hri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

Course: 16th to 18th Century English Literature

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Zeba Siddiqui DEPARTMENT: _English (Arts) CLASS: _TYBA SEMESTER: _6 MONTH: December ACADEMIC YEAR: __2022-2023

Learning Objectives

1) To introduce students to English Literature of the 16th, 17th and 18thcenturies.

2) To show them how background influences shaped the writer's thinking.

3) To present them to the literary masters who dominated the scene

4) To familiarize students with different writing styles that each age adopted.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

Unit 1: Background and Important Concepts:	1)Neo-Classical Period (1700-1798) i) Neo-Classical/Augustan ii) Age of Satire iii) Rise of the Periodical Essay and the Novel	20	1. Alpers, Paul E. Elizabethan Poetry: Modern Essays in Criticism (OUP: 1967) 2. Daiches, David. A Critical History of English Literature (Secker and Warburg: London, 1960) 3. Ford, Boris Ed. The New Pelican Guide to English Literature: The Age of Shakespeare Vol. 2 (Penguin, 1993) From Donne to Marvell Vol. 3 (Penguin, 1990) 4. Keast, William B. Seventeenth Century English Poetry: Modern Essays in Criticism (OUP: 1971) 5. King, Bruce. Seventeenth Century English Literature(Macmillan:1983). 6. Leggatt, Alexander. English Drama: Shakespeare to The Restoration 1590- 1660 (Longman: Literature in English Series, 1988) Perfitt, George. English Poetry of the Seventeenth Century (Longman: Literature in English Series,1992) 8. Parry, Graham.The Seventeenth Century: The Intellectual and Cultural Context of English Literature. 1603-1700 (Longman: Literature in English Series, 1989) 9.Pooley, Roger. English Prose of the Seventeenth Century (Longman: Literature in English Series, 1992) 10.Ricks, Christopher. The Penguin History of English Literature Vol.3. (Penguin, 1993) 11. Roston, Murray. Sixteenth Century English Literature (Macmillan, 1983) 12. Baugh, Albert C. A Literary History Of England, The Restoration and Eighteenth	Google classroom, PPT, blackboard

			Century (1660-1789), 2nd Edition, (London, Routledge and Kegan Paul, 1967.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

Vidya Verma

Dr Zeba Siddiqui

Signature of the Staff

Signature of the HOD

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2:	John Dryden: All for Love	20	1. Alpers, Paul E. Elizabethan Poetry: Modern Essays in Criticism (OUP: 1967) 2. Daiches, David. A Critical History of English Literature (Secker and Warburg: London, 1960) 3. Ford, Boris Ed. The New Pelican Guide to English Literature: The Age of Shakespeare Vol. 2 (Penguin, 1993) From Donne to Marvell Vol. 3 (Penguin, 1990) 4. Keast, William B. Seventeenth Century English Poetry: Modern Essays in Criticism (OUP: 1971) 5. King, Bruce. Seventeenth Century English Literature(Macmillan:1983). 6. Leggatt, Alexander. English Drama: Shakespeare to The	Google classroom, PPT, blackboard

			Restoration 1590- 1660 (Longman: Literature in English Series, 1988) Perfitt, George. English Poetry of the Seventeenth Century (Longman: Literature in English Series,1992) 8. Parry, Graham.The Seventeenth Century: The Intellectual and Cultural Context of English Literature. 1603-1700 (Longman: Literature in English Series, 1989) 9.Pooley, Roger. English Prose of the Seventeenth Century (Longman: Literature in English Series, 1992) 10.Ricks, Christopher. The Penguin History of English Literature Vol.3. (Penguin, 1993) 11. Roston, Murray. Sixteenth Century English Literature (Macmillan, 1983) 12. Baugh, Albert C. A Literary History Of England, The Restoration and Eighteenth Century (1660-1789), 2nd Edition, (London, Routledge and Kegan Paul, 1967	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

Vidya Verma

Dr. Zeba Siddiqui

Signature of the Staff

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

Course: Business Communication

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Zeba Siddiqui DEPARTMENT: _English CLASS: _FYBcom SEMESTER: _1 MONTH: August ACADEMIC YEAR: __2022- 2023

Learning Objectives

- To build up comprehensive understanding of business correspondence and conditions.
- To create influential oral, written and practical skills among students. ● To develop the powerful utilization of communication technologies.
- To equip students with the career skills such as collaborative working at workplace, interviews, etc

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD / ICT TOOLS USED

Unit 1: Unit I : Theory of Communica tio n	Concept of Communica tio n · Meaning · Definition · Process · Need · Feedback · Emergence of Communica tio n as a key concept in the Corporate and Global world	05	1. Agarwal, Anju D. A Practical Handbook for Consumers. India Book House, 1989. 2. Ashley, A. A Handbook of Commercial Correspondence. Oxford UP, 1992. 3. Aswalthapa, K. Organizational Behavior. Himalaya Publication, 1992. 4. Atreya, N. and Guha. Effective Credit Management. MMC School of Management, 1994. 5. Bah, J.C. and Nagamia S.M. Modern Business Correspondence and Minute Writing. N.M. Tripathi Pvt., 1974. 6. Balan, K.R. and Rayudu, C.S. Effective Communication. Beacon Books, 1996. 7. Bangh, L. Sue, Fryar, Maridell and Thomas David A. How to Write First Class Business Correspondence. N.T.C. Publishing Group USA, 1998. 8. Banerjee, Bani P. Foundation of Ethics in Management. Excel Books, 2005. 9. Bakar, Alan. Making Meeting Work. Sterling Publication Pvt., 1993. 10. Basu, C.R. Business Organization and Management. Tata McGraw-Hill, 1998. 11. Benjamin, James. Business and Professional	Google classroom, PPT, blackboard, youtube

			Communication Concept and Practices. Harper Collins College Publishers, 1993. 12. Bhargava and Bhargava. Company Notices, Meetings and Regulations. Taxman Publication, 1971.	

			13. Black, Sam. Practical Public Relations. E.L.B.S. London, 1972. 14. Britt, Deborah. Improving Business Communication Skills. Kendall Hunt Publishing, 1992. 15. Bovee Cortland, L. and John V. Thrill. Business Communication Today. Taxman Publication, 1989. 16. Burton, G. and Thakur. Management Today Principles and Practices. Tata McGraw Hill, 1995. 17. Darrow, Richard, Forrstal, Dan and Coolman, Audrey. Public Relations Handbook. The Dartwell, 1967	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

Dr. Zeba Siddiqui Dr. Vidya Verma

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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

Course: Business Communication

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Zeba Siddiqui DEPARTMENT: _English CLASS: _FYBcom SEMESTER: _1 MONTH: August ACADEMIC YEAR: __2022- 2023

Learning Objectives

- To build up comprehensive understanding of business correspondence and conditions.
- To create influential oral, written and practical skills among students. ● To develop the powerful utilization of communication technologies.
- To equip students with the career skills such as collaborative working at workplace, interviews, etc

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD / ICT TOOLS USED

Unit 2: Communica tio n at the Workplace	i. Channels of Communicatio n (03) Formal and Informal – Vertical, Horizontal, Diagonal and Grapevine ii. Methods of Communicatio n (05) Semester III: Applied Component: Paper-I Total Credits: 02 Course Title: Business Communicatio n Verbal, Non Verbal and Visual (including Kinesics, Para Language, Proxemics, Silence, Sign, Signal and Symbol) iii. Business Etiquette (04) Office Etiquette, Internet	29	1. Agarwal, Anju D. A Practical Handbook for Consumers. India Book House, 1989. 2. Ashley, A. A Handbook of Commercial Corresponden ce. Oxford UP, 1992. 3. Aswalthapa, K. Organizational Behavior. Himalaya Publication, 1992. 4. Atreya, N. and Guha. Effective Credit Management. MMC School of Managemen t, 1994. 5. Bah, J.C. and Nagamia S.M. Modern Business Correspondenc e and Minute Writing. N.M. Tripathi Pvt., 1974. 6. Balan, K.R. and Rayudu, C.S.	Google classroom, PPT, blackboar d, youtube

	Etiquette / Netiquette, Business Card Etiquette, Handshake Etiquette, Mobile Phone Etiquette iv. Barriers to Communication and Ways to Overcome Them (06) Physical or Environmental, Semantic or Language, Psychological and Cross-Cultural Barriers Ways to Overcome these Barriers v. Listening (04) What is Listening? The Listening Process Importance of Good Listening How to Develop Effective Listening Skills Obstacles to Listening ii. vi. Business Ethics (07) What is Ethics? Business Ethics? Importance of Business Ethics at Workplace Digital Ethics Environmental Ethics Ethics in International Business Corporate		Effective Communication. Beacon Books, 1996. 7. Bangh, L. Sue, Fryar, Maridell and Thomas David A. How to Write First Class Business Correspondence. N.T.C. Publishing Group USA, 1998. 8. Banerjee, Bani P. Foundation of Ethics in Management. Excel Books, 2005. 9. Bakar, Alan. Making Meeting Work. Sterling Publication Pvt., 1993. 10. Basu, C.R. Business Organization and Management. Tata McGraw-Hill, 1998. 11. Benjamin, James. Business and Professional Communication Concept and Practices. Harper Collins College Publishers, 1993. 12. Bhargava and	

	Social		Bhargava. Company Notices, Meetings and Regulations. Taxman Publication, 1971. 13. Black, Sam. Practical Public Relations. E.L.B.S. London, 1972. 14. Britt, Deborah.	

	Responsibility		Improving Business Communicati on Skills. Kendall Hunt Publishing, 1992. 15. Bovee Cortland, L. and John V. Thrill. Business Communication Today. Taxman Publication, 1989. 16. Burton, G. and Thakur. Management Today- Principles and Practices. Tata McGraw Hill, 1995. 17. Darrow, Richard, Forrstal, Dan and Coolman, Audrey. Public Relations	

			Handbook. The Dartwell, 1967	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 29

Dr. Zeba Siddiqui Dr. Vidya Verma

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
Course: Business Communication

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Zeba Siddiqui DEPARTMENT: _English CLASS: _FYBcom SEMESTER: _1 MONTH: August ACADEMIC YEAR: __2022- 2023

Learning Objectives

- To build up comprehensive understanding of business correspondence and conditions.
- To create influential oral, written and practical skills among students. ● To develop the powerful utilization of communication technologies.
- To equip students with the career skills such as collaborative working at workplace, interviews, etc

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD / ICT TOOLS USED

Unit 3: New Media in Communica tio n	· Impact of Technology Enabled Communica tio n · Video Conference: Skype, Google Meet, Go-To Meeting and Jio-Meet · Social Media: WhatsApp, Twitter, Facebook, Instagram, Telegram and Blog	07	1. Agarwal, Anju D. A Practical Handbook for Consumers. India Book House, 1989. 2. Ashley, A. A Handbook of Commercial Correspondence. Oxford UP, 1992. 3. Aswalthapa, K. Organizational Behavior. Himalaya Publication, 1992. 4. Atreya, N. and Guha. Effective Credit Management. MMC School of Management, 1994. 5. Bah, J.C. and Nagamia S.M. Modern Business Correspondence and Minute Writing. N.M. Tripathi Pvt., 1974. 6. Balan, K.R. and Rayudu, C.S. Effective Communication. Beacon Books, 1996. 7. Bangh, L. Sue, Fryar, Maridell and Thomas David A. How to Write First Class	Google classroom, PPT, blackboard, youtube

			Business Correspondence. N.T.C. Publishing Group USA, 1998. 8. Banerjee, Bani P. Foundation of Ethics in Management. Excel Books, 2005. 9. Bakar, Alan. Making Meeting Work. Sterling Publication Pvt., 1993. 10. Basu, C.R. Business Organization and Management. Tata McGraw-Hill, 1998. 11. Benjamin, James. Business and Professional Communication Concept and Practices. Harper Collins College Publishers, 1993. 12. Bhargava and Bhargava. Company Notices, Meetings and Regulations. Taxman Publication, 1971. 13. Black, Sam. Practical Public Relations. E.L.B.S. London, 1972. 14. Britt, Deborah. Improving Business Communication Skills. Kendall Hunt Publishing, 1992. 15. Bovee Cortland, L. and John V. Thrill. Business Communication Today. Taxman Publication, 1989. 16. Burton, G. and Thakur. Management Today Principles and Practices. Tata	

			McGraw Hill, 1995. 17. Darrow, Richard, Forrstal, Dan and Coolman, Audrey. Public Relations Handbook. The Dartwell, 1967	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

Dr. Zeba Siddiqui Dr. Vidya Verma Signature of the Staff Signature of the HOD

Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

Course: Business Communication

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Zeba Siddiqui DEPARTMENT: _English CLASS: _FYBcom SEMESTER: _1 MONTH: August ACADEMIC YEAR: __2022- 2023

Learning Objectives

- To build up comprehensive understanding of business correspondence and conditions.
- To create influential oral, written and practical skills among students. ● To develop the powerful utilization of communication technologies.
- To equip students with the career skills such as collaborative working at workplace, interviews, etc

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD

		ALLOTED		**/ ICT TOOLS USED**

Unit 4: Business Correspond en c	i. Theory of Business Letter Writing · Principles of Effective Letter Writing · Parts of a Business Letter · Layout of a Business Letter (Full Block) ii. Personnel Corresponden ce Job Application Letter and Resume Letter of Recommendati o n Letter of Appointment Letter of Acceptance of Job Offer Letter of Appreciation Letter of Resignation	14	1. Agarwal, Anju D. A Practical Handbook for Consumers. India Book House, 1989. 2. Ashley, A. A Handbook of Commercial Correspondence. Oxford UP, 1992. 3. Aswalthapa, K. Organizational Behavior. Himalaya Publication, 1992. 4. Atreya, N. and Guha. Effective Credit Management. MMC School of Management, 1994. 5. Bah, J.C. and Nagamia S.M. Modern Business Correspondence and Minute Writing. N.M. Tripathi Pvt., 1974. 6. Balan, K.R. and Rayudu, C.S. Effective Communication. Beacon Books, 1996. 7. Bangh, L. Sue, Fryar, Maridell and Thomas David A. How to Write First Class Business Correspondence. N.T.C. Publishing Group USA, 1998. 8. Banerjee, Bani P. Foundation of Ethics in Management. Excel Books, 2005. 9. Bakar, Alan. Making Meeting Work. Sterling Publication Pvt., 1993. 10. Basu, C.R. Business	Google classroom, PPT, blackboard, youtube

			Organization and Management. Tata McGraw-Hill, 1998. 11. Benjamin, James. Business and Professional Communication Concept and Practices. Harper Collins College Publishers, 1993. 12. Bhargava and Bhargava. Company	

			Notices, Meetings and Regulations. Taxman Publication, 1971. 13. Black, Sam. Practical Public Relations. E.L.B.S. London, 1972. 14. Britt, Deborah. Improving Business Communication Skills. Kendall Hunt Publishing, 1992. 15. Bovee Cortland, L. and John V. Thrill. Business Communication Today. Taxman Publication, 1989. 16. Burton, G. and Thakur. Management Today Principles and Practices. Tata McGraw Hill, 1995. 17. Darrow, Richard, Forrstal, Dan and Coolman, Audrey. Public Relations Handbook. The Dartwell, 1967	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

Dr. Zeba Siddiqui Dr. Vidya Verma

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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

Course: Business Communication

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Zeba Siddiqui DEPARTMENT: _English CLASS: _FYBcom SEMESTER: _1 MONTH: August ACADEMIC YEAR: __2022- 2023

Learning Objectives

- To build up comprehensive understanding of business correspondence and conditions.
- To create influential oral, written and practical skills among students. ● To develop the powerful utilization of communication technologies.
- To equip students with the career skills such as collaborative working at workplace, interviews, etc

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/ S	TEACHING METHOD/ ICT TOOLS USED

Unit 5: Paragraph Writing and Book Review	i. Paragraph Writing Developing an idea, using appropriate linking devices, etc. Cohesion and Coherence, etc. ii. Book Review Steps in writing a book review: Introduction, Summary,	05		Google classroom, PPT, blackboard, youtube

	Opinion and Conclusion Recommended Books are: The Wings of Fire by Dr. APJ Abdul Kalam, Bhujia Barons: The Untold Story of How Haldiram Built a 5000 Crore Empire by Pavitra Kumar and The 7 Habits of Highly Effective People by Stephen Covey			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

Dr. Zeba Siddiqui Dr. Vidya Verma

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Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

Course: Mass Communication

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Zeba Siddiqui DEPARTMENT: _English (Arts) CLASS: _SYBA SEMESTER: _4 MONTH: Feb ACADEMIC YEAR: __2022- 2023

Learning Objectives

1.To introduce some major aspects of communication, mass communication processes, crucial mass media theories and mass communication industries

2. To develop a broad perspective of the past and the present status of mass media in India

3. To comprehend different types of Mass Media and gain a critical understanding of the impact of mass media on Indian history, society and culture

4. To develop critical awareness of the ethics and ideologies in mass media products 5. To understand the mass media laws in India, and how these laws shape the media practices 6. To introduce students to the application of social media

7. To identify various careers opportunities in media industry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD / ICT TOOLS USED

Unit 1: Unit I Evolution of Different Media and the Contemporar y Context	A) Beginnings of mass media in India B) Technological milestones and changing trends from conventional to digital media C) Role of media in national developme nt D) Reach of media (regional and demograp hic coverage)	10	1. Acharya A.N. Television in India: A Sociological Study of Policy and Perspectives. New Delhi: Manas Publications, 1987. 2. Ahuja B.K. Mass Media Communication: Theory and Practices. New Delhi: Saurabh Publishing House, 2010. 3. Ahuja B. N. History of Press., Press Laws and Communications. New Delhi: Surjeet Publications, 1988. 4. Arceneaux, Noah, and Kavoori Anandam (Eds.). The Mobile Media Reader. Peter Lang Publishing, 2012. 5. Baghel, Sanjay Singh (Ed.). Social Media and Indian Youth. New Delhi: Apple Books, 2015. 6. Battaglia, Giulia. Documentary Film in India: An Anthropological History. Oxon: Routledge, 2018. 7. Black, Sam. Practical Public Relations. London: E.L.B.S, 1972. 8. Chatterji, P.C. Broadcasting in India. (Second Ed.). New Delhi: Sage, 2000. 9. Folkerts Jean and Stephen Lacey. The Media in Your Life: An Introduction to Mass Communication (Third Ed.). Pearson Education, 2004. 10. Guha Thakurta, Paranjoy. Media Ethics: Truth, Fairness, and Objectivity. (Second Ed.). New Delhi: Oxford University Press, 2011.	Google classroom, PPT, blackboard, youtube

			11. Hasan, Seema. Mass Communication: Principles and Concepts. CBS Publishers, 2010. 12. Joseph M.K. Freedom of the Press. New Delhi: Anmol Publication, 1997. 13. Joshi Uma. Textbook of Mass Communication and Media.	

			New Delhi: Anmol Publications, 2002. 14. Kamath. M V. Professional Journalism. New Delhi: Vikas Publishing House, 1980. 15. Kumar, Keval. Mass Communication: A Critical Analysis. Mumbai: Vipul Prakashan, 2002. 16. Menon, P. K. Practical Journalism. Jaipur: Aavishkar Publishers, 2005	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

Dr. Zeba Siddiqui Dr. Vidya Verma

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Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce

Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

Course: Mass Communication

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Zeba Siddiqui DEPARTMENT: _English (Arts) CLASS: _SYBA SEMESTER: _4 MONTH: Feb ACADEMIC YEAR: __2022- 2023

Learning Objectives

1.To introduce some major aspects of communication, mass communication processes, crucial mass media theories and mass communication industries

2. To develop a broad perspective of the past and the present status of mass media in India

3. To comprehend different types of Mass Media and gain a critical understanding of the impact of mass media on Indian history, society and culture

4. To develop critical awareness of the ethics and ideologies in mass media products 5. To understand the mass media laws in India, and how these laws shape the media practices 6. To introduce students to the application of social media

7. To identify various careers opportunities in media industry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD / ICT TOOLS USED

Unit 2: Television	A) Major formats of TV programmes B) Television and its impact on Indian families C) Television and consumerism D) Television and surveillance E) Reality Television	15	1. Acharya A.N. Television in India: A Sociological Study of Policy and Perspectives. New Delhi: Manas Publications, 1987. 2. Ahuja B.K. Mass Media Communication: Theory and Practices. New Delhi: Saurabh Publishing House, 2010. 3. Ahuja B. N. History of Press., Press Laws and Communications. New Delhi: Surjeet Publications, 1988. 4. Arceneaux, Noah, and Kavoori Anandam (Eds.). The Mobile Media Reader. Peter Lang Publishing, 2012. 5. Baghel, Sanjay Singh (Ed.). Social Media and Indian Youth. New Delhi: Apple Books, 2015. 6. Battaglia, Giulia. Documentary Film in India: An Anthropological History. Oxon: Routledge, 2018. 7. Black, Sam. Practical Public Relations. London: E.L.B.S, 1972. 8. Chatterji, P.C. Broadcasting in India. (Second Ed.). New Delhi: Sage, 2000. 9. Folkerts Jean and Stephen Lacey. The Media in Your Life: An Introduction to Mass Communication (Third Ed.). Pearson Education, 2004. 10. Guha Thakurta, Paranjoy. Media Ethics: Truth, Fairness, and	Google classroom, PPT, blackboard, youtube

			Objectivity. (Second Ed.). New Delhi: Oxford University Press, 2011. 11. Hasan, Seema. Mass Communication: Principles and Concepts. CBS Publishers, 2010. 12. Joseph M.K. Freedom of the Press. New Delhi: Anmol Publication, 1997. 13. Joshi Uma. Textbook of Mass Communication and Media. New Delhi: Anmol Publications, 2002. 14. Kamath. M V. Professional Journalism. New Delhi: Vikas Publishing House, 1980. 15. Kumar, Keval. Mass Communication: A Critical Analysis. Mumbai: Vipul Prakashan, 2002. 16. Menon, P. K. Practical Journalism. Jaipur: Aavishkar Publishers, 2005	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

Dr. Zeba Siddiqui Dr. Vidya Verma

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Vishnu Waman Thakur Charitable Trust

Bhaskar Waman Thakur College of Science

Yashvant Keshav Patil College of Commerce

Vidhya Dayanand Patil College of Arts

VIVA COLLEGE, Virar (W)

Course: Mass Communication

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Zeba Siddiqui DEPARTMENT: _English (Arts) CLASS: _SYBA SEMESTER: _4 MONTH: Feb ACADEMIC YEAR: __2022- 2023

Learning Objectives

1.To introduce some major aspects of communication, mass communication processes, crucial mass media theories and mass communication industries

2. To develop a broad perspective of the past and the present status of mass media in India

3. To comprehend different types of Mass Media and gain a critical understanding of the impact of mass media on Indian history, society and culture

4. To develop critical awareness of the ethics and ideologies in mass media products 5. To understand the mass media laws in India, and how these laws shape the media practices 6. To introduce students to the application of social media

7. To identify various careers opportunities in media industry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD / ICT TOOLS USED

Unit 3: Media related Issues and Laws in India	A) Freedom of expression and Censorship B) Relationship between media and government C) Media objectivity, media bias, and political leanings D) Trial by media and media ethics (Television and Print) E) Objectionable advertising F) Information technology (IT) Acts related to media G) Major laws in India related to media	20	1. Acharya A.N. Television in India: A Sociological Study of Policy and Perspectives. New Delhi: Manas Publications, 1987. 2. Ahuja B.K. Mass Media Communication: Theory and Practices. New Delhi: Saurabh Publishing House, 2010. 3. Ahuja B. N. History of Press., Press Laws and Communications. New Delhi: Surjeet Publications, 1988. 4. Arceneaux, Noah, and Kavoori Anandam (Eds.). The Mobile Media Reader. Peter Lang Publishing, 2012. 5. Baghel, Sanjay Singh (Ed.). Social Media and Indian Youth. New Delhi: Apple Books, 2015. 6. Battaglia, Giulia. Documentary Film in India: An Anthropological History. Oxon: Routledge, 2018. 7. Black, Sam. Practical Public Relations. London: E.L.B.S, 1972. 8. Chatterji, P.C. Broadcasting in India. (Second Ed.). New Delhi: Sage, 2000. 9. Folkerts Jean and Stephen Lacey. The Media in Your Life:	Google classroom, PPT, blackboard, youtube

			An Introduction to Mass Communication (Third Ed.). Pearson Education, 2004. 10. Guha Thakurta, Paranjoy. Media Ethics: Truth, Fairness, and Objectivity. (Second Ed.). New Delhi: Oxford University Press, 2011. 11. Hasan, Seema. Mass Communication: Principles and Concepts. CBS Publishers, 2010. 12. Joseph M.K. Freedom of the Press. New Delhi: Anmol Publication, 1997. 13. Joshi Uma. Textbook of Mass Communication and Media. New Delhi: Anmol Publications, 2002. 14. Kamath. M V. Professional Journalism. New Delhi: Vikas Publishing House, 1980. 15. Kumar, Keval. Mass Communication: A Critical Analysis. Mumbai: Vipul Prakashan, 2002. 16. Menon, P. K. Practical Journalism. Jaipur: Aavishkar Publishers, 2005	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

Dr. Zeba Siddiqui Dr. Vidya Verma

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Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

Course: Mass Communication

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Zeba Siddiqui DEPARTMENT: _English (Arts) CLASS: _SYBA SEMESTER: _4 MONTH: Feb ACADEMIC YEAR: __2022- 2023

Learning Objectives

1.To introduce some major aspects of communication, mass communication processes, crucial mass media theories and mass communication industries

2. To develop a broad perspective of the past and the present status of mass media in India

3. To comprehend different types of Mass Media and gain a critical understanding of the impact of mass media on Indian history, society and culture

4. To develop critical awareness of the ethics and ideologies in mass media products 5. To understand the mass media laws in India, and how these laws shape the media practices 6. To introduce students to the application of social media

7. To identify various careers opportunities in media industry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD / ICT TOOLS USED

Unit 4: Functions of Media Personnel and Careers in Media	A) Cyber Journalism B) Editors C) Translators D) Copywriters E) Role of Radio Jockey/Video Jockey F) Blogging G) Writing jingles H) Voice-over Artists I) Public Relations specialists J) Advertising/marketin g specialists K) Script writers L) Newsreaders M) Researchers/Writers N) Music specialists O) Social media specialist	15	1. Acharya A.N. Television in India: A Sociological Study of Policy and Perspectives. New Delhi: Manas Publications, 1987. 2. Ahuja B.K. Mass Media Communication: Theory and Practices. New Delhi: Saurabh Publishing House, 2010. 3. Ahuja B. N. History of Press., Press Laws and Communications. New Delhi: Surjeet Publications, 1988. 4. Arceneaux, Noah, and Kavoori Anandam (Eds.). The Mobile Media Reader. Peter Lang Publishing, 2012. 5. Baghel, Sanjay Singh (Ed.). Social Media and Indian Youth. New Delhi: Apple Books, 2015.	Google classroom, PPT, blackboard, youtube

			6. Battaglia, Giulia. Documentary Film in India: An Anthropological History. Oxon: Routledge, 2018. 7. Black, Sam. Practical Public Relations. London: E.L.B.S, 1972. 8. Chatterji, P.C. Broadcasting in India. (Second Ed.). New Delhi: Sage, 2000. 9. Folkerts Jean and Stephen Lacey. The Media in Your Life: An Introduction to Mass Communication (Third Ed.). Pearson Education, 2004. 10. Guha Thakurta, Paranjoy. Media Ethics: Truth, Fairness, and Objectivity. (Second Ed.). New Delhi: Oxford University Press, 2011. 11. Hasan, Seema. Mass Communication: Principles and Concepts. CBS Publishers, 2010. 12. Joseph M.K. Freedom of the Press. New Delhi: Anmol Publication, 1997. 13. Joshi Uma. Textbook of Mass Communication and Media. New Delhi: Anmol Publications, 2002. 14. Kamath. M V. Professional Journalism. New Delhi: Vikas Publishing House, 1980. 15. Kumar, Keval. Mass Communication: A Critical Analysis. Mumbai: Vipul	

			Prakashan, 2002. 16. Menon, P. K. Practical Journalism. Jaipur: Aavishkar Publishers, 2005.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

Dr. Zeba Siddiqui Dr. Vidya Verma

Signature of the Staff Signature of the HOD

Vishnu Waman Thakur Charitable Trust Bhaskar
Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

Course: 16th to 18th Century English Literature

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Zeba Siddiqui DEPARTMENT: _English (Arts) CLASS: _TYBA SEMESTER: _6 MONTH: Feb ACADEMIC YEAR: __2022- 2023

Learning Objectives

1) To introduce students to English Literature of the 16th, 17th and

18thcenturies. 2) To show them how background influences shaped the writer's

thinking.

3) To present them to the literary masters who dominated the scene

4) To familiarize students with different writing styles that each age adopted.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD / ICT TOOLS USED

Unit 1: Background and Important Concepts:	1)Neo-Classical Period (1700-1798) i) Neo Classical/Augusta n ii) Age of Satire iii) Rise of the Periodical Essay and the Novel	20	1. Alpers, Paul E. Elizabethan Poetry: Modern Essays in Criticism (OUP: 1967) 2. Daiches, David. A Critical History of English Literature (Secker and Warburg: London, 1960) 3. Ford, Boris Ed. The New Pelican Guide to English Literature: The Age of Shakespeare Vol. 2 (Penguin, 1993) From Donne to Marvell Vol. 3 (Penguin, 1990) 4. Keast, William B. Seventeenth Century English	Google classroom, PPT, blackboard

			Poetry: Modern Essays in Criticism (OUP: 1971) 5. King, Bruce. Seventeenth Century English Literature(Macmillan:1983). 6. Leggatt, Alexander. English Drama: Shakespeare to The Restoration 1590- 1660 (Longman: Literature in English Series, 1988) Perfitt, George. English Poetry of the Seventeenth Century (Longman: Literature in English Series,1992) 8. Parry, Graham.The Seventeenth Century: The Intellectual and Cultural Context of English Literature. 1603-1700 (Longman: Literature in English Series, 1989) 9.Pooley, Roger. English Prose of the Seventeenth Century (Longman: Literature in English Series, 1992) 10.Ricks, Christopher. The Penguin History of English Literature Vol.3. (Penguin, 1993) 11. Roston, Murray. Sixteenth Century English Literature (Macmillan, 1983) 12. Baugh, Albert C. A Literary History Of England, The Restoration and Eighteenth Century (1660-1789), 2nd Edition, (London, Routledge and Kegan Paul, 1967.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

Vidya Verma

Dr Zeba Siddiqui

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD /
				ICT TOOLS USED

Unit 2:	John Dryden: All for Love	20	1. Alpers, Paul E. Elizabethan Poetry: Modern Essays in Criticism (OUP: 1967) 2. Daiches, David. A Critical History of English Literature (Secker and Warburg: London, 1960) 3. Ford, Boris Ed. The New Pelican Guide to English Literature: The Age of Shakespeare Vol. 2 (Penguin, 1993) From Donne to Marvell Vol. 3 (Penguin, 1990) 4. Keast, William B. Seventeenth Century English Poetry: Modern Essays in Criticism (OUP: 1971) 5. King, Bruce. Seventeenth Century English Literature(Macmillan:1983). 6. Leggatt, Alexander. English Drama: Shakespeare to The Restoration 1590- 1660 (Longman: Literature in English Series, 1988) Perfitt, George. English Poetry of the Seventeenth Century (Longman: Literature in English Series,1992) 8. Parry, Graham.The Seventeenth Century: The Intellectual and Cultural Context of English Literature. 1603-1700 (Longman: Literature in English Series, 1989) 9.Pooley, Roger. English Prose of the Seventeenth Century (Longman: Literature in English Series, 1992) 10.Ricks, Christopher. The Penguin History of English Literature Vol.3. (Penguin, 1993) 11. Roston, Murray. Sixteenth Century English Literature (Macmillan, 1983) 12. Baugh, Albert C. A Literary History Of England,	Google classroom, PPT, blackboard

			The Restoration and Eighteenth Century (1660-1789), 2nd Edition, (London, Routledge and Kegan Paul, 1967	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

Dr. Zeba Siddiqui

Signature of the Staff Signature of the HOD

Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

Course: Grammar and Art of Writing

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Zeba Siddiqui DEPARTMENT: _English (Arts) CLASS: _TYBA SEMESTER: _6 MONTH: Feb ACADEMIC YEAR: __2022- 2023

Learning Objectives:

1. To develop amongst learners an insight into the process of word formation and transformation

2. To develop amongst them an insight into the sounds, stress patterns and intonations in the English language to improve their speaking skills

3. To develop among them an insight into the structure of the English language and to provide knowledge of the rules of grammar

4. To help them learn grammatical analysis and description and the skills of sentence transformation 5. To introduce the mechanics of writing for effective writing for various domains

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD / ICT TOOLS USED

Unit 1: Grammar	I. Clauses: · Clause elements and subject –verb concord · Basic clause patterns · Types of clauses : finite – non-finite (tensed – tenseless), independe nt – dependent (Main – Subordinated) · Kinds of subordinate clause : Noun clause, Prepositional Clause , Relative clause , Adverb Clause, Comparative Clause · Co-ordinated Clauses II. Sentences: · Basic and Derived structures Following rules to be studied – Fronting, Inversion, Passive reconsideration , Substitution of PP for Indirect Object, Tag	20	1. Leech, Geoffrey, Deuchar, Margaret and Hoogenraad, Robert, English Grammar for Today: A New Introduction. London: Macmillan, 1973 2. Quirk, R. and Greenbaum. S. A University Grammar of English, Longman, 1973 3. 2 Rajimwale, Sharad. Elements of General Linguistics, Vol. I, New Delhi: Rama Brothers 4. 3 Varshney, Dr. R.L. An Introductory Text Book of Linguistics and Phonetics, New Delhi: Prakash Book Depot 5. Payne, Lucile Vaughan. The Lively Art of Writing. New York: Mentor, 1969 6. Kleiser, Grenville. The Art of Writing. New Delhi: A P H, 2011 3. Trimble, John R.Writing with Style, Conversations on the Art of Writing. New Jersey: Prentice Hall, 1975 7. Bailey, Stephen. Academic Writing: A Handbook for International Students. New York: Routledge , 2011 5. Huddleson, Rodney and Pullum, Geoffrey. A Student's Introduction to English Grammar. New Delhi: Cambridge University Press, 2005 8. Leech, Geoffrey and Svartvik, Jan. A Communicative Grammar of English. New York: Routledge, 1975 9. Simpson, Paul and Mayr, Andrea. Language	Google classroom, PPT, blackboard

	Questions, Postponement of the postmodifier, Cleft Sentence, Existential		and Power: A Resource Book for Students.Routledge,	

	Sentence and Extraposition.		Taylor & Francis Group, 2010 18. Mohan, Krishna and Raman, Meenakshi. Advanced Communicative English: A Comprehensive Course for Undergraduate Learners. New Delhi: Tata McGraw Hill Education Private Limited, 2010	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

Signature of the Staff Signature of the HOD

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD / ICT TOOLS USED

Unit 2: Art of Writing	Mechanics of Writing 05 lectures · Characteristics of typical writing and typical speech · Cohesion and Coherence · Correct use of Articles, Prepositions, Adverbs, Adjectives · Common Errors – Grammatical, Syntactical, Lexical, Punctuation, Logical · Writing a	15	10. Leech, Geoffrey, Deuchar, Margaret and Hoogenraad, Robert, English Grammar for Today: A New Introduction. London: Macmillan, 1973 11. Quirk, R. and Greenbaum. S. A University Grammar of English, Longman, 1973 12. 2 Rajimwale, Sharad. Elements of General Linguistics, Vol. I, New Delhi: Rama Brothers 13. 3 Varshney, Dr. R.L. An Introductory Text Book of Linguistics and Phonetics, New Delhi: Prakash Book Depot 14. Payne, Lucile Vaughan. The Lively Art of Writing. New York: Mentor, 1969 15. Kleiser, Grenville. The Art of Writing. New Delhi: A P	Google classroom, PPT, blackboard

	Thesis Statement Rhetorical Structures 10 lectures · Classification, Comparison – Contrast, Cause – Effect, Chronological and Spatial Ordering, Order of Importance, Statement and Elaboration, Restatement, Exemplification , Listing · Understanding connotations, Using bias-free language, Avoiding jargon and archaic/ outdated language, Eliminating repetition and redundancy, Content Analysis, and Rhetorical Device		H, 2011 3. Trimble, John R.Writing with Style, Conversations on the Art of Writing. New Jersey: Prentice Hall, 1975 16. Bailey, Stephen. Academic Writing: A Handbook for International Students. New York: Routledge , 2011 5. Huddleson, Rodney and Pullum, Geoffrey. A Student's Introduction to English Grammar. New Delhi: Cambridge University Press, 2005 17. Leech, Geoffrey and Svartvik, Jan. A Communicative Grammar of English. New York: Routledge, 1975 18. Simpson, Paul and Mayr, Andrea. Language and Power: A Resource Book for Students.Routledge, Taylor & Francis Group, 2010 18. Mohan, Krishna and Raman, Meenakshi. Advanced Communicative English: A Comprehensive Course for Undergraduate Learners. New Delhi: Tata McGraw Hill Education Private Limited, 2010	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD / ICT TOOLS USED

Unit 3: Types/ Domains of Writing	Argumentative / reflective writing · Analytical writing · Creative / Figurative writing · Advertisement /Body Copy writing	10	19. Leech, Geoffrey, Deuchar, Margaret and Hoogenraad, Robert, English Grammar for Today: A New Introduction. London: Macmillan, 1973 20. Quirk, R. and Greenbaum. S. A University Grammar of English, Longman, 1973 21. 2 Rajimwale, Sharad. Elements of General Linguistics, Vol. I, New Delhi: Rama Brothers 22. 3 Varshney, Dr. R.L. An Introductory Text Book of Linguistics and Phonetics, New Delhi: Prakash Book Depot 23. Payne, Lucile Vaughan. The Lively Art of Writing. New York: Mentor, 1969 24. Kleiser, Grenville. The Art of Writing. New Delhi: A P H, 2011 3. Trimble, John R.Writing with Style, Conversations on the Art of Writing. New Jersey: Prentice Hall, 1975 25. Bailey, Stephen. Academic Writing: A Handbook for International Students. New York: Routledge , 2011 5. Huddleson, Rodney and Pullum, Geoffrey. A Student's Introduction to English Grammar. New Delhi: Cambridge University Press, 2005 26. Leech, Geoffrey and Svartvik, Jan. A Communicative Grammar of English. New York: Routledge, 1975 27. Simpson, Paul and Mayr, Andrea. Language	Google classroom, PPT, blackboard

			and Power: A Resource Book for Students.Routledge,	

			Taylor & Francis Group, 2010 18. 28. Mohan, Krishna and Raman, Meenakshi. Advanced Communicative English: A Comprehensive Course for Undergraduate Learners. New Delhi: Tata McGraw Hill Education Private Limited, 2010	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Zeba Siddiqui DEPARTMENT: _English (Arts) CLASS: _SYBA SEMESTER: _4 MONTH: Feb ACADEMIC YEAR: __2022- 2023

English II: Introduction to Drama

Learning Objectives:

1. Develop interest and passion for Western and Indian drama and its theatre 2. Be familiarized with salient elements and characteristics of drama. 3. Develop analytical skills and critical thinking through close reading of multidimensional dramas. 4. Be able to appreciate holistic understanding of the multifarious themes, issues and complexities portrayed by the renowned playwrights.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

Unit 1: Terms and concepts	Types of Drama (based on form, content, function, theme, style): Interlude, Chronicle Plays, Mystery Plays, Miracle Plays, Morality Plays, Romantic Comedy, Comedy of Humours, Restoration Comedy of	15	1. Hansberry, Lorraine. A raisin in the sun, PDF Drive, 2011. 2. Gajvi, Premanand. Kirwant, Seagull Books, n.d. 3. Keith, A. Berriedale, The Sanskrit Drama: In its Origin, Development Theory & Practice. Oxford UP, 1998. 4. Kennedy X. J. and Dana Gioia. An Introduction to Fiction, Poetry, and Drama. HarperCollins College Publishers Inc., 1995. 5. Klages, Mary. Key Terms in Literary Theory. Continnum International, 2012.	Google classroom, PPT, blackboard

	Manners, Sentimental Comedy, Senecan Plays or Revenge Plays, History Plays, Heroic Drama, Blank Verse Drama, Poetic Drama / Verse Drama, Drama of Ideas / Problem Play, Expressionist Plays, Epic Theatre, Absurd Plays, Plays by Angry Young Men, Kitchen Sink Drama, Theatre of Cruelty, Comedy of Menace, Dalit Theatre		6. Krasner, David. A History of Modern Drama. Volume I, Wiley-Blackwell, 2012. 7. McClinton-Temple, Jennifer. Encyclopaedia of Themes in Literature. Facts on File Inc., 2006. 8. Michael. A History of English Literature. Palgrave Macmillan, 2000. 9. Naik, M. K. A History of Indian English Literature. Sahitya Akademi, 2009. 10. Nicoll, Allardyce. The Theory of Drama. Doaba Publications, 1998. 11. O'Neil, Eugene. The Hairy Ape. Good Press, 2019. 12. Prasad, Birjadish. Background of the Study of English Literature. Macmillan, 1999. 13. Pritner, Cal, and Scott E. Walters. Introduction to Play Analysis. Waveland Press, 2017. 14. Quinn, Edward. A Dictionary of Literary and Thematic Terms. Facts on File Inc., 2006. 15. Rakesh, Mohan. Halfway House. Translated by Bindu Batra. Worldview Publications, 1999.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

Dr. Zeba Siddiqui Dr. Vidya Verma

Signature of the Staff Signature of the HOD

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTE	REFERENCE/S	TEACHING METHOD /

		D		**ICT TOOLS USED**

Unit 2: Play/Drama	Lorraine Hansberry: A Raisin in the Sun	15	1. Hansberry, Lorraine. A raisin in the sun, PDF Drive, 2011. 2. Gajvi, Premanand. Kirwant, Seagull Books, n.d. 3. Keith, A. Berriedale, The Sanskrit Drama: In its Origin, Development Theory & Practice. Oxford UP, 1998. 4. Kennedy X. J. and Dana Gioia. An Introduction to Fiction, Poetry, and Drama. HarperCollins College Publishers Inc., 1995. 5. Klages, Mary. Key Terms in Literary Theory. Continnum International, 2012. 6. Krasner, David. A History of Modern Drama. Volume I, Wiley-Blackwell, 2012. 7. McClinton-Temple, Jennifer. Encyclopaedia of Themes in Literature. Facts on File Inc., 2006. 8. Michael. A History of English Literature. Palgrave Macmillan, 2000. 9. Naik, M. K. A History of Indian English Literature. Sahitya Akademi, 2009. 10. Nicoll, Allardyce. The Theory of Drama. Doaba Publications, 1998. 11. O'Neil, Eugene. The Hairy Ape. Good Press, 2019. 12. Prasad, Birjadish. Background of the Study of English Literature. Macmillan, 1999. 13. Pritner, Cal, and Scott E. Walters. Introduction to Play Analysis. Waveland	Google classroom, PPT, blackboard

			Press, 2017. 14. Quinn, Edward. A Dictionary of Literary and Thematic Terms. Facts on File Inc., 2006. 15. Rakesh, Mohan. Halfway House. Translated by Bindu	

			Batra. Worldview Publications, 1999.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

Dr. Zeba Siddiqui Dr. Vidya Verma

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

Unit 3: Play/drama	David Williamson The Removalists	15	1. Hansberry, Lorraine. A raisin in the sun, PDF Drive, 2011. 2. Gajvi, Premanand. Kirwant, Seagull Books, n.d. 3. Keith, A. Berriedale, The Sanskrit Drama: In its Origin, Development Theory & Practice. Oxford UP, 1998. 4. Kennedy X. J. and Dana Gioia. An Introduction to Fiction, Poetry, and Drama. HarperCollins College Publishers Inc., 1995. 5. Klages, Mary. Key Terms in Literary Theory. Continnum International, 2012.	Google classroom, PPT, blackboard

			6. Krasner, David. A History of Modern Drama. Volume I, Wiley-Blackwell, 2012. 7. McClinton-Temple, Jennifer. Encyclopaedia of Themes in Literature. Facts on File Inc., 2006. 8. Michael. A History of English Literature. Palgrave Macmillan, 2000. 9. Naik, M. K. A History of Indian English Literature. Sahitya Akademi, 2009. 10. Nicoll, Allardyce. The Theory of Drama. Doaba Publications, 1998. 11. O'Neil, Eugene. The Hairy Ape. Good Press, 2019. 12. Prasad, Birjadish. Background of the Study of English Literature. Macmillan, 1999. 13. Pritner, Cal, and Scott E. Walters. Introduction to Play Analysis. Waveland Press, 2017. 14. Quinn, Edward. A Dictionary of Literary and Thematic Terms. Facts on File Inc., 2006. 15. Rakesh, Mohan. Halfway House. Translated by Bindu Batra. Worldview Publications, 1999.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

Dr. Zeba Siddiqui Dr. Vidya Verma

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR.VIDYA P.VERMA **DEPARTMENT**: ARTS (ENGLISH) **CLASS:** FYBBI (DIV- A, B) **SUBJECT –** BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** September **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Theory of Communication	**1)Concept of Communication, Channels and Objectives of Communication: Channels, Objective of Communication, Methods and Modes of Communication**	4	Manan Prakashan,	PPT, Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Vidya Verma

Dr. Vidya P. Verma

DAJoshi

Dr. Archana D. Joshi

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR.VIDYA P.VERMA **DEPARTMENT**: ARTS (ENGLISH) **CLASS:** FYBBI (DIV- A, B) **SUBJECT –** BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** October **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Theory of Communication	**Channels and Objectives of Communication: Channels, Objective of Communication, Methods and Modes of Communication**	11	Manan Prakashan	PPT. Online Lectures on Google Meet
2) Obstacles to Communication in Business World	**Problems in Communication in Business/Barriers to Communication, Listening, Introduction to Business World**	15	Manan Prakashan	PPT. Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 26

Vidya Verma

SIGNATURE OF THE STAFF

Dr. Vidya P. Verma

DAJoshi

SIGNATURE OF THE H.O.D.

Dr. Archana D. Joshi

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Vidya P. Verma DEPARTMENT: _English (Arts) CLASS: _FYBA SEMESTER: _2 MONTH: _ ACADEMIC YEAR: __2021- 2022

LEARNING OBJECTIVE/S:
The learners will be able to:
1. To enhance English language proficiency of students by familiarizing them with the skills of Listening, Speaking, Reading and Writing (LSRW)
2. To introduce learners to different perspectives of looking at a text or passage
3. To equip learners in the functional aspects of English so that they use the acquired language skills correctly and confidently
4. To guide learners in the effective use of the digital medium of communication.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Communication Skills in English – Paper I **Unit 1: English Usage in Communication**	1. Distinction between American English and British English 2. Indianism and Indian English 3. Appropriacy in the Use of English 4. Non-verbal Communication 5. Elevator Pitch 6. Information and Communication Technology and Use of English 7. Modes and Types of Interview	08	• McCarthy, Michael and Felicity O'Dell. *English Vocabulary in Use*. Cambridge:	Google Meet, Google classroom, PPT

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Unit 2: Enhancing Reading Competencies	8. Principles of Creative Writing *This unit shall work as theoretical base for the following units that are practical in nature.*		Cambridge University Press, 2001.	
	A variety of passages of 200-250 words may be taken such as extracts from novels, short stories, plays, magazine, newspapers, reports, documents, academic texts. The passages should have complex text type, function and lexis. The learners may be encouraged to gather meaning contextually or by referring to offline and online sources such as dictionary, thesaurus, and encyclopedia. 1. Augmenting active vocabulary 2. Understanding relations between parts of a text 3. Transferring information (Verbal to Non-Verbal) 4. Understanding concepts and arguments, 5. Developing skills in analysis and interpretation 6. Rewriting a passage from a defined perspective 7. Reading critically (presenting a reasoned argument that evaluates and analyses what you have read)	12	• Mohan, RC Sharma Krishna. *Business Correspondence and Report Writing*. Third edition. Tata McGraw-Hill Education, 2002. • Murphy, Raymond, et al. *Grammar in*	Google Meet, Google classroom, PPT
Unit 3: Advanced Oral Communication Skills	**A. Presentation skills**: (Formal presentations and skits) 1. Planning and structuring 2. Opening and closing a presentation 3. Use of body language	15	• Richards, Jack C., and Chuck	Google Meet, Google classroom, PPT

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	4. Use of technology in making a presentation 5. Drafting a skit (Not to be tested in theory exam) 6. Reading of a skit 7. Presenting a skit *Students are advised to prepare their own presentation scripts. Teachers should help them in* *drafting, reading and presenting those scripts in the class.* **B. Group Discussion:** 1. Formal and informal discussion 2. Elements of group discussion 3. Using appropriate language: Initiating, seeking and giving opinions, suggesting, responding to a suggestion, agreeing, disagreeing, interrupting, requesting, clarifying, summing up 4. Types of discussion: Giving and sharing opinions of a given topic, making decisions, problem solving (case study) **C. Interview Skills** 1. Interviewing others • Researching the interviewee (writer, social worker, entrepreneur, actor etc.) • Preparing questions		Sandy. *Passages Level 2* Student's Book. Cambridge University Press, 2014. • Sadanand, Kamlesh & S. Punitha. Spoken English: A Foundation Course. (Part 1 & 2). Orient Blackswan. 2009.	

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Unit 4: Advanced Writing Skills	• Conducting interview 2. Attending an Interview (Job/Entrance) • Researching the organization • Reviewing job-profile and your bio-data/CV • Preparing for standard questions • Responding to questions • Preparing your questions to ask to the interviewer/s 3. Analyzing Interviews			
	A. ReportWriting: 1. News report 2. Activity/Event report **B. CreativeWriting:** 1. Personal Essay 2. Memoir 3. Short Speech on the given occasion/ event 4. Story writing	10	• Taylor, Grant. *English Conversation Practice*. 1967. Tata McGraw-Hill, 2013 • Turton, Nigel D. *A B C of Common Grammatical*	Google Meet, Google classroom, PPT

Vidya Verma

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SIGNATURE OF THE H.O.D.

			Errors. 1995.Macmillan India Ltd., 1996	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

Vidya Verma

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Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR.VIDYA P.VERMA **DEPARTMENT**: ARTS (ENGLISH) **CLASS:** FYBBI (DIV- A, B) **SUBJECT –** BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** September **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Theory of Communication	**1)Concept of Communication, Channels and Objectives of Communication: Channels, Objective of Communication, Methods and Modes of Communication**	4	Manan Prakashan,	PPT, Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Vidya Verma

Dr. Vidya P. Verma

DAJoshi

Dr. Archana D. Joshi

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR.VIDYA P.VERMA **DEPARTMENT**: ARTS (ENGLISH) **CLASS:** FYBBI (DIV- A, B) **SUBJECT –** BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** October **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Theory of Communication	**Channels and Objectives of Communication: Channels, Objective of Communication, Methods and Modes of Communication**	11	Manan Prakashan	PPT. Online Lectures on Google Meet
2) Obstacles to Communication in Business World	**Problems in Communication in Business/Barriers to Communication, Listening, Introduction to Business World**	15	Manan Prakashan	PPT. Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 26

Vidya Verma

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Dr. Vidya P. Verma

DAJoshi

SIGNATURE OF THE H.O.D.

Dr. Archana D. Joshi

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Vidya P. Verma DEPARTMENT: _English (Arts) CLASS: TYBA SEMESTER: V MONTH: _____

ACADEMIC YEAR:2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to : After completion of the course, students are expected to be able to: 1) use some important critical terms 2) become aware the nature and function of literature and criticism 3) impart the technique of close reading of literary texts 4) understand the various literary theories and critical approaches 5) be familiar with the tenets of practical criticism

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Literary Criticism	UNIT I: Critical Terms - (i) Simile, (ii) Imagery, (iii) Symbol, (iv) Paradox, (v) Ambiguity, (vi) Myth	15	Abrams, M. H. A Glossary of Literary Terms. (8th Edition) New Delhi: Akash Press, 2007. Abrams, M. H. The Mirror and the Lamp: Romantic Theory and Critical Tradition. Oxford: OUP, 1971	Google Meet, Google classroom, PPT

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			Ashcroft, Bill etal. (ed.) The Post-Colonial Studies Reader. London: Routledge, 1995. Baldick, Chris. The Oxford Dictionary of Literary Terms. Oxford: OUP,2001. Blackstone, Bernard. Practical English Prosody. Mumbai: Orient Longman, 1984. Bodkin, Maud.Archetypal Patterns in Poetry. London: Oxford University Press, 1934. Buell, Lawrence.The Environmental Imagination: Thoreau, Nature Writing, and the Formation of	

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			American Culture. MA: Harvard University Press, 1995.	
	UNIT II: Nature and Function of Literature - i. Literature as Imitation (Plato-Aristotle debate) ii. Literature and Imagination (the Romantic Idea of the Imagination) iii. Literature as an expression of the writer's personality iv. Function of Literature (aesthetic, moral and cognitive functions)	15	Daiches, David. Critical Approaches to Literature.London: Longman, 1984. Drew, Elizabeth. Understanding Poetry. New York: Norton, 1959. Dutton, Richard. Introduction to Literary Criticism.London: Longman, 1984. Eagleton, Terry. Literary Theory.London: Basil Blackwell, 1983. Enid, Hamer. The Metres of English Poetry. Booksway, 2014 Garrard, Greg.	Google Meet, Google classroom, PPT

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			Ecocriticism. New York: Routledge, 2012. Garrard, Greg, ed. The Oxford Handbook of Ecocriticism. New York: OUP, 2014. Guerin, Wilfred et al. A Handbook of Critical Approaches to Literature.Oxford:	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Vidya P. Verma DEPARTMENT: _English (Arts) CLASS: _FYBA SEMESTER: _1 MONTH: _ ACADEMIC YEAR: __2021- 2022

LEARNING OBJECTIVE/S:
The learners will be able to:
1. To enhance English language proficiency of students by familiarizing them with the skills of Listening, Speaking, Reading and Writing (LSRW)
2. To introduce learners to different perspectives of looking at a text or passage
3. To equip learners in the functional aspects of English so that they use the acquired language skills correctly and confidently
4. To guide learners in the effective use of the digital medium of communication.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Communication Skills in English – Paper I **Unit 1: Introduction to Communication Skills**	1. English as an international language and varieties of English 2. Significance and ways of effective communication in English 3. Listening for academic and professional development 4. Formal and informal communication in spoken English 5. Reading for different purposes 6. Features of effective writing skills 7. Study skills in English	08	• Bellare, Nirmala. *Reading & Study Strategies*. Books. 1 and 2. Oxford University Press, 1997, 1998	Google Meet, Google classroom, PPT

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Unit 2: Developing Comprehension Skills in English No. of lectures: 12	*This unit shall work as theoretical base for the following units that are practical in Nature.*		• Bellare, Nirmala. *Easy Steps to Summary Writing and Note-Making*. Amazon Kindle Edition, 2020	
	A. Reading Skills 1. Scanning a text for information 2. Skimming a passage to look for main ideas, understanding text type 3. Guessing meaning of an expression (word/phrase/clause) 4. Building inference skills 5. Understanding language structure (such as subject verb agreement, voice, direct and reported speech) 6. Note making 7. Summarizing *Passages from fables, folk stories, short stories, non-fiction, history, business or environment, of around 250- 300 words, could be chosen in this unit.* **B. Listening Skills** 1. Listening for main ideas/Gist	12	• Comfort, Jeremy, et al. *Speaking Effectively: Developing Speaking Skills for Business English*. Cambridge University Press, 1994.	Google Meet, Google classroom, PPT

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Unit 3: Speaking Skills in English	2. Listening for detail 3. Listening for text organization features 4. Listening for tone, accent, style and register 5. Predicting content and guessing meaning 6. Making inferences from the audio-visual text 7. Listening for opinion/argument/counter-arguments etc. 8. Taking notes *A variety of relevant audio/visual texts as samples may be drawn from various sources.* *Listening skills in English should be developed through various activities along with the practice done while teaching in the class.*			
	A. Public Speaking in English 1. Introduction 2. Characteristics of an effective speech 3. Analysis of model speeches 4. Drafting and presenting a speech in formal and informal gatherings **B. Conversation in English** 1. Opening a conversation 2. Introducing oneself in various contexts 3. Introducing others formally and informally 4. Building a conversation 5. Leaving and closing a conversation 6. Conversation in group in various situations **C. Speaking at an Event**	15	• Das, Bikram K., et. al. *An Introduction to Professional English and Soft Skills*. Cambridge University Press India Pvt. Ltd., 2010 • Das, Yadjnaseni & R. Saha (eds.)	Google Meet, Google classroom, PPT

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Unit 4: Formal Writing Skills	1. Anchoring/compering an event 2. Introducing guests/ speakers/dignitaries 3. Proposing a vote of thanks 8 *A variety of relevant texts as samples may be drawn from print and non-print sources such as* *books, videos, audio files etc. Speaking skills in English should be developed through various* *activities along with the practice done while teaching in the class.*		*English for Careers*. Pearson Education India, 2012. ridge University Press, 2014.	
	A. Letters: 1. Job applications with bio data (solicited and unsolicited) 2. RTI applications 3. Applications for duplicate documents (I-cards / mark sheet, etc.) **B. Emails:** 1. Job acceptance and joining 2. Resignation 3. Complaints 4. Requests for references 5. Request for sponsorship	10	• Devlin,Joseph. *How to Speak And Write Correctly*. New York, The Christian Herald, 1910 • Dimond-Bayir, Stephanie. *Unlock Level 2 Listening and Speaking Skills Student's Book*	Google Meet, Google classroom, PPT

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			and Online Workbook: Listening and Speaking Skills Student's Book+ Online Workbook. Camb	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Vidya P. Verma DEPARTMENT: _English (Arts) CLASS: _FYBA SEMESTER: _1 MONTH: _ ACADEMIC YEAR: __2021- 2022

LEARNING OBJECTIVE/S:
The learners will be able to:

- To develop passion for reading literary works amongst students
- To make learners at ease in the process of appreciation of literature
- To enable learners to understand and analyze selected stories, prose, fiction and non- fiction masterpieces
- To imbibe the underlying philosophy and values reflected in literature
- To develop sensitivity to nature and understand the relationship between human beings and environment

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2:	O' Henry : "The Cop and the Anthem" • Ray Bradbury : "A Sound of Thunder"	15	Hudson, W.H., 2011, *An Outline History of English Literature*, India,	Google Meet, Google classroom, PPT

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	• Rabindranath Tagore : "The Kabuliwala" • Bernard Malamud : "The Jewbird" • Baburao Bagul : "Mother" • Ken Liu : "The Paper Menagerie"		G K Publishers Pvt. Ltd McKeon, Michael. *Theory of the Novel: A Historical Approach*. Baltimore : John Hopkins University Press, 2000. Prasad, B. . *Background of the Study of English Literature*, Chennai, Macmillan, 1999.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE **CLASS:** FY. B.COM (**Div-** M & N)

SUBJECT – BUSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** JANUARY 2022 **ACADEMIC YEAR:** 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Group Communication	Interviews: Group Discussion, Preparing for an Interview,	2	PPT	Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE **CLASS:** FY. B.COM (**Div-** M & N)

SUBJECT – BUSINESS COMMUNICATION **-** II **SEMESTER:** II **MONTH:** FEBRUARY 2022 **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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2) Group Communication	Types of Interviews – Selection, Appraisal, Grievance, Exit	1	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT:** COMMERCE **CLASS:** FY. B.COM **(Div-** M & N**)**

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** MARCH 2022 **ACADEMIC YEAR:** 2021-2022

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Meetings**: Need and Importance of Meetings, Conduct of Meeting and Group Dynamics,	1	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT:** COMMERCE **CLASS:** FY. B.COM **(Div-** M & N**)**

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** APRIL 2022 **ACADEMIC YEAR:** 2021-2022

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions	2	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_AVINASH PAWAR **DEPARTMENT: BAMMC** **CLASS: FYBAMMC- (A & B) ENGLISH**

SEMESTER: II **MONTH: JANUARY** **ACADEMIC YEAR:2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To_introduce key concepts of communications and make the students aware of functional and operational use of language in media.
2) To advance the communication and translation skills acquired in the first semester.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EFFECTIVE COMMUNICATION-II	Report Writing- Basics and Formats, Various types of reports.	08	PPT	Online lectures on Google Meet
	Writing for publicity materials: Headline, Sub-headline, Body Copy, Jingle, Radio Spot.	06	PPT	Online lectures on Google Meet

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH PAWAR **DEPARTMENT: BAMMC** **CLASS: FYBAMMC- (A & B) ENGLISH**

SEMESTER: II **MONTH: FEBRUARY** **ACADEMIC YEAR: 2021-2022**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EFFECTIVE COMMUNICATION-II	Organizational Writing: Email-Writing, Notice and Agenda, Letter Writing- Trade letter, RTI, Complain, Claim, Adjustment, Sales letter, Letter to Editor, Press Release	12	PPT	Online lectures on Google Meet

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	Copy writing – Headings Subheading, Body Copy, Slogans, Graphic Box	06	PPT	Online lectures on Google Meet
	Interpretation of Technical Data	02	PPT	Online lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH PAWAR **DEPARTMENT: BAMMC** **CLASS: FYBAMMC- (A & B) ENGLISH**

SEMESTER: II **MONTH: MARCH** **ACADEMIC YEAR: 2021-2022**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EFFECTIVE COMMUNICATION-II	Editing: Principles of editing, Coherence and Cohesion, Writing Synopsis, Abstract, Precis writing, Newspaper editing and Magazine editing.	06	PPT	Online lectures on Google Meet
	Paraphrasing: Meaning, Paraphrase in plagiarism, Translation.	04	PPT	Online lectures on Google Meet
	Summarization: Summarizing content, the points and sub-points and logical connection between the points.	04	PPT	Online lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY. FMG

SUBJECT – BUSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** JANUARY 2022 **ACADEMIC YEAR:** 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	4 Principles of Effective Presentation Effective use of OHP Effective use of Transparencies	15	PPT	Online Lectures on Google Meet

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	How to make a Power-Point Presentation			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY. FMG

SUBJECT – BUSINESS COMMUNICATION **-** II **SEMESTER:** II **MONTH:** FEBRUARY 2022 **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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2) Group Communication	**Interviews:** Group Discussion, Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit **Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics, Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **Conference:** Meaning and Importance of Conference, Organizing a Conference **Modern Methods:** Video and Tele – Conferencing	12	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY. FMG

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** MARCH 2022 **ACADEMIC YEAR:** 2021-2022

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	03	PPT	Online Lectures through Google Meet
3) Business Correspondence	Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters, Promotional Leaflets and Fliers, Consumer Grievance Letters, Letters under Right to Information (RTI) Act	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY. FMG

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** APRIL 2022 **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4) Language and Writing Skills	**Reports:** Parts, **Types** - Feasibility Reports, Investigative Reports **Summarisation:** Identification of main and supporting/sub points, Presenting these in a cohesive manner	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Avinash Pawar **DEPARTMENT:** English **Subject:** Indian Literature in English

CLASS: SYBA **SEMESTER:** III **MONTH** - July to October. **ACADEMIC YEAR**: 2021-2022

LEARNING OBJECTIVES:
The learners will be able to: After completion of the course, students are expected to be able to:

1. To introduce learners to the uniqueness of Indian Literature in English 2. To acquaint learners to the pluralistic dimensions of Indian Literature in English 3. To help them understand the different genres of Indian Literature in English 4. To familiarize learners with different perspectives of approaching this literature 5. To make learners aware of prominent Indian Writers in English

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Essays (Indian Non-Fiction in English)	i. Meenakshi Mukherjee: "The Anxiety of Indianness" from The Perishable Empire: Essays on Indian Writing in English. ii. Urvashi Butalia: "Memory" from The Other Side of Silence: Voices from the Partition of India	15	1. Agrawal, Anju Bala. 2010. Post-Independence Indian Writing in English (Vols. I and II). Delhi: Authorspress. 2. Agarwal, Beena. 2012. Contemporary Indian English	Google Meet, Google classroom, PPT

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	iii. K. Satchidanandan: "That Third Space: Interrogating the Diasporic Paradigm" from Indian Literature, Vol 45, No.3 (203) (May-June 2001) iv. Jasbir Jain: "Prologue" from beyond postcolonalism: dreams and realities of a nation.		Drama: Canons and Commitments. Jaipur: Aadi Publications	
Unit 2: Novel	i. Anita Desai: Fasting, Feasting. Penguin Random House. OR ii. Saradindu Bandyopadhyay: The Quills of the Porcupine- a novella from The Menagerie and Other Byomkesh Bakshi Mysteries. Translated from the Bengali by Sreejata Guha.	15	Naik, M.K. 1977. Critical Essays on Indian Writing in English. Madras: Macmillan. 34. Naik, M.K. 1979. Aspects of Indian Writing in English. Delhi: Macmillan. 35. Naik, M.K. 1982. History of Indian English Literature. New Delhi: Sahitya Akademi. 36. Naik. M.K. 1984. Dimensions of Indian English Literature. New Delhi: Sterling Publishers Pvt. Ltd.	Google Meet, Google classroom, PPT

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			37. Naik, M.K. 1987. Studies in Indian English Literature. New Delhi: Sterling Publishers Pvt. Ltd.	
Unit 3: Short Stories:	i. Bhisham Sahani : "Pali" (from Translating Partition. Katha, New Delhi, 2001) ii. Vilas Sarang: "A Revolt of the Gods" (from Fair Tree of the Void. Penguin Books (India) Ltd. New Delhi, 1990. iii. Githa Hariharan: "The Remains of the Feast" iv. Shashi Deshpande: "The Awakening" (from Collected Stories, Vol. 1, Penguin Books India Pvt. Ltd. New Delhi, 2003.	15	Rahman, Gulrez Roshan. 2012. Indian Writing in English: New Critical Perspectives. New Delhi: Swarup Book Publishers. Walsh, William. 1990. Indian Literature in English. London: Longman.	Google Meet, Google classroom, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE **CLASS:** FY. B.COM (**Div-** M & N)

SUBJECT – BUSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** JANUARY 2022 **ACADEMIC YEAR:** 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Group Communication	Interviews: Group Discussion, Preparing for an Interview,	2	PPT	Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE **CLASS:** FY. B.COM (**Div-** M & N)

SUBJECT – BUSINESS COMMUNICATION **-** II **SEMESTER:** II **MONTH:** FEBRUARY 2022 **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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2) Group Communication	Types of Interviews – Selection, Appraisal, Grievance, Exit	1	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT:** COMMERCE **CLASS:** FY. B.COM **(Div-** M & N**)**

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** MARCH 2022 **ACADEMIC YEAR:** 2021-2022

SIGNATURE OF THE STAFF

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Meetings**: Need and Importance of Meetings, Conduct of Meeting and Group Dynamics,	1	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT:** COMMERCE **CLASS:** FY. B.COM **(Div-** M & N**)**

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** APRIL 2022 **ACADEMIC YEAR:** 2021-2022

SIGNATURE OF THE STAFF

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions	2	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH PAWAR DEPARTMENT: ARTS CLASS: FY. BA (LITERATURE) SEMESTER: II
MONTH: JANUARY, FEBRUARY, MARCH & APRIL SUB: INTRODUCTION TO PROSE AND FICTION-II
ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S:

The learners will be able to:

1. To create interest and develop passion amongst learners towards English Literature.
2. To familiarize learners with salient characteristics of literary genres like short story, prose, fiction and non-fiction.
3. To introduce learners to various elements ofselected short stories written in English and translated into English.
4. To acquaint learners with different forms of prose and its importance through close reading of selected works.
5. To understand that literature is an expression of human values and universal truths.

PAPER TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTRODUCTION TO PROSE AND FICTION-II	1. R.K. Narayan: The Financial Expert OR 2. Isaac Asimov: Fantastic Voyage	15	Text Book- Nirali Publication PPT Presentation	Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_AVINASH PAWAR **DEPARTMENT: BAMMC** **CLASS: FYBAMMC- (A & B) ENGLISH**

SEMESTER: II **MONTH: JANUARY** **ACADEMIC YEAR:2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To_introduce key concepts of communications and make the students aware of functional and operational use of language in media.
2) To advance the communication and translation skills acquired in the first semester.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EFFECTIVE COMMUNICATION-II	Report Writing- Basics and Formats, Various types of reports.	08	PPT	Online lectures on Google Meet
	Writing for publicity materials: Headline, Sub-headline, Body Copy, Jingle, Radio Spot.	06	PPT	Online lectures on Google Meet

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH PAWAR **DEPARTMENT: BAMMC** **CLASS: FYBAMMC- (A & B) ENGLISH**

SEMESTER: II **MONTH: FEBRUARY** **ACADEMIC YEAR: 2021-2022**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EFFECTIVE COMMUNICATION-II	Organizational Writing: Email-Writing, Notice and Agenda, Letter Writing- Trade letter, RTI, Complain, Claim, Adjustment, Sales letter, Letter to Editor, Press Release	12	PPT	Online lectures on Google Meet

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	Copy writing – Headings Subheading, Body Copy, Slogans, Graphic Box	06	PPT	Online lectures on Google Meet
	Interpretation of Technical Data	02	PPT	Online lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH PAWAR **DEPARTMENT: BAMMC** **CLASS: FYBAMMC- (A & B) ENGLISH**

SEMESTER: II **MONTH: MARCH** **ACADEMIC YEAR: 2021-2022**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EFFECTIVE COMMUNICATION-II	Editing: Principles of editing, Coherence and Cohesion, Writing Synopsis, Abstract, Precis writing, Newspaper editing and Magazine editing.	06	PPT	Online lectures on Google Meet
	Paraphrasing: Meaning, Paraphrase in plagiarism, Translation.	04	PPT	Online lectures on Google Meet
	Summarization: Summarizing content, the points and sub-points and logical connection between the points.	04	PPT	Online lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY. FMG

SUBJECT – BUSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** JANUARY 2022 **ACADEMIC YEAR:** 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	4 Principles of Effective Presentation Effective use of OHP Effective use of Transparencies	15	PPT	Online Lectures on Google Meet

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	How to make a Power-Point Presentation			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY. FMG

SUBJECT – BUSINESS COMMUNICATION **-** II **SEMESTER:** II **MONTH:** FEBRUARY 2022 **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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2) Group Communication	**Interviews:** Group Discussion, Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit **Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics, Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **Conference:** Meaning and Importance of Conference, Organizing a Conference **Modern Methods:** Video and Tele – Conferencing	12	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY. FMG

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** MARCH 2022 **ACADEMIC YEAR:** 2021-2022

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	03	PPT	Online Lectures through Google Meet
3) Business Correspondence	Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters, Promotional Leaflets and Fliers, Consumer Grievance Letters, Letters under Right to Information (RTI) Act	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY. FMG

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** APRIL 2022 **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4) Language and Writing Skills	**Reports:** Parts, **Types** - Feasibility Reports, Investigative Reports **Summarisation:** Identification of main and supporting/sub points, Presenting these in a cohesive manner	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Avinash Pawar **DEPARTMENT:** English **Subject:** Indian Literature in English

CLASS: SYBA **SEMESTER:** IV **MONTH** – November to April **ACADEMIC YEAR**: 2021-2022

LEARNING OBJECTIVES:
The learners will be able to: After completion of the course, students are expected to be able to:

1. To introduce learners to the uniqueness of Indian Literature in English 2. To acquaint learners to the pluralistic dimensions of Indian Literature in English 3. To help them understand the different genres of Indian Literature in English 4. To familiarize learners with different perspectives of approaching this literature 5. To make learners aware of prominent Indian Writers in English

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Essays (Indian Non-Fiction in English)	i. Makarand Paranjape: Introductory essay to Indian Poetry in English. 1993. Madras: Macmillan India Press. ii. Arjun Dangle: "Dalit Literature: Past, Present and Future" from Poisoned Bread. 1992. Hyderabad: Orient Longman Ltd. iii. Vijay Tendulkar: "Characterization and Structure: Two Essentials for a Playwright" from Collected Plays in Translation. 2003. New Delhi: OUP.	15	Paranjape, Makarand. "Indian (English) Criticism: Some Notes." Indian Literature, Vol. 37, No. 2 (160) (March-April, 1994), pp. 70-78. Print.	Google Meet, Google classroom, PPT

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Vidya Verma

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	iv. Rajeswari Sunder Rajan: "English Literary Studies, Women's Studies and 6 Feminism in India". Source: Economic and Political Weekly, Vol 43. No. 43 (Oct. 25-31, 2008).			
Unit 2: Poetry:	i. Jayanta Mahapatra: 'Hunger' and 'Freedom' ii. Keki Daruwalla: 'Map-Maker' and 'A Take-Off on a Passing Remark' iii. Meena Kandasamy: 'Ekalavyan' and 'The Flight of Birds' iv. Dilip Chitre: 'Father Returning Home' and 'Ode to Bombay'	15	King, Bruce. 2001. Modern Indian Poetry in English. Revised Edition. Oxford University Press. Paranjape, Makarand. 1993. Indian Poetry in English. Macmillan India Ltd. Agarwal, Smita,ed. 2014. Marginalized: Indian Poetry in English. New York: Rodopi	Google Meet, Google classroom, PPT
Unit 3: Drama:	i. Manjula Padmanabhan: Harvest. (Aurora Metro Press: 2003) OR	15	Agarwal, Beena. 2012. Contemporary Indian English	Google Meet, Google classroom, PPT

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	ii. Mohan Rakesh: Halfway House (Adhe-Adhure) translated by Bindu Batra, Ed. Basu, Dilip K. (Worldview Publications, New Delhi: 1999)		Drama: Canons and Commitments. Jaipur: Aadi Publications.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

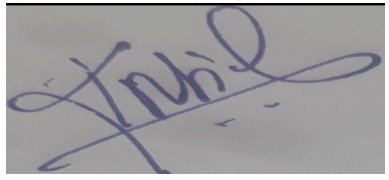
NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBAF (DIV- A, B, C)

SUBJECT – BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** SEPTEMBER **ACADEMIC YEAR:** 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Theory of Communication	**1) Concept of Communication-** Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World	15	Manan Prakashan,	PPT, Online Lectures on Google Meet



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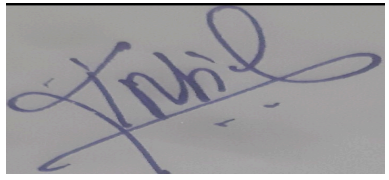
	Impact of technological advancements on communication **2) Channels and Objectives of Communication:** **Channels:** Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine **Objectives of Communication:** Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Morale of Employees **3) Methods and Modes of Communication:** **Methods:** Verbal and Nonverbal, Characteristics of Verbal Communication, Characteristics of Non-verbal Communication, Business Etiquette **Modes:** Telephone and SMS Communication (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication, Video and Satellite Conferencing			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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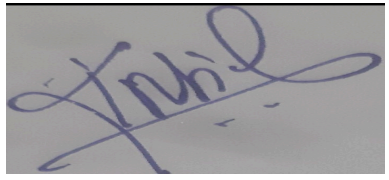
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBAF (DIV- A, B, C)

SUBJECT – BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** OCTOBER **ACADEMIC YEAR:**2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Obstacles to Communication in Business World	**1) Problems in Communication /Barriers to Communication:** Physical, Semantic/Language, Socio-Cultural, Psychological Barriers, Ways to Overcome these Barriers	15	Manan Prakashan,	PPT, Online Lectures on Google Meet PPT, Online Lectures on Google Meet



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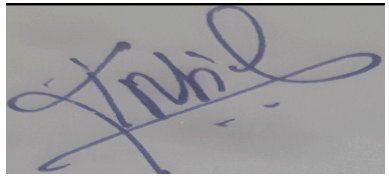
	2**) Listening:** Importance of Listening Skills, Cultivating good Listening Skills – **3) Introduction to Business Ethics:** Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility **Actual business practices:** Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical / E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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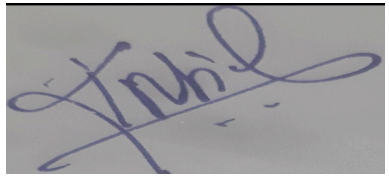
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBAF (DIV- A, B, C)

SUBJECT – BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** NOVEMBER **ACADEMIC YEAR:**2021-2022



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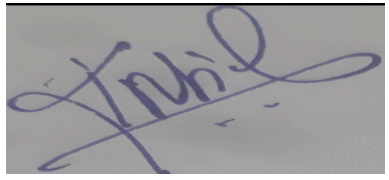
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3) Business Correspondence	**1)Theory of Business Letter Writing:** Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, **Personal Correspondence:** Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation	15	Manan Prakashan,	PPT Online Lectures on Google Meet
4) Language and Writing Skills	**Commercial Terms used in Business Communication** **Paragraph Writing:** Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc	15	Manan Prakashan,	PPT Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

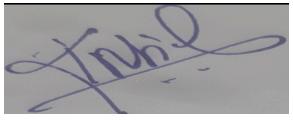
NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBBI (DIV- A, B)

SUBJECT – BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** SEPTEMBER **ACADEMIC YEAR:** 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Theory of Communication	**1) Concept of Communication-** Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World	15	Manan Prakashan,	PPT, Online Lectures on Google Meet



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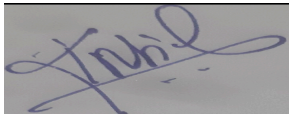
	Impact of technological advancements on communication **2) Channels and Objectives of Communication:** **Channels:** Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine **Objectives of Communication:** Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Morale of Employees **3) Methods and Modes of Communication:** **Methods:** Verbal and Nonverbal, Characteristics of Verbal Communication, Characteristics of Non-verbal Communication, Business Etiquette **Modes:** Telephone and SMS Communication (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication, Video and Satellite Conferencing			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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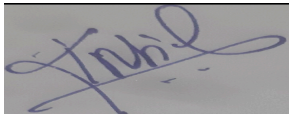
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBBI (DIV- A, B)

SUBJECT – BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** OCTOBER **ACADEMIC YEAR:**2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Obstacles to Communication in Business World	**1) Problems in Communication /Barriers to Communication:** Physical, Semantic/Language, Socio-Cultural, Psychological Barriers, Ways to Overcome these Barriers	15	Manan Prakashan,	PPT, Online Lectures on Google Meet
				PPT, Online Lectures on Google Meet



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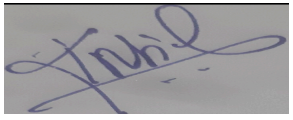
	2**) Listening:** Importance of Listening Skills, Cultivating good Listening Skills – **3) Introduction to Business Ethics:** Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility **Actual business practices:** Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical / E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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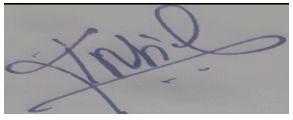
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBBI (DIV- A, B)

SUBJECT – BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** NOVEMBER **ACADEMIC YEAR:**2021-2022



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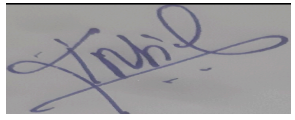
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3) Business Correspondence	**1)Theory of Business Letter Writing:** Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, **Personal Correspondence:** Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation	15	Manan Prakashan,	PPT Online Lectures on Google Meet
4) Language and Writing Skills	**Commercial Terms used in Business Communication** **Paragraph Writing:** Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc	15	Manan Prakashan,	PPT Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBAF (DIV- A, B, C)

SUBJECT – BUSSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** January 2022 **ACADEMIC YEAR:** 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	4 Principles of Effective Presentation Effective use of OHP Effective use of Transparencies How to make a Power-Point Presentation	15	PPT	Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 1

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBAF (DIV- A, B, C)

SUBJCT – BUSSINESS COMMUNICATION **-** II **SEMESTER:** II **MONTH:** February 2022 **ACADEMIC YEAR:**2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Interviews:** Group Discussion, Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit **Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics, Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **Conference:** Meaning and Importance of Conference, Organizing a Conference **Modern Methods:** Video and Tele – Conferencing	12	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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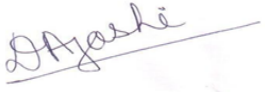

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBAF (DIV- A, B, C)

SUBJECT – BUSSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** March 2022 **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	03	PPT	Online Lectures through Google Meet
3) Business Correspondence	Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters, Promotional Leaflets and Fliers,	15	PPT	Online Lectures through Google Meet

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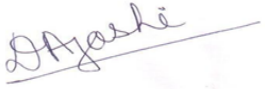

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	Consumer Grievance Letters, Letters under Right to Information (RTI) Act			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBAF (DIV- A, B, C)

SUBJECT – BUSSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** April 2022 **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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		ALLOTED		
4) Language and Writing Skills	**Reports:** Parts, **Types -** Feasibility Reports, Investigative Reports **Summarisation:** Identification of main and supporting/sub points, Presenting these in a cohesive manner	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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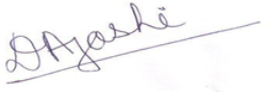

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBBI (DIV- A, B)

SUBJECT – BUSSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** January 2022 **ACADEMIC YEAR:** 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	4 Principles of Effective Presentation Effective use of OHP Effective use of Transparencies How to make a Power-Point Presentation	15	PPT	Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBBI (DIV- A, B)

SUBJECT – BUSSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** February 2022 **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Interviews:** Group Discussion, Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit **Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics, Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **Conference:** Meaning and Importance of Conference, Organizing a Conference **Modern Methods:** Video and Tele – Conferencing	12	PPT	Online Lectures through Google Meet

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBBI (DIV- A, B)

SUBJECT – BUSSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** March 2022 **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	03	PPT	Online Lectures through Google Meet
3) Business Correspondence	Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters,	15		Online Lectures through Google Meet

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	Promotional Leaflets and Fliers, Consumer Grievance Letters, Letters under Right to Information (RTI) Act		PPT	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBBI (DIV- A, B)

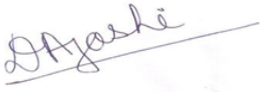
SUBJECT – BUSSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** April 2022 **ACADEMIC YEAR:** 2021-2022

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4) Language and Writing Skills	**Reports:** Parts, **Types -** Feasibility Reports, Investigative Reports **Summarisation:** Identification of main and supporting/sub points, Presenting these in a cohesive manner	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. Archana Devendra Joshi** DEPARTMENT: **ENGLISH** CLASS: **T Y BA** SEMESTER: V MONTH: **JUNE TO OCTOBER**

ACADEMIC YEAR: **2020-21.**

LEARNING OBJECTIVE/S:

The learners will be able to : **UNDERSTAND THE CONCEPT OF INTRODUCTION TO ENGLISH LITERATURE,SHORT STORIES, ESSAYS AND NOVELS. THE LEARNING OBJECTIVES ARE USED IN DIFFERENT WAY TO ACHIEVE LEARNING PROGRESSIONS IN ACADEMIC AND MULTIPLE DEVELOPMENT OF UNDERSTANDING KNOWLEDGE IN JOB**.

PERFORMANCE **IS ALL ROUND IN OBJECTIVE ENGLISH LITERATURE,SHORT STORIES, ESSAYS AND NOVELS SOFT SKILLS, VISUAL SIGNS, SPEED IN THE TURN AROUND TIME,**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	ELIZABETHAN AGE , JACOBEAN PERIOD	10		Google Classroom & Google Meet

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Vidya Verma

SIGNATURE OF THE H.O.D.

	UNIT 2 WILLIAM SHAKESPEARE HAMLET	10		
	PHILIP SIDNEY, EDMUND SPENSER, WILLIAM SHAKESPEARE	08	NIRALI PUBLICATION	
	JOHN DONNE,	03		
	GEORGE HERBERT, ANDREW MARVELL	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 37

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Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. Archana Devendra Joshi** DEPARTMENT: **ENGLISH** CLASS: **T Y BA** SEMESTER: I MONTH: **JUNE TO OCTOBER**

ACADEMIC YEAR: **2020-21.**

LEARNING OBJECTIVE/S:
The learners will be able to : **UNDERSTAND THE CONCEPT OF INTRODUCTION TO ENGLISH LITERATURE,SHORT STORIES, ESSAYS AND NOVELS. THE LEARNING OBJECTIVES ARE USED IN DIFFERENT WAY TO ACHIEVE LEARNING PROGRESSIONS IN ACADEMIC AND MULTIPLE DEVELOPMENT OF UNDERSTANDING KNOWLEDGE IN JOB**.

PERFORMANCE **IS ALL ROUND IN OBJECTIVE ENGLISH LITERATURE,SHORT STORIES, ESSAYS AND NOVELS SOFT SKILLS, VISUAL SIGNS, SPEED IN THE TURN AROUND TIME,**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	BACK GROUND AND IMPORTANT CONCEPTS OF RESTORATION PERIOD	06		CHALK DUSTER
	NEO-CLASSICAL PERIOD	06		
	UNIT 2JOHN DRYDEN ALL FOR LOVE	10	NIRALI PUBLICATION	

DAJoshi

SIGNATURE OF THE STAFF

Vidya Verma

SIGNATURE OF THE H.O.D.

	UNIT 3 JOHN MILTON PARADISE LOST, ALEXANDER POPE THE RAPE OF LOCK,	10		
	JOHN DRYDEN THE FIRE OF LONDON	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. Archana Devendra Joshi** DEPARTMENT: **ENGLISH** CLASS: **S Y BA** SEMESTER: I MONTH: **JUNE TO OCTOBER**

ACADEMIC YEAR: **2020-21.**

LEARNING OBJECTIVE/S:
The learners will be able to : **UNDERSTAND THE CONCEPT OF INTRODUCTION TO ENGLISH LITERATURE,SHORT STORIES, ESSAYS AND NOVELS. THE LEARNING OBJECTIVES ARE USED IN DIFFERENT WAY TO ACHIEVE LEARNING PROGRESSIONS IN ACADEMIC AND MULTIPLE DEVELOPMENT OF UNDERSTANDING KNOWLEDGE IN JOB**.

PERFORMANCE **IS ALL ROUND IN OBJECTIVE ENGLISH LITERATURE,SHORT STORIES, ESSAYS AND NOVELS SOFT SKILLS, VISUAL SIGNS, SPEED IN THE TURN AROUND TIME,**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	NATURALISM IN 20TH CENTURY AMERICAN FICTION, LOST GENERATION WRITERS, AFRICAN AMERICAN FICTION	06		Google Meet
	JEWISH AMERICAN FICTION, LITERATURE OF CHINESE AMERICAN DIASPORA, LITERATURE OF INDIAN AMERICAN DIASPORA	06		

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	UNIT 2 earnest hemingway old man and the sea	10	NIRALI PUBLICATION	
	Unit 3 john Steinbeck the chrysanthemums, alice walker everyday use, amy tan two kind Bernard Malamud the german refugee	10		
	Jhumpa lahiri unaccustomed earth	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. Archana Devendra Joshi** DEPARTMENT: **ENGLISH** CLASS: **S Y BA** SEMESTER: II MONTH: **NOVEMBER TO MARCH** ACADEMIC YEAR: **2020-21.**

LEARNING OBJECTIVE/S:
The learners will be able to : UNDERSTAND THE CONCEPT OF INTRODUCTION TO ENGLISH LITERATURE,SHORT STORIES, ESSAYS AND NOVELS. THE LEARNING OBJECTIVES ARE USED IN DIFFERENT WAY TO ACHIEVE LEARNING PROGRESSIONS IN ACADEMIC AND MULTIPLE DEVELOPMENT OF UNDERSTANDING KNOWLEDGE IN JOB.

PERFORMANCE IS ALL ROUND IN OBJECTIVE ENGLISH LITERATURE,SHORT STORIES, ESSAYS AND NOVELS SOFT SKILLS, VISUAL SIGNS, SPEED IN THE TURN AROUND TIME.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	American Dream , Confessional Poetry, Expressionism in AMERICAN Dream, African American poetry of 20th century	12		GOOGLE MEET
	Unit 2 play ARTHUR Mller Death of a salesman	10		PPT
	UNIT 3 langston Huges, MOTHER TO Sun , Democracy, Dream Dreferred	12	NIRALI PUBLICATION	PDF
	SYLVIA PLATH MIRROR< I AM VERTICAL< TULIPS	13		WORD DOC.

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	JANE AUSTEN:"PRIDE AND PREJUDICE" [UNIT-3]	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 47

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. Archana Devendra Joshi** DEPARTMENT: **ENGLISH** CLASS: **T Y BA** SEMESTER: I MONTH: **JUNE TO OCTOBER** ACADEMIC YEAR: **2019-20.**

LEARNING OBJECTIVE/S:

The learners will be able to : **UNDERSTAND THE CONCEPT OF INTRODUCTION TO ENGLISH LITERATURE,SHORT STORIES, ESSAYS AND NOVELS. THE LEARNING OBJECTIVES ARE USED IN DIFFERENT WAY TO ACHIEVE LEARNING PROGRESSIONS IN ACADEMIC AND MULTIPLE DEVELOPMENT OF UNDERSTANDING KNOWLEDGE IN JOB**.

PERFORMANCE **IS ALL ROUND IN OBJECTIVE ENGLISH LITERATURE,SHORT STORIES, ESSAYS AND NOVELS SOFT SKILLS, VISUAL SIGNS, SPEED IN THE TURN AROUND TIME,**

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	ELIZABETHAN AGE , JACOBEAN PERIOD	10		CHALK DUSTER
	UNIT 2 WILLIAM SHAKESPEARE HAMLET	10		
	PHILIP SIDNEY, EDMUND SPENSER, WILLIAM SHAKESPEARE	08	NIRALI PUBLICATION	
	JOHN DONNE,	03		
	GEORGE HERBERT, ANDREW MARVELL	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 37

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. Archana Devendra Joshi** DEPARTMENT: **ENGLISH** CLASS: **T Y BA** SEMESTER: I MONTH: **JUNE TO OCTOBER** ACADEMIC YEAR: **2019-20.**

LEARNING OBJECTIVE/S:

The learners will be able to : **UNDERSTAND THE CONCEPT OF INTRODUCTION TO ENGLISH LITERATURE,SHORT STORIES, ESSAYS AND NOVELS. THE LEARNING OBJECTIVES ARE USED IN DIFFERENT WAY TO ACHIEVE LEARNING PROGRESSIONS IN ACADEMIC AND MULTIPLE DEVELOPMENT OF UNDERSTANDING KNOWLEDGE IN JOB**.

PERFORMANCE **IS ALL ROUND IN OBJECTIVE ENGLISH LITERATURE,SHORT STORIES, ESSAYS AND NOVELS SOFT SKILLS, VISUAL SIGNS, SPEED IN THE TURN AROUND TIME,**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	BACK GROUND AND IMPORTANT CONCEPTS OF RESTORATION PERIOD	06		CHALK DUSTER
	NEO-CLASSICAL PERIOD	06		
	UNIT 2JOHN DRYDEN ALL FOR LOVE	10	NIRALI PUBLICATION	
	UNIT 3 JOHN MILTON PARADISE LOST, ALEXANDER POPE THE RAPE OF LOCK,	10		
	JOHN DRYDEN THE FIRE OF LONDON	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36

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Vidya Verma

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Vidya P. Verma DEPARTMENT: _English (Arts) CLASS: _SYBA SEMESTER: IV MONTH: _____

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : By the end of the course the students should be able to receive and analyse various media products critically and become interested in jobs or career in Media Industry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mass Communication	Unit 1: Special Roles of Mass Media in India a. Print media as an interpreter and a watchdog b. Radio as a patron of music c. Television and surveillance d. Television and its impact on the Indian family institution	20		Chalk and Talk

	e. Television and Consumerism f. Films voicing social problems g. Social networking sites and mass campaigns			
	Unit 2: Indian Mass Media and National Development a. Role of media in exposing anti-development elements b. Role of media in strengthening democracy c. Role of media in education d. Role of media in promoting government schemes	15		Chalk and Talk
	Unit 3: Media Related Issues and Laws in India a. Freedom of expression and Censorship b. The relationship between the media and the government c. Media objectivity, including media bias and political leanings d. Objectionable advertising e. Major laws in India related to media	15		Chalk and Talk

	Unit 4: Roles / Functions of Media Personnel and Career Opportunities in Mass Media	10		Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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Vidya Verma

Vidya Verma

Vidya Verma

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Vidya P. Verma DEPARTMENT: _English (Arts) CLASS: _FYBA SEMESTER: _1 MONTH: _

ACADEMIC YEAR: __2019- 2020

LEARNING OBJECTIVE/S:
The learners will be able to : 1) To enhance language proficiency by providing adequate exposure to reading and writing skills.

2) To orient the learners towards the functional aspects of language.

3) To increase the range of lexical resource through a variety of exercises.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Communication Skills in English – Paper I	Unit 1: Basic Language Skills: Grammar , Articles, prepositions, conjunctions b. Transformation of Sentences (Simple, Compound, Complex) c. Tenses d. Subject-Verb agreement e. Question Tags f. Direct and Indirect Speech g. Voice	09	Bellare, Nirmala. Reading Strategies. Vols. 1 and 2. New Delhi. Oxford University Press, 1998.	Chalk and Talk

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			2. Bhasker, W. W. S & Prabhu, N. S.: English through Reading, Vols. 1 and 2. Macmillan, 1975. 3. Blass, Laurie, Kathy Block and Hannah Friesan. Creating Meaning. Oxford: OUP, 2007	
	Unit 2: Reading Skills: Comprehension (unseen passage) , The following skills to be acquired: • Reading with fluency and speed • Skimming and scanning • Identifying relevant information • Isolating fact from opinion • Understanding concepts and arguments • Identifying distinctive features of language (Passage should be of 250-350 words of Level I. The passage may be taken from literary/scientific/technical writing as well as from the fields of journalism, management and commerce.)	09	1-Brown, Ralph: Making Business Writing Happen: A Simple and Effective Guide to Writing Well. Sydney: Allen and Unwin, 2004. 2. Buscemi, Santi and Charlotte Smith, 75	Chalk and Talk

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			Readings Plus. Second Edition New York: McGraw-Hill, 1994.	
	Unit 3: Writing Skills (Formal Correspondence): Letters ,Job Application Letter (without Resume) b. Statement of Purpose c. Request for Recommendation Letter d. Request for information under Right to Information Act (RTI)	09	1. Doff, Adrian and Christopher Jones .Language in Use (Intermediate and Upper Intermediate). Cambridge: CUP, 2004. 2. Doughty, P. P., Thornton, J. G, Language in Use. London: Edward Arrold, 1973. 3. Freeman, Sarah: Written Communication.	Chalk and Talk

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			New Delhi: Orient Longman, 1977	
	Unit 4: Interpretation of Technical Data , Students should be taught to read and interpret maps, pie charts, tables, line and bar graphs and flow charts and express the same in paragraph format.	09	1. Glendinning, Eric H. and Beverley Holmstrom. Second edition. Study Reading: A Course in Reading Skills for Academic Purposes. Cambridge: CUP, 2004 2. Grellet, F. Developing Reading Skills, Cambridge: Cambridge University Press, 1981. 3. Hamp-Lyons, Liz and Ben	Chalk and Talk

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			Heasiey. Second edition. Study Writing: A Course in Writing Skills for Academic Purposes. Cambridge: CUP, 2006 12. Jakeman, Vanessa and Clare McDowell. Cambridge Practice Test for IELTS 1. Cambridge:	
	Unit 5: Writing Skills: Essay 09 lectures a. Expository b. Persuasive c. Analytical d. Reflective/Descriptive	09	1. Maley, Alan and Alan Duff. Second Edition. Drama Techniques in Language Learning.	Chalk and Talk

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			Cambridge: CUP, 1983. 2. Mohan Krishna & Banerji, Meera: Developing Communication Skills. New Delhi: Macmillan India, 1990. 3. Mohan Krishna & Singh, N. P. Speaking English Effectively.New Delhi: Macmillan India, 1995. 4. Narayanaswami, V. R. Organised Writing, Book 2. New Delhi: Orient Longman	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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Vidya Verma

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce
CLASS : FYEME SEM : I MONTH : August YEAR : 2019-20
LEARNING OBJECTIVE/S : Learner will be able to learn various aspects of communication.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
BUSINESS COMMUNICATION UNIT II EFFECTIVE COMMUNICATION	Concept and practice of effective communication	02	Effective communication, Rai Urmila, Himalaya publication	Chalk and board
	Barriers to effective communication	02	Effective communication, Rai Urmila, Himalaya publication	Chalk and board
	Methods to improve communication skills	02	Effective communication, Rai Urmila, Himalaya publication	Chalk and board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 06

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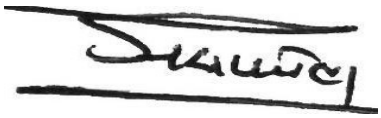
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce
CLASS : FYEME SEM : I MONTH : September YEAR : 2019-20
LEARNING OBJECTIVE/S : Learner will be able to learn oral communication skills.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
FYEME **UNIT IV** **Oral communication skills**	Understanding audience	03	How to listen better?, Pramila Ahuja & G. Ahuja	Chalk and board
	Use of language	03	Effective communication, Rai Urmila, Himalaya publication	Chalk and board
	Use of tone	03	Effective communication, Rai Urmila, Himalaya publication	Chalk and board
	Understanding body language	04	Effective communication, Rai Urmila, Himalaya publication	Chalk and board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 13



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TEACHING PLAN (UNIT PLAN)

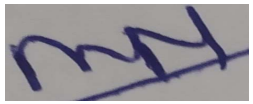
NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: F.Y.B.COM (EME) SEMESTER: I MONTH: JUNE. 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to : IT ENABLES THE LEARNERS IN UNDERSTANDING AND DEVELOPING THE KNOWLEDGE OF FINANCAL ACCOUNTING AND ITS APPLICATION IN BUSINESS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I A & B	A) MEANING & SCOPE OF ACCOUNTING	06	ELEMENTS OF ACCOUNTS- T.S. GREWAL	CHALK-BOARD METHOD
	B) ACCOUNTING TRANSACTIONS			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06



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TEACHING PLAN (UNIT PLAN)

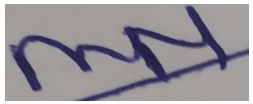
NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: F.Y.B.COM SEMESTER: I MONTH: JULY 19 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to : IT ENABLES THE LEARNERS IN UNDERSTANDING AND DEVELOPING THE KNOWLEDGE OF FINANCAL ACCOUNTING AND ITS APPLICATION IN BUSINESS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I -C- ACCOUNTING STANDARDS	AS-1 DISCLOSURE OF ACCOUNTING POLICIES	12	ELEMENTS OF ACCOUNTS- T.S. GREWAL	CHALK-BOARD METHOD
	AS-6 DEPRECIATION ACCOUNTING		ACCOUNTING STANDARDS	
	AS-9 REVENUE RECOGNITION			
	AS-10 ACCOUNTING FOR FIXED ASSEST			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

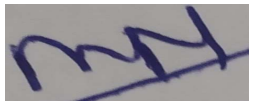
NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: F.Y.B.COM (EME) SEMESTER: I MONTH: AUGUST.2019 ACADEMIC YEAR: 2010-2020

LEARNING OBJECTIVE/S:

The learners will be able to : IT ENABLES THE LEARNERS IN UNDERSTANDING AND DEVELOPING THE KNOWLEDGE OF FINANCAL ACCOUNTING AND ITS APPLICATION IN BUSINESS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II	A. EXPENDITURE : CLASSIFICATION OF EXPENDITURE , CAPITAL REVENUE AND DEFERRED REVENUE EXPENDITURE, DISTINCTION BETWEEN CAPITAL EXPENDITURE AND REVENUE EXPENSES.	08	ELEMENTS OF ACCOUNTS- T.S. GREWAL	CHALK-BOARD METHOD
	B. RECEIPTS: CAPITAL RECEIPT, REVENUE RECEIPT, DISTINCTION BETWEEN CAPITAL & REVENUE RECEIPT.			
	C. PROFIT OR LOSS : REVENUE PROFIT OR LOSS , CAPITAL PROFIT OR LOSS			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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TEACHING PLAN (UNIT PLAN)

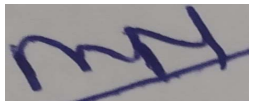
NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: F.Y.B.COM (EME) SEMESTER: I MONTH: SEPT.2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to : IT ENABLES THE LEARNERS IN UNDERSTANDING AND DEVELOPING THE KNOWLEDGE OF FINANCAL ACCOUNTING AND ITS APPLICATION IN BUSINESS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ACCOUNTING IN COMPUTERISED ENVIRONMENT	AN OVERVIEW OF COMPUTERISED ENVIRONMENT, FEATURES OF COMPUTERISED ACCOUNTING SYSTEM	10	ELEMENTS OF ACCOUNTS- T.S. GREWAL	CHALK-BOARD METHOD
	CONCEPT OF GROUPING OF ACCOUNTS, CODIFICATION OF ACCOUNTS,			
	MAINTAINING THE HIERARCHY AND LEDGERS			
	ACCOUNTING PACKAGES AND CONSIDERATION OF THEM IN SELECTION.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Muriel Rumao DEPARTMENT: _Commerce
CLASS: FYEME SEMESTER: I MONTH: ____August- September ACADEMIC YEAR: _2019-20_
LEARNING OBJECTIVE/S: The learners will be able to : __Know the basic concepts of communication
Know how to use communication in an effective way Learn
corporate correspondence.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
Unit 1	Concept of communication	3	Manan Prakashan	Chalk and board
Unit 3	Business correspondence	8	Manan Prakashan	Blackboard and tutorials

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Neeta D. Rath DEPARTMENT: Commerce CLASS: F.Y.E.M.E SEMESTER: I MONTH: July to October

ACADEMIC YEAR: 2019 - 2020 Subject: Introduction to Environmental Management

LEARNING OBJECTIVES: The learners will be able to understand current environmental problems in the society. The learners will be able to understand about the concepts of Environmental audit, EIA and Environmental Legislation in India.

UNIT 2	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environmental Degradation	1. Meaning, causes : Degradation of urban land, Forest and Agricultural land due to natural causes and human interference : Global Warming	4	1.Environmental science: R. Shantnu 2. Perspectives in environmental studies: A. Kaushik	Teaching Method: 1. lecture method 2.discussion method
	2. Problems of non-degradable Waste. Electronic Devices, Plastic and Man-made fibres	1		
	3. Environmental Impact Assessments (EIA). Environmental Auditing, Environmental Legislation in India, Carbon Bank.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 09

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NAME OF THE STAFF: Dr. Neeta D. Rath DEPARTMENT: Commerce CLASS: F.Y.E.M.E SEMESTER: I MONTH: July to October

ACADEMIC YEAR: 2019 - 2020 Subject: Introduction to Environmental Management

LEARNING OBJECTIVES: The learners will be able to understand current environmental problems in the society

UNIT 3 Environmental Management	1. Disaster Management meaning need and planning with reference to Flood, Storms, Tsunami, Cyclones and Earthquakes in India.	4	Perspectives in environmental studies: A. Kaushik	Teaching Method: 1. lecture method 2.discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

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TEACHING PLAN (UNIT PLAN)

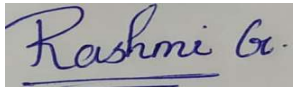
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Organizational Behavior DEPARTMENT: Commerce

CLASS:FYBCOM (EME) SEMESTER:I MONTH: July ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & III	Fundamentals of Organisational Behaviour –Concept, Feature	3	Human Behaviour at Work By Newstorm,J.W.	Chalk & Board
	Individual differences in people-Physical , Behavioural Role of Hereditary in environment	3		
	Prenatal and post natal environment	3		
	Dimensions and interactions in society, Different types of groups	3		
	Team Building , Features of Strong team	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Organizational Behavior DEPARTMENT: Commerce
CLASS:FYBCOM (EME) SEMESTER:I MONTH: September ACADEMIC YEAR: 2019-20
LEARNING OBJECTIVE/S: The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III & IV	Conflict resolution Strategies	3	Human Behaviour at Work By Newstorm,J.W.	Chalk & Board
	Group Decision making , Individual decision Making	3		
	Organizational Culture ,Organizational Developments and Techniques of OD	3		
	Resistance to change ,Overcoming Resistance	3		
	Stress Management, Counselling, Time management	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

Rashmi G.

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TEACHINGPLAN(UNITPLAN)

NAME OF THE STAFF: SNEHAL S. JADHAV DEPARTMENT: COMMERCE CLASS: F.Y.EME SEMESTER:1st MONTH:July-OCTOBER ACADEMICYEAR:2019-2020.

LEARNING OBJECTIVE/S:

The learners will be able equipped which will build knowledge, skills & motivation to address complex environmental challenges.The learner will understand different aspects in environment with issues and their management techniques

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLS USED
Paper1 Introduction to Environment Management	UNITII ENVIRONMENTAL DEGRADATION:1)Meaning,Causes:Degradation of Urbanland, forest & Agriculturall and due to natural causes& human interference.2)Global Warming, Problems of non-biodegradable Wastes. Electronic Devices,Plastic & Manmade fibres. 3)Environmental Assessment EIA, Environmental Auditing, Environmental Legislation in India,Carbon Bank.	10	Environmental Management byH.V.Jadhav	BlackBoardMethod
	ENVIRONMENTALMANAGEMENT:1)Disaster Management, needs & planning with reference to floods,storms,tsunami,cyclones & earthquakes in India.	05	Environmental Management by H.V.Jadhav. Environmental Management by N.K.Uberoi	Black Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___15

Jadha

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNITHA CHANDRASHEKHAR NAIR DEPARTMENT: COM MERCE
CLASS F.Y.E.M.E. SEMESTER: I MONTH: JUNE -OCTOBER ACADEMIC YEAR: 2019 -20
LEARNING OBJECTIVE/S: To make the students learn managerial economics and its application to business . The learners will be able to :to understand the decision making process of business .

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Managerial Economics –I **Unit I, II, III & IV.**	**Module I – Introduction**			
	1.Meaning and scope of managerial economics. 2. Relationship to economic theory 3. Relationship to decision theory. 4. Role of managerial economics 5. Objectives and Constraints of the firm 6. Introduction to Risk, Asymmetric information and Game theory.	10	**Managerial economics (Dean Joel)**	1.Chalk and Black Board Method 2 Quiz method 3.Discussion method
	Module II- Demand Analysis **1.**Meaning of demand , market demantd function, demand curve and factors affecting demand curve.2. Variation and increase/decrease in demand. 3. Elasticity of demand 4. Estimation of Demand –numerical problems for measurement of elasticity.	15	**Managerial economics (Dean Joel)**	1.Chalk and Black Board Method 2 Quiz method 3.Discussion method

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	Module III – Production and Costs 1.Meaning and types of production function , importance of production function in managerial decision making and applications of production function in productive sectors.2. Economies of scale and scope	10	**Managerial economics (H. L. Ahuja)**	1.Chalk and Black Board Method 2 Quiz method 3.Discussion method
	Module IV- Market Structure A.Perfect competition and Monopoly B. Oligopoly and Monopolistic Competition.	15	**Managerial economics (H. L. Ahuja)**	1.Chalk and Black Board Method 2 Quiz method 3.Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 50 .

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Vasanthi Shenoy DEPARTMENT: Environmental Management & Economics CLASS: FY EME SEMESTER:I MONTH: July to October ACADEMIC YEAR:_2019 -2020 SUBJECT :Organizational Behavior
LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Organizational behaviour	Fundamentals of ob ,individual difference in people ,role of hereditary in Environment ,pre natal and post natal env	4	Manan prakashan	Blackboard Method
	Learning , intelligence .group test , motivational cycles	4		
	Leadership style , performance appraisal ,empowerment	3		
	Different types of group , conflict resolution strategies	3		
	Organizational culture ,resistance to change , stress ,time management	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____17__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Vidya P. Verma DEPARTMENT: _English (Arts) CLASS: TYBA SEMESTER: V MONTH: ACADEMIC YEAR:2019-2020LEARNING OBJECTIVE/S:

The learners will be able to : After completion of the course, students are expected to be able to: 1) use some important critical terms 2) become aware the nature and function of literature and criticism 3) impart the technique of close reading of literary texts 4) understand the various literary theories and critical approaches 5) be familiar with the tenets of practical criticism

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

Vidya Verma

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. A. P. Pandey **DEPARTMENT:** Paper VI – Grammar and the Art of Writing – I (Arts)

CLASS: TYBA **SEMESTER:** V **MONTH** – June to Nov **ACADEMIC YEAR**: 2018-2019

LEARNING OBJECTIVES:

1. To develop amongst learners an insight into the process of word formation and transformation
2. To develop amongst them an insight into the sounds, stress patterns and intonations in the English language to improve their speaking skills
3. To develop among them an insight into the structure of the English language and to provide knowledge of the rules of grammar
4. To help them learn grammatical analysis and description and the skills of sentence transformation
5. To introduce the mechanics of writing for effective writing for various domains

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I: Phonetics and Morphology	**A. Phonetics** · Phoneme and its distinctive features	15	Leech, Geoffrey, Deuchar, Margaret and Hoogenraad, Robert, English Grammar for Today: A New Introduction. London: Macmillan, 1973 Rajimwale, Sharad. Elements of General Linguistics, Vol. I, New Delhi: Rama Brothers	Chalk and Talk

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	· English Vowels and Consonants (Difference between BRP and Indian English) · Diphthongs · Consonant Clusters · Transcription using phonetic script **B. Morphology** · Morph, Allomorph and Vowel Mutation · Free and Bound Morphemes · Root and stem · Inflection and Derivation · Morphological Analysis		A Course in English Phonetics for English EFL Students available in pdf format at file:///C:/ADMIN/Desktop/A_Course_in_English_Phonetics%20(1).pdf	
Unit 2: Grammar: Words and Phrases	· **Open word classes:** nouns, adjectives, verbs, adverbs · **Closed word classes**: pronouns, determiners, operator verbs, prepositions, conjunctions, enumerators, interjections · Noun Phrase, Genitive Phrase, Prepositional Phrase, Adjective Phrase and Adverb Phrase	15	Quirk, R. and Greenbaum. S. A University Grammar of English, Longman, 1973 Singh Sukhdev and Singh Balbir. Grammar of the Modern English Language: A Resource Book. New Delhi: Cambridge University Press India Pvt. Ltd., 2012	Chalk and Talk

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	· Verb Phrase			
Unit 3: Art of Writing	**Discourse Analysis** · Tenor · Mode · Domain Domain and language change – journalism, advertising and literature, scientific and technical writing **II. Mechanics of Writing** · Understanding paragraph divisions and topic sentences of paragraphs **III. Writing for Print Media** · Print – News Report	15	Varshney, Dr. R.L. An Introductory Text Book of Linguistics and Phonetics, New Delhi: Prakash Book Depot Huddleson, Rodney and Pullum, Geoffrey. A Student's Introduction to English Grammar. New Delhi: Cambridge University Press, 2005	Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

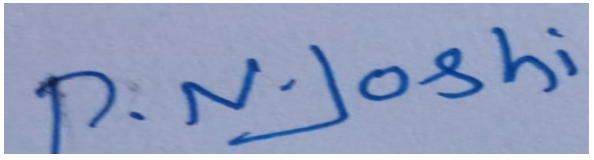
NAME OF THE STAFF: _Padmaja. N. Joshi **DEPARTMENT:** _English (Arts) **CLASS:** TYBA **SEMESTER:** VI

MONTH - Nov. To April **ACADEMIC YEAR**:2018-2019

LEARNING OBJECTIVES:

The learners will be able to : After completion of the course, students are expected to be able to: 1) use some important critical terms 2) become aware the nature and function of literature and criticism 3) impart the technique of close reading of literary texts 4) understand the various literary theories and critical approaches 5) be familiar with the tenets of practical criticism

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Literary Criticism	Unit III CRITICAL APPROACHES I. Marxist Criticism 2.Feminist Criticism 3.Postcolonial Criticism 4.Eco Criticism	15	Abrams, M. H. A Glossary of Literary Terms. (8th Edition) New Delhi: Akash Press, 2007. Abrams, M. H. The Mirror and	Chalk and Talk



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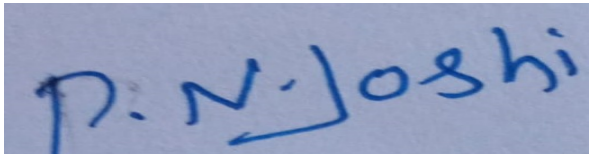
	UNIT IV PRACTICALLY CRITICISM: Critical Appreciation of an unseen poem		the Lamp: Romantic Theory and Critical Tradition. Oxford: OUP, 1971 Ashcroft, Bill etal. (ed.) The Post-Colonial Studies Reader. London: Routledge, 1995. Baldick, Chris. The Oxford Dictionary of Literary Terms. Oxford: OUP,2001. Blackstone, Bernard. Practical English Prosody. Mumbai: Orient Longman, 1984. Bodkin, Maud.Archetypal Patterns in Poetry.	



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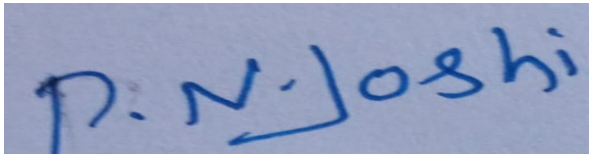
			London: Oxford University Press, 1934. Buell, Lawrence.The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture. MA: Harvard University Press, 1995.	
	U	15	Daiches, David. Critical Approaches to Literature.London: Longman, 1984. Drew, Elizabeth. Understanding Poetry. New York: Norton, 1959. Dutton, Richard.	Chalk and Talk



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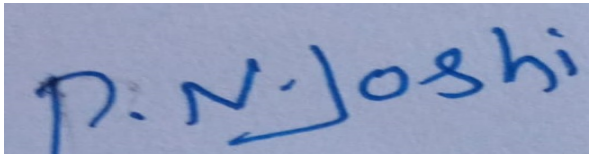
			Introduction to Literary Criticism.London: Longman, 1984. Eagleton, Terry. Literary Theory.London: Basil Blackwell, 1983. Enid, Hamer. The Metres of English Poetry. Booksway, 2014 Garrard, Greg. Ecocriticism. New York: Routledge, 2012. Garrard, Greg, ed. The Oxford Handbook of Ecocriticism. New York: OUP, 2014. Guerin, Wilfred et al. A Handbook of	



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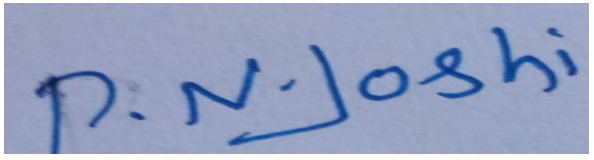
			Critical Approaches to Literature.Oxford:	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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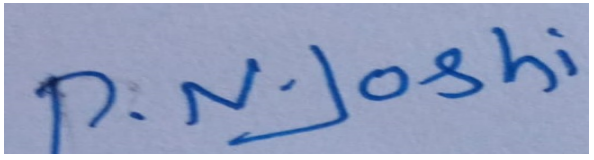

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Vidya P. Verma DEPARTMENT: _English (Arts) CLASS: _FYBA SEMESTER: _1 MONTH: _ ACADEMIC YEAR: __2018- 2019

LEARNING OBJECTIVE/S:
The learners will be able to : 1) To enhance language proficiency by providing adequate exposure to reading and writing skills.

2) To orient the learners towards the functional aspects of language.

3) To increase the range of lexical resource through a variety of exercises.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Communication Skills in English – Paper I	Unit 1: Basic Language Skills: Grammar , Articles, prepositions, conjunctions b. Transformation of Sentences (Simple, Compound, Complex) c. Tenses d. Subject-Verb agreement e. Question Tags f. Direct and Indirect Speech g. Voice	09	Bellare, Nirmala. Reading Strategies. Vols. 1 and 2. New Delhi. Oxford University Press, 1998. 2. Bhasker, W. W. S & Prabhu, N. S.:	Chalk and Talk

Vidya Verma

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			English through Reading, Vols. 1 and 2. Macmillan, 1975. 3. Blass, Laurie, Kathy Block and Hannah Friesan. Creating Meaning. Oxford: OUP, 2007	
	Unit 2: Reading Skills: Comprehension (unseen passage) , The following skills to be acquired: • Reading with fluency and speed • Skimming and scanning • Identifying relevant information • Isolating fact from opinion • Understanding concepts and arguments • Identifying distinctive features of language (Passage should be of 250-350 words of Level I. The passage may be taken from literary/scientific/technical writing as well as from the fields of journalism, management and commerce.)	09	1-Brown, Ralph: Making Business Writing Happen: A Simple and Effective Guide to Writing Well. Sydney: Allen and Unwin, 2004. 2. Buscemi, Santi and Charlotte Smith, 75 Readings Plus. Second Edition New York: McGraw-Hill, 1994.	Chalk and Talk

Vidya Verma

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	Unit 3: Writing Skills (Formal Correspondence): Letters ,Job Application Letter (without Resume) b. Statement of Purpose c. Request for Recommendation Letter d. Request for information under Right to Information Act (RTI)	09	1. Doff, Adrian and Christopher Jones .Language in Use (Intermediate and Upper Intermediate). Cambridge: CUP, 2004. 2. Doughty, P. P., Thornton, J. G, Language in Use. London: Edward Arrold, 1973. 3. Freeman, Sarah: Written Communication. New Delhi: Orient Longman, 1977	Chalk and Talk
	Unit 4: Interpretation of Technical Data , Students should be taught to read and interpret maps, pie charts, tables, line and bar graphs and flow charts and express the same in paragraph format.	09	1. Glendinning, Eric H. and Beverley Holmstrom. Second edition. Study Reading: A	Chalk and Talk

Vidya Verma

Vidya Verma

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			Course in Reading Skills for Academic Purposes. Cambridge: CUP, 2004 2. Grellet, F. Developing Reading Skills, Cambridge: Cambridge University Press, 1981. 3. Hamp-Lyons, Liz and Ben Heasiey. Second edition. Study Writing: A Course in Writing Skills for Academic Purposes. Cambridge: CUP, 2006 12. Jakeman, Vanessa and Clare	

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			McDowell. Cambridge Practice Test for IELTS 1. Cambridge:	
	Unit 5: Writing Skills: Essay 09 lectures a. Expository b. Persuasive c. Analytical d. Reflective/Descriptive	09	1. Maley, Alan and Alan Duff. Second Edition. Drama Techniques in Language Learning. Cambridge: CUP, 1983. 2. Mohan Krishna & Banerji, Meera: Developing Communication Skills. New Delhi: Macmillan India, 1990. 3. Mohan Krishna & Singh, N. P. Speaking English Effectively.New	Chalk and Talk

Vidya Verma

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			Delhi: Macmillan India, 1995. 4. Narayanaswami, V. R. Organised Writing, Book 2. New Delhi: Orient Longman	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

Vidya Verma

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. Archana Devendra Joshi** DEPARTMENT: **ENGLISH** CLASS: **S Y BA** SEMESTER: II MONTH: **NOVEMBER TO MARCH** ACADEMIC YEAR: **2018-19.**

LEARNING OBJECTIVE/S:

The learners will be able to : **UNDERSTAND THE CONCEPT OF INTRODUCTION TO ENGLISH LITERATURE,SHORT STORIES, ESSAYS AND NOVELS. THE LEARNING OBJECTIVES ARE USED IN DIFFERENT WAY TO ACHIEVE LEARNING PROGRESSIONS IN ACADEMIC AND MULTIPLE DEVELOPMENT OF UNDERSTANDING KNOWLEDGE IN JOB**.

PERFORMANCE **IS ALL ROUND IN OBJECTIVE ENGLISH LITERATURE,SHORT STORIES, ESSAYS AND NOVELS SOFT SKILLS, VISUAL SIGNS, SPEED IN THE TURN AROUND TIME,**

DAjoshi

Vidya Verma

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	American Dream , Confessional Poetry, Expressionism in AMERICAN Dream, African American poetry of 20th century	12		GOOGLE MEET
	Unit 2 play ARTHUR Mller Death of a salesman	10		PPT
	UNIT 3 langston Huges, MOTHER TO Sun , Democracy, Dream Dreferred	12	NIRALI PUBLICATION	PDF
	SYLVIA PLATH MIRROR< I AM VERTICAL< TULIPS	13		WORD DOC.
	JANE AUSTEN:"PRIDE AND PREJUDICE" [UNIT-3]	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 47

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. A. P. Pandey **DEPARTMENT:** Paper VI – Grammar and the Art of Writing – I (Arts)

CLASS: TYBA **SEMESTER:** V **MONTH** – June to Nov **ACADEMIC YEAR**: 2018-2019

LEARNING OBJECTIVES:

1. To develop amongst learners an insight into the process of word formation and transformation
2. To develop amongst them an insight into the sounds, stress patterns and intonations in the English language to improve their speaking skills
3. To develop among them an insight into the structure of the English language and to provide knowledge of the rules of grammar
4. To help them learn grammatical analysis and description and the skills of sentence transformation
5. To introduce the mechanics of writing for effective writing for various domains

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I: Phonetics and Morphology	**A. Phonetics** · Phoneme and its distinctive features	15	Leech, Geoffrey, Deuchar, Margaret and Hoogenraad, Robert, English Grammar for Today: A New Introduction. London: Macmillan, 1973 Rajimwale, Sharad. Elements of General Linguistics, Vol. I, New Delhi: Rama Brothers	Chalk and Talk

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	· English Vowels and Consonants (Difference between BRP and Indian English) · Diphthongs · Consonant Clusters · Transcription using phonetic script **B. Morphology** · Morph, Allomorph and Vowel Mutation · Free and Bound Morphemes · Root and stem · Inflection and Derivation · Morphological Analysis		A Course in English Phonetics for English EFL Students available in pdf format at file:///C:/ADMIN/Desktop/A_Course_in_English_Phonetics%20(1).pdf	
Unit 2: Grammar: Words and Phrases	· **Open word classes:** nouns, adjectives, verbs, adverbs · **Closed word classes**: pronouns, determiners, operator verbs, prepositions, conjunctions, enumerators, interjections · Noun Phrase, Genitive Phrase, Prepositional Phrase, Adjective Phrase and Adverb Phrase	15	Quirk, R. and Greenbaum. S. A University Grammar of English, Longman, 1973 Singh Sukhdev and Singh Balbir. Grammar of the Modern English Language: A Resource Book. New Delhi: Cambridge University Press India Pvt. Ltd., 2012	Chalk and Talk

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	· Verb Phrase			
Unit 3: Art of Writing	**Discourse Analysis** · Tenor · Mode · Domain Domain and language change – journalism, advertising and literature, scientific and technical writing **II. Mechanics of Writing** · Understanding paragraph divisions and topic sentences of paragraphs **III. Writing for Print Media** · Print – News Report	15	Varshney, Dr. R.L. An Introductory Text Book of Linguistics and Phonetics, New Delhi: Prakash Book Depot Huddleson, Rodney and Pullum, Geoffrey. A Student's Introduction to English Grammar. New Delhi: Cambridge University Press, 2005	Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

Vidya Verma

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts

VIVA COLLEGE, Virar (W)

NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **ASST. PROF. SUBORNA S BANERJEE** DEPARTMENT: **S.Y.B.A**

SEMESTER: **THREE** MONTH: **AUGUST 2021** TO **OCTOBER 2022** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:

The learners will be able to: To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

Unit 1:

a) Definitions, elements and process of communication.
b) Types – interpersonal, group and mass communication.
c) Modes – verbal and non-verbal
d) Means – Traditional, electronic, digital.
e) Barriers – physical, linguistic, psychological and cultural.

Unit 2: Nature of mass Communication.

a) Concept of 'mass audience'.
b) The Process of mass communication.
c) Features of mass communication.
d) Functions of mass communication: entertainment, surveillance, education, interpretation, persuasion, socialization, opinion building.
e) Channels of mass communication: traditional folk media, print media, electronic media, new/digital media.

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Unit 3: Mass media in India: Brief history and current status of each of the media-viz. Newspaper radio, television and cinema.

a) It's beginning in India.
b) Milestones in technological advancement.
c) Its reach / total users at present (regional, special, demographic coverage).
d) Its ownership, control and governance.

Unit 4: Media types & presentation formats: their nature, function and target audience.

a) Major types of newspaper and magazines.
b) Major formats of newspaper items.
c) Major formats of radio programmers.
d) Major formats of TV programmers.
e) Major types of films.
f) Major web based social media / networking sites.

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

The learners will be able to
Preparing resumes to attending interviews, convening meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.
To make students aware of the importance of developing skills

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35

S BANERJEE

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **ASST. PROF. SUBORNA S BANERJEE** DEPARTMENT: **F.Y.B.COM** CLASS: **A to H** SEMESTER: **ONE** MONTH: **OCTOBER 2021** TO **JANUARY 2022** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:

The learners will be able to : To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to
Preparing resumes to attending interviews, convening meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.
To make students aware of the importance of developing skills

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 chapter 3	BUSINESS ETHICS	10	JOURNALS	PPT
Unit 2 chapter 1	BUSINESS CORRESPONDENCE	15	REFERENCE BOOK	PPT
Unit 2 chapter 2	PERSONAL CORRESPONDENCE	15	REFERENCE BOOK	PPT

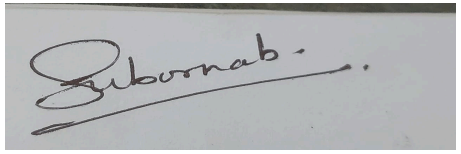
SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts

VIVA COLLEGE, Virar (W)

NAAC accredited "B" Grade, 2.69 CGPA

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35



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SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Vidya P. Verma DEPARTMENT: _English (Arts) CLASS: FYBA SEMESTER: II MONTH: _____

ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : • To write clearly, coherently and effectively about various genres of literature • To recognize the culture and context of the work of literature • To develop sensitivity to nature and fellow human beings.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Literature	Ballad : Thomas Campbell : "Lord Ullin's Daughter" Dramatic Monologue: Robert Browning : "The Last Ride" Lyric: Robert Frost : "Stopping by Woods on a Snowy Evening"	07	Bennett, Andrew and Nicholas Royle. Introduction to	Chalk and Talk

Vidya Verma

Vidya Verma

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

			Literature Criticism and Theory. Great Britain: Pearson Education Limited, 2004. Cavanagh, Dermot Alan Gillis, Michelle Keown, James Loxley and Randall Stevenson (Ed). The Edinburgh Introduction to Studying Literature. Edinburgh: Edinburgh University Press, 2010.	

Vidya Verma

Vidya Verma

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Play: William Shakespeare: Twelfth Night	15	Chakrabarti, Piyas. Anthem Dictionary of Literary Terms andTheory.Delhi: Anthem Press, 2006. Edmond Gore and Alexander Holmes. What is Poetry? England, Nabu Press, 2010.	Chalk and Talk

Vidya Verma

Vidya Verma

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

Vidya Verma

Vidya Verma

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. Vidya P. Verma DEPARTMENT: _English (Arts) CLASS: TYBA SEMESTER: V MONTH: _____

ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : After completion of the course, students are expected to be able to: 1) use some important critical terms 2) become aware the nature and function of literature and criticism 3) impart the technique of close reading of literary texts 4) understand the various literary theories and critical approaches 5) be familiar with the tenets of practical criticism

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Literary Criticism	UNIT I: Critical Terms - (i) Simile, (ii) Imagery, (iii) Symbol, (iv) Paradox, (v) Ambiguity, (vi) Myth	15	Abrams, M. H. A Glossary of Literary Terms. (8th Edition) New Delhi: Akash Press, 2007. Abrams, M. H. The Mirror and the Lamp:	Chalk and Talk

Vidya Verma

SIGNATURE OF THE STAFF

Vidya Verma

SIGNATURE OF THE H.O.D.

			Romantic Theory and Critical Tradition. Oxford: OUP, 1971 Ashcroft, Bill etal. (ed.) The Post-Colonial Studies Reader. London: Routledge, 1995. Baldick, Chris. The Oxford Dictionary of Literary Terms. Oxford: OUP,2001. Blackstone, Bernard. Practical English Prosody. Mumbai: Orient Longman, 1984. Bodkin, Maud.Archetypal Patterns in Poetry. London: Oxford University Press,	

Vidya Verma

SIGNATURE OF THE STAFF

Vidya Verma

SIGNATURE OF THE H.O.D.

			1934. Buell, Lawrence.The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture. MA: Harvard University Press, 1995.	
	UNIT II: Nature and Function of Literature - i. Literature as Imitation (Plato-Aristotle debate) ii. Literature and Imagination (the Romantic Idea of the Imagination) iii. Literature as an expression of the writer's personality iv. Function of Literature (aesthetic, moral and cognitive functions)	15	Daiches, David. Critical Approaches to Literature.London: Longman, 1984. Drew, Elizabeth. Understanding Poetry. New York: Norton, 1959. Dutton, Richard. Introduction to Literary Criticism.London:	Chalk and Talk

Vidya Verma

SIGNATURE OF THE STAFF

Vidya Verma

SIGNATURE OF THE H.O.D.

			Longman, 1984. Eagleton, Terry. Literary Theory.London: Basil Blackwell, 1983. Enid, Hamer. The Metres of English Poetry. Booksway, 2014 Garrard, Greg. Ecocriticism. New York: Routledge, 2012. Garrard, Greg, ed. The Oxford Handbook of Ecocriticism. New York: OUP, 2014. Guerin, Wilfred et al. A Handbook of Critical Approaches to Literature.Oxford:	

Vidya Verma

SIGNATURE OF THE STAFF

Vidya Verma

SIGNATURE OF THE H.O.D.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

Vidya Verma

Vidya Verma

Vidya Verma

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. Archana Devendra Joshi** DEPARTMENT: **ENGLISH** CLASS: **FY BA** SEMESTER: _1_ MONTH: **JUNE TO OCTOBER** ACADEMIC YEAR: **2018-19.**

LEARNING OBJECTIVE/S:
The learners will be able to : **UNDERSTAND THE CONCEPT OF INTRODUCTION TO ENGLISH LITERATURE,SHORT STORIES, ESSAYS AND NOVELS. THE LEARNING OBJECTIVES ARE USED IN DIFFERENT WAY TO ACHIEVE LEARNING PROGRESSIONS IN ACADEMIC AND MULTIPLE DEVELOPMENT OF UNDERSTANDING KNOWLEDGE IN JOB**.

PERFORMANCE **IS ALL ROUND IN OBJECTIVE ENGLISH LITERATURE,SHORT STORIES, ESSAYS AND NOVELS SOFT SKILLS, VISUAL SIGNS, SPEED IN THE TURN AROUND TIME,**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

UNIT 1	BILDUNGSROMAN, PICARESQUE NOVEL,EPISTORALY NOVEL	05		GOOGLE MEET
	STREAM-OF-CONSCIOUSNESS NOVEL,	03		PPT
	NOVEL OF SOCILA REALITY,PSYCHOLOGICAL NOVEL	05	NIRALI PUBLICATION	PDF
	HISTORICAL NOVEL , SCIENCE FICTION,GOTHIC NOVEL,GRAPHIC NOVEL	06		WORD DOC.
	JANE AUSTEN:"PRIDE AND PREJUDICE" [UNIT-3]	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 29

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Shri. Vishnu Waman Thakur Charitable Trust's

Bhaskar Waman Thakur College of Science,
Yashvant Keshav Patil College of Commerce,
Vidhya Dayanand Patil College of Arts,
(VIVA College)
(NAAC ACCREDITED-'B' Grade, CGPA 2.69)

TEACHING PLAN UNIT PLAN PSYCHOLOGY 2022-23

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

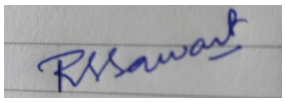
CLASS: **F.Y.B.A.** SEMESTER: **I**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2022-2023**

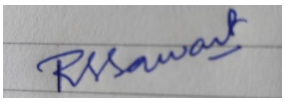
LEARNING OBJECTIVE/S: The learner will be able to know the important researchers and their contributions to the field of Psychology. The learner will be able to get an insight on different viewpoints in Psychology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I (UAPSY101) **FUNDAMENTALS OF PSYCHOLOGY - I** **UNIT 1**	**THE HISTORY OF PSYCHOLOGY** - Wundt, Introspection, Laboratory. - Titchner, structuralism.	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos

Rashmi sawant
Name of the staff

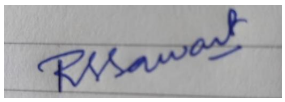


Rashmi Sawant
Name of the H.O.D

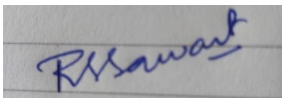


TITLE: THE SCIENCE OF PSYCHOLOGY	- James, Functionalism. - Gestalt -Freud, psychoanalysis. -Watson, Behaviourism.			
	THE FIELDS OF PSYCHOLOGY TODAY - Psychodynamic perspective - Behavioural perspective - Humanistic perspective - Bio - psychological perspective - Cognitive perspective - Sociology - cultural perspective - Evolutionary perspective	03	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	SCIENTIFIC RESEARCH - scientific methods - descriptive methods - finding relationship - qualitative methods	03	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos

Rashmi sawant
Name of the staff



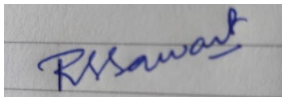
Rashmi Sawant
Name of the H.O.D



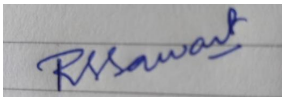
	ETHICS OF PSYCHOLOGICAL RESEARCH - guidelines for doing research with people.	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples - classic studies - E. G. Astrology	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

Rashmi sawant
Name of the staff



Rashmi Sawant
Name of the H.O.D



TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

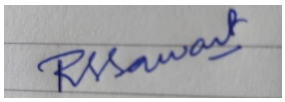
CLASS: **F.Y.B.A.** SEMESTER: **I**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2022-2023**

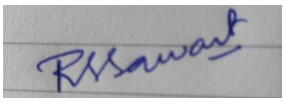
LEARNING OBJECTIVE/S: The learner will be able to know the biological basis of Psychology. The learner will be able to know the structure and functions of neurons. The learner will be able to understand the nervous system and its parts and what role it plays in Psychology. The learner will be able to have an insight in methods of studying the brain and parts of the brain that influence human Psychology. The learner will be able to understand the endocrine system and its functions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I (UAPSY 101) **FUNDAMENTALS OF PSYCHOLOGY - I** **UNIT 2** **TITLE: THE BIOLOGICAL PERSPECTIVE**	**NEURONS AND NERVES : BUILDING THE NETWORK** - structure of the neuron - neural impulse - synapse - neurotransmitters - reuptake and enzymes	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	AN OVERVIEW OF THE NERVOUS SYSTEM - central nervous system - peripheral nervous system	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India	Chalk and Board, Books, short videos

Rashmi sawant
Name of the staff

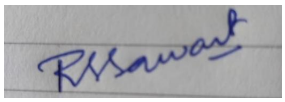


Rashmi Sawant
Name of the H.O.D

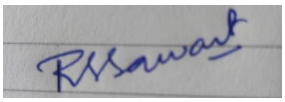


	And structure of the brain		Education Services Pvt.ltd.	
	DISTANT CONNECTIONS:THE ENDOCRINE GLANDS - pituitary gland - thyroid gland - pancreas - gonads - adrenal gland	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	LOOKING INSIDE THE LIVING BRAIN - clinical studies - EEG - CT scan - MRI scan - PET scan	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	FROM THE BOTTOM UP : THE STRUCTURES OF THE BRAIN - brain stem - structures under the cortex - the cortex - the association area of the cortex	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE.	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018).	Chalk and Board, Books,

Rashmi sawant
Name of the staff



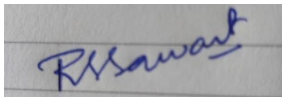
Rashmi Sawant
Name of the H.O.D



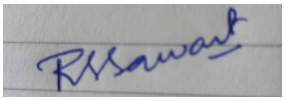
	- discussion and examples - Classic studies in Psychology. - e. g. Difference between male and female brains		Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	short videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

Rashmi sawant
Name of the staff



Rashmi Sawant
Name of the H.O.D



TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **I**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S: The learner will be able to define Learning. The learner will be able to understand the classical conditioning method of learning and its application. The learner will be able to know the operation conditioning method of learning and its application. The learner will be able to understand other cognitive methods of learning. The learner will be able to know observational methods of learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I (UAPSY101) **FUNDAMENTALS OF PSYCHOLOGY - I**	**DEFINITION OF LEARNING** - features	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
UNIT 3 **TITLE: LEARNING**	**CLASSICAL CONDITIONING, AND OPERANT CONDITIONING** - Pavlov and salivating dog - Elements of classical conditioning - Thorndike's puzzle box and frustrating cat - reinforcement	04	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos

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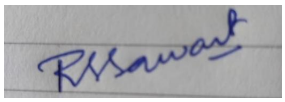
Name of the staff



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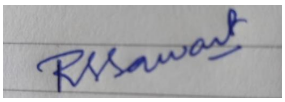

	- schedules of reinforcement			
	COGNITIVE LEARNING THEORY - Tolman's Maze running rats - latent learning Seligman's depressed dogs and learned helplessness - Killer's Chimp and insight learning	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	OBSERVATIONAL LEARNING - Bandura and bobo doll - four elements of observational learning	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples - classic studies - E. G. Mentally challenged child	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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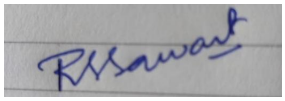

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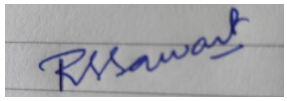

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **I**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S: The learner will be able to define memory. The learner will be able to know models of memory. The learner will be able to understand the three different stages of memory according to the information processing model. The learner will be able to have an insight in the retrieval process of long term memory. The learner will be able to define forgetting and understand its nature. The learner will be able to know the physical aspects of memory.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I (UAPSY101) **FUNDAMENTALS OF PSYCHOLOGY - I** **UNIT 4** **TITLE: MEMORY**	**WHAT IS MEMORY?** - encoding - storage - retrieval	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	THE INFORMATION PROCESSING MODEL:THREE MEMORY SYSTEMS - sensory memory - short term memory - long term memory - long term memory organization	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos

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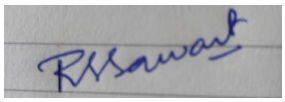

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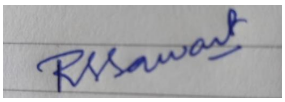

	RETRIEVAL OF LONG –TERM MEMORIES - retrieval cues - recall - recognition	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	FORGETTING - Ebbinghaus and forgetting curve - encoding failure - memory trace decay theory - interference theory.	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	NEUROSCIENCE OF MEMORY **- NEURAL ACTIVITY** **- HIPPOCAMPUS AND MEMORY** **- ORGANIC AMNESIA**	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples - classic studies - E. G. Alzheimer's disease	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India	Chalk and Board, Books, short videos

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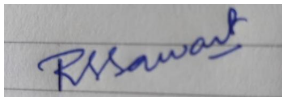

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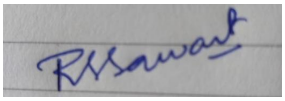

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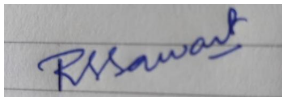

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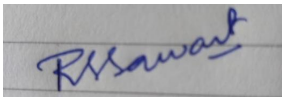

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S: The learner will be able to understand the concept of social psychology. The learner will be able to know how social psychology originated and developed. The learner will be able to gain insight into the research methods used in social psychology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY301) **SOCIAL PSYCHOLOGY - I** **UNIT 1** **TITLE: SOCIAL PSYCHOLOGY : THE SCIENCE OF THE SOCIAL SIDE OF LIFE**	**SOCIAL PSYCHOLOGY : WHAT IT IS AND WHAT IT IS NOT** -scientific in nature -focus on behavior of individual -causes of social behavior and thought	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Chalk and Board, Books, short videos
	SOCIAL PSYCHOLOGY : ADVANCES AT THE BOUNDARIES - origins and development	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

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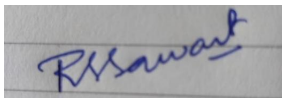

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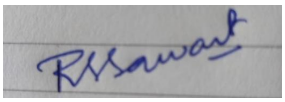

	HOW SOCIAL PSYCHOLOGISTS ANSWER THE QUESTIONS THEY ASK : RESEARCH AS THE ROUTE TO INCREASED KNOWLEDGE - experimental method -correlation method - importance of replications, meta-analysis, and converging operations	04	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	THE ROLE OF THEORY IN SOCIAL PSYCHOLOGY - role of Theory	01	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	THE QUEST FOR KNOWLEDGE AND THE RIGHTS OF INDIVIDUAL : SEEKING AN APPROPRIATE BALANCE - need for balancing	01	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

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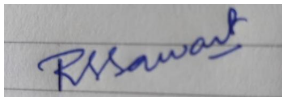

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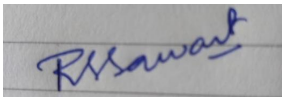

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S: The learner will be able to understand the nature of non verbal communication. The learner will be able to define attribution. The learner will be able to discuss factors contributing to attribution and the errors made while attributing. The learner will be able to understand the process of impression management and impression formation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY301) **SOCIAL PSYCHOLOGY - I** **UNIT 2** **TITLE: SOCIAL PERCEPTION : SEEKING TO UNDERSTAND OTHERS**	**NON VERBAL COMMUNICATION : AN UNSPOKEN LANGUAGE** - basic channels - emotional expressiveness - detection of deception	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Chalk and Board, Books, short videos
	ATTRIBUTION : UNDERSTANDING THE CAUSES OF BEHAVIOUR - theories of attribution - basic errors in attribution	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

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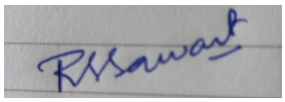

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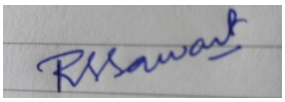

	IMPRESSION FORMATION AND MANAGEMENT : COMBINING INFORMATION ABOUT OTHERS - impression formation - impression management	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	WHAT RESEARCH TELLS US ABOUT THE ROLE OF NON VERBAL CUES IN JOB INTERVIEW? - research findings	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	WHAT RESEARCH TELLS US ABOUT WHY SOME PEOPLE CONCLUDE THEY ARE SUPERIOR TO OTHERS? - research findings	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

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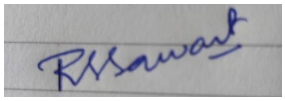

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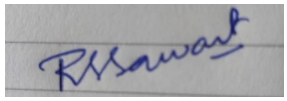

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S: The learner will be able to define attitude. The learner will be able to know how to form attitudes. The learner will be able to understand when and how attitudes influence and guide behaviour. The learner will be able to gain insight into the concept of persuasion and how to resist it. The learner will be able to know the cognitive dissonance. The learner will be able to know how culture influences attitudes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY301) **SOCIAL PSYCHOLOGY - I** **UNIT 3** **TITLE: ATTITUDES : EVALUATING AND RESPONDING TO THE SOCIAL WORLD**	**ATTITUDE FORMATION : HOW ATTITUDES DEVELOP** - social learning -social comparison - genetic factors	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Chalk and Board, Books, short videos
	WHEN AND WHY DO ATTITUDES INFLUENCE BEHAVIOUR? - attitudes and actions	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

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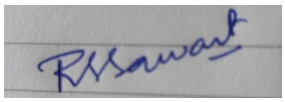

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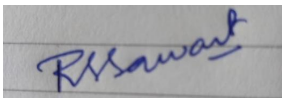

	HOW DO ATTITUDES GUIDE BEHAVIOUR? - specificity - strength - accessibility	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	THE SCIENCE OF PERSUASION: HOW ATTITUDES ARE CHANGED - traditional approach - cognitive approach - attitude functions - reciprocity - message framing	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	RESISTING PERSUASION ATTEMPTS - reactance - forewarning - selective avoidance	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	COGNITIVE DISSONANCE: WHAT IT IS AND HOW DO WE MANAGE IT? - forced compliance	01	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

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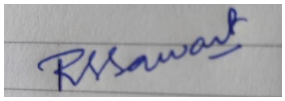

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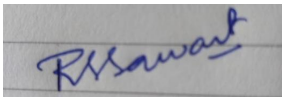

	WHAT RESEARCH TELLS US ABOUT CULTURE AND ATTITUDE PROCESSES? - social diversity	01	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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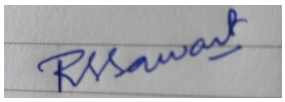

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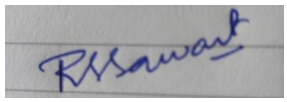

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S: The learner will be able to gain more insight into interpersonal liking. The learner will be able to understand the factors influencing interpersonal liking. The learner will be able to understand types of close relationships. The learner will be able to know the factors that may destroy close relationships.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY301) **SOCIAL PSYCHOLOGY - I** **UNIT 4** **TITLE: LIKING, LOVE AND OTHER CLOSE RELATIONSHIPS**	**INTERNAL SOURCES OF LIKING OTHERS : THE ROLE OF NEEDS AND EMOTIONS** - physical surroundings - positive and negative effects - need to affiliation	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Chalk and Board, Books, short videos
	EXTERNAL SOURCES OF ATTRACTION:THE EFFECTS OF PROXIMITY, FAMILIARITY AND PHYSICAL BEAUTY - proximity - familiarity	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

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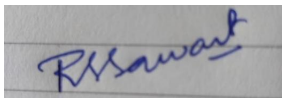

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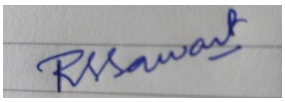

	- physical beauty			
	SOURCES OF LIKING BASED ON SOCIAL INTERACTION - familiarity and interaction	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	CLOSE RELATIONSHIPS: FOUNDATIONS OF SOCIAL LIFE - reciprocity - similarity	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	WHAT RESEARCH TELLS US ABOUT DRAMATIC DIFFERENCES IN APPEARANCE BETWEEN PARTNERS: IS LOVE REALLY BLIND? - factors influencing interpersonal attraction	01	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

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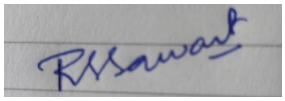

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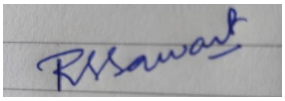

	WHAT RESEARCH TELLS US ABOUT TWO FACTORS THAT MAY DESTROY LOVE-JEALOUSY AND INFIDELITY - jealousy - infidelity	01	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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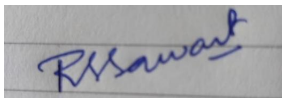

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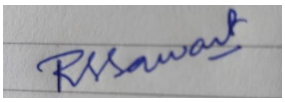

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S: The learner will be able to gain insight into lifespan development. The learner will be able to know developmental milestones in adolescence with reference to physical development. The learner will be able to understand the cognitive development that occurs in adolescence. The learner will understand the language development occurring in adolescence.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (UAPSY302) **DEVELOPMENTAL PSYCHOLOGY - I** **UNIT 1** **TITLE: AN INTRODUCTION TO LIFESPAN DEVELOPMENT AND ADOLESCENCE PHYSICAL & COGNITIVE DEVELOPMENT**	**LIFESPAN DEVELOPMENT** - An orientation to lifespan development - defining life span development - scope of the field (areas, age and individual differences) - basic influences in development (history, age, socio-cultural, life events)	03	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Chalk and Board, Books, short videos
	PHYSICAL MATURATION - puberty (timing, sequence and signs of maturation) - fitness - sleep needs	03	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	

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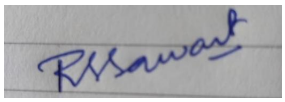

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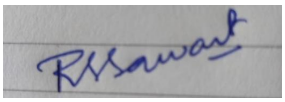

	COGNITIVE DEVELOPMENT AND SCHOOLING - Piaget's stage of formal operations - language development - educational and vocational issues	03	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	
	THREATS TO ADOLESCENCE WELL BEING - nutrition and eating disorder - uses and abuses of drugs - depression - deaths in adolescence	03	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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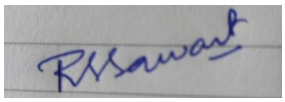

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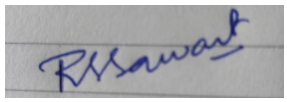

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S: The learner will be able to gain insight into psychosocial development during adolescence. The learner will be able to understand the process of realizing sexual orientation in adolescence. The learner will be able to know the dynamics of relationships with family and friends.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (UAPSY302) **DEVELOPMENTAL PSYCHOLOGY - I** **UNIT 2** **TITLE: SOCIAL AND PERSONALITY DEVELOPMENT IN ADOLESCENCE**	**IDENTITY** - Erikson's identity versus identity confusion - Marcia – identity status, crisis and commitment - gender differences	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Chalk and Board, Books, short videos
	RELATIONSHIPS - adolescence and parents - adolescence and siblings - adolescence and peers	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	

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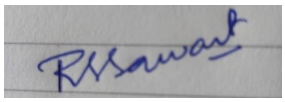

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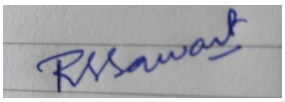

	DATING, SEXUAL BEHAVIOUR AND TEENAGE PREGNANCY - dating - sexual behaviour - teenage pregnancy		Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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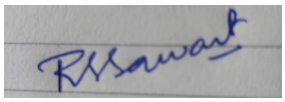

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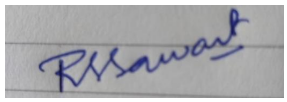

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S: The learner will be able to know the developmental milestones in adulthood. The learner will be able to understand the physical development occurring in early adulthood. The learner will be able to understand the cognitive development occurring in early adulthood. The learner will be able to know the relevance of pursuing higher education in early adulthood.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (PSY 302) **DEVELOPMENTAL PSYCHOLOGY - I** **UNIT 3** **TITLE: PHYSICAL AND COGNITIVE DEVELOPMENT IN EARLY ADULTHOOD**	**PHYSICAL DEVELOPMENT** - Erikson's identity versus identity confusion - Marcia – identity status, crisis and commitment - gender differences	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Chalk and Board, Books, short videos
	COGNITIVE DEVELOPMENT - Erikson's theory - post formal thinking - intelligence	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	

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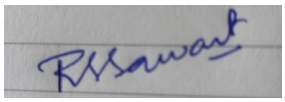

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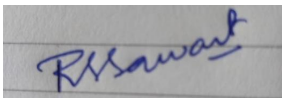

	COLLEGE: PURSUING HIGHER EDUCATION - demographics of higher education - college adjustment - reacting to the demands of college life		Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	

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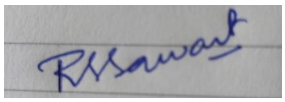

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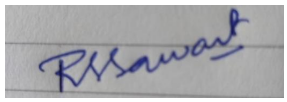

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S: The learner will be able to gain insight into psychosocial development during early adulthood. The learner will be able to understand the relationship patterns in early adulthood. The learner would be able to gain insight into the attachment styles of early adults. The learner will be able to know the process of choosing a partner in early adulthood.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (UAPSY302) **DEVELOPMENTAL PSYCHOLOGY - I** **UNIT 4** **TITLE: SOCIAL AND PERSONALITY DEVELOPMENT IN EARLY ADULTHOOD**	**FORGING RELATIONSHIPS: INTIMACY, LIKING AND LOVING DURING EARLY ADULTHOOD** - components happiness - emerging adulthood - love - choosing partner - attachment styles - gay and lesbian relationship	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Chalk and Board, Books, short videos
	THE COURSE OF RELATIONSHIPS - marriage - parenthood - gay and lesbian parents - staying single	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	

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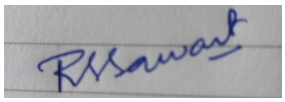

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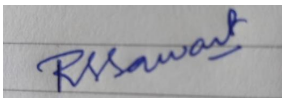

	WORK: CHOOSING & EMBARKING ON A CAREER - identity during young adulthood - picking an occupation - choosing a career - gender and career choices		Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	

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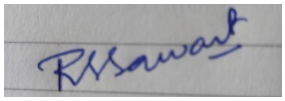

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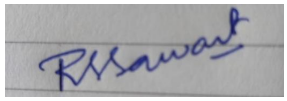

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:

1) To impart knowledge and understanding of nature, uses, technical features, and the process of construction of psychological tests.
2) To create awareness about measurement of intelligence and assessment of personality
3) To impart knowledge and understanding of the concepts in Statistics and the various measures of Descriptive Statistics - their characteristics, uses, applications and methods of calculation
4) To create a foundation for advanced learning of Psychological Testing, Assessment, and Statistics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV (UAPS501) **Psychological Testing and Statistics: Part I** **UNIT 1** **TITLE: Test Development and Correlation**	a) Test conceptualization and Test construction b) Test tryout and Item analysis c) Test revision d)Meaning and types of correlation – positive, negative and zero; Graphic representations of correlation	04 PER WEEK	Cohen, J. R., Swerdlik, M. E., & Sturman, E. D. (2013). *Psychological Testing and Assessment: An introduction to Tests and Measurement.* (8th ed.). New York. McGraw-Hill International edition. (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

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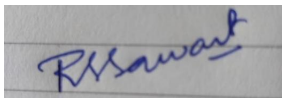

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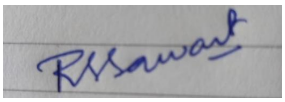

	- Scatterplots e) The steps involved in calculation of Pearson's product-moment correlation coefficient f) Calculation of rho by Spearman's rank-difference method; Uses and limitations of correlation coefficient g) Simple Regression and Multiple Regression			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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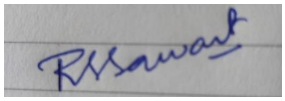

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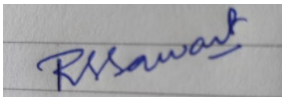

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:

1) To impart knowledge and understanding of nature, uses, technical features, and the process of construction of psychological tests.
2) To create awareness about measurement of intelligence and assessment of personality
3) To impart knowledge and understanding of the concepts in Statistics and the various measures of Descriptive Statistics - their characteristics, uses, applications and methods of calculation
4) To create a foundation for advanced learning of Psychological Testing, Assessment, and Statistics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV (UAPS501) **Psychological Testing and Statistics: Part I** **UNIT 2** **TITLE: Reliability**	a) The concept of Reliability; sources of error variance b) Reliability estimates: Test-Retest, Parallel and Alternate Forms, Split-Half, Inter-Item Consistency Kuder-Richardson, Cronbach's Coefficient Alpha; Inter-Scorer Reliability c) Using and interpreting a coefficient of	04 PER WEEK	Cohen, J. R., Swerdlik, M. E., & Sturman, E. D. (2013). *Psychological Testing and Assessment: An introduction to Tests and Measurement.* (8th ed.). New York. McGraw-Hill International edition. (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

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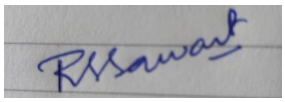

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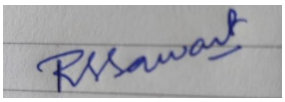

	Reliability – purpose of the Reliability coefficient, nature of the test, the true score model of measurement and alternatives to it d) Reliability and individual scores: SEM and SE-Difference			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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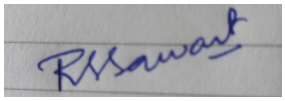

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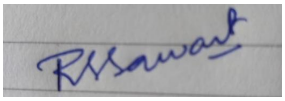

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV (UAPS501) **Psychological Testing and Statistics: Part I** **UNIT 3** **TITLE: Validity and Measures of central tendency**	a) The concept of validity; Face and Content validity b) Criterion-related validity and Construct validity c) Validity, bias, and fairness d) Calculation of mean, median and mode of a frequency distribution; The assumed mean method for calculating the mean e) Comparison of	04 PER WEEK	Cohen, J. R., Swerdlik, M. E., & Sturman, E. D. (2013). *Psychological Testing and Assessment: An introduction to Tests and Measurement.* (8th ed.). New York. McGraw-Hill International edition. (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

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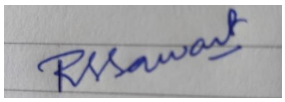
Name of the staff



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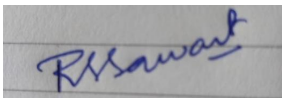

	measures of central tendency: Merits, limitations, and uses of mean, median and mode			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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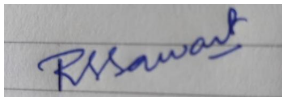

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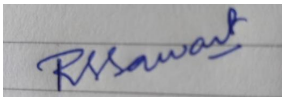

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2022-2023**

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PAPER IV (UAPS501) **Psychological Testing and Statistics: Part I** **UNIT 4** **TITLE: Types of scores, Types of scales, Frequency Distribution, Graphic representations**	a) Continuous and discrete scores – meaning and difference; Nominal, ordinal, interval and ratio scales of measurement b) Preparing a Frequency Distribution; advantages and disadvantages of preparing a frequency distribution; smoothed frequencies: method of running	04 PER WEEK	Cohen, J. R., Swerdlik, M. E., & Sturman, E. D. (2013). *Psychological Testing and Assessment: An introduction to Tests and Measurement.* (8th ed.). New York. McGraw-Hill International edition. (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

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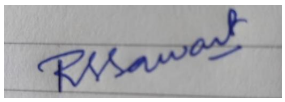

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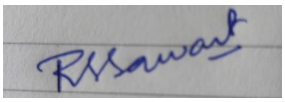

	averages c) Graphic representations: Frequency polygon, histogram, cumulative frequency curve, ogive, polygon of smoothed frequencies			

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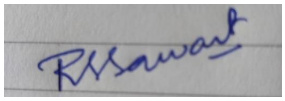

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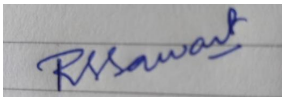

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CLASS: **T.Y.B.A.** SEMESTER: **V**

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PAPER V (UAPS502) **ABNORMAL PSYCHOLOGY - I** **UNIT 1** **TITLE:** **<u>Understanding Abnormal behavior, Diagnosis,</u>**	a) What is Abnormal Behaviour? The social impact of psychological disorders; defining abnormality; biological, psychological, sociocultural causes of abnormal behaviour, the biopsychosocial perspective; prominent themes in abnormal psychology throughout history – spiritual, humanitarian and	04 PER WEEK	**Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)**	Chalk and Board, Books, google classroom, short videos.

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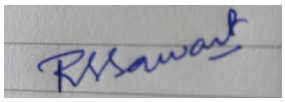

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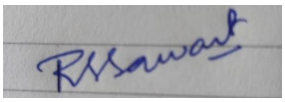

Treatment and Assessment	scientific approaches; what's new in the DSM-5 – definition of a mental disorder b) Psychological disorder : experiences of client and clinician; the diagnostic process, DSM-5, additional information, culture-bound syndromes c) Characteristics of psychological assessment; clinical interview and Mental Status Examination; behavioural, multicultural, neuropsychological assessment; neuroimaging			

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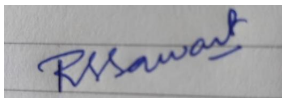

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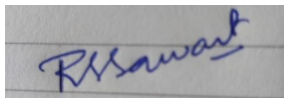

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PAPER V (UAPS502) **ABNORMAL PSYCHOLOGY - I** **UNIT 2** **TITLE:** Theoretical Perspectives	a) Theoretical perspectives in Abnormal Psychology; Biological perspective, Trait theory, Psychodynamic, Behavioral perspectives b) Cognitive, Humanistic, Sociocultural perspectives; Biopsychosocial perspectives on theories and treatments: an integrative approach	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

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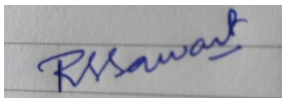

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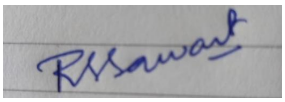

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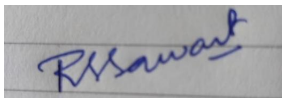

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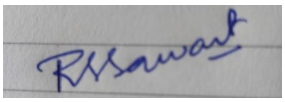

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PAPER V (UAPS502) **ABNORMAL PSYCHOLOGY - I** **UNIT 3** **TITLE: <u>Anxiety, Obsessive-compulsive, and Trauma- and</u>**	a) Anxiety Disorders b) Obsessive-compulsive and related disorders c) Trauma- and Stressor-related Disorders; the biopsychosocial perspective	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

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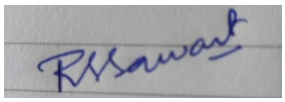

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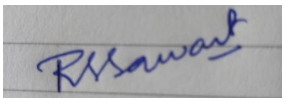

Stressor-related Disorders				

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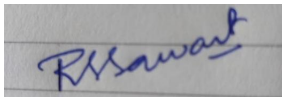

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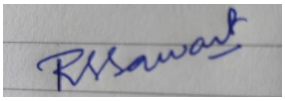

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CLASS: **T.Y.B.A.** SEMESTER: **V**

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PAPER V (UAPS502) **ABNORMAL PSYCHOLOGY - I** **UNIT 4** **TITLE:** **<u>Dissociative and Somatic Symptom Disorders</u>**	a) Dissociative disorders – major forms, theories and treatment b) Somatic symptom and related disorders - somatic symptom disorder, illness anxiety and conversion disorders, conditions related to Somatic Symptom Disorders, theories and treatment c) Psychological	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

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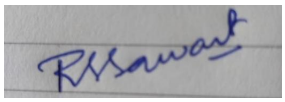

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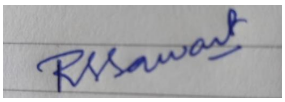

	factors affecting medical condition; Dissociative and Somatic Symptom Disorders: the biopsychosocial perspective			

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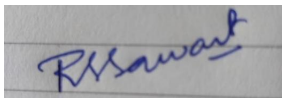

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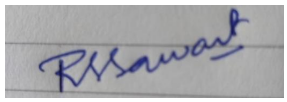

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 1** **TITLE: <u>Job Analysis</u>**	a) What is job analysis? Purposes of job analysis; How job analysis information is collected b) Methods of job analysis; Reliability and validity of job analysis information; Job evaluation	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

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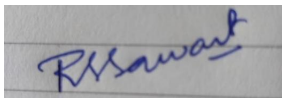

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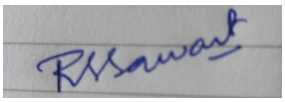

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 2** **TITLE: <u>Performance Appraisal</u>**	a) Why do we appraise employees? Performance criteria b) Objective and subjective methods for assessing job performance; the impact of technology on performance appraisal; legal issues in performance appraisal	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

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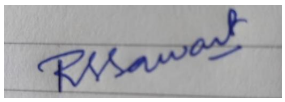

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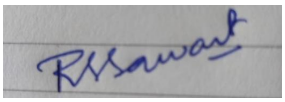

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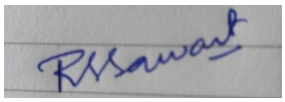
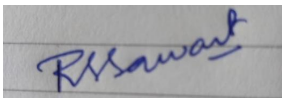
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 3** **TITLE: <u>Assessment Methods for Selection and Placement</u>**	a) Job-Related characteristics. b) Characteristics of psychological tests c) Ability Tests, Knowledge, Skills and all other tests d) Biographical information, interviews, work samples, Assessment centers and electronic assessment.	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

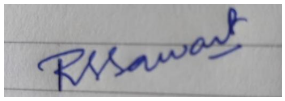
Rashmi sawant
Name of the staff



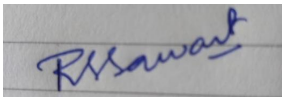
Rashmi Sawant
Name of the H.O.D



Rashmi sawant
Name of the staff



Rashmi Sawant
Name of the H.O.D



TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

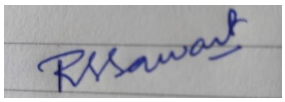
MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:

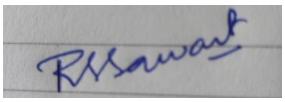
1. To impart knowledge and understanding of the basic concepts in and various facets of Industrial and Organizational Psychology
2. To create awareness about the role and importance of Psychological factors and processes in the world of work
3. To create a foundation for higher education and a professional career in Industrial Psychology and Organizational Behaviour

CATED TO THE UNIT: 12

Rashmi sawant
Name of the staff



Rashmi Sawant
Name of the H.O.D



Shri. Vishnu Waman Thakur Charitable Trust's

Bhaskar Waman Thakur College of Science,
Yashvant Keshav Patil College of Commerce,
Vidhya Dayanand Patil College of Arts,
(VIVA College)
(NAAC ACCREDITED-'B' Grade, CGPA 2.69)

TEACHING PLAN UNIT PLAN PSYCHOLOGY 2022-23

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

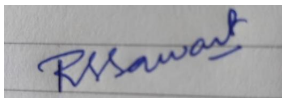
DEPARTMENT: **PSYCHOLOGY**

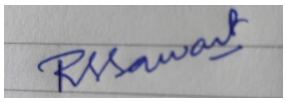
CLASS: **F.Y.B.A.** SEMESTER: **II**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
1. To impart knowledge of the basic concepts and modern trends in Psychology.
2. To foster interest in the subject of Psychology and to create a foundation for further studies in Psychology.
3. To make the students aware of the applications of Psychological concepts in different areas of day to day life.

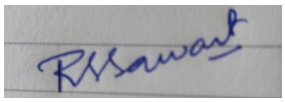
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I (UAPSY201) **FUNDAMENTALS OF PSYCHOLOGY - II** **UNIT 1**	a) How People think. b) Intelligence. c) Language d) Applying Psychology to Everyday life.	12	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India	Board and chalk, Classroom discussion, small experiments and activities, short videos

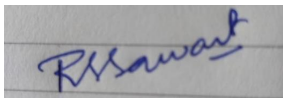




TITLE: Cognition: Thinking, Intelligence and Language.			Education Services Pvt.ltd.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **II**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

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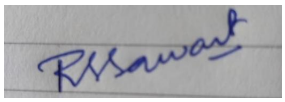
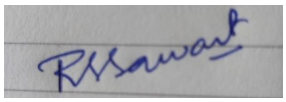
PAPER I (UAPSY201) **FUNDAMENTALS OF PSYCHOLOGY - II** **UNIT 2** **TITLE:** **Motivation and Emotion.**	a) Approaches to understanding Motivation. b)Wha, Hungry again? Why People Eat. c) Emotion. d) Culture and Emotions. e) Applying Psychology to Everyday life.	12	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Board and chalk, Classroom discussion, small experiments and activities, short videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **II**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

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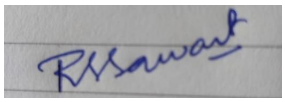
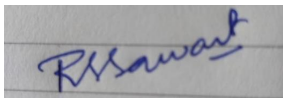
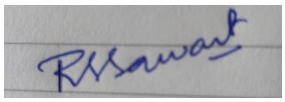
PAPER I (UAPSY201) **FUNDAMENTALS OF PSYCHOLOGY - II** **UNIT 3** **TITLE:** **Theories of Personality.**	a) Psychodynamic Perspective. b) Psychoanalysis in the East . c) The Behavioural and Social Cognitive View of Personality. d) The Third Force : Humanism and Personality. e) Trait Theories: Who are you? f) Modern Trait Theories: The Big Five and current thoughts on the trait Perspective.	12	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Board and chalk, Classroom discussion, small experiments and activities, short videos

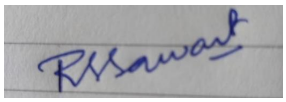




	g) Personality : Genetics and Culture. h) Assessment of Personality. i) Applying Psychology to Everyday life.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **II**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:

1. To impart knowledge of the basic concepts and modern trends in Psychology.
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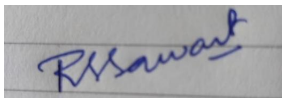
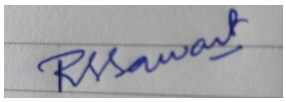
3. To make the students aware of the applications of Psychological concepts in different areas of day to day life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I (UAPSY201) **FUNDAMENTALS OF PSYCHOLOGY - II** **UNIT 4** **TITLE:** **Statistics in Psychology.**	a)What are Statistics? b) Descriptive Statistics. c) Inferential Statistics.	12	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Board and chalk, Classroom discussion, small experiments and activities, short videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

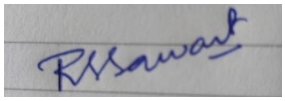
CLASS: **S.Y.B.A.** SEMESTER: **IV**

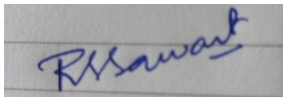
MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:

1. To help students in building knowledge of the basic concepts and modern trends in Social Psychology.
2. To foster interest in Social Psychology as a field of study and research among students.
3. To make the students aware of the applications of the various concepts in Social Psychology in the Indian context.

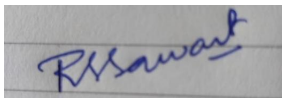
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY401) **SOCIAL PSYCHOLOGY - II** **UNIT 1** **TITLE:** **Causes, and Cures of Stereotyping, Prejudice and Discrimination**	**A) How Members Of Different Groups Perceive Inequality** **B) The Nature And Origins Of Stereotyping** **C) Prejudice: Feelings Toward Social Groups** **D) Discrimination: Prejudice In Action** **E) Why Prejudice Is Not Inevitable: Techniques For Countering Its Effects**	12	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Board and chalk, Classroom discussion, small experiments and activities, short videos

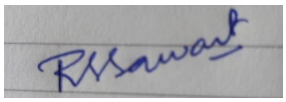




	F) What Research Tells Us About The Role Of Existential Threat In Prejudice			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

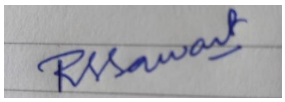
CLASS: **S.Y.B.A.** SEMESTER: **IV**

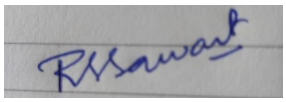
MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:

1. To help students in building knowledge of the basic concepts and modern trends in Social Psychology.
2. To foster interest in Social Psychology as a field of study and research among students.
3. To make the students aware of the applications of the various concepts in Social Psychology in the Indian context.

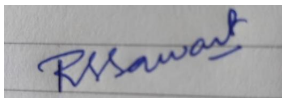
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY401) **SOCIAL PSYCHOLOGY - II** **UNIT 2** **TITLE:** **Social Influence: Changing Others' Behavior**	**a) Conformity: How groups – and norms – influence our behavior.** **b) Compliance: To ask – sometimes – is to receive** **c) Obedience to authority: Would you harm someone if ordered to do so?** **d) Unintentional social Influence: How others change our behaviors even when they are not trying to do so** **e) What research tells us about how**	12	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Board and chalk, Classroom discussion, small experiments and activities, short videos

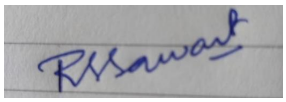




	MUCH WE REALLY CONFORM? F) WHAT RESEARCH TELLS US ABOUT USING SCARCITY TO GAIN COMPLIANCE?			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **IV**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

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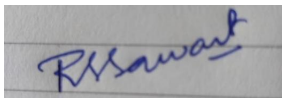
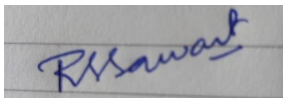
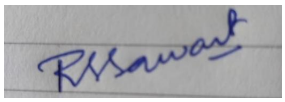
PAPER II (UAPSY401) **SOCIAL PSYCHOLOGY - II** **UNIT 3** **TITLE:** **Aggression: Its Nature, Causes and Control**	a) Perspectives on aggression: In search of the roots of violence b) Causes of human aggression: Social, cultural, personal and situational c) Aggression in the classroom and workplace d) The prevention and control of violence: some useful techniques e) What research tells us about the role of	12	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Board and chalk, Classroom discussion, small experiments and activities, short videos

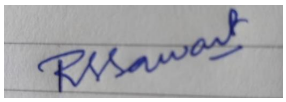




	emotions in aggression? f) What research tells us about workplace aggression?			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **IV**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

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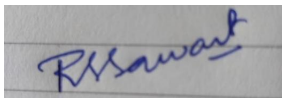
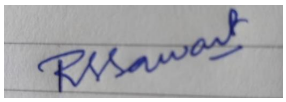
3. To make the students aware of the applications of the various concepts in Social Psychology in the Indian context.

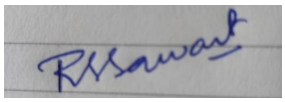
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY401) **SOCIAL PSYCHOLOGY - II** **UNIT 4** **TITLE:** **Prosocial Behavior: Helping Others**	a) Why people help: Motives for prosocial behaviour b) Responding to an emergency: Will bystanders help c) Factors that increase or decrease the tendency to help d) Crowdfunding: A new type of prosocial behaviour e) Final thoughts: Are prosocial behaviour and aggression opposites? f) What research tells us about paying it forward: Helping	12	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Board and chalk, Classroom discussion, small experiments and activities, short videos

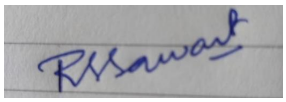




	others because we have been helped g) What research tells us about how people react to being helped			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **IV**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

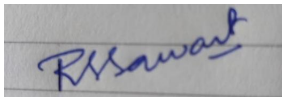
LEARNING OBJECTIVE/S:

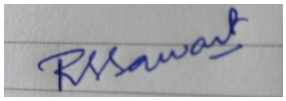
1. To help students in building knowledge and understanding of the basic concepts, principles, perspectives and modern trends in Developmental Psychology
2. To foster interest in Developmental Psychology as a field of study and research among students.
3. To make the students aware of the implications and applications of the various concepts, principles and theories of Developmental Psychology in daily life in the Indian context

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (UAPSY402) **DEVELOPMENTAL PSYCHOLOGY -II** **UNIT 1** **TITLE:** **Physical and Cognitive Development in Middle Adulthood**	**a) Physical development** **b) Health** **c) Cognitive development**	12	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Board and chalk, Classroom discussion, small experiments and activities, short videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)





NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **IV**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

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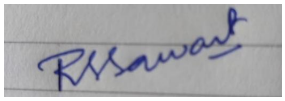
PAPER III (UAPSY402) **DEVELOPMENTAL PSYCHOLOGY -II** **UNIT 2** **TITLE:** **Social and Personality Development in Middle Adulthood**	**a) Personality Development** **b) Relationships: Family in Middle Age** **c) Work & Leisure**	12	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Board and chalk, Classroom discussion, small experiments and activities, short videos

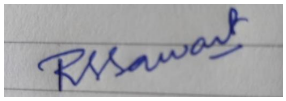
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**





CLASS: **S.Y.B.A.** SEMESTER: **IV**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

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PAPER III (UAPSY402) **DEVELOPMENTAL PSYCHOLOGY -II** **UNIT 3** **TITLE:** **Physical and Cognitive Development in Late Adulthood**	**a) Physical development in Late Adulthood** **b) Health and wellness in Late Adulthood** **c) Cognitive development in Late Adulthood**	12	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Board and chalk, Classroom discussion, small experiments and activities, short videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

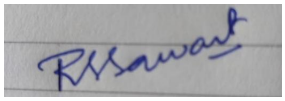
TEACHING PLAN (UNIT PLAN)

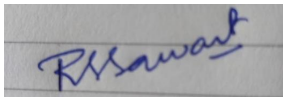
NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **IV**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**





LEARNING OBJECTIVE/S:

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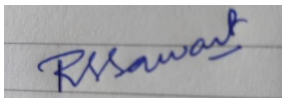
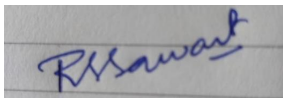
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (UAPSY402) **DEVELOPMENTAL PSYCHOLOGY -II** **UNIT 4** **TITLE:** **Social and Personality Development in Late Adulthood**	a) Personality Development and successful aging b) The daily life of Late Adulthood c) Relationships: Old & new	12	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Board and chalk, Classroom discussion, small experiments and activities, short videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

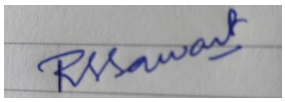
CLASS: **T.Y.B.A.** SEMESTER: **VI**

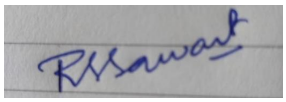
MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:

1) To impart knowledge and understanding of the nature, uses, technical features, and the process of construction of psychological tests
2) To create awareness about measurement of intelligence and assessment of personality
3) To impart knowledge and understanding of the concepts in Statistics and the various measures of Descriptive Statistics - their characteristics, uses, applications and methods of calculation
4) To create a foundation for advanced learning of Psychological Testing, Assessment, and Statistics

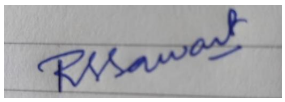
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV (UAPS601) **Psychological Testing and Statistics: Part II** **UNIT 1** **TITLE:** **Test Development and Correlation**	a) Test conceptualization and Test construction b) Test tryout and Item analysis c) Test revision d) Meaning and types of correlation positive, negative and zero; Graphic representations of correlation - Scatter Plots e) The steps involved in calculation of Pearson's product-moment correlation coefficient f) Calculation of	12	Cohen, J. R., Swerdlik, M. E., & Sturman, E. D. (2013). *Psychological Testing and Assessment: An introduction to Tests and Measurement.* (8th ed.). New York. McGraw-Hill International edition. (Indian reprint 2015)	Board and chalk, Classroom discussion, small experiments and activities, short videost google classroom,

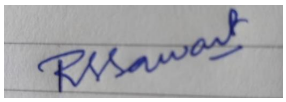




	rho by Spearman's rank-difference method; Uses and limitations of correlation coefficient g) Simple Regression and Multiple Regression			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **VI**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:

1) To impart knowledge and understanding of the nature, uses, technical features, and the process of construction of psychological tests
2) To create awareness about measurement of intelligence and assessment of personality
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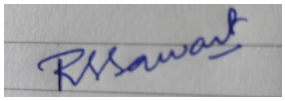
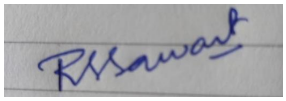
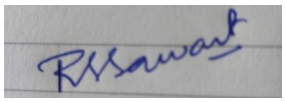
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV (UAPS601) **Psychological Testing and Statistics: Part II** **UNIT 2** **TITLE:** **Measurement of Intelligence, Intelligence Scales, Probability, Normal Probability Curve and Standard scores**	a) What is Intelligence? - Definitions and theories; measuring Intelligence b) The Stanford-Binet Intelligence Scales and the Wechsler Tests: WAIS, WISC, WPPSI c) The concept of Probability; laws of Probability; Characteristics, importance and applications of the Normal Probability	12	Cohen, J. R., Swerdlik, M. E., & Sturman, E. D. (2013). *Psychological Testing and Assessment: An introduction to Tests and Measurement.* (8th ed.). New York. McGraw-Hill International edition. (Indian reprint 2015)	Board and chalk, Classroom discussion, small experiments and activities, short videost google classroom,

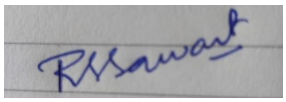




	Curve; Area under the Normal Curve d) Skewness- positive and negative, causes of skewness, formula for calculation; Kurtosis - meaning and formula for calculation e) Standard scores – z, T, Stanine; Linear and non-linear transformation; Normalised Standard scores			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **VI**

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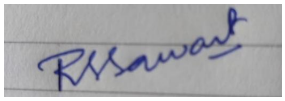
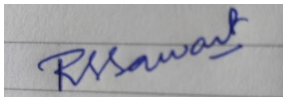
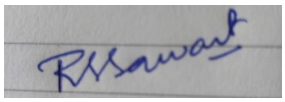
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV (UAPS601) **Psychological Testing and Statistics: Part II** **UNIT 3** **TITLE:** **Assessment of Personality**	a) Personality Assessment – some basic questions: who, what, where, how; Developing instruments to assess personality – logic and reason, theory, data reduction methods, criterion groups; personality assessment and culture b) Objective methods of personality assessment c) Projective methods of	12	Cohen, J. R., Swerdlik, M. E., & Sturman, E. D. (2013). *Psychological Testing and Assessment: An introduction to Tests and Measurement*. (8th ed.). New York. McGraw-Hill International edition. (Indian reprint 2015)	Board and chalk, Classroom discussion, small experiments and activities, short videos google classroom,

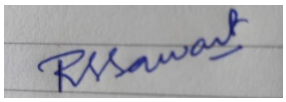




	personality assessment - Inkblots as Projective stimuli - the Rorschach; Pictures as Projective stimuli – Thematic Apperception Test; Projective methods in perspective			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





TEACHING PLAN (UNIT PLAN)

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DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **VI**

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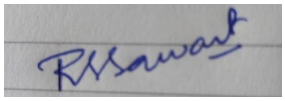
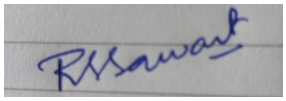
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV (UAPS601) **Psychological Testing and Statistics: Part II** **UNIT 4** **TITLE:** **Measures of Variability, Percentiles, and Percentile Ranks**	a) Calculation of 4 measures of variability: Range, Average Deviation, Quartile Deviation and Standard Deviation b) Comparison of 4 measures of variability: Merits, limitations, and uses c) Calculation of Percentile ranks and Percentile Scores. d) Percentiles – nature, merits, limitations, and uses.	12	Cohen, J. R., Swerdlik, M. E., & Sturman, E. D. (2013). *Psychological Testing and Assessment: An introduction to Tests and Measurement.* (8th ed.). New York. McGraw-Hill International edition. (Indian reprint 2015)	Board and chalk, Classroom discussion, small experiments and activities, short videos google classroom, .





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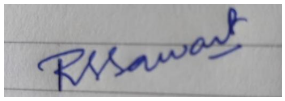
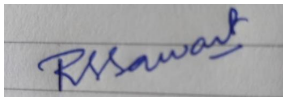




TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **VI**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:

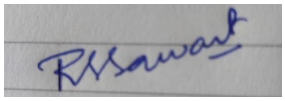
1) To impart knowledge and understanding of the basic concepts in Abnormal Psychology and the theories about Abnormality
2) To impart knowledge and understanding of the different Psychological Disorders – their symptoms, diagnosis, causes and treatment
3) To create awareness about Mental Health problems in society
4) To create a foundation for higher education and a professional career in Clinical Psychology

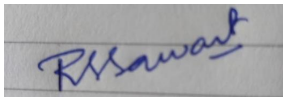
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER V (UAPS602) **ABNORMAL PSYCHOLOGY - II** **UNIT 1** **TITLE:** **Schizophrenia Spectrum and other Psychotic Disorders**	a) Schizophrenia, brief psychotic disorder, Schizophreniform Schizoaffective, delusional disorders b) Theories and treatment of schizophrenia; Biological, Psychological, Sociocultural perspectives; Schizophrenia: the biopsychosocial perspective	12	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Board and chalk, Classroom discussion, small experiments and activities, short videost google classroom,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**





DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **VI**

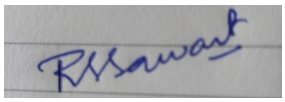
MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

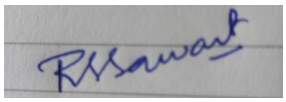
LEARNING OBJECTIVE/S:

1) To impart knowledge and understanding of the basic concepts in Abnormal Psychology and the theories about Abnormality
2) To impart knowledge and understanding of the different Psychological Disorders – their symptoms, diagnosis, causes and treatment
3) To create awareness about Mental Health problems in society
4) To create a foundation for higher education and a professional career in Clinical Psychology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER V (UAPS602) **ABNORMAL PSYCHOLOGY -II** **UNIT 2** **TITLE:** **Depressive and Bipolar Disorders**	a) Depressive disorders; disorders involving alterations in mood b) Theories and treatment of depressive and bipolar disorders; psychological and sociocultural perspectives c) Suicide; depressive and bipolar disorders: the biopsychosocial perspective	12	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Board and chalk, Classroom discussion, small experiments and activities, short videost google classroom,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **VI**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

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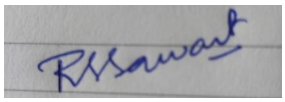
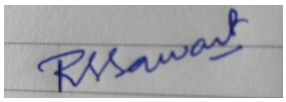
PAPER V (UAPS602) **ABNORMAL PSYCHOLOGY - II** **UNIT 3** **TITLE:** **Paraphilic Disorders, Sexual Dysfunctions, and Gender Dysphoria**	a) What patterns of sexual behavior represent psychological disorders? Paraphilic Disorders; Theories and treatment b) Sexual Dysfunctions; Theories and treatment c) Gender Dysphoria; Theories and treatment; The biopsychosocial perspective	12	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Board and chalk, Classroom discussion, small experiments and activities, short videost google classroom,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **VI**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER V (UAPS602) **ABNORMAL PSYCHOLOGY - II** **UNIT 4** **TITLE:** **Personality Disorders**	a) The nature of personality disorders b) Cluster A and Cluster B personality disorders c) Cluster C personality disorders; the biopsychosocial perspective	12	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Board and chalk, Classroom discussion, small experiments and activities, short videost google classroom,

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TEACHING PLAN (UNIT PLAN)

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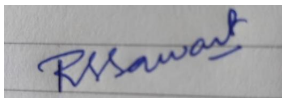

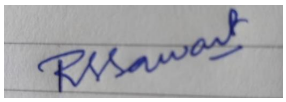

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **VI**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:

1. To impart knowledge and understanding of the basic concepts in and various facets of Industrial and Organizational Psychology
2. To create awareness about the role and importance of Psychological factors and processes in the world of work
3. To create a foundation for higher education and a professional career in Industrial Psychology and Organizational Behaviour

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS603) **Industrial-Organizational Psychology: Part II** **UNIT 1** **TITLE:** **Theories of Employee Motivation**	a) What is motivation? Work motivation theories, need theories b) Other Theories - Reinforcement theory, expectancy theory and self-efficacy theory; Justice theories, goal-setting theory, control theory and action theory	12	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Board and chalk, Classroom discussion, small experiments and activities, short videost google classroom,

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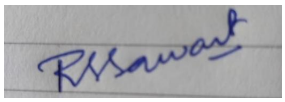

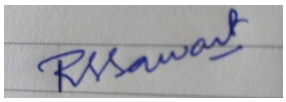

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **VI**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

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PAPER VI (UAPS603) **Industrial-Organizational Psychology: Part II** **UNIT 2** **TITLE:** **Feelings about Work: Job Attitudes and Emotions**	a) The nature of job satisfaction; how people feel about their jobs; the assessment and antecedents of job satisfaction b) Potential effects of job satisfaction; organizational commitment and emotions at work	12	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Board and chalk, Classroom discussion, small experiments and activities, short videost google classroom,

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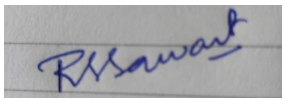

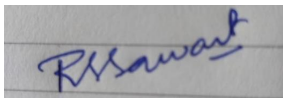

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **VI**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

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PAPER VI (UAPS603) **Industrial-Organizational Psychology: Part II** **UNIT 3** **TITLE:** **Leadership and Power in Organizations**	a) What is leadership? Sources of influence and power; abuse of supervisory power: sexual and ethnic harassment b) Approaches to the understanding of leadership; women in leadership positions; cross-cultural issues in leadership	12	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Board and chalk, Classroom discussion, small experiments and activities, short videost google classroom,

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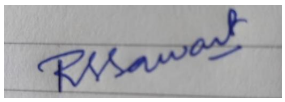

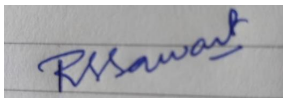

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **VI**

MONTH: **JANUARY - APRIL** ACADEMIC YEAR: **2022-2023**

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PAPER VI (UAPS603) **Industrial-Organizational Psychology: Part II** **UNIT 4** **TITLE: Organizational Development and Theory**	a) Organizational Development b) Organizational Theories	12	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Board and chalk, Classroom discussion, small experiments and activities, short videost google classroom,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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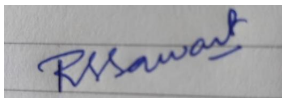

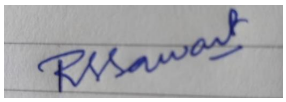

Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashwant Keshav Patil College of Commerce
Vidya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN UNIT PLAN PSYCHOLOGY 2021-22

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **I**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: The learner will be able to know the important researchers and their contributions to the field of Psychology. The learner will be able to get an insight on different viewpoints in Psychology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTE D	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizati onal Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER I (UAPSY101) **FUNDAMENTALS OF PSYCHOLOGY - I** **UNIT 1** **TITLE: THE SCIENCE OF PSYCHOLOGY**	**THE HISTORY OF PSYCHOLOGY** - Wundt, Introspection, Laboratory. - Titchner, structuralism. - James, Functionalism. - Gestalt -Freud, psychoanalysis. -Watson, Behaviourism.	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	THE FIELDS OF PSYCHOLOGY TODAY	03	Ciccarelli, S.K., White, J.N., & Mishra, G.	Chalk and Board,

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	- Psychodynamic perspective - Behavioural perspective - Humanistic perspective - Bio - psychological perspective - Cognitive perspective - Sociology - cultural perspective - Evolutionary perspective		(2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Books, short videos
	SCIENTIFIC RESEARCH - scientific methods - descriptive methods - finding relationship - qualitative methods	03	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation.	Chalk and Board, Books, short videos

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

			Pearson India Education Services Pvt.ltd.	
	ETHICS OF PSYCHOLOGICAL RESEARCH - guidelines for doing research with people.	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian	Chalk and Board, Books, short videos

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	- classic studies - E. G. Astrology		Adaptation. Pearson India Education Services Pvt.ltd.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **I**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: The learner will be able to know the biological basis of Psychology. The learner will be able to know the structure and functions of neurons. The learner will be able to understand the nervous system and its parts and what role it plays in Psychology. The learner will be able to have an insight in methods of studying the brain and parts of the brain that influence human Psychology. The learner will be able to understand the endocrine system and its functions.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER I (UAPSY 101) **FUNDAMENTALS OF PSYCHOLOGY - I** **UNIT 2** **TITLE: THE BIOLOGICAL PERSPECTIVE**	**NEURONS AND NERVES : BUILDING THE NETWORK** - structure of the neuron - neural impulse - synapse - neurotransmitters - reuptake and enzymes	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	AN OVERVIEW OF THE NERVOUS SYSTEM - central nervous system - peripheral nervous system	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India	Chalk and Board, Books, short videos

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**TEACHING METHOD/ ICT TOOLS USED**
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	And structure of the brain		Education Services Pvt.ltd.	
	DISTANT CONNECTIONS:THE ENDOCRINE GLANDS - pituitary gland - thyroid gland - pancreas - gonads - adrenal gland	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	LOOKING INSIDE THE LIVING BRAIN - clinical studies - EEG - CT scan - MRI scan - PET scan	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India	Chalk and Board, Books, short videos

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

			Education Services Pvt.ltd.	
	FROM THE BOTTOM UP : THE STRUCTURES OF THE BRAIN - brain stem - structures under the cortex - the cortex - the association area of the cortex	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India	Chalk and Board, Books, short videos

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	- Classic studies in Psychology. - e. g. Difference between male and female brains		Education Services Pvt.ltd.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **I**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: The learner will be able to define Learning. The learner will be able to understand the classical conditioning method of learning and its application. The learner will be able to know the operation conditioning method of learning and its application. The learner will be able to understand other cognitive methods of learning. The learner will be able to know observational methods of learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER I (UAPSY101) **FUNDAMENTALS OF PSYCHOLOGY - I**	**DEFINITION OF LEARNING** - features	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
UNIT 3 **TITLE: LEARNING**	**CLASSICAL CONDITIONING, AND OPERANT CONDITIONING** - Pavlov and salivating dog - Elements of classical conditioning - Thorndike's puzzle box and frustrating cat - reinforcement	04	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	- schedules of reinforcement			
	COGNITIVE LEARNING THEORY - Tolman's Maze running rats - latent learning Seligman's depressed dogs and learned helplessness - Killer's Chimp and insight learning	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	OBSERVATIONAL LEARNING - Bandura and bobo doll - four elements of observational learning	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India	Chalk and Board, Books, short videos

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

			Education Services Pvt.ltd.	
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples - classic studies - E. G. Mentally challenged child	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **I**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: The learner will be able to define memory. The learner will be able to know models of memory. The learner will be able to understand the three different stages of memory according to the information processing model. The learner will be able to have an insight in the retrieval process of long term memory. The learner will be able to define forgetting and understand its nature. The learner will be able to know the physical aspects of memory.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER I (UAPSY101) **FUNDAMENTALS OF PSYCHOLOGY - I** **UNIT 4** **TITLE: MEMORY**	**WHAT IS MEMORY?** - encoding - storage - retrieval	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	THE INFORMATION PROCESSING MODEL:THREE MEMORY SYSTEMS - sensory memory - short term memory - long term memory - long term memory organization	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**TEACHING METHOD/ ICT TOOLS USED**
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	RETRIEVAL OF LONG –TERM MEMORIES - retrieval cues - recall - recognition	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	FORGETTING - Ebbinghaus and forgetting curve - encoding failure - memory trace decay theory - interference theory.	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**TEACHING METHOD/ ICT TOOLS USED**
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	NEUROSCIENCE OF MEMORY **- NEURAL ACTIVITY** **- HIPPOCAMPUS AND MEMORY** **- ORGANIC AMNESIA**	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples - classic studies - E. G. Alzheimer's disease	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Chalk and Board, Books, short videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: The learner will be able to understand the concept of social psychology. The learner will be able to know how social psychology originated and developed. The learner will be able to gain insight into the research methods used in social psychology.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER II (UAPSY301) **SOCIAL PSYCHOLOGY - I** **UNIT 1** **TITLE: SOCIAL PSYCHOLOGY : THE SCIENCE OF THE SOCIAL SIDE OF LIFE**	**SOCIAL PSYCHOLOGY : WHAT IT IS AND WHAT IT IS NOT** -scientific in nature -focus on behavior of individual -causes of social behavior and thought	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Chalk and Board, Books, short videos
	SOCIAL PSYCHOLOGY : ADVANCES AT THE BOUNDARIES - origins and development	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**TEACHING METHOD/ ICT TOOLS USED**
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	HOW SOCIAL PSYCHOLOGISTS ANSWER THE QUESTIONS THEY ASK : RESEARCH AS THE ROUTE TO INCREASED KNOWLEDGE - experimental method -correlation method - importance of replications, meta-analysis, and converging operations	04	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	THE ROLE OF THEORY IN SOCIAL PSYCHOLOGY - role of Theory	01	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson	

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

			Education; Indian reprint 2017	
	THE QUEST FOR KNOWLEDGE AND THE RIGHTS OF INDIVIDUAL : SEEKING AN APPROPRIATE BALANCE - need for balancing	01	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: The learner will be able to understand the nature of non verbal communication. The learner will be able to define attribution. The learner will be able to discuss factors contributing to attribution and the errors made while attributing. The learner will be able to understand the process of impression management and impression formation.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER II (UAPSY301) **SOCIAL PSYCHOLOGY - I** **UNIT 2** **TITLE: SOCIAL PERCEPTION : SEEKING TO UNDERSTAND OTHERS**	**NON VERBAL COMMUNICATION : AN UNSPOKEN LANGUAGE** - basic channels - emotional expressiveness - detection of deception	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Chalk and Board, Books, short videos
	ATTRIBUTION : UNDERSTANDING THE CAUSES OF BEHAVIOUR - theories of attribution - basic errors in attribution	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	IMPRESSION FORMATION AND MANAGEMENT : COMBINING INFORMATION ABOUT OTHERS - impression formation - impression management	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	WHAT RESEARCH TELLS US ABOUT THE ROLE OF NON VERBAL CUES IN JOB INTERVIEW? - research findings	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	WHAT RESEARCH TELLS US ABOUT WHY SOME	02	Branscombe, N. R. & Baron, R. A., Adapted by	

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	PEOPLE CONCLUDE THEY ARE SUPERIOR TO OTHERS? - research findings		Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: The learner will be able to define attitude. The learner will be able to know how to form attitudes. The learner will be able to understand when and how attitudes influence and guide behaviour. The learner will be able to gain insight into the concept of persuasion and how to resist it. The learner will be able to know the cognitive dissonance. The learner will be able to know how culture influences attitudes.

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER II (UAPSY301) **SOCIAL PSYCHOLOGY - I** **UNIT 3** **TITLE: ATTITUDES : EVALUATING AND RESPONDING TO THE SOCIAL WORLD**	**ATTITUDE FORMATION : HOW ATTITUDES DEVELOP** - social learning -social comparison - genetic factors	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Chalk and Board, Books, short videos
	WHEN AND WHY DO ATTITUDES INFLUENCE BEHAVIOUR? - attitudes and actions	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**TEACHING METHOD/ ICT TOOLS USED**
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	HOW DO ATTITUDES GUIDE BEHAVIOUR? - specificity - strength - accessibility	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	THE SCIENCE OF PERSUASION: HOW ATTITUDES ARE CHANGED - traditional approach - cognitive approach - attitude functions - reciprocity - message framing	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	RESISTING PERSUASION ATTEMPTS - reactance - forewarning - selective avoidance	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	COGNITIVE DISSONANCE: WHAT IT IS AND HOW DO WE MANAGE IT? - forced compliance	01	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	WHAT RESEARCH TELLS US ABOUT CULTURE AND	01	Branscombe, N. R. & Baron, R. A., Adapted by	

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	ATTITUDE PROCESSES? - social diversity		Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: The learner will be able to gain more insight into interpersonal liking. The learner will be able to understand the factors influencing interpersonal liking. The learner will be able to understand types of close relationships. The learner will be able to know the factors that may destroy close relationships.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER II (UAPSY301) **SOCIAL PSYCHOLOGY - I** **UNIT 4** **TITLE: LIKING, LOVE AND OTHER CLOSE RELATIONSHIPS**	**INTERNAL SOURCES OF LIKING OTHERS : THE ROLE OF NEEDS AND EMOTIONS** - physical surroundings - positive and negative effects - need to affiliation	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Chalk and Board, Books, short videos
	EXTERNAL SOURCES OF ATTRACTION:THE EFFECTS OF PROXIMITY, FAMILIARITY AND PHYSICAL BEAUTY - proximity	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	- familiarity - physical beauty			
	SOURCES OF LIKING BASED ON SOCIAL INTERACTION - familiarity and interaction	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	CLOSE RELATIONSHIPS: FOUNDATIONS OF SOCIAL LIFE - reciprocity - similarity	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	WHAT RESEARCH TELLS US ABOUT DRAMATIC DIFFERENCES IN APPEARANCE BETWEEN PARTNERS: IS LOVE REALLY BLIND? - factors influencing interpersonal attraction	01	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	WHAT RESEARCH TELLS US ABOUT TWO FACTORS THAT MAY DESTROY LOVE-JEALOUSY AND INFIDELITY - jealousy - infidelity	01	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: The learner will be able to gain insight into lifespan development. The learner will be able to know developmental milestones in adolescence with reference to physical development. The learner will be able to understand the cognitive development that occurs in adolescence. The learner will understand the language development occurring in adolescence.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER III (UAPSY302) **DEVELOPMENTAL PSYCHOLOGY - I** **UNIT 1** **TITLE: AN INTRODUCTION TO LIFESPAN DEVELOPMENT AND ADOLESCENCE PHYSICAL & COGNITIVE DEVELOPMENT**	**LIFESPAN DEVELOPMENT** - An orientation to lifespan development - defining life span development - scope of the field (areas, age and individual differences) - basic influences in development (history, age, socio-cultural, life events)	03	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Chalk and Board, Books, short videos
	PHYSICAL MATURATION - puberty (timing, sequence and signs of maturation) - fitness - sleep needs	03	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India	

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

			Education services Pvt. Ltd	
	COGNITIVE DEVELOPMENT AND SCHOOLING - Piaget's stage of formal operations - language development - educational and vocational issues	03	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	THREATS TO ADOLESCENCE WELL BEING - nutrition and eating disorder - uses and abuses of drugs - depression - deaths in adolescence	03	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: The learner will be able to gain insight into psychosocial development during adolescence. The learner will be able to understand the process of realizing sexual orientation in adolescence. The learner will be able to know the dynamics of relationships with family and friends.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER III (UAPSY302) **DEVELOPMENTAL PSYCHOLOGY - I** **UNIT 2** **TITLE: SOCIAL AND PERSONALITY DEVELOPMENT IN ADOLESCENCE**	**IDENTITY** - Erikson's identity versus identity confusion - Marcia – identity status, crisis and commitment - gender differences	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Chalk and Board, Books, short videos
	RELATIONSHIPS - adolescence and parents - adolescence and siblings - adolescence and peers	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	DATING, SEXUAL BEHAVIOUR AND TEENAGE PREGNANCY - dating - sexual behaviour - teenage pregnancy		Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: The learner will be able to know the developmental milestones in adulthood. The learner will be able to understand the physical development occurring in early adulthood. The learner will be able to understand the cognitive development occurring in early adulthood. The learner will be able to know the relevance of pursuing higher education in early adulthood.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER III (PSY 302) **DEVELOPMENTAL PSYCHOLOGY - I** **UNIT 3** **TITLE: PHYSICAL AND COGNITIVE DEVELOPMENT IN EARLY ADULTHOOD**	**PHYSICAL DEVELOPMENT** - Erikson's identity versus identity confusion - Marcia – identity status, crisis and commitment - gender differences	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Chalk and Board, Books, short videos
	COGNITIVE DEVELOPMENT - Erikson's theory - post formal thinking - intelligence	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**TEACHING METHOD/ ICT TOOLS USED**
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	COLLEGE: PURSUING HIGHER EDUCATION - demographics of higher education - college adjustment - reacting to the demands of college life		Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: The learner will be able to gain insight into psychosocial development during early adulthood. The learner will be able to understand the relationship patterns in early adulthood. The learner would be able to gain insight into the attachment styles of early adults. The learner will be able to know the process of choosing a partner in early adulthood.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER III (UAPSY302) **DEVELOPMENTAL PSYCHOLOGY - I** **UNIT 4** **TITLE: SOCIAL AND PERSONALITY DEVELOPMENT IN EARLY ADULTHOOD**	**FORGING RELATIONSHIPS: INTIMACY, LIKING AND LOVING DURING EARLY ADULTHOOD** - components happiness - emerging adulthood - love - choosing partner - attachment styles - gay and lesbian relationship	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Chalk and Board, Books, short videos
	THE COURSE OF RELATIONSHIPS - marriage - parenthood - gay and lesbian parents - staying single	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	WORK: CHOOSING & EMBARKING ON A CAREER - identity during young adulthood - picking an occupation - choosing a career - gender and career choices		Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:

1) To impart knowledge and understanding of nature, uses, technical features, and the process of construction of psychological tests.
2) To create awareness about measurement of intelligence and assessment of personality
3) To impart knowledge and understanding of the concepts in Statistics and the various measures of Descriptive Statistics - their characteristics, uses, applications and methods of calculation
4) To create a foundation for advanced learning of Psychological Testing, Assessment, and Statistics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER IV (UAPS501) **Psychological Testing and Statistics: Part I** **UNIT 1** **TITLE: Test Development and Correlation**	a) Test conceptualization and Test construction b) Test tryout and Item analysis c) Test revision d)Meaning and types of correlation – positive, negative and zero; Graphic representations of correlation - Scatterplots	04 PER WEEK	Cohen, J. R., Swerdlik, M. E., & Sturman, E. D. (2013). *Psychological Testing and Assessment: An introduction to Tests and Measurement.* (8th ed.). New York. McGraw-Hill International edition. (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	e) The steps involved in calculation of Pearson's product-moment correlation coefficient f) Calculation of rho by Spearman's rank-difference method; Uses and limitations of correlation coefficient g) Simple Regression and Multiple Regression			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:

1) To impart knowledge and understanding of nature, uses, technical features, and the process of construction of psychological tests.
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER IV (UAPS501) **Psychological Testing and Statistics: Part I** **UNIT 2** **TITLE: Reliability**	a) The concept of Reliability; sources of error variance b) Reliability estimates: Test-Retest, Parallel and Alternate Forms, Split-Half, Inter-Item Consistency Kuder-Richardson, Cronbach's Coefficient Alpha; Inter-Scorer Reliability c) Using and interpreting a coefficient of Reliability – purpose of the Reliability coefficient, nature of	04 PER WEEK	Cohen, J. R., Swerdlik, M. E., & Sturman, E. D. (2013). *Psychological Testing and Assessment: An introduction to Tests and Measurement.* (8th ed.). New York. McGraw-Hill International edition. (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	the test, the true score model of measurement and alternatives to it d) Reliability and individual scores: SEM and SE-Difference			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:

1) To impart knowledge and understanding of nature, uses, technical features, and the process of construction of psychological tests.
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER IV (UAPS501) **Psychological Testing and Statistics: Part I** **UNIT 3** **TITLE: Validity and Measures of central tendency**	a) The concept of validity; Face and Content validity b) Criterion-related validity and Construct validity c) Validity, bias, and fairness d) Calculation of mean, median and mode of a frequency distribution; The assumed mean method for calculating the mean e) Comparison of measures of central tendency: Merits, limitations, and	04 PER WEEK	Cohen, J. R., Swerdlik, M. E., & Sturman, E. D. (2013). *Psychological Testing and Assessment: An introduction to Tests and Measurement.* (8th ed.). New York. McGraw-Hill International edition. (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	uses of mean, median and mode			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:

1) To impart knowledge and understanding of nature, uses, technical features, and the process of construction of psychological tests.
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER IV (UAPS501) **Psychological Testing and Statistics: Part I** **UNIT 4** **TITLE: Types of scores, Types of scales, Frequency Distribution, Graphic representations**	a) Continuous and discrete scores – meaning and difference; Nominal, ordinal, interval and ratio scales of measurement b) Preparing a Frequency Distribution; advantages and disadvantages of preparing a frequency distribution; smoothed frequencies: method of running averages c) Graphic representations: Frequency	04 PER WEEK	Cohen, J. R., Swerdlik, M. E., & Sturman, E. D. (2013). *Psychological Testing and Assessment: An introduction to Tests and Measurement.* (8th ed.). New York. McGraw-Hill International edition. (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	polygon, histogram, cumulative frequency curve, ogive, polygon of smoothed frequencies			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:

1) To impart knowledge and understanding of nature, uses, technical features, and the process of construction of psychological tests.
2) To create awareness about measurement of intelligence and assessment of personality
3) To impart knowledge and understanding of the concepts in Statistics and the various measures of Descriptive Statistics - their characteristics, uses, applications and methods of calculation
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER V (UAPS502) **ABNORMAL PSYCHOLOGY - I** **UNIT 1** **TITLE:** **<u>Understanding Abnormal behavior, Diagnosis, Treatment and Assessment</u>**	a) What is Abnormal Behaviour? The social impact of psychological disorders; defining abnormality; biological, psychological, sociocultural causes of abnormal behaviour, the biopsychosocial perspective; prominent themes in abnormal psychology throughout history – spiritual, humanitarian and scientific approaches; what's new in the DSM-5 – definition of a mental disorder	04 PER WEEK	**Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)**	Chalk and Board, Books, google classroom, short videos.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	b) Psychological disorder : experiences of client and clinician; the diagnostic process, DSM-5, additional information, culture-bound syndromes c) Characteristics of psychological assessment; clinical interview and Mental Status Examination; behavioural, multicultural, neuropsychological assessment; neuroimaging			

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:

1) To impart knowledge and understanding of nature, uses, technical features, and the process of construction of psychological tests.
2) To create awareness about measurement of intelligence and assessment of personality
3) To impart knowledge and understanding of the concepts in Statistics and the various measures of Descriptive Statistics - their characteristics, uses, applications and methods of calculation
4) To create a foundation for advanced learning of Psychological Testing, Assessment, and Statistics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER V (UAPS502) **ABNORMAL PSYCHOLOGY - I** **UNIT 2** **TITLE:** Theoretical Perspectives	a) Theoretical perspectives in Abnormal Psychology; Biological perspective, Trait theory, Psychodynamic, Behavioral perspectives b) Cognitive, Humanistic, Sociocultural perspectives; Biopsychosocial perspectives on theories and treatments: an integrative approach	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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TEACHING PLAN (UNIT PLAN)

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DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-2022**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER V (UAPS502) **ABNORMAL PSYCHOLOGY - I** **UNIT 3** **TITLE: <u>Anxiety, Obsessive-compulsive, and Trauma- and Stressor-related Disorders</u>**	a) Anxiety Disorders b) Obsessive-compulsive and related disorders c) Trauma- and Stressor-related Disorders; the biopsychosocial perspective	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER V (UAPS502) **ABNORMAL PSYCHOLOGY - I** **UNIT 4** **TITLE:** **<u>Dissociative and Somatic Symptom Disorders</u>**	a) Dissociative disorders – major forms, theories and treatment b) Somatic symptom and related disorders - somatic symptom disorder, illness anxiety and conversion disorders, conditions related to Somatic Symptom Disorders, theories and treatment c) Psychological factors affecting medical condition; Dissociative and Somatic Symptom	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

	Disorders: the biopsychosocial perspective			

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 1** **TITLE: <u>Job Analysis</u>**	a) What is job analysis? Purposes of job analysis; How job analysis information is collected b) Methods of job analysis; Reliability and validity of job analysis information; Job evaluation	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 2** **TITLE: <u>Performance Appraisal</u>**	a) Why do we appraise employees? Performance criteria b) Objective and subjective methods for assessing job performance; the impact of technology on performance appraisal; legal issues in performance appraisal	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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TEACHING PLAN (UNIT PLAN)

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DEPARTMENT: **PSYCHOLOGY**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 3** **TITLE: <u>Assessment Methods for Selection and Placement</u>**	a) Job-Related characteristics. b) Characteristics of psychological tests c) Ability Tests, Knowledge, Skills and all other tests d) Biographical information, interviews, work samples, Assessment centers and electronic assessment.	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Chalk and Board, Books, google classroom, short videos.

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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TEACHING PLAN (UNIT PLAN)

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DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2021-22**

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

CATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Chalk and Board, Books, google classroom, short videos.

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TEACHING PLAN UNIT PLAN PSYCHOLOGY 2020-21

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **I**

MONTH: **NOVEMBER - DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: The learner will be able to know the important researchers and their contributions to the field of Psychology. The learner will be able to get an insight on different viewpoints in Psychology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I (UAPSY101) **FUNDAMENTALS OF PSYCHOLOGY - I** **UNIT 1** **TITLE: THE SCIENCE OF PSYCHOLOGY**	**THE HISTORY OF PSYCHOLOGY** - Wundt, Introspection, Laboratory. - Titchner, structuralism. - James, Functionalism. - Gestalt -Freud, psychoanalysis. -Watson, Behaviourism.	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos

	THE FIELDS OF PSYCHOLOGY TODAY - Psychodynamic perspective - Behavioural perspective - Humanistic perspective - Bio - psychological perspective - Cognitive perspective - Sociology - cultural perspective - Evolutionary perspective	03	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos
	SCIENTIFIC RESEARCH - scientific methods - descriptive methods - finding relationship - qualitative methods	03	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos.
	ETHICS OF PSYCHOLOGICAL RESEARCH - guidelines for doing research with people.	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India	Google meet google classroom, short videos

			Education Services Pvt.ltd.	
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples - classic studies - E. G. Astrology	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos

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MONTH: **NOVEMBER - DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: The learner will be able to know the biological basis of Psychology. The learner will be able to know the structure and functions of neurons. The learner will be able to understand the nervous system and its parts and what role it plays in Psychology. The learner will be able to have an insight in methods of studying the brain and parts of the brain that influence human Psychology. The learner will be able to understand the endocrine system and its functions.

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PAPER I (PSY 101) **FUNDAMENTALS OF PSYCHOLOGY - I** **UNIT 2**	**NEURONS AND NERVES : BUILDING THE NETWORK** - structure of the neuron - neural impulse - synapse - neurotransmitters - reuptake and enzymes	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos
TITLE: THE BIOLOGICAL PERSPECTIVE	**AN OVERVIEW OF THE NERVOUS SYSTEM** - central nervous system	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation.	Google meet google classroom, short videos

	- peripheral nervous system And structure of the brain		Pearson India Education Services Pvt.ltd.	
	DISTANT CONNECTIONS:THE ENDOCRINE GLANDS - pituitary gland - thyroid gland - pancreas - gonads - adrenal gland	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos
	LOOKING INSIDE THE LIVING BRAIN - clinical studies - EEG - CT scan - MRI scan - PET scan	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos.
	FROM THE BOTTOM UP : THE STRUCTURES OF THE BRAIN - brain stem - structures under the cortex - the cortex - the association area of the cortex	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos

	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples - Classic studies in Psychology. - e. g. Difference between male and female brains	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos

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DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **I**

MONTH: **NOVEMBER - DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: The learner will be able to define Learning. The learner will be able to understand the classical conditioning method of learning and its application. The learner will be able to know the operation conditioning method of learning and its application. The learner will be able to understand other cognitive methods of learning. The learner will be able to know observational methods of learning.

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PAPER I (UAPSY101) **FUNDAMENTALS OF PSYCHOLOGY - I**	**DEFINITION OF LEARNING** - features	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos
UNIT 3 **TITLE: LEARNING**	**CLASSICAL CONDITIONING, AND OPERANT CONDITIONING** - Pavlov and salivating dog - Elements of classical conditioning - Thorndike's puzzle box and frustrating cat	04	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos

	- reinforcement - schedules of reinforcement			
	COGNITIVE LEARNING THEORY - Tolman's Maze running rats - latent learning Seligman's depressed dogs and learned helplessness - Killer's Chimp and insight learning	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos
	OBSERVATIONAL LEARNING - Bandura and bobo doll - four elements of observational learning	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos.
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples - classic studies - E. G. Mentally challenged child	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos

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LEARNING OBJECTIVE/S: The learner will be able to define memory. The learner will be able to know models of memory. The learner will be able to understand the three different stages of memory according to the information processing model. The learner will be able to have an insight in the retrieval process of long term memory. The learner will be able to define forgetting and understand its nature. The learner will be able to know the physical aspects of memory.

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PAPER I (UAPSY101) **FUNDAMENTALS OF PSYCHOLOGY - I**	**WHAT IS MEMORY?** - encoding - storage - retrieval	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos
UNIT 4 **TITLE: MEMORY**	**THE INFORMATION PROCESSING MODEL:THREE MEMORY SYSTEMS** - sensory memory - short term memory - long term memory	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos

	- long term memory organization			
	RETRIEVAL OF LONG –TERM MEMORIES - retrieval cues - recall - recognition	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos
	FORGETTING - Ebbinghaus and forgetting curve - encoding failure - memory trace decay theory - interference theory.	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos
	NEUROSCIENCE OF MEMORY **- NEURAL ACTIVITY** **- HIPPOCAMPUS AND MEMORY** **- ORGANIC AMNESIA**	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Google meet google classroom, short videos
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE.	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th	Google meet google classroom,

	- discussion and examples - classic studies - E. G. Alzheimer's disease		Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	short videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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Vidya Dayanand Patil College of Arts
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: The learner will be able to understand the concept of social psychology. The learner will be able to know how social psychology originated and developed. The learner will be able to gain insight into the research methods used in social psychology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY301) **SOCIAL PSYCHOLOGY - I**	**SOCIAL PSYCHOLOGY : WHAT IT IS AND WHAT IT IS NOT** -scientific in nature -focus on behavior of individual -causes of social behavior and thought	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Google meet google classroom, short videos
UNIT 1 **TITLE: SOCIAL PSYCHOLOGY : THE SCIENCE OF THE SOCIAL SIDE OF LIFE**	**SOCIAL PSYCHOLOGY : ADVANCES AT THE BOUNDARIES** - origins and development	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Google meet google classroom, short videos

	HOW SOCIAL PSYCHOLOGISTS ANSWER THE QUESTIONS THEY ASK : RESEARCH AS THE ROUTE TO INCREASED KNOWLEDGE - experimental method -correlation method - importance of replications, meta-analysis, and converging operations	04	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	THE ROLE OF THEORY IN SOCIAL PSYCHOLOGY - role of Theory	01	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Google meet google classroom, short videos
	THE QUEST FOR KNOWLEDGE AND THE RIGHTS OF INDIVIDUAL : SEEKING AN APPROPRIATE BALANCE - need for balancing	01	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Google meet google classroom, short videos,

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **202019-2021**

LEARNING OBJECTIVE/S: The learner will be able to understand the nature of non verbal communication. The learner will be able to define attribution. The learner will be able to discuss factors contributing to attribution and the errors made while attributing. The learner will be able to understand the process of impression management and impression formation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY301) **SOCIAL PSYCHOLOGY - I** **UNIT 2** **TITLE: SOCIAL PERCEPTION : SEEKING TO UNDERSTAND OTHERS**	**NON VERBAL COMMUNICATION : AN UNSPOKEN LANGUAGE** - basic channels - emotional expressiveness - detection of deception	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Google meet google classroom, short videos .
	ATTRIBUTION : UNDERSTANDING THE CAUSES OF BEHAVIOUR - theories of attribution - basic errors in attribution	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Google meet google classroom, short videos,

	IMPRESSION FORMATION AND MANAGEMENT : COMBINING INFORMATION ABOUT OTHERS - impression formation - impression management	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	WHAT RESEARCH TELLS US ABOUT THE ROLE OF NON VERBAL CUES IN JOB INTERVIEW? - research findings	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Google meet google classroom, short videos
	WHAT RESEARCH TELLS US ABOUT WHY SOME PEOPLE CONCLUDE THEY ARE SUPERIOR TO OTHERS? - research findings	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Google meet google classroom, short videos

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TEACHING PLAN (UNIT PLAN)

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DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: The learner will be able to define attitude. The learner will be able to know how to form attitudes. The learner will be able to understand when and how attitudes influence and guide behaviour. The learner will be able to gain insight into the concept of persuasion and how to resist it. The learner will be able to know the cognitive dissonance. The learner will be able to know how culture influences attitudes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY301) **SOCIAL PSYCHOLOGY - I** **UNIT 3** **TITLE: ATTITUDES : EVALUATING AND RESPONDING TO THE SOCIAL WORLD**	**ATTITUDE FORMATION : HOW ATTITUDES DEVELOP** - social learning -social comparison - genetic factors	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Google meet google classroom, short videos
	WHEN AND WHY DO ATTITUDES INFLUENCE BEHAVIOUR? - attitudes and actions	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Google meet google classroom, short videos

	HOW DO ATTITUDES GUIDE BEHAVIOUR? - specificity - strength - accessibility	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	THE SCIENCE OF PERSUASION: HOW ATTITUDES ARE CHANGED - traditional approach - cognitive approach - attitude functions - reciprocity - message framing	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Google meet google classroom, short videos
	RESISTING PERSUASION ATTEMPTS - reactance - forewarning - selective avoidance	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Google meet google classroom, short videos
	COGNITIVE DISSONANCE: WHAT IT IS AND HOW DO WE MANAGE IT? - forced compliance	01	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson	Google meet google classroom, short videos

			Education; Indian reprint 2017	
	WHAT RESEARCH TELLS US ABOUT CULTURE AND ATTITUDE PROCESSES? - social diversity	01	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: The learner will be able to gain more insight into interpersonal liking. The learner will be able to understand the factors influencing interpersonal liking. The learner will be able to understand types of close relationships. The learner will be able to know the factors that may destroy close relationships.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY301) **SOCIAL PSYCHOLOGY - I** **UNIT 4** **TITLE: LIKING, LOVE AND OTHER CLOSE RELATIONSHIPS**	**INTERNAL SOURCES OF LIKING OTHERS : THE ROLE OF NEEDS AND EMOTIONS** - physical surroundings - positive and negative effects - need to affiliation	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Google meet google classroom, short videos
	EXTERNAL SOURCES OF ATTRACTION:THE EFFECTS OF PROXIMITY, FAMILIARITY AND PHYSICAL BEAUTY - proximity	03	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson	Google meet google classroom, short videos

	- familiarity - physical beauty		Education; Indian reprint 2017	
	SOURCES OF LIKING BASED ON SOCIAL INTERACTION - familiarity and interaction	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Google meet google classroom, short videos
	CLOSE RELATIONSHIPS: FOUNDATIONS OF SOCIAL LIFE - reciprocity - similarity	02	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Google meet google classroom, short videos
	WHAT RESEARCH TELLS US ABOUT DRAMATIC DIFFERENCES IN APPEARANCE BETWEEN PARTNERS: IS LOVE REALLY BLIND? - factors influencing interpersonal attraction	01	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Google meet google classroom, short videos

	WHAT RESEARCH TELLS US ABOUT TWO FACTORS THAT MAY DESTROY LOVE-JEALOUSY AND INFIDELITY - jealousy - infidelity	01	Branscombe, N. R. & Baron, R. A., Adapted by Preeti Kapoor (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Google meet google classroom, short videos

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: The learner will be able to gain insight into lifespan development. The learner will be able to know developmental milestones in adolescence with reference to physical development. The learner will be able to understand the cognitive development that occurs in adolescence. The learner will understand the language development occurring in adolescence.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (UAPSY302) **DEVELOPMENTAL PSYCHOLOGY - I** **UNIT 1** **TITLE: AN INTRODUCTION TO LIFESPAN DEVELOPMENT AND ADOLESCENCE PHYSICAL & COGNITIVE DEVELOPMENT**	**LIFESPAN DEVELOPMENT** - An orientation to lifespan development - defining life span development - scope of the field (areas, age and individual differences) - basic influences in development (history, age, socio-cultural, life events)	03	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Google meet google classroom, short videos
	PHYSICAL MATURATION - puberty (timing, sequence and signs of maturation) - fitness	03	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India	Google meet google classroom, short videos,

	- sleep needs		Education services Pvt. Ltd	
	COGNITIVE DEVELOPMENT AND SCHOOLING - Piaget's stage of formal operations - language development - educational and vocational issues	03	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Google meet google classroom, short videos
	THREATS TO ADOLESCENCE WELL BEING - nutrition and eating disorder - uses and abuses of drugs - depression - deaths in adolescence	03	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Google meet google classroom, short videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: The learner will be able to gain insight into psychosocial development during adolescence. The learner will be able to understand the process of realizing sexual orientation in adolescence. The learner will be able to know the dynamics of relationship with family and friends.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (UAPSY302) **DEVELOPMENTAL PSYCHOLOGY - I** **UNIT 2** **TITLE: SOCIAL AND PERSONALITY DEVELOPMENT IN ADOLESCENCE**	**IDENTITY** - Erikson's identity versus identity confusion - Marcia – identity status, crisis and commitment - gender differences	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Google meet google classroom, short videos
	RELATIONSHIPS - adolescence and parents - adolescence and siblings - adolescence and peers	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk,

	DATING, SEXUAL BEHAVIOUR AND TEENAGE PREGNANCY - dating - sexual behaviour - teenage pregnancy	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk ,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: The learner will be able to know the developmental milestones in adulthood. The learner will be able to understand the physical development occurring in early adulthood. The learner will be able to understand the cognitive development occurring in early adulthood. The learner will be able to know the relevance of pursuing higher education in early adulthood.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (PSY 302) **DEVELOPMENTAL PSYCHOLOGY - I** **UNIT 3** **TITLE: PHYSICAL AND COGNITIVE DEVELOPMENT IN EARLY ADULTHOOD**	**PHYSICAL DEVELOPMENT** - Erikson's identity versus identity confusion - Marcia – identity status, crisis and commitment - gender differences	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Google meet google classroom, short videos
	COGNITIVE DEVELOPMENT - Erikson's theory - post formal thinking - intelligence	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Google meet google classroom, short videos

	COLLEGE: PURSUING HIGHER EDUCATION - demographics of higher education - college adjustment - reacting to the demands of college life	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Google meet google classroom, short videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: The learner will be able to gain insight into psychosocial development during early adulthood. The learner will be able to understand the relationship patterns in early adulthood. The learner would be able to gain insight into the attachment styles of early adults. The learner will be able to know the process of choosing a partner in early adulthood.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (UAPSY302) **DEVELOPMENTAL PSYCHOLOGY - I** **UNIT 4** **TITLE: SOCIAL AND PERSONALITY DEVELOPMENT IN EARLY ADULTHOOD**	**FORGING RELATIONSHIPS: INTIMACY, LIKING AND LOVING DURING EARLY ADULTHOOD** - components happiness - emerging adulthood - love - choosing partner - attachment styles - gay and lesbian relationship	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Google meet google classroom, short videos
	THE COURSE OF RELATIONSHIPS - marriage - parenthood - gay and lesbian parents - staying single	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Google meet google classroom, short videos

	WORK: CHOOSING & EMBARKING ON A CAREER - identity during young adulthood - picking an occupation - choosing a career - gender and career choices	04	Feldman, R. S. & Babu, N. (2018). Development across the LifeSpan. (8th Ed). India: Pearson India Education services Pvt. Ltd	Google meet google classroom, short videos,

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:

1) To impart knowledge and understanding of nature, uses, technical features, and the process of construction of psychological tests.
2) To create awareness about measurement of intelligence and assessment of personality
3) To impart knowledge and understanding of the concepts in Statistics and the various measures of Descriptive Statistics - their characteristics, uses, applications and methods of calculation
4) To create a foundation for advanced learning of Psychological Testing, Assessment, and Statistics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV (UAPS501) **Psychological Testing and Statistics: Part I** **UNIT 1** **TITLE: <u>Test Development and Correlation</u>**	a) Test conceptualization and Test construction b) Test tryout and Item analysis c) Test revision d)Meaning and types of correlation – positive, negative and zero; Graphic representations of	04 PER WEEK	Cohen, J. R., Swerdlik, M. E., & Sturman, E. D. (2013). *Psychological Testing and Assessment: An introduction to Tests and Measurement.* (8th ed.). New York. McGraw-Hill International edition. (Indian reprint 2015)	Google meet google classroom, short videos.

	correlation - Scatterplot s e) The steps involved in calculation of Pearson's product-mom ent correlation coefficient f) Calculation of rho by Spearman's rank-differenc e method; Uses and limitations of correlation coefficient g) Simple Regression and Multiple Regression			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:

1) To impart knowledge and understanding of nature, uses, technical features, and the process of construction of psychological tests.
2) To create awareness about measurement of intelligence and assessment of personality
3) To impart knowledge and understanding of the concepts in Statistics and the various measures of Descriptive Statistics - their characteristics, uses, applications and methods of calculation
4) To create a foundation for advanced learning of Psychological Testing, Assessment, and Statistics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV (UAPS501) **Psychological Testing and Statistics: Part I** **UNIT 2** **TITLE: <u>Reliability</u>**	a) The concept of Reliability; sources of error variance b) Reliability estimates: Test-Retest, Parallel and Alternate Forms, Split-Half, Inter-Item Consistency Kuder-Richardson, Cronbach's Coefficient Alpha; Inter-Scorer Reliability c) Using and	04 PER WEEK	Cohen, J. R., Swerdlik, M. E., & Sturman, E. D. (2013). *Psychological Testing and Assessment: An introduction to Tests and Measurement.* (8th ed.). New York. McGraw-Hill International edition. (<u>Indian reprint 2015)</u>	Google meet google classroom, short videos.

	interpreting a coefficient of Reliability – purpose of the Reliability coefficient, nature of the test, the true score model of measurement and alternatives to it d) Reliability and individual scores: SEM and SE-Difference			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:

1) To impart knowledge and understanding of nature, uses, technical features, and the process of construction of psychological tests.
2) To create awareness about measurement of intelligence and assessment of personality
3) To impart knowledge and understanding of the concepts in Statistics and the various measures of Descriptive Statistics - their characteristics, uses, applications and methods of calculation
4) To create a foundation for advanced learning of Psychological Testing, Assessment, and Statistics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV (UAPS501) **Psychological Testing and Statistics: Part I** **UNIT 3** **TITLE: <u>Validity and Measures of central tendency</u>**	a) The concept of validity; Face and Content validity b) Criterion-related validity and Construct validity c) Validity, bias, and fairness d) Calculation of mean, median and mode of a frequency distribution; The assumed mean method for calculating the mean	04 PER WEEK	Cohen, J. R., Swerdlik, M. E., & Sturman, E. D. (2013). *Psychological Testing and Assessment: An introduction to Tests and Measurement.* (8th ed.). New York. McGraw-Hill International edition. (Indian reprint 2015)	Google meet google classroom, short videos.

	e) Comparison of measures of central tendency: Merits, limitations, and uses of mean, median and mode			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:

1) To impart knowledge and understanding of nature, uses, technical features, and the process of construction of psychological tests.
2) To create awareness about measurement of intelligence and assessment of personality
3) To impart knowledge and understanding of the concepts in Statistics and the various measures of Descriptive Statistics - their characteristics, uses, applications and methods of calculation
4) To create a foundation for advanced learning of Psychological Testing, Assessment, and Statistics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV (UAPS501) **Psychological Testing and Statistics: Part I** **UNIT 4** **TITLE: <u>Types of scores, Types of scales, Frequency Distribution, Graphic representations</u>**	a) Continuous and discrete scores – meaning and difference; Nominal, ordinal, interval and ratio scales of measurement b) Preparing a Frequency Distribution; advantages and disadvantages of preparing a frequency distribution; smoothed	04 PER WEEK	Cohen, J. R., Swerdlik, M. E., & Sturman, E. D. (2013). *Psychological Testing and Assessment: An introduction to Tests and Measurement.* (8th ed.). New York. McGraw-Hill International edition. (<u>Indian reprint 2015)</u>	Google meet google classroom, short videos.

	frequencies: method of running averages c) Graphic representations: Frequency polygon, histogram, cumulative frequency curve, ogive, polygon of smoothed frequencies			

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TEACHING PLAN (UNIT PLAN)

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DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2020-2021**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER V (UAPS502) **ABNORMAL PSYCHOLOGY - I** **UNIT 1** **TITLE:** **<u>Understanding Abnormal behavior,</u>**	a) What is Abnormal Behaviour? The social impact of psychological disorders; defining abnormality; biological, psychological, sociocultural causes of abnormal behaviour, the biopsychosocial perspective; prominent themes in abnormal psychology throughout history – spiritual,	04 PER WEEK	**Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)**	Google meet google classroom, short videos

Diagnosis, Treatment and Assessment	humanitarian and scientific approaches; what's new in the DSM-5 – definition of a mental disorder b) Psychological disorder : experiences of client and clinician; the diagnostic process, DSM-5, additional information, culture-bound syndromes c) Characteristics of psychological assessment; clinical interview and Mental Status Examination; behavioural, multicultural, neuropsychological assessment; neuroimaging			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER V (UAPS502) **ABNORMAL PSYCHOLOGY - I** **UNIT 2** **TITLE:** Theoretical Perspectives	a) Theoretical perspectives in Abnormal Psychology; Biological perspective, Trait theory, Psychodynamic, Behavioral perspectives b) Cognitive, Humanistic, Sociocultural perspectives; Biopsychosocial perspectives on theories and	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Google meet google classroom, short videos

	treatments: an integrative approach			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2020-2021**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURE ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER V (UAPS502) **ABNORMAL PSYCHOLOGY - I** **UNIT 3** **TITLE: <u>Anxiety, Obsessive-compulsive, and Trauma-and</u>**	a) Anxiety Disorders b) Obsessive-compulsive and related disorders c) Trauma- and Stressor-related Disorders; the biopsychosocial perspective	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Google meet google classroom, short videos

Stressor-related Disorders				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

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PAPER V (UAPS502) **ABNORMAL PSYCHOLOGY - I** **UNIT 4** **TITLE:** **<u>Dissociative and Somatic Symptom Disorders</u>**	a) Dissociative disorders – major forms, theories and treatment b) Somatic symptom and related disorders - somatic symptom disorder, illness anxiety and conversion disorders, conditions related to Somatic Symptom Disorders, theories and treatment	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Google meet google classroom, short videos

	c) Psychological factors affecting medical condition; Dissociative and Somatic Symptom Disorders: the biopsychosocial perspective			

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TEACHING PLAN (UNIT PLAN)

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DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:

1. To impart knowledge and understanding of the basic concepts in and various facets of Industrial and Organizational Psychology
2. To create awareness about the role and importance of Psychological factors and processes in the world of work
3. To create a foundation for higher education and a professional career in Industrial Psychology and Organizational Behaviour

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 1** **TITLE: <u>Job Analysis</u>**	a) What is job analysis? Purposes of job analysis; How job analysis information is collected b) Methods of job analysis; Reliability and validity of job analysis information; Job evaluation	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Google meet google classroom, short videos

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2020-2021**

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PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 2** **TITLE: <u>Performance Appraisal</u>**	a) Why do we appraise employees? Performance criteria b) Objective and subjective methods for assessing job performance; the impact of technology on performance appraisal; legal issues in performance appraisal	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Google meet google classroom, short videos

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 3** **TITLE: <u>Assessment Methods for Selection and Placement</u>**	a) Job-Related characteristics. b) Characteristics of psychological tests c) Ability Tests, Knowledge, Skills and all other tests d) Biographical information, interviews, work samples, Assessment centers and electronic assessment.	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Google meet google classroom, short videos

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **T.Y.B.A.** SEMESTER: **V**

MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2020-2021**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER VI (UAPS503) **Industrial-Organizational Psychology: Part I** **UNIT 4** **TITLE: <u>Training</u>**	a) Needs assessment, objectives, training design b) Delivery and evaluation of a training program	04 PER WEEK	Whitbourne, S. K., & Halgin, R. P. (2014). *Abnormal Psychology: Clinical Perspectives on Psychological Disorders.* (7th ed.). McGraw-Hill (Indian reprint 2015)	Google meet google classroom, short videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN UNIT PLAN PSYCHOLOGY 2019-20

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

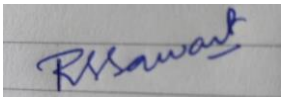
DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **I**

MONTH: **AUGUST- OCTOBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to know the important researchers and their contributions to the field of Psychology. The learner will be able to get an insight on different viewpoints in Psychology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I (UAPSY101) **FUNDAMENTALS OF PSYCHOLOGY - I**	**THE HISTORY OF PSYCHOLOGY** - Wundt, Introspection, Laboratory. - Titchner, structuralism. - James, Functionalism. - Gestalt -Freud, psychoanalysis. -Watson, Behaviourism.	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.
UNIT 1 **TITLE: THE SCIENCE OF P SYCHOLOGY**	**THE FIELDS OF PSYCHOLOGY TODAY** - Psychodynamic perspective - Behavioural perspective - Humanistic perspective - Bio - psychological perspective - Cognitive perspective - Sociology - cultural perspective - Evolutionary perspective	03	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.



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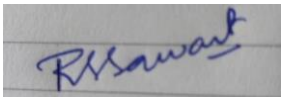

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	SCIENTIFIC RESEARCH - scientific methods - descriptive methods - finding relationship - qualitative methods	03	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.
	ETHICS OF PSYCHOLOGICAL RESEARCH - guidelines for doing research with people.	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples - classic studies - E. G. Astrology	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk,

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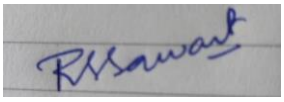

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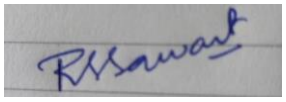

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **I**

MONTH: **AUGUST-OCTOBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to know the biological basis of Psychology. The learner will be able to know the structure and functions of neuron. The learner will be able to understand the nervous system and its parts and what role it plays in Psychology. The learner will be able to have an insight in methods of studying brain and parts of brain that influence human Psychology. The learner will be able to understand the endocrine system and its functions.

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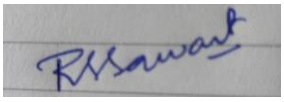
PAPER I (UAPSY101) **FUNDAMENTALS OF PSYCHOLOGY - I** **UNIT 2**	**NEURONS AND NERVES : BUILDING THE NETWORK** - structure of the neuron - neural impulse - synapse - neurotransmitters - reuptake and enzymes	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.



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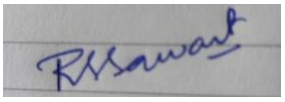

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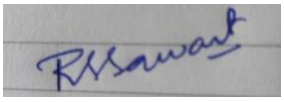
TITLE: THE BIOLOGICAL PERSPECTIVE	**AN OVERVIEW OF THE NERVOUS SYSTEM** - central nervous system - peripheral nervous system And structure of the brain	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.
	DISTANT CONNECTIONS:THE ENDOCRINE GLANDS - pituitary gland - thyroid gland - pancreas - gonads - adrenal gland	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.
	LOOKING INSIDE THE LIVING BRAIN - clinical studies - EEG - CT scan - MRI scan - PET scan	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.



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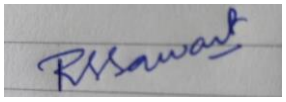

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	FROM THE BOTTOM UP : THE STRUCTURES OF THE BRAIN - brain stem - structures under the cortex - the cortex - the association area of the cortex	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples - Classic studies in Psychology. - e. g. Difference between male and female brains	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk,

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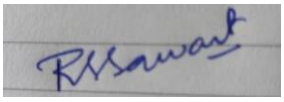

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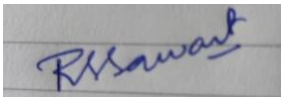

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VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

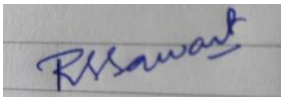
DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **I**

MONTH: **AUGUST-OCTOBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to define Learning. The learner will be able to understand the classical conditioning method of learning and its application. The learner will be able to know the operation conditioning method of learning and its application. The learner will be able to understand other cognitive methods of learning. The learner will be able to know observational methods of learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I (UAPSY101) **FUNDAMENTALS OF PSYCHOLOGY - I** **UNIT 3** **TITLE: LEARNING**	**DEFINITION OF LEARNING** - features	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.
	CLASSICAL CONDITIONING, AND OPERANT CONDITIONING	04	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian	Black Board-chalk, Short videos shown online.



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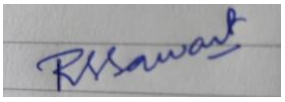

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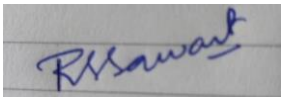
	- Pavlov and salivating dog - Elements of classical conditioning - Thorndike's puzzle box and frustrating cat - reinforcement - schedules of reinforcement		Adaptation. Pearson India Education Services Pvt.ltd.	
	COGNITIVE LEARNING THEORY - Tolman's Maze running rats - latent learning Seligman's depressed dogs and learned helplessness - Killer's Chimp and insight learning	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.
	OBSERVATIONAL LEARNING - Bandura and bobo doll - four elements of observational learning	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.



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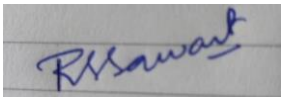

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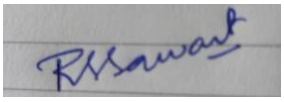
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples - classic studies - E. G. Mentally challenged child	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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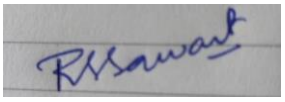

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NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

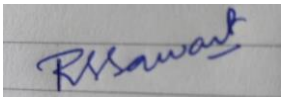
DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **I**

MONTH: **AUGUST-OCTOBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to define memory. The learner will be able to know models of memory. The learner will be able to understand the three different stages of memory according to information processing model. The learner will be able to have an insight in retrieval process of long term memory. The learner will be able to define forgetting and understand its nature. The learner will be able to know the physical aspects of memory.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I (UAPSY101) **FUNDAMENTALS OF PSYCHOLOGY - I** **UNIT 4** **TITLE: MEMORY**	**WHAT IS MEMORY?** - encoding - storage - retrieval	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.
	THE INFORMATION PROCESSING MODEL:THREE	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th	Black Board-chalk, Short videos shown online.



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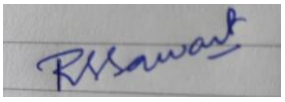

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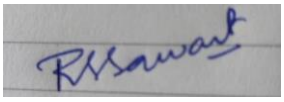
	MEMORY SYSTEMS - sensory memory - short term memory - long term memory - long term memory organization		Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	
	RETRIEVAL OF LONG –TERM MEMORIES - retrieval cues - recall - recognition	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.
	FORGETTING - Ebbinghaus and forgetting curve - encoding failure - memory trace decay theory - interference theory.	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.
	NEUROSCIENCE OF MEMORY **- NEURAL ACTIVITY**	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th	Black Board-chalk,



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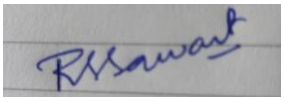

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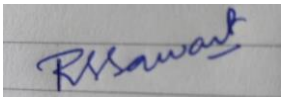
	- HIPPOCAMPUS AND MEMORY **- ORGANIC AMNESIA**		Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Short videos shown online
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples - classic studies - E. G. Alzheimer's disease	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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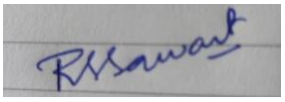

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

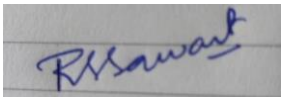
DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **II**

MONTH: **NOVEMBER - FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to know how thinking takes place with help of mental imagery and concepts. The learner will be able to understand problem solving and decision making Process. The learner will be able to gain insight into creativity. The learner will be able to define intelligence. The learner will be able to define intelligence. The learner will be able to know history of intelligence testing. The learner will be able to understand the individual differences in intelligence. The learner will be able to have insight into language acquisition.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY201) **FUNDAMENTALS OF PSYCHOLOGY - II** **UNIT 1**	**HOW PEOPLE THINK** - mental imagery - concepts - problem solving and decision making - creativity	03	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.
TITLE: COGNITION:THINKING	**INTELLIGENCE** - definition - measuring intelligence	04	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th	Black Board-chalk,



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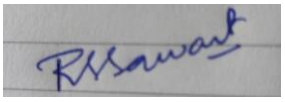

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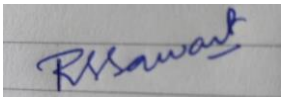
, INTELLIGENCE, AND LANGUAGE	- individual differences in intelligence - theories of intelligence		Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd	Short videos shown online.
	LANGUAGE - levels of language analysis - relationship between language and thoughts	03	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd	Black Board-chalk, Short videos shown online.
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples - classic studies - E. G. Mental exercise	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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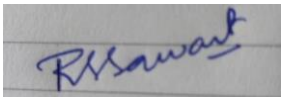

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

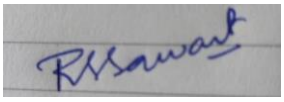
DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **II**

MONTH: **NOVEMBER - FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to define motivation and emotion. The learner will be able to know various theories of motivation. The learner will be able to understand the motivation behind hunger. The learner will be able to gain insight into psychological needs. The learner will be able to know theories of emotion.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY201) **FUNDAMENTALS OF PSYCHOLOGY - II** **UNIT 2** **TITLE: MOTIVATION AND EMOTION**	**APPROACHES TO UNDERSTANDING MOTIVATION** - instinct approach - drive reduction approach - arousal approach - incentive approach - humanistic approach - self determination theory	03	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.
	HUNGER MOTIVATION	03	Ciccarelli, S.K., White, J.N., & Mishra, G.	Black Board-chalk,



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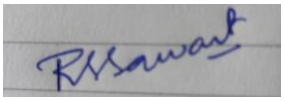

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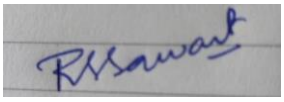
	- physiological components of hunger - social components of hunger - maladaptive eating problem		(2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd	Short videos shown online.
	EMOTION - Three elements of emotion - theories of emotion - culture and emotion	04	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd	Black Board-chalk, Short videos shown online.
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples - classic studies - E. G. Happiness	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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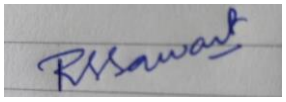

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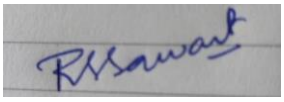
DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **II**

MONTH: **NOVEMBER - FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to define personality. The learner will be able to understand various approaches to personality. The learner will be able to know the different assessment tools of personality.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY201) **FUNDAMENTALS OF PSYCHOLOGY - II** **UNIT 3** **TITLE: THEORIES OF PERSONALITY**	**THEORIES OF PERSONALITY PSYCHODYNAIC APPROACH** - Freud and cultural background - Structure of mind - structure of personality - stages of personality development - neo – Freudian	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.
	PSYCHOANALYSIS IN EAST	01	Ciccarelli, S.K., White, J.N., &	Black Board-chalk,



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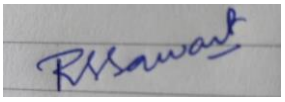

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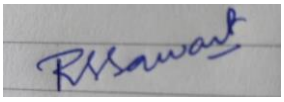
	- India and Psychoanalysis		Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd	Short videos shown online.
	BEHAVIOURISM AND COGITIVE APROACH TO PERSONALITY - learning and personality - Bandura's reciprocal determinism and self efficacy	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Service Pvt.ltd	Black Board-chalk, Short videos shown online.
	HUMANISM AND PERSONALITY - Carl Rogers and self concept	01	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.
	TRAIT THEORIES -Allport - Cattell and 16 PF	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018).	Black Board-chalk,



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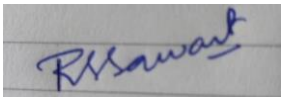

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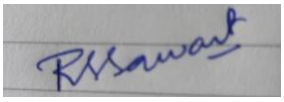
	- five factor theory of personality		Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Short videos shown online.
	GENETICS AND CULTURE -twin studies -adoption studies	01	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.
	ASSESSMENT OF PERSONALITY -interviews -Projective tests -Behavioural assessment -Personality inventories	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk, Short videos shown online.
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples	01	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian	Black Board-chalk,



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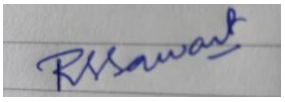

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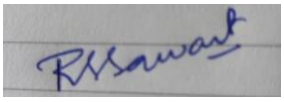
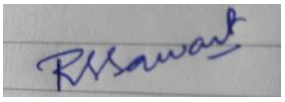
	- classic studies - E. G. personality testing on internet		Adaptation. Pearson India Education Services Pvt.ltd.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

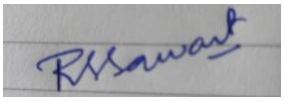
DEPARTMENT: **PSYCHOLOGY**

CLASS: **F.Y.B.A.** SEMESTER: **II**

MONTH: **NOVEMBER - FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to know what statistics are. The learner will be able to know how to use statistics in Psychology. The learner will be able to understand descriptive statistics and inferential statistics. The learner will be able to calculate and interpret measures on central tendency and measures of variability. The learner will be able to know where to apply inferential statistics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY201) **FUNDAMENTALS OF PSYCHOLOGY - II** **UNIT 4** **TITLE: STATISTICS IN PSYCHOLOGY**	**STATISTICS** - definition - usage	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk
	DESCRIPTIVE STATISTICS - Frequency distribution table	06	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian	Black Board-chalk



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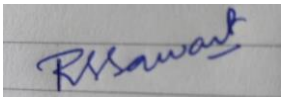

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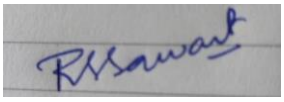
	- measures of central tendency - measures of variability		Adaptation. Pearson India Education Services Pvt.ltd	
	INFERENTIAL STATISTICS - application of inferential statistics - statistical significance - computing and interpreting reliability using co-efficient R	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd	Black Board-chalk,
	APPLYING PSYCHOLOGY TO EVERYDAY LIFE. - discussion and examples - classic studies - E. G. statistics and research	02	Ciccarelli, S.K., White, J.N., & Mishra, G. (2018). Psychology. 5th Edition; Indian Adaptation. Pearson India Education Services Pvt.ltd.	Black Board-chalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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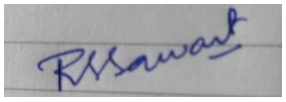

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

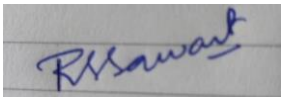
DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **JUNE – OCTOBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to understand the concept of social psychology. The learner will be able to know how social psychology originated and developed. The learner will be able to gain insight into the research methods used in social psychology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY301) **SOCIAL PSYCHOLOGY - I** **UNIT 1**	**SOCIAL PSYCHOLOGY : WHAT IT IS AND WHAT IT IS NOT** -scientific in nature -focus on behavior of individual -causes of social behavior and thought	03	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk
TITLE: SOCIAL PSYCHOLOGY : THE SCIENCE OF THE SOCIAL SIDE OF LIFE	**SOCIAL PSYCHOLOGY : ADVANCES AT THE BOUNDERIES** - origins and development	03	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*.	Black Board-chalk,



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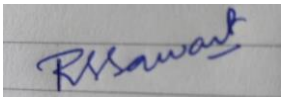

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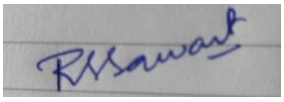
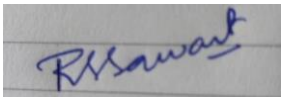
			(14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	HOW SOCIAL PSYCHOLOGISTS ANSWER THE QUESTIONS THEY ASK : RESEARCH AS THE ROUTE TO INCREASED KNOWLEDGE - experimental method -correlation method - importance of replications, meta-analysis, and converging operations	04	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	THE ROLE OF THEORY IN SOCIAL PSYCHLOGY - role of Theory	01	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	THE QUEST FOR KNOWLEDGE AND THE RIGHTS OF INDIVIDUAL : SEEKING AN	01	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*.	Black Board-chalk,





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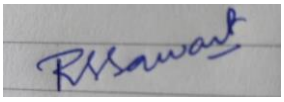
	APPROPRIATE BALANCE - need for balancing		(14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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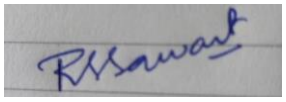

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

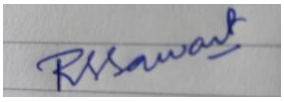
DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **JUNE – OCTOBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to understand the nature of non verbal communication. The learner will be able to define attribution. The learner will be able to discuss factors contributing to attribution and the errors made while attributing. The learner will be able to understand the process of impression management and impression formation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY301) **SOCIAL PSYCHOLOGY - I** **UNIT 2**	**NON VERBAL COMMUNICATION : AN UNSPOKEN LANGUAGE** - basic channels - emotional expressiveness - detection of deception	03	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk, .
TITLE: SOCIAL PERCEPTION : SEEKING TO UNDERSTAND OTHERS	**ATTRIBUTION : UNDERSTANDING THE CAUSES OF BEHAVIOUR** - theories of attribution	03	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson	Black Board-chalk,



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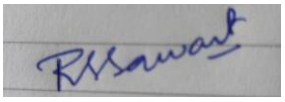

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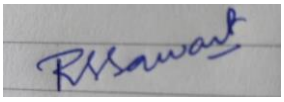
	- basic errors in attribution		Education; Indian reprint 2017	
	IMPRESSION FORMATION AND MANAGEMENT : COMBINING INFORMATION ABOUT OTHERS - impression formation - impression management	02	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	WHAT REASERCH TELLS US ABOUT THE ROLE OF NON VERBAL CUES IN JOB ITERVIEW? - research findings	02	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	WHAT RESEARCH TELLS US ABOUT WHY SOME PEOPLE CONCLUDE THEY ARE SUPERIOR TO OTHERS? - research findings	02	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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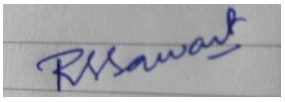

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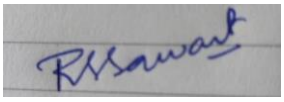

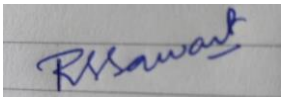

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

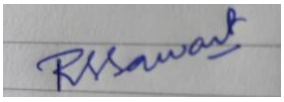
DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **JUNE – OCTOBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to define attitude. The learner will be able to know how to form attitudes. The learner will be able to understand when and how attitudes influence and guide behaviour. The learner will be able to gain insight into the concept of persuasion and how to resist it. The learner will be able to know the cognitive dissonance. The learner will be able to know how culture influence attitudes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY301) **SOCIAL PSYCHOLOGY - I** **UNIT 3** **TITLE: ATTITUDES : EVALUATING AND**	**ATTITUDE FORMATON : HOW ATTITUDES DEVELOP** - social learning -social comparison - genetic factors	02	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk
	WHEN AND WHY DO ATITUDES INFLUENCE BEHAVIOUR? - attitudes and actions	02	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*.	Black Board-chalk



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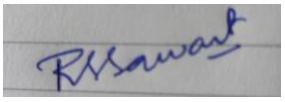

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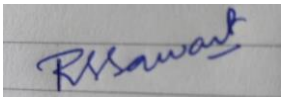
RESPONDING TO THE SOCIAL WORLD			(14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	HOW DO ATTITUDES GUIDE BEHAVIOUR? - specificity - strength - accessibility	02	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk
	THE SCIENCE OF PERSUASION: HOW ATTITUDES ARE CHANGED - traditional approach - cognitive approach - attitude functions - reciprocity - message framing	02	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk
	RESISTING PERSUASION ATTEMPTS - reactance - forewarning - selective avoidance	02	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson	Black Board-chalk



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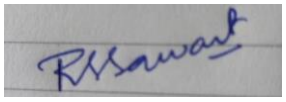

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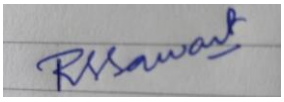
			Education; Indian reprint 2017	
	COGNITIVE DISSONANCE: WHAT IT IS AND HOW DO WE MANAGE IT? - forced compliance	01	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk
	WHAT RESEARCH TELLS US ABOUT CULTURE AND ATTITUDE PROCESSES? - social diversity	01	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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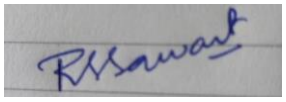

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

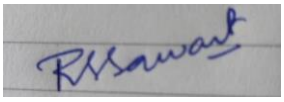
DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **JUNE – OCTOBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to gain more insight into interpersonal liking. The learner will be able to understand the factors influencing interpersonal liking. The learner will be able to understand types of close relationship. The learner will be able to know the factors that may destroy close relationship.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY301) **SOCIAL PSYCHOLOGY - I** **UNIT 4** **TITLE: LIKING, LOVE AND OTHER CLOSE RELATIONSHIPS**	**INTERNAL SOURCES OF LIKING OTHERS : THE ROLE OF NEEDS AND EMOTIONS** - physical surroundings - positive and negative affects - need to affiliation	03	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	EXTERNAL SOURCES OF ATTRACTION:THE EFFECTS OF	03	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur	Black Board-chalk,



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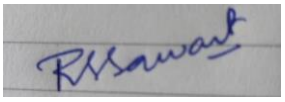

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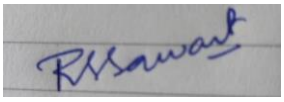
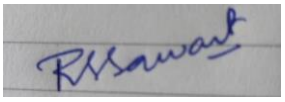
	PROXIMITY, FAMILIARITY AND PHYSICAL BEAUTY - proximity - familiarity - physical beauty		(2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	SOURCES OF LIKING BASED ON SOCIAL INTERACTION - familiarity and interaction	02	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	CLOSE RELATIONSHIPS: FOUNDATIONS OF SOCIAL LIFE - reciprocity - similarity	02	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	WHAT RESEARCH TELLS US ABOUT DRAMATIC DIFFERENCES IN APPEARANCE BETWEEN PARTNERS: IS	01	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson	Black Board-chalk,





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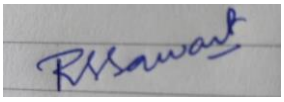
	LOVE REALLY BLIND? - factors influencing interpersonal attraction		Education; Indian reprint 2017	
	WHAT RESEARCH TELLS US ABOUT TWO FACTORS THAT MAY DESTROY LOVE-JEALOUSYAND INFIDELITY - jealousy - infidelity	01	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,



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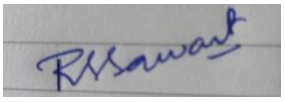

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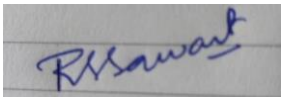
NAAC accredited "B" Grade, 2.69 CGPA

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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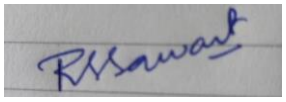

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

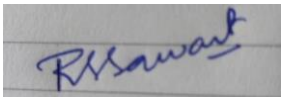
DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **IV**

MONTH: **NOVEMBER – FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to define stereotyping, prejudice and discrimination. The learner will be able to discriminate among the three concepts. The learner will be able to understand the origins of prejudice and how to unlearn them. The learner will be able to understand the harmful effects of discrimination.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY401) **SOCIAL PSYCHOLOGY - II** **UNIT 1**	**HOW MEMBERS OF DIFFERENT GROUPS PERCEIVE INEQUALITY** - social learning	03	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
TITLE: CAUSES, AND CURES OF STEREOTYPING, PREJUDICE AND DISCRIMINATION	**THE NATURE AND ORIGINS OF STEREOTYPING** - nature - origin - direct intergroup conflict	03	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson	Black Board-chalk,



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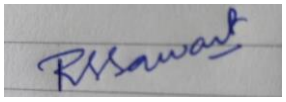

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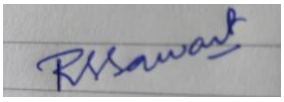
	- early experience - social categorization		Education; Indian reprint 2017	
	PREJUDICE: FEELINGS TOWARD SOCIAL GROUPS - choosing whom to hate - prejudice in action	01	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	DISCRIMINATION: PREJUDICE IN ACTION - reason - measures to reduce discrimination	02	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	Why prejudice is not inevitable: Techniques for countering its effects -learning not to hate - direct intergroup contact - re-categorization - cognitive interventions	02	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,



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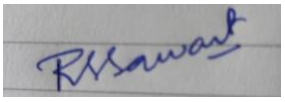

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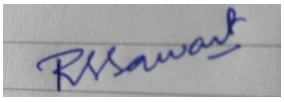
	WHAT RESEARCH TELLS US ABOUT THE ROLE OF EXISTENTIAL THREAT IN PREJUDICE - research findings	01	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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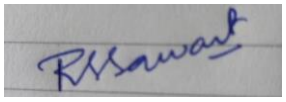

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

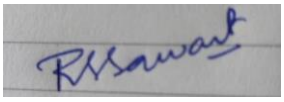
DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **IV**

MONTH: **NOVEMBER – FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to know about social influence. The learner will be able to understand the concept of conformity and factors that influence conformity. The learner will be able to know the principles of compliance and tactics based on those principal. The learner will be able to gain insight into concept of obedience. The learner will be able to know what destructive obedience is and how to reduce its effects.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY401) **SOCIAL PSYCHOLOGY - II** **UNIT 2**	**CONFORMITY** - definition - Soloman Asche's experiment - factors influencing conformity - minority influence	03	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
TITLE: CAUSES, AND CURES OF STEREOTYPING,	**COMPLIANCE** - nature - principles - tactics	03	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*.	Black Board-chalk,



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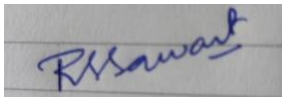

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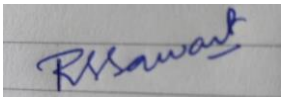
PREJUDICE AND DISCRIMINATION			(14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	
	OBEDIENCE - nature - Milgram's experiment - destructive obedience - measures to reduce it	03	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	UNINTENTIONAL SOCIAL INFLUENCE -factors	01	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	WHAT RESEARCH TELLS US ABOUT HOW MUCH WE REALLY CONFORM-LEARNING NOT TO HATE - reducing the social pressure	01	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,



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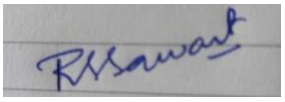

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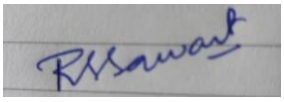
	WHAT RESEARCH TELLS US ABOUT USING SCARCITY TO GAIN COMPLIANCE - research findings	01	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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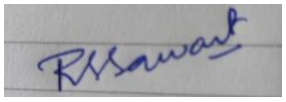

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

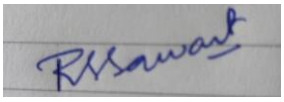
DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **IV**

MONTH: **NOVEMBER – FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able define aggression. The learner will be able to know the causes of aggression. The learner will be able to understand aggression shown in real life. The learner will be able to learn the prevention of aggression.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY401) **SOCIAL PSYCHOLOGY - II** **UNIT 3** **TITLE: AGGRESSION: ITS NATURE, CAUSES AND CONTROL**	**AGGRESSION** - definition - roots of violence	02	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	CAUSES OF HUMAN AGGRESSION - social - cultural - personal - situational	03	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson	Black Board-chalk,



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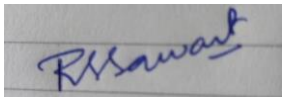

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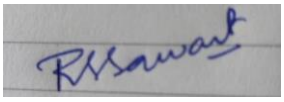
			Education; Indian reprint 2017	
	AGGRESSION IN THE CLASSROOM AND WORKPLACE - classroom - workplace	02	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	THE PREVENTION AND CONTROL OF VIOLENCE -techniques	03	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	WHAT RESEARCH TELLS US ABOUT THE ROLE OF EMOTIONS IN AGGRESSION - research findings	01	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,



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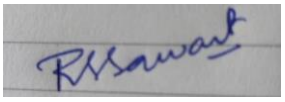

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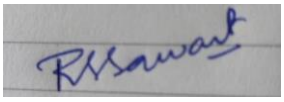
	WHAT RESEARCH TELLS US ABOUT WORKPLACE AGGRESSION? - research findings	01	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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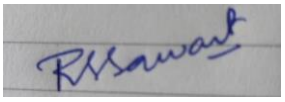

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

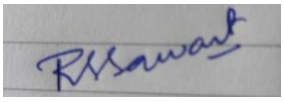
DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **IV**

MONTH: **NOVEMBER – FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to understand the prosocial behaviour. The learner will be able to know the reasons of prosocial behaviour. The learner will be able to understand the bystander's effect. The learner will be able to know the factors that influence prosocial behaviour. The learner would gain insight into concept of crowdfunding. The learner will be able to know the relation between aggression and prosocial behaviour.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (UAPSY401) **SOCIAL PSYCHOLOGY - II** **UNIT 4** **TITLE: PROSOCIAL BEHAVIOR: HELPING OTHERS**	**WHY PEOPLE HELP** - definition - Motives for prosocial behaviour	03	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	RESPONDING TO AN EMERGENCY - bystander's effect	03	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson	Black Board-chalk,



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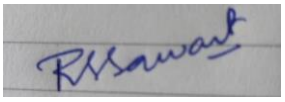

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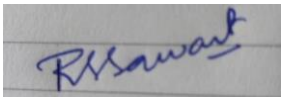
			Education; Indian reprint 2017	
	FACTORS THAT INCREASE OR DECREASE THE TENDENCY TO HELP - five choice points - social models	02	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	CROWDFUNDING -nature	01	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	ARE PROSOCIAL BEHAVIOUR AND AGGRESSION OPPOSITES? - nature of helping behaviour - nature of aggression - interlink	01	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,



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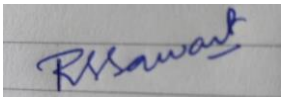

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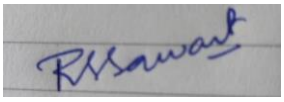
	WHAT RESEARCH TELLS US ABOUT PAYING IT FORWARD: HELPING OTHERS BECAUSE WE HAVE BEEN HELPED - research findings	01	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,
	WHAT RESEARCH TELLS US ABOUT HOW PEOPLE REACT TO BEING HELPED - research findings	01	Branscombe, N. R. &Baron, R. A., Adapted by PreetiKapur (2017). *Social Psychology*. (14th Ed.). New Delhi: Pearson Education; Indian reprint 2017	Black Board-chalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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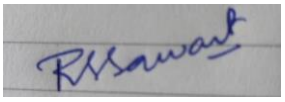

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VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

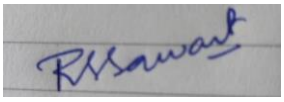
DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **JUNE – OCTOBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to gain insight into lifespan development. The learner will be able to know developmental milestone in adolescence with reference to physical development. The learner will be able to understand the cognitive development that occurs in adolescence. The learner will understand the language development occurring in adolescence.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (UAPSY302) **DEVELOPMENTAL PSYCHOLOGY - I** **UNIT 1** **TITLE: AN INTRODUCTION TO LIFESPAN**	**LIFESPAN DEVELOPMENT** - An orientation to lifespan development - defining life span development - scope of the field (areas, age and individual differences) - basic influences in development (history, age, socio-cultural, life events)	03	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk, Short videos



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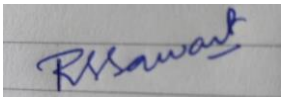

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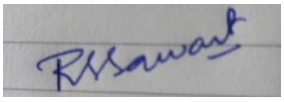
DEVELOPMENT AND ADOLESCENCE PHYSICAL & COGNITIVE DEVELOPMENT	**PHYSICAL MATURATION** - puberty (timing, sequence and signs of maturation) - fitness - sleep needs	03	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk,
	COGNITIVE DEVELOPMENT AND SCHOOLING - Piaget's stage of formal operations - language development - educational and vocational issues	03	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk,
	THREATS TO ADOLESCENCE WELL BEING - nutrition and eating disorder - uses and abuses of drugs - depression - deaths in adolescence	03	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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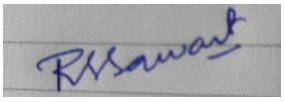

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

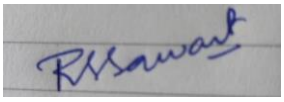
DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **JUNE – OCTOBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to gain insight into psychosocial development during adolescence. The learner will be able to understand the process of realizing sexual orientation in adolescence. The learner will be able to know the dynamics of relationship with family and friends.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (UAPSY302) **DEVELOPMENTAL PSYCHOLOGY - I**	**IDENTITY** - Erikson's identity versus identity confusion - Marcia – identity status, crisis and commitment - gender differences	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk, Short videos
UNIT 2 **TITLE: SOCIAL AND PERSONALITY**	**RELATIONSHIPS** - adolescence and parents - adolescence and siblings - adolescence and peers	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India	Black Board-chalk,



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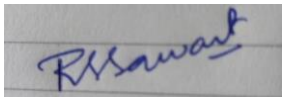

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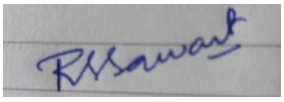
DEVELOPMENT IN ADOLESCENCE			Education services Pvt. Ltd	
	DATING, SEXUAL BEHAVIOUR AND TEENAGE PREGNANCY - dating - sexual behaviour - teenage pregnancy	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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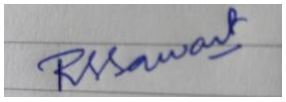

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

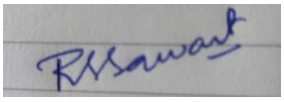
DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **JUNE – OCTOBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to know the developmental milestones in adulthood. The learner will be able to understand the physical development occurring in early adulthood. The learner will be able to understand the cognitive development occurring in early adulthood. The learner will be able to know relevance of pursuing higher education in early adulthood.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (UAPSY302) **DEVELOPMENTAL PSYCHOLOGY - I** **UNIT 3** **TITLE: PHYSICAL AND COGNITIVE**	**PHYSICAL DEVELOPMENT** - Erikson's identity versus identity confusion - Marcia – identity status, crisis and commitment - gender differences	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk, Short videos
	COGNITIVE DEVELOPMENT - Erikson's theory - post formal thinking - intelligence	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India	Black Board-chalk,



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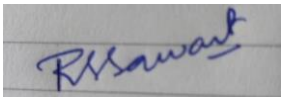

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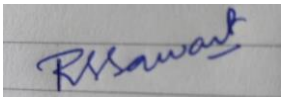
DEVELOPMENT IN EARLY ADULTHOOD			Education services Pvt. Ltd	
	COLLEGE: PURSUING HIGHER EDUCATION - demographics of higher education - college adjustment - reacting to the demands of college life	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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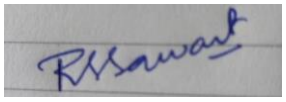

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

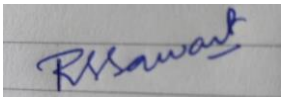
DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **III**

MONTH: **JUNE – OCTOBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to gain insight into psychosocial development during early adulthood. The learner will be able to understand the relationship patterns in early adulthood. The learner would be able to gain insight into the attachment styles of early adults. The learner will be able to know the process of choosing partner in early adulthood.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (UAPSY302) **DEVELOPMENTAL PSYCHOLOGY - I** **UNIT 4** **TITLE: SOCIAL AND PERSONALITY DEVELOPMENT IN EARLY ADULTHOOD**	**FORGING RELATIONSHIPS: INTIMACY, LIKING AND LOVING DURING EARLY ADULTHOOD** - components happiness - emerging adulthood - love - choosing partner - attachment styles - gay and lesbian relationship	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk, Short videos
	THE COURSE OF RELATIONSHIPS - marriage - parenthood	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed).	Black Board-chalk,



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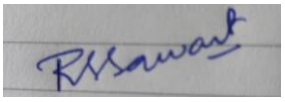

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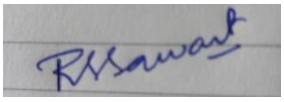
	- gay and lesbian parents - staying single		India: Pearson India Education services Pvt. Ltd	
	WORK: CHOOSING & EMBARKING ON A CAREER - identity during young adulthood - picking an occupation - choosing a career - gender and career choices	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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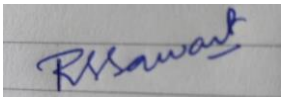

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

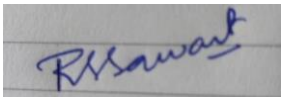
DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **IV**

MONTH: **NOVEMBER – FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to know the developmental milestones in middle adulthood. The learner will be able to understand the physical development occurring in middle adulthood. The learner will be able to understand the cognitive development occurring in middle adulthood.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (UAPSY402) **DEVELOPMENTAL PSYCHOLOGY - II** **UNIT 1** **TITLE: PHYSICAL AND COGNITIVE DEVELOPMENT IN**	**PHYSICAL DEVELOPMENT** - physical transitions : height, weight and strength - the senses : vision and hearing - reaction time - sex in middle adulthood - sexuality	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk, Short videos
	HEALTH - wellness and illness - stress -variations in health - gender differences	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India	Black Board-chalk,



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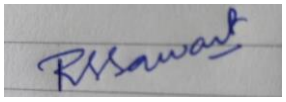

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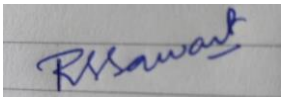
MIDDLE ADULTHOOD	- linking health and personality - threat of cancer		Education services Pvt. Ltd	
	COGNITIVE DEVELOPMENT - intelligence - development of expertise - memory	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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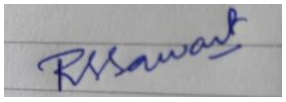

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

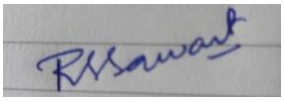
DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **IV**

MONTH: **NOVEMBER – FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to know the personality development during middle adulthood. The learner will be able to understand the role on relationships in the psycho-social development in middle adulthood. The learner will be able to know the importance of work and leisure during middle adulthood.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (UAPSY402) **DEVELOPMENTAL PSYCHOLOGY - II** **UNIT 2** **TITLE: SOCIAL AND PERSONALITY DEVELOPMENT IN MIDDLE ADULTHOOD**	**PERSONALITY DEVELOPMENT** - normative crisis versus life events - Erikson's stage of generativity versus stagnation - ability versus change in personality.	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk, Short videos
	RELATIONSHIPS - marriage and divorce - family evolution - becoming grandparents - family violence - dealing with domestic violence	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk,



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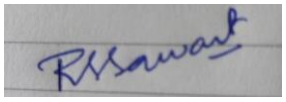

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	WORK AND LEISURE - work and career - unemployment - switching and starting careers - house husbands - leisure	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk,

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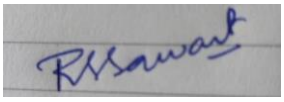

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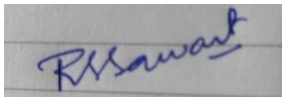

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

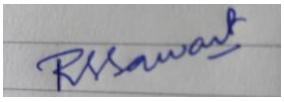
DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **IV**

MONTH: **NOVEMBER – FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to know the developmental milestones in late adulthood. The learner will be able to understand the physical development occurring in late adulthood. The learner will be able to understand the cognitive development occurring in late adulthood. The learner will gain insight into the health and wellness issues faced in late adulthood.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (UAPSY402) **DEVELOPMENTAL PSYCHOLOGY - II** **UNIT 3** **TITLE: PHYSICAL AND COGNITIVE DEVELOPMENT IN LATE ADULTHOOD**	**PHYSICAL DEVELOPMENT** - physical transitions - the senses : vision and hearing, taste and smell - slowing reaction time	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk, Short videos
	HEALTH AND WELLNESS - physical and psychological diseases - stress - wellness - sexuality - approaches to aging	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk,



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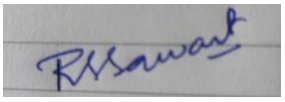

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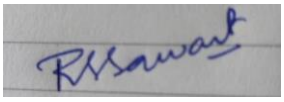
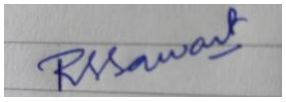
	- postponing aging			
	COGNITIVE DEVELOPMENT - intelligence - learning - memory	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

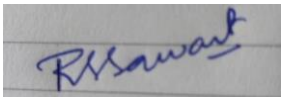
DEPARTMENT: **PSYCHOLOGY**

CLASS: **S.Y.B.A.** SEMESTER: **IV**

MONTH: **NOVEMBER – FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to know the personality development during late adulthood. The learner will be able to gain insight into the daily life of an adult in late adulthood. The learner will be able to understand the role on relationships in the psycho-social development in late adulthood.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (UAPSY402) **DEVELOPMENTAL PSYCHOLOGY - II** **UNIT 4** **TITLE: SOCIAL AND PERSONALITY DEVELOPMENT IN LATE ADULTHOOD**	**PERSONALITY DEVELOPMENT** - continuity and change in personality - age stratification approach - wisdom - successful aging	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk, Short videos
	THE DAILY LIFE - living arrangements - financial issues - work and retirement	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk,



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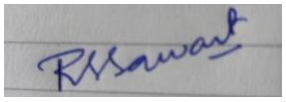

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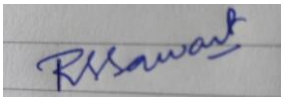
	RELATIONSHIP - marriage -divorce death of spouse - friendship - family relationship - elder abuse - legal provisions	04	Feldman, R. S. & Babu, N. (2018). Development across the Life Span. (8th Ed). India: Pearson India Education services Pvt. Ltd	Black Board-chalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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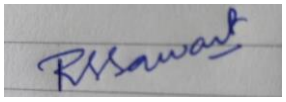

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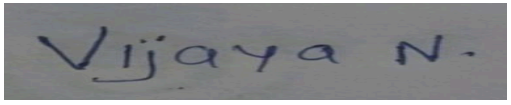
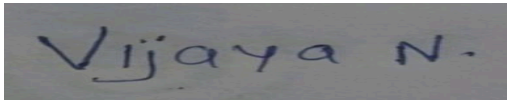
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF VIJAYA NARAYANRAO SHIRSAT DEPARTMENT:POLITICAL-SC CLASS:FYBA(MARATHI) MONTH: AUGUST ACADEMIC YEAR: 2022-23

PAPER I , UNIT I, TITLE	SUBTOPICS INDIAN POLITICAL SYSTEM	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
THE CONSTITUTIONAL FRAMEWORK INTRODUCTION TO THE CONSTITUTION	1.1 BRIEF HISTORY OF THE MAKING OF CONSTITUTION	4	Bhartache Shasan Ani Rajakaran. B.B.Patil	CHLK AND TALK
	1.2 PREMABLE	4		
	1.3 BASIC FEATURES	4		





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VIVA COLLEGE, Virar (W)

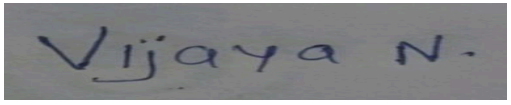
T The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF AUGUST POLITICALSCIENCE.**TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____**

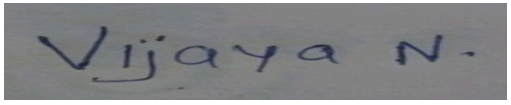
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF VIJAYA NARAYANRAO SHIRSAT DEPARTMENT:POLITICAL-SC CLASS:FYBA(MARATHI) MONTH: SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I, UNIT II, TITLE	SUBTOPICS INDIAN POLITICAL SYSTEM	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CITIZENS AND THE CONSTITUTION	2.1 FUNDAMENTAL RIGHTS – ARTS 14 TO 19	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK





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	2.2 FUNDAMENTAL RIGHTS –ARTS- 20 TO 32	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	2.3 DIRECTIVE PRINCIPLES OF STATEPOLICY	3	Bhartache Shasan Ani Rajakaran.B.B.Patil	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __11_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF VIJAYA NARAYANRAO SHIRSAT DEPARTMENT:POLITICAL-SC CLASS:FYBA(MARATHI) MONTH: OCTOBER ACADEMIC YEAR: 2022-23

Vijaya N.

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VIVA COLLEGE, Virar (W)

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I , UNIT III, TITLE	SUBTOPICS INDIAN POLITICAL SYSTEM	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
LEGISLATURE AND JUDICIARY	3.1 PARLIAMENT	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK
	3.2 JUDICIAL SYSTEM – ORIGINAL AND WRIT JURISDICTION	3	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	3.3 JUDICIAL ACTIVISM	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____ TEACHING PLAN (UNIT PLAN)

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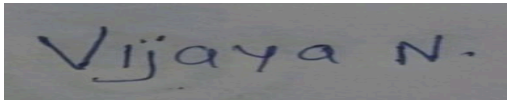
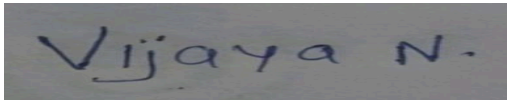
VIVA COLLEGE, Virar (W)

NAME OF THE STAFF: ASST PROF VIJAYA NARAYANRAO SHIRSAT DEPARTMENT:POLITICAL-SC CLASS:FYBA(MARATHI) MONTH: NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I, UNIT IV, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EXICATIVE	4.1 UNION EXECUTIVE - THE PRESIDENT	11	Laxmikant, M, Indian Polity, ,	CHLK AND TALK
	4.2 PRIME MINISTER AND COUNCIL OF MINISTERS			
	4.3 LOCAL SELF-GOVERNMENT – 73rd 74th AMENDMENTS AND THEIR IMPLEMENTATION			





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VIVA COLLEGE, Virar (W)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____11_____

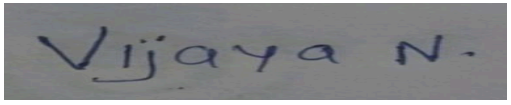
TEACHING PLAN (UNIT PLAN)

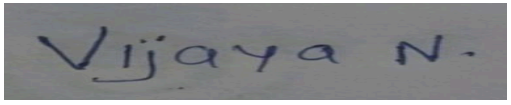
NAME OF THE STAFF:ASST PROF VIJAYA NARAYANRAO SHIRSAT

DEPARTMENT: POLITICAL-SC CLASS:FYBA(MARATHI) SEMESTER:II MONTH: DECEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I , UNIT I, TITLE	SUBTOPICS INDIAN POLITICAL PROCESS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED





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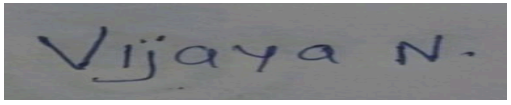
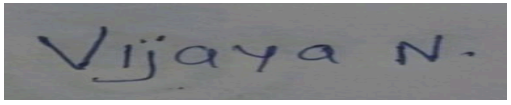
VIVA COLLEGE, Virar (W)

CHANGING NATURE OF FEDERAL SYSTEM	1.1 CENTRE-STATE RELATIONS WITH REFERENCE TO FISCAL AND EMERGNCY POWERS.	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK
	1.2 DEMAND FOR GREATER AUTONOMY	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	1.3 CHANGING DYNAMICS OF CENTRE-STATE RELATIONS	3	Bhartache Shasan Ani Rajakaran.B.B.Patil	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____

TEACHING PLAN (UNIT PLAN)





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VIVA COLLEGE, Virar (W)

NAME OF THE STAFF:ASST PROF VIJAYA NARAYANRAO SHIRSAT

DEPARTMENT:POLITICAL-SC CLASS:FYBA(MARATHI) SEMESTER: II MONTH: JANUARY ACADEMIC YEAR: 202-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I, UNIT II, TITLE	SUBTOPICS INDIAN POLITICAL PROCESS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PARTYPOLITICS AND ELECTIONS	2.1 NATIONAL PARTIES – FEATURES	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK
	2.2 REGIONAL PARTIES – CHARACTERISTICS	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	2.3 ANALYSIS OF ELECTORAL PERFORANCE OF NATIONAL AND REGIONAL PARTIES SINCE 1989.	3	Bhartache Shasan Ani Rajakaran.B.B.Patil	

Vijaya N.

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VIVA COLLEGE, Virar (W)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____

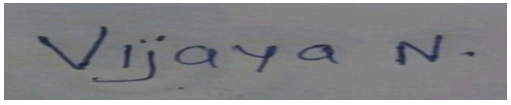
TEACHING PLAN (UNIT PLAN)

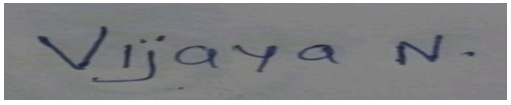
NAME OF THE STAFF: ASST PROF VIJAYA NARAYANRAO SHIRSAT

POLITICAL-SC CLASS: FYBA(MARATHI) SEMESTER:II MONTH:FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I, UNITIII, TITLE	SUBTOPICS INDIAN POLITICAL PROCESS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED





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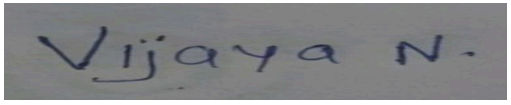
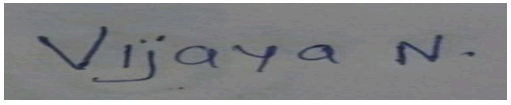
VIVA COLLEGE, Virar (W)

SOCIAL DYNAMICS	3.1 CASTE (WITH REFERENCE TO RESERVATION)	3	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK
	3.2 RELIGION (WITH REFERENCE TO COMMUNALISM)	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	3.3 GENDER (WITH REFERENCE TO POLITICAL PARTICIPATION)	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____11_____

TEACHING PLAN (UNIT PLAN)





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NAME OF THE STAFF: ASST PROF VIJAYA NARAYANRAO SHIRSAT DEPARTMENT: POLITICAL-SC CLASS:FYBA(MARATHI) SEMESTER: II MONTH:MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I , UNIT IV, TITLE	SUBTOPICS INDIAN POLITICAL PROCESS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CHALLENGES TO NATIONAL SECURITY	4.1 CRIMINALISATION OF POLITICS	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK
	4.2 INTERNAL THREATS TO SECURITY (WITH REFERENCE TO NAXALISM AND INSURGENCY)	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	4.3 GLOBAL TERRORISM	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	

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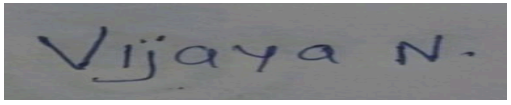
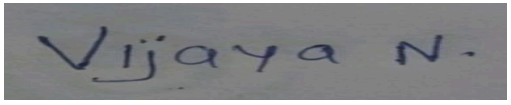
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____12_____





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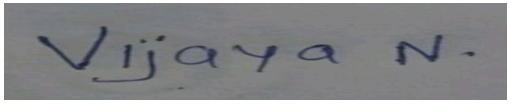
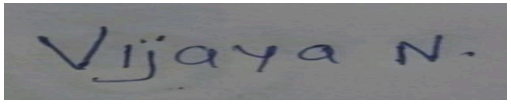
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF VIJAYA NARAYANRAO SHIRSAT DEPARTMENT:POLITICAL-SC CLASS:FYBA(MARATHI) MONTH: AUGUST ACADEMIC YEAR: 2022-23

PAPER I , UNIT I, TITLE	SUBTOPICS INDIAN POLITICAL SYSTEM	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
THE CONSTITUTIONAL FRAMEWORK INTRODUCTION TO THE CONSTITUTION	1.1 BRIEF HISTORY OF THE MAKING OF CONSTITUTION	4	Bhartache Shasan Ani Rajakaran. B.B.Patil	CHLK AND TALK
	1.2 PREMABLE	4		
	1.3 BASIC FEATURES	4		





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Vishnu Waman Thakur Charitable Trust
BhaskarWaman Thakur College of Science
Yashvant KeshavPatil College of Commerce
Vidhya DayanandPatil College of Arts
VIVA COLLEGE, Virar (W)

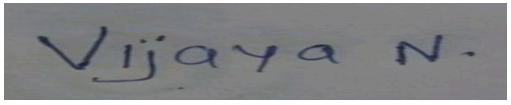
T The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF AUGUST POLITICALSCIENCE.**TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____**

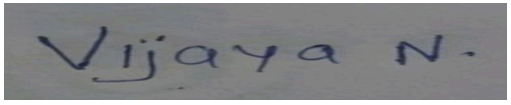
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF VIJAYA NARAYANRAO SHIRSAT DEPARTMENT:POLITICAL-SC CLASS:FYBA(MARATHI) MONTH: SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I, UNIT II, TITLE	SUBTOPICS INDIAN POLITICAL SYSTEM	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CITIZENS AND THE CONSTITUTION	2.1 FUNDAMENTAL RIGHTS – ARTS 14 TO 19	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK





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	2.2 FUNDAMENTAL RIGHTS –ARTS- 20 TO 32	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	2.3 DIRECTIVE PRINCIPLES OF STATEPOLICY	3	Bhartache Shasan Ani Rajakaran.B.B.Patil	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __11_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF VIJAYA NARAYANRAO SHIRSAT DEPARTMENT:POLITICAL-SC CLASS:FYBA(MARATHI) MONTH: OCTOBER ACADEMIC YEAR: 2022-23

Vijaya N.

Vijaya N.

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BhaskarWaman Thakur College of Science
Yashvant KeshavPatil College of Commerce
Vidhya DayanandPatil College of Arts
VIVA COLLEGE, Virar (W)

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I , UNIT III, TITLE	SUBTOPICS INDIAN POLITICAL SYSTEM	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
LEGISLATURE AND JUDICIARY	3.1 PARLIAMENT	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK
	3.2 JUDICIAL SYSTEM – ORIGINAL AND WRIT JURISDICTION	3	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	3.3 JUDICIAL ACTIVISM	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____ TEACHING PLAN (UNIT PLAN)

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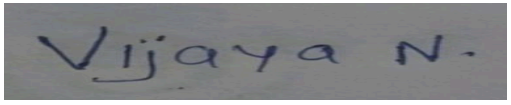
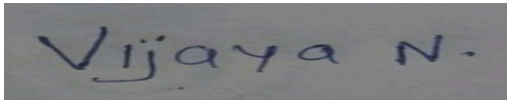
Vidhya DayanandPatil College of Arts
VIVA COLLEGE, Virar (W)

NAME OF THE STAFF: ASST PROF VIJAYA NARAYANRAO SHIRSAT DEPARTMENT:POLITICAL-SC CLASS:FYBA(MARATHI) MONTH: NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I, UNIT IV, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EXICATIVE	4.1 UNION EXECUTIVE - THE PRESIDENT	11	Laxmikant, M, Indian Polity, ,	CHLK AND TALK
	4.2 PRIME MINISTER AND COUNCIL OF MINISTERS			
	4.3 LOCAL SELF-GOVERNMENT – 73rd 74th AMENDMENTS AND THEIR IMPLEMENTATION			





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VIVA COLLEGE, Virar (W)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____11_____

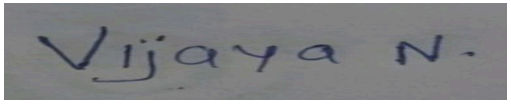
TEACHING PLAN (UNIT PLAN)

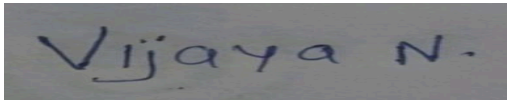
NAME OF THE STAFF:ASST PROF VIJAYA NARAYANRAO SHIRSAT

DEPARTMENT: POLITICAL-SC CLASS:FYBA(MARATHI) SEMESTER:II MONTH: DECEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I , UNIT I, TITLE	SUBTOPICS INDIAN POLITICAL PROCESS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED





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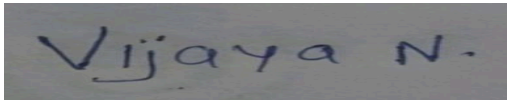
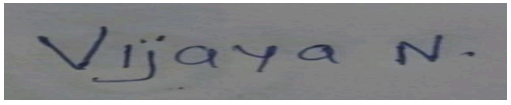
CHANGING NATURE OF FEDERAL SYSTEM	1.1 CENTRE-STATE RELATIONS WITH REFERENCE TO FISCAL AND EMERGNCY POWERS.	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK
	1.2 DEMAND FOR GREATER AUTONOMY	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	1.3 CHANGING DYNAMICS OF CENTRE-STATE RELATIONS	3	Bhartache Shasan Ani Rajakaran.B.B.Patil	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____

TEACHING PLAN (UNIT PLAN)





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VIVA COLLEGE, Virar (W)

NAME OF THE STAFF:ASST PROF VIJAYA NARAYANRAO SHIRSAT

DEPARTMENT:POLITICAL-SC CLASS:FYBA(MARATHI) SEMESTER: II MONTH: JANUARY ACADEMIC YEAR: 202-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I, UNIT II, TITLE	SUBTOPICS INDIAN POLITICAL PROCESS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PARTYPOLITICS AND ELECTIONS	2.1 NATIONAL PARTIES – FEATURES	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK
	2.2 REGIONAL PARTIES – CHARACTERISTICS	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	2.3 ANALYSIS OF ELECTORAL PERFORANCE OF NATIONAL AND REGIONAL PARTIES SINCE 1989.	3	Bhartache Shasan Ani Rajakaran.B.B.Patil	

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____

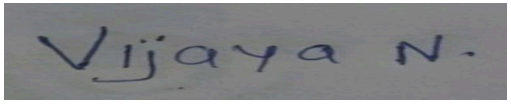
TEACHING PLAN (UNIT PLAN)

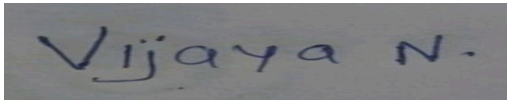
NAME OF THE STAFF: ASST PROF VIJAYA NARAYANRAO SHIRSAT

POLITICAL-SC CLASS: FYBA(MARATHI) SEMESTER:II MONTH:FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I, UNITIII, TITLE	SUBTOPICS INDIAN POLITICAL PROCESS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED





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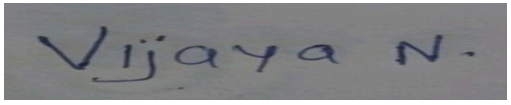
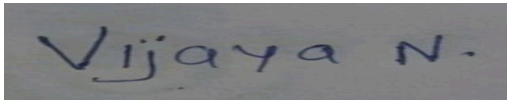
VIVA COLLEGE, Virar (W)

SOCIAL DYNAMICS	3.1 CASTE (WITH REFERENCE TO RESERVATION)	3	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK
	3.2 RELIGION (WITH REFERENCE TO COMMUNALISM)	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	3.3 GENDER (WITH REFERENCE TO POLITICAL PARTICIPATION)	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____11_____

TEACHING PLAN (UNIT PLAN)





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Vidhya DayanandPatil College of Arts
VIVA COLLEGE, Virar (W)

NAME OF THE STAFF: ASST PROF VIJAYA NARAYANRAO SHIRSAT DEPARTMENT: POLITICAL-SC CLASS:FYBA(MARATHI) SEMESTER: II MONTH:MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I , UNIT IV, TITLE	SUBTOPICS INDIAN POLITICAL PROCESS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CHALLENGES TO NATIONAL SECURITY	4.1 CRIMINALISATION OF POLITICS	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK
	4.2 INTERNAL THREATS TO SECURITY (WITH REFERENCE TO NAXALISM AND INSURGENCY)	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	4.3 GLOBAL TERRORISM	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	

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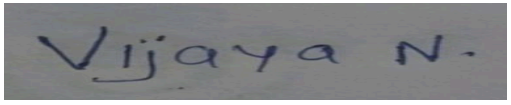

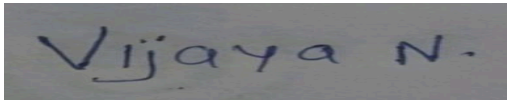

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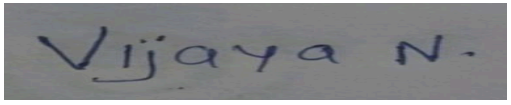
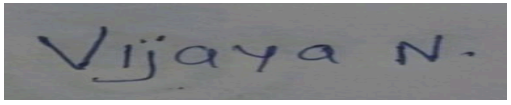
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF VIJAYA NARAYANRAO SHIRSAT DEPARTMENT:POLITICAL-SC CLASS:FYBA(MARATHI) MONTH: AUGUST ACADEMIC YEAR: 2022-23

PAPER I , UNIT I, TITLE	SUBTOPICS INDIAN POLITICAL SYSTEM	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
THE CONSTITUTIONAL FRAMEWORK INTRODUCTION TO THE CONSTITUTION	1.1 BRIEF HISTORY OF THE MAKING OF CONSTITUTION	4	Bhartache Shasan Ani Rajakaran. B.B.Patil	CHLK AND TALK
	1.2 PREMABLE	4		
	1.3 BASIC FEATURES	4		





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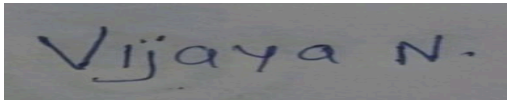
T The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF AUGUST POLITICALSCIENCE.**TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____**

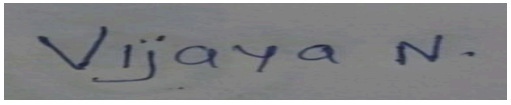
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF VIJAYA NARAYANRAO SHIRSAT DEPARTMENT:POLITICAL-SC CLASS:FYBA(MARATHI) MONTH: SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I, UNIT II, TITLE	SUBTOPICS INDIAN POLITICAL SYSTEM	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CITIZENS AND THE CONSTITUTION	2.1 FUNDAMENTAL RIGHTS – ARTS 14 TO 19	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK





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	2.2 FUNDAMENTAL RIGHTS –ARTS- 20 TO 32	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	2.3 DIRECTIVE PRINCIPLES OF STATEPOLICY	3	Bhartache Shasan Ani Rajakaran.B.B.Patil	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __11_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF VIJAYA NARAYANRAO SHIRSAT DEPARTMENT:POLITICAL-SC CLASS:FYBA(MARATHI) MONTH: OCTOBER ACADEMIC YEAR: 2022-23

Vijaya N.

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PAPER I , UNIT III, TITLE	SUBTOPICS INDIAN POLITICAL SYSTEM	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
LEGISLATURE AND JUDICIARY	3.1 PARLIAMENT	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK
	3.2 JUDICIAL SYSTEM – ORIGINAL AND WRIT JURISDICTION	3	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	3.3 JUDICIAL ACTIVISM	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____ TEACHING PLAN (UNIT PLAN)

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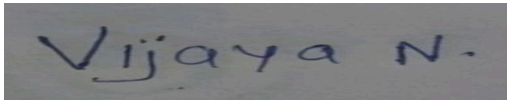
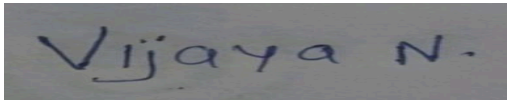
NAME OF THE STAFF: ASST PROF VIJAYA NARAYANRAO SHIRSAT DEPARTMENT:POLITICAL-SC CLASS:FYBA(MARATHI) MONTH: NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I, UNIT IV, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EXICATIVE	4.1 UNION EXECUTIVE - THE PRESIDENT	11	Laxmikant, M, Indian Polity, ,	CHLK AND TALK
	4.2 PRIME MINISTER AND COUNCIL OF MINISTERS			
	4.3 LOCAL SELF-GOVERNMENT – 73rd 74th AMENDMENTS AND THEIR IMPLEMENTATION			





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BhaskarWaman Thakur College of Science
Yashvant KeshavPatil College of Commerce
Vidhya DayanandPatil College of Arts
VIVA COLLEGE, Virar (W)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____11_____

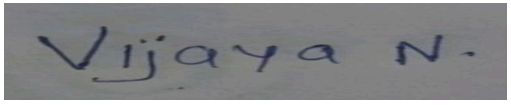
TEACHING PLAN (UNIT PLAN)

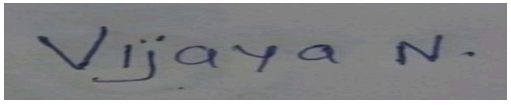
NAME OF THE STAFF:ASST PROF VIJAYA NARAYANRAO SHIRSAT

DEPARTMENT: POLITICAL-SC CLASS:FYBA(MARATHI) SEMESTER:II MONTH: DECEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I , UNIT I, TITLE	SUBTOPICS INDIAN POLITICAL PROCESS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED





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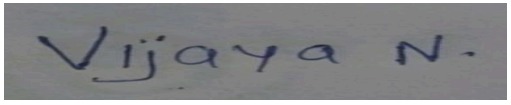
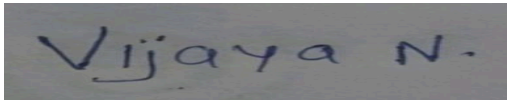
CHANGING NATURE OF FEDERAL SYSTEM	1.1 CENTRE-STATE RELATIONS WITH REFERENCE TO FISCAL AND EMERGNCY POWERS.	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK
	1.2 DEMAND FOR GREATER AUTONOMY	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	1.3 CHANGING DYNAMICS OF CENTRE-STATE RELATIONS	3	Bhartache Shasan Ani Rajakaran.B.B.Patil	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____

TEACHING PLAN (UNIT PLAN)





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VIVA COLLEGE, Virar (W)

NAME OF THE STAFF:ASST PROF VIJAYA NARAYANRAO SHIRSAT

DEPARTMENT:POLITICAL-SC CLASS:FYBA(MARATHI) SEMESTER: II MONTH: JANUARY ACADEMIC YEAR: 202-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I, UNIT II, TITLE	SUBTOPICS INDIAN POLITICAL PROCESS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PARTYPOLITICS AND ELECTIONS	2.1 NATIONAL PARTIES – FEATURES	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK
	2.2 REGIONAL PARTIES – CHARACTERISTICS	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	2.3 ANALYSIS OF ELECTORAL PERFORANCE OF NATIONAL AND REGIONAL PARTIES SINCE 1989.	3	Bhartache Shasan Ani Rajakaran.B.B.Patil	

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____

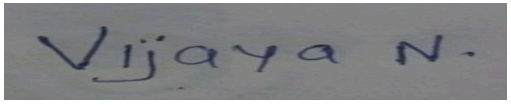
TEACHING PLAN (UNIT PLAN)

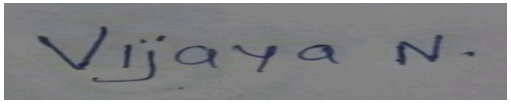
NAME OF THE STAFF: ASST PROF VIJAYA NARAYANRAO SHIRSAT

POLITICAL-SC CLASS: FYBA(MARATHI) SEMESTER:II MONTH:FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I, UNITIII, TITLE	SUBTOPICS INDIAN POLITICAL PROCESS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED





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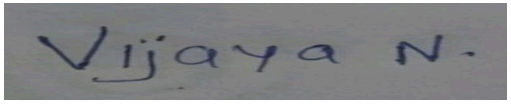
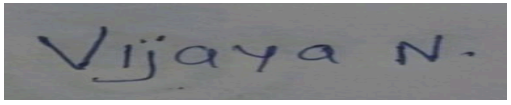
SOCIAL DYNAMICS	3.1 CASTE (WITH REFERENCE TO RESERVATION)	3	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK
	3.2 RELIGION (WITH REFERENCE TO COMMUNALISM)	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	3.3 GENDER (WITH REFERENCE TO POLITICAL PARTICIPATION)	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____11_____

TEACHING PLAN (UNIT PLAN)





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NAME OF THE STAFF: ASST PROF VIJAYA NARAYANRAO SHIRSAT DEPARTMENT: POLITICAL-SC CLASS:FYBA(MARATHI) SEMESTER: II MONTH:MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER I , UNIT IV, TITLE	SUBTOPICS INDIAN POLITICAL PROCESS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CHALLENGES TO NATIONAL SECURITY	4.1 CRIMINALISATION OF POLITICS	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	CHLK AND TALK
	4.2 INTERNAL THREATS TO SECURITY (WITH REFERENCE TO NAXALISM AND INSURGENCY)	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	
	4.3 GLOBAL TERRORISM	4	Bhartache Shasan Ani Rajakaran.B.B.Patil	

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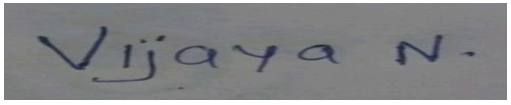
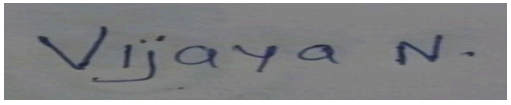
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____12_____





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VIVA COLLEGE, Virar (W)

TEACHING PLAN NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL-SCIENCE CLASS: SYBA (MARATHI) SEMESTER: III MONTH: JUNE&JULY ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Public Administration	1.1. Meaning, Scope and Significance	4	*Public Administration*, Tata McGraw hill,	CHALK AND TALK
	1.2. Evolution of Public Administration as a Discipline	4	*Public Administration*, Tata McGraw hill,	CHALK AND TALK
	1.3. Public Administration in the Age of Liberalisation, Privatisation	4	*Public Administration*, Tata McGraw hill,	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL-SCIENCE CLASS: SYBA (MARATHI) SEMESTER: III MONTH: AUGUST ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Theories of Administration	2.1. Scientific Management Theory- F.W. Taylor	4	*Public Administration*, Tata McGraw hill,	CHALK AND TALK
	2.2. Bureaucratic Theory- Max Weber	3	*Public Administration*, Tata McGraw hill,	CHALK AND TALK
	2.3. Human Relations Theory- Elton Mayo	3	*Public Administration*, Tata McGraw hill,	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TECHING PLAN NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE CLASS: SYBA (MARATHI) SEMESTER: III MONTH: OCTOBER ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Contemporary Techniques & Practices in Administration	.1.Good Governance	4	*Public Administration*, Tata McGraw hill,	CHALK AND TALK
	.2. E-Governance	4	*Public Administration*, Tata McGraw hill,	CHALK AND TALK
	.3. Public-Private Partnership (PPP)	3	*Public Administration*, Tata McGraw hill,	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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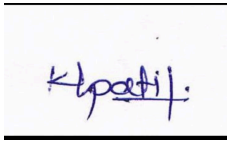
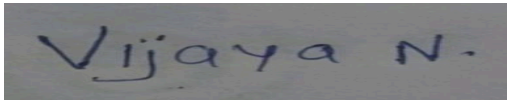
TEACHING PLAN (UNIT PLAN AFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE CLASS: SYBA (ENGLISH) SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2022-23.Ll /E/S: The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Indian Administration	.1.Evolution and Constitutional Context	4	*Public Administration*, Tata McGraw hill,	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11





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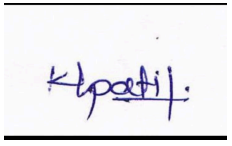
NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL-SCIENCE CLASS: SYBA (ENGLISH) SEMESTER: IV MONTH: FEBRUARY ACADEMIC YEAR: 2022-23

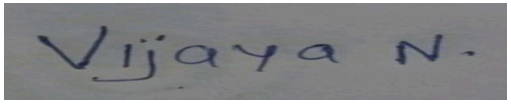
LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ancial Administration	1. Budgetary Process	4	*Public Administration*, Tata McGraw hill,	CHALK AND TALK
	2.Parliamentary Committees: Public Accounts Committee, Estimates Committee, Committee on Public Undertakings	4	*Public Administration*, Tata McGraw hill,	CHALK AND TALK
	3.Comptroller and Auditor General	4	*Public Administration*, Tata McGraw hill,	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

NAME OF THE STAFF: PROF. DEPARTMENT: POLITICAL-SCIENCE CLASS: SYBA (ENGLISH) SEMESTER: IV MONTH: MARCH ACADEMIC YEAR: 2022-23





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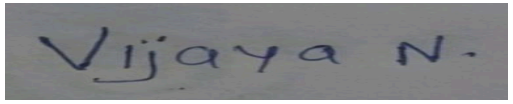
LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN AB NISTRATION IN INDIA

PAPER, UNIT, TITLE	OPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
ntemporary Issues in Indian Administration	1. Integrity in Administration: Lokpal, Lokyukta, CVC	4	*Public Administration*, Tata McGraw hill,	CHALK AND TALK
	4.2. Citizen and Administration	3	*Public Administration*, Tata McGraw hill,	CHALK AND TALK
	4.3.Citizens' Charter	3	*Public Administration*, Tata McGraw hill,	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11



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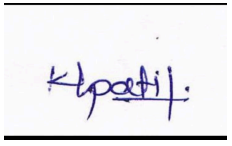

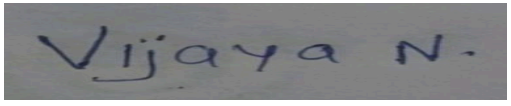

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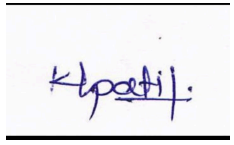
TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (MARATHI) SEMESTER: III MONTH: JUNE&JULY ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Political Theory	1.1 Definition and Scope of Political Theory	4	Verma, S.P., Modern Political Theory	CHALK AND TALK
	1.2Approaches to the Study of Political Theory: Traditional	3	Verma, S.P., Modern Political Theory	CHALK AND TALK
	1.3 Approaches to the Study of Political Theory: Contemporary	3	Verma, S.P., Modern Political Theory	CHALK AND TALK



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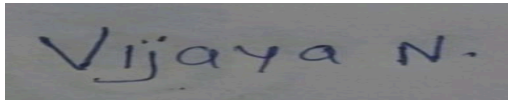

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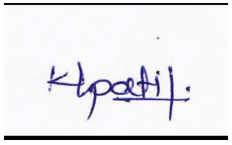
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (MARATHI) SEMESTER: III MONTH: AUGUST ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
State, Civil Society & Market	2.1 State: Concept and Perspectives	4	Jadhav T, Rajaneetishastra Parichay	CHALK AND TALK
	2.2 Nation - State: Meaning and Changing Perceptions	4	Jadhav T, Rajaneetishastra Parichay	CHALK AND TALK



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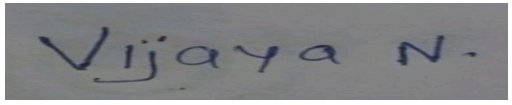

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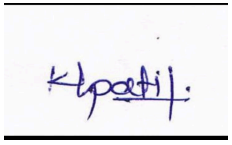
	2.3 State, Civil Soc	4	Jadhav T. Rajaneetishastra Parichay	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (MARATHI) SEMESTER: III MONTH: SEPTEMBER ACADEMIC YEAR: 2022-23LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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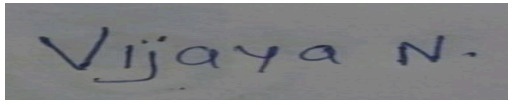

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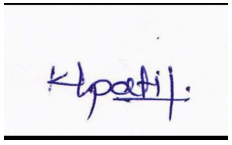
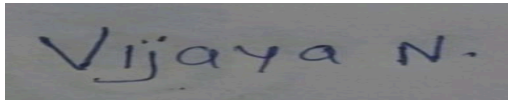
Power, Authority and Legitimacy	3.1 Power	4	Tijare, Peshwe, Adhunik Rajakiya Siddhanth	CHALK AND TALK
	3.2 Authority	3	Tijare, Peshwe, Adhunik Rajakiya Siddhanth	CHALK AND TALK
	3.3 Legitimacy	3	Tijare, Peshwe, Adhunik Rajakiya Siddhanth	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (MARATHI) SEMESTER: III MONTH: OCTOBER ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

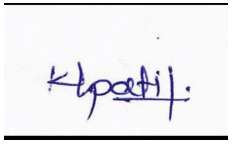




SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

PAPER, UNIT, TITLE	S	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Concept of Law and Political Obligation	4.1 Concept of Law	4	Political Theory, Pearson	CHALK AND TALK
	4.2 Political Obligation	4	Political Theory, Pearson	CHALK AND TALK
	4.3 Right to Resist	4	Political Theory, Pearson	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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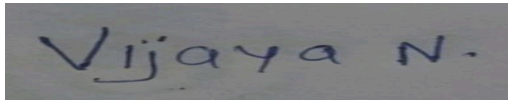

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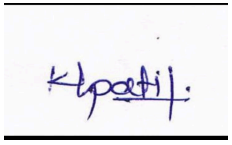
Vishnu Waman Thakur Charitable Trust
BhaskarWaman Thakur College of Science
Yashvant KeshavPatil College of Commerce
Vidhya DayanandPatil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)NAME OF [illegible]MAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (ENGLISH) SEMESTER: IV MONTH: NOV-DEC ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners [illegible]RN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	[illegible]PICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Rights	1 Meaning and Nature of Rights	4	Rajakiya Siddhanthachi Tatve, Vidya Books Publishers	CHALK AND TALK
	2 Theories of Rights	3	Rajakiya Siddhanthachi Tatve, Vidya Books Publishers	CHALK AND TALK
	3. Classification of Rights	3	Rajakiya Siddhanthachi Tatve, Vidya Books Publishers	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN) NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (ENGLISH) SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA



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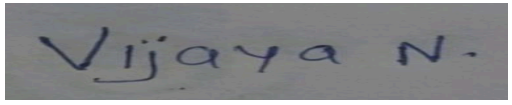
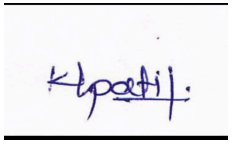


SIGNATURE OF THE H.O.D.

PAPER, UNIT, TITLE	[illegible]S	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Basic Political Values	2.1 Liberty	4	Verma, S.P., Modern Political Theory	CHALK AND TALK
	2.2 Equality	4	Verma, S.P., Modern Political Theory	CHALK AND TALK
	2.3 Justice	4	Verma, S.P., Modern Political Theory	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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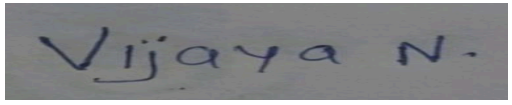
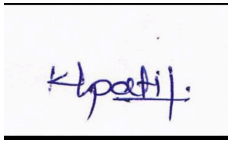


SIGNATURE OF THE H.O.D.

TEACHING PLAN (UNIT PLA 'HE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (ENGLISH) SEMESTER: IV MONTH: FEBRUARY ACADEMIC YEAR: 2022-23 LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Democracy	3.1 Theories of Democracy	4	Uchhatar Adhunik Rajakiya Siddhanth, Vidya Books Publishers	CHALK AND TALK
	3.2 Principles of Liberal Democracy	4	Uchhatar Adhunik Rajakiya Siddhanth, Vidya Books Publishers	CHALK AND TALK
	3.3 Conditions for the Successful Working of Democracy	3	Uchhatar Adhunik Rajakiya Siddhanth, Vidya Books Publishers	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11



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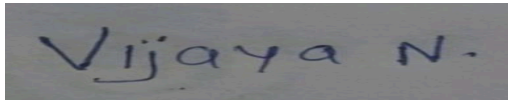

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Vishnu Waman Thakur Charitable Trust
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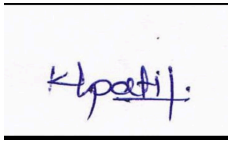
Yashvant KeshavPatil College of Commerce
Vidhya DayanandPatil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (ENGLISH) SEMESTER: IV MONTH: MARCH ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Political Ideologies	4.1 Marxism	4	Citizenship: Dialogues and Perception, Sage Publications	CHALK AND TALK
	4.2 Fascism	4	Citizenship: Dialogues and Perception, Sage Publications	CHALK AND TALK
	4.3 Feminism	4	Citizenship: Dialogues and Perception, Sage Publications	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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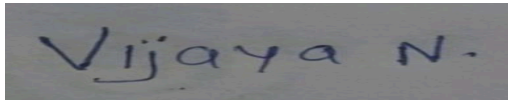

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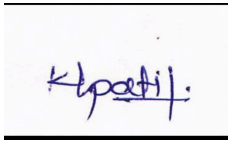

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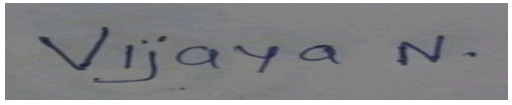

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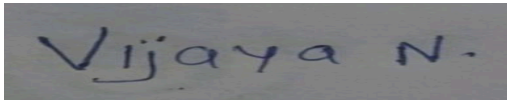
Yashvant KeshavPatil College of Commerce
Vidhya DayanandPatil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (MARATHI) SEMESTER: III MONTH: JUNE&JULY ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Political Theory	1.1 Definition and Scope of Political Theory	4	Verma, S.P., Modern Political Theory	CHALK AND TALK
	1.2Approaches to the Study of Political Theory: Traditional	3	Verma, S.P., Modern Political Theory	CHALK AND TALK
	1.3 Approaches to the Study of Political Theory: Contemporary	3	Verma, S.P., Modern Political Theory	CHALK AND TALK



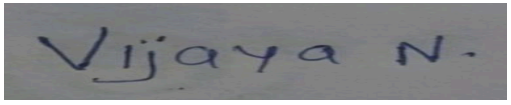
SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TOTAL NUMBER OF LECTURES ALLOTTED TO THE UNIT: 11

Vishnu Waman Thakur Charitable Trust
BhaskarWaman Thakur College of Science
Yashvant KeshavPatil College of Commerce
Vidhya DayanandPatil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (MARATHI) SEMESTER: III MONTH: AUGUST ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
State, Civil Society & Market	2.1 State: Concept and Perspectives	4	Jadhav T, Rajaneetishastra Parichay	CHALK AND TALK
	2.2 Nation - State: Meaning and Changing Perceptions	4	Jadhav T, Rajaneetishastra Parichay	CHALK AND TALK
	2.3 State, Civil Society and Market	4	Jadhav T, Rajaneetishastra Parichay	CHALK AND TALK



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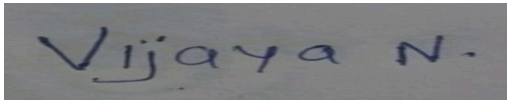
SIGNATURE OF THE H.O.D.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (MARATHI) SEMESTER: III MONTH: SEPTEMBER ACADEMIC YEAR: 2022-23LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Power, Authority and Legitimacy	3.1 Power	4	Tijare, Peshwe, Adhunik Rajakiya Siddhanth	CHALK AND TALK



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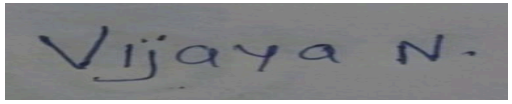
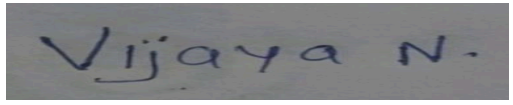
	3.2 Authority	3	Tijare, Peshwe, Adhunik Rajakiya Siddhanth	CHALK AND TALK
	3.3 Legitimacy	3	Tijare, Peshwe, Adhunik Rajakiya Siddhanth	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (MARATHI) SEMESTER: III MONTH: OCTOBER ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

PAPER, UNIT, TITLE	S	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Concept of Law and Political Obligation	4.1 Concept of Law	4	Political Theory, Pearson	CHALK AND TALK
	4.2 Political Obligation	4	Political Theory, Pearson	CHALK AND TALK
	4.3 Right to Resist	4	Political Theory, Pearson	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

Vijaya N.

Vijaya N.

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TEACHING PLAN (UNIT PL THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (ENGLISH) SEMESTER: IV M EC ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT PUBLIC ADMINIST DIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Rights	1.1 Meaning and Nature of Rights	4	Rajakiya Siddhanthachi Tatve, Vidya Books Publishers	CHALK AND TALK
	1.2 Theories of Rights	3	Rajakiya Siddhanthachi Tatve, Vidya Books Publishers	CHALK AND TALK
	1.3. Classification of Rights	3	Rajakiya Siddhanthachi Tatve, Vidya Books Publishers	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

Vijaya N.

Vijaya N.

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Vidhya DayanandPatil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN) NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (ENGLISH) SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Basic Political Values	2.1 Liberty	4	Verma, S.P., Modern Political Theory	CHALK AND TALK
	2.2 Equality	4	Verma, S.P., Modern Political Theory	CHALK AND TALK
	2.3 Justice	4	Verma, S.P., Modern Political Theory	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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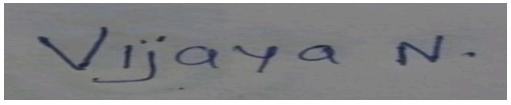

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Yashvant KeshavPatil College of Commerce
Vidhya DayanandPatil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (ENGLISH) SEMESTER: IV MONTH: FEBRUARY ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Democracy	3.1 Theories of Democracy	4	Uchhatar Adhunik Rajakiya Siddhanth, Vidya Books Publishers	CHALK AND TALK
	3.2 Principles of Liberal Democracy	4	Uchhatar Adhunik Rajakiya Siddhanth, Vidya Books Publishers	CHALK AND TALK
	3.3 Conditions for the Successful Working of Democracy	3	Uchhatar Adhunik Rajakiya	CHALK AND TALK

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Vijaya N.

SIGNATURE OF THE H.O.D.

			Siddhanth Vidya Books Publishers	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

Vijaya N.

TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (ENGLISH) SEMESTER: IV MONTH: MARCH ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Political Ideologies	4.1 Marxism	4	Citizenship: Dialogues and Perception, Sage Publications	CHALK AND TALK

Vijaya N.

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	4.2 Fascism	4	Citizenship: Dialogues and Perception, Sage Publications	CHALK AND TALK
	4.3 Feminism	4	Citizenship: Dialogues and Perception, Sage Publications	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

Vijaya N.

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Vijaya N.

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Vidhya DayanandPatil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF.ISHITA MAJUMDAR DEPARTMENT: POLITICAL-SC CLASS:TYBA(ENGLISH) SEMESTER:V MONTH: AUGUST ACADEMIC YEAR:2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT POLITICAL PROCESS IN MODERN MAHARASHTRA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV POLITICAL PROCESS IN MODERN MAHARASHTRA	1.1.Historical Background	10	Indian Government and politics. B.B.Patil.	EXPLANATION
	1.2. Social Reforms movement			
	1.3. Formation of the sangita Mahrshtra			

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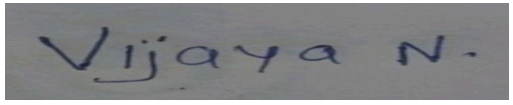


SIGNATURE OF THE H.O.D.

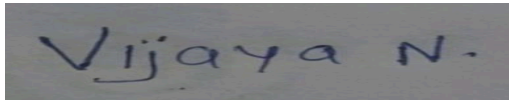
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASST PROF.ISHITA MAJUMDAR DEPARTMENT: POLITICAL-SC CLASS:TYBA(ENGLISH) SEMESTER: V MONTH: SEPTEMBER_ ACADEMIC YEAR: 2022-23LEARNING OBJECTIVE/S: The learners will be able to : TO LEARN ABOUT World Sub -Regionalism.

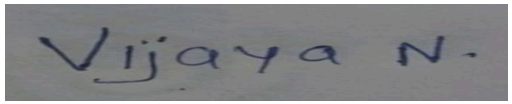
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 2. Sub_ Regionalism	2.1.Sub-Regionalism	10	Indian Government and politics. B.B.Patil.	lecture method
	2.2. Regional Disparities			
	2.3.Post-And Development			

SIGNATURE OF THE STAFF



SIGNATURE OF THE H.O.D.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____10_____

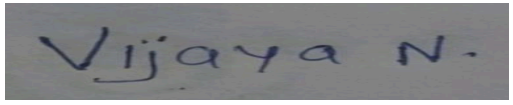


TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF.ISHITA MAJUMDARDEPARTMENT:POLITICAL-SC CLASS: TYBA(ENGLISH) SEMESTER:III MONTH: OCTOBER ACADEMIC YEAR: 2021-22LEARNING OBJECTIVE/S:

The learners will be able to : TO LEARN ABOUT political Institutions in Maharashtra.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
odule 3. Political Institutions in Maharashtra	3.1. State legiskature	O8	Indian Government and politics B.B.. Patil	
				EXPLANATION



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

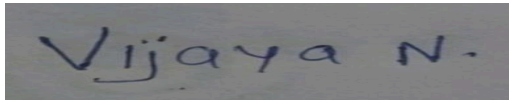
	3.2. State executive:Go hief Minister Councils and Ministers			
	3.3,Judiciary: High Court and subordinate Courts			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____o8_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF.ISHITA MAJUMDAR DEPARTMENT:POLITICA- SC CLASS: TYBA(ENGLISH) SEMESTER:III MONTH: NOVEMBER+DECEMBER_ ACADEMIC YEAR: 2022-23LEARNING OBJECTIVE/S: The learners will be able to : TO LEARN ABOUT Cast and politics in Maharashtra.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
odule 4. Cast and Politics	4.1.Historical Background of caste based politics	10	Indian Government and	Lecture Method



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

in Maharashtra			politics. B.B.Patil.	
	4.2. Cast dimensions of Maharashtra Politics			
	4.3. Dominant cast politics:OBC,Dalit			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___10_____

SIGNATURE OF THE STAFF

Vijaya N.

SIGNATURE OF THE H.O.D.

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BhaskarWaman Thakur College of Science
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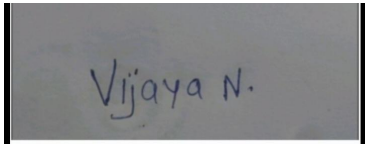
VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

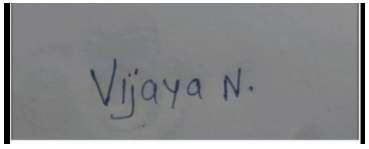
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:PROF ISHITA MAJUMDAR DEPARTMENT:POLITICAL-SC CLASS:TYBA(ENGLISH)_SEMESTER: V MONTH: JUNE& JULY ACADEMIC YEAR2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN ABOUT THE POLITICAL PROCESS OF MAHARASHTRA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Politics Paper VI A: Political Process in Modern Maharashtra Semester V: Politics of Modern Maharashtra	1.1 Evolution of the idea of Maharashtra 1.2 Nationalist Movement and Social Reform Movement 1.3 Sanyukta Maharashtra Movement	11	Phatak, Anagha: *Political Process of Maharashtra*	MAP CHALK & TALK





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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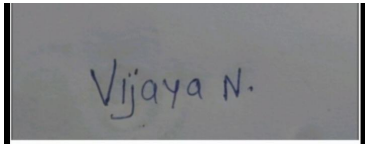
Module 1: Historical Background				

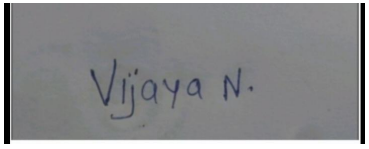
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __11_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:PROF VIJAYA SHIRSAT DEPARTMENT:POLITICAL-SC CLASS:TYBA(ENGLISH) SEMESTER: V_MONTH: AUGUST ACADEMIC YEAR2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN ABOUT THE POLITICAL PROCESS OF MAHARASHTRA





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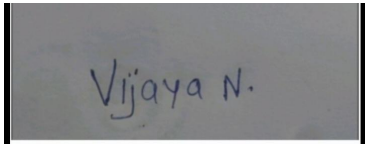
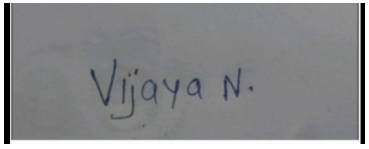
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 2: Sub-regionalism, Regional Disparity and Development	2.1 Konkan, Marathwada &Vidarbha 2.2 Dandekar Committee Report 2.3 Statutory Development Boards	12	Phatak, Anagha: *Political Process of Maharashtra*	MAP CHALK & TALK





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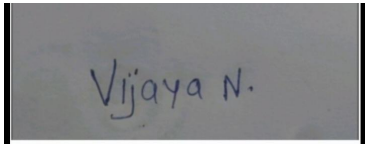
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

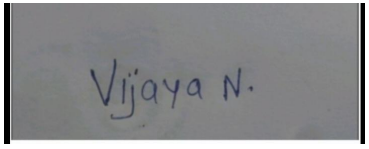
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF::PROF VIJAYA SHIRSAT_DEPARTMENT:POLITICAL-SC CLASS: TYBA(ENGLISH) SEMESTER:V MONTH:SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN ABOUT THE POLITICAL PROCESS OF MAHARASHTRA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED





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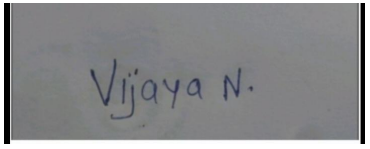
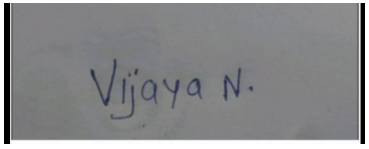
Module 3: Political Institutions in Maharashtra	3.1 State Legislature: Composition and Functions 3.2 Chief Minister and Council of Ministers: Role 3.3 High Court and Subordinate Courts	12	Phatak, Anagha: *Political Process of Maharashtra*	MAP CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _12_____

TEACHING PLAN (UNIT PLAN)





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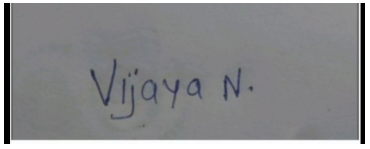
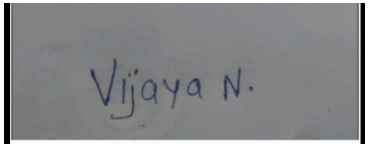
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF:PROF ISHITA MAJUMDAR DEPARTMENT:POLITICAL-SC CLASS: TYBA(ENGLISH) SEMESTER:V MONTH: OCTOBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN ABOUT THE POLITICAL PROCESS OF MAHARASHTRA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 4: Caste and Politics in Maharashtra	4.1 Dominant Caste Politics 4.2 Dalit Politics 4.3 OBC Politics	10	Phatak, Anagha: *Political Process of Maharashtra*	MAP CHALK & TALK





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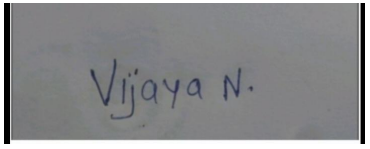
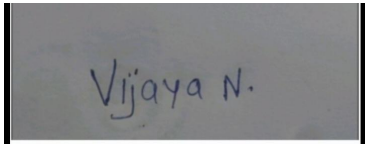
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____10_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF::PROF VIJAYA SHIRSAT DEPARTMENT:POLITICAL-SC CLASS:TYBA(ENGLISH) SEMESTER: VI_MONTH: NOV&DEC ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN ABOUT THE POLITICAL PROCESS OF MAHARASHTRA





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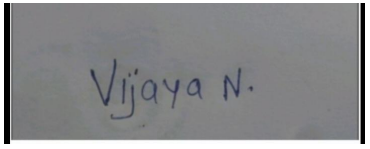
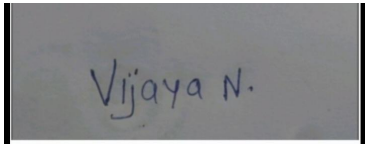
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Politics Paper VIA : Political Process in Modern Maharashtra Semester VI: Determinants of Politics of Maharashtra Module 1 : Political Economy of Maharashtra	1.1 Business and Politics 1.2 Politics of Cooperatives 1.3 Land issues: Urban and Rural	12	Phatak, Anagha: *Political Process of Maharashtra*	DISCUSSION EXPLANATION





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NAAC accredited "B" Grade, 2.69 CGPA

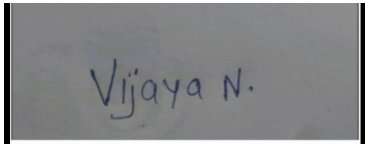
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _12_____

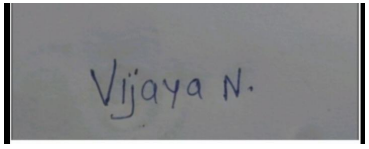
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF::PROF VIJAYA SHIRSAT DEPARTMENT: POLITICAL-SC CLASS:TYBA(ENGLISH) SEMESTER: VI_MONTH: JANUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN ABOUT THE POLITICAL PROCESS OF MAHARASHTRA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED





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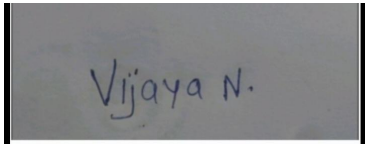
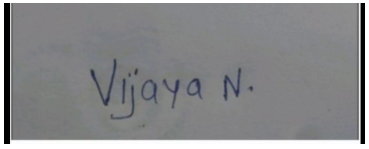
Rural **Module 2 : Political Parties**	2.1 Indian National Congress (I), Nationalist Congress Party and BharatiyaJanata Party	12		CHALK & TALK
	2.2 Republican Party of India, Peasants and Workers Party, Shiv Sena and Maharashtra MNS		Phatak, Anagha: *Political Process of Maharashtra*	
	2.2 Coalition Politics			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____12____

TEACHING PLAN (UNIT PLAN)





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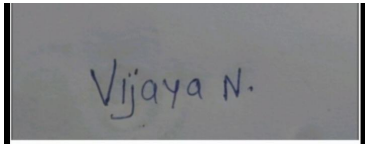
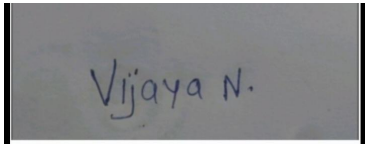
NAME OF THE STAFF:P:PROF VIJAYA SHIRSAT DEPARTMENT:POLITICAL-SC CLASS: TYBA(ENGLISH) SEMESTER: VI_MONTH: FEBRUARY ACADEMIC YEAR2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN ABOUT THE POLITICAL PROCESS OF MAHARASHTRA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 3 : Contemporary issues and movements	3.1 Tribal issues 3.2 Farmers movements and agitations	10	Phatak, Anagha: *Political Process of Maharashtra*	DISCUSSION CHALK AND TALK





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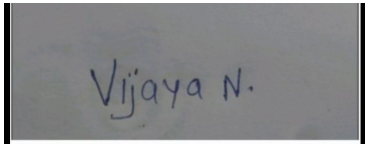
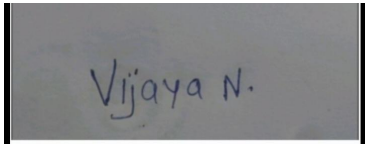
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:PROF :PROF VIJAYA SHIRSATT: POLITICAL –SC CLASS:TYBA(ENGLISH)_SEMESTER:VI MONTH:MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN ABOUT THE POLITICAL PROCESS OF MAHARASHTRA





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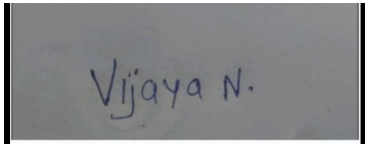
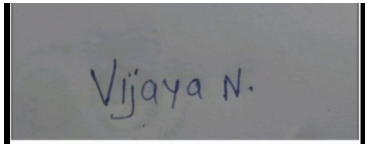
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 4 : Civil society initiatives and alternative models of development	4.1 Civil society - Concept and nature 4.2 Movements for the right to information in Maharashtra 4.3 Initiatives for protection of environment	11	Phatak, Anagha: *Political Process of Maharashtra*	DISCUSSION





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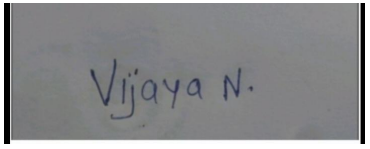
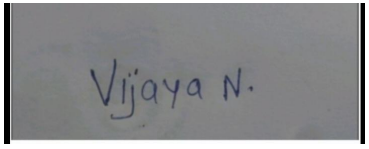
BhaskarWaman Thakur College of Science
YashvantKeshavPatil College of Commerce
VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _11_____





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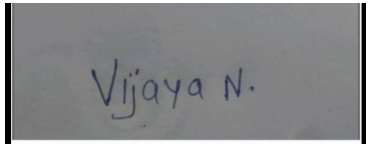
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:PROF ISHITA MAJUMDAR DEPARTMENT: POLITICAL-SC CLASS:SYBA(ENGLISH) SEMESTER:III MONTH:JUNE&JULY ACADEMIC YEAR:2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III - PUBLIC ADMINISTRATION	1.1. Meaning, Scope and Significance	12	*Public Administration*, Tata McGraw hill,	CHALK AND TALK EXPLANATION
	1.2. Evolution of Public Administration as a Discipline			
	1.3. Public Administration in the Age of Liberalisation, Privatisation			



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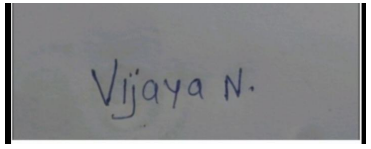
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF ISHITA MAJUMDAR DEPARTMENT: POLITICAL-SC CLASS:SYBA(ENGLISH) SEMESTER: III MONTH: AUGUST_ ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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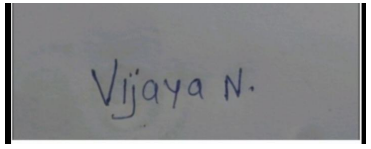
Module 2. Theories of Administration	2.1. Scientific Management Theory- F.W. Taylor	10	*Public Administration*, Tata McGraw hill,	CHALK AND TALK
	2.2. Bureaucratic Theory- Max Weber			
	2.3. Human Relations Theory- Elton Mayo			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____10_____



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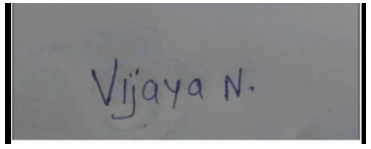
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:PROF ISHITA MAJUMDAR DEPARTMENT:POLITICAL-SC CLASS: SYBA(ENGLISH) SEMESTER:III MONTH: SEPTEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
lule 3. Basic Principles and Theories of Organisation	3.1. Hierarchy, Delegation, Centralisation-Decentralisation	12	*Public Administration*, Tata McGraw hill,	CHALK AND TALK
	3.2. Motivation Theories- McGregor, Mc Clelland			EXPLANATION
	.3,Leadership Theories- Trait theory, Contingency theory			



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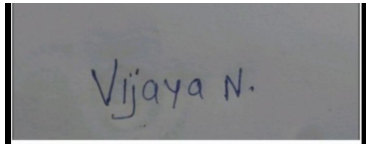
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____12_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:PROF ISHITA MAJUMDAR DEPARTMENT:POLITICA- SC CLASS: SYBS(ENGLISH) SEMESTER:III MONTH: OCTOBER_ ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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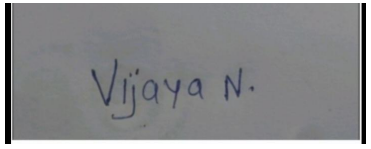
lule 4. Contemporary Techniques and Practices in Administration	.1.Good Governance	11	*Public Administration*, Tata McGraw hill,	CHALK AND TALK
	.2. E-Governance			
	.3. Public-Private Partnership (PPP)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____

TEACHING PLAN (UNIT PLAN)



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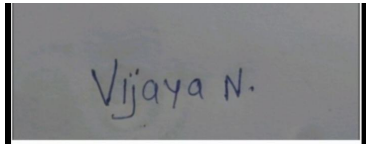
NAME OF THE STAFF:PROF ISHITA MAJUMDAR DEPARTMENT:POLITICAL-SC CLASS:SYBA(ENGLISH) SEMESTER: IV MONTH:NOVDEC ACADEMIC YEAR2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
IESTER IV - INDIAN ADMINISTRATION **ile 1. Introduction to Indian Administration**	1.Evolution and Constitutional Context	11	*Public Administration*, Tata McGraw hill,	EXPLANETION
	2.Salient features			
	3. District Administration since Independence: Changing role of District Collector			



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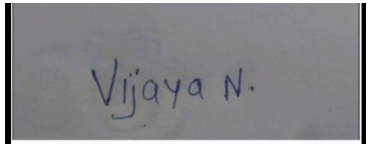
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____11_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:PROF ISHITA MAJUMDAR DEPARTMENT: POLITICAL-SC CLASS: SYBA(ENGLISH) SEMESTER: IV MONTH:JANUARY ACADEMIC YEAR2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 2. Personnel Administration	.1.Recruitment: All India Services, Central Services, State Services	11		EXPLANETION CHALK AND TALK



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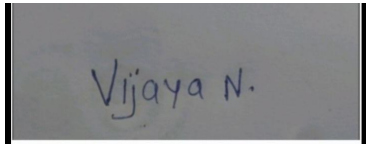
	2.2. Public Service Commission: Union Public Service Commission and Maharashtra Public Service Commission			
	raining: All- India Services, Central Services, State Services (Maharashtra)		*Public Administration*, Tata McGraw hill,	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:PROF ISHITA MAJUMDAR_DEPARTMENT:POLITICAL-SC CLASS:SYBA(ENGLISH) SEMESTER:IV_MONTH: FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:



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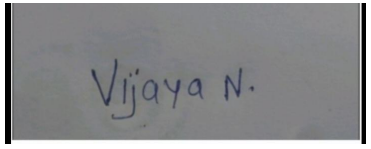
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
odule3. Financial Administration	1. Budgetary Process	12	*Public Administration*, Tata McGraw hill,	DISCUSSION CHALK & TALK
	2.Parliamentary Committees: Public Accounts Committee, Estimates Committee, Committee on Public Undertakings			
	3.Comptroller and Auditor General			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___12_____



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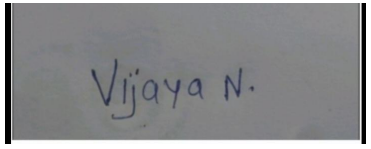
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF ISHITA MAJUMDAR DEPARTMENT:POLITICAL-SC CLASS: SYBA(ENGLISH) SEMESTER: IV MONTH:MARCH ACADEMIC YEAR2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
odule 4. Contemporary Issues in Indian Administration	1. Integrity in Administration: Lokpal, Lokyukta, CVC	11	*Public Administration*, Tata McGraw hill,	CHALK ABD TALK
	4.2. Citizen and Administration			



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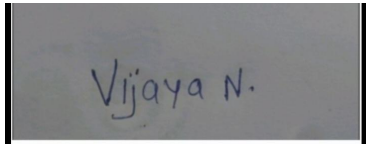
	13.Citizens' Charter			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____



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TEACHING PLAN (UNIT PLAN)

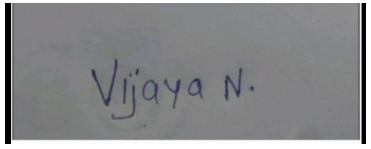
NAME OF THE STAFF:PROF ISHITA MAJUMDAR DEPARTMENT: POLITICAL-SC CLASS:SYBA(ENGLISH) SEMESTER:III MONTH:JUNE&JULY ACADEMIC YEAR:2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III - PUBLIC ADMINISTRATION	1.1. Meaning, Scope and Significance	12	*Public Administration*, Tata McGraw hill,	CHALK AND TALK EXPLANATION
	1.2. Evolution of Public Administration as a Discipline			
	1.3. Public Administration in the Age of Liberalisation, Privatisation			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

TEACHING PLAN (UNIT PLAN)



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NAME OF THE STAFF: PROF ISHITA MAJUMDAR DEPARTMENT: POLITICAL-SC CLASS:SYBA(ENGLISH) SEMESTER: III MONTH: AUGUST_ ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

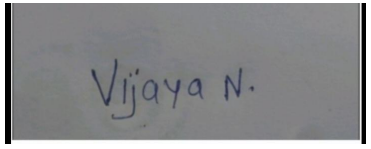
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 2. Theories of Administration	2.1. Scientific Management Theory- F.W. Taylor	10	*Public Administration*, Tata McGraw hill,	CHALK AND TALK
	2.2. Bureaucratic Theory- Max Weber			
	2.3. Human Relations Theory- Elton Mayo			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____10_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:PROF ISHITA MAJUMDAR DEPARTMENT:POLITICAL-SC CLASS: SYBA(ENGLISH) SEMESTER:III MONTH: SEPTEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:



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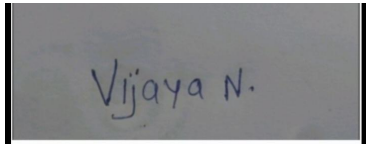
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
lule 3. Basic Principles and Theories of Organisation	3.1. Hierarchy, Delegation, Centralisation-Decentralisation	12	*Public Administration*, Tata McGraw hill,	CHALK AND TALK
	3.2. Motivation Theories- McGregor, Mc Clelland			EXPLANATION
	.3,Leadership Theories- Trait theory, Contingency theory			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____12_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:PROF ISHITA MAJUMDAR DEPARTMENT:POLITICA- SC CLASS: SYBS(ENGLISH) SEMESTER:III MONTH: OCTOBER_ ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:



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lule 4. Contemporary Techniques and Practices in Administration	.1.Good Governance	11	*Public Administration*, Tata McGraw hill,	CHALK AND TALK
	.2. E-Governance			
	.3. Public-Private Partnership (PPP)			

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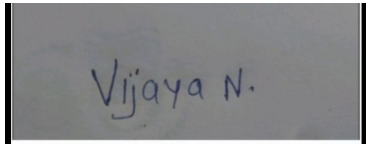
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:PROF ISHITA MAJUMDAR DEPARTMENT:POLITICAL-SC CLASS:SYBA(ENGLISH) SEMESTER: IV MONTH:NOVDEC ACADEMIC YEAR2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA



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IESTER IV - INDIAN ADMINISTRATION **le 1. Introduction to Indian Administration**	1.Evolution and Constitutional Context	11	*Public Administration*, Tata McGraw hill,	EXPLANETION
	2.Salient features			
	3. District Administration since Independence: Changing role of District Collector			

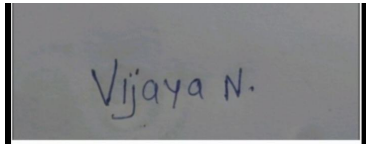
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____11_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:PROF ISHITA MAJUMDAR DEPARTMENT: POLITICAL-SC CLASS: SYBA(ENGLISH) SEMESTER: IV MONTH:JANUARY ACADEMIC YEAR2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
BhaskarWaman Thakur College of Science
YashvantKeshavPatil College of Commerce
VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

Module 2. Personnel Administration	.1.Recruitment: All India Services, Central Services, State Services	11		EXPLANETION CHALK AND TALK
	2.2. Public Service Commission: Union Public Service Commission and Maharashtra Public Service Commission			
	raining: All- India Services, Central Services, State Services (Maharashtra)		*Public Administration*, Tata McGraw hill,	

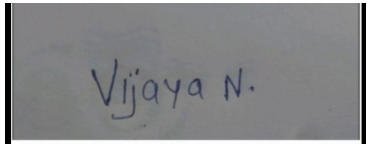
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:PROF ISHITA MAJUMDAR_DEPARTMENT:POLITICAL-SC CLASS:SYBA(ENGLISH) SEMESTER:IV_MONTH: FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
odule3. Financial Administration	1. Budgetary Process	12	*Public Administration*, Tata McGraw hill,	DISCUSSION CHALK & TALK
	2.Parliamentary Committees: Public Accounts Committee, Estimates Committee, Committee on Public Undertakings			



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SIGNATURE OF THE H.O.D.

	3.Comptroller and Auditor General			

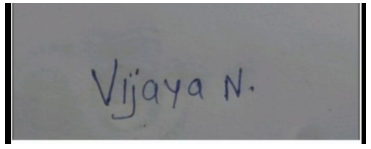
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___12_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF ISHITA MAJUMDAR DEPARTMENT:POLITICAL-SC CLASS: SYBA(ENGLISH) SEMESTER: IV MONTH:MARCH ACADEMIC YEAR2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
odule 4. Contemporary Issues in Indian Administration	1. Integrity in Administration: Lokpal, Lokyukta, CVC	11	*Public Administration*, Tata McGraw hill,	CHALK ABD TALK
	4.2. Citizen and Administration			
	3.Citizens' Charter			



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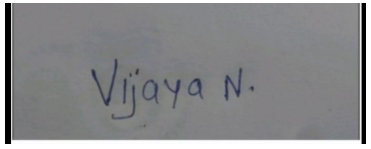
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____



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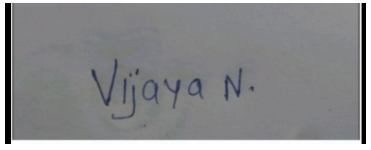
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF Dr.ISHITA MAJUMDAR DEPARTMENT:POLITICAL-SC CLASS:FYBA(ENGLISH) SEMESTER:I MONTH: NOVEMBER ACADEMIC YEAR:2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO TEACH THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDIAN POLITICAL SYSTEM. THE CONSTITUTIONAL FRAMEWORK INTRODUCTION TO THE CONSTITUTION	1.1 BRIEF HISTORY OF THE MAKING OF CONSTITUTION	O4	Indian political system ,B.B.Patil.	CHLK AND TALK
	1.2 PREMABLE			
	1.3 BASIC FEATURES			



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NAAC accredited "B" Grade, 2.69 CGPA

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __04_____

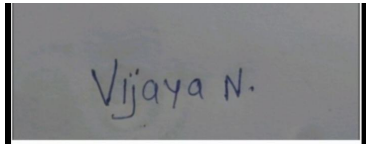
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF ISHITA MAJUMDARDEPARTMENT:POLITICAL-SC CLASS:FYBA(ENGLISH) :I MONTH: DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : TO TEACH THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CITIZENS AND THE CONSTITUTION	2.1 FUNDAMENTAL RIGHTS – ARTS 14 TO 19	06	Indian political system ,B.B.Patil.	CHLK AND TALK
	2.2 FUNDAMENTAL RIGHTS –ARTS- 20 TO 32			
	2.3 DIRECTIVE PRINCIPLES OF STATEPOLICY			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __06_____



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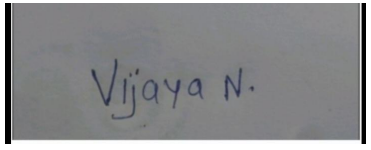
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF ISHITA MAJUMDAR DEPARTMENT:POLITICAL-SC CLASS:FYBA(ENGLISH) SEMESTER: I MONTH: DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : TO TEACH THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
LEGISLATURE AND JUDICIARY	3.1 PARLIAMENT	04	Indian political system ,B.B.Patil.	CHLK AND TALK
	3.2 JUDICIAL SYSTEM – ORIGINAL AND WRIT JURISDICTION			
	3.3 JUDICIAL ACTIVISM			



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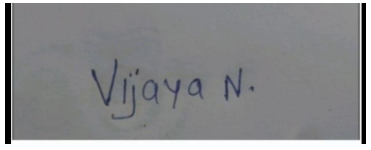
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____04_____ **TEACHING PLAN (UNIT PLAN)**

NAME OF THE STAFF: ASST PROF ISHITA MAJUMDAR DEPARTMENT:POLITICAL-SC CLASS:FYBA(ENGLISH) SEMESTER: I MONTH: DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : TO TEACH THE BESIC CONCEPT OF POLITICALSCIENCE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EXECUTIVE	4.1 UNION EXECUTIVE - THE PRESIDENT	04	Indian political system ,B.B.Patil.	CHLK AND TALK
	4.2 PRIME MINISTER AND COUNCIL OF MINISTERS			
	4.3 LOCAL SELF-GOVERNMENT – 73rd 74th AMENDMENTS AND THEIR IMPLEMENTATION			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____04_____



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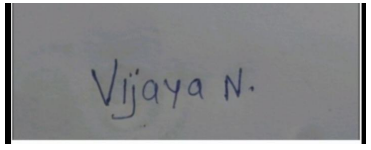

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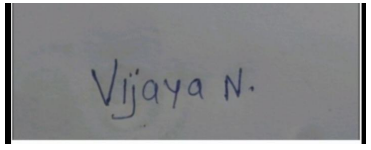

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TEACHING PLAN (UNIT PLAN)

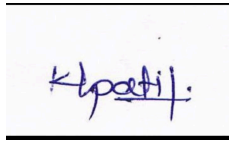
NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL-SCIENCE CLASS: FYBA (ENGLISH) SEMESTER: I

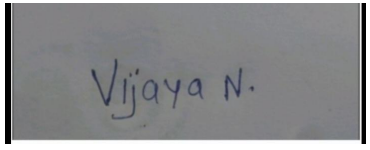
MONTH: JULY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: LEARN BASIC CONCEPT OF POLITICAL SCIENCE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
THE CONSTITUTIONAL FRAMEWORK	1.1 BRIEF HISTORY OF THE MAKING OF CONSTITUTION	4	1. Basu, Durga Das, Introduction to the Constitution of India, Lexis Nexis, 2012.	CHLK AND TALK
	1.2 PREMABLE	4	2. Laxmikant, M, Indian Polity, TMH, 2015.	CHLK AND TALK
	1.3 BASIC FEATURES	4	3. Laxmikant, M., Governance in India, TMH, 2015.	CHLK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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YashvantKeshavPatil College of Commerce
VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

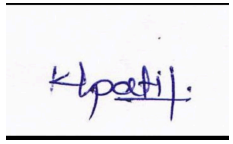
NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL-SCIENCE CLASS: FYBA (ENGLISH) SEMESTER: I MONTH: AUGUST ACADEMIC YEAR: 2022-23

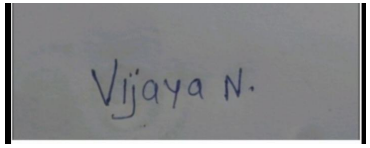
LEARNING OBJECTIVE/S:
The learners will be able to: LEARN THE BASIC CONCEPT OF POLITICAL SCIENCE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CITIZENS AND THE CONSTITUTION	2.1 FUNDAMENTAL RIGHTS – ARTS 14 TO 19	4	Basu, Durga Das, Introduction to the Constitution of India	CHLK AND TALK
	2.2 FUNDAMENTAL RIGHTS –ARTS- 20 TO 32	3	Basu, Durga Das, Introduction to the Constitution of India	CHLK AND TALK
	2.3 DIRECTIVE PRINCIPLES OF STATEPOLICY	4	Basu, Durga Das, Introduction to the Constitution of India	CHLK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

TEACHING PLAN (UNIT PLAN)





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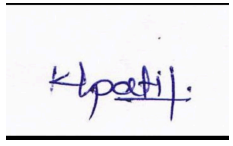
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL: POLITICAL-SCIENCE CLASS: FYBA(ENGLISH) SEMESTER: I MONTH: SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: LEARN THE BASIC CONCEPT OF POLITICAL SCIENCE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
LEGISLATURE AND JUDICIARY	3.1 PARLIAMENT	4	Laxmikant, M, Indian Polity	CHLK AND TALK
	3.2 JUDICIAL SYSTEM – ORIGINAL AND WRIT JURISDICTION	4	Laxmikant, M., Governance in India,	CHLK AND TALK
	3.3 JUDICIAL ACTIVISM	3	Laxmikant, M., Governance in India,	CHLK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11



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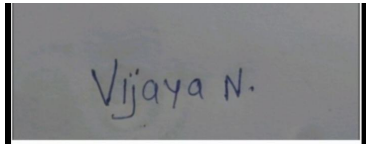

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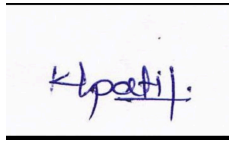
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL-SCIENCE CLASS: FYBA (ENGLISH) SEMESTER: I MONTH: OCTOBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: LEARN THE BASIC CONCEPT OF POLITICALSCIENCE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EXECUTIVE	4.1 UNION EXECUTIVE - THE PRESIDENT	4	Laxmikant, M, Indian Polity, ,	CHLK AND TALK
	4.2 PRIME MINISTER AND COUNCIL OF MINISTERS	4	Laxmikant, M, Indian Polity	CHLK AND TALK
	4.3 LOCAL SELF-GOVERNMENT – 73rd,74th, AMENDMENTS AND THEIR IMPLEMENTATION	3	Laxmikant, M., Governance in India	CHLK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11



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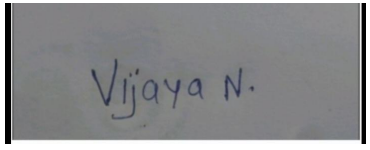

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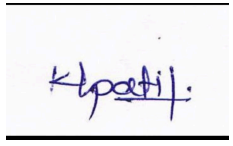
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL-SCIENCE CLASS: FYBA (ENGLISH) SEMESTER: II MONTH: NOV&DEC ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: LEARN THE BASIC CONCEPT OF POLITICAL SCIENCE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
TITLE: INDIAN POLITICAL PROCESS CHANGING NATURE OF FEDERAL SYSTEM	1.1 CENTRE-STATE RELATIONS WITH REFERENCE TO FISCAL AND EMERGNCY POWERS.	4	Laxmikant, M, Indian Polity	CHLK AND TALK
	1.2 DEMAND FOR GREATER AUTONOMY	4	Laxmikant, M, Indian Polity	CHLK AND TALK
	1.3 CHANGING DYNAMICS OF CENTRE-STATE RELATIONS	3	Laxmikant, M, Indian Polity	CHLK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11



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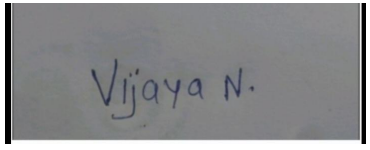

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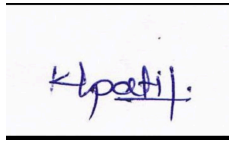
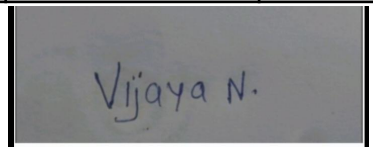
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL-SCIENCE CLASS: FYBA (ENGLISH) SEMESTER: II MONTH: JANUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: LEARN THE BASIC CONCEPT OF POLITICAL SCIENCE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PARTYPOLITICS AND ELECTIONS	2.1 NATIONAL PARTIES – FEATURES	4	Laxmikant, M, Indian Polity	CHLK AND TALK
	2.2 REGIONAL PARTIES – CHARACTERISTICS	3	Laxmikant, M, Indian Polity	CHLK AND TALK
	2.3 ANALYSIS OF ELECTORAL PERFORANCE OF NATIONAL AND REGIONAL PARTIES SINCE 1989.	4	Laxmikant, M, Indian Polity	CHLK AND TALK





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VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

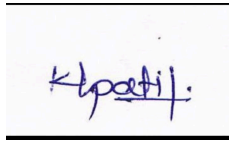
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL-SCIENCE CLASS: FYBA (ENGLISH) SEMESTER: II MONTH: FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: LEARN THE BASIC CONCEPT OF POLITICAL SCIENCE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
SOCIAL DYNAMICS	3.1 CASTE (WITH REFERENCE TO RESERVATION)	4	Laxmikant, M, Indian Polity	CHLK AND TALK
	3.2 RELIGION (WITH REFERENCE TO COMMUNALISM)	4	Laxmikant, M, Indian Polity	CHLK AND TALK
	3.3 GENDER (WITH REFERENCE TO POLITICAL PARTICIPATION)	3	Laxmikant, M, Indian Polity	CHLK AND TALK



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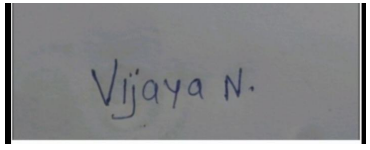

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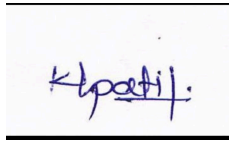
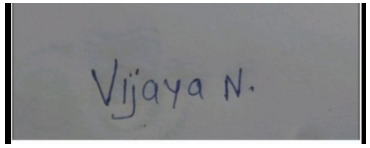
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF.KOMAL LAXMAN PATIL DEPARTMENT: POLITICAL-SCIENCE CLASS: FYBA (ENGLISH) SEMESTER: II MONTH: MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: LEARN THE BESIC CONCEPT OF POLITICALSCIENCE.





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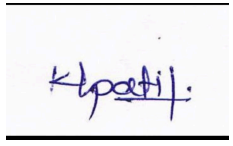
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CHALLENGES TO NATIONAL SECURITY	4.1 CRIMINALISATION OF POLITICS	4	Laxmikant, M, Indian Polity	CHLK AND TALK
	4.2 INTERNAL THREATS TO SECURITY (WITH REFERENCE TO NAXALISM AND INSURGENCY)	4	Laxmikant, M, Indian Polity	CHLK AND TALK
	4.3 GLOBAL TERRORISM	4	Laxmikant, M, Indian Polity	CHLK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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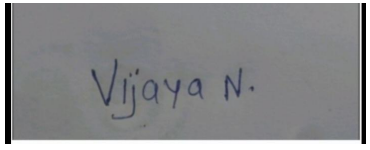

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NAME OF THE STAFF: ASSISTANT PROFESSOR VIJAYA N.SHIRSAT DEPARTMENT: POLITICAL-SCIENCE CLASS:TYBA (MARATHI) SEMESTER:V MONTH: JUNE ACADEMIC YEAR: 2022-23LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT HISTORICAL BACKGROUND OF MAHARASHTRA

PAPER VI UNIT I ,TITLE	SUBJECT TOPICS POLITICS OF MODERN MAHARASHTRA	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORICAL BACKGROUND	1.1 Introduction, Historical Background	4	Maharashtra Prashasan .Wa.Bha.Patil	CHALK AND TALK
	1.2 Social Reforms Movement	4	Maharashtra Prashasan .Wa.Bha.Patil	CHALK AND TALK
	1.3 The Nationalist Movement	4	Maharashtra Prashasan .Wa.Bha.Patil	Lecturer Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLA NAME OF THE STAFF: ASSISTANT PROFESSOR VIJAYA N.SHIRSAT DEPARTMENT: POLITICAL-SCIENCE-VI CLASS: TYBA (MARATHI) SEMESTER: V MONTH: JULY ACA -23 .LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT Sub-Regionalism.

PAPER VI, UNIT II , TITLE	SUBTOPICS POLITICS OF MODERN MAHARASHTRA	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Sub-Regionalism -Regional Disparities & Development	2.1 Profile of Maharashtra	5	Maharashtrache Shasan Aani Rajkaran.B.B.Patil	CHALK AND TALK
	2.2 western Maharashtra	6	Maharashtrache Shasan Aani Rajkaran.B.B.Patil	Lecture Method
	2.3.Konkan,Mumbai City,Marathwada, Vidarbh		Maharashtrache Shasan Aani Rajkaran.B.B.Patil	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: II

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASSISTANT PROFESSOR VIJAYA N SHIRSAT DEPARTMENT: POLITICAL SCIENCE-VI CLASS: TYBA (MARATHI) SEMESTER: V MONTH: AUGUST

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: TO LEARN ABOUT Conflict peace and Security

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PAPE VI ,, UNIT III, TITLE	SUBTOPICS POLITICS OF MODERN MAHARASHTRA	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
POLITICAL INSTITUTINS IN MAHARASHTRA	ure: Composition and Functions	4	Maharashtrache Shasan Aani Rajkaran.B.B.Pati	CHALK AND TALK
	3.2 State Executive:Governor,Chief Minister, Council and Ministers	4	Maharashtrache Shasan Aani Rajkaran.B.B.Pati	CHALK AND TALK
	3.2 Judiciary:High Court and Subordinate Courts	3	Maharashtrache Shasan Aani Rajkaran.B.B.Pati	

TOTAL NUMBER OF LECTURES ALLOCATED TO TH

TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: ASSISTANT PROFESSOR VIJAYA N .SHIRSAT DEPARTMENT: POLITICSCIENCEVI-CLASS: TYBA (MARATHI) SEMESTER: V MONTH: SEPTEMBER ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT CASTE AND POLITICS IN MAHARASHTRA

PAPER VI,UNIT IV TITLE	SUBTOPICS POLITICS OF MODERN MAHARASHTRA	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/
	4.1. Historical Background of caste based Politics	1	Maharashtra Prashasan. .Wa.Bha.Patil	CHALK AND TALK

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'aste and Politics in ıarashtra	n of Maharastra Politics	1	Maharashtra Prashasan. .Wa.Bha.Patil	Lecture Method
	4.3.Dominant Caste Politics .The OBC, The Dalit Politics	4	Maharashtra Prashasan. .Wa.Bha.Patil	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6

TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: ASSISTANT PROFESSOR VIJAYA N.SHIRSAT DEPARTMENT: POLITICAL-SCIENCE-V CLASS: TYBA Marathi SEMESTER: VI MONTH: NOV-DEC ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT FOREIGN POLICY

PAPER VI,UNIT I TITLE	SUBTOPICS DETERMINANTS OF POLITICS OF MAHARASHTRA .	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Political Economy of Maharastra	1.1.The Business class in Maharashtra	4	Maharashtra Prashasan .Wa.Bha.Patil	CHALK AND TALK
	1.2 Chambers of Commerce and Industry	4	Maharashtra Prashasan. .Wa.Bha.Patil	Lecture method
	3.Co-operation and Politics,Land issues-Urban and rural	4		Lecture Method

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		Maharashtra Prashasan. .Wa.Bha.Patil	

TOTAL NUMBER OF **CATED TO THE UNIT- 12**

TEACHING PLAN:NAME OF THE STAFF: ASSISTANT PROFESSOR VIJAYA N.SHIRSAT DEPARTMENT: POLITICAL-SCIENCE- CLASS: TYBA MARATHI SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT POLITICAL PARTIES IN MAHARASHTRA

PAPER VI, UNIT II TITLE	SUBTOPICS DETERMINANTS OF POLITICS OF MAHARASHTRA	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Political parties	2.1Indian National Congress,Nationalist Congress party	3	*I* Maharashtrache Shasan Aani Rajkaran.B.B.Pati	CHALK AND TALK
	2.2 Bhartiy Janata Party,Republic partiya of India	4	Maharashtrache Shasan Aani Rajkaran.B.B.Pati	Lecture Method
	2.3 Shiv Sena and Maharashtra Navnirman sena Coalition Politics	4	Maharashtrache Shasan Aani Rajkaran.B.B.Pati	Lecture Method

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TOTAL NUMBER OF CATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN) NAME OF THE STAFF ASSISTANT PROFESSOR VIJAYA N SHIRSAT DEPARTMENT: POLITICAL-SCIENCE. CLASS: TYBA (MARATHI) SEMESTER: VI MONTH: FEBRUARY ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT CONTEMPORARY ISSUES AND MOVEMENT

PAPER VI , UNIT III, TITLE	SUBTOPICS DETERMINANTS OF POLITICS OF MAHARASHTRA	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CONTEMPORARY ISSUES AND movement	3.1 Tribal Issues	5	Maharashtrache Shasan Aani Rajkaran.B.B.Pati	Lecture method
	3.2 Farmers Movements and agitations	5	Maharashtrache Shasan Aani Rajkaran.B.B.Pati	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: ASSISTANT PROFESSOR VIJAYA N.SHIRSAT DEPARTMENT: POLITICAL-SCIENCE- CLASS: TYBA MARATHI) SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2022-23.LEARNING OBJECTIVE/S:Thelearners will be able to: TO LEARN ABOUT CIVIL SOCIETY.

PAPER IV, UNIT III TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Civil society Initiatives and Alternative Methods of Development	4.1Civil society Initiatives in India and Maharashtra	3	Maharashtra Prashasan. .Wa.Bha.Patil	Lecture Method
	4.2 movement for the Right to Information in Maharashtra	2	Maharashtra Prashasan. .Wa.Bha.Patil	CHALK AND TALK
	4.3 Initiatives for the protection of environment	1	Maharashtra Prashasan. .Wa.Bha.Patil	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6

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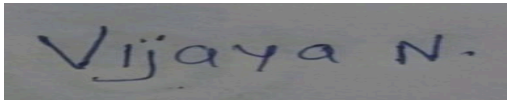
VIVA COLLEGE, Virar (W)

NAME OF THE STAFF: ASST PROF.VIJAYA NARAYANRAO SHIRSAT DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (MARATHI)SEMESTER: III MONTH: JUNE ACADEMIC YEAR: 2022-23LEARNING OBJECTIVE/S:The learners will be able to: TO LEARN ABOUT INTRODUCTION TO POLITICAL THEORY.

PAPER II , UNIT I , TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Political Theory	1.1 Definition and Scope of Political Theory	4	Dr.Patil Va.Bha.,Modern Political Theory	CHALK AND TALK
	1.2Approaches to the Study of Political Theory: Traditional	3	Dr.Patil Va.Bha.Modern Political Theory	CHALK AND TALK
	1.3 Approaches to the Study of Political Theory: Contemporary	3	Dr.Patil Va.Bha.Modern Political Theory	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11



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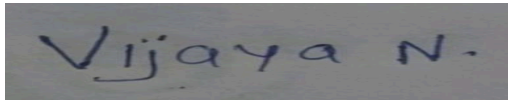

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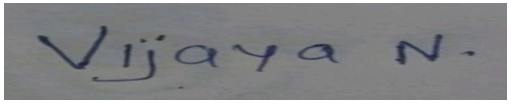
TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: ASST PROF.VIJAYA NARAYANRAO SHIRSAT DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (MARATHI) SEMESTER: III MONTH: JULY ACADEMIC YEAR: 2022-2023.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT STATE,CIVIL SOCIETY & MARKET.

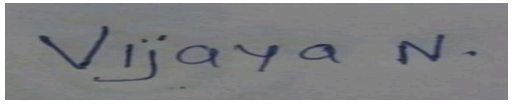
PAPER II , UNIT II, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
State, Civil Society & Market	2.1 State: Concept and Perspectives	4	Jadhav T, Rajaneetishastra Parichay	CHALK AND TALK
	2.2 Nation - State: Meaning and Changing Perceptions	4	Jadhav T, Rajaneetishastra Parichay	CHALK AND TALK
	2.3 State, Civil Society and Market	4	Jadhav T, Rajaneetishastra Parichay	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: ASST PROF.VIJAYA NARAYANRAO SHIRSAT DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (MARATHI) SEMESTER: III MONTH: AUGUST ACADEMIC YEAR: 202-23LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT POWER,AUTHORITY AND LEGITIMACY.

PAPER II, UNIT III, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Power, Authority and Legitimacy	3.1 Power	4	Tijare, Peshwe, Adhunik Rajakiya Siddhanth	CHALK AND TALK





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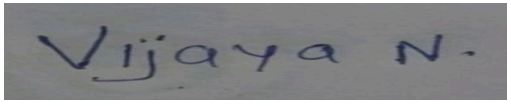
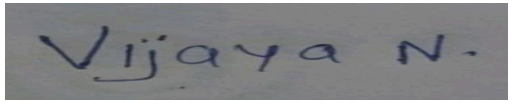
	3.2 Authority	3	Tijare, Peshwe, Adhunik Rajakiya Siddhanth	CHALK AND TALK
	.3 Legitimacy	3	Tijare, Peshwe, Adhunik Rajakiya Siddhanth	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF:ASST PROF.VIJAYA NARAYANRAO SHIRSAT DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (MARATHI) SEMESTER: III MONTH: SEPTEMBER ACADEMIC YEAR: 2022-2023.LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT CONCEPT OF LAW AND POLITICAL OBLIGATION.

PAPER II, UNIT IV, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Concept of Law and Political Obligation	.1 Concept of Law	4	Political Theory, Dr.Patil.Va.Bha.	CHALK AND TALK
	.2 Political Obligation	4	Political Theory , Dr.Patil.Va.Bha.	CHALK AND TALK
	.3 Right to Resist	4	Political Theory, Dr.Patil.Va.Bha.	CHALK AND TALK





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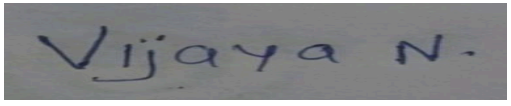
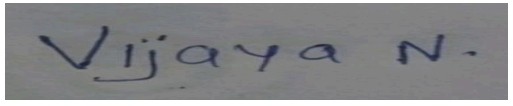
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: ASST PROF.VIJAYA NARAYANRAO SHIRSAT DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (MARATHI) SEMESTER: IV MONTH: NOVEMBER ACADEMIC YEAR: 2022-2023 .LEARNING OBJECTIVE/S:The learners will be able to: TO LEARN ABOUT RIGHTS.

PAPER II, UNIT I, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Rights	.1 Meaning and Nature of Rights	4	Rajakiya Siddhanthachi Tatve, Vidya Books Publishers	CHALK AND TALK
	.2 Theories of Rights	3	Rajakiya Siddhanthachi Tatve, Vidya Books Publishers	CHALK AND TALK
	3. Classification of Rights	3	Rajakiya Siddhanthachi Tatve, Vidya Books Publishers	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10





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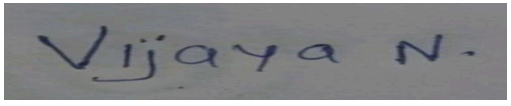
NAME OF THE STAFF: ASST PROF.VIJAYA NAR DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (MARATHI)DECEMBER: IV MONTH: JANUARY ACADEMIC YEAR: 2022-2023.LEARNING OBJECTIVE/S:The learners will be able to: TO LEARN ABOUT Basic Political Values.

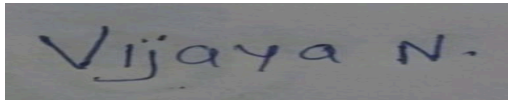
PAPER II, UNIT II, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Basic Political Values	2.1 Liberty	4	Adhunik Rajakiya Siddhanth, Vidya Books Publishers	CHALK AND TALK
	2.2 Equality	4	Adhunik Rajakiya Siddhanth, Vidya Books Publishers	Lecture method
	2.3 Justice	4	Adhunik Rajakiya Siddhanth, Vidya Books Publishers	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

NAME OF THE STAFF: ASST PROF.VIJAYA NARAYANRAO SHIRSAT DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (MARATHI)JANUARY: IV MONTH: FEBRUARY ACADEMIC YEAR: 2022-202LEARNING OBJECTIVE/S: The learners will be able to: TO LEARN ABOUT DEMOCRACY

PAPER II, UNIT III, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED





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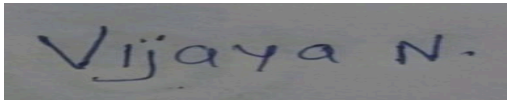
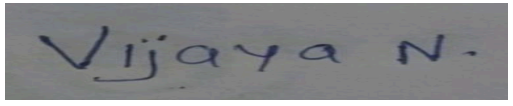
Democracy	mocracy	4	Adhunik Rajakiya Siddhanth, Vidya Books Publishers	CHALK AND TALK
	3.2 Principles of Liberal Democracy	4	Adhunik Rajakiya Siddhanth, Vidya Books Publishers	CHALK AND TALK
	3.3 Conditions for the Successful Working of Democracy	3	Adhunik Rajakiya Siddhanth, Vidya Books Publishers	CHALK AND TALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

NAME OF THE STAFF: ASST PROF.VIJAYA NARAYANRAO SHIRSAT DEPARTMENT: POLITICAL SCIENCE-II CLASS: SYBA (MARATHI) FEBRUARY & MARCH: IV MONTH: MARCH ACADEMIC YEAR: 2022-2023.LEARNING OBJECTIVE/S:The learners will be able to: TO LEARN ABOUT POLITICAL IDEOLOGY.

PAPER II, UNIT IV, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Political Ideologies	4.1 Marxism	4	Rajakiy Siddhantachi Multattve.	CHALK AND TALK
	4.2 Fascism	4	Rajakiy Siddhantachi Multattve.	CHALK AND TALK
	.3 Feminism	4	Rajakiy Siddhantachi Multattve.	CHALK AND TALK





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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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VIVA COLLEGE, Virar (W)

NAME OF THE STAFF:ASST PROF.VIJAYA NARAYANRAO SHIRSAT DEPARTMENT: POLITICAL-SC CLASS:SYBA(MARATHI) SEMESTER:IIIMONTH:JUNE&JULY ACADEMIC YEAR:2022-23.LEARNING OBJECTIVE/S: The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION

PAPER III, UNIT I, TITLE	SUBTOPICS PUBLIC ADMINISTRATION	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PUBLIC ADMINISTRATION	1.1. Meaning, Scope and Significance	4	Lokprashasan B.B.Patil	CHALK AND TALK EXPLANATION
	1.2. Evolution of Public Administration as a Discipline	4	Lokprashasan B.B.Patil	EXPLANATION
	1.3. Public Administration in the Age of Liberalisation, Privatisation	4	Lokprashasan B.B.Patil	EXPLANATION

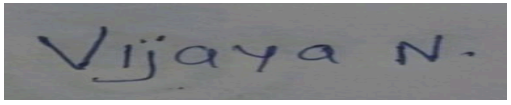
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

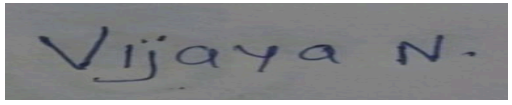
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASST. PROF.VIJAYA NARAYANRAO SHIRSAT DEPARTMENT: POLITICAL-SC CLASS:SYBA(MARATHI) SEMESTER: III MONTH: JULY_ ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT THEORIES OF ADMINISTRATION.

PAPER III, UNIT II. , TITLE	SUBTOPICS PUBLIC ADMINISTRATION	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Theories of Administration	2.1. Scientific Management Theory- F.W. Taylor	4	Lokprashasan B.B.Patil	CHALK AND TALK





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	2.2. Bureaucratic Theory- Max Weber	3	Lokprashasan B.B.Patil	LECTURE METHOD
	2.3. Human Relations Theory- Elton Mayo	3	Lokprashasan B.B.Patil	LECTURE METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____10_____

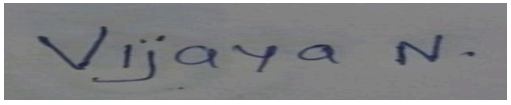
TEACHING PLAN (UNIT PLAN)

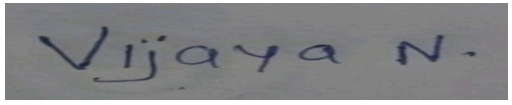
NAME OF THE STAFF:ASST PROF.VIJAYA NARAYANRAO SHIRSAT DEPARTMENT:POLITICAL-SC CLASS: SYBA(MARATHI) AUGUST:III MONTH: SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT BASIC PRINCIPALS AND THEORIES OF ORGANISATION.

PAPER III, UNITIII, TITLE	SUBTOPICS PUBLIC ADMINISTRATION	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
asic Principles and Theories of Organisation	3.1. Hierarchy, Delegation, Centralisation-Decentralisation	4	Lokprashasan B.B.Patil	CHALK AND TALK
	3.2. Motivation Theories- McGregor, Mc Clelland	4	Lokprashasan B.B.Patil	EXPLANATION
	3,Leadership Theories- Trait theory, Contingency theory	4	Lokprashasan B.B.Patil	EXPLANATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____12_____





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TEACI PLAN)

NAME OF THE STAFF:ASST PROF.VIJAYA NARAYANRAO SHIRSAT DEPARTMENT:POLITICA- SC CLASS: SYBS(MARATHI) SEMESTER:III MONTH: SEPTEMBER ACADEMIC YEAR: 2012-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT CONTEMPORAY TECHNIQURES AND PRACTICES IN ADMINISTRATION.

PAPER IV, UNIT IV, TITLE	SUBTOPICS PUBLIC ADMINISTRATION	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ontemporary Techniques and Practices in Administration	1.Good Governance	4	Lokprashasan Suvarna Benake	CHALK AND TALK
	2. E-Governance	4	Lokprashasan Suvarna Benake	LECTURE METHOD
	3. Public-Private Partnership (PPP)	3	Lokprashasan Suvarna Benake	LECTURE METHOD

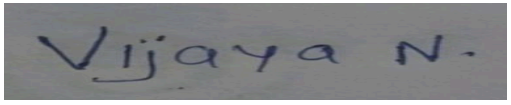
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____

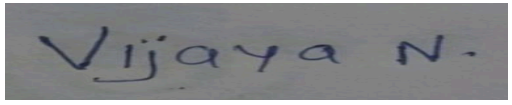
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF.VIJAYA NARAYANRAO SHIRSAT DEPARTMENT:POLITICAL-SC CLASS:SYBA(MARATHI) SEMESTER: IV MONTH: NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

PAPER III, UNIT I, TITLE	SUBTOPICS INDIAN ADMINISTRATION	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
troduction to Indian Administration	1.Evolution and Constitutional Context	4	Lokprashasan B.B.Patil	EXPLANETION
	2.Salient features	3	Lokprashasan B.B.Patil	EXPLANETION





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	. District Administration since Independ ict Collector		Lokprashasan B.B.Patil	EXPLANETION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____11_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF.VIJAYA NARAYANRAO SHIRSAT DEPARTMENT: POLITICAL-SC CLASS: SYBA(MARATHI) SEMESTER: IV MONTH: DECEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT PUBLIC ADMINISTRATION OF INDIA

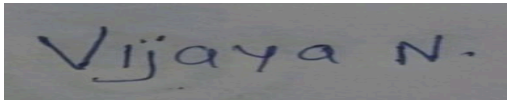
PAPERIII , UNIT II, TITLE	SUBTOPICS INDIAN ADMINISTRATION	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	.1.Recruitment: All India Services, Central Services, State Services	3	Lokprashasan B.B.Patil	EXPLANETION CHALK AND TALK
	2.2. Public Service Commission: Union Public Service Commission and Maharashtra Public Service Commission	4	Lokprashasan B.B.Patil	EXPLANETION
Personnel Administration	raining: All- India Services, Central Services, State Services (Maharashtra)	3	Lokprashasan B.B.Patil	EXPLANETION

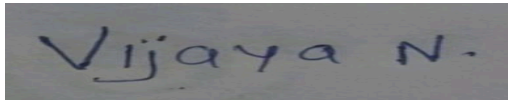
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASST PROF.VIJAYA NARAYANRAO SHIRSAT DEPARTMENT:POLITICAL-SC CLASS:SYBA(MARATHI) SEMESTER:IV MONTH: JANUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:





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The learners will be able to : TO LEARN ABOUT FINANCIALADM

PAPER III, UNIT III, TITLE		NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ancial Administration	. Budgetary Process	4	Lokprashasan B.B.Patil	DISCUSSION CHALK & TALK
	2.Parliamentary Committees: Public Accounts Committee, Estimates Committee, Committee on Public Undertakings	4	Lokprashasan B.B.Patil	EXPLANETION
	4.Comptroller and Auditor General	4	Lokprashasan B.B.Patil	EXPLANETION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___12_____

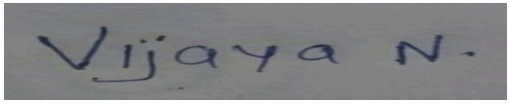
TEACHING PLAN (UNIT PLAN)

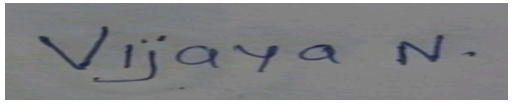
NAME OF THE STAFF: ASST PROF.VIJAYA NARAYANRAO SHIRSAT DEPARTMENT:POLITICAL-SC CLASS: SYBA(MARATHI) SEMESTER: IV MONTH: FEBRUARY & MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : TO LEARN ABOUT CONTEMPORARY ISSUES IN INDIAN ADMINISTRATION.

PAPER III , UNIT IV, TITLE	SUBTOPICS INDIAN ADMINISTRATION	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ontemporary Issues in Indian Administration	. Integrity in Administration: Lokpal, Lokyukta, CVC	4	Lokprashasan B.B.Patil	CHALK ABD TALK
	4.2. Citizen and Administration	3	Lokprashasan B.B.Patil	LECTURE METHOD
	3.Citizens' Charter	4	Lokprashasan B.B.Patil	LECTURE METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____





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Vijaya N.

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Vidhya Dayanand Patil College of Arts
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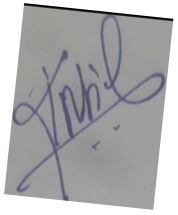
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KAVITA YOGESH PATIL** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(MARATHI)**

SEMESTER: I **SUB : FC** MONTH: **AUGUST TO NOVEMBER** ACADEMIC YEAR:**2022- 2023**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE DIVERSE COMPOSITION OF THE INDIAN SOCIETY.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE I **UNIT : I** OVERVIEW OF THE INDIAN SOCIETY	Understand the Multicultural diversity of Indian Society	01	**FOUNDATION COURSE I** Payabhut Abhyas-Prof	*1.Chalk Duster*
	Demographic Composition Population based on Religion, Caste & Gender	01		
	Concept of Linguistic Diversity	01		



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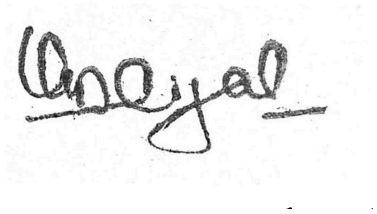

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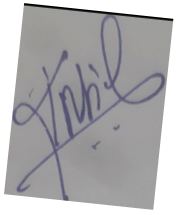
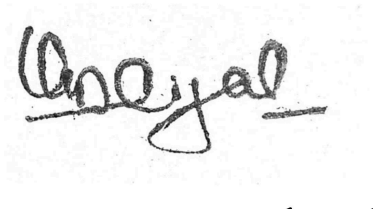
	Understand Regional Variations – Rural, Urban & Tribal	01	S.S.Liman,Prof S.J.Vaghmare	
	Understanding the Concept of Diversity as a Difference	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05 Lectures

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :II CONCEPT OF DISPARITY I	Concept of Disparity of Indian ,Stratifications And Inequality-Caste, Class & Estate System	03		*1.Chalk Duster*





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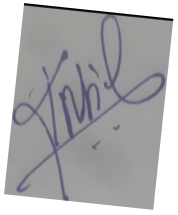
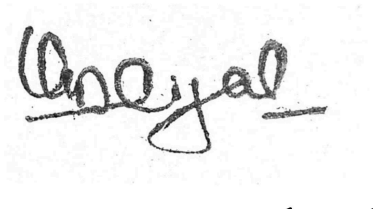
	Gender Disparities Especially problems related to Women	03	**FOUNDATION COURSE I** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	
	Disparities faced by People with Disabilities - Physical & Mental	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :III CONCEPT OF DISPARITY II	Examine inequalities Disparities due to Caste System and inter Group Conflicts	03	**FOUNDATION COURSE I** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	*1.Chalk Duster*
	Disparities based on inter group conflicts such as communalism	03		
	Causes & Effects of Conflicts arising out of Regionalism & Linguism	04		





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VIVA COLLEGE, Virar (W)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

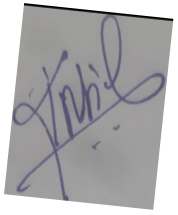
TEACHING PLAN (UNIT PLAN)

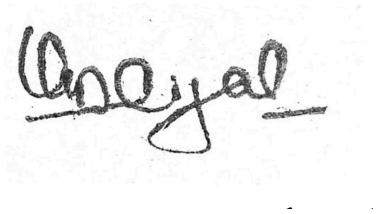
NAME OF THE STAFF: **KAVITA YOGESH PATIL** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(MARATHI/ENGLISH)**

SEMESTER: II **SUB : FC** MONTH: **JANUARY TO MARCH** ACADEMIC YEAR:**2022- 2023**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE DIVERSE COMPOSITION OF THE INDIAN SOCIETY.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED





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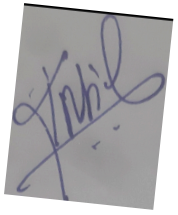
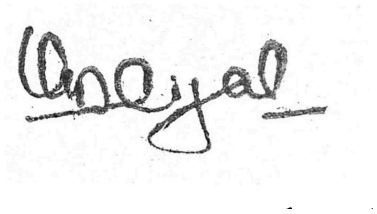
UNIT : 1 GLOBALIZATION AND INDIAN SOCIETY	concepts of liberalization,privatization and globalization ,	03	**FOUNDATION COURSE I** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	*1.Chalk Duster*
	growth of information technology and communication and its impact ,impact of globalization on industry	03		
	changes in agrarian sector due to globalization,reise in corporate farming	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07 LECTURES



SIGNATURE OF THE STAFF



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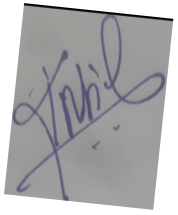
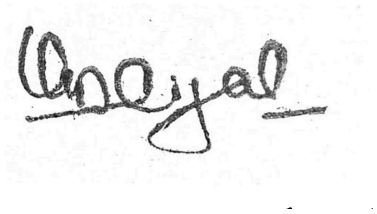
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :2 HUMAN RIGHTS	concept of Human Rights :origin and evolution of the concept	04	**FOUNDATION COURSE I** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	*1.Chalk Duster*
	The Universal Declaration of Human Rights	03		
	Human Rights constituency with special references to fundamental Rights stated in the constitution	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED





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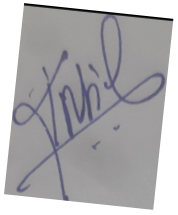
UNIT :3 ECOLOGY	Importance of environmental Studies in the current development context	03	**FOUNDATION COURSE I** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	*1.Chalk Duster*
	Concept of Environment ,Ecology and connection	03		
	connection to quality of human life	02		
	Degradation - causes and impact on human life	02		

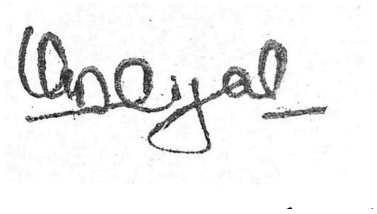
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

TEACHING PLAN (UNIT Plan)

NAME OF THE STAFF: MS. Kavita yogesh Patil MONTH: **JULY TO NOVEMBER** DEPARTMENT: History

SUB : MARATHI CLASS: F.Y.B.A. (MAR) comp. SEMESTER: I ACADEMIC YEAR: 2022-2023





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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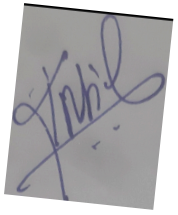
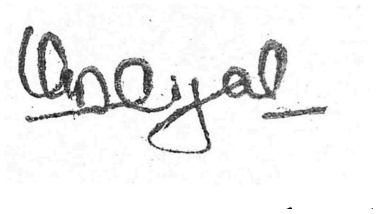
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: MARATHI LEKHANATIL VRUTTALEKHAN ,VRUTTANTLEKHAN KAUSHYALA,.KATHA PRAKAR VIDYARTHYANA MAHITI KARUN DENE .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MAR(COMP.) Ghatak -2 Vyavaharik Marathi Ghatak-1 KATHARANG	1)vrutta lekhan, vruttantlekhan 2)Give him a chance 3)Rohit 4)pakumavshi 5)bhuk 6) harih hasu	30	Valimbe,Mo.Ra.'Sugam Marathi Vyakran va Lekhan', Nitin Prakashan 1)M.na.advant:pradakshina khand pahila 2)joshi sudha:katha:sankalpana ani samiksha, mauje Prakashan	*1.Chalk Duster*

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30





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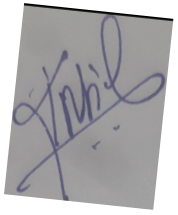
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Kavita yogesh Patil DEPARTMENT: History (ARTS)

CLASS: F.Y.B.A. (MAR) comp. SEMESTER: I MONTH: **JULY TO NOVEMBER** ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: DALIT KATHETIL BADLATYA PRAVHACHA ABHYAS KARANE.



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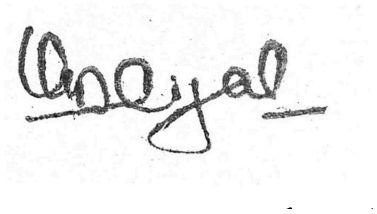

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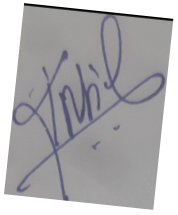
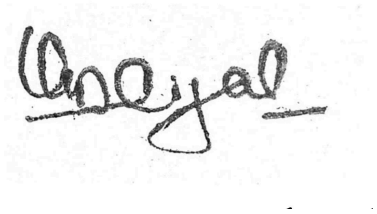
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MAR(COMP.) Ghatak -1 KATHARANG	1)ARJ LEKHAN 2)Bhashanter 3)GHUSMAT 4)CHURADA 5)kemikali boy ani saringa	30	Suravade manohar:1980 nantarchi gramin katha balivansh prakashan ,nanded	*1.Chalk Duster*

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Kavita yogesh Patil DEPARTMENT: History

CLASS: F.Y.B.A. (MAR) SEMESTER: II MONTH: **JANUARY TO MARCH** ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO:MANOVAIDNANIK KATHA,AADIVASI KATHA,SHAHRI KATHA CHA ABBHYAS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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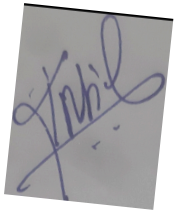
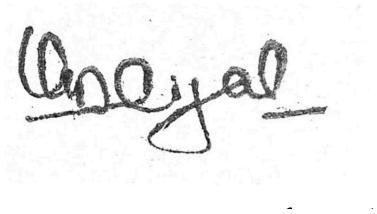
MAR(COMP.) Ghatak -1/2 KAVYARANG	1) Itivruttlehan 2) jahirat lekhan 3) janiv 4) bapuji uddeshun 5) sarv mothya kavina 6) aanghol n kelela paus 7) KAVYPRAKARNCHA AHYAS	04 04 02 02 02 02 04	KAVYARANG :sampadak dr.nitin arekar ,dr.nanasaheb yadav,dr.jagdish rane	Group Discussion, CHALK DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

MONTH: **JANUARY TO FEBRUARY**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED





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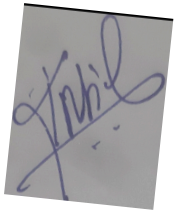
		ALLOTTED		
MAR(COMP.) Ghatak -1/2 KAVYARANG	1) UTARYAVARIL PRASHN 2) SARANSH LEHAN 3) NIBANDH LEKKHAN	04 04 04	kavyarang :sampadak dr.nitinarekar ,dr.nanasahbyadav,dr.jagdish rane	Group Discussion, CHALK DUSTER
	1) TICH BAI HOT JAN 2) BAIPANATUN BAHER HOT JAN	20		
	3) TAS GHARACH LAPEER MI 4) VIDNYAN VANDANA 5)GANDHI JAYANTI 6)RANABABHAL 7)PASHU 8)KRANTISATHI KAVITA LIHNARYANO 9)TE BAGHA TYA TITHE			



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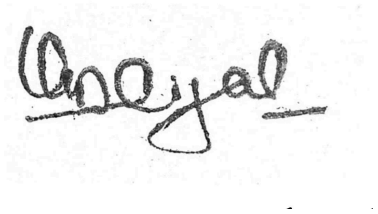

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	10)ANDUKINE ANUS MARTO HI AND SHRADDHA AAHE HI DOCTOR 11)ZULVE 12)SIMON THE 13) SHODH 14)GHEUN CHAL MLA 15)SHETAJURA CHYA PORI			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20 Lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Kavita Yogesh Patil

DEPARTMENT: HISTORY

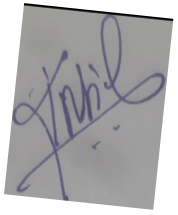
Month: JULY TO NOVEMBER

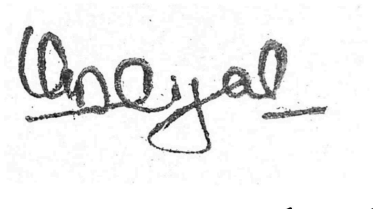
ACADEMIC YEAR: 2022-2023

F.Y.B.A. (Hindi(comp) SEMESTER: I

CLASS: **FYBA(ENGLISH)**

LEARNINBJECTIVE/S:





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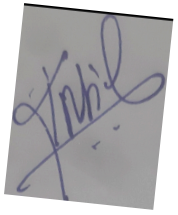
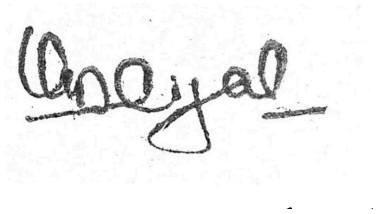
VIVA COLLEGE, Virar (W)

THE LEARNERS WILL BE ABLE TO: KAVITA AUR KAHANIYA KA ADHYAN, SHUDHALEKHAN KE NIYAM

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Hindi(COMP.) *kavya -sarita *katha -darpan	aadhunik hindi kavita ki vikas yatra 1)bharat mata ka mandir-maithalisharan gupta 2)sab jivan bita jata hai-jayshankar prasad 3)bhar dete ho-surkant tripathi 4)manovriti-premchand 5)vrat-bhang-jaishankar prasad	12	hindi kahani ka vikas-katha darpan satho hindi kahani-katha darpan	Group Discussion, CHALK DUSTER





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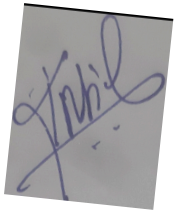
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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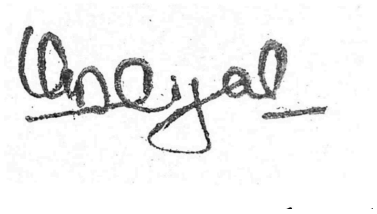

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TEACHING PLAN (UNIT PLAN)

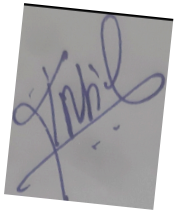
NAME OF THE STAFF: MS. Kavita yogesh Patil **DEPARTMENT: HISTORY**

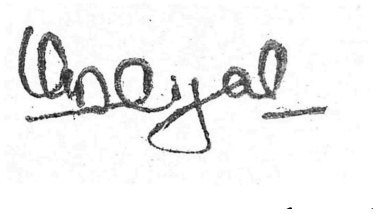
CLASS: F.Y.B.A. (HINDI) **SEMESTER: I** **MONTH: NOVEMBER TO DECEMBER ACADEMIC YEAR: 2022-2023**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO:KAVITA AUR KAHANIYA KA ADHYAN, SANGYA,SARVANAM, VISHESHAN

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1)pralay ki ratri -suderashan 2)enam-jainendra kumar 3)mahadan-yashpal 4)prayaschit-bhagwati charan verma		hindi kahani ka vikas	Group Discussion,





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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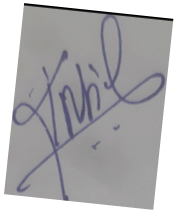
kathak darpan kavya sarita	5)these-phanishwar nath renu 6)yah mandir ka deep-mahadevi verma 7)shakti aur kshma-ramdhari sinh		aadhunik kavita ki vikas yatra	CHALK DUSTER



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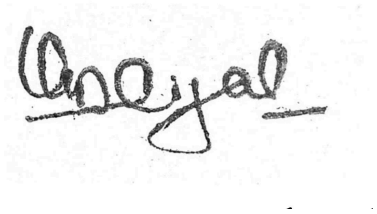

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TEACHING PLAN (UNIT PLAN)

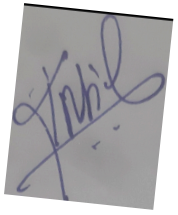
NAME OF THE STAFF:MS. KAVITA YOGESH PATIL **DEPARTMENT: HISTORY**

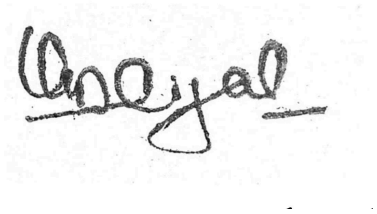
CLASS: F.Y.B.A. (HINDI) compulsory **SEMESTER: II** **MONTH: JANUARY TO FEBRUARY** **ACADEMIC YEAR: 2022-2023**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: KAVITA AUR KAHANIYA KA ADHYAN, APATHIT GADHYNSH,anulekhan

TITLE	SUBTOPIC	NO.OF LECTURES ALLOTTED	REFERENCES	METHOD/ ICT TOOLS USEDHi
kathak darpan	1)pushp ki abhilasha -makhanlal chaturvedi 2)ve aur tum -nagarjun		hindi kahani ka vikas	Group Discussion,





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Yashvant Keshav Patil College of Commerce
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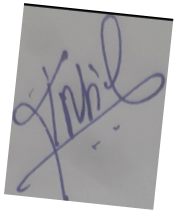
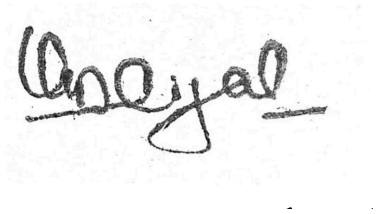
VIVA COLLEGE, Virar (W)

kavya sarita	3)rith ki haddi-harivansh rai bachchan 4) aaj ka dainik-bhavani prasad mishra vyakaran--naam,sarvanam,ling,vachan		aadhunik hindi kavita ki vikas yatra	CHALK DUSTER Group Discussion,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT





SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KAVITA YOGESH PATIL** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(MARATHI/ ENGLISH)**

SEMESTER: III MONTH: **JULY TO SEPTEMBER** ACADEMIC YEAR: **2022- 2023**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO GET A BRIEF OVERVIEW OF THE IMPORTANT ASPECTS OF THE GLOBAL SOCIETY**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE III **UNIT : I** HUMAN RIGHTS VIOLATIONS & REDRESSAL	Scheduled Castes – Constitutional & Legal Rights, Violations And Redressal Mechanisms	02	**FOUNDATION COURSE III** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	*1.Chalk Duster*
	Scheduled Tribes– Constitutional & Legal Rights, Violations And Redressal Mechanisms	02		
	Women– Constitutional & Legal Rights, Violations And Redressal Mechanisms	02		
	Children– Constitutional & Legal Rights, Violations And Redressal Mechanisms	02		
	Disabilities Minorities, Elderly Persons– Constitutional & Legal Rights, Violations And Redressal Mechanisms	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :II DEALING WITH ENVIRONMENTAL CONCERNS	Concept Of Disasters And General Effects Of Disasters On Human Life	03	**FOUNDATION COURSE III** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	*1.Chalk Duster*
	Local Case Studies Of Environmental Disasters	02		
	Dealing With Disasters: Prevention, Mitigation, Disaster Preparedness	03		
	Human Rights Issues And Violations In Addressing Disasters	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :III SCIENCE & TECHNOLOGY I	Development Of Science: Ancient Culture, Classical Era, Middle Ages, Renaissance, Age Of Enlightenment	03	**FOUNDATION COURSE III** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghma	*1.Chalk Duster*
	Nature Of Science : Principles, Characteristics, Theories & Practical's	02		
	Science & Superstition: Exploding Myths, Blind Beliefs, Prejudices. Building Scientific Temper	03		
	Science In Everyday Life : Science & Technology Inter Relation And Distinction	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV: SOFT SKILLS FOR INTERPERSONAL COMMUNICATION	PART A: • Verbal And Non Verbal Communication • Listening Skills • Barriers In Effective Communication • Importance Of Body Language	03	**FOUNDATION COURSE III** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	*1.Chalk Duster*
	PART B: • Formal & Informal Communication • Writing Skills • Group Discussions • Interviews • Presentations:	04		
	PART C : • Leadership Skills • Self Improvement Skills • Team Building	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF:MS. KAVITA YOGESH PATIL **DEPARTMENT: HISTORY**

CLASS: F.Y.B.A. (HINDI) compulsory **SEMESTER: I** **MONTH: NOVEMBER TO DECEMBER** **ACADEMIC YEAR: 2020-2021**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: KAVITA AUR KAHANIYA KA ADHYAN, APATHIT GADHYNSH,PATRA LEKHAN

TITLE		ALLOTTED		METHOD/ ICT TOOLS USEDHi
Hindi compulsory 1)Kavya Kunj 2)Shreshtha kahaniya bhag-1	1)DIYA JALANA kAB MANA HAI- HARIVANSH BACHHAN 2)JALAO DIYE PAR RAHE DHYAN ITNA-GOPALDAS 3)SADACHAR KA TABIJ-HARISHANKAR PARSAI 4) DIPTI COLLECTOR-AMARKANT 5) APNA GAV-MOHANDAS NAIMISHARANYA BHASHA dakshata- 1)apathit gadyansh 2)patra lekhan	12	1)Kavyakunj sampadan:hindi adhyan mandal, Mumbai vishwavidyalaya:Prakashan rajkamal, new Delhi 2)SHRESHTHA KAHANIYAN BHAG-1 SAMPADAN:HINDI ADHYAN MANDAL, MUMBAI VISHVAVIDYALAYA, PRAKASHAN:VANI,NEW DELHI	Group Discussion,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Nilima Bhagwat **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** JUNE-DEC **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand Budget of The Government of India
- To understand Components of Public Expenditure
- To understand Appraisal of FRBM Act
- To understandFourteenth Finance Commission Recommendations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit IV Indian Public Finance	Budget of The Government of India (Previous Financial Year); Sources of Public Receipts	03	1)Sury M.M., (1990), Government Budgeting in India,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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	(Tax And Non-Tax, Introduction To GST); Components of Public Expenditure; Sources of Public Borrowing and Debt Liabilities; Deficits; Appraisal of FRBM Act 2004; Fiscal Federalism: Fourteenth Finance Commission Recommendations		Commonwealth Publishers. 2)Bhatia H.L., (2012), Public Finance, Vikas Publications.3). Report of the Fourteenth Finance Commission,Government of India.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 03

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. NILIMA BHAGWAT DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:**JUNE-DEC **ACADEMIC YEAR:** 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
  To understand the upcoming policy of Universal Basic Income

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: PUBLIC FINANCE **Module 1: INTRODUCTION**	Meaning and Scope of Public Finance –Public Finance Versus Private Finance - Market Failure – Public Goods and Private Goods – Externalities - Efficiency versus Equity – Principles of Sound Finance and Functional Finance – Allocation, Distribution, Stabilisation and Growth functions of the Government	12	J. Hindriks, G. Myles, Intermediate Public Economics, MIT Press, 2006	GOOGLE CLASSROOM, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

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NAME OF THE STAFF: DR. NILIMA BHAGWAT DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** JULY **ACADEMIC YEAR:** 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To understand recent structural changes in economy
- To understand the economics of government expenditure and taxation.
- To use economic analysis to predict and verify the effects of government intervention on behaviour of individuals, households, and firms.
- To discuss the implications of policy for efficiency and equity.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IVPUBLIC FINANCE Module 2: Fiscal policy: Budget and taxation	Dalton's and Musgrave versions of the Law of Maximum Social Advantage - Role of government in a modern economy – Types of Public Budget - Structure of Public Budget - Role of taxation - Merits and Demerits of Direct and Indirect Tax Policy - Features of Good Tax System - Concept of Impact, Incidence and Shifting of Taxation–Elasticity and determination of tax burden	12	KaushikBasu and Maertens (ed) The New Oxford Companion to Economics in India, Oxford University Press, 2013	GOOGLE CLASSROOM, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. NILIMA BHAGWAT DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:**AUGUST **ACADEMIC YEAR:** 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To analyze public goods, externalities, and information asymmetries; market failures resulting
- From these conditions and policies to address those market failures; taxes; and expenditures.
- To analyze policy applications including welfare assistance, education, healthcare spending, and tax policies such as income taxes and consumption taxes.
- To critically analyze fiscal policies and its implication in the Indian Economy.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Public Finance Module 3: FISCAL POLICY: PUBLIC EXPENDITURE AND DEBT				
	Canons of Public Expenditure – Classification of Public Expenditure - Wagner's Law of Public Expenditure – Public Expenditure as an instrument of Fiscal Policy; Meaning and Types of Public Debt – Burden of Public Debt - Principles of Public Debt Management – Concepts of Deficits	12	Sury M.M., Government Budgeting in India	GOOGLE CLASSROOM, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. NILIMA BHAGWAT DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:**AUGUST **ACADEMIC YEAR:** 2022-23

SIGNATURE OF THE STAFF

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LEARNING OBJECTIVE/S:

The learners will be able to :

- To understand nature of Indian economy
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Public Finance **Unit IV Indian Public Finance**	Budget of The Government of India (Previous Financial Year); Sources of Public Receipts (Tax And Non-Tax, Introduction To GST); Components of Public Expenditure; Sources of Public Borrowing and Debt Liabilities; Deficits; Appraisal of FRBM Act 2004; Fiscal Federalism: Fourteenth Finance Commission Recommendations	12	Sury M.M., Government Budgeting in India	GOOGLE CLASSROOM, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. NILIMA BHAGWAT DEPARTMENT: ECONOMICS

SIGNATURE OF THE STAFF

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CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:**DECEMBER **ACADEMIC YEAR:** 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To analyze public goods, externalities, and information asymmetries; market failures resulting
- From these conditions and policies to address those market failures; taxes; and expenditures.
- To analyze policy applications including welfare assistance, education, healthcare spending, and tax policies such as income taxes and consumption taxes.
- To critically analyze fiscal policies and its implication in Indian Economy.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Module- I: Introduction	Trends in India's National Income and PCI Since 1990; Structural Changes In Indian Economy; Brief Overview of the Employment Generation and Poverty Alleviation Programmes; Regional Inequalities; Measures to Reduce Regional Inequalities in India	12	Ashwini Mahajan, Gaurav Datt, (2018) 'Indian Economy', S. Chand and Company, New Delhi.	GOOGLE CLASSROOM, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

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NAME OF THE STAFF: DR. NILIMA BHAGWAT DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:**JANUARY **ACADEMIC YEAR:** 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To analyze public goods, externalities, and information asymmetries; market failures resulting
- From these conditions and policies to address those market failures; taxes; and expenditures.
- To analyze policy applications including welfare assistance, education, healthcare spending, and tax policies such as income taxes and consumption taxes.
- To critically analyze fiscal policies and its implication in Indian Economy.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Module - II: Agricultural Sector	Role of Agriculture in Economic Development; Causes of Low Productivity; Agricultural Inputs; Agricultural Price Policy: Recent Minimum Support Price Policy; Income Support for Farmers; Sources of Agricultural Finance; Micro Finance; NABARD: Role and Function; Agricultural Marketing: Structure and Problems; National Policy for Farmers, 2007; Organic Farming Policy; Food Security in India	12	Ashwini Mahajan, Gaurav Datt, (2018) 'Indian Economy', S. Chand and Company, New Delhi.	GOOGLE CLASSROOM, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: DR. NILIMA BHAGWAT DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:**FEBRUARY **ACADEMIC YEAR:** 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To analyze public goods, externalities, and information asymmetries; market failures resulting
- From these conditions and policies to address those market failures; taxes; and expenditures.
- To analyze policy applications including welfare assistance, education, healthcare spending, and tax policies such as income taxes and consumption taxes.
- To critically analyze fiscal policies and its implication in Indian Economy.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Module -III: Industrial Sector	Infrastructure for Industrial Development; Industrial Policies in India; Industrial Policy of 1991; Micro, Small and Medium Enterprises (MSMEs): Classification, Role and Policy Measures; Growth of Large Scale Industries and Economic Development; Recent Policies and Programs for Industrial Development: Start Up India, Make in India, Skill India; Role and Trends of FDI in Industrial Sector Development		Ashwini Mahajan, Gaurav Datt, (2018) 'Indian Economy', S. Chand and Company, New Delhi.	
		12		GOOGLE CLASSROOM, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
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NAME OF THE STAFF: DR. NILIMA BHAGWAT DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:**MARCH **ACADEMIC YEAR:** 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To analyze public goods, externalities, and information asymmetries; market failures resulting
- From these conditions and policies to address those market failures; taxes; and expenditures.
- To analyze policy applications including welfare assistance, education, healthcare spending, and tax policies such as income taxes and consumption taxes.
- To critically analyze fiscal policies and its implication in Indian Economy.

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: **Module -IV: Service Sector**	Role of Service Sector in Indian Economy; Growth and Performance of Healthcare; Performance of Trade and Tourism, Information Technology and IT - Enabled Services; Research and Development Services With Reference to Education and Skill Development in Employment Generation in India; Performance of Service Sector during XIIth Five Year Plan	12	Ashwini Mahajan, Gaurav Datt, (2018) 'Indian Economy', S. Chand and Company, New Delhi.	GOOGLE CLASSROOM, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. ENG (DIV A AND B) SEMESTER: I MONTH: JUNE-DEC ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND BASIC PRINCIPLES OF MICROECONOMIC THEORY.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – I Module - I: Introduction to Microeconomics	Module - I: Introduction to Microeconomics : Microeconomics: Meaning, Scope, Nature, Importance and Limitations; Basic Economic Problems; Role of Price Mechanism in a Market Economy; Positive Economics and Normative Economics; Concepts of Equation, Functions, Graphs, Diagrams, Line, Slope and Intercept	2	N.Gregory Mankiw, (2015), "Principles of Microeconomics" 7th edition- Cengage Learning	Group Discussion, PPT, QUIZ

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS
CLASS: F.Y.B.A. ENG (DIV A AND B) SEMESTER: I MONTH: SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: TO UNDERSTAND THE CONCEPT OF CONSUMER'S BEHAVIOUR

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

ECO I: Microeconomics – I Module IV: Consumer's Behavior	Module IV: Consumer's Behavior Introduction to Cardinal and Ordinal Approaches; Indifference Curve Analysis - Properties of Indifference Curves, Budget Line, and Consumer's Equilibrium; Income, Price and Substitution Effect; Derivation of Demand Curve; Consumer's Surplus: Strong Ordering and Weak Ordering	2	M.L.Jhingan, (2006) "Microeconomics Theory", 5 th edition Vrinda Publication (P) Ltd. H.L.Ahuja, (2016) "Advance Economics Theory" S.Chand & Company Ltd	Group Discussion, PPT, QUIZ .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A.(ENGLISH) **SEMESTER: V** **MONTH: JULY -DEC** **ACADEMIC YEAR: 2021-22**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: THE CONCEPT OF ECONOMIC GROWTH AND DEVELOPMENT, HDI

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: ECONOMICS OF GROWTH & DEVELOPMENT: Module 1: Meaning of	Concepts of Economic Growth and Development-Distinction between Economic Growth and Development- Concept of Human Development- H.D.I, G.D.I, Green GDP- Sen's Capability approach- Millennium Development Goals (MDGs)- Initiative by Indian government towards MDGs.	12	Todaro, Michael P. and Stephen C. Smith. Economic Development, 8e. Delhi: Pearson	PPTs, Group Discussion, Quizzes

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Economic Growth and Development			Education, 2003.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: Various Theories of Growth and Development

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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ECO V: ECONOMICS OF GROWTH & DEVELOPMENT: Module 2: Theories of Economic Development	Rostow's Stages of Growth; Big Push Theory- Leibenstein's Critical Minimum Effort Thesis – Harrod – Domar Growth Model – Lewis Model of Unlimited Supply of Labour – Ragner Nurske's Theory of Disguised Unemployment- Schumpeter's Theory of Development	12	Todaro, Michael P. and Stephen C. Smith. Economic Development, 8e. Delhi: Pearson Education, 2003.	PPTs, Group Discussion, Quizzes

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: V MONTH: SEPTEMBER ACADEMIC YEAR: 2021-22

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

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LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: Structural Issues in Development Process

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: ECONOMICS OF GROWTH & DEVELOPMENT: Module 3: Structural Issues in Development Process	Concept of Human Capital- Role of Education, Health and nutrition in Human Capital - Meaning and Measurement of Poverty and Inequality- Measures to eradicate poverty and Inequality - Meaning of Inclusive growth - SHG and Microfinance- Migration – Urbanization- Formal and Informal Sector- Urban Informal Sector	12	Thirlwall, A.P. Growth and Development 8e. New York: Palgrave MacMillan, 2005	PPTs, Group Discussion, Quizzes

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: V** **MONTH: OCTOBER** **ACADEMIC YEAR: 2021-22**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: Planning, Technology and Economic Development

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: ECONOMICS OF GROWTH & DEVELOPMENT:	Concept and Role of infrastructure in Economic Development- Role of technology in Economic Development- Labour intensive versus Capital intensive technology- Schumacher's concepts of intermediate and appropriate technology- Green Technology- Meaning and	12	Thirlwall, A.P. Growth and Development 8e. New York: Palgrave	PPTs, Group Discussion, Quizzes

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Module 4: Planning, Technology and Economic Development	**Types of Economic Planning- Role of Planning in Economic Development**		**MacMillan, 2005**	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. NILIMA BHAGWAT DEPARTMENT: ECONOMICS CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: Understand the trade theories and determinants of trade which helps them to analyze the international trade policies.

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PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: INTERNATIONAL ECONOMICS: **Module 1: Introduction to Trade Theories**	Meaning, scope and importance of International Trade- Difference between Internal and International Trade - Adam Smith's Theory of International Trade – Ricardian theory of comparative cost difference Heckscher - Ohlin Theory- Leontief's Paradox- Krugman's Model	**12**	**Kindleberger Charles P, International Economics, Homewood, USA, 1978**	**PPTs, Group Discussion, Quizzes**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. NILIMA BHAGWAT **DEPARTMENT: ECONOMICS** **CLASS: T.Y.B.A. (ENGLISH)** **SEMESTER: VI** **MONTH: JANUARY** **ACADEMIC YEAR: 2021-22**

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LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: Understand the trade theories and determinants of trade which helps them to analyze the international trade policies.

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: INTERNATIONAL ECONOMICS: Module 2: Balance of Trade and Balance of Payment	Concepts of Terms of Trade(Net barter, Gross barter and Income terms of trade)-Meaning and difference between Balance of Trade (BOT) and Balance of Payment (BOP)-Purchasing Power Parity theory, Law of Reciprocal Demand-Marshall-Edgeworth Offer curves, Gains from trade-Case for and against Free Trade and Protection policy	12	Dominick Salvatore, International Economics: Trade and Finance, JohnWiley International Student Edition, 10th edition, 2011.	PPTs, Group Discussion, Quizzes

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. NILIMA BHAGWAT **DEPARTMENT: ECONOMICS** **CLASS: T.Y.B.A. (ENGLISH)** **SEMESTER: VI** **MONTH: FEBRUARY** **ACADEMIC YEAR: 2021-22**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: understand the role of various international institutions and trade blocks and their approaches in framing the policies for trade

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: INTERNATIONAL ECONOMICS:	Meaning and Functions of Foreign Exchange Market-Exchange rate determination, Factors influencing foreign exchange rate-Managed Flexibility-SWAP		Kindleberger Charles P, International Economics,	PPTs, Group Discussion, Quizzes

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Module 3: Foreign Exchange Market	Market, Components of foreign exchange reserves Foreign Aid Vs Foreign Trade, FDI and MNCs	12	Homewood, USA, 1978	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. NILIMA BHAGWAT **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: VI** **MONTH: MARCH** **ACADEMIC YEAR: 2021-22**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: understand the role of various international institutions and trade blocks and their approaches in framing the policies for trade

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PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: INTERNATIONAL ECONOMICS: Module 4: International Economic Institutions and Economic Integration	IMF, World Bank - Role and functions-WTO-Objectives, Functions and Agreements with respect to TRIPS,TRIMS, GATS, AoA - Forms and objectives of Economic Integration-Cartels-Trade Blocs, ASEAN-European Union (EU)- NAFTA and SAARC.	12	Dominick Salvatore, International Economics: Trade and Finance, JohnWiley International Student Edition, 10th edition, 2011.	PPTs, Group Discussion, Quizzes

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: Economics CLASS: TYBA SEMESTER: V MONTH: JUNE TO DEC

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to understand microeconomic theory, working of markets and welfare theory

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 1 : General Equilibrium and Welfare Theory Moudle 2: Market Structure: Monopoly and Monopolistic competition Module 3 : Oligopoly	Concept of generla Equilibrium, Walrasian general equilibrium model, pareto optimality, Arrow Impossibility Theorem	12	H.L Ahuja Advanced Microecomic Theory, M.L.Jhingan Advanced Economic Theory	Chalk and Board
	Concept monopoly, measurement of monopoly power,price discrimination,monopolistic competition, chamberlain approach, equilibrium in monopolistic competition	14	H.L Ahuja Advanced Microecomic Theory, M.L.Jhingan Advanced	Chalk and Board

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Module 4 : Information Economics			Economic Theory	
	Cournot model, meaning and characteristics of oligopoly,price rigidity, collusive oligopoly, cartel formation, Game theory	12	H.L Ahuja Advanced Microecomic Theory, M.L.Jhingan Advanced Economic Theory	Chalk and Board
	Search and Cost, theory of asymmetric information, market for lemons, adverse selection, price signalling, moral hazard, principle-agent problem	12	H.L Ahuja Advanced Microecomic Theory, M.L.Jhingan Advanced Economic Theory	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __40_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. ENG (DIV A AND B) SEMESTER: I MONTH: JUNE-DEC ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND BASIC PRINCIPLES OF MICROECONOMIC THEORY.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – I Module - I: Introduction to Microeconomics	Module - I: Introduction to Microeconomics : Microeconomics: Meaning, Scope, Nature, Importance and Limitations; Basic Economic Problems; Role of Price Mechanism in a Market Economy; Positive Economics and Normative Economics; Concepts of Equation, Functions, Graphs, Diagrams, Line, Slope and Intercept	2	N.Gregory Mankiw, (2015), "Principles of Microeconomics" 7th edition- Cengage Learning	Group Discussion, PPT, QUIZ

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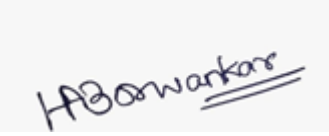
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS
CLASS: F.Y.B.A. ENG (DIV A AND B) SEMESTER: I MONTH: SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: TO UNDERSTAND THE CONCEPT OF CONSUMER'S BEHAVIOUR

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – I Module IV: Consumer's Behavior	Module IV: Consumer's Behavior Introduction to Cardinal and Ordinal Approaches; Indifference Curve Analysis - Properties of Indifference Curves, Budget Line, and Consumer's Equilibrium; Income, Price and Substitution Effect; Derivation of Demand Curve; Consumer's Surplus: Strong Ordering and Weak Ordering	2	M.L.Jhingan, (2006) "Microeconomics Theory", 5 th edition Vrinda Publication (P) Ltd. H.L.Ahuja, (2016) "Advance Economics	Group Discussion, PPT, QUIZ .



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: M.A. PART II SEMESTER: III MONTH: JUNE-DEC ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND CLASSICAL TRADE THEORIES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL TRADE: THEORY AND POLICY Module 1: Classical and Neoclassical Theories of Trade.	Brief review of absolute and comparative advantage of trade, real and opportunity cost approaches, terms of trade, reciprocal demand and offer curves, The Heckscher – Ohlin (H-O) Theory, Factor Price Equalization Theorem, Leontief's paradox, Rybczynski Theorem, Product cycle theory and technological gap theory.	4	1.Grimwade Nigel, International Trade (Second Ed), Routledge, London 2001 2.Grubel H.G. and P.J. Lloyd, Intra-Industry Trade, Macmillan, London,19	Group Discussion, PPT, QUIZ

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS
CLASS: M.A. PART II SEMESTER: III MONTH: SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: TO UNDERSTAND THE ROLE AND FUNCTIONS OF VARIOUS TRADE BLOCS IN INTERNATIONAL TRADE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL TRADE: THEORY AND POLICY Module 4: Contemporary	Regionalism and Multilateralism in the context of WTO, Critical Evaluation of the Role played by WTO, Overview of regional trading arrangement: SAARC, SAFTA, ASEAN, European Union, NAFTA.	4	1.Anderson, K. (2002) 'Peculiarities of Retaliation in WTO Dispute Settlement', World	Group Discussion, PPT, QUIZ .

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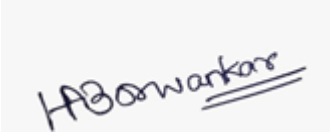
Regional Trading and WTO.			Trade Review 1, 2: 123-134 2. Esserman, S. and Howse, R. (2003) 'The WTO on Trial', Foreign Affairs 82, 1: 130-140	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: M.A. PART II **SEMESTER: IV** **MONTH: DEC-APRIL** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER : DEMOGRAPHY: THEORY AND POLICY Module 2: Nuptiality and Fertility	Concepts of Nuptiality, Analysis of Marital Status Data, Singulate Mean Age at Marriage, Concepts and Measurements of Cohort and Period Fertility, Rele's Method, Bongaarts Proximate determinants of fertility	2	Bhende AA and T. Kantikar, Principles of Population Studies, Himalaya publishers, Mumbai- 2021.	PPTs, Group Discussion, Quizzes

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: M.A. PART II **SEMESTER: IV** **MONTH: MARCH** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER: DEMOGRAPHY: THEORY AND POLICY Module 2: Nuptiality and Fertility	Socio-economic determinants of proximate variables, indirect estimation of Fertility, Social Engineering.	2	Bhende AA and T. Kantikar, Principles of Population Studies, Himalaya publishers, Mumbai- 2021.	PPTs, Group Discussion, Quizzes

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: M.A. PART II **SEMESTER: IV** **MONTH: APRIL** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: BAKING SECTOR REFORMS IN THE WORLD

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:DEMOGRAPHY: THEORY AND POLICY Module 4: Migration and Population Projections	Concepts, Patterns and Measures of Migration, Migration Theories and Models (Ravenstein's, Lee's, Wolpert's and Todaro's Models). Internal and International Migration, Spatial Distribution and Urbanization, Importance of Population Projection.	2	Bhende AA and T. Kantikar, Principles of Population Studies, Himalaya publishers, Mumbai- 2000.	PPTs, Group Discussion, Quizzes

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) (DIV A & B) SEMESTER: III MONTH: JUNE-DEC ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: MEANING OF MACROECONOMICS AND CONCEPTS OF NATIONAL INCOME

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS I MODULE I: Introduction to Macroeconomics and National Income	Introduction: Meaning and Scope of Macro Economics; Concepts of National Income: GNP, NNP, NDP, Per Capita Income, Personal Income and Disposable Income; Methods and Difficulties in Measurement of National Income; Circular Flow of National Income: Closed Economy (Two and Three Sector) and Open Economy Models (Four Sector Model)	3	1) N. Gregory Mankiw, (2015), Principle of Macroeconomics, 7th edition, Cengage Learning. 2) Abel A. B. B. S. Bernanke and D. Croushore (2011), Macroeconomics, Pearson, New Delhi	Group Discussion,, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) (DIV A & B) SEMESTER: III MONTH: JULY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: RELATIONSHIP AMONG INCOME, CONSUMPTION, SAVINGS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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ECO II:MACRO ECONOMICS I MODULE II: Consumption and Investment	Consumption and Investment; Says Law of Market; Theory of Effective Demand; Consumption Function; Investment Function; Marginal Efficiency of Capital and Rate of Interest- Investment Multiplier	3	1) N. Gregory Mnakiw, (2015), Principle of Macroeconomics, 7th edition, Cengage Learning. 2) Abel A. B. B. S. Bernanke and D. Croushore (2011), Macroeconomics, Pearson, New Delhi	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) (DIV A & B) SEMESTER: III MONTH: AUGUST ACADEMIC YEAR: 2022-23

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: DEMAND AND SUPPLY OF MONEY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS I MODULE III: Supply of Money and Demand for Money	Supply of Money; Determinants of Money Supply; Velocity of Circulation of Money; RBI's Approach to Measurement of Money Supply; Demand for Money: Classical, Keynesian and Friedman's Approaches	3	1) Ahuja H. L., (2008), Macroeconomics theory and Policy, S. Chand and company Ltd. New Delhi. 2) Dwivedi D.N., (2007), Macroeconomics theory and Policy, TATA Mcgraw - Hill Publication company Ltd. Delhi.	Group Discussion, PPT, QUIZ

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) (DIV A & B) SEMESTER: III MONTH: SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: FUNCTIONS OF BANK

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II: MODULE IV: Banking	Banking: Commercial Bank, Functions of Commercial Banks, Multiple Credit Creation, Balance Sheet of Commercial Bank; Development in Commercial Banking Sector Since 1990-91; Central Bank: Functions of Central Bank - Traditional, Developmental, Promotional	3	1) Ahuja H. L., (2008), Macroeconomics theory and Policy, S. Chand and company Ltd. New Delhi. 2) Dwivedi D.N., (2007), Macroeconomics theory and Policy, TATA Mcgraw - Hill Publication company Ltd. Delhi.	Group Discussion, PPT, QUIZ

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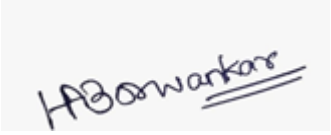
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

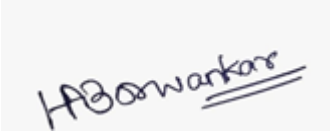
NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) (DIV A & B) SEMESTER: IV MONTH: JUNE-DECEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO KNOW: MEANING , TYPES , CONCEPTS OF INFLATION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II MODULE I: Module - I: Inflation	Module - I: Inflation The Economics of Depression, Hyperinflation; Inflation: Features and Causes, Demand Pull Inflation and Cost Push Inflation, Effects of Inflation; Nature of Inflation in Developing Economy; Phillips Curve; Stagflation: Meaning, Causes and Consequences	12	1) N. Gregory Mankiw, (2015), Principle of Macroeconomics, 7th edition, Cengage Learning. 2) Abel A. B. B. S. Bernanke and D. Croushore (2011), Macroeconomics, Pearson, New Delhi	Group Discussion,, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) (DIV A & B) SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO KNOW: MONETARY AND FISCAL POLICY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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ECO II:MACRO ECONOMICS II MODULE II: Economic Policy	Monetary Policy: Objectives, Instruments, Limitations, Role of Monetary Policy in Developing Economies; Fiscal Policy - Objectives, Instruments, Limitations and Role of Fiscal Policy in Developing Economies	12	1) N. Gregory Mnakiw, (2015), Principle of Macroeconomics, 7th edition, Cengage Learning. 2) Abel A. B. B. S. Bernanke and D. Croushore (2011), Macroeconomics, Pearson, New Delhi	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) (DIV A & B) SEMESTER: IV MONTH: FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO KNOW : Post Keynesian Economics

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II MODULE III: Post Keynesian Economics	The IS-LM Model of Integration of Commodity and Money Market; IS Curve: Derivation of IS Curve, Shift in IS Curve, Equilibrium in Goods Market; LM Curve: Derivation of LM Curve, Shift in LM Curve, Equilibrium in Money Market; Simultaneous Equilibrium in Goods and Money Market	12	1) Ahuja H. L., (2008), Macroeconomics theory and Policy, S. Chand and company Ltd. New Delhi. 2) Dwivedi D.N., (2007), Macroeconomics theory and Policy, TATA Mcgraw - Hill Publication company Ltd. Delhi.	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) (DIV A & B) SEMESTER: IV MONTH: MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND EXTERNAL SECTOR

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II: MODULE IV: External Sector	Balance of Payment: Structure, Disequilibrium in Balance of Payment, Types, Causes and Measures to Correct Balance of Payment Disequilibrium; Foreign Exchange Market: Determination of Exchange Rate: Fixed and Flexible Exchange Rate; Spot and Forward Exchange Rate; Exchange Rate Policy	12	1) Ahuja H. L., (2008), Macroeconomics theory and Policy, S. Chand and company Ltd. New Delhi. 2) Dwivedi D.N., (2007), Macroeconomics theory and Policy, TATA Mcgraw - Hill Publication company Ltd. Delhi.	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

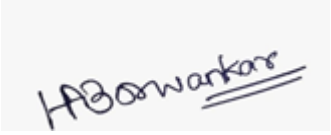
NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) (DIV A & B) SEMESTER: IV MONTH: JUNE-DECEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO KNOW: MEANING , TYPES , CONCEPTS OF INFLATION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II MODULE I: Module - I: Inflation	Module - I: Inflation The Economics of Depression, Hyperinflation; Inflation: Features and Causes, Demand Pull Inflation and Cost Push Inflation, Effects of Inflation; Nature of Inflation in Developing Economy; Phillips Curve; Stagflation: Meaning, Causes and Consequences	12	1) N. Gregory Mankiw, (2015), Principle of Macroeconomics, 7th edition, Cengage Learning. 2) Abel A. B. B. S. Bernanke and D. Croushore (2011), Macroeconomics, Pearson, New Delhi	Group Discussion,, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

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CLASS: S.Y.B.A. (ENGLISH) (DIV A & B) SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO KNOW: MONETARY AND FISCAL POLICY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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ECO II:MACRO ECONOMICS II MODULE II: Economic Policy	Monetary Policy: Objectives, Instruments, Limitations, Role of Monetary Policy in Developing Economies; Fiscal Policy - Objectives, Instruments, Limitations and Role of Fiscal Policy in Developing Economies	12	1) N. Gregory Mnakiw, (2015), Principle of Macroeconomics, 7th edition, Cengage Learning. 2) Abel A. B. B. S. Bernanke and D. Croushore (2011), Macroeconomics, Pearson, New Delhi	Group Discussion, PPT, QUIZ

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) (DIV A & B) SEMESTER: IV MONTH: FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO KNOW : Post Keynesian Economics

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II MODULE III: Post Keynesian Economics	The IS-LM Model of Integration of Commodity and Money Market; IS Curve: Derivation of IS Curve, Shift in IS Curve, Equilibrium in Goods Market; LM Curve: Derivation of LM Curve, Shift in LM Curve, Equilibrium in Money Market; Simultaneous Equilibrium in Goods and Money Market	12	1) Ahuja H. L., (2008), Macroeconomics theory and Policy, S. Chand and company Ltd. New Delhi. 2) Dwivedi D.N., (2007), Macroeconomics theory and Policy, TATA Mcgraw - Hill Publication company Ltd. Delhi.	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) (DIV A & B) SEMESTER: IV MONTH: MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND EXTERNAL SECTOR

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II: MODULE IV: External Sector	Balance of Payment: Structure, Disequilibrium in Balance of Payment, Types, Causes and Measures to Correct Balance of Payment Disequilibrium; Foreign Exchange Market: Determination of Exchange Rate: Fixed and Flexible Exchange Rate; Spot and Forward Exchange Rate; Exchange Rate Policy	12	1) Ahuja H. L., (2008), Macroeconomics theory and Policy, S. Chand and company Ltd. New Delhi. 2) Dwivedi D.N., (2007), Macroeconomics theory and Policy, TATA Mcgraw - Hill Publication company Ltd. Delhi.	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: VI** **MONTH: JUNE- DECEMBER** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: DERIVATION OF IS-LM CURVE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV: ADVANCED MACROECONOMICS - III Module 1: Post Keynesian Synthesis	Derivation of Aggregate Demand Curve with IS-LM - Aggregate Supply Curve - Determination of Equilibrium National Income and Price Level under Aggregate Demand and Aggregate Supply Model - Extension of IS-LM Model with Labour Market and Flexible Prices - Natural Rate of Unemployment- Long run Philips Curve - Friedman's Expectation Model - Tobin's Modified Phillips Curve - Adaptive Expectations and Rational Expectations.	4	Dornbusch, Fischer and Startz (2018): Macroeconomics, McGraw Hill Education (India) Pvt. Ltd.	PPTs, Group Discussion, Quizzes

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: VI** **MONTH: JANUARY** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: TRADE CYCLE THEORIES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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ECO IV: ADVANCED MACROECONOMICS - III **Module 2: Trade Cycles**	**Meaning- Nature- Features and Types of Trade Cycles - Phases of Trade Cycles - Theories of Trade Cycles- Hawtrey's, Kaldor, Paul Samuelson and Hicks - Measures to Control Trade Cycles.**	**4**	Mankiw N Gregory (2003), Macroeconomics , 6" edition, Worth Publishers, New York.	**PPTs, Group Discussion, Quizzes**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: VI** **MONTH: FEBRUARY** **ACADEMIC YEAR: 2022-23**

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LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: EXCHANGE RATE SYSTEM IN THE WORLD

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV: ADVANCED MACROECONOMICS - III Module 3: Exchange Rate Regimes and Currency Crises	Managed Exchange Rate- Advantage and Disadvantage - Policy of Managed Flexibility-Adjustable Peg System, Crawling Peg System, Managed Floating System, Clean and Dirty Float System - Balance of Payment and Exchange Rate - Is Balance of Payments Always in Balance? – Convertibility of Currency - Currency Crisis-Causes, Impact and Measures	4	Rana K. C. & Verma K.N (2017), International Economics, Vishal Publishing CO. Jalandhar.	PPTs, Group Discussion, Quizzes

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: VI** **MONTH: MARCH** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: CURRENCY MARKET IN THE WORLD

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV: ADVANCED MACROECONOMICS - III Module 4: International Monetary System	Rise and Fall of International Gold Standard - Bretton Woods System- Breakdown of the Bretton Woods System - Monetary System after the Collapse of Bretton Woods System - Maastricht Treaty, Features, Effects and Importance of Euro- Currency Market - Causes and Consequences of Global Economic Crisis - Impact of Global Recession on the Indian Economy - Asia Infrastructure Investment Bank (AIIB) - New Development Bank (NDB): Asian Development Bank (ADB).	4	Rana K. C. & Verma K.N (2017), International Economics, Vishal Publishing CO. Jalandhar.	PPTs, Group Discussion, Quizzes

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A.(ENGLISH) **SEMESTER: V** **MONTH: JUNE -DEC** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO : Get the information about the genesis of Economics and its modern scenario.

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX: HISTORY OF ECONOMIC THOUGHT - I **Module 1: Classical Economics**	Mercantilism and Physiocracy: Introduction -Adam Smith: Liberalism -Division of Labour -Theory of Value - David Ricardo: Rent Theory- Wage Theory - Theory of Value- Karl Marx: Surplus Value Materialistic Interpretation of History -Scientific Socialism	**3**	Ghosh and Ghosh: Concise History of Economic Thought, Himalaya Publishers.	**PPTs, Group Discussion, Quizzes**

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: V** **MONTH: JULY** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: Get the information about the genesis of Economics and its modern scenario.

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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ECO IX: HISTORY OF ECONOMIC THOUGHT - I **Module 2: Neoclassical Economics**	Alfred Marshall : Thought on Value - Representative Firm - Consumer's Surplus - Internal and External Economies-Quasi Rent - Schumpeter: Economic Development And Innovation-Pigou :Welfare Economics.	**3**	Ghosh and Ghosh: Concise History of Economic Thought, Himalaya Publishers.	**PPTs, Group Discussion, Quizzes**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: V** **MONTH: AUGUST** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

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Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
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THE LEARNERS WILL BE ABLE TO : UNDERSTAND TRADE CYCLE, FISCAL POLICY.

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX: HISTORY OF ECONOMIC THOUGHT - I **Module 3: Keynesian Ideas**	Employment Theory- Money- Wage Rigidity Model- Multiplier and accelerator and their interaction - Trade Cycle - Inflation -Role of Fiscal Policy - Keynesian Economics and Developing Countries	**3**	Gide, O. and G. Rist, A History of Economics Doctrine. George Harrop Co. London. 1956.	**PPTs, Group Discussion, Quizzes**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: V** **MONTH: SEPTEMBER** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO : Establish the correlation of Economics with other subjects.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX : HISTORY OF ECONOMIC THOUGHT - I **Module 4: Post-Keynesian Economics**	Supply Side Economics -Hayek's Theory of Trade Cycle- Life Cycle theory Consumption- Friedman: Theory of Demand for Money - Long-Run Philips Curve - Mankiw's New Keynesian Model - Stagflation.	**3**	Gide, O. and G. Rist, A History of Economics Doctrine. George Harrop Co. London. 1956.	**PPTs, Group Discussion, Quizzes**

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: VI** **MONTH: DECEMBER** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: Familiarize with the leading Indian economists who significantly contributed to the stream of Indian economic thought.

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX : HISTORY OF ECONOMIC THOUGHT-II	Kautilya on welfare state -Dadabhai Naoroji's Thoughts on Drain Theory- Ranade's Case on Protection - R. C. Dutt on Imperialism - Land Tax and Public Finance - Gopal Ganesh Agarkar.	**3**	Ajit K.Dasgupta,A History of Indian Economic Thought,	**PPTs, Group Discussion, Quizzes**

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Module 1: Indian Economic Thought			(1993)Routledge London and New York.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: VI** **MONTH: JANUARY** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: Familiarize with the leading Indian economists who significantly contributed to the stream of Indian economic thought.

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX: HISTORY OF			Ajit	

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ECONOMIC THOUGHT-II **Module 2: Economic Thought of Mahatma Phule and Gandhi**	Mahatma Phule's Views on Agriculture - Reasons of Farmer's Poverty - Gandhian Economic Thoughts on Self-Sufficient Village Economy - Dignity of Labour – Trusteeship - and Sarvodaya.	**3**	K.Dasgupta,A History of Indian Economic Thought, (1993)Routledge London and New York.	**PPTs, Group Discussion, Quizzes**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: VI** **MONTH: FEBRUARY** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: Get information about the genesis of Economics and its modern scenario

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PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX: HISTORY OF ECONOMIC THOUGHT-II **Module 3: Economic Thought of Dr. B.R.Ambedkar, G.K.Gokhale and Dr. Manmohan Singh**	Dr.Ambedkar's Case for State Socialism - Problem of Rupee - Public Finance – G.K.Gokhale on Development and Welfare - Dr. Manmohan Singh's ' Three Steps' to Stem India's Economic Crisis.	**3**	Ajit K.Dasgupta,A History of Indian Economic Thought, (1993)Routledge London and New York.	**PPTs, Group Discussion, Quizzes**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: VI** **MONTH: MARCH** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: Get information about the genesis of Economics and its modern scenario.

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX: HISTORY OF ECONOMIC THOUGHT-II **Module 4: Nodel Prize Winners in Economics**	Dr. Amartya Sen (1998) -Robert. A. Mundell (1999) -Joseph Stiglitz(2001) -Dr. Abhijeet Banarjee (2019)	**3**	Encyclopaedia of Nobel Laureate, Ed's, (2002) R. Kapila & A. Kapila, Academic Foundation.	**PPTs, Group Discussion, Quizzes**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A.(ENGLISH) **SEMESTER: V** **MONTH: JUNE -DEC** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: THE CONCEPT OF ECONOMIC GROWTH AND DEVELOPMENT, HDI

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: ECONOMICS OF GROWTH & DEVELOPMENT: Module 1: Meaning of Economic Growth and Development	Concepts of Economic Growth and Development-Distinction between Economic Growth and Development- Concept of Human Development- H.D.I, G.D.I, Green GDP- Sen's Capability approach- Millennium Development Goals (MDGs)- Initiative by Indian government towards MDGs.	4	Todaro, Michael P. and Stephen C. Smith. Economic Development, 8e. Delhi: Pearson Education, 2003.	PPTs, Group Discussion, Quizzes

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: V** **MONTH: JULY** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: Various Theories of Growth and Development

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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ECO V: ECONOMICS OF GROWTH & DEVELOPMENT: Module 2: Theories of Economic Development	Rostow's Stages of Growth; Big Push Theory- Leibenstein's Critical Minimum Effort Thesis – Harrod – Domar Growth Model – Lewis Model of Unlimited Supply of Labour – Ragnar Nurske's Theory of Disguised Unemployment- Schumpeter's Theory of Development	4	Todaro, Michael P. and Stephen C. Smith. Economic Development, 8e. Delhi: Pearson Education, 2003.	PPTs, Group Discussion, Quizzes

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: V** **MONTH: AUGUST** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

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THE LEARNERS WILL BE ABLE TO KNOW: Structural Issues in Development Process

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: ECONOMICS OF GROWTH & DEVELOPMENT: Module 3: Structural Issues in Development Process	Concept of Human Capital- Role of Education, Health and nutrition in Human Capital - Meaning and Measurement of Poverty and Inequality- Measures to eradicate poverty and Inequality - Meaning of Inclusive growth - SHG and Microfinance- Migration – Urbanization- Formal and Informal Sector- Urban Informal Sector	4	Thirlwall, A.P. Growth and Development 8e. New York: Palgrave MacMillan, 2005	PPTs, Group Discussion, Quizzes

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: V** **MONTH: SEPTEMBER** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: Planning, Technology and Economic Development

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: ECONOMICS OF GROWTH & DEVELOPMENT: Module 4: Planning, Technology and Economic Development	Concept and Role of infrastructure in Economic Development- Role of technology in Economic Development- Labour intensive versus Capital intensive technology- Schumacher's concepts of intermediate and appropriate technology- Green Technology- Meaning and Types of Economic Planning- Role of Planning in Economic Development	12	Thirlwall, A.P. Growth and Development 8e. New York: Palgrave MacMillan, 2005	PPTs, Group Discussion, Quizzes

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**
CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: VI** **MONTH: JUNE-DECEMBER** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: INDIAN LABOUR MARKET

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VI: INDUSTRIAL AND LABOUR ECONOMICS-II **Module 1: Introduction - Indian Labour Market**	**Characteristics of the Indian Labour Market, Child Labour and Women Labour -Problems and Measures, Labour Market Reforms - Exit Policy and Need for Safety Nets, Second National Commission on Labour, Globalization and its impact on Indian Labours.**	**3**	U. Ratna Sen, Industrial Relations in India - Shifting Paradigms (2005), Macmillan, New Delhi.	**PPTs, Group Discussion, Quizzes**

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

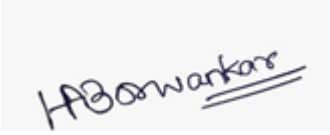
NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: VI** **MONTH: JANUARY** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: WORKING OF TRADE UNION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VI: INDUSTRIAL AND LABOUR ECONOMICS-II	Definition and Functions of Trade Unions, Historical Evolution of Trade Unions in India and their Present Status- Problems of Trade Unions in India- Role of	3	Mamoria C.B. and Mamoria S. (2002), Dynamics of Industrial	



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Module 2: Trade Unionism	**Outside Leadership- International Labour Organization.**		Relations, Himalaya Publishing House, Mumbai.	**PPTs, Group Discussion, Quizzes**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: VI** **MONTH: FEBRUARY** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: ROLE AND IMPORTANCE WORKERS PARTICIPATION IN FUNCTIONING OF THE INDUSTRY

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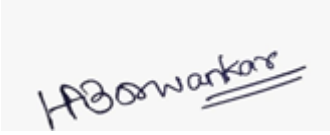
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VI: INDUSTRIAL AND LABOUR ECONOMICS-II Module 3: Industrial Relations	Causes of Industrial Disputes and Their Settlement Mechanism- Collective Bargaining - Concept, Features - Importance and Pre-requisites for Successful Collective Bargaining - Collective Bargaining in India -Workers' Participation in Management- Concept, Objectives and Forms of Workers Participation in India -Working Conditions and life style of Indian workers.	3	CO Monappa A, (2006), Industrial Relations, Tata McGraw Hill Publishing Company Ltd, New Delhi.	PPTs, Group Discussion, Quizzes

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2022-23



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LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: VARIOUS LABOUR WELFARE THEORIES AND PROGRAMMES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VI: INDUSTRIAL AND LABOUR ECONOMICS-II **Module 4: Labour Welfare and Social Security**	**Concept -Theories and Principles of Labour Welfare- Agencies for Labour Welfare, Role of the Labour Welfare Officer - Social Security-Concept; Social Assistance and Social Insurance – Social Security Measures in India - Indian Labour Legislations.**	**3**	Mamoria C.B. and Mamoria S. (2002), Dynamics of Industrial Relations, Himalaya Publishing House, Mumbai.	**PPTs, Group Discussion, Quizzes**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

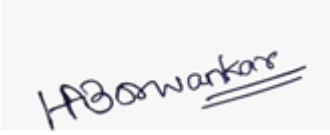
NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: V** **MONTH: JUNE-DEC** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: CONCEPT, QUALITIES OF ENTREPRENEUR

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: ENTREPRENEURSHIP & SMALL SCALE INDUSTRIES **Module 1: Entrepreneurship**	Concept of an entrepreneur and entrepreneurship, qualities of the successful entrepreneurs- role and functions of entrepreneurs in economic development- factors influencing entrepreneurship- Challenges before women entrepreneurship	**4**	Barra G.S, Dangwal R.C.Entrepreneurship and Small Scale Industries New Potentials – Deep & Publications 1999	**PPTs, Group Discussion, Quizzes**



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: V** **MONTH: JULY** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: Skills required for Starting a new venture

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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ECO VII: ENTREPRENEURSHIP & SMALL SCALE INDUSTRIES **Module 2: Starting a new venture**	Project identification - selection and formulation, Registration of small scale industries - project report - Sources of finance for a business - Export documents and trends of small enterprises- major constraints in export performance.	**4**	Desai Vasant, Dynamics of Entrepreneurial Development and Management, Himalaya Publication	**PPTs, Group Discussion, Quizzes**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: V** **MONTH: AUGUST** **ACADEMIC YEAR: 2022-23**

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LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: ABOUT THE SMALL SCALE INDUSTRIES

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII : ENTREPRENEURSHIP & SMALL SCALE INDUSTRIES **Module 3: Small scale industries**	Meaning and scope of small scale industries, importance of small scale industries, problems faced by small scale industries, SWOT analysis for small scale industries, forms of business organizations: Sole proprietorship – Features, advantages & disadvantages. Partnership - Features, advantages & disadvantages. Joint stock Company – Features, advantages & disadvantages. Co-operative – Features, advantages & disadvantages	**4**	Murthy C.S.V. Small Industries & Entrepreneurship Development, Himalaya Publication	**PPTs, Group Discussion, Quizzes**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

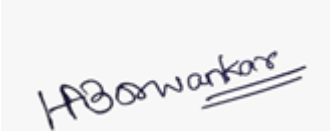
NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR **DEPARTMENT: ECONOMICS**

CLASS: T.Y.B.A. (ENGLISH) **SEMESTER: V** **MONTH: SEPTEMBER** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: FUNDAMENTALS OF MANAGEMENT IN SMALL SCALE INDUSTRIES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: ENTREPRENEURSHIP & SMALL SCALE INDUSTRIES **Module 4:** Management and incentives for small scale industries	Fundamentals of management: productions and operations management- working capital management, marketing management - Human resource management- Total quality management - Management information system- Incentives to small scale industries.	**4**	Singh P.N. and Saboo J.C., Entrepreneurship Management, P.N.Singh Centre	**PPTs, Group Discussion, Quizzes**



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

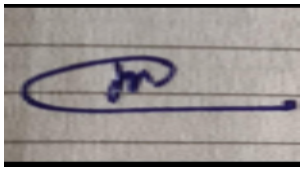
NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. Div-A & C **SEMESTER:** I **MONTH:** August **ACADEMIC YEAR:** 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of micro economics
- Understand the exchangeRole of Price Mechanism in a Market Economy
- Positive Economics and Normative

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Micro economics Module - I: Introduction to Microeconomics	.Microeconomics: Meaning, Scope, Nature, Importance and Limitations; Basic Economic	02	M.L.Jhingan, (2006) "Microeconomics Theory", 5	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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	Problems; Role of Price Mechanism in a Market Economy; Positive Economics and Normative		th edition Vrinda Publication (P) Ltd. 5. H.L.Ahuja, (2016) "Advance Economics Theory" S.Chand & Company Ltd.	

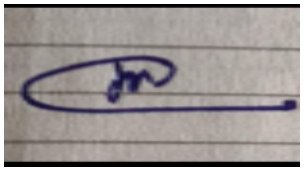
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02 & 02

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. Div A & C **SEMESTER:** I **MONTH: September** **ACADEMIC YEAR:** 2022/23

LEARNING OBJECTIVE/S:
The learners will be able to :



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Yashvant Keshav Patil College of Commerce
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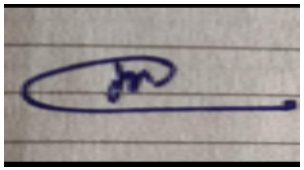
NAAC accredited "B" Grade, 2.69 CGPA

- Understand the concept of micro economics
- Understand the exchangeRole of Price Mechanism in a Market Economy
- Positive Economics and Normative

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Micro economics - Module - I: Introduction to Microeconomics	Economics; Concepts of Equation, Functions, Graphs, Diagrams, Line, Slope and Intercept	02	**.L.Jhingan, (2006) "Microeconomics Theory", 5 th edition Vrinda Publication (P) Ltd. 5. H.L.Ahuja, (2016) "Advance Economics**	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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			Theory" S.Chand & Company Ltd.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02 & 02

TEACHING PLAN (UNIT PLAN)

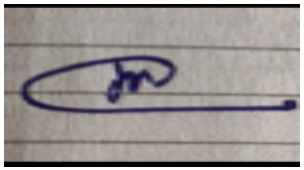
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A.Div A & C **SEMESTER:** I **MONTH: October** **ACADEMIC YEAR:** 2022/23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of micro economics
- Understand the exchangeRole of Price Mechanism in a Market Economy
- Positive Economics and Normative

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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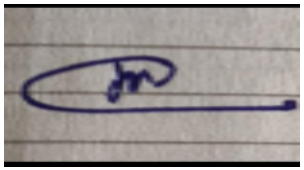
		ALLOTED		
Micro economics - Module IV: Consumer's Behavior	Module IV: Consumer's Behavior (12 Lectures) Introduction to Cardinal and Ordinal Approaches; Indifference Curve Analysis - Properties of Indifference Curves, Budget Line, and Consumer's Equilibrium; Income, Price and Substitution	02	**.L.Jhingan, (2006) "Microeconomics Theory", 5 th edition Vrinda Publication (P) Ltd.** **5. H.L.Ahuja, (2016) "Advance Economics Theory" S.Chand & Company Ltd.**	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02 & 02



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TEACHING PLAN (UNIT PLAN)

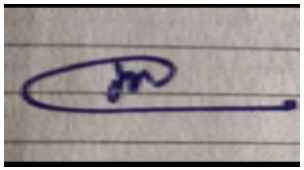
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. Div A & C **SEMESTER:** I **MONTH: November** **ACADEMIC YEAR:** 2022/23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of micro economics
- Understand the exchangeRole of Price Mechanism in a Market Economy
- Positive Economics and Normative

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Micro economics - Module IV: Consumer's Behavior	Effect; Derivation of Demand Curve; Consumer's Surplus: Strong Ordering and Weak Ordering	02	**.L.Jhingan, (2006) "Microeconomics Theory", 5**	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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			th edition Vrinda Publication (P) Ltd. 5. H.L.Ahuja, (2016) "Advance Economics Theory" S.Chand & Company Ltd.	

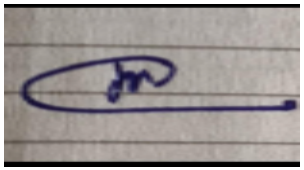
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02 & 02

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. Div A & C **SEMESTER:** II **MONTH:** January **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :



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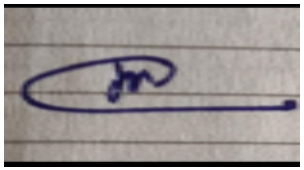
- Understand the concept of cost & revenue .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Microeconomics – II Module II: Cost & Revenue Analysis	Concepts of Costs: Money and Real Cost, Social Cost, Private Cost, Explicit and Implicit Cost, Opportunity Cost; Relationship between Average, Marginal and Total Cost;	02	**Jhingan, (2006) "Microeconomics Theory", 5 th edition Vrinda Publication (P) Ltd.** **5. H.L.Ahuja,**	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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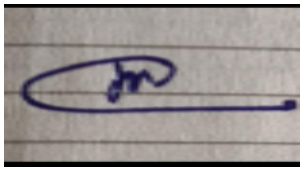
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02 & 02

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. Div A & C **SEMESTER:** II **MONTH:** February **ACADEMIC YEAR:** 2022-23

LEARNING OBJECTIVE/S:



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The learners will be able to :

- Understand the concept of cost & revenue

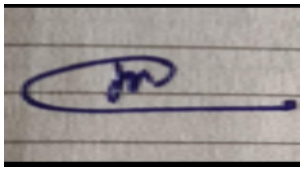
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – II Module II: Cost & Revenue Analysis	Derivation of Short Run and Long Run Cost Curves; Concepts of Revenue: Types and Interrelationship	02	Sikdar, S. (2006), Principles of Macroeconomics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02 & 02

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. Div A & C **SEMESTER:** I **MONTH: March** **ACADEMIC YEAR:** 2022-23



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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
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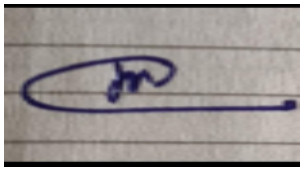
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the Concept Of Equilibrium

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – II Module IV: Equilibrium in Different Market Structure	Concept Of Equilibrium: TR - TC And MR - MC Approach; Features of Perfect Competition; Monopoly and Monopolistic Competition, Short Run and Long Run Equilibrium of Firm and	02	**.L.Jhingan, (2006) "Microeconomics Theory", 5 th edition Vrinda Publication (P) Ltd.**	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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			5. H.L.Ahuja, (2016) "Advance Economics Theory" S.Chand & Company Ltd.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02 & 02

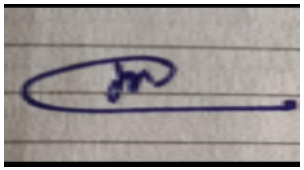
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. Div A & C **SEMESTER:** I **MONTH: April** **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the Concept Of Equilibrium



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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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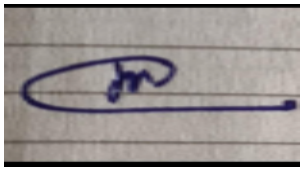
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – II Module IV: Equilibrium in Different Market Structure	Industry under each Market Condition; Selling Cost and Wastages under Monopolistic Competition	02	**.L.Jhingan, (2006) "Microeconomics Theory", 5 th edition Vrinda Publication (P) Ltd.** **5. H.L.Ahuja, (2016) "Advance Economics Theory" S.Chand & Company Ltd.**	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02 & 02

TEACHING PLAN (UNIT PLAN)

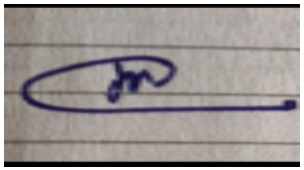
NAME OF THE STAFF: Ms MANSI GAWAND. **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** August **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand Meaning and Scope of Public Finance
- To understand Failure: Public Goods and Private Goods, Externalities, Efficiency versus Equity; Principles
- To understand Principles of Sound Finance and Functional Finance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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VIVA COLLEGE, Virar (W)
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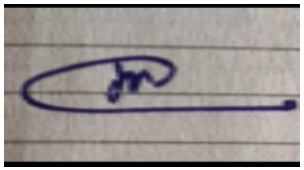
		ALLOTED		
Paper -3 Public finance Module:-1 introduction	Meaning and Scope of Public Finance; Public Finance versus Private Finance; Market Failure: Public Goods and Private Goods, Externalities, Efficiency versus Equity; Principles of Sound Finance and Functional Finance; Allocation, Distribution, Stabilisation and Growth Functions of the Government	03	1)Sury M.M., (1990), Government Budgeting in India, Commonwealth Publishers. 2)Bhatia H.L., (2012), Public Finance, Vikas Publications.3). Report of the Fourteenth Finance Commissio	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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SIGNATURE OF THE H.O.D.

			n,Government of India.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 03

TEACHING PLAN (UNIT PLAN)

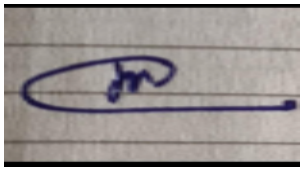
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** September **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand the Law of Maximum Social Advantage;
- To understand Types of Public Budget;
- To understand Role of Taxation
- To understand Determination of Tax Burden
-
- To understand th tax system

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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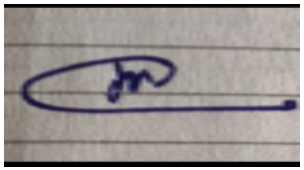
Unit III Fiscal Policy: Public Expenditure and Debt	Dalton's and Musgrave Versions of the Law of Maximum Social Advantage; Role of Government in a Modern Economy; Types of Public Budget; Structure of Public Budget; Role of Taxation; Merits and Demerits of Direct and Indirect Tax Policy; Features of Good Tax System; Concept of Impact, Incidence and Shifting of Taxation; Elasticity and	03	1)Sury M.M., (1990), Government Budgeting in India, Commonwealth Publishers. 2)Bhatia H.L., (2012), Public Finance, Vikas Publications.3). Report of the Fourteenth Finance Commission,Governm	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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	Determination of Tax Burden		ent of India.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 03

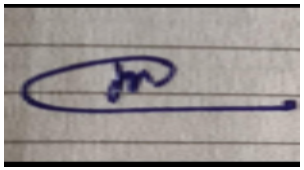
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** October **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand Canons of Public Expenditure
- To understand Classification of Public Expenditure
- To understand Meaning and Types of Public Debt
- To understand Concepts of Deficit



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VIVA COLLEGE, Virar (W)
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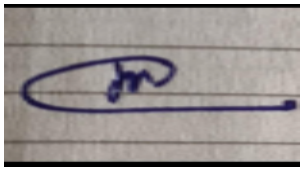
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III Fiscal Policy: Public Expenditure and Debt	Canons of Public Expenditure; Classification of Public Expenditure; Wagner's Law of Public Expenditure; Public Expenditure as an Instrument of Fiscal Policy; Meaning and Types of Public Debt; Burden of Public Debt; Principles of Public Debt Management; Concepts of Deficit	03	1)Sury M.M., (1990), Government Budgeting in India, Commonwealth Publishers. 2)Bhatia H.L., (2012), Public Finance, Vikas Publications.3). Report of	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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			the Fourteenth Finance Commission,Government of India.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 03

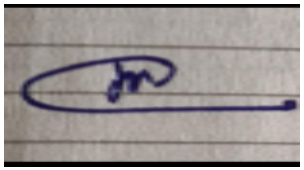
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** November **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand Budget of The Government of India
- To understand Components of Public Expenditure
- To understand Appraisal of FRBM Act
- To understandFourteenth Finance Commission Recommendations



SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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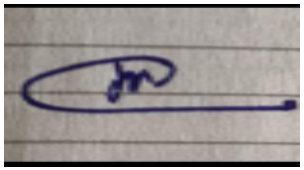
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit IV Indian Public Finance	Budget of The Government of India (Previous Financial Year); Sources of Public Receipts (Tax And Non-Tax, Introduction To GST); Components of Public Expenditure; Sources of Public Borrowing and Debt Liabilities; Deficits; Appraisal of FRBM Act 2004; Fiscal Federalism: Fourteenth Finance Commission Recommendations	03	1)Sury M.M., (1990), Government Budgeting in India, Commonwealth Publishers. 2)Bhatia H.L., (2012), Public Finance, Vikas Publications.3). Report of the Fourteenth	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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			Finance Commission,Government of India.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 03

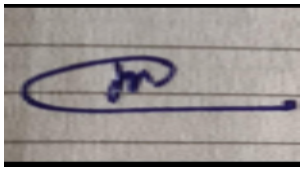
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** january **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand Structural Changes In Indian Economy;
- Overview on Poverty Alleviation Programmes
- To understand the Measures to Reduce Regional Inequalities in India



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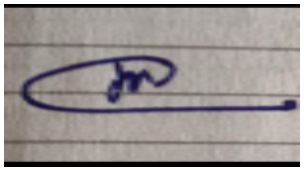
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module- I: Introduction (12 Lectures)	Trends in India's National Income and PCI Since 1990; Structural Changes In Indian Economy; Brief Overview of the Employment Generation and Poverty Alleviation Programmes; Regional Inequalities; Measures to Reduce Regional Inequalities in India	03	Datt, Ruddra and K.P.M, Sundaram, (2017), 'Indian Economy', S. Chand & Company Ltd., New Delhi. 4) Misra, S. K. and V. K. Puri, (2018) 'Indian Economy', Himalaya Publishing House, Mumbai.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 03



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TEACHING PLAN (UNIT PLAN)

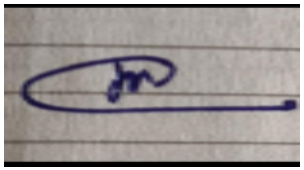
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** February **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand Role of Agriculture in Economic Development
- To understand Agricultural Price Policy
- Role and Function & Agricultural Marketing
- To understand Sources of Agricultural Finance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module - II: Agricultural Sector	Module - II: Agricultural Sector Role of Agriculture in Economic Development;	03	Datt, Ruddra and K.P.M, Sundaram, (2017), 'Indian Economy', S. Chand & Company	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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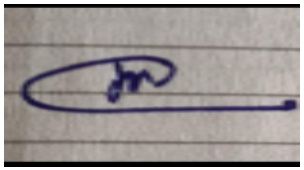
	Causes of Low Productivity; Agricultural Inputs; Agricultural Price Policy: Recent Minimum Support Price Policy; Income Support for Farmers; Sources of Agricultural Finance; Micro Finance; NABARD: Role and Function; Agricultural Marketing: Structure and Problems; National Policy for Farmers, 2007; Organic Farming Policy; Food Security in India		Ltd., New Delhi. 4) Misra, S. K. and V. K. Puri, (2018) 'Indian Economy', Himalaya Publishing House, Mumbai.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 03



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TEACHING PLAN (UNIT PLAN)

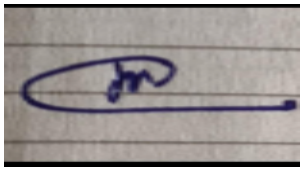
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** March **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand Industries and Economic Development Recent Policies and Programs for
- Industrial Development
- To understand Role and Trends of FDI
- To understand

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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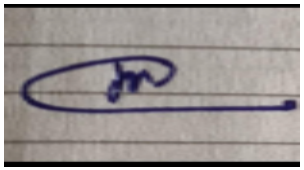
Module -III: Industrial Sector	Infrastructure for Industrial Development; Industrial Policies in India; Industrial Policy of 1991; Micro, Small and Medium Enterprises (MSMEs): Classification, Role and Policy Measures; Growth of Large Scale Industries and Economic Development; Recent Policies and Programs for Industrial Development: Start Up India, Make in India, Skill India; Role and Trends of FDI in Industrial Sector Development	03	Datt, Ruddra and K.P.M, Sundaram, (2017), 'Indian Economy', S. Chand & Company Ltd., New Delhi. 4) Misra, S. K. and V. K. Puri, (2018) 'Indian Economy', Himalaya Publishing House, Mumbai.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:03

TEACHING PLAN (UNIT PLAN)



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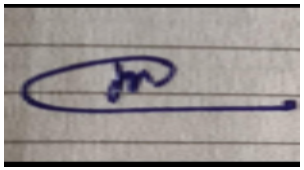
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** April **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand Role of Service Sector in Indian Economy;
- Research and Development Services With Reference to Education and Skill India
- To understandGrowth and Performance of Healthcare;

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module -IV: Service Sector	Role of Service Sector in Indian Economy; Growth and Performance of Healthcare; Performance of Trade and Tourism, Information Technology	03	Datt, Ruddra and K.P.M, Sundaram, (2017), 'Indian Economy', S. Chand & Company Ltd., New Delhi. 4) Misra, S. K. and V. K. Puri, (2018)	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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	and IT - Enabled Services; Research and Development Services With Reference to Education and Skill India; Performance of Service Sector during XIIth Five Year Plan		'Indian Economy', Himalaya Publishing House, Mumbai.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 03

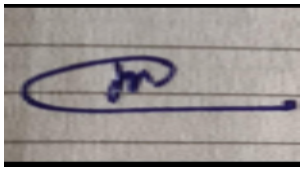
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** v **MONTH:** August **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:

- Enable students to apply and analyse issues in the development process.
- • Students will be able to identify the issues related to Growth and Development



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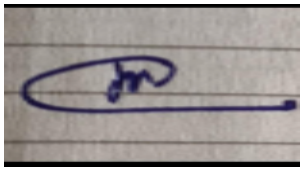
- • Students will be able to understand the policy options and analyzed the Measures taken for the
- Development of an economy.
-

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECOAME501-ADVANCED MICROECONOMICS - III Module 1: General Equilibrium and Welfare Economics	Concept of General Equilibrium and Walrasian General Equilibrium Model - Pareto Optimality – The Pareto Optimality Condition of Social Welfare - Marginal Conditions for Pareto Optimal Resource Allocation - Perfect Competition and Pareto Optimality - Arrow's Impossibility Theorem		Mankiw, N. Gregory, Principles of Microeconomics, Cengage Learning, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02



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TEACHING PLAN (UNIT PLAN)

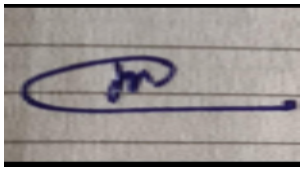
NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** v **MONTH:** September **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:

- Enable students to apply and analyse issues in the development process.
- • Students will be able to identify the issues related to Growth and Development
- • Students will be able to understand the policy options and analyzed the Measures taken for the
- Development of an economy.
-

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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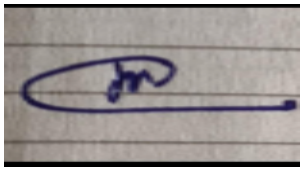
ECOAME501-ADVANCED MICROECONOMICS - III Module 2: Market Structure: Monopoly and Monopolistic Competition	Concept of Monopoly - Measurement of Monopoly Power - Price Discrimination: Types and Classification of Price Discrimination (Degrees of Price Discrimination) - Equilibrium under discriminating Monopoly - Regulation of Monopoly Market Product Differentiation in Monopolistic Competition - Chamberlin's Alternative approach- Equilibrium under Monopolistic Competition - Excess Capacity			CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02



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- **TEACHING PLAN (UNIT PLAN)**

- **NAME OF THE STAFF:** Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS
- **CLASS:** T.Y.B.A. **SEMESTER:** V **MONTH:** October **ACADEMIC YEAR:** 2022_23
- **LEARNING OBJECTIVE/S:**

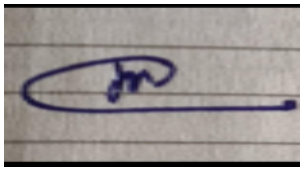
Enable students to apply and analyse issues in the development process.

• Students will be able to identify the issues related to Growth and Development

• Students will be able to understand the policy options and analyzed the Measures taken for the

Development of an economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECOAME501-ADVANCED MICROECONOMICS -III Module 3: Oligopoly	The Cournot Model - Meaning and Characteristics of Oligopoly Market - Rigid Prices - The Sweezy Model of Kinked Demand Curve - Collusive Oligopoly -	03		CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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	Cartel: Centralised and Market Sharing Cartel - Imperfect Collusion- Price Leadership Models, Game Theory - Prisoner's Dilemma, Nash Equilibrium and Dominant Strategy Equilibrium			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02

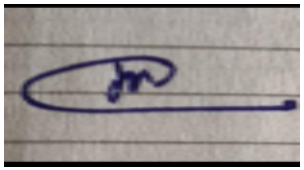
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** v **MONTH:** November **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:

Enable students to apply and analyse issues in the development process.



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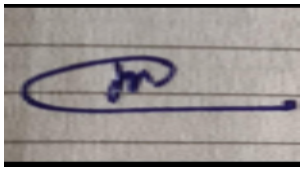
• Students will be able to identify the issues related to Growth and Development

• Students will be able to understand the policy options and analyzed the Measures taken for the

Development of an economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECOAME501-ADVANCED MICROECONOMICS -III Module 4: Information Economics	Economics of Search and Search Cost - The Theory of Asymmetric Information-The Market for Lemons and Adverse Selection - Risk Preference and Expected Utility - The Problem of Moral Hazard - Market Signaling - Principal-Agent Problem	03	Mansfield, Edwin, Micro-economics: Theory & Applications, 5th edition,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02



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TEACHING PLAN (UNIT PLAN)

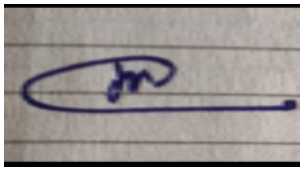
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** August **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR	Meaning and Scope of Industrial Economics, Industrial Profile : Private sector - Performance and Problems; Cooperatives - features, types, merits and demerits; Public Sector - Role, Performance and Problems, Diversification and Industrial Combinations -	03	Desai S.S.M. and Bhalerao N, Industrial Economy of India,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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ECONOMICS Module 1: Introduction	Motives for Mergers and Acquisitions.		Himalaya Publishing House, Mumbai, 2008. 6	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3

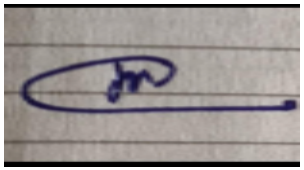
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** September **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management



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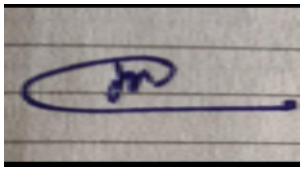
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 2: Industrial Location and Problem of Regional Imbalance	Determinants of Industrial Location, Theories of Industrial Location - Weber's and Sargent Florence's Theories, Dispersion of Industries and the Problem of Regional Imbalance	03	Datt R. and Sundaram K.P.M, Indian Economy, S.Chand& Co., New Delhi, 2009	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3



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TEACHING PLAN (UNIT PLAN)

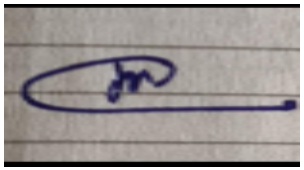
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** October **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR	Concept and Measurement of Industrial Productivity, Factors Affecting Industrial Productivity, Industrial Sickness - Causes, Effects and Remedial Measures,	03	Barthwal R.R, Industrial Economics, New	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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ECONOMICS Module 3: Industrial Productivity and Industrial Sickness	Rationalisation - Concept, Aspects and Impact		Age International Publishers, NewDelhi,	

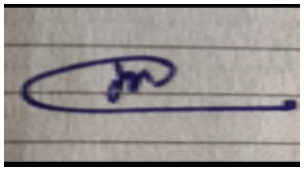
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** November **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :



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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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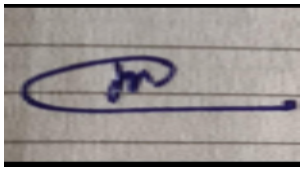
- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 4: Industrial Development in India	New Industrial Policy, 1991; Disinvestment Policy; FIPB Revamp- Micro, Small and Medium Enterprises Development Act, 2006; National Manufacturing Policy, 2011,Recent Trends in India's Industrial Growth, Industrial Policy, 2012, Role of MNCs in the Indian Economy - Merits and Demerits, Issues in Industrial Proliferation and Environment Preservation; Pollution Control Policies.	03	Agrawal A.N, Indian Economy, New Age International Publishers, New Delhi, 2011.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3

TEACHING PLAN (UNIT PLAN)

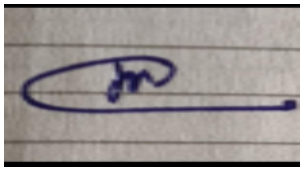
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** January **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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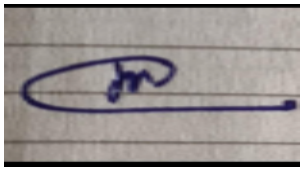
		ALLOTED		
INDUSTIRAL AND LABOUR ECONOMICS Module 1 : Introduction – Indian Labour Market	Characteristics of the Indian Labour Market - Child Labour and Female Labour – Problems and Measures- Globalisation and Indian Labour Market -Labour Market Reforms – Exit Policy and Need for Safety Nets - Second National Commission on Labour.	03	Datt R. and Sundaram K.P.M, Indian Economy, S.Chand & Co., New Delhi, 2009.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3

TEACHING PLAN (UNIT PLAN)



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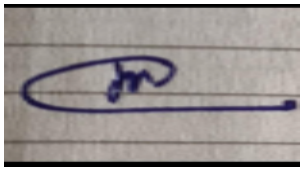
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** February **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 2 : Trade Unionism	Definition and Functions of Trade Unions- Historical Evolution of Trade Unions in India and Their Present Status - Problems of Trade Unions in India - Role of Outside Leadership	03	2. Mamoria C.B. and Mamoria S, Dynamics of Industrial Relations, Himalaya	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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			Publishing House, Mumbai, 2002.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3

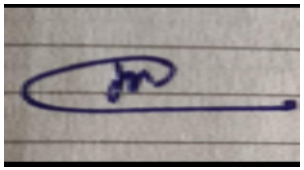
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** March **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal



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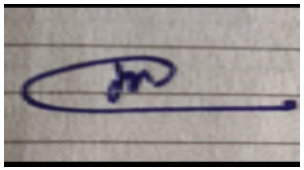
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTRIAL AND LABOUR ECONOMICS Module 3 : Industrial Relations	Causes of Industrial Disputes and Their Settlement Mechanism - Collective Bargaining – Concept, Features, Importance and Pre-requisites for Successful Collective Bargaining - Collective Bargaining in India - Workers" Participation in Management –Concept, objectives and Forms of Workers" Participation in India.	03	Mishra S.K. and Puri V.K, Indian Economy, Himalaya Publishing House, Mumbai,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3



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TEACHING PLAN (UNIT PLAN)

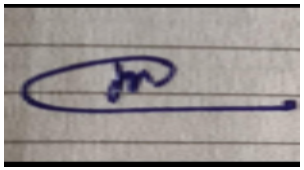
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** April **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS	Concept, Theories and Principles of Labour Welfare - Agencies for Labour Welfare - Role of the Labour Welfare Officer - Social Security – Concept; Social Assistance and Social Insurance - Social Security Measures in India - International Labour Organization	03	Monappa A, Industrial Relations, Tata McGraw Hill	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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Module 4 : Labour Welfare and Social Security	and Its Impact on Indian Labour Legislations.		Publishing Company Ltd., New Delhi, 2006 5.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3

TEACHING PLAN (UNIT PLAN)

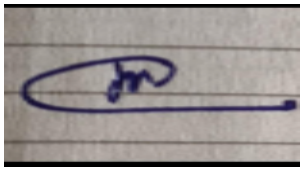
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** June **ACADEMIC YEAR:** 2022_23

LEARNING Outcomes:-

• Nurture the qualities of successful entrepreneurship

• Provides them knowledge about various processers to register for small scale industries which results in successful maintenances of such industries



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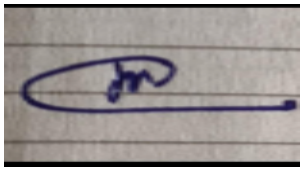
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECOESSIC504 ENTREPRENEURSHIP & SMALL SCALE INDUSTRIES **Module 1,: Entrepreneurship**	Concept of an entrepreneur and entrepreneurship, qualities of the successful entrepreneurs- role and functions of entrepreneurs in economic development- factors influencing entrepreneurship- Challenges before women entrepreneurship	04	Barra G.S, Dangwal R.C.Entrepreneurship and Small Scale Industries New Potentials – Deep & Publications 1999 2. Desai Vasant, Dynamics of Entrepreneurial Developme	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

TEACHING PLAN (UNIT PLAN)

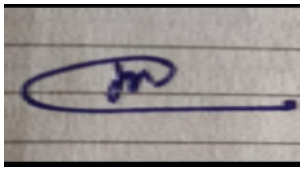
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** July **ACADEMIC YEAR:** 2022_23

LEARNING Outcomes:-

• Nurture the qualities of successful entrepreneurship

• Provides them knowledge about various processers to register for small scale industries which results in successful maintenances of such industries



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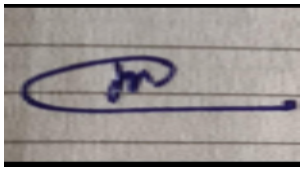
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECOESSIC504 ENTREPRENEURSHIP & SMALL SCALE INDUSTRIES **Module2: Starting a new venture**	**Project identification - selection and formulation, Registration of small scale industries - project report -** **Sources of finance for a business - Export documents and trends of small enterprises- major constraints in** **export performance.**	**Starting a new venture**	Barra G.S, Dangwal R.C.Entrepreneurship and Small Scale Industries New Potentials – Deep & Publications 1999 2. Desai Vasant, Dynamics of Entrepreneurial Developme	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

TEACHING PLAN (UNIT PLAN)

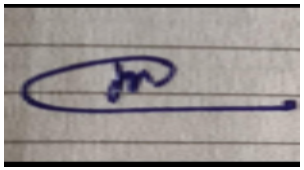
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** August **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

• Nurture the qualities of successful entrepreneurship

• Provides them knowledge about various processers to register for small scale industries which results in successful maintenances of such industries



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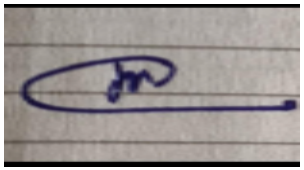
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECOESSIC504 ENTREPRENEURSHIP & SMALL SCALE INDUSTRIES **Module 3: Small scale industries**	Meaning and scope of small scale industries, importance of small scale industries, problem faced by small scale industries, SWOT analysis for small scale industries, forms of business organizations: Sole proprietorship – Features, advantages & disadvantages. Partnership - Features, advantages &	04	Khushpat S. Jain House Export Import Procedures and Documentation' Himalaya Publishing House 5. Murthy C.S.V. Small Industries	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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	disadvantages. Joint stock Company – Features, advantages & disadvantages. Co-operative – Features, advantages & disadvantages.		& Entrepreneurship Development, Himalaya Publication	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

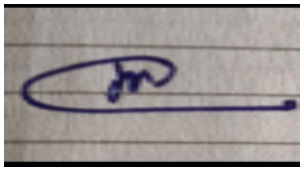
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** September **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

Course Outcomes
- **On the completion of the course, the students will be able to understand the basic Concept of rural development.**
- **Learners will also be understanding objectives and importance of rural development.**



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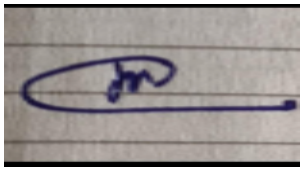
- **Learners will have good understanding of problems in relation of rural development.**
- **Learners will come to know what rural development programmes have initiated by the government to overcome the problems of rural development**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECOESSIC504 ENTREPRENEURSHIP & SMALL SCALE INDUSTRIES **Module 4: Management and incentives for small scale industries**	Fundamentals of management: productions and operations management- working capital management, marketing management - Human resource management- Total quality management - Management information system- Incentives to small scale industries.	04	Singh P.N. and Saboo J.C., Entrepreneurship Management, P.N.Singh Centre	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04



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TEACHING PLAN (UNIT PLAN)

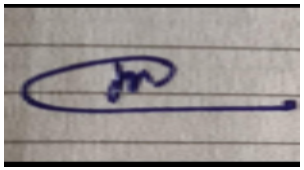
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** December **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

Course Outcomes

- **On the completion of the course, the students will be able to understand the basic Concept of rural development.**
- **Learners will also be understanding objectives and importance of rural development.**
- **Learners will have good understanding of problems in relation of rural development.**
- **Learners will come to know what rural development programmes have initiated by the government to overcome the problems of rural development**



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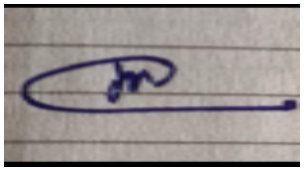
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECOAME601 ADVANCED MACROECONOMICS - III Module 1: Post Keynesian Synthesis	Derivation of Aggregate Demand Curve with IS-LM - Aggregate Supply Curve - Determination of Equilibrium National Income and Price Level under Aggregate Demand and Aggregate Supply Model - Extension of IS-LM Model with Labour Market and Flexible Prices - Natural Rate of Unemployment- Long run Philips Curve - Friedman's Expectation Model - Tobin's Modified Philips Curve - Adaptive Expectations and Rational Expectations.	04	Blanchard, Oliver (2008), Macroeconomics, Pearson education, New Delhi, India. 2. Dornbusch, Fisher and Startz (2018): Macroeconomics, McGraw Hill Education	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

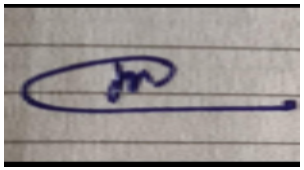
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** January **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

Course Outcomes
- **On the completion of the course, the students will be able to understand the basic Concept of rural development.**
- **Learners will also be understanding objectives and importance of rural development.**
- **Learners will have good understanding of problems in relation of rural development.**
- **Learners will come to know what rural development programmes have initiated by the government to overcome the problems of rural development**



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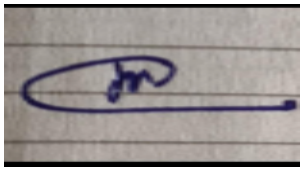
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECOAME601 ADVANCED MACROECONOMICS - III Module 2: Trade Cycles	Meaning- Nature- Features and Types of Trade Cycles - Phases of Trade Cycles - Theories of Trade Cycles- Hawtrey's, Kaldor, Paul Samuelson and Hicks - Measures to Control Trade Cycles.	04	Mankiw N Gregory (2003), Macroeconomics, 6" edition, Worth Publishers, New York. 4. Patil J. F (2005, Marathi Edition), Macroeconomic Analysis, Phadke	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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			Prakashan, Kolhapur.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

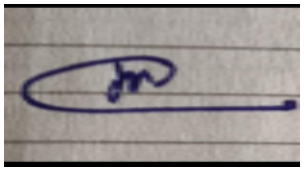
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** February **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

Course Outcomes
- **On the completion of the course, the students will be able to understand the basic Concept of rural development.**
- **Learners will also be understanding objectives and importance of rural development.**
- **Learners will have good understanding of problems in relation of rural development.**
- **Learners will come to know what rural development programmes have initiated by the government to overcome the problems of rural development**



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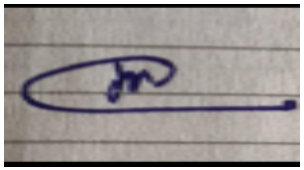
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECOAME601 ADVANCED MACROECONOMICS - III Module 3: Exchange Rate Regimes and Currency Crises	Managed Exchange Rate- Advantage and Disadvantage - Policy of Managed Flexibility-Adjustable Peg System, Crawling Peg System, Managed Floating System, Clean and Dirty Float System - Balance of Payment and Exchange Rate - Is Balance of Payments Always in Balance? – Convertibility of Currency - Currency Crisis-Causes, Impact and Measures.	04	til J. F (2005, Marathi Edition), Macroeconomic Analysis, Phadke Prakashan, Kolhapur. 5. Rana K. C. & Verma K.N (2017), International Economics, Vishal Publishing	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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			CO. Jalandhar. 6. Salvatore D. (1997), International Economics, Printice Hall, New York.	

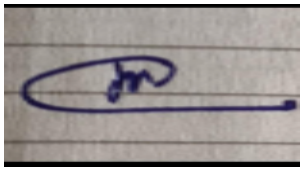
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER: VI** **MONTH:** March **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :



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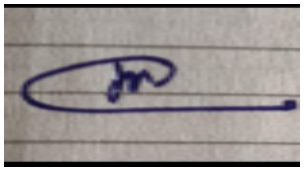
.Identify and define basic terms and concepts of insurance

• Describe the importance of insurance for an individual and the economy

• Understand the concept of risk and its types, and the process of risk management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECOAME601 ADVANCED MACROECONOMICS - III **Module 4: International Monetary System**	Rise and Fall of International Gold Standard - Bretton Woods System- Breakdown of the Bretton Woods System - Monetary System after the Collapse of Bretton Woods System - Maastricht Treaty, Features, Effects and Importance of Euro-Currency Market - Causes and Consequences of Global Economic Crisis	02	til J. F (2005, Marathi Edition), Macroeconomic Analysis, Phadke Prakashan, Kolhapur.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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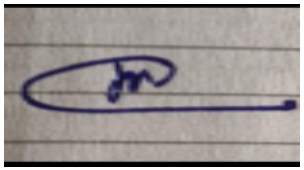
	- Impact of Global Recession on the Indian Economy - Asia Infrastructure Investment Bank (AIIB) - New Development Bank (NDB): Asian Development Bank (ADB)		5. Rana K. C. & Verma K.N (2017), International Economics, Vishal Publishing CO. Jalandhar. 6. Salvatore D. (1997), International Economics, Printice Hall, New York.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06



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TEACHING PLAN (UNIT PLAN)

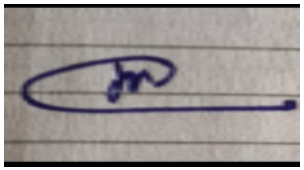
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** January **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- **the students will be able to understand the basic Concept of rural development.**
- **Learners will also be understanding objectives and importance of rural development**
- Describe the importance of rural development the economy
- Understand the problems of rural development

Course Outcomes
• On the completion of the course, the students will be able to understand the basic Concept of rural development.
• Learners will also be understanding objectives and importance of rural development.
• Learners will have good understanding of problems in relation of rural development.
• Learners will come to know what rural development programmes have initiated by the government to overcome the problems of rural development



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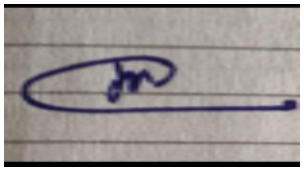
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECORDC604 **RURAL DEVELOPMENT. :-** **Module 1: Rural Development: Introductory Aspects**	Concept, Nature and Scope of Rural Development, Charactersties of the Rural Economy, Objectives and Importance of Rural Development, The problems of Rural Development in India	04	Datt & Sundharam (2012), Indian Economy, S. Chand & Company LTD. Mumbai. 4. Desai Vasant (2012), Rural Developmen	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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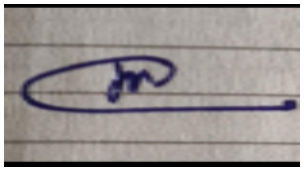
			t in India, Himalaya Publishing House, Mumbai. 5. Dr. I. Satya Sundaram (2002), Rural Developmen t, Himalaya Publishing House, Mumbai. Page No. 3	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04



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TEACHING PLAN (UNIT PLAN)

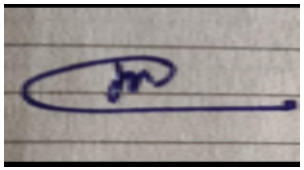
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** February **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Learners will have good understanding of problems in relation of rural development**
- Identify the verious approach of rural development
- Evaluation of verious approach to rurul development

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECORDC604		04	Datt & Sundharam	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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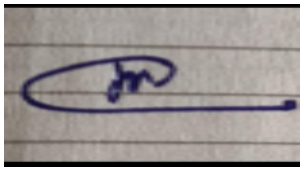
RURAL DEVELOPMENT. :- **Module 2: Approaches to Rural Development**	Gandhian Approach, Rural Reconstruction Approach, Community Development Approach, Sectoral Approach, Participatory Approach, Area-Specific and Target Group Oriented Approach, Integrated Rural Development and Economic Development with Social Justice Approach		(2012), Indian Economy, S. Chand & Company LTD. Mumbai. 4. Desai Vasant (2012), Rural Development in India, Himalaya Publishing House, Mumbai. 5. Dr. I. Satya Sundaram (2002), Rural Development,	



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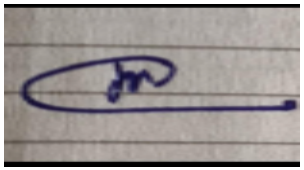
			Himalaya Publishing House, Mumbai. Page No. 3 to 24 6. Eleventh Five Year Plan 2007-12, Planning Commission, Government of India, New Delhi.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04



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TEACHING PLAN (UNIT PLAN)

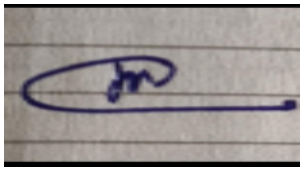
NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** March **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Identify and importans of the livestock economics
- Described agro based industries
- Understand the role of kvic

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECORDC604 **RURAL DEVELOPMENT. :-**	Livestock economics, Dairy Development, Social Forestry, Agro-Based Industries: Problems &	04	Annual Report 2019-20, 2018-19 & State performanc	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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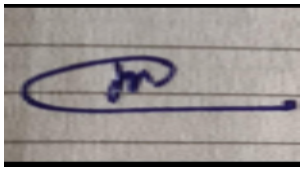
Module 3: Diversification of Rural Economy	Remedial Measures, Role of KVIC in Rural Development, Recent Development of Science & Technology in Rural Development.		e report-2018-19 and Action plan 2019-20, Volume-I, Ministry of Rural Development, Department of Animal Husbandary & Dairying, Government of India, New	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

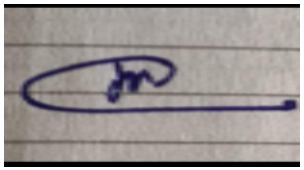
CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** April **ACADEMIC YEAR:** 2022_23

LEARNING OBJECTIVE/S:
The learners will be able to :

Learners will come to know rural development programmes have initiated by the government to

- **overcome the problems of rural development**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECORDC604	An Overview of Rural Development Programmes, Provisions of Urban Amenities in Rural Area (PURA),	04	Eleventh Five Year Plan 2007-12,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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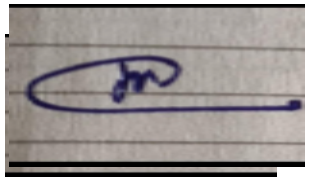
RURAL DEVELOPMENT. :- **Module 4: Rural Empowerment Programmes**	Rural Employment: Mahatma Gandhi National Rural Employment Guarantee Act -2005 (MGNREGA), Rural Livelihoods: Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM), National Social Assistance Programme (NSAP), Microfinance and Self-help Groups		Planning Commission, Government of India, New Delhi. Thomas William and A.J. Christopher (2011), Rural Development: Concept and Recent Approaches, Rawat Publication, Jaipur.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04



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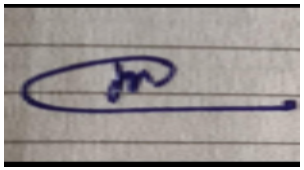

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: JULY MONTH: JUL-DEC ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

THE VERY PURPOSE OF THIS COURSE IS TO PROVIDE INFORMATION ABOUT THE BIOGRAPHY AND CONTRIBUTION OF THE MOST INFLUENTIAL ECONOMISTS WHO INFLUENCED THE ECONOMIC FRATERNITY AND TO WHOM WE ARE OBLIGED TO FOR SHAPING UP THE ECONOMIC THOUGHT PROCESS

THE LEARNERS WILL BE ABLE TO: BASIC UNDERSTANDING ABOUT THE CELEBRATED ECONOMISTS AND THEIR CONTRIBUTIONS STARTING FROM THE CLASSICAL PERIOD. (ADAM SMITH,RICARDIO,KARL MARX)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

R.P.Patil

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Late Shri. Vishnu Waman Thakur Charitable Trust
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ECO IX : HISTORY OF ECONOMIC THOUGHT Module 1: Classical Economics	Mercantilism and Physiocracy: Introduction -Adam Smith: Liberalism -Division of Labour -Theory of Value - David Ricardo: Rent Theory- Wage Theory - Theory of Value- Karl Marx: Surplus Value Materialistic Interpretation of History -Scientific Socialism.	12	**Prof. Raykhelkar,' Aarthik Vichara cha Etihas',** Vidya books publishers. **Dr.Chavhan N.L.,'Pragat Sukshmalakshi Arthashastra'**, Prashant Publication. Dr.Kulkarni S.P," Aarthik Vichargatha", Shree Sainath Prakashan, Nagpur	Group Discussion, PPT,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

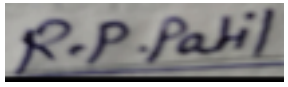
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

THE VERY PURPOSE OF THIS COURSE IS TO PROVIDE INFORMATION ABOUT THE BIOGRAPHY AND CONTRIBUTION OF THE MOST INFLUENTIAL ECONOMISTS WHO INFLUENCED THE ECONOMIC FRATERNITY AND TO WHOM WE ARE OBLIGED TO FOR SHAPING UP THE ECONOMIC THOUGHT PROCESS

THE LEARNERS WILL BE ABLE TO:



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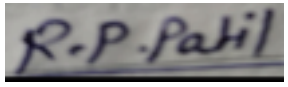
THE CELEBRATED ECONOMISTS AND THEIR CONTRIBUTIONS STARTING FROM THE CLASSICAL PERIOD. (MARSHALL TO SCHUMPETER)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX : HISTORY OF ECONOMIC THOUGHT **Module 2: Neo-Classical Economics**	Alfred Marshall : Thought on Value - Representative Firm - Consumer's Surplus - Internal and External Economies-Quasi Rent - Schumpeter: Economic Development And Innovation- Pigou :Welfare Economics.	12	**Prof. Raykhelkar,' Aarthik Vichara cha Etihas',** Vidya books publishers **Dr.Chavhan N.L.,'Pragat Sukshmalakshi Arthashastra'**, Prashant Publication. **Dr. Kulkarni,B. D.,Dr.Dhamdhere S.V., " Aarthik Vichar va Vicharvanta",** Diamond Publications	Group Discussion, PPT,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: SEPTEMBER ACADEMIC YEAR: 2022-2023

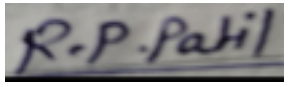
LEARNING OBJECTIVE/S:

THE VERY PURPOSE OF THIS COURSE IS TO PROVIDE INFORMATION ABOUT THE BIOGRAPHY AND CONTRIBUTION OF THE MOST INFLUENTIAL ECONOMISTS WHO INFLUENCED THE ECONOMIC FRATERNITY AND TO WHOM WE ARE OBLIGED TO FOR SHAPING UP THE ECONOMIC THOUGHT PROCESS

THE LEARNERS WILL BE ABLE TO:

CONTRIBUTIONS OF KEYNES IN ECONOMICS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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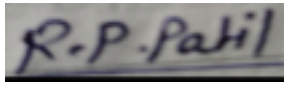
ECO IX : HISTORY OF ECONOMIC THOUGHT **Module 3: Keynesian Ideas**	Employment Theory- Money- Wage Rigidity Model- Multiplier and accelerator and their interaction - Trade Cycle - Inflation -Role of Fiscal Policy - Keynesian Economics and Developing Countries	12	**Prof. Raykhelkar,' Aarthik Vichara cha Etihas',** Vidya books publishers. **Dr.Chavhan N.L.,'Pragat Sukshmalakshi Arthashastra',** Prashant Publication. **Dr.Kulkarni S.P," Aarthik Vichargatha",** Shree Sainath Prakashan, Nagpur	Group Discussion,PPT ,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS
CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: OCTOBER ACADEMIC YEAR: 2022-2023



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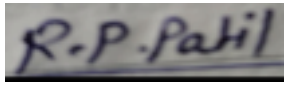
Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashwant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:

THE VERY PURPOSE OF THIS COURSE IS TO PROVIDE INFORMATION ABOUT THE BIOGRAPHY AND CONTRIBUTION OF THE MOST INFLUENTIAL ECONOMISTS WHO INFLUENCED THE ECONOMIC FRATERNITY AND TO WHOM WE ARE OBLIGED TO FOR SHAPING UP THE ECONOMIC THOUGHT PROCESS

THE LEARNERS WILL BE ABLE TO: FOCUS ON POST KEYNESIAN ECONOMICS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX : HISTORY OF ECONOMIC THOUGHT Module: 4 Post Keynesian Economics	Post-Keynesian Economics Supply Side Economics -Hayek's Theory of Trade Cycle- Life Cycle theory Consumption- Friedman: Theory of Demand for Money - Long-Run Philips Curve - Mankiw's New Keynesian Model - Stagflation.	12	. **Prof. Raykhelkar,' Aarthik Vichara cha Etihas',** Vidya books publishers. **Dr.Chavhan N.L.,'Pragat Sukshmalakshi Arthashastra',** Prashant Publication.	Group Discussion, PPT,Quiz



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			Dr.Kulkarni S.P," Aarthik Vichargatha", Shree Sainath Prakashan, Nagpur.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

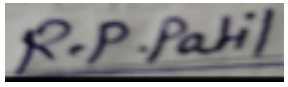
CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: DECEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

This paper aims to provide the information about the biography and contribution of various economic thinkers. This paper is framed with the objective of making students aware of the varying phases of economic thoughts and development of that into economic science.

THE LEARNERS WILL BE ABLE TO:

Students get familiarized with the leading Indian economists who significantly contributed to the stream of Indian economic thought.



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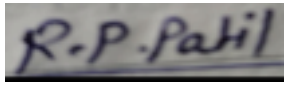
NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX : **HISTORY OF ECONOMIC THOUGHT-II** **Module 1: Indian Economic Thought**	Kautilya on welfare state -Dadabhai Naoroji's Thoughts on Drain Theory- Ranade's Case on Protection - R. C. Dutt on Imperialism - Land Tax and Public Finance - Gopal Ganesh Agarkar.	06	**Prof. Raykhelkar,' Aarthik Vicharacha Etihas',** Vidya books publishers. **Dr.Chavhan N.L.,'Pragat Sukshmalakshi Arthashastra',** Prashant Publication. **Dr.Kulkarni S.P," Aarthik Vichargatha"**, Shree Sainath Prakashan, Nagpur	Group Discussion, PPT,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)



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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

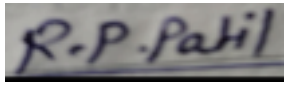
CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

THIS PAPER AIMS TO PROVIDE THE INFORMATION ABOUT THE BIOGRAPHY AND CONTRIBUTION OF VARIOUS ECONOMIC THINKERS. THIS PAPER IS FRAMED WITH THE OBJECTIVE OF MAKING STUDENTS AWARE OF THE VARYING PHASES OF ECONOMIC THOUGHTS AND DEVELOPMENT OF THAT INTO ECONOMIC SCIENCE.

THE LEARNERS WILL BE ABLE TO: FOCUS ON MAHATMA PHULE' S AGRICULTURE VIEW & GANDHIAN THOUGHT

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX : **HISTORY OF ECONOMIC THOUGHT-II**	Mahatma Phule's Views on Agriculture - Reasons of Farmer's Poverty - Gandhian Economic Thoughts on Self-Sufficient Village Economy - Dignity of Labour – Trusteeship - and Sarvodaya	06	**Prof. Raykhelkar,' Aarthik Vichara cha Etihas'**, Vidya books publishers.	Group Discussion, PPT,Quiz



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Module 2: Economic Thought of Mahatma Phule and Gandhi			**Dr.Chavhan N.L.,'Pragat Sukshmalakshi Arthashastra'**, Prashant Publication. **Dr.Kulkarni S.P," Aarthik Vichargatha",** Shree Sainath Prakashan, Nagpur	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

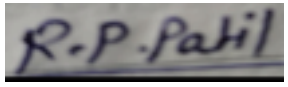
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

This paper aims to provide the information about the biography and contribution of various economic thinkers. This paper is framed with the objective of making students aware of the varying phases of economic thoughts and development of that into economic science.

THE LEARNERS WILL BE ABLE TO:



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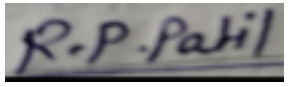
NAAC accredited "B" Grade, 2.69 CGPA

CONTRIBUTIONS OF DR. B.R. AMBEDKAR AND DR.MANMOHAN SINGH IN ECONOMICS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX : HISTORY OF ECONOMIC THOUGHT-II Module 3: Economic Thought of Dr. B.R. Ambedkar, G.K. Gokhale and Dr. Manmohan Singh	Dr. Ambedkar's Case for State Socialism - Problem of Rupee - Public Finance – G.K. Gokhale on Development and Welfare - Dr. Manmohan Singh's ' Three Steps' to Stem India's Economic Crisis	12	**Prof. Raykhelkar,' Aarthik Vicharacha Etihas',** Vidya books publishers. **Dr. Chavhan N.L.,'Pragat Sukshmalakshi Arthashastra'**, Prashant Publication. **Dr.Kulkarni S.P," Aarthik Vichargatha",** Shree Sainath Prakashan, Nagpur	Group Discussion, PPT,Quiz



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			Dr. Kulkarni,B. D.,Dr.Dhamdhere S.V., " Aarthik Vichar va Vicharvanta", Diamond Publications	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

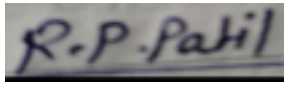
CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

THIS PAPER AIMS TO PROVIDE THE INFORMATION ABOUT THE BIOGRAPHY AND CONTRIBUTION OF VARIOUS ECONOMIC THINKERS. THIS PAPER IS FRAMED WITH THE OBJECTIVE OF MAKING STUDENTS AWARE OF THE VARYING PHASES OF ECONOMIC THOUGHTS AND DEVELOPMENT OF THAT INTO ECONOMIC SCIENCE.

THE LEARNERS WILL BE ABLE TO:

KNOW CONTRIBUTION OF NOBEL PRIZE WINNER ECONOMIST.



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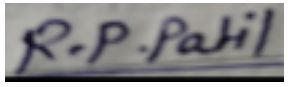
Yashwant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX : HISTORY OF ECONOMIC THOUGHT-II Module 4: Nobel Prize Winners in Economics	Dr. Amartya Sen (1998) , Robert. A. Mundell (1999) , Joseph Stiglitz(2001) , Dr. Abhijeet Banarjee (2019)	12	**Prof. Raykhelkar,' Aarthik Vichara cha Etihas'**, Vidya books publishers. **Dr.Chavhan N.L.,'Pragat Sukshmalakshi Arthashastra'**, Prashant Publication. **Dr.Kulkarni S.P," Aarthik Vichargatha"**, Shree Sainath Prakashan, Nagpur Dr. Kulkarni,B. D.,Dr.Dhamdhere S.V., " Aarthik Vichar va Vicharvanta", Diamond Publications	Group Discussion, PPT,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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R.P.Patil

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: JULY -DEC ACADEMIC YEAR: 2022-23

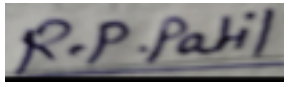
LEARNING OBJECTIVE/S:

THE COURSE IS DESIGNED TO PROVIDE AN UNDERSTANDING OF THE FUNDAMENTALS OF INSURANCE. WITH THE OPENING OF THE INSURANCE SECTOR TO PRIVATE PLAYERS, THE INTEREST IN THE SUBJECT HAS INCREASED. THE PAPER ON ECONOMICS OF INSURANCE ATTEMPTS TO PROVIDE A FAIRLY COMPREHENSIVE VIEW OF THE SUBJECT TO THE UNDERGRADUATE STUDENTS IN ECONOMICS.

THE LEARNERS WILL BE ABLE TO:

Identify and define basic terms and concepts of insurance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VIII : ECONOMICS OF INSURANCE - I	Definition of Insurance, Characteristics of Insurance, Principles of Insurance, Distinction between		Dr. PK Gupta (2011), Insurance & Risk Management, Himalaya Publishing House.	



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Module 1: Introduction	Assurance and Insurance .	04	https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.insuranceinstituteofindia.com/web/guest/ic-33-marathi&ved=2ahUKEwio3_K9_JjxAhW7zzgGHTh-DF8QFnoECAoQAQ&usg=AOvVaw2NhuYgu1zKZUIaTSYKgW6P	Group Discussion, PPT,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

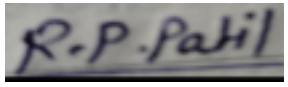
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

THE COURSE IS DESIGNED TO PROVIDE AN UNDERSTANDING OF THE FUNDAMENTALS OF INSURANCE. WITH THE OPENING OF THE INSURANCE SECTOR TO PRIVATE PLAYERS, THE INTEREST IN THE SUBJECT HAS INCREASED. THE PAPER ON ECONOMICS OF INSURANCE ATTEMPTS TO PROVIDE A FAIRLY COMPREHENSIVE VIEW OF THE SUBJECT TO THE UNDERGRADUATE STUDENTS IN ECONOMICS.



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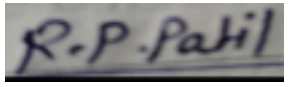
THE LEARNERS WILL BE ABLE TO:

Identify and define basic terms and concepts of insurance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VIII : ECONOMICS OF INSURANCE - I **Module 1: Introduction**	Purpose and need of insurance, Functions of Insurance, Classification of Insurance, Limitations of Insurance.	08	Dr. PK Gupta (2011), Insurance & Risk Management, Himalaya Publishing House. https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.insuranceinstituteofindia.com/web/guest/ic-33-marathi&ved=2ahUKEwio3_K9_JjxAhW7zzgGHTh-DF8QFnoECAoQAQ&usg=AOvVaw2NhuYgu1zKZUIaTSYKgW6P	Group Discussion, PPT,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: SEPTEMBER ACADEMIC YEAR: 2022-23

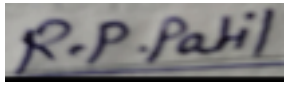
LEARNING OBJECTIVE/S:

THE COURSE IS DESIGNED TO PROVIDE AN UNDERSTANDING OF THE FUNDAMENTALS OF INSURANCE. WITH THE OPENING OF THE INSURANCE SECTOR TO PRIVATE PLAYERS, THE INTEREST IN THE SUBJECT HAS INCREASED. THE PAPER ON ECONOMICS OF INSURANCE ATTEMPTS TO PROVIDE A FAIRLY COMPREHENSIVE VIEW OF THE SUBJECT TO THE UNDERGRADUATE STUDENTS IN ECONOMICS.

THE LEARNERS WILL BE ABLE TO:

KNOW RECENT TRENDS IN INSURANCE SECTOR

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/



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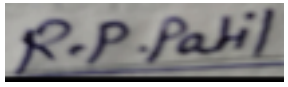
				ICT TOOLS USED
ECO VIII : ECONOMICS OF INSURANCE - I **Module 3: Recent Trends in Insurance Sector**	Insurance and economic development, Insurance institutions as financial intermediaries; insurance institution as investment institution; Growth & Performance of Public & Private Insurance Companies in India: Life and Non-Life sector including foreign collaborations;	06	Dr. PK Gupta (2011), Insurance & Risk Management, Himalaya Publishing House. https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.insuranceinstituteofindia.com/web/guest/ic-33-marathi&ved=2ahUKEwio3_K9_JjxAhW7zzgGHTh-DF8QFnoECAoQAQ&usg=AOvVaw2NhuYgu1zKZUIaTSYKgW6P	Group Discussion, PPT,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)



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NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: OCTOBER ACADEMIC YEAR: 2022-23

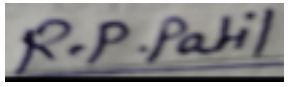
LEARNING OBJECTIVE/S:

THE COURSE IS DESIGNED TO PROVIDE AN UNDERSTANDING OF THE FUNDAMENTALS OF INSURANCE. WITH THE OPENING OF THE INSURANCE SECTOR TO PRIVATE PLAYERS, THE INTEREST IN THE SUBJECT HAS INCREASED. THE PAPER ON ECONOMICS OF INSURANCE ATTEMPTS TO PROVIDE A FAIRLY COMPREHENSIVE VIEW OF THE SUBJECT TO THE UNDERGRADUATE STUDENTS IN ECONOMICS.

THE LEARNERS WILL BE ABLE TO:

FOCUS ON GOVERNMENT POLICIES IN INDIA.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VIII : ECONOMICS OF INSURANCE - I	Disinvestment of LIC, Listing of Public & Private Insurance companies in Stock market; Government policies in insurance – Ayushman Bharat	06	Dr. PK Gupta (2011), Insurance & Risk Management, Himalaya Publishing House.	Group Discussion,



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Module 3: Recent Trends in Insurance Sector	Yojna, Pradhan Mantri Suraksha Bima Yojna, Pradhan Mantri Jeevan Jyoti Bima Yojna.		https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.insuranceinstituteofindia.com/web/guest/ic-33-marathi&ved=2ahUKEwio3_K9_JjxAhW7zzgGHTh-DF8QFnoECAoQAQ&usg=AOvVaw2NhuYgu1zKZUIaTSYKgW6P	PPT,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

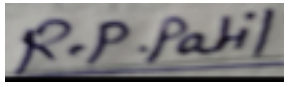
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: DECEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The course is designed to provide an understanding of the fundamentals of insurance. With the opening of the insurance sector to private players, the interest in the subject has increased. The paper on Economics of Insurance attempts to provide a fairly comprehensive view of the subject to the undergraduate students in Economics.



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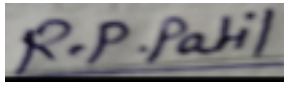
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

THE LEARNERS WILL BE ABLE TO:

Identify and define basic terms and concepts of life, health & general insurance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VIII : ECONOMICS OF INSURANCE - II **Module 1: Introduction to Life Insurance**	Meaning and Definition, Features of Life Insurance, Benefits of Life Insurance - Method of risk classification in Life Insurance - Treatment of Sub-standard risk in Life Insurance - Types of life insurance policies -Term insurance plan, Endowment policy - ULIP plan - Retirement plan -	05	Dr. PK Gupta (2011), Insurance & Risk Management, Himalaya Publishing House. https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.insuranceinstituteofindia.com/web/guest/ic-33-marathi&ved=2ahUKEwio3_K9_JjxAhW7zzgGHTh-DF8QFnoECAoQAQ&usg=AOvVaw2NhuYgu1zKZUIaTSYKgW6P	Group Discussion, PPt,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR: 2022-23

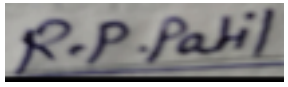
LEARNING OBJECTIVE/S:

The course is designed to provide an understanding of the fundamentals of insurance. With the opening of the insurance sector to private players, the interest in the subject has increased. The paper on Economics of Insurance attempts to provide a fairly comprehensive view of the subject to the undergraduate students in Economics.

THE LEARNERS WILL BE ABLE TO:

Identify and define basic terms and concepts of life, health & general insurance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/



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				ICT TOOLS USED
ECO VIII : ECONOMICS OF INSURANCE - II **Module 1: Introduction to Life Insurance**	Calculation of net Premium - Calculation of single premium for one year term insurance policy - Calculation of single premium for five year term policy - Calculation of single premium for pure endowment insurance policy and calculation of single premium for ordinary endowment policy.	07	Dr. PK Gupta (2011), Insurance & Risk Management, Himalaya Publishing House.	Group Discussion, PPt,Quiz

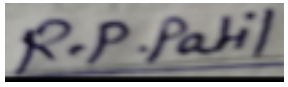
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:



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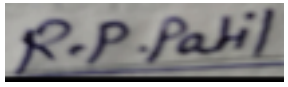
THE COURSE IS DESIGNED TO PROVIDE AN UNDERSTANDING OF THE FUNDAMENTALS OF INSURANCE. WITH THE OPENING OF THE INSURANCE SECTOR TO PRIVATE PLAYERS, THE INTEREST IN THE SUBJECT HAS INCREASED. THE PAPER ON ECONOMICS OF INSURANCE ATTEMPTS TO PROVIDE A FAIRLY COMPREHENSIVE VIEW OF THE SUBJECT TO THE UNDERGRADUATE STUDENTS IN ECONOMICS.

THE LEARNERS WILL BE ABLE TO: FOCUS ON INSURANCE ACT AND IRDAI

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VIII : ECONOMICS OF INSURANCE - II **Module 3: IRDAI & Rural Insurance**	The Insurance Act, 1938 (as amended)-The Insurance Regulatory and Development Authority Act, 1999 (as amended) -The Regulatory Body- IRDAL duties-functions-powers and role-	12	Dr. PK Gupta (2011), Insurance & Risk Management, Himalaya Publishing House. https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.insuranceinstituteofindia.com/web/guest/ic-33-marathi&ved=2ahUKEwio3_K9_JjxAhW7zzgGHTh-DF8QFnoECAoQAQ&usg=AOvVaw2NhuYgu1zKZUIaTSYKgW6P	Group Discussion, Chalk & Board,Quiz



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

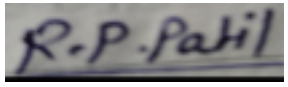
CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The course is designed to provide an understanding of the fundamentals of insurance. With the opening of the insurance sector to private players, the interest in the subject has increased. The paper on Economics of Insurance attempts to provide a fairly comprehensive view of the subject to the undergraduate students in Economics.

THE LEARNERS WILL BE ABLE TO:

KNOW FUNCTIONS OF IRDAI AND RURAL INSURANCE



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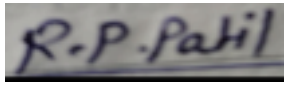
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VIII : ECONOMICS OF INSURANCE - II **Module 3: IRDAI & Rural Insurance**	Rural Insurance: Need and potential of rural insurance - IRDAI provisions on obligations of insurers to rural and social sectorNeed and significance of Micro Insurance	12	Dr. PK Gupta (2011), Insurance & Risk Management, Himalaya Publishing House.	Group Discussion, Chalk & Board Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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R.P.Patil

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TEACHING PLAN (UNIT PLAN)

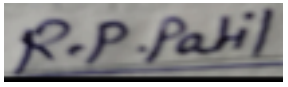
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: JULY -DEC ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Enables students to get knowledge on new market structure, imperfect competition.

.THE LEARNERS WILL BE ABLE TO:
Provides understanding on the welfare economics and economics of information

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV: ADVANCED MICROECONOMICS - III **Module 1: General Equilibrium and Welfare Economics**	Concept of General Equilibrium and Walrasian General Equilibrium Model - Pareto Optimality – The Pareto Optimality Condition of Social Welfare	02	**Dr.Chavhan N.L., 'Pragat Sukshmalakshi Arthashastra',** Prashant Publications.	Group Discussion, PPT,Quiz



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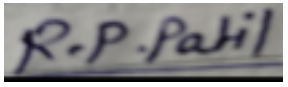
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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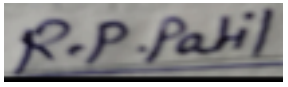
ECO IV: ADVANCED MICROECONOMICS - III **Module 1: General Equilibrium and Welfare Economics**	Marginal Conditions for Pareto Optimal Resource Allocation - Perfect Competition and Pareto Optimality - Arrow's Impossibility Theorem	10	**Dr. Chavhan N.L., 'Pragat Sukshmalakshi Arthashastra',** Prashant Publications. Prof.Deshmukh Ram,'Aadhunik Sthul Arthashastra', Vidya books publishers.	Group Discussion, PPT,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

Enables students to get knowledge on new market structure, imperfect competition.

.
THE LEARNERS WILL BE ABLE TO: Focus on Monopoly



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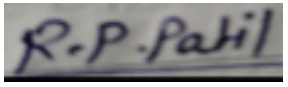
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV: ADVANCED MICROECONOMICS - III Module 2: Market Structure: Monopoly and Monopolistic Competition	Concept of Monopoly - Measurement of Monopoly Power - Price Discrimination: Types and Classification of Price Discrimination (Degrees of Price Discrimination) - Equilibrium under discriminating Monopoly	06	**Dr. Zamre G.N. ,'Sukshma Arthashastriya Vishleshan'**. **Dr.Chavhan N.L., 'Pragat Sukshmalakshi Arthashastra'**, Prashant Publications.	Group Discussion, PPT,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

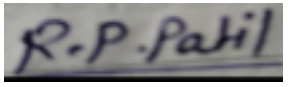
CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: OCTOBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

Enables students to get knowledge on new market structure, imperfect competition.

.
THE LEARNERS WILL BE ABLE TO: REGULATION OF MONOPOLY AND FOCUS ON MONOPOLISTIC COMPETITION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT



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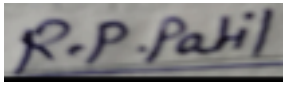
				TOOLS USED
ECO IV: ADVANCED MICROECONOMICS - III Module 2: Market Structure: Monopoly and Monopolistic Competition (14 Lectures)	Regulation of Monopoly Market Product Differentiation in Monopolistic Competition - Chamberlin's Alternative approach- Equilibrium under Monopolistic Competition - Excess Capacity	06	**Dr.Chavhan N.L., 'Pragat Sukshmalakshi Arthashastra', Prashant Publications.** **Prof Dr.Dhamdhere S.V.,'Sukshma Arthashastra'**, Diamond publications.	Group Discussion, PPT,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)



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NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: DECEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

To make students aware about Post Keynesian Synthesis and understand various aspects of Trade Cycles.

Students will be able to describe the contemporary Exchange Rate Regimes and International Monetary System

THE LEARNERS WILL BE ABLE TO:

understand various aspects of Trade Cycles

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV:	Meaning- Nature- Features and Types of Trade Cycles - Phases of Trade Cycles			

R.P.Patil

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ADVANCED MACROECONOMICS - III **Module 2: Trade Cycles**		04		Group Discussion, PPT,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

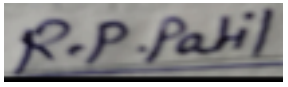
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: CONCEPTS OF REAL EXCHANGE RATE , FISCAL & EXCHANGE RATE POLICY



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV: ADVANCED MACROECONOMICS - III **Module 2: Trade Cycles**	Theories of Trade Cycles- Hawtrey's, Kaldor, Paul Samuelson and Hicks - Measures to Control Trade Cycles	08		Group Discussion, PPT,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

R.P.Patil

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TEACHING PLAN (UNIT PLAN)

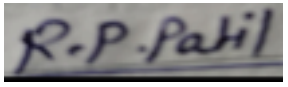
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: CONCEPT OF EXCHANGE RATE REGIMES.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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ECO IV: ADVANCED MACROECONOMICS - III **Module 3: Exchange Rate Regimes and Currency Crises**	Managed Exchange Rate- Advantage and Disadvantage - Policy of Managed Flexibility- Adjustable Peg System, Crawling Peg System, Managed Floating System, Clean and Dirty Float System	07		Group Discussion, PPT,Quiz

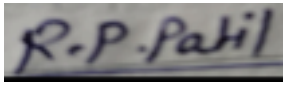
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:



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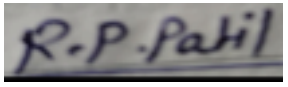
THE LEARNERS WILL BE ABLE TO: ECONOMIC CRISES.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV: ADVANCED MACROECONOMICS - III **Module 3: Exchange Rate Regimes and Currency Crises (12 Lectures)**	Balance of Payment and Exchange Rate - Is Balance of Payments Always in Balance? – Convertibility of Currency Currency Crisis-Causes, Impact and Measures.	05		Group Discussion, PPT,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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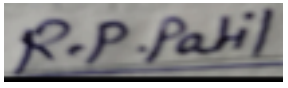
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. RUPALI PRASHIL PATIL **DEPARTMENT: ECONOMICS** **CLASS: T.Y.B.A.(MARATHI)** **SEMESTER: V** **MONTH: JULY** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: THE CONCEPT OF ECONOMIC GROWTH AND DEVELOPMENT, HDI

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: ECONOMICS OF GROWTH & DEVELOPMENT: **Module 1: Meaning of Economic Growth and Development**	**Concepts of Economic Growth and Development-Distinction between Economic Growth and Development- Concept of Human Development- H.D.I.**	**12**	**. Dr.Kavimandan Vijay,'Vikasache Arthashastra va Niyojan'**, Shree Mangesh Prakashan, Nagpur. **Prof.Sontakke,Joshi,'Aarthik**	**PPTs, Group Discussion**



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			Vrudhi aani Vikasache Arthashastra', Sheth publications	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. RUPALI PRASHIL PATIL

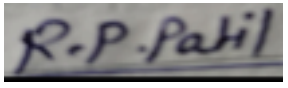
DEPARTMENT: ECONOMICS **CLASS: T.Y.B.A. (MARATHI)** **SEMESTER: V** **MONTH: AUGUST**

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: VARIOUS CONCEPTS OF GROWTH AND DEVELOPMENT.

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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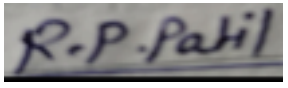
ECO V: ECONOMICS OF GROWTH & DEVELOPMENT: **Module 1: Meaning of Economic Growth and Development**	**G.D.I, Green GDP- Sen's Capability approach- Millennium Development Goals (MDGs)- Initiative by Indian government towards MDGs**	**12**	**. Dr.Kavimandan Vijay,'Vikasache Arthashastra va Niyojan',** Shree Mangesh Prakashan, Nagpur. **Prof.Sontakke,Joshi,'Aarthik Vrudhi aani Vikasache Arthashastra',** Sheth publications	**PPTs, Group Discussion, Quiz**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)



SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF:Mrs. RUPALI PRASHIL PATIL

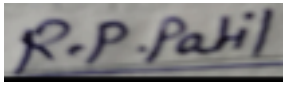
DEPARTMENT: ECONOMICS **CLASS: T.Y.B.A. (MARATHI)** **SEMESTER: V** **MONTH: SEPTEMBER**

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: VARIOUS THEORIES OF GROWTH AND DEVELOPMENT.

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: ECONOMICS OF GROWTH & DEVELOPMENT: **Module 2: Theories of Economic Development**	**Rostow's Stages of Growth; Big Push Theory- Leibenstein's Critical Minimum Effort Thesis – Harrod – Domar Growth Model**	**12**	**Dr.Kavimandan Vijay,'Vikasache Arthashastra va Niyojan',** Shree Mangesh Prakashan, Nagpur. **Prof.Sontakke,Joshi,'Aarthik Vrudhi aani Vikasache Arthashastra',**	**PPTs, Group Discussion, Quizzes**



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			Sheth publications	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Mrs. RUPALI PRASHIL PATIL

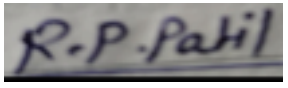
DEPARTMENT: ECONOMICS **CLASS: T.Y.B.A. (MARATHI)** **SEMESTER: V** **MONTH: OCTOBER**

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO KNOW: VARIOUS THEORIES OF GROWTH AND DEVELOPMENT.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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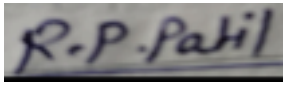
ECO V: ECONOMICS OF GROWTH & DEVELOPMENT: **Module 2: Theories of Economic Development**	**– Lewis Model of Unlimited Supply of Labour – Ragner Nurske's Theory of Disguised Unemployment- Schumpeter's Theory of Development**	**12**	**Dr.Kavimandan Vijay,'Vikasache Arthashastra va Niyojan',** Shree Mangesh Prakashan, Nagpur. **Prof.Sontakke,Joshi,'Aarthik Vrudhi aani Vikasache Arthashastra',** Sheth publications	**PPTs, Group Discussion, Quizzes**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. RUPALI PRASHIL PATIL **DEPARTMENT: ECONOMICS** **CLASS: T.Y.B.A. (MARATHI)** **SEMESTER: VI** **MONTH: DECEMBER** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:



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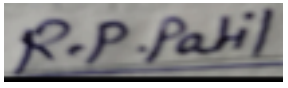
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

THE LEARNERS WILL BE ABLE TO: Understand the trade theories and determinants of trade which helps them to analyze the international trade policies.

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: INTERNATIONAL ECONOMICS: **Module 1: Introduction to Trade Theories**	Meaning, scope and importance of International Trade- Difference between Internal and International Trade - Adam Smith's Theory of International Trade – Ricardian theory of comparative cost difference Heckscher - Ohlin Theory- Leontief's Paradox- Krugman's Model	**12**	**Prof.Dr. Rasal Rajendra, 'Aantarrashriya Arthshastra',** Success Publications. **Dr. Dhamdhere S.V,'Aantarrashriya Arthashastra',** Diamond publications.	**PPTs, Group Discussion, Quizzes**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. RUPALI PRASHIL PATIL

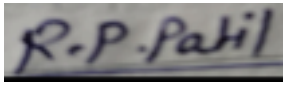
DEPARTMENT: ECONOMICS **CLASS: T.Y.B.A. (MARATHI)** **SEMESTER: VI** **MONTH: JANUARY**

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: Understand the trade theories and determinants of trade which helps them to analyze the international trade policies.

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: INTERNATIONAL ECONOMICS: Module 2: Balance of Trade and Balance of Payment	Concepts of Terms of Trade(Net barter, Gross barter and Income terms of trade)-Meaning and difference between Balance of Trade (BOT) and Balance of Payment (BOP)-Purchasing Power Parity theory, Law of Reciprocal Demand-Marshall-Edgeworth Offer curves, Gains from trade-Case for and against Free Trade and Protection policy	12	Prof.Dr. Rasal Rajendra, 'Aantarrashriya Arthshastra', Success Publications. Dr. Dhamdhere S.V,'Aantarrash	PPTs, Group Discussion, Quizzes



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			riya Arthashastra', Diamond publications.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

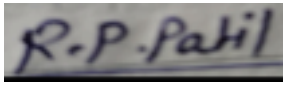
NAME OF THE STAFF: Mrs. RUPALI PRASHIL PATIL

DEPARTMENT: ECONOMICS **CLASS: T.Y.B.A. (MARATHI)** **SEMESTER: VI** **MONTH: FEBRUARY**

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: understand the role of various international institutions and trade blocks and their approaches in framing the policies for trade



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Vidhya Dayanand Patil College of Arts
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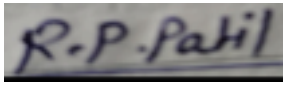
PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: INTERNATIONAL ECONOMICS: Module 3: Foreign Exchange Market	Meaning and Functions of Foreign Exchange Market-Exchange rate determination, Factors influencing foreign exchange rate-Managed Flexibility-SWAP Market, Components of foreign exchange reserves Foreign Aid Vs Foreign Trade, FDI and MNCs	12	Prof.Dr. Rasal Rajendra, 'Aantarrashriya Arthshastra', Success Publications. Dr. Dhamdhere S.V,'Aantarrashriya Arthashastra', Diamond publications.	PPTs, Group Discussion, Quizzes

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. RUPALI PRASHIL PATIL

LEARNING OBJECTIVE/S:



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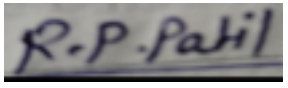
THE LEARNERS WILL BE ABLE TO: understand the role of various international institutions and trade blocks and their approaches in framing the policies for trade

PAPER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: INTERNATIONAL ECONOMICS: **Module 4: International Economic Institutions and Economic Integration**	**IMF, World Bank - Role and functions-WTO-Objectives, Functions and Agreements with respect to TRIPS,TRIMS, GATS, AoA - Forms and objectives of Economic Integration-Cartels-Trade Blocs, ASEAN-European Union (EU)- NAFTA and SAARC.**	**12**	**Prof.Dr. Rasal Rajendra, 'Aantarrashriya Arthshastra',** Success Publications. **Dr. Dhamdhere S.V,'Aantarrashriya Arthashastra',** Diamond publications.	**PPTs, Group Discussion, Quizzes**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

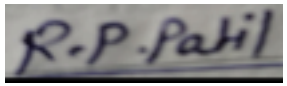
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Patil DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (MARATHI) SEMESTER: III MONTH: JULY -DEC ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: MEANING OF MACROECONOMICS AND CONCEPTS OF NATIONAL INCOME

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS I MODULE I: Introduction to	Introduction: Meaning and Scope of Macro Economics; Concepts of National Income: GNP, NNP, NDP, Per Capita Income, Personal Income and Disposal Income; Methods and Difficulties in Measurement of National Income; Circular Flow of National Income: Closed Economy (Two	12	1) N. Gregory Mankiw, (2015), Principle of Macroeconomics, 7th edition,	Group Discussion,, PPT, QUIZ



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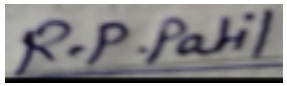
Macro Economics and National Income	and Three Sector) and Open Economy Models (Four Sector Model)		Cengage Learning. 2) Abel A. B. B. S. Beranake and D. Croushore (2011), Macroeconomics, Pearson, New Delhi	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: RELATIONSHIP AMONG INCOME, CONSUMPTION, SAVINGS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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		ALLOTTED		
ECO II:MACRO ECONOMICS I MODULE II: Consumption and Investment	Consumption and Investment; Says Law of Market; Theory of Effective Demand; Consumption Function; Investment Function; Marginal Efficiency of Capital and Rate of Interest- Investment Multiplier	12	1) N. Gregory Mnakiw, (2015), Principle of Macroeconomics, 7th edition, Cengage Learning. 2) Abel A. B. B. S. Beranake and D. Croushore (2011), Macroeconomics, Pearson, New Delhi	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: DEMAND AND SUPPLY OF MONEY

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**

R.P. Patil

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
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		ALLOTTED		
ECO II:MACRO ECONOMICS I MODULE III: Supply of Money and Demand for Money	Supply of Money; Determinants of Money Supply; Velocity of Circulation of Money; RBI's Approach to Measurement of Money Supply; Demand for Money: Classical, Keynesian and Friedman's Approaches	12	1) Ahuja H. L., (2008), Macroeconomics theory and Policy, S. Chand and company Ltd. New Delhi. 2) Dwivedi D.N., (2007), Macroeconomics theory and Policy, TATA Mcgraw - Hill Publication company Ltd. Delhi.	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

R.P.Patil

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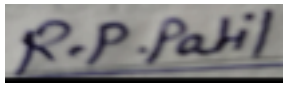
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: FUNCTIONS OF BANK

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II: MODULE IV: Banking	Banking: Commercial Bank, Functions of Commercial Banks, Multiple Credit Creation, Balance Sheet of Commercial Bank; Development in Commercial Banking Sector Since 1990-91; Central Bank: Functions of Central Bank - Traditional, Developmental, Promotional	12	1) Ahuja H. L., (2008), Macroeconomics theory and Policy, S. Chand and company Ltd. New Delhi. 2) Dwivedi D.N., (2007), Macroeconomics theory and Policy,	Group Discussion, PPT, QUIZ



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			TATA Mcgraw - Hill Publication company Ltd. Delhi.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: MEANING , TYPES , CONCEPTS OF INFLATION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

R.P.Patil

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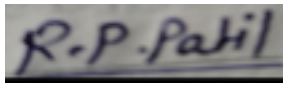
ECO II: MACRO ECONOMICS II MODULE I: Inflation	Module - I: Inflation The Economics of Depression, Hyper Inflation; Inflation: Features and Causes, Demand Pull Inflation and Cost Push Inflation, Effects of Inflation; Nature of Inflation in Developing Economy; Phillips Curve; Stagflation: Meaning, Causes and Consequences	12	1) N. Gregory Mankiw, (2015), Principle of Macroeconomics, 7th edition, Cengage Learning. 2) Abel A. B. B. S. Beranake and D. Croushore (2011), Macroeconomics, Pearson, New Delhi	Group Discussion,, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: MONETARY AND FISCAL POLICY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECOII: MACRO ECONOMICS II MODULE II: Economic Policy	Monetary Policy: Objectives, Instruments, Limitations, Role of Monetary Policy in Developing Economies; Fiscal Policy - Objectives, Instruments, Limitations and Role of Fiscal Policy in Developing Economies	12	1) N. Gregory Mnakiw, (2015), Principle of Macroeconomics, 7th edition, Cengage Learning. 2) Abel A. B. B. S. Beranake and D. Croushore (2011), Macroeconomics, Pearson, New Delhi	Group Discussion, PPT, QUIZ

R.P.Patil

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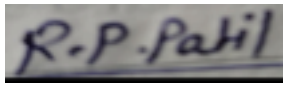
NAAC accredited "B" Grade, 2.69 CGPA

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO:Post Keynesian Economics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECOII: MACRO ECONOMICS II MODULE III: Post Keynesian Economics	The IS-LM Model of Integration of Commodity and Money Market; IS Curve: Derivation of IS Curve, Shift in IS Curve, Equilibrium in Goods Market; LM Curve: Derivation of LM Curve, Shift in LM Curve, Equilibrium in Money Market; Simultaneous Equilibrium in Goods and Money Market	12	1) Ahuja H. L., (2008), Macroeconomics theory and Policy, S. Chand and company Ltd. New Delhi. 2) Dwivedi D.N., (2007), Macroeconomics theory	Group Discussion, PPT, QUIZ



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			and Policy, TATA Mcgraw - Hill Publication company Ltd. Delhi.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12
THE LEARNERS WILL BE ABLE TO: UNDERSTAND EXTERNAL SECTOR

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

R.P.Patil

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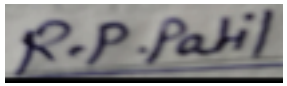
Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

ECO II: MACRO ECONO MICS II: MODULE IV: External Sector	Balance of Payment: Structure, Disequilibrium in Balance of Payment, Types, Causes and Measures to Correct Balance of Payment Disequilibrium; Foreign Exchange Market: Determination of Exchange Rate: Fixed and Flexible Exchange Rate; Spot and Forward Exchange Rate; Exchange Rate Policy	12	1) Ahuja H. L., (2008), Macroecono mics theory and Policy, S. Chand and company Ltd. New Delhi. 2) Dwivedi D.N., (2007), Macroecono mics theory and Policy, TATA Mcgraw - Hill Publication company Ltd. Delhi.	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

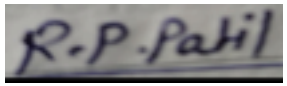
NAME OF THE STAFF: **MS. Rupali Prashil Patil** DEPARTMENT: ECONOMICS

CLASS: SY.B.A. (MARATHI) SEMESTER: III MONTH: JULY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: EDUCATE THE STUDENTS ABOUT THE UNIQUE POSITION OF DEMOGRAPHY AMONG VARIOUS BRANCHES OF POPULATION SCIENCE.IT ALSO THROWS LIGHT ON VARIOUS POPULATION THEORIES,MEASURES AND THE TRENDS IN GROWTH OF POPULATION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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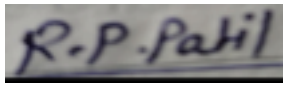
Demography **Unit-1** **Introduction**	How demography is different from population science Applications in other disciplines Demography-Its definition, nature & Scope. It's relation with other disciplines. .	08	BhendeA.A.&TaraKanitkar(1982)–'PrinciplesofPopulationStudies'–HimalayaPublishingHouse,Bombay. Dr.D.D.Kachole(2001)–'Demography'–KailashaPublication,Aurangabad.	Group Discussion ,PPT, Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: KNOW VARIOUS THEORIES OF POPULATION & TRENDS IN GROWTH OF POPULATION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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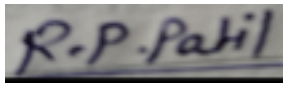
Demography **Unit-1** **Introduction**	Theory of Population-Malthus Theory. Optimum theory of Population Theory of demographic transition. Trends in population growth-Developed Vs Developing Countries. Features of Indian Population.	08	Dr.D.D.Kachole(2001)–'Demography'–KailashaPublication,Aurangabad. GovernmentofIndia–(VariousReports),CensusofIndia,NewDelhi.Ahirrao-Alizad-Dapte-Varat-Bhose(2001)–'Loksankhya'–NiraliPublication,Pune.	Group Discussion ,PPT, Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

LEARNING OBJECTIVE/S:



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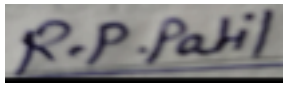
THE LEARNERS WILL BE ABLE TO: EDUCATE THE STUDENTS ABOUT THE CONCEPT OF FERTILITY AND MORTALITY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit-3 **Basic concepts of measures**	Concept related to fertility and mortality Crude birth rate & death rate. Age specific birthrate & death rate Standardized birth rate &death rate.	08	Dr.D.D.Kachole(2001)–'Demography' –KailashaPublication,Aurangabad GovernmentofIndia–(VariousReports),CensusofIndia,NewDelh	Group Discussion, PPT, Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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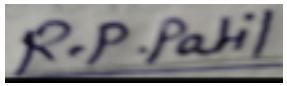
LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: KNOW MEASURES OF BIRTH RATE AND DEATH RATE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit-3 **Basic concepts of measures**	Standardize birth rate Standardize death rate Methods to rectify the errors in Age data-Whipples Index, Myers Index ,UN Method- Relative merits and demerits	08	Dr.D.D.Kachole(2001)–'Demography'–KailashaPublication,Aurangabad GovernmentofIndia–(VariousReports),CensusofIndia,NewDelh	Group Discussion,PPT, Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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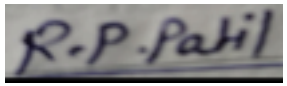
LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: CONCEPT OF MORTALITY & LIFE TABLE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit-1 **Fertility,Nuptiality & Mortality**	Mortality_Concept&Factorsaffecting mortality. LifeTable-Concept Its Importance,	08	Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Ahirrao-Alizad-Dapte-Varat-Bhose (2001) – 'Loksankhya' – Nirali Publication, Pune.	Group Discussion, PPT, Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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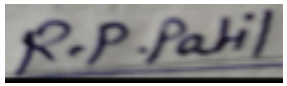
LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: CONCEPT OF NUPTIALITY AND MORTALITY.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit-2 **Migration Urbanization**	Nuptiality- Concept & Factors Affecting Nuptiality Mortality- Concept & factors Affecting Mortality	08	.Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Ahirrao-Alizad-Dapte-Varat-Bhose (2001) – 'Loksankhya' – Nirali Publication, Pune.	Group Discussion, PPT, Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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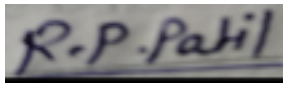
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KNOW CONCEPT OF MIGRATION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit-2 **Migration Urbanization**	Migration-Concept Types FactorsaffectingMigration TheoryofMigration(Harris&TodaroModel) Issues Related To Migration	10	Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Dr.Kavimandan Vijay,'Vikasache Arthashastra va Niyojan', Shree Mangesh Prakashan, Nagpur.	Group Discussion, PPT, Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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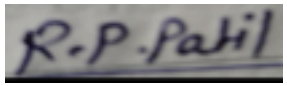
LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO:

URBANIZATION AND PROBLEMS OF URBANIZATION IN INDIA.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit-3	Urbanization_Concept,Trends pattern of Urbanization in India. Problems ofUrbanizationinIndia.(Poverty,Goods Supply,Water,Sanitation,housing,Slimarea,Employment,health,education,transport,environmental degradation	06	Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Dr.Kavimandan Vijay,'Vikasache Arthashastra va Niyojan', Shree Mangesh Prakashan, Nagpur.	Group Discussion,PPT, Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

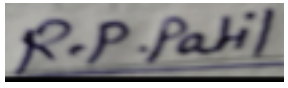
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Patil DEPARTMENT: ECONOMICS
CLASS: F.Y.B.A. (Mar) SEMESTER: I MONTH: OCTOBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND BASIC PRINCIPLES OF MICROECONOMIC THEORY.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – I Module - II: Ten Principles of Economics & Module 3	Trade-Off Faced by the Individuals; Significance of Opportunity Cost in Decision Making; Thinking at the Margin; Responses to incentives; Benefits from Exchange; Organization of Economic Activities through Markets and its Benefits; Role of Government in improving Market Outcomes; Dependence of Standard of Living on Production; Growth in Quantity of Money; Inflation and Unemployment Trade Off	18	N.Gregory Mankiw, (2015), "Principles of Microeconomics" 7th edition- Cengage Learning Sukshma Aarthashashra, Ram Deshmukh	Group Discussion, PPT, QUIZ .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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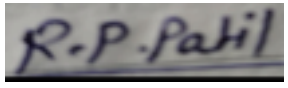
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: GET AN INTRODUCTION TO SUPPLY AND DEMAND AND THE BASIC FORCES THAT DETERMINE EQUILIBRIUM IN A MARKET ECONOMY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – I Module –III	Module - III: Markets, Demand and Supply What is a Market; What is Competition; Demand Curves: Market Demand versus Individual Demand, Movements along the Demand Curve, Shifts in the Demand Curve; Supply Curves: Market Supply and Individual Supply, Shifts in Supply Curve	18	Sukshmalakshi Aarthashashra, RamDeshmukh ,	Group Discussion, . PPT, QUIZ .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: GET AN INTRODUCTION TO SUPPLY AND DEMAND AND THE BASIC FORCES THAT DETERMINE EQUILIBRIUM IN A MARKET ECONOMY, CONCEPT OF ELASTICITY



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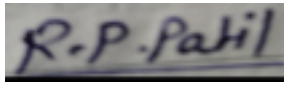
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – I Module –III	Market Equilibrium - Price Elasticity of Demand ,Concepts of Income Elasticity of Demand, Cross Elasticity of Demand and Promotional Elasticity of Demand	18	Sukshalakshi Aarthashashra, RamDeshmukh,	Group Discussion, . PPT, QUIZ .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: CONCEPT OF PRODUCTION & KNOW VARIOUS ECONOMIC THEORIES RELATED TO PRODUCTION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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ECO II: MACRO ECONOMICS II MODULE I: Production Analysis	Module - I: Production Analysis Production Function: Concept And Types; Concepts of Total, Average and Marginal Product Law of Variable Proportion and Returns to Scale, Isoquant and Producer's Equilibrium	12	H.L.Ahuja, (2016), "Advance Economics Theory" S.Chand & Company Ltd	Group Discussion,, PPT, QUIZ

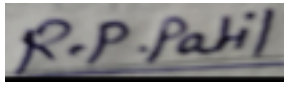
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO:

KNOW VARIOUS THEORIES OF DISTRIBUTION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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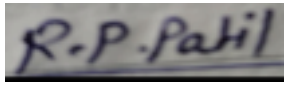
		ALLOTTED		
ECOII: MACRO ECONOMICS II MODULE III: **Factor Pricing**	Marginal Productivity Theory of Distribution; Rent: Ricardian Theory of Rent, Modern Theory of Rent, Quasi Rent; Wages: Modern Theory of Wages; Collective Bargaining; Supply Curve of Labour;	12	Deshmukh Mahadev,Vibhute Somnath ,"Sukshmalakshi AArthashatra"Sheth Publications	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12
LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: KNOW VARIOUS THEORIES OF INTEREST

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**



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ECOII: MACRO ECONO MICS II MODULE III: FACTOR PRICING	Interest: Classical Theory of Interest, Loanable Funds Theory of Interest; Profit: Risk and Uncertainty Theory, Innovation Theory	12	. Deshmukh Mahadev,Vib hute Somnath ,"Sukshmala kshi AArthashatra "Sheth Publicatio	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

R.P.Patil

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

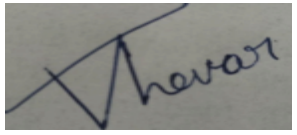
CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:**JUNE-DEC **ACADEMIC YEAR:** 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 1: Introduction	Meaning and Scope of Industrial Economics, Industrial Profile : Private sector - Performance and Problems; Cooperatives - features, types, merits and demerits; Public Sector - Role, Performance and Problems, Diversification and Industrial Combinations - Motives for Mergers and Acquisitions.	12	Desai S.S.M. and Bhalerao N, Industrial Economy of India, Himalaya Publishing House, Mumbai, 2008. 6	CHALK AND DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

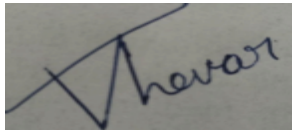
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JULY **ACADEMIC YEAR:** 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND	Determinants of Industrial Location, Theories of Industrial Location - Weber's and	12	Datt R. and Sundaram K.P.M, Indian	CHALK AND DUSTER



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SIGNATURE OF THE H.O.D.

LABOUR ECONOMICS Module 2: Industrial Location and Problem of Regional Imbalance	Sargent Florence's Theories, Dispersion of Industries and the Problem of Regional Imbalance		Economy, S.Chand& Co., New Delhi, 2009	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

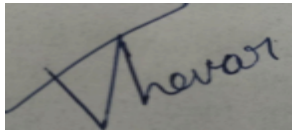
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:**AUGUST **ACADEMIC YEAR:** 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.



SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

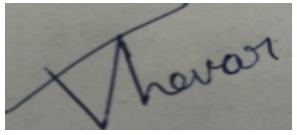
Late Shri. Vishnu Waman Thakur Charitable Trust
BhaskarWaman Thakur College of Science
Yashwant Keshav Patil College of Commerce
Vidya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 3: Industrial Productivity and Industrial Sickness	Concept and Measurement of Industrial Productivity, Factors Affecting Industrial Productivity, Industrial Sickness - Causes, Effects and Remedial Measures, Rationalisation - Concept, Aspects and Impact	12	Barthwal R.R, Industrial Economics, New Age International Publishers, NewDelhi,	CHALK AND DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS



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NAAC accredited "B" Grade, 2.69 CGPA

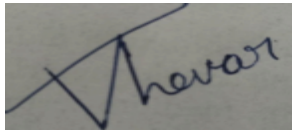
CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** SEPTEMBER **ACADEMIC YEAR:** 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 4: Industrial Development in India	New Industrial Policy, 1991; Disinvestment Policy; FIPB Revamp- Micro, Small and Medium Enterprises Development Act, 2006; National Manufacturing Policy, 2011,Recent Trends in India's Industrial Growth, Industrial Policy, 2012, Role of MNCs in the Indian Economy - Merits and Demerits, Issues in Industrial Proliferation and Environment Preservation; Pollution Control Policies.	12	Agrawal A.N, Indian Economy, New Age International Publishers, New Delhi, 2011.	CHALK AND DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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TEACHING PLAN (UNIT PLAN)

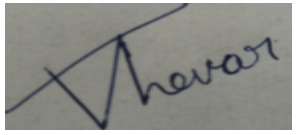
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:**JUNE **ACADEMIC YEAR:** 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECONOMICS OF INSURANCE - I Module1: Introduction	Definition of Insurance, Characteristics of Insurance, Principles of Insurance, Distinction between Assurance and Insurance ,Purpose and need of insurance, Functions of Insurance, Classification of Insurance, Limitations of Insurance.	12	5. Meltem Tumay (2009), Asymmetric Information & Adverse Selection in Insurance Markets: The	CHALK AND DUSTER



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	.		problem of Moral Hazard at dergipark.org.tr/tr/download/article-file/146009.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

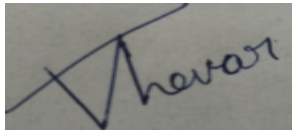
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JULY **ACADEMIC YEAR:** 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.



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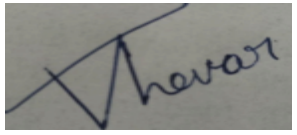
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECONOMICS OF INSURANCE - I Module 2: Risk and Risk Management	Concept of Risk, Risk Vs Uncertainty – Loss and chances of loss, Perils, Hazards, Types of Risk, Classification of Pure risk, Elements of insurable risk, Losses and methods of handling pure risk, Asymmetries of information - Adverse selection and Moral hazard in insurance, Risk management process - Risk analysis, Risk control, Risk financing, Risk transfer.	12	4. Kishore Kumar Das (2016), Insurance Sector in India: Problems, Possibilities and Prospects, IBP,	CHALK AND DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:**AUGUST **ACADEMIC YEAR:** 2022-23



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LEARNING OBJECTIVE/S:
The learners will be able to :

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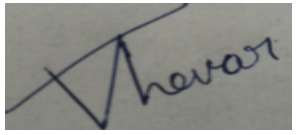
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECONOMICS OF INSURANCE - I Module 3: Recent Trends in Insurance Sector	Insurance and economic development, Insurance institutions as financial intermediaries; insurance institution as investment institution; Growth & Performance of Public & Private Insurance Companies in India: Life and Non-Life sector including foreign collaborations; Disinvestment of LIC, Listing of Public & Private Insurance companies in Stock market; Government policies in insurance – Ayushman Bharat Yojna, Pradhan Mantri Suraksha Bima Yojna, Pradhan Mantri Jeevan Jyoti Bima Yojna.	12	2. Dr. MJ Mathew (2005), Insurance Principles & Practice, RBSA Publishers.	CHALK AND DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

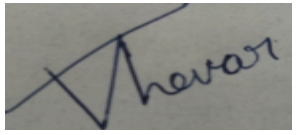
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:**SEPTEMBER **ACADEMIC YEAR:** 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECONOMICS OF INSURANCE - I **Module 4:** **Reinsurance**	Definition, Objectives of Reinsurance, Role of Reinsurance, Techniques of Reinsurance. Role of Reinsurer, Role of General Insurance Corporation of India (GIC Re), Issues and challenges in Indian Reinsurance.	12	1. Dr. PK Gupta (2011), Insurance & Risk Management, Himalaya Publishing House. .	CHALK AND DUSTER



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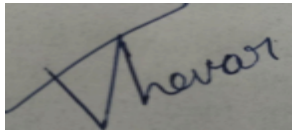
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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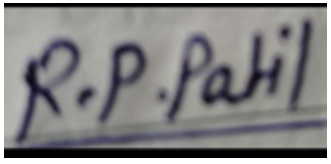
NAMEOFTHESTAFF:MS.RupaliPrashilPatil DEPARTMENT:ECONOMICS

CLASS:F.Y.B.A.(MAR) SEMESTER:I MONTH:JULY ACADEMICYEAR:2019-2020

LEARNINGOBJECTIVE/S:
THELEARNERSWILLBEABLETO:MARATHILEKHANACHENIYAMVAVIRAMCHINHANCHIMAHITIGHENE.

PAPER,UNIT,TITLE	SUBTOPICS	NOOF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MAR(COMP.) Ghatak-2 Vyavharik Marathi	MarathilekhanacheniyamvaViramchinhe.	04	Valimbe,Mo.Ra.'SugamMarathi Vyakaran vaLekhan',NitinPrakashan	Group Discussion, Chalk And Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4



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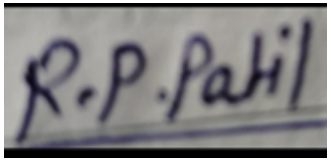
LEARNINGOBJECTIVE/S:
THELEARNERSWILLBEABLETO:AARJALEKHANACHYAVIVIDPRAKARANCHAAABHYASKARANE.

PAPER,UNIT,TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
MAR(COMP.) Ghatak-2 Vyavharik Marathi	Aarjalekhan	04	Valimbe,Mo.Ra.'SugamMarathi Vyakaran vaLekhan',NitinPrakashan	Group Discussion, Chalkand Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:4

PAPER,UNIT, TITLE	SUBTOPICS	NOOF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS



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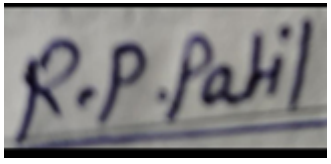
				USED
MAR(COMP .) Ghatak-2 Vyavharik Marathi	Bhashantar(EnglishtoMarathi)	04	Gurjar,V.C.'MarathiVyakaran', ManoramaPrakashan. Valimbe,Mo.Ra.'Sugam MarathiVyakranvaLekhan', NitinPrakashan	Group Discussion, ChalkandTalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:4
THEL EARNERS WILLBE ABLE TO:AUTARYAVARUNDILELYAPRASHNANCHIUTTARESHODHANYACHEKAUSHALYAAABHYA SANE.

PAPER,UNIT, TITLE	SUBTOPICS	NOOF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED



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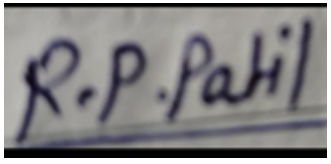
MAR(COMP .) Ghatak-2 Vyavharik Marathi	AutaryavarilPrasha	03	Gurjar,VC Marathi Vyakaran',Manorama Prakashan. Valimbe,Mo.Ra.'Sugam MarathiVyakranvaLekhan', NitinPrakashan	Group Discussion, Chalkand Talk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:04

LEARNINGOBJECTIVE/S:
THELEARNERSWILLBEABLETO:SARAUNSHLEKHANKARANYACHEKAUSHLYAAATMASATKARANE.

PAPER,UNIT, TITLE	SUBTOPICS	NOOF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED



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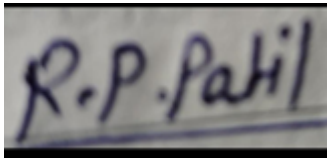
MAR(COMP .) Ghatak-2 Vyavharik Marathi	SaraunshLekhan	03	Gurjar,VC Marathi Vyakaran',Manorama Prakashan. Valimbe,Mo.Ra.'Sugam MarathiVyakranva Lekhan',NitinPrakashan.	Group Discussion, ChalkandTalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:04

THELEARNERSWILLBEABLETO:NIBANDHACHEVIVIDPRAKARAABHYASANE.

PAPER,UNIT, TITLE	SUBTOPICS	NOOF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED



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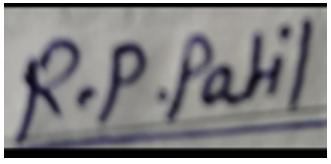
MAR(COMP .) Ghatak-2 Vyavharik Marathi	Nibandh Lekhan	04	'K'Sagar-'Nibandhalekh an Aarekhan-'K'Sagar Publication. Valimbe,Mo.Ra.'Sugam MarathiVyakranva Lekhan',NitinPrakashan.	Group Discussion, ChalkandTalk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:04

LEARNINGOBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO:VYAVAHARIK MARATHI CHASARAVKARANE.

PAPER,UNIT, TITLE	SUBTOPICS	NOOF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED



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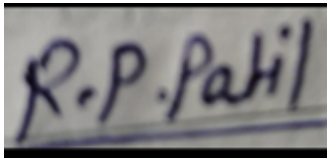
MAR(COMP .) Ghatak-2 Vyavharik Marathi	*VyavharikMarathi,Sarav.*	*02*	*'K'Sagar-'Nibandhalekh an Aarekhan-'K'Sagar Publication.* *Valimbe,Mo.Ra.'Sug am MarathiVyakranva Lekhan',NitinPrakashan*	*Group Discussion,* *ChalkandTalk,*

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

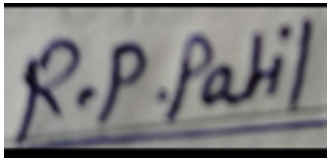
CLASS: S.Y.B.A. (MARATHI) Div-A & B SEMESTER: III MONTH: JULY-DECEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: MEANING OF DEMOGRAPHY AND POPULATION THEORY.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit- 1 Introduction	Demography-Its definition,nature & Scope. It's relation with other disciplines. Theory of Population-Malthusion Theory. Optimum theory of Population.	10	Bhende A.A. & Tara Kanitkar (1982) – 'Principles of Population Studies'– Himalaya Publishing House, Bombay. Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad.	Classroom Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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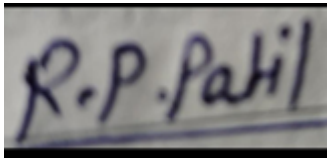
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: Issues related to demographic techniques and basic sources of demographic data in the Indian economy has also been included.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit1 & Unit 3 Techniques of Analysis	Theory of demographic transition. Population growth in India. Features of Indian Population. Crude birth rate & death rate. Age specific birth rate & death rate	06 04		Classroom Discussion, Chalk and Talk



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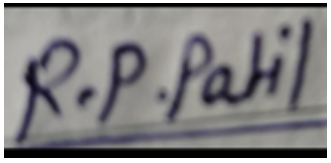
			Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Government of India – (Various Reports), Census of India, New Delhi.Ahirrao-Alizad-Dapte-Varat-Bhose (2001) – 'Loksankhya' – Nirali Publication, Pune.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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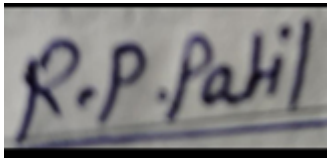
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: MEASURES OF POPULATION GROWTH RATE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit- 3 Techniques of Analysis	Standardized birth rate & death rate. Study of fertility-Total fertility rate, gross reproduction rate, net reproduction rate. Measures of population growth rate- Simple growth rate & Compound growth rate.	12	Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad Government of India – (Various Reports), Census of India, New Delhi.	Classroom Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



SIGNATURE OF THE STAFF

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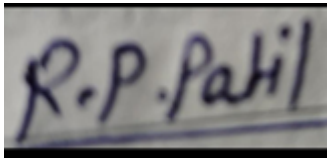
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO:
The learners will be able to : __Inter- relationship between Fertility,Nuptiality, Mortality & population. .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit- 1 Fertility, Nuptiality & Mortality	Fertility- Concept & Factors affecting Fertility. Nuptiality _ Concept,Age at marriage & Factors affecting Nuptiality.	08	Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad Bhosale & Kate (2006)– 'Loksankhya Shastra' - Phadke Prakashan , Kolhapur.	Classroom Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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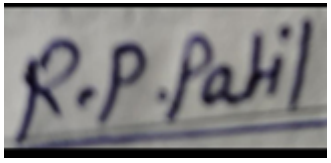
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: CONCEPT OF MORTALITY & LIFE TABLE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit- 1 Fertility, Nuptiality & Mortality	Mortality _ Concept & Factors affecting mortality. Life Table- Concept & it's importance	08	.Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. 10. Bhosale & Kate (2010) – 'Bhartiya Arth Vyavastha' – Phadke Prakashan , Kolhapur.	Classroom Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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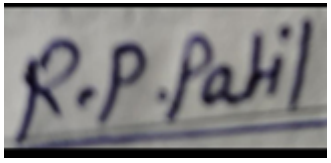
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: Know the social effects of the population .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit -2 Migration & Urbanization	Migration - Concept & Types Factors affecting Migration Theory of Migration (Harris & Todaro Model) Issues related to migration.	08	Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Ahirrao-Alizad-Dapte-Varat-Bhose (2001) – 'Loksankhya' – Nirali Publication, Pune	Classroom Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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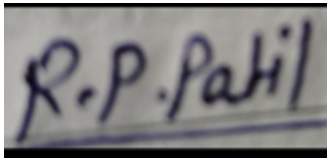
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: Know recent Trends of Urbanization .Get information about related issues with Urbanization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit _ 2 Migration & Urbanization	Urbanization _ Concept,Trends & pattern of Urbanization in India. Problems of Urbanization in India.(Poverty,Good supply,Water, Sanitation, housing,Slim area,Employment, health, education, transport, environment etc)	08	Agarwal S.S. (1985) - 'India's Population Problem' – Tata McGraw Hill Publication, Bombay Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad	Classroom Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

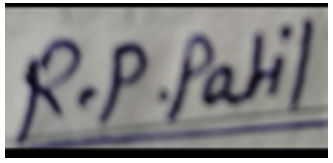
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (MARATHI) Div-A & B SEMESTER: III MONTH: JULY-DECEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: MICRO ECONOMICS II MODULE I: UTILITY ANALYSIS- PREFERENCES WHILE HAVING CHOICES WITH LIMITED RESOURCES WHILE TAKING ANY ECONOMIC DECISION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MICRO ECONOMICS II: MODULE I: Utility Analysis	Preferences-strong ordering-weak ordering – completeness-transitivity-rational preferences	2	Dr.N.L.Chavan, 'Pragat Sukshmalakshi Arthashastra',Prashant Publication.	Classroom Discussion, Chalk and Talk



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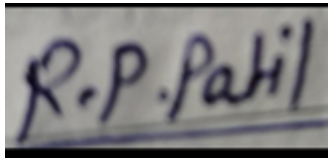
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: MICRO ECONOMICS II MODULE I: UTILITY ANALYSIS- PREFERENCES WHILE HAVING CHOICES WITH LIMITED RESOURCES WHILE TAKING ANY ECONOMIC DECISION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MICRO ECONOMICS II: MODULE I: Utility Analysis	Utility as representation of preferences-indifference curves and their properties -budget constraint-utility maximization and consumer's equilibrium-income effect-substitution effect- derivation of demand curves	10	Dr.N.L.Chavan, 'Pragat Sukshmalakshi Arthashastra',Prashant Publication. Prof.Deshmukh Ram,'Sukshma Arthashastra', Vidya Books Publishers	Classroom Discussion, Chalk and Talk



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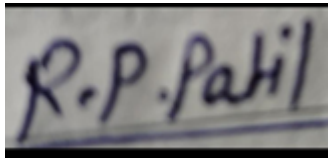
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: MICRO ECONOMICS II- CONCEPTS RELATED TO PRODUCTION ANALYSIS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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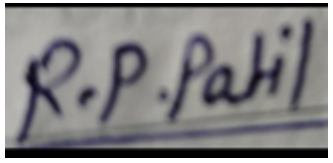
ECO II:MICRO ECONOMICS II: MODULE II: PRODUCTION FUNCTION	Production function- Cobb-Douglas production function-short run and long run returns to scale-Isoquants and their properties –MRTS-Iso-cost curves-cost minimisation and producer's equilibrium-derivation of factor demand curves,	12	Dr.N.L.Chavan, 'Pragat Sukshmalakshi Arthashastra',Prashant Publication. Prof. Deshmukh Ram,'Sukshma Arthashastra', Vidya Books Publishers	Classroom Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: MICRO ECONOMICS II **:**MODULE III: COST AND REVENUE: CONCEPTS OF COST AND REVENUE AND THEIR RELATIONSHIP

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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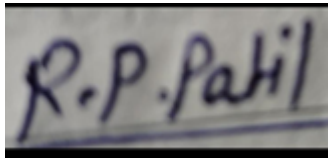
ECO II:MICRO ECONOMICS II: MODULE III: Cost and revenue	Various concepts of costs and their inter-relationship - behaviour of costs in the short run and the long run -long run average cost curve and it's derivation-implicit and explicit costs total revenue-marginal revenue-average revenue.	12	Dr.N.L.Chavan, 'Pragat Sukshmalakshi Arthashastra',Prashant Publication. Prof.Deshmukh Ram,'Sukshma Arthashastra', Vidya Books Publishers	Classroom Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: STRUCTURE OF COMPETITIVE MARKET AND PRICE DETERMINATION UNDER THIS



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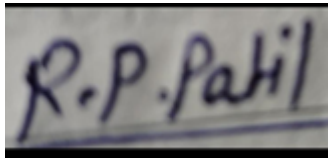
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MICRO ECONOMICS II: MODULE IV: Competitive Markets:	Perfect Competitive Market: Features, Short Run Equilibrium of the firm and the industry, Long run equilibrium. Price equals marginal cost in competitive markets- supply curve and derivation in competitive markets	12	Dr.N.L.Chavan, 'Pragat Sukshmalakshi Arthashastra',Prashant Publication. Prof. Deshmukh Ram,'Sukshma Arthashastra', Vidya Books Publishers	Classroom Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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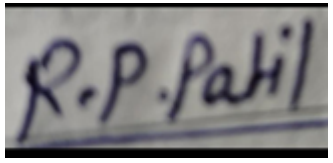
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: FUNCTIONS OF MONEY, CONCEPTS OF MONEY, THEORIES OF MONEY SUPPLY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II: MODULE I: MONEY	Concept of money- supply of money- CRR, SLR, high powered money and its components- Money multiplier- current measures of money supply in India – quantity theory of money- velocity of circulation- factors affecting velocity of circulation- Fisher and Cambridge equations.	12	Prof Deshmukh Ram, 'Samashti Arthashastra' ,Vidya books Publishers. Prof. Deshmukh Ram, 'Aadhunik Sthul Arthashastra', Vidya books Publishers.	Classroom Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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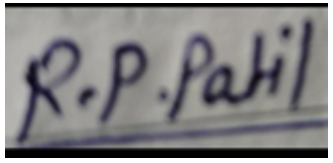
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: MOTIVES FOR HOLDING MONEY, MONEY MARKET, LM CURVE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II: MODULE II: THE MONEY MARKET	Motives for holding money- transactions motive-precautionary motive-speculative motive-interest rate as cost of holding money-liquidity trap-money-market equilibrium-derivation of LM curve-shifts in the LM curve.	12	Prof Deshmukh Ram, 'Samashti Arthashastra' ,Vidya books Publishers. Prof. Deshmukh Ram, 'Aadhunik Sthul Arthashastra', Vidya books Publishers.	Classroom Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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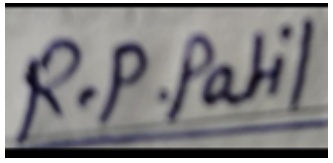
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: SAVING FUNCTIONAND ITS CONCEPTS, IS CURVE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II: MODULE III: THE GOODS MARKET	Savings function-marginal propensity to save-investment demand function and its interest elasticity-animal spirits- equilibrium in the goods market-derivation of the IS curve-shifts in the IS curve.	12	Prof Deshmukh Ram, 'Samashti Arthashastra' ,Vidya books Publishers. Prof. Deshmukh Ram, 'Aadhunik Sthul Arthashastra', Vidya books Publishers.	Classroom Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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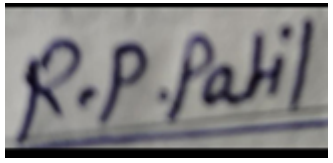
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: IS-LM EQUILIBRIUM, MONETARY AND FISCAL POLICY AND THEIR EFFECTIVENESS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II: MODULE IV: Monetary and Fiscal Policy	Simultaneous equilibrium in the goods and money markets (IS-LM equilibrium) – determination of income and interest rates- monetary policy and its instruments- effectiveness of monetary policy- Fiscal policy and its instruments- effectiveness of Fiscal policy.	12	Prof Deshmukh Ram, 'Samashti Arthashastra' ,Vidya books Publishers. Prof. Deshmukh Ram, 'Aadhunik Sthul Arthashastra', Vidya books Publishers.	Classroom Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** I **MONTH:** JULY-DECEMBER **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the basic principle of economics
- Understand the exchange rate functioning
- Understand the role of Government in managing market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS Module –II : Economics and Its Methods	The scientific method –role of assumptions- economic models: circular flow of income and production possibilities curve positive economics and normative economics Micro economics and Macro economics .	06	Sen Anindya (2007), : Theory and Applications,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** I **MONTH:** AUGUST **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand various scientific method used to asses economic functioning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS Module –II : Economics and Its Methods	economist as policy causes of disagreement among economists basics of graphs (graph of single variable, graph of two variable, curves in the coordinate system, slopecause and effect).	06	Sen Anindya (2007), : Theory and Applications,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** II **MONTH:** DECEMBER **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- This course is designed to introduce the student to the basic building blocks of macroeconomics using an open economy framework.
- The course develops an understanding of the constituents of the open economy.
- The student should be able to build on these constituents in the later years so as to be able to analyses macroeconomic policies

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACRO ECONOMICS **Module I: Concepts and Definitions**	Circular flow of Income in an Open Economy–GDP-GNP-NNP- GDP Deflator–Real and Nominal Quantitates GDP at purchasing power parity –	06	Sikdar, S. (2006), Principles of Macroeconomics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACRO ECONOMICS **Module I: Concepts and Definitions**	Exchange rate as a price –GDP Growth: India's Experience Trends in Growth Rate and Sectoral Composition of GDP- Sources of Data.	06	Sikdar, S. (2006), Principles of Macroeconomics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:

The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
  To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Indian Economy:	Objectives of demonetisation and previous instances of demonetisation - India's demonetisation as unprecedented in international economic history - Short term costs and Long term benefits of demonetization - Analytics of demonetization -	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Contemporary Concerns. Module 1: Demonetization: To Deify or Demonize?	Future policy measures to maximize benefits and minimize costs of demonetisation			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
- To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Indian Economy: Contemporary Concerns Module 2: Fiscal Framework: The World is	Fiscal Responsibility and Budget Management (FRBM) Act - Why is there a need for counter-cyclical fiscal policy in India? - Debt dynamics with the help of equation for debt sustainability	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Changing, Should India Change Too?	Fiscal Responsibility Legislation (FRL) - Impact of FRL on Budget process - Impact of FRL on Deficits - Lessons for future fiscal rules			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
- To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	The Conceptual/Philosophical case for UBI - The Conceptual Case against UBI - Arguments in Favour and Against UBI - How can UBI overcome the issues of misallocation and leakages of resources? - Can UBI improve financial inclusion? - Will UBI lead to moral hazard and reduce labor supply? - What are the guiding principles for setting up UBI? - What are the prerequisites for introducing UBI? - Is there fiscal space to finance UBI?	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
- To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Indian Economy: Contemporary Concerns **Module 4: Income, Health and Fertility: Convergence Puzzles**	Income convergence/divergence within India - Consumption convergence/divergence within India - Health Convergence within India with room for improvement against International standard - Total Fertility rate convergence (India and World) - Interpreting Graphs/Data regarding Income/Life Expectancy/ Infant mortality rate/Total fertility rate (For All Indian States)	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module 1**	Introduction to Maharashtra's Economy – Backdrop, Demography, Key Indicators of Development, Macroeconomics development of the Regions, Paradigm Shift	10	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARASHTRA PLANNING DEPARTMENT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module 2** Importance of Tribal Areas	Present Status, Comparison with States, PCI, Poverty, Overview of Nutrition, Health & Education, Causes of Deprivation, Reforms to be undertaken	10	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARASHTRA PLANNING DEPARTMENT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module** 3 Water Resources	Availability of Water resources, government policy, overview of irrigation development (No division – wise discussion), overview of irrigation in Rest of Maharashtra, General Overview of Rural & Urban areas water supply, Recommendation for water distribution/ Balanced development	15	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARASHTRA PLANNING DEPARTMENT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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LEARNING OBJECTIVE/S:

The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module 4** **Health and connectivity**	Health : The Kelkar Committee approach to health, Regional disparities, Health Care Systems, Health outcomes, Recommendation and Strategies Connectivity – Introduction, General Overview of Roads, Railways, Ports, Airports and Broadband, Resources required	10	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARASHTRA PLANNING DEPARTMENT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** JUNE **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:

- The learners will be able to : The modules incorporated in this paper educate the students about the inter-relationship between economic development and population along with an exposition of the established theories of population. Issues related to demographic techniques and basic sources of demographic data in the Indian economy have also been included. Aspects of the population policy and the study of its social characteristics are other important components of the modules of this paper.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Paper – I MODULE 2 Sources of demographic data in India	Salient features of census – including 2011 census. Civil Registration System,National Sample Survey. Demographic Survey –	06	Bose A. (1996)– 'India's Basic Demographic Statistics' – B.R. Publishing Corporation, New Delhi	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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LEARNING OBJECTIVE/S:

- The learners will be able to : The modules incorporated in this paper educate the students about the inter-relationship between economic development and population along with an exposition of the established theories of population. Issues related to demographic techniques and basic sources of demographic data in the Indian economy have also been included. Aspects of the population policy and the study of its social characteristics are other important components of the modules of this paper.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Paper – I MODULE 2 Sources of demographic data in India	National Family Health survey -1,2 and 3. ,merits and demerits of these sources.	06	Agarwal S.S. (1985) - 'India's Population Problem' – Tata McGraw Hill Publication, Bombay	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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VIVA COLLEGE, Virar (W)
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LEARNING OBJECTIVE/S:

- The learners will be able to : The modules incorporated in this paper educate the students about the inter-relationship between economic development and population along with an exposition of the established theories of population. Issues related to demographic techniques and basic sources of demographic data in the Indian economy have also been included. Aspects of the population policy and the study of its social characteristics are other important components of the modules of this paper.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Paper – II MODULE 3 Population Policy	Salient features and evolution of India's population policy. • Shift in policy focus from population control to family welfare to women empowerment.	06	Agarwal S.S. (1985) - 'India's Population Problem' – Tata McGraw Hill Publication, Bombay	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

- The learners will be able to : The modules incorporated in this paper educate the students about the inter-relationship between economic development and population along with an exposition of the established theories of population. Issues related to demographic techniques and basic sources of demographic data in the Indian economy have also been included. Aspects of the population policy and the study of its social characteristics are other important components of the modules of this paper.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Paper – II MODULE 3 Population Policy	• Family Planning – Meaning, importance and methods of family planning. • Population Projection in India	07	Hans Raj (1984) – 'Fundamentals of Demography – Surjeet Publication, Delhi.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06
LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III	Prisoner"s Dilemma – Dominant strategy equilibrium – Battle of sexes game –	06	Mankiw, N. Gregory, Principles of	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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SIGNATURE OF THE H.O.D.

Module 2: Basics of Game theory			Microeconomics, Cengage Learning, 2015.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

The learners will be able to :

- To able to understand the theory of oligopoly & duopoly
- To able to understand the new theories of oligopoly market
- To able to understand theory of distribution
- To able to understand general equilibrium & economic efficiency & welfare

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III **Module 2: Basics of Game theory**	Nash equilibrium – Extensive form games – Game tree.	06	Mankiw, N. Gregory, Principles of Microeconomics, Cengage Learning, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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- To able to understand the theory of oligopoly & duopoly
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- To able to understand theory of distribution
- To able to understand general equilibrium & economic efficiency & welfare

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III **Module 3: Oligopoly**	The Cournot model – The Bertrand model – The Edgeworth model – The Chamberlin Model	06	Mansfield, Edwin, Micro-economics: Theory & Applications, 5th edition,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand the theory of oligopoly & duopoly
- To able to understand the new theories of oligopoly market
- To able to understand theory of distribution
- To able to understand general equilibrium & economic efficiency & welfare

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III **Module 3: Oligopoly**	The Kinked demand curve model – Collusion and Cartels – Price Leadership	06	Sen Anindya, Microeconomics: Theory and Applications, Second edition Oxford	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:

The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III **Module2: Money/Financial Markets and**	The LM equation for the open economy –Uncovered Interest Parity and its implications for exchange rate determination – The combined IS/LM/UIP model.	06	Froyen, R. T.; Macroeconomics : Theory and Policy, Pearson Education Asia, Delhi,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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Mundell-Fleming Model: **:**				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:

The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III Module 2: Money/Financial Markets and Mundell-Fleming Model:	Fiscal and Monetary Policy under Fixed and Flexible Exchange Rates– The Mundell-Fleming trilemma.	06	Salvatore, D.; International Economics, Prentice Hall, New York, 1997 .	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III **Module 4: International Monetary History, 1900-present**	The Gold Standard – The Inter-War Period and the Great Depression – 1944, Bretton Woods System and its collapse ; Fixing in Europe via ERM, and the Dollar Standard elsewhere.	06	Mankiw, Gregory; Macroeconomics, 6e, Worth Publishers, New York, 2003.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

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Late Shri. Vishnu Waman Thakur Charitable Trust
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** MARCH **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III **Module 4: International Monetary History, 1900-present:**	The Maastricht Treaty and preparations for the Euro; The Global Financial Crisis and its consequences for the Euro; The Euro Crisis, Asia Infrastructure Investment Bank (AIIB), New Development Bank (NDB).	06	Blanchard, Oliver, Macroeconomics , Pearson education, New Delhi, India, 2008	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JUNE **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTRIAL AND LABOUR ECONOMICS Module 1: Introduction	Meaning and Scope of Industrial Economics, Industrial Profile : Private sector - Performance and Problems; Cooperatives - features, types, merits and demerits; Public Sector - Role, Performance and Problems, Diversification and Industrial Combinations - Motives for Mergers and Acquisitions.	12	Desai S.S.M. and Bhalerao N, Industrial Economy of India, Himalaya Publishing House, Mumbai, 2008. 6	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labor relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTRIAL AND LABOUR ECONOMICS Module 2: Industrial Location and Problem of Regional Imbalance	Determinants of Industrial Location, Theories of Industrial Location - Weber's and Sargent Florence's Theories, Dispersion of Industries and the Problem of Regional Imbalance	12	Datt R. and Sundaram K.P.M, Indian Economy, S.Chand & Co., New Delhi, 2009	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labor relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTRIAL AND LABOUR ECONOMICS Module 3: Industrial Productivity and Industrial Sickness	Concept and Measurement of Industrial Productivity, Factors Affecting Industrial Productivity, Industrial Sickness - Causes, Effects and Remedial Measures, Rationalisation - Concept, Aspects and Impact	12	Barthwal R.R, Industrial Economics, New Age International Publishers, NewDelhi,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** SEPTEMBER **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labor relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTRIAL AND LABOUR ECONOMICS Module 4: Industrial Development in India	New Industrial Policy, 1991; Disinvestment Policy; FIPB Revamp- Micro, Small and Medium Enterprises Development Act, 2006; National Manufacturing Policy, 2011,Recent Trends in India's Industrial Growth, Industrial Policy, 2012, Role of MNCs in the Indian Economy - Merits and Demerits, Issues in Industrial Proliferation and Environment Preservation; Pollution Control Policies.	12	Agrawal A.N, Indian Economy, New Age International Publishers, New Delhi, 2011.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTRIAL AND LABOUR ECONOMICS Module 1 : Introduction – Indian Labour Market	Characteristics of the Indian Labour Market - Child Labour and Female Labour – Problems and Measures- Globalization and Indian Labour Market -Labour Market Reforms – Exit Policy and Need for Safety Nets - Second National Commission on Labour.	12	Datt R. and Sundaram K.P.M, Indian Economy, S.Chand & Co., New Delhi, 2009.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

		ALLOTTED		
INDUSTRIAL AND LABOUR ECONOMICS Module 2 : Trade Unionism	Definition and Functions of Trade Unions- Historical Evolution of Trade Unions in India and Their Present Status - Problems of Trade Unions in India - Role of Outside Leadership	12	2. Mamoria C.B. and Mamoria S, Dynamics of Industrial Relations, Himalaya Publishing House, Mumbai, 2002.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTRIAL AND LABOUR ECONOMICS Module 3 : Industrial Relations	Causes of Industrial Disputes and Their Settlement Mechanism - Collective Bargaining – Concept, Features, Importance and Pre-requisites for Successful Collective Bargaining - Collective Bargaining in India - Workers" Participation in Management –Concept,	12	Mishra S.K. and Puri V.K, Indian Economy, Himalaya Publishing House, Mumbai,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	objectives and Forms of Workers" Participation in India.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

The learners will be able to :

- To familiarize students with the basic concepts of industrial and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTRIAL AND LABOUR ECONOMICS Module 4 : Labour Welfare and Social Security	Concept, Theories and Principles of Labour Welfare - Agencies for Labour Welfare - Role of the Labour Welfare Officer - Social Security – Concept; Social Assistance and Social Insurance - Social Security Measures in India - International Labour Organization and Its Impact on Indian Labour Legislations.	12	Monappa A, Industrial Relations, Tata McGraw Hill Publishing Company Ltd., New Delhi, 2006 5.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:

The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 3: Sources of Data for Research:	Types of data sources: Primary and Secondary - Primary data-Meaning and Collection methods - Observational method - Interview technique - Design of Schedule and Questionnaire - Survey method and Field Visits - Case Study as a method. Major Sources of Secondary data: Meaning, advantages, Relevance, limitations and cautions of secondary data.	06	. Gupta S. P., Statistical Methods, Sultan Chand and Sons, New Delhi, 2014 .	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TrEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 3: Sources of Data for Research:	Sampling Technique: Census and sample survey- Essentials of a good Sampling - Advantages and limitations of sampling, Methods of sampling: Random sampling : Simple or Unrestricted Random Sampling- Mixed or Stratified Random Sampling, Systematic or Quasi Random sampling – Multistage or Cluster Random Sampling - Sequential Random Sampling, Non random sampling : Judgement or Purposive sampling–Convenience sampling accidental sampling – Quota sampling, Selecting an appropriate sampling technique- Sampling and Non-sampling errors - Sample size.	06	. Rajaram V., Fundamentals of computers, Prentice Hall of India, New Delhi, 1996	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related to economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 4: Research Report Writing:	Types of Research Report: Technical, Popular, Interim, Summary, Article- Format of a Research Report- Principles of writing the Research Report: Organization and Style - Contents-Styles of reporting- Steps in drafting Reports- Editing the final draft-Evaluating the final draft	06	Kothari, C.R., Research Methodology: An Introduction, Delhi, New Age, 2004.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 4: Research Report Writing:	-Organization of the Research Report: Preliminaries, Contents of Report, Structuring the Report: Chapter format- Pagination- Identification- Using quotations- Presenting footnotes –abbreviations- Presentation of tables and figures- Referencing- Documentation-Use and format of appendices- Indexing - Bibliography, Appendices.	06	. Krishnaswami, O.R & M. Ranganatham ,Methodology of Research in Social Sciences,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
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LEARNING OBJECTIVE/S:
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This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 3: Hypothesis formulation and Hypothesis Testing:	Definition and functions of hypothesis –Criteria of workable hypothesis – forms and sources of hypothesis- Concepts in Testing of Hypothesis: Universe / Population, parameter and statistic,	06	Goode J. William & Hatt K. Paul, Methods in social Research, New York, McGraw-Hill, 1952	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** JANUARY **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 3: Hypothesis formulation and Hypothesis Testing:	Null and Alternative Hypotheses, Levels of Significance, critical region, Type I and Type II errors - Point and Interval Estimates.	06	Kothari, C.R (2004) Research Methodology: An Introduction, Delhi, New Age, 2004.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related to economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 4: Research Report Writing:	Types of Research Report: Technical, Popular, Interim, Summary, Article- Format of a Research Report- Principles of writing the Research Report: Organization and Style - Contents-Styles of reporting- Steps in drafting Reports- Editing the final draft-Evaluating the final draft -Organization of the Research Report: Preliminaries, Contents of Report,	06	Kumar, Renjith (2009) Research Methodology: A Step by Step Guide for Research, Delhi, Pearson Education, 2009	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:
The learners will be able to :

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
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This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 4: Research Report Writing:	Structuring the Report: Chapter format- Pagination- Identification- Using quotations- Presenting footnotes –abbreviations- Presentation of tables and figures- Referencing- Documentation-Use and format of appendices- Indexing - Bibliography, Appendices.	06	Gupta S P Statistical Methods Sultan Chand and Sons, New Delhi, 1987.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JUNE **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyze environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS Module1: Introduction to Environmental Economics:	Introduction to environmental development and environmental economics, Rio-Declaration on environmental development,	06	4. Hanley Nick, Shogren Jason and White Ben: Introduction to Environmental Economics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:
The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS Module1: Introduction to Environmental Economics:	Agenda 21 programme of action for sustainable development, Social and economic dimensions, Conservation and management of resources for development.	06	4. Hanley Nick, Shogren Jason and White Ben: Introduction to Environmental Economics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06
LEARNING OBJECTIVE/S:
The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
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- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

ENVIRONMENTAL ECONOMICS Module 4: Environmental problems:	The global environment- Trans-boundary environmental problems, economics of climate change,	06	Barry C. Fields: Environmental Economics : An Introduction, McGraw Hill International Edition, 1997.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:

The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS Module 4: Environmental problems:	International environmental Agreements - , sustainable development: Concepts and measures.	12	Barry C. Fields: Environmental Economics : An Introduction, McGraw Hill International Edition, 1997.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:

The learners will be able to :

- Understanding the concept and aspects of economic Development.
- Knowing the theories of economic growth & Development.
- Measuring the concept and issues of economic planning.
- Discussing the need, types and necessary conditions of economic planning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT THEORY AND EXPERIENCE Module IV: The Environment and Development:	The core of environmental problems- Rural poverty and environmental destruction industrialization and environmental pollution - Economic models of environmental issues: .	06	Partha Dasgupta, Economics: A Very Short Introduction, Oxford University	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understanding the concept and aspects of economic Development.
- Knowing the theories of economic growth & Development.
- Measuring the concept and issues of economic planning.
- Discussing the need, types and necessary conditions of economic planning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT THEORY AND EXPERIENCE Module IV: The Environment and Development:	privately owned resources, common property resources, public goods: regional environmental degradation and the free rider problem, limitations of pubic goods framework.	06	Partha Dasgupta, Economics: A Very Short Introduction, Oxford University	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

- Evaluating various types of exchange rates and its merits and demerits.
- Discussing the types and effects of tariffs and quotas.
- Judging the function, merits and demerits of Foreign Capital, and International Corporation (IMF, IBRD, WTO and SAARC).

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL TRADE, POLICY AND PRACTICE Module 2 : Emerging new International Economic Order	GATT, Uruguay Round, WTO, WTO Agreement, Dispute settlement Mechanism, Impact of WTO on Emerging Economies and India, Doha Round and implications of its failure-	06	Paul R Krugman, Maurice Obstfeld and Melitz Mark, International Economics: Theory and Policy, Princeton University, USA, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
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LEARNING OBJECTIVE/S:
The learners will be able to :

- Evaluating various types of exchange rates and its merits and demerits.
- Discussing the types and effects of tariffs and quotas.
- Judging the function, merits and demerits of Foreign Capital, and International Corporation (IMF, IBRD, WTO and SAARC).

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL TRADE, POLICY AND PRACTICE Module 2 : Emerging new International Economic Order	Emergence of Regional Free Trade agreements (FTA), Bilateral Investment Treaty (BIT), Double Taxation Avoidance Agreement (DTAA).	06	Paul R Krugman, Maurice Obstfeld and Melitz Mark, International Economics: Theory and Policy, Princeton University, USA, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MARATHI) SEMESTER: I MONTH: JULY-DECEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: UNDERSTAND BASIC PRINCIPLES OF MICROECONOMIC THEORY.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – I Module - II: Ten Principles of Economics	Trade-Off Faced by the Individuals; Significance of Opportunity Cost in Decision Making; Thinking at the Margin; Responses to incentives; Benefits from Exchange; Organization of Economic Activities through Markets and its Benefits; Role of Government in improving Market Outcomes; Dependence of Standard of Living on Production; Growth in Quantity of Money; Inflation and Unemployment Trade Off	12	N.Gregory Mankiw, (2015), "Principles of Microeconomics" 7th edition Cengage Learning	Group Discussion, Chalk and Talk .

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: GET AN INTRODUCTION TO SUPPLY AND DEMAND AND THE BASIC FORCES THAT DETERMINE EQUILIBRIUM IN A MARKET ECONOMY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – I Module - III: Markets, Demand and Supply	What is a Market; What is Competition; Demand Curves: Market Demand versus Individual Demand, Movements along the Demand Curve, Shifts in the Demand Curve; Supply Curves: Market Supply and Individual Supply, Shifts in Supply Curve; Market Equilibrium - Three Steps to Analyze Changes in Equilibrium; Price Elasticity of Demand, Methods of Measuring Price Elasticity of Demand – Total Outlay Method, Percentage Method and Point Method; Concepts of Income Elasticity of Demand, Cross Elasticity of Demand and Promotional Elasticity of Demand	12	M.L.Jhingan, (2006) "Microeconomics Theory", 5 th edition Vrinda Publication (P) Ltd. H.L.Ahuja, (2016) "Advance Economics Theory"	Group Discussion, Chalk and Talk .

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

			S.Chand & Company Ltd	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS CLASS: F.Y.B.A. (MARATHI) SEMESTER: I MONTH: SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: USE THE FUNDAMENTAL TECHNIQUES TO THINK ABOUT A NUMBER OF POLICY QUESTIONS RELATED TO THE OPERATION OF THE REAL ECONOMY.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

HABorwankar

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SIGNATURE OF THE H.O.D.

ECO I: Microeconomics – I Module IV: Consumer's Behavior	Introduction to Cardinal and Ordinal Approaches; Indifference Curve Analysis - Properties of Indifference Curves, Budget Line, and Consumer's Equilibrium; Income, Price and Substitution Effect; Derivation of Demand Curve; Consumer's Surplus: Strong Ordering and Weak Ordering	12	M.L.Jhingan, (2006) "Microeconomics Theory", 5 th edition Vrinda Publication (P) Ltd. H.L.Ahuja, (2016) "Advance Economics Theory" S.Chand & Company Ltd	Group Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND THE TYPES OF COSTS AND THEIR DERIVATION

PAPER,	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

UNIT, TITLE		ALLOTTED		ICT TOOLS USED
ECO I: Microeconomics – II Module II: Cost & Revenue Analysis	Concepts of Costs: Money and Real Cost, Social Cost, Private Cost, Explicit and Implicit Cost, Opportunity Cost; Relationship between Average, Marginal and Total Cost	6	M.L.Jhingan, (2006), "Microeconomics Theory", 5 th edition,Vrinda Publication (P) Ltd. 6. H.L.Ahuja, (2016), "Advance Economics Theory" S.Chand & Company Ltd.	Group Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: ANALYZE THE DETERMINATION OF REWARDS FOR FACTORS OF PRODUCTION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – II Module II: Cost & Revenue Analys	Derivation of Short Run and Long Run Cost Curves; Concepts of Revenue: Types and Interrelationship	6	M.L.Jhingan, (2006), "Microeconomics Theory", 5 th edition,Vrinda Publication (P) Ltd. 6..	Group Discussion, Chalk and Talk
ECO I: Microeconomics – II Module III: Factor Pricing	Marginal Productivity Theory of Distribution; Rent: Ricardian Theory of Rent, Modern Theory of Rent, Quasi Rent; Wages: Modern Theory of Wages; Collective Bargaining; Supply Curve of Labour	6	H.L.Ahuja, (2016), "Advance Economics Theory" S.Chand & Company Ltd	Group Discussion, Chalk and Talk .

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
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VIVA COLLEGE, Virar (W)
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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS CLASS: F.Y.B.A. (MARATHI) SEMESTER: II MONTH: FEBRUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KNOW VARIOUS ECONOMIC THEORIES RELATED TO FACTORS OF PRODUCTION, UNDERSTAND MARKET STRUCTURE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – II Module III: Factor Pricing	Interest: Classical Theory of Interest, Loanable Funds Theory of Interest; Profit: Risk and Uncertainty Theory, Innovation Theory	6	Mankiw M.G (2015), Principles of Microeconomics 7 th edition - Cengage Learning.	Group Discussion, Chalk and Talk

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ECO I: Microeconomics – II Module IV: Equilibrium in Different Market Structure	Concept Of Equilibrium: TR - TC And MR - MC Approach; Features of Perfect Competition; Monopoly and Monopolistic Competition	6	Mankiw M.G (2015), Principles of Micro economics 7 th edition - Cengage Learning.	Group Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND MARKET EQUILIBRIUM

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

ECO I: Microeconomics – II Module IV: Equilibrium in Different Market Structure	Short Run and Long Run Equilibrium of Firm and Industry under each Market Condition; Selling Cost and Wastages under Monopolistic Competition	6	Mankiw M.G (2015), Principles of Micro economics 7 th edition - Cengage Learning.	Group Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS CLASS: T.Y.B.A. (ENGLISH) SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KNOW MEANING AND IMPORTANCE OF RESEARCH

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 1: Introduction to Concept of Research:	Nature, Scope & Purpose of social research - Basic assumptions of research - Significance and objectivity in social sciences research Types of research: pure & applied research; formulative or exploratory research	8	Kothari, C.R., Research Methodology: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk

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VIVA COLLEGE, Virar (W)
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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND MEANING AND IMPORTANCE OF RESEARCH, VARIOUS STEPS IN RESEARCH

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 1: Introduction to Concept of Research:	Descriptive research, historical research, experimental research, survey research - Ethical issues and major difficulties relating to research .	4	Kothari, C.R., Research Methodology: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk
ECO VII: RESEARCH METHODOLOGY Module 2: Elements of Research Methodology:	Steps in Research process: Identification, selection and formulation of research problem – sources of research problem – criteria of a good research problem - Review of literature - Formulation of hypothesis - Preparing Research Design: Definition, Concepts, and types– exploratory, descriptive and diagnostic, experimental and Analytical research designs – Collection and analysis of the data - Interpretation and report writing. Use of web search in research process- introduction to Internet and WWW -	12	SumitGuha (ed.), Growth, Stagnation or Decline?, Delhi , Oxford University Press,1993.	Group Discussion, Chalk and Talk

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	Using search engine like Google, Yahoo etc. Use of advanced search techniques.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: LEARN HOW TO COLLECT THE DATA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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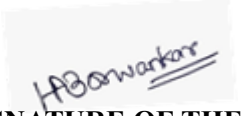
ECO VII: RESEARCH METHODOLOGY Module 3: Sources of Data for Research:	Types of data sources: Primary and Secondary - Primary data Meaning and Collection methods - Observational method - Interview technique - Design of Schedule and Questionnaire - Survey method and Field Visits - Case Study as a method. Major Sources of Secondary data: Meaning, advantages, Relevance, limitations and cautions of secondary data. Sampling Technique: Census and sample survey- Essentials of a good Sampling - Advantages and limitations of sampling, Methods of sampling: Random sampling : Simple or Unrestricted Random Sampling- Mixed or Stratified Random Sampling, Systematic or Quasi Random sampling – Multistage or Cluster Random Sampling - Sequential Random Sampling, Non random sampling : Judgement or Purposive sampling– Convenience sampling accidental sampling – Quota sampling, Selecting an appropriate sampling technique- Sampling and Non-sampling errors - Sample size.	12	Kothari, C.R., Research Methodology: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: USE VARIOUS QUANTITATIVE TECHNIQUES IN STATISTICS



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 4: Processing and Analysis of Data	Classification, Tabulation and Graphical presentation of socio economic data - An introduction to Statistical Analytical Tools – Measures of Central Tendency – Measures of Variation: absolute and relative measures – Quartile deviation, standard deviation, coefficient of variation- Skewness: meaning and Measurement (Karl Pearson‟s and Bowley‟s methods) - Basics of Computer Applications in Data organization & Data Processing, Introduction to spreadsheet application, features and functions, Using formulas and functions, Data storing, Features for Statistical data analysis, Graphical representation of data, Generating charts/ graph and other features.	12	Krishnaswami, O.R & M. Ranganatham ,Methodology of Research in SocialSciences, Himalaya Publishing House, Mumbai, 2011.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS CLASS: T.Y.B.A.

LEARNING OBJECTIVE/S:

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THE LEARNERS WILL BE ABLE TO: QUANTITATIVE TECHNIQUES FOR ANALYSIS OF DATA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 1: Statistical applications in research:	Methods of studying Correlation- measurement of simple correlation: graphic method: scatter diagram - coefficient of correlation - Karl Pearson and rank correlation interpretation of r = ± 1 Linear Regression analysis: meaning, regression lines, regression coefficients, regression equations, relationship between correlation and regression. Analysis of Time Series – components –trend analysis- moving averages (3, 4 and 5 yearly)- method of least square.	12	Goode J. William & Hatt K. Paul, Methods in social Research, New York, McGraw Hill, 1952.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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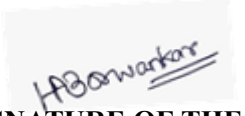
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 2: Index numbers:	Meaning – classification – problems encountered while constructing index numbers- uses and limitation of index numbers, Methods of constructing index numbers: Simple index: i) aggregate method ii) simple average of relatives method, Weighted index: Laspeyer‟s, Paache‟s and Fisher‟s index – weighted average of relatives method, Chain based index – concepts of Base shifting, splicing, and deflating, Consumer price index: meaning, need and construction – methods: aggregate expenditure method and family budget method.	12	Kothari, C.R., Research Methodology: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: FORMULATE AND TEST THE HYPOTHESIS

PAPER,	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/



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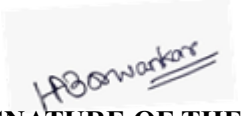
UNIT, TITLE		ALLOTTED		ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 3: Hypothesis formulation and Hypothesis Testing:	Definition and functions of hypothesis –Criteria of workable hypothesis – forms and sources of hypothesis- Concepts in Testing of Hypothesis: Universe / Population, parameter and statistic, Null and Alternative Hypotheses, Levels of Significance, critical region, Type I and Type II errors - Point and Interval Estimates.	12	Kumar, Renjith (2009) Research Methodology: A Step by Step Guide for Research, Delhi, Pearson Education, 2009.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: LEARN THE STYLE OF REPORT WRITING

PAPER, UNIT,	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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TITLE				
ECO VII: RESEARCH METHODOLOGY Module 4: Research Report Writing:	Types of Research Report: Technical, Popular, Interim, Summary, Article- Format of a Research Report- Principles of writing the Research Report: Organization and Style - Contents-Styles of reporting- Steps in drafting Reports- Editing the final draft-Evaluating the final draft -Organization of the Research Report: Preliminaries, Contents of Report, Structuring the Report: Chapter format- Pagination Identification- Using quotationsPresenting footnotes – abbreviations- Presentation of tables and figures ReferencingDocumentation-Use and format of appendices Indexing - Bibliography, Appendices.	12	Kothari, C.R., Research Methodology: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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Bhaskar Waman Thakur College of Science
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TEACHING PLAN (UNIT PLAN)

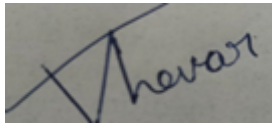
NAME OF THE STAFF: Ms VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** I **MONTH:** JULY **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on the development of analytical thinking with the help of statistical tools among the students and develop the skill of application of microeconomics concepts to analyze real life situations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS **Module - I: Introduction to Microeconomics**	Microeconomics: Meaning, Scope, Nature, Importance and Limitations; Basic Economic Problems; Role of Price Mechanism in a Market Economy; Positive Economics and Normative Economics; Concepts of Equation, Functions, Graphs, Diagrams, Line, Slope and Intercept	12	Salvatore D. (2003), Microeconomics: Theory and Applications, Oxford University Press, New	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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			Delhi.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

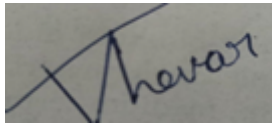
NAME OF THE STAFF: Ms VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** I **MONTH:** AUGUST **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on the development of analytical thinking with the help of statistical tools among the students and develop the skill of application of microeconomics concepts to analyze the real life situations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS	Trade-Off Faced by the Individuals; Significance of Opportunity Cost in Decision Making; Thinking at the Margin; Responses to incentives; Benefits from Exchange; Organization of	12	Sen Anindya (2007), Microeconomics: Theory and	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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Module - II: Ten Principles of Economics	Economic Activities through Markets and its Benefits; Role of Government in improving Market Outcomes; Dependence of Standard of Living on Production; Growth in Quantity of Money; Inflation and Unemployment Trade Off		Applications, Oxford University Press, New Delhi	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

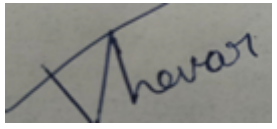
NAME OF THE STAFF: Ms VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** II **MONTH:** DECEMBER **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

As a logical sequence to Microeconomics Paper I, this paper is aimed at giving supply side knowledge of Economics to the learner which will enhance their knowledge about aspects of production, cost and revenue analysis, theories of distribution and understanding about the market structure.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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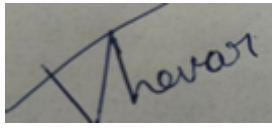
MICROECONOMICS **Module III: Factor Pricing**	Marginal Productivity Theory of Distribution; Rent: Ricardian Theory of Rent, Modern Theory of Rent, Quasi Rent; Wages: Modern Theory of Wages; Collective Bargaining; Supply Curve of Labour; Interest: Classical Theory of Interest, Loanable Funds Theory of Interest; Profit: Risk and Uncertainty Theory, Innovation Theory	12	H.L.Ahuja, (2016), "Advance Economics Theory" S.Chand & Company Ltd.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** II **MONTH:** JANUARY **ACADEMIC YEAR:** 2019-20



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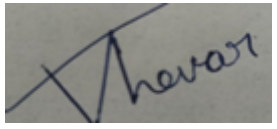
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

As a logical sequence to Microeconomics Paper I, this paper is aimed at giving supply side knowledge of Economics to the learner which will enhance their knowledge about aspects of production, cost and revenue analysis, theories of distribution and understanding about the market structure.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS **Module IV: Equilibrium in Different Market Structure**	Concept Of Equilibrium: TR - TC And MR - MC Approach; Features of Perfect Competition; Monopoly and Monopolistic Competition, Short Run and Long Run Equilibrium of Firm and Industry under each Market Condition; Selling Cost and Wastages under Monopolistic Competition	12	M.L.Jhingan, (2006), "Microeconomics Theory", 5th edition,Vrinda Publication (P) Ltd.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

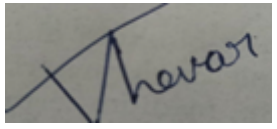
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** JUNE **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
  To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Indian Economy: Contemporary Concerns. Module 1: Demonetization:	Objectives of demonetisation and previous instances of demonetisation - India's demonetisation as unprecedented in international economic history - Short term costs and Long term benefits of demonetization - Analytics of demonetization - Future policy measures to maximise benefits and minimise costs of demonetisation	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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To Deify or Demonize?				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

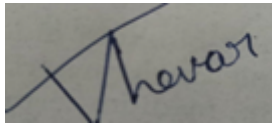
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** JULY **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
- To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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Paper IV: Indian Economy: Contemporary Concerns **Module 2: Fiscal Framework: The World is Changing, Should India Change Too?**	Fiscal Responsibility and Budget Management (FRBM) Act - Why there is a need for counter-cyclical fiscal policy in India? - Debt dynamics with the help of equation for debt sustainability Fiscal Responsibility Legislation (FRL) - Impact of FRL on Budget process - Impact of FRL on Deficits - Lessons for future fiscal rules	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

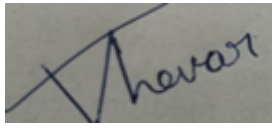
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** AUGUST **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
- To understand the upcoming policy of Universal Basic Income



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Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Indian Economy: Contemporary Concerns Module 3: Universal Basic Income: A Conversation With and Within the Mahatma				
	The Conceptual/Philosophical case for UBI - The Conceptual Case against UBI - Arguments in Favour and Against UBI - How can UBI overcome the issues of misallocation and leakages of resources? - Can UBI improve financial inclusion? - Will UBI lead to moral hazard and reduce labour supply? - What are the guiding principles for setting up UBI? - What are the prerequisites for introducing UBI? - Is there fiscal space to finance UBI?	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

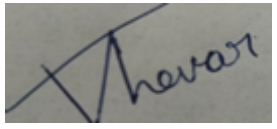
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** SEPTEMBER **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :



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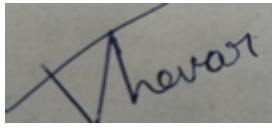
- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
- To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Indian Economy: Contemporary Concerns **Module 4: Income, Health and Fertility: Convergence Puzzles**	Income convergence/divergence within India - Consumption convergence/divergence within India - Health Convergence within India with room for improvement against International standard - Total Fertility rate convergence (India and World) - Interpreting Graphs/Data regarding Income/Life Expectancy/ Infant mortality rate/Total fertility rate (For All Indian States)	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

TEACHING PLAN (UNIT PLAN)



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NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

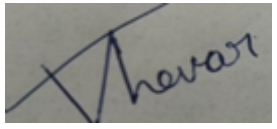
CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** DECEMBER **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module 1**	Introduction to Maharashtra's Economy – Backdrop, Demography, Key Indicators of Development, Macroeconomics development of the Regions, Paradigm Shift	10	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARASHTRA PLANNING DEPARTMENT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

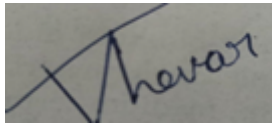
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** JANUARY **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY Module 2	Present Status, Comparison with States, PCI, Poverty, Overview of Nutrition, Health & Education, Causes of Deprivation, Reforms to be undertaken	10	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARASHTRA	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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Importance of Tribal Areas			PLANNING DEPARTMENT, OCTOBER 2013	

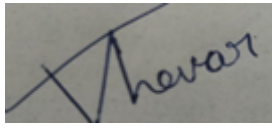
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

LEARNING OBJECTIVE/S:

The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module** 3 Water Resources	Availability of Water resources, government policy, overview of irrigation development (No division – wise discussion), overview of irrigation in Rest of Maharashtra, General Overview of Rural & Urban areas water supply, Recommendation for water distribution/ Balanced development	15	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARASHTRA PLANNING DEPARTMENT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

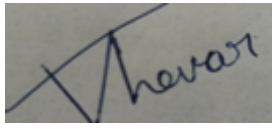
LEARNING OBJECTIVE/S:

The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module 4** **Health and connectivity**	Health : The Kelkar Committee approach to health, Regional disparities, Health Care Systems, Health outcomes, Recommendation and Strategies Connectivity – Introduction, General Overview of Roads, Railways, Ports, Airports and Broadband, Resources required	10	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARASHTRA PLANNING DEPARTMENT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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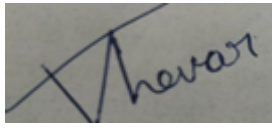
EARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III **Module 1: Monopoly**	Sources of monopoly - Profit maximizing monopoly – Calculation of price, output and profit for a monopoly- Price discrimination: First, Second and Third degree- Public policy towards monopoly.	12	Koutsoyannis, Modern Microeconomics, Macmillan Press Ltd., London, 1975.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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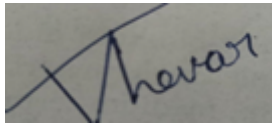
LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand the theory of oligopoly & duopoly
- To able to understand the new theories of oligopoly market
- To able to understand theory of distribution
- To able to understand general equilibrium & economic efficiency & welfare

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III **Module 2: Basics of Game theory**	Prisoner‟s Dilemma – Dominant strategy equilibrium – Battle of sexes game – Nash equilibrium – Extensive form games – Game tree.	12	Mankiw, N. Gregory, Principles of Microeconomics, Cengage Learning, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

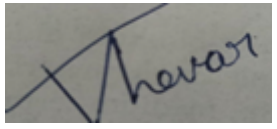
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** AUGUST **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand the theory of oligopoly & duopoly
- To able to understand the new theories of oligopoly market
- To able to understand theory of distribution
- To able to understand general equilibrium & economic efficiency & welfare

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III **Module 3: Oligopoly**	Cournot model – The Bertrand model – The Edgeworth model – The Chamberlin model – The Kinked demand curve model – Collusion and Cartels – Price Leadership.	12	Mansfield, Edwin, Micro-economics: Theory & Applications, 5th edition,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

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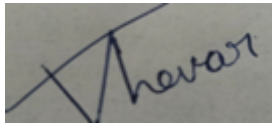
- To able to understand theory of distribution
- To able to understand general equilibrium & economic efficiency & welfare

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III **Module 4: General Equilibrium and Welfare Economics**	Interdependence in the Economy – General Equilibrium and its Existence -The Pareto Optimality Condition of Social Welfare, Marginal Conditions for Pareto Optimal Resource Allocation. Perfect Competition and Pareto Optimality – Kaldor-Hicks Compensation Criterion - Arrow"s Impossibility Theorem.	12	Sen Anindya, Microeconomics: Theory and Applications, Second edition Oxford	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _12_____



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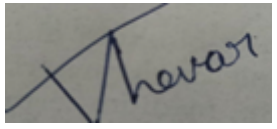
LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III **Module 1: The Goods Market in the Open Economy:**	Trade Balance and its implications for GDP calculations – Export and Import Functions – The Real Exchange Rate and why it matters –Why equilibrium GDP is consistent with a trade imbalance? – Fiscal and Exchange Rate Policy with a Fixed Exchange Rate.	12	Froyen, R. T.; Macroeconomics : Theory and Policy, Pearson Education Asia, Delhi,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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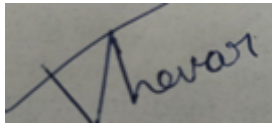
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III **Module 2: Money/Financial Markets and Mundell-Fleming Model:**	The LM equation for the open economy –Uncovered Interest Parity and its implications for exchange rate determination – The combined IS/LM/UIP model. Fiscal and Monetary Policy under Fixed and Flexible Exchange Rates– The Mundell- Fleming trilemma.	12	Salvatore, D.; International Economics, Prentice Hall, New York, 1997 .	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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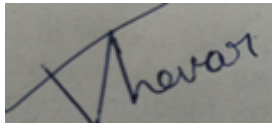
LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III **Module 3: Exchange Rate Regimes & Exchange Rate Crises:**	The choice of regime – Fixed or Flexible – The spectrum of arrangements from Hard Peg at one end to Fully Floating at the other; Why the Balance of Payments must always balance under Floating Exchange Rates but need not balance under a Fixed or Managed Exchange Rate regime. Exchange Rate crises – The relation between Exchange Rate crises and other kinds of crises (banking crises, financial crises, etc.).	12	Mankiw, Gregory; Macroeconomics, 6e, Worth Publishers, New York, 2003.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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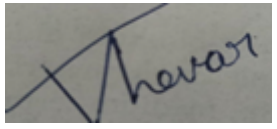
LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III **Module 4: International Monetary History, 1900-present:**	The Gold Standard – The Inter-War Period and the Great Depression – 1944, Bretton Woods System and its collapse ; Fixing in Europe via ERM, and the Dollar Standard elsewhere. The Maastricht Treaty and preparations for the Euro; The Global Financial Crisis and its consequences for the Euro; The Euro Crisis, Asia Infrastructure Investment Bank (AIIB), New Development Bank (NDB).	12	Blanchard, Oliver, Macroeconomics , Pearson education, New Delhi, India, 2008	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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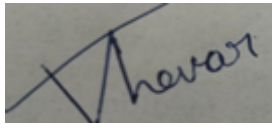
LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labor relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 1: Introduction	Meaning and Scope of Industrial Economics, Industrial Profile : Private sector - Performance and Problems; Cooperatives - features, types, merits and demerits; Public Sector - Role, Performance and Problems, Diversification and Industrial Combinations - Motives for Mergers and Acquisitions.	12	Desai S.S.M. and Bhalerao N, Industrial Economy of India, Himalaya Publishing House, Mumbai, 2008. 6	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labor relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTRIAL AND LABOUR ECONOMICS Module 2: Industrial Location and Problem of Regional Imbalance	Determinants of Industrial Location, Theories of Industrial Location - Weber's and Sargent Florence's Theories, Dispersion of Industries and the Problem of Regional Imbalance	12	Datt R. and Sundaram K.P.M, Indian Economy, S.Chand & Co., New Delhi, 2009	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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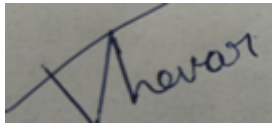

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INDUSTRIAL AND LABOUR ECONOMICS Module 3: Industrial Productivity and Industrial Sickness	Concept and Measurement of Industrial Productivity, Factors Affecting Industrial Productivity, Industrial Sickness - Causes, Effects and Remedial Measures, Rationalisation - Concept, Aspects and Impact	12	Barthwal R.R, Industrial Economics, New Age International Publishers, NewDelhi,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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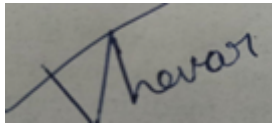

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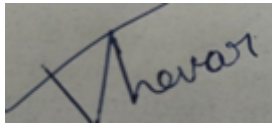
INDUSTIRAL AND LABOUR ECONOMICS Module 4: Industrial Development in India	New Industrial Policy, 1991; Disinvestment Policy; FIPB Revamp- Micro, Small and Medium Enterprises Development Act, 2006; National Manufacturing Policy, 2011,Recent Trends in India's Industrial Growth, Industrial Policy, 2012, Role of MNCs in the Indian Economy - Merits and Demerits, Issues in Industrial Proliferation and Environment Preservation; Pollution Control Policies.	12	Agrawal A.N, Indian Economy, New Age International Publishers, New Delhi, 2011.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _12_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** DECEMBER **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 1 : Introduction – Indian Labour Market	Characteristics of the Indian Labour Market - Child Labour and Female Labour – Problems and Measures- Globalisation and Indian Labour Market -Labour Market Reforms – Exit Policy and Need for Safety Nets - Second National Commission on Labour.	12	Datt R. and Sundaram K.P.M, Indian Economy, S.Chand & Co., New Delhi, 2009.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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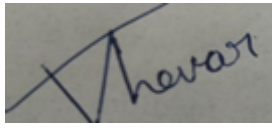

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 2 : Trade Unionism	Definition and Functions of Trade Unions- Historical Evolution of Trade Unions in India and Their Present Status - Problems of Trade Unions in India - Role of Outside Leadership	12	2. Mamoria C.B. and Mamoria S, Dynamics of Industrial Relations, Himalaya Publishing House, Mumbai, 2002.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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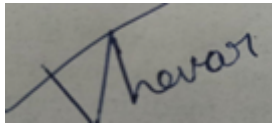

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INDUSTIRAL AND LABOUR ECONOMICS Module 3 : Industrial Relations	Causes of Industrial Disputes and Their Settlement Mechanism - Collective Bargaining – Concept, Features, Importance and Pre-requisites for Successful Collective Bargaining - Collective Bargaining in India - Workers" Participation in Management –Concept, objectives and Forms of Workers" Participation in India.	12	Mishra S.K. and Puri V.K, Indian Economy, Himalaya Publishing House, Mumbai,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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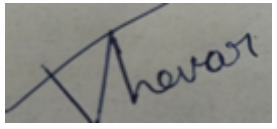

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INDUSTRIAL AND LABOUR ECONOMICS Module 4 : Labour Welfare and Social Security	Concept, Theories and Principles of Labour Welfare - Agencies for Labour Welfare - Role of the Labour Welfare Officer - Social Security – Concept; Social Assistance and Social Insurance - Social Security Measures in India - International Labour Organization and Its Impact on Indian Labour Legislations.	12	Monappa A, Industrial Relations, Tata McGraw Hill Publishing Company Ltd., New Delhi, 2006 5.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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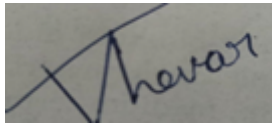

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- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS Module1: Introduction to Environmental Economics:	Introduction to environmental development and environmental economics, Rio-Declaration on environmental development, Agenda 21 programme of action for sustainable development, Social and economic dimensions, Conservation and management of resources for development.	12	4. Hanley Nick, Shogren Jason and White Ben: Introduction to Environmental Economics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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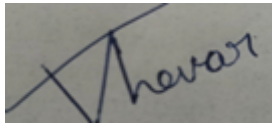

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ENVIRONMENTAL ECONOMICS Module 2: The design and implementation of Environmental Policy:	Overview - Criteria for evaluating environmental policies; Standards, Pigovian taxes and effluent fees, tradable permits, choice between taxes and quotas, implementation of environmental policy.	12	Kaltschmitt, Martin, Streicher, Wolfgang, Wiese, Andreas, Renewable Energy: Technology, Economics and Environment, Springer, Germany, 2007	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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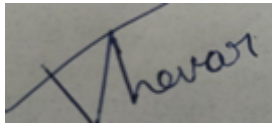

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ENVIRONMENTAL ECONOMICS Module 3: Measuring benefits of environmental improvements:	Economic value of Environment- Use and Non-use values-Measurement method:-market based and non-market based methods, contingent valuation, travel cost method, hedonic price method, risk assessment and perceptions.	12	Charles Kolstad : Environmental Economics, Oxford University Press, New York, 2000	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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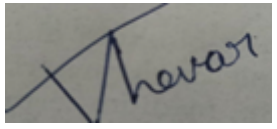

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ENVIRONMENTAL ECONOMICS Module 4: Environmental problems:	The global environment- Trans-boundary environmental problems, economics of climate change, International environmental Agreements - , sustainable development: Concepts and measures.	12	Barry C. Fields: Environmental Economics : An Introduction, McGraw Hill International Edition, 1997.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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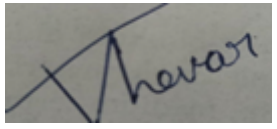

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The learners will be able to :

- Understanding the concept and aspects of economic Development.
- Knowing the theories of economic growth & Development.
- Measuring the concept and issues of economic planning.
- Discussing the need, types and necessary conditions of economic planning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT THEORY AND EXPERIENCE Module I: Demography and Development:	Demographic concepts; birth and death rates, age structure, fertility and mortality; demographic transitions during the process of development; gender bias in preferences and outcomes and evidence on unequal treatment within households; connections between income, mortality, fertility choices and human capital accumulation.	12	Abhijit Banerjee, Roland Benabou and Dilip Mookerjee, Understanding Poverty, Oxford University Press,2006.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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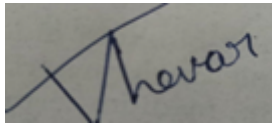

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DEVELOPMENT THEORY AND EXPERIENCE Module II: Structural Transformation:	The Lewis model –Clark-Fisher model of structural change , Urbanization: Trends and Projections with reference to India, Urbanization and Development, Causes of urbanization, Urban informal sector, Policies for the urban informal sector, Migration and development, Economic theory of rural-urban migration: Harris-Todaro migration model	12	Amartya Sen, Development as Freedom, Oxford University Press,2000.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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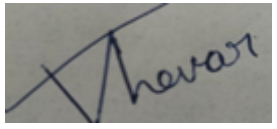

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT THEORY AND EXPERIENCE Module III: Land, Labor and Credit Markets:	Role of Agriculture in Economic Development, Market Failure and Agriculture, The distribution of land ownership; Land reform and its effects on productivity; contractual relationships between tenants and landlords; Land Acquisition; Nutrition and Labour Productivity; Rural Credit Market; Microfinance; Inter-linkages between Rural Factor Markets.	12	Partha Dasgupta, Economics: A Very Short Introduction, Oxford University	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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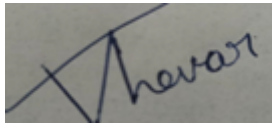

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT THEORY AND EXPERIENCE Module IV: The Environment and Development:	The core of environmental problems- Rural poverty and environmental destruction industrialization and environmental pollution - Economic models of environmental issues: privately owned resources, common property resources, public goods: regional environmental degradation and the free rider problem, limitations of pubic goods framework.	12	Debraj Ray, Development Economics, Oxford University Press,2009.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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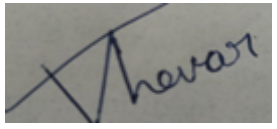

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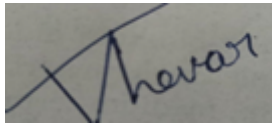
LEARNING OBJECTIVE/S:
The learners will be able to :

- Acquaintance with the economic thoughts of Classical, Nationalist and Socialist Thinkers.
- Judging the development of economic thoughts.
- Realizing the economic concepts and theories of Neo-classicals and indian thinkers.
- Evaluating the development of Indian economic thoughts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY OF ECONOMIC THOUGHT: Module 2: Marginalist : Marshall To Schumpeter	Role of time in price determination , economics methods, ideas of consumer's surplus, representative firm, external and internal economies, quasi-rent, nature of profit; Pigou : welfare economics: Schumpeter: role of entrepreneur and innovation.	12	2. Roll, E, A History of Economic Thought, Faber Landon, 1973.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



SIGNATURE OF THE STAFF

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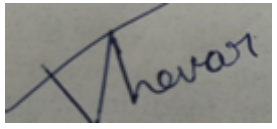
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

- Acquaintance with the economic thoughts of Classical, Nationalist and Socialist Thinkers.
- Judging the development of economic thoughts.
- Realizing the economic concepts and theories of Neo-classicals and Indian thinkers.
- Evaluating the development of Indian economic thoughts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY OF ECONOMIC THOUGHT: Module 3: Keynesian Ideas:	Liquidity Preference Theory and Liquidity trap, Consumption Function, MPC, Multiplier & Accelerator principles and their interaction, wage rigidities, underemployment equilibrium, role of fiscal policy: deficit spending and public works, multiplier principles, cyclical behaviour of the economy.	12	Gide, O. and G. Rist , A History of Economic Doctrine, George Harrop Co., London,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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LEARNING OBJECTIVE/S:
The learners will be able to :

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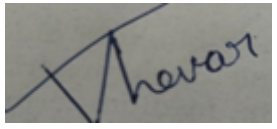
- Judging the development of economic thoughts.
- Realizing the economic concepts and theories of Neo-classicals and indian thinkers.
- Evaluating the development of Indian economic thoughts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY OF ECONOMIC THOUGHT: Module 4: Post-Keynesian Developments:	Hayek – Supply side economics: Arthur Laffer, Evans – Monetarism: Milton Friedman"s Don Patinkin – An overview of the new classical economics: Robert Lucas. Nobel Prize Winners in Economics: A. K. Sen (1998), Joseph Stiglitz (2001), Paul Krugman (2008), Jean Tirole (2014), Angus Deaton (2015), Richard Thaler (2017).	12	Gide, O. and G. Rist , A History of Economic Doctrine, George Harrop Co., London,	GOOGLE MEET , QUIZZES, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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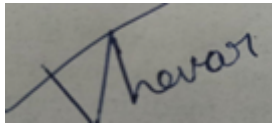
LEARNING OBJECTIVE/S:
The learners will be able to :

- Evaluating various types of exchange rates and its merits and demerits.
- Discussing the types and effects of tariffs and quotas.
- Judging the function, merits and demerits of Foreign Capital, and International Corporation (IMF, IBRD, WTO and SAARC).

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL TRADE, POLICY AND PRACTICE Module 1 :Introduction	Inter regional and international trade, Role of Dynamic factors i.e. change in Tastes, Technology and Role of Factor Accumulation. Foreign Exchange Rate: Concepts - Short and Forward rates - Foreign Exchange rate determination – Fixed and flexible exchange rate – Interrelationship between exchange rates and Interest rates. Exchange Rate system in India, managed floating, Current and Capital Account Convertibility and their impact, FEMA.	12	3. Dennis R Appleyard, Alfred J Field, International Economics, McGraw-Hill, USA, 2013.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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LEARNING OBJECTIVE/S:
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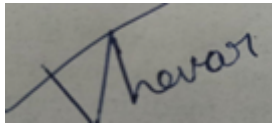
- Evaluating various types of exchange rates and its merits and demerits.
- Discussing the types and effects of tariffs and quotas.
- Judging the function, merits and demerits of Foreign Capital, and International Corporation (IMF, IBRD, WTO and SAARC).

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL TRADE, POLICY AND PRACTICE Module 2 : Emerging new International Economic Order	GATT, Uruguay Round, WTO, WTO Agreement, Dispute settlement Mechanism, Impact of WTO on Emerging Economies and India, Doha Round and implications of its failure- Emergence of Regional Free Trade agreements (FTA), Bilateral Investment Treaty (BIT), Double Taxation Avoidance Agreement (DTAA).	12	Paul R Krugman, Maurice Obstfeld and Melitz Mark, International Economics: Theory and Policy, Princeton University, USA, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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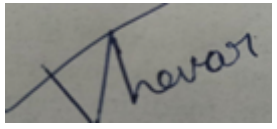
LEARNING OBJECTIVE/S:
The learners will be able to :

- Evaluating various types of exchange rates and its merits and demerits.
- Discussing the types and effects of tariffs and quotas.
- Judging the function, merits and demerits of Foreign Capital, and International Corporation (IMF, IBRD, WTO and SAARC).

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL TRADE, POLICY AND PRACTICE Module 3 :International Financial Institutions and International Debt Problem.	IMF, World Bank, Asian Development Bank (ADB) –New Development Bank (NDB), Asia Infrastructure Investment Bank (AIIB) and their role with special reference to India. South East Asian Crisis and Lessons for India, Global Economic Crisis, Global Financial Crisis of 2008, International Debt Problem – Emerging Global Financial Architecture.	12	1. Robert J Carbaugh, International Economics, South-Western Cengage Learning, USA, 2017.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

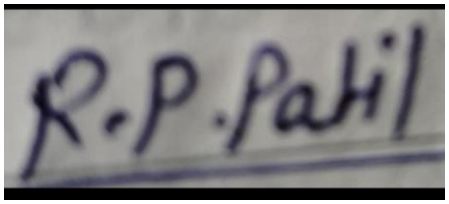
NAME OF THE STAFF: MS. Rupali Patil DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (MARATHI) SEMESTER: III MONTH: SEPTEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: MEANING OF MACROECONOMICS AND CONCEPTS OF NATIONAL INCOME

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS I MODULE I: Introduction to Macro Economics and National Income	Introduction: Meaning and Scope of Macro Economics; Concepts of National Income: GNP, NNP, NDP, Per Capita Income, Personal Income and Disposal Income; Methods and Difficulties in Measurement of National Income; Circular Flow of National Income: Closed Economy (Two and Three Sector) and Open Economy Models (Four Sector Model)	12	1) N. Gregory Mankiw, (2015), Principle of Macroeconomics, 7th edition, Cengage Learning. 2) Abel A. B. B. S. Beranake and D. Croushore (2011), Macroeconomics, Pearson, New Delhi	Group Discussion,, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

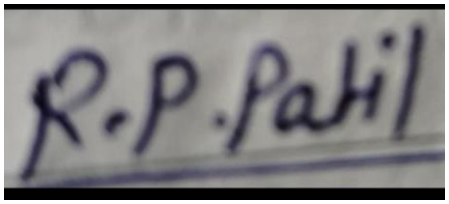
NAME OF THE STAFF: MS. Rupali Patil DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (MARATHI) SEMESTER: III MONTH: OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: RELATIONSHIP AMONG INCOME, CONSUMPTION, SAVINGS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS I MODULE II: Consumption and Investment	Consumption and Investment; Says Law of Market; Theory of Effective Demand; Consumption Function; Investment Function; Marginal Efficiency of Capital and Rate of Interest- Investment Multiplier	12	1) N. Gregory Mnakiw, (2015), Principle of Macroeconomics, 7th edition, Cengage Learning. 2) Abel A. B. B. S. Beranake and D. Croushore (2011), Macroeconomics, Pearson, New Delhi	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

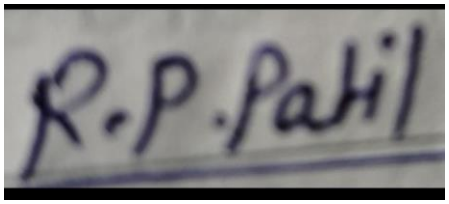
NAME OF THE STAFF: MS. Rupali Patil DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (MARATHI) SEMESTER: III MONTH: NOVEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: DEMAND AND SUPPLY OF MONEY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS I MODULE III: Supply of Money and Demand for Money	Supply of Money; Determinants of Money Supply; Velocity of Circulation of Money; RBI's Approach to Measurement of Money Supply; Demand for Money: Classical, Keynesian and Friedman's Approaches	12	1) Ahuja H. L., (2008), Macroeconomics theory and Policy, S. Chand and company Ltd. New Delhi. 2) Dwivedi D.N., (2007), Macroeconomics theory and Policy, TATA Mcgraw - Hill Publication company Ltd. Delhi.	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

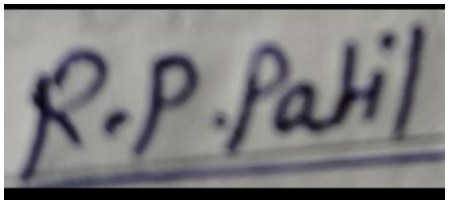
NAME OF THE STAFF: MS. Rupali Patil DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (MARATHI) SEMESTER: III MONTH: DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: FUNCTIONS OF BANK

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II: MODULE IV: Banking	Banking: Commercial Bank, Functions of Commercial Banks, Multiple Credit Creation, Balance Sheet of Commercial Bank; Development in Commercial Banking Sector Since 1990-91; Central Bank: Functions of Central Bank - Traditional, Developmental, Promotional	12	1) Ahuja H. L., (2008), Macroeconomics theory and Policy, S. Chand and company Ltd. New Delhi. 2) Dwivedi D.N., (2007), Macroeconomics theory and Policy, TATA Mcgraw - Hill Publication company Ltd. Delhi.	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

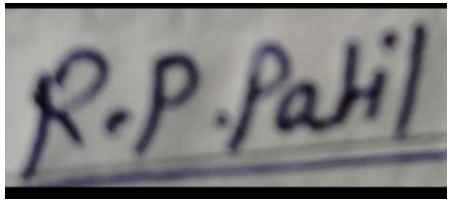
NAME OF THE STAFF: **MS. Rupali Patil** DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (MARATHI) SEMESTER: IV MONTH: January ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: MEANING , TYPES , CONCEPTS OF INFLATION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II: MACRO ECONOMICS II MODULE I: Inflation	Module - I: Inflation The Economics of Depression, Hyper Inflation; Inflation: Features and Causes, Demand Pull Inflation and Cost Push Inflation, Effects of Inflation; Nature of Inflation in Developing Economy; Phillips Curve; Stagflation: Meaning, Causes and Consequences	12	1) N. Gregory Mankiw, (2015), Principle of Macroeconomics, 7th edition, Cengage Learning. 2) Abel A. B. B. S. Beranake and D. Croushore (2011), Macroeconomics, Pearson, New Delhi	Group Discussion,, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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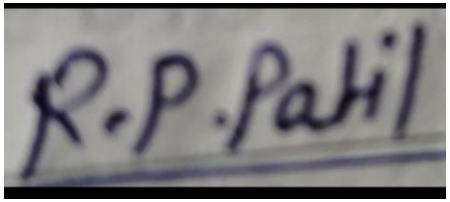
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. Rupali Patil** DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (MARATHI) SEMESTER: IV MONTH: February ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: MONETARY AND FISCAL POLICY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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ECOII: MACRO ECONOMICS II MODULE II: Economic Policy	Monetary Policy: Objectives, Instruments, Limitations, Role of Monetary Policy in Developing Economies; Fiscal Policy - Objectives, Instruments, Limitations and Role of Fiscal Policy in Developing Economies	12	1) N. Gregory Mnakiw, (2015), Principle of Macroeconomics, 7th edition, Cengage Learning. 2) Abel A. B. B. S. Beranake and D. Croushore (2011), Macroeconomics, Pearson, New Delhi	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

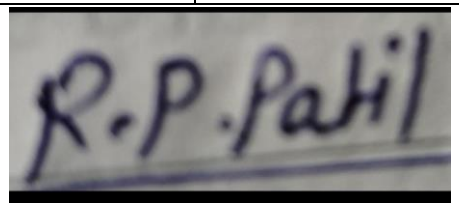
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. Rupali Patil** DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (MARATHI) SEMESTER: IV MONTH: March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO:Post Keynesian Economics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

ECOII: MACRO ECONOMICS II MODULE III: Post Keynesian Economics	The IS-LM Model of Integration of Commodity and Money Market; IS Curve: Derivation of IS Curve, Shift in IS Curve, Equilibrium in Goods Market; LM Curve: Derivation of LM Curve, Shift in LM Curve, Equilibrium in Money Market; Simultaneous Equilibrium in Goods and Money Market	12	1) Ahuja H. L., (2008), Macroeconomics theory and Policy, S. Chand and company Ltd. New Delhi. 2) Dwivedi D.N., (2007), Macroeconomics theory and Policy, TATA Mcgraw - Hill Publication company Ltd. Delhi.	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

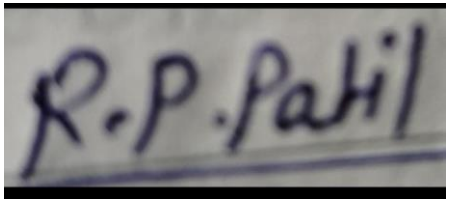
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. Rupali Patil** DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (MARATHI) SEMESTER: IV MONTH: April ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND EXTERNAL SECTOR

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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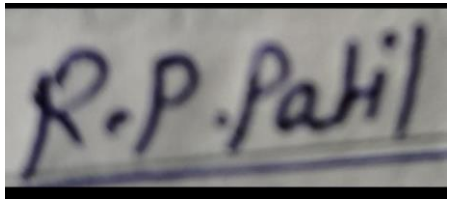
ECO II: MACRO ECONOMICS II: MODULE IV: External Sector	Balance of Payment: Structure, Disequilibrium in Balance of Payment, Types, Causes and Measures to Correct Balance of Payment Disequilibrium; Foreign Exchange Market: Determination of Exchange Rate: Fixed and Flexible Exchange Rate; Spot and Forward Exchange Rate; Exchange Rate Policy	12	1) Ahuja H. L., (2008), Macroeconomics theory and Policy, S. Chand and company Ltd. New Delhi. 2) Dwivedi D.N., (2007), Macroeconomics theory and Policy, TATA Mcgraw - Hill Publication company Ltd. Delhi.	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

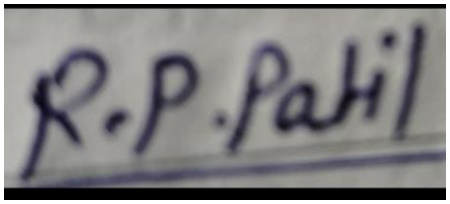
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS CLASS: T.Y.B.A. (MARATHI)

SEMESTER: V MONTH: August ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: RIO -DECLARATION AND ENVIRONMENTAL DEVELOPMENT.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VIII : ENVIRONMENTAL ECONOMICS Module1: Introduction to environmental economics	Introduction to environmental development and environmental economics, Rio-Declaration on environmental development.	04	Barry C. Fields: Environmental Economics : An Introduction, McGraw HillInternational ,Edition, 1997.	Group Discussion, PPT,Quiz



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NAAC accredited "B" Grade, 2.69 CGPA

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

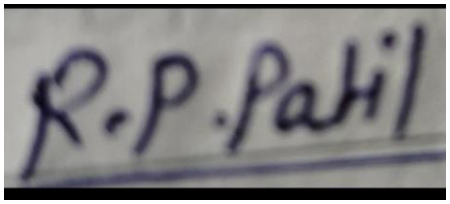
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS CLASS: T.Y.B.A. (MARATHI)

SEMESTER: V MONTH: September ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: AGENDA 21 PROGRAMME FOR ENVIRONMENT.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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ECO VIII : ENVIRONMENTAL ECONOMICS Module1: Introduction to environmental economics	Agenda 21 programme of action for sustainable development, Social and economic dimensions, Conservation and management of resources for development.	08	United Nations Sustainable Development, UN Conference on Environment & Development, Rio de Janerio, Brazil, Agenda 21,https://sustainabledevelopment.un.org/content/documents/Agenda 21.pdf, 1992.	Group Discussion, PPT,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

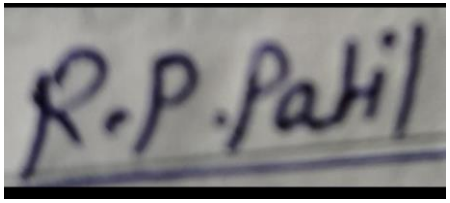
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS CLASS: T.Y.B.A. (MARATHI)

SEMESTER: V MONTH: October ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: EVALUATION OF ENVIRONMENTAL POLICIES AND ITS IMPLEMENTATION.



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VIII : ENVIRONMENTAL ECONOMICS Module -2 The design and implementation of Environmental Policy.	Overview - Criteria for evaluating environmental policies; Standards, Pigovian taxes and effluent fees.	06	Singh Katar,Shisodiya Anil,'Paryavarniya Arthashastra, Sidhhant aani aupayojan',SAGE publication.	Group Discussion, PPT,Quiz

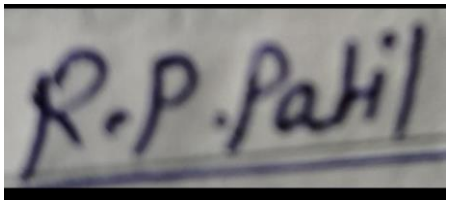
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS CLASS: T.Y.B.A. (MARATHI)

SEMESTER: V MONTH: November ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:



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THE LEARNERS WILL BE ABLE TO: INFRASTRUCTURE IN ECONOMIC DEVELOPMENT, TYPES OF TECHNICAL PROGRESS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VIII : ENVIRONMENTAL ECONOMICS Module -2 The design and implementation of Environmental Policy.	Tradable permits, choice between taxes and quotas, implementation of environmental policy.	06	Singh Katar,Shisodiya Anil,'Paryavarniya Arthashastra, Sidhhant aani aupayojan',SAGE publication.	Group Discussion, PPT,Quiz

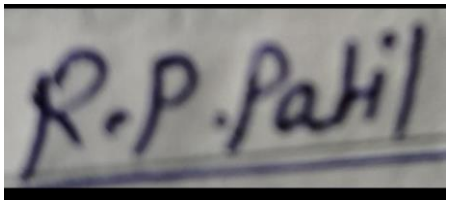
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS CLASS: T.Y.B.A. (MARATHI)

SEMESTER: VI MONTH: January ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:



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THE LEARNERS WILL BE ABLE TO: DEMOGRAPHIC CONCEPTS.

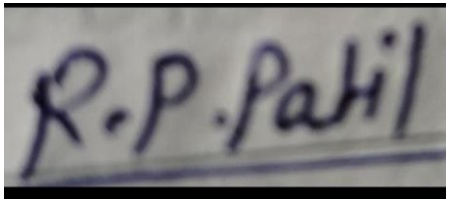
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VIII : DEVELOPMENT THEORY & EXPERIENCE Module- 1 Demography and Development	Demographic concepts; birth and death rates, age structure, fertility and mortality;	05	Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Ahirrao-Alizad-Dapte-Varat-Bhose (2001) – 'Loksankhya' – Nirali Publication, Pune.	Group Discussion, PPt,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS CLASS: T.Y.B.A. (MARATHI)

SEMESTER: VI MONTH: February ACADEMIC YEAR: 2020-21



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LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: DEMOGRAPHIC TRANSITIONS DURING THE DEVELOPMENT.

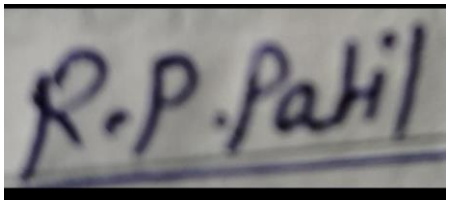
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VIII : DEVELOPMENT THEORY & EXPERIENCE Module- 1 Demography and Development	Demographic transitions during the process of development; gender bias in preferences and outcomes and evidence on unequal treatment within households; connections between income, mortality, fertility choices and human capital accumulation.	07	.Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Ahirrao-Alizad-Dapte-Varat-Bhose (2001) – 'Loksankhya' – Nirali Publication, Pune.	Group Discussion, PPt,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS CLASS: T.Y.B.A. (MARATHI)

SEMESTER: VI MONTH: March ACADEMIC YEAR: 2020-21



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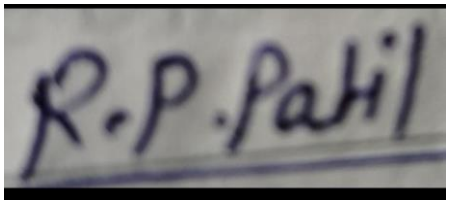
LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: IMPORTANCE OF STRUCTURAL CHANGES IN ECONOMIC DEVELOPMENT.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VIII : DEVELOPMENT THEORY & EXPERIENCE Module -2: Structural Transformation	The Lewis model –Clark-Fisher model of structural change , Urbanization: Trends and Projections with reference to India, Urbanization and Development, Causes of urbanization, Urban informal sector, Policies for the urban informal sector, Migration and development, Economic theory of rural-urban migration: Harris-Todaro migration model	12	Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Dr.Kavimandan Vijay,'Vikasache Arthashastra va Niyojan', Shree Mangesh Prakashan, Nagpur.	Group Discussion, PPT,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)



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NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS CLASS: T.Y.B.A. (MARATHI)

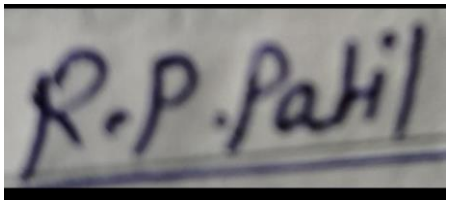
SEMESTER: VI MONTH: April ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: ROLE OF AGRICULTURE AND RURAL CREDIT MARKET.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VIII : DEVELOPMENT THEORY & EXPERIENCE n: Harris-Todaro migration model Module -3: Land, Labor and Credit Markets	Role of Agriculture in Economic Development, Market Failure and Agriculture, The distribution of land ownership; Land reform and its effects on productivity; contractual relationships between tenants and landlords; Land Acquisition; Nutrition and Labour Productivity; Rural Credit Market; Microfinance; Inter-linkages between Rural Factor markets.	12	Dr.Kavimandan Vijay,'Krushi va Gramin Arthashastra', Shree Mangesh Prakashan, Nagpur.	Group Discussion, PPT,Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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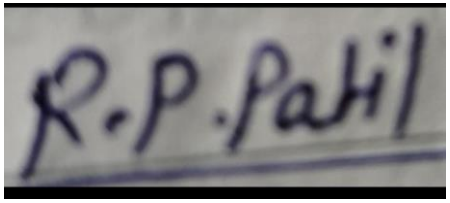

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NAAC accredited "B" Grade, 2.69 CGPA
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. Rupali Prashil Patil** DEPARTMENT: ECONOMICS CLASS: SY.B.A. (MARATHI) SEMESTER: III

MONTH: September ACADEMIC YEAR: 2020-21

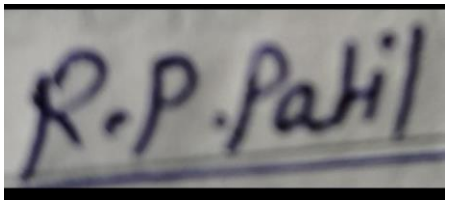
LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: EDUCATE THE STUDENTS ABOUT THE UNIQUE POSITION OF DEMOGRAPHY AMONG VARIOUS BRANCHES OF POPULATION SCIENCE.IT ALSO THROWS LIGHT ON VARIOUS POPULATION THEORIES,MEASURES AND THE TRENDS IN GROWTH OF POPULATION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit-1 Introduction	How demography is different from population science Applications in other disciplines Demography-Its definition, nature & Scope. It'srelationwithotherdisciplines. .	08	BhendeA.A.&TaraKanitkar(1982)–'PrinciplesofPopulationStudies'–HimalayaPublishingHouse,Bombay. Dr.D.D.Kachole(2001)–'Demography'–KailashaPublication,Aurangabad.	Group Discussion,PPT, Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)



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NAME OF THE STAFF: **MS. Rupali Prashil Patil** DEPARTMENT: ECONOMICS CLASS: S.Y.B.A. (MARATHI) SEMESTER: III

MONTH: October ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO:

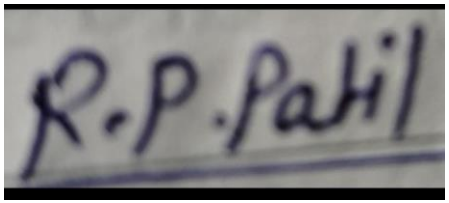
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit-1 Introduction	Theory of Population-Malthus Theory. Optimum theory of Population Theory of demographic transition. Trends in population growth- Developed Vs Developing Countries. Features of Indian Population.	08	Dr.D.D.Kachole(2001)–'Demography'–KailashaPublication,Aurangabad. GovernmentofIndia–(VariousReports),CensusofIndia,NewDelhi.Ahirrao-Alizad-Dapte-Varat-Bhose(2001)–'Loksankhya'–NiraliPublication,Pune.	Group Discussion,PPT, Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. Rupali Prashil Patil** DEPARTMENT: ECONOMICS CLASS: S.Y.B.A. (MARATHI) SEMESTER: III

MONTH: November ACADEMIC YEAR: 2020-21LEARNING OBJECTIVE/S:



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THE LEARNERS WILL BE ABLE TO: EDUCATE THE STUDENTS ABOUT THE UNIQUE POSITION OF DEMOGRAPHY AMONH VARIOUS BRANCHES OF POPULATION SCIENCE.IT ALSO THROWS LIGHT ON VARIOUS POPULATION THORIES,MEASURES AND THE TRENDS IN GROWTH OF POPULATION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit-3 **Basic concepts of measures**	Concept related to fertility and mortality Crude birth rate & death rate. Age specific birthrate & death rate Standardized birth rate &death rate.	08	Dr.D.D.Kachole(2001)–'Demography'–KailashaPublication,Aurangabad GovernmentofIndia–(VariousReports),CensusofIndia,NewDelh	Group Discussion,PPT, Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

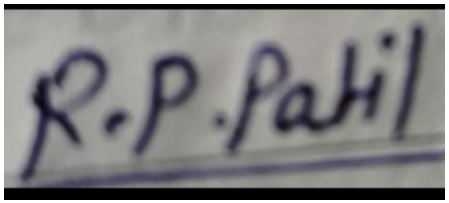
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. Rupali Prashil Patil** DEPARTMENT: ECONOMICS CLASS: S.Y.B.A. (MARATHI) SEMESTER: III

MONTH: December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO:



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit-3 **Basic concepts of measures**	Standardize birth rate Standardize death rate Methods to rectify the errors in Age data- Whipples Index, Myers Index ,UN Method- Relative merits and demerits	08	Dr.D.D.Kachole(2001)–'Demography'–KailashaPublication,Aurangabad GovermmentofIndia–(VariousReports),CensusofIndia,NewDelh	Group Discussion,PPT, Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

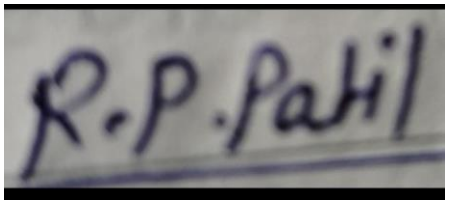
NAME OF THE STAFF: **MS. Rupali Prashil Patil** DEPARTMENT: ECONOMICS CLASS: S.Y.B.A. (MARATHI) SEMESTER: IV

MONTH: January ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: CONCEPT OF MORTALITY & LIFE TABLE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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Demography Unit-1 Fertility,Nuptiality & Mortality	Mortality_Concept&Factorsaffecting mortality. LifeTable-Concept Its Importance,	08	Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Ahirrao-Alizad-Dapte-Varat-Bhose (2001) – 'Loksankhya' – Nirali Publication, Pune.	Group Discussion, PPT, Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

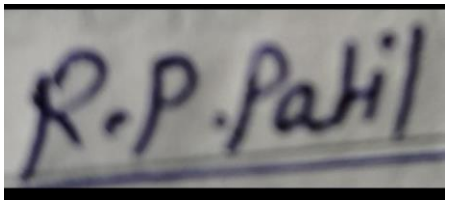
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. Rupali Prashil Patil** DEPARTMENT: ECONOMICS CLASS: S.Y.B.A.

(MARATHI) SEMESTER: IV MONTH: February ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: .Concept of Nuptiality & Mortality



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit-1 Fertility,Nuptiality & Mortality	Nuptiality- Concept & Factors Affecting Nuptiality Mortality- Concept & factors Affecting Mortality	08	.Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Ahirrao-Alizad-Dapte-Varat-Bhose (2001) – 'Loksankhya' – Nirali Publication, Pune.	Group Discussion, PPT, Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

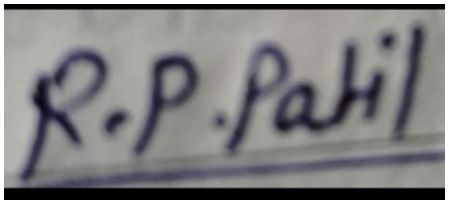
NAME OF THE STAFF: **MS. Rupali Prashil Patil** DEPARTMENT: ECONOMICS CLASS: S.Y.B.A.

(MARATHI) SEMESTER: IV MONTH: March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/



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		ALLOTTED		ICT TOOLS USED
Demography Unit-2 Migration Urbanization	Migration-Concept Types FactorsaffectingMigration TheoryofMigration(Harris&TodaroModel) Issues Related To Migration.	10	Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Dr.Kavimandan Vijay,'Vikasache Arthashastra va Niyojan', Shree Mangesh Prakashan, Nagpur.	Group Discussion, PPT, Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

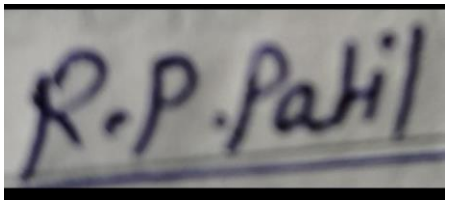
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. Rupali Prashil Patil** DEPARTMENT: ECONOMICS CLASS: S.Y.B.A

SEMESTER: IV MONTH: April ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO:



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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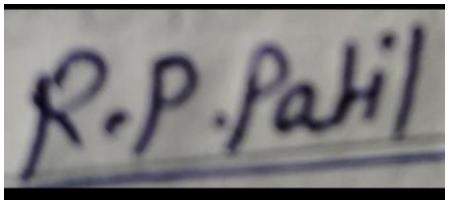
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit-2 Migration Urbanization	Urbanization_Concept,Trends pattern of Urbanization in India. Problems ofUrbanizationinIndia.(Poverty,Goods Supply,Water,Sanitation,housing,Slimarea,Employment,health,education,transport,environmental degradation	06	Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Dr.Kavimandan Vijay,'Vikasache Arthashastra va Niyojan', Shree Mangesh Prakashan, Nagpur.	Group Discussion,PPT, Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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TEACHING PLAN (UNIT PLAN)

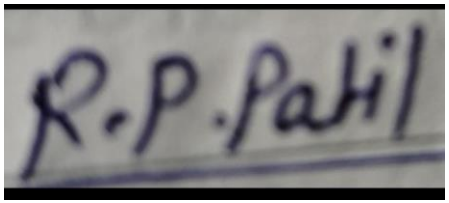
NAME OF THE STAFF: **MS. Rupali Patil** DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MARATHI) SEMESTER: II MONTH: January ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: CONCEPT OF PRODUCTION & KNOW VARIOUS ECONOMIC THEORIES RELATED TO PRODUCTION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II: MACRO ECONOMICS II MODULE I: Production Analysis	Module - I: Production Analysis Production Function: Concept And Types; Concepts of Total, Average and Marginal Product Law of Variable Proportion and Returns to Scale, Isoquant and Producer's Equilibrium	12	H.L.Ahuja, (2016), "Advance Economics Theory" S.Chand & Company Ltd	Group Discussion,, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

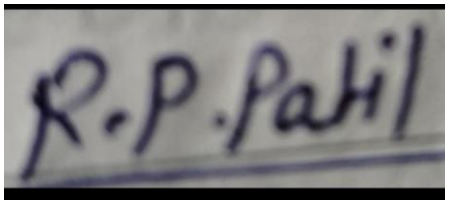
NAME OF THE STAFF: **MS. Rupali Patil** DEPARTMENT: ECONOMICS

CLASS: .F.Y.B.A. (MARATHI) SEMESTER: II MONTH: February ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO:this paper is aimed at giving supply side knowledge of Economics to the learner which will enhance their knowledge about aspects of production, cost and revenue analysis, theories of distribution and understanding about the market structure

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECOII: MACRO ECONOMICS II MODULE III: **Factor Pricing**	Marginal Productivity Theory of Distribution; Rent: Ricardian Theory of Rent, Modern Theory of Rent, Quasi Rent; Wages: Modern Theory of Wages; Collective Bargaining; Supply Curve of Labour; Interest: Classical Theory of Interest, Loanable Funds Theory of Interest; Profit: Risk and Uncertainty Theory, Innovation Theory	12	Deshmukh Mahadev,Vibhute Somnath ,"Sukshmalakshi AArthashatra"Sheth Publications	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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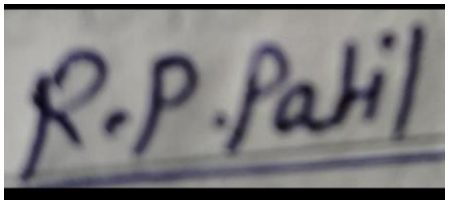
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. Rupali Patil** DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MARATHI) SEMESTER: II MONTH: March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO:his paper is aimed at giving supply side knowledge of Economics to the learner which will enhance their knowledge about aspects of production, cost and revenue analysis, theories of distribution and understanding about the market structure.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECOII: MACRO ECONOMICS II MODULE IV: **Equilibrium in Different Market Structure**	Concept Of Equilibrium: TR - TC And MR - MC Approach; Features of Perfect Competition; Monopoly and Monopolistic Competition, Short Run and Long Run Equilibrium of Firm and Industry under each Market Condition; Selling Cost and Wastages under Monopolistic Competition	12	. Deshmukh Mahadev,Vibhute Somnath ,"Sukshmalakshi AArthashatra"Sheth Publicatio	Group Discussion, PPT, QUIZ



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

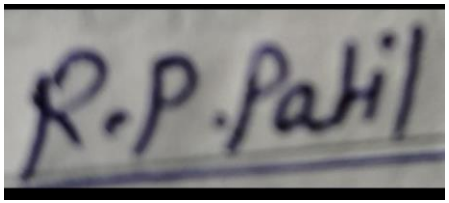
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. Rupali Patil** DEPARTMENT: ECONOMICS

CLASS: SEMESTER: IV MONTH: ACADEMIC YEAR:

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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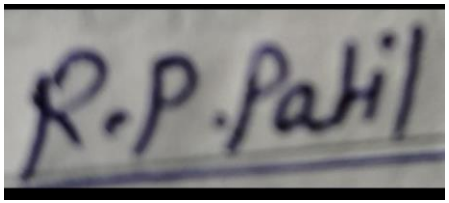

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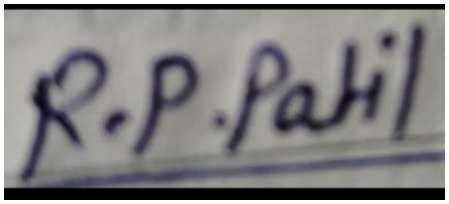
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Patil DEPARTMENT: ECONOMICS
CLASS: F.Y.B.A. (Mar) SEMESTER: I MONTH: NOVEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND BASIC PRINCIPLES OF MICROECONOMIC THEORY.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – I Module - II: Ten Principles of Economics & Module 3	Trade-Off Faced by the Individuals; Significance of Opportunity Cost in Decision Making; Thinking at the Margin; Responses to incentives; Benefits from Exchange; Organization of Economic Activities through Markets and its Benefits; Role of Government in improving Market Outcomes; Dependence of Standard of Living on Production; Growth in Quantity of Money; Inflation and Unemployment Trade Off Module - III: Markets, Demand and Supply What is a Market; What is Competition; Demand Curves: Market Demand versus Individual Demand, Movements along the Demand Curve, Shifts in the Demand Curve; Supply Curves: Market Supply and Individual Supply, Shifts in Supply Curve	18	N.Gregory Mankiw, (2015), "Principles of Microeconomics" 7th edition- Cengage Learning Sukshma Aarthashashra, Ram Deshmukh	Group Discussion, PPT, QUIZ .



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

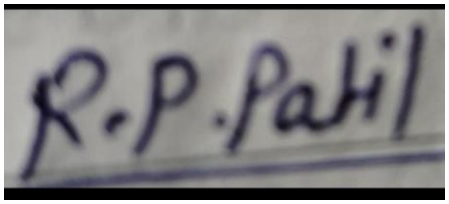
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Patil DEPARTMENT: ECONOMICS
CLASS: F.Y.B.A. (MAR) SEMESTER: I MONTH: DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: GET AN INTRODUCTION TO SUPPLY AND DEMAND AND THE BASIC FORCES THAT DETERMINE EQUILIBRIUM IN A MARKET ECONOMY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – I Module –III & IV Introduction to Microeconomics	Market Equilibrium - Price Elasticity of Demand ,Concepts of Income Elasticity of Demand, CrossElasticityofDemand and Promotional Elasticity of Demand Module IV: Consumer's Behavior (12 Lectures) Introduction to Cardinal and Ordinal Approaches,Indifference Curve Analysis - Properties ,Budget Line, and Consumer's Equilibrium; Income, Price and Substitution Effect; Derivation of Demand Curve; Consumer's Surplus: Strong Ordering and Weak Ordering	18	Sukshalakshi Aarthashashra, RamDeshmukh,	Group Discussion, . PPT, QUIZ .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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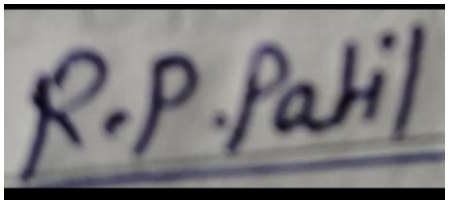

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** I **MONTH:** August & September **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of micro economics
- Understand the exchangeRole of Price Mechanism in a Market Economy
- Positive Economics and Normative

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Micro economics Module - I: Introduction to Microeconomics	.Microeconomics: Meaning, Scope, Nature, Importance and Limitations; Basic Economic Problems; Role of Price Mechanism in a Market Economy; Positive Economics and Normative	02	M.L.Jhingan, (2006) "Microeconomics Theory", 5 th edition Vrinda Publication (P) Ltd. 5. H.L.Ahuja, (2016) "Advance Economics Theory" S.Chand & Company Ltd.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** I **MONTH: October** & November **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand verious economics tooles

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Micro economics - Module - I: Introduction to Microeconomics	Economics; Concepts of Equation, Functions, Graphs, Diagrams, Line, Slope and Intercept	02	**.L.Jhingan, (2006) "Microeconomics Theory", 5 th edition Vrinda Publication (P) Ltd. 5. H.L.Ahuja, (2016) "Advance Economics Theory" S.Chand & Company Ltd.**	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** II **MONTH:** January & February **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the function of production .
-

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACRO ECONOMICS Module 1- Production Analysis	Production Function: Concept And Types; Concepts of Total, Average and Marginal	02	**Jhingan, (2006) "Microeconomics Theory", 5 th edition Vrinda Publication (P) Ltd. 5. H.L.Ahuja, (2016) "Advance Economics Theory" S.Chand & Company Ltd**	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** II **MONTH:** March & April **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the low of variable proportion
- understand isoquant & producer's equilibrium

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACRO ECONOMICS Module 1- Production Analysis	Law of Variable Proportion and Returns to Scale, Isoquant and Producer's Equilibrium	02	Sikdar, S. (2006), Principles of Macroeconomics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** August **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand Meaning and Scope of Public Finance
- To understand Failure: Public Goods and Private Goods, Externalities, Efficiency versus Equity; Principles
- To understand Principles of Sound Finance and Functional Finance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -3 Public finance Module:- 1 introduction	Meaning and Scope of Public Finance; Public Finance versus Private Finance; Market Failure: Public Goods and Private Goods, Externalities, Efficiency versus Equity; Principles of Sound Finance and Functional Finance; Allocation, Distribution, Stabilisation and Growth Functions of the Government	03	1)Sury M.M., (1990), Government Budgeting in India, Commonwealth Publishers. 2)Bhatia H.L., (2012), Public Finance, Vikas Publications.3). Report of the Fourteenth Finance Commission,Governm	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

			ent of India.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** September **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand the Law of Maximum Social Advantage;
- To understand Types of Public Budget;
- To understand Role of Taxation
- To understand Determination of Tax Burden
-
- To understand th tax system

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III Fiscal Policy: Public Expenditure and Debt	Dalton's and Musgrave Versions of the Law of Maximum Social Advantage; Role of Government in a Modern Economy; Types of Public Budget; Structure of Public Budget; Role of Taxation; Merits and Demerits of Direct and Indirect	03	1)Sury M.M., (1990), Government Budgeting in India, Commonwealth Publishers. 2)Bhatia H.L., (2012), Public Finance, Vikas Publication	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

	Tax Policy; Features of Good Tax System; Concept of Impact, Incidence and Shifting of Taxation; Elasticity and Determination of Tax Burden		s.3). Report of the Fourteenth Finance Commission,Government of India.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** October **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand Canons of Public Expenditure
- To understand Classification of Public Expenditure
- To understand Meaning and Types of Public Debt
- To understand Concepts of Deficit

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III Fiscal Policy: Public Expenditure and Debt	Canons of Public Expenditure; Classification of Public Expenditure; Wagner's Law of Public	03	1)Sury M.M., (1990), Government Budgeting	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

	Expenditure; Public Expenditure as an Instrument of Fiscal Policy; Meaning and Types of Public Debt; Burden of Public Debt; Principles of Public Debt Management; Concepts of Deficit		in India, Commonwealth Publishers. 2)Bhatia H.L., (2012), Public Finance, Vikas Publications.3). Report of the Fourteenth Finance Commission,Government of India.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** November **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand Budget of The Government of India
- To understand Components of Public Expenditure
- To understand Appraisal of FRBM Act
- To understandFourteenth Finance Commission Recommendations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

Unit IV Indian Public Finance	Budget of The Government of India (Previous Financial Year); Sources of Public Receipts (Tax And Non-Tax, Introduction To GST); Components of Public Expenditure; Sources of Public Borrowing and Debt Liabilities; Deficits; Appraisal of FRBM Act 2004; Fiscal Federalism: Fourteenth Finance Commission Recommendations	03	1)Sury M.M., (1990), Government Budgeting in India, Commonwealth Publishers. 2)Bhatia H.L., (2012), Public Finance, Vikas Publications.3). Report of the Fourteenth Finance Commission,Government of India.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** january **ACADEMIC YEAR:** 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand Structural Changes In Indian Economy;
- Overview on Poverty Alleviation Programmes
- To understand the Measures to Reduce Regional Inequalities in India

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module- I: Introduction (12 Lectures)	Trends in India's National Income and PCI Since 1990; Structural Changes In Indian Economy; Brief Overview of the Employment Generation and Poverty Alleviation Programmes; Regional Inequalities; Measures to Reduce Regional Inequalities in India	03	Datt, Ruddra and K.P.M, Sundaram, (2017), 'Indian Economy', S. Chand & Company Ltd., New Delhi. 4) Misra, S. K. and V. K. Puri, (2018) 'Indian Economy', Himalaya Publishing House, Mumbai.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** February **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand Role of Agriculture in Economic Development
- To understand Agricultural Price Policy
- Role and Function & Agricultural Marketing
- To understand Sources of Agricultural Finance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module - II: Agricultural Sector	Module - II: Agricultural Sector Role of Agriculture in Economic Development; Causes of Low Productivity; Agricultural Inputs; Agricultural Price Policy: Recent Minimum Support Price Policy; Income Support for Farmers; Sources of Agricultural Finance; Micro Finance; NABARD: Role and Function; Agricultural Marketing: Structure and Problems; National Policy for Farmers, 2007; Organic Farming Policy; Food Security in India	03	Datt, Ruddra and K.P.M, Sundaram, (2017), 'Indian Economy', S. Chand & Company Ltd., New Delhi. 4) Misra, S. K. and V. K. Puri, (2018) 'Indian Economy', Himalaya Publishing House, Mumbai.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** March **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand Industries and Economic Development Recent Policies and Programs for
- Industrial Development
- To understand Role and Trends of FDI
- To understand

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module -III: Industrial Sector	Infrastructure for Industrial Development; Industrial Policies in India; Industrial Policy of 1991; Micro, Small and Medium Enterprises (MSMEs): Classification, Role and Policy Measures; Growth of Large Scale Industries and Economic Development; Recent Policies and Programs for Industrial Development: Start Up India, Make in India, Skill India; Role and Trends of FDI in Industrial Sector Development	03	Datt, Ruddra and K.P.M, Sundaram, (2017), 'Indian Economy', S. Chand & Company Ltd., New Delhi. 4) Misra, S. K. and V. K. Puri, (2018) 'Indian Economy', Himalaya Publishing House, Mumbai.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** April

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand Role of Service Sector in Indian Economy;
- Research and Development Services With Reference to Education and Skill India
- To understandGrowth and Performance of Healthcare;

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module -IV: Service Sector	Role of Service Sector in Indian Economy; Growth and Performance of Healthcare; Performance of Trade and Tourism, Information Technology and IT - Enabled Services; Research and Development Services With Reference to Education and Skill India; Performance of Service Sector during XIIth Five Year Plan	03	Datt, Ruddra and K.P.M, Sundaram, (2017), 'Indian Economy', S. Chand & Company Ltd., New Delhi. 4) Misra, S. K. and V. K. Puri, (2018) 'Indian Economy', Himalaya Publishing House, Mumbai.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** August **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:

- The learners will be able to : The modules incorporated in this paper educate the students about the inter-relationship between economic development and population along with an exposition of the established theories of population. Issues related to demographic techniques and basic sources of demographic data in the Indian economy have also been included. Aspects of the population policy and the study of its social characteristics are other important components of the modules of this paper.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Paper – I MODULE 2 Sources of demographic da India	Salient features of census – including 2011 census. Civil Registration System,National Sample Survey. Demographic Survey –	03	Bose A. (1996)– 'India's Basic Demographic Statistics' – B.R. Publishing Corporation, New Delhi	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** September **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:

- The learners will be able to : The modules incorporated in this paper educate the students about the inter-relationship between economic development and population along with an exposition of the established theories of population. Issues related to demographic techniques and basic sources of demographic data in the Indian economy have also been included. Aspects of the population policy and the study of its social characteristics are other important components of the modules of this paper.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Paper – I MODULE 2 Sources of demographic da India	National Family Health survey - 1,2 and 3. ,merits and demerits of these sources.	03	Agarwal S.S. (1985) - 'India's Population Problem' – Tata McGraw Hill Publication, Bombay	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** January **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:

- The learners will be able to : The modules incorporated in this paper educate the students about the inter-relationship between economic development and population along with an exposition of the established theories of population. Issues related to demographic techniques and basic sources of demographic data in the Indian economy have also been included. Aspects of the population policy and the study of its social characteristics are other important components of the modules of this paper.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Paper – II MODULE 3	Salient features and evolution of India's population policy.	03	Agarwal S.S. (1985) - 'India's Population Problem' – Tata McGraw Hill Publication, Bombay	CHALK AND TALK , GROUP DISCUSSION,

Population Policy	• Shift in policy focus from population control to family welfare to women empowerment.			PRESENTATI ON

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** March **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:

- The learners will be able to : The modules incorporated in this paper educate the students about the inter-relationship between economic development and population along with an exposition of the established theories of population. Issues related to demographic techniques and basic sources of demographic data in the Indian economy have also been included. Aspects of the population policy and the study of its social characteristics are other important components of the modules of this paper.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURE S ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Paper – II MODULE 3 Population Policy	• Family Planning – Meaning, importance and methods of family planning. • Population Projection in India	03	Hans Raj (1984) – 'Fundamentals of Demography – Surjeet Publication, Delhi.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATI ON

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** August **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III Module 2: Basics of Game theory	Prisoner‟s Dilemma – Dominant strategy equilibrium – Battle of sexes game –	02	Mankiw, N. Gregory, Principles of Microeconomics, Cengage Learning, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** September **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand the theory of oligopoly & duopoly
- To able to understand the new theories of oligopoly market
- To able to understand theory of distribution
- To able to understand general equilibrium & economic efficiency & welfare

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III Module 2: Basics of Game theory	Nash equilibrium – Extensive form games – Game tree.	02	Mankiw, N. Gregory, Principles of Microeconomics, Cengage Learning, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** October **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand the theory of oligopoly & duopoly
- To able to understand the new theories of oligopoly market
- To able to understand theory of distribution
- To able to understand general equilibrium & economic efficiency & welfare

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III **Module 3: Oligopoly**	The Cournot model – The Bertrand model – The Edgeworth model – The Chamberlin Model	02	Mansfield, Edwin, Micro-economics: Theory & Applications, 5th edition,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** November **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand the theory of oligopoly & duopoly

- To able to understand the new theories of oligopoly market
- To able to understand theory of distribution
- To able to understand general equilibrium & economic efficiency & welfare

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III **Module 3: Oligopoly**	The Kinked demand curve model – Collusion and Cartels – Price Leadership	02	Sen Anindya, Microeconomics: Theory and Applications, Second edition Oxford	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** January **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III Module2: Money/Financial Markets and Mundell-Fleming Model: :	The LM equation for the open economy –Uncovered Interest Parity and its implications for exchange rate determination – The combined IS/LM/UIP model.	02	Froyen, R. T.; Macroeconomics : Theory and Policy, Pearson Education Asia, Delhi,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** February **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III	Fiscal and Monetary Policy under Fixed and Flexible Exchange Rates– The Mundell-Fleming trilemma.	02	Salvatore, D.; International	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

Module 2: Money/Financial Markets and Mundell-Fleming Model:			Economics, Printice Hall, New York, 1997.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** March **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III Module 4: International Monetary History, 1900-present	The Gold Standard – The Inter-War Period and the Great Depression – 1944, Bretton Woods System and its collapse ; Fixing in Europe via ERM, and the Dollar Standard elsewhere.	02	Mankiw, Gregory; Macroeconomics, 6e, Worth Publishers, New York, 2003.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** April **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III Module 4: International Monetary History, 1900-present:	The Maastricht Treaty and preparations for the Euro; The Global Financial Crisis and its consequences for the Euro; The Euro Crisis, Asia Infrastructure Investment Bank (AIIB), New Development Bank (NDB).	02	Blanchard, Oliver, Macroeconomics , Pearson education, New Delhi, India, 2008	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** August **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 1: Introduction	Meaning and Scope of Industrial Economics, Industrial Profile : Private sector - Performance and Problems; Cooperatives - features, types, merits and demerits; Public Sector - Role, Performance and Problems, Diversification and Industrial Combinations - Motives for Mergers and Acquisitions.	03	Desai S.S.M. and Bhalerao N, Industrial Economy of India, Himalaya Publishing House, Mumbai, 2008. 6	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** September **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 2: Industrial Location and Problem of Regional Imbalance	Determinants of Industrial Location, Theories of Industrial Location - Weber's and Sargent Florence's Theories, Dispersion of Industries and the Problem of Regional Imbalance	03	Datt R. and Sundaram K.P.M, Indian Economy, S.Chand& Co., New Delhi, 2009	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** October **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 3: Industrial Productivity and Industrial Sickness	Concept and Measurement of Industrial Productivity, Factors Affecting Industrial Productivity, Industrial Sickness - Causes, Effects and Remedial Measures, Rationalisation - Concept, Aspects and Impact	03	Barthwal R.R, Industrial Economics, New Age International Publishers, NewDelhi,	CHALK AND TALK, GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** Novemi **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.

- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 4: Industrial Development in India	New Industrial Policy, 1991; Disinvestment Policy; FIPB Revamp- Micro, Small and Medium Enterprises Development Act, 2006; National Manufacturing Policy, 2011,Recent Trends in India's Industrial Growth, Industrial Policy, 2012, Role of MNCs in the Indian Economy - Merits and Demerits, Issues in Industrial Proliferation and Environment Preservation; Pollution Control Policies.	03	Agrawal A.N, Indian Economy, New Age International Publishers, New Delhi, 2011.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** January **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.

- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 1 : Introduction – Indian Labour Market	Characteristics of the Indian Labour Market - Child Labour and Female Labour – Problems and Measures- Globalisation and Indian Labour Market -Labour Market Reforms – Exit Policy and Need for Safety Nets - Second National Commission on Labour.	03	Datt R. and Sundaram K.P.M, Indian Economy, S.Chand & Co., New Delhi, 2009.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** February **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 2 : Trade Unionism	Definition and Functions of Trade Unions- Historical Evolution of Trade Unions in India and Their Present Status - Problems of Trade Unions in India - Role of Outside Leadership	03	2. Mamoria C.B. and Mamoria S, Dynamics of Industrial Relations, Himalaya Publishing House, Mumbai, 2002.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** March **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

		ALLOTED		
INDUSTIRAL AND LABOUR ECONOMICS Module 3 : Industrial Relations	Causes of Industrial Disputes and Their Settlement Mechanism - Collective Bargaining – Concept, Features, Importance and Pre-requisites for Successful Collective Bargaining - Collective Bargaining in India - Workers" Participation in Management –Concept, objectives and Forms of Workers" Participation in India.	03	Mishra S.K. and Puri V.K, Indian Economy, Himalaya Publishing House, Mumbai,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** April **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR	Concept, Theories and Principles of Labour Welfare - Agencies for Labour Welfare - Role of the Labour Welfare Officer - Social Security – Concept; Social Assistance and	03	Monappa A, Industrial Relations,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

ECONOMICS Module 4 : Labour Welfare and Social Security	Social Insurance - Social Security Measures in India - International Labour Organization and Its Impact on Indian Labour Legislations.		Tata McGraw Hill Publishing Company Ltd., New Delhi, 2006 5.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** August **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY	Types of data sources: Primary and Secondary - Primary data-Meaning and Collection methods - Observational	02	. Gupta S. P., Statistical	CHALK AND TALK , GROUP

Module 3: Sources of Data for Research:	method - Interview technique - Design of Schedule and Questionnaire - Survey method and Field Visits - Case Study as a method. Major Sources of Secondary data: Meaning, advantages, Relevance, limitations and cautions of secondary data.		Methods, Sultan Chand and Sons, New Delhi, 2014 .	DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** September **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
RESEARCH METHODOLOGY **Module 3: Sources of Data for Research:**	Sampling Technique: Census and sample survey- Essentials of a good Sampling - Advantages and limitations of sampling, Methods of sampling: Random sampling : Simple or Unrestricted Random Sampling- Mixed or Stratified Random Sampling, Systematic or Quasi Random sampling – Multistage or Cluster Random Sampling - Sequential Random Sampling, Non random sampling :	02	. Rajaram V., Fundamentals of computers, Prentice Hall of India, New Delhi, 1996	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

	Judgement or Purposive sampling– Convenience sampling accidental sampling – Quota sampling, Selecting an appropriate sampling technique- Sampling and Non-sampling errors - Sample size.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** October **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 4: Research Report Writing:	Types of Research Report: Technical, Popular, Interim, Summary, Article- Format of a Research Report- Principles of writing the Research Report: Organization and Style - Contents-Styles of reporting- Steps in drafting Reports- Editing the final draft-Evaluating the final draft	02	Kothari, C.R., Research Methodology: An Introduction, Delhi, New Age, 2004.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** November **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY **Module 4: Research Report Writing:**	-Organization of the Research Report: Preliminaries, Contents of Report, Structuring the Report: Chapter format- Pagination- Identification- Using quotations- Presenting footnotes – abbreviations- Presentation of tables and figures- Referencing- Documentation-Use and format of appendices- Indexing - Bibliography, Appendices.	02	. Krishnaswami, O.R & M. Ranganatham ,Methodology of Research in Social Sciences,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** January **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 3: Hypothesis formulation and Hypothesis Testing:	Definition and functions of hypothesis – Criteria of workable hypothesis – forms and sources of hypothesis- Concepts in Testing of Hypothesis: Universe / Population, parameter and statistic,	02	Goode J. William & Hatt K. Paul, Methods in social Research, New York, McGraw-Hill, 1952	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** February **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 3: Hypothesis formulation and Hypothesis Testing:	Null and Alternative Hypotheses, Levels of Significance, critical region, Type I and Type II errors - Point and Interval Estimates.	02	Kothari, C.R (2004) Research Methodology: An Introduction, Delhi, New Age, 2004.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** March **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 4: Research Report Writing:	Types of Research Report: Technical, Popular, Interim, Summary, Article-Format of a Research Report- Principles of writing the Research Report: Organization and Style - Contents-Styles of reporting- Steps in drafting Reports- Editing the final draft-Evaluating the final draft -Organization of the Research Report: Preliminaries, Contents of Report,	02	Kumar, Renjith (2009) Research Methodology: A Step by Step Guide for Research, Delhi, Pearson Education, 2009	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** April **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze

primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 4: Research Report Writing:	Structuring the Report: Chapter format- Pagination- Identification- Using quotations- Presenting footnotes –abbreviations- Presentation of tables and figures- Referencing- Documentation-Use and format of appendices- Indexing - Bibliography, Appendices.	02	Gupta S P Statistical Methods Sultan Chand and Sons, New Delhi, 1987.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** August **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS Module: 1 Introduction to Environmental Economics:	Introduction to environmental development and environmental economics, Rio-Declaration on environmental development,	02	4. Hanley Nick, Shogren Jason and White Ben: Introduction to Environmental Economics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** September **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS Module1: Introduction to Environmental Economics:	Agenda 21 programme of action for sustainable development, Social and economic dimensions, Conservation and management of resources for development.	02	4. Hanley Nick, Shogren Jason and White Ben: Introduction to Environmental Economics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** October **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS Module 4: Environmental problems:	The global environment- Trans-boundary environmental problems, economics of climate change,	02	Barry C. Fields: Environmental Economics: An Introduction, McGraw Hill International Edition, 1997.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** November **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS Module 4: Environmental problems:	International environmental Agreements - , sustainable development: Concepts and measures.	02	Barry C. Fields: Environmental Economics: An Introduction, McGraw Hill International Edition, 1997.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** JANUARY **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understanding the concept and aspects of economic Development.
- Knowing the theories of economic growth & Development.
- Measuring the concept and issues of economic planning.
- Discussing the need, types and necessary conditions of economic planning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT THEORY AND EXPERIENCE Module IV: The Environment and Development:	The core of environmental problems- Rural poverty and environmental destructionindustrialization and environmental pollution - Economic models of environmental issues: .	01	Partha Dasgupta, Economics: A Very Short Introduction, Oxford University	CHALK AND TALK, GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** FEBRUARY **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understanding the concept and aspects of economic Development.
- Knowing the theories of economic growth & Development.
- Measuring the concept and issues of economic planning.
- Discussing the need, types and necessary conditions of economic planning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT THEORY AND EXPERIENCE Module IV: The Environment and Development:	privately owned resources, common property resources, public goods: regional environmental degradation and the free rider problem, limitations of pubic goods framework.	01	Partha Dasgupta, Economics: A Very Short Introduction, Oxford University	CHALK AND TALK, GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** March **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- Evaluating various types of exchange rates and its merits and demerits.
- Discussing the types and effects of tariffs and quotas.
- Judging the function, merits and demerits of Foreign Capital, and International Corporation (IMF, IBRD, WTO and SAARC).

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL TRADE, POLICY AND PRACTICE Module 2 : Emerging new International Economic Order	GATT, Uruguay Round, WTO, WTO Agreement, Dispute settlement Mechanism, Impact of WTO on Emerging Economies and India, Doha Round and implications of its failure-	01	Paul R Krugman, Maurice Obstfeld and Melitz Mark, International Economics : Theory and Policy, Princeton University, USA, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:-** April **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- Evaluating various types of exchange rates and its merits and demerits.
- Discussing the types and effects of tariffs and quotas.
- Judging the function, merits and demerits of Foreign Capital, and International Corporation (IMF, IBRD, WTO and SAARC).

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL TRADE, POLICY AND PRACTICE Module 2 : Emerging new International Economic Order	Emergence of Regional Free Trade agreements (FTA), Bilateral Investment Treaty (BIT), Double Taxation Avoidance Agreement (DTAA).	01	Paul R Krugman, Maurice Obstfeld and Melitz Mark, International Economics : Theory and Policy, Princeton University, USA, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

NAME OF THE H.OD.::-Mansi Gawand

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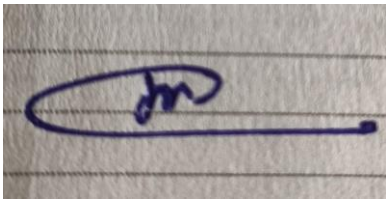

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. ENG ECO SEMESTER: II MONTH: JANUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND THE TYPES OF COSTS AND THEIR DERIVATION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – II Module II: Cost & Revenue Analysis	Concepts of Costs: Money and Real Cost, Social Cost, Private Cost, Explicit and Implicit Cost, Opportunity Cost; Relationship between Average, Marginal and Total Cost	6	M.L.Jhingan, (2006), "Microeconomics Theory", 5 th edition,Vrinda Publication (P) Ltd. 6. H.L.Ahuja, (2016), "Advance Economics Theory" S.Chand & Company Ltd.	Group Discussion, PPT, QUIZ .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS
CLASS: F.Y.B.A. ECO ENG SEMESTER: **II** MONTH: FEBRUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: ANALYSE PRODUCTION FUNCTION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – II Module II: Cost & Revenue Analys	Derivation of Short Run and Long Run Cost Curves; Concepts of Revenue: Types and Interrelationship	6	M.L.Jhingan, (2006), "Microeconomics Theory", 5th edition,Vrinda Publication (P) Ltd. 6..	Group Discussion, PPT, QUIZ
ECO I: Microeconomics – II Module I: Production Analysis	Production Analysis Production Function: Concept And Types; Concepts of Total, Average and Marginal Product	6	H.L.Ahuja, (2016), "Advance Economics Theory" S.Chand & Company Ltd	Group Discussion, PPT, QUIZ .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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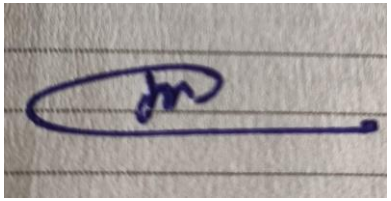
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS
CLASS: F.Y.B.A. ECO ENG SEMESTER: II MONTH: MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KNOW VARIOUS ECONOMIC THEOTIES RELATED TO PRODUCTION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – II Module I: Production Analysis	Law of Variable Proportion and Returns to Scale, Isoquant and Producer's Equilibrium	6	Mankiw M.G (2015), Principles of Micro economics 7th edition - Cengage Learning.	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: KNOW SYSTEMATIC EXPOSITION OF MODELS WHICH EXPLAIN THE COMPOSITION, DIRECTION, AND CONSEQUENCES OF INTERNATIONAL TRADE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: INTERNATIONAL ECONOMICS:	Importance of the study of International Economics - An overview of world trade Distinction between domestic & international Trade -Concepts of Cost Difference , Adam Smith"s Theory of International Trade, The Ricardian Theory	12	Kindleberger Charles P, International Economics, Homewood, USA, 1978	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: FEBRUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: KNOW SYSTEMATIC EXPOSITION OF MODELS WHICH EXPLAIN THE COMPOSITION, DIRECTION, AND CONSEQUENCES OF INTERNATIONAL TRADE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: INTERNATIONAL ECONOMICS: Module 2: Modern Theories of International Trade	Heckshcher- Ohlin Theory of International Trade, Factor Abundance: Two Criteria, Leontief Paradox, Haberler"s theory of Opportunity Cost, Law of reciprocal demand and offer curves, Role of Factor Accumulation, Stolper-Samuelson theorem.	12	Dominick Salvatore, International Economics: Trade and Finance, JohnWiley International Student Edition, 10th edition, 2011.	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: LEARN AN ANALYTICAL ACCOUNT OF THE CAUSES AND CONSEQUENCES OF THE RAPID EXPANSION OF INTERNATIONAL FINANCIAL FLOWS IN RECENT YEARS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: INTERNATIONAL ECONOMICS: Module 3: Importance of Trade and Recent trends:	Monopolistic competition and trade - firm heterogeneity, FDI: The concept and role, FDI Inflows- FDI Outflows, and the global supply chain, Business Process Outsourcing.	12	Kindleberger Charles P, International Economics, Homewood, USA, 1978	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: APRIL ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: LEARN ANALYTICAL ACCOUNT OF THE CAUSES AND CONSEQUENCES OF THE RAPID EXPANSION OF INTERNATIONAL FINANCIAL FLOWS IN RECENT YEARS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO V: INTERNATIONAL ECONOMICS: Module 4: Trade Policy and Regionalism	Instruments of trade policy; Why countries cooperate? - GATT, GATS, Regional Trade Agreements - controversies in trade policy (labour standards, IPR and environment) - ASEAN, SAARC, SAFTA, Protectionism.	12	Dominick Salvatore, International Economics: Trade and Finance, JohnWiley International Student Edition, 10th edition, 2011.	Group Discussion, PPT , QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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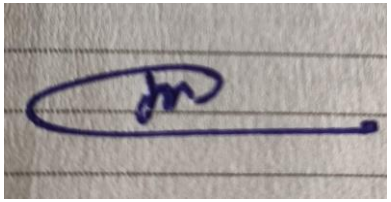

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KNOW QUANTITATIVE TECHNIQUES FOR ANALYSIS OF DATA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 1: Statistical applications in research:	Methods of studying Correlation- measurement of simple correlation: graphic method: scatter diagram - coefficient of correlation - Karl Pearson and rank correlation interpretation of r = ± 1 Linear Regression analysis: meaning, regression lines, regression coefficients, regression equations, relationship between correlation and regression. Analysis of Time Series – components –trend analysis- moving averages (3, 4 and 5 yearly)- method of least square.	12	Goode J. William & Hatt K. Paul, Methods in social Research, New York, McGraw-Hill, 1952.	Group Discussion, PPT, QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: FEBRUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: CONSTRUCTION OF INDEX NUMBERS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 2: Index numbers:	Meaning – classification – problems encountered while constructing index numbers- uses and limitation of index numbers, Methods of constructing index numbers: Simple index: i) aggregate method ii) simple average of relatives method, Weighted index: Laspeyer‟s, Paache‟s and Fisher‟s index – weighted average of relatives method, Chain based index – concepts of Base shifting, splicing, and deflating, Consumer price index: meaning, need and construction – methods: aggregate expenditure method and family budget method.	12	Kothari, C.R., Research Methodoloy: An Introduction, Delhi, New Age, 2004	Group Discussion, PPT,QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: FORMULATE AND TEST THE HYPOTHESIS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 3: Hypothesis formulation and Hypothesis Testing:	Definition and functions of hypothesis –Criteria of workable hypothesis – forms and sources of hypothesis- Concepts in Testing of Hypothesis: Universe / Population, parameter and statistic, Null and Alternative Hypotheses, Levels of Significance, critical region, Type I and Type II errors - Point and Interval Estimates.	12	Kumar, Renjith (2009) Research Methodology: A Step by Step Guide for Research, Delhi, Pearson Education, 2009.	Group Discussion, PPT,QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: APRIL ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: LEARN THE STYLE OF REPORT WRITING

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 4: Research Report Writing:	Types of Research Report: Technical, Popular, Interim, Summary, Article- Format of a Research Report- Principles of writing the Research Report: Organization and Style - Contents-Styles of reporting- Steps in drafting Reports- Editing the final draft-Evaluating the final draft -Organization of the Research Report: Preliminaries, Contents of Report, Structuring the Report: Chapter format- Pagination- Identification- Using quotationsPresenting footnotes – abbreviations- Presentation of tables and figures- ReferencingDocumentation-Use and format of appendices- Indexing - Bibliography, Appendices.	12	Kothari, C.R., Research Methodoloy: An Introduction, Delhi, New Age, 2004	Group Discussion, PPT,QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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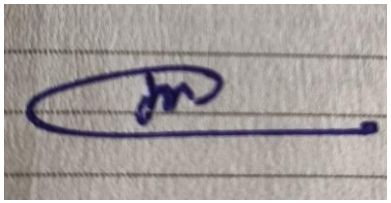

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: LEARN QUANTITATIVE TECHNIQUES FOR ANALYSIS OF DATA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 1: Statistical applications in research:	Methods of studying Correlation- measurement of simple correlation: graphic method: scatter diagram - coefficient of correlation - Karl Pearson and rank correlation interpretation of r = ± 1 Linear Regression analysis: meaning, regression lines, regression coefficients, regression equations, relationship between correlation and regression. Analysis of Time Series – components –trend analysis- moving averages (3, 4 and 5 yearly)- method of least square.	9	Goode J. William & Hatt K. Paul, Methods in social Research, New York, McGraw-Hill, 1952.	Group Discussion, PPT , QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: FEBRUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND CONSTRUCTION OF INDEX NUMBERS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 1: Statistical applications in research:	Analysis of Time Series – components –trend analysis- moving averages (3, 4 and 5 yearly)- method of least square.	3	Goode J. William & Hatt K. Paul, Methods in social Research, New York, McGraw-Hill, 1952.	Group Discussion, PPT , QUIZ
ECO VII: RESEARCH METHODOLOGY Module 2: Index numbers:	Meaning – classification – problems encountered while constructing index numbers- uses and limitation of index numbers, Methods of constructing index numbers: Simple index: i) aggregate method ii) simple average of relatives method, Weighted index: Laspeyer‟s, Paache‟s and Fisher‟s index – weighted average of relatives method, Chain based index – concepts of Base shifting, splicing, and deflating,.	9	Kothari, C.R., Research Methodoloy: An Introduction, Delhi, New Age, 2004	Group Discussion, PPT , QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KNOW APPLICATION OF INDEX NUMBERS, FORMULATE AND TESTING THE HYPOTHESIS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 2: Index numbers:	Consumer price index: meaning, need and construction – methods: aggregate expenditure method and family budget method.	3	Kothari, C.R., Research Methodoloy: An Introduction, Delhi, New Age, 2004	Group Discussion, PPT , QUIZ
ECO VII: RESEARCH METHODOLOGY Module 3: Hypothesis formulation and Hypothesis Testing:	Definition and functions of hypothesis –Criteria of workable hypothesis – forms and sources of hypothesis- Concepts in Testing of Hypothesis: Universe / Population, parameter and statistic, Null and Alternative Hypotheses, Levels of Significance, critical region, Type I and Type II errors - Point and Interval Estimates.	9	Kumar, Renjith (2009) Research Methodology: A Step by Step Guide for Research, Delhi, Pearson Education, 2009.	Group Discussion, PPT , QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

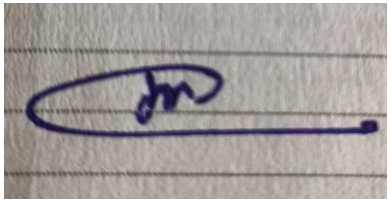
NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: APRIL ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: FORMULATE AND TEST THE HYPOTHESIS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 3: Hypothesis formulation and Hypothesis Testing:	Levels of Significance, critical region, Type I and Type II errors - Point and Interval Estimates.	3	Kumar, Renjith (2009) Research Methodology: A Step by Step Guide for Research, Delhi, Pearson Education, 2009.	Group Discussion, PPT , QUIZ

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MAR) SEMESTER: I MONTH: JULY ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: MARATHI LEKHANACHE NIYAM VA VIRAMCHINHANCHI MAHITI GHENE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MAR(COMP.) Ghatak -2 Vyavharik Marathi	Marathi lekhanache niyam va Viramchinhe.	04	Valimbe,Mo.Ra.'Sugam Marathi Vyakran va Lekhan', Nitin Prakashan	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MAR) SEMESTER: I MONTH: AUGUST ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: AARJA LEKHANACHYA VIVID PRAKARANCHA AABHYAS KARANE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MAR(COMP.) Ghatak -2 Vyavharik Marathi	Aarja lekhan	04	Valimbe,Mo.Ra.'Sugam Marathi Vyakran va Lekhan', Nitin Prakashan	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MAR) SEMESTER: I MONTH: SEPTEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: BHASHANTARACHE KAUSHALYA AATMASAT KARANE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MAR(COMP.) Ghatak -2 Vyavharik Marathi	Bhashantar (English to Marathi)	04	Gurjar,V.C. 'Marathi Vyakaran', Manorama Prakashan. Valimbe,Mo.Ra.'Sugam Marathi Vyakran va Lekhan', Nitin Prakashan	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MAR) SEMESTER: II MONTH: DECEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: AUTARYAVARUN DILELYA PRASHNANCHI UTTARE SHODHANYACHE KAUSHALYA AABHYASANE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MAR(COMP.) Ghatak -2 Vyavharik Marathi	Autaryavaril Prasha	03	Gurjar,V.C. 'Marathi Vyakaran', Manorama Prakashan. Valimbe,Mo.Ra.'Sugam Marathi Vyakran va Lekhan', Nitin Prakashan	Group Discussion, Chalk and Talk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MAR) SEMESTER: II MONTH: JANUARY ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: SARAUNSH LEKHAN KARANYACHE KAUSHLYA AATMASAT KARANE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MAR(COMP.) Ghatak -2 Vyavharik Marathi	Saraunsh Lekhan	03	Gurjar,V.C. 'Marathi Vyakaran', Manorama Prakashan. Valimbe,Mo.Ra.'Sugam Marathi Vyakran va Lekhan', Nitin Prakashan.	Group Discussion, Chalk and Talk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MAR) SEMESTER: II MONTH:. FEBRUARY ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: NIBANDHACHE VIVID PRAKAR AABHYASANE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MAR(COMP.) Ghatak -2 Vyavharik Marathi	Nibandha Lekhan	04	'K'Sagar-'Nibandha lekhan-Aarekhan-'K'Sagar Publication. Valimbe,Mo.Ra.'Sugam Marathi Vyakran va Lekhan', Nitin Prakashan.	Group Discussion, Chalk and Talk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MAR) SEMESTER: II MONTH:. MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: VYAVHARIK MARATHI CHA SARAV KARANE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MAR(COMP.) Ghatak -2 Vyavharik Marathi	Vyavharik Marathi,Sarav.	02	'K'Sagar-'Nibandha lekhan-Aarekhan-'K'Sagar Publication. Valimbe,Mo.Ra.'Sugam Marathi Vyakran va Lekhan', Nitin Prakashan	Group Discussion, Chalk and Talk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

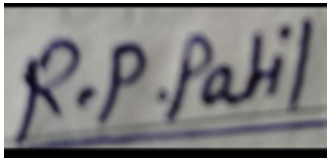
CLASS: S.Y.B.A. (MARATHI) Div-A & B SEMESTER: III MONTH: JULY-DECEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: MEANING OF DEMOGRAPHY AND POPULATION THEORY.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit- 1 Introduction	Demography-Its definition,nature & Scope. It's related to other disciplines. Theory of Population-Malthusian Theory. Optimum theory of Population.	10	Bhende A.A. & Tara Kanitkar (1982) – 'Principles of Population Studies'– Himalaya Publishing House, Bombay. Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad.	Classroom Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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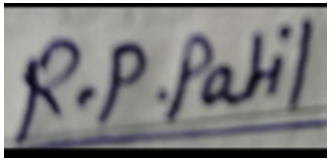
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: Issues related to demographic techniques and basic sources of demographic data in the Indian economy has also been included.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit1 & Unit 3 Techniques of Analysis	Theory of demographic transition. Population growth in India. Features of Indian Population. Crude birth rate & death rate. Age specific birth rate & death rate	06 04		Classroom Discussion, Chalk and Talk



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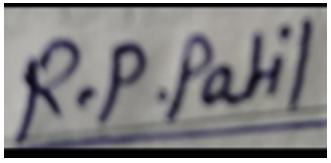
			Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Government of India – (Various Reports), Census of India, New Delhi.Ahirrao-Alizad-Dapte-Varat-Bhose (2001) – 'Loksankhya' – Nirali Publication, Pune.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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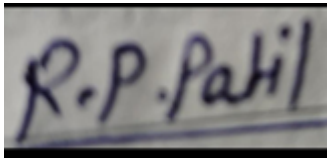
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: MEASURES OF POPULATION GROWTH RATE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit- 3 Techniques of Analysis	Standardized birth rate & death rate. Study of fertility-Total fertility rate, gross reproduction rate, net reproduction rate. Measures of population growth rate- Simple growth rate & Compound growth rate.	12	Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad Government of India – (Various Reports), Census of India, New Delhi.	Classroom Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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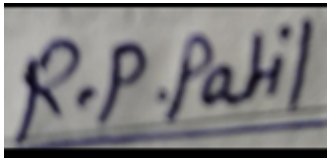
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO:
The learners will be able to : __Inter- relationship between Fertility,Nuptiality, Mortality & population. .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit- 1 Fertility, Nuptiality & Mortality	Fertility- Concept & Factors affecting Fertility. Nuptiality _ Concept,Age at marriage & Factors affecting Nuptiality.	08	Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad Bhosale & Kate (2006)– 'Loksankhya Shastra' - Phadke Prakashan , Kolhapur.	Classroom Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



SIGNATURE OF THE STAFF

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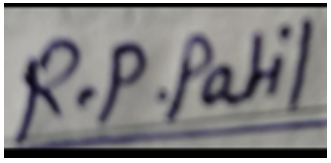
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: CONCEPT OF MORTALITY & LIFE TABLE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit- 1 Fertility, Nuptiality & Mortality	Mortality _ Concept & Factors affecting mortality. Life Table- Concept & it's importance	08	.Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. 10. Bhosale & Kate (2010) – 'Bhartiya Arth Vyavastha' – Phadke Prakashan , Kolhapur.	Classroom Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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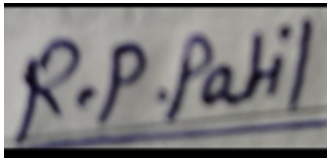
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: Know the social effects of the population .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit -2 Migration & Urbanization	Migration - Concept & Types Factors affecting Migration Theory of Migration (Harris & Todaro Model) Issues related to migration.	08	Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Ahirrao-Alizad-Dapte-Varat-Bhose (2001) – 'Loksankhya' – Nirali Publication, Pune	Classroom Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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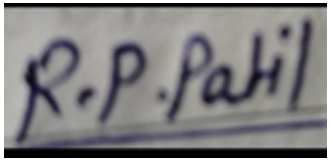
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: Know recent Trends of Urbanization .Get information about related issues with Urbanization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Unit _ 2 Migration & Urbanization	Urbanization _ Concept,Trends & pattern of Urbanization in India. Problems of Urbanization in India.(Poverty,Good supply,Water, Sanitation, housing,Slim area,Employment, health, education, transport, environment etc)	08	Agarwal S.S. (1985) - 'India's Population Problem' – Tata McGraw Hill Publication, Bombay Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad	Classroom Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

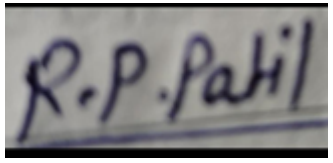
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (MARATHI) Div-A & B SEMESTER: III MONTH: JULY-DECEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: MICRO ECONOMICS II MODULE I: UTILITY ANALYSIS- PREFERENCES WHILE HAVING CHOICES WITH LIMITED RESOURCES WHILE TAKING ANY ECONOMIC DECISION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MICRO ECONOMICS II: MODULE I: Utility Analysis	Preferences-strong ordering-weak ordering – completeness-transitivity-rational preferences	2	Dr.N.L.Chavan, 'Pragat Sukshmalakshi Arthashastra',Prashant Publication.	Classroom Discussion, Chalk and Talk



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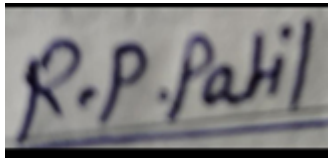
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: MICRO ECONOMICS II MODULE I: UTILITY ANALYSIS- PREFERENCES WHILE HAVING CHOICES WITH LIMITED RESOURCES WHILE TAKING ANY ECONOMIC DECISION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MICRO ECONOMICS II: MODULE I: Utility Analysis	Utility as representation of preferences-indifference curves and their properties -budget constraint-utility maximization and consumer's equilibrium-income effect-substitution effect- derivation of demand curves	10	Dr.N.L.Chavan, 'Pragat Sukshmalakshi Arthashastra',Prashant Publication. Prof.Deshmukh Ram,'Sukshma Arthashastra', Vidya Books Publishers	Classroom Discussion, Chalk and Talk



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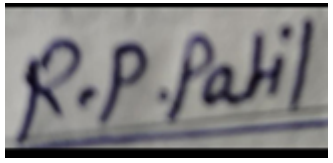
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: MICRO ECONOMICS II- CONCEPTS RELATED TO PRODUCTION ANALYSIS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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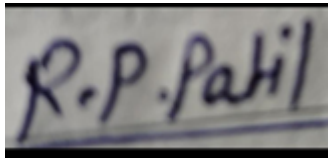
ECO II:MICRO ECONOMICS II: MODULE II: PRODUCTION FUNCTION	Production function- Cobb-Douglas production function-short run and long run returns to scale-Isoquants and their properties –MRTS-Iso-cost curves-cost minimisation and producer's equilibrium-derivation of factor demand curves,	12	Dr.N.L.Chavan, 'Pragat Sukshmalakshi Arthashastra',Prashant Publication. Prof. Deshmukh Ram,'Sukshma Arthashastra', Vidya Books Publishers	Classroom Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: MICRO ECONOMICS II **:**MODULE III: COST AND REVENUE: CONCEPTS OF COST AND REVENUE AND THEIR RELATIONSHIP

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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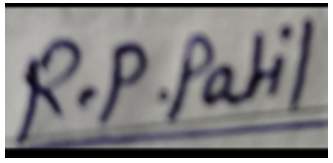
ECO II:MICRO ECONOMICS II: MODULE III: Cost and revenue	Various concepts of costs and their inter-relationship - behaviour of costs in the short run and the long run -long run average cost curve and it's derivation-implicit and explicit costs total revenue-marginal revenue-average revenue.	12	Dr.N.L.Chavan, 'Pragat Sukshmalakshi Arthashastra',Prashant Publication. Prof.Deshmukh Ram,'Sukshma Arthashastra', Vidya Books Publishers	Classroom Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: STRUCTURE OF COMPETITIVE MARKET AND PRICE DETERMINATION UNDER THIS



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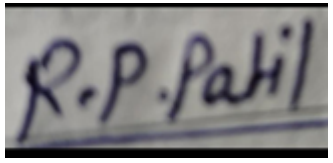
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MICRO ECONOMICS II: MODULE IV: Competitive Markets:	Perfect Competitive Market: Features, Short Run Equilibrium of the firm and the industry, Long run equilibrium. Price equals marginal cost in competitive markets- supply curve and derivation in competitive markets	12	Dr.N.L.Chavan, 'Pragat Sukshmalakshi Arthashastra',Prashant Publication. Prof. Deshmukh Ram,'Sukshma Arthashastra', Vidya Books Publishers	Classroom Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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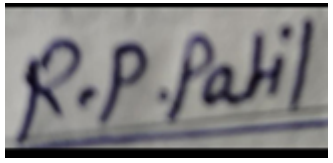
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: FUNCTIONS OF MONEY, CONCEPTS OF MONEY, THEORIES OF MONEY SUPPLY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II: MODULE I: MONEY	Concept of money- supply of money- CRR, SLR, high powered money and its components- Money multiplier- current measures of money supply in India – quantity theory of money- velocity of circulation- factors affecting velocity of circulation- Fisher and Cambridge equations.	12	Prof Deshmukh Ram, 'Samashti Arthashastra' ,Vidya books Publishers. Prof. Deshmukh Ram, 'Aadhunik Sthul Arthashastra', Vidya books Publishers.	Classroom Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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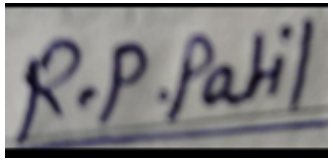
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: MOTIVES FOR HOLDING MONEY, MONEY MARKET, LM CURVE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II: MODULE II: THE MONEY MARKET	Motives for holding money- transactions motive-precautionary motive-speculative motive-interest rate as cost of holding money-liquidity trap-money-market equilibrium-derivation of LM curve-shifts in the LM curve.	12	Prof Deshmukh Ram, 'Samashti Arthashastra' ,Vidya books Publishers. Prof. Deshmukh Ram, 'Aadhunik Sthul Arthashastra', Vidya books Publishers.	Classroom Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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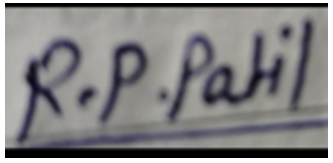
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: SAVING FUNCTIONAND ITS CONCEPTS, IS CURVE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II: MODULE III: THE GOODS MARKET	Savings function-marginal propensity to save-investment demand function and its interest elasticity-animal spirits- equilibrium in the goods market-derivation of the IS curve-shifts in the IS curve.	12	Prof Deshmukh Ram, 'Samashti Arthashastra' ,Vidya books Publishers. Prof. Deshmukh Ram, 'Aadhunik Sthul Arthashastra', Vidya books Publishers.	Classroom Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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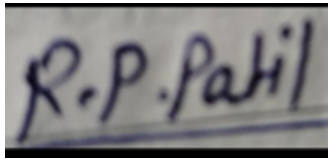
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: IS-LM EQUILIBRIUM, MONETARY AND FISCAL POLICY AND THEIR EFFECTIVENESS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II: MODULE IV: Monetary and Fiscal Policy	Simultaneous equilibrium in the goods and money markets (IS-LM equilibrium) – determination of income and interest rates- monetary policy and its instruments- effectiveness of monetary policy- Fiscal policy and its instruments- effectiveness of Fiscal policy.	12	Prof Deshmukh Ram, 'Samashti Arthashastra' ,Vidya books Publishers. Prof. Deshmukh Ram, 'Aadhunik Sthul Arthashastra', Vidya books Publishers.	Classroom Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** I **MONTH:** JULY-DECEMBER **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the basic principle of economics
- Understand the exchange rate functioning
- Understand the role of Government in managing market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS Module –II : Economics and Its Methods	The scientific method –role of assumptions- economic models: circular flow of income and production possibilities curve positive economics and normative economics Micro economics and Macro economics .	06	Sen Anindya (2007), : Theory and Applications,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** I **MONTH:** AUGUST **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand various scientific method used to asses economic functioning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS Module –II : Economics and Its Methods	economist as policy causes of disagreement among economists basics of graphs (graph of single variable, graph of two variable, curves in the coordinate system, slopecause and effect).	06	Sen Anindya (2007), : Theory and Applications,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** II **MONTH:** DECEMBER **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- This course is designed to introduce the student to the basic building blocks of macroeconomics using an open economy framework.
- The course develops an understanding of the constituents of the open economy.
- The student should be able to build on these constituents in the later years so as to be able to analyses macroeconomic policies

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACRO ECONOMICS **Module I: Concepts and Definitions**	Circular flow of Income in an Open Economy–GDP-GNP-NNP- GDP Deflator–Real and Nominal Quantitates GDP at purchasing power parity –	06	Sikdar, S. (2006), Principles of Macroeconomics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACRO ECONOMICS **Module I: Concepts and Definitions**	Exchange rate as a price –GDP Growth: India's Experience Trends in Growth Rate and Sectoral Composition of GDP- Sources of Data.	06	Sikdar, S. (2006), Principles of Macroeconomics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:

The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
  To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Indian Economy:	Objectives of demonetisation and previous instances of demonetisation - India's demonetisation as unprecedented in international economic history - Short term costs and Long term benefits of demonetization - Analytics of demonetization -	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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Contemporary Concerns. Module 1: Demonetization: To Deify or Demonize?	Future policy measures to maximize benefits and minimize costs of demonetisation			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
- To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Indian Economy: Contemporary Concerns Module 2: Fiscal Framework: The World is	Fiscal Responsibility and Budget Management (FRBM) Act - Why is there a need for counter-cyclical fiscal policy in India? - Debt dynamics with the help of equation for debt sustainability	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Changing, Should India Change Too?	Fiscal Responsibility Legislation (FRL) - Impact of FRL on Budget process - Impact of FRL on Deficits - Lessons for future fiscal rules			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
- To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	The Conceptual/Philosophical case for UBI - The Conceptual Case against UBI - Arguments in Favour and Against UBI - How can UBI overcome the issues of misallocation and leakages of resources? - Can UBI improve financial inclusion? - Will UBI lead to moral hazard and reduce labor supply? - What are the guiding principles for setting up UBI? - What are the prerequisites for introducing UBI? - Is there fiscal space to finance UBI?	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
- To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Indian Economy: Contemporary Concerns **Module 4: Income, Health and Fertility: Convergence Puzzles**	Income convergence/divergence within India - Consumption convergence/divergence within India - Health Convergence within India with room for improvement against International standard - Total Fertility rate convergence (India and World) - Interpreting Graphs/Data regarding Income/Life Expectancy/ Infant mortality rate/Total fertility rate (For All Indian States)	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module 1**	Introduction to Maharashtra's Economy – Backdrop, Demography, Key Indicators of Development, Macroeconomics development of the Regions, Paradigm Shift	10	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARASHTRA PLANNING DEPARTMENT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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The learners will be able to :

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- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module 2** Importance of Tribal Areas	Present Status, Comparison with States, PCI, Poverty, Overview of Nutrition, Health & Education, Causes of Deprivation, Reforms to be undertaken	10	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARASHTRA PLANNING DEPARTMENT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module** 3 Water Resources	Availability of Water resources, government policy, overview of irrigation development (No division – wise discussion), overview of irrigation in Rest of Maharashtra, General Overview of Rural & Urban areas water supply, Recommendation for water distribution/ Balanced development	15	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARASHTRA PLANNING DEPARTMENT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

SIGNATURE OF THE STAFF

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LEARNING OBJECTIVE/S:

The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module 4** **Health and connectivity**	Health : The Kelkar Committee approach to health, Regional disparities, Health Care Systems, Health outcomes, Recommendation and Strategies Connectivity – Introduction, General Overview of Roads, Railways, Ports, Airports and Broadband, Resources required	10	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARASHTRA PLANNING DEPARTMENT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** JUNE **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:

- The learners will be able to : The modules incorporated in this paper educate the students about the inter-relationship between economic development and population along with an exposition of the established theories of population. Issues related to demographic techniques and basic sources of demographic data in the Indian economy have also been included. Aspects of the population policy and the study of its social characteristics are other important components of the modules of this paper.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Paper – I MODULE 2 Sources of demographic data in India	Salient features of census – including 2011 census. Civil Registration System,National Sample Survey. Demographic Survey –	06	Bose A. (1996)– 'India's Basic Demographic Statistics' – B.R. Publishing Corporation, New Delhi	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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VIVA COLLEGE, Virar (W)
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LEARNING OBJECTIVE/S:

- The learners will be able to : The modules incorporated in this paper educate the students about the inter-relationship between economic development and population along with an exposition of the established theories of population. Issues related to demographic techniques and basic sources of demographic data in the Indian economy have also been included. Aspects of the population policy and the study of its social characteristics are other important components of the modules of this paper.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Paper – I MODULE 2 Sources of demographic data in India	National Family Health survey -1,2 and 3. ,merits and demerits of these sources.	06	Agarwal S.S. (1985) - 'India's Population Problem' – Tata McGraw Hill Publication, Bombay	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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VIVA COLLEGE, Virar (W)
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LEARNING OBJECTIVE/S:

- The learners will be able to : The modules incorporated in this paper educate the students about the inter-relationship between economic development and population along with an exposition of the established theories of population. Issues related to demographic techniques and basic sources of demographic data in the Indian economy have also been included. Aspects of the population policy and the study of its social characteristics are other important components of the modules of this paper.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Paper – II MODULE 3 Population Policy	Salient features and evolution of India's population policy. • Shift in policy focus from population control to family welfare to women empowerment.	06	Agarwal S.S. (1985) - 'India's Population Problem' – Tata McGraw Hill Publication, Bombay	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

- The learners will be able to : The modules incorporated in this paper educate the students about the inter-relationship between economic development and population along with an exposition of the established theories of population. Issues related to demographic techniques and basic sources of demographic data in the Indian economy have also been included. Aspects of the population policy and the study of its social characteristics are other important components of the modules of this paper.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Paper – II MODULE 3 Population Policy	• Family Planning – Meaning, importance and methods of family planning. • Population Projection in India	07	Hans Raj (1984) – 'Fundamentals of Demography – Surjeet Publication, Delhi.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06
LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III	Prisoner"s Dilemma – Dominant strategy equilibrium – Battle of sexes game –	06	Mankiw, N. Gregory, Principles of	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Module 2: Basics of Game theory			Microeconomics, Cengage Learning, 2015.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

The learners will be able to :

- To able to understand the theory of oligopoly & duopoly
- To able to understand the new theories of oligopoly market
- To able to understand theory of distribution
- To able to understand general equilibrium & economic efficiency & welfare

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III **Module 2: Basics of Game theory**	Nash equilibrium – Extensive form games – Game tree.	06	Mankiw, N. Gregory, Principles of Microeconomics, Cengage Learning, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

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Yashvant Keshav Patil College of Commerce
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- To able to understand theory of distribution
- To able to understand general equilibrium & economic efficiency & welfare

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III **Module 3: Oligopoly**	The Cournot model – The Bertrand model – The Edgeworth model – The Chamberlin Model	06	Mansfield, Edwin, Micro-economics: Theory & Applications, 5th edition,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand the theory of oligopoly & duopoly
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III **Module 3: Oligopoly**	The Kinked demand curve model – Collusion and Cartels – Price Leadership	06	Sen Anindya, Microeconomics: Theory and Applications, Second edition Oxford	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:

The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III **Module2: Money/Financial Markets and**	The LM equation for the open economy –Uncovered Interest Parity and its implications for exchange rate determination – The combined IS/LM/UIP model.	06	Froyen, R. T.; Macroeconomics : Theory and Policy, Pearson Education Asia, Delhi,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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Mundell-Fleming Model: **:**				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:

The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III Module 2: Money/Financial Markets and Mundell-Fleming Model:	Fiscal and Monetary Policy under Fixed and Flexible Exchange Rates– The Mundell-Fleming trilemma.	06	Salvatore, D.; International Economics, Prentice Hall, New York, 1997 .	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

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- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III **Module 4: International Monetary History, 1900-present**	The Gold Standard – The Inter-War Period and the Great Depression – 1944, Bretton Woods System and its collapse ; Fixing in Europe via ERM, and the Dollar Standard elsewhere.	06	Mankiw, Gregory; Macroeconomics, 6e, Worth Publishers, New York, 2003.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** MARCH **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III **Module 4: International Monetary History, 1900-present:**	The Maastricht Treaty and preparations for the Euro; The Global Financial Crisis and its consequences for the Euro; The Euro Crisis, Asia Infrastructure Investment Bank (AIIB), New Development Bank (NDB).	06	Blanchard, Oliver, Macroeconomics , Pearson education, New Delhi, India, 2008	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JUNE **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTRIAL AND LABOUR ECONOMICS Module 1: Introduction	Meaning and Scope of Industrial Economics, Industrial Profile : Private sector - Performance and Problems; Cooperatives - features, types, merits and demerits; Public Sector - Role, Performance and Problems, Diversification and Industrial Combinations - Motives for Mergers and Acquisitions.	12	Desai S.S.M. and Bhalerao N, Industrial Economy of India, Himalaya Publishing House, Mumbai, 2008. 6	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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LEARNING OBJECTIVE/S:
The learners will be able to :

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- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTRIAL AND LABOUR ECONOMICS Module 2: Industrial Location and Problem of Regional Imbalance	Determinants of Industrial Location, Theories of Industrial Location - Weber's and Sargent Florence's Theories, Dispersion of Industries and the Problem of Regional Imbalance	12	Datt R. and Sundaram K.P.M, Indian Economy, S.Chand & Co., New Delhi, 2009	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

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- Examine the labor relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTRIAL AND LABOUR ECONOMICS Module 3: Industrial Productivity and Industrial Sickness	Concept and Measurement of Industrial Productivity, Factors Affecting Industrial Productivity, Industrial Sickness - Causes, Effects and Remedial Measures, Rationalisation - Concept, Aspects and Impact	12	Barthwal R.R, Industrial Economics, New Age International Publishers, NewDelhi,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** SEPTEMBER **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labor relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTRIAL AND LABOUR ECONOMICS Module 4: Industrial Development in India	New Industrial Policy, 1991; Disinvestment Policy; FIPB Revamp- Micro, Small and Medium Enterprises Development Act, 2006; National Manufacturing Policy, 2011,Recent Trends in India's Industrial Growth, Industrial Policy, 2012, Role of MNCs in the Indian Economy - Merits and Demerits, Issues in Industrial Proliferation and Environment Preservation; Pollution Control Policies.	12	Agrawal A.N, Indian Economy, New Age International Publishers, New Delhi, 2011.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTRIAL AND LABOUR ECONOMICS Module 1 : Introduction – Indian Labour Market	Characteristics of the Indian Labour Market - Child Labour and Female Labour – Problems and Measures- Globalization and Indian Labour Market -Labour Market Reforms – Exit Policy and Need for Safety Nets - Second National Commission on Labour.	12	Datt R. and Sundaram K.P.M, Indian Economy, S.Chand & Co., New Delhi, 2009.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:
The learners will be able to :

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- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

		ALLOTTED		
INDUSTRIAL AND LABOUR ECONOMICS Module 2 : Trade Unionism	Definition and Functions of Trade Unions- Historical Evolution of Trade Unions in India and Their Present Status - Problems of Trade Unions in India - Role of Outside Leadership	12	2. Mamoria C.B. and Mamoria S, Dynamics of Industrial Relations, Himalaya Publishing House, Mumbai, 2002.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTRIAL AND LABOUR ECONOMICS Module 3 : Industrial Relations	Causes of Industrial Disputes and Their Settlement Mechanism - Collective Bargaining – Concept, Features, Importance and Pre-requisites for Successful Collective Bargaining - Collective Bargaining in India - Workers" Participation in Management –Concept,	12	Mishra S.K. and Puri V.K, Indian Economy, Himalaya Publishing House, Mumbai,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	objectives and Forms of Workers" Participation in India.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVE/S:

The learners will be able to :

- To familiarize students with the basic concepts of industrial and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTRIAL AND LABOUR ECONOMICS Module 4 : Labour Welfare and Social Security	Concept, Theories and Principles of Labour Welfare - Agencies for Labour Welfare - Role of the Labour Welfare Officer - Social Security – Concept; Social Assistance and Social Insurance - Social Security Measures in India - International Labour Organization and Its Impact on Indian Labour Legislations.	12	Monappa A, Industrial Relations, Tata McGraw Hill Publishing Company Ltd., New Delhi, 2006 5.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:

The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 3: Sources of Data for Research:	Types of data sources: Primary and Secondary - Primary data-Meaning and Collection methods - Observational method - Interview technique - Design of Schedule and Questionnaire - Survey method and Field Visits - Case Study as a method. Major Sources of Secondary data: Meaning, advantages, Relevance, limitations and cautions of secondary data.	06	. Gupta S. P., Statistical Methods, Sultan Chand and Sons, New Delhi, 2014 .	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TrEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
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VIVA COLLEGE, Virar (W)
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LEARNING OBJECTIVE/S:
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 3: Sources of Data for Research:	Sampling Technique: Census and sample survey- Essentials of a good Sampling - Advantages and limitations of sampling, Methods of sampling: Random sampling : Simple or Unrestricted Random Sampling- Mixed or Stratified Random Sampling, Systematic or Quasi Random sampling – Multistage or Cluster Random Sampling - Sequential Random Sampling, Non random sampling : Judgement or Purposive sampling–Convenience sampling accidental sampling – Quota sampling, Selecting an appropriate sampling technique- Sampling and Non-sampling errors - Sample size.	06	. Rajaram V., Fundamentals of computers, Prentice Hall of India, New Delhi, 1996	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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Late Shri. Vishnu Waman Thakur Charitable Trust
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 4: Research Report Writing:	Types of Research Report: Technical, Popular, Interim, Summary, Article- Format of a Research Report- Principles of writing the Research Report: Organization and Style - Contents-Styles of reporting- Steps in drafting Reports- Editing the final draft-Evaluating the final draft	06	Kothari, C.R., Research Methodology: An Introduction, Delhi, New Age, 2004.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 4: Research Report Writing:	-Organization of the Research Report: Preliminaries, Contents of Report, Structuring the Report: Chapter format- Pagination- Identification- Using quotations- Presenting footnotes –abbreviations- Presentation of tables and figures- Referencing- Documentation-Use and format of appendices- Indexing - Bibliography, Appendices.	06	. Krishnaswami, O.R & M. Ranganatham ,Methodology of Research in Social Sciences,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
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NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 3: Hypothesis formulation and Hypothesis Testing:	Definition and functions of hypothesis –Criteria of workable hypothesis – forms and sources of hypothesis- Concepts in Testing of Hypothesis: Universe / Population, parameter and statistic,	06	Goode J. William & Hatt K. Paul, Methods in social Research, New York, McGraw-Hill, 1952	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** JANUARY **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 3: Hypothesis formulation and Hypothesis Testing:	Null and Alternative Hypotheses, Levels of Significance, critical region, Type I and Type II errors - Point and Interval Estimates.	06	Kothari, C.R (2004) Research Methodology: An Introduction, Delhi, New Age, 2004.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related to economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 4: Research Report Writing:	Types of Research Report: Technical, Popular, Interim, Summary, Article- Format of a Research Report- Principles of writing the Research Report: Organization and Style - Contents-Styles of reporting- Steps in drafting Reports- Editing the final draft-Evaluating the final draft -Organization of the Research Report: Preliminaries, Contents of Report,	06	Kumar, Renjith (2009) Research Methodology: A Step by Step Guide for Research, Delhi, Pearson Education, 2009	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:
The learners will be able to :

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Late Shri. Vishnu Waman Thakur Charitable Trust
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This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 4: Research Report Writing:	Structuring the Report: Chapter format- Pagination- Identification- Using quotations- Presenting footnotes –abbreviations- Presentation of tables and figures- Referencing- Documentation-Use and format of appendices- Indexing - Bibliography, Appendices.	06	Gupta S P Statistical Methods Sultan Chand and Sons, New Delhi, 1987.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JUNE **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyze environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS Module1: Introduction to Environmental Economics:	Introduction to environmental development and environmental economics, Rio-Declaration on environmental development,	06	4. Hanley Nick, Shogren Jason and White Ben: Introduction to Environmental Economics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:
The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.

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- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS Module1: Introduction to Environmental Economics:	Agenda 21 programme of action for sustainable development, Social and economic dimensions, Conservation and management of resources for development.	06	4. Hanley Nick, Shogren Jason and White Ben: Introduction to Environmental Economics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06
LEARNING OBJECTIVE/S:
The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

ENVIRONMENTAL ECONOMICS Module 4: Environmental problems:	The global environment- Trans-boundary environmental problems, economics of climate change,	06	Barry C. Fields: Environmental Economics : An Introduction, McGraw Hill International Edition, 1997.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:

The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS Module 4: Environmental problems:	International environmental Agreements - , sustainable development: Concepts and measures.	12	Barry C. Fields: Environmental Economics : An Introduction, McGraw Hill International Edition, 1997.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

LEARNING OBJECTIVE/S:

The learners will be able to :

- Understanding the concept and aspects of economic Development.
- Knowing the theories of economic growth & Development.
- Measuring the concept and issues of economic planning.
- Discussing the need, types and necessary conditions of economic planning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT THEORY AND EXPERIENCE Module IV: The Environment and Development:	The core of environmental problems- Rural poverty and environmental destruction industrialization and environmental pollution - Economic models of environmental issues: .	06	Partha Dasgupta, Economics: A Very Short Introduction, Oxford University	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understanding the concept and aspects of economic Development.
- Knowing the theories of economic growth & Development.
- Measuring the concept and issues of economic planning.
- Discussing the need, types and necessary conditions of economic planning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT THEORY AND EXPERIENCE Module IV: The Environment and Development:	privately owned resources, common property resources, public goods: regional environmental degradation and the free rider problem, limitations of pubic goods framework.	06	Partha Dasgupta, Economics: A Very Short Introduction, Oxford University	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

- Evaluating various types of exchange rates and its merits and demerits.
- Discussing the types and effects of tariffs and quotas.
- Judging the function, merits and demerits of Foreign Capital, and International Corporation (IMF, IBRD, WTO and SAARC).

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL TRADE, POLICY AND PRACTICE Module 2 : Emerging new International Economic Order	GATT, Uruguay Round, WTO, WTO Agreement, Dispute settlement Mechanism, Impact of WTO on Emerging Economies and India, Doha Round and implications of its failure-	06	Paul R Krugman, Maurice Obstfeld and Melitz Mark, International Economics: Theory and Policy, Princeton University, USA, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

- Evaluating various types of exchange rates and its merits and demerits.
- Discussing the types and effects of tariffs and quotas.
- Judging the function, merits and demerits of Foreign Capital, and International Corporation (IMF, IBRD, WTO and SAARC).

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL TRADE, POLICY AND PRACTICE Module 2 : Emerging new International Economic Order	Emergence of Regional Free Trade agreements (FTA), Bilateral Investment Treaty (BIT), Double Taxation Avoidance Agreement (DTAA).	06	Paul R Krugman, Maurice Obstfeld and Melitz Mark, International Economics: Theory and Policy, Princeton University, USA, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MARATHI) SEMESTER: I MONTH: JULY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND BASIC PRINCIPLES OF MICROECONOMIC THEORY.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – I Module - II: Ten Principles of Economics	Trade-Off Faced by the Individuals; Significance of Opportunity Cost in Decision Making; Thinking at the Margin; Responses to incentives; Benefits from Exchange; Organization of Economic Activities through Markets and its Benefits; Role of Government in improving Market Outcomes; Dependence of Standard of Living on Production; Growth in Quantity of Money; Inflation and Unemployment Trade Off	12	N.Gregory Mankiw, (2015), "Principles of Microeconomics" 7th edition- Cengage Learning	Group Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS
CLASS: F.Y.B.A. (MARATHI) SEMESTER: I MONTH: AUGUST ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: GET AN INTRODUCTION TO SUPPLY AND DEMAND AND THE BASIC FORCES THAT DETERMINE EQUILIBRIUM IN A MARKET ECONOMY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – I Module - III: Markets, Demand and Supply	What is a Market; What is Competition; Demand Curves: Market Demand versus Individual Demand, Movements along the Demand Curve, Shifts in the Demand Curve; Supply Curves: Market Supply and Individual Supply, Shifts in Supply Curve; Market Equilibrium - Three Steps to Analyze Changes in Equilibrium; Price Elasticity of Demand, Methods of Measuring Price Elasticity of Demand – Total Outlay Method, Percentage Method and Point Method; Concepts of Income Elasticity of Demand, Cross Elasticity of Demand and Promotional Elasticity of Demand	12	M.L.Jhingan, (2006) "Microeconomics Theory", 5 th edition Vrinda Publication (P) Ltd. H.L.Ahuja, (2016) "Advance Economics Theory" S.Chand & Company Ltd	Group Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MARATHI) SEMESTER: I MONTH: SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: USE THE FUNDAMENTAL TECHNIQUES TO THINK ABOUT A NUMBER OF POLICY QUESTIONS RELATED TO THE OPERATION OF THE REAL ECONOMY.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – I Module IV: Consumer's Behaviour	Introduction to Cardinal and Ordinal Approaches; Indifference Curve Analysis - Properties of Indifference Curves, Budget Line, and Consumer's Equilibrium; Income, Price and Substitution Effect; Derivation of Demand Curve; Consumer's Surplus: Strong Ordering and Weak Ordering	12	M.L.Jhingan, (2006) "Microeconomics Theory", 5 th edition Vrinda Publication (P) Ltd. H.L.Ahuja, (2016) "Advance Economics Theory" S.Chand & Company Ltd	Group Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MARATHI) SEMESTER: II MONTH: DECEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND THE TYPES OF COSTS AND THEIR DERIVATION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – II Module II: Cost & Revenue Analysis	Concepts of Costs: Money and Real Cost, Social Cost, Private Cost, Explicit and Implicit Cost, Opportunity Cost; Relationship between Average, Marginal and Total Cost	6	M.L.Jhingan, (2006), "Microeconomics Theory", 5 th edition,Vrinda Publication (P) Ltd. 6. H.L.Ahuja, (2016), "Advance Economics Theory" S.Chand & Company Ltd.	Group Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Yashvant Keshav Patil College of Commerce
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS
CLASS: F.Y.B.A. (MARATHI) SEMESTER: **II** MONTH: JANUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: ANALYSE THE DETERMINATION OF REWARDS FOR FACTORS OF PRODUCTION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – II Module II: Cost & Revenue Analys	Derivation of Short Run and Long Run Cost Curves; Concepts of Revenue: Types and Interrelationship	6	M.L.Jhingan, (2006), "Microeconomics Theory", 5 th edition,Vrinda Publication (P) Ltd. 6..	Group Discussion, Chalk and Talk
ECO I: Microeconomics – II Module III: Factor Pricing	Marginal Productivity Theory of Distribution; Rent: Ricardian Theory of Rent, Modern Theory of Rent, Quasi Rent; Wages: Modern Theory of Wages; Collective Bargaining; Supply Curve of Labour	6	H.L.Ahuja, (2016), "Advance Economics Theory" S.Chand & Company Ltd	Group Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS
CLASS: F.Y.B.A. (MARATHI) SEMESTER: **II** MONTH: FEBRUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KNOW VARIOUS ECONOMIC THEOTIES RELATED TO FACTORS OF PRODUCTION, UNDERSTAND MARKET STRUCTURE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – II Module III: Factor Pricing	Interest: Classical Theory of Interest, Loanable Funds Theory of Interest; Profit: Risk and Uncertainty Theory, Innovation Theory	6	Mankiw M.G (2015), Principles of Micro economics 7 th edition - Cengage Learning.	Group Discussion, Chalk and Talk
ECO I: Microeconomics – II Module IV: Equilibrium in Different Market Structure	Concept Of Equilibrium: TR - TC And MR - MC Approach; Features of Perfect Competition; Monopoly and Monopolistic Competition	6	Mankiw M.G (2015), Principles of Micro economics 7 th edition - Cengage Learning.	Group Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MARATHI) SEMESTER: II MONTH: MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND MARKET EQUILIBRIUM

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I: Microeconomics – II Module IV: Equilibrium in Different Market Structure	Short Run and Long Run Equilibrium of Firm and Industry under each Market Condition; Selling Cost and Wastages under Monopolistic Competition	6	Mankiw M.G (2015), Principles of Micro economics 7 th edition - Cengage Learning.	Group Discussion, Chalk and Talk .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS CLASS: T.Y.B.A. (ENGLISH) SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KNOW MEANING AND IMPORTANCE OF RESEARCH

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 1: Introduction to Concept of Research:	Nature, Scope & Purpose of social research - Basic assumptions of research - Significance and objectivity in social sciences research Types of research: pure & applied research; formulative or exploratory research	8	Kothari, C.R., Research Methodology: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND MEANING AND IMPORTANCE OF RESEARCH, VARIOUS STEPS IN RESEARCH

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 1: Introduction to Concept of Research:	Descriptive research, historical research, experimental research, survey research - Ethical issues and major difficulties relating to research .	4	Kothari, C.R., Research Methodology: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk
ECO VII: RESEARCH METHODOLOGY Module 2: Elements of Research Methodology:	Steps in Research process: Identification, selection and formulation of research problem – sources of research problem – criteria of a good research problem - Review of literature - Formulation of hypothesis - Preparing Research Design: Definition, Concepts, and types– exploratory, descriptive and diagnostic, experimental and Analytical research designs – Collection and analysis of the data - Interpretation and report writing. Use of web search in research process- introduction to Internet and WWW -	12	SumitGuha (ed.), Growth, Stagnation or Decline?, Delhi , Oxford University Press,1993.	Group Discussion, Chalk and Talk

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	Using search engine like Google, Yahoo etc. Use of advanced search techniques.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: LEARN HOW TO COLLECT THE DATA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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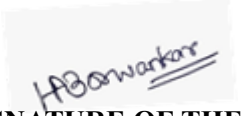
ECO VII: RESEARCH METHODOLOGY Module 3: Sources of Data for Research:	Types of data sources: Primary and Secondary - Primary data Meaning and Collection methods - Observational method - Interview technique - Design of Schedule and Questionnaire - Survey method and Field Visits - Case Study as a method. Major Sources of Secondary data: Meaning, advantages, Relevance, limitations and cautions of secondary data. Sampling Technique: Census and sample survey- Essentials of a good Sampling - Advantages and limitations of sampling, Methods of sampling: Random sampling : Simple or Unrestricted Random Sampling- Mixed or Stratified Random Sampling, Systematic or Quasi Random sampling – Multistage or Cluster Random Sampling - Sequential Random Sampling, Non random sampling : Judgement or Purposive sampling– Convenience sampling accidental sampling – Quota sampling, Selecting an appropriate sampling technique- Sampling and Non-sampling errors - Sample size.	12	Kothari, C.R., Research Methodology: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: USE VARIOUS QUANTITATIVE TECHNIQUES IN STATISTICS



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NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 4: Processing and Analysis of Data	Classification, Tabulation and Graphical presentation of socio economic data - An introduction to Statistical Analytical Tools – Measures of Central Tendency – Measures of Variation: absolute and relative measures – Quartile deviation, standard deviation, coefficient of variation- Skewness: meaning and Measurement (Karl Pearson‟s and Bowley‟s methods) - Basics of Computer Applications in Data organization & Data Processing, Introduction to spreadsheet application, features and functions, Using formulas and functions, Data storing, Features for Statistical data analysis, Graphical representation of data, Generating charts/ graph and other features.	12	Krishnaswami, O.R & M. Ranganatham ,Methodology of Research in SocialSciences, Himalaya Publishing House, Mumbai, 2011.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS CLASS: T.Y.B.A.

LEARNING OBJECTIVE/S:

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Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
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THE LEARNERS WILL BE ABLE TO: QUANTITATIVE TECHNIQUES FOR ANALYSIS OF DATA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 1: Statistical applications in research:	Methods of studying Correlation- measurement of simple correlation: graphic method: scatter diagram - coefficient of correlation - Karl Pearson and rank correlation interpretation of r = ± 1 Linear Regression analysis: meaning, regression lines, regression coefficients, regression equations, relationship between correlation and regression. Analysis of Time Series – components –trend analysis- moving averages (3, 4 and 5 yearly)- method of least square.	12	Goode J. William & Hatt K. Paul, Methods in social Research, New York, McGraw Hill, 1952.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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Bhaskar Waman Thakur College of Science
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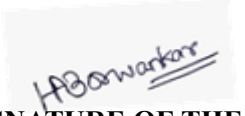
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 2: Index numbers:	Meaning – classification – problems encountered while constructing index numbers- uses and limitation of index numbers, Methods of constructing index numbers: Simple index: i) aggregate method ii) simple average of relatives method, Weighted index: Laspeyer‟s, Paache‟s and Fisher‟s index – weighted average of relatives method, Chain based index – concepts of Base shifting, splicing, and deflating, Consumer price index: meaning, need and construction – methods: aggregate expenditure method and family budget method.	12	Kothari, C.R., Research Methodology: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: FORMULATE AND TEST THE HYPOTHESIS

PAPER,	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/



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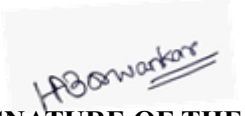
UNIT, TITLE		ALLOTTED		ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 3: Hypothesis formulation and Hypothesis Testing:	Definition and functions of hypothesis –Criteria of workable hypothesis – forms and sources of hypothesis- Concepts in Testing of Hypothesis: Universe / Population, parameter and statistic, Null and Alternative Hypotheses, Levels of Significance, critical region, Type I and Type II errors - Point and Interval Estimates.	12	Kumar, Renjith (2009) Research Methodology: A Step by Step Guide for Research, Delhi, Pearson Education, 2009.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: LEARN THE STYLE OF REPORT WRITING

PAPER, UNIT,	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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TITLE				
ECO VII: RESEARCH METHODOLOGY Module 4: Research Report Writing:	Types of Research Report: Technical, Popular, Interim, Summary, Article- Format of a Research Report- Principles of writing the Research Report: Organization and Style - Contents-Styles of reporting- Steps in drafting Reports- Editing the final draft-Evaluating the final draft -Organization of the Research Report: Preliminaries, Contents of Report, Structuring the Report: Chapter format- Pagination Identification- Using quotationsPresenting footnotes – abbreviations- Presentation of tables and figures ReferencingDocumentation-Use and format of appendices Indexing - Bibliography, Appendices.	12	Kothari, C.R., Research Methodology: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KNOW MEANING AND IMPORTANCE OF RESEARCH

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 1: Introduction to Concept of Research:	Nature, Scope & Purpose of social research - Basic assumptions of research - Significance and objectivity in social sciences research Types of research: pure & applied research; formulative or exploratory research	8	Kothari, C.R., Research Methodoloy: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND MEANING AND IMPORTANCE OF RESEARCH, VARIOUS STEPS IN RESEARCH

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 1: Introduction to Concept of Research:	Descriptive research, historical research, experimental research, survey research - Ethical issues and major difficulties relating to research .	4	Kothari, C.R., Research Methodoloy: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk
ECO VII: RESEARCH METHODOLOGY Module 2: Elements of Research Methodology:	Steps in Research process: Identification, selection and formulation of research problem – sources of research problem – criteria of a good research problem - Review of literature - Formulation of hypothesis - Preparing Research Design: Definition, Concepts, and types– exploratory, descriptive and diagnostic, experimental and Analytical research designs – Collection and analysis of the data - Interpretation and report writing. Use of web search in research process- introduction to Internet and WWW - Using search engine like Google, Yahoo etc. Use of advanced search techniques.	12	SumitGuha (ed.), Growth, Stagnation or Decline?, Delhi , Oxford University Press,1993.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: LEARN HOW TO COLLECT THE DATA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 3: Sources of Data for Research:	Types of data sources: Primary and Secondary - Primary data- Meaning and Collection methods - Observational method - Interview technique - Design of Schedule and Questionnaire - Survey method and Field Visits - Case Study as a method. Major Sources of Secondary data: Meaning, advantages, Relevance, limitations and cautions of secondary data. Sampling Technique: Census and sample survey- Essentials of a good Sampling - Advantages and limitations of sampling, Methods of sampling: Random sampling : Simple or Unrestricted Random Sampling- Mixed or Stratified Random Sampling, Systematic or Quasi Random sampling – Multistage or Cluster Random Sampling - Sequential Random Sampling, Non random sampling : Judgement or Purposive sampling– Convenience sampling accidental sampling – Quota sampling, Selecting an appropriate sampling technique- Sampling and Non-sampling errors - Sample size.	12	Kothari, C.R., Research Methodoloy: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: V MONTH: SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: USE VARIOUS QUANTITATIVE TECHNIQUES IN STATISTICS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 4: Processing and Analysis of Data	Classification, Tabulation and Graphical presentation of socio-economic data - An introduction to Statistical Analytical Tools – Measures of Central Tendency – Measures of Variation: absolute and relative measures – Quartile deviation, standard deviation, coefficient of variation- Skewness: meaning and Measurement (Karl Pearson‟s and Bowley‟s methods) - Basics of Computer Applications in Data organization & Data Processing, Introduction to spreadsheet application, features and functions, Using formulas and functions, Data storing, Features for Statistical data analysis, Graphical representation of data, Generating charts/ graph and other features.	12	Krishnaswami, O.R & M. Ranganatham ,Methodology of Research in SocialSciences, Himalaya Publishing House, Mumbai, 2011.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: DECEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: QUANTITATIVE TECHNIQUES FOR ANALYSIS OF DATA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 1: Statistical applications in research:	Methods of studying Correlation- measurement of simple correlation: graphic method: scatter diagram - coefficient of correlation - Karl Pearson and rank correlation interpretation of r = ± 1 Linear Regression analysis: meaning, regression lines, regression coefficients, regression equations, relationship between correlation and regression. Analysis of Time Series – components –trend analysis- moving averages (3, 4 and 5 yearly)- method of least square.	12	Goode J. William & Hatt K. Paul, Methods in social Research, New York, McGraw-Hill, 1952.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: CONSTRUCTION OF INDEX NUMBERS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 2: Index numbers:	Meaning – classification – problems encountered while constructing index numbers- uses and limitation of index numbers, Methods of constructing index numbers: Simple index: i) aggregate method ii) simple average of relatives method, Weighted index: Laspeyer‟s, Paache‟s and Fisher‟s index – weighted average of relatives method, Chain based index – concepts of Base shifting, splicing, and deflating, Consumer price index: meaning, need and construction – methods: aggregate expenditure method and family budget method.	12	Kothari, C.R., Research Methodoloy: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: FEBRUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: FORMULATE AND TEST THE HYPOTHESIS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 3: Hypothesis formulation and Hypothesis Testing:	Definition and functions of hypothesis –Criteria of workable hypothesis – forms and sources of hypothesis- Concepts in Testing of Hypothesis: Universe / Population, parameter and statistic, Null and Alternative Hypotheses, Levels of Significance, critical region, Type I and Type II errors - Point and Interval Estimates.	12	Kumar, Renjith (2009) Research Methodology: A Step by Step Guide for Research, Delhi, Pearson Education, 2009.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: LEARN THE STYLE OF REPORT WRITING

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 4: Research Report Writing:	Types of Research Report: Technical, Popular, Interim, Summary, Article- Format of a Research Report- Principles of writing the Research Report: Organization and Style - Contents-Styles of reporting- Steps in drafting Reports- Editing the final draft-Evaluating the final draft -Organization of the Research Report: Preliminaries, Contents of Report, Structuring the Report: Chapter format- Pagination- Identification- Using quotationsPresenting footnotes – abbreviations- Presentation of tables and figures- ReferencingDocumentation-Use and format of appendices- Indexing - Bibliography, Appendices.	12	Kothari, C.R., Research Methodoloy: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts VIVA COLLEGE, Virar (W) NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MARATHI) (DIV. A AND B) SEMESTER: I MONTH: JULY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND TEN PRINCIPLES OF ECONOMICS
ELEMENTARY CONCEPTS IN MICRO ECONOMICS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I MICRO ECONOMICS I Module –I: Ten Principles of Economics	Trade-offs faced by the individuals – significance of opportunity cost in decision making – thinking at the margin- responses to incentives-benefits from exchange- organization of economic activities through markets and its benefits – seventh, role of government in improving market outcomes – dependence of standard of living on production- growth in quantity of money and inflation-inflation and unemployment trade-off.	12	N.Gregory Mankiw, Principles of Microeconomics, 7th edition, Cengage Learning, 2015	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

HABorwankar

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MARATHI) (DIV. A AND B) SEMESTER: I MONTH: AUGUST ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KNOW MARKETS, DEMAND AND SUPPLY
MARKET STRUCTURE IN ECONOMICS AND CONCEPTS OF DEMAND AND SUPPLY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I MICRO ECONOMICS I	What is a market- what is competition-demand curves: market demand versus individual demand - movements along the demand curve-shifts in the demand curve, supply curves: market supply and individual supply- shifts in supply curve–		Salvatore D. (2003), Microeconomics: Theory and	Group Discussion, Chalk and Talk

HABorwankar

Module –III: Markets, Demand and Supply	market equilibrium – three steps to analyse changes in equilibrium –price ceilings and floors-taxes and their impact-priceelasticity of demand- total revenue and the elasticity of demand - impact of price elasticity on revenue	12	Applications, Oxford University Press, New Delhi.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MARATHI) (DIV. A AND B) SEMESTER: I MONTH: SEPTEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: ANALYSE INTERDEPENDENCE AND TRADE - INTERNATIONAL TRADE AND IT'S IMPORTANCE, VARIOUS CONCEPTS RELATED TO TRADE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I MICRO ECONOMICS I	Specialisation and trade –meaning of absolute cost advantage – opportunity cost and comparative cost advantage – comparative advantage and trade- gains from trade- application of	12	Sen Anindya (2007), Microeconomics: Theory and Applications,	Group Discussion, Chalk and Talk

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Module –IV: Interdependence and Trade	comparative cost advantage to international trade - trade policy: free trade and protection.		Oxford University Press, New Delhi.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MARATHI) DIV. A AND B) SEMESTER: II MONTH: JANUARY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KNOW RELATIONSHIP AMONG NATION INCOME, CONSUMPTION, SAVINGS, CAPITAL AND THEIR TRENDS IN ECONOMY.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO I MACRO ECONOMICS I **Module II: Consumption, Saving and Investment**	National Income Identity in an Open Economy- Keynesian Consumption Function- Investment Multiplier-Marginal Efficiency of Capital and Rate of Interest-Accelerator- Savings in India: Trends and Composition-Capital Formation in India: Trends and Composition- Sources of Data	12	N. Gregory Mankiw, Principles of Macroeconomics , 7th edition, Cengage	Group Discussion, Chalk and Talk, Using ICT for Economic Survey of India.

			Learning, 2015	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MARATHI) (DIV. A AND B) SEMESTER: II MONTH: FEBRUARY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: HAVE DEEP KNOWLEDGE OF PUBLIC FINANCE SYSTEM IN A COUNTRY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

ECO I MACRO ECONOMICS I **Module III: Government**	Public Goods and their Features- Merit Goods- Sources of Revenue: Direct and Indirect Tax- Impact, Shifting and Incidence of Tax- Sources of Non- Tax Revenue- Public Expenditure: Revenue and Capital Expenditure- Subsidies- Types of Deficit: Revenue, Budgetary, Fiscal and Primary-Concept of GST- Recent Trends- Sources of Data.	12	Sikdar, S. (2006), Principles of Macroeconomics, Oxford University Press, New Delhi	Group Discussion, Chalk and Talk, Using ICT for Economic Survey of India.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: F.Y.B.A. (MARATHI) (DIV. A AND B) SEMESTER: II MONTH: MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KNOW MEANING OF BOP AND IT'S STRCTURE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

ECO I MACRO ECONOMICS I **Module IV: External Sector**	Structure of Balance of Payments-Types of Disequilibrium in BOP- Exchange Rate Determination- Concept of FOREX and its components-Sources of Data	12	Abel, A. B., B. S. Bernanke and D. Croushore (2011), Macroeconomics, Pearson, New Delhi	Group Discussion, Chalk and Talk, Using ICT for Economic Survey of India.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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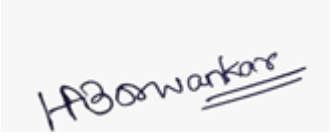
NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) SEMESTER: III MONTH: JUNE-DEC ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: MICRO ECONOMICS II MODULE I: KNOW UTILITY ANALYSIS- PREFERENCES WHILE HAVING CHOICES WITH LIMITED RESOURCES WHILE TAKING ANY ECONOMIC DECISION

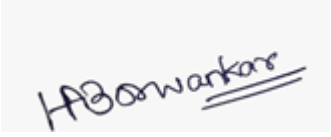
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MICRO ECONOMICS II: MODULE I: Utility Analysis	Preferences-strong ordering-weak ordering – completeness-transitivity-rational preferences	2	N.Gregory Mankiw, Principles of Microeconomics, 7th edition, Cengage Learning, 2015	Group Discussion, Chalk and Talk



SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

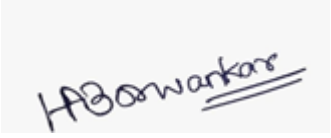
NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) SEMESTER: III MONTH: JULY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KNOW UTILITY ANALYSIS- PREFERENCES WHILE HAVING CHOICES WITH LIMITED RESOURCES WHILE TAKING ANY ECONOMIC DECISION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MICRO ECONOMICS II: MODULE I: Utility Analysis	Utility as representation of preferences-indifference curves and their properties -budget constraint-utility maximisation and consumer's equilibrium-income effect-substitution effect- derivation of demand curves	10	N.Gregory Mankiw, Principles of Microeconomics, 7th edition, Cengage Learning, 2015	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

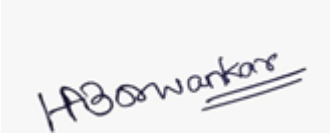
NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) SEMESTER: III MONTH: AUGUST ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND CONCEPTS RELATED TO PRODUCTION ANALYSIS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MICRO ECONOMICS II: MODULE II: PRODUCTION FUNCTION	Production function- Cobb-Douglas production function-short run and long run returns to scale-Isoquants and their properties –MRTS-Iso-cost curves-cost minimisation and producer's equilibrium-derivation of factor demand curves,	12	Ahuja, H. L. (2012), Advanced Economic Theory, S. Chand & Company, New Delhi.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

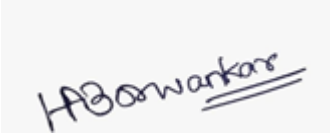
NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) SEMESTER: III MONTH: SEPTEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: GRASP COST AND REVENUE: CONCEPTS OF COST AND REVENUE AND THEIR RELATIONHIP

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MICRO ECONOMICS II: MODULE III: Cost and revenue	Various concepts of costs and their inter-relationship - behaviour of costs in the short run and the long run -long run average cost curve and it's derivation-implicit and explicit costs total revenue-marginal revenue-average revenue.	12	Koutsoyiannis, A. (1980) Modern Microeconomics, Macmillan Press Ltd, London	Group Discussion, Chalk and Talk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

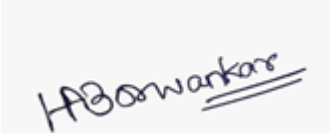
NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) SEMESTER: III MONTH: OCTOBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KNOW THE STRUCTURE OF COMPETITIVE MARKET AND PRICE DETERMINATION UNDER THIS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MICRO ECONOMICS II: MODULE IV: Competitive Markets:	Perfect Competitive Market: Features, Short Run Equilibrium of the firm and the industry, Long run equilibrium. Price equals to marginal cost in competitive markets- supply curve and derivation in competitive markets	12	Salvatore, D. (2003), Microeconomics, Oxford University Press	Group Discussion, Chalk and Talk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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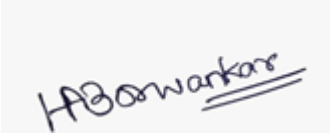
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) SEMESTER: IV MONTH: DECEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND THE FUNCTIONS OF MONEY, CONCEPTS OF MONEY, THEORIES OF MONEY SUPPLY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
			N. Gregory	Group Discussion, Chalk and Talk, .



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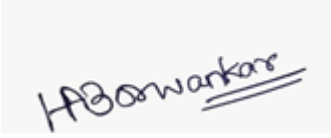
ECO II:MACRO ECONOMICS II: MODULE I: MONEY	Concept of money- supply of money- CRR, SLR, high powered money and its components- Money multiplier- current measures of money supply in India – quantity theory of money- velocity of circulation- factors affecting velocity of circulation- Fisher and Cambridge equations.	12	Mankiw, Principles of Macroeconomics, 7th edition, Cengage Learning, 2015	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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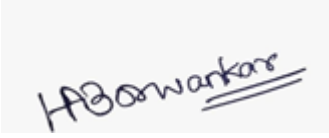
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KNOW MOTIVES FOR HOLDING MONEY, MONEY MARKET, LM CURVE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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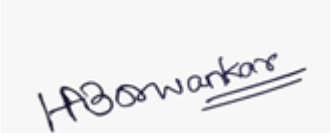
ECO II:MACRO ECONOMICS II: MODULE II: THE MONEY MARKET	Motives for holding money- transactions motive-precautionary motive-speculative motive- interest rate as cost of holding money-liquidity trap- money-market equilibrium-derivation of LM curve-shifts in the LM curve.	12	N. Gregory Mankiw, Principles of Macroeconomics, 7th edition, Cengage Learning, 2015	Group Discussion, Chalk and Talk, .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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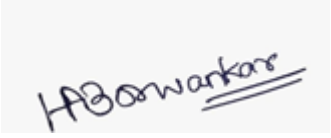
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) SEMESTER: IV MONTH: FEBRUARY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND SAVING FUNCTIONAND ITS CONCEPTS, IS CURVE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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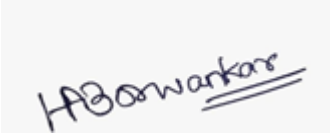
ECO II:MACRO ECONOMICS II: MODULE III: THE GOODS MARKET	Savings function-marginal propensity to save-investment demand function and its interest elasticity-animal spirits- equilibrium in the goods market-derivation of the IS curve-shifts in the IS curve.	12	Sikdar, S. (2006), Principles of Macroeconomics , Oxford University Press, New Delhi.	Group Discussion, Chalk and Talk, .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: S.Y.B.A. (ENGLISH) SEMESTER: IV MONTH: MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KNOW IS-LM EQUILIBRIUM, MONETARY AND FISCAL POLICY AND THEIR EFFECTIVENESS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO II:MACRO ECONOMICS II: MODULE IV: Monetary and Fiscal Policy	Simultaneous equilibrium in the goods and money markets (IS-LM equilibrium) – determination of income and interest rates- monetary policy and its instruments- effectiveness of monetary policy- Fiscal policy and its instruments- effectiveness of Fiscal policy.	12	Bernanke,B.S., D,Croushore, A.B Abel (2011) Macroeconomics. Pearson, New Delhi.	Group Discussion, Chalk and Talk, .

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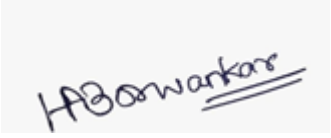

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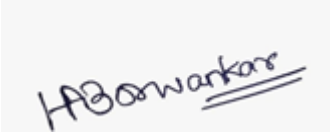

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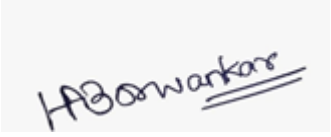

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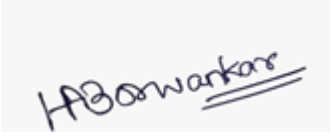

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ECO IX: HISTORY OF ECONOMIC THOUGHT: Module 4: Post-Keynesian Developments:	Hayek – Supply side economics: Arthur Laffer,	2	. Gide, O. and G. Rist , A History of Economic Doctrine, George Harrop Co., London, 1956.	Group Discussion, Chalk and Talk

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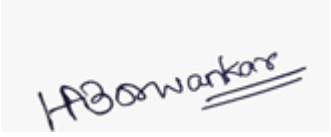

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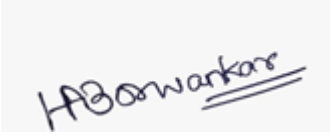

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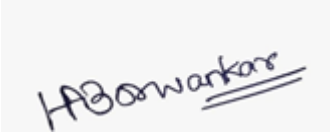

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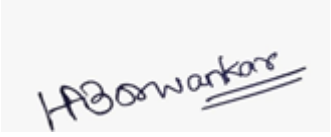
ECO IX: HISTORY OF ECONOMIC THOUGHT: Module 4: Post-Keynesian Developments:	Angus Deaton (2015), Richard Thaler (2017).	2	Dasgupta A. K, Epochs of Economic Theory Oxford University Press. New Delhi, 1985.	Group Discussion, Chalk and Talk



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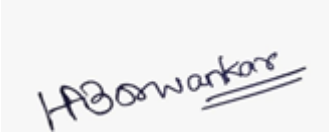

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CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: DECEMBER ACADEMIC YEAR: 2018-2019 LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: ANALYSE CURRENT TRENDS IN INTERNATIONAL DEVELOPMENTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX: INTERNATIONAL TRADE, POLICY AND PRACTICE Module 4: Role of Foreign Capital Flow	Factors determining Foreign Investment,	2	Bo Sodersten and Geofrey Reed, International Economics, 3rd Edition, Palgrave Macmillan; (May 15, 1994)	Group Discussion, Chalk and Talk

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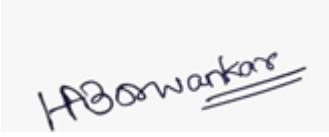

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CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND FII, QFI, FPI

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX: INTERNATIONAL TRADE, POLICY AND PRACTICE Module 4: Role of Foreign Capital Flow	Foreign Institutional Investment (FII), Qualified Foreign Investment (QFI), Foreign Portfolio Investment (FPI), Role of FDI in Economic Development-	4	Robert J Carbaugh, International Economics, South-Western Cengage Learning, USA, 2017.	Group Discussion, Chalk and Talk

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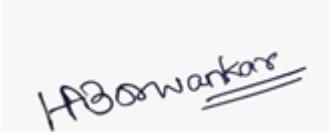
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS
CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: FEBRUARY ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: ANALYSE FDI

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ IC TOOLS USED
ECO IX: INTERNATIONAL TRADE, POLICY AND PRACTICE Module 4: Role of Foreign Capital Flow	Factors influencing FDI inflows- Green Field and Brown field FDI in India,	4	Paul R Krugman, Maurice Obstfeld and Melitz Mark, InternationalEconomics: Theory and Policy, Princeton University, USA, 2015.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND WORKING AND ROLE OF MNCs

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX: INTERNATIONAL TRADE, POLICY AND PRACTICE Module 4: Role of Foreign Capital Flow	Foreign Investment and Role of MNCs in India.	2	Bo Sodersten and Geofrey Reed, International Economics, 3rd Edition, Palgrave Macmillan; (May 15, 1994)	Group Discussion, Chalk and Talk

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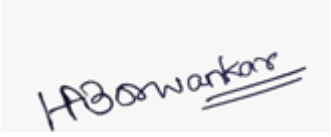

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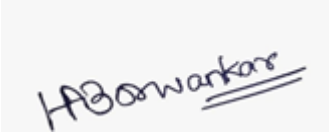

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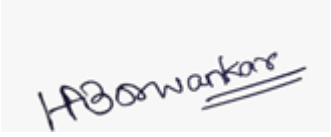

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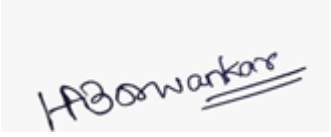

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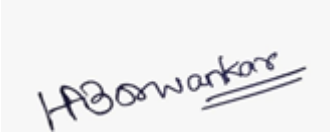

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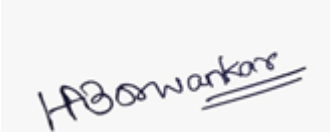
ECO IX: HISTORY OF ECONOMIC THOUGHT: Module 4: Post-Keynesian Developments:	Angus Deaton (2015), Richard Thaler (2017).	2	Dasgupta A. K, Epochs of Economic Theory Oxford University Press. New Delhi, 1985.	Group Discussion, Chalk and Talk



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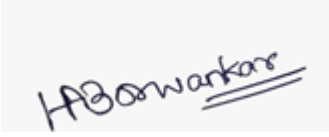
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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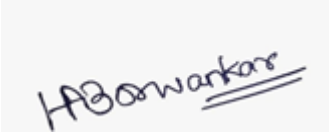
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS
CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: DECEMBER ACADEMIC YEAR: 2018-2019 LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: ANALYSE CURRENT TRENDS IN INTERNATIONAL DEVELOPMENTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX: INTERNATIONAL TRADE, POLICY AND PRACTICE Module 4: Role of Foreign Capital Flow	Factors determining Foreign Investment,	2	Bo Sodersten and Geofrey Reed, International Economics, 3rd Edition, Palgrave Macmillan; (May 15, 1994)	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS
CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND FII, QFI, FPI

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX: INTERNATIONAL TRADE, POLICY AND PRACTICE Module 4: Role of Foreign Capital Flow	Foreign Institutional Investment (FII), Qualified Foreign Investment (QFI), Foreign Portfolio Investment (FPI), Role of FDI in Economic Development-	4	Robert J Carbaugh, International Economics, South-Western Cengage Learning, USA, 2017.	Group Discussion, Chalk and Talk

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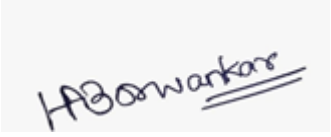
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS
CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: FEBRUARY ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: ANALYSE FDI

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ IC TOOLS USED
ECO IX: INTERNATIONAL TRADE, POLICY AND PRACTICE Module 4: Role of Foreign Capital Flow	Factors influencing FDI inflows- Green Field and Brown field FDI in India,	4	Paul R Krugman, Maurice Obstfeld and Melitz Mark, InternationalEconomics: Theory and Policy, Princeton University, USA, 2015.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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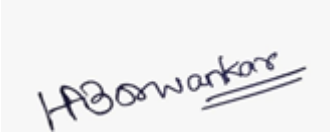
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND WORKING AND ROLE OF MNCs

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IX: INTERNATIONAL TRADE, POLICY AND PRACTICE Module 4: Role of Foreign Capital Flow	Foreign Investment and Role of MNCs in India.	2	Bo Sodersten and Geofrey Reed, International Economics, 3rd Edition, Palgrave Macmillan; (May 15, 1994)	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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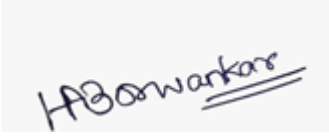

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TEACHING PLAN (UNIT PLAN)

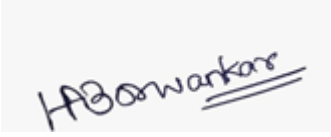
NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: V MONTH: JUNE-DEC ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KNOW MEANING AND IMPORTANCE OF RESEARCH

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 1: Introduction to Concept of Research:	Nature, Scope & Purpose of social research - Basic assumptions of research - Significance and objectivity in social sciences research Types of research: pure & applied research; formulative or exploratory research	8	Kothari, C.R., Research Methodoloy: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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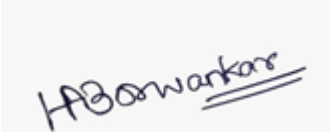
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: UNDERSTAND MEANING AND IMPORTANCE OF RESEARCH, VARIOUS STEPS IN RESEARCH

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 1: Introduction to Concept of Research:	Descriptive research, historical research, experimental research, survey research - Ethical issues and major difficulties relating to research .	4	Kothari, C.R., Research Methodoloy: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk
ECO VII:	Steps in Research process: Identification, selection and formulation of research problem – sources of research problem – criteria of a good research problem - Review of literature - Formulation of hypothesis - Preparing Research Design: Definition, Concepts, and types– exploratory, descriptive and		SumitGuha (ed.), Growth, Stagnation or Decline?, Delhi ,	



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RESEARCH METHODOLOGY Module 2: Elements of Research Methodology:	diagnostic, experimental and Analytical research designs – Collection and analysis of the data - Interpretation and report writing. Use of web search in research process- introduction to Internet and WWW - Using search engine like Google, Yahoo etc. Use of advanced search techniques.	12	Oxford University Press,1993.	Group Discussion, Chalk and Talk

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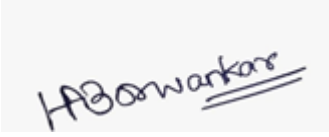

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: LEARN HOW TO COLLECT THE DATA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 3: Sources of Data for Research:	Types of data sources: Primary and Secondary - Primary data- Meaning and Collection methods - Observational method - Interview technique - Design of Schedule and Questionnaire - Survey method and Field Visits - Case Study as a method. Major Sources of Secondary data: Meaning, advantages, Relevance, limitations and cautions of secondary data. Sampling Technique: Census and sample survey- Essentials of a good Sampling - Advantages and limitations of sampling, Methods of sampling: Random sampling : Simple or Unrestricted Random Sampling- Mixed or Stratified Random Sampling, Systematic or Quasi Random sampling – Multistage or Cluster Random Sampling - Sequential Random Sampling, Non random sampling : Judgement or Purposive sampling– Convenience sampling accidental sampling – Quota sampling, Selecting an appropriate sampling technique- Sampling and Non-sampling errors - Sample size.	12	Kothari, C.R., Research Methodoloy: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS
CLASS: T.Y.B.A. (ENGLISH) SEMESTER: V MONTH: SEPTEMBER ACADEMIC YEAR: 2018-2019 LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: USE VARIOUS QUANTITATIVE TECHNIQUES IN STATISTICS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 4: Processing and Analysis of Data	Classification, Tabulation and Graphical presentation of socio-economic data - An introduction to Statistical Analytical Tools – Measures of Central Tendency – Measures of Variation: absolute and relative measures – Quartile deviation, standard deviation, coefficient of variation- Skewness: meaning and Measurement (Karl Pearson‟s and Bowley‟s methods) - Basics of Computer Applications in Data organization & Data Processing, Introduction to spreadsheet application, features and functions, Using formulas and functions, Data storing, Features for Statistical data analysis, Graphical representation of data, Generating charts/ graph and other features.	12	Krishnaswami, O.R & M. Ranganatham ,Methodology of Research in SocialSciences, Himalaya Publishing House, Mumbai, 2011.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: DECEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: QUANTITATIVE TECHNIQUES FOR ANALYSIS OF DATA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 1: Statistical applications in research:	Methods of studying Correlation- measurement of simple correlation: graphic method: scatter diagram - coefficient of correlation - Karl Pearson and rank correlation interpretation of r = ± 1 Linear Regression analysis: meaning, regression lines, regression coefficients, regression equations, relationship between correlation and regression. Analysis of Time Series – components –trend analysis- moving averages (3, 4 and 5 yearly)- method of least square.	12	Goode J. William & Hatt K. Paul, Methods in social Research, New York, McGraw-Hill, 1952.	Group Discussion, Chalk and Talk

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: CONSTRUCTION OF INDEX NUMBERS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 2: Index numbers:	Meaning – classification – problems encountered while constructing index numbers- uses and limitation of index numbers, Methods of constructing index numbers: Simple index: i) aggregate method ii) simple average of relatives method, Weighted index: Laspeyer‟s, Paache‟s and Fisher‟s index – weighted average of relatives method, Chain based index – concepts of Base shifting, splicing, and deflating, Consumer price index: meaning, need and construction – methods: aggregate expenditure method and family budget method.	12	Kothari, C.R., Research Methodoloy: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: FEBRUARY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: FORMULATE AND TEST THE HYPOTHESIS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 3: Hypothesis formulation and Hypothesis Testing:	Definition and functions of hypothesis –Criteria of workable hypothesis – forms and sources of hypothesis- Concepts in Testing of Hypothesis: Universe / Population, parameter and statistic, Null and Alternative Hypotheses, Levels of Significance, critical region, Type I and Type II errors - Point and Interval Estimates.	12	Kumar, Renjith (2009) Research Methodology: A Step by Step Guide for Research, Delhi, Pearson Education, 2009.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. HARSHAVARDHINI ARVIND BORWANKAR DEPARTMENT: ECONOMICS
CLASS: T.Y.B.A. (ENGLISH) SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: LEARN THE STYLE OF REPORT WRITING

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VII: RESEARCH METHODOLOGY Module 4: Research Report Writing:	Types of Research Report: Technical, Popular, Interim, Summary, Article- Format of a Research Report- Principles of writing the Research Report: Organization and Style - Contents-Styles of reporting- Steps in drafting Reports- Editing the final draft-Evaluating the final draft -Organization of the Research Report: Preliminaries, Contents of Report, Structuring the Report: Chapter format- Pagination- Identification- Using quotationsPresenting footnotes – abbreviations- Presentation of tables and figures- ReferencingDocumentation-Use and format of appendices- Indexing - Bibliography, Appendices.	12	Kothari, C.R., Research Methodoloy: An Introduction, Delhi, New Age, 2004	Group Discussion, Chalk and Talk

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** I **MONTH:** JULY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the basic principle of economics
- Understand the exchange rate functioning
- Understand the role of Government in managing market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS Module –II : Economics and Its Methods	The scientific method –role of assumptions- economic models: circular flow of income and production possibilities curve positive economics and normative economics Micro economics and Macro economics .	06	Sen Anindya (2007), : Theory and Applications,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** I **MONTH:** AUGUST **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand various scientific method used to asses economic functioning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS	economist as policy causes of disagreement among economists basics of graphs (graph of single variable,	06	Sen Anindya (2007), : Theory and Applications,	CHALK AND TALK , GROUP

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Module –II : Economics and Its Methods	graph of two variable, curves in the co-ordinate system, slopecause and effect).			DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** II **MONTH:** DECEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- This course is designed to introduce the student to the basic building blocks of macroeconomics using an open economy framework.

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- The course develops an understanding of the constituents of the open economy.
- The student should be able to build on these constituents in the later years so as to be able to analyses macroeconomic policies

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACRO ECONOMICS **Module I: Concepts and Definitions**	Circular flow of Income in an Open Economy–GDP-GNP-NNP- GDP Deflator–Real and Nominal Quantitates GDP at purchasing power parity –	06	Sikdar, S. (2006), Principles of Macroeconomics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

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CLASS: F.Y.B.A. **SEMESTER:** II **MONTH:** JANUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- This course is designed to introduce the student to the basic building blocks of macroeconomics using an open economy framework.
- The course develops an understanding of the constituents of the open economy.
- The student should be able to build on these constituents in the later years so as to be able to analyses macroeconomic policies

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACRO ECONOMICS **Module I: Concepts and Definitions**	Exchange rate as a price –GDP Growth: India's Experience Trends in Growth Rate and Sectoral Composition of GDP- Sources of Data.	06	Sikdar, S. (2006), Principles of Macroeconomics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** JUNE **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
  To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper IV: Indian Economy: Contemporary Concerns. Module 1: Demonetization: To Deify or Demonize?	Objectives of demonetisation and previous instances of demonetisation - India's demonetisation as unprecedented in international economic history - Short term costs and Long term benefits of demonetization - Analytics of demonetization - Future policy measures to maximise benefits and minimise costs of demonetisation	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** JULY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy

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- To understand Demonetization, Fiscal policies.
- To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Indian Economy: Contemporary Concerns **Module 2: Fiscal Framework: The World is Changing, Should India Change Too?**	Fiscal Responsibility and Budget Management (FRBM) Act - Why there is a need for counter-cyclical fiscal policy in India? - Debt dynamics with the help of equation for debt sustainability Fiscal Responsibility Legislation (FRL) - Impact of FRL on Budget process - Impact of FRL on Deficits - Lessons for future fiscal rules	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

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NAAC accredited "B" Grade, 2.69 CGPA

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** AUGUST **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
- To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	The Conceptual/Philosophical case for UBI - The Conceptual Case against UBI - Arguments in Favour and Against UBI - How can UBI overcome the issues of misallocation and leakages of resources? - Can UBI improve financial inclusion? - Will UBI lead to moral hazard and reduce labour supply? - What are the guiding principles for setting up UBI? - What are the prerequisites for introducing UBI? - Is there fiscal space to finance UBI?	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** SEPTEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
- To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Indian Economy: Contemporary Concerns	Income convergence/divergence within India - Consumption convergence/divergence within India - Health Convergence within India with room for improvement against International standard - Total	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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Module 4: Income, Health and Fertility: Convergence Puzzles	Fertility rate convergence (India and World) - Interpreting Graphs/Data regarding Income/Life Expectancy/ Infant mortality rate/Total fertility rate (For All Indian States)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** DECEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module 1**	Introduction to Maharashtra's Economy – Backdrop, Demography, Key Indicators of Development, Macroeconomics development of the Regions, Paradigm Shift	10	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARSHTRA OLANNING DEPARTEMNT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** JANUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:

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The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module 2** Importance of Tribal Areas	Present Status, Comparison with States, PCI, Poverty, Overview of Nutrition, Health & Education, Causes of Deprivation, Reforms to be undertaken	10	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARSHTRA OLANNING DEPARTEMNT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** FEBRUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module** 3 Water Resources	Availability of Water resources, government policy, overview of irrigation development (No division – wise discussion), overview of irrigation in Rest of Maharashtra, General Overview of Rural & Urban areas water supply, Recommendation for water distribution/ Balanced development	15	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARSHTRA OLANNING DEPARTEMNT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** MARCH **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module 4** **Health and connectivity**	Health : The Kelkar Committee approach to health, Regional disparities, Health Care Systems, Health outcomes, Recommendation and Strategies Connectivity – Introduction, General Overview of Roads, Railways, Ports, Airports and Broadband, Resources required	10	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARSHTRA OLANNING DEPARTEMNT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** JUNE **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:

- The learners will be able to : The modules incorporated in this paper educate the students about the inter-relationship between economic development and population along with an exposition of the established theories of population. Issues related to demographic techniques and basic sources of

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demographic data in the Indian economy have also been included. Aspects of the population policy and the study of its social characteristics are other important components of the modules of this paper.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Paper – I MODULE 2 Sources of demographic data in India	Salient features of census – including 2011 census. Civil Registration System,National Sample Survey. Demographic Survey –	06	Bose A. (1996)– 'India's Basic Demographic Statistics' – B.R. Publishing Corporation, New Delhi	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** JULY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:

- The learners will be able to : The modules incorporated in this paper educate the students about the inter-relationship between economic development and population along with an exposition of the established theories of population. Issues related to demographic techniques and basic sources of demographic data in the Indian economy have also been included. Aspects of the population policy and the study of its social characteristics are other important components of the modules of this paper.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Paper – I MODULE 2 Sources of demographic data in India	National Family Health survey -1,2 and 3. ,merits and demerits of these sources.	06	Agarwal S.S. (1985) - 'India's Population Problem' – Tata McGraw Hill Publication, Bombay	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** DECEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:

- The learners will be able to : The modules incorporated in this paper educate the students about the inter-relationship between economic development and population along with an exposition of the established theories of population. Issues related to demographic techniques and basic sources of demographic data in the Indian economy have also been included. Aspects of the population policy and the study of its social characteristics are other important components of the modules of this paper.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Paper – II MODULE 3	Salient features and evolution of India's population policy.	06	Agarwal S.S. (1985) - 'India's Population Problem' – Tata McGraw Hill Publication, Bombay	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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Population Policy	• Shift in policy focus from population control to family welfare to women empowerment.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** DECEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:

- The learners will be able to : The modules incorporated in this paper educate the students about the inter-relationship between economic development and population along with an exposition of the established theories of population. Issues related to demographic techniques and basic sources of demographic data in the Indian economy have also been included. Aspects of the population policy and the study of its social characteristics are other important components of the modules of this paper.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Demography Paper – II MODULE 3 Population Policy	• Family Planning – Meaning, importance and methods of family planning. • Population Projection in India	07	Hans Raj (1984) – 'Fundamentals of Demography – Surjeet Publication, Delhi.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JUNE **ACADEMIC YEAR:** 2018-19

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NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III **Module 2: Basics of Game theory**	Prisoner‟s Dilemma – Dominant strategy equilibrium – Battle of sexes game –	06	Mankiw, N. Gregory, Principles of Microeconomics, Cengage Learning, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JULY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand the theory of oligopoly & duopoly
- To able to understand the new theories of oligopoly market
- To able to understand theory of distribution
- To able to understand general equilibrium & economic efficiency & welfare

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III **Module 2: Basics of Game theory**	Nash equilibrium – Extensive form games – Game tree.	06	Mankiw, N. Gregory, Principles of Microeconomics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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			Cengage Learning, 2015.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JULY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand the theory of oligopoly & duopoly
- To able to understand the new theories of oligopoly market
- To able to understand theory of distribution
- To able to understand general equilibrium & economic efficiency & welfare

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III **Module 3: Oligopoly**	The Cournot model – The Bertrand model – The Edgeworth model – The Chamberlin model	06	Mansfield, Edwin, Micro-economics: Theory & Applications, 5th edition,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** AUGUST **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

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- To able to understand the theory of oligopoly & duopoly
- To able to understand the new theories of oligopoly market
- To able to understand theory of distribution
- To able to understand general equilibrium & economic efficiency & welfare

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/ S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III **Module 3: Oligopoly**	The Kinked demand curve model – Collusion and Cartels – Price Leadership	06	Sen Anindya, Microeconomics: Theory and Applications, Second edition Oxford	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** DECEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III Module2: Money/Financial Markets and Mundell-Fleming Model: :	The LM equation for the open economy –Uncovered Interest Parity and its implications for exchange rate determination – The combined IS/LM/UIP model.	06	Froyen, R. T.; Macroeconomics : Theory and Policy, Pearson Education Asia, Delhi,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** JANUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III	Fiscal and Monetary Policy under Fixed and Flexible Exchange Rates– The Mundell-Fleming trilemma.	06	Salvatore, D.; International Economics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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Module 2: Money/Financial Markets and Mundell-Fleming Model:			Printice Hall, New York, 1997 .	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** FEBRUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees

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SIGNATURE OF THE H.O.D.

- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III Module 4: International Monetary History, 1900-present	The Gold Standard – The Inter-War Period and the Great Depression – 1944, Bretton Woods System and its collapse ; Fixing in Europe via ERM, and the Dollar Standard elsewhere.	06	Mankiw, Gregory; Macroeconomics, 6e, Worth Publishers, New York, 2003.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

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CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** MARCH **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III **Module 4: International Monetary History, 1900-present:**	The Maastricht Treaty and preparations for the Euro; The Global Financial Crisis and its consequences for the Euro; The Euro Crisis, Asia Infrastructure Investment Bank (AIIB), New Development Bank (NDB).	06	Blanchard, Oliver, Macroeconomics , Pearson education, New Delhi, India, 2008	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JUNE **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 1: Introduction	Meaning and Scope of Industrial Economics, Industrial Profile : Private sector - Performance and Problems; Cooperatives - features, types, merits and demerits; Public Sector - Role, Performance and Problems, Diversification and Industrial Combinations - Motives for Mergers and Acquisitions.	12	Desai S.S.M. and Bhalerao N, Industrial Economy of India, Himalaya Publishing House, Mumbai, 2008.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

			6	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JULY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

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INDUSTIRAL AND LABOUR ECONOMICS Module 2: Industrial Location and Problem of Regional Imbalance	Determinants of Industrial Location, Theories of Industrial Location - Weber's and Sargent Florence's Theories, Dispersion of Industries and the Problem of Regional Imbalance	12	Datt R. and Sundaram K.P.M, Indian Economy, S.Chand& Co., New Delhi, 2009	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** AUGUST **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
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VIVA COLLEGE, Virar (W)
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- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 3: Industrial Productivity and Industrial Sickness	Concept and Measurement of Industrial Productivity, Factors Affecting Industrial Productivity, Industrial Sickness - Causes, Effects and Remedial Measures, Rationalisation - Concept, Aspects and Impact	12	Barthwal R.R, Industrial Economics, New Age International Publishers, NewDelhi,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** SEPTEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 4: Industrial Development in India	New Industrial Policy, 1991; Disinvestment Policy; FIPB Revamp- Micro, Small and Medium Enterprises Development Act, 2006; National Manufacturing Policy, 2011,Recent Trends in India's Industrial Growth, Industrial Policy, 2012, Role of MNCs in the Indian Economy - Merits and Demerits, Issues in Industrial Proliferation and Environment Preservation; Pollution Control Policies.	12	Agrawal A.N, Indian Economy, New Age International Publishers, New Delhi, 2011.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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SIGNATURE OF THE H.O.D.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** DECEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

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INDUSTIRAL AND LABOUR ECONOMICS Module 1 : Introduction – Indian Labour Market	Characteristics of the Indian Labour Market - Child Labour and Female Labour – Problems and Measures- Globalisation and Indian Labour Market -Labour Market Reforms – Exit Policy and Need for Safety Nets - Second National Commission on Labour.	12	Datt R. and Sundaram K.P.M, Indian Economy, S.Chand & Co., New Delhi, 2009.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** JANUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 2 : Trade Unionism	Definition and Functions of Trade Unions- Historical Evolution of Trade Unions in India and Their Present Status - Problems of Trade Unions in India - Role of Outside Leadership	12	2. Mamoria C.B. and Mamoria S, Dynamics of Industrial Relations, Himalaya Publishing House, Mumbai, 2002.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** FEBRUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 3 : Industrial Relations	Causes of Industrial Disputes and Their Settlement Mechanism - Collective Bargaining – Concept, Features, Importance and Pre-requisites for Successful Collective Bargaining - Collective Bargaining in India - Workers" Participation in Management –Concept, objectives and Forms of Workers" Participation in India.	12	Mishra S.K. and Puri V.K, Indian Economy, Himalaya Publishing House, Mumbai,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** MARCH **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 4 : Labour Welfare	Concept, Theories and Principles of Labour Welfare - Agencies for Labour Welfare - Role of the Labour Welfare Officer - Social Security – Concept; Social Assistance and	12	Monappa A, Industrial Relations, Tata McGraw Hill Publishing	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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and Social Security	Social Insurance - Social Security Measures in India - International Labour Organization and Its Impact on Indian Labour Legislations.		Company Ltd., New Delhi, 2006 5.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JUNE **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 2: Elements of Research Methodology:	Steps in Research process: Identification, selection and formulation of research problem – sources of research problem – criteria of a good research problem - Review of literature - Formulation of hypothesis - Preparing Research Design: Definition, Concepts, and types– exploratory, descriptive and diagnostic, experimental and Analytical research designs –	06	Kothari, C.R., Research Methodoloy: An Introduction, Delhi, New Age, 2004.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JULY **ACADEMIC YEAR:** 2018-19

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Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 2: Elements of Research Methodology:	Collection and analysis of the data - Interpretation and report writing. Use of web search in research process- introduction to Internet and WWW - Using search engine like Google, Yahoo etc. Use of advanced search techniques.	06	. Krishnaswami, O.R & M. Ranganatham ,Methodology of Research in Social Sciences,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** AUGUST **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 3: Sources of Data for Research:	Types of data sources: Primary and Secondary - Primary data-Meaning and Collection methods - Observational method - Interview technique - Design of Schedule and Questionnaire - Survey method and Field Visits - Case Study as a method.	06	. Gupta S. P., Statistical Methods, Sultan Chand and Sons,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

SIGNATURE OF THE STAFF

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	Major Sources of Secondary data: Meaning, advantages, Relevance, limitations and cautions of secondary data.		New Delhi, 2014 .	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** SEPTEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

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RESEARCH METHODOLOGY Module 3: Sources of Data for Research:	Sampling Technique: Census and sample survey- Essentials of a good Sampling - Advantages and limitations of sampling, Methods of sampling: Random sampling : Simple or Unrestricted Random Sampling- Mixed or Stratified Random Sampling, Systematic or Quasi Random sampling – Multistage or Cluster Random Sampling - Sequential Random Sampling, Non random sampling : Judgement or Purposive sampling–Convenience sampling accidental sampling – Quota sampling, Selecting an appropriate sampling technique- Sampling and Non-sampling errors - Sample size.	06	. Rajaram V., Fundamentals of computers, Prentice Hall of India, New Delhi, 1996	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** DECEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

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Late Shri. Vishnu Waman Thakur Charitable Trust
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 3: Hypothesis formulation and Hypothesis Testing:	Definition and functions of hypothesis –Criteria of workable hypothesis – forms and sources of hypothesis- Concepts in Testing of Hypothesis: Universe / Population, parameter and statistic,	06	Goode J. William & Hatt K. Paul, Methods in social Research, New York, McGraw-Hill, 1952	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

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Late Shri. Vishnu Waman Thakur Charitable Trust
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** JANUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 3: Hypothesis formulation and Hypothesis Testing:	Null and Alternative Hypotheses, Levels of Significance, critical region, Type I and Type II errors - Point and Interval Estimates.	06	Kothari, C.R (2004) Research Methodology: An Introduction, Delhi, New Age, 2004.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** FEBRUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 4: Research Report Writing:	Types of Research Report: Technical, Popular, Interim, Summary, Article- Format of a Research Report- Principles of writing the Research Report: Organization and Style -	06	Kumar, Renjith (2009) Research Methodology: A Step by Step Guide for	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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	Contents-Styles of reporting- Steps in drafting Reports-Editing the final draft-Evaluating the final draft -Organization of the Research Report: Preliminaries, Contents of Report,		Research, Delhi, Pearson Education, 2009	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** MARCH **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY Module 4: Research Report Writing:	Structuring the Report: Chapter format- Pagination- Identification- Using quotations- Presenting footnotes –abbreviations- Presentation of tables and figures- Referencing- Documentation-Use and format of appendices- Indexing - Bibliography, Appendices.	06	Gupta S P Statistical Methods Sultan Chand and Sons, New Delhi, 1987.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JUNE **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:

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Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS Module1: Introduction to Environmental Economics:	Introduction to environmental development and environmental economics, Rio-Declaration on environmental development,	06	4. Hanley Nick, Shogren Jason and White Ben: Introduction to Environmental Economics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JULY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS Module1: Introduction to Environmental Economics:	Agenda 21 programme of action for sustainable development, Social and economic dimensions, Conservation and management of resources for development.	06	4. Hanley Nick, Shogren Jason and White Ben: Introduction to Environmental Economics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** AUGUST **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

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ENVIRONMENTAL ECONOMICS Module 4: Environmental problems:	The global environment- Trans-boundary environmental problems, economics of climate change,	06	Barry C. Fields: Environmental Economics : An Introduction, McGraw Hill International Edition, 1997.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** SEPTEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS Module 4: Environmental problems:	International environmental Agreements - , sustainable development: Concepts and measures.	12	Barry C. Fields: Environmental Economics : An Introduction, McGraw Hill International Edition, 1997.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** JANUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understanding the concept and aspects of economic Development.
- Knowing the theories of economic growth & Development.
- Measuring the concept and issues of economic planning.
- Discussing the need, types and necessary conditions of economic planning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT THEORY AND EXPERIENCE Module IV: The Environment and Development:	The core of environmental problems- Rural poverty and environmental destructionindustrialization and environmental pollution - Economic models of environmental issues: .	06	Partha Dasgupta, Economics: A Very Short Introduction, Oxford University	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** FEBRUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understanding the concept and aspects of economic Development.
- Knowing the theories of economic growth & Development.
- Measuring the concept and issues of economic planning.
- Discussing the need, types and necessary conditions of economic planning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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DEVELOPMENT THEORY AND EXPERIENCE Module IV: The Environment and Development:	privately owned resources, common property resources, public goods: regional environmental degradation and the free rider problem, limitations of pubic goods framework.	06	Partha Dasgupta, Economics: A Very Short Introduction, Oxford University	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** JANUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

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- Evaluating various types of exchange rates and its merits and demerits.
- Discussing the types and effects of tariffs and quotas.
- Judging the function, merits and demerits of Foreign Capital, and International Corporation (IMF, IBRD, WTO and SAARC).

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL TRADE, POLICY AND PRACTICE Module 2 : Emerging new International Economic Order	GATT, Uruguay Round, WTO, WTO Agreement, Dispute settlement Mechanism, Impact of WTO on Emerging Economies and India, Doha Round and implications of its failure-	06	Paul R Krugman, Maurice Obstfeld and Melitz Mark, International Economics: Theory and Policy, Princeton University, USA, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

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NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: Ms MANSI GAWAND **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:FEBRUARY** **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Evaluating various types of exchange rates and its merits and demerits.
- Discussing the types and effects of tariffs and quotas.
- Judging the function, merits and demerits of Foreign Capital, and International Corporation (IMF, IBRD, WTO and SAARC).

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL TRADE, POLICY AND PRACTICE Module 2 : Emerging new International Economic Order	Emergence of Regional Free Trade agreements (FTA), Bilateral Investment Treaty (BIT), Double Taxation Avoidance Agreement (DTAA).	06	Paul R Krugman, Maurice Obstfeld and Melitz Mark, International Economics: Theory and Policy, Princeton University, USA, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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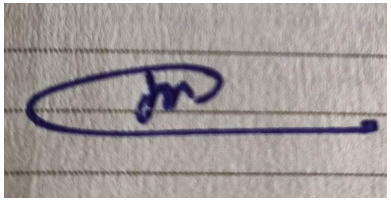
Name of the teacher and H.O.D:- Mansi Gawand.



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TEACHING PLAN (UNIT PLAN)

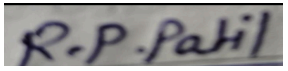
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: Concept of Monopoly .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV: MICRO ECONOMICS Module- 1 Monopoly	Sources of Monopoly.	02	Dr.Chavhan N.L., 'Pragat Sukshmalakshi Arthashastra', Prashant Publications.	Group Discussion, Chalk and Talk



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SIGNATURE OF THE H.O.D.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

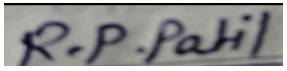
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: Control of Monopoly.



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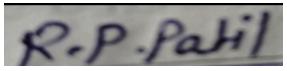
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV: MICRO ECONOMICS Module- 1 Monopoly	Profit maximising monopoly, calculation of price, out put and profit for a monopoly. Price discrimination- First, Second & Third degree. Public policy towards monopoly.	10	Dr.Chavhan N.L., 'Pragat Sukshmalakshi Arthashastra', Prashant Publications. Prof.Deshmukh Ram,'Aadhunik Sthul Arthashastra', Vidya books publishers.	Group Discussion, Chalk and Talk



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SIGNATURE OF THE H.O.D.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

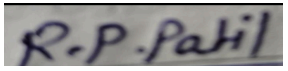
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: Focus on General equilibrium and Welfare economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV:	Interdependence in the economy,	06		



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MICRO ECONOMICS Module- 4 General equilibrium & Welfare economics	General equilibrium & it's existence, The Pareto optimality condition of social welfare, Marginal conditions for Pareto optimal resource allocation.		Dr. Zamre G.N. ,'Sukshma Arthashastriya Vishleshan'. Dr.Chavhan N.L., 'Pragat Sukshmalakshi Arthashastra', Prashant Publications.	Group Discussion, Chalk and Talk

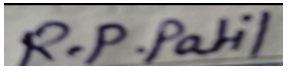
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: SEPTEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:



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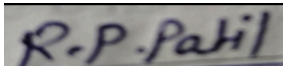
THE LEARNERS WILL BE ABLE TO: PERFECT COMPITITION , COMPENSATION THEORY.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV: MICRO ECONOMICS Module- 4 General equilibrium & Welfare economics	Perfect compitition & Pareto optimality, Kaldor- Hicks compensation criteria, Arrow's impossibility theorem.	06	Dr.Chavhan N.L., 'Pragat Sukshmalakshi Arthashastra', Prashant Publications. Prof Dr.Dhamdhere S.V.,'Sukshma Arthashastra', Diamond publications.	Group Discussion, Chalk and Talk



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

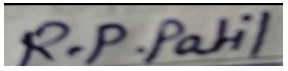
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: DECEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: MACRO ECONOMIC THEORY WITH ANALYTICAL TOOLS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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ECO IV: MACRO ECONOMICS Module -1 The goods market in open economy	Trade balance & it's implications for GDP calculations. Export & Import functions.	04	Prof.Dr. Rasal Rajendra, 'Aantarrashriya Arthshastra', Success Publications Prof.Deshmukh Ram,' Samashti Arthashastra', Vidya books publishers.	Group Discussion, Chalk and Talk

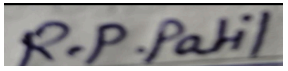
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:



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THE LEARNERS WILL BE ABLE TO: CONCEPTS OF REAL EXCHANGE RATE , FISCAL & EXCHANGE RATE POLICY

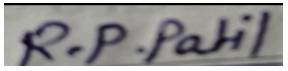
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV: MACRO ECONOMICS Module -1 The goods market in open economy	The real exchange rate & why it matters. Why equilibrium GDP is consistent with a trade balance? Fiscal & Exchange rate policy with a fixed exchange rate.	08	Dr. Dhamdhere S.V,'Aantarrashriya Arthashastra', Diamond publications. Prof.Deshmukh Ram,' Aadhunik Sthul Arthshastra', Vidya books publishers.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: FEBRUARY ACADEMIC YEAR: 2018-2019



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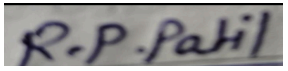
LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: CONCEPT OF EXCHANGE RATE REGIMES.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV: MACRO ECONOMICS Module -3 Exchange rate regimes & exchange rate crises.	The choice of regime- Fixed or flexible, The spectrum of arrangement from Hard peg at one end to fully floating at the other, Why the Balance of Payments must always balance under floating exchange rate.	07	Prof.Dr. Rasal Rajendra, 'Aantarrashriya Arthshastra', Success Publications. Dr. Dhamdhere S.V,'Aantarrashriya Arthashastra', Diamond publications.	Group Discussion, Chalk and Talk



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

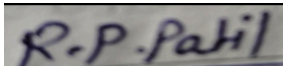
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: ECONOMIC CRISES.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT



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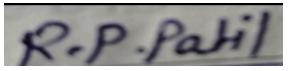
SIGNATURE OF THE H.O.D.

				TOOLS USED
ECO IV: MACRO ECONOMICS Module -3 Exchange rate regimes & exchange rate crises.	Exchange rate Crises_ The relation between exchange rate crises & other kinds of crises (banking crises, financial crises).	05	Prof.Dr. Rasal Rajendra, 'Aantarrashriya Arthshastra', Success Publications. Dr.Rasal Rajendra,,Bhartiya aani Jagtik Aarthik Vikas'.	Group Discussion, Chalk & Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

Name of the Teacher



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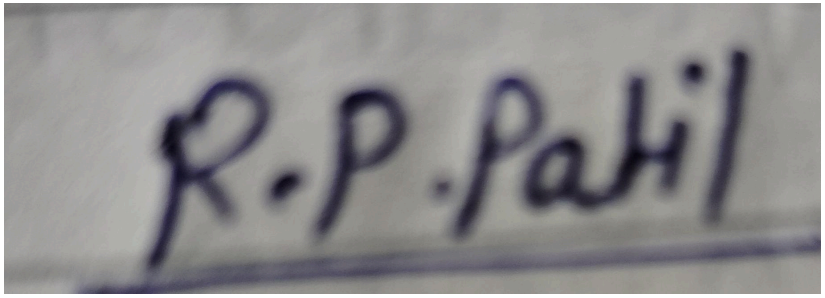
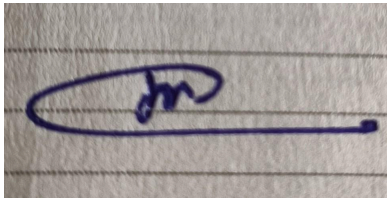
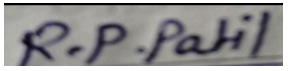


Rupali Prashil Patil

Name of the HOD

Prof.Mansi Gawand





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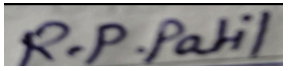


SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

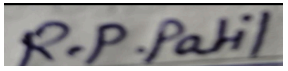
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: Concept of Monopoly .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV: MICRO ECONOMICS Module- 1 Monopoly	Sources of Monopoly.	02	Dr.Chavhan N.L., 'Pragat Sukshmalakshi Arthashastra', Prashant Publications.	Group Discussion, Chalk and Talk



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

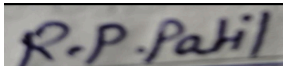
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: Control of Monopoly.



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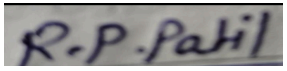
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV: MICRO ECONOMICS Module- 1 Monopoly	Profit maximising monopoly, calculation of price, out put and profit for a monopoly. Price discrimination- First, Second & Third degree. Public policy towards monopoly.	10	Dr.Chavhan N.L., 'Pragat Sukshmalakshi Arthashastra', Prashant Publications. Prof.Deshmukh Ram,'Aadhunik Sthul Arthashastra', Vidya books publishers.	Group Discussion, Chalk and Talk



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

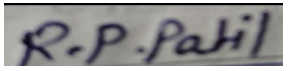
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: Focus on General equilibrium and Welfare economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV:	Interdependence in the economy,	06		



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MICRO ECONOMICS Module- 4 General equilibrium & Welfare economics	General equilibrium & it's existence, The Pareto optimality condition of social welfare, Marginal conditions for Pareto optimal resource allocation.		Dr. Zamre G.N. ,'Sukshma Arthashastriya Vishleshan'. Dr.Chavhan N.L., 'Pragat Sukshmalakshi Arthashastra', Prashant Publications.	Group Discussion, Chalk and Talk

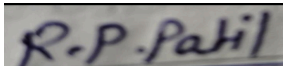
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: SEPTEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:



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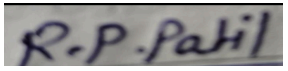
THE LEARNERS WILL BE ABLE TO: PERFECT COMPITITION , COMPENSATION THEORY.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV: MICRO ECONOMICS Module- 4 General equilibrium & Welfare economics	Perfect compitition & Pareto optimality, Kaldor- Hicks compensation criteria, Arrow's impossibility theorem.	06	Dr.Chavhan N.L., 'Pragat Sukshmalakshi Arthashastra', Prashant Publications. Prof Dr.Dhamdhere S.V.,'Sukshma Arthashastra', Diamond publications.	Group Discussion, Chalk and Talk



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

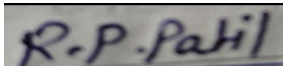
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: DECEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: MACRO ECONOMIC THEORY WITH ANALYTICAL TOOLS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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ECO IV: MACRO ECONOMICS Module -1 The goods market in open economy	Trade balance & it's implications for GDP calculations. Export & Import functions.	04	Prof.Dr. Rasal Rajendra, 'Aantarrashriya Arthshastra', Success Publications Prof.Deshmukh Ram,' Samashti Arthashastra', Vidya books publishers.	Group Discussion, Chalk and Talk

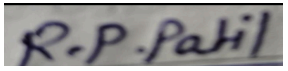
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:



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THE LEARNERS WILL BE ABLE TO: CONCEPTS OF REAL EXCHANGE RATE , FISCAL & EXCHANGE RATE POLICY

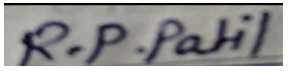
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV: MACRO ECONOMICS Module -1 The goods market in open economy	The real exchange rate & why it matters. Why equilibrium GDP is consistent with a trade balance? Fiscal & Exchange rate policy with a fixed exchange rate.	08	Dr. Dhamdhere S.V,'Aantarrashriya Arthashastra', Diamond publications. Prof.Deshmukh Ram,' Aadhunik Sthul Arthshastra', Vidya books publishers.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: FEBRUARY ACADEMIC YEAR: 2018-2019



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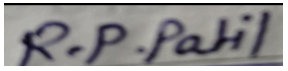
LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: CONCEPT OF EXCHANGE RATE REGIMES.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO IV: MACRO ECONOMICS Module -3 Exchange rate regimes & exchange rate crises.	The choice of regime- Fixed or flexible, The spectrum of arrangement from Hard peg at one end to fully floating at the other, Why the Balance of Payments must always balance under floating exchange rate.	07	Prof.Dr. Rasal Rajendra, 'Aantarrashriya Arthshastra', Success Publications. Dr. Dhamdhere S.V,'Aantarrashriya Arthashastra', Diamond publications.	Group Discussion, Chalk and Talk



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

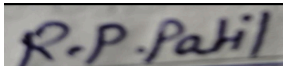
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: ECONOMIC CRISES.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT



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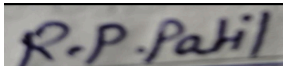
				TOOLS USED
ECO IV: MACRO ECONOMICS Module -3 Exchange rate regimes & exchange rate crises.	Exchange rate Crises_ The relation between exchange rate crises & other kinds of crises (banking crises, financial crises).	05	Prof.Dr. Rasal Rajendra, 'Aantarrashriya Arthshastra', Success Publications. Dr.Rasal Rajendra,,Bhartiya aani Jagtik Aarthik Vikas'.	Group Discussion, Chalk & Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

Name of the Teacher



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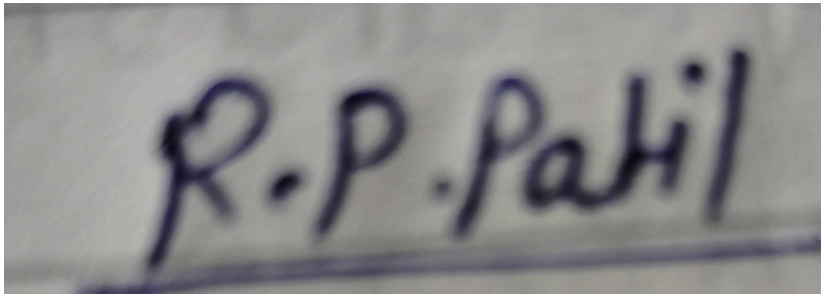
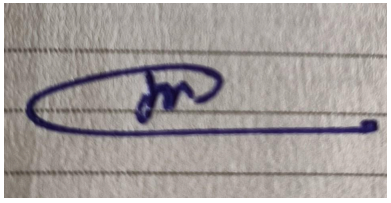
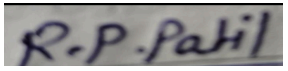


Rupali Prashil Patil

Name of the HOD

Prof.Mansi Gawand





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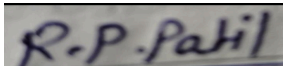

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2018-2019 LEARNING OBJECTIVE/S: THE LEARNERS WILL BE ABLE TO: RIO -DECLARATION AND ENVIRONMENTAL DEVELOPMENT.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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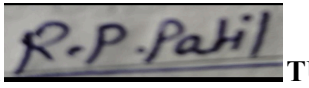
Vidhya Dayanand Patil College of Arts

ECO VIII : ENVIRONMENTAL ECONOMICS Module1: Introduction to environmental economics	Introduction to environmental development and environmental economics, Rio-Declaration on environmental development.	04	Barry C. Fields: Environmental Economics : An Introduction, McGraw HillInternational ,Edition, 1997.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNA  **TURE OF THE STAFF**

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Vidhya Dayanand Patil College of Arts

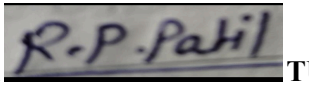
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: AGENDA 21 PROGRAMME FOR ENVIRONMENT.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNA  **TURE OF THE STAFF**

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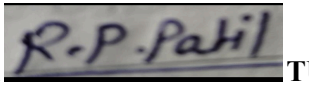
ECO VIII : ENVIRONMENTAL ECONOMICS Module1: Introduction to environmental economics	Agenda 21 programme of action for sustainable development, Social and economic dimensions, Conservation and management of resources for development.	08	United Nations Sustainable Development, UN Conference on Environment & Development, Rio de Janerio, Brazil, Agenda 21,https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf, 1992.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNA  **TURE OF THE STAFF**

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NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: EVALUATION OF ENVIRONMENTAL POLICIES AND ITS IMPLEMENTATION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/

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		ALLOTED		ICT TOOLS USED
ECO VIII : ENVIRONMENTAL ECONOMICS Module -2 The design and implementation of Environmental Policy.	Overview - Criteria for evaluating environmental policies; Standards, Pigovian taxes and effluent fees.	06	Singh Katar,Shisodiya Anil,'Paryavarniya Arthashastra, Sidhhant aani aupayojan',SAGE publication.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: V MONTH: SEPTEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: INFRASTRUCTURE IN ECONOMIC DEVELOPMENT, TYPES OF TECHNICAL PROGRESS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/

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				ICT TOOLS USED
ECO VIII : ENVIRONMENTAL ECONOMICS Module -2 The design and implementation of Environmental Policy.	Tradable permits, choice between taxes and quotas, implementation of environmental policy.	06	Singh Katar,Shisodiya Anil,'Paryavarniya Arthashastra, Sidhhant aani aupayojan',SAGE publication.	Group Discussion, Chalk and Talk

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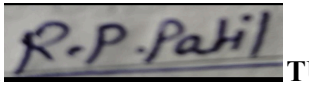
SIGNA  **TURE OF THE STAFF**

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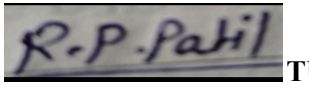
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI

MONTH: DECEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: THE LEARNERS WILL BE ABLE TO: DEMOGRAPHIC CONCEPTS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT

SIGNA  **TURE OF THE STAFF**

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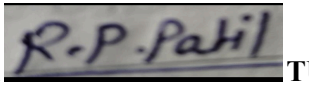
				TOOLS USED
ECO VIII : DEVELOPMENT THEORY & EXPERIENCE Module- 1 Demography and Development	Demographic concepts; birth and death rates, age structure, fertility and mortality;	05	Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Ahirrao-Alizad-Dapte-Varat-Bhose (2001) – 'Loksankhya' – Nirali Publication, Pune.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNA  **TURE OF THE STAFF**

SIGNATURE OF THE H.O.D.

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts

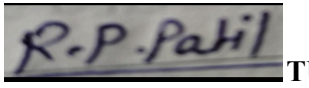
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: DEMOGRAPHIC TRANSITIONS DURING THE DEVELOPMENT.

SIGNA  **TURE OF THE STAFF**

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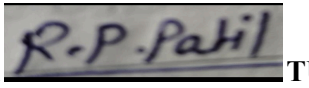
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECO VIII : DEVELOPMENT THEORY & EXPERIENCE Module- 1 Demography and Development	Demographic transitions during the process of development; gender bias in preferences and outcomes and evidence on unequal treatment within households; connections between income, mortality, fertility choices and human capital accumulation.	07	.Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Ahirrao-Alizad-Dapte-Varat-Bhose (2001) – 'Loksankhya' – Nirali Publication, Pune.	Group Discussion, Chalk and Talk

SIGNA  **TURE OF THE STAFF**

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

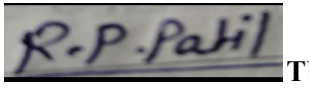
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: FEBRUARY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: IMPORTANCE OF STRUCTURAL CHANGES IN ECONOMIC DEVELOPMENT.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING

SIGNA  **TURE OF THE STAFF**

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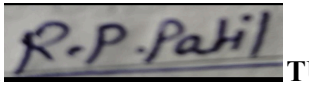
				METHOD/ ICT TOOLS USED
ECO VIII : DEVELOPMENT THEORY & EXPERIENCE Module -2: Structural Transformation	The Lewis model –Clark-Fisher model of structural change , Urbanization: Trends and Projections with reference to India, Urbanization and Development, Causes of urbanization, Urban informal sector, Policies for the urban informal sector, Migration and development, Economic theory of rural-urban migration: Harris-Todaro migration model	12	Dr. D.D.Kachole (2001) – 'Demography' – Kailasha Publication, Aurangabad. Dr.Kavimandan Vijay,'Vikasache Arthashastra va Niyojan', Shree Mangesh Prakashan, Nagpur.	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNA  **TURE OF THE STAFF**

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TEACHING PLAN (UNIT PLAN)

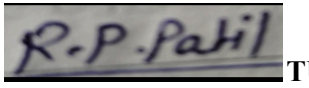
NAME OF THE STAFF: MS. Rupali Prashil Patil DEPARTMENT: ECONOMICS

CLASS: T.Y.B.A. (MARATHI) SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: ROLE OF AGRICULTURE AND RURAL CREDIT MARKET.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT

SIGNA  **TURE OF THE STAFF**

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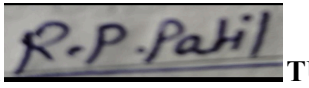
				TOOLS USED
ECO VIII : DEVELOPMENT THEORY & EXPERIENCE n: Harris-Todaro migration model Module -3: Land, Labor and Credit Markets	Role of Agriculture in Economic Development, Market Failure and Agriculture, The distribution of land ownership; Land reform and its effects on productivity; contractual relationships between tenants and landlords; Land Acquisition; Nutrition and Labour Productivity; Rural Credit Market; Microfinance; Inter-linkages between Rural Factor markets.	12	Dr.Kavimandan Vijay,'Krushi va Gramin Arthashastra', Shree Mangesh Prakashan, Nagpur.	Group Discussion, Chalk & Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNA  **TURE OF THE STAFF**

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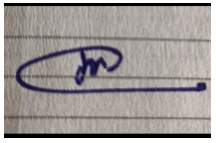
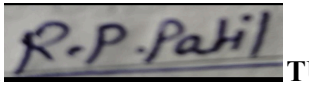


Prof. Mansi Gawand

SIGNA  **TURE OF THE STAFF**

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

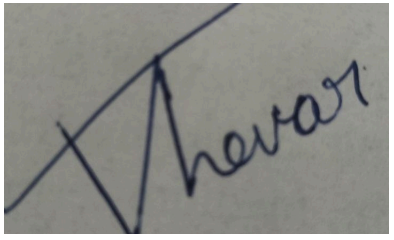
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** I **MONTH:** JULY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the basic principle of economics
- Understand the exchange rate functioning
- Understand the role of Government in managing market

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS	Trade-offs faced by the individuals, significance of opportunity cost in decision making thinking	12	N.Gregory Mankiw, Principles of Microeconomics,	CHALK AND TALK , GROUP



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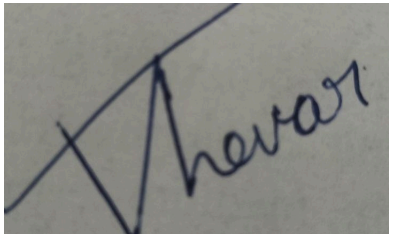
Module –I: Ten Principles of Economics	at the margin ,responses to incentives, benefits from exchange, organization of economic activities through markets and its benefits role of government in improving market outcomes , dependence of standard of living on production , growth in quantity of money and inflation , inflation and unemployment trade-off.			DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** I **MONTH:** AUGUST **ACADEMIC YEAR:** 2018-19



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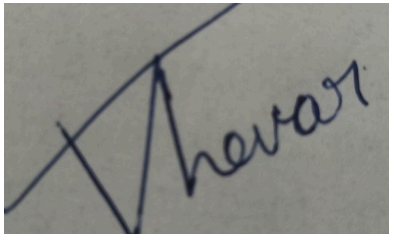
LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand various scientific method used to asses economic functioning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS Module –II : Economics and Its Methods	The scientific method –role of assumptions- economic models: circular flow of income and production possibilities curve positive economics and normative economics Micro economics and Macro economics-economist as policy causes of disagreement among economists basics of graphs (graph of single variable, graph of two variable, curves in the co-ordinate system, slopecause and effect).	12	Sen Anindya (2007), : Theory and Applications,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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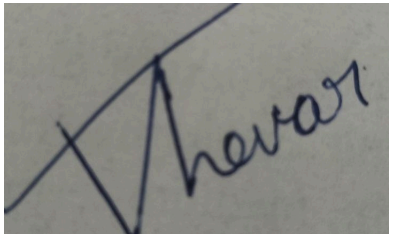
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** I **MONTH:** SEPTEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand price determination of factors
- To understand various theories of factors
- To understand concept of profit & Interest
- To understand market equilibrium of firm in monopolistic market.



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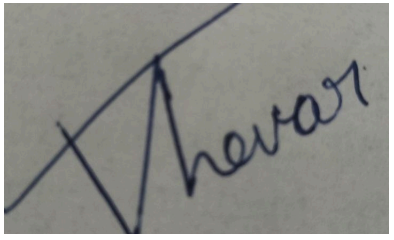
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module –III: Markets, Demand and Supply	What is a market- what is competition-demand curves: market demand versus individual demand - movements along the demand curve-shifts in the demand curve, supply curves: market supply and individual supply shifts in supply curve–market equilibrium – three steps to analyse changes in equilibrium price ceilings and floors-taxes and their impact-priceelasticity of demand- total revenue and the elasticity of demand - impact of price elasticity on revenue	12	Salvatore D. (2003), Microeconomics: Theory and Applications, Oxford University Press	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)



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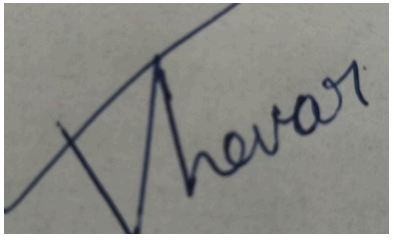
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** I **MONTH:** OCTOBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand price determination of factors
- To understand various theories of factors
- To understand concept of profit & Interest
- To understand market equilibrium of firm in monopolistic market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS **Module –IV: Interdependence and Trade (lectures 12)**	Specialisation and trade –meaning of absolutecost advantage –opportunity cost and comparative cost comparative advantage and trade- gains from trade- application of comparative trade policy: free tradeand protection.	12	Salvatore D. (2003), Microeconomics: Theory and Applications, Oxford University Press	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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	cost advantage to international trade advantage			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

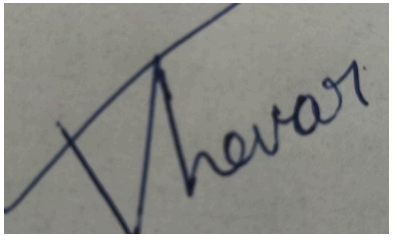
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** II **MONTH:** DECEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- This course is designed to introduce the student to the basic building blocks of macroeconomics using an open economy framework.
- The course develops an understanding of the constituents of the open economy.



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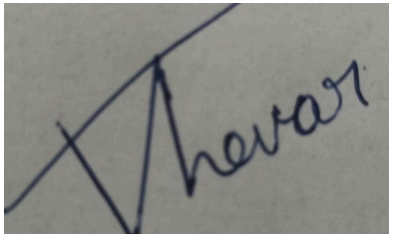
- The student should be able to build on these constituents in the later years so as to be able to analyses macroeconomic policies

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACRO ECONOMICS **Module I: Concepts and Definitions**	Circular flow of Income in an Open Economy–GDP-GNP-NNP- GDP Deflator–Real and Nominal Quantitates GDP at purchasing power parity –Exchange rate as a price –GDP Growth: India's Experience Trends in Growth Rate and Sectoral Composition of GDP- Sources of Data.	12	Sikdar, S. (2006), Principles of Macroeconomics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

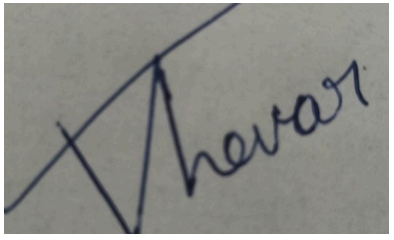
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** II **MONTH:** JANUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- This course is designed to introduce the student to the basic building blocks of macroeconomics using an open economy framework.
- The course develops an understanding of the constituents of the open economy.
- The student should be able to build on these constituents in the later years so as to be able to analyses macroeconomic policies

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACRO ECONOMICS	National Income Identity in an Open Economy- Keynesian Consumption Function- Investment Multiplier Marginal	03	Sikdar, S. (2006), Principles of Macroeconomics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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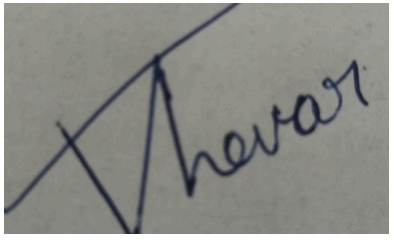
Module II:Consumption, Saving and Investment	Efficiency of Capital and Rate of Interest Accelerator- Savings in India: Trends and Composition Capital Formation in India: Trends and Composition- Sources of Data.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** II **MONTH:** FEBRUARY **ACADEMIC YEAR:** 2018-19



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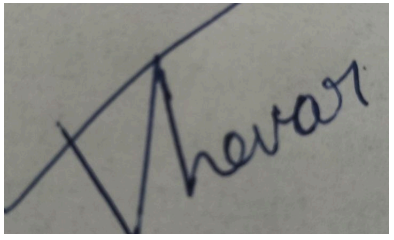
- The course develops an understanding of the constituents of the open economy.
- The student should be able to build on these constituents in the later years so as to be able to analyses macroeconomic policies

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACRO ECONOMICS **Module III: Government**	Public Goods and their Features- Merit Goods Sources of Revenue: Direct and Indirect Tax- Impact Shifting and Incidence of Tax- Sources of Non- Tax Revenue Public Expenditure: Revenue and Capital Subsidies- Types of Deficit: Revenue, Budgetary, Fiscal and Primary-Concept of GSTRecent Trends- Sources of Data	12	N. Gregory Mankiw, Principles of Macroeconomics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12_



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TEACHING PLAN (UNIT PLAN)

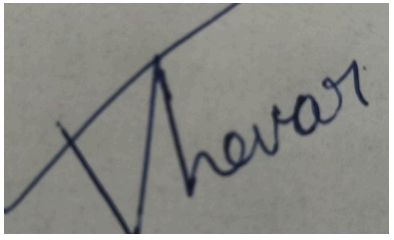
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: F.Y.B.A. **SEMESTER:** II **MONTH:** MARCH **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- This course is designed to introduce the student to the basic building blocks of macroeconomics using an open economy framework.
- The course develops an understanding of the constituents of the open economy.
- The student should be able to build on these constituents in the later years so as to be able to analyses macroeconomic policies

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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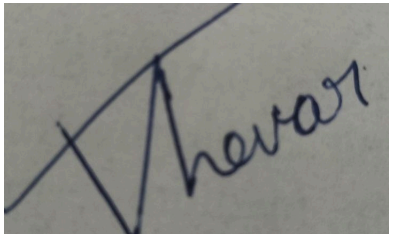
MACRO ECONOMICS Module IV: External Sector	Structure of Balance of Payments Types of Disequilibrium in BOP Exchange Rate Determination Concept of FOREX and its components-Sources of Data.	12	N. Gregory Mankiw, Principles of Macroeconomics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS



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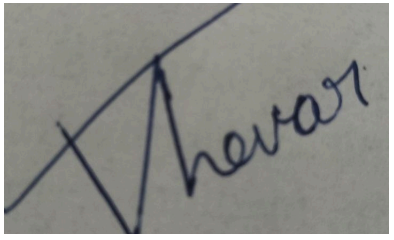
Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** JUNE **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
  To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Indian Economy: Contemporary Concerns.	Objectives of demonetisation and previous instances of demonetisation - India's demonetisation as unprecedented in international economic history - Short term costs and Long term benefits of demonetization - Analytics of demonetization - Future policy measures to maximise benefits and minimise costs of demonetisation	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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Module 1: Demonetization: To Deify or Demonize?				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

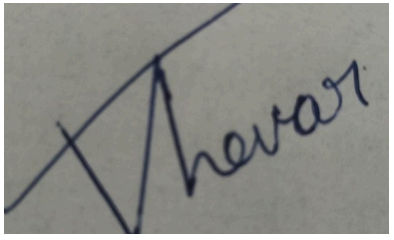
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** JULY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.



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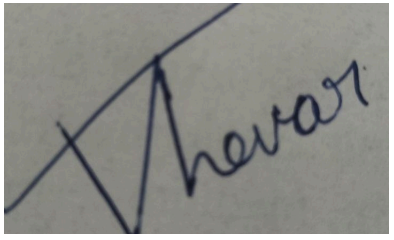
- To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Indian Economy: Contemporary Concerns **Module 2: Fiscal Framework: The World is Changing, Should India Change Too?**	Fiscal Responsibility and Budget Management (FRBM) Act - Why there is a need for counter-cyclical fiscal policy in India? - Debt dynamics with the help of equation for debt sustainability Fiscal Responsibility Legislation (FRL) - Impact of FRL on Budget process - Impact of FRL on Deficits - Lessons for future fiscal rules	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)



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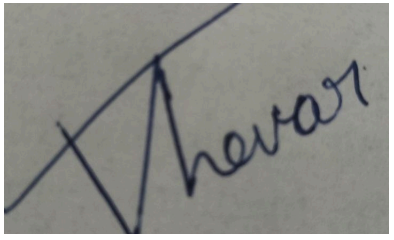
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** AUGUST **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
- To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Indian Economy: Contemporary Concerns				
	The Conceptual/Philosophical case for UBI - The Conceptual Case against UBI - Arguments in Favour and Against UBI - How can UBI overcome the issues of misallocation and	12	INDIAN ECONOMIC SURVEY	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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Module 3: Universal Basic Income: A Conversation With and Within the Mahatma	leakages of resources? - Can UBI improve financial inclusion? - Will UBI lead to moral hazard and reduce labour supply? - What are the guiding principles for setting up UBI? - What are the prerequisites for introducing UBI? - Is there fiscal space to finance UBI?		207-18	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

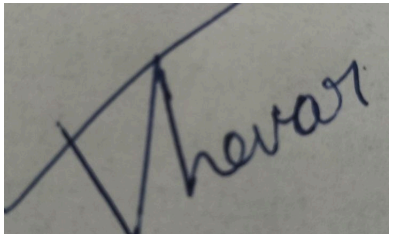
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** III **MONTH:** SEPTEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand nature of Indian economy
- To understand economic planning in India



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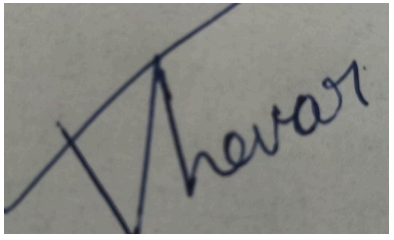
- To understand recent structural changes in economy
- To understand Demonetization, Fiscal policies.
- To understand the upcoming policy of Universal Basic Income

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: Indian Economy: Contemporary Concerns **Module 4: Income, Health and Fertility: Convergence Puzzles**	Income convergence/divergence within India - Consumption convergence/divergence within India - Health Convergence within India with room for improvement against International standard - Total Fertility rate convergence (India and World) - Interpreting Graphs/Data regarding Income/Life Expectancy/ Infant mortality rate/Total fertility rate (For All Indian States)	12	INDIAN ECONOMIC SURVEY 207-18	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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TEACHING PLAN (UNIT PLAN)

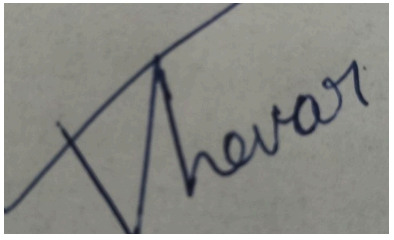
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** DECEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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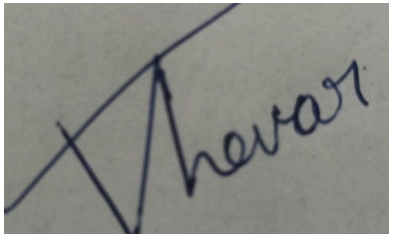
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module 1**	Introduction to Maharashtra's Economy – Backdrop, Demography, Key Indicators of Development, Macroeconomics development of the Regions, Paradigm Shift	10	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARSHTRA OLANNING DEPARTEMNT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** JANUARY **ACADEMIC YEAR:** 2018-19



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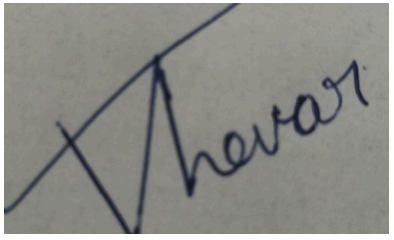
LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module 2** Importance of Tribal Areas	Present Status, Comparison with States, PCI, Poverty, Overview of Nutrition, Health & Education, Causes of Deprivation, Reforms to be undertaken	10	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARSHTRA OLANNING DEPARTEMNT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

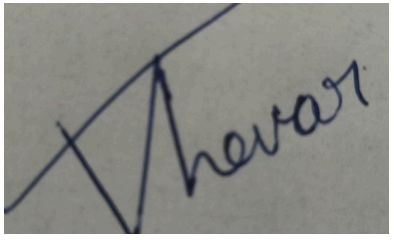
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** FEBRUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra



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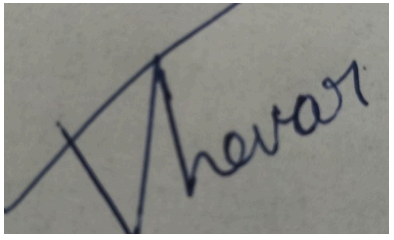
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY **Module** 3 Water Resources	Availability of Water resources, government policy, overview of irrigation development (No division – wise discussion), overview of irrigation in Rest of Maharashtra, General Overview of Rural & Urban areas water supply, Recommendation for water distribution/ Balanced development	15	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARSHTRA OLANNING DEPARTEMNT, OCTOBER 2013	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

TEACHING PLAN (UNIT PLAN)



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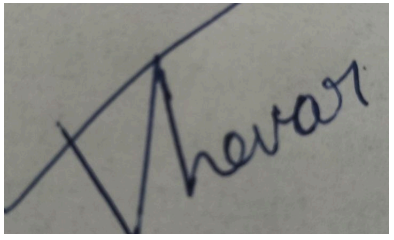
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: S.Y.B.A. **SEMESTER:** IV **MONTH:** MARCH **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To understand economic planning in Maharashtra
- Issues Maharashtra's economy
- To understand the condition of Tribal population in Maharashtra.
- To understand the issues in Infrastructural development in Maharashtra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY Module 4	Health : The Kelkar Committee approach to health, Regional disparities, Health Care Systems, Health outcomes, Recommendation and Strategies	10	REPORT OF HIGH LEVEL COMMITTEE ON BALANCED REGIONAL DEVELOPMENT ISSUES IN MAHARASHTRA, GOVT OF MAHARSHTRA	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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Health and connectivity	Connectivity – Introduction, General Overview of Roads, Railways, Ports, Airports and Broadband, Resources required		OLANNING DEPARTEMNT, OCTOBER 2013	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

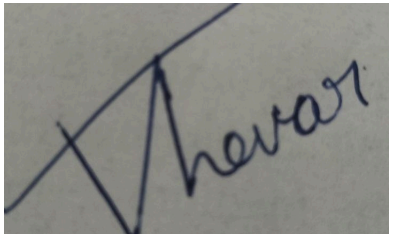
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JUNE **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/ S	TEACHING METHOD/ ICT TOOLS USED



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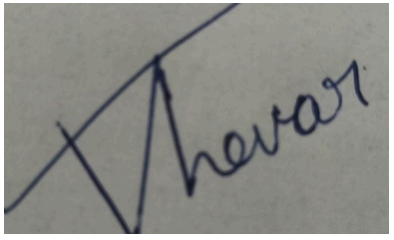
		ALLOTED		
MICROECONOMICS III **Module 1: Monopoly**	Sources of monopoly - Profit maximising monopoly – Calculation of price, output and profit for a monopoly- Price discrimination: First, Second and Third degree- Public policy towards monopoly.	12	Koutsoyannis, Modern Microeconomics, Macmillan Press Ltd., London, 1975.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

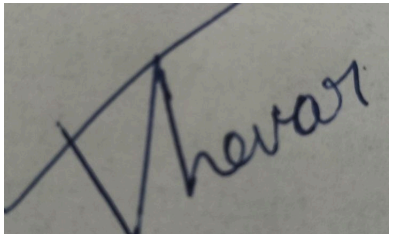
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JULY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand the theory of oligopoly & duopoly
- To able to understand the new theories of oligopoly market
- To able to understand theory of distribution
- To able to understand general equilibrium & economic efficiency & welfare

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/ S	TEACHING METHOD/ ICT TOOLS USED



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MICROECONOMICS III **Module 2: Basics of Game theory**	Prisoner‟s Dilemma – Dominant strategy equilibrium – Battle of sexes game – Nash equilibrium – Extensive form games – Game tree.	12	Mankiw, N. Gregory, Principles of Microeconomics, Cengage Learning, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

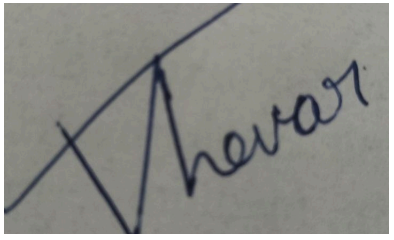
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** AUGUST **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:



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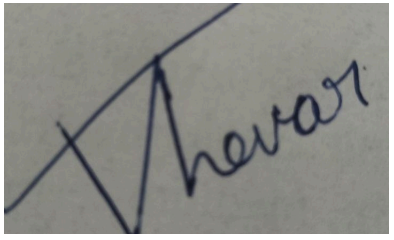
The learners will be able to :

- To able to understand the theory of oligopoly & duopoly
- To able to understand the new theories of oligopoly market
- To able to understand theory of distribution
- To able to understand general equilibrium & economic efficiency & welfare

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/ S	TEACHING METHOD/ ICT TOOLS USED
MICROECONOMICS III **Module 3: Oligopoly**	Cournot model – The Bertrand model – The Edgeworth model – The Chamberlin model – The Kinked demand curve model – Collusion and Cartels – Price Leadership.	12	Mansfield, Edwin, Micro-economics: Theory & Applications, 5th edition,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

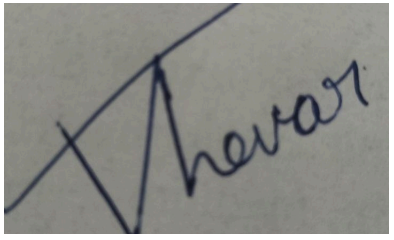
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** SEPTEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand the theory of oligopoly & duopoly
- To able to understand the new theories of oligopoly market
- To able to understand theory of distribution
- To able to understand general equilibrium & economic efficiency & welfare

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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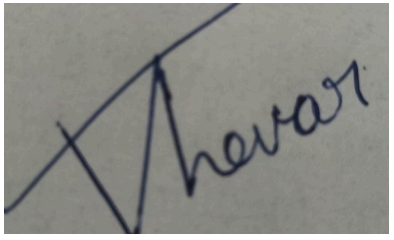
MICROECONOMICS III **Module 4: General Equilibrium and Welfare Economics**	Interdependence in the Economy – General Equilibrium and its Existence -The Pareto Optimality Condition of Social Welfare, Marginal Conditions for Pareto Optimal Resource Allocation. Perfect Competition and Pareto Optimality – Kaldor-Hicks Compensation Criterion - Arrow‟s Impossibility Theorem.	12	Sen Anindya, Microeconomics: Theory and Applications, Second edition Oxford	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** DECEMBER **ACADEMIC YEAR:** 2018-19



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Late Shri. Vishnu Waman Thakur Charitable Trust
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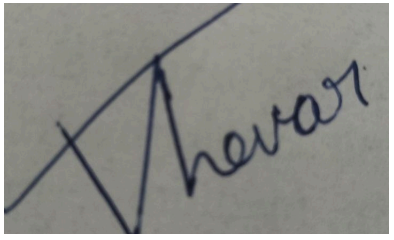
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III **Module 1: The Goods Market in the Open Economy:**	Trade Balance and its implications for GDP calculations – Export and Import Functions – The Real Exchange Rate and why it matters –Why equilibrium GDP is consistent with a trade imbalance? – Fiscal and Exchange Rate Policy with a Fixed Exchange Rate.	12	Froyen, R. T.; Macroeconomics : Theory and Policy, Pearson Education Asia, Delhi,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

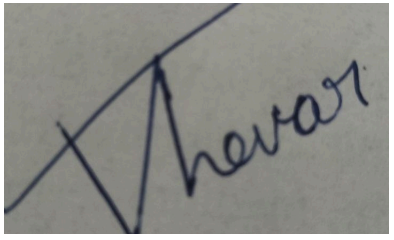
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** JANUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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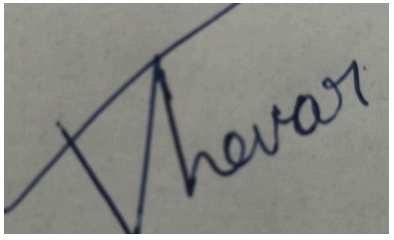
MACROECONOMICS III **Module 2: Money/Financial Markets and Mundell-Fleming Model:**	The LM equation for the open economy –Uncovered Interest Parity and its implications for exchange rate determination – The combined IS/LM/UIP model. Fiscal and Monetary Policy under Fixed and Flexible Exchange Rates– The Mundell- Fleming trilemma.	12	Salvatore, D.; International Economics, Printice Hall, New York, 1997 .	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** FEBRUARY **ACADEMIC YEAR:** 2018-19



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LEARNING OBJECTIVE/S:
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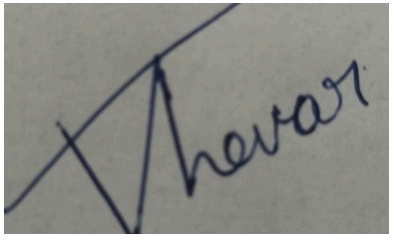
- To able to understand Euro currency market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III **Module 3: Exchange Rate Regimes & Exchange Rate Crises:**	The choice of regime – Fixed or Flexible – The spectrum of arrangements from Hard Peg at one end to Fully Floating at the other; Why the Balance of Payments must always balance under Floating Exchange Rates but need not balance under a Fixed or Managed Exchange Rate regime.	12	Mankiw, Gregory; Macroeconomics, 6e, Worth Publishers, New York, 2003.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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	Exchange Rate crises – The relation between Exchange Rate crises and other kinds of crises (banking crises, financial crises, etc.).			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

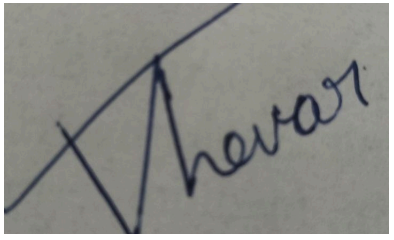
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** MARCH **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To able to understand international instructions & regional economic cooperation
- To able to understand concept of devaluation & convertibility of rupees
- To able to understand Euro currency market



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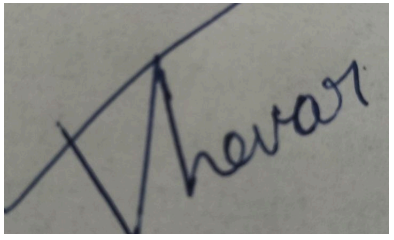
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MACROECONOMICS III **Module 4: International Monetary History, 1900-present:**	The Gold Standard – The Inter-War Period and the Great Depression – 1944, Bretton Woods System and its collapse ; Fixing in Europe via ERM, and the Dollar Standard elsewhere. The Maastricht Treaty and preparations for the Euro; The Global Financial Crisis and its consequences for the Euro; The Euro Crisis, Asia Infrastructure Investment Bank (AIIB), New Development Bank (NDB).	12	Blanchard, Oliver, Macroeconomics , Pearson education, New Delhi, India, 2008	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

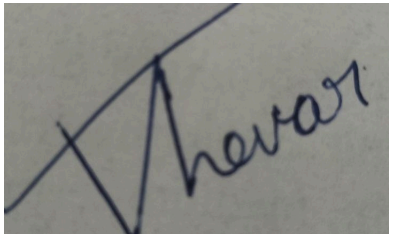
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JUNE **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS	Meaning and Scope of Industrial Economics, Industrial Profile : Private sector - Performance and Problems; Cooperatives - features, types, merits and demerits; Public Sector - Role, Performance and Problems, Diversification and Industrial Combinations -	12	Desai S.S.M. and Bhalerao N, Industrial Economy of India, Himalaya	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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Module 1: Introduction	Motives for Mergers and Acquisitions.		Publishing House, Mumbai, 2008. 6	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

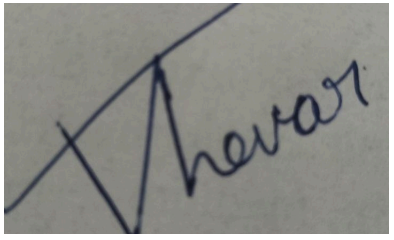
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JULY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management



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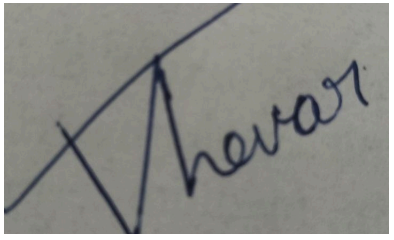
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 2: Industrial Location and Problem of Regional Imbalance	Determinants of Industrial Location, Theories of Industrial Location - Weber's and Sargent Florence's Theories, Dispersion of Industries and the Problem of Regional Imbalance	12	Datt R. and Sundaram K.P.M, Indian Economy, S.Chand& Co., New Delhi, 2009	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

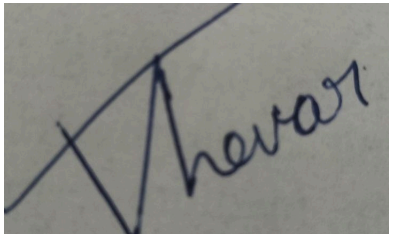
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** AUGUST **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize with the role of management and unions in the promotions of industrial relations.
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND	Concept and Measurement of Industrial Productivity, Factors Affecting Industrial Productivity, Industrial Sickness - Causes, Effects and Remedial Measures,	12	Barthwal R.R, Industrial Economics, New Age International	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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LABOUR ECONOMICS Module 3: Industrial Productivity and Industrial Sickness	Rationalisation - Concept, Aspects and Impact		Publishers, NewDelhi,	

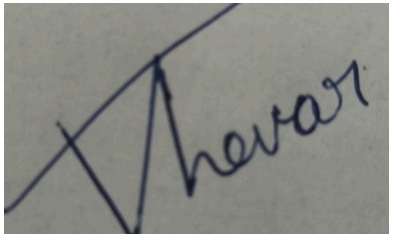
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** SEPTEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :



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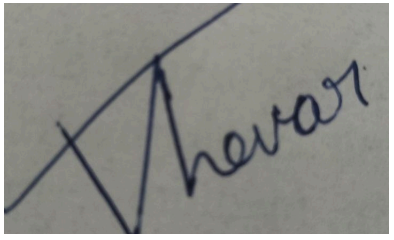
- Examine the labour relation issues and its management
- To acquire skills in handling employer-employee relations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 4: Industrial Development in India	New Industrial Policy, 1991; Disinvestment Policy; FIPB Revamp- Micro, Small and Medium Enterprises Development Act, 2006; National Manufacturing Policy, 2011,Recent Trends in India's Industrial Growth, Industrial Policy, 2012, Role of MNCs in the Indian Economy - Merits and Demerits, Issues in Industrial Proliferation and Environment Preservation; Pollution Control Policies.	12	Agrawal A.N, Indian Economy, New Age International Publishers, New Delhi, 2011.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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TEACHING PLAN (UNIT PLAN)

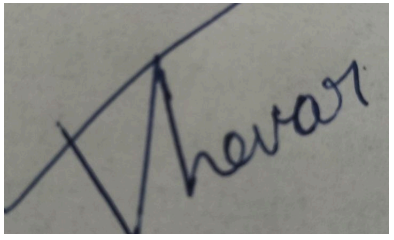
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** DECEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS	Characteristics of the Indian Labour Market - Child Labour and Female Labour –	12	Datt R. and Sundaram K.P.M, Indian	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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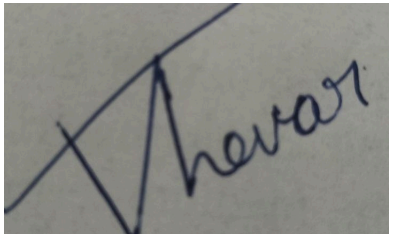
Module 1 : Introduction – Indian Labour Market	Problems and Measures- Globalisation and Indian Labour Market -Labour Market Reforms – Exit Policy and Need for Safety Nets - Second National Commission on Labour.		Economy, S.Chand & Co., New Delhi, 2009.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** JANUARY **ACADEMIC YEAR:** 2018-19



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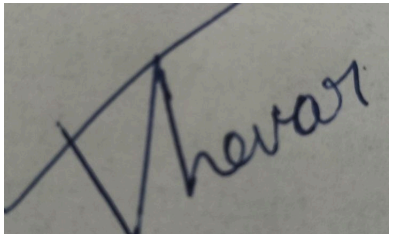
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 2 : Trade Unionism	Definition and Functions of Trade Unions- Historical Evolution of Trade Unions in India and Their Present Status - Problems of Trade Unions in India - Role of Outside Leadership	12	2. Mamoria C.B. and Mamoria S, Dynamics of Industrial Relations, Himalaya Publishing House, Mumbai, 2002.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** FEBRUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

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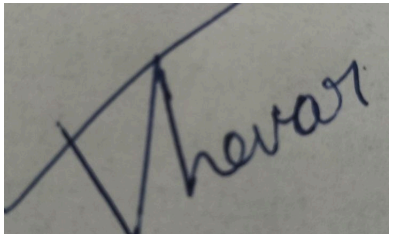
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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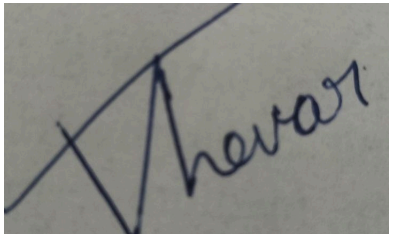
INDUSTIRAL AND LABOUR ECONOMICS Module 3 : Industrial Relations	Causes of Industrial Disputes and Their Settlement Mechanism - Collective Bargaining – Concept, Features, Importance and Pre-requisites for Successful Collective Bargaining - Collective Bargaining in India - Workers" Participation in Management –Concept, objectives and Forms of Workers" Participation in India.	12	Mishra S.K. and Puri V.K, Indian Economy, Himalaya Publishing House, Mumbai,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS



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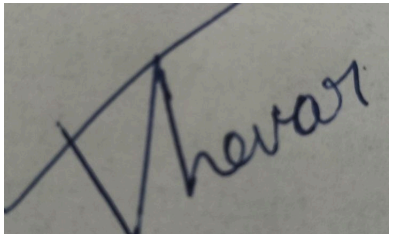
CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** MARCH **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To familiarize students with the basic concepts of industrial relations, its philosophy, origin and Development.
- To develop knowledge on trade unions and its formation, structure, functions and legal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDUSTIRAL AND LABOUR ECONOMICS Module 4 : Labour Welfare and Social Security	Concept, Theories and Principles of Labour Welfare - Agencies for Labour Welfare - Role of the Labour Welfare Officer - Social Security – Concept; Social Assistance and Social Insurance - Social Security Measures in India - International Labour Organization and Its Impact on Indian Labour Legislations.	12	Monappa A, Industrial Relations, Tata McGraw Hill Publishing Company Ltd., New Delhi, 2006 5.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

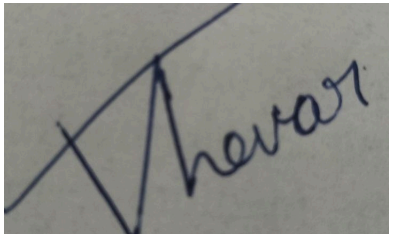
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JUNE **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.



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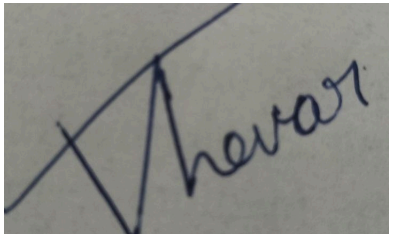
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS Module1: Introduction to Environmental Economics:	Introduction to environmental development and environmental economics, Rio-Declaration on environmental development, Agenda 21 programme of action for sustainable development, Social and economic dimensions, Conservation and management of resources for development.	12	4. Hanley Nick, Shogren Jason and White Ben: Introduction to Environmental Economics,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)



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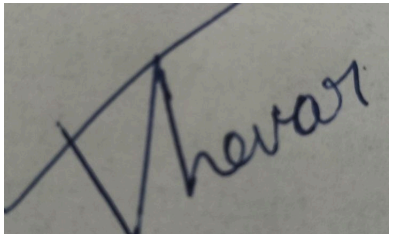
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JULY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS Module 2: The design and implementation of	Overview - Criteria for evaluating environmental policies; Standards, Pigovian taxes and effluent fees, tradable permits, choice between taxes and quotas, implementation of environmental policy.	12	Kaltschmitt, Martin, Streicher, Wolfgang, Wiese, Andreas, Renewable Energy:	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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Environmental Policy:			Technology, Economics and Environment, Springer, Germany, 2007	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

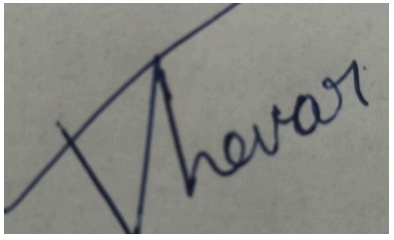
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** AUGUST **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.



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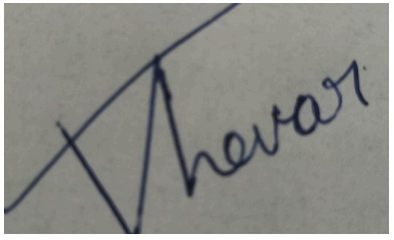
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS Module 3: Measuring benefits of environmental improvements:	Economic value of Environment- Use and Non-use values-Measurement method:-market based and non-market based methods, contingent valuation, travel cost method, hedonic price method, risk assessment and perceptions.	12	Charles Kolstad : Environmental Economics, Oxford University Press, New York, 2000	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

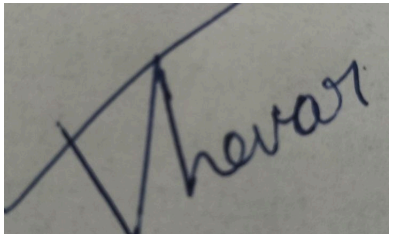
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** SEPTEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Have a detailed understanding of the discipline of environmental economics, including its key principles and methods.
- Be able to use economic techniques to analyse environmental problems and to assess environmental policies.
- Have developed research skills in the field of environmental economics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL ECONOMICS	The global environment- Trans-boundary environmental problems, economics of climate	12	Barry C. Fields: Environmental Economics : An	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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Module 4: Environmental problems:	change, International environmental Agreements - , sustainable development: Concepts and measures.		Introduction, McGraw Hill International Edition, 1997.	

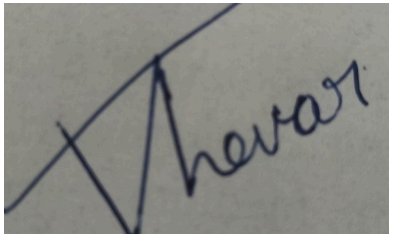
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** DECEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:



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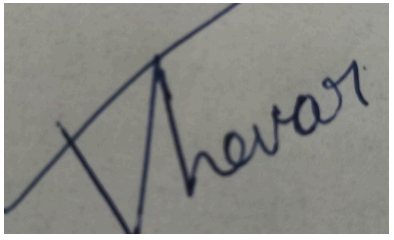
The learners will be able to :

- Understanding the concept and aspects of economic Development.
- Knowing the theories of economic growth & Development.
- Measuring the concept and issues of economic planning.
- Discussing the need, types and necessary conditions of economic planning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT THEORY AND EXPERIENCE Module I: Demography and Development:	Demographic concepts; birth and death rates, age structure, fertility and mortality; demographic transitions during the process of development; gender bias in preferences and outcomes andevidence on unequal treatment within households; connections between income, mortality, fertility choices and human capital accumulation.	12	Abhijit Banerjee, Roland Benabou and Dilip Mookerjee, Understanding Poverty, Oxford University Press,2006.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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TEACHING PLAN (UNIT PLAN)

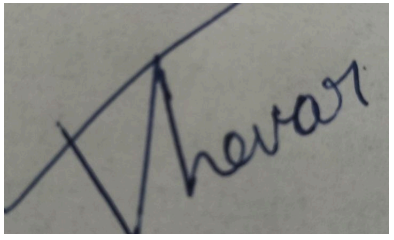
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** JANUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understanding the concept and aspects of economic Development.
- Knowing the theories of economic growth & Development.
- Measuring the concept and issues of economic planning.
- Discussing the need, types and necessary conditions of economic planning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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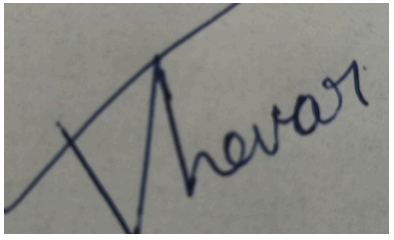
		ALLOTED		
DEVELOPMENT THEORY AND EXPERIENCE Module II: Structural Transformation:	The Lewis model –Clark-Fisher model of structural change , Urbanization: Trends and Projections with reference to India, Urbanization and Development, Causes of urbanization, Urban informal sector, Policies for the urban informal sector, Migration and development, Economic theory of rural-urban migration: Harris-Todaro migration model	12	Amartya Sen, Development as Freedom, Oxford University Press,2000.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** FEBRUARY **ACADEMIC YEAR:** 2018-19



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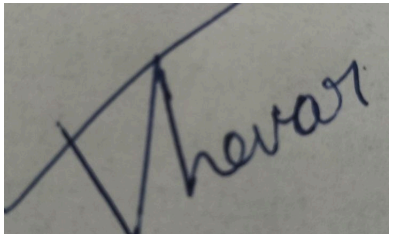
LEARNING OBJECTIVE/S:
The learners will be able to :

- Understanding the concept and aspects of economic Development.
- Knowing the theories of economic growth & Development.
- Measuring the concept and issues of economic planning.
- Discussing the need, types and necessary conditions of economic planning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT THEORY AND EXPERIENCE Module III: Land, Labor and Credit Markets:	Role of Agriculture in Economic Development, Market Failure and Agriculture, The distribution of land ownership; Land reform and its effects on productivity; contractual relationships between tenants and landlords; Land Acquisition; Nutrition and Labour Productivity; Rural Credit Market; Microfinance; Inter-linkages between Rural Factor Markets.	12	Partha Dasgupta, Economics: A Very Short Introduction, Oxford University	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

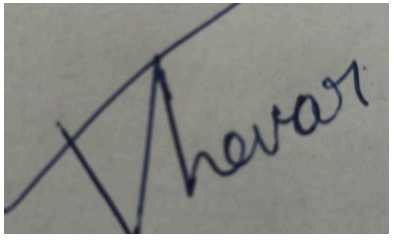
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** MARCH **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understanding the concept and aspects of economic Development.
- Knowing the theories of economic growth & Development.
- Measuring the concept and issues of economic planning.
- Discussing the need, types and necessary conditions of economic planning



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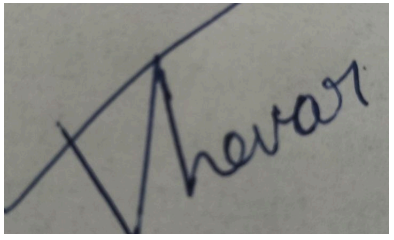
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEVELOPMENT THEORY AND EXPERIENCE Module IV: The Environment and Development:	The core of environmental problems- Rural poverty and environmental destructionindustrialization and environmental pollution - Economic models of environmental issues: privately owned resources, common property resources, public goods: regional environmental degradation and the free rider problem, limitations of pubic goods framework.	12	Debraj Ray, Development Economics, Oxford University Press,2009.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)



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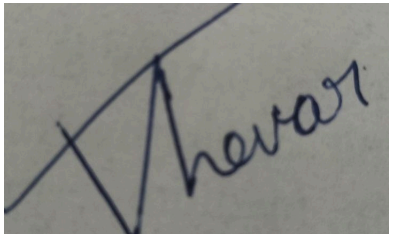
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JUNE **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Acquaintance with the economic thoughts of Classical, Nationalist and Socialist Thinkers.
- Judging the development of economic thoughts.
- Realizing the economic concepts and theories of Neo-classicals and ndian thinkers.
- Evaluating the development of Indian economic thoughts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY OF ECONOMIC THOUGHT: Module 2: Marginalist :	Role of time in price determination , economics methods, ideas of consumer's surplus, representative firm, external and internal economies, quasi-rent, nature of profit; Pigou : welfare economics: Schumpeter: role of entrepreneur and innovation.	12	2. Roll, E, A History of Economic Thought, Faber Landon, 1973.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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Marshall To Schumpeter				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

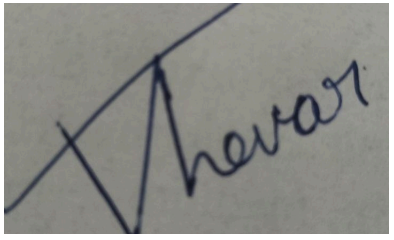
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** JULY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Acquaintance with the economic thoughts of Classical, Nationalist and Socialist Thinkers.



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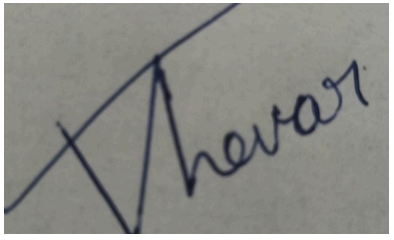
- Judging the development of economic thoughts.
- Realizing the economic concepts and theories of Neo-classicals and ndian thinkers.
- Evaluating the development of Indian economic thoughts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY OF ECONOMIC THOUGHT: Module 3: Keynesian Ideas:	Liquidity Preference Theory and Liquidity trap, Consumption Function, MPC, Multiplier & Accelerator principles and their interaction, wage rigidities, underemployment equilibrium, role of fiscal policy: deficit spending and public works, multiplier principles, cyclical behaviour of the economy.	12	Gide, O. and G. Rist , A History of Economic Doctrine, George Harrop Co., London,	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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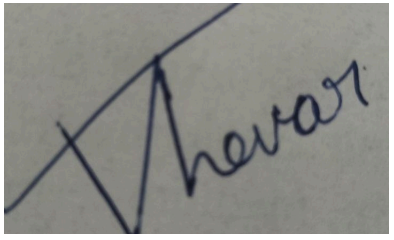
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** V **MONTH:** AUGUST **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Acquaintance with the economic thoughts of Classical, Nationalist and Socialist Thinkers.
- Judging the development of economic thoughts.
- Realizing the economic concepts and theories of Neo-classicals and ndian thinkers.
- Evaluating the development of Indian economic thoughts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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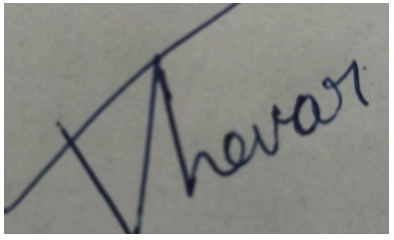
HISTORY OF ECONOMIC THOUGHT: Module 4: Post-Keynesian Developments:	Hayek – Supply side economics: Arthur Laffer, Evans – Monetarism: Milton Friedman‟s Don Patinkin – An overview of the new classical economics: Robert Lucas. Nobel Prize Winners in Economics: A. K. Sen (1998), Joseph Stiglitz (2001), Paul Krugman (2008), Jean Tirole (2014), Angus Deaton (2015), Richard Thaler (2017).	12	Gide, O. and G. Rist , A History of Economic Doctrine, George Harrop Co., London,	GOOGLE MEET , QUIZES, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)



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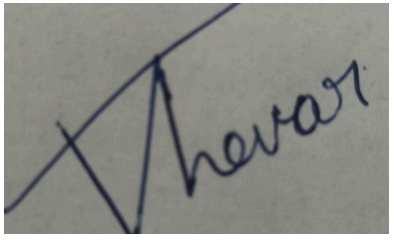
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** DECEMBER **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Evaluating various types of exchange rates and its merits and demerits.
- Discussing the types and effects of tariffs and quotas.
- Judging the function, merits and demerits of Foreign Capital, and International Corporation (IMF, IBRD, WTO and SAARC).

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL TRADE, POLICY AND PRACTICE Module 1 :Introduction	Inter regional and international trade, Role of Dynamic factors i.e. change in Tastes, Technology and Role of Factor Accumulation. Foreign Exchange Rate: Concepts - Short and Forward rates - Foreign Exchange rate determination – Fixed and flexible exchange rate – Interrelationship between exchange	12	3. Dennis R Appleyard, Alfred J Field, International Economics, McGraw-Hill, USA, 2013.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

	rates and Interest rates. Exchange Rate system in India, managed floating, Current and Capital Account Convertibility and their impact, FEMA.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

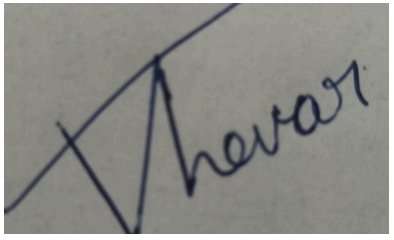
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** JANUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Evaluating various types of exchange rates and its merits and demerits.
- Discussing the types and effects of tariffs and quotas.
- Judging the function, merits and demerits of Foreign Capital, and International Corporation (IMF, IBRD, WTO and SAARC).

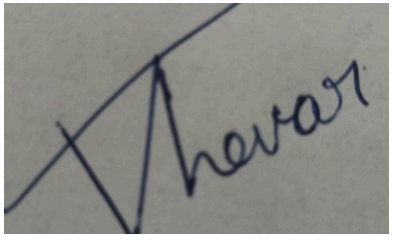


SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL TRADE, POLICY AND PRACTICE Module 2 : Emerging new International Economic Order	GATT, Uruguay Round, WTO, WTO Agreement, Dispute settlement Mechanism, Impact of WTO on Emerging Economies and India, Doha Round and implications of its failure- Emergence of Regional Free Trade agreements (FTA), Bilateral Investment Treaty (BIT), Double Taxation Avoidance Agreement (DTAA).	12	Paul R Krugman, Maurice Obstfeld and Melitz Mark, International Economics: Theory and Policy, Princeton University, USA, 2015.	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



SIGNATURE OF THE STAFF

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

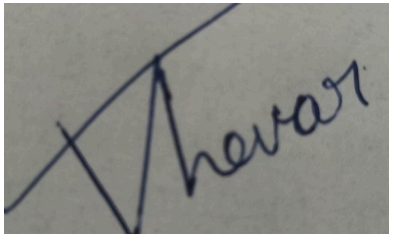
NAME OF THE STAFF: Ms.VALARMATHI TEVAR **DEPARTMENT:** ECONOMICS

CLASS: T.Y.B.A. **SEMESTER:** VI **MONTH:** FEBRUARY **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Evaluating various types of exchange rates and its merits and demerits.
- Discussing the types and effects of tariffs and quotas.
- Judging the function, merits and demerits of Foreign Capital, and International Corporation (IMF, IBRD, WTO and SAARC).

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL TRADE, POLICY AND PRACTICE	IMF, World Bank, Asian Development Bank (ADB) –New Development Bank (NDB), Asia Infrastructure Investment Bank (AIIB) and their role with special reference to India.	12	1. Robert J Carbaugh, International Economics, South-Western	CHALK AND TALK , GROUP DISCUSSION, PRESENTATION



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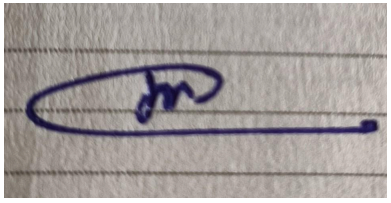
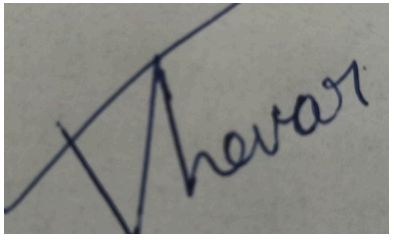
Module 3 :International Financial Institutions and International Debt Problem.	South East Asian Crisis and Lessons for India, Global Economic Crisis, Global Financial Crisis of 2008, International Debt Problem – Emerging Global Financial Architecture.		Cengage Learning, USA, 2017.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

Name of the teacher and H.O.D:- mansi Gawand.





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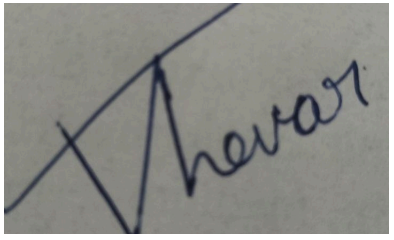

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani DEPARTMENT: ARTS CLASS: SYBA

SEMESTER: III MONTH: June to August History Paper: III ACADEMIC YEAR 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : To enable the students to think critically, understand their past and develop interest in historical matters.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Ancient India Module 1 Sources of Ancient India and their importance.	a. Archaeological b. Literary c. Foreign travellers	12	Dr. Eugene D'Souza: Ancient India	Explanation with illustrations Story Narration Discussion method

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Module 2 Indus Valley Civilization.	a. Social and economic life b. Religious life	10	A.L Bhasham: Wonder that was India.	Explanation with illustrations Story Narration Discussion method
	ALLOCATED TO THE UNITS 22			

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Ms.Mala Khanchandani DEPARTMENT: Arts CLASS: T,Y.B.A SEMESTER: V

MONTH: June to August HISTORY PAPER VI ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : To analyze archaeological artifacts as a source of information about other cultures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 1 Aims and methods of archaeology	A. Definition, aims and development of archaeology in India. B. Archaeology and History, archaeology and other sciences. C. Field archaeology; Methods of exploration, excavation	10	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Archaeology	Explanation with illustrations Story Narration Discussion method
	ALLOCATED TO THE UNIT: 10			

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Late Shri. Vishnu Waman Thakur Charitable Trust
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VidhyaDayanandPatil College of Arts
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchadani DEPARTMENT: Arts CLASS: S.Y.B.A SEMESTER: IV

MONTH: January to March ACADEMIC YEAR: 2022-2023 History Paper II

LEARNING OBJECTIVE/S:
The learners will be able to :

To enable the students to understand the political, socio-economic, and cultural development of ancient period and to appreciate the rich cultural heritage of India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Inter war Period	A. Kemal Pasha & Modernization of Turkey B. Reza Shah & Reforms in Iran C. Birth of Israel	8	Dr. Eugene D Souza	❖ Explanation with examples
Module 2 Rise of Dictatorships	A. Fascism B. Nazism C. Militarism in Japan	7	Dr. Eugene D Souza	❖ Explanation with examples
	A. World War II B. The Atlantic Charter	6	Dr. Eugene D Souza	❖ Explanation with examples

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Module 3 World War II & Efforts for Peace Module 4 Major Dynasties of Deccan and South India	C. United Nations Organization			
	A. Dr. Sun-Yat-Sen and China B. Mahatma Gandhi and India C. Dr. Sukarno and Indonesia	6	Dr. Eugene D Souza	❖ Explanation with examples

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
BhaskarWaman Thakur College of Science
YashvantKeshavPatil College of Commerce
VidhyaDayanandPatil College of Arts
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchadani DEPARTMENT: Arts CLASS: S.Y.B.A SEMESTER: IV

MONTH: January to March HISTORY PAPER III ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

To enable the students to understand the political, socio-economic, and cultural development of ancient period and to appreciate the rich cultural heritage of India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Ancienr India Module 1 Mauryan and post mauryan period	A. Chandragupta and Ashoka B. Mauryan Administration C. Post Mauryan Dynasties- Sungas, Kushana and Satavahans.	8	Dr. Eugene D'Souza: Ancient India	❖ Explanation with examples
Module 2 Gupta Age	A. Imperial Expansion: Chandragupta 1, Samudragupta and Chandragupta II. B. Administration C. Classical Age	7	A.L Bhasham: Wonder that was India.	❖ Explanation with examples

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Module 3 Post Gupta period Module 4 Major Dynasties of Deccan and South India	A. The age of Harshvardhan B. The rise of Rajputs C. Arab Invasion of Sind	6	A.L Bhasham: Wonder that was India.	❖ Explanation with examples
	A. Chalukyas of Badami and Rashtrakutas B. Pallavas and Cholas C. Spread of Indian Culture in South East Asia	6	A.L Bhasham: Wonder that was India.	❖ Explanation with examples

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani DEPARTMENT: Arts CLASS: T.Y.B.A SEMESTER: VI

MONTH: January to March HISTORY PAPER VI ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

To take up the responsibility for preserving an object or heritage and making it accessible.

To survey, acquire and scientifically preserve records of historical values from autonomous bodies, private institutions and individuals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Museology and Archival Science Module 1 Museology	i) Definition of Museology, museum movement in India. ii) Role of curator iii) Types of Museums	8	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Archaeology	❖ Discussion ❖ Explanation with examples
Module 2 Museums	i) Methods of collection and conservation of objects in museums. ii) Preservation techniques and types of exhibitions. iii) Changing roles of museums: In-house and out-	7	Dr. Ranade Dr. Samel Dr. Nabar:	❖ Discussion ❖ Explanation with examples

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	reach activities of museums.		Introduction to Archaeology	
Module 3 Archival Science	i) Meaning, scope, objectives and classes of archives. ii) Importance of archives : Value of record as a source of history. iii) Classification of records	6	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Archaeology	❖ Discussion ❖ Explanation with examples
Module 4 Management of Archives	i) Appraisal and retention of records. ii) Conservation and preservation of records. iii) Digital archives	6	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Archaeology	❖ Discussion ❖ Explanation with examples ❖

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
BhaskarWaman Thakur College of Science
YashvantKeshavPatil College of Commerce
VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani DEPARTMENT: Arts CLASS: T.Y.B.A SEMESTER: VI

MONTH: January to March HISTORY PAPER VI ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

To take up the responsibility for preserving an object or heritage and making it accessible.

To survey, acquire and scientifically preserve records of historical values from autonomous bodies, private institutions and individuals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Museology and Archival Science Module 1 Museology	i) Definition of Museology, museum movement in India. ii) Role of curator iii) Types of Museums	8	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Archaeology	❖ Discussion ❖ Explanation with examples
Module 2 Museums	i) Methods of collection and conservation of objects in museums. ii) Preservation techniques and types of exhibitions. iii) Changing roles of museums: In-house and out-	7	Dr. Ranade Dr. Samel Dr. Nabar:	❖ Discussion ❖ Explanation with examples

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	reach activities of museums.		Introduction to Archaeology	
Module 3 Archival Science	i) Meaning, scope, objectives and classes of archives. ii) Importance of archives : Value of record as a source of history. iii) Classification of records	6	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Archaeology	❖ Discussion ❖ Explanation with examples
Module 4 Management of Archives	i) Appraisal and retention of records. ii) Conservation and preservation of records. iii) Digital archives	6	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Archaeology	❖ Discussion ❖ Explanation with examples

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(MARATHI)**

SEMESTER: I MONTH: **NOVEMBER TO DECEMBER** ACADEMIC YEAR: **2022- 2023**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENCE**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA **MODULE I:** GROWTH OF POLITICAL AWAKENING	(A) Revolt of 1857- Causes & Consequences	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	(B) Contribution of Political Associations	04		
	(C) Foundation of Indian National Congress	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

Janhavi Naik

SIGNATURE OF THE STAFF

Janhavi Naik

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashwant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: TRENDS IN INDIAN NATIONALISM	Moderates	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Extremists	04		
	Revolutionary Nationalist	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODUL III: GANDHIAN MOVEMENTS	Non Co-operation Movement	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh Swtantra Bhartacha Itihas	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Civil Disobedience Movement	04		
	Quit India Movement	04		

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

			Dr.Suman Vaidya & Dr. Shanta Kothekar	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(ENGLISH DIV-A)**

SEMESTER: I MONTH: **NOVEMBER TO DECEMBER** ACADEMIC YEAR: **2022- 2023 b**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENCE**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA	(A) Revolt of 1857- Causes & Consequences	04	**Modern India** By Dr. Eugene	Google Meet, Google Classroom,
MODULE I:	(B) Contribution of Political Associations	04		

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GROWTH OF POLITICAL AWAKENING	(C) Foundation of Indian National Congress	04	D'Souza	PPT Presented Online Map, You Tube Video.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: TRENDS IN INDIAN NATIONALISM	Moderates	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Extremists	04		
	Revolutionary Nationalist	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

MODUL III: GANDHIAN MOVEMENTS	Non Co-operation Movement	04	Modern India **Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Civil Disobedience Movement	04		
	Quit India Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(ENGLISH DIV-B)**

SEMESTER: I MONTH: **NOVEMBER TO DECEMBER** ACADEMIC YEAR: **2022- 2023**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENCE**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA **MODULE I:** GROWTH OF POLITICAL AWAKENING	(A) Revolt of 1857- Causes & Consequences	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	(B) Contribution of Political Associations	04		
	(C) Foundation of Indian National Congress	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

Janhavi Naik

SIGNATURE OF THE STAFF

Janhavi Naik

SIGNATURE OF THE H.O.D.

MODULE II: TRENDS IN INDIAN NATIONALISM	Moderates	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Extremists	04		
	Revolutionary Nationalist	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODUL III: GANDHIAN MOVEMENTS	Non Co-operation Movement	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Civil Disobedience Movement	04		
	Quit India Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURE

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(ENGLISH DIV-B)**

SEMESTER: I MONTH: **NOVEMBER TO DECEMBER** ACADEMIC YEAR: **2022- 2023**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENCE**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :IV THE INDIAN CONSTITUTION	The Constitution as set out in the Preamble	03	**FOUNDATION COURSE I Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare**	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	The Structure of the Constitution	03		
	Fundamental Duties of the Indian Citizen	02		

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	Basic Feature of the Constitution	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :V SIGNIFICANT ASPECTS OF POLITICAL PROCESSES	The Party System in India Politics	03	**FOUNDATION COURSE I Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare**	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Local Self Government in Urban Rural Areas	03		
	The 73rd and 74th Amendments and Their Implication for Inclusive Politic	02		
	Role and Significance of Women in Politics	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURE

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
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NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(DIV- A)** **SEMESTER: III**

MONTH: **SEPTEMBER TO DECEMBER** ACADEMIC YEAR: **2022- 2023**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY III: ANCIENT India EARLIEST TIMES TO 1000AD MODULE I: SOURCES OF ANCIENT INDIA AND THEIR IMPORTANCE	Archaeological	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Literary	04		
	Foreign Travelers	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

Janhavi Naik

SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
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NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: INDUS VALLEY CIVILIZATION	Social and Economic Life	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Religious Life	04		
	Town Planning and Decline of the Civilization	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: VEDIC AGE	Janapada	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Social and Economic Life	04		
	Religion	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Late Shri. Vishnu Waman Thakur Charitable Trust
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NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: INDIA AFTER 6TH CENTURY BC	Administration of Mahajanapadas Century B.C.	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Jainism and Buddhism	04		
	Persian and Greek Invasions	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(DIV- B)** **SEMESTER: III**

MONTH: **SEPTEMBER TO DECEMBER** ACADEMIC YEAR: **2022- 2023**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY III: ANCIENT India EARLIEST TIMES TO 1000AD MODULE I: SOURCES OF ANCIENT INDIA AND THEIR IMPORTANCE	Archaeological	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Literary	04		
	Foreign Travelers	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: INDUS VALLEY CIVILIZATION	Social and Economic Life	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Religious Life	04		
	Town Planning and Decline of the Civilization	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: VEDIC AGE	Janapada	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Social and Economic Life	04		
	Religion	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: INDIA AFTER 6TH CENTURY BC	Administration of Mahajanapadas Century B.C.	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Jainism and Buddhism	04		
	Persian and Greek Invasions	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA- ENGLISH**

SEMESTER: V MONTH: **AUGUST TO DECEMBER** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE BASIC FACETS OF ARCHAEOLOGY. TO EVALUATE THE IMPORTANCE OF EPIGRAPHY. TO STUDY THE IMPORTANCE OF NUMISMATICS AS AN IMPORTANT SOURCE OF HISTORY.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY VI: INTRODUCTION TO ARCHAEOLOGY **MODULE I: AIMS AND METHODS OF ARCHAEOLOGY**	Definition, Aims and Development of Archaeology in India	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Archaeology and History; Archaeology and Other Sciences	04		
	Field Archaeology: Methods of Exploration, Excavation and Dating Antiquities; Significance of Archaeology	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT,	SUBTOPICS	NO OF	REFERENCE/S	TEACHING METHOD/ ICT

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TITLE		LECTURES ALLOTTED		TOOLS USED
MODULE II: PRE-HISTORIC, PROTO-HISTORIC AND EARLY HISTORICAL PERIODS	Palaeolithic and Mesolithic Periods	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Neolithic and Chalcolithic Periods	04		
	Megalithic and Early Historical Periods	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: EPIGRAPHY	Definition and History of Indian Epigraphy	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Types of Inscriptions and their significance	04		
	Evolution of Brahmi and Kharosthi Scripts; Edicts of Ashoka	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: NUMISMATICS	Definition and History of Indian Numismatics	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Ancient Indian Coinage: Punch-Marked, Satavahana, Western Kshatrapas, Kushana and Gupta Coins	04		
	Contribution of Numismatics to Indian History	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: **MS. JANHAVI NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: VI MONTH: **JANUARY TO MARCH** ACADEMIC YEAR 2022 **- 2023**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THEMSELVES WITH THE HISTORY OF INDIA SINCE THE EMERGENCE OF THE MUGHAL RULE. TO UNDERSTAND ADMINISTRATION OF THE MUGHAL EMPIRE. TO STUDY THE RISE OF THE MARATHA POWER**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA MODULE I: FOUNDATION EXPANSION & DECLINE OF MUGHAL RULE	• India on the Eve of Mughal Rule: • Invasion of Babur	04	Medieval India 1526 CE to 1707CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizizz, h5p, You Tube Video.
	• Humayun • Sher Shah • Akbar	04		
	• Jehangir • ShahJahan • Aurangzeb	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: ADMINISTRATIVE STRUCTURE OF THE MUGHALS	• Central Administration • Provincial Administration	04	Medieval India 1526 CE to 1707CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizizz, h5p, You Tube Video.
	• Mansabdari System •	04		
	• Judicial System • Revenue System	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: RISE OF THE MARATHA POWER	• Shivaji & Foundation of Swarajya	04	Medieval India 1526 CE to 1707CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizizz, h5p, You Tube Video.
	• Administration of Shivaji •	04		
	• Sambhaji • Raja ram • Tarabai	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	• Society • Economy	04	Medieval India 1526 CE to 1707CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizizz, h5p, You Tube Video.
	• Religion • Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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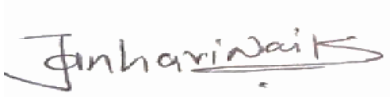
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: I**MS. JANHAVI NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: VI MONTH: **JANUARY TO MARCH** ACADEMIC YEAR: **2022 - 2023**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE PROCESS OF MAKING THE CONSTITUTION AND THE INTEGRATION AND REORGANIZATION OF INDIAN STATES. TO ACQUAINT THE STUDENTS WITH THE POLITICAL DEVELOPMENTS IN INDIA AFTER INDEPENDENCE. TO COMPREHEND THE SOCIO-ECONOMIC CHANGES AND PROGRESS IN SCIENCE AND TECHNOLOGY IN INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: : HISTORY OF CONTEMPORARY INDIA MODULE I:	Features Of The Indian Constitution	04	History Of Contemporary India (1947-2000)	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p,
	• Integration of States • Reorganisation of States	04		



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THE NEHRU ERA 1947-1964			By Dr. Eugene D'souza	You Tube Video.
	• Socio-economic reforms • Foreign policy	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: POLITICAL ECONOMIC SOCIAL DEVELOPMENTS 1964-1984	• Political Developments After Nehru • Green Revolution	04	History Of Contemporary India (1947-2000) By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	• Abolition of Privy Purses • Nationalisation of Banks • Emergence	04		
	• Janata Government • Return of Congress	04		

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	• Foreign Policy			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: POLITICAL ECONOMIC SOCIAL DEVELOPMENTS 1984-2000	• Political Developments	04	History Of Contemporary India (1947-2000) By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	• Relations with Foreign Countries •	04		
	• Globalisation	04		

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	• Liberalisation • Privatisation			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGING TRENDS	• Communalism • Separatists Movements	04	History Of Contemporary India (1947-2000) By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizizz, h5p, You Tube Video.
	• Empowerment of Women • Policy of Reservation	04		
	• Science • Technology • Education	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: : **DR. DIPALI CHPUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(MARATHI)**

SEMESTER: III MONTH: **SEPTEMBER TO DECEMBER** ACADEMIC YEAR: **2022- 2023**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THE STUDENTS WITH DIFFERENT SOURCES OF ANCIENT INDIAN HISTORY.TO ENABLE THE STUDENTS TO UNDERSTAND THE POLITICAL, SOCIO-ECONOMIC AND CULTURAL DEVELOPMENTS IN THE PERIOD UNDER STUDY AND APPRECIATE THE RICH CULTURAL HERITAGE IN INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY III: **ANCIENT India** **EARLIEST TIMES TO 1000AD** **MODULE I:** SOURCES OF ANCIENT INDIA AND THEIR	Archaeological	04	Prachin Bharatacha Ithihas – Prof. Jitendra Bhamreh Prachin Bharat- Dr. S.G.Kolalkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Literary	04		
	Foreign Travellers	04		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

IMPORTANCE				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: INDUS VALLEY CIVILIZATION	Social and Economic Life	04	Prachin Bharatacha Ithihas – Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Religious Life	04		
	Town Planning and Decline of the Civilization	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

MODULE III: VEDIC AGE	Janapada	04	Prachin Bharatacha Ithihas – Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video You Tube Video
	Social and Economic Life	04		
	Religion	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: INDIA AFTER 6TH CENTURY BC	Administration of Mahajanapadas Century B.C.	04	Prachin Bharatacha Ithihas – Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Jainism and Buddhism	04		
	Persian and Greek Invasions	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: V MONTH: **AUGUST TO DECEMBER** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH THE HISTORY OF EARLY MEDIEVAL INDIA THAT LAID THE FOUNDATION OF THE SULTANATE IN INDIA. TO STUDY THE CONTRIBUTION OF VIJAYNAGAR AND BAHAMANI KINGDOMS TO MEDIEVAL INDIAN HISTORY. AND TO EXAMINE THE ADMINISTRATIVE, SOCIO-ECONOMIC AND CULTURAL ASPECTS OF MEDIEVAL INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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		ALLOTTED		
HISTORY IV: MEDIEVAL INDIA **MODULE I:** **FOUNDATION EXPANSION & DECLINE OF DELHI SULTANATE**	Socio-Economic & Political conditions on the eve of Turkish Invasions	04	Madhya Yugin Bharat By S G Kolarkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	• Rise and Decline of Slave Dynasty • Khilji Dynasty	04		
	• Tughlaq Dynasty • Sayyid Dynasty • Lodi Dynasty	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	• Central Administration • Iqta System	04	Madhya Yugin Bharat	

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MODULE II: **ADMINISTRATIVE STRUCTURE OF THE SULTANATE**	• Administrative & Military Reforms of Alauddin Khilji	04	By S G Kolarkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	• Reforms of Firoz Shah Tughlaq • Reforms of Mohammad Bin Tughlaq	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: **EMERGENCE OF THE VIJAYNAGAR & BAHAMANI KINGDOMS**	Rise, Growth & Decline of the Vijaynagar Empire & Bahamani Kingdom	04	Madhya Yugin Bharat By S G Kolarkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Administrative Socio-Economic & Cultural Conditions of the Vijaynagar Empire	04		
	Administrative Socio-Economic & Cultural Conditions of the Bahamani Kingdom	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURE

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	Socio-Economic & Religious Life	04	Madhya Yugin Bharat By S G Kolarkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	• Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA MARATHI**

SEMESTER: V MONTH: **AUGUST TO DECEMBER** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH REGIONAL HISTORY OF MAHARASHTRA TO UNDERSTAND POLITICAL AND SOCIO-ECONOMIC DEVELOPMENTS DURING THE 19TH AND 20TH CENTURIES TO CREATE UNDERSTANDING OF THE MOVEMENT THAT LED TO THE FORMATION OF MAHARASHTRA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: HISTORY OF MODERN MAHARASHTRA	Socio-Economic Conditions in Maharashtra in the 19th Century	04	Adhunik Maharashtra	Google Meet, Google Classroom, PPT Presented
	• Administration	04		

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MODULE I: **BEGINNING OF BRITISH RULE**	• Judiciary		By Prakash Javdadekar	Online Map, You Tube Video
	• Tribal Uprisings • Peasant Movements	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
MODULE II: **SOCIO-ECONOMIC AWAKENING**	Mahatma Jyotirao Phule - Sathyashodak Samaj & Universal Humanism	04	Adhunik Maharashtra By Prakash Javdadekar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Prarthana Samaj	04		
	Contribution of thinkers of Maharashtra to Economic Nationalism	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: **POLITICAL DEVELOPMENTS IN**	• Moderates • Extremists • Revolutionary Nationalists	04	Adhunik Maharashtra By	Google Meet, Google Classroom, PPT Presented
	Response to Gandhian Movements in Maharashtra	04		

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MAHARASHTRA **1885-1960**	Samyukta Maharshtra Movement	04	Prakash Javdadekar	Online Map, You Tube Video

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Contribution of reformers towards Education	04		

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MODULE IV: **EMERGENCE OF NEW FORCES**	Contribution of Reformers towards Women's Education	04	Adhunik Maharashtra By Prakash Javdadekar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Contribution of Reformers to the Upliftment of the Depressed Classes	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA MARATHI**

SEMESTER: V MONTH: **AUGUST TO DECEMBER** ACADEMIC YEAR:**2022-23**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE BASIC FACETS OF ARCHAEOLOGY. TO EVALUATE THE IMPORTANCE OF EPIGRAPHY. TO STUDY THE IMPORTANCE OF NUMISMATICS AS AN IMPORTANT SOURCE OF HISTORY.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY VI: INTRODUCTION TO ARCHAEOLOGY	Definition, Aims and Development of Archaeology in India	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Archaeology and History; Archaeology and Other Sciences	04		
MODULE I: AIMS AND METHODS OF ARCHAEOLOGY	Field Archaeology: Methods of Exploration, Excavation and Dating Antiquities; Significance of Archaeology	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: PRE-HISTORIC, PROTO-HISTORIC AND EARLY HISTORICAL PERIODS	Palaeolithic and Mesolithic Periods	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar ar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Neolithic and Chalcolithic Periods	04		
	Megalithic and Early Historical Periods	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: EPIGRAPHY	Definition and History of Indian Epigraphy	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Types of Inscriptions and their significance	04		
	Evolution of Brahmi and Kharosthi Scripts; Edicts of Ashoka	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: NUMISMATICS	Definition and History of Indian Numismatics	04	Puratav Shastra Va Vastusangrahlay By	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Ancient Indian Coinage: Punch-Marked, Satavahana, Western Kshatrapas, Kushana and Gupta Coins	04		
	Contribution of Numismatics to Indian History	04		

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			Samel, Nabar	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA** **SEMESTER: IV** MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2022-23**

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LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY **MODULE I:** INTER WAR PERIOD	Kemal Pasha & Modernisation of Turkey	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	Reza Shah Pahlavi & Reforms in Iran	04		
	Birth of Israel	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: RISE OF	Fascism & Benito Mussolini	04	Adhunik Jag By	1. Chalk & Duster

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DICTATORSHIP	Nazism & Adolf Hitler	04	Joshi P J S.G Kolarkar	
	Militarism in Japan	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: WORLD WAR II	World War II Cause, Effects & Consequences	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	Atlantic Charter	04		
	United Nations Organisation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV: NATIONALIST S MOVEMENTS IN ASIA	Dr. Sun Yat Sen & China	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	Mahatma Gandhi & India	04		
	Dr. Sukarno & Indonesia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTUR

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR.DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA** **SEMESTER: III** MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR:**2022-23**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THE STUDENTS WITH DIFFERENT SOURCES OF ANCIENT INDIAN HISTORY.TO ENABLE THE STUDENTS TO UNDERSTAND THE POLITICAL, SOCIO-ECONOMIC AND CULTURAL DEVELOPMENTS IN THE PERIOD UNDER STUDY AND APPRECIATE THE RICH CULTURAL HERITAGE IN INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY III: ANCIENT India EARLIEST TIMES TO 1000AD **MODULE I:** SOURCES OF	Archaeological	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Literary	04		

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ANCIENT INDIA AND THEIR IMPORTANCE	Foreign Travelers	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: INDUS VALLEY CIVILIZATION	Social and Economic Life	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Religious Life	04		
	Town Planning and Decline of the Civilization	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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MODULE III: VEDIC AGE	Janapada	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Social and Economic Life	04		
	Religion	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: INDIA AFTER 6TH CENTURY BC	Administration of Mahajanapadas Century B.C.	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Jainism and Buddhism	04		
	Persian and Greek Invasions	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA** **SEMESTER: IV** MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2022-23**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THE STUDENTS WITH DIFFERENT SOURCES OF ANCIENT INDIAN HISTORY.TO ENABLE THE STUDENTS TO UNDERSTAND THE POLITICAL, SOCIO-ECONOMIC AND**

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CULTURAL DEVELOPMENTS IN THE PERIOD UNDER STUDY AND APPRECIATE THE RICH CULTURAL HERITAGE IN INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: ANCIENT India EARLIEST TIMES TO 1000AD **MODULE I:** MAURYAN AND POST-MAURYAN PERIOD (322 B.C. TO 320 A.D.)	Chandragupta and Ashoka	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Mauryan Administration	04		
	Post Mauryan Dynasties- Sungas, Kushanas and Satavahanas	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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MODULE II: GUPTA AGE (320 A.D. TO 600 A.D.)	Imperial Expansion: Chandragupta I, Samudragupta and Chandragupta II	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Administration	04		
	Classical Age	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: :POST GUPTA PERIOD (600A.D. TO 1000A.D.)	The Age of Harshavardhan	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	The Rise of Rajputs	04		
	Arab Invasion of Sind	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV: MAJOR DYNASTIES OF DECCAN AND SOUTH INDIA	Chalukyas of Badami and Rashtrakutas	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Mahatma Gandhi & Ind Pallavas and Cholas ia	04		
	Spread of Indian Culture in South-East Asia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA** **SEMESTER: V** MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR:**2022-23**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH THE HISTORY OF EARLY MEDIEVAL INDIA THAT LAID THE FOUNDATION OF THE SULTANATE IN INDIA. TO STUDY THE CONTRIBUTION OF VIJAYNAGAR AND BAHAMANI KINGDOMS TO MEDIEVAL INDIAN HISTORY. AND TO EXAMINE THE ADMINISTRATIVE, SOCIO-ECONOMIC AND CULTURAL ASPECTS OF MEDIEVAL INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA	Socio-Economic & Political conditions on the eve of Turkish Invasions	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
MODULE I: FOUNDATION	· Rise and Decline of Slave Dynasty · Khilji Dynasty	04		

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EXPANSION & DECLINE OF DELHI SULTANATE	· Tughlaq Dynasty · Sayyid Dynasty · Lodi Dynasty	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: ADMINISTRATIVE STRUCTURE OF THE SULTANATE	· Central Administration · Iqta System	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	· Administrative & Military Reforms of Alauddin Khilji	04		
	· Reforms of Firoz Shah Tughlaq · Reforms of Mohammad Bin Tughlaq	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII : EMERGENCE OF THE VIJAYNAGAR & BAHAMANI KINGDOMS	Rise, Growth & Decline of the Vijaynagar Empire & Bahamani Kingdom	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	Administrative Socio-Economic & Cultural Conditions of the Vijaynagar Empire	04		
	Administrative Socio-Economic & Cultural Conditions of the Bahamani Kingdom	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	Socio-Economic & Religious Life	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	· Education · Literature	04		
	· Art · Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA** **SEMESTER: VI** MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

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LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THEMSELVES WITH THE HISTORY OF INDIA SINCE THE EMERGENCE OF THE MUGHAL RULE. TO UNDERSTAND ADMINISTRATION OF THE MUGHAL EMPIRE. TO STUDY THE RISE OF THE MARATHA POWER**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA **MODULE I: FOUNDATION EXPANSION & DECLINE OF MUGHAL RULE**	· India on the Eve of Mughal Rule: · Invasion of Babur	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	· Humayun · Sher Shah · Akbar	04		
	· Jehangir · ShahJahan · Aurangzeb	04		

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NAAC accredited "B" Grade, 2.69 CGPA

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: ADMINISTRATIVE STRUCTURE OF THE MUGHALS	· Central Administration · Provincial Administration	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	· Mansabdari System ·	04		
	· Judicial System · Revenue System	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII : RISE OF THE MARATHA POWER	· Shivaji & Foundation of Swarajya	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	· Administration of Shivaji ·	04		
	· Sambhaji · Raja ram · Tarabai	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

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SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	· Society · Economy	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	· Religion · Education · Literature	04		
	· Art · Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA** **SEMESTER: V** MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH REGIONAL HISTORY OF MAHARASHTRA TO UNDERSTAND POLITICAL AND SOCIO-ECONOMIC DEVELOPMENTS DURING THE 19TH AND 20TH CENTURIES TO CREATE UNDERSTANDING OF THE MOVEMENT THAT LED TO THE FORMATION OF MAHARASHTRA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: HISTORY OF MODERN MAHARASHTRA **MODULE I: BEGINNING OF BRITISH RULE**	Socio-Economic Conditions in Maharashtra in the 19th Century	04	Adhunik Maharashtra By Prakash Javdadekar	1. Chalk & Duster
	· Administration · Judiciary	04		
	· Tribal Uprisings · Peasant Movements	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: SOCIO ECONOMIC AWAKENING	Mahatma Jyotirao Phule - Sathyashodak Samaj & Universal Humanism	04	Adhunik Maharashtra By Prakash Javdadekar	1. Chalk & Duster
	Prarthana Samaj	04		
	Contribution of thinkers of Maharashtra to Economic Nationalism	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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MODULEIII: POLITICAL DEVELOPMENTS IN MAHARASHTRA 1885-1960	· Moderates · Extremists · Revolutionary Nationalists	04	Adhunik Maharashtra By Prakash Javdadekar	1. Chalk & Duster
	Response to Gandhian Movements in Maharashtra	04		
	Samyukta Maharshtra Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGENCE OF NEW FORCES	Contribution of reformers towards Education	04	Adhunik Maharashtra By Prakash Javdadekar	1. Chalk & Duster
	Contribution of Reformers towards Women's Education	04		
	Contribution of Reformers to the Upliftment of the Depressed Classes	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Late Shri. Vishnu Waman Thakur Charitable Trust
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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA** **SEMESTER: VI** MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE PROCESS OF MAKING THE CONSTITUTION AND THE INTEGRATION AND REORGANIZATION OF INDIAN STATES. TO ACQUAINT THE STUDENTS WITH THE POLITICAL DEVELOPMENTS IN INDIA AFTER INDEPENDENCE. TO COMPREHEND THE SOCIO-ECONOMIC CHANGES AND PROGRESS IN SCIENCE AND TECHNOLOGY IN INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: : HISTORY OF CONTEMPORARY INDIA **MODULE I: THE NEHRU ERA 1947-1964**	Features Of The Indian Constitution	04	Adhunik Bharat By Suman Vaidhya	1. Chalk & Duster
	· Integration of States · Reorganisation of States	04		
	· Socio-economic reforms · Foreign policy	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: POLITICAL ECONOMIC SOCIAL DEVELOPMENTS 1964-1984	· Political Developments After Nehru · Green Revolution	04	Adhunik Bharat By Suman Vaidhya	1. Chalk & Duster
	· Abolition of Privy Purses · Nationalisation of Banks · Emergence	04		
	· Janata Government · Return of Congress	04		

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	· Foreign Policy			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: POLITICAL ECONOMIC SOCIAL DEVELOPMENTS 1984-2000	· Political Developments	04	Adhunik Bharat By Suman Vaidhya	1. Chalk & Duster
	· Relations with Foreign Countries	04		
	· Globalisation · Liberalisation · Privatisation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGING TRENDS	· Communalism · Seperatists Movements	04	Adhunik Bharat By Suman Vaidhya	1. Chalk & Duster
	· Empowerment of Women · Policy of Reservation	04		
	· Science · Technology · Education	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA** **SEMESTER: V** MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE BASIC FACETS OF ARCHAEOLOGY. TO EVALUATE THE IMPORTANCE OF EPIGRAPHY. TO STUDY THE IMPORTANCE OF NUMISMATICS AS AN IMPORTANT SOURCE OF HISTORY.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY VI: INTRODUCTION TO ARCHAEOLOGY **MODULE I: AIMS AND METHODS OF ARCHAEOLOGY**	Definition, Aims and Development of Archaeology in India	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Archaeology and History; Archaeology and Other Sciences	04		
	Field Archaeology: Methods of Exploration, Excavation and Dating Antiquities; Significance of Archaeology	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: PRE HISTORIC, PROTO HISTORIC AND EARLY HISTORICAL PERIODS	Palaeolithic and Mesolithic Periods	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar ar	1. Chalk & Duster
	Neolithic and Chalcolithic Periods	04		
	Megalithic and Early Historical Periods	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT,	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TITLE				
MODULEI II: EPIGRAPHY	Definition and History of Indian Epigraphy	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Types of Inscriptions and their significance	04		
	Evolution of Brahmi and Kharosthi Scripts; Edicts of Ashoka	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: NUMISMATICS	Definition and History of Indian Numismatics	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Ancient Indian Coinage: Punch-Marked, Satavahana, Western Kshatrapas, Kushana and Gupta Coins	04		

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	Contribution of Numismatics to Indian History	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA** **SEMESTER: VI** MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE TO INFORM THE STUDENTS ABOUT THE ROLE OF MUSEUMS IN THE PRESERVATION OF HERITAGE. TO UNDERSTAND THE IMPORTANCE OF ARCHIVAL SCIENCE IN THE STUDY OF HISTORY. TO ENCOURAGE STUDENTS TO PURSUE CAREERS IN VARIOUS MUSEUMS AND ARCHIVES IN INDIA AND ABROAD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY VI: : INTRODUCTIO N TO	Definition of Museology, Museum Movement in India	04	Puratav Shastra Va Vastusangrahl	1. Chalk & Duster

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MUSEOLOGY AND ARCHIVAL SCIENCE **MODULE I: MUSEOLOGY**	Role of the Curator	04	ay By Samel, Nabar	
	Types of Museums	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: MUSEUMS	Methods of Collection and Conservation of Objects in Museums	04	Puratav Shastra Va Vastusangrahl ay By Samel, Nabar	1. Chalk & Duster
	Preservation Techniques and Types of Exhibitions	04		
	Changing Role of Museums: In-house and Out-reach activities of Museums	04		

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEI II: ARCHIVAL SCIENCE	Meaning, Scope, Objectives and Classes of Archives	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Importance of Archives: Value of Records as Sources of History	04		
	Classification of Records	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: MANAGEMENT OF ARCHIVES	Appraisal and Retention of Records (b) (c)	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Conservation and Preservation of Records	04		
	Digital Archives	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(ENGLISH)** A & B

SEMESTER: III MONTH: **JULY TO SEPTEMBER** ACADEMIC YEAR: **2022- 2023**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO GET A BRIEF OVERVIEW OF THE IMPORTANT ASPECTS OF THE GLOBAL SOCIETY**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE III **UNIT : I** HUMAN RIGHTS	Scheduled Castes – Constitutional & Legal Rights, Violations& Redressal Mechanisms	02	**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA VAZ	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Sheduled Tribes– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Women– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Children– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		

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VIOLATIONS & REDRESSAL	Disabilities Minorities, Elderly Persons– Constitutional & Legal Rights, Violations& Redressal Mechanisms	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT: II DEALING WITH ENVIRONMENTAL CONCERNS	Concept Of Disasters And General Effects Of Disasters On Human Life	03	**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA VAZ	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Local Case Studies Of Environmental Disasters	02		
	Dealing With Disasters: Prevention, Mitigation, Disaster Preparedness	03		
	Human Rights Issues And Violations In Addressing Disasters	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT: III SCIENCE & TECHNOLOGY I	Development Of Science: Ancient Culture, Classical Era, Middle Ages, Renaissance, Age Of Enlightment	03	**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA VAZ	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Nature Of Science: Principles, Characteristics, Theories & Practical's	02		
	Science & Superstition: Exploding Myths, Blind Beliefs, Prejudices. Building Scientific Temper	03		
	Science In Everyday Life : Science & Technology Inter	03		

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	Relation And Distinction			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV:	PART A: • Verbal And Non Verbal Communication	03		Google Meet,

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SOFT SKILLS FOR INTERPERSONAL COMMUNICATION	• Listening Skills • Barriers In Effective Communication • Importance Of Body Language		**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA VAZ	Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	PART B: • Formal & Informal Communication • Writing Skills • Group Discussions • Interviews • Presentations:	04		
	PART C : • Leadership Skills • Self Improvement Skills • Team Building	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

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NAME OF THE STAFF: **MS.QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(ENGLISH) A & B**

SEMESTER: III MONTH: **JULY TO SEPTEMBER** ACADEMIC YEAR: **2022- 2023**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY MODULE I: THE MODERN AGE	Renaissance, Art, Architecture, Science & Literature	04	Landmarks In World History By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Geographical Discoveries, Vasco Da Gama, Christopher Columbus	04		
	Reformation & Counter Reformation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: AGE OF REVOLUTIONS	American Revolution	04	Landmarks In World History By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	French Revolution	04		
	Industrial Revolution	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: NATIONALISM & IMPERIALISM	Formation of Nation States in Europe	04		Google Meet, Google Classroom,
	Nationalist Movements in Italy & Germany	04		

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	Imperialist Expansion in Asia	04	Landmarks In World History By Dr. Eugene D'souza	PPT Presented Quizzizz, h5p, You Tube Video You Tube Video

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: WORLD IN TRANSITION	World War I	04	Landmarks In World History By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Russian Revolution	04		
	League of Nations	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: V MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR: **2022- 2023**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH THE HISTORY OF EARLY MEDIEVAL INDIA THAT LAID THE FOUNDATION OF THE SULTANATE IN INDIA. TO STUDY THE CONTRIBUTION OF VIJAYNAGAR AND BAHAMANI KINGDOMS TO MEDIEVAL INDIAN HISTORY. AND TO EXAMINE THE ADMINISTRATIVE, SOCIO-ECONOMIC AND CULTURAL ASPECTS OF MEDIEVAL INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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		ALLOTED		
HISTORY IV: MEDIEVAL INDIA **MODULE I:** **FOUNDATION EXPANSION & DECLINE OF DELHI SULTANATE**	Socio-Economic & Political conditions on the eve of Turkish Invasions	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	• Rise and Decline of Slave Dynasty • Khilji Dynasty	04		
	• Tughlaq Dynasty • Sayyid Dynasty • Lodi Dynasty	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

MODULE II: **ADMINISTRATIVE STRUCTURE OF THE SULTANATE**	• Central Administration • Iqta System	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	• Administrative & Military Reforms of Alauddin Khilji	04		
	• Reforms of Firoz Shah Tughlaq • Reforms of Mohammad Bin Tughlaq	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: EMERGENCE OF THE VIJAYNAGAR & BAHAMANI KINGDOMS	Rise, Growth & Decline of the Vijaynagar Empire & Bahamani Kingdom	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Administrative Socio-Economic & Cultural Conditions of the Vijaynagar Empire	04		
	Administrative Socio-Economic & Cultural Conditions of the Bahamani Kingdom	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: **SOCIETY, ECONOMY, RELIGION & CULTURE**	Socio-Economic & Religious Life	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	• Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: V MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR: **2022- 2023**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH REGIONAL HISTORY OF MAHARASHTRA TO UNDERSTAND POLITICAL AND SOCIO-ECONOMIC DEVELOPMENTS DURING THE 19TH AND 20TH CENTURIES TO CREATE UNDERSTANDING OF THE MOVEMENT THAT LED TO THE FORMATION OF MAHARASHTRA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: HISTORY OF	Socio-Economic Conditions in Maharashtra in the 19th Century	04		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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MODERN MAHARASHTRA **MODULE I:** **BEGINNING OF BRITISH RULE**			History Of Modern Maharashtra (1818CE – 1960CE) By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	• Administration • Judiciary	04		
	• Tribal Uprisings • Peasant Movements	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Mahatma Jyotirao Phule - Sathyashodak Samaj & Universal Humanism	04		

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

MODULE II: **SOCIO-ECONOMIC AWAKENING**			History Of Modern Maharashtra (1818CE – 1960CE**)** By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Prarthana Samaj	04		
	Contribution of thinkers of Maharashtra to Economic Nationalism	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

MODULEIII: **POLITICAL DEVELOPMENTS IN MAHARASHTRA** **1885-1960**	• Moderates • Extremists • Revolutionary Nationalists	04	History Of Modern Maharashtra (1818CE – 1960CE**)** By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Response to Gandhian Movements in Maharashtra	04		
	Samyukta Maharshtra Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGENCE OF NEW FORCES	Contribution of reformers towards Education	04	History Of Modern Maharashtra (1818CE – 1960CE) By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Contribution of Reformers towards Women's Education	04		
	Contribution of Reformers to the Upliftment of the Depressed Classes	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

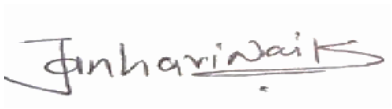
NAME OF THE STAFF: **MS.JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(MARATHI) DIV-A**

SEMESTER: II MONTH: **FEBRUARY TO APRIL** ACADEMIC YEAR: **2022- 2023**

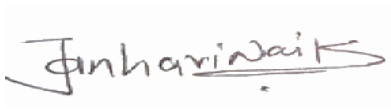
LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE SOCIO-ECONOMIC IMPACT OF BRITISH RULE ON INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA: SOCIETY & ECONOMY MODULE IV: NATIONALISM & SOCIAL GROUPS	Women	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh Swtantra Bhartacha Itihas Dr.Suman Vaidya & Dr. Shanta Kothekar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Dalit	04		
	Peasant	02		
	Tribals	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



SIGNATURE OF THE STAFF



SIGNATURE OF THE H.O.D.

Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS.JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA (ENGLISH) DIV -B**

SEMESTER: II MONTH: **FEBRUARY TO APRIL** ACADEMIC YEAR: **2022- 2023**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE SOCIO-ECONOMIC IMPACT OF BRITISH RULE ON INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA: SOCIETY & ECONOMY **MODULE I:** SOCIO-RELIGIOUS REFOEM MOVEMENT	Brahmo Samaj, Arya Samaj, Ramkrishna Mission	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Sathyashodak Samaj, Aligarh Movement, Singh Sabha	04		
	Impact of Reform movements on Indian Society	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: EDUCATION, PRESS & TRANSPORT	Introduction to Western Education & its Impact	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Development Of Press	04		
	Transport & Communication	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: IMPACT OF BRITISH RULE ON INDIAN ECONOMY	Revenue Settlements & Commercialisation of Agriculture	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Drain Theory	04		
	Deindustrialisation & Growth of Large Scale Industries	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: NATIONALISM AND SOCIAL GROUPS: INTERFACES	WOMEN	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	DALITS	04		
	PEASANTS AND TRIBALS	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

NAME OF THE STAFF: **MS.JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA (ENGLISH) DIV- C**

SEMESTER: II MONTH: **FEBRUARY TO APRIL**

ACADEMIC YEAR:**2022- 2023**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE SOCIO-ECONOMIC IMPACT OF BRITISH RULE ON INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA: SOCIETY & ECONOMY **MODULE I:** SOCIO-RELIGIOUS REFOEM MOVEMENT	Brahmo Samaj, Arya Samaj, Ramkrishna Mission	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Sathyashodak Samaj, Aligarh Movement, Singh Sabha	04		
	Impact of Reform movements on Indian Society	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT,	SUBTOPICS	NO OF	REFERENCE/S	TEACHING METHOD/ ICT

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TITLE		LECTURES ALLOTED		TOOLS USED
MODULE II: EDUCATION, PRESS & TRANSPORT	Introduction to Western Education & its Impact	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Development Of Press	04		
	Transport & Communication	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: IMPACT OF BRITISH RULE ON INDIAN ECONOMY	Revenue Settlements & Commercialisation of Agriculture	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Drain Theory	04		
	Deindustrialisation & Growth of Large Scale Industries	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: NATIONALISM AND SOCIAL GROUPS: INTERFACES	WOMEN	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	DALITS	04		
	PEASANTS AND TRIBALS	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

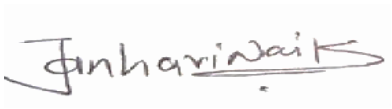
NAME OF THE STAFF: : **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(ENGLISH) SEMESTER: IV**

MONTH: **JANUARY TO APRIL** ACADEMIC YEAR: **2022- 2023**

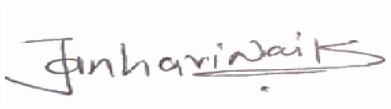
LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY **MODULE I:** INTER WAR PERIOD	Kemal Pasha & Modernisation of Turkey	04	Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Reza Shah Pahlavi & Reforms in Iran	04		
	Birth of Israel	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



SIGNATURE OF THE STAFF



SIGNATURE OF THE H.O.D.

Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: RISE OF DICTATORSHIP	Fascism & Benito Mussolini	04	Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Nazism & Adolf Hitler	04		
	Militarism in Japan	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: WORLD WAR II	World War II Cause, Effects & Consequences	04	Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Atlantic Charter	04		
	United Nations Organisation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: NATIONALISTS MOVEMENTS IN ASIA	Dr. Sun Yat Sen & China	04	Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Mahatma Gandhi & India	04		
	Dr. Sukarno & Indonesia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: : **DR. DIPALI CHPUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(MARATHI)**

SEMESTER: III MONTH: **SEPTEMBER TO DECEMBER** ACADEMIC YEAR: **2021 - 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THE STUDENTS WITH DIFFERENT SOURCES OF ANCIENT INDIAN HISTORY.TO ENABLE THE STUDENTS TO UNDERSTAND THE POLITICAL, SOCIO-ECONOMIC AND CULTURAL DEVELOPMENTS IN THE PERIOD UNDER STUDY AND APPRECIATE THE RICH CULTURAL HERITAGE IN INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY III: **ANCIENT India** **EARLIEST TIMES TO 1000AD** **MODULE I:** SOURCES OF ANCIENT INDIA AND THEIR	Archaeological	04	Prachin Bharatacha Ithihas – Prof. Jitendra Bhamreh Prachin Bharat-Dr. S.G.Kolalkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Literary	04		
	Foreign Travellers	04		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

IMPORTANCE				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: INDUS VALLEY CIVILIZATION	Social and Economic Life	04	Prachin Bharatacha Ithihas – Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Religious Life	04		
	Town Planning and Decline of the Civilization	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: VEDIC AGE	Janapada	04	Prachin Bharatacha Ithihas – Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video You Tube Video
	Social and Economic Life	04		
	Religion	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV:	Administration of Mahajanapadas Century B.C.	04	Prachin Bharatacha Ithihas – Prof.	Google Meet, Google Classroom,
	Jainism and Buddhism	04		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

INDIA AFTER 6TH CENTURY BC	Persian and Greek Invasions	04	Jitendra Bhamreh	PPT Presented Online Map, You Tube Video

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: V MONTH: **AUGUST TO DECEMBER** ACADEMIC YEAR: **2021 - 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH THE HISTORY OF EARLY MEDIEVAL INDIA THAT LAID THE FOUNDATION OF THE SULTANATE IN INDIA. TO STUDY THE CONTRIBUTION OF VIJAYNAGAR AND BAHAMANI KINGDOMS TO MEDIEVAL INDIAN HISTORY. AND TO EXAMINE THE ADMINISTRATIVE, SOCIO-ECONOMIC AND CULTURAL ASPECTS OF MEDIEVAL INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA **MODULE I:** **FOUNDATION EXPANSION & DECLINE OF DELHI SULTANATE**	Socio-Economic & Political conditions on the eve of Turkish Invasions	04	Madhya Yugin Bharat By S G Kolarkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	• Rise and Decline of Slave Dynasty • Khilji Dynasty	04		
	• Tughlaq Dynasty • Sayyid Dynasty • Lodi Dynasty	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: ADMINISTRATIVE STRUCTURE OF THE SULTANATE	• Central Administration • Iqta System	04	Madhya Yugin Bharat By S G Kolarkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	• Administrative & Military Reforms of Alauddin Khilji	04		
	• Reforms of Firoz Shah Tughlaq • Reforms of Mohammad Bin Tughlaq	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII:	Rise, Growth & Decline of the Vijaynagar Empire & Bahamani Kingdom	04		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

EMERGENCE OF THE VIJAYNAGAR & BAHAMANI KINGDOMS	Administrative Socio-Economic & Cultural Conditions of the Vijaynagar Empire	04	Madhya Yugin Bharat By S G Kolarkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Administrative Socio-Economic & Cultural Conditions of the Bahamani Kingdom	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: **SOCIETY, ECONOMY, RELIGION & CULTURE**	Socio-Economic & Religious Life	04	Madhya Yugin Bharat By S G Kolarkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	• Education • Literature	04		
	• Art	04		

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	• Architecture			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA MARATHI**

SEMESTER: V MONTH: **AUGUST TO DECEMBER** ACADEMIC YEAR:**2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH REGIONAL HISTORY OF MAHARASHTRA TO UNDERSTAND POLITICAL AND SOCIO-ECONOMIC DEVELOPMENTS DURING THE 19TH AND 20TH CENTURIES TO CREATE UNDERSTANDING OF THE MOVEMENT THAT LED TO THE FORMATION OF MAHARASHTRA.**

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: HISTORY OF MODERN MAHARASHTRA **MODULE I:** **BEGINNING OF BRITISH RULE**	Socio-Economic Conditions in Maharashtra in the 19th Century	04	Adhunik Maharashtra By Prakash Javdadekar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	• Administration • Judiciary	04		
	• Tribal Uprisings • Peasant Movements	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT,	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TITLE		ALLOTED		TOOLS USED
MODULE II: **SOCIO-ECONOMIC AWAKENING**	Mahatma Jyotirao Phule - Sathyashodak Samaj & Universal Humanism	04	Adhunik Maharashtra By Prakash Javdadekar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Prarthana Samaj	04		
	Contribution of thinkers of Maharashtra to Economic Nationalism	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: POLITICAL DEVELOPMENTS IN MAHARASHTRA 1885-1960	• Moderates • Extremists • Revolutionary Nationalists	04	Adhunik Maharashtra By Prakash Javdadekar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Response to Gandhian Movements in Maharashtra	04		
	Samyukta Maharshtra Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGENCE OF NEW FORCES	Contribution of reformers towards Education	04	Adhunik Maharashtra By Prakash Javdadekar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Contribution of Reformers towards Women's Education	04		
	Contribution of Reformers to the Upliftment of the Depressed Classes	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA MARATHI**

SEMESTER: V MONTH: **AUGUST TO DECEMBER** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE BASIC FACETS OF ARCHAEOLOGY. TO EVALUATE THE IMPORTANCE OF EPIGRAPHY. TO STUDY THE IMPORTANCE OF NUMISMATICS AS AN IMPORTANT SOURCE OF HISTORY.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY VI: INTRODUCTION TO ARCHAEOLOGY	Definition, Aims and Development of Archaeology in India	04	Puratav Shastra Va	Google Meet,
	Archaeology and History; Archaeology and Other Sciences	04		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

MODULE I: **AIMS AND METHODS OF ARCHAEOLOGY**	Field Archaeology: Methods of Exploration, Excavation and Dating Antiquities; Significance of Archaeology	04	Vastusangrahlay By Samel, Nabar	Google Classroom, PPT Presented Online Map, You Tube Video

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
MODULE II:	Palaeolithic and Mesolithic Periods	04	Puratav Shastra Va	
	Neolithic and Chalcolithic Periods	04		

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PRE-HISTORIC, PROTO-HISTORIC AND EARLY HISTORICAL PERIODS	Megalithic and Early Historical Periods	04	Vastusangrahlay By Samel, Nabar ar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

MODULEIII: EPIGRAPHY	Definition and History of Indian Epigraphy	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Types of Inscriptions and their significance	04		
	Evolution of Brahmi and Kharosthi Scripts; Edicts of Ashoka	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: NUMISMATICS	Definition and History of Indian Numismatics	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Ancient Indian Coinage: Punch-Marked, Satavahana, Western Kshatrapas, Kushana and Gupta Coins	04		
	Contribution of Numismatics to Indian History	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

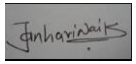
NAME OF THE STAFF: **MS.JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(MARATHI)**

SEMESTER: II MONTH: **FEBRUARY TO APRIL** ACADEMIC YEAR:**2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE SOCIO-ECONOMIC IMPACT OF BRITISH RULE ON INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA: SOCIETY & ECONOMY **MODULE I:** SOCIO-RELIGIOUS REFOEM MOVEMENT	Brahmo Samaj, Arya Samaj, Ramkrishna Mission	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh Swtantra Bhartacha Itihas Dr.Suman Vaidya & Dr. Shanta Kothekar	
	Sathyashodak Samaj, Aligarh Movement, Singh Sabha	04		
	Impact of Reform movements on Indian Society	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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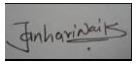
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: EDUCATION, PRESS & TRANSPORT	Introduction to Western Education & its Impact	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	
	Development Of Press	04		
	Transport & Communication	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: IMPACT OF BRITISH RULE ON INDIAN ECONOMY	Revenue Settlements & Commercialisation of Agriculture	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	
	Drain Theory	04		
	Deindustrialisation & Growth of Large Scale Industries	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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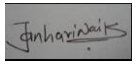
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: NATIONALISM AND SOCIAL GROUPS: INTERFACES	WOMEN	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	
	DALITS	04		
	PEASANTS AND TRIBALS	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

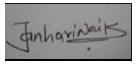
NAME OF THE STAFF: **MS.JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA (Eng Eco–DIV- A)**

SEMESTER: II MONTH: **FEBRUARY TO APRIL** ACADEMIC YEAR:**2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE SOCIO-ECONOMIC IMPACT OF BRITISH RULE ON INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA: SOCIETY & ECONOMY **MODULE I:** SOCIO-RELIGIOUS REFOEM MOVEMENT	Brahmo Samaj, Arya Samaj, Ramkrishna Mission	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh Swtantra Bhartacha Itihas Dr.Suman Vaidya & Dr. Shanta Kothekar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Sathyashodak Samaj, Aligarh Movement, Singh Sabha	04		
	Impact of Reform movements on Indian Society	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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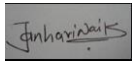
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: EDUCATION, PRESS & TRANSPORT	Introduction to Western Education & its Impact	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Development Of Press	04		
	Transport & Communication	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: IMPACT OF BRITISH RULE ON INDIAN ECONOMY	Revenue Settlements & Commercialisation of Agriculture	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Drain Theory	04		
	Deindustrialisation & Growth of Large Scale Industries	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS.JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA (Eng Lit–DIV- B)**

SEMESTER: II MONTH: **FEBRUARY TO APRIL** ACADEMIC YEAR:**2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE SOCIO-ECONOMIC IMPACT OF BRITISH RULE ON INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
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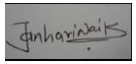
	Sathyashodak Samaj, Aligarh Movement, Singh Sabha	04		
	Impact of Reform movements on Indian Society	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: EDUCATION, PRESS & TRANSPORT	Introduction to Western Education & its Impact	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Development Of Press	04		
	Transport & Communication	04		

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MODULE III: IMPACT OF BRITISH RULE ON INDIAN ECONOMY	Revenue Settlements & Commercialisation of Agriculture	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Drain Theory	04		
	Deindustrialisation & Growth of Large Scale Industries	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

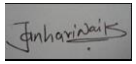
NAME OF THE STAFF: : **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(MARATHI)**

SEMESTER: IV MONTH: **JANUARY TO APRIL** ACADEMIC YEAR: **2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY **MODULE I:** INTER WAR PERIOD	Kemal Pasha & Modernisation of Turkey	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Aadhunik jag- Dr Suman Vaidya	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Reza Shah Pahlavi & Reforms in Iran	04		
	Birth of Israel	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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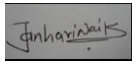
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: RISE OF DICTATORSHIP	Fascism & Benito Mussolini	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Aadhunik jag- Dr Suman Vaidya	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Nazism & Adolf Hitler	04		
	Militarism in Japan	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: WORLD WAR II	World War II Cause, Effects & Consequences	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Europ cha itihas – S.G.Kolalkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Atlantic Charter	04		
	United Nations Organisation	04		



SIGNATURE OF THE STAFF

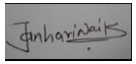
SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV: NATIONALISTS MOVEMENTS IN ASIA	Dr. Sun Yat Sen & China	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Aadhunik Bhartacha Itihas – Dr.N.A.Vakkani	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Mahatma Gandhi & India	04		
	Dr. Sukarno & Indonesia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA (Eng. Eco–DIV- A)**

SEMESTER: I MONTH: **NOVEMBER TO DECEMBER** ACADEMIC YEAR: **2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENT**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: **MODERN INDIA** **MODULE IV:** TOWARDS INDEPENDENCE & PARTITION	Indian Act Of 1935	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Cripps Mission Cabinet Mission Mountbatten Plan	04		
	Indian Independence Act & Partition	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA (Eng. Lit–DIV- B)**

SEMESTER: I MONTH: **NOVEMBER TO DECEMBER** ACADEMIC YEAR:**2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENCE**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: **MODERN INDIA** **MODULE IV:** TOWARDS INDEPENDENCE & PARTITION	Indian Act Of 1935	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Cripps Mission Cabinet Mission Mountbatten Plan	04		
	Indian Independence Act & Partition	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(ENGLISH)**

SEMESTER: III MONTH: **SEPTEMBER TO DECEMBER** ACADEMIC YEAR:**2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO GET A BRIEF OVERVIEW OF THE IMPORTANT ASPECTS OF THE GLOBAL SOCIETY**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE III **UNIT : I** HUMAN RIGHTS VIOLATIONS & REDRESSAL	Scheduled Castes – Constitutional & Legal Rights, Violations& Redressal Mechanisms	02	**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA VAZ	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Sheduled Tribes– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Women– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Children– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Disabilities Minorities, Elderly Persons– Constitutional & Legal Rights, Violations& Redressal Mechanisms	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT: II DEALING WITH ENVIRONMENTAL CONCERNS	Concept Of Disasters And General Effects Of Disasters On Human Life	03	**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA VAZ	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Local Case Studies Of Environmental Disasters	02		
	Dealing With Disasters: Prevention, Mitigation, Disaster Preparedness	03		
	Human Rights Issues And Violations In Addressing Disasters	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT: III SCIENCE & TECHNOLOGY I	Development Of Science: Ancient Culture, Classical Era, Middle Ages, Renaissance, Age Of Enlightment	03	**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA VAZ	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Nature Of Science: Principles, Characteristics, Theories & Practical's	02		
	Science & Superstition: Exploding Myths, Blind Beliefs, Prejudices. Building Scientific Temper	03		
	Science In Everyday Life : Science & Technology Inter Relation And Distinction	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV: SOFT SKILLS FOR INTERPERSONAL COMMUNICATION	PART A: • Verbal And Non Verbal Communication • Listening Skills • Barriers In Effective Communication • Importance Of Body Language	03	**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA VAZ	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	PART B:Formal & Informal Communication • Writing Skills • Group Discussions • Interviews • Presentations:	04		
	PART C : • Leadership Skills • Self Improvement Skills • Team Building	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS.QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(ENGLISH)**

SEMESTER: III MONTH: **SEPTEMBER TO DECEMBER** ACADEMIC YEAR: **2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY MODULE I: THE MODERN AGE	Renaissance, Art, Architecture, Science & Literature	04	Landmarks In World History By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Geographical Discoveries, Vasco Da Gama, Christopher Columbus	04		
	Reformation & Counter Reformation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Bhaskar Waman Thakur College of Science
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: AGE OF REVOLUTIONS	American Revolution	04	Landmarks In World History By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	French Revolution	04		
	Industrial Revolution	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: NATIONALISM & IMPERIALISM	Formation of Nation States in Europe	04	Landmarks In World History By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video You Tube Video
	Nationalist Movements in Italy & Germany	04		
	Imperialist Expansion in Asia	04		

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV: WORLD IN TRANSITION	World War I	04	Landmarks In World History By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Russian Revolution	04		
	League of Nations	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Vidhya Dayanand Patil College of Arts
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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: V MONTH: **AUGUST TO DECEMBER** ACADEMIC YEAR: **2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH THE HISTORY OF EARLY MEDIEVAL INDIA THAT LAID THE FOUNDATION OF THE SULTANATE IN INDIA. TO STUDY THE CONTRIBUTION OF VIJAYNAGAR AND BAHAMANI KINGDOMS TO MEDIEVAL INDIAN HISTORY. AND TO EXAMINE THE ADMINISTRATIVE, SOCIO-ECONOMIC AND CULTURAL ASPECTS OF MEDIEVAL INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA **MODULE I:** **FOUNDATION EXPANSION & DECLINE OF DELHI**	Socio-Economic & Political conditions on the eve of Turkish Invasions	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	• Rise and Decline of Slave Dynasty • Khilji Dynasty	04		
	• Tughlaq Dynasty • Sayyid Dynasty	04		

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SULTANATE	• Lodi Dynasty			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: ADMINISTRATIVE STRUCTURE OF THE SULTANATE	• Central Administration • Iqta System	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	• Administrative & Military Reforms of Alauddin Khilji	04		
	• Reforms of Firoz Shah Tughlaq • Reforms of Mohammad Bin Tughlaq	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: EMERGENCE OF THE VIJAYNAGAR & BAHAMANI KINGDOMS	Rise, Growth & Decline of the Vijaynagar Empire & Bahamani Kingdom	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Administrative Socio-Economic & Cultural Conditions of the Vijaynagar Empire	04		
	Administrative Socio-Economic & Cultural Conditions of the Bahamani Kingdom	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	Socio-Economic & Religious Life	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	• Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: V MONTH: **AUGUST TO DECEMBER** ACADEMIC YEAR**2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH REGIONAL HISTORY OF MAHARASHTRA TO UNDERSTAND POLITICAL AND SOCIO-ECONOMIC DEVELOPMENTS DURING THE 19TH AND 20TH CENTURIES TO CREATE UNDERSTANDING OF THE MOVEMENT THAT LED TO THE FORMATION OF MAHARASHTRA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: HISTORY OF MODERN MAHARASHTRA	Socio-Economic Conditions in Maharashtra in the 19th Century	04	History Of Modern Maharashtra (1818CE – 1960CE)	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	• Administration • Judiciary	04		

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MODULE I: **BEGINNING OF BRITISH RULE**	• Tribal Uprisings • Peasant Movements	04	By Dr. Eugene D'souza	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: SOCIO-ECONOMIC AWAKENING	Mahatma Jyotirao Phule - Sathyashodak Samaj & Universal Humanism	04	History Of Modern Maharashtra (1818CE – 1960CE) By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Prarthana Samaj	04		
	Contribution of thinkers of Maharashtra to Economic Nationalism	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: **POLITICAL DEVELOPMENTS IN MAHARASHTRA** **1885-1960**	• Moderates • Extremists • Revolutionary Nationalists	04	History Of Modern Maharashtra (1818CE – 1960CE**)** By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Response to Gandhian Movements in Maharashtra	04		
	Samyukta Maharshtra Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGENCE OF NEW FORCES	Contribution of reformers towards Education	04	History Of Modern Maharashtra (1818CE – 1960CE) By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Contribution of Reformers towards Women's Education	04		
	Contribution of Reformers to the Upliftment of the Depressed Classes	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani DEPARTMENT: ARTS CLASS: SYBA

SEMESTER: III MONTH: June to October ACADEMIC YEAR **2021- 2022**

LEARNING OBJECTIVE/S:
The learners will be able to : To enable the students to think critically, understand their past and develop interest in historical matters.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Ancient India Module 1 Sources of Ancient India and their importance.	a. Archaeological b. Literary c. Foreign travellers	12	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
Module 2 Indus Valley Civilization. .	a. Social and economic life b. Religious life c. Town planning and decline of the civilization	12	A.L Bhasham: Wonder that was India.	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and

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				assessment Explanation with illustrations Story Narration Discussion method
Module 3 Vedic Age	a. Janapada b. Social and economical life c. Religion ❖ Administration of mahajanapadas ❖ Jainism & Buddhism ❖ Persian & Greek invasions	12	Sheth Publication Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
Module 4 India after 6 century B.C :		12	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Ms.Mala Khanchandani DEPARTMENT: Arts CLASS: T,Y.B.A SEMESTER: V

MONTH: June to October ACADEMIC YEAR: **2021- 2022**

LEARNING OBJECTIVE/S:
The learners will be able to :

_To analyze archaeological artifacts as a source of information about other cultures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Module 1 Aims and methods of archaeology	A. Definition, aims and development of archaeology in India. B. Archaeology and History, archaeology and other sciences. C. Field archaeology; Methods of exploration, excavation and dating antiquities; significance of archaeology.	12	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Archaeology	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
Module 2 Prehistoric, proto-historic and early historical period.	A. Palaeolithic and Mesolithic Period B. Neolithic and Chalcolithic Period C. Megalithic and Early Historical Period	12	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Archaeology	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method

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Module 3 Epigraphy	A. Definition and History of Indian Epigraphy. B. Types of Inscriptions and their significance C. Evolution of Brahmi and Kharosthi script; Edits of Ashoka.	12	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Archaeology	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
Module 4 Numismatics	A. Definition and History of Indian Numismatics B. Ancient Indian Coinage: Panch- marked, Satavahana, Western Kshatrapas, Kushanas and Gupta coins C. Contribution of Numismatics to Indian History	12	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Archaeology	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

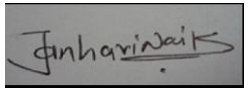
NAME OF THE STAFF: **MS.JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(MARATHI)**

SEMESTER: II MONTH: **FEBRUARY TO APRIL** ACADEMIC YEAR:**2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE SOCIO-ECONOMIC IMPACT OF BRITISH RULE ON INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA: SOCIETY & ECONOMY **MODULE I:** SOCIO-RELIGIOUS REFOEM MOVEMENT	Brahmo Samaj, Arya Samaj, Ramkrishna Mission	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh Swtantra Bhartacha Itihas Dr.Suman Vaidya & Dr. Shanta Kothekar	
	Sathyashodak Samaj, Aligarh Movement, Singh Sabha	04		
	Impact of Reform movements on Indian Society	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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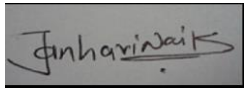
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: EDUCATION, PRESS & TRANSPORT	Introduction to Western Education & its Impact	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	
	Development Of Press	04		
	Transport & Communication	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: IMPACT OF BRITISH RULE ON INDIAN ECONOMY	Revenue Settlements & Commercialisation of Agriculture	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	
	Drain Theory	04		
	Deindustrialisation & Growth of Large Scale Industries	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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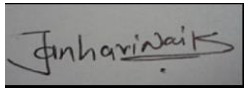
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: NATIONALISM AND SOCIAL GROUPS: INTERFACES	WOMEN	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	
	DALITS	04		
	PEASANTS AND TRIBALS	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS.JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA (Eng Eco–DIV- A)**

SEMESTER: II MONTH: **FEBRUARY TO APRIL** ACADEMIC YEAR:**2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE SOCIO-ECONOMIC IMPACT OF BRITISH RULE ON INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
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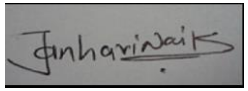
	Sathyashodak Samaj, Aligarh Movement, Singh Sabha	04		
	Impact of Reform movements on Indian Society	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: EDUCATION, PRESS & TRANSPORT	Introduction to Western Education & its Impact	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Development Of Press	04		
	Transport & Communication	04		

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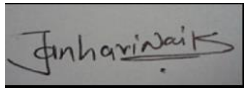
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: IMPACT OF BRITISH RULE ON INDIAN ECONOMY	Revenue Settlements & Commercialisation of Agriculture	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Drain Theory	04		
	Deindustrialisation & Growth of Large Scale Industries	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS.JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA (Eng Lit–DIV- B)**

SEMESTER: II MONTH: **FEBRUARY TO APRIL** ACADEMIC YEAR:**2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE SOCIO-ECONOMIC IMPACT OF BRITISH RULE ON INDIA**

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	Sathyashodak Samaj, Aligarh Movement, Singh Sabha	04		
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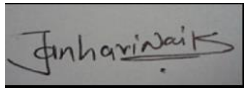
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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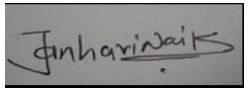
	Drain Theory	04		
	Deindustrialisation & Growth of Large Scale Industries	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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TEACHING PLAN (UNIT PLAN)

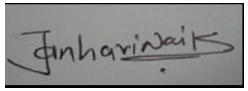
NAME OF THE STAFF: : **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(MARATHI)**

SEMESTER: IV MONTH: **JANUARY TO APRIL** ACADEMIC YEAR: **2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY **MODULE I:** INTER WAR PERIOD	Kemal Pasha & Modernisation of Turkey	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Aadhunik jag- Dr Suman Vaidya	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Reza Shah Pahlavi & Reforms in Iran	04		
	Birth of Israel	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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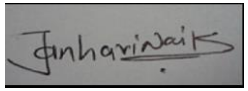
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: RISE OF DICTATORSHIP	Fascism & Benito Mussolini	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Aadhunik jag- Dr Suman Vaidya	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Nazism & Adolf Hitler	04		
	Militarism in Japan	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: WORLD WAR II	World War II Cause, Effects & Consequences	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Europ cha itihas – S.G.Kolalkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Atlantic Charter	04		
	United Nations Organisation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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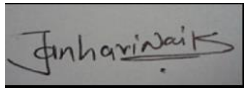
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV: NATIONALISTS MOVEMENTS IN ASIA	Dr. Sun Yat Sen & China	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Aadhunik Bhartacha Itihas – Dr.N.A.Vakkani	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Mahatma Gandhi & India	04		
	Dr. Sukarno & Indonesia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchadani DEPARTMENT: Arts CLASS: S.Y.B.A SEMESTER: IV

MONTH: January to March ACADEMIC YEAR: **2021- 2022**

LEARNING OBJECTIVE/S:
The learners will be able to : To enable the students to understand the political, socio-economic, and cultural development of ancient period and to appreciate the rich cultural heritage of India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Ancienr India Module 1 Mauryan and post mauryan period Module 2 Gupta Age Module 3 Post Gupta	A. Chandragupta and Ashoka B. Mauryan Administration C. Post Mauryan Dynasties- Sungas, Kushana and Satavahans.	8	Dr. Eugene D'Souza: Ancient India	❖ Online lectures(Google Classroom) ❖ Google Slides ❖ Explanation with examples
	A. Imperial Expansion: Chandragupta 1, Samudragupta and Chandragupta II. B. Administration C. Classical Age	7	A.L Bhasham: Wonder that was India.	❖ Online lectures(Google Classroom) ❖ Google Slides ❖ Explanation with examples

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period Module 4 Major Dynasties of Deccan and South India	A. The age of Harshvardhan B. The rise of Rajputs C. Arab Invasion of Sind	6	A.L Bhasham: Wonder that was India.	❖ Online lectures(Google Classroom) ❖ Google Slides ❖ Explanation with examples
	A. Chalukyas of Badami and Rashtrakutas B. Pallavas and Cholas C. Spread of Indian Culture in South East Asia	6	A.L Bhasham: Wonder that was India.	❖ Online lectures(Google Classroom) ❖ Google Slides ❖ Explanation with examples

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA A ENGLISH**

SEMESTER: II MONTH: **JANUARY TO FEBRUARY** ACADEMIC YEAR: **2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENCE**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA MODULE IV: NATIONALISM & SOCIAL GROUPS	Women	04	Modern India By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Dalits	04		
	Peasant & Tribal Uprisings	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA B ENGLISH**

SEMESTER: II MONTH: **JANUARY TO FEBRUARY** ACADEMIC YEAR: **2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENCE**

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA ENGLISH**

SEMESTER: IV MONTH: **JANUARY TO MARCH** ACADEMIC YEAR: **2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE VARIOUS POWERS AND RIGHTS GRANTED TO THEM AS INDIAN CITIZENS, LEARN THE VARIOUS ENVIRONMENTAL PRINCIPLES ALONG WITH LATEST TECHNOLOGIES IN SCIENCE. LASTLY STUDENTS WILL ALSO BE GIVEN A QUICK INSIHT INTO COMPETITIVE EXAMS TO GET ENTRY INTO HIGHER DEGREES & GOVERNMENT JOBS, THEIR PAPER PATTERN ELIGIBILITY & TEST CENTERS**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE IV **UNIT : I** SIGNIFICANT CONTEMPERORY RIGHTS OF CITIZENS	Consumer Rights: Provisions, Violations, Consumer Courts & Movements	03	**FOUNDATION COURSE IV** BY MICHEAL VAS & AURORA VAZ	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Right To Information: Genesis, Provisions Of RTI Act 2015, Success Stories	03		
	Public Interest Litigation, Provisions, Procedure to File, Landmark Cases	03		
	Citizen's Charter, Public Service Guarantee Act	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 1

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :II APPROACHES TO UNDERSTANDING ECOLOGY	Scope Of Ecology, Anthropocentrism, Bio-Centrism, Eco-Centrism, Eco –Feminism & Deep Ecology	03	**FOUNDATION COURSE IV** BY MICHEAL VAS & AURORA VAZ	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Environmental Principles I : Sustainability Principle, Polluter Pays Principle, Precautionary Principle	04		
	Environmental Principles Ii: Equity Principle, Human Rights Principle, Participation Principle	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

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UNIT :III SCIENCE & TECHNOLOGY II	PART A: Modern Technologies: ● Laser Technology ● Satellite Technology ● Information & Communication Technology ● Nano Technology ● Biotechnology	07	**FOUNDATION COURSE IV** BY MICHEAL VAS & AURORA VAZ	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	PART B: Issues Of Control, Access & Misuse Of Technology	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV: INRODUCTION TO COMPETITIVE EXAMS	PART A: Basic Introduction To Competitive Exams. Paper Pattern, Eligibility Criteria, Local Centres ● Examinations Conducted For Entry In Professional Courses ● Examinations Conducted for entry into government jobs	04	**FOUNDATION COURSE IV** BY MICHEAL VAS & AURORA VAZ	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	PART B: Soft Skills required for competitive exams ● Information on areas tested ● Motivation ● Goal Setting ● Time Management ● Writing skills:	07		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA ENGLISH**

SEMESTER: IV MONTH: **JANUARY TO MARCH** ACADEMIC YEAR: **2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: **LANDMARKS IN WORLD HISTORY** **MODULE I:** INTER WAR PERIOD	Kemal Pasha & Modernisation of Turkey	04	Landmarks In World History By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Reza Shah Pahlavi & Reforms in Iran	04		
	Birth of Israel	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: RISE OF DICTATORSHIP	Fascism & Benito Mussolini	04	Landmarks In World History By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Nazism & Adolf Hitler	04		
	Militarism in Japan	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: WORLD WAR II	World War II Cause, Effects & Consequences	04	Landmarks In World History By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Atlantic Charter	04		
	United Nations Organisation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV: NATIONALISTS MOVEMENTS IN ASIA	Dr. Sun Yat Sen & China	04	Landmarks In World History By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Mahatma Gandhi & India	04		
	Dr. Sukarno & Indonesia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Vidhya Dayanand Patil College of Arts
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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: VI MONTH: **JANUARY TO MARCH** ACADEMIC YEAR : **2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THEMSELVES WITH THE HISTORY OF INDIA SINCE THE EMERGENCE OF THE MUGHAL RULE. TO UNDERSTAND ADMINISTRATION OF THE MUGHAL EMPIRE. TO STUDY THE RISE OF THE MARATHA POWER**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA **MODULE I:** **FOUNDATION EXPANSION & DECLINE OF MUGHAL RULE**	• India on the Eve of Mughal Rule: • Invasion of Babur	04	Medieval India 1526CE to 1707CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	• Humayun • Sher Shah • Akbar	04		
	• Jehangir • ShahJahan • Aurangzeb	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: **ADMINISTRATIVE STRUCTURE OF THE MUGHALS**	• Central Administration • Provincial Administration	04	Medieval India 1526CE to 1707CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	• Mansabdari System •	04		
	• Judicial System • Revenue System	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: **RISE OF THE MARATHA POWER**	• Shivaji & Foundation of Swarajya	04	Medieval India 1526CE to 1707CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	• Administration of Shivaji •	04		
	• Sambhaji • Raja ram • Tarabai	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: **SOCIETY, ECONOMY, RELIGION & CULTURE**	• Society • Economy	04	Medieval India 1526CE to 1707CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	• Religion • Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: VI MONTH: **JANUARY TO MARCH** ACADEMIC YEAR:**2021- 2022**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE PROCESS OF MAKING THE CONSTITUTION AND THE INTEGRATION AND REORGANIZATION OF INDIAN STATES. TO ACQUAINT THE STUDENTS WITH THE POLITICAL DEVELOPMENTS IN INDIA AFTER INDEPENDENCE. TO COMPREHEND THE SOCIO-ECONOMIC CHANGES AND PROGRESS IN SCIENCE AND TECHNOLOGY IN INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: : HISTORY OF CONTEMPORARY INDIA **MODULE I:** **THE NEHRU ERA 1947-1964**	Features Of The Indian Constitution	04	History Of Contemporary India (1947-2000) By Dr. Eugene	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	• Integration of States • Reorganisation of States	04		
	• Socio-economic reforms • Foreign policy	04		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

			D'souza	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: **POLITICAL ECONOMIC SOCIAL DEVELOPMENTS 1964-1984**	• Political Developments After Nehru • Green Revolution	04	History Of Contemporary India (1947-2000) By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	• Abolition of Privy Purses • Nationalisation of Banks • Emergence	04		
	• Janata Government • Return of Congress • Foreign Policy	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: **POLITICAL ECONOMIC SOCIAL DEVELOPMENTS 1984-2000**	• Political Developments	04	History Of Contemporary India (1947-2000) By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	• Relations with Foreign Countries •	04		
	• Globalisation • Liberalisation • Privatisation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGING TRENDS	• Communalism • Seperatists Movements	04	History Of Contemporary India (1947-2000) By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	• Empowerment of Women • Policy of Reservation	04		
	• Science • Technology • Education	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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YashvantKeshavPatil College of Commerce
VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani DEPARTMENT: Arts CLASS: T.Y.B.A SEMESTER: VI

MONTH: January to March ACADEMIC YEAR: **2021- 2022**

LEARNING OBJECTIVE/S: The learners will be able to : To take up the responsibility for preserving an object or heritage and making it accessible.
To survey, acquire and scientifically preserve records of historical values from autonomous bodies, private institutions and individuals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Museology and Archival Science Module 1 Museology . Module 2 Museums	i) Definition of Museology, museum movement in India. ii) Role of curator iii) Types of Museums	8	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Archaeology	❖ Online lectures(Google Classroom) ❖ Google Slides ❖ Discussion ❖ Explanation with examples ❖ Online Projects through Google classroom & assessment
	i) Methods of collection and conservation of objects in museums. ii) Preservation techniques and types of exhibitions.	7	Dr. Ranade Dr. Samel Dr. Nabar:	❖ Online lectures(Google Classroom) ❖ Google Slides

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Module 3 Archival Science	iii) Changing roles of museums: In-house and out-reach activities of museums.		Introduction to Archaeology	❖ Discussion ❖ Explanation with examples ❖ Online Projects through Google classroom & assessment
Module 4 Management of Archives	i) Meaning, scope, objectives and classes of archives. ii) Importance of archives : Value of record as a source of history. iii) Classification of records	6	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Archaeology	❖ Online lectures(Google Classroom) ❖ Google Slides ❖ Discussion ❖ Explanation with examples ❖ Online Projects through Google classroom & assessment
	i) Appraisal and retention of records. ii) Conservation and preservation of records. iii) Digital archives	6	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Archaeology	❖ Online lectures(Google Classroom) ❖ Google Slides ❖ Discussion

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				❖ Explanation with examples ❖ Online Projects through Google classroom & assessment

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: : **DR. DIPALI CHPUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(MARATHI)**

SEMESTER: III MONTH: **SEPTEMBER TO DECEMBER** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THE STUDENTS WITH DIFFERENT SOURCES OF ANCIENT INDIAN HISTORY.TO ENABLE THE STUDENTS TO UNDERSTAND THE POLITICAL, SOCIO-ECONOMIC AND CULTURAL DEVELOPMENTS IN THE PERIOD UNDER STUDY AND APPRECIATE THE RICH CULTURAL HERITAGE IN INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY III: ANCIENT India EARLIEST TIMES TO 1000AD MODULE I: SOURCES OF ANCIENT INDIA AND THEIR IMPORTANCE	Archaeological	04	Prachin Bharatacha Ithihas – Prof. Jitendra Bhamreh Prachin Bharat- Dr. S.G.Kolalkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Literary	04		
	Foreign Travellers	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT,	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
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VIVA COLLEGE, Virar (W)
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TITLE		ALLOTED		TOOLS USED
MODULE II: INDUS VALLEY CIVILIZATION	Social and Economic Life	04	Prachin Bharatacha Ithihas – Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Religious Life	04		
	Town Planning and Decline of the Civilization	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: VEDIC AGE	Janapada	04	Prachin Bharatacha Ithihas – Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video You Tube Video
	Social and Economic Life	04		
	Religion	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: INDIA AFTER 6TH CENTURY BC	Administration of Mahajanapadas Century B.C.	04	Prachin Bharatacha Ithihas – Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Jainism and Buddhism	04		
	Persian and Greek Invasions	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: V MONTH: **AUGUST TO DECEMBER** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH THE HISTORY OF EARLY MEDIEVAL INDIA THAT LAID THE FOUNDATION OF THE SULTANATE IN INDIA. TO STUDY THE CONTRIBUTION OF VIJAYNAGAR AND BAHAMANI KINGDOMS TO MEDIEVAL INDIAN HISTORY. AND TO EXAMINE THE ADMINISTRATIVE, SOCIO-ECONOMIC AND CULTURAL ASPECTS OF MEDIEVAL INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA MODULE I: FOUNDATION EXPANSION & DECLINE OF DELHI SULTANATE	Socio-Economic & Political conditions on the eve of Turkish Invasions	04	Madhya Yugin Bharat By S G Kolarkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	• Rise and Decline of Slave Dynasty • Khilji Dynasty	04		
	• Tughlaq Dynasty • Sayyid Dynasty • Lodi Dynasty	04		

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: ADMINISTRATIVE STRUCTURE OF THE SULTANATE	• Central Administration • Iqta System	04	Madhya Yugin Bharat By S G Kolarkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	• Administrative & Military Reforms of Alauddin Khilji	04		
	• Reforms of Firoz Shah Tughlaq • Reforms of Mohammad Bin Tughlaq	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: EMERGENCE OF THE VIJAYNAGAR & BAHAMANI KINGDOMS	Rise, Growth & Decline of the Vijaynagar Empire & Bahamani Kingdom	04	Madhya Yugin Bharat By S G Kolarkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Administrative Socio-Economic & Cultural Conditions of the Vijaynagar Empire	04		
	Administrative Socio-Economic & Cultural Conditions of the Bahamani Kingdom	04		

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	Socio-Economic & Religious Life	04	Madhya Yugin Bharat By S G Kolarkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	• Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA MARATHI**

SEMESTER: V MONTH: **AUGUST TO DECEMBER** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH REGIONAL HISTORY OF MAHARASHTRA TO UNDERSTAND POLITICAL AND SOCIO-ECONOMIC DEVELOPMENTS DURING THE 19TH AND 20TH CENTURIES TO CREATE UNDERSTANDING OF THE MOVEMENT THAT LED TO THE FORMATION OF MAHARASHTRA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: HISTORY OF MODERN MAHARASHTRA MODULE I: BEGINNING OF BRITISH RULE	Socio-Economic Conditions in Maharashtra in the 19th Century	04	Adhunik Maharashtra By Prakash Javdadekar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	• Administration • Judiciary	04		
	• Tribal Uprisings • Peasant Movements	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: SOCIO-ECONOMIC AWAKENING	Mahatma Jyotirao Phule - Sathyashodak Samaj & Universal Humanism	04	Adhunik Maharashtra By Prakash Javdadekar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Prarthana Samaj	04		
	Contribution of thinkers of Maharashtra to Economic Nationalism	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: POLITICAL DEVELOPMENTS IN MAHARASHTRA 1885-1960	• Moderates • Extremists • Revolutionary Nationalists	04	Adhunik Maharashtra By Prakash Javdadekar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Response to Gandhian Movements in Maharashtra	04		
	Samyukta Maharshtra Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGENCE OF NEW FORCES	Contribution of reformers towards Education	04	Adhunik Maharashtra By Prakash Javdadekar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Contribution of Reformers towards Women's Education	04		
	Contribution of Reformers to the Upliftment of the Depressed Classes	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA MARATHI**

SEMESTER: V MONTH: **AUGUST TO DECEMBER** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE BASIC FACETS OF ARCHAEOLOGY. TO EVALUATE THE IMPORTANCE OF EPIGRAPHY. TO STUDY THE IMPORTANCE OF NUMISMATICS AS AN IMPORTANT SOURCE OF HISTORY.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY VI: INTRODUCTION TO ARCHAEOLOGY **MODULE I: AIMS AND METHODS OF ARCHAEOLOGY**	Definition, Aims and Development of Archaeology in India	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Archaeology and History; Archaeology and Other Sciences	04		
	Field Archaeology: Methods of Exploration, Excavation and Dating Antiquities; Significance of Archaeology	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: PRE-HISTORIC, PROTO-HISTORIC AND EARLY HISTORICAL PERIODS	Palaeolithic and Mesolithic Periods	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar ar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Neolithic and Chalcolithic Periods	04		
	Megalithic and Early Historical Periods	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: EPIGRAPHY	Definition and History of Indian Epigraphy	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Types of Inscriptions and their significance	04		
	Evolution of Brahmi and Kharosthi Scripts; Edicts of Ashoka	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: NUMISMATICS	Definition and History of Indian Numismatics	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Ancient Indian Coinage: Punch-Marked, Satavahana, Western Kshatrapas, Kushana and Gupta Coins	04		
	Contribution of Numismatics to Indian History	04		

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TEACHING PLAN (UNIT PLAN)

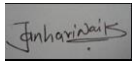
NAME OF THE STAFF: **MS.JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(MARATHI)**

SEMESTER: II MONTH: **FEBRUARY TO APRIL** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE SOCIO-ECONOMIC IMPACT OF BRITISH RULE ON INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA: SOCIETY & ECONOMY **MODULE I:** SOCIO-RELIGIOUS REFOEM MOVEMENT	Brahmo Samaj, Arya Samaj, Ramkrishna Mission	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh Swtantra Bhartacha Itihas Dr.Suman Vaidya & Dr. Shanta Kothekar	
	Sathyashodak Samaj, Aligarh Movement, Singh Sabha	04		
	Impact of Reform movements on Indian Society	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: EDUCATION, PRESS & TRANSPORT	Introduction to Western Education & its Impact	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	
	Development Of Press	04		
	Transport & Communication	04		

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: IMPACT OF BRITISH RULE ON INDIAN ECONOMY	Revenue Settlements & Commercialisation of Agriculture	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	
	Drain Theory	04		
	Deindustrialisation & Growth of Large Scale Industries	04		

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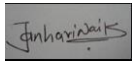

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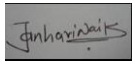
MODULE IV: NATIONALISM AND SOCIAL GROUPS: INTERFACES	WOMEN	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	
	DALITS	04		
	PEASANTS AND TRIBALS	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS.JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA (Eng Eco–DIV- A)**

SEMESTER: II MONTH: **FEBRUARY TO APRIL** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE SOCIO-ECONOMIC IMPACT OF BRITISH RULE ON INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
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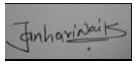
	Sathyashodak Samaj, Aligarh Movement, Singh Sabha	04		
	Impact of Reform movements on Indian Society	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: EDUCATION, PRESS & TRANSPORT	Introduction to Western Education & its Impact	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Development Of Press	04		
	Transport & Communication	04		

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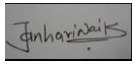
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: IMPACT OF BRITISH RULE ON INDIAN ECONOMY	Revenue Settlements & Commercialisation of Agriculture	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Drain Theory	04		
	Deindustrialisation & Growth of Large Scale Industries	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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TEACHING PLAN (UNIT PLAN)

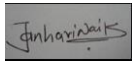
NAME OF THE STAFF: **MS.JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA (Eng Lit–DIV- B)**

SEMESTER: II MONTH: **FEBRUARY TO APRIL** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE SOCIO-ECONOMIC IMPACT OF BRITISH RULE ON INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA: SOCIETY & ECONOMY **MODULE I:** SOCIO-RELIGIOUS REFOEM MOVEMENT	Brahmo Samaj, Arya Samaj, Ramkrishna Mission	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh Swtantra Bhartacha Itihas Dr.Suman Vaidya & Dr. Shanta Kothekar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Sathyashodak Samaj, Aligarh Movement, Singh Sabha	04		
	Impact of Reform movements on Indian Society	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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	Development Of Press	04		
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TEACHING PLAN (UNIT PLAN)

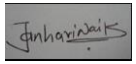
NAME OF THE STAFF: : **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(MARATHI)**

SEMESTER: IV MONTH: **JANUARY TO APRIL** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY **MODULE I:** INTER WAR PERIOD	Kemal Pasha & Modernisation of Turkey	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Aadhunik jag- Dr Suman Vaidya	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Reza Shah Pahlavi & Reforms in Iran	04		
	Birth of Israel	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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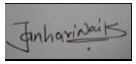
MODULE II: RISE OF DICTATORSHIP	Fascism & Benito Mussolini	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Aadhunik jag- Dr Suman Vaidya	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Nazism & Adolf Hitler	04		
	Militarism in Japan	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: WORLD WAR II	World War II Cause, Effects & Consequences	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Europ cha itihas – S.G.Kolalkar	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Atlantic Charter	04		
	United Nations Organisation	04		



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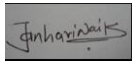
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV: NATIONALISTS MOVEMENTS IN ASIA	Dr. Sun Yat Sen & China	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Aadhunik Bhartacha Itihas – Dr.N.A.Vakkani	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video
	Mahatma Gandhi & India	04		
	Dr. Sukarno & Indonesia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA (Eng. Eco–DIV- A)**

SEMESTER: I MONTH: **NOVEMBER TO DECEMBER** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENT**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA MODULE IV: TOWARDS INDEPENDENCE & PARTITION	Indian Act Of 1935	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Cripps Mission Cabinet Mission Mountbatten Plan	04		
	Indian Independence Act & Partition	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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NAME OF THE STAFF: **MS. QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA (Eng. Lit–DIV- B)**

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(ENGLISH)**

SEMESTER: III MONTH: **SEPTEMBER TO DECEMBER** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO GET A BRIEF OVERVIEW OF THE IMPORTANT ASPECTS OF THE GLOBAL SOCIETY**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE III **UNIT : I** HUMAN RIGHTS VIOLATIONS & REDRESSAL	Scheduled Castes – Constitutional & Legal Rights, Violations& Redressal Mechanisms	02	**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA VAZ	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Sheduled Tribes– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Women– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Children– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Disabilities Minorities, Elderly Persons– Constitutional & Legal Rights, Violations& Redressal Mechanisms	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT,	SUBTOPICS	NO OF	REFERENCE/S	TEACHING METHOD/ ICT

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TITLE		LECTURES ALLOTED		TOOLS USED
UNIT: II DEALING WITH ENVIRONMENTAL CONCERNS	Concept Of Disasters And General Effects Of Disasters On Human Life	03	**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA VAZ	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Local Case Studies Of Environmental Disasters	02		
	Dealing With Disasters: Prevention, Mitigation, Disaster Preparedness	03		
	Human Rights Issues And Violations In Addressing Disasters	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT: III SCIENCE & TECHNOLOGY I	Development Of Science: Ancient Culture, Classical Era, Middle Ages, Renaissance, Age Of Enlightment	03	**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA VAZ	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	Nature Of Science: Principles, Characteristics, Theories & Practical's	02		
	Science & Superstition: Exploding Myths, Blind Beliefs, Prejudices. Building Scientific Temper	03		
	Science In Everyday Life : Science & Technology Inter Relation And Distinction	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV: SOFT SKILLS FOR INTERPERSONAL COMMUNICATION	PART A: • Verbal And Non Verbal Communication • Listening Skills • Barriers In Effective Communication • Importance Of Body Language	03	**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p,

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	PART B:Formal & Informal Communication ● Writing Skills ● Group Discussions ● Interviews ● Presentations:	04	VAZ	You Tube Video.
	PART C : ● Leadership Skills ● Self Improvement Skills ● Team Building	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS.QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(ENGLISH)**

SEMESTER: III MONTH: **SEPTEMBER TO DECEMBER** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY MODULE I: THE MODERN AGE	Renaissance, Art, Architecture, Science & Literature	04	Landmarks In World History By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Geographical Discoveries, Vasco Da Gama, Christopher Columbus	04		
	Reformation & Counter Reformation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: AGE OF REVOLUTIONS	American Revolution	04	Landmarks In World History By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	French Revolution	04		
	Industrial Revolution	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: NATIONALISM & IMPERIALISM	Formation of Nation States in Europe	04	Landmarks In World History By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video You Tube Video
	Nationalist Movements in Italy & Germany	04		
	Imperialist Expansion in Asia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV: WORLD IN TRANSITION	World War I	04	Landmarks In World History By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Russian Revolution	04		
	League of Nations	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: V MONTH: **AUGUST TO DECEMBER** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH THE HISTORY OF EARLY MEDIEVAL INDIA THAT LAID THE FOUNDATION OF THE SULTANATE IN INDIA. TO STUDY THE CONTRIBUTION OF VIJAYNAGAR AND BAHAMANI KINGDOMS TO MEDIEVAL INDIAN HISTORY. AND TO EXAMINE THE ADMINISTRATIVE, SOCIO-ECONOMIC AND CULTURAL ASPECTS OF MEDIEVAL INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA MODULE I: FOUNDATION EXPANSION & DECLINE OF DELHI SULTANATE	Socio-Economic & Political conditions on the eve of Turkish Invasions	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	• Rise and Decline of Slave Dynasty • Khilji Dynasty	04		
	• Tughlaq Dynasty • Sayyid Dynasty • Lodi Dynasty	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: ADMINISTRATIVE STRUCTURE OF THE SULTANATE	• Central Administration • Iqta System	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	• Administrative & Military Reforms of Alauddin Khilji	04		
	• Reforms of Firoz Shah Tughlaq • Reforms of Mohammad Bin Tughlaq	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII:	Rise, Growth & Decline of the Vijaynagar Empire & Bahamani Kingdom	04	Medieval India	Google Meet,

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EMERGENCE OF THE VIJAYNAGAR & BAHAMANI KINGDOMS			1000CE to 1526CE By Dr. Eugene D'souza	Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Administrative Socio-Economic & Cultural Conditions of the Vijaynagar Empire	04		
	Administrative Socio-Economic & Cultural Conditions of the Bahamani Kingdom	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	Socio-Economic & Religious Life	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	• Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: V MONTH: **AUGUST TO DECEMBER** ACADEMIC YEAR **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH REGIONAL HISTORY OF MAHARASHTRA TO UNDERSTAND POLITICAL AND SOCIO-ECONOMIC DEVELOPMENTS DURING THE 19TH AND 20TH CENTURIES TO CREATE UNDERSTANDING OF THE MOVEMENT THAT LED TO THE FORMATION OF MAHARASHTRA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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HISTORY V: HISTORY OF MODERN MAHARASHTRA **MODULE I: BEGINNING OF BRITISH RULE**	Socio-Economic Conditions in Maharashtra in the 19th Century	04	History Of Modern Maharashtra (1818CE – 1960CE) By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	• Administration • Judiciary	04		
	• Tribal Uprisings • Peasant Movements	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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VIVA COLLEGE, Virar (W)
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: SOCIO-ECONOMIC AWAKENING	Mahatma Jyotirao Phule - Sathyashodak Samaj & Universal Humanism	04	History Of Modern Maharashtra (1818CE – 1960CE) By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Prarthana Samaj	04		
	Contribution of thinkers of Maharashtra to Economic Nationalism	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

MODULEIII: POLITICAL DEVELOPMENTS IN MAHARASHTRA 1885-1960	• Moderates • Extremists • Revolutionary Nationalists	04	History Of Modern Maharashtra (1818CE – 1960CE**)** By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Response to Gandhian Movements in Maharashtra	04		
	Samyukta Maharshtra Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT,	SUBTOPICS	NO OF	REFERENCE/S	TEACHING METHOD/ ICT

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TITLE		LECTURES ALLOTED		TOOLS USED
MODULE IV: EMERGENCE OF NEW FORCES	Contribution of reformers towards Education	04	History Of Modern Maharashtra (1818CE – 1960CE) By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video
	Contribution of Reformers towards Women's Education	04		
	Contribution of Reformers to the Upliftment of the Depressed Classes	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(MARATHI)**

SEMESTER: I MONTH: **NOVEMBER TO DECEMBER** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENCE**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA **MODULE I:** GROWTH OF POLITICAL AWAKENING	(A) Revolt of 1857- Causes & Consequences	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	(B) Contribution of Political Associations	04		
	(C) Foundation of Indian National Congress	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

Janhavi Naik

SIGNATURE OF THE STAFF

Janhavi Naik

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Late Shri. Vishnu Waman Thakur Charitable Trust
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: TRENDS IN INDIAN NATIONALISM	Moderates	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Extremists	04		
	Revolutionary Nationalist	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODUL III: GANDHIAN MOVEMENTS	Non Co-operation Movement	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh Swtantra Bhartacha Itihas	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Civil Disobedience Movement	04		
	Quit India Movement	04		

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			Dr.Suman Vaidya & Dr. Shanta Kothekar	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(ENGLISH DIV-A)**

SEMESTER: I MONTH: **NOVEMBER TO DECEMBER** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENCE**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA	(A) Revolt of 1857- Causes & Consequences	04	**Modern India** By Dr. Eugene	Google Meet, Google Classroom,
MODULE I:	(B) Contribution of Political Associations	04		

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GROWTH OF POLITICAL AWAKENING	(C) Foundation of Indian National Congress	04	D'Souza	PPT Presented Online Map, You Tube Video.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: TRENDS IN INDIAN NATIONALISM	Moderates	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Extremists	04		
	Revolutionary Nationalist	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

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MODUL III: GANDHIAN MOVEMENTS	Non Co-operation Movement	04	Modern India **Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Civil Disobedience Movement	04		
	Quit India Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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NAME OF THE STAFF: **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(ENGLISH DIV-B)**

SEMESTER: I MONTH: **NOVEMBER TO DECEMBER** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENCE**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA **MODULE I:** GROWTH OF POLITICAL AWAKENING	(A) Revolt of 1857- Causes & Consequences	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	(B) Contribution of Political Associations	04		
	(C) Foundation of Indian National Congress	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

Janhavi Naik

SIGNATURE OF THE STAFF

Janhavi Naik

SIGNATURE OF THE H.O.D.

MODULE II: TRENDS IN INDIAN NATIONALISM	Moderates	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Extremists	04		
	Revolutionary Nationalist	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODUL III: GANDHIAN MOVEMENTS	Non Co-operation Movement	04	**Modern India** By Dr. Eugene D'Souza	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Civil Disobedience Movement	04		
	Quit India Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURE

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(ENGLISH DIV-B)**

SEMESTER: I MONTH: **NOVEMBER TO DECEMBER** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENCE**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :IV THE INDIAN CONSTITUTION	The Constitution as set out in the Preamble	03	**FOUNDATION COURSE I Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare**	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	The Structure of the Constitution	03		
	Fundamental Duties of the Indian Citizen	02		

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	Basic Feature of the Constitution	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :V SIGNIFICANT ASPECTS OF POLITICAL PROCESSES	The Party System in India Politics	03	**FOUNDATION COURSE I Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare**	Google Meet, Google Classroom, PPT Presented Online Map, You Tube Video.
	Local Self Government in Urban Rural Areas	03		
	The 73rd and 74th Amendments and Their Implication for Inclusive Politic	02		
	Role and Significance of Women in Politics	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURE

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
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NAME OF THE STAFF: **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(DIV- A)** **SEMESTER: III**

MONTH: **SEPTEMBER TO DECEMBER** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY III: ANCIENT India EARLIEST TIMES TO 1000AD MODULE I: SOURCES OF ANCIENT INDIA AND THEIR IMPORTANCE	Archaeological	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Literary	04		
	Foreign Travelers	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

Janhavi Naik

SIGNATURE OF THE STAFF

Janhavi Naik

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashwant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: INDUS VALLEY CIVILIZATION	Social and Economic Life	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Religious Life	04		
	Town Planning and Decline of the Civilization	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: VEDIC AGE	Janapada	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Social and Economic Life	04		
	Religion	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Late Shri. Vishnu Waman Thakur Charitable Trust
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: INDIA AFTER 6TH CENTURY BC	Administration of Mahajanapadas Century B.C.	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Jainism and Buddhism	04		
	Persian and Greek Invasions	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(DIV- B)** **SEMESTER: III**

MONTH: **SEPTEMBER TO DECEMBER** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY III: ANCIENT India EARLIEST TIMES TO 1000AD MODULE I: SOURCES OF ANCIENT INDIA AND THEIR IMPORTANCE	Archaeological	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Literary	04		
	Foreign Travelers	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: INDUS VALLEY CIVILIZATION	Social and Economic Life	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Religious Life	04		
	Town Planning and Decline of the Civilization	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: VEDIC AGE	Janapada	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Social and Economic Life	04		
	Religion	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: INDIA AFTER 6TH CENTURY BC	Administration of Mahajanapadas Century B.C.	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Jainism and Buddhism	04		
	Persian and Greek Invasions	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA- ENGLISH**

SEMESTER: V MONTH: **AUGUST TO DECEMBER** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE BASIC FACETS OF ARCHAEOLOGY. TO EVALUATE THE IMPORTANCE OF EPIGRAPHY. TO STUDY THE IMPORTANCE OF NUMISMATICS AS AN IMPORTANT SOURCE OF HISTORY.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY VI: INTRODUCTION TO ARCHAEOLOGY **MODULE I: AIMS AND METHODS OF ARCHAEOLOGY**	Definition, Aims and Development of Archaeology in India	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Archaeology and History; Archaeology and Other Sciences	04		
	Field Archaeology: Methods of Exploration, Excavation and Dating Antiquities; Significance of Archaeology	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT,	SUBTOPICS	NO OF	REFERENCE/S	TEACHING METHOD/ ICT

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TITLE		LECTURES ALLOTTED		TOOLS USED
MODULE II: PRE-HISTORIC, PROTO-HISTORIC AND EARLY HISTORICAL PERIODS	Palaeolithic and Mesolithic Periods	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Neolithic and Chalcolithic Periods	04		
	Megalithic and Early Historical Periods	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: EPIGRAPHY	Definition and History of Indian Epigraphy	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Types of Inscriptions and their significance	04		
	Evolution of Brahmi and Kharosthi Scripts; Edicts of Ashoka	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: NUMISMATICS	Definition and History of Indian Numismatics	04	Dr. Eugene D'Souza: Ancient India	Online Lectures on Google meet Google Slides Google Classroom Online Projects assigned and assessment Explanation with illustrations Story Narration Discussion method
	Ancient Indian Coinage: Punch-Marked, Satavahana, Western Kshatrapas, Kushana and Gupta Coins	04		
	Contribution of Numismatics to Indian History	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: **MS. JANHAVI NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: VI MONTH: **JANUARY TO MARCH** ACADEMIC YEAR **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THEMSELVES WITH THE HISTORY OF INDIA SINCE THE EMERGENCE OF THE MUGHAL RULE. TO UNDERSTAND ADMINISTRATION OF THE MUGHAL EMPIRE. TO STUDY THE RISE OF THE MARATHA POWER**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA MODULE I: FOUNDATION EXPANSION & DECLINE OF MUGHAL RULE	• India on the Eve of Mughal Rule: • Invasion of Babur	04	Medieval India 1526 CE to 1707CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizizz, h5p, You Tube Video.
	• Humayun • Sher Shah • Akbar	04		
	• Jehangir • ShahJahan • Aurangzeb	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Late Shri. Vishnu Waman Thakur Charitable Trust
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: ADMINISTRATIVE STRUCTURE OF THE MUGHALS	• Central Administration • Provincial Administration	04	Medieval India 1526 CE to 1707CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizizz, h5p, You Tube Video.
	• Mansabdari System •	04		
	• Judicial System • Revenue System	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

MODULEIII: RISE OF THE MARATHA POWER	• Shivaji & Foundation of Swarajya	04	Medieval India 1526 CE to 1707CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizizz, h5p, You Tube Video.
	• Administration of Shivaji •	04		
	• Sambhaji • Raja ram • Tarabai	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	• Society • Economy	04	Medieval India 1526 CE to 1707CE By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizizz, h5p, You Tube Video.
	• Religion • Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: I**MS. JANHAVI NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: VI MONTH: **JANUARY TO MARCH** ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE PROCESS OF MAKING THE CONSTITUTION AND THE INTEGRATION AND REORGANIZATION OF INDIAN STATES. TO ACQUAINT THE STUDENTS WITH THE POLITICAL DEVELOPMENTS IN INDIA AFTER INDEPENDENCE. TO COMPREHEND THE SOCIO-ECONOMIC CHANGES AND PROGRESS IN SCIENCE AND TECHNOLOGY IN INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: : HISTORY OF CONTEMPORARY INDIA MODULE I: THE NEHRU ERA 1947-1964	Features Of The Indian Constitution	04	History Of Contemporary India (1947-2000) By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	• Integration of States • Reorganisation of States	04		
	• Socio-economic reforms • Foreign policy	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

Janhavi Naik

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: POLITICAL ECONOMIC SOCIAL DEVELOPMENTS 1964-1984	• Political Developments After Nehru • Green Revolution	04	History Of Contemporary India (1947-2000) By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	• Abolition of Privy Purses • Nationalisation of Banks • Emergence	04		
	• Janata Government • Return of Congress • Foreign Policy	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: POLITICAL ECONOMIC SOCIAL DEVELOPMENTS 1984-2000	• Political Developments	04	History Of Contemporary India (1947-2000) By Dr. Eugene D'souza	Google Meet, Google Classroom, PPT Presented Quizzizz, h5p, You Tube Video.
	• Relations with Foreign Countries •	04		
	• Globalisation • Liberalisation • Privatisation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGING TRENDS	• Communalism • Separatists Movements	04	History Of Contemporary India (1947-2000)	Google Meet, Google Classroom, PPT Presented Quizizz, h5p,
	• Empowerment of Women • Policy of Reservation	04		

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	• Science • Technology • Education	04	By Dr. Eugene D'souza	You Tube Video.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

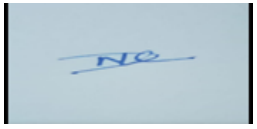
NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA**

SEMESTER: I MONTH: **AUGUST TO OCTOBER** ACADEMIC YEAR:**2019-2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENCE**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA **MODULE IV:** TOWARDS INDEPENDENCE & PARTITION	Indian Act Of 1935	04	Modern India By Dr. Eugene D'souza Adhunik Bharatacha Ithihas By Suman Vaidhy	1. Chalk & Duster
	Cripps Mission Cabinet Mission Mountbatten Plan	04		
	Indian Independence Act & Partition	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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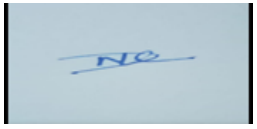
LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE SOCIO-ECONOMIC IMPACT OF BRITISH RULE ON INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA: SOCIETY & ECONOMY **MODULE IV:** NATIONALISM & SOCIAL GROUPS	Women	04	Modern India: Society & Economy By Dr. Eugene D'souza Adhunik Bharatacha Ithihas By Suman Vaidhy	1. Chalk & Duster
	Dalit	04		
	Peasant & Tribals	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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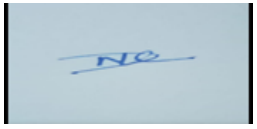
LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY	Renaissance , Art, Architecture, Science & Literature	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	Geographical Discoveries, Vasco Da Gama, Christopher Columbus	04		
MODULE I: THE MODERN AGE	Reformation & Counter Reformation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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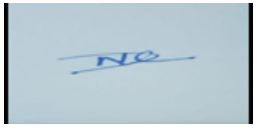
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: AGE OF REVOLUTIONS	American Revolution	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	French Revolution	04		
	Industrial Revolution	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: NATIONALISM &	Formation of Nation States in Europe	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	Nationalist Movements in Italy & Germany	04		



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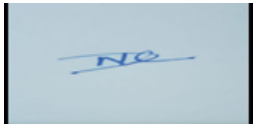
IMPERIALISM	Imperialist Expansion in Asia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: WORLD IN TRANSITION	World War I	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	Russian Revolution	04		
	League of Nations	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTUREs



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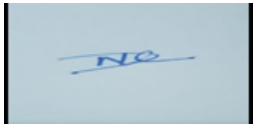
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY **MODULE I:** INTER WAR PERIOD	Kemal Pasha & Modernisation of Turkey	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	Reza Shah Pahlavi & Reforms in Iran	04		
	Birth of Israel	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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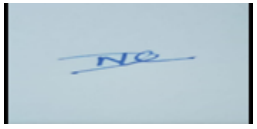
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: RISE OF DICTATORSHIP	Fascism & Benito Mussolini	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	Nazism & Adolf Hitler	04		
	Militarism in Japan	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: WORLD WAR II	World War II Cause, Effects & Consequences	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	Atlantic Charter	04		
	United Nations Organisation	04		



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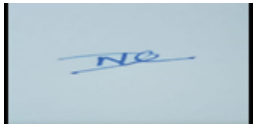
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: NATIONALISTS MOVEMENTS IN ASIA	Dr. Sun Yat Sen & China	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	Mahatma Gandhi & India	04		
	Dr. Sukarno & Indonesia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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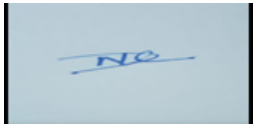

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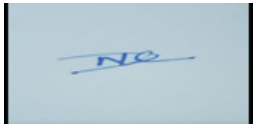
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: INDUS VALLEY CIVILIZATION	Social and Economic Life	04	Prachin Bharatach a Itihas By N C Dikshit	1. Chalk & Duster
	Religious Life	04		
	Town Planning and Decline of the Civilization	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: VEDIC AGE	Janapada	04	Prachin Bharatach a Itihas By N C Dikshit	1. Chalk & Duster
	Social and Economic Life	04		
	Religion	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURE



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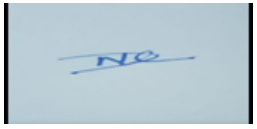
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: INDIA AFTER 6TH CENTURY BC	Administration of Mahajanapadas Century B.C.	04	Prachin Bharatach a Ithihas By N C Dikshit	1. Chalk & Duster
	Jainism and Buddhism	04		
	Persian and Greek Invasions	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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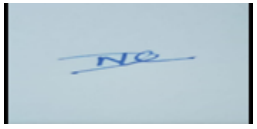
LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THE STUDENTS WITH DIFFERENT SOURCES OF ANCIENT INDIAN HISTORY.TO ENABLE THE STUDENTS TO UNDERSTAND THE POLITICAL, SOCIO-ECONOMIC AND CULTURAL DEVELOPMENTS IN THE PERIOD UNDER STUDY AND APPRECIATE THE RICH CULTURAL HERITAGE IN INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: ANCIENT India EARLIEST TIMES TO 1000AD **MODULE I:** MAURYAN AND POST- MAURYAN PERIOD (322 B.C. TO 320 A.D.)	Chandragupta and Ashoka	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Mauryan Administration	04		
	Post Mauryan Dynasties- Sungas, Kushanas and Satavahanas	04		



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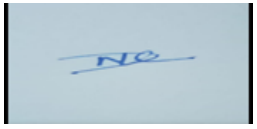
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: GUPTA AGE (320 A.D. TO 600 A.D.)	Imperial Expansion: Chandragupta I, Samudragupta and Chandragupta II	04	Prachin Bharatach a Itihas By N C Dikshit	1. Chalk & Duster
	Administration	04		
	Classical Age	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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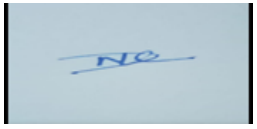
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: :POST GUPTA PERIOD (600A.D. TO 1000A.D.)	The Age of Harshavardhan	04	Prachin Bharatach a Itihas By N C Dikshit	1. Chalk & Duster
	The Rise of Rajputs	04		
	Arab Invasion of Sind	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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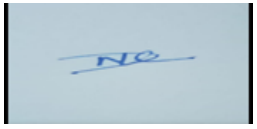

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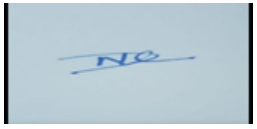
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: MAJOR DYNASTIES OF DECCAN AND SOUTH INDIA	Chalukyas of Badami and Rashtrakutas	04	Prachin Bharatach a Itihas By N C Dikshit	1. Chalk & Duster
	Mahatma Gandhi & Ind Pallavas and Cholas ia	04		
	Spread of Indian Culture in South-East Asia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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VIVA COLLEGE, Virar (W)
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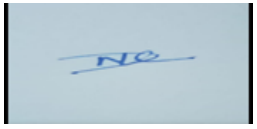
LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH THE HISTORY OF EARLY MEDIEVAL INDIA THAT LAID THE FOUNDATION OF THE SULTANATE IN INDIA. TO STUDY THE CONTRIBUTION OF VIJAYNAGAR AND BAHAMANI KINGDOMS TO MEDIEVAL INDIAN HISTORY. AND TO EXAMINE THE ADMINISTRATIVE, SOCIO-ECONOMIC AND CULTURAL ASPECTS OF MEDIEVAL INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA **MODULE I: FOUNDATION EXPANSION & DECLINE OF DELHI SULTANATE**	Socio-Economic & Political conditions on the eve of Turkish Invasions	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Rise and Decline of Slave Dynasty • Khilji Dynasty	04		
	• Tughlaq Dynasty • Sayyid Dynasty • Lodi Dynasty	04		



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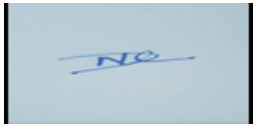

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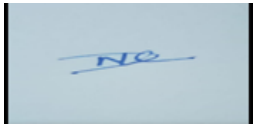
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: ADMINISTRATIVE STRUCTURE OF THE SULTANATE	• Central Administration • Iqta System	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Administrative & Military Reforms of Alauddin Khilji	04		
	• Reforms of Firoz Shah Tughlaq • Reforms of Mohammad Bin Tughlaq	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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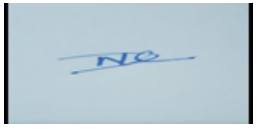
MODULEIII: EMERGENCE OF THE VIJAYNAGAR & BAHAMANI KINGDOMS	Rise, Growth & Decline of the Vijaynagar Empire & Bahamani Kingdom	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	Administrative Socio-Economic & Cultural Conditions of the Vijaynagar Empire	04		
	Administrative Socio-Economic & Cultural Conditions of the Bahamani Kingdom	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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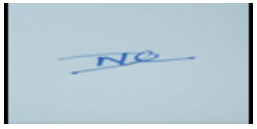
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	Socio-Economic & Religious Life	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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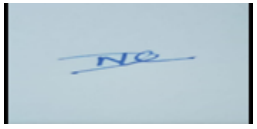
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: VI MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THEMSELVES WITH THE HISTORY OF INDIA SINCE THE EMERGENCE OF THE MUGHAL RULE. TO UNDERSTAND ADMINISTRATION OF THE MUGHAL EMPIRE. TO STUDY THE RISE OF THE MARATHA POWER**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA	• India on the Eve of Mughal Rule: • Invasion of Babur	04	Madhya Yugin	1. Chalk & Duster



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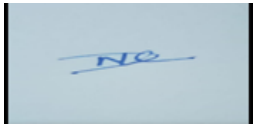
MODULE I: FOUNDATION EXPANSION & DECLINE OF MUGHAL RULE	• Humayun • Sher Shah • Akbar	04	Bharat By S G Kolarkar	
	• Jehangir • ShahJahan • Aurangzeb	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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MODULE II: ADMINISTRATIVE STRUCTURE OF THE MUGHALS	• Central Administration • Provincial Administration	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Mansabdari System •	04		
	• Judicial System • Revenue System	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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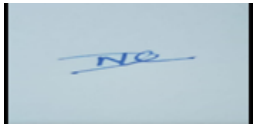

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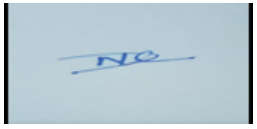
MODULEIII: RISE OF THE MARATHA POWER	• Shivaji & Foundation of Swarajya	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Administration of Shivaji •	04		
	• Sambhaji • Raja ram • Tarabai	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
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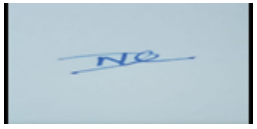
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	• Society • Economy	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Religion • Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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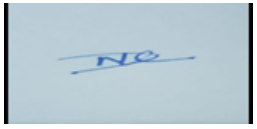
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: V MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH REGIONAL HISTORY OF MAHARASHTRA TO UNDERSTAND POLITICAL AND SOCIO-ECONOMIC DEVELOPMENTS DURING THE 19TH AND 20TH CENTURIES TO CREATE UNDERSTANDING OF THE MOVEMENT THAT LED TO THE FORMATION OF MAHARASHTRA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: HISTORY OF MODERN MAHARASHTRA	Socio-Economic Conditions in Maharashtra in the 19th Century	04	Adhunik Maharashtra By Prakash Javdadekar	1. Chalk & Duster



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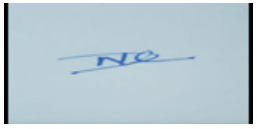
MODULE I: BEGINNING OF BRITISH RULE	• Administration • Judiciary	04		
	• Tribal Uprisings • Peasant Movements	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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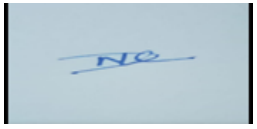
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: SOCIO-ECONOMIC AWAKENING	Mahatma Jyotirao Phule - Sathyashodak Samaj & Universal Humanism	04	Adhunik Maharashtra By Prakash Javdadekar	1. Chalk & Duster
	Prarthana Samaj	04		
	Contribution of thinkers of Maharashtra to Economic Nationalism	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	• Moderates		Adhunik	



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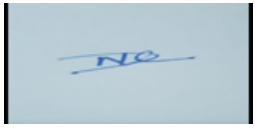
MODULEIII: POLITICAL DEVELOPMENTS IN MAHARASHTRA 1885-1960	• Extremists • Revolutionary Nationalists	04	Maharashtra By Prakash Javdadekar	1. Chalk & Duster
	Response to Gandhian Movements in Maharashtra	04		
	Samyukta Maharshtra Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGENCE OF NEW FORCES	Contribution of reformers towards Education	04	Adhunik Maharashtra By Prakash Javdadekar	1. Chalk & Duster
	Contribution of Reformers towards Women's Education	04		
	Contribution of Reformers to the Upliftment of the Depressed Classes	04		

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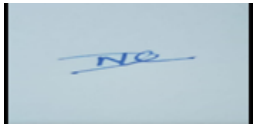

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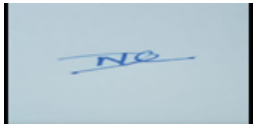
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: VI MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE PROCESS OF MAKING THE CONSTITUTION AND THE INTEGRATION AND REORGANIZATION OF INDIAN STATES. TO ACQUAINT THE STUDENTS WITH THE POLITICAL DEVELOPMENTS IN INDIA AFTER INDEPENDENCE. TO COMPREHEND THE SOCIO-ECONOMIC CHANGES AND PROGRESS IN SCIENCE AND TECHNOLOGY IN INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: : HISTORY OF CONTEMPORARY INDIA	Features Of The Indian Constitution	04	Adhunik Bharat By Suman Vaidhya	1. Chalk & Duster



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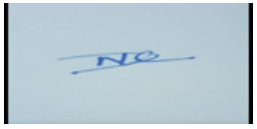
MODULE I: THE NEHRU ERA 1947-1964	• Integration of States • Reorganisation of States	04		
	• Socio-economic reforms • Foreign policy	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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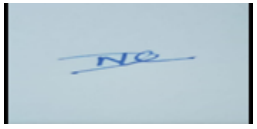
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: POLITICAL ECONOMIC SOCIAL DEVELOPMENTS 1964-1984	• Political Developments After Nehru • Green Revolution	04	Adhunik Bharat By Suman Vaidhya	1. Chalk & Duster
	• Abolition of Privy Purses • Nationalisation of Banks • Emergence	04		
	• Janata Government • Return of Congress • Foreign Policy	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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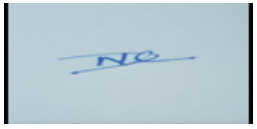
MODULE III: POLITICAL ECONOMIC SOCIAL DEVELOPMENTS **1984-2000**	• Political Developments	04	Adhunik Bharat By Suman Vaidhya	1. Chalk & Duster
	• Relations with Foreign Countries •	04		
	• Globalisation • Liberalisation • Privatisation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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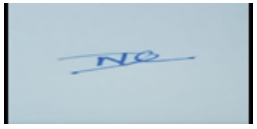
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGING TRENDS	• Communalism • Seperatists Movements	04	Adhunik Bharat By Suman Vaidhya	1. Chalk & Duster
	• Empowerment of Women • Policy of Reservation	04		
	• Science • Technology • Education	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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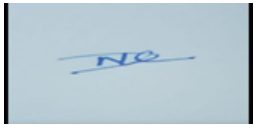
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA 7**

SEMESTER: V MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE BASIC FACETS OF ARCHAEOLOGY. TO EVALUATE THE IMPORTANCE OF EPIGRAPHY. TO STUDY THE IMPORTANCE OF NUMISMATICS AS AN IMPORTANT SOURCE OF HISTORY.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY VI: INTRODUCTION TO ARCHAEOLOGY **MODULE I: AIMS AND METHODS**	Definition, Aims and Development of Archaeology in India	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Archaeology and History; Archaeology and Other Sciences	04		



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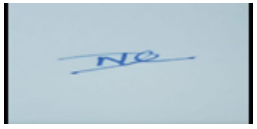
OF ARCHAEOLOGY	Field Archaeology: Methods of Exploration, Excavation and Dating Antiquities; Significance of Archaeology	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: PRE-HISTORIC, PROTO-HISTORIC AND EARLY HISTORICAL PERIODS	Palaeolithic and Mesolithic Periods	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar ar	1. Chalk & Duster
	Neolithic and Chalcolithic Periods	04		
	Megalithic and Early Historical Periods	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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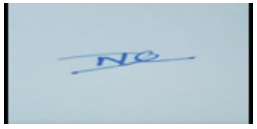

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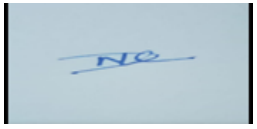
MODULEIII: EPIGRAPHY	Definition and History of Indian Epigraphy	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Types of Inscriptions and their significance	04		
	Evolution of Brahmi and Kharosthi Scripts; Edicts of Ashoka	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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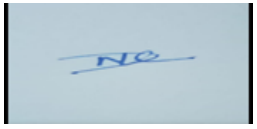
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: NUMISMATICS	Definition and History of Indian Numismatics	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Ancient Indian Coinage: Punch-Marked, Satavahana, Western Kshatrapas, Kushana and Gupta Coins	04		
	Contribution of Numismatics to Indian History	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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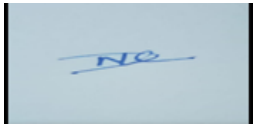
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: VI MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE TO INFORM THE STUDENTS ABOUT THE ROLE OF MUSEUMS IN THE PRESERVATION OF HERITAGE. TO UNDERSTAND THE IMPORTANCE OF ARCHIVAL SCIENCE IN THE STUDY OF HISTORY. TO ENCOURAGE STUDENTS TO PURSUE CAREERS IN VARIOUS MUSEUMS AND ARCHIVES IN INDIA AND ABROAD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY VI: : INTRODUCTION TO MUSEOLOGY AND ARCHIVAL	Definition of Museology, Museum Movement in India	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Role of the Curator	04		



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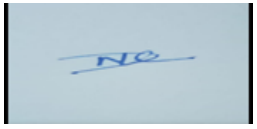
SCIENCE **MODULE I: MUSEOLOGY**	Types of Museums	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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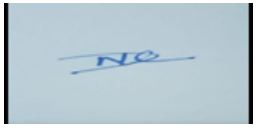
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: MUSEUMS	Methods of Collection and Conservation of Objects in Museums	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Preservation Techniques and Types of Exhibitions	04		
	Changing Role of Museums: In-house and Out-reach activities of Museums	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII:	Meaning, Scope, Objectives and Classes of Archives	04	Puratav Shastra Va	1. Chalk & Duster



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ARCHIVAL SCIENCE	Importance of Archives: Value of Records as Sources of History	04	Vastusangrahlay By Samel, Nabar	
	Classification of Records	04		

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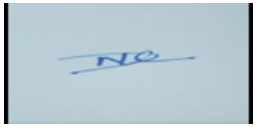

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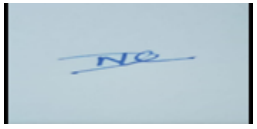
MODULE IV: MANAGEMENT OF ARCHIVES	Appraisal and Retention of Records (b) (c)	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Conservation and Preservation of Records	04		
	Digital Archives	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II:	Social and Economic Life	04	Prachin Bharata	1. Chalk & Duster



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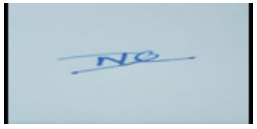
INDUS VALLEY CIVILIZATION	Religious Life	04	cha Itihas By N C Dikshit	
	Town Planning and Decline of the Civilization	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
MODULE III: VEDIC AGE	Janapada	04	Prachin Bharata cha Itihas By N C Dikshit	1. Chalk & Duster
	Social and Economic Life	04		
	Religion	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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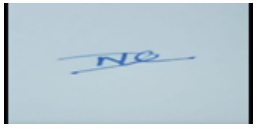
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: INDIA AFTER 6TH CENTURY BC	Administration of Mahajanapadas Century B.C.	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Jainism and Buddhism	04		
	Persian and Greek Invasions	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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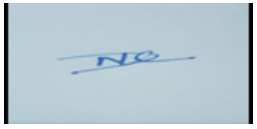
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA**

SEMESTER: IV MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THE STUDENTS WITH DIFFERENT SOURCES OF ANCIENT INDIAN HISTORY.TO ENABLE THE STUDENTS TO UNDERSTAND THE POLITICAL, SOCIO-ECONOMIC AND CULTURAL DEVELOPMENTS IN THE PERIOD UNDER STUDY AND APPRECIATE THE RICH CULTURAL HERITAGE IN INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: ANCIENT India EARLIEST TIMES	Chandragupta and Ashoka	04	Prachin Bharatacha	1. Chalk & Duster
	Mauryan Administration	04		



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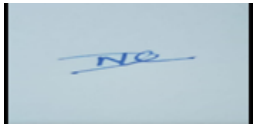
TO 1000AD			Ithihas By N C Dikshit	
MODULE I: MAURYAN AND POST-MAURYAN PERIOD (322 B.C. TO 320 A.D.)	Post Mauryan Dynasties- Sungas, Kushanas and Satavahanas	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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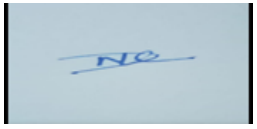
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
MODULE II: GUPTA AGE (320 A.D. TO 600 A.D.)	Imperial Expansion: Chandragupta I, Samudragupta and Chandragupta II	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Administration	04		
	Classical Age	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCES	TEACHING METHOD/ ICT TOOLS USED



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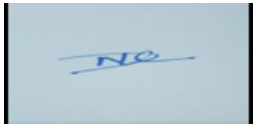
		ALLOTED		
MODULE III: :POST GUPTA PERIOD (600A.D. TO 1000A.D.)	The Age of Harshavardhan	04	Prachin Bharata cha Ithihas By N C Dikshit	1. Chalk & Duster
	The Rise of Rajputs	04		
	Arab Invasion of Sind	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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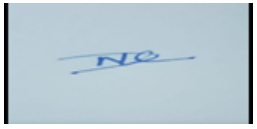
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV : MAJOR DYNASTIES OF DECCAN AND SOUTH INDIA	Chalukyas of Badami and Rashtrakutas	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Mahatma Gandhi & Ind Pallavas and Cholasia	04		
	Spread of Indian Culture in South-East Asia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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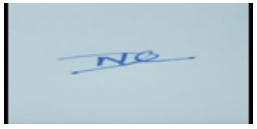
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: V MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH THE HISTORY OF EARLY MEDIEVAL INDIA THAT LAID THE FOUNDATION OF THE SULTANATE IN INDIA. TO STUDY THE CONTRIBUTION OF VIJAYNAGAR AND BAHAMANI KINGDOMS TO MEDIEVAL INDIAN HISTORY. AND TO EXAMINE THE ADMINISTRATIVE, SOCIO-ECONOMIC AND CULTURAL ASPECTS OF MEDIEVAL INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA	Socio-Economic & Political conditions on the eve of Turkish Invasions	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
MODULE I: FOUNDATION	• Rise and Decline of Slave Dynasty • Khilji Dynasty	04		



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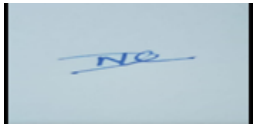
EXPANSION & DECLINE OF DELHI SULTANATE	• Tughlaq Dynasty • Sayyid Dynasty • Lodi Dynasty	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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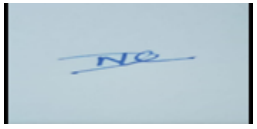
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
MODULE II: ADMINISTRATIVE STRUCTURE OF THE SULTANATE	• Central Administration • Iqta System	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Administrative & Military Reforms of Alauddin Khilji	04		
	• Reforms of Firoz Shah Tughlaq • Reforms of Mohammad Bin Tughlaq	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT,	SUBTOPICS	NO OF LECTURES	REFERENCES	TEACHING METHOD/ ICT



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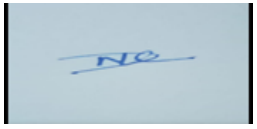
TITLE		ALLOTED		TOOLS USED
MODULEIII : EMERGENCE OF THE VIJAYNAGAR & BAHAMANI KINGDOMS	Rise, Growth & Decline of the Vijaynagar Empire & Bahamani Kingdom	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	Administrative Socio-Economic & Cultural Conditions of the Vijaynagar Empire	04		
	Administrative Socio-Economic & Cultural Conditions of the Bahamani Kingdom	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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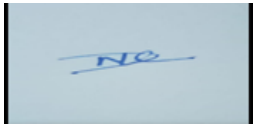
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	Socio-Economic & Religious Life	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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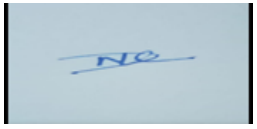
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: VI MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THEMSELVES WITH THE HISTORY OF INDIA SINCE THE EMERGENCE OF THE MUGHAL RULE. TO UNDERSTAND ADMINISTRATION OF THE MUGHAL EMPIRE. TO STUDY THE RISE OF THE MARATHA POWER**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVA	• India on the Eve of Mughal Rule: • Invasion of Babur	04	Madhya Yugin	1. Chalk & Duster



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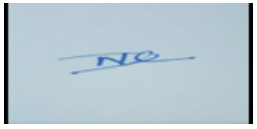
L INDIA			Bhar at By S G Kolarkar	
MODULE I: FOUNDATION EXPANSION & DECLINE OF MUGHAL RULE	• Humayun • Sher Shah • Akbar	04		
	• Jehangir • ShahJahan • Aurangzeb	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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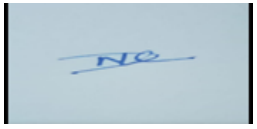
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
MODULE II: ADMINISTRATIVE STRUCTURE OF THE MUGHALS	• Central Administration • Provincial Administration	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Mansabdari System •	04		
	• Judicial System • Revenue System	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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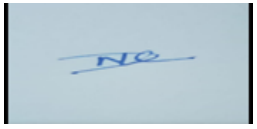
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
MODULEIII : RISE OF THE MARATHA POWER	• Shivaji & Foundation of Swarajya	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Administration of Shivaji •	04		
	• Sambhaji • Raja ram • Tarabai	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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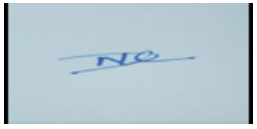
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	• Society • Economy	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Religion • Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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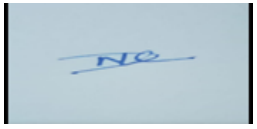
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: V MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH REGIONAL HISTORY OF MAHARASHTRA TO UNDERSTAND POLITICAL AND SOCIO-ECONOMIC DEVELOPMENTS DURING THE 19TH AND 20TH CENTURIES TO CREATE UNDERSTANDING OF THE MOVEMENT THAT LED TO THE FORMATION OF MAHARASHTRA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: HISTORY OF MODERN MAHARASHTRA	Socio-Economic Conditions in Maharashtra in the 19th Century	04	Adhunik Maharashtra By Prakash	1. Chalk & Duster



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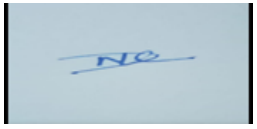
MODULE I: BEGINNING OF BRITISH RULE	• Administration • Judiciary	04	Javdade kar	
	• Tribal Uprisings • Peasant Movements	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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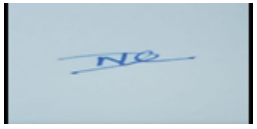
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
MODULE II: SOCIO-ECONOMIC AWAKENING	Mahatma Jyotirao Phule - Sathyashodak Samaj & Universal Humanism	04	Adhunik Maharashtra By Prakash Javdadekar	1. Chalk & Duster
	Prarthana Samaj	04		
	Contribution of thinkers of Maharashtra to Economic Nationalism	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT,	SUBTOPICS	NO OF LECTU	REFERENCES	TEACHING METHOD/ ICT TOOLS USED



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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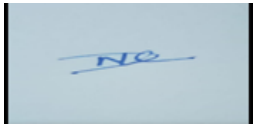
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TITLE		RES ALLOTED		
MODULEIII: POLITICAL DEVELOPMENTS IN MAHARASHTRA 1885-1960	• Moderates • Extremists • Revolutionary Nationalists	04	Adhunik Maharashtra By Prakash Javdadekar	1. Chalk & Duster
	Response to Gandhian Movements in Maharashtra	04		
	Samyukta Maharshtra Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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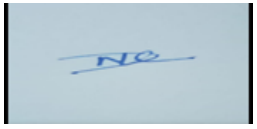
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGENCE OF NEW FORCES	Contribution of reformers towards Education	04	Adhunik Maharashtra By Prakash Javdadekar	1. Chalk & Duster
	Contribution of Reformers towards Women's Education	04		
	Contribution of Reformers to the Upliftment of the Depressed Classes	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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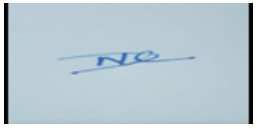
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: VI MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE PROCESS OF MAKING THE CONSTITUTION AND THE INTEGRATION AND REORGANIZATION OF INDIAN STATES. TO ACQUAINT THE STUDENTS WITH THE POLITICAL DEVELOPMENTS IN INDIA AFTER INDEPENDENCE. TO COMPREHEND THE SOCIO-ECONOMIC CHANGES AND PROGRESS IN SCIENCE AND TECHNOLOGY IN INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: : HISTORY OF CONTEMPOR	Features Of The Indian Constitution	04	Adhunik Bharat By	1. Chalk & Duster



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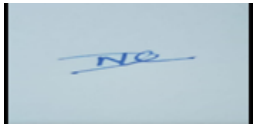
ARY INDIA **MODULE I: THE NEHRU ERA 1947-1964**	• Integration of States • Reorganisation of States	04	Suman Vaidhya	
	• Socio-economic reforms • Foreign policy	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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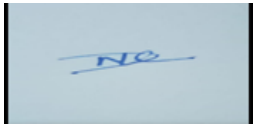
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: POLITICAL ECONOMIC SOCIAL DEVELOPMENTS 1964-1984	• Political Developments After Nehru • Green Revolution	04	Adhunik Bharat By Suman Vaidhya	1. Chalk & Duster
	• Abolition of Privy Purses • Nationalisation of Banks • Emergence	04		
	• Janata Government • Return of Congress • Foreign Policy	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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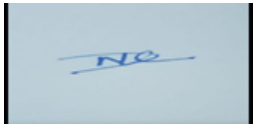
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: POLITICAL ECONOMIC SOCIAL DEVELOPMENTS 1984-2000	• Political Developments	04	Adhunik Bharat By Suman Vaidhya	1. Chalk & Duster
	• Relations with Foreign Countries •	04		
	• Globalisation • Liberalisation • Privatisation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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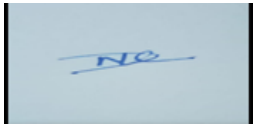
MODULE IV: EMERGING TRENDS	• Communalism • Seperatists Movements	04	Adhunik Bharat By Suman Vaidhya	1. Chalk & Duster
	• Empowerment of Women • Policy of Reservation	04		
	• Science • Technology • Education	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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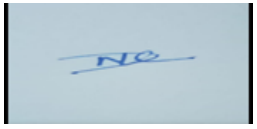
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA 7**

SEMESTER: V MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE BASIC FACETS OF ARCHAEOLOGY. TO EVALUATE THE IMPORTANCE OF EPIGRAPHY. TO STUDY THE IMPORTANCE OF NUMISMATICS AS AN IMPORTANT SOURCE OF HISTORY.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
HISTORY VI: INTRODUCTION TO ARCHAEOLOGY MODULE	Definition, Aims and Development of Archaeology in India	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Archaeology and History; Archaeology and Other Sciences	04		



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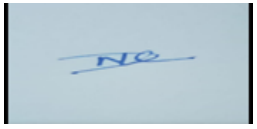
I: AIMS AND METHODS OF ARCHAEOLOGY	Field Archaeology: Methods of Exploration, Excavation and Dating Antiquities; Significance of Archaeology	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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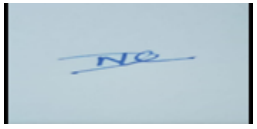
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
MODULE II: PRE-HISTORIC, PROTO-HISTORIC AND EARLY HISTORICAL PERIODS	Palaeolithic and Mesolithic Periods	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar ar	1. Chalk & Duster
	Neolithic and Chalcolithic Periods	04		
	Megalithic and Early Historical Periods	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
MODULE II: EPIGRAPHY	Definition and History of Indian Epigraphy	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Types of Inscriptions and their significance	04		
	Evolution of Brahmi and Kharosthi Scripts; Edicts of Ashoka	04		

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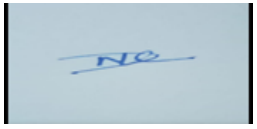

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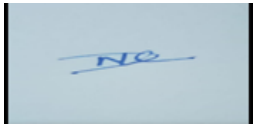
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: NUMISMATICS	Definition and History of Indian Numismatics	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Ancient Indian Coinage: Punch-Marked, Satavahana, Western Kshatrapas, Kushana and Gupta Coins	04		
	Contribution of Numismatics to Indian History	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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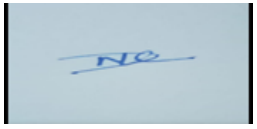
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: VI MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE TO INFORM THE STUDENTS ABOUT THE ROLE OF MUSEUMS IN THE PRESERVATION OF HERITAGE. TO UNDERSTAND THE IMPORTANCE OF ARCHIVAL SCIENCE IN THE STUDY OF HISTORY. TO ENCOURAGE STUDENTS TO PURSUE CAREERS IN VARIOUS MUSEUMS AND ARCHIVES IN INDIA AND ABROAD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY VI: : INTRODUCTION TO MUSEOLOGY AND	Definition of Museology, Museum Movement in India	04	Puratav Shastra Va Vastusangrahlay By	1. Chalk & Duster
	Role of the Curator	04		



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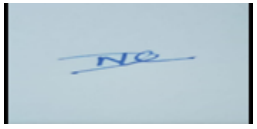
ARCHIVAL SCIENCE **MODULE I: MUSEOLOGY**			Samel, Nabar	
	Types of Museums	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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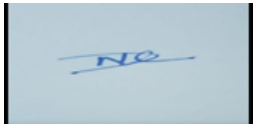
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
MODULE II: MUSEUMS	Methods of Collection and Conservation of Objects in Museums	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Preservation Techniques and Types of Exhibitions	04		
	Changing Role of Museums: In-house and Out-reach activities of Museums	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED



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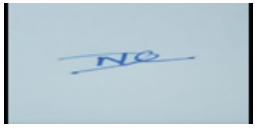
MODULEI II: ARCHIVAL SCIENCE	Meaning, Scope, Objectives and Classes of Archives	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Importance of Archives: Value of Records as Sources of History	04		
	Classification of Records	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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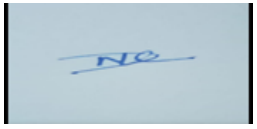
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: MANAGEMENT OF ARCHIVES	Appraisal and Retention of Records (b) (c)	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Conservation and Preservation of Records	04		
	Digital Archives	04		



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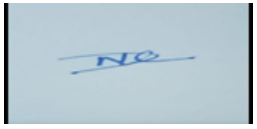

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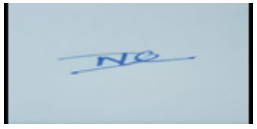

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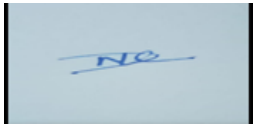

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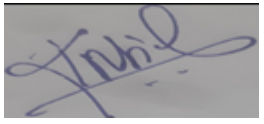
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani **DEPARTMENT: HISTORY/ARTS** **CLASS: SYBA**

SEMESTER: III **MONTH: June to October** **ACADEMIC YEAR 2019-20**

LEARNING OBJECTIVE/S: The learners will be able to : To enable the students to think critically, understand their past and develop interest in historical matters.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Ancient India Module 1 Sources of Ancient India and their importance	a. Archaeological b. Literary c. Foreign travellers	12	Dr. Eugene D'Souza: Ancient India	Lecture method Interactive method
Module 2 Indus Valley Civilization	a. Social and economic life b. Religious life c. Town planning and decline of the civilization	12		



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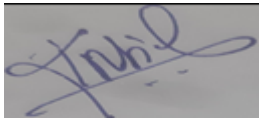
Module 3 Vedic Age	a. Janapada b. Social and economical life c. Religion	12		
Module 4 India after 6 century B.C	a. Administration of mahajanapadas b. Jainism & Buddhism c. Persian & Greek invasions	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 EACH



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani **DEPARTMENT: HISTORY/ARTS** **CLASS: SYBA**

SEMESTER: IV **MONTH: December to February** **ACADEMIC YEAR 2019-20**

LEARNING OBJECTIVE/S: The learners will be able to : To enable the students to think critically, understand their past and develop interest in historical matters.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Ancient India Module 1 Mauryan and post mauryan period	A. Chandragupta and Ashoka B. Mauryan Administration C. Post Mauryan Dynasties- Sungas, Kushana and Satavahans	12	Dr. Eugene D'Souza: Ancient India	Lecture method Interactive method
the Module 2 Gupta Age	A. Imperial Expansion: Chandragupta 1, Samudragupta and Chandragupta II. B. Administration C. Classical Age	12		
Module 3 Post Gupta period	A. The age of Harshvardhan B. The rise of Rajputs C. Arab Invasion of Sind	12		

Module 4 Major Dynasties of Deccan and South India	A. Chalukyas of Badami and Rashtrakutas B. Pallavas and Cholas C. Spread of Indian Culture in South East Asia	12		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani **DEPARTMENT: HISTORY ARTS** **CLASS: TYBA**

SEMESTER: V **MONTH: June to October** **ACADEMIC YEAR 2019-20**

LEARNING OBJECTIVE/S: The learners will be able to : To enable the students To analyze archaeological artifacts as a source of information about other cultures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Archaeology Module 1 Aims and methods of archaeology	A. Definition, aims & development of archaeology Archaeology and History, and other sciences. B. Field archaeology; Methods of exploration, excavation and dating antiquities; significance of archaeology.	12	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Archaeology	Lecture method Discussion method
Module 2 Prehistoric, proto-historic and early historical period.	A. Palaeolithic and Mesolithic Period B. Neolithic and Chalcolithic Period C. Megalithic and Early Historical Period	12		
Module 3 Epigraphy	A. Definition and History of Indian Epigraphy. B. Types of Inscriptions and their significance C. Evolution of Brahmi & Kharosthi script; Edits of Ashoka.	12		

Module 4 Numismatics	A. Definition and History of Indian Numismatics B. Ancient Indian Coinage: Panch- marked, Satavahana, Western Kshatrapas, Kushanas and Gupta coins C. Contribution of Numismatics to Indian History	12		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani **DEPARTMENT:HISTORY/ ARTS** **CLASS: TYBA**

SEMESTER: VI **MONTH: December to February** **ACADEMIC YEAR 2019-20**

LEARNING OBJECTIVE/S: The learners will be able to : To take up the responsibility for preserving an object or heritage and making it accessible.To survey, acquire and scientifically preserve records of historical values from autonomous bodies, private institutions and individuals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Museology and Archival Science Module 1 Museology	A. Definition of Museology, museum movement in India. B. Role of curator C. Types of Museums.	12	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Museology & Archival Science	Lecture method Discussion method
Module 2 Museum s	A. Methods of collection and conservation of objects in museums. B. Preservation techniques and types of exhibitions. C. Changing roles of museums: In-house and out-reach activities of museums.	12		
Module 3 Archival Science	A. Meaning, scope, objectives and classes of archives. B. Importance of archives : Value of record as a source of history. C. Classification of records	12		
Module 4 Management of Archives	A. Appraisal and retention of records. B. Conservation and preservation of records. C. Digital archives	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 EACH

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA ENGLISH**

SEMESTER: I MONTH: **AUGUST TO OCTOBER** ACADEMIC YEAR: **2019 - 2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENCE**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA **MODULE I:** GROWTH OF POLITICAL	Revolt of 1857- Causes & Consequences	04	Modern India By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions
	Contribution of Political Associations	04		
	Foundation of Indian National Congress	04		

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AWAKENING				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: TRENDS IN INDIAN NATIONALISM	Moderates	04	Modern India By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions
	Extremists	04		
	Revolutionary Nationalist	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: GANDHIAN MOVEMENTS	Non Cooperation Movement	04	Modern India By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions
	Civil Disobedience Movement	04		
	Quit India Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE SOCIO-ECONOMIC IMPACT OF BRITISH RULE ON INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA: SOCIETY & ECONOMY **MODULE I:** SOCIO-RELIGIOUS REFORM MOVEMENT	Brahmo Samaj, Arya Samaj, Ramkrishna Mission	04	Modern India: Society & Economy By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Sathyashodak Samaj, Aligarh Movement, Singh Sabha	04		
	Impact of Reform movements on Indian Society	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: EDUCATION, PRESS & TRANSPORT	Introduction to Western Education & its Impact	04	Modern India: Society & Economy By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Development Of Press	04		
	Transport & Communication	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: IMPACT OF BRITISH RULE ON	Revenue Settlements & Commercialisation of Agriculture	04	Modern India: Society & Economy	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Drain Theory	04		

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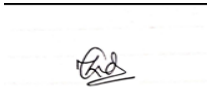
INDIAN ECONOMY	Deindustrialisation & Growth of Large Scale Industries	04	By Dr. Eugene D'souza	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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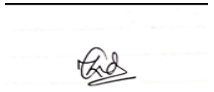
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA ENGLISH**

SEMESTER: III MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR: **2019 - 2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO LEARN THE VARIOUS HUMAN RIGHTS GIVEN TO THE SOCIETY, VARIOUS BRANCHES OF ECOLOGY, HISTORY OF SCIENCE AND EFFECTIVE COMMUNICATION SKILLS. THIS PAPER GIVES A BRIEF OVERVIEW OF THE IMPORTANT ASPECTS OF THE GLOBAL SOCIETY**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE III	Scheduled Castes – Constitutional & Legal Rights, Violations& Redressal Mechanisms	02	**FOUNDATION COURSE III** BY	1. CHALK & DUSTER 2. GROUP DISCUSSIONS 3. DEBATES
	Sheduled Tribes– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		



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UNIT : I HUMAN RIGHTS VIOLATIONS & REDRESSAL	Women– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02	MICHEAL VAS & AURORA VAZ	4. POWERPOINT PRESENTATION 5. SHORTFILM MAKING ON SOCIAL ISSUES
	Children– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Disabilities Minorities, Elderly Persons– Constitutional & Legal Rights, Violations& Redressal Mechanisms	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :II DEALING WITH ENVIRONMENTAL CONCERNS	Concept Of Disasters And General Effects Of Disasters On Human Life	03	**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA VAZ	1. CHALK & DUSTER 2. GROUP DISCUSSIONS 3. DEBATES 4. POWERPOINT PRESENTATION 5. SHORTFILM MAKING ON SOCIAL ISSUES
	Local Case Studies Of Environmental Disasters	02		
	Dealing With Disasters: Prevention, Mitigation, Disaster Preparedness	03		
	Human Rights Issues And Violations In Addressing Disasters	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Development Of Science: Ancient Culture, Classical Era, Middle Ages, Renaissance, Age Of Enlightment	03	**FOUNDATION COURSE III**	1. CHALK & DUSTER 2. GROUP DISCUSSIONS

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UNIT :III SCIENCE & TECHNOLOGY I	Nature Of Science : Principles, Characteristics, Theories & Practical's	02	BY MICHEAL VAS & AURORA VAZ	3. DEBATES 4. POWERPOINT PRESENTATION 5. SHORTFILM MAKING ON SOCIAL ISSUES
	Science & Superstition: Exploding Myths, Blind Beliefs, Prejudices. Building Scientific Temper	03		
	Science In Everyday Life : Science & Technology Inter Relation And Distinction	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV: SOFT SKILLS FOR INTERPERSONAL COMMUNICATION	PART A: • Verbal And Non Verbal Communication • Listening Skills • Barriers In Effective Communication • Importance Of Body Language	03	**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA VAZ	1. CHALK & DUSTER 2. GROUP DISCUSSIONS 3. DEBATES 4. POWERPOINT PRESENTATION 5. SHORTFILM MAKING ON SOCIAL ISSUES
	PART B: Formal & Informal Communication Writing Skills Group Discussions Interviews	04		

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	Presentations:			
	PART C : • Leadership Skills • Self Improvement Skills • Team Building	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA ENGLISH**

SEMESTER: IV MONTH: **DECEMBER TO FEBRUARY** ACADEMIC YEAR: **2019 - 2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE VARIOUS POWERS AND RIGHTS GRANTED TO THEM AS INDIAN CITIZENS, LEARN THE VARIOUS ENVIRONMENTAL PRINCIPLES ALONG WITH LATEST TECHNOLOGIES IN SCIENCE. LASTLY STUDENTS WILL ALSO BE GIVEN A QUICK INSIHT INTO COMPETITIVE EXAMS TO GET ENTRY INTO HIGHER DEGREES & GOVERNMENT JOBS, THEIR PAPER PATTERN ELIGIBILITY & TEST CENTERS**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE IV	Consumer Rights: Provisions, Violations, Consumer Courts & Movements	03	**FOUNDATION COURSE IV** BY	1. CHALK & DUSTER 2. GROUP DISCUSSIONS 3. DEBATES
	Right To Information: Genesis, Provisions Of RTI Act 2015, Success Stories	03		

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UNIT : I SIGNIFICANT CONTEMPERORY RIGHTS OF CITIZENS	Public Interest Litigation, Provisions, Procedure to File, Landmark Cases	03	MICHEAL VAS & AURORA VAZ	4. POWERPOINT PRESENTATION 5. PUBLIC SURVEYS
	Citizen's Charter, Public Service Guarantee Act	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :II APPROACHES TO UNDERSTANDING ECOLOGY	Scope Of Ecology, Anthropocentrism, Bio-Centrism, Eco-Centrism, Eco –Feminism & Deep Ecology	03	**FOUNDATION COURSE IV** BY MICHEAL VAS & AURORA VAZ	1. CHALK & DUSTER 2. GROUP DISCUSSIONS 3. DEBATES 4. POWERPOINT PRESENTATION 5. PUBLIC SURVEYS
		04		
	Environmental Principles Ii: Equity Principle, Human Rights Principle, Participation Principle	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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UNIT :III SCIENCE & TECHNOLOGY II	PART A: Modern Technologies: • Laser Technology • Satellite Technology • Information & Communication Technology • Nano Technology • Biotechnology	07	**FOUNDATION COURSE IV** BY MICHEAL VAS & AURORA VAZ	1. CHALK & DUSTER 2. GROUP DISCUSSIONS 3. DEBATES 4. POWERPOINT PRESENTATION 5. SHORTFILM MAKING ON SOCIAL ISSUES
	PART B: Issues Of Control, Access & Misuse Of Technology	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

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Late Shri. Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts VIVA COLLEGE, Virar (W)

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV: INRODUCTION TO COMPETITIVE EXAMS	PART A: Basic Introduction To Competitive Exams. Paper Pattern, Eligibility Criteria, Local Centres ● Examinations Conducted For Entry In Professional Courses ● Examinations Conducted for entry into government jobs	04	**FOUNDATION COURSE IV** BY MICHEAL VAS & AURORA VAZ	1. CHALK & DUSTER 2. GROUP DISCUSSIONS 3. DEBATES 4. POWERPOINT PRESENTATION 5. PUBLIC SURVEYS
	PART B: Soft Skills required for competitive exams Information on areas tested Motivation Goal Setting	07		

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	Time Management Writing skills:			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY **MODULE I:** THE MODERN AGE	Renaissance , Art, Architecture, Science & Literature	04	Landmarks In World History By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Geographical Discoveries, Vasco Da Gama, Christopher Columbus	04		
	Reformation & Counter Reformation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: AGE OF REVOLUTIONS	American Revolution	04	Landmarks In World History By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	French Revolution	04		
	Industrial Revolution	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: NATIONALISM & IMPERIALISM	Formation of Nation States in Europe	04	Landmarks In World History By Dr. Eugene	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Nationalist Movements in Italy & Germany	04		

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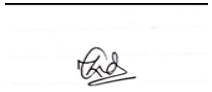
	Imperialist Expansion in Asia	04	D'souza	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV: WORLD IN TRANSITIO N	World War I	04	Landmarks In World History By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Russian Revolution	04		
	League of Nations	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY **MODULE I:** INTER WAR PERIOD	Kemal Pasha & Modernisation of Turkey	04	Landmarks In World History By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Reza Shah Pahlavi & Reforms in Iran	04		
	Birth of Israel	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: RISE OF DICTATORSHIP	Fascism & Benito Mussolini	04	Landmarks In World History By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Nazism & Adolf Hitler	04		
	Militarism in Japan	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III:	World War II Cause, Effects & Consequences	04	Landmarks In World History	1. Chalk & Duster 2. Maps

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WORLD WAR II	Atlantic Charter	04	By Dr. Eugene D'souza	3. Discussions 4. Documentaries & movies
	United Nations Organisation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV: NATIONALISTS MOVEMENTS IN ASIA	Dr. Sun Yat Sen & China	04	Landmarks In World History By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Mahatma Gandhi & India	04		
	Dr. Sukarno & Indonesia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Late Shri. Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts VIVA COLLEGE, Virar (W)

NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA **MODULE I: FOUNDATION EXPANSION & DECLINE OF DELHI SULTANATE**	Socio-Economic & Political conditions on the eve of Turkish Invasions	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Rise and Decline of Slave Dynasty • Khilji Dynasty	04		
	• Tughlaq Dynasty • Sayyid Dynasty • Lodi Dynasty	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Late Shri. Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts VIVA COLLEGE, Virar (W)

NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: ADMINISTRATIVE STRUCTURE OF THE SULTANATE	• Central Administration • Iqta System	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Administrative & Military Reforms of Alauddin Khilji	04		
	• Reforms of Firoz Shah Tughlaq • Reforms of Mohammad Bin Tughlaq	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: EMERGENCE	Rise, Growth & Decline of the Vijaynagar Empire & Bahamani Kingdom	04	Medieval India 1000CE	1. Chalk & Duster 2. Maps

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OF THE VIJAYNAGAR & BAHAMANI KINGDOMS	Administrative Socio-Economic & Cultural Conditions of the Vijaynagar Empire	04	to 1526CE By Dr. Eugene D'souza	3. Discussions 4. Documentaries & movies
	Administrative Socio-Economic & Cultural Conditions of the Bahamani Kingdom	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	Socio-Economic & Religious Life	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Late Shri. Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts VIVA COLLEGE, Virar (W)

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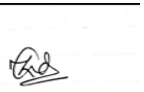
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: VI MONTH: **DECEMBER TO FEBRUARY** ACADEMIC YEAR **2019 - 2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THEMSELVES WITH THE HISTORY OF INDIA SINCE THE EMERGENCE OF THE MUGHAL RULE. TO UNDERSTAND ADMINISTRATION OF THE MUGHAL EMPIRE. TO STUDY THE RISE OF THE MARATHA POWER**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA **MODULE I: FOUNDATION**	• India on the Eve of Mughal Rule: • Invasion of Babur	04	Medieval India 1526CE to 1707CE By Dr. Eugene	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies



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EXPANSION & DECLINE OF MUGHAL RULE	• Humayun • Sher Shah • Akbar	04	D'souza	
	• Jehangir • ShahJahan • Aurangzeb	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Late Shri. Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts VIVA COLLEGE, Virar (W)

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: ADMINISTRATIVE STRUCTURE OF THE MUGHALS	• Central Administration • Provincial Administration	04	Medieval India 1526CE to 1707CE By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Mansabdari System .	04		
	• Judicial System • Revenue System	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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MODULEIII: RISE OF THE MARATHA POWER	• Shivaji & Foundation of Swarajya	04	Medieval India 1526CE to 1707CE By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Administration of Shivaji •	04		
	• Sambhaji • Raja ram • Tarabai	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Late Shri. Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts VIVA COLLEGE, Virar (W)

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	• Society • Economy	04	Medieval India 1526CE to 1707CE By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Religion • Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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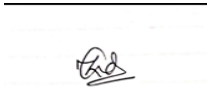
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: V MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR: **2019 - 2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH REGIONAL HISTORY OF MAHARASHTRA TO UNDERSTAND POLITICAL AND SOCIO-ECONOMIC DEVELOPMENTS DURING THE 19TH AND 20TH CENTURIES TO CREATE UNDERSTANDING OF THE MOVEMENT THAT LED TO THE FORMATION OF MAHARASHTRA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: HISTORY OF MODERN MAHARASHTR	Socio-Economic Conditions in Maharashtra in the 19th Century	04	History Of Modern Maharashtra	1. Chalk & Duster 2. Maps



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A **MODULE I: BEGINNING OF BRITISH RULE**	• Administration • Judiciary	04	(1818CE – 1960CE) By Dr. Eugene D'souza	3. Discussions 4. Documentaries & movies
	• Tribal Uprisings • Peasant Movements	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Late Shri. Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts VIVA COLLEGE, Virar (W) NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: SOCIO-ECONOMIC AWAKENING	Mahatma Jyotirao Phule - Sathyashodak Samaj & Universal Humanism	04	History Of Modern Maharashtra (1818CE – 1960CE) By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Prarthana Samaj	04		
	Contribution of thinkers of Maharashtra to Economic Nationalism	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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MODULEIII: POLITICAL DEVELOPMENTS IN MAHARASHTRA 1885-1960	• Moderates • Extremists • Revolutionary Nationalists	04	History Of Modern Maharashtra (1818CE – 1960CE) By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Response to Gandhian Movements in Maharashtra	04		
	Samyukta Maharshtra Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGENCE OF NEW FORCES	Contribution of reformers towards Education	04	History Of Modern Maharashtra (1818CE – 1960CE) By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Contribution of Reformers towards Women's Education	04		
	Contribution of Reformers to the Upliftment of the Depressed Classes	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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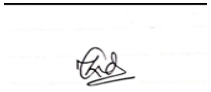
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: VI MONTH: **DECEMBER TO FEBRUARY** ACADEMIC YEAR: **2019 - 2020**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE PROCESS OF MAKING THE CONSTITUTION AND THE INTEGRATION AND REORGANIZATION OF INDIAN STATES. TO ACQUAINT THE STUDENTS WITH THE POLITICAL DEVELOPMENTS IN INDIA AFTER INDEPENDENCE. TO COMPREHEND THE SOCIO-ECONOMIC CHANGES AND PROGRESS IN SCIENCE AND TECHNOLOGY IN INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: : HISTORY OF CONTEMPORARY	Features Of The Indian Constitution	04	: History Of Contemporar	1. Chalk & Duster



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INDIA **MODULE I: THE NEHRU ERA 1947-1964**	• Integration of States • Reorganisation of States	04	y India (1947-2000) By Dr. Eugene D'souza	2. Maps 3. Discussions 4. Documentaries & movies
	• Socio-economic reforms • Foreign policy	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: POLITICAL ECONOMIC SOCIAL DEVELOPMENTS 1964-1984	• Political Developments After Nehru • Green Revolution	04	: History Of Contemporary India (1947-2000) By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Abolition of Privy Purses • Nationalisation of Banks • Emergence	04		
	• Janata Government • Return of Congress • Foreign Policy	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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MODULEIII: POLITICAL ECONOMIC SOCIAL DEVELOPMENTS **1984-2000**	• Political Developments • Relations with Foreign Countries •	04 04	: History Of Contemporary India (1947-2000) By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Globalisation • Liberalisation • Privatisation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGING TRENDS	• Communalism • Seperatists Movements	04	: History Of Contemporary India (1947-2000) By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Empowerment of Women • Policy of Reservation	04		
	• Science • Technology • Education	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA**

SEMESTER: I MONTH: **AUGUST TO OCTOBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENCE**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA **MODULE IV:** TOWARDS INDEPENDENCE & PARTITION	Indian Act Of 1935	04	Modern India By Dr. Eugene D'souza Adhunik Bharatacha Ithihas By Suman Vaidhy	1. Chalk & Duster
	Cripps Mission Cabinet Mission Mountbatten Plan	04		
	Indian Independence Act & Partition	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA**

SEMESTER: II MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE SOCIO-ECONOMIC IMPACT OF BRITISH RULE ON INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA: SOCIETY & ECONOMY **MODULE IV:** NATIONALISM & SOCIAL GROUPS	Women	04	Modern India: Society & Economy By Dr. Eugene D'souza Adhunik Bharatacha Ithihas By Suman Vaidhy	1. Chalk & Duster
	Dalit	04		
	Peasant & Tribals	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR.DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA**

SEMESTER: III MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY **MODULE I:** THE MODERN AGE	Renaissance , Art, Architecture, Science & Literature	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	Geographical Discoveries, Vasco Da Gama, Christopher Columbus	04		
	Reformation & Counter Reformation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: AGE OF REVOLUTIONS	American Revolution	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	French Revolution	04		
	Industrial Revolution	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: NATIONALISM & IMPERIALISM	Formation of Nation States in Europe	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	Nationalist Movements in Italy & Germany	04		
	Imperialist Expansion in Asia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV: WORLD IN TRANSITION	World War I	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	Russian Revolution	04		
	League of Nations	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA**

SEMESTER: IV MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY **MODULE I:** INTER WAR PERIOD	Kemal Pasha & Modernisation of Turkey	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	Reza Shah Pahlavi & Reforms in Iran	04		
	Birth of Israel	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: RISE OF DICTATORSHIP	Fascism & Benito Mussolini	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	Nazism & Adolf Hitler	04		
	Militarism in Japan	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: WORLD WAR II	World War II Cause, Effects & Consequences	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	Atlantic Charter	04		
	United Nations Organisation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV: NATIONALISTS MOVEMENTS IN ASIA	Dr. Sun Yat Sen & China	04	Adhunik Jag By Joshi P J S.G Kolarkar	1. Chalk & Duster
	Mahatma Gandhi & India	04		
	Dr. Sukarno & Indonesia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR.DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA**

SEMESTER: III MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THE STUDENTS WITH DIFFERENT SOURCES OF ANCIENT INDIAN HISTORY.TO ENABLE THE STUDENTS TO UNDERSTAND THE POLITICAL, SOCIO-ECONOMIC AND CULTURAL DEVELOPMENTS IN THE PERIOD UNDER STUDY AND APPRECIATE THE RICH CULTURAL HERITAGE IN INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY III: ANCIENT India EARLIEST TIMES TO 1000AD **MODULE I:** SOURCES OF ANCIENT INDIA AND THEIR IMPORTANCE	Archaeological	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Literary	04		
	Foreign Travellers	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: INDUS VALLEY CIVILIZATION	Social and Economic Life	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Religious Life	04		
	Town Planning and Decline of the Civilization	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: VEDIC AGE	Janapada	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Social and Economic Life	04		
	Religion	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: INDIA AFTER 6TH CENTURY BC	Administration of Mahajanapadas Century B.C.	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Jainism and Buddhism	04		
	Persian and Greek Invasions	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA**

SEMESTER: IV MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THE STUDENTS WITH DIFFERENT SOURCES OF ANCIENT INDIAN HISTORY.TO ENABLE THE STUDENTS TO UNDERSTAND THE POLITICAL, SOCIO-ECONOMIC AND CULTURAL DEVELOPMENTS IN THE PERIOD UNDER STUDY AND APPRECIATE THE RICH CULTURAL HERITAGE IN INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: ANCIENT India EARLIEST TIMES TO 1000AD **MODULE I:** MAURYAN AND POST- MAURYAN PERIOD (322 B.C. TO 320 A.D.)	Chandragupta and Ashoka	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Mauryan Administration	04		
	Post Mauryan Dynasties- Sungas, Kushanas and Satavahanas	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: GUPTA AGE (320 A.D. TO 600 A.D.)	Imperial Expansion: Chandragupta I, Samudragupta and Chandragupta II	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Administration	04		
	Classical Age	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: :POST GUPTA PERIOD (600A.D. TO 1000A.D.)	The Age of Harshavardhan	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	The Rise of Rajputs	04		
	Arab Invasion of Sind	04		

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MODULEIV: MAJOR DYNASTIES OF DECCAN AND SOUTH INDIA	Chalukyas of Badami and Rashtrakutas	04	Prachin Bharatacha Ithihas By N C Dikshit	1. Chalk & Duster
	Mahatma Gandhi & Ind Pallavas and Cholas ia	04		
	Spread of Indian Culture in South-East Asia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: V MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH THE HISTORY OF EARLY MEDIEVAL INDIA THAT LAID THE FOUNDATION OF THE SULTANATE IN INDIA. TO STUDY THE CONTRIBUTION OF VIJAYNAGAR AND BAHAMANI KINGDOMS TO MEDIEVAL INDIAN HISTORY. AND TO EXAMINE THE ADMINISTRATIVE, SOCIO-ECONOMIC AND CULTURAL ASPECTS OF MEDIEVAL INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA **MODULE I: FOUNDATION EXPANSION & DECLINE OF DELHI SULTANATE**	Socio-Economic & Political conditions on the eve of Turkish Invasions	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Rise and Decline of Slave Dynasty • Khilji Dynasty	04		
	• Tughlaq Dynasty • Sayyid Dynasty • Lodi Dynasty	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: ADMINISTRATIVE STRUCTURE OF THE SULTANATE	• Central Administration • Iqta System	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Administrative & Military Reforms of Alauddin Khilji	04		
	• Reforms of Firoz Shah Tughlaq • Reforms of Mohammad Bin Tughlaq	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: EMERGENCE OF THE VIJAYNAGAR & BAHAMANI KINGDOMS	Rise, Growth & Decline of the Vijaynagar Empire & Bahamani Kingdom	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	Administrative Socio-Economic & Cultural Conditions of the Vijaynagar Empire	04		
	Administrative Socio-Economic & Cultural Conditions of the Bahamani Kingdom	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	Socio-Economic & Religious Life	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: VI MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THEMSELVES WITH THE HISTORY OF INDIA SINCE THE EMERGENCE OF THE MUGHAL RULE. TO UNDERSTAND ADMINISTRATION OF THE MUGHAL EMPIRE. TO STUDY THE RISE OF THE MARATHA POWER**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA **MODULE I: FOUNDATION EXPANSION & DECLINE OF MUGHAL RULE**	• India on the Eve of Mughal Rule: • Invasion of Babur	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Humayun • Sher Shah • Akbar	04		
	• Jehangir • ShahJahan • Aurangzeb	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: ADMINISTRATIVE STRUCTURE OF THE MUGHALS	• Central Administration • Provincial Administration	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Mansabdari System •	04		
	• Judicial System • Revenue System	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: RISE OF THE MARATHA POWER	• Shivaji & Foundation of Swarajya	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Administration of Shivaji •	04		
	• Sambhaji • Raja ram • Tarabai	04		

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	• Society • Economy	04	Madhya Yugin Bharat By S G Kolarkar	1. Chalk & Duster
	• Religion • Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: V MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH REGIONAL HISTORY OF MAHARASHTRA TO UNDERSTAND POLITICAL AND SOCIO-ECONOMIC DEVELOPMENTS DURING THE 19TH AND 20TH CENTURIES TO CREATE UNDERSTANDING OF THE MOVEMENT THAT LED TO THE FORMATION OF MAHARASHTRA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: HISTORY OF MODERN MAHARASHTRA **MODULE I: BEGINNING OF BRITISH RULE**	Socio-Economic Conditions in Maharashtra in the 19th Century	04	Adhunik Maharashtra By Prakash Javdadekar	1. Chalk & Duster
	• Administration • Judiciary	04		
	• Tribal Uprisings • Peasant Movements	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: SOCIO-ECONOMIC AWAKENING	Mahatma Jyotirao Phule - Sathyashodak Samaj & Universal Humanism	04	Adhunik Maharashtra By Prakash Javdadekar	1. Chalk & Duster
	Prarthana Samaj	04		
	Contribution of thinkers of Maharashtra to Economic Nationalism	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: POLITICAL DEVELOPMENTS IN MAHARASHTRA 1885-1960	• Moderates • Extremists • Revolutionary Nationalists	04	Adhunik Maharashtra By Prakash Javdadekar	1. Chalk & Duster
	Response to Gandhian Movements in Maharashtra	04		
	Samyukta Maharshtra Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGENCE OF NEW FORCES	Contribution of reformers towards Education	04	Adhunik Maharashtra By Prakash Javdadekar	1. Chalk & Duster
	Contribution of Reformers towards Women's Education	04		
	Contribution of Reformers to the Upliftment of the Depressed Classes	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: VI MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE PROCESS OF MAKING THE CONSTITUTION AND THE INTEGRATION AND REORGANIZATION OF INDIAN STATES. TO ACQUAINT THE STUDENTS WITH THE POLITICAL DEVELOPMENTS IN INDIA AFTER INDEPENDENCE. TO COMPREHEND THE SOCIO-ECONOMIC CHANGES AND PROGRESS IN SCIENCE AND TECHNOLOGY IN INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: : HISTORY OF CONTEMPORARY INDIA **MODULE I: THE NEHRU ERA 1947-1964**	Features Of The Indian Constitution	04	Adhunik Bharat By Suman Vaidhya	1. Chalk & Duster
	• Integration of States • Reorganisation of States	04		
	• Socio-economic reforms • Foreign policy	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: POLITICAL ECONOMIC SOCIAL DEVELOPMENTS 1964-1984	• Political Developments After Nehru • Green Revolution	04	Adhunik Bharat By Suman Vaidhya	1. Chalk & Duster
	• Abolition of Privy Purses • Nationalisation of Banks • Emergence	04		
	• Janata Government • Return of Congress • Foreign Policy	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: POLITICAL ECONOMIC SOCIAL DEVELOPMENTS 1984-2000	• Political Developments	04	Adhunik Bharat By Suman Vaidhya	1. Chalk & Duster
	• Relations with Foreign Countries •	04		
	• Globalisation • Liberalisation • Privatisation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGING TRENDS	• Communalism • Seperatists Movements	04	Adhunik Bharat By Suman Vaidhya	1. Chalk & Duster
	• Empowerment of Women • Policy of Reservation	04		
	• Science • Technology • Education	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: V MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE BASIC FACETS OF ARCHAEOLOGY. TO EVALUATE THE IMPORTANCE OF EPIGRAPHY. TO STUDY THE IMPORTANCE OF NUMISMATICS AS AN IMPORTANT SOURCE OF HISTORY.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY VI: INTRODUCTION TO ARCHAEOLOGY **MODULE I: AIMS AND METHODS OF ARCHAEOLOGY**	Definition, Aims and Development of Archaeology in India	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Archaeology and History; Archaeology and Other Sciences	04		
	Field Archaeology: Methods of Exploration, Excavation and Dating Antiquities; Significance of Archaeology	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: PRE-HISTORIC, PROTO-HISTORIC AND EARLY HISTORICAL PERIODS	Palaeolithic and Mesolithic Periods	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar ar	1. Chalk & Duster
	Neolithic and Chalcolithic Periods	04		
	Megalithic and Early Historical Periods	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: EPIGRAPHY	Definition and History of Indian Epigraphy	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Types of Inscriptions and their significance	04		
	Evolution of Brahmi and Kharosthi Scripts; Edicts of Ashoka	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: NUMISMATICS	Definition and History of Indian Numismatics	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Ancient Indian Coinage: Punch-Marked, Satavahana, Western Kshatrapas, Kushana and Gupta Coins	04		
	Contribution of Numismatics to Indian History	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR DIPALI CHOUDHARY** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA**

SEMESTER: VI MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE TO INFORM THE STUDENTS ABOUT THE ROLE OF MUSEUMS IN THE PRESERVATION OF HERITAGE. TO UNDERSTAND THE IMPORTANCE OF ARCHIVAL SCIENCE IN THE STUDY OF HISTORY. TO ENCOURAGE STUDENTS TO PURSUE CAREERS IN VARIOUS MUSEUMS AND ARCHIVES IN INDIA AND ABROAD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY VI: : INTRODUCTION TO MUSEOLOGY AND ARCHIVAL SCIENCE **MODULE I: MUSEOLOGY**	Definition of Museology, Museum Movement in India	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Role of the Curator	04		
	Types of Museums	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: MUSEUMS	Methods of Collection and Conservation of Objects in Museums	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Preservation Techniques and Types of Exhibitions	04		
	Changing Role of Museums: In-house and Out-reach activities of Museums	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: ARCHIVAL SCIENCE	Meaning, Scope, Objectives and Classes of Archives	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Importance of Archives: Value of Records as Sources of History	04		
	Classification of Records	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: MANAGEMENT OF ARCHIVES	Appraisal and Retention of Records (b) (c)	04	Puratav Shastra Va Vastusangrahlay By Samel, Nabar	1. Chalk & Duster
	Conservation and Preservation of Records	04		
	Digital Archives	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(MARATHI -DIV-A)**

SEMESTER: I MONTH: **AUGUST TO OCTOBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE DIVERSE COMPOSITION OF THE INDIAN SOCIETY.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE I **UNIT : I** OVERVIEW OF THE INDIAN SCIETY	Understand the Multicultural diversity of Indian Society	01	**FOUNDATION COURSE I** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & duster
	Demographic Composition Population based on Religion, Caste & Gender	01		
	Concept of Linguistic Diversity	01		
	Understand Regional Variations – Rural, Urban & Tribal	01		
	Understanding the Concept of Diversity as a Difference	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05 Lectures

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :II CONCEPT OF DISPARITY I	Concept of Disparity of Indian ,Stratifications And Inequality- Caste, Class & Estate System	03	**FOUNDATION COURSE I** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & duster
	Gender Disparities Especially problems related to Women	03		
	Disparities faced by People with Disabilities - Physical & Mental	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :III CONCEPT OF DIPARITY II	Examine inequalities Disparities due to Caste System and inter Group Conflicts	03	**FOUNDATION COURSE I** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	Disparities based on inter group conflicts such as communalism	03		
	Causes & Effects of Conflicts arising out of Regionalism & Linguism	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :IV THE INDIAN CONSTITUTION	The Constitution as set out in the Preamble	03	**FOUNDATION COURSE I** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	The Structure of the Constitution	03		
	Fundamental Duties of the Indian Citizen	02		
	Basic Feature of the Constitution	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :V SIGNIFICANT ASPECTS OF POLITICAL PROCESSES	The Party System in India Politics	03	**FOUNDATION COURSE I** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	Local Self Government in Urban Rural Areas	03		
	The 73rd and 74th Amendments and Their Implication for Inclusive Politics	02		
	Role and Significance of Women in Politcs	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(MARATHI -DIV-A)**

SEMESTER: II MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO LEARN HOW TO MANAGE THE ENVIRONMENT, PERSONAL STRESS, CONFLICT AND AGGRESSION ISSUES**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE II **UNIT : I** GLOBALISATION AND INDIAN SOCIETY	The concept of Liberalization, Privatization And Globalisation	02	**FOUNDATION COURSE II** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	Information Technology and Communication and Its Impact	02		
	Changes in Agrarian Sector due to globalisation	02		
	Rise in Corporate farming and increase in farmer Suicides	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :II HUMAN RIGHTS	Concept of Human Right origin & Evolution of the Concept	02	**FOUNDATION COURSE II** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	The Universal Declaration of Human Rights	02		
	Human Rights Constituents.	03		
	Special reference to Fundamental rights stated in the Constitution	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :III ECOLOGY	Importance of Environment Studies in the current developmental context	03	**FOUNDATION COURSE II** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	Concept of Environment Ecology and their inter-connectedness	02		
	Environmental Degradation – Causes and Impact on Human life	03		
	Sustainable development Concept and Components	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :IV UNDERSTANDING STRESS AND CONFLICT	Causes of Stress & Conflict on Individuals in the Society	02	**FOUNDATION COURSE II** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1.Chalk & Duster
	Agents of Socialisation, Significance of Values & Ethics	02		
	Stereotyping & Prejudice as Significant factors causing stress & Conflicts	03		
	Aggression & Violence as Public expression of Conflict	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :V MANAGING STRESS AND CONFLICT	Types of Conflicts and Coping Mechanisms	03	**FOUNDATION COURSE II** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1.Chalk & Duster
	Maslow's Theory of Self Actualisation	02		
	Different Methods of Responding to Conflict	03		
	Efforts towards building Peace & Harmony in the Society	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(MARATHI -DIV-A& B)**

SEMESTER: I MONTH: **AUGUST TO OCTOBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENCE**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA **MODULE I:** GROWTH OF POLITICAL AWAKENING	(A) Revolt of 1857- Causes & Consequences	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	1. Chalk & Duster
	(B) Contribution of Political Associations	04		
	(C) Foundation of Indian National Congress	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: TRENDS IN INDIAN NATIONALISM	Moderates	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	1. Chalk & Duster
	Extremists	04		
	Revolutionary Nationalist	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODUL III: GANDHIAN MOVEMENTS	Non Co-operation Movement	04	Swtantra Bhartacha Itihas Dr.Suman Vaidya & Dr. Shanta Kothekar	1. Chalk & Duster
	Civil Disobedience Movement	04		
	Quit India Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS.JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(MARATHI -DIV-A& B)**

SEMESTER: II MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE SOCIO-ECONOMIC IMPACT OF BRITISH RULE ON INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA: SOCIETY & ECONOMY **MODULE I:** SOCIO-RELIGIOUS REFOEM MOVEMENT	Brahmo Samaj, Arya Samaj, Ramkrishna Mission	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh Swtantra Bhartacha Itihas Dr.Suman Vaidya & Dr. Shanta Kothekar	1. Chalk & Duster
	Sathyashodak Samaj, Aligarh Movement, Singh Sabha	04		
	Impact of Reform movements on Indian Society	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: EDUCATION, PRESS & TRANSPORT	Introduction to Western Education & its Impact	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	1. Chalk & Duster
	Development Of Press	04		
	Transport & Communication	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: IMPACT OF BRITISH RULE ON INDIAN ECONOMY	Revenue Settlements & Commercialisation of Agriculture	04	Modern India Aadhunik Bhartacha Itihas Prof. Jitendra Bhamreh	1. Chalk & Duster
	Drain Theory	04		
	Deindustrialisation & Growth of Large Scale Industries	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS.JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(MARATHI –DIV- B)**

SEMESTER: III MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO GET A BRIEF OVERVIEW OF THE IMPORTANT ASPECTS OF THE GLOBAL SOCIETY**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE III **UNIT : I** HUMAN RIGHTS VIOLATIONS & REDRESSAL	Scheduled Castes – Constitutional & Legal Rights, Violations& Redressal Mechanisms	02	**FOUNDATION COURSE III** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	Sheduled Tribes– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Women– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Children– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Disabilities Minorities, Elderly Persons– Constitutional & Legal Rights, Violations& Redressal Mechanisms	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :II DEALING WITH ENVIRONMENTAL CONCERNS	Concept Of Disasters And General Effects Of Disasters On Human Life	03	**FOUNDATION COURSE III** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	Local Case Studies Of Environmental Disasters	02		
	Dealing With Disasters: Prevention, Mitigation, Disaster Preparedness	03		
	Human Rights Issues And Violations In Addressing Disasters	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :III SCIENCE & TECHNOLOGY I	Development Of Science: Ancient Culture, Classical Era, Middle Ages, Renaissance, Age Of Enlightment	03	**FOUNDATION COURSE III** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghma	1. Chalk & Duster
	Nature Of Science : Principles, Characteristics, Theories & Practical's	02		
	Science & Superstition: Exploding Myths, Blind Beliefs, Prejudices. Building Scientific Temper	03		
	Science In Everyday Life : Science & Technology Inter Relation And Distinction	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV: SOFT SKILLS FOR INTERPERSONAL COMMUNICATION	PART A: • Verbal And Non Verbal Communication • Listening Skills • Barriers In Effective Communication • Importance Of Body Language	03	**FOUNDATION COURSE III** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	PART B: • Formal & Informal Communication • Writing Skills • Group Discussions • Interviews • Presentations:	04		
	PART C : • Leadership Skills • Self Improvement Skills • Team Building	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: : **MS.JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(MARATHI –DIV- B)**

SEMESTER: IV MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE VARIOUS POWERS AND RIGHTS GRANTED TO THEM AS INDIAN CITIZENS, A QUICK INSIHT INTO COMPETITIVE EXAMS TO GET ENTRY INTO HIGHER DEGREES & GOVERNMENT JOBS, THEIR PAPER PATTERN ELIGIBILITY & TEST CENTERS**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE IV **UNIT : I** SIGNIFICANT CONTEMPERORY RIGHTS OF CITIZENS	Consumer Rights: Provisions, Violations, Consumer Courts & Movements	03	**FOUNDATION COURSE IV** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	Right To Information: Genesis, Provisions Of RTI Act 2015, Success Stories	03		
	Public Interest Litigation, Provisions, Procedure to File, Landmark Cases	03		
	Citizen's Charter, Public Service Guarantee Act	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :II APPROACHES TO UNDERSTANDING ECOLOGY	Scope Of Ecology, Anthropocentrism, Bio-Centrism, Eco-Centrism, Eco –Feminism & Deep Ecology	03	**FOUNDATION COURSE IV** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	Environmental Principles I : Sustainability Principle, Polluter Pays Principle, Precautionary Principle	04		
	Environmental Principles Ii: Equity Principle, Human Rights Principle, Participation Principle	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :III SCIENCE & TECHNOLOGY II	PART A: Modern Technologies: • Laser Technology • Satellite Technology • Information & Communication Technology • Nano Technology • Biotechnology	07	**FOUNDATION COURSE IV** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	PART B: Issues Of Control, Access & Misuse Of Technology	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV: INRODUCTION TO COMPETITIVE EXAMS	PART A: Basic Introduction To Competitive Exams. Paper Pattern, Eligibility Criteria, Local Centres • Examinations Conducted For Entry In Professional Courses • Examinations Conducted for entry into government jobs	04	**FOUNDATION COURSE IV** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	PART B: Soft Skills required for competitive exams • Information on areas tested • Motivation • Goal Setting • Time Management • Writing skills:	07		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(MARATHI –DIV- B)**

SEMESTER: III MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY **MODULE I:** THE MODERN AGE	Renaissance , Art, Architecture, Science & Literature	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Aadhunik jag- Dr Suman Vaidya	1. Chalk & Duster
	Geographical Discoveries, Vasco Da Gama, Christopher Columbus	04		
	Reformation & Counter Reformation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: AGE OF REVOLUTIONS	American Revolution	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh America cha tihas- Dr.Shanta Kothekar	1. Chalk & Duster
	French Revolution	04		
	Industrial Revolution	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: NATIONALISM & IMPERIALISM	Formation of Nation States in Europe	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Aadhunik jag- Dr Suman Vaidya	1. Chalk & Duster
	Nationalist Movements in Italy & Germany	04		
	Imperialist Expansion in Asia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV: WORLD IN TRANSITION	World War I	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Aadhunik jag- Dr Suman Vaidya	1. Chalk & Duster
	Russian Revolution	04		
	League of Nations	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: : **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(MARATHI –DIV- B)**

SEMESTER: IV MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY **MODULE I:** INTER WAR PERIOD	Kemal Pasha & Modernisation of Turkey	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Aadhunik jag- Dr Suman Vaidya	1. Chalk & Duster
	Reza Shah Pahlavi & Reforms in Iran	04		
	Birth of Israel	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: RISE OF DICTATORSHIP	Fascism & Benito Mussolini	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Aadhunik jag- Dr Suman Vaidya	1. Chalk & Duster
	Nazism & Adolf Hitler	04		
	Militarism in Japan	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: WORLD WAR II	World War II Cause, Effects & Consequences	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Europ cha itihas – S.G.Kolalkar	1. Chalk & Duster
	Atlantic Charter	04		
	United Nations Organisation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV: NATIONALISTS MOVEMENTS IN ASIA	Dr. Sun Yat Sen & China	04	Jagachya Itihasatil Mahatvache Tappe- prof.Jitendra Bhamreh Aadhunik Bhartacha Itihas – Dr.N.A.Vakkani	1. Chalk & Duster
	Mahatma Gandhi & India	04		
	Dr. Sukarno & Indonesia	04		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: : **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(MARATHI –DIV- B)**

SEMESTER: III MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THE STUDENTS WITH DIFFERENT SOURCES OF ANCIENT INDIAN HISTORY.TO ENABLE THE STUDENTS TO UNDERSTAND THE POLITICAL, SOCIO-ECONOMIC AND CULTURAL DEVELOPMENTS IN THE PERIOD UNDER STUDY AND APPRECIATE THE RICH CULTURAL HERITAGE IN INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY III: ANCIENT India EARLIEST TIMES TO 1000AD **MODULE I:** SOURCES OF ANCIENT INDIA AND THEIR IMPORTANCE	Archaeological	04	Prachin Bharatacha Ithihas – Prof. Jitendra Bhamreh Prachin Bharat- Dr. S.G.Kolalkar	1. Chalk & Duster
	Literary	04		
	Foreign Travellers	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: INDUS VALLEY CIVILIZATION	Social and Economic Life	04	Prachin Bharatacha Ithihas – Prof. Jitendra Bhamreh Prachin Bharat- Dr. S.G.Kolalkar	1. Chalk & Duster
	Religious Life	04		
	Town Planning and Decline of the Civilization	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: VEDIC AGE	Janapada	04	Prachin Bharatacha Ithihas – Prof. Jitendra Bhamreh Prachin Bharat- Dr. S.G.Kolalkar	1. Chalk & Duster
	Social and Economic Life	04		
	Religion	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: INDIA AFTER 6TH CENTURY BC	Administration of Mahajanapadas Century B.C.	04	Prachin Bharatacha Ithihas – Prof. Jitendra Bhamreh Prachin Bharat- Dr. S.G.Kolalkar	1. Chalk & Duster
	Jainism and Buddhism	04		
	Persian and Greek Invasions	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: : **MS. JANHAVI PRAFULL NAIK** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(MARATHI –DIV- B)**

SEMESTER: IV MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THE STUDENTS WITH DIFFERENT SOURCES OF ANCIENT INDIAN HISTORY.TO ENABLE THE STUDENTS TO UNDERSTAND THE POLITICAL, SOCIO-ECONOMIC AND CULTURAL DEVELOPMENTS IN THE PERIOD UNDER STUDY AND APPRECIATE THE RICH CULTURAL HERITAGE IN INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY III: ANCIENT India EARLIEST TIMES TO 1000AD **MODULE I:** MAURYAN AND POST- MAURYAN PERIOD (322 B.C. TO 320 A.D.)	Chandragupta and Ashoka	04	Prachin Bharatacha Ithihas – Prof. Jitendra Bhamreh Prachin Bharat- Dr. S.G.Kolalkar	1. Chalk & Duster
	Mauryan Administration	04		
	Post Mauryan Dynasties- Sungas, Kushanas and Satavahanas	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: GUPTA AGE (320 A.D. TO 600 A.D.)	Imperial Expansion: Chandragupta I, Samudragupta and Chandragupta II	04	Prachin Bharatacha Ithiha- N C Dikshit Prachin Bharat- Dr. S.G.Kolalkar	1. Chalk & Duster
	Administration	04		
	Classical Age	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: :POST GUPTA PERIOD (600A.D. TO 1000A.D.)	The Age of Harshavardhan	04	Prachin Bharatacha Ithihas - N C Dikshit	1. Chalk & Duster
	The Rise of Rajputs	04		
	Arab Invasion of Sind	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV: MAJOR DYNASTIES OF DECCAN AND SOUTH INDIA	Chalukyas of Badami and Rashtrakutas	04	Prachin Bharatacha Ithihas- N C Dikshit Prachin Bharatacha Ithihas – Prof. Jitendra Bhamreh Prachin Bharat- Dr. S.G.Kolalkar	1. Chalk & Duster
	Mahatma Gandhi & Ind Pallavas and Cholas ia	04		
	Spread of Indian Culture in South-East Asia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KAVITAYOGESHPATIL** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(MARATHI & ENGLISH)**

SEMESTER: I MONTH: **AUGUST TO OCTOBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE DIVERSE COMPOSITION OF THE INDIAN SOCIETY.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE I **UNIT : I** OVERVIEW OF THE INDIAN SCIETY	Understand the Multicultural diversity of Indian Society	01	**FOUNDATION COURSE I** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & duster
	Demographic Composition Population based on Religion, Caste & Gender	01		
	Concept of Linguistic Diversity	01		
	Understand Regional Variations – Rural, Urban & Tribal	01		
	Understanding the Concept of Diversity as a Difference	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05 Lectures

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :II CONCEPT OF DISPARITY I	Concept of Disparity of Indian ,Stratifications And Inequality- Caste, Class & Estate System	03	**FOUNDATION COURSE I** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & duster
	Gender Disparities Especially problems related to Women	03		
	Disparities faced by People with Disabilities - Physical & Mental	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :III CONCEPT OF DIPARITY II	Examine inequalities Disparities due to Caste System and inter Group Conflicts	03	**FOUNDATION COURSE I** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	Disparities based on inter group conflicts such as communalism	03		
	Causes & Effects of Conflicts arising out of Regionalism & Linguism	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :IV THE INDIAN CONSTITUTION	The Constitution as set out in the Preamble	03	**FOUNDATION COURSE I** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	The Structure of the Constitution	03		
	Fundamental Duties of the Indian Citizen	02		
	Basic Feature of the Constitution	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :V SIGNIFICANT ASPECTS OF POLITICAL PROCESSES	The Party System in India Politics	03	**FOUNDATION COURSE I** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	Local Self Government in Urban Rural Areas	03		
	The 73rd and 74th Amendments and Their Implication for Inclusive Politics	02		
	Role and Significance of Women in Politcs	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KAVITAYOGESHPATIL** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA(MARATHI & ENGLISH)**

SEMESTER: II MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO LEARN HOW TO MANAGE THE ENVIRONMENT, PERSONAL STRESS, CONFLICT AND AGGRESSION ISSUES**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE II **UNIT : I** GLOBALISATION AND INDIAN SOCIETY	The concept of Liberalization, Privatization And Globalisation	02	**FOUNDATION COURSE II** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	Information Technology and Communication and Its Impact	02		
	Changes in Agrarian Sector due to globalisation	02		
	Rise in Corporate farming and increase in farmer Suicides	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :II HUMAN RIGHTS	Concept of Human Right origin & Evolution of the Concept	02	**FOUNDATION COURSE II** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	The Universal Declaration of Human Rights	02		
	Human Rights Constituents.	03		
	Special reference to Fundamental rights stated in the Constitution	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :III ECOLOGY	Importance of Environment Studies in the current developmental context	03	**FOUNDATION COURSE II** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	Concept of Environment Ecology and their inter-connectedness	02		
	Environmental Degradation – Causes and Impact on Human life	03		
	Sustainable development Concept and Components	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :IV UNDERSTANDING STRESS AND CONFLICT	Causes of Stress & Conflict on Individuals in the Society	02	**FOUNDATION COURSE II** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1.Chalk & Duster
	Agents of Socialisation, Significance of Values & Ethics	02		
	Stereotyping & Prejudice as Significant factors causing stress & Conflicts	03		
	Aggression & Violence as Public expression of Conflict	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :V MANAGING STRESS AND CONFLICT	Types of Conflicts and Coping Mechanisms	03	**FOUNDATION COURSE II** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1.Chalk & Duster
	Maslow's Theory of Self Actualisation	02		
	Different Methods of Responding to Conflict	03		
	Efforts towards building Peace & Harmony in the Society	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KAVITAYOGESHPATIL** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(MARATHI –DIV- B)**

SEMESTER: III MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO GET A BRIEF OVERVIEW OF THE IMPORTANT ASPECTS OF THE GLOBAL SOCIETY**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE III **UNIT : I** HUMAN RIGHTS VIOLATIONS & REDRESSAL	Scheduled Castes – Constitutional & Legal Rights, Violations& Redressal Mechanisms	02	**FOUNDATION COURSE III** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	Sheduled Tribes– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Women– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Children– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Disabilities Minorities, Elderly Persons– Constitutional & Legal Rights, Violations& Redressal Mechanisms	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :II DEALING WITH ENVIRONMENTAL CONCERNS	Concept Of Disasters And General Effects Of Disasters On Human Life	03	**FOUNDATION COURSE III** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	Local Case Studies Of Environmental Disasters	02		
	Dealing With Disasters: Prevention, Mitigation, Disaster Preparedness	03		
	Human Rights Issues And Violations In Addressing Disasters	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :III SCIENCE & TECHNOLOGY I	Development Of Science: Ancient Culture, Classical Era, Middle Ages, Renaissance, Age Of Enlightment	03	**FOUNDATION COURSE III** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghma	1. Chalk & Duster
	Nature Of Science : Principles, Characteristics, Theories & Practical's	02		
	Science & Superstition: Exploding Myths, Blind Beliefs, Prejudices. Building Scientific Temper	03		
	Science In Everyday Life : Science & Technology Inter Relation And Distinction	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV: SOFT SKILLS FOR INTERPERSONAL COMMUNICATION	PART A: • Verbal And Non Verbal Communication • Listening Skills • Barriers In Effective Communication • Importance Of Body Language	03	**FOUNDATION COURSE III** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	PART B: • Formal & Informal Communication • Writing Skills • Group Discussions • Interviews • Presentations:	04		
	PART C : • Leadership Skills • Self Improvement Skills • Team Building	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KAVITAYOGESHPATIL** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA(MARATHI –DIV- B)**

SEMESTER: IV MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE VARIOUS POWERS AND RIGHTS GRANTED TO THEM AS INDIAN CITIZENS, A QUICK INSIHT INTO COMPETITIVE EXAMS TO GET ENTRY INTO HIGHER DEGREES & GOVERNMENT JOBS, THEIR PAPER PATTERN ELIGIBILITY & TEST CENTERS**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE IV **UNIT : I** SIGNIFICANT CONTEMPERORY RIGHTS OF CITIZENS	Consumer Rights: Provisions, Violations, Consumer Courts & Movements	03	**FOUNDATION COURSE IV** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	Right To Information: Genesis, Provisions Of RTI Act 2015, Success Stories	03		
	Public Interest Litigation, Provisions, Procedure to File, Landmark Cases	03		
	Citizen's Charter, Public Service Guarantee Act	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :II APPROACHES TO UNDERSTANDING ECOLOGY	Scope Of Ecology, Anthropocentrism, Bio-Centrism, Eco-Centrism, Eco –Feminism & Deep Ecology	03	**FOUNDATION COURSE IV** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	Environmental Principles I : Sustainability Principle, Polluter Pays Principle, Precautionary Principle	04		
	Environmental Principles Ii: Equity Principle, Human Rights Principle, Participation Principle	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :III SCIENCE & TECHNOLOGY II	PART A: Modern Technologies: • Laser Technology • Satellite Technology • Information & Communication Technology • Nano Technology • Biotechnology	07	**FOUNDATION COURSE IV** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	PART B: Issues Of Control, Access & Misuse Of Technology	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV: INRODUCTION TO COMPETITIVE EXAMS	PART A: Basic Introduction To Competitive Exams. Paper Pattern, Eligibility Criteria, Local Centres • Examinations Conducted For Entry In Professional Courses • Examinations Conducted for entry into government jobs	04	**FOUNDATION COURSE IV** Payabhut Abhyas-Prof S.S.Liman,Prof S.J.Vaghmare	1. Chalk & Duster
	PART B: Soft Skills required for competitive exams • Information on areas tested • Motivation • Goal Setting • Time Management • Writing skills:	07		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAVITAYOGESHPATIL **DEPARTMENT: History** **CLASS: F.Y.B.A. (MAR) comp.**

SEMESTER: I **MONTH: JULY** **ACADEMIC YEAR: 2018-2019**

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: MARATHI LEKHANATIL VRUTTALEKHAN ,VRUTTANTLEKHAN KAUSHYALA ABHYASANE.KATHA PRAKAR,ABHYAS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MAR(COMP.) Ghatak -2 Vyavharik Marathi Ghatak-1 kathabandh Gramin katha	1)vruttalekhan, vruttantlekhan 2)panbali-bhaskar chandanshiv 3)lanchad-sadand deshmukh 4)satbaryacha garbh-dinkar kunte 5)bhutalya-najubai gavit 6)mi meloch nayi-madhav surkude	09	Valimbe,Mo.Ra.'Sugam Marathi Vyakran va Lekhan', Nitin Prakashan 1)M.na.advant:pradakshina khand pahila 2)joshi sudha:katha:sankalpana ani samiksha, mauje Prakashan	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAVITAYOGESHPATIL **DEPARTMENT: History** **CLASS: F.Y.B.A. (MAR) comp.**

SEMESTER: I **MONTH: AUGUST** **ACADEMIC YEAR: 2018-2019**

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: DALIT KATHETIL BADLATYA PRAVHACHA ABHYAS KARANE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MAR(COMP.) Ghatak -1 Kathabandh Dalit katha	1)bhuk-baburav bagul 2)budhachi shapath-annabhau sathe 3)virhar-daya pavar 4)chuthi bhint-urmila pavar	10	Suravade manohar:1980 nanterchi gramin katha balivansh prakashan ,nanded	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAVITAYOGESHPATIL **DEPARTMENT: History** **CLASS: F.Y.B.A. (MAR)**

SEMESTER: I **MONTH: SEPTEMBER** **ACADEMIC YEAR: 2018-2019**

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO:MANOVAIDNANIK KATHA,AADIVASI KATHA,SHARI KATHA CHA ABBHYAS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MAR(COMP.) Ghatak -1 Kathabandh	1)PUR-VILAS SARANG 2)MORACHI BAYKO-kiran yele 3)zoomachi dandi-kumar anil 4)udhvasat-kamal gadgil 5)rakhiv savalyancha khel-kiran gurav	09	Lalit :katha vishank,August 2013	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAVITAYOGESHPATIL **DEPARTMENT: History** **CLASS: F.Y.B.A. (MAR) comp.**

SEMESTER: II **MONTH: DECEMBER** **ACADEMIC YEAR: 2018-2019**

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: ETIVRITTALEKHAN KAUSHALYA SHIKANE,KAVITA PRAKAR ABHYASANE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MAR(COMP.) Ghatak -2 Vyavharik Marathi Ghatak-1 kavyabandh	Etivrittalekhan Nisarga Kavita-1)mayboli -suresh bhat 2)hya nabhane hya bhuila dan dhyve-na.dho.mahanor Nvkavita-1)chhar shabd-narayan surve 2)darasamorche dev-arun kale	05	Gurjar,V.C. 'Marathi Vyakaran', Manorama Prakashan. Valimbe,Mo.Ra.'Sugam Marathi Vyakran va Lekhan', Nitin Prakashan Arvachin marathi kavyadarshan-dr.akshay kumar kale	Group Discussion, Chalk and Talk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAVITAYOGESHPATIL **DEPARTMENT: History** **CLASS: F.Y.B.A. (MAR)**

SEMESTER: II **MONTH: JANUARY** **ACADEMIC YEAR: 2018-2019**

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: DALIT KAVITA ABHYAS KARANE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MAR(COMP.) Ghatak -2 Vyavharik Marathi Ghatak-1 Kavyabandh	Jahiratlekhan Dalit Kavita-1)aata-namdev dhasal 2)balirajsathi gaan-narayan kavathekar 3)ghratyasathi-a.k.shekh 4)aaydiyalstate-saidhRth tambe	08	Gurjar,V.C. 'Marathi Vyakaran', Manorama Prakashan. Valimbe,Mo.Ra.'Sugam Marathi Vyakran va Lekhan', Nitin Prakashan. Navodattari aambedkari kavitechi mimansa :dr.ashok ra.ingle	Group Discussion, Chalk and Talk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAVITAYOGESHPATIL **DEPARTMENT: History** **CLASS: F.Y.B.A. (MAR) comp.**
SEMESTER: II **MONTH:. FEBRUARY** **ACADEMIC YEAR: 2018-2019**

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: STRIVADI KAVITA PRAKAR AABHYASANE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MAR(COMP.) Ghatak -1 Kavyabandh	Strivadi kavita-1)stri hach tuza samaj-Kavita morvanka 2)mazi pach/saha varshachi porgi-sandhya 3)vaan-anupama ujagare 4)rangoli-rajani paruleker	08	Arvachin marathi kavyadarshan-dr.akshaykumar kale 2)navvodatter aambedkari mimansa:dr.ashok ra.ingle	Group Discussion, Chalk and Talk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAVITAYOGESHPATIL **DEPARTMENT: History** **CLASS: F.Y.B.A. (MAR) comp.**
SEMESTER: II **MONTH:. MARCH** **ACADEMIC YEAR: 2018-2019**

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: AADIVASI KAVITECHA ABHYAS KARANE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MAR(COMP.) Ghatak -1 Kavyabandh	Aadivasi Kavita-1)madya-vinod kumare 2)gognlu-prabhu rajgadkar 3)gondavan maze-kusum aalam 4)steaje-vaharu sonavane 5)bhog-va.na.aandhale	07	Arvachin marathi kavyadarshan-dr.akshaykumar kale 2)navvodatter aambedkari mimansa:dr.ashok ra.ingle	Group Discussion, Chalk and Talk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAVITAYOGESHPATIL **DEPARTMENT: History** **CLASS: F.Y.B.A. (Hindi) comp.**
SEMESTER: II **MONTH:. AUGUST** **ACADEMIC YEAR: 2018-2019**

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KAVITA AUR KAHANIYAON KA ABHYAS ,SANDNA,SARVANAM ABHYAS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Hindi compalsary Kavyakunj Shreshtha kahaniya-1	1)pushpa ki abhilasha- makhanlal chaturvedi 2)har ki jeet-sudarshan 3)chif ki davat-bhishma sahani 3)pajeb-jainendra kumar 4)zansi ki rani-subhdra kumari chauhan 5)sindur tilkit bhal-nagarjun Bhasha dakshata- sandgya ,sarvanam	10	1)Kavyakunj sampadan:hindi adhyan mandal, Mumbai vishvavidhylay, rajkamal Prakashan, nai Delhi adhyan 2)shreshtha kahaniya bhag -1 Sampadan:hindi adhyan mandal, Mumbai vishvavidhylay, Prakashan:vani Prakashan, new Delhi	Group Discussion, Chalk and Talk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:MS. Kavita yogesh Patil **DEPARTMENT: History** **CLASS: F.Y.B.A. (Hindi)**

SEMESTER: I **MONTH: SEPTEMBER** **ACADEMIC YEAR: 2018-2019**

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO:KAVITA AUR KAHANIYA ABHYAS, PATRALEKHAN

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Hindi(COMP.) Kavyakunj Shreshtha kahaniya-1	1)diya jalana kab mana hai-harivanshray bachhan 2)jalao diye per -gopaldas 3)sadachar ka tabij-harishanker parsai 4)dipti collecteri-amerkant 5)apna gav-mondas naimeshray Bhasha dakshata-1)visheshan 2)apathit gadhyansh 3)patralekhan	10 2	Kavyakunj sampadan:hindi adhyan mandal, Mumbai vishvavidhylay, Prakashan:rajkamal Prakashan, nahi Delhi 2)shreshtha kahaniya bhag-1sampadan:hindi adhyan mandal, Mumbai vishvavidhylay, Prakashan:vani Prakashan, nai Delhi	Group Discussion, Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Kavita yogesh Patil **DEPARTMENT: History** **CLASS: F.Y.B.A. (hindi) comp.**

SEMESTER: II **MONTH: DECEMBER** **ACADEMIC YEAR: 2018-2019**

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: ETIVRITTALEKHAN KAUSHALYA SHIKANE,KAVITA PRAKAR ABHYASANE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HINDI(COMP.) 1)Kavyakunj 2)shreshtha kahaniya bhag-	1)vapasi -usha priyanvada 2)akeli-mannu bhandari 3)vaiterni karoge par -shivmangal sinh 4)baat bolegi-shemsher bahadur sinh	O8	Kavyakunj sampadan:hindi adhyan mandal, Mumbai vishvavidhylay, Prakashan:rajkamal Prakashan, nahi Delhi 2)shreshtha kahaniya bhag-1sampadan:hindi adhyan mandal, Mumbai vishvavidhylay, Prakashan:vani Prakashan, nai Delhi	Group Discussion, Chalk and Talk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Kavita yogesh Patil **DEPARTMENT: History**

CLASS: F.Y.B.A. Hindi(comp) **SEMESTER: II** **MONTH: JANUARY** **ACADEMIC YEAR: 2018-2019**

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KAVITA AUR KAHANIYA ABHYAS,LING,VACHAN ,

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Hindi (compalsary) Kavyakunj Shreshtha kahaniya-2	Kavyakunj sampadan:hindi adhyan mandal, Mumbai vishvavidhylay, Prakashan:rajkamal Prakashan, nahi Delhi 2)shreshtha kahaniya bhag-1sampadan:hindi adhyan mandal, Mumbai vishvavidhylay, Prakashan:vani Prakashan, nai Delhi	12	Gurjar,V.C. 'Marathi Vyakaran', Manorama Prakashan. Valimbe,Mo.Ra.'Sugam Marathi Vyakran va Lekhan', Nitin Prakashan. Navodattari aambedkari kavitechi mimansa :dr.ashok ra.ingle	Group Discussion, Chalk and Talk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Kavita yogesh l Patil **DEPARTMENT: History**

CLASS: F.Y.B.A. (HINDI) comp. **SEMESTER: II** **MONTH:. FEBRUARY** **ACADEMIC YEAR: 2018-2019**

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KAVITA AUR KAHANIYA KA ABHYAS, NIBANDH LEKHAN

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Hindi(COMP.) Kavyakunj Shreshtha kahaniya-2	1)GANPATI GANNAYAK-SURYABALA 2)KABRA KA MUNAPHA-TEJENDRA SHERMA 3)DALIT BRAHMAN-SATYAPRAKASH 4)KAHA TO TAY THA-DUSHANT KUMAR 5)chal pade jidhar -sohanlal dwivedi Bhasha dakshata- 1)NIBANDH LEKHAN	12	Kavyakunj sampadan:hindi adhyan mandal, Mumbai vishvavidhylay, Prakashan:rajkamal Prakashan, nahi Delhi 2)shreshtha kahaniya bhag-1sampadan:hindi adhyan mandal, Mumbai vishvavidhylay, Prakashan:vani Prakashan, nai Delhi	Group Discussion, Chalk and Talk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. Kavita yogesh Patil **DEPARTMENT: History** **CLASS: F.Y.B.A. (HINDI) comp.**
SEMESTER: II **MONTH:. MARCH** **ACADEMIC YEAR: 2018-2019**

LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: KAVITA AUR KAHANIYA ABHYAS, MUHAVERE,SANKHEPAN ADHYAN

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Hindi(COMP.) Kavyakunj Shreshtha kahaniya-2	1)Hum divanoki ki kya hasti- bhag vaticharan verma 2)kissa jantantra -dhumil 3)vidrohini-sushila takbhore Bhasha dakshata- 1)muhavare 2)sankshepan	08	Kavyakunj sampadan:hindi adhyan mandal, Mumbai vishvavidhylay, Prakashan:rajkamal Prakashan, nahi Delhi 2)shreshtha kahaniya bhag-1sampadan:hindi adhyan mandal, Mumbai vishvavidhylay, Prakashan:vani Prakashan, nai Delhi	Group Discussion, Chalk and Talk,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani **DEPARTMENT: HISTORY/ARTS** **CLASS: SYBA**

SEMESTER: III **MONTH: June to October** **ACADEMIC YEAR 2018-19**

LEARNING OBJECTIVE/S: The learners will be able to : To enable the students to think critically, understand their past and develop interest in historical matters.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Ancient India Module 1 Sources of Ancient India and their importance	a. Archaeological b. Literary c. Foreign travellers	12	Dr. Eugene D'Souza: Ancient India	Lecture method Interactive method
Module 2 Indus Valley Civilization	a. Social and economic life b. Religious life c. Town planning and decline of the civilization	12		
Module 3 Vedic Age	a. Janapada b. Social and economical life c. Religion	12		
Module 4 India after 6 century B.C	a. Administration of mahajanapadas b. Jainism & Buddhism c. Persian & Greek invasions	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 EACH

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani **DEPARTMENT: HISTORY/ARTS** **CLASS: SYBA**

SEMESTER: IV **MONTH: November to February** **ACADEMIC YEAR 2018-19**

LEARNING OBJECTIVE/S: The learners will be able to : To enable the students to think critically, understand their past and develop interest in historical matters.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Ancient India Module 1 Mauryan and post mauryan period	A. Chandragupta and Ashoka B. Mauryan Administration C. Post Mauryan Dynasties- Sungas, Kushana and Satavahans	12	Dr. Eugene D'Souza: Ancient India	Lecture method Interactive method
the Module 2 Gupta Age	A. Imperial Expansion: Chandragupta 1, Samudragupta and Chandragupta II. B. Administration C. Classical Age	12		
Module 3 Post Gupta period	A. The age of Harshvardhan B. The rise of Rajputs C. Arab Invasion of Sind	12		
Module 4 Major Dynasties of Deccan and South India	A. Chalukyas of Badami and Rashtrakutas B. Pallavas and Cholas C. Spread of Indian Culture in South East Asia	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 EACH

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani **DEPARTMENT: HISTORY ARTS** **CLASS: TYBA**

SEMESTER: V **MONTH: June to October** **ACADEMIC YEAR 2018-19**

LEARNING OBJECTIVE/S: The learners will be able to : To enable the students To analyze archaeological artifacts as a source of information about other cultures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Archaeology Module 1 Aims and methods of archaeology	A. Definition, aims & development of archaeology Archaeology and History, and other sciences. B. Field archaeology; Methods of exploration, excavation and dating antiquities; significance of archaeology.	12	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Archaeology	Lecture method Discussion method
Module 2 Prehistoric, proto-historic and early historical period.	A. Palaeolithic and Mesolithic Period B. Neolithic and Chalcolithic Period C. Megalithic and Early Historical Period	12		
Module 3 Epigraphy	A. Definition and History of Indian Epigraphy. B. Types of Inscriptions and their significance C. Evolution of Brahmi & Kharosthi script; Edits of Ashoka.	12		
Module 4 Numismatics	A. Definition and History of Indian Numismatics B. Ancient Indian Coinage: Panch- marked, Satavahana, Western Kshatrapas, Kushanas and Gupta coins C. Contribution of Numismatics to Indian History	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 EACH

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani **DEPARTMENT:HISTORY/ ARTS** **CLASS: TYBA**

SEMESTER: VI **MONTH: November to February** **ACADEMIC YEAR 2018-19**

LEARNING OBJECTIVE/S: The learners will be able to : To take up the responsibility for preserving an object or heritage and making it accessible.To survey, acquire and scientifically preserve records of historical values from autonomous bodies, private institutions and individuals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Museology and Archival Science Module 1 Museology	A. Definition of Museology, museum movement in India. B. Role of curator C. Types of Museums.	12	Dr. Ranade Dr. Samel Dr. Nabar: Introduction to Museology & Archival Science	Lecture method Discussion method
Module 2 Museums	A. Methods of collection and conservation of objects in museums. B. Preservation techniques and types of exhibitions. C. Changing roles of museums: In-house and out-reach activities of museums.	12		
Module 3 Archival Science	A. Meaning, scope, objectives and classes of archives. B. Importance of archives : Value of record as a source of history. C. Classification of records	12		
Module 4 Management of Archives	A. Appraisal and retention of records. B. Conservation and preservation of records. C. Digital archives	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 EACH

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA ENGLISH**

SEMESTER: I MONTH: **AUGUST TO OCTOBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE DIVERSE COMPOSITION OF THE INDIAN SOCIETY ITS GENESIS, UNIQUENESS YET ONENESS, ITS SOCIAL & POLITICAL STRUCTURE.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE I **UNIT : I** OVERVIEW OF THE INDIAN SCIETY	Multicultural diversity of Indian Society	01	**FOUNDATION COURSE I** BY MICHEAL VAS & AURORA VAZ	1. Chalk & duster 2. Group discussions 3. Debates 4. PowerPoint presentation 5. Short film making on social issues
	Demographic Composition based on Religion, Caste & Gender	01		
	Linguistic Diversity	01		
	Regional Variations – Rural, Urban & Tribal	01		
	Diversity as a Difference	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05 Lectures

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :II CONCEPT OF DISPARITY I	Stratifications And Inequality- Caste, Class & Estate System	03	**FOUNDATION COURSE I** BY MICHEAL VAS & AURORA VAZ	1. Chalk & duster 2. Group discussions 3. Debates 4. PowerPoint presentation 5. Short film making on social issues
	Gender Disparities Especially problems related to Women	03		
	Disparities faced by People with Disabilities - Physical & Mental	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :III CONCEPT OF DIPARITY II	Disparities due to Caste System and inter Group Conflicts	03	**FOUNDATION COURSE I** BY MICHEAL VAS & AURORA VAZ	1. Chalk & Duster 2. Group Discussions 3. Debates 4. PowerPoint Presentation 5. Short film Making On Social Issues
	Disparities based on inter group conflicts such as communalism	03		
	Causes & Effects of Conflicts arising out of Regionalism & Linguism	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA ENGLISH**

SEMESTER: II MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE ENVIRONMENTAL ISSUES WE ARE FACING AND WHY CONSERVATION IS NECESSARY. ALSO AN INSIGHT INTO THE STRESS & CONFLICT RIDDEN SOCIETY WILL BE TAUGHT AND WAYS IN WHICH ONE CAN COPE WITH IT. HENCE HELPING THE STUDENTS LEARN HOW TO MANAGE THE ENVIRONMENT, PERSONAL STRESS, CONFLICT AND AGGRESSION ISSUES**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE II **UNIT : III** ECOLOGY	Importance of Environmental Studies Studies	02	**FOUNDATION COURSE II** BY MICHEAL VAS & AURORA VAZ	1. Chalk & Duster 2. Group Discussions 3. Debates 4. PowerPoint Presentation 5. Public Surveys
	Understanding Concepts of Environment, ecology & interconnectedness	02		
	Environmental Degradation- Causes & impact on Human Life	03		
	Sustainable Development- Concept & Components	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :IV UNDERSTANDING STRESS AND CONFLICT	Causes of Stress & Conflict on Individuals in the Society	02	**FOUNDATION COURSE II** BY MICHEAL VAS & AURORA VAZ	1. Chalk & Duster 2. Group Discussions 3. Debates 4. PowerPoint Presentation 5. Public Surveys
	Agents of Socialisation, Significance of Values & Ethics	02		
	Stereotyping & Prejudice as Significant factors causing stress & Conflicts	03		
	Aggression & Violence as Public expression of Conflict	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :V MANAGING STRESS AND CONFLICT	Types of Conflicts and Coping Mechanisms	03	**FOUNDATION COURSE II** BY MICHEAL VAS & AURORA VAZ	1. Chalk & Duster 2. Group Discussions 3. Debates 4. PowerPoint Presentation 5. Short film Making On Social Issues
	Maslow's Theory of Self Actualisation	02		
	Different Methods of Responding to Conflict	03		
	Efforts towards building Peace & Harmony in the Society	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA ENGLISH**

SEMESTER: I MONTH: **AUGUST TO OCTOBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE STRUGGLE FOR INDIA'S INDEPENDENCE**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA **MODULE I:** GROWTH OF POLITICAL AWAKENING	Revolt of 1857- Causes & Consequences	04	Modern India By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Contribution of Political Associations	04		
	Foundation of Indian National Congress	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: TRENDS IN INDIAN NATIONALISM	Moderates	04	Modern India By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Extremists	04		
	Revolutionary Nationalist	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: GANDHIAN MOVEMENTS	Non Co-operation Movement	04	Modern India By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Civil Disobedience Movement	04		
	Quit India Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **FYBA ENGLISH**

SEMESTER: II MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE MAKINGS OF MODERN INDIA AND THE SOCIO-ECONOMIC IMPACT OF BRITISH RULE ON INDIA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY I: MODERN INDIA: SOCIETY & ECONOMY **MODULE I:** SOCIO-RELIGIOUS REFOEM MOVEMENT	Brahmo Samaj, Arya Samaj, Ramkrishna Mission	04	Modern India: Society & Economy By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Sathyashodak Samaj, Aligarh Movement, Singh Sabha	04		
	Impact of Reform movements on Indian Society	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: EDUCATION, PRESS & TRANSPORT	Introduction to Western Education & its Impact	04	Modern India: Society & Economy By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Development Of Press	04		
	Transport & Communication	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: IMPACT OF BRITISH RULE ON INDIAN ECONOMY	Revenue Settlements & Commercialisation of Agriculture	04	Modern India: Society & Economy By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Drain Theory	04		
	Deindustrialisation & Growth of Large Scale Industries	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA ENGLISH**

SEMESTER: III MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO LEARN THE VARIOUS HUMAN RIGHTS GIVEN TO THE SOCIETY, VARIOUS BRANCHES OF ECOLOGY, HISTORY OF SCIENCE AND EFFECTIVE COMMUNICATION SKILLS. THIS PAPER GIVES A BRIEF OVERVIEW OF THE IMPORTANT ASPECTS OF THE GLOBAL SOCIETY**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE III **UNIT : I** HUMAN RIGHTS VIOLATIONS & REDRESSAL	Scheduled Castes – Constitutional & Legal Rights, Violations& Redressal Mechanisms	02	**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA VAZ	1. Chalk & Duster 2. Group Discussions 3. Debates 4. Powerpoint Presentation 5. Shortfilm Making On Social Issues
	Sheduled Tribes– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Women– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Children– Constitutional & Legal Rights, Violations& Redressal Mechanisms	02		
	Disabilities Minorities, Elderly Persons– Constitutional & Legal Rights, Violations& Redressal Mechanisms	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :II DEALING WITH ENVIRONMENTAL CONCERNS	Concept Of Disasters And General Effects Of Disasters On Human Life	03	**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA VAZ	1. Chalk & Duster 2. Group Discussions 3. Debates 4. Powerpoint Presentation 5. Shortfilm Making On Social Issues
	Local Case Studies Of Environmental Disasters	02		
	Dealing With Disasters: Prevention, Mitigation, Disaster Preparedness	03		
	Human Rights Issues And Violations In Addressing Disasters	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :III SCIENCE & TECHNOLOGY I	Development Of Science: Ancient Culture, Classical Era, Middle Ages, Renaissance, Age Of Enlightment	03	**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA VAZ	1. Chalk & Duster 2. Group Discussions 3. Debates 4. Powerpoint Presentation 5. Shortfilm Making On Social Issues
	Nature Of Science : Principles, Characteristics, Theories & Practical's	02		
	Science & Superstition: Exploding Myths, Blind Beliefs, Prejudices. Building Scientific Temper	03		
	Science In Everyday Life : Science & Technology Inter Relation And Distinction	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV: SOFT SKILLS FOR INTERPERSONAL COMMUNICATION	PART A: • Verbal And Non Verbal Communication • Listening Skills • Barriers In Effective Communication • Importance Of Body Language	03	**FOUNDATION COURSE III** BY MICHEAL VAS & AURORA VAZ	1. Chalk & Duster 2. Group Discussions 3. Debates 4. Powerpoint Presentation 5. Shortfilm Making On Social Issues
	PART B: • Formal & Informal Communication • Writing Skills • Group Discussions • Interviews • Presentations:	04		
	PART C : • Leadership Skills • Self Improvement Skills • Team Building	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA ENGLISH**

SEMESTER: IV MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE VARIOUS POWERS AND RIGHTS GRANTED TO THEM AS INDIAN CITIZENS, LEARN THE VARIOUS ENVIRONMENTAL PRINCIPLES ALONG WITH LATEST TECHNOLOGIES IN SCIENCE. LASTLY STUDENTS WILL ALSO BE GIVEN A QUICK INSIHT INTO COMPETITIVE EXAMS TO GET ENTRY INTO HIGHER DEGREES & GOVERNMENT JOBS, THEIR PAPER PATTERN ELIGIBILITY & TEST CENTERS**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE IV **UNIT : I** SIGNIFICANT CONTEMPERORY RIGHTS OF CITIZENS	Consumer Rights: Provisions, Violations, Consumer Courts & Movements	03	**FOUNDATION COURSE IV** BY MICHEAL VAS & AURORA VAZ	1. Chalk & Duster 2. Group Discussions 3. Debates 4. PowerPoint Presentation 5. Public Surveys
	Right To Information: Genesis, Provisions Of RTI Act 2015, Success Stories	03		
	Public Interest Litigation, Provisions, Procedure to File, Landmark Cases	03		
	Citizen's Charter, Public Service Guarantee Act	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :II APPROACHES TO UNDERSTANDING ECOLOGY	Scope Of Ecology, Anthropocentrism, Bio-Centrism, Eco-Centrism, Eco –Feminism & Deep Ecology	03	**FOUNDATION COURSE IV** BY MICHEAL VAS & AURORA VAZ	1. Chalk & Duster 2. Group Discussions 3. Debates 4. PowerPoint Presentation 5. Public Surveys
	Environmental Principles I : Sustainability Principle, Polluter Pays Principle, Precautionary Principle	04		
	Environmental Principles Ii: Equity Principle, Human Rights Principle, Participation Principle	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT :III SCIENCE & TECHNOLOGY II	PART A: Modern Technologies: • Laser Technology • Satellite Technology • Information & Communication Technology • Nano Technology • Biotechnology	07	**FOUNDATION COURSE IV** BY MICHEAL VAS & AURORA VAZ	1. Chalk & Duster 2. Group Discussions 3. Debates 4. PowerPoint Presentation 5. Short film Making On Social Issues
	PART B: Issues Of Control, Access & Misuse Of Technology	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV: INRODUCTION TO COMPETITIVE EXAMS	PART A: Basic Introduction To Competitive Exams. Paper Pattern, Eligibility Criteria, Local Centres • Examinations Conducted For Entry In Professional Courses • Examinations Conducted for entry into government jobs	04	**FOUNDATION COURSE IV** BY MICHEAL VAS & AURORA VAZ	1. Chalk & Duster 2. Group Discussions 3. Debates 4. PowerPoint Presentation 5. Public Surveys
	PART B: Soft Skills required for competitive exams • Information on areas tested • Motivation • Goal Setting • Time Management • Writing skills:	07		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA ENGLISH**

SEMESTER: III MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY **MODULE I:** THE MODERN AGE	Renaissance , Art, Architecture, Science & Literature	04	Landmarks In World History By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Geographical Discoveries, Vasco Da Gama, Christopher Columbus	04		
	Reformation & Counter Reformation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: AGE OF REVOLUTIONS	American Revolution	04	Landmarks In World History By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	French Revolution	04		
	Industrial Revolution	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: NATIONALISM & IMPERIALISM	Formation of Nation States in Europe	04	Landmarks In World History By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Nationalist Movements in Italy & Germany	04		
	Imperialist Expansion in Asia	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV: WORLD IN TRANSITION	World War I	04	Landmarks In World History By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Russian Revolution	04		
	League of Nations	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **SYBA ENGLISH**

SEMESTER: IV MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO COMPREHEND THE TRANSITION OF EUROPE FROM MEDIEVAL TO MODERN TIMES AND ITS IMPACT ON THE WORLD. TO PROVIDE ACCURATE KNOWLEDGE OF THE MOST SIGNIFICANT EVENTS & PERSONALITIES OF THE PERIOD UNDER STUDY AND ENCOURAGE OF THE MAKING OF THE MODERN WORLD**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY II: LANDMARKS IN WORLD HISTORY **MODULE I:** INTER WAR PERIOD	Kemal Pasha & Modernisation of Turkey	04	Landmarks In World History By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Reza Shah Pahlavi & Reforms in Iran	04		
	Birth of Israel	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: RISE OF DICTATORSHIP	Fascism & Benito Mussolini	04	Landmarks In World History By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Nazism & Adolf Hitler	04		
	Militarism in Japan	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE III: WORLD WAR II	World War II Cause, Effects & Consequences	04	Landmarks In World History By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Atlantic Charter	04		
	United Nations Organisation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIV: NATIONALISTS MOVEMENTS IN ASIA	Dr. Sun Yat Sen & China	04	Landmarks In World History By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Mahatma Gandhi & India	04		
	Dr. Sukarno & Indonesia	04		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: V MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH THE HISTORY OF EARLY MEDIEVAL INDIA THAT LAID THE FOUNDATION OF THE SULTANATE IN INDIA. TO STUDY THE CONTRIBUTION OF VIJAYNAGAR AND BAHAMANI KINGDOMS TO MEDIEVAL INDIAN HISTORY. AND TO EXAMINE THE ADMINISTRATIVE, SOCIO-ECONOMIC AND CULTURAL ASPECTS OF MEDIEVAL INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA **MODULE I: FOUNDATION EXPANSION & DECLINE OF DELHI SULTANATE**	Socio-Economic & Political conditions on the eve of Turkish Invasions	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Rise and Decline of Slave Dynasty • Khilji Dynasty	04		
	• Tughlaq Dynasty • Sayyid Dynasty • Lodi Dynasty	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: ADMINISTRATIVE STRUCTURE OF THE SULTANATE	• Central Administration • Iqta System	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Administrative & Military Reforms of Alauddin Khilji	04		
	• Reforms of Firoz Shah Tughlaq • Reforms of Mohammad Bin Tughlaq	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: EMERGENCE OF THE VIJAYNAGAR & BAHAMANI KINGDOMS	Rise, Growth & Decline of the Vijaynagar Empire & Bahamani Kingdom	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Administrative Socio-Economic & Cultural Conditions of the Vijaynagar Empire	04		
	Administrative Socio-Economic & Cultural Conditions of the Bahamani Kingdom	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	Socio-Economic & Religious Life	04	Medieval India 1000CE to 1526CE By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: VI MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT THEMSELVES WITH THE HISTORY OF INDIA SINCE THE EMERGENCE OF THE MUGHAL RULE. TO UNDERSTAND ADMINISTRATION OF THE MUGHAL EMPIRE. TO STUDY THE RISE OF THE MARATHA POWER**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY IV: MEDIEVAL INDIA **MODULE I: FOUNDATION EXPANSION & DECLINE OF MUGHAL RULE**	• India on the Eve of Mughal Rule: • Invasion of Babur	04	Medieval India 1526CE to 1707CE By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Humayun • Sher Shah • Akbar	04		
	• Jehangir • ShahJahan • Aurangzeb	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: ADMINISTRATIVE STRUCTURE OF THE MUGHALS	• Central Administration • Provincial Administration	04	Medieval India 1526CE to 1707CE By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Mansabdari System •	04		
	• Judicial System • Revenue System	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: RISE OF THE MARATHA POWER	• Shivaji & Foundation of Swarajya	04	Medieval India 1526CE to 1707CE By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Administration of Shivaji •	04		
	• Sambhaji • Raja ram • Tarabai	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: SOCIETY, ECONOMY, RELIGION & CULTURE	• Society • Economy	04	Medieval India 1526CE to 1707CE By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Religion • Education • Literature	04		
	• Art • Architecture	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: V MONTH: **JUNE TO SEPTEMBER** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO ACQUAINT WITH REGIONAL HISTORY OF MAHARASHTRA TO UNDERSTAND POLITICAL AND SOCIO-ECONOMIC DEVELOPMENTS DURING THE 19TH AND 20TH CENTURIES TO CREATE UNDERSTANDING OF THE MOVEMENT THAT LED TO THE FORMATION OF MAHARASHTRA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: HISTORY OF MODERN MAHARASHTRA **MODULE I: BEGINNING OF BRITISH RULE**	Socio-Economic Conditions in Maharashtra in the 19th Century	04	History Of Modern Maharashtra (1818CE – 1960CE) By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Administration • Judiciary	04		
	• Tribal Uprisings • Peasant Movements	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: SOCIO-ECONOMIC AWAKENING	Mahatma Jyotirao Phule - Sathyashodak Samaj & Universal Humanism	04	History Of Modern Maharashtra (1818CE – 1960CE) By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Prarthana Samaj	04		
	Contribution of thinkers of Maharashtra to Economic Nationalism	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: POLITICAL DEVELOPMENTS IN MAHARASHTRA 1885-1960	• Moderates • Extremists • Revolutionary Nationalists	04	History Of Modern Maharashtra (1818CE – 1960CE) By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Response to Gandhian Movements in Maharashtra	04		
	Samyukta Maharshtra Movement	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGENCE OF NEW FORCES	Contribution of reformers towards Education	04	History Of Modern Maharashtra (1818CE – 1960CE) By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	Contribution of Reformers towards Women's Education	04		
	Contribution of Reformers to the Upliftment of the Depressed Classes	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **QUDASIYA SAYED** DEPARTMENT: **HISTORY/ ARTS** CLASS: **TYBA ENGLISH**

SEMESTER: VI MONTH: **NOVEMBER TO FEBRUARY** ACADEMIC YEAR:**2018- 2019**

LEARNING OBJECTIVE/S: **THE LEARNERS WILL BE ABLE TO UNDERSTAND THE PROCESS OF MAKING THE CONSTITUTION AND THE INTEGRATION AND REORGANIZATION OF INDIAN STATES. TO ACQUAINT THE STUDENTS WITH THE POLITICAL DEVELOPMENTS IN INDIA AFTER INDEPENDENCE. TO COMPREHEND THE SOCIO-ECONOMIC CHANGES AND PROGRESS IN SCIENCE AND TECHNOLOGY IN INDIA.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY V: : HISTORY OF CONTEMPORARY INDIA **MODULE I: THE NEHRU ERA 1947-1964**	Features Of The Indian Constitution	04	: History Of Contemporary India (1947-2000) By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Integration of States • Reorganisation of States	04		
	• Socio-economic reforms • Foreign policy	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II: POLITICAL ECONOMIC SOCIAL DEVELOPMENTS 1964-1984	• Political Developments After Nehru • Green Revolution	04	: History Of Contemporary India (1947-2000) By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Abolition of Privy Purses • Nationalisation of Banks • Emergence	04		
	• Janata Government • Return of Congress • Foreign Policy	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULEIII: POLITICAL ECONOMIC SOCIAL DEVELOPMENTS 1984-2000	• Political Developments	04	: History Of Contemporary India (1947-2000) By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Relations with Foreign Countries •	04		
	• Globalisation • Liberalisation • Privatisation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Bhaskar Waman Thakur College of Science
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE IV: EMERGING TRENDS	• Communalism • Seperatists Movements	04	: History Of Contemporary India (1947-2000) By Dr. Eugene D'souza	1. Chalk & Duster 2. Maps 3. Discussions 4. Documentaries & movies
	• Empowerment of Women • Policy of Reservation	04		
	• Science • Technology • Education	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 LECTURES

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TYBAMMC

SEM V (JOURNALISM) (ENGLISH)

ACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. TRUPTI PATILDEPARTMENT: BMM CLASS: TYBAMMC JOURNALISM ENGLISH SEMESTER: V

MONTH: JUNE ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVES: 1. TO PROVIDE STUDENTS WITH TECHNIQUE OF BNARRATION AND SYORY TELLING
2. TO SHARE THE ART OF DEVELOPING A STORY IDEA
3. TO ACQUAINT AND SENSITIZE THROUGH ASSIGNMENTS TO THE ISSUES OF DEPRIVATION AROUND US AND USING WRITING AS A TOOL FOR SOCIAL JUSTICE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FEATURES AND WRITING FOR SOCIAL JUSTICE	**ABOUT FEATURES** • What makes feature writing different • Deconstructing feature • News Feature	08	SETH PUBLICATION AND ONLINE REFERENCES	CLASSROOM AND ICT METHOS

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

MODULE 1				
	• Human Interest Feature • Profiles • Developmental stories, Opinion pieces, in dept Features as a tools of social justice	08	SETH PUBLICATION AND ONLINE REFERENCES	CLASSROOM AND ICT METHOS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.TRUPTI PATIL DEPARTMENT: BMM CLASS: TYBAMMC JOURNALISM ENGLISH

SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2022-2023

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FEATURES AND WRITING FOR SOCIAL JUSTICE MODULE II	**HOW TO PEN A FEATURE** • Finding Fresh Ideas, developing a story idea • On and Off field research • Building observation and listening skills • Structuring the story • Use of Anecdotes, Illustrations,Interviewing	08	SETH PUBLICATION AND ONLINE REFERENCES	CLASSROOM AND ICT METHOS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.TRUPTI PATIL DEPARTMENT: BMM CLASS: TYBAMMC JOURNALISM ENGLISH

SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2022-2023

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FEATURES AND WRITING FOR SOCIAL JUSTICE MODULE III	**BECOMING THE VOICE OF THE URBAN POOR (MUMBAI): LETTERS TO EDITORS,BLOGS** • Prone to disasters : floods etc • Poor health specially mental health • Lack of facilities and obstacles to education • Night Schools • Unemployment and Exploitation	08	SETH PUBLICATION AND ONLINE REFERENCES	CLASSROOM AND ICT METHOS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. TRUPTI PATIL DEPARTMENT: BMM CLASS: TYBAMMC JOURNALISM ENGLISH

SEMESTER: V MONTH: SEPTEMBER ACADEMIC YEAR: 2022-2023

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FEATURES AND WRITING FOR SOCIAL JUSTICE MODULE IV	**MUMBAI BASED FEATURES/ LETTER TO THE EDITOR/ POST/OPINION PIECE ON** • Plight Of Rag Pickers • Construction Workers • The Homeless • Slum Rehabilitations Projects • Condition Of Mumbai Jails/Courts •	08	SETH PUBLICATION AND ONLINE REFERENCES	CLASSROOM AND ICT METHOS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAME OF THE STAFF: MRS. TRUPTI PATIL DEPARTMENT: BMM CLASS: TYBAMMC JOURNALISM ENGLISH

SEMESTER: V MONTH: OCTOBER ACADEMIC YEAR: 2022-2023

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FEATURES AND WRITING FOR SOCIAL JUSTICE MODULE V	**MUMBAI BASED FEATURES/ LETTER TO THE EDITOR/ POST/OPINION PIECE ON** • City Issues of Hygiene and Pollution • Water Crises • Crime and Safety • Corruption Issues Faced by the Common Man • Challenges faced by senior citizens and the physically / Mentally challenged	08	SETH PUBLICATION AND ONLINE REFERENCES	CLASSROOM AND ICT METHOS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Alina Dcosta DEPARTMENT: BAMMC CLASS: TYBAMMC Journalism English SEMESTER: V MONTH: July ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

1. Understand the role of investigative reporting in modern journalism
2. To create and write excellent investigative stories for media and to acquire advanced investigative journalistic skills

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Investigative Journalism, Unit 1	Who is an Investigative Reporter, Role of an Investigative Reporter Qualities and essentials for becoming an investigative journalist, career and opportunities	4	What is special about Investigative Journalism? A critical look at its precepts and practice By N. Ram & e-book IJ manual by UNESCO	CIJ's YouTube introductory lessons and profiles of Investigative Reporters
Investigative Journalism, Unit 2	Centre for Investigative Journalism (CIJ) Ethical/unethical use of sting operations	4	https://tcij.org/ e-book IJ manual by UNESCO	PowerPoint Presentation and blackboard

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	Records and the Confidentiality of Source Issues of contempt, defamation	4	e-book IJ manual by UNESCO Blogs by K. Venkataramanan(The Hindu)	PowerPoint Presentation and blackboard
	Right to Privacy and Official Secrets Act What is evidence?	4	Reporting by Troy Rebeiro	PowerPoint Presentation and blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

NAME OF THE STAFF: Ms Alina Dcosta DEPARTMENT: BAMMC CLASS: TYBAMMC Journalism English SEMESTER: V MONTH: August ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

1. Understand the role of investigative reporting in modern journalism
2. To create and write excellent investigative stories for media and to acquire advanced investigative journalistic skills

PAPER, UNIT, TITLE	NO OF SUBTOPICS LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Investigative Journalism, Unit 3	Case Study: Panama Papers and Watergate Scandal 4	e-book IJ manual by UNESCO & Amazon Prime for movie screening	International Consortium of Investigative Journalists, flipped classroom and group discussions

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	Observation Planning techniques 4	e-book IJ manual by UNESCO	PowerPoint Presentation
	Cultivating sources Developing the project 4	Reporting by Troy Rebeiro	PowerPoint Presentation

Investigative Journalism, Unit 4
Protection of sources
Safety of journalists
Criticism of Investigative Journalism 4
News Reporting and Writing – Melvin Mencher
&
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

NAME OF THE STAFF: Ms Alina Dcosta DEPARTMENT: BAMMC CLASS: TYBAMMC Journalism English SEMESTER: V MONTH: September ACADEMIC YEAR: 2022-23 LEARNING OBJECTIVE/S:

1. Understand the role of investigative reporting in modern journalism
2. To create and write excellent investigative stories for media and to acquire advanced investigative journalistic skills

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Investigative Journalism, Unit 5	Research methods	4	Research Methodology: A step-by-step guide by Ranjit Kumar	Published papers and thesis analysis PowerPoint Presentation
	Insight knowledge Asking the right questions, Libel and fact checking	4	e-book IJ manual by UNESCO	PowerPoint Presentation
	Writing and rewriting the report	4	Advanced Research Methology Part-I: Bhalla, Ranjit Kaur / Puri, Mohit	Published papers and thesis analysis PowerPoint Presentation
	Revision	4		PowerPoint Presentation and blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS ALINA DCOSTA DEPARTMENT: BAMMC CLASS: TYBAMMC Journalism English SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

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-To make them understand the basic ethos of the news and news-gathering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Reporting, Unit 1	What is News? Definition of News. News values. Elements of news/news sense. What makes news as news?	04	What is news? - BBC World https://youtu.be/TSL2fG5BQI0	PowerPoint Presentation and blackboard
	Basic Principles of Reporting ABC of Reporting Accuracy, Balance/Brevity and Clarity.	04	https://youtu.be/uNidQHk5SZs	PowerPoint Presentation and

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Reporting, Unit 2	News Gathering , How do reporters gather news? Interviews Citizen Journalism Participation of citizens in breaking news-stories.	04 04	News Reporting and Writing: Melvin Mencher The art of interview: Martin Perlich https://youtu.be/bAvQv cskr-o	PowerPoint Presentation and PowerPoint Presentation and blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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NAME OF THE STAFF: MS ALINA DCOSTA DEPARTMENT: BAMMC CLASS: TYBAMMC Journalism English SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

-To enable students to become Reporters, which is supposed to be a prerequisite while entering into the field of Journalism.

-To make them understand the basic ethos of the news and news-gathering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Reporting, Unit 3	Importance of New Tools in the hands of Reporters.	04	Reporting: Troy Riberio	blackboard
Reporting, Unit 4	What is beat system, The basic beats Do's and Don'ts. Role of Reporters.	04	e-book IJ manual by UNESCO	PowerPoint Presentation
	Pulwama attack Gadchiroli Naxal attack Return of Abhinandan Varthaman	04	International Consortium of Investigative Journalists	PowerPoint Presentation and Group Discussions
	Kerala flood, Orissa thunderstorm, Bihar, Assam flood may also be studied	04	Natural disasters risk in India by Atlas Magazine	PowerPoint Presentation and Group Discussions

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS ALINA DCOSTA DEPARTMENT: BAMMC CLASS: TYBAMMC Journalism English SEMESTER: V MONTH: SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

-To enable students to become Reporters, which is supposed to be a prerequisite while entering into the field of Journalism.

-To make them understand the basic ethos of the news and news-gathering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Reporting, unit 5	Ethical Issues in reporting/ Credibility of Reporters. studies Follow-up Story Yellow Journalism and its comparison with other forms.	04	e-book IJ manual by UNESCO	PowerPoint Presentation and blackboard
	Rafale scam Agusta westland case	04	International Consortium of Investigative Journalists	PowerPoint Presentation and Group Discussions

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	PNB scam (Nirav modi) National Herald Panama case	04	International Consortium of Investigative Journalists	PowerPoint Presentation and Group Discussions
	Bofors scam Watergate scam	04	International Consortium of Investigative Journalists	PowerPoint Presentation and Group Discussions

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Alina Dcosta DEPARTMENT: BAMMC CLASS: TYBAMMC Journalism English SEMESTER: V MONTH: July ACADEMIC YEAR: 2022-23
LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Global adoption of mobile and its versatility

:M-Learning, in the Era of New Media

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Mobile Journalism & New Media, Unit 1	How mobile has influenced modern journalism Mobile centric reporting and editing Mobile as a 'Newsroom'	04	The Mobile Journalism Handbook : :Routledge	Canva Interactive presentations
Mobile	Branding of News using social media Mobile News catering to Niche beats Evolution of M-Learning (Mobile Learning)	04	A Field Guide for Mobile Journalism Producing photographic stories with smart phones	Canva Interactive presentations and online whiteboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

NAME OF THE STAFF: Ms Alina Dcosta DEPARTMENT: BAMMC CLASS: TYBAMMC Journalism English SEMESTER: V MONTH: August ACADEMIC YEAR: 2022-23
LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Global adoption of mobile and its versatility

: M-Learning, in the Era of New Media

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Mobile Journalism & New Media, Unit 3	How good design is intuitive, making something immediately usable. About the importance of satisfying expectations of tactile interaction and content: tap, flick, pinch, drag, etc.	04	Designing Interactive Websites, Mohleo James L and Thompson Learning	PowerPoint Presentation and blackboard
Mobile Journalism & New Media, Unit 4	How mobile design differs from established desktop design. (Options and choices for your content). About best practices for process: How design, development and content best work together. About Mobile Analytics:	04	Web Masters Hand Book, Galgotia	Canva Interactive presentations
	Different mobile development approaches and their benefits as well as weaknesses Responsive vs. mobile apps vs. mobile-optimized Sites	04	A Field Guide for Mobile Journalism Producing photographic stories with smart phones	Canva Interactive presentations
	How to go about planning and building mobile products (Different frameworks and services to move swiftly, other considerations such as staffing, timelines, etc.)	04	The Mobile Journalism Handbook : :Routledge	PowerPoint Presentation and blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Alina Dcosta DEPARTMENT: BAMMC CLASS: TYBAMMC Journalism English SEMESTER: V MONTH: September
ACADEMIC YEAR: 2022-23
LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Global adoption of mobile and its versatility

M-Learning, in the Era of New Media

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	About the evolution of wearable About the rise of Google Glass About Glass Journalism	04	Web Masters Hand Book, Galgotia	Canva Interactive presentations
Mobile Journalism & New Media, Unit 5	About augmented reality storytelling and journalism Emerging Forms of News management : 360 degree videos, wearable, accessories etc	04	A Field Guide for Mobile Journalism Producing photographic stories with smart phones	PowerPoint Presentation and blackboard

Emerging Managing Change in Newsroom culture and Evolving Business Models for M-Learning 04

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TYBMMC ADVERTISING

SEM V

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **NEETU AKHIL SHARMA** DEPARTMENT: **BAMMC** CLASS: **TYBAMMC (ADVERTSISING)** SEMESTER: V

SUBJECT**: BRAND BUILDING** MONTH: **JUNE** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to : To understand the awareness and growing importance of Brand Building

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BRAND BUILDING	Meaning, Product v/s Brand. Why brand matters ,Process of Branding, Types of brand - National, Building Retail, Flanker, Distributor, Luxury , Global brands)	02	David, A Aker, Building strong brands	PPT Slide
	Consumer, Industrial, Retail, Classified, Corporate, Public service, Generic, National, Global, personality International, Social (CSR) and Advocacy	03	Advertising Management	Newspaper and TVC Advertisement
	Product class, Consumer segmentation, Perceptual mapping, Brand benefits and attributes.	03	Brand positioning Subroto Sengupta	PPT Slide

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

N. Sharma

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **NEETU AKHIL SHARMA** DEPARTMENT: **BAMMC** CLASS: **TYBAMMC (ADVERTSISING)** SEMESTER: V

SUBJECT**: BRAND BUILDING** MONTH: **JULY** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: To know the various new way of building brands

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BRAND BUILDING	**a.Leveraging the brands:** Line, Brand extension, Types of Brand Extensions, their advantages and disadvantages, Moving up/ Down, Co- branding **b.Branding Strategies:** Multi- branding, Mix branding, Hierarchy Building Equity at Different Hierarchy Levels, Brand Product Matrix.	08	David, A Aker, Building strong brands	PPT Slide , various (Indian as well as international brand examples).
	Elements/ Sources. Measurement-Models: a. Yand R – Graveyard model **b**.Brand Asset Valuator **c.** Brand Equity Ten **d.**Inter brand Equity brand	08		PPT Slide and concept mapping

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:16

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NAME OF THE STAFF: **NEETU AKHIL SHARMA** DEPARTMENT: **BAMMC** CLASS: **TYBAMMC (ADVERTSISING)** SEMESTER: V

SUBJECT**: BRAND BUILDING** MONTH: **AUGUST** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to : To know about the global perspective of brand building

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BRAND BUILDING	Co-ordination across organization,. Co-ordination Imperatives across geography, Re-branding, revitalizing, Rural Advertising and brands	07	David, A Aker, Building strong brands Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation	PPT Slide , videos and group discussion
	Emergence of global brands, Advantages and Disadvantages, Global leadership brands and position , Globalization	06		PPT Slide and concept mapping
	Corporate Image in Contemporary Management, , image Advertising and Corporate Image	03		PPT Slide

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **NEETU AKHIL SHARMA** DEPARTMENT: **BAMMC** CLASS: **TYBAMMC (ADVERTSISING)** SEMESTER: V

SUBJECT**: BRAND BUILDING** MONTH: **SEPTEMBER** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: How to handle the brands at every stage from introduction to maturity.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BRAND BUILDING	CSR as part of business environment management, Building How CSR activities can be used for Brand Building though, social activities other than CSR to enhance the corporate brand	03	Kumar, Ramesh S, Marketing and branding-Indian scenario	Class Discussion
	Important factors in conception and various and stages of Growth growth and maturity of brands with various case studies	03	Kumar, Ramesh S, Marketing and branding-Indian scenario	TVC, Radio and print ads and discussion
	Customer, Industrial, Retail and Service Brands	02	. Brand management – the Indian context – Y L R Moorth	PPT slides with TVC , radio and Print ads
	Corporate Image in Contemporary Management, image Advertising and Corporate Image	04		
	REVISION and CASE STUDY SOLVING	04	Past Question Papers	Class Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: NEETU AKHIL SHARMA** DEPARTMENT: **BAMMC** CLASS: **TYBAMMC ADVERTISING (ENG)** SEMESTER: **V**
MONTH: **JUNE** ACADEMIC YEAR**: 2022-23**
LEARNING OBJECTIVES: To acquaint the students with concepts, techniques for developing an effective advertising campaign.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AGENCY MANAGEMENT	Advertising Agencies: • their role, Functions, Organization and Importance • different types of ad agencies	04	Advertising and Promotion by G. Belch and M. Belch	PowerPoint Presentation
	The Client - Agency Relationship • 3P's of Service: Physical evidence, Process and People • The Gaps Model of service quality	04	Advertising Promotion and Other Aspects of Integrated Marketing Communications by Terence A. Shimp	Case studies PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: NEETU AKHIL SHARMA** DEPARTMENT: **BAMMC** CLASS: **TYBAMMC ADVERTISING (ENG)** SEMESTER: **V**
MONTH: **JULY** ACADEMIC YEAR**: 2022-23**
LEARNING OBJECTIVES: To familiarize students with the different aspects of running an ad agency.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AGENCY MANAGEMENT	Two current campaigns (Previous current two years) for each of the following Advertising agencies including TVC, Print, campaigns of the Outdoor and digital should be best advertising studied, and analyzed in the class agencies for 15 room. their clients a. JWT b. Ogilvy c. Lowe Lintas d. FCB Ulka e. DDB Mudra f. Publicize Worldwide	08	Case- Studies / analysis of ads prepared by the agency	PowerPoint Presentation and impromptu agency formation
	a. Entrepreneurship Definitions, Meaning Concept, Functions, Need and Importance. b. Entrepreneurship-As Innovation, risk taking and problem solving. c. Social Entrepreneurship	04	Advertising and Promotion by G. Belch and M. Belch	Case studies and PowerPoint Presentation
	a. Sources of new Ideas, Starting the Venture b. Methods of generating ideas, creating problem solving, c. product planning and development process	04	Advertising Promotion and Other Aspects of IMC by Terence A. Shimp	Flipped classroom method and PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: NEETU AKHIL SHARMA** DEPARTMENT: **BAMMC** CLASS: **TYBAMMC ADVERTISING (ENG)** SEMESTER: **V**
MONTH: **AUGUST** ACADEMIC YEAR**: 2022-23**
LEARNING OBJECTIVES: To inculcate competencies to undertake professional work in the field of advertising.

PAPER, UNIT, TITLE	SUBTOPICS	No. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AGENCY MANAGEMENT	a. Business plan introduction, Setting up an Agency b. Various Stages in setting up a new Agency Growing the Agency • The Pitch	04	Advertising and Promotion by G. Belch and M. Belch	PowerPoint Presentation
	a. The Marketing brief, the client b. Marketing Audit, c. Marketing Objectives, d. Marketing Problems and Opportunities Review, e. STP, f. Executing the plan, g. Evaluating the plan	04	Advertising Promotion and Other Aspects of Integrated Marketing Communications by Terence A. Shimp	PowerPoint Presentation
	a. Traditional Response Process Hierarchy Models: AIDA b. Communications Objectives c. DAGMAR: An Approach to Setting Objectives The psychological theories behind sales promotion	06	Advertising and Promotion by G. Belch and M. Belch	PowerPoint Presentation
	a. Various methods of Agency Compensation Remunerations	02	Advertising Promotion and Other Aspects of Integrated Marketing Communications by Terence A. Shimp	PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: NEETU AKHIL SHARMA** DEPARTMENT: **BAMMC** CLASS: **TYBAMMC ADVERTISING (ENG)** SEMESTER: **V**
MONTH: **SEPTEMBER** ACADEMIC YEAR**: 2022-23**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AGENCY MANAGEMENT	a. The Pitch: request for Agency proposal, speculative pitches, Pitch Process b. References, Image and reputation, PR	04	Advertising Promotion and Other Aspects of Integrated Marketing Communications by Terence A. Shimp	PowerPoint Presentation With advertisement of TVC and Print media
	a. The Scope and Role of Sales Management b. Reasons for the Increase in Sales Promotion	01	Advertising and Promotion by G. Belch and M. Belch	
	c. Objectives of Trade-Oriented Sales Promotion d. Techniques of Trade-Oriented Sales Promotion e. Objectives and Techniques of Consumer-Oriented Sales Promotion	03		
	Revision and Case Study solving	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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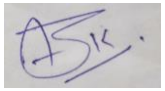
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BALKRISHNA AEER DEPARTMENT: BAMMC CLASS: TYBAMMC ADVT ENG

SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: help students acquire basic skills in the practical aspects, write and shoot effective Documentary and Ad film.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Documentary & AD film making **Understanding Documentary**	Introduction : Screening of Four different kind of documentaries and discussion	04		AV room Lectures Documentary Screening



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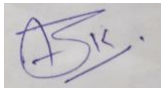
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BALKRISHNA AEER DEPARTMENT: BAMMC CLASS: TYBAMMC ADVT ENG

SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: The learners will be able to: help students acquire basic skills in the practical aspects, write and shoot effective Documentary and Ad film.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Documentary & AD film making **Understanding Documentary**	**1.Category-** Anthropological/Ethnographic Biographical/Historical Arts/Cultural Science Technology Promotional Educational Issues Investigative Family Values Exploration/Adventure Environment including Agricultural Social	8		AV room Lectures Documentary Screening



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	2.Writing formation of Concept **Research Modes**: Library, Archives, Location, Life stories, ethnographic. Synopsis Script and Visualization Commentary Subtitling/Translation	4	Book: Making documentary films & Videos By Barry Hampe	Classroom - Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

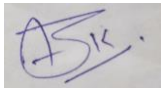
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BALKRISHNA AEER DEPARTMENT: BAMMC CLASS: TYBAMMC ADVT ENG

SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: The learners will be able to: The learners will be able to: help students acquire basic skills in the practical aspects, write and shoot effective Documentary and Ad film.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Documentary & AD film making	**Pre-Production :** Engaging technical team & equipment. Acquiring shooting permissions. Production : On locale and studio shooting. Technology involved	8	Book: Making documentary films & Videos By Barry Hampe	Classroom - Blackboard



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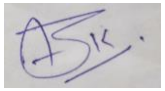
Understanding Documentary (Production)				
	Post Production : Editing (Technique & Grammar), Voice over, Music, Foley, Sp. Effects/Graphics, Sound Re- recording and Mixing, DI and Subtitling. Making final master& telecast copy.	8	Book: Making documentary films & Videos By Barry Hampe	Classroom - Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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TEACHING PLAN (UNIT PLAN)

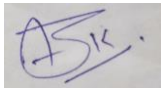
NAME OF THE STAFF: BALKRISHNA AEER DEPARTMENT: BAMMC CLASS: TYBAMMC ADVT ENG

SEMESTER: V MONTH: SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: The learners will be able to: The learners will be able to: help students acquire basic skills in the practical aspects, write and shoot effective Documentary and Ad film.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Documentary & AD film making Pre to post Production	Writing a selling concept. Budgeting. Preparing Storyboard (Using different formats of making) Agency/Client approval.	8	Book: Making documentary films & Videos By Barry Hampe	Classroom - Blackboard
	Finalization of Cast and Crew. Set erection/Location, Scheduling, Shooting. Editing, Voice over, Music, Foley, Sp. Effects/Graphics, Sound Re-recording & Mixing, DI & Subtitling. Making final master & telecast copy.	8	Book: Making documentary films & Videos By Barry Hampe	Classroom - Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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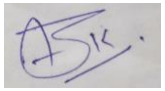
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BALKRISHNA AEER DEPARTMENT: BAMMC CLASS: TYBMM ADVT ENG

SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : communicate and tell stories through the web

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Social Media Marketing **Digital Era**	**Introduction To E-Marketing** What is the E Marketing? changing marketing E-Marketing landscape. The internet and business.	**2**	Digital marketing by Vanadana Ahuja	**AV Room Lecture –PPT**
Social Media Marketing **Digital Era**	**E-Marketing** E- marketing strength and application, Communication modes, The behavioural internet (B2C, B2B, C2Cand C2B) E –marketing and Online advertising. Emarketing and Consumer segmentation, E-marketing and Sales and Trade promotions	4	Digital marketing by Vanadana Ahuja	**AV Room Lecture –PPT**



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Digital Era	**Types Of Digital Marketing** Types E- mail marketing, Types Internet marketing . Types of Mobile marketing	2	Digital marketing by Vanadana Ahuja	**AV Room Lecture –PPT**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

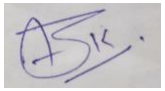
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BALKRISHNA AEER DEPARTMENT: BAMMC CLASS: TYBMM ADVT ENG

SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: communicate and tell stories through the web

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Digital Era	**Generation Y** Expectation and influence , Implication of Digital change , Emerging consumer segmentation in India	2	Social Media Marketing: a strategic approach by Barker and Barker	Classroom Lecture – chalk board



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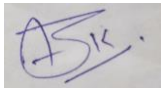
SMM	**1.Introduction to SSM** Meaning , Importance , Myths about SSM. Brief History Characteristics of Social Medkia. marketer and Careers in Social media marketing	3	Social Media Marketing: a strategic approach by Barker and Barker	**AV Room Lecture –PPT**
SMM	**2.Content Strategy -**10- step framework for creating successful SMM For Social Media strategy, Building content for sharing, Generating Marketing Ideas, Creating content for Multiple platforms	3	Social Media Marketing: a strategic approach by Barker and Barker	**AV Room Lecture –PPT**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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TEACHING PLAN (UNIT PLAN)

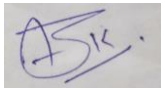
NAME OF THE STAFF: BALKRISHNA AEER DEPARTMENT: BAMMC CLASS: TYBMM ADVT ENG

SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : communicate and tell stories through the web

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
SMM	**3.Face Book Face book –** the Origin and Eight different version Marketing of Facebook , What is Face book marketing ? Facebook page best practices, KPI and insights , How does Face book advertising work – Face book ad campaign Objectives and targeting and Content creation and sharing	3	Social Media Marketing: a strategic approach by Barker and Barker	Lab Lecture - Practical
	4.Instagram Optimizing Instagram profile, Creating content Marketing strategy, Influencer marketing and Instagram Ads	1	Digital marketing by Vanadana Ahuja	Lab Lecture - Practical
SMM	**5.Linked** In LinkedIn for personal branding, LinkedIn for Marketing Company pages ,Brand marketing for LinkedIn, Ads on LinkedIn	2	Digital marketing by Vanadana Ahuja	Lab Lecture - Practical
SMM	**6.Pinterest** Pinterest for business, Marketing on Pinterest, Marketing Leveraging Rich Pins	1	Digital marketing by Vanadana Ahuja	Lab Lecture - Practical
SMM	**7.Youtube** How to build foundation for your Youtube channel, Marketing Usage of free resource , Optimize organic traffic by selecting key words for videos , Optimization of advertisements	1	Digital marketing by Vanadana Ahuja	Lab Lecture - Practical

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:08



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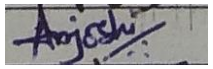
FYBMMC (MARATHI)

SEM I



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Aradhana M. Joshi DEPARTMENT: BAMMC CLASS: _FYBAMMC (Mar) SEMESTER: _I__

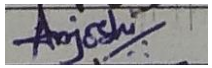
MONTH: ___September_____ ACADEMIC YEAR: 2022 - 2023

LEARNING OBJECTIVE/S:

The learners will be able to : _

1. To provide learners with overview on current developments in various fields.
2. To generate interest among the learners about burning issues covered in the media
3. To equip them with basic understanding of politics, economics, environment and technology so that students can grasp the relevance of related news.
4. Twenty minutes of newspaper reading and discussion is mandatory in every lecture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Current Affairs/ Current National stories	• Three political stories of national importance • Political leaders : news makers of the season (brief profile of any three) • One dominating economic/ business news • One dominating environment news stories • One story of current importance from any other genre	10	Newspapers like Loksatta, Lokmat, Sakal, News apps	PPTs



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Polity and Governace	• Ministries of Govt. of India, Autonomous govt. bodies • Ministry of Home affairs – Enforcement Organizations, Internal Security, Police	02	Newspapers like Loksatta, Lokmat, Sakal, News apps , Govt. websites	PPTs

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____12___

TEACHING PLAN (UNIT PLAN)

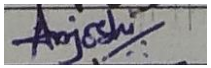
NAME OF THE STAFF: ___Aradhana M. Joshi_____ DEPARTMENT: _BAMMC__CLASS: __FYBAMMC (Marathi) SEMESTER: _I___

MONTH: __Oct._____ ACADEMIC YEAR: 2022 - 2023

LEARNING OBJECTIVE/S:
The learners will be able to : _

1. To provide learners with overview on current developments in various fields.
2. To generate interest among the learners about burning issues covered in the media
3. To equip them with basic understanding of politics, economics, environment and technology so that students can grasp the relevance of related news.
4. Twenty minutes of newspaper reading and discussion is mandatory in every lecture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Polity and Governace	• Communal tensions – Review of latest episodes of communal tensions	03	Newspapers like Loksatta,	PPTs, Quiz on current affairs



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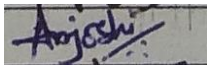
	• The tensions in J& K - Background, Political players, Update on the current situation • Review of any three Central Government projects and policies		Lokmat, Sakal, News apps	
Inrenational Affairs	• Security Council – Structure and role • Issues that currently engage the SC • Role of United Nations – General Assembly, other main organs of the UNO • Issues that currently engage the UNO • Four conflicts / issues of international importance	08	Newspapers like Loksatta, Lokmat, Sakal, News apps, Competition Master	Laptop and Mobile for current updates, chalk and board method
Maharashtra Issues	• Political parties reach and challenges, political leaders • An update on the current political dynamics of Maharashtra • News relating to the marginalized and displaced tribes • The latest news on the floods and drought, unemployment, health issues etc. • Update two on going state projects	05	Newspapers like Loksatta, Lokmat, Sakal, News apps	PPTs

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____16_____



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TEACHING PLAN (UNIT PLAN)

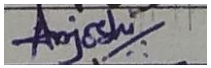
NAME OF THE STAFF: _Aradhana M. Joshi_____ DEPARTMENT: BAMMC CLASS: _FYBAMMC (Marathi)____ SEMESTER: ___I__

MONTH: ____Nov._____ ACADEMIC YEAR: 2022 - 2023

LEARNING OBJECTIVE/S:
The learners will be able to : _

1. To provide learners with overview on current developments in various fields.
2. To generate interest among the learners about burning issues covered in the media
3. To equip them with basic understanding of politics, economics, environment and technology so that students can grasp the relevance of related news.
4. Twenty minutes of newspaper reading and discussion is mandatory in every lecture

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Technology	• Mobile application for Journalists – Mobile apps help in content creation, examples of Mobile apps used by journalists worldwide • Artificial intelligence and content Automation Tools – Introduction to Al and data science , Introduction to Content Automation tools, Examples of content automation tools in content creation	08	The Virtual Reality Primer – Casey Larijani The Secret of Viral Content Creation – Priyanka Agarwal	PPTs



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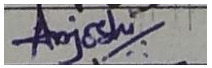
	• Augmented Reality & Virtual Reality in Media – Introduction to Augmented Reality, Introduction to Virtual Reality, Examples of Augmented Reality games and apps, Examples of Virtual Reality news websites worldwide			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __08_____



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TEACHING PLAN (UNIT PLAN)

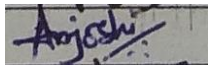
NAME OF THE STAFF: _Aradhana M. Joshi_____ DEPARTMENT: BAMMC CLASS: _FYBAMMC (Marathi)____ SEMESTER: ___I__

MONTH: ____Dec._____ ACADEMIC YEAR: 2022- 2023

LEARNING OBJECTIVE/S:
The learners will be able to : _

1. To provide learners with overview on current developments in various fields.
2. To generate interest among the learners about burning issues covered in the media
3. To equip them with basic understanding of politics, economics, environment and technology so that students can grasp the relevance of related news.
4. Twenty minutes of newspaper reading and discussion is mandatory in every lecture

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Technology	• Digital Gaming Industry – Introduction to Digital Gaming Industry	04	https://www.lucidpress.co/blog/top-30-social-media-automation-tools	PPTs



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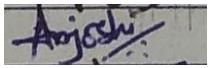
	• Digital gaming in India – Overview of Indian digital gaming		https://www.forbes.com/sites/suparnadutt/2018/03/09/how-online-gaming-in-india-is-growing-fast-into-a-billion-dollar	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __04_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **RUKSARBANO SHALAM SHAIKH** DEPARTMENT: **BAMMC**

CLASS: **FYBAMMC (MARATHI)** SEMESTER: **I** MONTH: **JULY** ACADEMIC YEAR: **2022 - 2023**

LEARNING OBJECTIVE/S:
The learners will be able to:

- The overview of the Indian Society.
- Understand the constitution of India.
- Acquaint them with the socio-political problems of India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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FOUNDATION COURSE – 01 **1. OVERVIEW OF INDIAN SOCIETY** **&** **2. Concept of Disparity – 1**	**1. Overview of Indian Society:** Understand the multi-cultural diversity of Indian society through its demographic composition population distribution according to religion, caste, and gender; Appreciate the concept of linguistic diversity in relation to the Indian situation; Understand regional variations according to rural. Urban and tribal characteristics; Understanding the concept of diversity as difference.	08	Foundation course – 01 by M.S. limn & A.J Vaghmare Online sources	Group Discussion lecture format practical experiences
	2. Concept of Disparity – 1 Understand the concept of disparity as arising out of stratification and inequality Explore the disparities arising out of gender with special reference to violence against women, female foeticide (declining sex ratio) Portrayal of women in media; Appreciate the inequalities faced by people with disabilities and understand the issues of people with physical and mental disabilities.	08	Foundation course –01 by M.S. limn & A.J Vaghmare Online sources	Group Discussion lecture format practical experiences

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **RUKSARBANO SHALAM SHAIKH** DEPARTMENT: **BAMMC**

CLASS: **FYBAMMC (MARATHI)** SEMESTER: **I** MONTH: **AUGUST** ACADEMIC YEAR: **2022-2023**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE – 01 **3. Concept of Disparity - 2 : &** **4. The Indian Constitution :**	**3.Concept of Disparity - 2 :** Examine inequalities manifested due to the caste system and inter-group conflicts arising thereof Understand inter-group conflicts arising out of communalism; Examine the causes and effects of conflicts arising out of regionalism and linguistic differences	08	Foundation course –01 by M.S. limn & A.J Vaghmare Online sources	Group Discussion lecture format practical experiences
	4.The Indian Constitution : Philosophy of the Constitution as set out in the Preamble;The structure of the Constitution-the Preamble, Main Body and Schedules; Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony As crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution	08	Foundation course –01 by M.S. limn & A.J Vaghmare Online sources	Group Discussion lecture format

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **RUKSARBANO SHALAM SHAIKH** DEPARTMENT: **BMM/MASS MEDIA**

CLASS: **FYBAMMC (MARATHI)** SEMESTER: **I** MONTH: **SEPTEMBER** **ACADEMIC YEAR: 2022-2023**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE – 01 **5. Significant Aspects of Political Processes :** **&** **6. Growing Social Problems in India :**	**Significant Aspects of Political Processes :** The party system in Indian politics; Local self-government in urban and rural areas the 73rd and 74th Amendments and their implications for inclusive politics; Role and significance of women in politics	08	Foundation course –01 by M.S. limn & A.J Vaghmare Online sources	Group Discussion lecture format practical experiences
	Growing Social Problems in India : Substance abuse- impact on youth & challenges for the future HIV/AIDS- awareness, prevention, treatment and services	08	Foundation course –01 by M.S. limn & A.J Vaghmare Online sources	Group Discussion lecture format practical experiences

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **RUKSARBANO SHALAM SHAIKH** DEPARTMENT: **BMM/MASS MEDIA**

CLASS: **FYBAMMC (MARATHI)** SEMESTER: **I** MONTH: **OCTOBER** ACADEMIC YEAR: **2022-2023**

Foundation Course – 01 **6. Growing Social Problems in India :**	Problems of the elderly- causes, implications and response Issue of child labour- magnitude, causes, effects and response Child abuse- effects and ways to prevent Trafficking of women- causes, effects and response. Doubt clearing lectures and revision	04	Foundation course –01 by M.S. limn & A.J Vaghmare Online sources	Group Discussion lecture format practical experiences

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAVIN R. PATIL **DEPARTMENT: BAMMC** **CLASS: FYBAMMC(MARATHI) SEMESTER: I**

MONTH: OCT/NOV **ACADEMIC YEAR:2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication
2) To make students aware with functional and operational use of language in media
3) To enhance students with structural and analytical reading, writing and thinking skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EFFECTIVE COMMUNICATION-I	The concepts of communication and its process	03	Textbook	GOOGLE MEET
	Types of communication, Oral communication and Media and Listening Skills.	03	Textbook	GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAVIN R. PATIL **DEPARTMENT: BAMMC** **CLASS: FYBAMMC MARATHI** **SEMESTER: I**

MONTH: NOV/DEC **ACADEMIC YEAR: 2022-2023**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EFFECTIVE COMMUNICATION-I	Reading: Types of Reading, Various aspects of language and Grammar and usages.	04	Textbooks	GOOGLE MEET
	Thinking : its types and process	05	Textbook	GOOGLE MEET
	Presentation: Types, Importance of Presentation, Making and delivering a presentation	05	Textbook	GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAVIN R. PATIL **DEPARTMENT: BAMMC** **CLASS: FYBAMMC(MARATHI) SEMESTER: I**

MONTH: OCT/NOV **ACADEMIC YEAR:2022-2023**

LEARNING OBJECTIVE/S: Learner will be able to: understand Media history through key events in the cultural history

- understand the history and role of professionals in shaping communications.
- understand the values that shaped and continues to influence Indian mass media.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY OF MEDIA	a. Newspaper – the rise of the voice of India during British rule b. India's Freedom Struggle and Role of Media	03	JOURNALISM IN INDIA: HISTORY, GROWTH, DEVELOPMENT BY K. C. SHARMA	GOOGLE MEET
	c. Independence and rise of Newspapers, Newspapers – a social aspect for freedom struggle, PRESS ACTS of India	03	INDIAN NEWS MEDIA: FROM OBSERVER TO PARTICIPANT BY USHA M. RODRIGUES & MAYA RANGANATHAN	GOOGLE MEET

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	d. Press during the Emergency Period			
	Rise of Hindi Language Newspapers (detailed report on vernacular press in India referring to newspapers	02	JOURNALISM IN INDIA: HISTORY, GROWTH, DEVELOPMENT BY K. C. SHARMA	GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAVIN R. PATIL **DEPARTMENT: BAMMC** **CLASS:FYBAMMC(MARATHI) SEMESTER: I_**

MONTH:NOV/DEC **ACADEMIC YEAR: 2022-2023**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HISTORY OF MEDIA	a. Regional Press and its popularity of Indian regional languages in various regions Vernacular Press Act1876	02	JOURNALISM IN INDIA: HISTORY, GROWTH, DEVELOPMENT BY K. C. SHARMA	Black board method
	a. Genesis of documentaries and short film	02	DOCUMENTARY FILMS AND INDIAN AWAKEN BY JAGMOHAN, PUBLICATIONS DIVISIONS MINISTRY OF BROADCASTING AND INFORMATION, GOVERNMENT OF INDIA	Blackboard method and group discussions

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	b. Evolution of film making in India -brief history, Photography to moving films c. Origin of Hindi cinema	02		Blackboard method and group discussions with thorough analysis of notable movies
	d. Origin of Short films to what it is today, role of you tube and WhatsApp Great masters of world cinema	03	COMMUNICATION IN HISTORY: STONE AGE SYMBOLS TO SOCIAL MEDIA BY DAVID CROWLEY	Group discussions and social media application
	a. Radio & Television as Mass Media b. Radio and Television Broadcasting c. The beginning of Radio and Television Shows ● A New Era in Broadcasting in India	03	MASS COMMUNICATION IN INDIA – BY KEVAL J. KUMAR	Blackboard method and group discussions

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAHESH BHILA JAGTAP DEPARTMENT: BAMMC CLASS: FY BAMMC MAR SEMESTER: I MONTH: OCTOMBER ACADEMIC YEAR: 2022- 2023

LEARNING OBJECTIVE/S:
The learners will be able to : **Understanding Visual communication as part of Mass Communication**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Visual Communication	INTRODUCTION : History and development of Visuals, Need and importance of visual communication ,Visual Communication as a process and as an expression, Language and visual communication attitudes	1	Textbook of VC from Vipul publication And Examples shown through videos and PPT slides wherever necessary	PPT,GOOGL MEET,
	THEORIES: SENSUAL : a) Gestal b)Constructivism c) Ecological	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 2

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NAME OF THE STAFF: MAHESH BHILA JAGTAP DEPARTMENT: BAMMC CLASS: FY BAMMC MAR SEMESTER: I MONTH: NOVEMBER ACADEMIC YEAR: 2022- 2023

LEARNING OBJECTIVE/S:
The learners will be able to : The ability to understand and analyze visual communication from a critical perspective

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Visual Communication	**IMPACT OF COLORS :** **1.Color theory** **2. Psychological implications of color** **3. Colors and visual pleasure** **4. Elements of Design** **Visible concepts: Plans and organisational charts,Maps ,Chronologies. Invisible Concepts :Generalisation Theories, Feelings or**	**4**	**Colour wheel , Advertising Design book of TYBMM . help of colour newspaper cuttings were used**	**PPT ,GOOGL MEET,**

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	LANGUAGE AND CULTURE IN THE AGE OF SOCIAL MEDIA : 1.Ethics 2. Impact of Language and culture, Images and messages, Signs & Symbols (GIF, etc.) 3. Audience Behavior PERCEPTUAL : a)Semitics b) Cognitive	4	Social media (facebook, instagram etcGIF , Whats app emojis etc	PPT,GOOGL MEET,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAHESH BHILA JAGTAP DEPARTMENT: BAMMC CLASS: FY BAMMC MAR SEMESTER: I MONTH: DECEMBER _____ ACADEMIC YEAR: 2022- 2023

LEARNING OBJECTIVE/S:
The learners will be able to : : To provide students with tools that would help them visualize and communicate

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Visual Communication	• Citizen Journalism, Going Viral • Visual stereotyping in social media	2	Recent cases from social media	PPT,GOOGL MEET,
	CHANNELS OF VISUAL COMMUNICATION 1. Painting & Photography 2. Film & Television, Documentaries, Script writing & visualization	1	Topic Related sources from newspaper, TV, photographs, theatre artist expression etc	PPT,GOOGL MEET,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAHESH BHILA JAGTAP DEPARTMENT: BAMMC CLASS: FY BAMMC MAR SEMESTER: I MONTH: DECEMBER _____ ACADEMIC YEAR: 2022- 2023

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Visual Communication	3.Comics & Cartoons, Digital Images, Animation & VFX 4. News Papers, Advertisements, Photo Journalism 5. Folk & Performing Arts , Theatre	2	Topic Related sources from newspaper, TV, photographs, theatre artist expression etc	PPT,GOOGL MEET,
	Case- Study / practical Session	2	Brand names, logos, Signs , Symbols, Advertisements etc	Videos and PPT,Class room self assessment , projects given to evaluation
	Revision / Doubt Solving session	03	----------	PPT and Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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NAME OF THE STAFF: **MAHESH BHILA JAGTAP** DEPARTMENT**: BAMMC** CLASS: **FY BAMMC** SEMESTER: **I** MONTH: **OCTOMBER**

ACADEMIC YEAR: **2022- 2023**

LEARNING OBJECTIVES: TO INTRODUCE STUDENTS TO THE HISTORY,EVOLUTION AND DEVELOPMENT OF MASS COMMUNICATION IN THE WORLD.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FUNDAMENTALS OF MASS COMMUNICATION MODULE I	Meaning and need for Mass communication	1	Mass Communication in India: Keval.J Kumar	Google meet ,ppt
	Forms of communication: Interpersonal, Intrapersonal, Group, Public, Mass communication, Electronic, Satellite, Interactive, Digital Communication etc..	01	Mass Communication in India: Keval.J Kumar	Google meet ,ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 2

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NAME OF THE STAFF**: MAHESH BHILA JAGTAP** DEPARTMENT: **BAMMC** CLASS: **FY BAMMC** SEMESTER: **I** MONTH: **NOVEMBER** _____ ACADEMIC YEAR: **2022- 2023**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FUNDAMENTALS OF MASS COMMUNICATION MODULE II & III	1. From Oral to communication (Kirtan, Davandi, Powada, Nagara) 2. From Electric to Electronic communication, From Electric to Digital Communication, Contemporary Scene in Indian Communication Landscape Models Of Communication: Gerber's Model, Sociological Model, Gate keeping Model, Defleur's Model of the taste-differentiated of Audience Model, HUB model, Sadharnikaran	4	Mass Communication in India: Keval.J Kumar Jansamvad and sidhant	Google meet ,ppt
	1. Traditional and Folk Media 2. Print, Newspaper, Books and Magazines 3. Broadcast: Television/ Radio 4. Films	4	Mass Communication	Google meet ,ppt

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	5. Radio		in India: Keval.J Kumar	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MAHESH BHILA JAGTAP** DEPARTMENT: **BAMMC** CLASS: **FY BAMMC** SEMESTER: **I** MONTH: **DECEMBER**

ACADEMIC YEAR**: 2022- 2023**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FUNDAMENTALS OF MASS COMMUNICATION MODULE IV	A 1. Social Impact (With social reformers who have successfully used mass communication) 2. Political Impact (With Political Leaders who have successfully used mass communication) 3. Economic Impact (with how economic changes were brought about by mass communication) 4. Developmental Impact (With how the government has successfully used mass communication) B. Impact of Mass Media on:	5	Web sources and various news channels and newspapers, biopic	Google meet ,ppt

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	1. Education 2. Children 3. Women 4. Culture 5. Youth 6. Development		Mass Communication in India: Keval.J Kumar	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MAHESH BHILA JAGTAP** DEPARTMENT: **BAMMC** CLASS**: FY BAMMC** SEMESTER**: I** MONTH: **DECEMBER**

ACADEMIC YEAR: 2022- 2023

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FUNDAMENTALS OF	1. Elements and Features of New Media, Technologies used in the New Media 2. Major Challenges to new media, Acquisition Personal, Social and national 3. Future Prospect	5	Mass Communication in India: Keval.J Kumar	Google meet ,ppt

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MASS COMMUNICATION **MODULE** **V**	**REVISION**	As per students requirement		Google meet ,ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 (Revision- Total number of lectures required by students)

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TEACHING PLAN (UNIT PLAN)

SEM III

SYBAMMC (MARATHI)

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **RUKSARBANO SHALAM SHAIKH** DEPARTMENT: **BAMMC**

CLASS: **SYBAMMC (MARATHI)** SEMESTER:**III** MONTH: **JULY** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To make the students acquainted with working of the two powerful media; i.e. radio and television.
- The content is useful for both advertising and journalism students in order to further their careers in their respective fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ELECTRONIC MEDIA-01 **Module I & II**	**Introduction** A) A Short History of Radio and TV in India and abroad Doorsdarshan	05	Radio and Television by Aparajit Deshpande Radio and Television by Jinal Dhaval Bhatt & Pooja Narayan Patil Electronic Media-01 _ Aparajit Deshpande	Lecture format PowerPoint Presentation Discussion YouTube video Audio – Visual Format

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	B) Introduction to Prasar Bharti		https://www.youtube.com/watch?v=U6p1Rsd2rq4 (History of Radio in Hindi) https://www.youtube.com/watch?v=GcHmFE9Goto (Television Invention History) https://www.youtube.com/watch?v=gZlqfrxbkWQ (Doorsdarshan History) https://www.youtube.com/watch?v=6TEeQo00uHY Prasar Bharati Turns 20 (History to Present) Online sources	
	C. FM radio and community radio D. Convergence trends	05	Notes by Ruksar Shaikh Electronic Media-01 _ Aparajit Deshpande https://www.youtube.com/watch?v=aCa4ZR80BlM (Community Radio in India) Jansawad Siddhant Aani Vyvhar by Rama Golvalkar Potdukhe	Lecture format PowerPoint Presentation Discussion YouTube video Audio – Visual Format

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	A. Introduction to sound 1. Types of Sound: Natural, Ambient, Recorded 2. The Studio Setup 3. Types of recording- Tape Recording, Digital Recording 4. Outdoor Recording 5. Types of Microphones	04	Electronic Media-01 _ Aparajit Deshpande Radio and Television by Aparajit Deshpande Radio and Television by Jinal Dhaval Bhatt & Pooja Narayan Patil Online sources	Lecture format PowerPoint Presentation Discussion YouTube video Audio – visual Format
	B. Introduction to Visuals 1. The Power and Influence of Visuals 2. The Video-camera: types of shots, camera positions, shot sequences, shot length	02	Electronic Media-01 _ Aparajit Deshpande Radio and Television by Aparajit Deshpande Online sources	Lecture format PowerPoint Presentation Discussion YouTube video Audio – visual Format

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **RUKSARBANO SHALAM SHAIKH** DEPARTMENT: **BAMMC**

CLASS: **SYBAMMC (MARATHI)** SEMESTER: **III** MONTH: **AUGUST** ACADEMIC YEAR: **2022-2023**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ELECTRONIC MEDIA-01 **Module II & III**	3. Lighting: The importance of lighting 4. Television setup: The TV studio 5. difference between Studio and on-location shoots	03	Electronic Media-01 _ Aparajit Deshpande Radio and Television by Aparajit Deshpande Online sources Radio and Television by Aparajit Deshpande Radio and Television by Navita Kulkarni Jansawad Siddhant Aani Vyvhar by Rama Golvalkar Potdukhe	Lecture format PowerPoint Presentation Discussion YouTube video Audio – visual Format

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	C. Electronic News Gathering (ENG) 1. Single camera 2. Two men crew D. Electronic Field (EFP) Production 1. Single camera set up 2. Multi-camera set up 3. Live show production	03	Radio and Television by Aparajit Deshpande Radio and Television by Jinal Dhaval Bhatt & Pooja Narayan Patil Online sources	Lecture format PowerPoint Presentation Discussion YouTube video Audio – visual Format
	1. Introduction to Radio Formats - - News - Documentary -Feature - Talk Show - Music shows - Radio Drama - Radio interviews - Sports broadcasting 2. Introduction to Television formats -News - Documentary - Feature	10	Radio and Television by Aparajit Deshpande Online sources Notes by Gajendr Deoda https://www.youtube.com/watch?v=X9bh7OxmsuE (KHIDKI - Radio Play) https://www.youtube.com/watch?v=ezpBLzPB2dU (Radio Documentary titled "Nehru Tara Mandal") https://www.youtube.com/watch?v=NTBkm9SHL5M **Radio Mirchi Talk Show**	Lecture format PowerPoint Presentation Discussion YouTube video Audio – visual Format

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	- Talk Shows - TV serials and soaps - Introduction to web series - Docudrama - Sports - Reality - Animation - Web series			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **RUKSARBANO SHALAM SHAIKH** DEPARTMENT: **BAMMC**

CLASS: **SYBAMMC (MARATHI)** SEMESTER: **III** MONTH: **SEPTEMBER** ACADEMIC YEAR: **2022-2023**

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ELECTRONIC MEDIA-01 **Module IV & V**	Different Roles and contributions in the society A. Community Radio-role and importance B. Contribution of All India Radio C. The Satellite and Direct to Home challenge	07	Notes by Gajendr Deoda Radio and Television by Aparajit Deshpande Online sources	PowerPoint Presentation Lecture format Discussion
	Introduction to Production process 1. Pre- Production Script Storyboard Camera plot Lighting plot	03	Online sources Notes by Gajendr Deoda Radio and Television by Aparajit Deshpande	PowerPoint Presentation Lecture format Discussion

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	2. Production Camera angles Sequence Scene Shot Log keeping	03	Notes by Gajendr Deoda Radio and Television by Aparajit Deshpande Online sources	PowerPoint Presentation Lecture format Discussion
	3. Post- Production Linear editing Non-linear editing Library shots Library sounds Dubbing	03	Online sources Notes by Gajendr Deoda Radio and Television by Aparajit Deshpande	PowerPoint Presentation PDF Presentation Movie scaring

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **RUKSARBANO SHALAM SHAIKH** DEPARTMENT: **BAMMC**

CLASS: **SYBAMMC (MARATHI)** SEMESTER: **III** MONTH: **JULY** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To inculcate liking and understanding of good cinema.
- To make students aware with a brief history of movies; the major cinema movements.
- Understanding the power of visuals and sound and the ability to make use of them in effective communication.
- Insight into film techniques and aesthetics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

FILM COMMUNICATION-I **MODULE I , II & III**	History: Still pictures to moving images. 1.1 History of Cinema. 1.2 Birth of Visual Art. 1.3 Understanding the Language of Cinema. 1.4 Transition from Documentary to Feature Film	06	Understanding Cinema by Sudipta Roy Chowdhury Film Communication-I by Chetan Mathur Film Communication-I by Dr. Mahesh patil & Ms. Tejal Shinde Online Sources	PowerPoint Presentation Discussion YouTube video website Storytelling method
	Understanding aspects of film appreciation. 2.1 Grammar, Technology and Art. Director - the captain Writer – the back bone. 2.2 Aspects of Film-1: Visual Aspects and Editing, Mise-en-Scene (Art, Costume, Camera placement) Cinematography Creating Meaning through editing 2.3 Aspects of Film-1: Film Sound, Three components of Film Sound, The relationship between Sound and Image	08	Understanding Cinema by Sudipta Roy Chowdhury Film Communication-I by Chetan Mathur Film Communication-I by Dr. Mahesh patil & Ms. Tejal Shinde Online Sources	PowerPoint Presentation Discussion YouTube video website Storytelling method

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	The Early Cinema: 1895 to 1950 3.1 Early Years (1895-1919) World and India.The Silent Era (1920-1931)	02	Understanding Cinema by Sudipta Roy Chowdhury Film Communication-I by Chetan Mathur Film Communication-I by Dr. Mahesh patil & Ms. Tejal Shinde Online Sources	PowerPoint Presentation Discussion YouTube video website Storytelling method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **RUKSARBANO SHALAM SHAIKH** DEPARTMENT: **BAMMC**

CLASS: **SYBAMMC (MARATHI)** SEMESTER: **III** MONTH: **AUGUST** ACADEMIC YEAR: **2022-2023**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FILM COMMUNICATION-I **MODULE III & IV**	3.2 Early Sound Era (1930-1939) 3.3 The developmental stage (1940-1950)	04	Understanding Cinema by Sudipta Roy Chowdhury Film Communication-I by Chetan Mathur Film Communication-I by Dr. Mahesh patil & Ms. Tejal Shinde Online Sources	Discussion YouTube video website Storytelling method

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	Major film movements and its impact. 4.1 The major cinema movements and their film makers 4.2 Hollywood Cinema-Brief history of Hollywood, Star system, academy Awards, global audience of Hollywood cinema 4.3 Italian neo-realism- Origin and impact on world cinema, work of Roberto Rossellini and Vittorio de sica	07	Understanding Cinema by Sudipta Roy Chowdhury Film Communication-I by Chetan Mathur Film Communication-I by Dr. Mahesh patil & Ms. Tejal Shinde Online Sources	PowerPoint Presentation Discussion YouTube video website Storytelling method
	4.4 Japanese cinema- Work of Yasujiro ozu, Akira Kurosawa, Hayao Miyazaki etc. 4.5 Irani cinema- Contribution of Abbas Kiarostami, Majid Majidi etc.	05	Understanding Cinema by Sudipta Roy Chowdhury Film Communication-I by Chetan Mathur Film Communication-I by Dr. Mahesh patil & Ms. Tejal Shinde Online Sources	PowerPoint Presentation Discussion YouTube video website Storytelling method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **RUKSARBANO SHALAM SHAIKH** DEPARTMENT: **BAMMC**

CLASS: **SYBAMMC (MARATHI)** SEMESTER: **III** MONTH: **SEPTEMBER** ACADEMIC YEAR: **2022-2023**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

FILM COMMUNICATION-I **MODULE V**	Mainstream Indian Cinema and parallel Indian cinema 5.1 Art v/s Commercial 5.2 Indian Meaningful cinema(Commercial) • The Angry Young Man • The Indian Diaspora and Bollywood • Contemporary Bollywood Cinema • Globalisation and Indian Cinema, The multiplex Era	06	Understanding Cinema by Sudipta Roy Chowdhury Film Communication-I by Chetan Mathur Film Communication-I by Dr. Mahesh patil & Ms. Tejal Shinde Online Sources	PowerPoint Presentation Discussion YouTube video website Storytelling method
	5.3 Golden era of Indian Cinema – Important work of Bimal Roy, Guru Datt, Raj Kapoor and V. Shantaram	04	Understanding Cinema by Sudipta Roy Chowdhury Film Communication-I by Chetan Mathur Film Communication-I by Dr. Mahesh patil & Ms. Tejal Shinde Online Sources	PowerPoint Presentation Discussion YouTube video website Storytelling method

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	5.4 Indian New Wave cinema – Mrinal Sen, Mani Kaul, Girish Kasarvalli, MS Sathu 5.5 Parallel cinema: Contribution of Shyam Benegal, Govind Nihlani, Gulzar, Mani Kaul,	06	Understanding Cinema by Sudipta Roy Chowdhury Film Communication-I by Chetan Mathur Film Communication-I by Dr. Mahesh patil & Ms. Tejal Shinde Online Sources	PowerPoint Presentation Discussion YouTube video website Storytelling method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _MAHESH JAGTAP DEPARTMENT:BMM / BAMMC CLASS: SYBAMMC SEMESTER: III MONTH: AUGUST

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : **To provide the students with basic understanding of the concepts of corporate communication and public relations.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CORPORATE COMMUNICATION and PUBLIC RELATIONS	Introduction to Meaning , Need and Scope of Corporate Corporate Communication towards Indian Media Communication Scenario	1	Public Relations Ethics, Philip Seib and Kathy Fitzpatrick	PPT,GOOGLE MEET
	Keys concept in Corporate Identity: Meaning and Features, Corporate Corporate Image: Meaning, Factors Communication influencing Corporate Image, Corporate:	1	Public Relations Ethics, Philip Seib and Kathy Fitzpatrick	PPT,GOOGLE MEET
	Ethics and Law in Importance of Ethics in Corporate Corporate Communication, Professional Code of Ethics,	1	SELF NOTES	PPT,GOOGLE MEET

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	Communication Mass Media Laws: Defamation, Invasion of Privacy, Copyright Act, Cyber-crime and RTI			
	1.Introduction and Meaning, Definitions, Scope, Objective and Growth of Public Significance of Public Relation in	1	SELF NOTES	PPT,GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAHESH JAGTAP DEPARTMENT: BMM / BAMMC CLASS: SYBAMMC SEMESTER: III

MONTH: SEPTEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : To introduce the various elements of corporate communication and consider their roles in managing media organizations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CORPORATE COMMUNICATION	Relations, in India, Scenario Internal and External PR. Reasons for Emerging International Public Relations,	2	JANSAMVAD SIDHANT RAMA POTDUKHE	PPT,GOOGLE MEET

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and PUBLIC RELATIONS	Business. 06 Relations- Indian Tracing Growth of Public	2	SELF NOTES	PPT,GOOGLE MEET
	Mergers/Collaborations/Joint Ventures between Indian and international public relations agencies, advantages and disadvantages of Public Relatio	2	SELF NOTES	PPT,GOOGLE MEET
	2.Role of Public Healthcare, Entertainment, Banking and	2	SELF NOTES	PPT,GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAHESH JAGTAP DEPARTMENT: BMM / BAMMC CLASS: SYBAMMC SEMESTER: III

MONTH: OCTOMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

The learners will be able to : To examine how various elements of corporate communication must be coordinated to communicate effectively in today's competitive world.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CORPORATE COMMUNICATION and PUBLIC RELATIONS	Relations in various Finance, Real estate, Fashion and Lifestyle 04 sectors and Service.	3	Public Relations- The realities of PR by Newsom, Turk, Kruckleberg	PPT,GOOGLE MEET
	3.Theories and Tools of Grunting's (4 models),Pseudo-events, Public Relations Publicity , Propaganda, Persuasion,.	3	YASHWANT RAO CHAVHAN BOOK	PPT,GOOGLE MEET
	Latest Trends, Tools and Technology Role of Social media in Corporate Communication and Public Relations 1.Emerging Introduction,	2	SELF NOTES	PPT,GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAHESH JAGTAP DEPARTMENT: BMM / BAMMC CLASS: SYBAMMC SEMESTER: III

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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MONTH: NOVEMBER ACADEMIC YEAR:2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : To develop critical understanding of the different practices associated with corporate communication with the latest trends and social media tools.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CORPORATE COMMUNICATION and PUBLIC RELATIONS	2.New Media Website, Online press release, Article marketing, Tools Online newsletters, Blogs	1	JANAMPARK EK SIDHANT RAMA POTDUKHE	PPT,GOOGLE MEET
	02technology Communication, pros and cons of technology used in Corporate Communication.	1	JANSAMPARK AANI PATRKARITA	PPT,GOOGLE MEET
	. Today's Communication Technology, trends, tools and Importance of Technology to Corporate	1	SELF	PPT,GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAHESH JAGTAP DEPARTMENT: BMM / BAMMC CLASS: SYBAMMC SEMESTER: III

MONTH: NOVEMBER ACADEMIC YEAR:2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : to information about different types of social media

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CORPORATE COMMUNICATION and PUBLIC RELATIONS	3.Role of Social Role of Social media as Influential marketing,	1	Principals of Public Relations- C.S Rayudu and K.R. Balan	PPT,GOOGLE MEET
	Media Identifying brand threats, influence journalist's stories	2	Public Relations - Diwakar Sharma	PPT,GOOGLE MEET
	04 swiftly react to negative press, Viral marketing, engaging and interacting,	1		PPT,GOOGLE MEET

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	storytelling, E- Public Relations and its importance	1		PPT,GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5 (NOVEMBER TOTAL LEC 8)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAHESH JAGTAP DEPARTMENT: BMM / BAMMC CLASS: SYBAMMC SEMESTER: III MONTH: DECEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : To knowledge about different tools of media

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CORPORATE COMMUNICATION	06Situational theory , Diffusion theory and various tools of	1	Principals of Public Relations- C.S Rayudu and K.R. Balan	PPT,GOOGLE MEET

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and PUBLIC RELATIONS	Public Relations (Press conference, Press release , Media Dockets, Advertorials, Sponsorship	1	Public Relations - Diwakar Sharma	PPT,GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Aradhana M. Joshi DEPARTMENT: BAMMC CLASS: _SYBAMMC (Mar) SEMESTER: _III__

MONTH: ___Aug._____ ACADEMIC YEAR: 2022- 2023

LEARNING OBJECTIVE/S:

The learners will be able to : _

To provide an understanding of media theories

To understand the relationship of media with culture and society

To understand Media Studies in the context of trends in Global Media

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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MEDIA STUDIES/ Eras, Relevance, connection to culture, Litraure	• Era of Mass Society and culture – till 1965 • Normative Theories – Social Responsibility Theory • Development Media Theory	04	Janasanwad : siddhant ani Vyavahar – Dr. Rama Golwalkar Janasanwad ani Janamadhyame – Shripad Joshi	PPTs

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____04___

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___Aradhana M. Joshi_____ DEPARTMENT: _BAMMC__CLASS: __SYBAMMC (Marathi) SEMESTER: _III___

MONTH: __sept_____ ACADEMIC YEAR: 2022 -2023

LEARNING OBJECTIVE/S:
The learners will be able to : _

To provide an understanding of media theories

To understand the relationship of media with culture and society

To understand Media Studies in the context of trends in Global Media

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Media Studies/ Propaganda and propaganda Theory Scientific perspectives to limited perspectives	• Origin and meaning of propaganda • Hypodermic Needle/ Magic Bullet • Harold Lasswell • Paul Lazarfeld – Two step flow • Carl Hovland and attitude change theory	08	1.Janasanwad : siddhant ani Vyavahar – Dr. Rama Golwalkar 2. Janasanwad ani Janamadhyame – Shripad Joshi 3. 2014: The election that changed India	PPTs, YouTube videos regarding Propaganda of Hitlar, 2014 Indian Elections

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____08_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Aradhana M. Joshi_____ DEPARTMENT: BAMMC CLASS: _SYBAMMC (Marathi)____ SEMESTER: ___III__

MONTH: ____Oct_____ ACADEMIC YEAR: 2022 - 2023

LEARNING OBJECTIVE/S:
The learners will be able to : _

To provide an understanding of media theories

To understand the relationship of media with culture and society

To understand Media Studies in the context of trends in Global Media

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Various Schools Media and identity	• Toronto School (McLuhan) • Schools – Birmingham (Stuart Hall) • Frankfurt – Theodor Adorno and Max Horkheimer • Raymond Williams – Technological determinism • Harold Innis – Bias of Coomunication	04		PPTs

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____08_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Aradhana M. Joshi _____ DEPARTMENT: _BAMMC__CLASS: __SYBAMMC (Marathi)_ SEMESTER: __III___

MONTH: _____Nov_____ ACADEMIC YEAR: 2022 - 2023

LEARNING OBJECTIVE/S:
The learners will be able to : _

To provide an understanding of media theories

To understand the relationship of media with culture and society

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To understand Media Studies in the context of trends in Global Media

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Theories on media effects	• Media effects and Behaviour • Media effect theories and the argument against Media Effect theories • Agenda setting theories • Cultivation theory • Politics and Media studies- Media bias, Media decency, media consolidation	08	1.Janasanwad : siddhant ani Vyavahar – Dr. Rama Golwalkar 2. Janasanwad ani Janamadhyame – Shripad Joshi	PPTs, Laptop,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __08_____

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: __Aradhana Joshi_____ DEPARTMENT: BAMMC ___CLASS: SYBAMMC (Marathi)_____

SEMESTER: _III_____MONTH: _____Dec_____ ACADEMIC YEAR: 2022 - 2023

LEARNING OBJECTIVE/S:
The learners will be able to : _

To provide an understanding of media theories

To understand the relationship of media with culture and society

To understand Media Studies in the context of trends in Global Media

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Meaning making perspectives	• New media • Henry Jenkins- Participatry culture • Internet as public sphere- Habermas to Twitter • McLuhan's concept of global village in the age of Netflix • Usese and Gratification in the age of Internet	02		PPTs

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __02_____

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TYBAMMC ADV (MARATHI)

SIGNATURE OF THE STAFF

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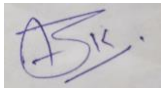
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BALKRISHNA AEER DEPARTMENT: BAMMC CLASS: TYBAMMC ADVT Marathi

SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: help students acquire basic skills in the practical aspects, write and shoot effective Documentary and Ad film.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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Documentary & AD film making **Understanding Documentary**	Introduction : Screening of Four different kind of documentaries and discussion	04		AV room Lectures Documentary Screening

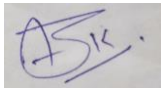
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BALKRISHNA AEER DEPARTMENT: BAMMC CLASS: TYBAMMC ADVT Marathi

SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: The learners will be able to: help students acquire basic skills in the practical aspects, write and shoot effective Documentary and Ad film.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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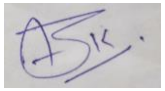
Documentary & AD film making	**1.Category-** Anthropological/Ethnographic Biographical/Historical Arts/Cultural Science Technology Promotional Educational Issues Investigative Family Values Exploration/Adventure Environment including Agricultural Social	8		AV room Lectures Documentary Screening
Understanding Documentary	**2.Writing** formation of Concept **Research Modes**: Library, Archives, Location, Life stories, ethnographic. Synopsis Script and Visualization Commentary Subtitling/Translation	4	Book: Making documentary films & Videos By Barry Hampe	Classroom - Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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TEACHING PLAN (UNIT PLAN)

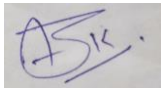
NAME OF THE STAFF: BALKRISHNA AEER DEPARTMENT: BAMMC CLASS: TYBAMMC ADVT Marathi

SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: The learners will be able to: The learners will be able to: help students acquire basic skills in the practical aspects, write and shoot effective Documentary and Ad film.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Documentary & AD film making **Understanding Documentary (Production)**	**Pre-Production :** Engaging technical team & equipment. Acquiring shooting permissions. Production : On locale and studio shooting. Technology involved	8	Book: Making documentary films & Videos By Barry Hampe	Classroom - Blackboard
	Post Production : Editing (Technique & Grammar), Voice over, Music, Foley, Sp. Effects/Graphics, Sound Re- recording and Mixing, DI and Subtitling. Making final master& telecast copy.	8	Book: Making documentary films & Videos By Barry Hampe	Classroom - Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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TEACHING PLAN (UNIT PLAN)

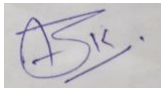
NAME OF THE STAFF: BALKRISHNA AEER DEPARTMENT: BAMMC CLASS: TYBAMMC ADVT Marathi

SEMESTER: V MONTH: SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: The learners will be able to: The learners will be able to: help students acquire basic skills in the practical aspects, write and shoot effective Documentary and Ad film.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Documentary & AD film making Pre to post Production	Writing a selling concept. Budgeting. Preparing Storyboard (Using different formats of making) Agency/Client approval.	8	Book: Making documentary films & Videos By Barry Hampe	Classroom - Blackboard
	Finalization of Cast and Crew. Set erection/Location, Scheduling, Shooting. Editing, Voice over, Music, Foley, Sp. Effects/Graphics, Sound Re-recording & Mixing, DI & Subtitling. Making final master & telecast copy.	8	Book: Making documentary films & Videos By Barry Hampe	Classroom - Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAVIN R. PATIL **DEPARTMENT: BMM** **CLASS: TYBMM ADVERTISING (MARATHI)** **SEMESTER: V**

MONTH: AUGUST **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVES: To familiarize the students with the concept of copywriting as selling through writing

To learn the process of creating original, strategic, compelling copy for various media

To train students to generate, develop and express ideas effectively

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COPY WRITING MODULE I,II	Basics of copy writing Responsibility of Copy writer		Textbook	Google meet, ppt
	How to inculcate a 'creative thinking attitude', Left brain thinking; Right Brain thinking , Conscious mind; unconscious mind , Role of Heuristics and assumptions in creative thinking , Five steps of Creative process	04	Textbook	Google meet, ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAVIN R. PATIL **DEPARTMENT: BMM** **CLASS: TYBMM ADVERTISING (MARATHI)** **SEMESTER: V**

MONTH: SEPTEMBER **SUB CW** **ACADEMIC YEAR: 2022-23**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COPY WRITING MODULE III,IV	Theories of ideation, Idea generation techniques: eg. a. Brainstorming, b. Triggered brainwalking, c. Questioning assumptions, d. Picture prompts, e. Scamper, f. Observation, g. Referencing, h. Interaction, i. Imagination, j. Dreams, and k. Creative Aerobics.	05	Textbook	Google meet, ppt
	Transcreativity Introduction Purpose	03	Textbook	Google meet, ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAVIN R. PATIL **DEPARTMENT: BMM** **CLASS: TYBMM ADVERTISING (MARATHI)** **SEMESTER: V**

MONTH: OCTOBER **SUBJECT CW** **ACADEMIC YEAR: 2022-23**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COPY WRITING MODULE V,VI	Briefs Marketing Brief Creative Brief	03	Textbook	Google meet, ppt
	Writing persuasive copy The CAN Elements (connectedness, appropriateness, and novelty) , Getting Messages to "Stick": Simplicity, Unexpectedness, Concreteness, Credibility, Emotionality, Storytelling,	05	Textbook	Google meet, ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAVIN R. PATIL **DEPARTMENT: BMM** **CLASS: TYBMM ADVERTISING (MARATHI)** **SEMESTER: V**

MONTH: NOVEMBER **ACADEMIC YEAR: 2022-23**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COPY WRITING MODULE VII,VIII,IX	Writing copy for various Media a. Print: Headlines, sub headlines, captions, body copy, and slogans b. Television: Storyboard, Storyboarding Techniques, Balance between words and visuals | Power of silence, formats of TVS's c. Outdoor posters d. Radio e. Digital: email, web pages	4	Textbook	Google meet, ppt
	Writing copy for various audiences a. Children, b. Youth, c. Women, d. Senior citizen and e. Executives	02	Textbook	Google meet, ppt
	How to write copy for: a. Direct mailer, b. Classified, c. Press release, d. B2B, e. Advertorial, f. Informercial	02	Textbook	Google meet, ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAVIN R. PATIL **DEPARTMENT: BMM** **CLASS: TYBMM ADVERTISING (MARATHI)** **SEMESTER: V**

MONTH: DECEMBER **ACADEMIC YEAR: 2022-23**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COPY WRITING MODULE X,XI	Various types of Advertising appeals and execution styles a. Rational appeals b. Emotional appeals: Humour, Fear, Sex appeal, c. Various advertising execution techniques	01	Textbook	Google meet, ppt
	The techniques Evaluation of an Ad Campaign a. Evaluate the ad in terms of its efficacy	01	Textbook	Google meet, ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _MAHESH JAGTAP DEPARTMENT:BMM / BAMMC CLASS: TYBMM ADV (MAR) SEMESTER: V
MONTH: AUGUST ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S:
The learners will be able To study the concept of Brands

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BRAND BUILDING	Definition ,Importance of branding , Difference between Brand and Product , Process of branding	1	1. David, A Aker, Building strong brands, the free press, 1996	PPT,GOOGLE MEET
	Core Identity , Extended Identity , Brand Identity Traps	1	Al Ries and Laura Ries, the 11 Immutable Laws of internet branding, Harper Collins,	PPT,GOOGLE MEET
	Definition , Importance of Brand Positioning	1	SELF NOTES	PPT,GOOGLE MEET
	Perceptual Mapping	1	SELF NOTES	PPT,GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4

SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _MAHESH JAGTAP DEPARTMENT:BMM / BAMMC CLASS: TYBMM ADV (MAR) SEMESTER: V
MONTH: SEPTEMBR ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S:
The learners will be able to : To study the concept of Brands PERSONALITY
· To study the process of building brands

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BRAND BUILDING	Brand Personality : Definition ,The importance of creating Brand Personality , Attributes that affect Brand Personality , Factors that affect Brand Personality Brand Personality Models - Relationship Model - Self Expressive Model	5	SELF NOTES	PPT,GOOGLE MEET
	The Big Five User Imagery MODULEV Brand Leverage Line Extension Brand Extension Moving Brand up / down Co-branding	3	SELF NOTES	PPT,GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _MAHESH JAGTAP DEPARTMENT:BMM / BAMMC CLASS: TYBMM ADV (MAR) SEMESTER: V
MONTH: OCTOMBER ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S:
The learners will be able to : To study its importance to the consumer and advertisers

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BRAND BUILDING	The three perspective of Brand Strategic customer analysis Completion self analyss . Multi Product Branding Multi Branding	5	SELF NOTES	PPT,GOOGLE MEET
	Mix Branding 6. Brand Licensing	2	SELF NOTES	PPT,GOOGLE MEET

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	Brand Product Matrix 8. Brand Hierchy 9. Brand Building Blocks	1	SELF NOTES	PPT,GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _MAHESH JAGTAP DEPARTMENT:BMM / BAMMC CLASS: TYBMM ADV (MAR) SEMESTER: V
MONTH: NOVEMBER ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S:
The learners will be able to : To study its importance to the BRAND

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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BRAND BUILDING	Brand Repositioning 1. Meaning ,Occasion of use ,Falling sales Making the brand contemporary , New customers , Changed market conditioning	5	SELF NOTES	PPT,GOOGLE MEET
	Differentiating brands from competitors , Case studies such as Vicks Vapour, Milkmaid etc	2	SELF NOTES	PPT,GOOGLE MEET
	Brand Equity Ten	1	SELF NOTES	PPT,GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF

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NAME OF THE STAFF: _MAHESH JAGTAP DEPARTMENT:BMM / BAMMC CLASS: TYBMM ADV (MAR) SEMESTER: V
MONTH: DECEMBER ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S:
The learners will be able to :. To study its importance to the consumer and advertisers AND Co-ordination across organization

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BRAND BUILDING	Co-ordination across organisation	1	SELF NOTES	PPT,GOOGLE MEET
	Co-ordination across media 3. Co-ordinating strategy & tactics across mar	1	SELF NOTES	PPT,GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _2

SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF MAHESH JAGTAP DEPARTMENT: BMM/BAMMC

CLASS: TYBAMMC (MAR) ADV.. SEMESTER: V MONTH: JULY. ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

To inculcate the analytical abilities and research skills among the students.
To understand research methodologies – Qualitative vs Quantitative.
To discuss the foundations of Research and audience analysis that is imperative to successful advertising.
To understand the scope and techniques of Advertising and Marketing research, and their utility.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ADVERTISING AND MARKETING RESEARCH	Fundamentals of Research	2	Notes and online sources	PPT
	Research design	2	Notes and online sources	PPT
	Preparing Questionnaire	2	Notes and online sources	PPT
	Sampling	2	Notes and online sources	PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAHESH JAGTAP DEPARTMENT: BMM/BAMMC

CLASS: TYBAMMC (MAR) ADV. SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

To inculcate the analytical abilities and research skills among the students.
To understand research methodologies – Qualitative vs Quantitative.
To discuss the foundations of Research and audience analysis that is imperative to successful advertising.
To understand the scope and techniques of Advertising and Marketing research, and their utility.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ADVERTISING AND MARKETING RESEARCH	Preparation of data sheet and processing	2	Notes and online sources	PPT
	Data Analysis	2	Notes and online sources	PPT
	Methods of Data Analysis	2	Notes and online sources	PPT

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	Report Writing: Essential of a good report, Content of report , Steps in writing a report, Footnotes and Bibliography	2	Notes and online sources	PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____8____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAHESH JAGTAP DEPARTMENT: BMM/BAMMC

CLASS: TYBAMMC (MAR) ADV. SEMESTER: V MONTH: September ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :
To inculcate the analytical abilities and research skills among the students.
To understand research methodologies – Qualitative vs Quantitative.
To discuss the foundations of Research and audience analysis that is imperative to successful advertising.
To understand the scope and techniques of Advertising and Marketing research, and their utility.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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ADVERTISING AND MARKETING RESEARCH	Advertising Research	2	Notes and online sources	PPT
	Concept testing, Name testing, Slogan testing, Pretesting & Post testing	2	Notes and online sources	PPT
	Physiological rating scales	2	Notes and online sources	PPT
	MARKETING RESEARCH	2	Notes and online sources	PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____8___

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **ANKIT TALEKAR** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **F.Y BSc** SEMESTER: **II** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to : To acquire information about the different concepts of nutrition like BMR, BMI and SDA. It also describes detailed information about the nutritional significance of the macro and the macromolecules of a balanced diet.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT 3 NUTRITION	Definitions- calorie, joule, food calorimetry, calorific value, proximate principles, BMI and BV.	2	Joshi, Shubhangani- nutrition and dietetics Srilakshmi B- Nutrition Science Biochemistry by satyanarayan	White board method
	BMR	2		White board method
	SDA/DIT	1		White board method
	Nutritional significance of carbohydrates, proteins, lipids, vitamins, minerals, fibre and water.	6		White board method
	Balanced diet and numerical problems	2		White board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **ANKIT TALEKAR** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **F.Y BSc** SEMESTER: **II** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about nucleic acid structure and it's components in detail.
- To understand evidence and properties of nucleic acids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit II Nucleic Acids	2.1 Structure - Purine & Pyrimidine bases, ribose, deoxyribose, nucleosides and nucleotides (ATP, CTP, GTP, TTP, UTP) Formation of polynucleotide strand with its shorthand Representation	04	Lehninger, Albert L, Biochemistry, Ka Publishers ● Nelson, D. L. and Cox, M.M, (2008). Lehninger, Principles of Biochemistry 5th Edition, W. H. Freeman and Company, NY., USA.	●Students were explained via an interactive session. ●Structures of nucleic acids were shown.
	2.2 RNAs (various types in prokaryotes and eukaryotes) mRNA & r RNA - general account, t RNA - clover leaf model, Ribozymes	04		●Structures of types RNAs were explained via diagrams.
	2.3 DNA 2.3.1 Physical evidence of DNA helical structure. Chargaff's rules (chemical evidence), Watson-Crick model of DNA & its features 2.3.2 Physical properties of DNA - Effect of heat on physical properties of DNA (Viscosity, buoyant density, UV absorption), Hypochromism, hyperchromism, denaturation	07 Total: 15		●Students were explained about the evidences and properties by drawing structures and reactions.

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	of DNA. 2.3.3 Reactions of nucleic acids (with DPA and Orcinol)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **ANKIT TALEKAR** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **S.Y BSc** SEMESTER: **IV** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to :

Gain knowledge about enzymes, its classification, kinetics,and enzyme inhibition.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I Enzymology	**1.1** Definition – Enzyme, coenzyme, cofactor, apoenzyme, holoenzyme, prosthetic group, active site , enzyme specificity, Turnover number, specific activity, Katal, IU.	2	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.2 IUB / EC classification upto one digit. Enzyme specificity :Fischers lock & key and Koshlands induced fit theories	2	David L. Nelson, Michal M. Cox, Lehniger Principles of	White board

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			Biochemistry, W. H. Freeman & company, New york, 4th edition	
	1.3 Activation energy, mechanism of enzyme action (concept of active site, single and bi- substrate reaction), factors affecting enzyme activity – substrate concentration, pH, temperature	3	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.4 Enzyme kinetics – Derivation of Michaelis - Menten equation and Lineweaver Burk plot for mono-substrate reactions and numerical problems based on them.	4	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.5 Enzyme inhibition – Reversible and Irreversible; competitive and non competitive, (one example of each)	4	David L. Nelson, Michal M. Cox,	White board

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	Numerical problems on above.		Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **F.Y BSc** SEMESTER: **I** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand basic structure and various forms of amino acids.
- To learn the classifications of amino acids.
- To understand physical and chemical properties of amino acids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit II 2.1 Amino acids and proteins	2.1.1 Amino acid structure - D & L forms of all 20 amino acids	03	• Lehninger, Albert L, Biochemistry, Kalyani Publishers • Nelson, D. L. and Cox, M.M, (2008). Lehninger, Principles of Biochemistry 5th Edition, W. H. Freeman and Company, NY., USA.	•Students were explained about structures by using various images and videos.
	2.1.2 Detailed classification based on polarity, essential and non-essential amino acid	03		•Students were explained about amino acids classification by interactive session.
	2.1.3 Physical properties: zwitter ions, pI of amino acids amino acids as ampholytes, melting point, optical rotation, UV absorption and chemical properties: Chemical reactions of amino acids with Ninhydrin, Sanger's reagent, Edman's reagent and Dansyl chloride	09 Total: 15		•Students were explained about physical and chemical reactions using images and presentation.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **F.Y BSc** SEMESTER: **I** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about reasons for origin of life.
- To understand different theories behind evolution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Unit I Origin of Life & Formation of cells	1.1 Big bang theory, Theories on the origin of life: Abiogenesis, Heterotroph hypothesis, RNA world, protein world, Miller's experiment, Formation of the first cell, endosymbiont theory	05	●Verma, P.S. and Agarwal V.K.; Cell Biology, Genetics, Molecular biology, Evolution and Ecology ; Publishers : S. Chand and Co.Ltd., (2009)	●Students were explained via an interactive session. ● Diagrams related to theories were shown online.
	1.2 Evolution - Darwinian theory, Modern synthetic theory of evolution and its factors: Gene mutations(recombination), heredity, natural selection and isolation Biological evidences: Fossil record, chemical and anatomical similarities of related life forms, geographic distribution of related species, genetic changes in living organisms over generations and Mechanism of evolution, Gene flow and genetic drift, Hardy-Weinberg principle	10 Total: 15		●Students were explained about amino acids classification via videos. ●They were shown photos of scientists behind these theories. ●Also a project was assigned to them on evolution.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **S.Y BSc** SEMESTER: **III** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about beneficial and harmful organisms for body in detail.
- To understand structure, classification and life cycle of virus.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Unit I Microbiology in Human Health and Diseases	1.1 Beneficial Microorganism: Lactobacillus, Normal flora of human gut, Probiotics, Yeast, Nitrogen fixing bacteria (Rhizobium and Azotobacter)	03	●Michael J. Pelczar, Jr; E.C.S. Chan; Noel R. Krieg; Microbiology Tata McGraw Hill. ●Roger Y stanier; General Microbiology,Macmillan, 1981	●Students were explained about beneficial and harmful bacteria, structure, classification and life cycle of virus with the help of slides.
	1.2 Harmful microorganisms: 1.2.1 Air borne- *Mycobacterium tuberculae*(Tuberculosis), *Corynebacterium diptheriae*(Diptheria), *Candida sp*., *Haemophilus influenzae* (Influenza), morbillivirus (measles) 1.2.2 Water borne- *Shigella sp.* (Dysentery), *Vibrio cholerae* (Cholera), *Salmonella sp.* (Enteric fever), Hepatitis virus 1.2.3 Food borne- *Staphylococcus aureus*, *Clostridium botulinum* (Botulism) 1.2.4 Soil borne- *Clostridium tetani*	08		
	1.3 Virology- General structure of a typical virus, classification of viruses based on genome (DNA, RNA); symmetry (helical, icosahedral, complex), host (bacteria, plant, animal, insect); Lytic and Lysogenic cycle	04 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS**: S.Y BSc** SEMESTER: **III** MONTH:**JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To explain the process of plant tissue culture and animal tissue culture
- To understand the applications of the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Unit II Cell and Tissue Culture	2.1 Plant Tissue Culture: 2.1.1 History, Introduction or definition (explants, callus, dedifferentiation, re-differentiation) concept of totipotency 2.1.2 Culture techniques; Types of culture (Callus culture, Organ culture, protoplast culture, cell culture) 2.1.3 Applications: secondary metabolites in plant culture, Micropropagation	07	●Jogdand, Advances in Biotechnology; Himalaya Publishing House ●U. Satyanarayan ;Biotechnology, Books & allied (P) Ltd., Kolkata	●Students were explained the procedures with the help of slides.
	2.2 Animal Cell Culture: 2.2.1 History, Introduction to Primary cell culture, Cell lines (Finite and continuous) 2.2.2 Culture techniques used for primary culture, 2.2.3 Stem cell culture, Animal Organ Culture, Whole embryo culture 2.2.4 Applications: hybridoma (monoclonal antibody), production of Vaccines	08 Total:15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS**: S.Y BSc** SEMESTER: **III** MONTH:**JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to :
Gain knowledge about pH, buffers pK, titration curves of acids and will be able to solve problems on above concepts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I Acids, bases, buffers and ionic equilibria	**1.1** Definition – pH, pK, pKw, isoelectric pH, buffer, buffering capacity	2	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.2 Derivations: Ionic product of water, Hendersen–Hasselbalch equation,	3	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board

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	1.3 Relation between pI, pKa_1 and pKa_2 for a neutral, acidic and basic amino acid 1.3.1 Ionization and titration curves of glycine, lysine and aspartic acid; pKa, pHm, and pI values of these amino acids 1.3.2 Sorensen's reaction and formol titration of amino acids	5	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.4 Physiological buffers: Hb - HHb, carbonate-bicarbonate, phosphate and protein	2	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.5 Numerical on above concepts	3	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS**: S.Y BSc** SEMESTER: **III** MONTH:**JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about different types of microscopic techniques
- Understand working and instrumentation of various microscopes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
US BCH 301 UNIT III Microscopy	**3.1** History, Basic principles of microscopy, of light and colour.	03	• Wilson and Walker's Principles and Techniques of Biochemistry and Molecular Biology (seventh edition) • http://www.microscopyu.com/ • http://www.microscopy.fsu.edu/ • http://www.microscopy-analysis.com/ • http://www.msa.microscopy.org • http://www.openmicroscopy.org	• Youtube videos, Powerpoint presentation, online quiz.
	3.2 Dissection and compound microscope: Construction and parts of a microscope, function of each part, levels of magnification, concept of refractive index and role of oil in magnification	04		
	3.3 Specialized microscopy I; 3.3.1 Differential interference contrast (DIC), 3.3.2 Phase contrast, 3.3.3 Dark Field	04		
	3.4 Specialized Microscopy II; 3.4.1 Simple fluorescence microscopy, 3.4.2 Confocal microscopy 3.4.3 Electron microscopy • Principle, applications and comparative study • Types - SEM and TEM	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **T.Y BSc** SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand the overall organization of the immune system, relationship between innate and adaptive systems and humoral and cell mediated immunity.
- To learn about the cells and organs of immune system in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit I 1.0 Human immune system	1.1 Types of Immunity Innate immunity – Anatomical barriers, physiological barriers, Characteristics of Inflammation, phagocytosis [no mechanism] Adaptive immunity – Active & Passive Humoral & Cell mediated immunity.	06	●Immunology by Goldsby and Kuby	●Students were explained about human immune system with the help of videos and diagrams.
	1.2 Organs of the immune system: Primary lymphoid organs: Thymus, Bone marrow Secondary lymphoid organs: Lymphatic system, Lymph nodes, Spleen, MALT.	04		
	1.3 Cells of the immune system: Lymphocytes – B cells and T cells, Natural killer cells – Mononuclear phagocytes, Granulocytes, Antigen presenting cells. Clonal selection & immunologic memory. Cytokines: biological functions of IL1, tumor necrosis factoralpha, interferon –alpha, IL2, interferon-gamma.	05 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **T.Y BSc** SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand the overall organization of the immune system.
- To learn the structure and function of antibodies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit II 2.0 Antigen-Antibody interactions	2.1 Antigens: Antigenicity, immunogenicity, epitope, factors determining immunogenicity, Haptens. Antibodies: Fine structure of immunoglobulin, Antibodymediated functions, Antibody classes, Monoclonal antibodies (concept, production and applications)	09	●Immunology by Goldsby and Kuby	●Students were explained about antigens and antibodies with the help of videos and diagrams.
	2.2 Antibody diversity: Multigene organization of immunoglobulin genes – Lambda, kappa & heavy chain Light chain DNA – VJ rearrangements Heavy chain DNA - VDJ rearrangements	06 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **T.Y BSc** SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to :
Understand gene libraries, various gene transfer techniques. They will also study about processes like PCR, DNA fingerprinting and DNA sequencing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit IV Recombinant DNA Technology II	4.1 Isolation of gene: Gene library and c-DNA library; Southern blot; Chimeric DNA	4	iGenetics by Russel	White board and videos
	4.2 Gene Transfer: Transformation, Transfection, Electroporation, Microinjection, Liposome, Microprojectile (in brief) Selection and screening- Antibiotic and colony hybridization	3	iGenetics by Russel	
	4.3 DNA Amplification by PCR (Steps, Types, Applications)	4	iGenetics by Russel	
	4.4 DNA fingerprinting, DNA sequencing (any one method)	4	iGenetics by Russel	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **T.Y BSc** SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to : Gain knowledge about the concept of bioenergetics including electron transport chain and its inhibitors. They will also study about the oxidative phosphorylation process in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I, U-II (Bioenergetics & Oxidative Phosphorylatio n)	2.1 Bioenergetics: Concept of free energy; Respiratory electron transport chain – Carriers [basic chemistry, redox potentials, orientation on the membrane, sequence}; Q cycle in Complex III; Inhibitors of electron transport – Antimycin A , Amytal, Rotenone, CN, Azide, CO; Barbital Malate-Aspartate shuttle and Glycerol phosphate shuttle	6	1)Lehninger's-Principles of Biochemistry by David L. Nelson 2) Harper's Illustrated Biochemistry by Robert K. Murray 3) Biochemistry by Donald Voet 4) Biochemistry by Jeremy M. Berg 5) Biochemistry (2 Volume Set): The Chemical Reactions of	White board and videos
	2.2 Oxidative phosphorylation –Chemiosmotic hypothesis, Proton motive force; Structure of ATP synthase, Uncoupler- of ETC and Oxidative phosphorylation [DNP]	3		
	2.3 Photosynthesis – Light and dark reactions, Z scheme and electron carriers, photophosphorylation [linear and cyclic]; Calvin cycle – schematic with enzymes; Photorespiration	4		

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	2.4 Bioluminescence. Phenomenon and its biological significance. Applications of Bioluminescence	2	Living Cells by David E. Metzler	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **F.Y BSc** SEMESTER: **II** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand the parts and function of respiratory and excretory system in detail.
- To learn disorders of respiratory and excretory system and their causes in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Unit II Physiology of respiration and excretion	2.1 Respiratory system	01	● Guyton, Arthur C. and Hall, John E.;Text book of Medical physiology ; Harcourt Brace & Company Asia Pvt. Ltd.	●Students were explained via interactive sessions.
	2.2 Breathing - inspiration and expiration,	01		
	2.3 Composition of air and partial pressure of gases	01		
	2.4 Physical exchange of gases 2.4.1 Transport of oxygen 2.4.2 Transport of carbon dioxide Respiratory disorders – cyanosis, respiratory acidosis and alkalosis	03		●Students were explained about it by structures and reactions in the presentation.
	2.5 Excretion -2.5.1 Structure of the nephron: Bowman's capsule & glomerulus - Structure & function, (ultrafiltration, pressures involved, GFR, regulation of GFR); Renal tubule - structure & function (proximal and distal convoluted tubules and Henle's loop) 2.5.2 Urine formation: Reabsorption / Secretion of glucose, Na+, K+. HCO3 Cl^- and H+ : renal threshold, Excretory disorder: Nephritis	09 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **S.Y BSc** SEMESTER: **IV** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about different movements of plants.
- To understand process of contraction and relaxation of muscles in mammals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Unit II Movement and locomotion	2.1 Movement in plants 2.1.1 Movements of Locomotion Spontaneous: Ciliary, Amoeboid, Cyclosis (Rotation, Circulation) Induced: Chemotaxis, Phototaxis, Thermotaxis 2.1.2 Movements of Curvature: Mechanical: hygroscopic movements Vital:i)Spontaneous-movements of growth(nutation, circumutation, Hyponasty, epinasty); movements of variation ii)Induced–Tropic-hapto/geo/hydrotropism; Nastic–seismonasty, Nyctynasty	10	●S.K.Verma and Mohit Verma, Plant physiology, Biochemistry and Biotechnology ●Tortora G J, Derrickson B H; Principles of Anatomy and Physiology, Wiley	●Students were explained about different movements in plants with the help of videos.
	2.2 Muscle contraction 2.2.1 Structural organization of a muscle fibre, myofibril 2.2.2 Contraction and Relaxation of Muscles; -mechanisms, Other types of contractions–e.g. twitch, tetanus, Isotonic, Isometric regulation of Muscle contraction	05 Total:15		●Students were explained about movements of muscle with the help of videos.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **S.Y BSc** SEMESTER: **IV** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about different trends in biotechnology and their applications.
- To understand process of biodegradation of various contaminants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Unit I Trends in Biotechnology	1.1 Bioremediation: 1.1.1 Introduction to terms – Bioremediation, Biotransformation, Xenobiotics, Recalcitrant xenobiotics, Biomagnification, Factors affecting bioremediation 1.1.2 Types of Bioremediation (Insitu, Exsitu); Types of reactions (Aerobic, anaerobic, sequential) 1.1.3 Applications of Biodegradation - hydrocarbons, (Oil spills) Pesticides and herbicides, Heavy metals (Uranium) contaminated soil and waste land, Ground Water; Genetically Engineered Microbes in bioremediation	08	●U. Satyanarayan ;Biotechnology, Books & allied (P) Ltd., Kolkata	●Students were explained about different trends in biotechnology with the help of videos.
	1.2 Biopesticides: 1.2.1 Introduction; Types of Biological Control (Classical, inoculation, Inundation); 1.2.2 Examples each of Bacterial, Viral, Fungal and Protozoal biopesticide .	04		
	1.3 Biofungicide: Examples and applications	02		
	1.4 Biofertilizers: Examples and applications	01 Total:15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **S.Y BSc** SEMESTER: **IV** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand biochemical processes involved in animal and plant studies.
- Learn about different sell and tissue handling and processing techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH 401 UNIT III Approaches to Biochemical investigations	**3.1** Whole animal and plant studies - the advantages and disadvantages of any four model systems for biochemical investigation (e.g. *E.coli*, yeast, *Dictyostelium*, *C. elegans*, Drosophila, *Arabidopsis)*	05	• David L. Nelson, Michael M. Cox, Lehninger; Principles of Biochemistry, W H Freeman & Co.	• Whiteboard method / Google meet, Youtube videos, Powerpoint presentation, online quiz.
	3.2 Organ & tissue studies	03		
	3.3 Isolated and cultured tissue and cell techniques: isolation, culture and counting of cells.	03		
	3.4 *Cell Fractionation* 3.4.1 Cell rupture – solid shear, liquid shear, high pressure, ultrasound, osmotic shock, chemical treatment (enzyme, organic solvent), temperature. 3.4.2 Choice of suspension medium (isotonic & hypotonic solution, PBS) and separation methods.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **T.Y BSc** SEMESTER: **VI** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II **Unit 3** **Pharmacology**	3.1. General pharmacology Pharmacodynamics, Physicochemical properties of drugs, Drug absorption: through-GIT, pulmonary, renal, placental and blood-brain barrier Bioavailability and Bioequivalence Drug Distribution, Metabolism and Excretion	05	● Essentials of Pharmacotherapeutics by FSK Brara ● Textbook of Medical Biochemistry by M.N. Chatterjea & Ranashinde	●Students were explained with the help of videos and diagrams.
	3.2 Bioassays: Preclinical and clinical evaluation, Therapeutic drug monitoring	05		
	3.3 Pharmacokinetics: LD50, ED50, Half Life, Loading dose, Maintenance dose, Therapeutic dose, Therapeutic Index, Drug plasma concentration, Volume of distribution	05 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **T.Y BSc** SEMESTER: **VI** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II **Unit 4** **Mechanism of Drug Action and Therapeutic**	4.1Mechanism of action of drugs: i. Specific interaction – receptor mediated ii. Partially specific – drugs via enzymes iii. Nonspecific interactions – antimetabolites and antiseptics iv. Through Antibodies v. Placebo effects	05	●Essentials of Pharmacotherapeutics by FSK Brara ● Textbook of Medical Biochemistry by M.N. Chatterjea & Ranashinde	●Students were explained with the help of videos and diagrams.
	4.2 Mechanism of action of drugs: i. Specific interaction – receptor mediated ii. Partially specific – drugs via enzymes iii. Nonspecific interactions – antimetabolites and antiseptics iv. Through Antibodies v. Placebo effects Therapeutic drugs: (Mechanism of action and adverse effects) Anti-inflammatory – non steroid anti-inflammatory NSAID [Ibuprofen], Salicylates – [Aspirins] Cardiovascular drugs- CVS [Ca channel blocker-Amlodipine, and Beta blocker – Proprenolol	10 Total: 15		

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	Antibiotic – Penicillin and Sulphonamide Antacid- Proton pump blocker –Omeprazole			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **T.Y BSc** SEMESTER: **VI** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To be familiar with the MHC; its structure and classes, specific role of each class of MHC and importance in immune response and graft rejection.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit II 2.0 Major histocompatibility complex & Transplant immunology	2.1. Major histocompatibility complex: MHC polymorphism & organization of MHC genes- class I & class II; Cellular distribution & structure of class I & II molecules; Self MHC restriction of T cells. Role of antigen presenting cells.	05	●Immunology by Goldsby and Kuby	●Students were explained about MHC, transplantation and autoimmunity with the help of videos and diagrams.
	2.2 Transplant immunology: Types of transplant; immunological basis of allograft rejection	03		
	2.3 Autoimmunity: Organ specific –Myasthenia gravis; Hashimoto's thyroiditis, Insulin dependent diabetes mellitus Systemic – Rheumatoid arthritis, Multiple sclerosis, Systemic lupus erythematosus (immunological basis of these autoimmune diseases)	07 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **T.Y BSc** SEMESTER: **VI** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**
The learners will be able to:
Gain knowledge about various antigen-antibody interactions, techniques for detecting them, and concept of complement system in human body.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit I Antigen-Antibody interactions & Complement system	1.1 Antigen- Antibody interactions: 1.1.1 Forces involved, antibody affinity, antibody avidity. 1.1.2 Precipitation reactions – Oudins, Ouchterlony 1.1.3 Agglutination reactions: Blood typing, bacterial agglutination, Passive agglutination, agglutination inhibition, Coomb's test. Immunoelectrophoresis; 1.1.4 Principles of Radioimmunoassay, ELISA, 1.1.5 Immunofluorescence	10	Immunology by Goldsby and Kuby	Presentation/Videos
	1.2 Complement 1.2.1 Components of complement; 1.2.2 Complement activation – Classical & alternate pathway; formation of membrane attack complex. 1.2.3 Biological consequences of complement activation.[in brief]	5	Immunology by Goldsby and Kuby	Presentation/Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **T.Y BSc** SEMESTER: **VI** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand the basic concepts of demography and epidemiology of aging and pathophysiology and issues in common diseases of older people.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit IV 4.0 Endocrine Diseases & Ageing	4.1 Endocrine diseases: Diabetes mellitus. Hyper and Hypothyroidism, Cushing's syndrome, Acromegaly	05	●Immunology by Goldsby and Kuby	●Students were explained about diseases with the help of videos and diagrams. ●They were taught about ageing using videos.
	4.2 Diabetes insipidus. 4.2 Ageing: Definition of ageing. Molecular changes during ageing. Theories of Ageing.	07		
	4.3 Alzheimer's disease, Parkinson's diseases	03 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. ROHAN LOUIS D'SOUZA** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSC.**

SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: The learner will be able to define Air Pollution.
The learner will be able to get an insight on the sources of air pollution.
The learner will be able to understand the impact of air pollution on the environment.

The learners will be able to: understand the problems associated with air pollution and the impact of air pollution on the different aspects of the environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 1 **Title:** Air	**ATMOSPHERE** □ Composition and structure of atmosphere □ Particles , ions and radicals in the atmosphere □ Chemical and photochemical reactions in the atmosphere [reactions of oxygen, ozone, sulphur dioxide , nitrogen oxide and organic compounds]	08	Environmental Chemistry by Anil Kumar De	White Board-Marker
	AIR POLLUTANTS □ CO, Oxides of Nitrogen, SO2, hydrocarbons and photochemical smog, Greenhouse gases, suspended particulate matter[sources and effect of] , depletion of ozone	07	Environmental Chemistry by Anil Kumar De	White Board-Marker

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. ROHAN LOUIS D'SOUZA** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSC.**

SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: The learner will be able to define water Pollution.
The learner will be able to get an insight on the sources of water pollution.
The learner will be able to understand the impact of water pollution on the environment and human health.

The learners will be able to: understand the problems associated with water pollution and the significance of different water treatment techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 2 **Title:** Water & Water treatment	**WATER HYDROSPHERE** • Characteristics and the water cycle	05	Environmental Chemistry by Anil Kumar De	White Board-Marker
	WATER POLLUTION • Organic pollutants[pesticides, insecticides, detergents, oil spills, toxic organic chemicals] • Inorganic pollutants [heavy metals – Hg, Pb, As, Cd] Thermal pollution of water	05	Environmental Chemistry by Anil Kumar De & A Textbook of Environmental Chemistry and Pollution Control by S.S.Dara	White Board-Marker
	WATER TREATMENT • Criteria for water purity, Water purification [preliminary, • primary, secondary, tertiary- chlorination, ion exchange]	05		White Board-Marker

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. ROHAN LOUIS D'SOUZA** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSC.**

SEMESTER: **VI** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: The learner will be able to define RCF & RPM, and state the relationship between them.
The learner will be able understand the Beer-Lambert law and derive it.
The learner will be able to know the different types of centrifugation techniques and their applications.
The learners will be able to: understand the working and application of a centrifuge and spectrophotometer.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I (USBCH601) Metabolism & analytical techniques-II Unit 3 **Title:** Centrifugation and Spectroscopy	**CENTRIFUGATION** RCF , RPM and derivation of an equation relating the two ; Nomogram ; Sedimentation coefficient	15	Wilson and Walker's Principles and Techniques of Biochemistry and Molecular Biology	White Board-Marker
	Types and applications of centrifuges – Clinical, High speed, Ultra centrifuge - preparative and analytical.			
	Types of centrifugation and its applications– Differential, Rate zonal, Isopycnic (Centrifugation with and without density gradients)			
	SPECTROSCOPY Beer-Lambert law, derivation , limitations, application – estimation of sugar(DNSA) and protein(Biuret); concepts of Lambda max; determination of molar extinction coefficient		Wilson and Walker's Principles and Techniques of Biochemistry and Molecular Biology **&** Analytical Chemistry Textbook (S.Y.B.Sc.) **&** epg pathshala	White Board-Marker
	Construction and working of a simple colorimeter and spectrophotometer			
	Applications of Beer-Lambert law in the estimation of sugar[DNSA] and protein[Biuret]			
	Numericals based on the above concepts			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. ROHAN LOUIS D'SOUZA** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSC.**

SEMESTER: **VI** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: The learner will be able to define RCF & RPM, and state the relationship between them.
The learner will be able to understand the Beer-Lambert law and derive it.
The learner will be able to know the different types of centrifugation techniques and their applications.

The learners will be able to: understand the working and application of a centrifuge and spectrophotometer.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 (USBCH604) Immunology & pathophysiology-II Unit 3 **Title:** Virology & AIDS	General Structure of Virus	15	Fenner And White's Medical Virology & Prescott's Microbiology	White Board-Marker You-tube videos
	Structure and mechanism of replication in: 1. Vaccinia 2. Polio 3. Influenza			
	AIDS: Structure and genetics basis of AIDS virus. Replication of AIDS Virus. Symptoms and Causes of AIDS. AIDS Therapy.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **GHALIB RAHAB AKHTAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **FY BSc**
SEMESTER**: I** MONTH: **JUNE- OCTOBER** ACADEMIC YEAR- **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concepts of microbiology this includes the historical background, general characteristics of bacteria, microbial taxonomy, structure and function of bacterial cell wall and different staining methods for identification of bacteria.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT 3 MICROBIOLOGY I	Historical background and general characteristics of bacteria	2	Microbiology by Pelczar Michael J	Google Meet/ Presentations/ Videos and Diagrams
	Microbial taxonomy- species and strains, classification based on morpholoy, staining reaction, nutrition and extreme environment	4	Microbiology by Pelczar Michael J	
	Bacterial cell wall- structure and function, components of peptidolycan frame work	4	Microbiology by Pelczar Michael J	
	Introduction to extremophiles	2	Britannica encyclopedia	
	Staining methods and microscopic identification of bacteria	3	Microbiology by Pelczar Michael J And Cliffs notes.com	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **GHALIB RAHAB AKHTAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **FY BSc**
SEMESTER**: I** MONTH**: JUNE- OCTOBER** ACADEMIC YEAR- **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to: understand the deep knowledge of carbohydrates like their classification, sources, importance and some chemical properties

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – 1 Unit – III Carbohydrates	Definition, Classification, and functions of carbohydrates (mono, oligo, polysaccharides)	2	Biochemistry -lehninger	White Board
	Monosaccharides ● Classification in terms of aldoses and ketoses ● Occurrence,structures and significance of glucose, fructose, galactose, mannose, and ribos	3	Biochemistry -lehninger	White Board
	Properties: a) Physical - isomerism D & L, optical; epimers : anomers b) Chemical reactions - ● oxidation to produce aldonic. aldaric and uronic acids (with respect to glucose); ● reducing action in boiling alkali, enediol formation (with respect to glucose and fructose) ● Osazone formation (with respect to glucose and fructose ● Orcinol (with respect to ribose)	5	Biochemistry -lehninger	White Board

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	Disaccharides ● Occurrence and structure of maltose , lactose and sucrose ● Formation of glycosidic bonds	2	Biochemistry -lehninger	White Board
	Polysaccharides Classification based on function. storage and structure i. Composition: homo & hetero. with examples ii. Storage : starch and glycogen - action of amylase on starch iii. Structural: cellulose, chitin	3	Biochemistry -lehninger	White Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **GHALIB RAHAB AKHTAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **SY BSc**
SEMESTER**: III** MONTH: **JUNE- OCTOBER** ACADEMIC YEAR- **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to : To acquire information about the different concepts of Industrial biotechnology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT 3 INDUSTRIAL BIOTECHNOLOGY	Basics of fermentation.	4	Biochemistry by Satyanarayan Biotechnology by Satyanarayan	Google Meet , Presentation, Youtube And Online quizzes.
	Industrial production of wine and penicillin.	2		
	Immobilisation of enzymes.	4		
	Biosensors	4		
	Single cell proteins	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____16_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **GHALIB RAHAB AKHTAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **SY BSc**
SEMESTER**: III** MONTH: **JUNE- OCTOBER** ACADEMIC YEAR- **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about Mendalian Genetics with various crossing techniques
- Learn about gene interaction and numerical for the different concepts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH302 UNIT I Genetics: I	**1.1 History**: Contributions of Mendel, Bateson, Hardy-Weinberg, Garrod, Morgan, Griffith, Beadle and Tatum, Avery, Mac Leod, Mc Carthy, Lederberg, Tatum, Barbara Mclintock, Hershey & Chase, Watson &Crick.	04	• Russell iGenetics Molecular Approach 3rd edition • CliffsAP Biology 3rd edition.	• Google meet, Youtube videos, Powerpoint presentation, online quiz.
	1.2 Mendelian genetics: Mendel's experiments - Monohybrid, Dihybrid crosses, Laws of inheritance	04		
	1.3 Dominance, recessivity, co dominance, incomplete (semi) dominance, lethal genes	04		
	1.4 Gene interaction -Epistasis, types of epistasis, multiple alleles, maternal effects	03		
	1.5 Numerical on above concepts			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **GHALIB RAHAB AKHTAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **TY BSc**
SEMESTER**: V** MONTH: **JUNE- OCTOBER** ACADEMIC YEAR- **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to : Understand simple concepts related to metabolism , metabolic roles played by vitamins and minerals, appreciate the correlation between energy molecules, reducing equivalents and pathways.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT 1 ROLE OF VITAMINS AND MINERALS IN METABOLISM	Minerals as cofactors- Iron, Calcium, Magnesiun, Zinc, Selenium, Molybdenum	3	Lehninger Medical biochemistry by Rana shinde Biochemistry by satyanarayan	Google Meet , Youtube And Online quizzes.
	Water soluble vitamins-thiamin, riboflavin, niacin, pyridoxines	4		
	Biotin, Lipoic acid- chemistry, its co-enzyme and biochemical role	2		
	Fat soluble vitamin- A, D, E and K (INTRODUCTION)	1		
	Vit A- chemistry, wald's cycle, role of rhodopsin, transducin, cGMP Vit D- role in Ca absorption and mobilization Vit E and K- physiological role	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **GHALIB RAHAB AKHTAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **TY BSc**
SEMESTER**: V** MONTH: **JUNE- OCTOBER** ACADEMIC YEAR- **2022-23**
LEARNING OBJECTIVES:
The learners will be able to : Understand the mechanisms of dna transcription and translation in prokaryotes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT 2 TRANSCRIPTION AND TRANSLATION	Transcription in prokaryotes	1	Igenetics by Russel Biochemistry by satyanarayan	Google Meet , Youtube And Online quizzes.
	Mechanism of RNA transcription- initiation, elongation and termination,	4		
	Processing of RNA , concept of split genes, reverse transcription and role of inhibitor- Rifampicin, Actinomycin D	4		
	Translation in prokaryotes- genetic code and mechanism of translation	3		
	Post translational modification of proteins. Inhibitors and mode of action	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **GHALIB RAHAB AKHTAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **TY BSc**
SEMESTER**: V** MONTH: **JUNE- OCTOBER** ACADEMIC YEAR- **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to :
Gain knowledge about DNA replication process in prokaryotes, DNA damage and their repair mechanisms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit I DNA Replication & Repair	**1.1 Replication of DNA (in prokaryotes) -** Models of DNA replication : Semi-conservative, Dispersive & Conservative; Modes of DNA replication: Theta & rolling circle; Enzymes (pol I, II and III) and accessory proteins; Mechanism of semi-conservative replication;	9	iGenetics by Russel	White board
	1.2 DNA repair: Direct, Photoreactivation,O6 methyl guanine DNA methyl transferase, Excision repair, Mismatch repair, Recombination repair, SOS-error prone repair	6	iGenetics by Russel	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **GHALIB RAHAB AKHTAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **TY BSc**
SEMESTER**: V** MONTH: **JUNE- OCTOBER** ACADEMIC YEAR- **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about Cancer and its physiology
- Understand causes of cancer and treatment procedure.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH504 UNIT IV Cancer	4.1 Biology of Cancer	02	• Cell and Molecular Biology by Gerald Karp, 6th edition • Biochemistry by U.Satyanarayana	• Google meet, Youtube videos, Powerpoint presentation, online quiz.
	4.2 Physiology of Cancer cells	02		
	4.3 Causes of cancer Carcinogens: Types (Physical, Chemical and Biological, Environmental Factor); AMES test	03		
	4.4 Oncogenes and activation of oncogenes	02		
	4.5 Genetics of cancer with reference to p53 and Bcl2.	02		
	4.6 Cancer therapy (Chemo – purine, pyrimidine and folate analogs)	03		
	4.7 Cancer and the cell cycle	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**
SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to define soil and noise pollution.
The learners will be able to understand the types of soil and noise pollution.
The learner will be able to get an insight on causes and consequences of soil and noise pollution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 3 **Title:** Soil & Noise	**Soil:** Composition of soil, Nitrogen cycle Types of soil pollution – acidification, agrochemical pollution, salinization, and contamination by metalliferous wastes **Noise:** Noise and its measurement Classification of Noise Causes and consequences of Noise pollution	15	Environmental Chemistry by Anil Kumar De The textbook of Environmental studies by Erach Bharucha Fundamental concepts in Environmental studies by Dr. D. D. Mishra	Google Classroom, Google Meet, YouTube Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**
SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to differentiate between conventional and non-conventional sources of energy.
The learners will be able to understand the Sources and remedial measures for Industrial pollutants.
The learner will be able to get an insight on Environmental monitoring.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 4 **Title:** Energy, Industrial Pollutants and Environmental Monitoring	**Energy Conventional Sources :** Coal, Coke, Natural gas (CNG), Petroleum products (Petrol, Diesel, Kerosene, Oils, Naphtha) Non-Conventional Sources : Solar , Geothermal, Tidal, Hydroelectric power, Nuclear energy, Biofuels , Natural gas (Synthetic Natural Gas) **Industrial pollutants (Sources and remedial measures):** Polymers and Plastics Asbestos Poly Chlorinated Biphenyls Mining – Acid mine drainage **Environmental monitoring:** Approaches used to monitor the environment-air, water and soil. [Principles and Significance only. Protocols for each factor – not required] Remote Sensing	15	Environmental Chemistry by Anil Kumar De The textbook of Environmental studies by Erach Bharucha Fundamental concepts in Environmental studies by Dr. D. D. Mishra	Google Classroom, Google Meet, YouTube Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUNIL JAISAWAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **F.Y.BSc**
SEMESTER: **I** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to: understand about Cell and their organelles and cell division

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – II The cell- cell wall, cell membrane, cell organelles and cell division	Structural organization of cells ● Prokaryotic, Eukaryotic (plant & animal) and yeast cells - a comparative overview	1	Cell and Molecular Biology by Gerald Karp	Power Point, YouTube And Online quizzes.
	Cell wall structure (plant), cell membrane (fluid mosaic model) ● Cytoskeleton: microtubules & microfilaments	2	Cell and Molecular Biology by Gerald Karp	
	Cell organelles ● Mitochondrion*:* Organization & function of the mitochondria, mitochondrial genome ● Chloroplast: Structure and function of the chloroplast. the chloroplast genome, other plastids ● Ribosome*: ER*: *Golgi* Structure & Function of Ribosome, ER, Golgi apparatus	9	Cell and Molecular Biology by Gerald Karp	

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	• Peroxisome & Lysosome: Peroxisome function & assembly (in brief) and Lysosome structure and function • Nucleus: Structure & function of the nucleus, nuclear envelope, nuclear pores, nuclear matrix and Nucleolus			
	Mitosis and Meiosis	3	Cell and Molecular Biology by Gerald Karp	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUNIL JAISAWAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **S.Y.BSc**
SEMESTER: **III** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to: understand about physiology of body fluids

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – 2 Blood and Body Fluids	Fluid compartments of the body–ICF and ECF	3	Medical Physiology by Guyton & Hall	Power Point, YouTube And Online quizzes. .
	Blood: Composition, characteristics and function; role of plasma proteins, Starling's hypothesis; blood clotting and factors involved	5	Medical Physiology by Guyton & Hall	
	Bile: Composition, characteristics and function; storage	3	Medical Physiology by Guyton & Hall	
	Urine: Composition–normal and abnormal constituents; formation of urine	2	Medical Physiology by Guyton & Hall	
	Lymph: Composition, Formation and Circulation	2	Medical Physiology by Guyton & Hall	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUNIL JAISAWAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **S.Y.BSc**
SEMESTER: **III** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to : understand and gain knowledge about transportation system in plant and mammals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – 3 Biological transport mechanisms	**Transport in plants**: Role of xylem and phloem	1	S.K. Verma and Mohit Verma; Plant physiology, Biochemistry and Biotechnology	Power Point, YouTube And Online quizzes.
	Transport in blood: Transport of gases CO2 and O2, Role of hemoglobin, O2 dissociation curves, Bohr effect Chloride shift	5	Medical Physiology by Guyton & Hall	
	Transport of Metabolites: transport of lipids – lipoproteins and their types, role of plasma protein, albumin in transport of metabolites and drugs	3	Medical Physiology by Guyton & Hall	
	Transport of Ions: Fe -Ferritin and transferrin and Calcium	2	Medical Physiology by Guyton & Hall	
	Transport across cell membranes ● Channel proteins and Carrier proteins ● Passive transport (simple and facilitated diffusion) with suitable examples; concept of symport, antiport,	4	S.K. Verma and Mohit Verma; Plant physiology, Biochemistry	

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	uniport, Endocytosis and Exocytosis – with one example each ● Active transport: primary–Na+&K+ pump, secondary Glucose-amino acid transport, types of glucose transporters (GLUT 1 to GLUT 4), aquaporins, ion channel inhibitors like gramicidin and valinomycin		and Biotechnology	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUNIL JAISAWAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **S.Y.BSc**
SEMESTER: **III** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to :
Study about the concepts and processes of diffusion , osmosis, colloids , viscocity and surface tension.

PAPER , UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit II Physicochemical principles	**2.1** Diffusion and osmosis 2.1.1 Ways of expressing solute concentration - mole, molal, normal, percent, activity & ionic strength. 2.1.2 Diffusion & diffusion coefficient and factors affecting diffusion of solute in solution 2.1.3 Osmosis - Vant Hoff's law of osmotic pressure law & mathematical expression (no derivation), mechanism of osmosis, role of osmosis in physiology. 2.1.4 Renal dialysis: Principles and process	7	Biophysical Chemistry, Upadhyay	White board
	2.2 Colloids and viscosity 2.2.1 Colloidal state in relation to surface forces, surface area, electrical charge, precipitation and flocculation. 2.2.2 Surface tension and its measurement, factors affecting surface tension Eg. Role of bile in digestion 2.2.3 Viscosity - definition, measurement; Donnan membrane equilibrium, relation between Donnan equilibrium and osmotic pressure.	8	Biophysical Chemistry, Upadhyay	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUNIL JAISAWAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSc**
SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to : comprehend the catabolism and anabolism of carbohydrates and the disorders associate with these biomolecules.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 1 UNIT – III Carbohydrate metabolism	Catabolism – Cellular location, sequence of reactions, labelling of carbon atoms, and energetics of: Glycolysis (aerobic and anaerobic); Oxidation of pyruvate, Kreb cycle; Glyoxylate pathway; Glycogenolysis – [schematic – no structures, but with enzymes and coenzymes]	7	Biochemistry -lehninger	Power point
	Anabolism – HMP shunt (Cellular location, sequence of reactions, multifunctional nature); Gluconeogenesis,Glycogenesis –[schematic – no structures, but with enzymes and coenzymes]	5	Biochemistry -lehninger	Power point
	Disorders of carbohydrate metabolism: - Galactosemia, Fructosemia, - Lactose intolerance	3	Biochemistry -lehninger	Power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUNIL JAISAWAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSc**
SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to : understand the basic tools required and know the techniques of recombinant DNA technology, their applications and the use of the technology for the benefit of society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 3 UNIT – III Recombinant DNA Technology I	Introduction to RDT	1	Biotechnology by U.Satyanarayana	Power Point, YouTube And Online quizzes.
	Tools for RDT ● Enzymes- Restriction endonucleases, ligases, terminal transferases, reverse transcriptase: ● Cloning and Expression Vectors- Plasmid, pBR 322, PUC-19, Bacteriophage – Lambda phage; Cosmid; Artificial Chromosomes (BAC and YAC); Shuttle vectors; ● Probes- DNA probes	9	Biotechnology by U.Satyanarayana	
	Applications of RDT- Agriculture (Bt Cotton); Medicine (Insulin); GM food	5	Biotechnology by U.Satyanarayana	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUNIL JAISAWAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSc**
SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about metabolic, blood related and cardiovascular disorders.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV UNIT III Pathophysiology of metabolic and other disorders	**3.1 Metabolic disorder** 3.1.1 Inborn error: With respect to Etiology and Clinical manifestations 3.1.2 Carbohydrate Metabolism: Glycogen storage disease Type I & III. 3.1.3 Amino acid Metabolism: Albinism, Phenylketonuria, Maple syrup urine disease, Alkaptonuria 3.1.4 Lipid Metabolism: Tay Sach's disease, Niemann–Pick diseases, Fabry's disease	06	• Harper's Illustrated Biochemistry by Robert K. Murray • Lehninger's- Principles of Biochemistry by David L. Nelson	• Youtube videos, Powerpoint presentation, online quiz.
	3.2 Blood related diseases: 3.2.1 Iron deficiency anemia 3.2.2 Sickle cell anemia 3.2.3 Thalassemia 3.2.4 Pernicious anemia 3.2.5 Hemophilia A and B	05		
	3.3 Cardio Vascular System and related diseases: 3.3.1 Hypertension, Arteriosclerosis and Atherosclerosis	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUNIL JAISAWAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **F.Y.BSc**
SEMESTER: **II** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to : understand in detail about fundamental structural and functional properties of the digestive system along with some disorders related to the digestive system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 UNIT – I Physiology of digestion and absorption	Parts and Functions of gastrointestinal tract (GIT)	2	Medical Physiology – GUYTON & HALL	Power Point, YouTube And Online quizzes.
	Organs and Glands associated with GIT Secretions and Juices of GIT (Saliva, Gastric juice, Intestinal juice, pancreatic and Bile juice)	8	Medical Physiology – GUYTON & HALL	
	Digestion and Absorption of carbohydrates	1	Medical Physiology – GUYTON & HALL	
	Digestion and Absorption of Lipid	1	Medical Physiology – GUYTON & HALL	
	Digestion and Absorption of Proteins	1	Medical Physiology –	

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			GUYTON & HALL	
	Disorders - Peptic ulcer, Lactose Intolerance	2	Medical Physiology – GUYTON & HALL	Power Point, YouTube And Online quizzes..

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUNIL JAISAWAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **F.Y.BSc**
SEMESTER: **II** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:

The learners will be able to: understand about biochemical study of Lipids like definition, complex structure, importance, classification and some chemical properties.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 1 UNIT – 1 LIPIDS	Definition, classification (Bloor's) and functions of Lipids	2	Fundamental of Biochemistry by Jain & Jain	White board, Power Point, YouTube And Online quizzes.
	Fatty' acids and Triacylglycerol	1	Fundamental of Biochemistry by Jain & Jain	
	Classification & Chemistry, ● Saturated fatty acids - classification of C2 to C20: even carbon: Common and IUPAC names. Unsaturated fatty acids MUFA, PUFA (2.3.4 double bonds) Omega - 3.6.9 fatty acids. Triacylglycerol - simple and mixed - names and structure ● Chemical Reactions of fats Saponification, Iodination, Ozonolysis, Auto-oxidation,	6	Fundamental of Biochemistry by Jain & Jain	

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	Action of heat on glycerol and choline, Rancidity Definition & significance - Acid number, Saponification number, Iodine number, Reichert - Meissel number			
	Compound Lipids ● Functions of glycerophospholipids (PE.PC.PL) Phosphosphingolipids (ceramide, sphingomyelin), Glycolipids /Cerebrosides (gluco & galactocerebrosides)	4	Fundamental of Biochemistry by Jain & Jain	
	Steroids Cholesterol structure and biochemical significance.	2	Fundamental of Biochemistry by Jain & Jain	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUNIL JAISAWAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **S.Y.BSc**
SEMESTER: **IV** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S: The learners will be able to **:** understand the basic concept of Eukaryotic & Prokaryotic genome, their organization up-to chromosome & Recombination of genome in Prokaryotes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – 1 Genetics : II	**Genome organization**	1	Biotechnology - U. Satyanarayan	Power Point, YouTube And Online quizzes.
	Prokaryotic Genome: Nucleoid structure	1	Biotechnology - U. Satyanarayan	
	Eukaryotic chromosomes: Packaging of DNA(upto Solenoid structure), DNA supercoiling, Topoisomerase, Chromatin structure -Euchromatin, Heterochromatin, structure of condensed chromatin, Centromere, kinetochore, telomere, Comparison of chromosomal structure in prokaryotes and Eukaryotes	9	Biotechnology - U. Satyanarayan	
	Recombination in prokaryotes	1	Biotechnology - U. Satyanarayan	
	Transformation: Transformation in *S. pneumonia* Transduction: General features with one example	1	Biotechnology - U. Satyanarayan	
	Conjugation: Mechanism F+, F- and Hfr strain	1	Biotechnology - U. Satyanarayan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUNIL JAISAWAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **S.Y.BSc**
SEMESTER: **IV** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to :
Learn about various types of plant and animal hormones, their structures mechanisms and effects.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit II Plant growth regulators and endocrinology	**2.1** Plant growth regulators- Structure and function of- auxins, gibberellins, cytokinins, ethylene and abscisic acid.	3	Hall John E ; Guyton : Textbook of Medical Physiology Elsevier publishers	White board
	2.2 Definition of hormones, hormone receptor, endocrine & exocrine glands	2	Hall John E ; Guyton : Textbook of Medical Physiology Elsevier publishers	White board
	2.3 Classification of hormones on the basis of: 2.3.1 Distance of target tissue - autocrine, paracrine, endocrine. Hierarchal organization of the mammalian endocrine 15 lectures system	4	Hall John E ; Guyton : Textbook of Medical	White board

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	2.3.2 Chemistry - One example for each sub class.		Physiology Elsevier publishers	
	2.4 Chemistry & physiological role of thyroxine, oxytocin & vasopressin, Physiological role of glucocorticoids, FSH, LH, Estrogen, Progesterone (Reproductive cycle) Mode of action of steroid hormones and epinephrine. (amplification cascade Only till the level of protein kinase A) G protein not to be covered.	6	Hall John E ; Guyton : Textbook of Medical Physiology Elsevier publishers	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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VIVA COLLEGE, Virar (W)
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUNIL JAISAWAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **S.Y.BSc**
SEMESTER: **IV** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the nervous system and the parts of the nervous system.
- Learn how all parts of the nervous system are involved in a neurotransmission.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH402 UNIT III Neurophysiology	**3.1 Nervous System Classification**: CNS,PNS; Components: Neurons (3types) and Neuroglia(6types)–structure and function, Axonal transport	05	• Metzler David E. Biochemistry, The chemical reactions of living cells, Volume II. Elsevier publications.	• Whiteboard method / Google meet, Youtube videos, Powerpoint presentation, online quiz.
	3.2 Nerve impulse transmission: Resting Membrane Potential, ion channels [voltage and ligand gated], Action Potential (depolarization, polarization and refraction period), propagation of action potential (salutatory & continuous conduction)	03		
	3.3 Synaptic transmission: Physiological anatomy of a synapse;– Electrical & Chemical synapses, Excitatory & inhibitory postsynaptic potentials, Agonists & Antagonists, inactivation of Neurotransmitter	03		
	3.4 Neurotransmitters: Structure and function of acetylcholine, catecholamines, GABA, glutamate, glycine	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUNIL JAISAWAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSc**
SEMESTER: **VI** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to: understand breakdown and synthesis of fatty acid appreciate experiments carried out by scientists to enable understanding the pathways and cycles of lipid metabolism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 1 UNIT – I Lipid metabolism	Catabolism - Knoop's experiment; Beta oxidation of even carbon saturated fatty acids (C4 to C20) Energetics of fatty acid oxidation. Beta oxidation of odd carbon chain fatty acid	7	Biochemistry -lehninger	Power Point, YouTube And Online quizzes.
	Anabolism – FAS complex; Fatty acid biosynthesis (palmitic acid); Ketone body formation, utilization, and the physiological significance of Ketone bodies in Diabetes mellitus, Starvation, Pregnancy and Alcoholism.	8	Biochemistry -lehninger	Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUNIL JAISAWAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSc**
SEMESTER: **VI** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S
The learners will be able to: about proximate principles, nutritional status and balanced diet.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – I Nutrition	Principles of nutrition	2	Biochemistry by U.Satyanarayana	Power Point, YouTube And Online quizzes.
	Nutrients [Proximate principles, vitamins and minerals (macro And micro- role of Ca, Mg, Na, K and Fe, Zn)], dietary fibre.	3	Biochemistry by U.Satyanarayana	
	Nutritional status [malnutrition (protein energy and protein calorie) and over nutrition]	2	Biochemistry by U.Satyanarayana	
	Balanced diet	1	Biochemistry by U.Satyanarayana	
	Energy Assessment - RQ, BMR;	2	Biochemistry by U.Satyanarayana	
	Anthropometry – BMI, Waist:hip ratio;	2	Biochemistry by U.Satyanarayana	
	Protein quality indices: Chemical score of amino acids, Protein Deficiency Corrected Amino Acid Score, Net Protein utilization	3	Biochemistry by U.Satyanarayana	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUNIL JAISAWAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSc**
SEMESTER: **VI** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to : Learn about reactions of amino acids and protein metabolism, hormones and signal transduction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit II Amino acid and protein metabolism & Endocrinology	2.1 Amino acid and protein metabolism – 2.1.1 Reactions of amino acids – Transamination [GOT/GPT and mechanism of transamination] ; Decarboxylation [His, Trp, Glu, and mechanism of decarboxylation] , Deamination [oxidative – NAD(P) linked dehydrogenases and D & L - Amino acid oxidases, Non oxidative – Asp, Cys, Ser] 2.1.2 Urea cycle – Cellular location, sequence of reactions, Labeling of N atom, transport of NH3	8	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	2.2 **Endocrinology** 2.2.1 Chemistry, synthesis , secretion and physiological effects of Thyroxine and Insulin [synthesis from preproinsulin], Diabetes mellitus , Hypothyroidism [cretinism and myxedema], Hyperthyroidism [goiter – simple & toxic] Physiological role of Glucocorticoids, Oxytocin and ADH 2.2.2 Mode of action of steroid hormones, Effect of epinephrine on glycogen synthesis and breakdown [amplification cascade with G proteins, cAMP, adenylate cyclase, kinases]	7	Hall John E ; Guyton : Textbook of Medical Physiology Elsevier publishers	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUNIL JAISAWAR** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSc**
SEMESTER: **VI** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about electrophoretic techniques and their different procedures.
- Understand about radioactivity and how it is used in biological experiments.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH601 UNIT IV Electrophoresis & Radioactivity	4.1 **Electrophoresis** 4.1.1 Principle: Factors affecting the rate of migration of sample in an electric field 4.1.2 Moving boundary and Zone electrophoresis; Components of electrophoresis unit/apparatus 4.1.3 Various support media - paper, cellulose acetate, agar, agarose and polyacrylamide 4.1.4Technique of electrophoresis with staining/visualization method • agarose electrophoresis for separation of DNA • Native PAGE for separation of proteins • SDS PAGE for molecular weight determination; • Discontinuous electrophoresis • Other applications of electrophoresis: blotting techniques Southern, Northern, and Western 4.1.5 Isoelectric Focusing of protein	11	• Principals and Techiniques of Biochemistry and Molecular Biology 7th Ed Wilson Walker • Analytical Biochemistry by David Holme	• Whiteboard method / Google meet, Youtube videos, Powerpoint presentation, online quiz.
	4.2 **Radioactivity-** Isotopes, Radioactive decay; Decay constant; Half-life; Measurement of radioactivity (principle)	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DEVESH MACHHI** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **FY BSc** SEMESTER**:II** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR- **2022-23**

LEARNING OBJECTIVE/S:The learners will be able to: Understand microbial growth,media required for growth, sterilization and disinfection techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II **Unit III** **Microbiology II**	**3.1** Microbial Growth - Growth Curve, Mathematical expression, Synchronous growth, Generation time	4	1))Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd. 2)Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition.	Presentation/Videos

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	3.2 Culture media (N, C, Special requirements), Natural and Synthetic media	3	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6 2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition	Presentation/Videos
	3.3 Sterilization and Disinfection techniques	3	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6 2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition	Presentation/Videos

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	3.4 Physical Agent of sterilization - Temperature- Pressure (Hot Air Oven, Autoclave), Radiations (UV, Gamma) (examples with mechanism) Chemical agents of sterilization - Alcohol, Halogens, Formaldehyde	5	Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6 2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition	Presentation/Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DEVESH MACHHI** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **SY BSc** SEMESTER**:IV** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR- **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to : understand basic concepts of Pharmacology and be able to understand basic information about drugs like their sources , formulation types, administration route, their pharmacokinetics effect and their novel delivery system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 3 UNIT – 2 Introduction of Pharmacology	Scope of pharmacology	1	Essentials of Pharmacology - F. S. K Brar	White Board
	Sources, Classification, Chemical & physical properties of drug and Nomenclature of drugs	4	Essentials of Pharmacology - F. S. K Brar	White Board
	Dosage forms and routes of drug administration; Factors affecting dosage and drug delivery	3	Essentials of Pharmacology - F. S. K Brar	White Board
	Pharmacokinetics: LD 50, ED 50 Half Life, Loading dose, Maintenance dose (Explanation of terms only);Therapeutic index	3	Essentials of Pharmacology - F. S. K Brar	White Board

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	Novel Drug delivery system (NDDS)	1	Essentials of Pharmacology - F. S. K Brar	White Board
	Transdermal and oral modes	1	Essentials of Pharmacology - F. S. K Brar	White Board
	Liposomes and nanoparticles	2	Essentials of Pharmacology - F. S. K Brar	White Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DEVESH MACHHI** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **T.Y BSc** SEMESTER**:VI** MONTH: **NOVEMBER-APRIL** ACADEMIC YEAR- **2022-23**

LEARNING OBJECTIVE/S:

The learners will be able to:

- Learn about different tools used in bioinformatics and understand genome, proteome and nucleotide sequence analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH603 UNIT II Bioinformatics	2.1 **Bioinformatics:** Definition, Aims and History of Bioinformatics Applications of Bioinformatics in – Sequence analysis, Molecular modeling and drug designing, Phylogeny/evolution, Ecology & population studies, Medical informatics and agriculture. Introduction to Genomics and Proteomics Databases- Definition & types – Public domain database, Sequence database, Structural database, Motif database, Genome database, Proteome database, Annotated sequence database. Full form & function in brief of - GenBank, EMBL, PIR, SWISS PROT, PDB, GDB. Sequence analysis Tools - Explain the following terms in brief-BLAST, FASTA, L-ALIGN, CLUSTAL- X & W, RASMOL, Software for protein sequencing - PROSPECT, AMMP,COPIA	15	• Principles and Techniques of Biochemistry and Molecular Biology, 4th edition.	Whiteboard method / Google meet, Youtube videos, Powerpoint presentation, online quiz.

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	(Explanation of the terms in brief) Micro-array analysis-concept and applications			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma
DEPARTMENT: Biochemistry
CLASS: T.Y.B.Sc. Biochemistry
SEMESTER: **V**
MONTH: June-October
ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:

- To differentiate about different chromatographic techniques
- To understand chromatography as a separation technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit – IV	Chromatography: Principle, Theoretical plates	02	• Principles of Instrumental Analysis - by Douglas A. Skoog • An Introduction to Practical Biochemistry- by David Plummer	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Technique and Applications of the following kinds of chromatography : Partition chromatography (Paper)	03		
	Adsorption Chromatography (TLC and column)	04		
	Ion exchange chromatography and Gel filtration	01		
	Principle and applications of GLC, HPLC, HPTLC, Affinity chromatography,	03		
	Numerical problems based on above concept	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma
SEMESTER: **VI**

DEPARTMENT: Biochemistry
MONTH: November-April

CLASS: T.Y.B.Sc. Biochemistry
ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:

- The learner will learn the concept of diet management, nutrition at various stages of life and diseases related to diet.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit – II	Concepts like Balanced diet, Meal planning.	03	• Lehninger's-Principles of Biochemistry by David L. Nelson	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Nutrition during pregnancy, lactation, infancy, toddlerhood, preschool stage, school going children, and adolescence, adulthood and geriatric	07		
	Dietary Management in :- Obesity, Diabetes Mellitus, Hypertension, Peptic ulcer , Obstructive Jaundice	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma
DEPARTMENT: Biochemistry
CLASS: T.Y.B.Sc. Biochemistry
SEMESTER: **V**
MONTH: September – December
ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:

- To differentiate about different chromatographic techniques
- To understand about chromatography as a separation technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit – IV	Chromatography: Principle, Theoretical plates	02	• Principles of Instrumental Analysis - by Douglas A. Skoog • An Introduction to Practical Biochemistry- by David Plummer	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Technique and Applications of the following kinds of chromatography : Partition chromatography (Paper)	03		
	Adsorption Chromatography (TLC and column)	04		
	Ion exchange chromatography and Gel filtration	01		
	Principle and applications of GLC, HPLC, HPTLC, Affinity chromatography,	03		
	Numerical problems based on above concept	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Biochemistry CLASS: T.Y.B.Sc. Biochemistry

SEMESTER: **V** MONTH: September – December ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:

- This unit aims to acquaint the learner with oxidative phosphorylation and photophosphorylation and fixation of carbon dioxide, photorespiration and bioluminescence.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit – II	Bioenergetics: Concept of free energy; Respiratory electron transport chain – Carriers [basic chemistry, redox potentials, orientation on the membrane, sequence}; Q cycle in Complex III; Inhibitors of electron transport – Antimycin A , Amytal, Rotenone, CN, Azide, CO; Barbital Malate-Aspartate shuttle and Glycerol phosphate shuttle	05	• Lehninger's-Principles of Biochemistry by David L. Nelson • Harper's Illustrated Biochemistry by Robert K. Murray • Biochemistry by Donald Voet • Biochemistry by Jeremy M. Berg • Biochemistry (2 Volume Set): The Chemical Reactions of Living Cells by David E.Metzler	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Oxidative phosphorylation –Chemiosmotic hypothesis, Proton motive force; Structure of ATP synthase, Uncoupler- of ETC and Oxidative phosphorylation [DNP]	03		
	Photosynthesis – Light and dark reactions, Z scheme and electron carriers, photophosphorylation [linear and cyclic]; Calvin cycle – schematic with enzymes; Photorespiration	04		

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	Bioluminescence. Phenomenon and its biological significance. Applications of Bioluminescence	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Biochemistry CLASS: T.Y.B.Sc. Biochemistry

SEMESTER: **VI** MONTH: January

ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:

- The learner will learn the concept of diet management, nutrition at various stages of life and diseases related to diet.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit – II	Concepts like Balanced diet, Meal planning.	03	• Lehninger's- Principles of Biochemistry by David L. Nelson	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Nutrition during pregnancy, lactation, infancy, toddlerhood, preschool stage, school going children, and adolescence, adulthood and geriatric	07		
	Dietary Management in :- Obesity, Diabetes Mellitus, Hypertension, Peptic ulcer , Obstructive Jaundice	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma | DEPARTMENT: Biochemistry | CLASS: T.Y.B.Sc. Biochemistry

SEMESTER: **VI** | MONTH: January | ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:

- The learner will know about the basic insights in pharmacology, pharmacokinetics and mechanism of action of therapeutic drugs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit – III	General pharmacology Pharmacodynamics, Physicochemical properties of drugs, Drug absorption: through-GIT, pulmonary, renal, placental and blood-brain barrier Bioavailability and Bioequivalence Drug Distribution, Metabolism and Excretion	06	• Essentials of Pharmacotherapeutics by FSK Brara • Textbook of Medical Biochemistry by M.N. Chatterjea & Ranashinde	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Bioassays: Preclinical and clinical evaluation, Therapeutic drug monitoring	03		
	Pharmacokinetics: LD50, ED50, Half Life, Loading dose, Maintenance dose, Therapeutic dose, Therapeutic Index, Drug plasma concentration, Volume of distribution, Clearance	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ROHINI SHINDE DEPARTMENT: BIOCHEMISTRY
CLASS: FY BSc SEMESTER: I MONTH: JANUARY-MARCH ACADEMIC YEAR- 2021-2022

LEARNING OBJECTIVE/S:The learners will be able to :Understand microbial growth,media required for growth, sterilization and disinfection techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II **Unit III** **Microbiology II**	**3.1** Microbial Growth - Growth Curve, Mathematical expression, Synchronous growth, Generation time	4	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6 2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition.	Presentation/Videos

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	3.2 Culture media (N, C, Special requirements), Natural and Synthetic media	3	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6 2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition	Presentation/Videos
	3.3 Sterilization and Disinfection techniques	3	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6 2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition	Presentation/Videos

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	3.4 Physical Agent of sterilization - Temperature-Pressure (Hot Air Oven, Autoclave), Radiations (UV, Gamma) (examples with mechanism) Chemical agents of sterilization - Alcohol, Halogens, Formaldehyde	5	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6 2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition	Presentation/Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ROHINI SHINDE DEPARTMENT: BIOCHEMISTRY
CLASS: S.Y.B.Sc SEMESTER: IV MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand biochemical processes involved in animal and plant studies.
- Learn about different sell and tissue handling and processing techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH 401 UNIT III Approaches to Biochemical investigations	**3.1** Whole animal and plant studies - the advantages and disadvantages of any four model systems for biochemical investigation (e.g. *E.coli*, yeast, *Dictyostelium*, *C. elegans*, Drosophila, *Arabidopsis)*	05	• David L. Nelson, Michael M. Cox, Lehninger; Principles of Biochemistry, W H Freeman & Co.	• Whiteboard method / Google meet, Youtube videos, Powerpoint presentation, online quiz.
	3.2 Organ & tissue studies	03		
	3.3 Isolated and cultured tissue and cell techniques: isolation, culture and counting of cells.	03		
	3.4 *Cell Fractionation* 3.4.1 Cell rupture – solid shear, liquid shear, high pressure, ultrasound, osmotic shock, chemical treatment (enzyme, organic solvent), temperature. 3.4.2 Choice of suspension medium (isotonic & hypotonic solution, PBS) and separation methods.	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ROHINI SHINDE DEPARTMENT: BIOCHEMISTRY
CLASS: T.Y.BSc SEMESTER: VI MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to :
Learn about reactions of amino acids and protein metabolism, hormones and signal transduction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit II Amino acid & protein metabolism and Hormones & Signal transduction	2.1 Amino acid and protein metabolism – Reactions of amino acids – Transamination [GOT/GPT and mechanism of transamination] ; Decarboxylation [His, Trp, Glu, and mechanism of decarboxylation] , Deamination [oxidative – NAD(P) linked dehydrogenases and D & L - Amino acid oxidases, Non oxidative – Asp, Cys, Ser] 2.1.2 Glucogenic and ketogenic amino acids 2.1.3 Urea cycle – Cellular location, sequence of reactions, Labeling of N atom, transport of NH_3	9	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	Presentation/Videos
	2.2 **Hormone action and signal transduction** 2.2.1Hormone receptors (membrane and intracellular) 2.2.2 Introduction to G protein, G protein coupled receptor, Effect of epinephrine on glycogen synthesis and breakdown: amplification cascade with G proteins, cAMP (as second messenger), adenylate	6	Hall John E ; Guyton : Textbook of Medical Physiology	Presentation/Videos

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	cyclase, kinases 2.2.3 IP3 and Calcium as second messenger		Elsevier publishers	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ROHINI SHINDE DEPARTMENT: BIOCHEMISTRY
CLASS: T.Y.BSc SEMESTER: VI MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to:
Gain knowledge about various antigen-antibody interactions, techniques for detecting them, and concept of complement system in human body.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit I Antigen-Antibody interactions & Complement system	1.1 Antigen- Antibody interactions: 1.1.1 Forces involved, antibody affinity, antibody avidity. 1.1.2 Precipitation reactions – Oudins, Ouchterlony 1.1.3 Agglutination reactions: Blood typing, bacterial agglutination, Passive agglutination, agglutination inhibition, Coomb's test. Immunoelectrophoresis; 1.1.4 Principles of Radioimmunoassay, ELISA, 1.1.5 Immunofluorescence	10	Immunology by Goldsby and Kuby	Presentation/Videos

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	1.2 Complement 1.2.1 Components of complement; 1.2.2 Complement activation – Classical & alternate pathway; formation of membrane attack complex. 1.2.3 Biological consequences of complement activation.[in brief]	5	Immunology by Goldsby and Kuby	Presentation/Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **F.Y BSc** SEMESTER: **I** MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: **2021-22**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand basic structure and various forms of amino acids.
- To learn the classifications of amino acids.
- To understand physical and chemical properties of amino acids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit II 2.1 Amino acids and proteins	2.1.1 Amino acid structure - D & L forms of all 20 amino acids	03	• Lehninger, Albert L, Biochemistry, Kalyani Publishers • Nelson, D. L. and Cox, M.M, (2008). Lehninger, Principles of Biochemistry 5th Edition, W. H. Freeman and	•Students were explained about structures by using various images and videos.
	2.1.2 Detailed classification based on polarity, essential and non-essential amino acid	03		•Students were explained about amino acids classification by interactive session.
	2.1.3 Physical properties: zwitter ions, pI of amino acids amino acids as ampholytes, melting point, optical rotation, UV absorption and chemical properties: Chemical reactions of amino acids with Ninhydrin, Sanger's reagent, Edman's reagent and Dansyl chloride	09 Total: 15		•Students were explained about physical and chemical reactions using images and presentation.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **F.Y BSc** SEMESTER: **I** MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: **2021-22**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about reasons for origin of life.
- To understand different theories behind evolution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Unit I Origin of Life & Formation of cells	1.1 Big bang theory, Theories on the origin of life: Abiogenesis, Heterotroph hypothesis, RNA world, protein world, Miller's experiment, Formation of the first cell, endosymbiont theory	05	●Verma, P.S. and Agarwal V.K.; Cell Biology, Genetics, Molecular biology, Evolution and Ecology ; Publishers : S. Chand and Co.Ltd., (2009)	●Students were explained via an interactive session. ● Diagrams related to theories were shown online.
	1.2 Evolution - Darwinian theory, Modern synthetic theory of evolution and its factors: Gene mutations(recombination), heredity, natural selection and isolation Biological evidences: Fossil record, chemical and anatomical similarities of related life forms, geographic distribution of related species, genetic changes in living organisms over generations and Mechanism of evolution, Gene flow and genetic drift, Hardy-Weinberg principle	10 Total: 15		●Students were explained about amino acids classification via videos. ●They were shown photos of scientists behind these theories. ●Also a project was assigned to them on evolution.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **S.Y BSc** SEMESTER: **III** MONTH: **JULY-DECEMBER** ACADEMIC YEAR: **2021-22**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about beneficial and harmful organisms for body in detail.
- To understand structure, classification and life cycle of virus.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Unit I Microbiology in Human Health and Diseases	1.1 Beneficial Microorganism: Lactobacillus, Normal flora of human gut, Probiotics, Yeast, Nitrogen fixing bacteria (Rhizobium and Azotobacter)	03	●Michael J. Pelczar, Jr; E.C.S. Chan; Noel R. Krieg; Microbiology Tata McGraw Hill. ●Roger Y stanier; General Microbiology,Macmillan, 1981	●Students were explained about beneficial and harmful bacteria, structure, classification and life cycle of virus with the help of slides.
	1.2 Harmful microorganisms: 1.2.1 Air borne- *Mycobacterium tuberculae*(Tuberculosis), *Corynebacterium diptheriae*(Diptheria), *Candida sp*., *Haemophilus influenzae* (Influenza), morbillivirus (measles) 1.2.2 Water borne- *Shigella sp.* (Dysentery), *Vibrio cholerae* (Cholera), *Salmonella sp.* (Enteric fever), Hepatitis virus 1.2.3 Food borne- *Staphylococcus aureus*, *Clostridium botulinum* (Botulism) 1.2.4 Soil borne- *Clostridium tetani*	08		
	1.3 Virology- General structure of a typical virus, classification of viruses based on genome (DNA, RNA); symmetry (helical, icosahedral, complex), host (bacteria, plant, animal, insect); Lytic and Lysogenic cycle	04 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS**: S.Y BSc** SEMESTER: **III** MONTH:**JULY-DECEMBER** ACADEMIC YEAR: **2021-22**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To explain the process of plant tissue culture and animal tissue culture
- To understand the applications of the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Unit II Cell and Tissue Culture	2.1 Plant Tissue Culture: 2.1.1 History, Introduction or definition (explants, callus, dedifferentiation, re-differentiation) concept of totipotency 2.1.2 Culture techniques; Types of culture (Callus culture, Organ culture, protoplast culture, cell culture) 2.1.3 Applications: secondary metabolites in plant culture, Micropropagation	07	●Jogdand, Advances in Biotechnology; Himalaya Publishing House ●U. Satyanarayan ;Biotechnology, Books & allied (P) Ltd., Kolkata	●Students were explained the procedures with the help of slides.
	2.2 Animal Cell Culture: 2.2.1 History, Introduction to Primary cell culture, Cell lines (Finite and continuous) 2.2.2 Culture techniques used for primary culture, 2.2.3 Stem cell culture, Animal Organ Culture, Whole embryo culture 2.2.4 Applications: hybridoma (monoclonal antibody), production of Vaccines	08 Total:15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **T.Y BSc** SEMESTER: **V** MONTH: **JULY-DECEMBER** ACADEMIC YEAR: **2021-22**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand the overall organization of the immune system, relationship between innate and adaptive systems and humoral and cell mediated immunity.
- To learn about the cells and organs of immune system in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit I 1.0 Human immune system	1.1 Types of Immunity Innate immunity – Anatomical barriers, physiological barriers, Characteristics of Inflammation, phagocytosis [no mechanism] Adaptive immunity – Active & Passive Humoral & Cell mediated immunity.	06	●Immunology by Goldsby and Kuby	●Students were explained about human immune system with the help of videos and diagrams.
	1.2 Organs of the immune system: Primary lymphoid organs: Thymus, Bone marrow Secondary lymphoid organs: Lymphatic system, Lymph nodes, Spleen, MALT.	04		
	1.3 Cells of the immune system: Lymphocytes – B cells and T cells, Natural killer cells – Mononuclear phagocytes, Granulocytes, Antigen presenting cells. Clonal selection & immunologic memory. Cytokines: biological functions of IL1, tumor necrosis factoralpha, interferon –alpha, IL2, interferon-gamma.	05 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **T.Y BSc** SEMESTER: **V** MONTH: **JULY-DECEMBER** ACADEMIC YEAR: **2021-22**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand the overall organization of the immune system.
- To learn the structure and function of antibodies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit II 2.0 Antigen-Antibody interactions	2.1 Antigens: Antigenicity, immunogenicity, epitope, factors determining immunogenicity, Haptens. Antibodies: Fine structure of immunoglobulin, Antibodymediated functions, Antibody classes, Monoclonal antibodies (concept, production and applications)	09	●Immunology by Goldsby and Kuby	●Students were explained about antigens and antibodies with the help of videos and diagrams.
	2.2 Antibody diversity: Multigene organization of immunoglobulin genes – Lambda, kappa & heavy chain Light chain DNA – VJ rearrangements Heavy chain DNA - VDJ rearrangements	06 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **F.Y BSc** SEMESTER: **II** MONTH: **JANUARY-MARCH** ACADEMIC YEAR: **2021-22**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about nucleic acid structure and it's components in detail.
- To understand evidences and properties of nucleic acids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit II Nucleic Acids	2.1 Structure - Purine & Pyrimidine bases, ribose, deoxyribose, nucleosides and nucleotides (ATP, CTP, GTP, TTP, UTP) Formation of polynucleotide strand with its shorthand Representation	04	• Lehninger, Albert L, Biochemistry, Kalyani Publishers • Nelson, D. L. and Cox, M.M, (2008). Lehninger, Principles of Biochemistry 5th Edition, W. H. Freeman and	•Students were explained via an interactive session. •Structures of nucleic acids were shown.
	2.2 RNAs (various types in prokaryotes and eukaryotes) mRNA & r RNA - general account, t RNA - clover leaf model, Ribozymes	04		•Structures of types RNAs were explained via diagrams.
	2.3 DNA 2.3.1 Physical evidence of DNA helical structure. Chargaff's rules (chemical evidence), Watson-Crick model of DNA & its features 2.3.2 Physical properties of DNA - Effect of heat on physical properties of DNA (Viscosity, buoyant density, UV absorption), Hypochromism, hyperchromism, denaturation of DNA. 2.3.3 Reactions of nucleic acids (with DPA and Orcinol)	07 Total: 15		•Students were explained about the evidences and properties by drawing structures and reactions.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **F.Y BSc** SEMESTER: **II** MONTH:**JANUARY-MARCH** ACADEMIC YEAR: **2021-22**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand the parts and function of respiratory and excretory system in detail.
- To learn disorders of respiratory and excretory system and their causes in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Unit II Physiology of respiration and excretion	2.1 Respiratory system	01	● Guyton, Arthur C. and Hall, John E.;Text book of Medical physiology ; Harcourt Brace & Company Asia Pvt. Ltd.	●Students were explained about via interactive session.
	2.2 Breathing - inspiration and expiration,	01		
	2.3 Composition of air and partial pressure of gases	01		
	2.4 Physical exchange of gases 2.4.1 Transport of oxygen 2.4.2 Transport of carbon dioxide Respiratory disorders – cyanosis, respiratory acidosis and alkalosis	03		●Students where explained about it by structures and reactions in the presentation.
	2.5 Excretion -2.5.1 Structure of the nephron: Bowman's capsule & glomerulus - Structure & function, (ultrafiltration, pressures involved, GFR, regulation of GFR); Renal tubule - structure & function (proximal and distal convoluted tubules and Henle's loop) 2.5.2 Urine formation: Reabsorption / Secretion of glucose, Na+, K+. HCO3 Cl^- and H+ : renal threshold, Excretory disorder: Nephritis	09 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **S.Y BSc** SEMESTER: **IV** MONTH: **JANUARY-MARCH** ACADEMIC YEAR: **2021-22**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about different movements of plants.
- To understand process of contraction and relaxation of muscles in mammals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Unit II Movement and locomotion	2.1 Movement in plants 2.1.1 Movements of Locomotion Spontaneous: Ciliary, Amoeboid, Cyclosis (Rotation, Circulation) Induced: Chemotaxis, Phototaxis, Thermotaxis 2.1.2 Movements of Curvature: Mechanical: hygroscopic movements Vital:i)Spontaneous-movements of growth(nutation, circumutation, Hyponasty, epinasty); movements of variation ii)Induced–Tropic-hapto/geo/hydrotropism; Nastic–seismonasty, Nyctynasty	10	●S.K.Verma and Mohit Verma, Plant physiology, Biochemistry and Biotechnology ●Tortora G J, Derrickson B H; Principles of Anatomy and Physiology, Wiley	●Students were explained about different movements in plants with the help of videos.
	2.2 Muscle contraction 2.2.1 Structural organization of a muscle fibre, myofibril 2.2.2 Contraction and Relaxation of Muscles; -mechanisms, Other types of contractions–e.g. twitch, tetanus, Isotonic, Isometric regulation of Muscle contraction	05 Total:15		●Students were explained about movements of muscle with the help of videos.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **S.Y BSc** SEMESTER: **IV** MONTH:**JANUARY-MARCH** ACADEMIC YEAR: **2021-22**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about different trends in biotechnology and their applications.
- To understand process of biodegradation of various contaminants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Unit I Trends in Biotechnology	1.1 Bioremediation: 1.1.1 Introduction to terms – Bioremediation, Biotransformation, Xenobiotics, Recalcitrant xenobiotics, Biomagnification, Factors affecting bioremediation 1.1.2 Types of Bioremediation (Insitu, Exsitu); Types of reactions (Aerobic, anaerobic, sequential) 1.1.3 Applications of Biodegradation - hydrocarbons, (Oil spills) Pesticides and herbicides, Heavy metals (Uranium) contaminated soil and waste land, Ground Water; Genetically Engineered Microbes in bioremediation	08	●U. Satyanarayan ;Biotechnology, Books & allied (P) Ltd., Kolkata	●Students were explained about different trends in biotechnology with the help of videos.
	1.2 Biopesticides: 1.2.1 Introduction; Types of Biological Control (Classical, inoculation, Inundation); 1.2.2 Examples each of Bacterial, Viral, Fungal and Protozoal biopesticide .	04		
	1.3 Biofungicide: Examples and applications	02		
	1.4 Biofertilizers: Examples and applications	01 Total:15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **T.Y BSc** SEMESTER: **VI** MONTH:**JANUARY-MARCH** ACADEMIC YEAR: **2021-22**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To be familiar with the MHC; its structure and classes, specific role of each class of MHC and importance in immune response and graft rejection.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit II 2.0 Major histocompatibility complex & Transplant immunology	2.1. Major histocompatibility complex: MHC polymorphism & organization of MHC genes- class I & class II; Cellular distribution & structure of class I & II molecules; Self MHC restriction of T cells. Role of antigen presenting cells.	05	●Immunology by Goldsby and Kuby	●Students were explained about MHC, transplantation and autoimmunity with the help of videos and diagrams.
	2.2 Transplant immunology: Types of transplant; immunological basis of allograft rejection	03		
	2.3 Autoimmunity: Organ specific –Myasthenia gravis; Hashimoto's thyroiditis, Insulin dependent diabetes mellitus Systemic – Rheumatoid arthritis, Multiple sclerosis, Systemic lupus erythematosus (immunological basis of these autoimmune diseases)	07 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **T.Y BSc** SEMESTER: **VI** MONTH:**JANUARY-MARCH** ACADEMIC YEAR: **2021-22**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand the basic concepts of demography and epidemiology of aging and pathophysiology and issues in common diseases of older people.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit IV 4.0 Endocrine Diseases & Ageing	4.1 Endocrine diseases: Diabetes mellitus. Hyper and Hypothyroidism, Cushing's syndrome, Acromegaly	05	●Immunology by Goldsby and Kuby	●Students were explained about diseases with the help of videos and diagrams. ●They were taught about ageing using videos.
	4.2 Diabetes insipidus. 4.2 Ageing: Definition of ageing. Molecular changes during ageing. Theories of Ageing.	07		
	4.3 Alzheimer's disease, Parkinson's diseases	03 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: F.Y.BIOCHEMISTRY SEMESTER: I
MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to: understand about Cell and their organelles and cell division

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – II The cell- cell wall, cell membrane, cell organelles and cell division	Structural organization of cells ● Prokaryotic, Eukaryotic (plant & animal) and yeast cells - a comparative overview	1	Cell and Molecular Biology by Gerald Karp	Google Meet, Power Point, YouTube And Online quizzes.
	Cell wall structure (plant), cell membrane (fluid mosaic model) ● Cytoskeleton: microtubules & microfilaments	2	Cell and Molecular Biology by Gerald Karp	Google Meet, Power Point, YouTube And Online quizzes.
	Cell organelles ● Mitochondrion*:* Organization & function of the mitochondria, mitochondrial genome ● Chloroplast: Structure and function of the chloroplast. the chloroplast genome, other plastids ● Ribosome*: ER*: *Golgi* Structure & Function of Ribosome, ER, Golgi apparatus	9	Cell and Molecular Biology by Gerald Karp	Google Meet, Power Point, YouTube And Online quizzes.

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	• Peroxisome & Lysosome: Peroxisome function & assembly (in brief) and Lysosome structure and function • Nucleus: Structure & function of the nucleus, nuclear envelope, nuclear pores, nuclear matrix and Nucleolus			
	Mitosis and Meiosis	3	Cell and Molecular Biology by Gerald Karp	Google Meet, Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: F.Y.BIOCHEMISTRY SEMESTER: I
MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to: understand the deep knowledge of carbohydrates like their classification, sources, importance and some chemical properties

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – 1 Unit – III Carbohydrates	Definition, Classification, and functions of carbohydrates (mono, oligo, polysaccharides)	2	Biochemistry -lehninger	Google Meet, Power Point, YouTube And Online quizzes.
	Monosaccharides ● Classification in terms of aldoses and ketoses ● Occurrence,structures and significance of glucose, fructose, galactose, mannose, and ribos	3	Biochemistry -lehninger	Google Meet, Power Point, YouTube And Online quizzes.
	Properties: a) Physical - isomerism D & L, optical; epimers : anomers b) Chemical reactions - ● oxidation to produce aldonic. aldaric and uronic acids (with respect to glucose); ● reducing action in boiling alkali, enediol formation (with respect to glucose and fructose) ● Osazone formation (with respect to glucose and fructose	5	Biochemistry -lehninger	Google Meet, Power Point, YouTube And Online quizzes.

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	• Orcinol (with respect to ribose)			
	Disaccharides • Occurrence and structure of maltose , lactose and sucrose • Formation of glycosidic bonds	2	Biochemistry -lehninger	Google Meet, Power Point, YouTube And Online quizzes.
	Polysaccharides Classification based on function. storage and structure i. Composition: homo & hetero. with examples ii. Storage : starch and glycogen - action of amylase on starch iii. Structural: cellulose, chitin	3	Biochemistry -lehninger	Google Meet, Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.BIOCHEMISTRY SEMESTER: III
MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to: understand about physiology of body fluids

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – 2 Blood and Body Fluids	Fluid compartments of the body–ICF and ECF	3	Medical Physiology by Guyton & Hall	Google Meet, Power Point, YouTube And Online quizzes.
	Blood: Composition, characteristics and function; role of plasma proteins, Starling's hypothesis; blood clotting and factors involved	5	Medical Physiology by Guyton & Hall	Google Meet, Power Point, YouTube And Online quizzes.
	Bile: Composition, characteristics and function; storage	3	Medical Physiology by Guyton & Hall	Google Meet, Power Point, YouTube And Online quizzes.
	Urine: Composition–normal and abnormal constituents; formation of urine	2	Medical Physiology by Guyton & Hall	Google Meet, Power Point, YouTube And Online quizzes.
	Lymph: Composition, Formation and Circulation	2	Medical Physiology by Guyton & Hall	Google Meet, Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.BIOCHEMISTRY SEMESTER: III
MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to : understand and gain knowledge about transportation system in plant and mammals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – 3 Biological transport mechanisms	**Transport in plants**: Role of xylem and phloem	1	S.K. Verma and Mohit Verma; Plant physiology, Biochemistry and Biotechnology	Google Meet, Power Point, YouTube And Online quizzes.
	Transport in blood: Transport of gases CO2 and O2, Role of hemoglobin, O2 dissociation curves, Bohr effect Chloride shift	5	Medical Physiology by Guyton & Hall	Google Meet, Power Point, YouTube And Online quizzes.
	Transport of Metabolites: transport of lipids – lipoproteins and their types, role of plasma protein, albumin in transport of metabolites and drugs	3	Medical Physiology by Guyton & Hall	Google Meet, Power Point, YouTube And Online quizzes.
	Transport of Ions: Fe -Ferritin and transferrin and Calcium	2	Medical Physiology by Guyton & Hall	Google Meet, Power Point, YouTube And Online quizzes.
	Transport across cell membranes ● Channel proteins and Carrier proteins ● Passive transport (simple and facilitated diffusion)	4	S.K. Verma and Mohit Verma; Plant physiology,	Google Meet, Power Point, YouTube And Online quizzes.

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	with suitable examples; concept of symport, antiport, uniport, Endocytosis and Exocytosis – with one example each ● Active transport: primary–Na+&K+ pump, secondary Glucose-amino acid transport, types of glucose transporters (GLUT 1 to GLUT 4), aquaporins, ion channel inhibitors like gramicidin and valinomycin		Biochemistry and Biotechnology	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.BIOCHEMISTRY SEMESTER: V

MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : comprehend the catabolism and anabolism of carbohydrates and the disorders associate with these biomolecules.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 1 UNIT – III Carbohydrate metabolism	Catabolism – Cellular location, sequence of reactions, labelling of carbon atoms, and energetics of: Glycolysis (aerobic and anaerobic); Oxidation of pyruvate, Kreb cycle; Glyoxylate pathway; Glycogenolysis – [schematic – no structures, but with enzymes and coenzymes]	7	Biochemistry -lehninger	Power point
	Anabolism – HMP shunt (Cellular location, sequence of reactions, multifunctional nature); Gluconeogenesis,Glycogenesis –[schematic – no structures, but with enzymes and coenzymes]	5	Biochemistry -lehninger	Power point
	Disorders of carbohydrate metabolism: - Galactosemia, Fructosemia, - Lactose intolerance	3	Biochemistry -lehninger	Power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.BIOCHEMISTRY SEMESTER: V

MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : understand the basic tools required and know the techniques of recombinant DNA technology, their applications and the use of the technology for the benefit of society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 3 UNIT – III Recombinant DNA Technology I	Introduction to RDT	1	Biotechnology by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.
	Tools for RDT ● Enzymes- Restriction endonucleases, ligases, terminal transferases, reverse transcriptase: ● Cloning and Expression Vectors- Plasmid, pBR 322, PUC-19, Bacteriophage – Lambda phage; Cosmid; Artificial Chromosomes (BAC and YAC); Shuttle vectors; ● Probes- DNA probes	9	Biotechnology by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.
	Applications of RDT- Agriculture (Bt Cotton); Medicine (Insulin); GM food	5	Biotechnology by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: F.Y.BIOCHEM SEMESTER: II

MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : understand in detail about fundamental structural and functional properties of the digestive system along with some disorders related to the digestive system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 UNIT – I Physiology of digestion and absorption	Parts and Functions of gastrointestinal tract (GIT)	2	Medical Physiology – GUYTON & HALL	Google Meet, Power Point, YouTube And Online quizzes.
	Organs and Glands associated with GIT Secretions and Juices of GIT (Saliva, Gastric juice, Intestinal juice, pancreatic and Bile juice)	8	Medical Physiology – GUYTON & HALL	Google Meet, Power Point, YouTube And Online quizzes.
	Digestion and Absorption of carbohydrates	1	Medical Physiology – GUYTON & HALL	Google Meet, Power Point, YouTube And Online quizzes.
	Digestion and Absorption of Lipid	1	Medical Physiology –	Google Meet, Power Point, YouTube And Online quizzes.

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			GUYTON & HALL	
	Digestion and Absorption of Proteins	1	Medical Physiology – GUYTON & HALL	Google Meet, Power Point, YouTube And Online quizzes.
	Disorders - Peptic ulcer, Lactose Intolerance	2	Medical Physiology – GUYTON & HALL	Google Meet, Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: F.Y.BIOCHEM SEMESTER: II

MONTH:**JANUARY-MAY** ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: understand about biochemical study of Lipids like definition, complex structure, importance, classification and some chemical properties.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 1 UNIT – 1 LIPIDS	Definition, classification (Bloor's) and functions of Lipids	2	Fundamental of Biochemistry by Jain & Jain	Google Meet, Power Point, YouTube And Online quizzes.
	Fatty' acids and Triacylglycerol	1	Fundamental of Biochemistry by Jain & Jain	Google Meet, Power Point, YouTube And Online quizzes.
	Classification & Chemistry, ● Saturated fatty acids - classification of C2 to C20: even carbon: Common and IUPAC names. Unsaturated fatty acids MUFA, PUFA (2.3.4 double bonds) Omega - 3.6.9 fatty acids. Triacylglycerol - simple and mixed - names and structure ● Chemical Reactions of fats Saponification, Iodination, Ozonolysis, Auto-oxidation,	6	Fundamental of Biochemistry by Jain & Jain	Google Meet, Power Point, YouTube And Online quizzes.

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	Action of heat on glycerol and choline, Rancidity Definition & significance - Acid number, Saponification number, Iodine number, Reichert - Meissel number			
	Compound Lipids ● Functions of glycerophospholipids (PE.PC.PL) Phosphosphingolipids (ceramide, sphingomyelin), Glycolipids /Cerebrosides (gluco & galactocerebrosides)	4	Fundamental of Biochemistry by Jain & Jain	Google Meet, Power Point, YouTube And Online quizzes.
	Steroids Cholesterol structure and biochemical significance.	2	Fundamental of Biochemistry by Jain & Jain	Google Meet, Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS:S.Y.BIOCHEMISTRY SEMESTER: IV

MONTH:**JANUARY-MAY** ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : understand basic concepts of Pharmacology and be able to understand basic information about drugs like their sources , formulation types, administration route, their pharmacokinetics effect and their novel delivery system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 3 UNIT – 2 Introduction of Pharmacology	Scope of pharmacology	1	Essentials of Pharmacology - F. S. K Brar	Google Meet, Power Point, YouTube And Online quizzes.
	Sources, Classification, Chemical & physical properties of drug and Nomenclature of drugs	4	Essentials of Pharmacology - F. S. K Brar	Google Meet, Power Point, YouTube And Online quizzes.
	Dosage forms and routes of drug administration; Factors affecting dosage and drug delivery	3	Essentials of Pharmacology - F. S. K Brar	Google Meet, Power Point, YouTube And Online quizzes.
	Pharmacokinetics: LD 50, ED 50 Half Life, Loading dose, Maintenance dose (Explanation of terms only);Therapeutic index	3	Essentials of Pharmacology - F. S. K Brar	Google Meet, Power Point, YouTube And Online quizzes.
	Novel Drug delivery system (NDDS)	1	Essentials of Pharmacology - F. S. K Brar	Google Meet, Power Point, YouTube And Online quizzes.

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	Transdermal and oral modes	1	Essentials of Pharmacology - F. S. K Brar	Google Meet, Power Point, YouTube And Online quizzes.
	Liposomes and nanoparticles	2	Essentials of Pharmacology - F. S. K Brar	Google Meet, Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS : S.Y.BIOCHEMISTRY

SEMESTER: IV MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to **:** understand the basic concept of Eukaryotic & Prokaryotic genome, their organization up-to chromosome & Recombination of genome in Prokaryotes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – 1 Genetics : II	**Genome organization**	1	Biotechnology - U. Satyanarayan	Google Meet, Power Point, YouTube And Online quizzes.
	Prokaryotic Genome: Nucleoid structure	1	Biotechnology - U. Satyanarayan	Google Meet, Power Point, YouTube And Online quizzes.
	Eukaryotic chromosomes: Packaging of DNA(upto Solenoid structure), DNA supercoiling, Topoisomerase, Chromatin structure -Euchromatin, Heterochromatin, structure of condensed chromatin, Centromere, kinetochore, telomere, Comparison of chromosomal structure in prokaryotes and Eukaryotes	9	Biotechnology - U. Satyanarayan	Google Meet, Power Point, YouTube And Online quizzes.
	Recombination in prokaryotes	1	Biotechnology - U. Satyanarayan	Google Meet, Power Point, YouTube And Online quizzes.
	Transformation: Transformation in *S. pneumonia* Transduction: General features with one example	1	Biotechnology - U. Satyanarayan	Google Meet, Power Point, YouTube And Online quizzes.

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	Conjugation: Mechanism F+, F- and Hfr strain	1	Biotechnology - U. Satyanarayan	Google Meet, Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.BIOCHEMISTRY SEMESTER: VI

MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: understand breakdown and synthesis of fatty acid appreciate experiments carried out by scientists to enable understanding the pathways and cycles of lipid metabolism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 1 UNIT – I Lipid metabolism	Catabolism - Knoop's experiment; Beta oxidation of even carbon saturated fatty acids (C4 to C20) Energetics of fatty acid oxidation. Beta oxidation of odd carbon chain fatty acid	7	Biochemistry -lehninger	Google Meet, Power Point, YouTube And Online quizzes.
	Anabolism – FAS complex; Fatty acid biosynthesis (palmitic acid); Ketone body formation, utilization, and the physiological significance of Ketone bodies in Diabetes mellitus, Starvation, Pregnancy and Alcoholism.	8	Biochemistry -lehninger	Google Meet, Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.BIOCHEMISTRY SEMESTER: VI

MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S
The learners will be able to: about proximate principles, nutritional status and balanced diet.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – I Nutrition	Principles of nutrition	2	Biochemistry by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.
	Nutrients [Proximate principles, vitamins and minerals (macro And micro- role of Ca, Mg, Na, K and Fe, Zn)], dietary fibre.	3	Biochemistry by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.
	Nutritional status [malnutrition (protein energy and protein calorie) and over nutrition]	2	Biochemistry by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.
	Balanced diet	1	Biochemistry by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.
	Energy Assessment - RQ, BMR;	2	Biochemistry by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.
	Anthropometry – BMI, Waist:hip ratio;	2	Biochemistry by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.
	Protein quality indices: Chemical score of amino acids, Protein Deficiency Corrected Amino Acid Score, Net Protein utilization	3	Biochemistry by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.B.Sc
SEMESTER: III MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about different types of microscopic techniques
- Understand working and instrumentation of various microscopes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
US BCH 301 UNIT III Microscopy	**3.1** History, Basic principles of microscopy, of light and colour.	03	• Wilson and Walker's Principles and Techniques of Biochemistry and Molecular Biology (seventh edition) • http://www.microscopyu.com/ • http://www.microscopy.fsu.edu/ • http://www.microscopy-analysis.com/ • http://www.msa.microscopy.org • http://www.openmicroscopy.org	• Google meet, Youtube videos, Powerpoint presentation, online quiz.
	3.2 Dissection and compound microscope: Construction and parts of a microscope, function of each part, levels of magnification, concept of refractive index and role of oil in magnification	04		
	3.3 Specialized microscopy I; 3.3.1 Differential interference contrast (DIC), 3.3.2 Phase contrast, 3.3.3 Dark Field	04		
	3.4 Specialized Microscopy II; 3.4.1 Simple fluorescence microscopy, 3.4.2 Confocal microscopy 3.4.3 Electron microscopy • Principle, applications and comparative study • Types - SEM and TEM	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.B.Sc
SEMESTER: III MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about Mendalian Genetics with various crossing techniques
- Learn about gene interaction and numerical for the different concepts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH302 UNIT I Genetics: I	**1.1 History**: Contributions of Mendel, Bateson, Hardy-Weinberg, Garrod, Morgan, Griffith, Beadle and Tatum, Avery, Mac Leod, Mc Carthy, Lederberg, Tatum, Barbara Mclintock, Hershey & Chase, Watson &Crick.	04	• Russell iGenetics Molecular Approach 3rd edition • CliffsAP Biology 3rd edition.	• Google meet, Youtube videos, Powerpoint presentation, online quiz.
	1.2 Mendelian genetics: Mendel's experiments - Monohybrid, Dihybrid crosses, Laws of inheritance	04		
	1.3 Dominance, recessivity, co dominance, incomplete (semi) dominance, lethal genes	04		
	1.4 Gene interaction -Epistasis, types of epistasis, multiple alleles, maternal effects	03		
	1.5 Numerical on above concepts			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.B.Sc
SEMESTER: V MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about metabolic, blood related and cardiovascular disorders.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH504 UNIT III Pathophysiology of metabolic and other disorders	**3.1 Metabolic disorder** 3.1.1 Inborn error: With respect to Etiology and Clinical manifestations 3.1.2 Carbohydrate Metabolism: Glycogen storage disease Type I & III. 3.1.3 Amino acid Metabolism: Albinism, Phenylketonuria, Maple syrup urine disease, Alkaptonuria 3.1.4 Lipid Metabolism: Tay Sach's disease, Niemann–Pick diseases, Fabry's disease	06	• Harper's Illustrated Biochemistry by Robert K. Murray • Lehninger's- Principles of Biochemistry by David L. Nelson	• Google meet, Youtube videos, Powerpoint presentation, online quiz.
	3.2 Blood related diseases: 3.2.1 Iron deficiency anemia 3.2.2 Sickle cell anemia 3.2.3 Thalassemia 3.2.4 Pernicious anemia 3.2.5 Hemophilia A and B	05		
	3.3 Cardio Vascular System and related diseases: 3.3.1 Hypertension, Arteriosclerosis and Atherosclerosis	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.B.Sc
SEMESTER: V MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about Cancer and its physiology
- Understand causes of cancer and treatment procedure.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH504 UNIT IV Cancer	4.1 Biology of Cancer	02	• Cell and Molecular Biology by Gerald Karp, 6th edition • Biochemistry by U.Satyanarayana	• Google meet, Youtube videos, Powerpoint presentation, online quiz.
	4.2 Physiology of Cancer cells	02		
	4.3 Causes of cancer Carcinogens: Types (Physical, Chemical and Biological, Environmental Factor); AMES test	03		
	4.4 Oncogenes and activation of oncogenes	02		
	4.5 Genetics of cancer with reference to p53 and Bcl2.	02		
	4.6 Cancer therapy (Chemo – purine, pyrimidine and folate analogs)	03		
	4.7 Cancer and the cell cycle	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.B.Sc
SEMESTER: IV MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand biochemical processes involved in animal and plant studies.
- Learn about different sell and tissue handling and processing techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH 401 UNIT III Approaches to Biochemical investigations	**3.1** Whole animal and plant studies - the advantages and disadvantages of any four model systems for biochemical investigation (e.g. *E.coli*, yeast, *Dictyostelium*, *C. elegans*, Drosophila, *Arabidopsis)*	05	• David L. Nelson, Michael M. Cox, Lehninger; Principles of Biochemistry, W H Freeman & Co.	• Whiteboard method / Google meet, Youtube videos, Powerpoint presentation, online quiz.
	3.2 Organ & tissue studies	03		
	3.3 Isolated and cultured tissue and cell techniques: isolation, culture and counting of cells.	03		
	3.4 *Cell Fractionation* 3.4.1 Cell rupture – solid shear, liquid shear, high pressure, ultrasound, osmotic shock, chemical treatment (enzyme, organic solvent), temperature. 3.4.2 Choice of suspension medium (isotonic & hypotonic solution, PBS) and separation methods.	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.B.Sc
SEMESTER: IV MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand nervous system and the parts of the nervous system.
- Learn how all parts of nervous system are involved in a neurotransmission.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH402 UNIT III Neurophysiology	**3.1 Nervous System Classification**: CNS,PNS; Components: Neurons (3types) and Neuroglia(6types)–structure and function, Axonal transport	05	• Metzler David E. Biochemistry, The chemical reactions of living cells, Volume II. Elsevier publications.	• Whiteboard method / Google meet, Youtube videos, Powerpoint presentation, online quiz.
	3.2 Nerve impulse transmission: Resting Membrane Potential, ion channels [voltage and ligand gated], Action Potential (depolarization, polarization and refraction period), propagation of action potential (salutatory & continuous conduction)	03		
	3.3 Synaptic transmission: Physiological anatomy of a synapse;– Electrical & Chemical synapses, Excitatory & inhibitory postsynaptic potentials, Agonists & Antagonists, inactivation of Neurotransmitter	03		
	3.4 Neurotransmitters: Structure and function of acetylcholine, catecholamines, GABA, glutamate, glycine	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.B.Sc
SEMESTER: VI MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about electrophoretic techniques and their different procedures.
- Understand about radioactivity and how it is used in biological experiments.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH601 UNIT IV Electrophoresis & Radioactivity	4.1 **Electrophoresis** 4.1.1 Principle: Factors affecting the rate of migration of sample in an electric field 4.1.2 Moving boundary and Zone electrophoresis; Components of electrophoresis unit/apparatus 4.1.3 Various support media - paper, cellulose acetate, agar, agarose and polyacrylamide 4.1.4Technique of electrophoresis with staining/visualization method ● agarose electrophoresis for separation of DNA ● Native PAGE for separation of proteins ● SDS PAGE for molecular weight determination; ● Discontinuous electrophoresis ● Other applications of electrophoresis: blotting techniques Southern, Northern, and Western 4.1.5 Isoelectric Focusing of protein	11	● Principles and Techniques of Biochemistry and Molecular Biology 7th Ed Wilson Walker ● Analytical Biochemistry by David Holme	● Whiteboard method / Google meet, Youtube videos, Powerpoint presentation, online quiz.
	4.2 **Radioactivity-** Isotopes, Radioactive decay; Decay constant; Half-life; Measurement of radioactivity (principle)	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY
SEMESTER: VI

DEPARTMENT: BIOCHEMISTRY
MONTH: **JANUARY-MAY**

CLASS: T.Y.B.Sc
ACADEMIC YEAR: 2021-22

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LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about different tools used in bioinformatics.
- Understand genome, proteome and nucleotide sequence analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH603 UNIT II Bioinformatics	2.1 **Bioinformatics:** Definition, Aims and History of Bioinformatics Applications of Bioinformatics in – Sequence analysis, Molecular modeling and drug designing, Phylogeny/evolution, Ecology & population studies, Medical informatics and agriculture. Introduction to Genomics and Proteomics Databases- Definition & types – Public domain database, Sequence database, Structural database, Motif database, Genome database, Proteome database, Annotated sequence database. Full form & function in brief of - GenBank, EMBL, PIR, SWISS PROT, PDB, GDB. Sequence analysis Tools - Explain the following terms in brief-BLAST, FASTA, L-ALIGN, CLUSTAL- X & W, RASMOL, Software for protein sequencing - PROSPECT, AMMP,COPIA (Explanation of the terms in brief) Micro-array analysis-concept and applications	15	• Principles and Techniques of Biochemistry and Molecular Biology, 4th edition.	Whiteboard method / Google meet, Youtube videos, Powerpoint presentation, online quiz.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**
SEMESTER: **V** MONTH: **AUGUST-DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able to define soil and noise pollution.
The learners will be able to understand the types of soil and noise pollution.
The learner will be able to get an insight on causes and consequences of soil and noise pollution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 3 **Title:** Soil & Noise	**Soil:** Composition of soil, Nitrogen cycle Types of soil pollution – acidification, agrochemical pollution, salinization, and contamination by metalliferous wastes **Noise:** Noise and its measurement Classification of Noise Causes and consequences of Noise pollution	15	Environmental Chemistry by Anil Kumar De The textbook of Environmental studies by Erach Bharucha Fundamental concepts in Environmental studies by Dr. D. D. Mishra	Google Classroom, Google Meet, YouTube Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**
SEMESTER: **V** MONTH: **AUGUST-DECEMBER** ACADEMIC YEAR: **2021-2022**
LEARNING OBJECTIVE/S:
The learners will be able to differentiate between conventional and non-conventional sources of energy.
The learners will be able to understand the Sources and remedial measures for Industrial pollutants.
The learner will be able to get an insight on Environmental monitoring.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 4 **Title:** Energy, Industrial Pollutants and Environmental Monitoring	**Energy Conventional Sources :** Coal, Coke, Natural gas (CNG), Petroleum products (Petrol, Diesel, Kerosene, Oils, Naphtha) Non-Conventional Sources : Solar , Geothermal, Tidal, Hydroelectric power, Nuclear energy, Biofuels , Natural gas (Synthetic Natural Gas) **Industrial pollutants (Sources and remedial measures):** Polymers and Plastics Asbestos Poly Chlorinated Biphenyls Mining – Acid mine drainage **Environmental monitoring:** Approaches used to monitor the environment-air, water and soil. [Principles and Significance only. Protocols for each factor – not required] Remote Sensing	15	Environmental Chemistry by Anil Kumar De The textbook of Environmental studies by Erach Bharucha Fundamental concepts in Environmental studies by Dr. D. D. Mishra	Google Classroom, Google Meet, YouTube Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**
SEMESTER: **VI** MONTH: **JANUARY-MAY** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able to define Biostatistics and its applications.
The learner will be able to get an insight on Hypothesis testing.
The learners will be able to understand the difference between Type I and Type II errors
The learner will be able understand the Z test and its applications.
The learner will be able solve sums based on Z-Test.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (USBCH603) Biostatistics &Bioinformatics Unit 3 **Title:** Hypothesis Testing	Introduction; Single population mean, difference between population means Type I and Type II errors, One-tailed and two tailed tests Z-test Statistical problems based on the above concepts.	15	Biostatistics by Veer Bala Rastogi Methods in Biostatistics by BK Mahajan Introduction to Biostatistics by Dr. Pranab Kumar Banerjee	White Board-Marker Google Classroom, Google Meet, YouTube Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**
SEMESTER: **VI** MONTH: **JANUARY-MAY** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able to define t-Test and its applications.
The learner will be able to get an insight on types of t-Test.
The learners will be able to understand the difference between t-Test and Z-Test.
The learner will be able understand the Chi-square test and its applications.
The learner will be able solve sums based on Chi-square test and t-Test.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (USBCH603) Biostatistics &Bioinformatics Unit 4 **Title:** Hypothesis Testing	t-test- Paired and unpaired Chi-square Statistical problems based on the above concepts	15	Biostatistics by Veer Bala Rastogi Methods in Biostatistics by BK Mahajan Introduction to Biostatistics by Dr. Pranab Kumar Banerjee	White Board-Marker Google Classroom, Google Meet, YouTube Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _GHALIB RAHAB AKHTAR__ DEPARTMENT: BIOCHEMISTRY CLASS: FY BSc SEMESTER: I MONTH: **OCTOBER-DECEMBER**_ACADEMIC YEAR- 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concepts of microbiology this includes the historical background, general characteristics of bacteria, microbial taxonomy, structure and function of bacterial cell wall and different staining methods for identification of bacteria.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT 3 MICROBIOLOGY I	Historical background and general characteristics of bacteria	2	Microbiology by Pelczar Michael J	Google Meet/ Presentations/ Videos and Diagrams
	Microbial taxonomy- species and strains, classification based on morpholoy, staining reaction, nutrition and extreme environment	4	Microbiology by Pelczar Michael J	
	Bacterial cell wall- structure and function, components of peptidolycan frame work	4	Microbiology by Pelczar Michael J	
	Introduction to extremophiles	2	Britannica encyclopedia	
	Staining methods and microscopic identification of bacteria	3	Microbiology by Pelczar Michael J And Cliffs notes.com	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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NAME OF THE STAFF: _GHALIB RAHAB AKHTAR__ DEPARTMENT: BIOCHEMISTRY CLASS-SY BSc SEMESTER: III MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR- 2021-2022
LEARNING OBJECTIVE/S:
The learners will be able to : To acquire information about the different concepts of Industrial biotechnology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT 3 INDUSTRIAL BIOTECHNOLOGY	Basics of fermentation.	4	Biochemistry by Satyanarayan Biotechnology by Satyanarayan	Google Meet , Presentation, Youtube And Online quizzes.
	Industrial production of wine and penicillin.	2		
	Immobilisation of enzymes.	4		
	Biosensors	4		
	Single cell proteins	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____16_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _GHALIB RAHAB AKHTAR__ DEPARTMENT: BIOCHEMISTRY CLASS: TY BSc SEMESTER: V MONTH: **J SEPTEMBER-DECEMBER** _ACADEMIC YEAR- 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to : Understand simple concepts related to metabolism , metabolic roles played by vitamins and minerals, appreciate the correlation between energy molecules, reducing equivalents and pathways.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT 1 ROLE OF VITAMINS AND MINERALS IN METABOLISM	Minerals as cofactors- Iron, Calcium, Magnesiun, Zinc, Selenium, Molybdenum	3	Lehninger Medical biochemistry by Rana shinde Biochemistry by satyanarayan	Google Meet , Youtube And Online quizzes.
	Water soluble vitamins-thiamin, riboflavin, niacin, pyridoxines	4		
	Biotin, Lipoic acid- chemistry, its co-enzyme and biochemical role	2		
	Fat soluble vitamin- A, D, E and K (INTRODUCTION)	1		
	Vit A- chemistry, wald's cycle, role of rhodopsin, transducin, cGMP Vit D- role in Ca absorption and mobilization Vit E and K- physiological role	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _GHALIB RAHAB AKHTAR__ DEPARTMENT: BIOCHEMISTRY CLASS: TY BSc SEMESTER: V MONTH: **SEPTEMBER-DECEMBER**_ACADEMIC YEAR- 2021-2022

LEARNING OBJECTIVES:

The learners will be able to : Understand the mechanisms of dna transcription and translation in prokaryotes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT 2 TRANSCRIPTION AND TRANSLATION	Transcription in prokaryotes	1	Igenetics by Russel Biochemistry by satyanarayan	Google Meet , Youtube And Online quizzes.
	Mechanism of RNA transcription- initiation, elongation and termination,	4		
	Processing of RNA , concept of split genes, reverse transcription and role of inhibitor- Rifampicin, Actinomycin D	4		
	Translation in prokaryotes- genetic code and mechanism of translation	3		
	Post translational modification of proteins. Inhibitors and mode of action	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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SECOND TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _GHALIB RAHAB AKHTAR__ DEPARTMENT: BIOCHEMISTRY CLASS: FY BSc SEMESTER: II MONTH: **JANUARY-MAY** ACADEMIC YEAR- 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to : To acquire information about the different concepts of nutrition like BMR, BMI and SDA. It also describes a detailed information about the nutritional significance of the macro and the micro molecules of a balanced diet.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT 3 NUTRITION	Definitions- calorie, joule, food calorimetry, calorific value, proximate principles, BMI and BV.	2	Joshi, Shubhangani- nutrition and dietetics Srilakshmi B- Nutrition Science Biochemistry by satyanarayan	White board method (If online, then PPT, Videos, Daigrams and Google meet)
	BMR	2		White board method
	SDA/DIT	1		White board method
	Nutritional significance of carbohydrates, proteins, lipids, vitamins, minerals, fibre and water.	6		White board method
	Balanced diet and numerical problems	2		White board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____13_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _GHALIB RAHAB AKHTAR__ DEPARTMENT: BIOCHEMISTRY CLASS-SY BSc SEMESTER: IV MONTH: **JANUARY-MAY** ACADEMIC YEAR- 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to : To acquire information about the different concepts of resource management like treatment of solid waste, waste water treatment, sludge treatment and disposal . To understand the production of biogas, biomass and biofuels.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT 3 RESOURCE MANAGEMENT	Solid waste-types, treatment and recycling	2	Biochemistry by Satyanarayan Biotechnology by Satyanarayan	White board method (If online, then PPT, Videos, Daigrams and Google meet)
	Waste water treatment- primary, secondary, tertiary and disinfectant	4		White board method and Youtube
	Sludge treatment and disposal	2		White board method
	Biofuels and biomass- fossil fuels, energy rich crops, animal energy, sources, its cultivation and extraction.	4		White board method
	Biogas- production,composition, application and gobar gas	2		White board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____14_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _GHALIB RAHAB AKHTAR__ DEPARTMENT: BIOCHEMISTRY CLASS-SY BSc SEMESTER: IV MONTH: **JANUARY-MAY** ACADEMIC YEAR- 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to : To acquire information about the different concepts of Enzymology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT 1 ENZYMOLOGY	Definitions	2	Biochemistry by Satyanarayan and Lehninger	White board method (If online, then PPT, Videos, Daigrams and Google meet)
	IUB/ EC Classification	2		White board method and Youtube
	Activation energy, mechanism of action and factors affecting enzyme action.	5		White board method
	Enzyme kinetics	4		White board method
	Enzyme inhibition	2		White board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GHALIB RAHAB AKHTAR DEPARTMENT: BIOCHEMISTRY CLASS: TY BSc SEMESTER: VI MONTH: **JANUARY-MAY** ACADEMIC YEAR- 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to : To be able to utilize critical thinking skills in discussing the concepts of pharmacodynamics and also be able to explain various therapeutics drugs in use.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT 4 MECHANISM OF DRUG ACTION AND THERAPEUTIC DRUGS	Different mechanism of action of drugs- Specific interaction, partial specific, non-specific, through antibodies and placebo effects.	4	Essentials of Pharmacotherapeutics by FSK Brar	White board method (If online, then PPT, Videos, Daigrams and Google meet)
	Therapeutics drugs- NSAID and salicylates	2		White board method
	Cardiovascular drugs- CVS and beta blockers	2		White board method
	Antibiotic- Penicillin and Sulphonamide	2		White board method
	Antacid- proton pump blocker	2		White board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GHALIB RAHAB AKHTAR DEPARTMENT: BIOCHEMISTRY CLASS: TY BSc SEMESTER: VI MONTH: **JANUARY-MAY** ACADEMIC YEAR- 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the fundamental concepts and definition for Biostatistics and also explain the concept of probability and its distribution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT 1 BIOSTATISTICS AND DESCRIPTIVE STATISTICS	Introduction- scope and application	1	Biostatistics by Arora	White board method (If online, then PPT, Videos, Daigrams and Google meet)
	Common statistical terms and scales of measurement	2		White board method
	Descriptive statistics- measures of central tendency- mean, median and mode	6		White board method
	Measures of dispersions- range, percentile, variance, SD, mean deviation.	7		White board method
	Probality- Definition Normal distribution and normal curve Asymmetric distribution and statistical problems	4		White board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. ROHAN LOUIS D'SOUZA** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSC.**

SEMESTER: **V** MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: The learner will be able to define Air Pollution.
The learner will be able to get an insight on the sources of air pollution.
The learner will be able to understand the impact of air pollution on the environment.

The learners will be able to: understand the problems associated with air pollution and the impact of air pollution on the different aspects of the environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 1 **Title:** Air	**ATMOSPHERE** □ Composition and structure of atmosphere □ Particles , ions and radicals in the atmosphere □ Chemical and photochemical reactions in the atmosphere [reactions of oxygen, ozone, sulphur dioxide , nitrogen oxide and organic compounds]	08	Environmental Chemistry by Anil Kumar De	Google Classroom, Google Meet, YouTube Videos
	AIR POLLUTANTS □ CO, Oxides of Nitrogen, SO2, hydrocarbons and photochemical smog, Greenhouse gases, suspended particulate matter[sources and effect of] , depletion of ozone	07	Environmental Chemistry by Anil Kumar De	Google Classroom, Google Meet, YouTube Videos

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. ROHAN LOUIS D'SOUZA** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSC.**

SEMESTER: **V** MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: The learner will be able to define water Pollution.
The learner will be able to get an insight on the sources of water pollution.
The learner will be able to understand the impact of water pollution on the environment and human health.

The learners will be able to: understand the problems associated with water pollution and the significance of different water treatment techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 2 **Title:** Water & Water treatment	**WATER HYDROSPHERE** □ Characteristics and the water cycle	05	Environmental Chemistry by Anil Kumar De	Google Classroom, Google Meet, YouTube Videos
	WATER POLLUTION □ Organic pollutants[pesticides, insecticides, detergents, oil spills, toxic organic chemicals] □ Inorganic pollutants [heavy metals – Hg, Pb, As, Cd] Thermal pollution of water	05	Environmental Chemistry by Anil Kumar De & A Textbook of Environmental	Google Classroom, Google Meet, YouTube Videos

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	WATER TREATMENT • Criteria for water purity, Water purification [preliminary, • primary, secondary, tertiary- chlorination, ion exchange]	05	Chemistry and Pollution Control by S.S.Dara	Google Classroom, Google Meet, YouTube Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. ROHAN LOUIS D'SOUZA** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSC.**

SEMESTER: **VI** MONTH: **JANUARY-MAY** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: The learner will be able to define RCF & RPM, and state the relationship between them.
The learner will be able understand the Beer-Lambert law and derive it.
The learner will be able to know the different types of centrifugation techniques and their applications.
The learners will be able to: understand the working and application of a centrifuge and spectrophotometer.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I (USBCH601) Metabolism & analytical techniques-II Unit 3 **Title:** Centrifugation and Spectroscopy	**CENTRIFUGATION** RCF , RPM and derivation of an equation relating the two ; Nomogram ; Sedimentation coefficient	15	Wilson and Walker's Principles and Techniques of Biochemistry and Molecular Biology	Google Classroom, Google Meet, YouTube Videos
	Types and applications of centrifuges – Clinical, High speed, Ultra centrifuge - preparative and analytical.			
	Types of centrifugation and its applications– Differential, Rate zonal, Isopycnic (Centrifugation with and without density gradients)			
	SPECTROSCOPY Beer-Lambert law, derivation , limitations, application – estimation of sugar(DNSA) and protein(Biuret); concepts of Lambda max; determination of molar extinction coefficient		Wilson and Walker's Principles and Techniques of Biochemistry and Molecular Biology **&** Analytical Chemistry Textbook (S.Y.B.Sc.) **&**	Google Classroom, Google Meet, YouTube Videos
	Construction and working of a simple colorimeter and spectrophotometer			

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	Applications of Beer-Lambert law in the estimation of sugar[DNSA] and protein[Biuret]		epg pathshala	
	Numericals based on the above concepts			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. ROHAN LOUIS D'SOUZA** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSC.**

SEMESTER: **VI** MONTH: **JANUARY-MAY** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: The learner will be able to define RCF & RPM, and state the relationship between them.
The learner will be able understand the Beer-Lambert law and derive it.
The learner will be able to know the different types of centrifugation techniques and their applications.

The learners will be able to: understand the working and application of a centrifuge and spectrophotometer.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 (USBCH604) Immunology & pathophysiology-II Unit 3 **Title:** Virology & AIDS	General Structure of Virus	15	Fenner And White's Medical Virology & Prescott's Microbiology	Google Classroom, Google Meet, YouTube Videos
	Structure and mechanism of replication in: 1. Vaccinia 2. Polio 3. Influenza			
	AIDS: Structure and genetics basis of AIDS virus. Replication of AIDS Virus. Symptoms and Causes of AIDS. AIDS Therapy.			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **F.Y BSc** SEMESTER: **I** MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: **2020-21**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand basic structure and various forms of amino acids.
- To learn the classifications of amino acids.
- To understand physical and chemical properties of amino acids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit II 2.1 Amino acids and proteins	2.1.1 Amino acid structure - D & L forms of all 20 amino acids	03	• Lehninger, Albert L, Biochemistry, Kalyani Publishers • Nelson, D. L. and Cox, M.M, (2008). Lehninger, Principles of Biochemistry 5th Edition, W. H. Freeman and Company, NY., USA.	•Students were explained about structures by using various images and videos.
	2.1.2 Detailed classification based on polarity, essential and non-essential amino acid	03		•Students were explained about amino acids classification by interactive session.
	2.1.3 Physical properties: zwitter ions, pI of amino acids amino acids as ampholytes, melting point, optical rotation, UV absorption and chemical properties: Chemical reactions of amino acids with Ninhydrin, Sanger's reagent, Edman's reagent and Dansyl chloride	09 Total: 15		•Students were explained about physical and chemical reactions using images and presentation.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **F.Y BSc** SEMESTER: **I** MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: **2020-21**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about reasons for origin of life.
- To understand different theories behind evolution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Unit I Origin of Life & Formation of cells	1.1 Big bang theory, Theories on the origin of life: Abiogenesis, Heterotroph hypothesis, RNA world, protein world, Miller's experiment, Formation of the first cell, endosymbiont theory	05	●Verma, P.S. and Agarwal V.K.; Cell Biology, Genetics, Molecular biology, Evolution and Ecology ; Publishers : S. Chand and Co.Ltd., (2009)	●Students were explained via an interactive session. ● Diagrams related to theories were shown online.
	1.2 Evolution - Darwinian theory, Modern synthetic theory of evolution and its factors: Gene mutations(recombination), heredity, natural selection and isolation Biological evidences: Fossil record, chemical and anatomical similarities of related life forms, geographic distribution of related species, genetic changes in living organisms over generations and Mechanism of evolution, Gene flow and genetic drift, Hardy-Weinberg principle	10 Total: 15		●Students were explained about amino acids classification via videos. ●They were shown photos of scientists behind these theories. ●Also a project was assigned to them on evolution.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **S.Y BSc** SEMESTER: **III** MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: **2020-21**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about beneficial and harmful organisms for body in detail.
- To understand structure, classification and life cycle of virus.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Unit I Microbiology in Human Health and Diseases	1.1 Beneficial Microorganism: Lactobacillus, Normal flora of human gut, Probiotics, Yeast, Nitrogen fixing bacteria (Rhizobium and Azotobacter)	03	●Michael J. Pelczar, Jr; E.C.S. Chan; Noel R. Krieg; Microbiology Tata McGraw Hill. ●Roger Y stanier; General Microbiology,Macmillan, 1981	●Students were explained about beneficial and harmful bacteria, structure, classification and life cycle of virus with the help of slides.
	1.2 Harmful microorganisms: 1.2.1 Air borne- *Mycobacterium tuberculae*(Tuberculosis), *Corynebacterium diptheriae*(Diptheria), *Candida sp*., *Haemophilus influenzae* (Influenza), morbillivirus (measles) 1.2.2 Water borne- *Shigella sp.* (Dysentery), *Vibrio cholerae* (Cholera), *Salmonella sp.* (Enteric fever), Hepatitis virus 1.2.3 Food borne- *Staphylococcus aureus*, *Clostridium botulinum* (Botulism) 1.2.4 Soil borne- *Clostridium tetani*	08		
	1.3 Virology- General structure of a typical virus, classification of viruses based on genome (DNA, RNA); symmetry (helical, icosahedral, complex), host (bacteria, plant, animal, insect); Lytic and Lysogenic cycle	04 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS**: S.Y BSc** SEMESTER: **III** MONTH:**SEPTEMBER-DECEMBER** ACADEMIC YEAR: **2020-21**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To explain the process of plant tissue culture and animal tissue culture
- To understand the applications of the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Unit II Cell and Tissue Culture	2.1 Plant Tissue Culture: 2.1.1 History, Introduction or definition (explants, callus, dedifferentiation, re-differentiation) concept of totipotency 2.1.2 Culture techniques; Types of culture (Callus culture, Organ culture, protoplast culture, cell culture) 2.1.3 Applications: secondary metabolites in plant culture, Micropropagation	07	●Jogdand, Advances in Biotechnology; Himalaya Publishing House ●U. Satyanarayan ;Biotechnology, Books & allied (P) Ltd., Kolkata	●Students were explained the procedures with the help of slides.
	2.2 Animal Cell Culture: 2.2.1 History, Introduction to Primary cell culture, Cell lines (Finite and continuous) 2.2.2 Culture techniques used for primary culture, 2.2.3 Stem cell culture, Animal Organ Culture, Whole embryo culture 2.2.4 Applications: hybridoma (monoclonal antibody), production of Vaccines	08 Total:15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **T.Y BSc** SEMESTER: **V** MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: **2020-21**
LEARNING OBJECTIVE/S:
The learners will be able to:
- To understand the overall organization of the immune system, relationship between innate and adaptive systems and humoral and cell mediated immunity.
- To learn about the cells and organs of immune system in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit I 1.0 Human immune system	1.1 Types of Immunity Innate immunity – Anatomical barriers, physiological barriers, Characteristics of Inflammation, phagocytosis [no mechanism] Adaptive immunity – Active & Passive Humoral & Cell mediated immunity.	06	●Immunology by Goldsby and Kuby	●Students were explained about human immune system with the help of videos and diagrams.
	1.2 Organs of the immune system: Primary lymphoid organs: Thymus, Bone marrow Secondary lymphoid organs: Lymphatic system, Lymph nodes, Spleen, MALT.	04		
	1.3 Cells of the immune system: Lymphocytes – B cells and T cells, Natural killer cells – Mononuclear phagocytes, Granulocytes, Antigen presenting cells. Clonal selection & immunologic memory. Cytokines: biological functions of IL1, tumor necrosis factoralpha, interferon –alpha, IL2, interferon-gamma.	05 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **T.Y BSc** SEMESTER: **V** MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: **2020-21**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand the overall organization of the immune system.
- To learn the structure and function of antibodies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit II 2.0 Antigen-Antibody interactions	2.1 Antigens: Antigenicity, immunogenicity, epitope, factors determining immunogenicity, Haptens. Antibodies: Fine structure of immunoglobulin, Antibodymediated functions, Antibody classes, Monoclonal antibodies (concept, production and applications)	09	●Immunology by Goldsby and Kuby	●Students were explained about antigens and antibodies with the help of videos and diagrams.
	2.2 Antibody diversity: Multigene organization of immunoglobulin genes – Lambda, kappa & heavy chain Light chain DNA – VJ rearrangements Heavy chain DNA - VDJ rearrangements	06 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **F.Y BSc** SEMESTER: **II** MONTH: **JANUARY-MAY** ACADEMIC YEAR: **2020-21**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about nucleic acid structure and it's components in detail.
- To understand evidences and properties of nucleic acids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit II Nucleic Acids	2.1 Structure - Purine & Pyrimidine bases, ribose, deoxyribose, nucleosides and nucleotides (ATP, CTP, GTP, TTP, UTP) Formation of polynucleotide strand with its shorthand Representation	04	• Lehninger, Albert L, Biochemistry, Kalyani Publishers • Nelson, D. L. and Cox, M.M, (2008). Lehninger, Principles of Biochemistry 5th Edition, W. H. Freeman and Company, NY., USA.	•Students were explained via an interactive session. •Structures of nucleic acids were shown.
	2.2 RNAs (various types in prokaryotes and eukaryotes) mRNA & r RNA - general account, t RNA - clover leaf model, Ribozymes	04		•Structures of types RNAs were explained via diagrams.
	2.3 DNA 2.3.1 Physical evidence of DNA helical structure. Chargaff's rules (chemical evidence), Watson-Crick model of DNA & its features 2.3.2 Physical properties of DNA - Effect of heat on physical properties of DNA (Viscosity, buoyant density, UV absorption), Hypochromism, hyperchromism, denaturation of DNA. 2.3.3 Reactions of nucleic acids (with DPA and Orcinol)	07 Total: 15		•Students were explained about the evidences and properties by drawing structures and reactions.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **F.Y BSc** SEMESTER: **II** MONTH:**JANUARY-MAY** ACADEMIC YEAR: **2020-21**
LEARNING OBJECTIVE/S:
The learners will be able to:
- To understand the parts and function of respiratory and excretory system in detail.
- To learn disorders of respiratory and excretory system and their causes in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Unit II Physiology of respiration and excretion	2.1 Respiratory system	01	● Guyton, Arthur C. and Hall, John E.;Text book of Medical physiology ; Harcourt Brace & Company Asia Pvt. Ltd.	●Students were explained about via interactive session.
	2.2 Breathing - inspiration and expiration,	01		
	2.3 Composition of air and partial pressure of gases	01		
	2.4 Physical exchange of gases 2.4.1 Transport of oxygen 2.4.2 Transport of carbon dioxide Respiratory disorders – cyanosis, respiratory acidosis and alkalosis	03		●Students where explained about it by structures and reactions in the presentation.
	2.5 Excretion -2.5.1 Structure of the nephron: Bowman's capsule & glomerulus - Structure & function, (ultrafiltration, pressures involved, GFR, regulation of GFR); Renal tubule - structure & function (proximal and distal convoluted tubules and Henle's loop) 2.5.2 Urine formation: Reabsorption / Secretion of glucose, Na+, K+. HCO3 Cl^- and H+ : renal threshold, Excretory disorder: Nephritis	09 Total: 15		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **S.Y BSc** SEMESTER: **IV** MONTH: **JANUARY-MAY** ACADEMIC YEAR: **2020-21**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about different movements of plants.
- To understand process of contraction and relaxation of muscles in mammals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Unit II Movement and locomotion	2.1 Movement in plants 2.1.1 Movements of Locomotion Spontaneous: Ciliary, Amoeboid, Cyclosis (Rotation, Circulation) Induced: Chemotaxis, Phototaxis, Thermotaxis 2.1.2 Movements of Curvature: Mechanical: hygroscopic movements Vital:i)Spontaneous-movements of growth(nutation, circumutation, Hyponasty, epinasty); movements of variation ii)Induced–Tropic-hapto/geo/hydrotropism; Nastic–seismonasty, Nyctynasty	10	●S.K.Verma and Mohit Verma, Plant physiology, Biochemistry and Biotechnology ●Tortora G J, Derrickson B H; Principles of Anatomy and Physiology, Wiley	●Students were explained about different movements in plants with the help of videos.
	2.2 Muscle contraction 2.2.1 Structural organization of a muscle fibre, myofibril 2.2.2 Contraction and Relaxation of Muscles; -mechanisms, Other types of contractions–e.g. twitch, tetanus, Isotonic, Isometric regulation of Muscle contraction	05 Total:15		●Students were explained about movements of muscle with the help of videos.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: S**.Y BSc** SEMESTER: **IV** MONTH:**JANUARY-MAY** ACADEMIC YEAR: **2020-21**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about different trends in biotechnology and their applications.
- To understand process of biodegradation of various contaminants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Unit I Trends in Biotechnology	1.1 Bioremediation: 1.1.1 Introduction to terms – Bioremediation, Biotransformation, Xenobiotics, Recalcitrant xenobiotics, Biomagnification, Factors affecting bioremediation 1.1.2 Types of Bioremediation (Insitu, Exsitu); Types of reactions (Aerobic, anaerobic, sequential) 1.1.3 Applications of Biodegradation - hydrocarbons, (Oil spills) Pesticides and herbicides, Heavy metals (Uranium) contaminated soil and waste land, Ground Water; Genetically Engineered Microbes in bioremediation	08	●U. Satyanarayan ;Biotechnology, Books & allied (P) Ltd., Kolkata	●Students were explained about different trends in biotechnology with the help of videos.
	1.2 Biopesticides: 1.2.1 Introduction; Types of Biological Control (Classical, inoculation, Inundation); 1.2.2 Examples each of Bacterial, Viral, Fungal and Protozoal biopesticide .	04		
	1.3 Biofungicide: Examples and applications	02		
	1.4 Biofertilizers: Examples and applications	01 Total:15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **T.Y BSc** SEMESTER: **VI** MONTH:**JANUARY-MAY** ACADEMIC YEAR: **2020-21**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To be familiar with the MHC; its structure and classes, specific role of each class of MHC and importance in immune response and graft rejection.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit II 2.0 Major histocompatibility complex & Transplant immunology	2.1. Major histocompatibility complex: MHC polymorphism & organization of MHC genes- class I & class II; Cellular distribution & structure of class I & II molecules; Self MHC restriction of T cells. Role of antigen presenting cells.	05	●Immunology by Goldsby and Kuby	●Students were explained about MHC, transplantation and autoimmunity with the help of videos and diagrams.
	2.2 Transplant immunology: Types of transplant; immunological basis of allograft rejection	03		
	2.3 Autoimmunity: Organ specific –Myasthenia gravis; Hashimoto's thyroiditis, Insulin dependent diabetes mellitus Systemic – Rheumatoid arthritis, Multiple sclerosis, Systemic lupus erythematosus (immunological basis of these autoimmune diseases)	07 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**
CLASS: **T.Y BSc** SEMESTER: **VI** MONTH:**JANUARY-MAY** ACADEMIC YEAR: **2020-21**
LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand the basic concepts of demography and epidemiology of aging and pathophysiology and issues in common diseases of older people.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit IV 4.0 Endocrine Diseases & Ageing	4.1 Endocrine diseases: Diabetes mellitus. Hyper and Hypothyroidism, Cushing's syndrome, Acromegaly	05	●Immunology by Goldsby and Kuby	●Students were explained about diseases with the help of videos and diagrams. ●They were taught about ageing using videos.
	4.2 Diabetes insipidus. 4.2 Ageing: Definition of ageing. Molecular changes during ageing. Theories of Ageing.	07		
	4.3 Alzheimer's disease, Parkinson's diseases	03 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: F.Y.BIOCHEMISTRY SEMESTER: I

MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: understand about Cell and their organelles and cell division

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – II The cell- cell wall, cell membrane, cell organelles and cell division	Structural organization of cells ● Prokaryotic, Eukaryotic (plant & animal) and yeast cells - a comparative overview	1	Cell and Molecular Biology by Gerald Karp	Google Meet, Power Point, YouTube And Online quizzes.
	Cell wall structure (plant), cell membrane (fluid mosaic model) ● Cytoskeleton: microtubules & microfilaments	2	Cell and Molecular Biology by Gerald Karp	Google Meet, Power Point, YouTube And Online quizzes.
	Cell organelles ● Mitochondrion: Organization & function of the mitochondria, mitochondrial genome ● Chloroplast: Structure and function of the chloroplast. the chloroplast genome, other plastids	9	Cell and Molecular Biology by Gerald Karp	Google Meet, Power Point, YouTube And Online quizzes.

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	• Ribosome*: ER*: *Golgi* Structure & Function of Ribosome, ER, Golgi apparatus • Peroxisome & Lysosome: Peroxisome function & assembly (in brief) and Lysosome structure and function • Nucleus: Structure & function of the nucleus, nuclear envelope, nuclear pores, nuclear matrix and Nucleolus			
	Mitosis and Meiosis	3	Cell and Molecular Biology by Gerald Karp	Google Meet, Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: F.Y.BIOCHEMISTRY SEMESTER: I

MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: understand the deep knowledge of carbohydrates like their classification, sources, importance and some chemical properties

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – 1 Unit – III Carbohydrates	Definition, Classification, and functions of carbohydrates (mono, oligo, polysaccharides)	2	Biochemistry -lehninger	Google Meet, Power Point, YouTube And Online quizzes.
	Monosaccharides ● Classification in terms of aldoses and ketoses ● Occurrence,structures and significance of glucose, fructose, galactose, mannose, and ribos	3	Biochemistry -lehninger	Google Meet, Power Point, YouTube And Online quizzes.
	Properties: a) Physical - isomerism D & L, optical; epimers : anomers b) Chemical reactions - ● oxidation to produce aldonic. aldaric and uronic acids (with respect to glucose); ● reducing action in boiling alkali, enediol formation (with respect to glucose and fructose) ● Osazone formation (with respect to glucose and fructose ● Orcinol (with respect to ribose)	5	Biochemistry -lehninger	Google Meet, Power Point, YouTube And Online quizzes.

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	Disaccharides ● Occurrence and structure of maltose , lactose and sucrose ● Formation of glycosidic bonds	2	Biochemistry -lehninger	Google Meet, Power Point, YouTube And Online quizzes.
	Polysaccharides Classification based on function. storage and structure i. Composition: homo & hetero. with examples ii. Storage : starch and glycogen - action of amylase on starch iii. Structural: cellulose, chitin	3	Biochemistry -lehninger	Google Meet, Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.BIOCHEMISTRY SEMESTER: III

MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: understand about physiology of body fluids

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – 2 Blood and Body Fluids	Fluid compartments of the body–ICF and ECF	3	Medical Physiology by Guyton & Hall	Google Meet, Power Point, YouTube And Online quizzes.
	Blood: Composition, characteristics and function; role of plasma proteins, Starling's hypothesis; blood clotting and factors involved	5	Medical Physiology by Guyton & Hall	Google Meet, Power Point, YouTube And Online quizzes.
	Bile: Composition, characteristics and function; storage	3	Medical Physiology by Guyton & Hall	Google Meet, Power Point, YouTube And Online quizzes.
	Urine: Composition–normal and abnormal constituents; formation of urine	2	Medical Physiology by Guyton & Hall	Google Meet, Power Point, YouTube And Online quizzes.
	Lymph: Composition, Formation and Circulation	2	Medical Physiology by Guyton & Hall	Google Meet, Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.BIOCHEMISTRY SEMESTER: III

MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand and gain knowledge about transportation system in plant and mammals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – 3 Biological transport mechanisms	**Transport in plants**: Role of xylem and phloem	1	S.K. Verma and Mohit Verma; Plant physiology, Biochemistry and Biotechnology	Google Meet, Power Point, YouTube And Online quizzes.
	Transport in blood: Transport of gases CO2 and O2, Role of hemoglobin, O2 dissociation curves, Bohr effect Chloride shift	5	Medical Physiology by Guyton & Hall	Google Meet, Power Point, YouTube And Online quizzes.
	Transport of Metabolites: transport of lipids – lipoproteins and their types, role of plasma protein, albumin in transport of metabolites and drugs	3	Medical Physiology by Guyton & Hall	Google Meet, Power Point, YouTube And Online quizzes.
	Transport of Ions: Fe -Ferritin and transferrin and Calcium	2	Medical Physiology by Guyton & Hall	Google Meet, Power Point, YouTube And Online quizzes.
	Transport across cell membranes ● Channel proteins and Carrier proteins	4	S.K. Verma and Mohit Verma;	Google Meet, Power Point, YouTube And Online quizzes.

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	• Passive transport (simple and facilitated diffusion) with suitable examples; concept of symport, antiport, uniport, Endocytosis and Exocytosis – with one example each • Active transport: primary–Na+&K+ pump, secondary Glucose-amino acid transport, types of glucose transporters (GLUT 1 to GLUT 4), aquaporins, ion channel inhibitors like gramicidin and valinomycin		Plant physiology, Biochemistry and Biotechnology	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.BIOCHEMISTRY SEMESTER: V

MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : comprehend the catabolism and anabolism of carbohydrates and the disorders associate with these biomolecules.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 1 UNIT – III Carbohydrate metabolism	Catabolism – Cellular location, sequence of reactions, labelling of carbon atoms, and energetics of: Glycolysis (aerobic and anaerobic); Oxidation of pyruvate, Kreb cycle; Glyoxylate pathway; Glycogenolysis – [schematic – no structures, but with enzymes and coenzymes]	7	Biochemistry -lehninger	Power point
	Anabolism – HMP shunt (Cellular location, sequence of reactions, multifunctional nature); Gluconeogenesis,Glycogenesis –[schematic – no structures, but with enzymes and coenzymes]	5	Biochemistry -lehninger	Power point
	Disorders of carbohydrate metabolism: ▪ Galactosemia, Fructosemia, ▪ Lactose intolerance	3	Biochemistry -lehninger	Power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.BIOCHEMISTRY SEMESTER: V

MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand the basic tools required and know the techniques of recombinant DNA technology, their applications and the use of the technology for the benefit of society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 3 UNIT – III Recombinant DNA Technology I	Introduction to RDT	1	Biotechnology by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.
	Tools for RDT ● Enzymes- Restriction endonucleases, ligases, terminal transferases, reverse transcriptase: ● Cloning and Expression Vectors- Plasmid, pBR 322, PUC-19, Bacteriophage – Lambda phage; Cosmid; Artificial Chromosomes (BAC and YAC); Shuttle vectors; ● Probes- DNA probes	9	Biotechnology by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.
	Applications of RDT- Agriculture (Bt Cotton); Medicine (Insulin); GM food	5	Biotechnology by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: F.Y.BIOCHEM SEMESTER: II

MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand in detail about fundamental structural and functional properties of the digestive system along with some disorders related to the digestive system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 UNIT – I Physiology of digestion and absorption	Parts and Functions of gastrointestinal tract (GIT)	2	Medical Physiology – GUYTON & HALL	Google Meet, Power Point, YouTube And Online quizzes.
	Organs and Glands associated with GIT Secretions and Juices of GIT (Saliva, Gastric juice, Intestinal juice, pancreatic and Bile juice)	8	Medical Physiology – GUYTON & HALL	Google Meet, Power Point, YouTube And Online quizzes.
	Digestion and Absorption of carbohydrates	1	Medical Physiology – GUYTON & HALL	Google Meet, Power Point, YouTube And Online quizzes.

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	Digestion and Absorption of Lipid	1	Medical Physiology – GUYTON & HALL	Google Meet, Power Point, YouTube And Online quizzes.
	Digestion and Absorption of Proteins	1	Medical Physiology – GUYTON & HALL	Google Meet, Power Point, YouTube And Online quizzes.
	Disorders - Peptic ulcer, Lactose Intolerance	2	Medical Physiology – GUYTON & HALL	Google Meet, Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: F.Y.BIOCHEM SEMESTER: II

MONTH:**JANUARY-MAY** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: understand about biochemical study of Lipids like definition, complex structure, importance, classification and some chemical properties.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 1 UNIT – 1 LIPIDS	Definition, classification (Bloor's) and functions of Lipids	2	Fundamental of Biochemistry by Jain & Jain	Google Meet, Power Point, YouTube And Online quizzes.
	Fatty' acids and Triacylglycerol	1	Fundamental of Biochemistry by Jain & Jain	Google Meet, Power Point, YouTube And Online quizzes.
	Classification & Chemistry, ● Saturated fatty acids - classification of C2 to C20: even carbon: Common and IUPAC names. Unsaturated fatty acids MUFA, PUFA (2.3.4 double bonds) Omega - 3.6.9 fatty acids. Triacylglycerol - simple and mixed - names and structure ● Chemical Reactions of fats Saponification, Iodination, Ozonolysis, Auto-oxidation,	6	Fundamental of Biochemistry by Jain & Jain	Google Meet, Power Point, YouTube And Online quizzes.

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	Action of heat on glycerol and choline, Rancidity Definition & significance - Acid number, Saponification number, Iodine number, Reichert - Meissel number			
	Compound Lipids ● Functions of glycerophospholipids (PE.PC.PL) Phosphosphingolipids (ceramide, sphingomyelin), Glycolipids /Cerebrosides (gluco & galactocerebrosides)	4	Fundamental of Biochemistry by Jain & Jain	Google Meet, Power Point, YouTube And Online quizzes.
	Steroids Cholesterol structure and biochemical significance.	2	Fundamental of Biochemistry by Jain & Jain	Google Meet, Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS:S.Y.BIOCHEMISTRY SEMESTER: IV

MONTH:**JANUARY-MAY** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand basic concepts of Pharmacology and be able to understand basic information about drugs like their sources , formulation types, administration route, their pharmacokinetics effect and their novel delivery system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 3 UNIT – 2 Introduction of Pharmacology	Scope of pharmacology	1	Essentials of Pharmacology - F. S. K Brar	Google Meet, Power Point, YouTube And Online quizzes.
	Sources, Classification, Chemical & physical properties of drug and Nomenclature of drugs	4	Essentials of Pharmacology - F. S. K Brar	Google Meet, Power Point, YouTube And Online quizzes.
	Dosage forms and routes of drug administration; Factors affecting dosage and drug delivery	3	Essentials of Pharmacology - F. S. K Brar	Google Meet, Power Point, YouTube And Online quizzes.
	Pharmacokinetics: LD 50, ED 50 Half Life, Loading dose, Maintenance dose (Explanation of terms only);Therapeutic index	3	Essentials of Pharmacology - F. S. K Brar	Google Meet, Power Point, YouTube And Online quizzes.
	Novel Drug delivery system (NDDS)	1	Essentials of Pharmacology - F. S. K Brar	Google Meet, Power Point, YouTube And Online quizzes.

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	Transdermal and oral modes	1	Essentials of Pharmacology - F. S. K Brar	Google Meet, Power Point, YouTube And Online quizzes.
	Liposomes and nanoparticles	2	Essentials of Pharmacology - F. S. K Brar	Google Meet, Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS : S.Y.BIOCHEMISTRY

SEMESTER: IV MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to **:** understand the basic concept of Eukaryotic & Prokaryotic genome, their organization up-to chromosome & Recombination of genome in Prokaryotes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – 1 Genetics : II	**Genome organization**	1	Biotechnology - U. Satyanarayan	Google Meet, Power Point, YouTube And Online quizzes.
	Prokaryotic Genome: Nucleoid structure	1	Biotechnology - U. Satyanarayan	Google Meet, Power Point, YouTube And Online quizzes.
	Eukaryotic chromosomes: Packaging of DNA(upto Solenoid structure), DNA supercoiling, Topoisomerase, Chromatin structure -Euchromatin, Heterochromatin, structure of condensed chromatin, Centromere, kinetochore, telomere, Comparison of chromosomal structure in prokaryotes and Eukaryotes	9	Biotechnology - U. Satyanarayan	Google Meet, Power Point, YouTube And Online quizzes.
	Recombination in prokaryotes	1	Biotechnology - U. Satyanarayan	Google Meet, Power Point, YouTube And Online quizzes.
	Transformation: Transformation in *S. pneumonia* Transduction: General features with one example	1	Biotechnology - U. Satyanarayan	Google Meet, Power Point, YouTube And Online quizzes.

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	Conjugation: Mechanism F+, F- and Hfr strain	1	Biotechnology - U. Satyanarayan	Google Meet, Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.BIOCHEMISTRY SEMESTER: VI

MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: understand breakdown and synthesis of fatty acid appreciate experiments carried out by scientists to enable understanding the pathways and cycles of lipid metabolism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 1 UNIT – I Lipid metabolism	Catabolism - Knoop's experiment; Beta oxidation of even carbon saturated fatty acids (C4 to C20) Energetics of fatty acid oxidation. Beta oxidation of odd carbon chain fatty acid	7	Biochemistry -lehninger	Google Meet, Power Point, YouTube And Online quizzes.
	Anabolism – FAS complex; Fatty acid biosynthesis (palmitic acid); Ketone body formation, utilization, and the physiological significance of Ketone bodies in Diabetes mellitus, Starvation, Pregnancy and Alcoholism.	8	Biochemistry -lehninger	Google Meet, Power Point, YouTube And Online quizzes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.BIOCHEMISTRY SEMESTER: VI

MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S
The learners will be able to: about proximate principles, nutritional status and balanced diet.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – I Nutrition	Principles of nutrition	2	Biochemistry by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.
	Nutrients [Proximate principles, vitamins and minerals (macro And micro- role of Ca, Mg, Na, K and Fe, Zn)], dietary fibre.	3	Biochemistry by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.
	Nutritional status [malnutrition (protein energy and protein calorie) and over nutrition]	2	Biochemistry by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.
	Balanced diet	1	Biochemistry by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.
	Energy Assessment - RQ, BMR;	2	Biochemistry by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.
	Anthropometry – BMI, Waist:hip ratio;	2	Biochemistry by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.
	Protein quality indices: Chemical score of amino acids, Protein Deficiency Corrected Amino Acid Score, Net Protein utilization	3	Biochemistry by U.Satyanarayana	Google Meet, Power Point, YouTube And Online quizzes.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _GHALIB RAHAB AKHTAR__ DEPARTMENT: BIOCHEMISTRY CLASS: FY BSc SEMESTER: I

MONTH: **SEPTEMBER-DECEMBER**_ACADEMIC YEAR- 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concepts of microbiology this includes the historical background, general characteristics of bacteria, microbial taxonomy, structure and function of bacterial cell wall and different staining methods for identification of bacteria.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT 3 MICROBIOLOGY I	Historical background and general characteristics of bacteria	2	Microbiology by Pelczar Michael J	Google Meet/ Presentations/ Videos and Diagrams
	Microbial taxonomy- species and strains, classification based on morpholoy, staining reaction, nutrition and extreme environment	4	Microbiology by Pelczar Michael J	
	Bacterial cell wall- structure and function, components of peptidolycan frame work	4	Microbiology by Pelczar Michael J	
	Introduction to extremophiles	2	Britannica encyclopedia	
	Staining methods and microscopic identification of bacteria	3	Microbiology by Pelczar Michael J And Cliffs notes.com	

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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NAME OF THE STAFF: _GHALIB RAHAB AKHTAR__ DEPARTMENT: BIOCHEMISTRY CLASS-SY BSc SEMESTER: III

MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR- 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : To acquire information about the different concepts of Industrial biotechnology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT 3 INDUSTRIAL BIOTECHNOLOGY	Basics of fermentation.	4	Biochemistry by Satyanarayan Biotechnology by Satyanarayan	Google Meet , Presentation, Youtube And Online quizzes.
	Industrial production of wine and penicillin.	2		
	Immobilisation of enzymes.	4		
	Biosensors	4		
	Single cell proteins	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____16_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GHALIB RAHAB AKHTAR DEPARTMENT: BIOCHEMISTRY CLASS: TY BSc SEMESTER: V MONTH: **J**

SEPTEMBER-DECEMBER ACADEMIC YEAR- 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Understand simple concepts related to metabolism , metabolic roles played by vitamins and minerals, appreciate the correlation between energy molecules, reducing equivalents and pathways.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT 1 ROLE OF VITAMINS AND MINERALS IN METABOLISM	Minerals as cofactors- Iron, Calcium, Magnesiun, Zinc, Selenium, Molybdenum	3	Lehninger Medical biochemistry by Rana shinde Biochemistry by satyanarayan	Google Meet , Youtube And Online quizzes.
	Water soluble vitamins-thiamin, riboflavin, niacin, pyridoxines	4		
	Biotin, Lipoic acid- chemistry, its co-enzyme and biochemical role	2		
	Fat soluble vitamin- A, D, E and K (INTRODUCTION)	1		
	Vit A- chemistry, wald's cycle, role of rhodopsin, transducin, cGMP Vit D- role in Ca absorption and mobilization Vit E and K- physiological role	5		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _GHALIB RAHAB AKHTAR__ DEPARTMENT: BIOCHEMISTRY CLASS: TY BSc SEMESTER: V MONTH: **SEPTEMBER-DECEMBER**_ACADEMIC YEAR- 2020-2021

LEARNING OBJECTIVES:
The learners will be able to : Understand the mechanisms of dna transcription and translation in prokaryotes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT 2 TRANSCRIPTION AND TRANSLATION	Transcription in prokaryotes	1	Igenetics by Russel Biochemistry by satyanarayan	Google Meet , Youtube And Online quizzes.
	Mechanism of RNA transcription- initiation, elongation and termination,	4		
	Processing of RNA , concept of split genes, reverse transcription and role of inhibitor- Rifampicin, Actinomycin D	4		
	Translation in prokaryotes- genetic code and mechanism of translation	3		
	Post translational modification of proteins. Inhibitors and mode of action	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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SECOND TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GHALIB RAHAB AKHTAR DEPARTMENT: BIOCHEMISTRY CLASS: FY BSc SEMESTER: II MONTH: **JANUARY-MAY** ACADEMIC YEAR- 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to : To acquire information about the different concepts of nutrition like BMR, BMI and SDA. It also describes a detailed information about the nutritional significance of the macro and the micro molecules of a balanced diet.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT 3 NUTRITION	Definitions- calorie, joule, food calorimetry, calorific value, proximate principles, BMI and BV.	2	Joshi, Shubhangani- nutrition and dietetics Srilakshmi B- Nutrition Science Biochemistry by satyanarayan	White board method (If online, then PPT, Videos, Daigrams and Google meet)
	BMR	2		White board method
	SDA/DIT	1		White board method
	Nutritional significance of carbohydrates, proteins, lipids, vitamins, minerals, fibre and water.	6		White board method
	Balanced diet and numerical problems	2		White board method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____13_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GHALIB RAHAB AKHTAR DEPARTMENT: BIOCHEMISTRY CLASS-SY BSc SEMESTER: IV MONTH: **JANUARY-MAY** ACADEMIC YEAR- 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : To acquire information about the different concepts of resource management like treatment of solid waste, waste water treatment, sludge treatment and disposal . To understand the production of biogas, biomass and biofuels.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT 3 RESOURCE MANAGEMENT	Solid waste-types, treatment and recycling	2	Biochemistry by Satyanarayan Biotechnology by Satyanarayan	White board method (If online, then PPT, Videos, Daigrams and Google meet)
	Waste water treatment- primary, secondary, tertiary and disinfectant	4		White board method and Youtube
	Sludge treatment and disposal	2		White board method
	Biofuels and biomass- fossil fuels, energy rich crops, animal energy, sources, its cultivation and extraction.	4		White board method
	Biogas- production,composition, application and gobar gas	2		White board method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____14_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GHALIB RAHAB AKHTAR DEPARTMENT: BIOCHEMISTRY CLASS: TY BSc SEMESTER: VI MONTH: **JANUARY-MAY** ACADEMIC YEAR- 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : To be able to utilize critical thinking skills in discussing the concepts of pharmacodynamics and also be able to explain various therapeutics drugs in use.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT 4 MECHANISM OF DRUG ACTION AND THERAPEUTIC DRUGS	Different mechanism of action of drugs- Specific interaction, partial specific, non-specific, through antibodies and placebo effects.	4	Essentials of Pharmacotherapeutics by FSK Brar	White board method (If online, then PPT, Videos, Daigrams and Google meet)
	Therapeutics drugs- NSAID and salicylates	2		White board method
	Cardiovascular drugs- CVS and beta blockers	2		White board method
	Antibiotic- Penicillin and Sulphonamide	2		White board method
	Antacid- proton pump blocker	2		White board method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GHALIB RAHAB AKHTAR DEPARTMENT: BIOCHEMISTRY CLASS: TY BSc SEMESTER: VI MONTH: **JANUARY-MAY** ACADEMIC YEAR- 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the fundamental concepts and definition for Biostatistics and also explain the concept of probability and its distribution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT 1 BIOSTATISTICS AND DESCRIPTIVE STATISTICS	Introduction- scope and application	1	Biostatistics by Arora	White board method (If online, then PPT, Videos, Daigrams and Google meet)
	Common statistical terms and scales of measurement	2		White board method
	Descriptive statistics- measures of central tendency- mean, median and mode	6		White board method
	Measures of dispersions- range, percentile, variance, SD, mean deviation.	7		White board method
	Probality- Definition Normal distribution and normal curve Asymmetric distribution and statistical problems	4		White board method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: F.Y.BSc SEMESTER: I MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the structure, physical and chemical properties of water, concept of solutions and ionization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit I** **Water**	**1.1 *Water*:** Its effect on Biomolecules, hydrogen bonding and structure, properties (surface tension, latent heat, specific heat, viscosity, dilectric constant, colligative properties) of water and their biological significance, water as a universal solvent. 1.1.1 Entropy and dissolution of solute 1.1.2 Effect of non polar compounds on the structure of water 1.1.3 Weak interactions of biomolecules in aqueous solutions	4	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	Presentation/Videos
	1.2 *Solutions* 1.2.1 Concepts of mole, molar, molar equivalent and normal, Dalton	5	David L. Nelson, Michal M. Cox, Lehniger	Presentation/Videos

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			Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	
	1.3 ***Ionization of water, weak acids and weak bases*** 1.3.1 pH: pH scale, H^+ and OH^- concentrations 1.3.2 Weak acids and bases and their dissociation constants Ka & Kb 1.3.3 Buffers - definition, action, physiological buffers - phosphate and carbonate (No derivations. Only simple problems on solutions)	6	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	Presentation/Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: S.Y.BSc SEMESTER: III MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Gain knowledge about pH, buffers pK, titration curves of acids and will be able to solve problems on above concepts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I Acids, bases, buffers and ionic equilibria	**1.1** Definition – pH, pK, pKw, isoelectric pH, buffer, buffering capacity	2	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	Presentation/Videos
	1.2 Derivations: Ionic product of water, Hendersen–Hasselbalch equation,	3	David L. Nelson, Michal M. Cox, Lehniger Principles of	Presentation/Videos

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			Biochemistry, W. H. Freeman & company, New york, 4th edition	
	1.3 Relation between pI, pKa_1 and pKa_2 for a neutral, acidic and basic amino acid 1.3.1 Ionization and titration curves of glycine, lysine and aspartic acid; pKa, pHm, and pI values of these amino acids 1.3.2 Sorensen's reaction and formol titration of amino acids	5	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	Presentation/Videos
	1.4 Physiological buffers: Hb - HHb, carbonate-bicarbonate, phosphate and protein	2	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	Presentation/Videos
	1.5 Numerical on above concepts	3	David L. Nelson,	Presentation/Videos

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			Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: S.Y.BSc SEMESTER: III MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Study about the concepts and processes of diffusion , osmosis, colloids , viscocity and surface tension.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit II** **Physicochemical principles**	**2.1** Diffusion and osmosis 2.1.1 Ways of expressing solute concentration - mole, molal, normal, percent, activity & ionic strength. 2.1.2 Diffusion & diffusion coefficient and factors affecting diffusion of solute in solution 2.1.3 Osmosis - Vant Hoff's law of osmotic pressure law & mathematical expression (no derivation), mechanism of osmosis, role of osmosis in physiology. 2.1.4 Renal dialysis: Principles and process	7	Biophysical Chemistry, Upadhyay	Presentation/Videos
	2.2 Colloids and viscosity 2.2.1 Colloidal state in relation to surface forces, surface area, electrical charge, precipitation and flocculation.	8	Biophysical Chemistry, Upadhyay	Presentation/Videos

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	2.2.2 Surface tension and its measurement, factors affecting surface tension Eg. Role of bile in digestion 2.2.3 Viscosity - definition, measurement; Donnan membrane equilibrium, relation between Donnan equilibrium and osmotic pressure.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: T.Y.BSc SEMESTER: V MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Gain knowledge about DNA replication process in prokaryotes, study about mutations and DNA damage and their repair mechanisms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit I DNA Replication & Repair	**1.0 DNA Replication & Repair 15** 1.1 **Replication of DNA (in prokaryotes) -** Models of DNA replication: Semi-conservative, Dispersive & Conservative; Modes of DNA replication: Theta & rolling circle; Enzymes (pol I, II and III) and accessory proteins; Mechanism of semi-conservative replication;	6	iGenetics by Russel	Presentation/Videos
	1.2 **Mutations:** Point and Gross- Structural (Deletion, Duplication, Inversion, Translocation, insertion); Numerical (Euploidy, Aneuploidy)	3	iGenetics by Russel	Presentation/Videos

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	1.3 **DNA repair**: Direct, Photoreactivation O6 - methyl guanine DNA methyl transferase, Excision repair, Mismatch repair, Recombination repair, SOS-error prone repair	6	iGenetics by Russel	Presentation/Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: T.Y.BSc SEMESTER: V MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand gene libraries, various gene transfer techniques. They will also study about processes like PCR, DNA fingerprinting and DNA sequencing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit IV Recombinant DNA Technology II	4.1 Isolation of gene: Gene library and c-DNA library; Southern blot; Chimeric DNA	4	iGenetics by Russel	Presentation/Videos
	4.2 Gene Transfer: Transformation, Transfection, Electroporation, Microinjection, Liposome, Microprojectile (in brief) Selection and screening- Antibiotic and colony hybridization	3	iGenetics by Russel	Presentation/Videos
	4.3 DNA Amplification by PCR (Steps, Types, Applications)	4	iGenetics by Russel	Presentation/Videos
	4.4 DNA fingerprinting, DNA sequencing (any one method)	4	iGenetics by Russel	Presentation/Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: F.Y.BSc SEMESTER: II MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand microbial growth,media required for growth, sterilization and disinfection techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit III Microbiology II	**3.1** Microbial Growth - Growth Curve, Mathematical expression, Synchronous growth, Generation time	4	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6 2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition.	Presentation/Videos

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	3.2 Culture media (N, C, Special requirements), Natural and Synthetic media	3	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6 2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition	Presentation/Videos
	3.3 Sterilization and Disinfection techniques	3	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6 2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition	Presentation/Videos
	3.4 Physical Agent of sterilization - Temperature- Pressure (Hot Air Oven, Autoclave), Radiations (UV, Gamma) (examples with mechanism) Chemical agents of sterilization - Alcohol, Halogens, Formaldehyde	5	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6	Presentation/Videos

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			2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: S.Y.BSc SEMESTER: IV MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Gain knowledge about enzymes, its classification, kinetics,and enzyme inhibition.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I Enzymology	**1.1** Definition – Enzyme, coenzyme, cofactor, apoenzyme, holoenzyme, prosthetic group, active site , enzyme specificity, Turnover number, specific activity, Katal, IU.	2	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	Presentation/Videos
	1.2 IUB / EC classification upto one digit. Enzyme specificity :Fischers lock & key and Koshlands in duced fit theories	2	David L. Nelson, Michal M. Cox, Lehniger Principles of	Presentation/Videos

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			Biochemistry, W. H. Freeman & company, New york, 4th edition	
	1.3 Activation energy, mechanism of enzyme action (concept of active site, single and bi- substrate reaction), factors affecting enzyme activity – substrate concentration, pH, temperature	3	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	Presentation/Videos
	1.4 Enzyme kinetics – Derivation of Michaelis - Menten equation and Lineweaver Burk plot for mono-substrate reactions and numerical problems based on them.	4	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	Presentation/Videos
	1.5 Enzyme inhibition – Reversible and Irreversible; competitive and non competitive, (one example of each) Numerical problems on above.	4	David L. Nelson, Michal M. Cox, Lehniger Principles of	Presentation/Videos

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			Biochemistry, W. H. Freeman & company, New york, 4th edition	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: S.Y.BSc SEMESTER: IV MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Learn about various types of plant and animal hormones, their structures mechanisms and effects.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit II Plant growth regulators and endocrinology	**2.1** Plant growth regulators- Structure and function of- auxins, gibberellins, cytokinins, ethylene and abscisic acid.	3	Hall John E ; Guyton : Textbook of Medical Physiology Elsevier publishers	Presentation/Videos
	2.2 Definition of hormones, hormone receptor, endocrine & exocrine glands	2	Hall John E ; Guyton : Textbook of Medical Physiology Elsevier publishers	Presentation/Videos

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	2.3 Classification of hormones on the basis of: 2.3.1 Distance of target tissue - autocrine, paracrine, endocrine. Hierarchal organization of the mammalian endocrine 15 lectures system 2.3.2 Chemistry - One example for each sub class.	4	Hall John E ; Guyton : Textbook of Medical Physiology Elsevier publishers	Presentation/Videos
	2.4 Chemistry & physiological role of thyroxine, oxytocin & vasopressin, Physiological role of glucocorticoids, FSH, LH, Estrogen, Progesterone (Reproductive cycle) Mode of action of steroid hormones and epinephrine. (amplification cascade Only till the level of protein kinase A) G protein not to be covered.	6	Hall John E ; Guyton : Textbook of Medical Physiology Elsevier publishers	Presentation/Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: T.Y.BSc SEMESTER: VI MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Learn about reactions of amino acids and protein metabolism, hormones and signal transduction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit II** **Amino acid & protein metabolism and Hormones & Signal transduction**	2.1 Amino acid and protein metabolism – Reactions of amino acids – Transamination [GOT/GPT and mechanism of transamination] ; Decarboxylation [His, Trp, Glu, and mechanism of decarboxylation] , Deamination [oxidative – NAD(P) linked dehydrogenases and D & L - Amino acid oxidases, Non oxidative – Asp, Cys, Ser] 2.1.2 Glucogenic and ketogenic amino acids 2.1.3 Urea cycle – Cellular location, sequence of reactions, Labeling of N atom, transport of NH_3	9	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	Presentation/Videos
	2.2 **Hormone action and signal transduction** 2.2.1Hormone receptors (membrane and intracellular) 2.2.2 Introduction to G protein, G protein coupled receptor, Effect	6	Hall John E ; Guyton : Textbook of Medical	Presentation/Videos

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	of epinephrine on glycogen synthesis and breakdown: amplification cascade with G proteins, cAMP (as second messenger), adenylate cyclase, kinases 2.2.3 IP3 and Calcium as second messenger		Physiology Elsevier publishers	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: T.Y.BSc SEMESTER: VI MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Gain knowledge about various antigen-antibody interactions, techniques for detecting them, and concept of complement system in human body.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit I Antigen-Antibody interactions & Complement system	1.1 Antigen- Antibody interactions: 1.1.1 Forces involved, antibody affinity, antibody avidity. 1.1.2 Precipitation reactions – Oudins, Ouchterlony 1.1.3 Agglutination reactions: Blood typing, bacterial agglutination, Passive agglutination, agglutination inhibition, Coomb's test. Immunoelectrophoresis; 1.1.4 Principles of Radioimmunoassay, ELISA, 1.1.5 Immunofluorescence	10	Immunology by Goldsby and Kuby	Presentation/Videos
	1.2 Complement 1.2.1 Components of complement; 1.2.2 Complement activation – Classical & alternate pathway;	5	Immunology by Goldsby and Kuby	Presentation/Videos

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	formation of membrane attack complex. 1.2.3 Biological consequences of complement activation.[in brief]			

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**

SEMESTER: **V** MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able to define soil and noise pollution.
The learners will be able to understand the types of soil and noise pollution.
The learner will be able to get an insight on causes and consequences of soil and noise pollution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 3 **Title:** Soil & Noise	**Soil:** Composition of soil, Nitrogen cycle Types of soil pollution – acidification, agrochemical pollution, salinization, and contamination by metalliferous wastes **Noise:** Noise and its measurement Classification of Noise Causes and consequences of Noise pollution	15	Environmental Chemistry by Anil Kumar De The textbook of Environmental studies by Erach Bharucha Fundamental concepts in Environmental	Google Classroom, Google Meet, YouTube Videos

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			studies by Dr. D. D. Mishra	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**

SEMESTER: **V** MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR:

2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to differentiate between conventional and non-conventional sources of energy.
The learners will be able to understand the Sources and remedial measures for Industrial pollutants.
The learner will be able to get an insight on Environmental monitoring.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 4 **Title:** Energy, Industrial Pollutants and Environmental Monitoring	**Energy Conventional Sources :** Coal, Coke, Natural gas (CNG), Petroleum products (Petrol, Diesel, Kerosene, Oils, Naphtha) Non-Conventional Sources : Solar , Geothermal, Tidal, Hydroelectric power, Nuclear energy, Biofuels , Natural gas (Synthetic Natural Gas) **Industrial pollutants (Sources and remedial measures):** Polymers and Plastics Asbestos Poly Chlorinated Biphenyls Mining – Acid mine drainage **Environmental monitoring:** Approaches used to monitor the environment-air, water and soil. [Principles and Significance only. Protocols for each factor – not required] Remote Sensing	15	Environmental Chemistry by Anil Kumar De The textbook of Environmental studies by Erach Bharucha Fundamental concepts in Environmental	Google Classroom, Google Meet, YouTube Videos

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			studies by Dr. D. D. Mishra	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**

SEMESTER: **VI** MONTH:**JANUARY-MAY** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able to define Biostatistics and its applications.
The learner will be able to get an insight on Hypothesis testing.
The learners will be able to understand the difference between Type I and Type II errors
The learner will be able understand the Z test and its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (USBCH603) Biostatistics &Bioinformatics Unit 3 **Title:** Hypothesis Testing	Introduction; Single population mean, difference between population means Type I and Type II errors, One-tailed and two tailed tests Z-test Statistical problems based on the above concepts.	15	Biostatistics by Veer Bala Rastogi Methods in Biostatistics by BK Mahajan Introduction to Biostatistics by Dr. Pranab Kumar Banerjee	White Board-Marker Google Classroom, Google Meet, YouTube Videos

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**

SEMESTER: **VI** MONTH: **JANUARY-MAY** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able to define t-Test and its applications.
The learner will be able to get an insight on types of t-Test.
The learners will be able to understand the difference between t-Test and Z-Test.
The learner will be able understand the Chi-square test and its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (USBCH603) Biostatistics &Bioinformatics Unit 4 **Title:** Hypothesis Testing	t-test- Paired and unpaired Chi-square Statistical problems based on the above concepts	15	Biostatistics by Veer Bala Rastogi Methods in Biostatistics by BK Mahajan Introduction to Biostatistics by Dr. Pranab Kumar Banerjee	White Board-Marker Google Classroom, Google Meet, YouTube Videos

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma
DEPARTMENT: Biochemistry
CLASS: T.Y.B.Sc. Biochemistry
SEMESTER: **V**
MONTH: September – December
ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:

- To differentiate about different chromatographic techniques
- To understand about chromatography as a separation technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit – IV	Chromatography: Principle, Theoretical plates	02	• Principles of Instrumental Analysis - by Douglas A. Skoog • An Introduction to Practical Biochemistry- by David Plummer	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Technique and Applications of the following kinds of chromatography : Partition chromatography (Paper)	03		
	Adsorption Chromatography (TLC and column)	04		
	Ion exchange chromatography and Gel filtration	01		
	Principle and applications of GLC, HPLC, HPTLC, Affinity chromatography,	03		
	Numerical problems based on above concept	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Biochemistry CLASS: T.Y.B.Sc. Biochemistry

SEMESTER: **V** MONTH: September – December ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:

- This unit aims to acquaint the learner with oxidative phosphorylation and photophosphorylation and fixation of carbon dioxide, photorespiration and bioluminescence.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit – II	Bioenergetics: Concept of free energy; Respiratory electron transport chain – Carriers [basic chemistry, redox potentials, orientation on the membrane, sequence}; Q cycle in Complex III; Inhibitors of electron transport – Antimycin A , Amytal, Rotenone, CN, Azide, CO; Barbital Malate-Aspartate shuttle and Glycerol phosphate shuttle	05	• Lehninger's-Principles of Biochemistry by David L. Nelson • Harper's Illustrated Biochemistry by Robert K. Murray • Biochemistry by Donald Voet • Biochemistry by Jeremy M. Berg • Biochemistry (2 Volume Set): The Chemical Reactions of Living Cells by David E.Metzler	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Oxidative phosphorylation –Chemiosmotic hypothesis, Proton motive force; Structure of ATP synthase, Uncoupler- of ETC and Oxidative phosphorylation [DNP]	03		
	Photosynthesis – Light and dark reactions, Z scheme and electron carriers, photophosphorylation [linear and cyclic]; Calvin cycle – schematic with enzymes; Photorespiration	04		

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	Bioluminescence. Phenomenon and its biological significance. Applications of Bioluminescence	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Biochemistry CLASS: T.Y.B.Sc. Biochemistry

SEMESTER: **VI** MONTH: January

ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:

- The learner will learn the concept of diet management, nutrition at various stages of life and diseases related to diet.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit – II	Concepts like Balanced diet, Meal planning.	03	• Lehninger's- Principles of Biochemistry by David L. Nelson	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Nutrition during pregnancy, lactation, infancy, toddlerhood, preschool stage, school going children, and adolescence, adulthood and geriatric	07		
	Dietary Management in :- Obesity, Diabetes Mellitus, Hypertension, Peptic ulcer , Obstructive Jaundice	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma | DEPARTMENT: Biochemistry | CLASS: T.Y.B.Sc. Biochemistry

SEMESTER: **VI** | MONTH: January | ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:

- The learner will know about the basic insights in pharmacology, pharmacokinetics and mechanism of action of therapeutic drugs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit – III	General pharmacology Pharmacodynamics, Physicochemical properties of drugs, Drug absorption: through-GIT, pulmonary, renal, placental and blood-brain barrier Bioavailability and Bioequivalence Drug Distribution, Metabolism and Excretion	06	• Essentials of Pharmacotherapeutics by FSK Brara • Textbook of Medical Biochemistry by M.N. Chatterjea & Ranashinde	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Bioassays: Preclinical and clinical evaluation, Therapeutic drug monitoring	03		
	Pharmacokinetics: LD50, ED50, Half Life, Loading dose, Maintenance dose, Therapeutic dose, Therapeutic Index, Drug plasma concentration, Volume of distribution, Clearance	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST TERM
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.B.Sc

SEMESTER: III MONTH: **SEPTEMBER-DECEMBER** ACADEMIC

YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about different types of microscopic techniques
- Understand working and instrumentation of various microscopes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
US BCH 301 UNIT III Microscopy	**3.1** History, Basic principles of microscopy, of light and colour.	03	• Wilson and Walker's Principles and Techniques of Biochemistry and Molecular Biology (seventh edition) • http://www.microscopyu.com/ • http://www.microscopy.fsu.edu/ • http://www.microscopy-analysis.com/	• Google meet, Youtube videos, Powerpoint presentation, online quiz.
	3.2 Dissection and compound microscope: Construction and parts of a microscope, function of each part, levels of magnification, concept of refractive index and role of oil in magnification	04		
	3.3 Specialized microscopy I; 3.3.1 Differential interference contrast (DIC), 3.3.2 Phase contrast, 3.3.3 Dark Field	04		

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	3.4 Specialized Microscopy II; 3.4.1 Simple fluorescence microscopy, 3.4.2 Confocal microscopy 3.4.3 Electron microscopy ● Principle, applications and comparative study ● Types - SEM and TEM	04	● http://www.msa.microscopy.org ● http://www.openmicroscopy.org	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.B.Sc

SEMESTER: III MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about Mendalian Genetics with various crossing techniques
- Learn about gene interaction and numerical for the different concepts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH302 UNIT I Genetics: I	**1.1 History**: Contributions of Mendel, Bateson, Hardy-Weinberg, Garrod, Morgan, Griffith, Beadle and Tatum, Avery, Mac Leod, Mc Carthy, Lederberg, Tatum, Barbara Mclintock, Hershey & Chase, Watson &Crick.	04	• Russell iGenetics Molecular Approach 3rd edition • CliffsAP Biology 3rd edition.	• Google meet, Youtube videos, Powerpoint presentation, online quiz.
	1.2 Mendelian genetics: Mendel's experiments - Monohybrid, Dihybrid crosses, Laws of inheritance	04		
	1.3 Dominance, recessivity, co dominance, incomplete (semi) dominance, lethal genes	04		
	1.4 Gene interaction -Epistasis, types of epistasis, multiple alleles, maternal effects	03		

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	1.5 Numerical on above concepts			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.B.Sc

SEMESTER: V MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about metabolic, blood related and cardiovascular disorders.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH504 UNIT III Pathophysiology of metabolic and other disorders	**3.1 Metabolic disorder** 3.1.1 Inborn error: With respect to Etiology and Clinical manifestations 3.1.2 Carbohydrate Metabolism: Glycogen storage disease Type I & III. 3.1.3 Amino acid Metabolism: Albinism, Phenylketonuria, Maple syrup urine disease, Alkaptonuria 3.1.4 Lipid Metabolism: Tay Sach's disease, Niemann–Pick diseases, Fabry's disease	06	• Harper's Illustrated Biochemistry by Robert K. Murray • Lehninger's- Principles of Biochemistry by David L. Nelson	• Google meet, Youtube videos, Powerpoint presentation, online quiz.
	3.2 Blood related diseases: 3.2.1 Iron deficiency anemia 3.2.2 Sickle cell anemia 3.2.3 Thalassemia 3.2.4 Pernicious anemia 3.2.5 Hemophilia A and B	05		

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	3.3 Cardio Vascular System and related diseases: 3.3.1 Hypertension, Arteriosclerosis and Atherosclerosis	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.B.Sc

SEMESTER: V MONTH: **SEPTEMBER-DECEMBER** ACADEMIC

YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about Cancer and its physiology
- Understand causes of cancer and treatment procedure.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH504 UNIT IV Cancer	4.1 Biology of Cancer	02	• Cell and Molecular Biology by Gerald Karp, 6th edition • Biochemistry by U.Satyanarayana	• Google meet, Youtube videos, Powerpoint presentation, online quiz.
	4.2 Physiology of Cancer cells	02		
	4.3 Causes of cancer Carcinogens: Types (Physical, Chemical and Biological, Environmental Factor); AMES test	03		
	4.4 Oncogenes and activation of oncogenes	02		
	4.5 Genetics of cancer with reference to p53 and Bcl2.	02		
	4.6 Cancer therapy (Chemo – purine, pyrimidine and folate analogs)	03		
	4.7 Cancer and the cell cycle	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY

DEPARTMENT: BIOCHEMISTRY

CLASS: S.Y.B.Sc SEMESTER: IV

MONTH: **JANUARY-MAY**

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand biochemical processes involved in animal and plant studies.
- Learn about different sell and tissue handling and processing techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH 401 UNIT III Approaches to Biochemical investigations	**3.1** Whole animal and plant studies - the advantages and disadvantages of any four model systems for biochemical investigation (e.g. *E.coli*, yeast, *Dictyostelium*, *C. elegans*, Drosophila, *Arabidopsis)*	05	• David L. Nelson, Michael M. Cox, Lehninger; Principles of Biochemistry, W H Freeman & Co.	• Whiteboard method / Google meet, Youtube videos, Powerpoint presentation, online quiz.
	3.2 Organ & tissue studies	03		
	3.3 Isolated and cultured tissue and cell techniques: isolation, culture and counting of cells.	03		

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	3.4 *Cell Fractionation* 3.4.1 Cell rupture – solid shear, liquid shear, high pressure, ultrasound, osmotic shock, chemical treatment (enzyme, organic solvent), temperature. 3.4.2 Choice of suspension medium (isotonic & hypotonic solution, PBS) and separation methods.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.B.Sc
SEMESTER: IV MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2020-21
LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand nervous system and the parts of the nervous system.
- Learn how all parts of nervous system are involved in a neurotransmission.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH402 UNIT III Neurophysiology	**3.1 Nervous System Classification**: CNS,PNS; Components: Neurons (3types) and Neuroglia(6types)–structure and function, Axonal transport	05	• Metzler David E. Biochemistry, The chemical reactions of living cells, Volume II. Elsevier publications.	• Whiteboard method / Google meet, Youtube videos, Powerpoint presentation, online quiz.
	3.2 Nerve impulse transmission: Resting Membrane Potential, ion channels [voltage and ligand gated], Action Potential (depolarization, polarization and refraction period), propagation of action potential (salutatory & continuous conduction)	03		
	3.3 Synaptic transmission: Physiological anatomy of a synapse;– Electrical & Chemical synapses, Excitatory & inhibitory postsynaptic potentials, Agonists & Antagonists, inactivation of Neurotransmitter	03		

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	3.4 Neurotransmitters: Structure and function of acetylcholine, catecholamines, GABA, glutamate, glycine	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.B.Sc

SEMESTER: VI MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about electrophoretic techniques and their different procedures.
- Understand about radioactivity and how it is used in biological experiments.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH601 UNIT IV Electrophoresis & Radioactivity	4.1 **Electrophoresis** 4.1.1 Principle: Factors affecting the rate of migration of sample in an electric field 4.1.2 Moving boundary and Zone electrophoresis; Components of electrophoresis unit/apparatus 4.1.3 Various support media - paper, cellulose acetate, agar, agarose and polyacrylamide 4.1.4Technique of electrophoresis with staining/visualization method ● agarose electrophoresis for separation of DNA ● Native PAGE for separation of proteins ● SDS PAGE for molecular weight determination; ● Discontinuous electrophoresis ● Other applications of electrophoresis: blotting techniques Southern, Northern, and Western 4.1.5 Isoelectric Focusing of protein	11	● Principals and Techiniques of Biochemistry and Molecular Biology 7th Ed Wilson Walker ● Analytical Biochemistry by David Holme	● Whiteboard method / Google meet, Youtube videos, Powerpoint presentation, online quiz.

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	4.2 **Radioactivity-** Isotopes, Radioactive decay; Decay constant; Half-life; Measurement of radioactivity (principle)	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.B.Sc

SEMESTER: VI MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about different tools used in bioinformatics.
- Understand genome, proteome and nucleotide sequence analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH603 UNIT II Bioinformatics	2.1 **Bioinformatics:** Definition, Aims and History of Bioinformatics Applications of Bioinformatics in – Sequence analysis, Molecular modeling and drug designing, Phylogeny/evolution, Ecology & population studies, Medical informatics and agriculture. Introduction to Genomics and Proteomics Databases- Definition & types – Public domain database, Sequence database, Structural database, Motif database, Genome database, Proteome database, Annotated sequence database. Full form & function in brief of - GenBank, EMBL, PIR, SWISS PROT, PDB, GDB. Sequence analysis Tools - Explain the following terms in brief-BLAST, FASTA, L-ALIGN, CLUSTAL- X & W, RASMOL, Software for protein sequencing - PROSPECT, AMMP,COPIA (Explanation of the terms in brief) Micro-array analysis-concept and applications	15	• Principles and Techniques of Biochemistry and Molecular Biology, 4th edition.	Whiteboard method / Google meet, Youtube videos, Powerpoint presentation, online quiz.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma
DEPARTMENT: Biochemistry
CLASS: T.Y.B.Sc. Biochemistry
SEMESTER: **V**
MONTH: September – December
ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:

- To differentiate about different chromatographic techniques
- To understand about chromatography as a separation technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit – IV	Chromatography: Principle, Theoretical plates	02	• Principles of Instrumental Analysis - by Douglas A. Skoog • An Introduction to Practical Biochemistry- by David Plummer	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Technique and Applications of the following kinds of chromatography : Partition chromatography (Paper)	03		
	Adsorption Chromatography (TLC and column)	04		
	Ion exchange chromatography and Gel filtration	01		
	Principle and applications of GLC, HPLC, HPTLC, Affinity chromatography,	03		
	Numerical problems based on above concept	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Biochemistry CLASS: T.Y.B.Sc. Biochemistry
SEMESTER: **VI** MONTH: January ACADEMIC YEAR: **2019-20**
LEARNING OBJECTIVE/S:

- The learner will learn the concept of diet management, nutrition at various stages of life and diseases related to diet.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit – II	Concepts like Balanced diet, Meal planning.	03	• Lehninger's-Principles of Biochemistry by David L. Nelson	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Nutrition during pregnancy, lactation, infancy, toddlerhood, preschool stage, school going children, and adolescence, adulthood and geriatric	07		
	Dietary Management in :- Obesity, Diabetes Mellitus, Hypertension, Peptic ulcer , Obstructive Jaundice	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Biochemistry CLASS: T.Y.B.Sc. Biochemistry
SEMESTER: **VI** MONTH: January ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:

- The learner will know about the basic insights in pharmacology, pharmacokinetics and mechanism of action of therapeutic drugs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit – III	General pharmacology Pharmacodynamics, Physicochemical properties of drugs, Drug absorption: through-GIT, pulmonary, renal, placental and blood-brain barrier Bioavailability and Bioequivalence Drug Distribution, Metabolism and Excretion	06	• Essentials of Pharmacotherapeutics by FSK Brara • Textbook of Medical Biochemistry by M.N. Chatterjea & Ranashinde	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Bioassays: Preclinical and clinical evaluation, Therapeutic drug monitoring	03		
	Pharmacokinetics: LD50, ED50, Half Life, Loading dose, Maintenance dose, Therapeutic dose, Therapeutic Index,	06		

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	Drug plasma concentration, Volume of distribution, Clearance			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **F.Y BSc** SEMESTER: **I** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand basic structure and various forms of amino acids.
- To learn the classifications of amino acids.
- To understand physical and chemical properties of amino acids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit II 2.1 Amino acids and proteins	2.1.1 Amino acid structure - D & L forms of all 20 amino acids	03	• Lehninger, Albert L, Biochemistry, Kalyani Publishers • Nelson, D. L. and Cox, M.M, (2008). Lehninger, Principles of Biochemistry 5th Edition, W. H. Freeman and	•Students were explained about structures by drawing on white board.
	2.1.2 Detailed classification based on polarity, essential and non-essential amino acid	03		•Students were explained about amino acids classification by interactive session and using white board.
	2.1.3 Physical properties: zwitter ions, pI of amino acids amino acids as ampholytes, melting point, optical rotation, UV absorption and	09		•Students were explained about physical and chemical reactions on white board.

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	chemical properties: Chemical reactions of amino acids with Ninhydrin, Sanger's reagent, Edman's reagent and Dansyl chloride	Total: 15	Company, NY., USA.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **F.Y BSc** SEMESTER: **I** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:
- To learn about reasons for origin of life.
- To understand different theories behind evolution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Unit I Origin of Life & Formation of cells	1.1 Big bang theory, Theories on the origin of life: Abiogenesis, Heterotroph hypothesis, RNA world, protein world, Miller's experiment, Formation of the first cell, endosymbiont theory	05	●Verma, P.S. and Agarwal V.K.; Cell Biology, Genetics, Molecular biology, Evolution and Ecology ; Publishers : S. Chand and Co.Ltd., (2009)	●Students were explained via an interactive session in classroom. ● Diagrams related to theories were drawn on whiteboard.
	1.2 Evolution - Darwinian theory, Modern synthetic theory of evolution and its factors: Gene mutations(recombination), heredity, natural selection and isolation Biological evidences: Fossil record, chemical and anatomical similarities of related life forms, geographic distribution of related species, genetic changes in living organisms over generations and Mechanism of evolution, Gene flow and genetic drift, Hardy-Weinberg principle	10 Total: 15		●Students were explained about amino acids classification using white board. ●They were shown photos of scientists behind these theories using projector and laptop.

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				●Also a project was assigned o evolution.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **S.Y BSc** SEMESTER: **III** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about beneficial and harmful organisms for body in detail.
- To understand structure, classification and life cycle of virus.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Unit I Microbiology in Human Health and Diseases	1.1 Beneficial Microorganism: Lactobacillus, Normal flora of human gut, Probiotics, Yeast, Nitrogen fixing bacteria (Rhizobium and Azotobacter)	03	●Michael J. Pelczar, Jr; E.C.S. Chan; Noel R. Krieg; Microbiology Tata McGraw Hill. ●Roger Y stanier; General Microbiology,Macmillan, 1981	●Students were explained about beneficial and harmful bacteria, structure, classification and life cycle of virus with the help of slides displayed using projector.
	1.2 Harmful microorganisms: 1.2.1 Air borne- *Mycobacterium tuberculae*(Tuberculosis), *Corynebacterium diptheriae*(Diptheria), *Candida sp*., *Haemophilus influenzae* (Influenza), morbillivirus (measles) 1.2.2 Water borne- *Shigella sp.* (Dysentery), *Vibrio cholerae* (Cholera), *Salmonella sp.* (Enteric fever), Hepatitis virus 1.2.3 Food borne- *Staphylococcus aureus*, *Clostridium botulinum* (Botulism) 1.2.4 Soil borne- *Clostridium tetani*	08		
	1.3 Virology- General structure of a typical virus, classification of viruses based on genome (DNA, RNA); symmetry (helical, icosahedral, complex), host (bacteria, plant, animal, insect); Lytic and Lysogenic cycle	04 Total: 15		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS**: S.Y BSc** SEMESTER: **III** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To explain the process of plant tissue culture and animal tissue culture
- To understand the applications of the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Unit II Cell and Tissue Culture	2.1 Plant Tissue Culture: 2.1.1 History, Introduction or definition (explants, callus, dedifferentiation, re-differentiation) concept of totipotency 2.1.2 Culture techniques; Types of culture (Callus culture, Organ culture, protoplast culture, cell culture) 2.1.3 Applications: secondary metabolites in plant culture, Micropropagation	07	●Jogdand, Advances in Biotechnology; Himalaya Publishing House ●U. Satyanarayan ;Biotechnology, Books & allied (P) Ltd., Kolkata	●Students were explained the procedures with the help of slides presented by using projector.
	2.2 Animal Cell Culture: 2.2.1 History, Introduction to Primary cell culture, Cell lines (Finite and continuous) 2.2.2 Culture techniques used for primary culture, 2.2.3 Stem cell culture, Animal Organ Culture, Whole embryo culture 2.2.4 Applications: hybridoma (monoclonal antibody), production of Vaccines	08 Total:15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **T.Y BSc** SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:
- To understand the overall organization of the immune system, relationship between innate and adaptive systems and humoral and cell mediated immunity.
- To learn about the cells and organs of immune system in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit I 1.0 Human immune system	1.1 Types of Immunity Innate immunity – Anatomical barriers, physiological barriers, Characteristics of Inflammation, phagocytosis [no mechanism] Adaptive immunity – Active & Passive Humoral & Cell mediated immunity.	06	●Immunology by Goldsby and Kuby	●Students were explained about human immune system with the help of videos and diagrams displayed using projector.
	1.2 Organs of the immune system: Primary lymphoid organs: Thymus, Bone marrow Secondary lymphoid organs: Lymphatic system, Lymph nodes, Spleen, MALT.	04		
	1.3 Cells of the immune system: Lymphocytes – B cells and T cells, Natural killer cells – Mononuclear phagocytes, Granulocytes, Antigen presenting cells. Clonal selection & immunologic memory. Cytokines: biological functions of IL1, tumor necrosis factoralpha, interferon –alpha, IL2, interferon-gamma.	05 Total: 15		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **T.Y BSc** SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand the overall organization of the immune system.
- To learn the structure and function of antibodies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit II 2.0 Antigen-Antibody interactions	2.1 Antigens: Antigenicity, immunogenicity, epitope, factors determining immunogenicity, Haptens. Antibodies: Fine structure of immunoglobulin, Antibodymediated functions, Antibody classes, Monoclonal antibodies (concept, production and applications)	09	●Immunology by Goldsby and Kuby	●Students were explained about antigens and antibodies with the help of videos and diagrams displayed using projector.
	2.2 Antibody diversity: Multigene organization of immunoglobulin genes – Lambda, kappa & heavy chain Light chain DNA – VJ rearrangements Heavy chain DNA - VDJ rearrangements	06 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **F.Y BSc** SEMESTER: **II** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about nucleic acid structure and it's components in detail.
- To understand evidences and properties of nucleic acids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit II Nucleic Acids	2.1 Structure - Purine & Pyrimidine bases, ribose, deoxyribose, nucleosides and nucleotides (ATP, CTP, GTP, TTP, UTP) Formation of polynucleotide strand with its shorthand Representation	04	• Lehninger, Albert L, Biochemistry, Kalyani Publishers • Nelson, D. L. and Cox, M.M, (2008). Lehninger, Principles of Biochemistry 5th Edition, W. H. Freeman and	•Students were explained via an interactive session in classroom. • Structures of nucleic acids were drawn on whiteboard.
	2.2 RNAs (various types in prokaryotes and eukaryotes) mRNA & r RNA - general account, t RNA - clover leaf model, Ribozymes	04		•Structures of types RNAs were explained via drawing it on whiteboard.
	2.3 DNA 2.3.1 Physical evidence of DNA helical structure. Chargaff's rules (chemical evidence), Watson-Crick model of DNA & its features 2.3.2 Physical properties of DNA - Effect of heat on physical properties of DNA (Viscosity, buoyant density, UV absorption),	07		•Students were explained about the evidences and properties by drawing structures and reactions on whiteboard.

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	Hypochromism, hyperchromism, denaturation of DNA. 2.3.3 Reactions of nucleic acids (with DPA and Orcinol)	Total: 15	Company, NY., USA.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **F.Y BSc** SEMESTER: **II** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:
- To understand the parts and function of respiratory and excretory system in detail.
- To learn disorders of respiratory and excretory system and their causes in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Unit II Physiology of respiration and excretion	2.1 Respiratory system	01	● Guyton, Arthur C. and Hall, John E.;Text book of Medical physiology ; Harcourt Brace & Company Asia Pvt. Ltd.	●Students were explained about it in classroom via interactive session.
	2.2 Breathing - inspiration and expiration,	01		
	2.3 Composition of air and partial pressure of gases	01		
	2.4 Physical exchange of gases 2.4.1 Transport of oxygen 2.4.2 Transport of carbon dioxide Respiratory disorders – cyanosis, respiratory acidosis and alkalosis	03		●Students where explained about it by drawing structures and reactions on whiteboard.

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	2.5 Excretion -2.5.1 Structure of the nephron: Bowman's capsule & glomerulus - Structure & function, (ultrafiltration, pressures involved, GFR, regulation of GFR); Renal tubule - structure & function (proximal and distal convoluted tubules and Henle's loop) 2.5.2 Urine formation: Reabsorption / Secretion of glucose, Na+, K+. HCO3 Cl^- and H+ : renal threshold, Excretory disorder: Nephritis	09 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **S.Y BSc** SEMESTER: **IV** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about different movements of plants.
- To understand process of contraction and relaxation of muscles in mammals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Unit II Movement and locomotion	2.1 Movement in plants 2.1.1 Movements of Locomotion Spontaneous: Ciliary, Amoeboid, Cyclosis (Rotation, Circulation) Induced: Chemotaxis, Phototaxis, Thermotaxis 2.1.2 Movements of Curvature: Mechanical: hygroscopic movements	10	●S.K.Verma and Mohit Verma, Plant	●Students were explained about different movements in plants with the help of videos displayed

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	Vital:i)Spontaneous-movements of growth(nutation, circumutation, Hyponasty, epinasty); movements of variation ii)Induced–Tropic-hapto/geo/hydrotropism; Nastic–seismonasty, Nyctynasty		physiology, Biochemistry and Biotechnology ● Tortora G J, Derrickson B H; Principles of Anatomy and Physiology, Wiley	using projector. Also they were told to make plant models at home for better understanding.
	2.2 Muscle contraction 2.2.1 Structural organization of a muscle fibre, myofibril 2.2.2 Contraction and Relaxation of Muscles; -mechanisms, Other types of contractions–e.g. twitch, tetanus, Isotonic, Isometric regulation of Muscle contraction	05 Total:15		● Students were explained about movements of muscle with the help of video displayed using projector.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **S.Y BSc** SEMESTER: **IV** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about different trends in biotechnology and their applications.
- To understand process of biodegradation of various contaminants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Unit I Trends in Biotechnology	1.1 Bioremediation: 1.1.1 Introduction to terms – Bioremediation, Biotransformation, Xenobiotics, Recalcitrant xenobiotics, Biomagnification, Factors affecting bioremediation 1.1.2 Types of Bioremediation (Insitu, Exsitu); Types of reactions (Aerobic, anaerobic, sequential) 1.1.3 Applications of Biodegradation - hydrocarbons, (Oil spills) Pesticides and herbicides, Heavy metals (Uranium) contaminated soil and waste land, Ground Water; Genetically Engineered Microbes in bioremediation	08	●U. Satyanarayan ;Biotechnology, Books & allied (P) Ltd., Kolkata	●Students were explained about different trends in biotechnology with the help of videos displayed using projector.
	1.2 Biopesticides: 1.2.1 Introduction; Types of Biological Control (Classical, inoculation, Inundation); 1.2.2 Examples each of Bacterial, Viral, Fungal and Protozoal biopesticide .	04		
	1.3 Biofungicide: Examples and applications	02		

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	1.4 Biofertilizers: Examples and applications	01 Total:15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **T.Y BSc** SEMESTER: **VI** MONTH: **NOVEMBER -MARCH** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To be familiar with the MHC; its structure and classes, specific role of each class of MHC and importance in immune response and graft rejection.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit II 2.0 Major histocompatibility complex & Transplant immunology	2.1. Major histocompatibility complex: MHC polymorphism & organization of MHC genes- class I & class II; Cellular distribution & structure of class I & II molecules; Self MHC restriction of T cells. Role of antigen presenting cells.	05	●Immunology by Goldsby and Kuby	●Students were explained about MHC, transplantation and autoimmunity with the help of videos and diagrams displayed using projector.
	2.2 Transplant immunology: Types of transplant; immunological basis of allograft rejection	03		
	2.3 Autoimmunity: Organ specific –Myasthenia gravis; Hashimoto's thyroiditis, Insulin dependent diabetes mellitus Systemic – Rheumatoid arthritis, Multiple sclerosis, Systemic lupus erythematosus (immunological basis of these autoimmune diseases)	07 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **T.Y BSc** SEMESTER: **VI** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand the basic concepts of demography and epidemiology of aging and pathophysiology and issues in common diseases of older people.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit IV 4.0 Endocrine Diseases & Ageing	4.1 Endocrine diseases: Diabetes mellitus. Hyper and Hypothyroidism, Cushing's syndrome, Acromegaly	05	●Immunology by Goldsby and Kuby	●Students were explained about diseases with the help of videos and diagrams displayed using projector. ● They were taught about ageing using whiteboards.
	4.2 Diabetes insipidus. 4.2 Ageing: Definition of ageing. Molecular changes during ageing. Theories of Ageing.	07		
	4.3 Alzheimer's disease, Parkinson's diseases	03 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.B.Sc

SEMESTER: IV MONTH: NOVEMBER-APRIL ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand biochemical processes involved in animal and plant studies.
- Learn about different sell and tissue handling and processing techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH 401 UNIT III Approaches to Biochemical investigations	**3.1** Whole animal and plant studies - the advantages and disadvantages of any four model systems for biochemical investigation (e.g. *E.coli*, yeast, *Dictyostelium*, *C. elegans*, Drosophila, *Arabidopsis)*	05	• David L. Nelson, Michael M. Cox, Lehninger; Principles of Biochemistry, W H Freeman & Co.	• Students were explained about different biochemical investigation techniques using video explanation for working of microscopes displayed using projector. • Use of whiteboard for diagrammatic explanation.
	3.2 Organ & tissue studies	03		
	3.3 Isolated and cultured tissue and cell techniques: isolation, culture and counting of cells.	03		
	3.4 *Cell Fractionation* 3.4.1 Cell rupture – solid shear, liquid shear, high pressure, ultrasound, osmotic shock, chemical treatment (enzyme, organic solvent), temperature. 3.4.2 Choice of suspension medium (isotonic & hypotonic solution, PBS) and separation methods.	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.B.Sc
SEMESTER: IV MONTH: NOVEMBER-APRIL ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to:

- Understand nervous system and the parts of the nervous system.
- Learn how all parts of nervous system are involved in a neurotransmission.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH402 UNIT III Neurophysiology	**3.1 Nervous System Classification**: CNS,PNS; Components: Neurons (3types) and Neuroglia(6types)–structure and function, Axonal transport	05	• Metzler David E. Biochemistry, The chemical reactions of living cells, Volume II. Elsevier publications.	• Students were explained about neurotransmission using video explanation for working of microscopes displayed using projector. • Use of whiteboard for diagrammatic explanation of nervous system.
	3.2 Nerve impulse transmission: Resting Membrane Potential, ion channels [voltage and ligand gated], Action Potential (depolarization, polarization and refraction period), propagation of action potential (salutatory & continuous conduction)	03		
	3.3 Synaptic transmission: Physiological anatomy of a synapse;– Electrical & Chemical synapses, Excitatory & inhibitory postsynaptic potentials, Agonists & Antagonists, inactivation of Neurotransmitter	03		

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	3.4 Neurotransmitters: Structure and function of acetylcholine, catecholamines, GABA, glutamate, glycine	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.B.Sc

SEMESTER: VI MONTH: NOVEMBER-APRIL ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about electrophoretic techniques and their different procedures.
- Understand about radioactivity and how it is used in biological experiments.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH601 UNIT IV Electrophoresis & Radioactivity	4.1 **Electrophoresis** 4.1.1 Principle: Factors affecting the rate of migration of sample in an electric field 4.1.2 Moving boundary and Zone electrophoresis; Components of electrophoresis unit/apparatus 4.1.3 Various support media - paper, cellulose acetate, agar, agarose and polyacrylamide 4.1.4Technique of electrophoresis with staining/visualization method • agarose electrophoresis for separation of DNA • Native PAGE for separation of proteins • SDS PAGE for molecular weight determination; • Discontinuous electrophoresis • Other applications of electrophoresis: blotting techniques Southern, Northern, and Western 4.1.5 Isoelectric Focusing of protein	11	• Principals and Techiniques of Biochemistry and Molecular Biology 7th Ed Wilson Walker • Analytical Biochemistry by David Holme	• Video representation with a projector for explaining electrophoretic movement in different techniques. • Whiteboard was used for explaining principle and instrumentation.

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	4.2 **Radioactivity-** Isotopes, Radioactive decay; Decay constant; Half-life; Measurement of radioactivity (principle)	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.B.Sc

SEMESTER: VI MONTH: NOVEMBER-APRIL ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about different tools used in bioinformatics.
- Understand genome, proteome and nucleotide sequence analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH603 UNIT II Bioinformatics	2.1 **Bioinformatics:** Definition, Aims and History of Bioinformatics Applications of Bioinformatics in – Sequence analysis, Molecular modeling and drug designing, Phylogeny/evolution, Ecology & population studies, Medical informatics and agriculture. Introduction to Genomics and Proteomics Databases- Definition & types – Public domain database, Sequence database, Structural database, Motif database, Genome database, Proteome database, Annotated sequence database. Full form & function in brief of - GenBank, EMBL, PIR, SWISS PROT, PDB, GDB. Sequence analysis Tools - Explain the following terms in brief-BLAST, FASTA, L-ALIGN, CLUSTAL- X & W, RASMOL, Software for protein sequencing - PROSPECT, AMMP,COPIA (Explanation of the terms in brief) Micro-array analysis-concept and applications	15	• Principles and Techniques of Biochemistry and Molecular Biology, 4th edition.	• Use of projector for explaining different tools used in bioinformatics.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST HALF

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: F.Y.BIOCHEMISTRY SEMESTER: I MONTH: JULY

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: understand about Cell and their organelles and cell division

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – II The cell- cell wall, cell membrane, cell organelles and cell division	Structural organization of cells ● Prokaryotic, Eukaryotic (plant & animal) and yeast cells - a comparative overview	1	Cell and Molecular Biology by Gerald Karp	White Board
	Cell wall structure (plant), cell membrane (fluid mosaic model) ● Cytoskeleton: microtubules & microfilaments	2	Cell and Molecular Biology by Gerald Karp	White Board
	Cell organelles ● Mitochondrion: Organization & function of the mitochondria, mitochondrial genome ● Chloroplast: Structure and function of the chloroplast. the chloroplast genome, other plastids	9	Cell and Molecular Biology by Gerald Karp	White Board

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	• Ribosome*: ER*: *Golgi* Structure & Function of Ribosome, ER, Golgi apparatus • Peroxisome & Lysosome: Peroxisome function & assembly (in brief) and Lysosome structure and function • Nucleus: Structure & function of the nucleus, nuclear envelope, nuclear pores, nuclear matrix and Nucleolus			
	Mitosis and Meiosis	3	Cell and Molecular Biology by Gerald Karp	White Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: F.Y.BIOCHEMISTRY SEMESTER: I

MONTH: OCTOBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: understand the deep knowledge of carbohydrates like their classification, sources, importance and some chemical properties

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – 1 Unit – III Carbohydrates	Definition, Classification, and functions of carbohydrates (mono, oligo, polysaccharides)	2	Biochemistry -lehninger	White Board
	Monosaccharides ● Classification in terms of aldoses and ketoses ● Occurrence,structures and significance of glucose, fructose, galactose, mannose, and ribos	3	Biochemistry -lehninger	White Board
	Properties: a) Physical - isomerism D & L, optical; epimers : anomers b) Chemical reactions -	5	Biochemistry -lehninger	White Board

Jaisawar

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	• oxidation to produce aldonic. aldaric and uronic acids (with respect to glucose); • reducing action in boiling alkali, enediol formation (with respect to glucose and fructose) • Osazone formation (with respect to glucose and fructose • Orcinol (with respect to ribose)			
	Disaccharides • Occurrence and structure of maltose , lactose and sucrose • Formation of glycosidic bonds	2	Biochemistry -lehninger	White Board
	Polysaccharides Classification based on function. storage and structure i. Composition: homo & hetero. with examples ii. Storage : starch and glycogen - action of amylase on starch iii. Structural: cellulose, chitin	3	Biochemistry -lehninger	White Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.BIOCHEMISTRY SEMESTER: III

MONTH: JUNE ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: understand about physiology of body fluids

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – 2 Blood and Body Fluids	Fluid compartments of the body–ICF and ECF	3	Medical Physiology by Guyton & Hall	White Board

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	Blood: Composition, characteristics and function; role of plasma proteins, Starlings hypothesis; blood clotting and factors involved	5	Medical Physiology by Guyton & Hall	White Board
	Bile: Composition, characteristics and function; storage	3	Medical Physiology by Guyton & Hall	White Board
	Urine: Composition–normal and abnormal constituents; formation of urine	2	Medical Physiology by Guyton & Hall	White Board
	Lymph: Composition, Formation and Circulation	2	Medical Physiology by Guyton & Hall	White Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.BIOCHEMISTRY SEMESTER: III

MONTH: AUGUST ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : understand and gain knowledge about transportation system in plant and mammals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – 3 Biological transport mechanisms	**Transport in plants**: Role of xylem and phloem	1	S.K. Verma and Mohit Verma; Plant physiology, Biochemistry and Biotechnology	White Board
	Transport in blood: Transport of gases CO2 and O2, Role of hemoglobin, O2 dissociation curves, Bohr effect Chloride shift	5	Medical Physiology by Guyton & Hall	White Board
	Transport of Metabolites: transport of lipids – lipoproteins and their types, role of plasma protein, albumin in transport of metabolites and drugs	3	Medical Physiology by Guyton & Hall	White Board
	Transport of Ions: Fe -Ferritin and transferrin and Calcium	2	Medical Physiology by Guyton & Hall	White Board
	Transport across cell membranes ● Channel proteins and Carrier proteins	4	S.K. Verma and Mohit Verma;	White Board

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	• Passive transport (simple and facilitated diffusion) with suitable examples; concept of symport, antiport, uniport, Endocytosis and Exocytosis – with one example each • Active transport: primary–Na+&K+ pump, secondary Glucose-amino acid transport, types of glucose transporters (GLUT 1 to GLUT 4), aquaporins, ion channel inhibitors like gramicidin and valinomycin		Plant physiology, Biochemistry and Biotechnology	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.BIOCHEMISTRY SEMESTER: V

MONTH: JUNE ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : comprehend the catabolism and anabolism of carbohydrates and the disorders associated with these biomolecules.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 1 UNIT – III Carbohydrate metabolism	Catabolism – Cellular location, sequence of reactions, labelling of carbon atoms, and energetics of: Glycolysis (aerobic and anaerobic); Oxidation of pyruvate, Kreb cycle; Glyoxylate pathway; Glycogenolysis – [schematic – no structures, but with enzymes and coenzymes]	7	Biochemistry -lehninger	Power point
	Anabolism – HMP shunt (Cellular location, sequence of reactions, multifunctional nature); Gluconeogenesis,Glycogenesis –[schematic – no structures, but with enzymes and coenzymes]	5	Biochemistry -lehninger	Power point
	Disorders of carbohydrate metabolism: Galactosemia, Fructosemia, Lactose intolerance	3	Biochemistry -lehninger	Power point

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.BIOCHEMISTRY SEMESTER: V

MONTH: AUGUST ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : understand the basic tools required and know the techniques of recombinant DNA technology, their applications and the use of the technology for the benefit of society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 3 UNIT – III Recombinant DNA Technology I	Introduction to RDT	1	Biotechnology by U.Satyanarayana	White Board
	Tools for RDT ● Enzymes- Restriction endonucleases, ligases, terminal transferases, reverse transcriptase: ● Cloning and Expression Vectors- Plasmid, pBR 322, PUC-19, Bacteriophage – Lambda phage; Cosmid; Artificial Chromosomes (BAC and YAC); Shuttle vectors; ● Probes- DNA probes	9	Biotechnology by U.Satyanarayana	White Board

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	Applications of RDT- Agriculture (Bt Cotton); Medicine (Insulin); GM food	5	Biotechnology by U.Satyanarayana	White Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SECOND HALF

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISWAR DEPARTMENT: BIOCHEMISTRY CLASS: F.Y.BIOCHEM SEMESTER: II MONTH: JANUARY

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : understand in detail about fundamental structural and functional properties of the digestive system along with some disorders related to the digestive system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 UNIT – I Physiology of digestion and absorption	Parts and Functions of gastrointestinal tract (GIT)	2	Medical Physiology – GUYTON & HALL	White Board

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	Organs and Glands associated with GIT Secretions and Juices of GIT (Saliva, Gastric juice, Intestinal juice, pancreatic and Bile juice)	8	Medical Physiology – GUYTON & HALL	White Board
	Digestion and Absorption of carbohydrates	1	Medical Physiology – GUYTON & HALL	White Board
	Digestion and Absorption of Lipid	1	Medical Physiology – GUYTON & HALL	White Board
	Digestion and Absorption of Proteins	1	Medical Physiology – GUYTON & HALL	White Board
	Disorders - Peptic ulcer, Lactose Intolerance	2	Medical Physiology – GUYTON & HALL	White Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISWAR DEPARTMENT: BIOCHEMISTRY CLASS: F.Y.BIOCHEM SEMESTER: II

MONTH: FEBRUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: understand about biochemical study of Lipids like definition, complex structure, importance, classification and some chemical properties.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 1 UNIT – 1 LIPIDS	Definition, classification (Bloor's) and functions of Lipids	2	Fundamental of Biochemistry by Jain & Jain	White Board
	Fatty' acids and Triacylglycerol	1	Fundamental of Biochemistry by Jain & Jain	White Board
	Classification & Chemistry, ● Saturated fatty acids - classification of C2 to C20: even carbon: Common and IUPAC names. Unsaturated fatty acids MUFA, PUFA (2.3.4 double bonds) Omega - 3.6.9 fatty acids. Triacylglycerol - simple and mixed - names and structure	6	Fundamental of Biochemistry by Jain & Jain	White Board

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	• Chemical Reactions of fats Saponification, Iodination, Ozonolysis, Auto-oxidation, Action of heat on glycerol and choline, Rancidity Definition & significance - Acid number, Saponification number, Iodine number, Reichert - Meissel number			
	Compound Lipids • Functions of glycerophospholipids (PE.PC.PL) Phosphosphingolipids (ceramide, sphingomyelin), Glycolipids /Cerebrosides (gluco & galactocerebrosides)	4	Fundamental of Biochemistry by Jain & Jain	White Board
	Steroids Cholesterol structure and biochemical significance.	2	Fundamental of Biochemistry by Jain & Jain	White Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISWAR DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.BIOCHEMISTRY SEMESTER: IV

MONTH: NOVEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : understand basic concepts of Pharmacology and be able to understand basic information about drugs like their sources , formulation types, administration route, their pharmacokinetics effect and their novel delivery system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 3 UNIT – 2 Introduction of Pharmacology	Scope of pharmacology	1	Essentials of Pharmacology - F. S. K Brar	White Board
	Sources, Classification, Chemical & physical properties of drug and Nomenclature of drugs	4	Essentials of Pharmacology - F. S. K Brar	White Board
	Dosage forms and routes of drug administration; Factors affecting dosage and drug delivery	3	Essentials of Pharmacology - F. S. K Brar	White Board
	Pharmacokinetics: LD 50, ED 50 Half Life, Loading dose, Maintenance dose (Explanation of terms only);Therapeutic index	3	Essentials of Pharmacology - F. S. K Brar	White Board
	Novel Drug delivery system (NDDS)	1	Essentials of Pharmacology - F. S. K Brar	White Board

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	Transdermal and oral modes	1	Essentials of Pharmacology - F. S. K Brar	White Board
	Liposomes and nanoparticles	2	Essentials of Pharmacology - F. S. K Brar	White Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISWAR DEPARTMENT: BIOCHEMISTRY CLASS : S.Y.BIOCHEMISTRY

SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to **:** understand the basic concept of Eukaryotic & Prokaryotic genome, their organization up-to chromosome & Recombination of genome in Prokaryotes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – 1 Genetics : II	**Genome organization**	1	Biotechnology - U. Satyanarayan	White board
	Prokaryotic Genome: Nucleoid structure	1	Biotechnology - U. Satyanarayan	White board
	Eukaryotic chromosomes: Packaging of DNA(upto Solenoid structure), DNA supercoiling, Topoisomerase, Chromatin structure -Euchromatin, Heterochromatin, structure of condensed chromatin, Centromere, kinetochore, telomere, Comparison of chromosomal structure in prokaryotes and Eukaryotes	9	Biotechnology - U. Satyanarayan	White board
	Recombination in prokaryotes	1	Biotechnology - U. Satyanarayan	White board
	Transformation: Transformation in *S. pneumonia* Transduction: General features with one example	1	Biotechnology - U. Satyanarayan	White board

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	Conjugation: Mechanism F+, F- and Hfr strain	1	Biotechnology - U. Satyanarayan	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.BIOCHEMISTRY SEMESTER: VI

MONTH: NOVEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: understand breakdown and synthesis of fatty acid appreciate experiments carried out by scientists to enable understanding the pathways and cycles of lipid metabolism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 1 UNIT – I Lipid metabolism	Catabolism - Knoop's experiment; Beta oxidation of even carbon saturated fatty acids (C4 to C20) Energetics of fatty acid oxidation. Beta oxidation of odd carbon chain fatty acid	7	Biochemistry -lehninger	Power point
	Anabolism – FAS complex; Fatty acid biosynthesis (palmitic acid); Ketone body formation, utilization, and the physiological significance of Ketone bodies in Diabetes mellitus, Starvation, Pregnancy and Alcoholism.	8	Biochemistry -lehninger	Power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISWAR DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.BIOCHEMISTRY SEMESTER: VI

MONTH: FEBRUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S
The learners will be able to: about proximate principles, nutritional status and balanced diet.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – I Nutrition	Principles of nutrition	2	Biochemistry by U.Satyanarayana	White board
	Nutrients [Proximate principles, vitamins and minerals (macro And micro- role of Ca, Mg, Na, K and Fe, Zn)], dietary fibre.	3	Biochemistry by U.Satyanarayana	White board
	Nutritional status [malnutrition (protein energy and protein calorie) and over nutrition]	2	Biochemistry by U.Satyanarayana	White board
	Balanced diet	1	Biochemistry by U.Satyanarayana	White board
	Energy Assessment - RQ, BMR;	2	Biochemistry by U.Satyanarayana	White board
	Anthropometry – BMI, Waist:hip ratio;	2	Biochemistry by U.Satyanarayana	White board

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	Protein quality indices: Chemical score of amino acids, Protein Deficiency Corrected Amino Acid Score, Net Protein utilization	3	Biochemistry by U.Satyanarayana	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. ROHAN LOUIS D'SOUZA** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSC.**

SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S: The learner will be able to define Air Pollution.
The learner will be able to get an insight on the sources of air pollution.
The learner will be able to understand the impact of air pollution on the environment.

The learners will be able to: understand the problems associated with air pollution and the impact of air pollution on the different aspects of environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 1 **Title:** Air	**ATMOSPHERE** □ Composition and structure of atmosphere □ Particles , ions and radicals in the atmosphere □ Chemical and photochemical reactions in the atmosphere [reactions of oxygen, ozone, sulphur dioxide , nitrogen oxide and organic compounds]	08	Environmental Chemistry by Anil Kumar De	White Board-Marker
	AIR POLLUTANTS □ CO, Oxides of Nitrogen, SO2, hydrocarbons and photochemical smog, Greenhouse gases, suspended particulate matter[sources and effect of] , depletion of ozone	07	Environmental Chemistry by Anil Kumar De	White Board-Marker

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. ROHAN LOUIS D'SOUZA** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSC.**

SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S: The learner will be able to define water Pollution.
The learner will be able to get an insight on the sources of water pollution.
The learner will be able to understand the impact of water pollution on the environment and human health.

The learners will be able to: understand the problems associated with water pollution and the significance of different water treatment techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 2	**WATER HYDROSPHERE** Characteristics and the water cycle	05	Environmental Chemistry by Anil Kumar De	White Board-Marker
	WATER POLLUTION Organic pollutants[pesticides, insecticides, detergents, oil spills, toxic organic chemicals]	05	Environmental Chemistry by Anil Kumar De	White Board-Marker

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Title: Water & Water treatment	Inorganic pollutants [heavy metals – Hg, Pb, As, Cd] Thermal pollution of water		&	
	WATER TREATMENT Criteria for water purity, Water purification [preliminary, primary, secondary, tertiary- chlorination, ion exchange]	05	A Textbook of Environmental Chemistry and Pollution Control by S.S.Dara	White Board-Marker

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. ROHAN LOUIS D'SOUZA** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSC.**

SEMESTER: **VI** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S: The learner will be able to define RCF & RPM, and state the relationship between them.
The learner will be able understand the Beer-Lambert law and derive it.
The learner will be able to know the different types of centrifugation techniques and their applications.
The learners will be able to: understand the working and application of a centrifuge and spectrophotometer.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I (USBCH601)	**CENTRIFUGATION** RCF , RPM and derivation of an equation relating the two ; Nomogram ; Sedimentation coefficient	15	Wilson and Walker's Principles and Techniques of Biochemistry and Molecular Biology	White Board-Marker

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Metabolism & analytical techniques-II Unit 3 **Title:** Centrifugation and Spectroscopy	Types and applications of centrifuges – Clinical, High speed, Ultra centrifuge - preparative and analytical.			
	Types of centrifugation and its applications– Differential, Rate zonal, Isopycnic (Centrifugation with and without density gradients)			
	SPECTROSCOPY Beer-Lambert law, derivation , limitations, application – estimation of sugar(DNSA) and protein(Biuret); concepts of Lambda max; determination of molar extinction coefficient		Wilson and Walker's Principles and Techniques of Biochemistry and Molecular Biology **&** Analytical Chemistry Textbook (S.Y.B.Sc.) **&** epg pathshala	White Board-Marker
	Construction and working of a simple colorimeter and spectrophotometer			
	Applications of Beer-Lambert law in the estimation of sugar[DNSA] and protein[Biuret]			
	Numericals based on the above concepts			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. ROHAN LOUIS D'SOUZA** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSC.**

SEMESTER: **VI** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S: The learner will be able to define RCF & RPM, and state the relationship between them.
The learner will be able understand the Beer-Lambert law and derive it.
The learner will be able to know the different types of centrifugation techniques and their applications.

The learners will be able to: understand the working and application of a centrifuge and spectrophotometer.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 (USBCH604) Immunology & pathophysiology-II Unit 3 **Title:** Virology & AIDS	General Structure of Virus	15	Fenner And White's Medical Virology & Prescott's Microbiology	White Board-Marker You-tube videos
	Structure and mechanism of replication in: 1. Vaccinia 2. Polio 3. Influenza			
	AIDS: Structure and genetics basis of AIDS virus. Replication of AIDS Virus. Symptoms and Causes of AIDS. AIDS Therapy.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GHALIB RAHAB AKHTAR DEPARTMENT: BIOCHEMISTRY CLASS: FY BSc SEMESTER: I MONTH: AUGUST

ACADEMIC YEAR- 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concepts of microbiology this includes the historical background, general characteristics of bacteria, microbial taxonomy, structure and function of bacterial cell wall and different staining methods for identification of bacteria.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT 3 MICROBIOLOGY I	Historical background and general characteristics of bacteria	2	Microbiology by Pelczar Michael J	White board method
	Microbial taxonomy- species and strains, classification based on morpholoy, staining reaction, nutrition and extreme environment	4	Microbiology by Pelczar Michael J	White board method
	Bacterial cell wall- structure and function, components of peptidolycan frame work	4	Microbiology by Pelczar Michael J	White board method
	Introduction to extremophiles	2	Britannica encyclopedia	White board method
	Staining methods and microscopic identification of bacteria	3	Microbiology by Pelczar Michael J And Cliffs notes.com	White board method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _GHALIB RAHAB AKHTAR__ DEPARTMENT: BIOCHEMISTRY CLASS: TY BSc SEMESTER: V MONTH: September

ACADEMIC YEAR- 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to : Understand simple concepts related to metabolism , metabolic roles played by vitamins and minerals, appreciate the correlation between energy molecules, reducing equivalents and pathways.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT 1 ROLE OF VITAMINS AND MINERALS IN METABOLISM	Minerals as cofactors- Iron, Calcium, Magnesiun, Zinc, Selenium, Molybdenum	3	Lehninger Medical biochemistry by Rana shinde Biochemistry by satyanarayan	WHITE BOARD METHOD
	Water soluble vitamins-thiamin, riboflavin, niacin, pyridoxines	4		WHITE BOARD METHOD
	Biotin, Lipoic acid- chemistry, its co-enzyme and biochemical role	2		WHITE BOARD METHOD
	Fat soluble vitamin- A, D, E and K (INTRODUCTION)	1		WHITE BOARD METHOD

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	Vit A- chemistry, wald's cycle, role of rhodopsin, transducin, cGMP Vit D- role in Ca absorption and mobilization Vit E and K- physiological role	5		WHITE BOARD METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _GHALIB RAHAB AKHTAR__ DEPARTMENT: BIOCHEMISTRY CLASS: TY BSc SEMESTER: V MONTH: JULY

ACADEMIC YEAR- 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the mechanisms of dna transcription and translation in prokaryotes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT 2 TRANSCRIPTION AND TRANSLATION	Transcription in prokaryotes	1	Igenetics by Russel Biochemistry by satyanarayan	White board method
	Mechanism of RNA transcription- initiation, elongation and termination,	4		White board method and Youtube
	Processing of RNA , concept of split genes, reverse transcription and role of inhibitor- Rifampicin, Actinomycin D	4		White board method

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	Translation in prokaryotes- genetic code and mechanism of translation	3		White board method and Youtube
	Post translational modification of proteins. Inhibitors and mode of action	3		White board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _GHALIB RAHAB AKHTAR__ DEPARTMENT: BIOCHEMISTRY CLASS: FY BSc SEMESTER: II MONTH: DECEMBER ACADEMIC YEAR- 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to : To acquire information about the different concepts of nutrition like BMR, BMI and SDA. It also describes a detailed information about the nutritional significance of the macro and the micro molecules of a balanced diet.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER I UNIT 3 NUTRITION	Definitions- calorie, joule, food calorimetry, calorific value, proximate principles, BMI and BV.	2	Joshi, Shubhangani- nutrition and dietetics Srilakshmi B- Nutrition Science Biochemistry by satyanarayan	White board method
	BMR	2		White board method
	SDA/DIT	1		White board method
	Nutritional significance of carbohydrates, proteins, lipids, vitamins, minerals, fibre and water.	6		White board method
	Balanced diet and numerical problems	2		White board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____13_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _GHALIB RAHAB AKHTAR__ DEPARTMENT: BIOCHEMISTRY CLASS-SY BSc SEMESTER: II MONTH: NOVEMBER_ACADEMIC YEAR- 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to : To acquire information about the different concepts of resource management like treatment of solid waste, waste water treatment, sludge treatment and disposal . To understand the production of biogas, biomass and biofuels.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT 3 RESOURCE MANAGEMENT	Solid waste-types, treatment and recycling	2	Biochemistry by Satyanarayan Biotechnology by Satyanarayan	White board method
	Waste water treatment- primary, secondary, tertiary and disinfectant	4		White board method and Youtube
	Sludge treatment and disposal	2		White board method
	Biofuels and biomass- fossil fuels, energy rich crops, animal energy, sources, its cultivation and extraction.	4		White board method
	Biogas- production,composition, application and gobar gas	2		White board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____14_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _GHALIB RAHAB AKHTAR__ DEPARTMENT: BIOCHEMISTRY CLASS: TY BSc SEMESTER: II MONTH: JANUARY

ACADEMIC YEAR- 2019-2020

LEARNING OBJECTIVE/S:

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The learners will be able to : To be able to utilize critical thinking skills in discussing the concepts of pharmacodynamics and also be able to explain various therapeutics drugs in use.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT 4 MECHANISM OF DRUG ACTION AND THERAPEUTIC DRUGS	Different mechanism of action of drugs- Specific interaction, partial specific, non-specific, through antibodies and placebo effects.	4	Essentials of Pharmacotherapeutics by FSK Brar	White board method
	Therapeutics drugs- NSAID and salicylates	2		White board method
	Cardiovascular drugs- CVS and beta blockers	2		White board method
	Antibiotic- Penicillin and Sulphonamide	2		White board method
	Antacid- proton pump blocker	2		White board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____12_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _GHALIB RAHAB AKHTAR__ DEPARTMENT: BIOCHEMISTRY CLASS: TY BSc SEMESTER: II MONTH: NOVEMBER__ACADEMIC YEAR- 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the fundamental concepts and definition for Biostatistics and also explain the concept of probability and its distribution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT 1 BIOSTATISTICS AND DESCRIPTIVE STATISTICS	Introduction- scope and application	1	Biostatistics by Arora	White board method
	Common statistical terms and scales of measurement	2		White board method
	Descriptive statistics- measures of central tendency- mean, median and mode	6		White board method
	Measures of dispersions- range, percentile, variance, SD, mean deviation.	7		White board method
	Probality- Definition Normal distribution and normal curve Asymmetric distribution and statistical problems	4		White board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____20_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**

SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to define soil and noise pollution.
The learners will be able to understand the types of soil and noise pollution.
The learner will be able to get an insight on causes and consequences of soil and noise pollution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 3 **Title:** Soil & Noise	**Soil:** Composition of soil, Nitrogen cycle Types of soil pollution – acidification, agrochemical pollution, salinization, and contamination by metalliferous wastes	15	Environmental Chemistry by Anil Kumar De The textbook of Environmental studies by Erach Bharucha Fundamental concepts in Environmental studies by Dr. D. D. Mishra	White Board-Marker

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	Noise: Noise and its measurement Classification of Noise Causes and consequences of Noise pollution			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**

SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to differentiate between conventional and non-conventional sources of energy.
The learners will be able to understand the Sources and remedial measures for Industrial pollutants.
The learner will be able to get an insight on Environmental monitoring.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 4 **Title:** Energy, Industrial Pollutants and Environmental Monitoring	**Energy Conventional Sources :** Coal, Coke, Natural gas (CNG), Petroleum products (Petrol, Diesel, Kerosene, Oils, Naphtha) Non-Conventional Sources : Solar , Geothermal, Tidal, Hydroelectric power, Nuclear energy, Biofuels , Natural gas (Synthetic Natural Gas) **Industrial pollutants (Sources and remedial measures):** Polymers and Plastics Asbestos Poly Chlorinated Biphenyls Mining – Acid mine drainage **Environmental monitoring:**	15	Environmental Chemistry by Anil Kumar De The textbook of Environmental studies by Erach Bharucha Fundamental concepts in Environmental studies by Dr. D. D. Mishra	White Board-Marker

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	Approaches used to monitor the environment-air, water and soil. [Principles and Significance only. Protocols for each factor – not required] Remote Sensing			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**

SEMESTER: **VI** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to define Biostatistics and its applications.
The learner will be able to get an insight on Hypothesis testing.
The learners will be able to understand the difference between Type I and Type II errors
The learner will be able understand the Z test and its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (USBCH603) Biostatistics &Bioinformatics Unit 3 **Title:** Hypothesis Testing	Introduction; Single population mean, difference between population means Type I and Type II errors, One-tailed and two tailed tests Z-test Statistical problems based on the above concepts.	15	Biostatistics by Veer Bala Rastogi Methods in Biostatistics by BK Mahajan Introduction to Biostatistics by Dr. Pranab Kumar Banerjee	White Board-Marker

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**

SEMESTER: **VI** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to define t-Test and its applications.
The learner will be able to get an insight on types of t-Test.
The learners will be able to understand the difference between t-Test and Z-Test.
The learner will be able understand the Chi-square test and its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (USBCH603) Biostatistics &Bioinformatics Unit 4 **Title:** Hypothesis Testing	t-test- Paired and unpaired Chi-square Statistical problems based on the above concepts	15	Biostatistics by Veer Bala Rastogi Methods in Biostatistics by BK Mahajan Introduction to Biostatistics by Dr. Pranab Kumar Banerjee	White Board-Marker

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: F.Y.BSc SEMESTER: I MONTH: JUNE ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the structure, physical and chemical properties of water, concept of solutions and ionization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit I** **Water**	**1.1 *Water*:** Its effect on Biomolecules, hydrogen bonding and structure, properties (surface tension, latent heat, specific heat, viscosity, dilectric constant, colligative properties) of water and their biological significance, water as a universal solvent. 1.1.1 Entropy and dissolution of solute 1.1.2 Effect of non polar compounds on the structure of water 1.1.3 Weak interactions of biomolecules in aqueous solutions	4	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board

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	1.2 ***Solutions*** 1.2.1 Concepts of mole, molar, molar equivalent and normal, Dalton	5	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.3 ***Ionization of water, weak acids and weak bases*** 1.3.1 pH: pH scale, H^+ and OH^- concentrations 1.3.2 Weak acids and bases and their dissociation constants Ka & Kb 1.3.3 Buffers - definition, action, physiological buffers - phosphate and carbonate (No derivations. Only simple problems on solutions)	6	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: S.Y.BSc SEMESTER: III MONTH: JUNE ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Gain knowledge about pH, buffers pK, titration curves of acids and will be able to solve problems on above concepts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit I** **Acids, bases, buffers and ionic equilibria**	**1.1** Definition – pH, pK, pKw, isoelectric pH, buffer, buffering capacity	2	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board

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	1.2 Derivations: Ionic product of water, Hendersen–Hasselbalch equation,	3	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.3 Relation between pI, pKa_1 and pKa_2 for a neutral, acidic and basic amino acid 1.3.1 Ionization and titration curves of glycine, lysine and aspartic acid; pKa, pHm, and pI values of these amino acids 1.3.2 Sorensen's reaction and formol titration of amino acids	5	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.4 Physiological buffers: Hb - HHb, carbonate-bicarbonate, phosphate and protein	2	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W.	White board

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			H. Freeman & company, New york, 4th edition	
	1.5 Numerical on above concepts	3	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: S.Y.BSc SEMESTER: III MONTH: JUNE ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Study about the concepts and processes of diffusion , osmosis, colloids , viscocity and surface tension.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit II** **Physicochemical principles**	**2.1** Diffusion and osmosis 2.1.1 Ways of expressing solute concentration - mole, molal, normal, percent, activity & ionic strength. 2.1.2 Diffusion & diffusion coefficient and factors affecting diffusion of solute in solution 2.1.3 Osmosis - Vant Hoff's law of osmotic pressure law & mathematical expression (no derivation), mechanism of osmosis, role of osmosis in physiology. 2.1.4 Renal dialysis: Principles and process	7	Biophysical Chemistry, Upadhyay	White board
	2.2 Colloids and viscosity 2.2.1 Colloidal state in relation to surface forces, surface area, electrical charge, precipitation and flocculation.	8	Biophysical Chemistry, Upadhyay	White board

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	2.2.2 Surface tension and its measurement, factors affecting surface tension Eg. Role of bile in digestion 2.2.3 Viscosity - definition, measurement; Donnan membrane equilibrium, relation between Donnan equilibrium and osmotic pressure.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: T.Y.BSc SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Gain knowledge about DNA replication process in prokaryotes, study about mutations and DNA damage and their repair mechanisms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit I DNA Replication & Repair	**1.0 DNA Replication & Repair 15** 1.1 **Replication of DNA (in prokaryotes) -** Models of DNA replication: Semi-conservative, Dispersive & Conservative; Modes of DNA replication: Theta & rolling circle; Enzymes (pol I, II and III) and accessory proteins; Mechanism of semi-conservative replication;	6	iGenetics by Russel	White board
	1.2 **Mutations:** Point and Gross- Structural (Deletion, Duplication, Inversion, Translocation, insertion); Numerical (Euploidy, Aneuploidy)	3	iGenetics by Russel	White board

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	1.3 **DNA repair**: Direct, Photoreactivation O6 - methyl guanine DNA methyl transferase, Excision repair, Mismatch repair, Recombination repair, SOS-error prone repair	6	iGenetics by Russel	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: T.Y.BSc SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand gene libraries, various gene transfer techniques. They will also study about processes like PCR, DNA fingerprinting and DNA sequencing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit IV Recombinant DNA Technology II	4.1 Isolation of gene: Gene library and c-DNA library; Southern blot; Chimeric DNA	4	iGenetics by Russel	White board
	4.2 Gene Transfer: Transformation, Transfection, Electroporation, Microinjection, Liposome, Microprojectile (in brief) Selection and screening- Antibiotic and colony hybridization	3	iGenetics by Russel	White board

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	4.3 DNA Amplification by PCR (Steps, Types, Applications)	4	iGenetics by Russel	White board
	4.4 DNA fingerprinting, DNA sequencing (any one method)	4	iGenetics by Russel	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: F.Y.BSc SEMESTER: II MONTH: NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand microbial growth,media required for growth, sterilization and disinfection techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit III Microbiology II	**3.1** Microbial Growth - Growth Curve, Mathematical expression, Synchronous growth, Generation time	4	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6	White board

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			2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition.	
	3.2 Culture media (N, C, Special requirements), Natural and Synthetic media	3	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6 2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition	White board
	3.3 Sterilization and Disinfection techniques	3	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6	White board

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			2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition	
	3.4 Physical Agent of sterilization - Temperature- Pressure (Hot Air Oven, Autoclave), Radiations (UV, Gamma) (examples with mechanism) Chemical agents of sterilization - Alcohol, Halogens, Formaldehyde	5	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6 2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: S.Y.BSc SEMESTER: IV MONTH: NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Gain knowledge about enzymes, its classification, kinetics,and enzyme inhibition.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I Enzymology	**1.1** Definition – Enzyme, coenzyme, cofactor, apoenzyme, holoenzyme, prosthetic group, active site , enzyme specificity, Turnover number, specific activity, Katal, IU.	2	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.2 IUB / EC classification upto one digit. Enzyme specificity :Fischers lock & key and Koshlands induced fit theories	2	David L. Nelson, Michal M. Cox, Lehniger	White board

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			Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	
	1.3 Activation energy, mechanism of enzyme action (concept of active site, single and bi- substrate reaction), factors affecting enzyme activity – substrate concentration, pH, temperature	3	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.4 Enzyme kinetics – Derivation of Michaelis - Menten equation and Lineweaver Burk plot for mono-substrate reactions and numerical problems based on them.	4	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.5 Enzyme inhibition – Reversible and Irreversible; competitive	4	David L. Nelson,	White board

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	and non competitive, (one example of each) Numerical problems on above.		Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: S.Y.BSc SEMESTER: IV MONTH: NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Learn about various types of plant and animal hormones, their structures mechanisms and effects.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit II**	**2.1** Plant growth regulators- Structure and function of- auxins, gibberellins, cytokinins, ethylene and abscisic acid.	3	Hall John E ; Guyton :	White board

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Plant growth regulators and endocrinology			Textbook of Medical Physiology Elsevier publishers	
	2.2 Definition of hormones, hormone receptor, endocrine & exocrine glands	2	Hall John E ; Guyton : Textbook of Medical Physiology Elsevier publishers	White board
	2.3 Classification of hormones on the basis of: 2.3.1 Distance of target tissue - autocrine, paracrine, endocrine. Hierarchal organization of the mammalian endocrine 15 lectures system 2.3.2 Chemistry - One example for each sub class.	4	Hall John E ; Guyton : Textbook of Medical Physiology Elsevier publishers	White board
	2.4 Chemistry & physiological role of thyroxine, oxytocin & vasopressin, Physiological role of glucocorticoids, FSH, LH, Estrogen, Progesterone (Reproductive cycle) Mode of action of steroid hormones and epinephrine. (amplification cascade Only till the level of protein kinase A) G protein not to be covered.	6	Hall John E ; Guyton : Textbook of Medical Physiology	White board

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			Elsevier publishers	

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: T.Y.BSc SEMESTER: VI MONTH: NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Learn about reactions of amino acids and protein metabolism, hormones and signal transduction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit II** **Amino acid & protein metabolism and Hormones & Signal transduction**	2.1 Amino acid and protein metabolism – Reactions of amino acids – Transamination [GOT/GPT and mechanism of transamination] ; Decarboxylation [His, Trp, Glu, and mechanism of decarboxylation] , Deamination [oxidative – NAD(P) linked dehydrogenases and D & L - Amino acid oxidases, Non oxidative – Asp, Cys, Ser] 2.1.2 Glucogenic and ketogenic amino acids 2.1.3 Urea cycle – Cellular location, sequence of reactions, Labeling of N atom, transport of NH_3	9	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	2.2 **Hormone action and signal transduction** 2.2.1Hormone receptors (membrane and intracellular)	6	Hall John E ; Guyton :	White board

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	2.2.2 Introduction to G protein, G protein coupled receptor, Effect of epinephrine on glycogen synthesis and breakdown: amplification cascade with G proteins, cAMP (as second messenger), adenylate cyclase, kinases 2.2.3 IP3 and Calcium as second messenger		Textbook of Medical Physiology Elsevier publishers	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: T.Y.BSc SEMESTER: VI MONTH: NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

Gain knowledge about various antigen-antibody interactions, techniques for detecting them, and concept of complement system in human body.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit I Antigen-Antibody	1.1 Antigen- Antibody interactions: 1.1.1 Forces involved, antibody affinity, antibody avidity. 1.1.2 Precipitation reactions – Oudins, Ouchterlony 1.1.3 Agglutination	10	Immunology by Goldsby and Kuby	White board

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interactions & Complement system	reactions: Blood typing, bacterial agglutination, Passive agglutination, agglutination inhibition, Coomb's test. Immunoelectrophoresis; 1.1.4 Principles of Radioimmunoassay, ELISA, 1.1.5 Immunofluorescence			
	1.2 Complement 1.2.1 Components of complement; 1.2.2 Complement activation – Classical & alternate pathway; formation of membrane attack complex. 1.2.3 Biological consequences of complement activation.[in brief]	5	Immunology by Goldsby and Kuby	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SIDDHESH MANGAONKAR DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.B.Sc

SEMESTER: VI MONTH: **JANUARY-MAY** ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about different tools used in bioinformatics.
- Understand genome, proteome and nucleotide sequence analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH603 **UNIT II** **Bioinformatics**	2.1 **Bioinformatics:** Definition, Aims and History of Bioinformatics Applications of Bioinformatics in – Sequence analysis, Molecular modeling and drug designing, Phylogeny/evolution, Ecology & population studies, Medical informatics and agriculture. Introduction to Genomics and Proteomics	15	• Principles and Techniques of Biochemistry and Molecular Biology, 4th edition.	Whiteboard method / Google meet, Youtube videos, Powerpoint presentation, online quiz.

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	Databases- Definition & types – Public domain database, Sequence database, Structural database, Motif database, Genome database, Proteome database, Annotated sequence database. Full form & function in brief of - GenBank, EMBL, PIR, SWISS PROT, PDB, GDB. Sequence analysis Tools - Explain the following terms in brief-BLAST, FASTA, L-ALIGN, CLUSTAL- X & W, RASMOL, Software for protein sequencing - PROSPECT, AMMP,COPIA (Explanation of the terms in brief) Micro-array analysis-concept and applications			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST TERM

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma
DEPARTMENT: Biochemistry
CLASS: T.Y.B.Sc. Biochemistry
SEMESTER: **V**
MONTH: September – December
ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:

- To differentiate about different chromatographic techniques
- To understand about chromatography as a separation technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit – IV	Chromatography: Principle, Theoretical plates	02	• Principles of Instrumental Analysis - by Douglas A. Skoog • An Introduction to Practical Biochemistry- by David Plummer	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Technique and Applications of the following kinds of chromatography : Partition chromatography (Paper)	03		
	Adsorption Chromatography (TLC and column)	04		
	Ion exchange chromatography and Gel filtration	01		
	Principle and applications of GLC, HPLC, HPTLC, Affinity chromatography,	03		
	Numerical problems based on above concept	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND TERM
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Biochemistry CLASS: T.Y.B.Sc. Biochemistry
SEMESTER: **VI** MONTH: January ACADEMIC YEAR: **2018-19**
LEARNING OBJECTIVE/S:

- The learner will learn the concept of diet management, nutrition at various stages of life and diseases related to diet.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit – II	Concepts like Balanced diet, Meal planning.	03	• Lehninger's-Principles of Biochemistry by David L. Nelson	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Nutrition during pregnancy, lactation, infancy, toddlerhood, preschool stage, school going children, and adolescence, adulthood and geriatric	07		
	Dietary Management in :- Obesity, Diabetes Mellitus, Hypertension, Peptic ulcer , Obstructive Jaundice	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Biochemistry CLASS: T.Y.B.Sc. Biochemistry
SEMESTER: **VI** MONTH: January ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:

- The learner will know about the basic insights in pharmacology, pharmacokinetics and mechanism of action of therapeutic drugs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit – III	General pharmacology Pharmacodynamics, Physicochemical properties of drugs, Drug absorption: through-GIT, pulmonary, renal, placental and blood-brain barrier Bioavailability and Bioequivalence Drug Distribution, Metabolism and Excretion	06	• Essentials of Pharmacotherapeutics by FSK Brara • Textbook of Medical Biochemistry by M.N. Chatterjea & Ranashinde	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Bioassays: Preclinical and clinical evaluation, Therapeutic drug monitoring	03		
	Pharmacokinetics: LD50, ED50, Half Life, Loading dose, Maintenance dose, Therapeutic dose, Therapeutic Index,	06		

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	Drug plasma concentration, Volume of distribution, Clearance			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **F.Y BSc** SEMESTER: **I** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand basic structure and various forms of amino acids.
- To learn the classifications of amino acids.
- To understand physical and chemical properties of amino acids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit II 2.1 Amino acids and proteins	2.1.1 Amino acid structure - D & L forms of all 20 amino acids	03	• Lehninger, Albert L, Biochemistry, Kalyani Publishers • Nelson, D. L. and Cox, M.M, (2008). Lehninger, Principles of Biochemistry 5th	•Students were explained about structures by drawing on white board.
	2.1.2 Detailed classification based on polarity, essential and non-essential amino acid	03		•Students were explained about amino acids classification by interactive session and using white board.

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	2.1.3 Physical properties: zwitter ions, pI of amino acids amino acids as ampholytes, melting point, optical rotation, UV absorption and chemical properties: Chemical reactions of amino acids with Ninhydrin, Sanger's reagent, Edman's reagent and Dansyl chloride	09 Total: 15	Edition, W. H. Freeman and Company, NY., USA.	●Students were explained about physical and chemical reactions on white board.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **F.Y BSc** SEMESTER: **I** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about reasons for origin of life.
- To understand different theories behind evolution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Unit I Origin of Life & Formation of cells	1.1 Big bang theory, Theories on the origin of life: Abiogenesis, Heterotroph hypothesis, RNA world, protein world, Miller's experiment, Formation of the first cell, endosymbiont theory	05	• Verma, P.S. and Agarwal V.K.; Cell Biology, Genetics, Molecular biology, Evolution and Ecology ; Publishers : S.	•Students were explained via an interactive session in classroom. • Diagrams related to theories were drawn on whiteboard.
	1.2 Evolution - Darwinian theory, Modern synthetic theory of evolution and its factors: Gene mutations(recombination), heredity, natural selection and isolation Biological evidences: Fossil record, chemical and anatomical similarities of related life forms, geographic distribution of related species, genetic changes in living organisms	10		•They were shown photos of scientists behind these theories using projector and laptop. •Also a project was assigned to students on evolution.

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	over generations and Mechanism of evolution, Gene flow and genetic drift, Hardy-Weinberg principle	Total: 15	Chand and Co.Ltd., (2009)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **S.Y BSc** SEMESTER: **III** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about acids, bases, buffers and ionic equilibrium.
- To solve numerical related to the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit I Acids, bases, buffers and ionic equilibria	1.1 Definition – pH, pK, pKw, isoelectric pH, buffer, buffering capacity	03	●J. L. Jain, Fundamentals of Biochemistry, S. Chand & company, 2005 edition	●Students were explained via an interactive session in classroom using whiteboard.
	1.2 Derivations: Ionic product of water, Hendersen– Hasselbalch equation	02		
	1.3 Relation between pI, pKa1and pKa2for a neutral, acidic and basic amino acid 1.3.1 Ionization and titration curves of glycine, lysine and aspartic acid; pKa, pHm, and pI values of these amino acids 1.3.2 Sorensen's reaction and formol titration of amino acids	06		
	1.4 Physiological buffers: Hb - HHb, carbonatebicarbonate, phosphate and protein	02		

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	1.5 Numerical on above concepts	02 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **S.Y BSc** SEMESTER: **III** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about beneficial and harmful organisms for body in detail.
- To understand structure, classification and life cycle of virus.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Unit I Microbiology in Human Health and Diseases	1.1 Beneficial Microorganism: Lactobacillus, Normal flora of human gut, Probiotics, Yeast, Nitrogen fixing bacteria (Rhizobium and Azotobacter)	03	●Michael J. Pelczar, Jr; E.C.S. Chan; Noel R. Krieg; Microbiology Tata McGraw Hill. ●Roger Y stanier; General Microbiology,Macmillan, 1981	●Students were explained about beneficial and harmful bacteria, structure, classification and life cycle of virus with the help of slides displayed using projector.
	1.2 Harmful microorganisms: 1.2.1 Air borne- *Mycobacterium tuberculae*(Tuberculosis), *Corynebacterium diptheriae*(Diptheria), *Candida sp*., *Haemophilus influenzae* (Influenza), morbillivirus (measles) 1.2.2 Water borne- *Shigella sp.* (Dysentery), *Vibrio cholerae* (Cholera), *Salmonella sp.* (Enteric fever), Hepatitis virus 1.2.3 Food borne- *Staphylococcus aureus*, *Clostridium botulinum* (Botulism) 1.2.4 Soil borne- *Clostridium tetani*	08		

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	1.3 Virology- General structure of a typical virus, classification of viruses based on genome (DNA, RNA); symmetry (helical, icosahedral, complex), host (bacteria, plant, animal, insect); Lytic and Lysogenic cycle	04 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS**: S.Y BSc** SEMESTER: **III** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To explain the process of plant tissue culture and animal tissue culture
- To understand the applications of the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Unit II Cell and Tissue Culture	2.1 Plant Tissue Culture: 2.1.1 History, Introduction or definition (explants, callus, dedifferentiation, re-differentiation) concept of totipotency 2.1.2 Culture techniques; Types of culture (Callus culture, Organ culture, protoplast culture, cell culture) 2.1.3 Applications: secondary metabolites in plant culture, Micropropagation	07	●Jogdand, Advances in Biotechnology; Himalaya Publishing House ●U. Satyanarayan ;Biotechnology, Books & allied (P) Ltd., Kolkata	●Students were explained the procedures with the help of slides presented by using projector.
	2.2 Animal Cell Culture: 2.2.1 History, Introduction to Primary cell culture, Cell lines (Finite and continuous) 2.2.2 Culture techniques used for primary culture, 2.2.3 Stem cell culture, Animal Organ Culture, Whole embryo culture 2.2.4 Applications: hybridoma (monoclonal antibody), production of Vaccines	08 Total:15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **T.Y BSc** SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about buffers and its derivations.
- To explain about vitamins and their roles.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit IV pH and Buffers & Vitamins	4.1 pH and Buffers Derivation of Hendersen- Hasselbalch equation ; Numericals Ionization of Gly, Asp, Lys (pKa values required) Titration curve of Glycine , Valine and Lysine Derivation of the relationship between pI, pKa1 and pKa2 for Glycine pH meter and Glass electrode	07	●J. L. Jain, Fundamentals of Biochemistry, S. Chand & company, 2005 edition ●Lehninger's- Principles of	. ●Students were explained by drawing reactions on whiteboard.
	4.2 Vitamins and Coenzymes : Water soluble vitamins –Thiamin, Riboflavin, Niacin, 4.2.2 Pyridoxine, Biotin, Lipoic acid :- Chemistry of the Vitamin and its coenzyme form [structure not to be done, only group involved in its activity] and one biochemical role; Fat soluble vitamins A,D,E,K :- Vitamin A – Chemistry, Wald's Visual cycle and role of Rhodopsin (with structure), Transducin, cGMP in vision ;	08 Total: 15		

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	Vitamin D – role in Ca absorption and mobilization; Vit E and Vit K– physiological role (Vitamins D,E,K no structures)		Biochemistry by David L. Nelson	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **T.Y BSc** SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:
- To understand the process of transcription and translation in detail.
- To learn about role of inhibitors for both the processes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Unit II Transcription & Translation	2.1 Transcription - in prokaryotes, prokaryotic RNA polymerase and promoter; mechanism of RNA transcription: Initiation, elongation and termination; processing of t RNA , r RNA, mRNA (prokaryotes and eukaryotes)- concept of split genes, reverse transcription. Role of Inhibitor- Rifampicin , Actinomycin D	08	• iGenetics by Russel • Gene Biotechnology by Jogdand	• Students were explained with the help of videos displayed using projector.
	2.2 Translation (protein biosynthesis) in prokaryotes – Genetic code, mechanism of translation: Activation of amino acids, chain initiation, elongation & termination: Post translational modifications of proteins Role of Inhibitor- Puromycin	07 Total:15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **T.Y BSc** SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:
- To learn about the tools of RDT.
- To understand the applications of RDT.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Unit III Recombinant DNA Technology (RDT)	3.1 Introduction & Applications of RDT- Agriculture (Bt Cotton); Medicine (Insulin); GM food	04	●iGenetics by Russel ●Gene Biotechnology by Jogdand ●Genes VIII by Lewin, Benjamin; Pearson Prentice and Hall publishers	●Students were explained with the help of videos displayed using projector and by drawing diagrams on whiteboard.
	3.2 Tools for RDT (a) Enzymes- Restriction endonucleases, ligases, terminal transferases, reverse transcriptase: (b) Cloning and Expression Vectors- Plasmid, pBR 322, PUC-19, Bacteriophage – Lambda phage; Cosmid; Artificial Chromosomes(BAC and YAC); Shuttle vectors; (c) Probes- DNA probes	11 Total:15		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **T.Y BSc** SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:
- To understand the overall organization of the immune system, relationship between innate and adaptive systems and humoral and cell mediated immunity.
- To learn about the cells and organs of immune system in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit I 1.0 Human immune system	1.1 Types of Immunity Innate immunity – Anatomical barriers, physiological barriers, Characteristics of Inflammation, phagocytosis [no mechanism] Adaptive immunity – Active & Passive Humoral & Cell mediated immunity.	06	●Immunology by Goldsby and Kuby	●Students were explained about human immune system with the help of videos and diagrams displayed using projector.
	1.2 Organs of the immune system: Primary lymphoid organs: Thymus, Bone marrow Secondary lymphoid organs: Lymphatic system, Lymph nodes, Spleen, MALT.	04		

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	1.3 Cells of the immune system: Lymphocytes – B cells and T cells, Natural killer cells – Mononuclear phagocytes, Granulocytes, Antigen presenting cells. Clonal selection & immunologic memory. Cytokines: biological functions of IL1, tumor necrosis factoralpha, interferon –alpha, IL2, interferon-gamma.	05 Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **T.Y BSc** SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand the overall organization of the immune system.
- To learn the structure and function of antibodies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit II 2.0 Antigen-Antibody interactions	2.1 Antigens: Antigenicity, immunogenicity, epitope, factors determining immunogenicity, Haptens. Antibodies: Fine structure of immunoglobulin, Antibodymediated functions, Antibody classes, Monoclonal antibodies (concept, production and applications)	09	●Immunology by Goldsby and Kuby	●Students were explained about antigens and antibodies with the help of whiteboard.
	2.2 Antibody diversity: Multigene organization of immunoglobulin genes – Lambda, kappa & heavy chain Light chain DNA – VJ rearrangements Heavy chain DNA - VDJ rearrangements	06 Total: 15		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **F.Y BSc** SEMESTER: **II** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about nucleic acid structure and it's components in detail.
- To understand evidences and properties of nucleic acids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit II Nucleic Acids	2.1 Structure - Purine & Pyrimidine bases, ribose, deoxyribose, nucleosides and nucleotides (ATP, CTP, GTP, TTP, UTP) Formation of polynucleotide strand with its shorthand Representation	04	• Lehninger, Albert L, Biochemistry, Kalyani Publishers • Nelson, D. L. and Cox, M.M, (2008). Lehninger, Principles of Biochemistry 5th Edition, W. H. Freeman and	•Students were explained via an interactive session in classroom. • Structures of nucleic acids were drawn on whiteboard.
	2.2 RNAs (various types in prokaryotes and eukaryotes) mRNA & r RNA - general account, t RNA - clover leaf model, Ribozymes	04		•Structures of types RNAs were explained via drawing it on whiteboard.
	2.3 DNA 2.3.1 Physical evidence of DNA helical structure. Chargaff's rules (chemical evidence), Watson-Crick model of DNA & its features 2.3.2 Physical properties of DNA - Effect of heat on physical properties of DNA (Viscosity, buoyant density, UV absorption),	07		•Students were explained about the evidences and properties by drawing structures and reactions on whiteboard.

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	Hypochromism, hyperchromism, denaturation of DNA. 2.3.3 Reactions of nucleic acids (with DPA and Orcinol)	Total: 15	Company, NY., USA.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **F.Y BSc** SEMESTER: **II** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:
- To understand the parts and function of respiratory and excretory system in detail.
- To learn disorders of respiratory and excretory system and their causes in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Unit II Physiology of respiration and excretion	2.1 Respiratory system	01	● Guyton, Arthur C. and Hall, John E.;Text book of Medical physiology ; Harcourt Brace & Company Asia Pvt. Ltd.	●Students were explained about it in classroom via interactive session.
	2.2 Breathing - inspiration and expiration,	01		
	2.3 Composition of air and partial pressure of gases	01		
	2.4 Physical exchange of gases 2.4.1 Transport of oxygen 2.4.2 Transport of carbon dioxide Respiratory disorders – cyanosis, respiratory acidosis and alkalosis	03		●Students where explained about it by drawing structures and reactions on whiteboard.
	2.5 Excretion -2.5.1 Structure of the nephron: Bowman's capsule & glomerulus - Structure & function, (ultrafiltration, pressures involved, GFR, regulation of GFR); Renal tubule - structure & function (proximal and distal convoluted tubules and Henle's loop) 2.5.2 Urine	09		

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	formation: Reabsorption / Secretion of glucose, Na+, K+. HCO3 Cl^- and H+ : renal threshold, Excretory disorder: Nephritis	Total: 15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **S.Y BSc** SEMESTER: **IV** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about different movements of plants.
- To understand process of contraction and relaxation of muscles in mammals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Unit II Movement and locomotion	2.1 Movement in plants 2.1.1 Movements of Locomotion Spontaneous: Ciliary, Amoeboid, Cyclosis (Rotation, Circulation) Induced: Chemotaxis, Phototaxis, Thermotaxis 2.1.2 Movements of Curvature: Mechanical: hygroscopic movements Vital:i)Spontaneous-movements of growth(nutation, circumutation, Hyponasty, epinasty); movements of variation ii)Induced–Tropic-hapto/geo/hydrotropism; Nastic–seismonasty, Nyctynasty	10	●S.K.Verma and Mohit Verma, Plant physiology, Biochemistry and Biotechnology ●Tortora G J, Derrickson B H; Principles of Anatomy and Physiology, Wiley	●Students were explained about different movements in plants with the help of videos displayed using projector. Also they were told to make plant models at home for better understanding.
	2.2 Muscle contraction 2.2.1 Structural organization of a muscle fibre, myofibril 2.2.2 Contraction and Relaxation of Muscles; -mechanisms,	05		●Students were explained about movements of muscle with the

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	Other types of contractions–e.g. twitch, tetanus, Isotonic, Isometric regulation of Muscle contraction	Total:10		help of video displayed using projector.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **S.Y BSc** SEMESTER: **IV** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To learn about different trends in biotechnology and their applications.
- To understand process of biodegradation of various contaminants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Unit I Trends in Biotechnology	1.1 Bioremediation: 1.1.1 Introduction to terms – Bioremediation, Biotransformation, Xenobiotics, Recalcitrant xenobiotics, Biomagnification, Factors affecting bioremediation 1.1.2 Types of Bioremediation (Insitu, Exsitu); Types of reactions (Aerobic, anaerobic, sequential) 1.1.3 Applications of Biodegradation - hydrocarbons, (Oil spills) Pesticides and herbicides, Heavy metals (Uranium) contaminated soil and waste land, Ground Water; Genetically Engineered Microbes in bioremediation	08	●U. Satyanarayan ;Biotechnology, Books & allied (P) Ltd., Kolkata	●Students were explained about different trends in biotechnology with the help of videos displayed using projector.
	1.2 Biopesticides: 1.2.1 Introduction; Types of Biological Control (Classical, inoculation, Inundation); 1.2.2 Examples each of Bacterial, Viral, Fungal and Protozoal biopesticide .	04		

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	1.3 Biofungicide: Examples and applications	02		
	1.4 Biofertilizers: Examples and applications	01 Total:15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **T.Y BSc** SEMESTER: **VI** MONTH: **NOVEMBER -MARCH** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To be familiar with the MHC; its structure and classes, specific role of each class of MHC and importance in immune response and graft rejection.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit II 2.0 Major histocompatibility complex & Transplant immunology	2.1. Major histocompatibility complex: MHC polymorphism & organization of MHC genes- class I & class II; Cellular distribution & structure of class I & II molecules; Self MHC restriction of T cells. Role of antigen presenting cells.	05	●Immunology by Goldsby and Kuby	●Students were explained about MHC, transplantation and autoimmunity with the help of videos and diagrams displayed using projector.
	2.2 Transplant immunology: Types of transplant; immunological basis of allograft rejection	03		
	2.3 Autoimmunity: Organ specific –Myasthenia gravis; Rheumatoid arthritis, (immunological basis of these autoimmune diseases)	03 Total: 11		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TANVI BORE** DEPARTMENT: **BIOCHEMISTRY**

CLASS: **T.Y BSc** SEMESTER: **VI** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand the basic concepts of demography and epidemiology of aging and pathophysiology and issues in common diseases of older people.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit IV 4.0 Endocrine Diseases & Ageing	4.1 Endocrine diseases: Diabetes mellitus. Diabetes insipidus.	03	●Immunology by Goldsby and Kuby	●Students were explained about diseases with the help of videos and diagrams displayed using projector. ● They were taught about ageing using whiteboards.
	4.2 Ageing: Definition of ageing. Molecular changes during ageing. Theories of Ageing.	06		
	4.3 Alzheimer's disease	01 Total: 10		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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FIRST HALF

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: F.Y.BIOCHEMISTRY SEMESTER: I MONTH: JULY

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – II The cell- cell wall, cell membrane, cell organelles and cell division	Structural organization of cells ● Prokaryotic, Eukaryotic (plant & animal) and yeast cells - a comparative overview	1	Cell and Molecular Biology by Gerald Karp	White Board
	Cell wall structure (plant), cell membrane (fluid mosaic model) ● Cytoskeleton: microtubules & microfilaments	2	Cell and Molecular Biology by Gerald Karp	White Board
	Cell organelles ● Mitochondrion: Organization & function of the mitochondria, mitochondrial genome ● Chloroplast: Structure and function of the chloroplast. the chloroplast genome, other plastids	9	Cell and Molecular Biology by Gerald Karp	White Board

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	• Ribosome*: ER*: *Golgi* Structure & Function of Ribosome, ER, Golgi apparatus • Peroxisome & Lysosome: Peroxisome function & assembly (in brief) and Lysosome structure and function • Nucleus: Structure & function of the nucleus, nuclear envelope, nuclear pores, nuclear matrix and Nucleolus			
	Mitosis and Meiosis	3	Cell and Molecular Biology by Gerald Karp	White Board

The learners will be able to: understand about Cell and their organelles and cell division **TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: F.Y.BIOCHEMISTRY SEMESTER: I

MONTH: OCTOBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: understand the deep knowledge of carbohydrates like their classification, sources, importance and some chemical properties

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – 1 Unit – III Carbohydrates	Definition, Classification, and functions of carbohydrates (mono, oligo, polysaccharides)	2	Biochemistry -lehninger	White Board
	Monosaccharides ● Classification in terms of aldoses and ketoses ● Occurrence,structures and significance of glucose, fructose, galactose, mannose, and ribos	3	Biochemistry -lehninger	White Board
	Properties: a) Physical - isomerism D & L, optical; epimers : anomers b) Chemical reactions - ● oxidation to produce aldonic. aldaric and uronic acids (with respect to glucose); ● reducing action in boiling alkali, enediol formation (with respect to glucose and fructose) ● Osazone formation (with respect to glucose and fructose	5	Biochemistry -lehninger	White Board

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	• Orcinol (with respect to ribose)			
	Disaccharides • Occurrence and structure of maltose , lactose and sucrose • Formation of glycosidic bonds	2	Biochemistry -lehninger	White Board
	Polysaccharides Classification based on function. storage and structure i. Composition: homo & hetero. with examples ii. Storage : starch and glycogen - action of amylase on starch iii. Structural: cellulose, chitin	3	Biochemistry -lehninger	White Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.BIOCHEMISTRY SEMESTER: III

MONTH: JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: understand about physiology of body fluids

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – 2 Blood and Body Fluids	Fluid compartments of the body–ICF and ECF	3	Medical Physiology by Guyton & Hall	White Board
	Blood: Composition, characteristics and function; role of plasma proteins, Starlings hypothesis; blood clotting and factors involved	5	Medical Physiology by Guyton & Hall	White Board
	Bile: Composition, characteristics and function; storage	3	Medical Physiology by Guyton & Hall	White Board
	Urine: Composition–normal and abnormal constituents; formation of urine	2	Medical Physiology by Guyton & Hall	White Board

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	Lymph: Composition, Formation and Circulation	2	Medical Physiology by Guyton & Hall	White Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.BIOCHEMISTRY SEMESTER: III

MONTH: AUGUST ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand and gain knowledge about transportation system in plant and mammals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – 3 Biological transport mechanisms	**Transport in plants**: Role of xylem and phloem	1	S.K. Verma and Mohit Verma; Plant physiology, Biochemistry and Biotechnology	White Board
	Transport in blood: Transport of gases CO2 and O2, Role of hemoglobin, O2 dissociation curves, Bohr effect Chloride shift	5	Medical Physiology by Guyton & Hall	White Board
	Transport of Metabolites: transport of lipids – lipoproteins and their types, role of plasma protein, albumin in transport of metabolites and drugs	3	Medical Physiology by Guyton & Hall	White Board
	Transport of Ions: Fe -Ferritin and transferrin and Calcium	2	Medical Physiology by Guyton & Hall	White Board

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	Transport across cell membranes ● Channel proteins and Carrier proteins ● Passive transport (simple and facilitated diffusion) with suitable examples; concept of symport, antiport, uniport, Endocytosis and Exocytosis – with one example each ● Active transport: primary–Na+&K+ pump, secondary Glucose-amino acid transport, types of glucose transporters (GLUT 1 to GLUT 4), aquaporins, ion channel inhibitors like gramicidin and valinomycin	4	S.K. Verma and Mohit Verma; Plant physiology, Biochemistry and Biotechnology	White Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.BIOCHEMISTRY SEMESTER: V

MONTH: JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : comprehend the catabolism and anabolism of carbohydrates and the disorders associated with these biomolecules.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 1 UNIT – III Carbohydrate metabolism	Catabolism – Cellular location, sequence of reactions, labelling of carbon atoms, and energetics of: Glycolysis (aerobic and anaerobic); Oxidation of pyruvate, Kreb cycle; Glyoxylate pathway; Glycogenolysis – [schematic – no structures, but with enzymes and coenzymes]	7	Biochemistry -lehninger	Power point
	Anabolism – HMP shunt (Cellular location, sequence of reactions, multifunctional nature); Gluconeogenesis,Glycogenesis –[schematic – no structures, but with enzymes and coenzymes]	5	Biochemistry -lehninger	Power point
	Disorders of carbohydrate metabolism: - Galactosemia, Fructosemia, - Lactose intolerance	3	Biochemistry -lehninger	Power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.BIOCHEMISTRY SEMESTER: V

MONTH: AUGUST ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand the basic tools required and know the techniques of recombinant DNA technology, their applications and the use of the technology for the benefit of society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 3 UNIT – III Recombinant DNA Technology I	Introduction to RDT	1	Biotechnology by U.Satyanarayana	White Board
	Tools for RDT ● Enzymes- Restriction endonucleases, ligases, terminal transferases, reverse transcriptase: ● Cloning and Expression Vectors- Plasmid, pBR 322, PUC-19, Bacteriophage – Lambda phage; Cosmid; Artificial Chromosomes (BAC and YAC); Shuttle vectors; ● Probes- DNA probes	9	Biotechnology by U.Satyanarayana	White Board

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	Applications of RDT- Agriculture (Bt Cotton); Medicine (Insulin); GM food	5	Biotechnology by U.Satyanarayana	White Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SECOND HALF

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISWAR DEPARTMENT: BIOCHEMISTRY CLASS: F.Y.BIOCHEM SEMESTER: II MONTH: JANUARY

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand in detail about fundamental structural and functional properties of the digestive system along with some disorders related to the digestive system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 UNIT – I Physiology of digestion and absorption	Parts and Functions of gastrointestinal tract (GIT)	2	Medical Physiology – GUYTON & HALL	White Board
	Organs and Glands associated with GIT Secretions and Juices of GIT (Saliva, Gastric juice, Intestinal juice, pancreatic and Bile juice)	8	Medical Physiology – GUYTON & HALL	White Board
	Digestion and Absorption of carbohydrates	1	Medical Physiology – GUYTON & HALL	White Board

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	Digestion and Absorption of Lipid	1	Medical Physiology – GUYTON & HALL	White Board
	Digestion and Absorption of Proteins	1	Medical Physiology – GUYTON & HALL	White Board
	Disorders - Peptic ulcer, Lactose Intolerance	2	Medical Physiology – GUYTON & HALL	White Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISWAR DEPARTMENT: BIOCHEMISTRY CLASS: F.Y.BIOCHEM SEMESTER: II

MONTH: FEBRUARY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: understand about biochemical study of Lipids like definition, complex structure, importance, classification and some chemical properties.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 1 UNIT – 1 LIPIDS	Definition, classification (Bloor's) and functions of Lipids	2	Fundamental of Biochemistry by Jain & Jain	White Board
	Fatty' acids and Triacylglycerol	1	Fundamental of Biochemistry by Jain & Jain	White Board
	Classification & Chemistry, ● Saturated fatty acids - classification of C2 to C20: even carbon: Common and IUPAC names. Unsaturated fatty acids MUFA, PUFA (2.3.4 double bonds) Omega - 3.6.9 fatty acids. Triacylglycerol - simple and mixed - names and structure ● Chemical Reactions of fats	6	Fundamental of Biochemistry by Jain & Jain	White Board

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	Saponification, Iodination, Ozonolysis, Auto-oxidation, Action of heat on glycerol and choline, Rancidity Definition & significance - Acid number, Saponification number, Iodine number, Reichert - Meissel number			
	Compound Lipids ● Functions of glycerophospholipids (PE.PC.PL) Phosphosphingolipids (ceramide, sphingomyelin), Glycolipids /Cerebrosides (gluco & galactocerebrosides)	4	Fundamental of Biochemistry by Jain & Jain	White Board
	Steroids Cholesterol structure and biochemical significance.	2	Fundamental of Biochemistry by Jain & Jain	White Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISWAR DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.BIOCHEMISTRY SEMESTER: IV

MONTH: NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand basic concepts of Pharmacology and be able to understand basic information about drugs like their sources , formulation types, administration route, their pharmacokinetics effect and their novel delivery system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 3 UNIT – 2 Introduction of Pharmacology	Scope of pharmacology	1	Essentials of Pharmacology - F. S. K Brar	White Board
	Sources, Classification, Chemical & physical properties of drug and Nomenclature of drugs	4	Essentials of Pharmacology - F. S. K Brar	White Board
	Dosage forms and routes of drug administration; Factors affecting dosage and drug delivery	3	Essentials of Pharmacology - F. S. K Brar	White Board
	Pharmacokinetics: LD 50, ED 50 Half Life, Loading dose, Maintenance dose (Explanation of terms only);Therapeutic index	3	Essentials of Pharmacology - F. S. K Brar	White Board
	Novel Drug delivery system (NDDS)	1	Essentials of Pharmacology - F. S. K Brar	White Board

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	Transdermal and oral modes	1	Essentials of Pharmacology - F. S. K Brar	White Board
	Liposomes and nanoparticles	2	Essentials of Pharmacology - F. S. K Brar	White Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISWAR DEPARTMENT: BIOCHEMISTRY CLASS : S.Y.BIOCHEMISTRY

SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to **:** understand the basic concept of Eukaryotic & Prokaryotic genome, their organization up-to chromosome & Recombination of genome in Prokaryotes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – 1 Genetics : II	**Genome organization**	1	Biotechnology - U. Satyanarayan	White board
	Prokaryotic Genome: Nucleoid structure	1	Biotechnology - U. Satyanarayan	White board
	Eukaryotic chromosomes: Packaging of DNA(upto Solenoid structure), DNA supercoiling, Topoisomerase, Chromatin structure -Euchromatin, Heterochromatin, structure of condensed chromatin, Centromere, kinetochore, telomere, Comparison of chromosomal structure in prokaryotes and Eukaryotes	9	Biotechnology - U. Satyanarayan	White board
	Recombination in prokaryotes	1	Biotechnology - U. Satyanarayan	White board

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	Transformation: Transformation in *S. pneumonia* Transduction: General features with one example	1	Biotechnology - U. Satyanarayan	White board
	Conjugation: Mechanism F+, F- and Hfr strain	1	Biotechnology - U. Satyanarayan	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISAWAR DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.BIOCHEMISTRY SEMESTER: VI

MONTH: NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: understand breakdown and synthesis of fatty acid appreciate experiments carried out by scientists to enable understanding the pathways and cycles of lipid metabolism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 1 UNIT – I Lipid metabolism	Catabolism - Knoop's experiment; Beta oxidation of even carbon saturated fatty acids (C4 to C20) Energetics of fatty acid oxidation. Beta oxidation of odd carbon chain fatty acid	7	Biochemistry -lehninger	Power point
	Anabolism – FAS complex; Fatty acid biosynthesis (palmitic acid); Ketone body formation, utilization, and the physiological significance of Ketone bodies in Diabetes mellitus, Starvation, Pregnancy and Alcoholism.	8	Biochemistry -lehninger	Power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNIL JAISWAR DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.BIOCHEMISTRY SEMESTER: VI

MONTH: FEBRUARY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S
The learners will be able to: about proximate principles, nutritional status and balanced diet.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – 2 UNIT – I Nutrition	Principles of nutrition	2	Biochemistry by U.Satyanarayana	White board
	Nutrients [Proximate principles, vitamins and minerals (macro And micro- role of Ca, Mg, Na, K and Fe, Zn)], dietary fibre.	3	Biochemistry by U.Satyanarayana	White board
	Nutritional status [malnutrition (protein energy and protein calorie) and over nutrition]	2	Biochemistry by U.Satyanarayana	White board
	Balanced diet	1	Biochemistry by U.Satyanarayana	White board
	Energy Assessment - RQ, BMR;	2	Biochemistry by U.Satyanarayana	White board
	Anthropometry – BMI, Waist:hip ratio;	2	Biochemistry by U.Satyanarayana	White board
	Protein quality indices: Chemical score of amino acids, Protein	3	Biochemistry by U.Satyanarayana	White board

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	Deficiency Corrected Amino Acid Score, Net Protein utilization			

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. ROHAN LOUIS D'SOUZA** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSC.**

SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: The learner will be able to define Air Pollution.
The learner will be able to get an insight on the sources of air pollution.
The learner will be able to understand the impact of air pollution on the environment.

The learners will be able to: understand the problems associated with air pollution and the impact of air pollution on the different aspects of environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 1 **Title:** Air	**ATMOSPHERE** □ Composition and structure of atmosphere □ Particles , ions and radicals in the atmosphere □ Chemical and photochemical reactions in the atmosphere [reactions of oxygen, ozone, sulphur dioxide , nitrogen oxide and organic compounds]	08	Environmental Chemistry by Anil Kumar De	White Board-Marker
	AIR POLLUTANTS	07	Environmental Chemistry by Anil Kumar De	White Board-Marker

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	CO, Oxides of Nitrogen, SO2, hydrocarbons and photochemical smog, Greenhouse gases, suspended particulate matter[sources and effect of] , depletion of ozone			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. ROHAN LOUIS D'SOUZA** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSC.**

SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: The learner will be able to define water Pollution.
The learner will be able to get an insight on the sources of water pollution.
The learner will be able to understand the impact of water pollution on the environment and human health.

The learners will be able to: understand the problems associated with water pollution and the significance of different water treatment techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 2 **Title:** Water & Water treatment	**WATER HYDROSPHERE** Characteristics and the water cycle	05	Environmental Chemistry by Anil Kumar De	White Board-Marker
	WATER POLLUTION Organic pollutants[pesticides, insecticides, detergents, oil spills, toxic organic chemicals] Inorganic pollutants [heavy metals – Hg, Pb, As, Cd] Thermal pollution of water	05	Environmental Chemistry by Anil Kumar De & A Textbook of Environmental Chemistry and	White Board-Marker
	WATER TREATMENT Criteria for water purity, Water purification [preliminary, primary, secondary, tertiary- chlorination, ion exchange]	05		White Board-Marker

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			Pollution Control by S.S.Dara	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. ROHAN LOUIS D'SOUZA** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSC.**

SEMESTER: **VI** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: The learner will be able to define RCF & RPM, and state the relationship between them.
The learner will be able understand the Beer-Lambert law and derive it.
The learner will be able to know the different types of centrifugation techniques and their applications.
The learners will be able to: understand the working and application of a centrifuge and spectrophotometer.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I (USBCH601) Metabolism & analytical techniques-II Unit 3 **Title:** Centrifugation and Spectroscopy	**CENTRIFUGATION** RCF , RPM and derivation of an equation relating the two ; Nomogram ; Sedimentation coefficient	15	Wilson and Walker's Principles and Techniques of Biochemistry and Molecular Biology	White Board-Marker
	Types and applications of centrifuges – Clinical, High speed, Ultra centrifuge - preparative and analytical.			
	Types of centrifugation and its applications– Differential, Rate zonal, Isopycnic (Centrifugation with and without density gradients)			
	SPECTROSCOPY Beer-Lambert law, derivation , limitations, application – estimation of sugar(DNSA) and protein(Biuret); concepts of Lambda max; determination of molar extinction coefficient		Wilson and Walker's Principles and Techniques of Biochemistry and Molecular Biology **&** Analytical Chemistry Textbook (S.Y.B.Sc.) **&** epg pathshala	White Board-Marker
	Construction and working of a simple colorimeter and spectrophotometer			
	Applications of Beer-Lambert law in the estimation of sugar[DNSA] and protein[Biuret]			

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	Numericals based on the above concepts			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. ROHAN LOUIS D'SOUZA** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.BSC.**

SEMESTER: **VI** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: The learner will be able to define RCF & RPM, and state the relationship between them.
The learner will be able to understand the Beer-Lambert law and derive it.
The learner will be able to know the different types of centrifugation techniques and their applications.

The learners will be able to: understand the working and application of a centrifuge and spectrophotometer.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 (USBCH604) Immunology & pathophysiology-II Unit 3 **Title:** Virology & AIDS	General Structure of Virus **Structure and mechanism of replication in:** 1. Vaccinia 2. Polio 3. Influenza **AIDS:** Structure and genetics basis of AIDS virus. Replication of AIDS Virus. Symptoms and Causes of AIDS.	15	Fenner And White's Medical Virology & Prescott's Microbiology	White Board-Marker You-tube videos

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	AIDS Therapy.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: F.Y.BSc SEMESTER: I MONTH: JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the structure, physical and chemical properties of water, concept of solutions and ionization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit I** **Water**	**1.1 *Water*:** Its effect on Biomolecules, hydrogen bonding and structure, properties (surface tension, latent heat, specific heat, viscosity, dilectric constant, colligative properties) of water and their biological significance, water as a universal solvent. 1.1.1 Entropy and dissolution of solute 1.1.2 Effect of non polar compounds on the structure of water 1.1.3 Weak interactions of biomolecules in aqueous solutions	4	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.2 *Solutions* 1.2.1 Concepts of mole, molar, molar equivalent and normal,	5	David L. Nelson, Michal M. Cox,	White board

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	Dalton		Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	
	1.3 ***Ionization of water, weak acids and weak bases*** 1.3.1 pH: pH scale, H^+ and OH^- concentrations 1.3.2 Weak acids and bases and their dissociation constants Ka & Kb 1.3.3 Buffers - definition, action, physiological buffers - phosphate and carbonate (No derivations. Only simple problems on solutions)	6	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: T.Y.BSc SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Learn about the catabolism and anabolism of carbohydrates and the various pathways involved in the metabolism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I Carbohydrate metabolism	1.1. Catabolism – Cellular location, sequence of reactions, labelling of carbon atoms, and energetics of : Glycolysis (aerobic and anaerobic); Oxidation of pyruvate, Krebs cycle ; Glyoxylate pathway; Glycogenolysis – [schematic – no structures, but with enzymes and coenzymes]	8	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.2 Anabolism – HMP shunt (Cellular location, sequence of reactions, multifunctional nature) ; Gluconeogenesis,	7	David L. Nelson, Michal M. Cox,	White board

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	Glycogenesis – [schematic – no structures, but with enzymes and coenzymes]		Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: T.Y.BSc SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Gain knowledge about the concept of bioenergetics including electron transport chain and its inhibitors. They will also study about the oxidative phosphorylation process in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit II** **Bioenergetics & Oxidative Phosphorylation**	2.1 **Bioenergetics** Concept of free energy ; Respiratory electron transport chain – Carriers [basic chemistry, redox potentials, orientation on the membrane, sequence}; Q cycle in Complex III ; Inhibitors of electron transport – Antimycin A , Amytal, Rotenone, CN, Azide, CO Malate-Aspartate shuttle and Glycerol phosphate shuttle	7	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	2.2. **Oxidative phosphorylation** –Chemiosmotic hypothesis, Proton motive force; Structure of ATP synthase , Uncoupler- of	4	David L. Nelson, Michal M. Cox,	White board

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	ETC and Oxidative phosphoryaltion [DNP]		Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	
	2.3 **Photosynthesis** – Light and dark reactions, Z scheme and electron carriers, photophosphorylation [linear and cyclic]; Calvin cycle – schematic with enzymes	4	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: T.Y.BSc SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Gain knowledge about DNA replication process in prokaryotes, DNA damage and their repair mechanisms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit I DNA Replication & Repair	**1.1 Replication of DNA (in prokaryotes) -** Models of DNA replication : Semi-conservative, Dispersive & Conservative; Modes of DNA replication: Theta & rolling circle; Enzymes (pol I, II and III) and accessory proteins; Mechanism of semi-conservative replication;	9	iGenetics by Russel	White board
	1.2 DNA repair: Direct, Photoreactivation,O6 methyl guanine DNA methyl transferase, Excision repair, Mismatch repair, Recombination repair, SOS-error prone repair	6	iGenetics by Russel	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: T.Y.BSc SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand gene libraries,various gene transfer techniques. They will also study about processes like PCR .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit IV RDT Recombinant DNA Technology (RDT) techniques	**techniques** 15 4.1 Isolation of gene: Gene library and c-DNA library; Southern blot; Chimeric DNA	5	iGenetics by Russel	White board
	4.2 Gene Transfer: Transformation, Transfection, Electroporation, Microinjection, Liposome, Microprojectile (in brief)	3	iGenetics by Russel	White board
	4.3 Selection and screening- Antibiotic and colony hybridization	4	iGenetics by Russel	White board
	4.4 DNA Amplification by PCR	3	iGenetics by Russel	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: T.Y.BSc SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the biological and physiological characteristics of cancer, learn about carcinogens, factors affecting it and also about cancer therapy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit IV Cancer	4.1 Biology of Cancer.	2	Gerald Karp Cell and Molecular Biology: Concepts and Experiments, published by Wiley.	White board
	4.2 Physiology of Cancer cells.	2	Gerald Karp Cell and Molecular Biology: Concepts and Experiments,	White board

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			published by Wiley.	
	4.3 Carcinogens: Types (Physical, Chemical and Biological); Environmental Factor	3	Gerald Karp Cell and Molecular Biology: Concepts and Experiments, published by Wiley.	White board
	4.4. Causes of cancer.	2	Gerald Karp Cell and Molecular Biology: Concepts and Experiments, published by Wiley.	White board
	4.5 Genetics of cancer with reference to p53 and oncogenes	3	Gerald Karp Cell and Molecular Biology: Concepts and Experiments, published by Wiley.	White board

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	4.6 . Cancer therapy (Chemo – purine, pyrimidine and folate analogs)	3	Gerald Karp Cell and Molecular Biology: Concepts and Experiments, published by Wiley.	White board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: F.Y.BSc SEMESTER: II MONTH: NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Learn about lipids with respect to its classification, properties types and functions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I Lipids	**1.1** Definition, classification (Bloor's) and functions of Lipids	3	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.2 Fatty' acids and Triacylglvcerol 1.2.1 Classification &Chemistry, Saturated fatty acids - classification of C2 to C20: even carbon: Common and IUPAC names. Unsaturated fatty acids MUFA, PUFA (2.3.4 double bonds) Omega - 3.6.9 fatty acids. Triacyl glycerol - simple and mixed - names and structure 1.2.2 Chemical Reactions of	5	David L. Nelson, Michal M. Cox, Lehniger Principles of	White board

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	fats Saponification, Iodination, Ozonolysis, Auto-oxidation, Action of heat on glycerol and choline, Rancidity Definition & significance - Acid number, Saponification number, Iodine number, Reichert - Meissel number		Biochemistry, W. H. Freeman & company, New york, 4th edition	
	1.3 Compound Lipids Functions of glycerophospholipids (PE.PC.PL) Phosphosphingolipids (ceramide, sphingomyelin), Glycolipids /Cerebrosides (gluco & galactocerebrosides)	5	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.4 Steroids Cholesterol structure and biochemical significance.	2	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: F.Y.BSc SEMESTER: II MONTH: NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand about the concepts involved in human nutrition, BMR,DIT and nutritional significances of biomolecules.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit III Nutrition	**3.1** Definition: Calorie, Joule, Food calorimetry - calorific value determination by 130mb calorimeter, calorific values of proximate principles, concept of BMI, BV and PER	2	Srilakshmi, B.; Nutrition Science; New Age International publishers.	White board
	3.2 BMR – definition, factors affecting BMR, Significance of BMR in clinical diagnosis	2	Srilakshmi, B.; Nutrition Science; New Age International publishers.	White board
	3.3 SDA/DIT -General concept and significance, energy requirement of individuals for various activities- sedentary, moderate and heavy	2	Srilakshmi, B.; Nutrition Science; New	White board

SIGNATURE OF THE STAFF **SIGNATURE OF THE COORDINATOR**

			Age International publishers.	
	3.4 Nutritional significance of carbohydrates, Protein, lipids, vitamins, minerals and water	3	Srilakshmi, B.; Nutrition Science; New Age International publishers.	White board
	3.5 Formulation of balanced diet	3	Srilakshmi, B.; Nutrition Science; New Age International publishers.	White board
	3.6 Numerical problems based on above concepts	3	Srilakshmi, B.; Nutrition Science; New Age International publishers.	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: F.Y.BSc SEMESTER: II MONTH: NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand microbial growth, media required for growth, sterilization and disinfection techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit III Microbiology II	**3.1** Microbial Growth - Growth Curve, Mathematical expression, Synchronous growth, Generation time	4	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6 2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition.	White board

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	3.2 Culture media (N, C, Special requirements), Natural and Synthetic media	3	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6 2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition.	White board
	3.3 Sterilization and Disinfection techniques	3	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6 2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition.	White board

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	3.4 Physical Agent of sterilization - Temperature- Pressure (Hot Air Oven, Autoclave), Radiations (UV, Gamma) (examples with mechanism) Chemical agents of sterilization - Alcohol, Halogens, Formaldehyde	5	1)Stanier,Ingraham et al ,General Microbiology 4th & 5th Ed. 1987, Macmillan Education Ltd 6 2) Pelczar Michael J: Chan Jr.,E .C.S. , Krieg ,Noel R.; Microbiology TMH 5th Edition.	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: S.Y.BSc SEMESTER: IV MONTH: NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Gain knowledge about enzymes, its classification, kinetics,and enzyme inhibition.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I Enzymology	**1.1** Definition – Enzyme, coenzyme, cofactor, apoenzyme, holoenzyme, prosthetic group, active site , enzyme specificity, Turnover number, specific activity, Katal, IU.	2	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.2 IUB / EC classification upto one digit. Enzyme specificity :Fischers lock & key and Koshlands induced fit theories	2	David L. Nelson, Michal M. Cox, Lehniger Principles of	White board

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			Biochemistry, W. H. Freeman & company, New york, 4th edition	
	1.3 Activation energy, mechanism of enzyme action (concept of active site, single and bi- substrate reaction), factors affecting enzyme activity – substrate concentration, pH, temperature	3	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.4 Enzyme kinetics – Derivation of Michaelis - Menten equation and Lineweaver Burk plot for mono-substrate reactions and numerical problems based on them.	4	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board

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	1.5 Enzyme inhibition – Reversible and Irreversible; competitive and non competitive, (one example of each) Numerical problems on above.	4	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: S.Y.BSc SEMESTER: IV MONTH: NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Learn about various types of plant and animal hormones, their structures mechanisms and effects.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit II Plant growth regulators and endocrinology	**2.1** Plant growth regulators- Structure and function of- auxins, gibberellins, cytokinins, ethylene and abscisic acid.	3	Hall John E ; Guyton : Textbook of Medical Physiology Elsevier publishers	White board
	2.2 Definition of hormones, hormone receptor, endocrine & exocrine glands	2	Hall John E ; Guyton : Textbook of Medical Physiology Elsevier publishers	White board

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	2.3 Classification of hormones on the basis of: 2.3.1 Distance of target tissue - autocrine, paracrine, endocrine. Hierarchal organization of the mammalian endocrine 15 lectures system 2.3.2 Chemistry - One example for each sub class.	4	Hall John E ; Guyton : Textbook of Medical Physiology Elsevier publishers	White board
	2.4 Chemistry & physiological role of thyroxine, oxytocin & vasopressin, Physiological role of glucocorticoids, FSH, LH, Estrogen, Progesterone (Reproductive cycle) Mode of action of steroid hormones and epinephrine. (amplification cascade Only till the level of protein kinase A) G protein not to be covered.	6	Hall John E ; Guyton : Textbook of Medical Physiology Elsevier publishers	White board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: T.Y.BSc SEMESTER: VI MONTH: NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Learn about catabolism and anabolism of lipids, pathways involved in it and ketone body formation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I Lipid Metabolism	1.1 Lipid metabolism – , Catabolism - Knoop's experiment ; Beta oxidation of even carbon saturated fatty acids (C4 to C20) Energetics of fatty acid oxidation .	8	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board
	1.2 Anabolism – Fatty acid biosynthesis (palmitic acid) ,	7	David L. Nelson, Michal M. Cox,	White board

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	Ketone body formation, utilization, and the physiological significance of Ketone bodies in Diabetes mellitus, Starvation, Pregnancy and Alcoholism		Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI KAPADIA DEPARTMENT: BIOCHEMISTRY

CLASS: T.Y.BSc SEMESTER: VI MONTH: NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Learn about reactions of amino acids and protein metabolism, hormones and signal transduction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit II Amino acid and protein metabolism & Endocrinology	2.1 Amino acid and protein metabolism – 2.1.1 Reactions of amino acids – Transamination [GOT/GPT and mechanism of transamination] ; Decarboxylation [His, Trp, Glu, and mechanism of decarboxylation] , Deamination [oxidative – NAD(P) linked dehydrogenases and D & L - Amino acid oxidases, Non oxidative – Asp, Cys, Ser] 2.1.2 Urea cycle – Cellular location, sequence of reactions, Labeling of N atom, transport of NH3	8	David L. Nelson, Michal M. Cox, Lehniger Principles of Biochemistry, W. H. Freeman & company, New york, 4th edition	White board

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	2.2 **Endocrinology** 2.2.1 Chemistry, synthesis , secretion and physiological effects of Thyroxine and Insulin [synthesis from preproinsulin], Diabetes mellitus , Hypothyroidism [cretinism and myxedema], Hyperthyroidism [goiter – simple & toxic] Physiological role of Glucocorticoids, Oxytocin and ADH 2.2.2 Mode of action of steroid hormones, Effect of epinephrine on glycogen synthesis and breakdown [amplification cascade with G proteins, cAMP, adenylate cyclase, kinases]	7	Hall John E ; Guyton : Textbook of Medical Physiology Elsevier publishers	White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.B.Sc

SEMESTER: IV MONTH: NOVEMBER-APRIL ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand biochemical processes involved in animal and plant studies.
- Learn about different sell and tissue handling and processing techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH 401 UNIT III Approaches to Biochemical investigations	**3.1** Whole animal and plant studies - the advantages and disadvantages of any four model systems for biochemical investigation (e.g. *E.coli*, yeast, *Dictyostelium*, *C. elegans*, Drosophila, *Arabidopsis)*	05	• David L. Nelson, Michael M. Cox, Lehninger; Principles of Biochemistry, W H Freeman & Co.	• Students were explained about different biochemical investigation techniques using video explanation for working of microscopes displayed using projector. • Use of whiteboard for diagrammatic explanation.
	3.2 Organ & tissue studies	03		
	3.3 Isolated and cultured tissue and cell techniques: isolation, culture and counting of cells.	03		
	3.4 *Cell Fractionation* 3.4.1 Cell rupture – solid shear, liquid shear, high pressure, ultrasound, osmotic shock, chemical treatment (enzyme, organic solvent), temperature.	04		

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	3.4.2 Choice of suspension medium (isotonic & hypotonic solution, PBS) and separation methods.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: S.Y.B.Sc
SEMESTER: IV MONTH: NOVEMBER-APRIL ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand nervous system and the parts of the nervous system.
- Learn how all parts of nervous system are involved in a neurotransmission.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH402 UNIT III Neurophysiology	**3.1 Nervous System Classification**: CNS,PNS; Components: Neurons (3types) and Neuroglia(6types)–structure and function, Axonal transport	05	• Metzler David E. Biochemistry, The chemical reactions of living cells, Volume II. Elsevier publications.	• Students were explained about neurotransmission using video explanation for working of microscopes displayed using projector. • Use of whiteboard for diagrammatic explanation of nervous system.
	3.2 Nerve impulse transmission: Resting Membrane Potential, ion channels [voltage and ligand gated], Action Potential (depolarization, polarization and refraction period), propagation of action potential (salutatory & continuous conduction)	03		
	3.3 Synaptic transmission: Physiological anatomy of a synapse;– Electrical & Chemical synapses, Excitatory & inhibitory postsynaptic potentials, Agonists & Antagonists, inactivation of Neurotransmitter	03		

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	3.4 Neurotransmitters: Structure and function of acetylcholine, catecholamines, GABA, glutamate, glycine	04		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.B.Sc

SEMESTER: VI MONTH: NOVEMBER-APRIL ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about electrophoretic techniques and their different procedures.
- Understand about radioactivity and how it is used in biological experiments.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH601 UNIT IV Electrophoresis & Radioactivity	4.1 **Electrophoresis** 4.1.1 Principle: Factors affecting the rate of migration of sample in an electric field 4.1.2 Moving boundary and Zone electrophoresis; Components of electrophoresis unit/apparatus 4.1.3 Various support media - paper, cellulose acetate, agar, agarose and polyacrylamide 4.1.4Technique of electrophoresis with staining/visualization method • agarose electrophoresis for separation of DNA • Native PAGE for separation of proteins • SDS PAGE for molecular weight determination; • Discontinuous electrophoresis	11	• Principals and Techiniques of Biochemistry and Molecular Biology 7th Ed Wilson Walker • Analytical Biochemistry by David Holme	• Video representation with a projector for explaining electrophoretic movement in different techniques. • Whiteboard was used for explaining principle and instrumentation.

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	• Other applications of electrophoresis: blotting techniques Southern, Northern, and Western • 4.1.5 Isoelectric Focusing of protein			
	4.2 **Radioactivity-** Isotopes, Radioactive decay; Decay constant; Half-life; Measurement of radioactivity (principle)	04		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK CHAUDHARY DEPARTMENT: BIOCHEMISTRY CLASS: T.Y.B.Sc

SEMESTER: VI MONTH: NOVEMBER-APRIL ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn about different drugs and their actions inside body
- Understanding mechanism of different drugs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBCH602 UNIT IV Mechanism of Drug Action and Therapeutic drugs	**4.1 Mechanism of action of drugs:** i. Specific interaction – receptor mediated ii. Partially specific – drugs via enzymes iii. Nonspecific interactions – antimetabolites and antiseptics iv. Through Antibodies v. Placebo effects	07	Essentials of Pharmacotherapeutics by FSK Brar.	• Use of projector for explaining different drug mechanism. • Whiteboard used for drug synthesis.

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	4.2 Therapeutic drugs: (Mechanism of action and adverse effects) Anti-inflammatory – non steroid anti-inflammatory NSAID [Ibuprofen], Salicylates – [Aspirins] 4.2.1 Cardiovascular drugs- CVS [Ca channel blocker-Amlodipine, and Beta blocker – Proprenolol 4.2.2 Antibiotic – Penicillin and Sulphonamide 4.2.3 Antacid- Proton pump blocker –Omeprazole	08		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**

SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to define soil and noise pollution.
The learners will be able to understand the types of soil and noise pollution.
The learner will be able to get an insight on causes and consequences of soil and noise pollution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 3 **Title:** Soil & Noise	**Soil:** Composition of soil, Nitrogen cycle Types of soil pollution – acidification, agrochemical pollution, salinization, and contamination by metalliferous wastes **Noise:** Noise and its measurement Classification of Noise Causes and consequences of Noise pollution	15	Environmental Chemistry by Anil Kumar De The textbook of Environmental studies by Erach Bharucha Fundamental concepts in Environmental studies by Dr. D. D. Mishra	White Board-Marker

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**

SEMESTER: **V** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to differentiate between conventional and non-conventional sources of energy.

The learners will be able to understand the Sources and remedial measures for Industrial pollutants.

The learner will be able to get an insight on Environmental monitoring.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II (USBCH502) Environmental Science Unit 4 **Title:** Energy, Industrial Pollutants and Environmental Monitoring	**Energy Conventional Sources :** Coal, Coke, Natural gas (CNG), Petroleum products (Petrol, Diesel, Kerosene, Oils, Naphtha) Non-Conventional Sources : Solar , Geothermal, Tidal, Hydroelectric power, Nuclear energy, Biofuels , Natural gas (Synthetic Natural Gas) **Industrial pollutants (Sources and remedial measures):** Polymers and Plastics Asbestos Poly Chlorinated Biphenyls Mining – Acid mine drainage **Environmental monitoring:** Approaches used to monitor the environment-air, water and soil. [Principles and Significance only. Protocols for each factor – not required] Remote Sensing	15	Environmental Chemistry by Anil Kumar De The textbook of Environmental studies by Erach Bharucha Fundamental concepts in Environmental studies by Dr. D. D. Mishra	White Board-Marker

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**

SEMESTER: **VI** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to define Biostatistics and its applications.

The learner will be able to get an insight on Hypothesis testing.

The learners will be able to understand the difference between Type I and Type II errors

The learner will be able understand the Z test and its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (USBCH603) Biostatistics &Bioinformatics Unit 3 **Title:** Hypothesis Testing	Introduction; Single population mean, difference between population means Type I and Type II errors, One-tailed and two tailed tests Z-test Statistical problems based on the above concepts.	15	Biostatistics by Veer Bala Rastogi Methods in Biostatistics by BK Mahajan Introduction to Biostatistics by Dr. Pranab Kumar Banerjee	White Board-Marker

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **T.Y.B.Sc.**

SEMESTER: **VI** MONTH: **NOVEMBER-MARCH** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to define t-Test and its applications.

The learner will be able to get an insight on types of t-Test.

The learners will be able to understand the difference between t-Test and Z-Test.

The learner will be able understand the Chi-square test and its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (USBCH603) Biostatistics &Bioinformatics Unit 4 **Title:** Hypothesis Testing	t-test- Paired and unpaired Chi-square Statistical problems based on the above concepts	15	Biostatistics by Veer Bala Rastogi Methods in Biostatistics by BK Mahajan Introduction to Biostatistics by Dr. Pranab Kumar Banerjee	White Board-Marker

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BIOCHEMISTRY** CLASS: **S.Y.B.Sc.**

SEMESTER: **III** MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to define Fermenter, Biosensors, Single cell protein.
The learners will be able to understand the types of fermenter, methods of immobilization of enzymes.
The learner will be able to get an insight on applications of Biosensors and single cell protein.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (USBCH303) Applied Biochemistry I Unit 3 **Title:** Industrial Biochemistry	Basics of fermentation: Typical Fermenter, Types of Fermenters (CSTF, Bubble cap, Airlift, Fluidized Bed reactor) Industrial production of wine, penicillin Immobilized Enzyme: Introduction, Methods of immobilization (entrapment, adsorption, covalent binding, microencapsulation, cross linking) Stabilization of soluble enzyme (solvent and substrate stabilization, enzyme stabilization by polymer. Salts and chemical modification) Applications Biosensors: Features of Biosensors, classification based on transducers, applications Single Cell proteins and their applications	15	Jogdand, Advances in biotechnology S S purohit, Biotechnology fundamental and applications Michael J. Pelczar, Jr; E.C.S. Chan; Noel R. Krieg; Microbiology	White Board-Marker

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Amol Samant DEPARTMENT: Biotechnology CLASS: M.Sc. I SEMESTER: I

MONTH: AUG-DEC ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

Familiar with the basic concepts and advanced techniques used to reveal protein protein and gene protein interactions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT101 BIOCHEMISTRY **UNIT III**	Forces stabilizing nucleic acid structures, triple helix. Superhelix topology- linking number, Twist and writhing number, measurement of supercoiling and Topoisomerases. Nucleic acid binding protein leucine Zipper, Zinc fingers, OB fold, Beta Barrel, Helix-turn-helix, Helix-loop-helix. Biosynthesis of nucleic acids and inborn errors of nucleic acid metabolism. Methodologies for detection: protein, DNA – Protein interactions: Gel retardation assay, DNA foot printing, Yeast 2 Hybrid Method advantages and limitations, yeast split-hybrid and reverse two-hybrid systems, Co-Immunoprecipitation (Co-IP) and Far-Western Blot Analysis.	15	Lehninger, A. L. (2012). Principles of Biochemistry (6th edition). New York, NY: Worth. Lodish, H. F. (2016). Molecular Cell Biology (8th Ed.). New York: W.H. Freeman. Cooper, G. M., & Hausman, R. E. (2013). The Cell: a Molecular Approach (6th Ed.). Washington: ASM; Sunderland.	Ppt, Google form, Animation video,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: T.Y.B.Sc SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: 1. Students will be able to list the routes of exposure for a pathogen to a human being.
2. Students will be able to demonstrate and assess the proper use of PPE, best practices, biological containment, and be prepared to safely conduct research.
3. Students will be able to identify the role of the Biosafety Professional in Biomedical Research Laboratories

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied component UNIT-I Introduction to biosafety	Introduction; Biological Risk Assessment, Hazardous Characteristics of an Agent; Genetically modified agent hazards	04	Biosafety in Microbiological and Biomedical Laboratories - 5th Edition, L. Casey Chosewood Deborah E. Wilson U.S. Department of Health and Human Services Centers for Disease Control and Prevention National Institutes of Health.	CHALKBOARD METHOD, TEACHING AIDS
	Cell cultures; Hazardous Characteristics of Laboratory Procedures; Potential Hazards Associated with Work Practices	04		
	Safety Equipment and Facility Safeguards	02		
	Pathogenic risk and management	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Amol Samant DEPARTMENT: Biotechnology CLASS: M.Sc. I SEMESTER: I

MONTH: AUG-DEC ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

Familiar with the basic concepts and advanced techniques used to reveal protein protein and gene protein interactions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT101 BIOCHEMISTRY **UNIT III**	Forces stabilizing nucleic acid structures, triple helix. Superhelix topology- linking number, Twist and writhing number, measurement of supercoiling and Topoisomerases. Nucleic acid binding protein leucine Zipper, Zinc fingers, OB fold, Beta Barrel, Helix-turn-helix, Helix-loop-helix. Biosynthesis of nucleic acids and inborn errors of nucleic acid metabolism. Methodologies for detection: protein, DNA – Protein interactions: Gel retardation assay, DNA foot printing, Yeast 2 Hybrid Method advantages and limitations, yeast split-hybrid and reverse two-hybrid systems, Co-Immunoprecipitation (Co-IP) and Far-Western Blot Analysis.	15	Lehninger, A. L. (2012). Principles of Biochemistry (6th edition). New York, NY: Worth. Lodish, H. F. (2016). Molecular Cell Biology (8th Ed.). New York: W.H. Freeman. Cooper, G. M., & Hausman, R. E. (2013). The Cell: a Molecular Approach (6th Ed.). Washington: ASM; Sunderland.	Ppt, Google form, Animation video,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Amol Samant DEPARTMENT: Biotechnology CLASS: M.Sc. SEMESTER: III

MONTH: AUG-DEC ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

Familiar with the basic concepts and significance of Biologics/Biosimilar in addition to having knowledge about its therapeutic applications

Knowledgeable in the steps involved in the production of Biologics/Biosimilars Aware of the protocols/techniques required for characterization

of the Biosimilar relative to the Reference Biologic Acquainted with the regulatory aspects of approval of a Biosimilars.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT303 Biologics and Regulatory Affairs **UNIT III**	Appearance, particulates, pH, osmolality, particle size Molecular Weight, Protein Sequence and/or amino acid composition Glycosylation, Sialylation, Phosphorylation, Acetylation, and Myristoylation, if any Sulfhydryl groups(s) and di-sulphide bridges. Size and Purity on HPLC/ MALDI Isoform pattern. Gel electrophoresis (IEF, SDS PAGE and Native PAGE), Western blot Fluorescence spectrum FTIR spectrum and NMR spectrum Bioassays, characterization using Monoclonal Antibody as an example	15	Introduction to Biologic and Biosimilar Product Development and Analysis, Karen M. Nagel, AAPS Introductions in the Pharmaceutical Sciences, ditor-in-Chief: Robin M. Zavod, Midwestern University, Downers Grove, IL, USA. Biosimilars of Monoclonal Antibodies, A Practical Guide to Manufacturing, Preclinical, and Clinical Development. Edited by Cheng Liu, Ph.D.,K. John Morrow, Jr., Ph.D., Copyright c 2017 by John Wiley & Sons, Inc. All rights reserved. Published by John Wiley & Sons, Inc., Hoboken, New Jersey.	Ppt, Google form, Animation video,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Amol Samant DEPARTMENT: **BIOTECHNOLOGY** CLASS: FYBSc

SEMESTER: **II** MONTH: **DECEMBER - MARCH** ACADEMIC YEAR: **2022 -2023**

LEARNING OBJECTIVE/S:
The learners will be able to :

- Learn about fundamental structures and functions of amino acids & proteins.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Biochemistry **Unit I** **Proteins and amino acids**	Amino acids: General introduction, Classification and structures, properties (physical & chemical) Amino Acids as drugs. Titration Curve of Amino Acids. Concept of Isoelectric pH, Zwitterion Reactions of Amino Acids: Sorenson's Titration, Ninhydrin Test	15	Biochemistry, Lehninger Biochemistry, Satyanarayan	GC for sharing reference presentation and assignments

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	Proteins: Introduction, definition and functional classification. Classification of Proteins: Simple- Fibrous and Globular Conjugated- Nucleoprotein, Lipoprotein, Glycoprotein, Phosphoprotein, Chromoprotein, Metalloprotein Derived- Primary and Secondary Peptide bond: Features Example of Dipeptide, tripeptide,Nonapeptide e.g., Oxytocin, Vasopressin Amino acid composition of Bovine Cytochrome C and Bovine Chymotrypsinogen Three-dimensional Structure of proteins: Concept of Monomeric, dimeric and multimeric proteins Primary structure - Peptide linkage, Native			

	Secondary structure - Alpha Pleat and Beta fold; Spatial arrangements of adjacent amino acid residues Tertiary structure - Three-Dimensional arrangement Quaternary structure Di and Multimeric proteins E.g., structure of human Insulin Properties of proteins: Solubility, Molecular weight, Shape, Iso electric pH, Salting out of proteins for purification Protein Denaturation and folding: Denaturing agents and properties of denatured proteins			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Amol Samant DEPARTMENT: Biotechnology CLASS: M.Sc. I SEMESTER: II

MONTH: JAN-MAY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

Able to learn about drug discovery-design pathway using some in-silico tools.

Able to understand the clinical trial design set up as well as they will gain

information on rules-regulation and responsibilities in clinical studies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT403 **Drug Discovery** **&** **Clinical Study** **UNIT I**	Introduction to the drug discovery & development Source of drugs Structural effects on drug action Drugs derived from natural products General principles of pharmacology Drug development and testing process Approaches to new drug discovery Computer-aided drug design Identification of novel drug candidates and drug targets Construction the signaling network of a drug using integer linear programming Identification for druggable targets of a disease	15	Introduction to Basics of Pharmacology and Toxicology, Volume 1: General and Molecular Pharmacology: Principles of Drug Action, Chapter 3 Basic & Clinical Pharmacology, 2017, Fourteenth Edition, Section I, Chapter 1. Software based approaches for drug designing and development: A systematic review on commonly used	Ppt, Google classroom, online software

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			software and its applications, Bulletin of Faculty of Pharmacy, Cairo University 55 (2017) 203–210 Bioinformatics and Drug Discovery, Third Edition, (A Computational Platform and Guide for Acceleration of Novel Medicines and Personalized Medicine, Chapter 10)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Amol Samant DEPARTMENT: **BIOTECHNOLOGY** CLASS: SYBSc

SEMESTER: **IV** MONTH: **DECEMBER - MARCH** ACADEMIC YEAR: **2022 -2023**

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of lipid metabolism
- Learn nucleotide metabolism pathway

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 401 BIOCHEMISTRY U3-LIPID METABOLISM	Mobilization, Transport of Fatty Acids.	2	Lehninger principles of biochemistry, 4th edition, Nelson and Cox	GC for sharing reference presentation and assignments
	Beta, Alpha and Omega Oxidation of Saturated Fatty Acids; Oxidation of Unsaturated Fatty Acids; Oxidation of Odd Chain Fatty Acids. Energy Yield, Ketone Body Breakdown to Yield Energy.	9		
	Nucleotide Metabolism :	4		

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	Degradation of Purines and Pyrimidines.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Amol Samant DEPARTMENT: **BIOTECHNOLOGY** CLASS: SYBSc

SEMESTER: **IV** MONTH: **DECEMBER - MARCH** ACADEMIC YEAR: **2022 -2023**

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of lipid metabolism
- Learn nucleotide metabolism pathway

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 401 BIOCHEMISTRY U3-LIPID METABOLISM	Mobilization, Transport of Fatty Acids.	2	Lehninger principles of biochemistry, 4th edition, Nelson and Cox	GC for sharing reference presentation and assignments
	Beta, Alpha and Omega Oxidation of Saturated Fatty Acids; Oxidation of Unsaturated Fatty Acids; Oxidation of Odd Chain Fatty Acids. Energy Yield, Ketone Body Breakdown to Yield Energy.	9		
	Nucleotide Metabolism :	4		

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	Degradation of Purines and Pyrimidines.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Amol Samant DEPARTMENT: **BIOTECHNOLOGY** CLASS: TYBSc

SEMESTER: **VI** MONTH: **DECEMBER - MARCH** ACADEMIC YEAR: **2022 -2023**

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of wastewater treatment system
- Learn how microbes can be used in wastewater treatment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 604 Environmental Biotechnology U3-Wastewater treatment	Wastewater treatment- introduction, biological treatment, impact of pollutants on biotreatment, use of packaged organisms and genetically engineered organisms in waste treatment	5	Environmental Biotechnology (Industrial pollution management) S.D. Jogdand Himalaya Publishing House	GC for sharing reference presentation and assignments
	Heavy metal pollution – sources, microbial systems for heavy metal accumulation, techniques used for heavy metal removal	5		
	biosorption by bacteria, fungi and algae, factors affecting biosorption, limitations of biosorption	5		

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			Environmental Biotechnology (Basic concepts and applications) Indu Shekar Thakur IK International	
USBT 604 Agri Biotechnology Unit III Molecular Markers in Plant Breeding	Genetic markers in plant breeding-- Classical markers, DNA markers (RFLP, RAPD, AFLP, SSR, SNP)- Application of Molecular Markers to Plant Breeding [quantitative trait locus (QTL) mapping] - Plant DNA Barcoding- Barcoding Markers (matK, rbcl, ITS, tmH-psbA), steps, recent advances, Benefits, Limitations	15	S.B. Anderson (ed.), Plant Breeding from Laboratories to Fields, InTech,2013 M. Ajmal Ali, G. Gyulai, F. Al-Hemaid -Plant DNA Barcoding and Phylogenetics, LAP	GC for sharing reference presentation and assignments

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			Lambert Academic Publishing (2015)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: I MONTH: AUGUST ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To Predict the names of common ionic compounds and simple molecular compounds from their formulas.
To understand the difference between valence band theory and molecular orbital theory.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I- Nomenclature and Chemical bonds	Classification and Systematic Nomenclature of organic compounds (few examples)	04	NCERT 12th Chemistry Textbook	CHALKBOARD METHOD, TEACHING AIDS
	Chemical Bonds: Types and transition between the main types of bonding. **Ionic Bond:** Nature of Ionic Bond, factors influencing the formation of Ionic Bond. Structure of NaCl and CsCl.	05		
	Covalent Bond: Nature of Covalent Bond, Types of covalent bond (Polar and Coordinate covalent bonds). Structure of CH4, NH3, H2O, Shapes of BeCl2, BF3.	03		
	Hydrogen Bond: Theory of Hydrogen Bonding and Types of Hydrogen Bonding (with examples of RCOOH, ROH, Salicylaldehyde, Amides and Polyamides).	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: FYBSC SEMESTER:I

MONTH: October to December ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to:

Identify various physical and chemical agents of controlling microorganisms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 104 Basic Life Sciences-II: Microbial Techniques Unit II Sterilization Techniques	Definition: Sterilization and Disinfection. Types and Applications Dry Heat, Steam under pressure, Gases, Radiation and Filteration	04	Microbiology by Pelczar, Chan & Krieg 5th E	Power point presentation and topic related videos
	Chemical Agents and their Mode of Action - Aldehydes, Halogens, Quaternary Ammonium Compounds, Phenol and Phenolic Compounds, Heavy Metals, Alcohol, Dyes, and Detergents	04	Microbiology by Pelczar, Chan & Krieg 5th E	Power point presentation and topic related videos
	Ideal Disinfectant. Examples of Disinfectants and Evaluation of Disinfectant	02	Fundamentals of Microbiology by Frobisher 9th Ed	Power point presentation and topic related videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: FYBSC SEMESTER:I

MONTH: October to December ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to:

Identify various physical and chemical agents of controlling microorganisms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 104 Basic Life Sciences-II: Microbial Techniques Unit II Sterilization Techniques	Definition: Sterilization and Disinfection. Types and Applications Dry Heat, Steam under pressure, Gases, Radiation and Filteration	04	Microbiology by Pelczar, Chan & Krieg 5th E	Power point presentation and topic related videos
	Chemical Agents and their Mode of Action - Aldehydes, Halogens, Quaternary Ammonium Compounds, Phenol and Phenolic Compounds, Heavy Metals, Alcohol, Dyes, and Detergents	04	Microbiology by Pelczar, Chan & Krieg 5th E	Power point presentation and topic related videos
	Ideal Disinfectant. Examples of Disinfectants and Evaluation of Disinfectant	02	Fundamentals of Microbiology by Frobisher 9th Ed	Power point presentation and topic related videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Amol Samant DEPARTMENT: Biotechnology CLASS: F.Y.B.Sc. SEMESTER: I

MONTH: Jun-Nov ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Experiments which proved DNA as a transforming element and RNA as a genetic material.

2. DNA repair mechanisms system

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT106 **MOLECULAR BIOLOGY I** **UNIT I** **Chromosome structure, composition and packing**	The Composition and structure of DNA and RNA: Nucleotide and Nucleoside, Structure of nucleotides. Structure of DNA. DNA double helix – Watson and Crick's Model. Structure of RNA. Types of RNA. Organization of DNA in chromosome: Viral and Prokaryotic Chromosomes. Eukaryotic Chromosomes. Histone and Non-histone proteins. Nucleosome Structure. Packaging of DNA into chromosomes. Euchromatin and Heterochromatin. Centromeres and Telomeres Chromosome Banding Techniques. Karyotype and Idiogram	15	Genetics - Peter A Textbook o f Russell 5th edition.	Ppt, Demo video

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USBT106 **MOLECULAR BIOLOGY I** **UNIT III** **Mutation and repair**	Definition and concept of Mutations: Classification of mutations Types of Point Mutations, Types of Spontaneous and induced mutations Mutagenesis and types of Mutagens. (Examples of Physical, Chemical and Biological Mutagens) DNA repair: Photoreversal, Base Excision Repair, Nucleotide Excision Repair, Mismatch Repair, SOS Repair.	15	Genetics - Peter A Textbook o f Russell 5th edition.	Ppt, Animation video

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: II MONTH: JANUARY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: To acquaint students Knowledge of Redox reaction.
The learners will be able to : Understand the relationship between oxidation and reduction.

Learn to assign oxidation numbers to different elements and compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 202 PHYSICAL CHEMISTRY UNIT III OXIDATION REDUCTION REACTIONS	Principles of Oxidation & Reduction Reactions Oxidising and Reducing Agents, Oxidation Number	02	XI STD MAH.STATE BOARD TEXT BOOK	CHALK BOARD, PRESENTATION AND TEACHING AIDS
	Rules to assign Oxidation Numbers with examples Ions like Oxalate, Permanganate and Dichromate	06		
	Balancing Redox Reactions by Ion Electron Method	05		
	Oxidation, Reduction, Addition and Substitution and Elimination Reactions.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: II MONTH: JANUARY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: To acquaint the students with some core aspects of physical chemistry
The learners will be able to : Learn the concept of thermodynamics and problems related to it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 203 Basic Chemistry-II UNIT 1 - Thermodynamics	**Thermodynamics:** System, Surrounding, Boundaries Sign Conventions, State Functions, Internal Energy and Enthalpy: Significance, examples, (Numericals expected.)	05	NCERT 12th Chemistry Textbook	CHALKBOARD METHOD, TEACHING AIDS
	Laws of Thermodynamics and its Limitations: Mathematical expression. Qualitative discussion of Carnot Cycle for ideal Gas and Mechanical Efficiency. Laws of Thermodynamics as applied to Biochemical Systems.	06		
	Concept of Entropy, Entropy for Isobaric, Isochoric and Isothermal Processes.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Amol Samant DEPARTMENT: Biotechnology CLASS: S.Y.B.Sc. SEMESTER: III

MONTH: Jun-Nov ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Basic concept of types of selectivity base organic reaction
2. Microwave and ultrasound assisted organic synthesis
3. Concept of Retrosynthesis

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT302 Applied Chemistry- **UNIT-II**	Ideal criteria of organic synthesis, types of selectivity, multicomponent reaction, Microwave and ultrasound assisted organic synthesis, Solid phase peptide synthesis, Retrosynthesis	15	College Organic Chemistry for T.Y. B.Sc. 181-85, 186-89 (Himalaya Publishing House)	Ppt, Google form, Animation video

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Swati Chaudhari

DEPARTMENT: Biotechnology

CLASS: S.Y.B.Sc

SEMESTER: III

MONTH: September- December

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Describe chemical and biological assay methods, Bioavailability and Bioequivalence concept.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III *In-vivo* and *Invitro* Assay of Industrial Products	Assay of Industrial Products: Chemical - Types and Subtypes; Kinetics. Advantages and Disadvantages.	6	Industrial Microbiology- A. H. Patel Industrial Microbiology- L. E. Casida- John Wiley & Sons	Power point Presentation Mind Map You Tube Videos Teaching Aids
	Biological; Types and Subtypes; Kinetics. Advantages and Disadvantages.	6		
	Bioavailability and Bioequivalence Studies	2		
	Half-Life Determination of Pharmacological Products.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: S.Y.B.Sc SEMESTER: IV MONTH: NOVEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: To have a firm foundation of the fundamentals and applications of current Chemical Theories for the Physical World.
The learners will be able to : Understand the different aspects of Analytical Chemistry.
Gain knowledge about various separation techniques.
Learn the benefits and limitations of different sampling strategies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT402 APPLIED CHEMISTRY-II UNIT I SAMPLING AND SEPARATION TECHNIQUES	Sampling : Importance of Sampling and Sampling Techniques Types of Sampling - Random and Non-Random Sampling of Solids, Liquids and Gases.	06	Text Book of T.Y. B.Sc Analytical Chemistry Revised Syllabus	CHALKBOARD METHOD, YOU TUBE VIDEOS AND PRESENTATION
	Separation Techniques : Types of Separation Techniques - Filtration, Zone Refining, Distillation, Vacuum Distillation.	03	S.Y.B.Sc Analytical Chemistry Text Book-Sheth Publishers	
	Solvent Extraction - Partition Coefficient and Distribution Ratio, Extraction Efficiency, Separation Factor,	02		
	Role of Complexing Agents, Chelation, Ion Pair Formation, Solvation, and Soxhlation.	02		
	Centrifugation - Basic Principles of Sedimentation.	02	Fundamentals of Bioanalytical Techniques and Instrumentation - A. K.SRIVASTAVA	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Swati Chaudhari

DEPARTMENT: Biotechnology

CLASS: T.Y.B.Sc

SEMESTER: V

MONTH: August- October

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Describe general properties of virus, classification schemes, cultivation systems and virus purification and assay.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 502 Medical Microbiology and Instrumentation Unit 1-Virology	Introduction to viruses-Position in biological spectrum; Virus properties -	2	Foundations In Microbiology by Talaro and Talaro Third edition W.C Brown. Understanding Viruses by Teri Shors II	Powerpoint Presentations Mind Maps Youtube Videos Teaching Aids
	General structure of viruses Baltimore Classification and Taxonomy(ICTV) -	2		
	Cultivation of viruses	2		
	Reproduction of ds DNA phages Hepatitis /ss RNA (influenza), animal viruses and plant (TMV)virus	4		
	Virus purification and assays	2		

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	Cytocidal infections and cell damage	2	Microbiology by Prescott Harley and Klein 5th edition Mc Graw Hill	
	Viroids and Prions	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Amol Samant DEPARTMENT: Biotechnology CLASS: T.Y.B.Sc. SEMESTER: V

MONTH: Jun-Nov ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Basic concept, working principle of Affinity chromatography, Size exclusion chromatography, ion exchange chromatography
2. HPLC method validation
3. Radioisotopes and detection system

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT502 Cell biology + Medical Microbiology and Instrumentation **Unit IV**	Affinity Chromatography, SE Chromatography, IE Chromatography,	16	Principles and techniques of biochemistry and molecular biology, 7th ed - Wilson Walker Principles and techniques of biochemistry and molecular 5th edition	Ppt, Google form, Animation video Chromatography demo video
	Isotope Biology, GM Counter, Scintillation Counter,			
	Autoradiography, Tracer Technique, HPLC METHOD VALIDATION			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____16_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: T.Y.B.Sc SEMESTER: V MONTH: NOVEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: To understand concepts related to the general principles of pharmacology.
The learners will be able to : Understand the general mechanisms of the drug action and effect in the human body.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 603 BASIC PHARMACOLOGY AND NEUROCHEMISTRY UNIT I GENERAL PRINCIPLES OF PHARMACOLOGY	Mechanism of drug action , drug receptors and biological responses	04	Modern Pharmacology with clinical Applications Craig,C.R, Stitzel,R.E 5th edition	CHALKBOARD METHOD, YOU TUBE VIDEOS
	second-messenger systems, the chemistry of drug–receptor binding, dose–response relationship: therapeutic index	05		
	ED, LD; Potency and Intrinsic Activity	04		
	Drug antagonism	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: FYBSC SEMESTER:I

MONTH:August to November ACADEMIC YEAR: 2022-23

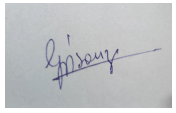
LEARNING OBJECTIVE/S:
The learners will be able to:

Identify Parts of speech, Articles, Modals, Sentences and their types., Punctuation marks

Develop an understanding of communication skills required to excel in real work environment and corporate life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT107 Unit I Academic skills	Essentials of Grammar: Parts of speech, Articles, Modals, Sentences and their types., Punctuation marks	03	Kumar, Sanjay, and Lata, Pushp. Communication Skills, Second Edition. India, Oxford University Press, 2015.	Lecturing, worksheets

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: POOJAKANWAR M. SOLANKI DEPARTMENT: BIOTECHNOLOGY CLASS: F.Y.B.Sc SEMESTER:II MONTH: **MARCH**

ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S: The objective of this course is to make students aware of Physiological Processes in Plants.
The learners will be able to : Understand the various processes in plants with its physiology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT203: PHYSIOLOGY AND ECOLOGY UNIT I: PLANT PHYSIOLOGY	Photosynthesis, Intracellular,Organization of Photosynthetic System Fundamental Reactions of Photosynthesis, Photosynthetic Pigments, Role of Light. Hill Reaction and its Significance, Light Reactions, Cyclic and Non-Cyclic Photo induced Electron Flow, Energetics of Photosynthesis,	7	Plant physiology Of V. verma	CHALKBOARD METHOD
	Photorespiration, Dark Phase of Photosynthesis, Calvin Cycle, C-3, C-4 pathways	4	SAME AS ABOVE	CHALKBOARD METHOD
	Plant hormones - Auxin ,Gibbrellins, Cytokinins, Ethylene, Abscissic acid	3	SAME AS ABOVE	CHALKBOARD METHOD, TEACHING AIDS
	Introduction to secondary metabolites	1	SAME AS ABOVE	CHALKBOARD METHODS, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: POOJAKANWAR M. SOLANKI DEPARTMENT: BIOTECHNOLOGY CLASS: S.Y..B.Sc SEMESTER: IV MONTH: **MARCH** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S: The objective of this course is to make students aware of the regulation of gene expression.
The objective of this course is to have an insight into the mechanism of gene expression and Regulation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT305: MOLECULAR BIOLOGY UNIT III: REGULATION OF GENE EXPRESSION	In Prokaryotes: In Bacteria : lac Operon of E.coli; trp Operon of E.coli. In Viruses : Lytic / Lysogenic Regulation	4	iGenetics- Peter Russell -Pearson Education	CHALKBOARD METHOD
	In Eukaryotes : Operons in Eukaryotes; Control of Transcriptional Initiation;	4	SAME AS ABOVE	CHALKBOARD METHOD
	Gene Silencing and Genomic Imprinting;	4	SAME AS ABOVE	CHALKBOARD METHOD, TEACHING AIDS
	Post-Transcriptional Control; RNA Interference	3	SAME AS ABOVE	CHALK BOARD METHODS, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: POOJAKANWAR M. SOLANKI DEPARTMENT: BIOTECHNOLOGY CLASS: T.Y..B.Sc SEMESTER: **VI** MONTH: **MARCH**

ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S: The objective of this course is to make students aware about the renewable sources of energy for sustainable development .
At the end of the unit students will be able to understand about renewable energy sources as well as biogas, biofuels and Petrocrops.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT604: ENVIRONMENTAL BIOLOGY UNIT I: RENEWABLE SOURCES OF ENERGY	Energy sources renewable – solar energy, wind power, geothermal energy and hydropower, biomass energy	4	Environmental Biotechnology Allan Scragg Oxford University press	PPT PRESENTATION
	Biogas technology- biogas plant & types, biodigester.	4	Environmental Biotechnology (Basic concepts and applications) Indu Shekar Thakurm	PPT PRESENTATION
	Biogas- composition, production and factors affecting production, uses	4	SAME AS ABOVE	PPT PRESENTATION
	Biofuels – ethanol production. petrocrops	3	SAME AS ABOVE	PPT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: S.Y.B.Sc SEMESTER: III MONTH: **DECEMBER** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S: The objective of this course is to have a firm foundation of the fundamentals and applications of current biophysical theories.
The learners will be able to: Develop an understanding of the different aspects of classical Physics.
Be able to relate principles of Physics to applications and techniques in the field of Biology such as Electrophoresis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT301: BIOPHYSICS UNIT III: ELECTROPHORETIC TECHNIQUES	Migration of Ions in an applied electric field;Factors affecting Electrophoretic Mobility;Moving Boundary Electrophoresis	03	BIOPHYSICAL CHEMISTRY, UPADHYAY,UPADHYAY,NATH	POWERPOINT PRESENTATION, TEACHING AIDS
	Principle of Electrophoresis; Supporting Matrix;	02	SAME AS ABOVE	TEACHING AIDS, POWERPOINT PRESENTATION
	Paper Electrophoresis; AGE; Native and SDS PAGE (reducing and non-reducing, continuous and discontinuous)	05	SAME AS ABOVE	POWERPOINT PRESENTATION, TEACHING AIDS
	IEF and 2D PAGE. Staining and Detection Methods; Gel-Documentation. Applications in Biology	05	SAME AS ABOVE	POWERPOINT PRESENTATION, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: SYBSC SEMESTER: II

MONTH: January to April ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

Gain an understanding of the causes, types and control methods for environmental pollution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT303 IMMUNOLOGY UNIT I Effectors of Immune Response	**Sources of Pollution.** **Air Pollution:** Types; Sources; Classification of Air Pollutants; Air Pollution Monitoring and Control.	05	Environmental Biotechnology Indu shekar Thakur IK International (Basic concepts and applications)	Power point presentation & Topic related videos
	Water Pollution: Causes, Types and Classification; Eutrophication; Assessment of Water Quality-Pollutant Monitoring and Control;		Environmental Biotechnology Indu shekar Thakur IK International (Basic concepts and applications)	Power point presentation & Topic related videos
	Soil and Solid Waste Pollution: Characteristics of Wastes, Impacts of Solid waste on Health, Occupational Hazards and Control. **Soil Erosion :** Concept, Causes and Effects.	05	Environmental Biotechnology Indu shekar Thakur IK International (Basic concepts and applications)	Power point presentation & Topic related videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY CLASS: F.Y.B.Sc SEMESTER: I MONTH: **DECEMBER** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S: The aim of this course is to enlighten students about various microbial techniques.
The learners will be able to: Understand different microscopes and their applications.

Differentiate between different stains and dyes along with types of them.

Learn variety of staining techniques used in the field of microbiology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT104: MICROBIAL TECHNIQUES UNIT I: MICROSCOPY AND STAINS	Microscope- Simple and Compound: Principle. Parts, functions and applications.	04	Prescott's microbiology by Wiley, Sherwood and Woolverton	POWERPOINT PRESENTATION, TEACHING AIDS
	Dark field and Phase contrast microscope	03	SAME AS ABOVE	TEACHING AIDS, POWERPPOINT PRESENTATION
	Stains and staining solutions-Definition of dye and chromogen. Structure of dye and chromophore.	03	Fundamental principles of bacteriology, A.J.Salle	POWERPOINT PRESENTATION
	Functions of mordant and fixative. Natural and synthetic dyes.	02	SAME AS ABOVE	POWERPOINT PRESENTATION
	Simple staining, Differential staining and acid fast staining with specific examples	03	SAME AS ABOVE	TEACHING AIDS, POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: II MONTH: **MARCH** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S: The objective of this course is to make students aware of the branches of genetics and its importance
The learners will be able to : Understand the genetics structure of populations.

Learn the genetic variations and its measurements at protein and DNA level.

Gain knowledge about various factors that lead to study of population genetics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT204: GENETICS UNIT III: POPULATION GENETICS	Genetic structure of populations – genotypic frequencies and allelic frequencies,	05	IGenetics: A Mendelian approach, P. J. Russell	CHALK BOARD METHOD
	Hardy- Weinberg law and its assumptions	03	SAME AS ABOVE	CHALK BOARD METHOD
	Genetic variations in populations- Measuring genetic variation at protein level and measuring genetic variations at DNA level	03	SAME AS ABOVE	CHALK BOARD METHOD, TEACHING AIDS
	Natural Selection. Genetic Drift Speciation Role of population genetics in Consevation biology	04	SAME AS ABOVE	CHALK BOARD METHODS, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY CLASS: M.Sc. SEMESTER: I MONTH: **DECEMBER** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S: The aim of this course is to enlighten students about various microscopic techniques.
The learners will be able to: Understand the principle and working of basic and advanced microscopic techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT104: UNIT II- BASIC AND ADVANCED MICROSCOPY	Light Microscopy: lenses and microscopes, resolution: Rayleigh's Approach, Darkfield; Phase Advanced Contrast; Differential Interference Contrast; Microscopy: fluorescence and fluorescence microscopy: what is fluorescence, what makes a molecule fluorescent, fluorescence microscope; optical arrangement, light source; filter sets: excitation filter, dichroic mirror, and barrier, optical layout for image capture; CCD cameras; back illumination, binning; recording color; three CCD elements with dichroic beamsplitters, boosting the signal. Confocal microscopy.	06	Campbell, I. D. (2012). Biophysical Techniques. Oxford: Oxford University Press Serdyuk, I. N., Zaccai, N. R., & Zaccai, G. (2007). Methods in Molecular Biophysics: Structure, Dynamics,	POWERPOINT PRESENTATION,

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			Function. Cambridge: Cambridge University Press.	
	Advanced fluorescence techniques: FLIM, FRET, and FCS, Fluorescence Lifetime, Fluorescence Resonant Energy Transfer (FRET), Fluorescence Correlation Spectroscopy (FCS)	03	Huang, B., Bates, M., & Zhuang, X. (2009). Super-Resolution Fluorescence Microscopy. Annual Review of Biochemistry, 78(1)	TEACHING AIDS,
	Evanescent Wave Microscopy; Near-Field and Evanescent Waves, Total Internal Reflection Microscopy; Near-Field Microscopy; Beyond the Diffraction Limit: Stimulated Emission Depletion (STED), Super-Resolution Summary, Super Resolution Imaging with Stochastic Optical Reconstruction Microscopy (STORM) and Photoactivated Localization Microscopy (PALM).	06	Serdyuk, I. N., Zaccai, N. R., & Zaccai, G. (2007). Methods in Molecular Biophysics: Structure, Dynamics, Function. Cambridge: Cambridge University Press.	POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: M.Sc. SEMESTER: II MONTH: **APRIL** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S: The aim of this course is to enlighten students about types of intellectual property.
The learners will be able to: Understand the concepts of novelty, inventive steps and moral issues in patenting inventions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT104: UNIT 1- INTRODUCTION TO IPR	Introduction to intellectual property; types of IP: patents, trademarks, trade secrets, copyright & related IPR rights, industrial design, geographical indications	05	Ganguli, P. (2001). Intellectual Property Rights: Unleashing the Knowledge Economy. Tata McGraw-Hill Publishing Company	POWERPOINT PRESENTATION, LMS (PADLET)
	Biodiversity importance and legislation, International convention and treaties;	05	Kshitij Kumar Singh (auth.) - Biotechnology and Intellectual Property Rights_ Legal and Social Implications-Springer India (2015)	TEACHING AIDS,
	Plant variety protection and farmers rights act. , traditional knowledge	05	Kshitij Kumar Singh (auth.) - Biotechnology and Intellectual Property Rights_ Legal and Social Implications-Springer India (2015)	POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY CLASS: M.Sc.

SEMESTER: II MONTH: **MARCH** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S: The aim of this course is to enlighten students about basics of patents.
The learners will be able to: Understand the eligibility criterion for patenting.

Learn about drafting patent application and infringement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT204: UNIT II- PATENTS	Basics of patents: eligibility criteria, classification of patents, categories, special patents and patenting biological products. Patentable and Non-patentable inventions in India and abroad.	05	Ganguli, P. (2001). Intellectual Property Rights: Unleashing the Knowledge Economy. Tata McGraw-Hill Publishing Company.	POWERPOINT PRESENTATION,
	Process of Patenting, Patent Search and Inventor's homework, drafting patent applications, patenting systems. Rights of the patent holder	05	Kshitij Kumar Singh (auth.) - Biotechnology and Intellectual Property Rights_ Legal and Social Implications-Springer India (2015)	TEACHING AIDS,
	Assignment and licensing of patents and patent Infringement, case studies. Patent Agent	05	Singh, S. S. (2004). The Law of Intellectual Property Rights. Deep and Deep Publications, New Delhi, 96.	POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY CLASS: M.Sc. SEMESTER: III

MONTH: **DECEMBER** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S: The aim of this course is to enlighten students about hazardous waste management of water.
The learners will be able to: Understand types of phytoremediation.Learn about strategies involved in phytoremediation and about biofilms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT302: ENVIRONMENTAL BIOTECHNOLOGY UNIT III: WATER	Biofilms in treatment of waste water; Biofilm development and biofilm Kinetics; Aerobic Biofilms. Marine pollution-major pollutants (heavy metal, pesticide, oil, thermal, radioactive, plastics, litter and microbial, microplastics) Biological indicators (Marine microbes, algae and crustaceans) and accumulators	07	Maier, R. M., Pepper, I. L., & Gerba, C. P. (2009). Environmental microbiology (Vol. 397). Academic press.	POWERPOINT PRESENTATION, TEACHING AIDS
	Biotechnological application of hazardous waste management of water; Use of microbial systems,	02	SAME AS ABOVE	TEACHING AIDS, PROJECTOR
	Phytoremediation strategies in constructed wetlands, Designing constructed wetlands, Substrate, Hydraulic loading rate, Hydraulic retention time, The selection of plant species, Surface area of wetland, Mechanisms to remove pollutants from constructed wetlands	06	Upadhyay, A. K., Singh, D. P., Singh, N. K., Pandey, V. C., & Rai, U. N. (2019). Sustainable Phytoremediation Strategies for River Water Rejuvenation. In Phytomanagement of Polluted Sites (pp. 301-311). Elsevier.	POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

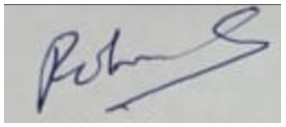
NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_____ CLASS: MSc_____ SEMESTER: I

MONTH: -_August_ ACADEMIC YEAR:___2021-22_

LEARNING OBJECTIVE/S: Techniques and tools used in rDNA Technology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 101 Unit- IV Bioenergetics and regulation of metabolism	Biosynthesis of Amino acids; phenylalanine, tyrosine, threonine and methionine. Bioenergetics- coupled interconnecting reactions in metabolism; oxidation of carbon fuels; recurring motifs in metabolism. Elucidation of metabolic pathways: Experimental approaches to the study of Metabolism. Integration of central metabolism; entry/ exit of various biomolecules from central pathways, principles of metabolic regulation. Strategies of energy Metabolism: organ specializationBrain, Muscle, Adipose Tissue, Liver, Kidney. Metabolic Homeostasis: Regulation of Appetite, Energy Expenditure, and Body Weight; Metabolic Adaptation: Starve–Feed Cycles, insulin signaling and Diabetes Mellitus, target of rapamycin (TOR).	15	1. Stryer, L. (2015). Biochemistry. (8th edition) New York: Freeman. 2. Lehninger, A. L. (2012). Principles of Biochemistry (6th edition). New York, NY: Worth. 3. Voet, D., & Voet, J. G. (2016). Biochemistry (5th edition). Hoboken, NJ: J. Wiley & Sons.	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Mrs. Victoria Manoranjitham DEPARTMENT: BIOTECHNOLOGY
CLASS: M.Sc. PART-I SEMESTER: I II MONTH: AUGUST ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
To acquaint the students with the types of immunization, different types of vaccines and it's applications, monoclonal antibodies and hybridoma technology,

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 102 Paper 2 Unit 1 vaccinology	Active and passive immunization; live, killed, attenuated, subunit vaccines; vaccine technology: role and properties of adjuvants,	03	Kindt, T. J., Goldsby, R. A., Osborne, B. A., & Kuby, J. (2006). Kuby Immunology. New York: W.H. Freeman	Chalk and talk and discussion
	recombinant DNA and protein based vaccines, plant-based vaccines, reverse vaccinology; peptide vaccines, conjugate vaccines;	03	Brostoff, J., Seaddin, J. K., Male, D., & Roitt, I. M. (2002). Clinical Immunology. London: Gower Medical Pub. 3. Murphy, K., Travers, P., W	Chalk and talk and discussion
	antibody genes and antibody engineering: chimeric, generation of monoclonal antibodies, hybrid monoclonal antibodies;	04	Goding, J. W. (1996). Monoclonal Antibodies: Principles and Practice: Production and Application of Monoclonal Antibodies in Cell Biology, Biochemistry, and Immunology.London: Academic Press.	Chalk and talk and discussion
	antibodies and generation of immunoglobulin gene libraries, idiotypic vaccines and marker vaccines, virallike particles (VLPs), dendritic cell based vaccines, vaccine against cancer, T cell based vaccine, edible vaccine and therapeutic vaccine.	05	Immunology, An introduction, fourth edition. Ian R Tizard Thomson Immunology, sixth Ed Roitt, Brostoff, Male Mosby, An imprint of Elsevier science Lt	Chalk and talk and discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_ _____ CLASS: MSc_ ___ SEMESTER: II MONTH: -_December_ ACADEMIC YEAR:___2021-22_

LEARNING OBJECTIVE/S: Sequence Analysis and Modelling of protein.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 201 Unit 2 – Multiple sequence alignments and protein modelling	**MSA:** **Clustal analysis** **Sequence submission** **Protein Modelling** ***Ab initio* modelling** **Homology Modelling**	15	1. Lesk, A. M. (2002). Introduction to Bioinformatics. Oxford: 2. Mount, D. W. (2001). Bioinformatics: Sequence and Genome Analysis. 3. Baxevanis, A. D., & Ouellette, B. F. (2001). Bioinformatics: a Practical Guide to the Analysis of Genes and Proteins. New York: Wiley-Interscience. 4. Pevsner, J. (2015). Bioinformatics and Functional Genomics. Hoboken, NJ.:	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS D'SOUZA_____DEPARTMENT: BIOTECHNOLOGY_____ CLASS: M. Sc. I_____SEMESTER: II_____MONTH: March-June_____ ACADEMIC YEAR:2021-22_____

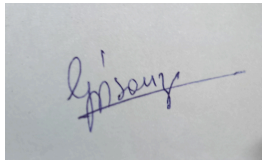
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

LEARNING OBJECTIVE/S: The learners will be able to:

- Have a specialized knowledge of applications of enzymes in the food industry.
- Understand the mechanisms of enzyme functionality and their specific reactions in food processes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 203, III, Applications of enzyme technology in food processing	Introduction and Scope: Enzymes sourced from animals and plants used in food manufacturing technology, enzyme usage in food applications	4	Enzymes in food technology by Whitehurst & M, V. Oort	Online Teaching/ Microsoft PowerPoint and online videos
	Mechanism of enzyme function and reactions in food processes: Starch processing and related carbohydrates, lipases for the production of food components: inter-estrified fats	4	Enzymes in food technology by Whitehurst & M, V. Oort	Online Teaching/ Microsoft PowerPoint and online videos
	Enzymes in protein modification: Hydrolyzed protein, enzymes in bread making-flavour, texture and keeping quality	3	Enzymes in food technology by Whitehurst & M, V. Oort	Online Teaching/ Microsoft PowerPoint and online videos
	Enzymes in dairy product manufacture, Enzymes in fruit and vegetable processing and juice extraction	2	Enzymes in food technology by Whitehurst & M, V. Oort	Online Teaching/ Microsoft PowerPoint and online videos
	Enzymes in fish and meat processing, beer production using immobilized cell technology	2	Enzymes in food technology by Whitehurst & M, V. Oort	Online Teaching/ Microsoft PowerPoint and online video

TOTAL NUMBER LECTURES ALLOCATED TO THE UNIT: ____15_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_____ CLASS: MSc_____ SEMESTER: III

MONTH: -_August_ ACADEMIC YEAR:___2021-22_

LEARNING OBJECTIVE/S: Biochemical Pathway studies

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 301 Unit- I Introduction to Biologics and Biosimilars	Definition: Drugs, Small molecules, Large molecules/Biologics Categories of Biologics: protein-based hormones, enzymes, monoclonal antibodies, vaccines, blood products, and gene/ cellular therapies. Similarities and Differences: Small molecules versus generics, Biologics versus Biosimilars. USFDA Approved Small Molecules and USFDA Approved Generics USFDA Approved Biologics and USFDA Approved Biosimilars Indian Regulatory Scenario in relation to Small Molecules and Biologics Therapeutic uses of some of the Biologics/Biosimilars Acceptable quality differences between approved Biosimilar and	15	1. Biosimilars: Regulatory, Clinical and Biopharmaceu tic al Development, Editors: Hiten J. Gutka • Harry Yang • Shefali Kakar, AAPS Advances in the Pharmaceutic al, Sciences Series,	Online

	innovator's product		Volume 34. 4. http://nib.gov.in/ NIB DBT2016.pdf.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Mrs. Victoria Manoranjitham DEPARTMENT: BIOTECHNOLOGY
CLASS: M.Sc. PART-II SEMESTER: IV MONTH: AUGUST ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 402 UNIT 2 Transcriptomics, Lipidomics And Metabolomics	Introduction: To concepts of Transcriptomics, Lipidomics And Metabolomics, Glycomics, Pharmacogenomics	02	Multi-omics approaches to disease- - by Hasin et, al; Genome Biology 2017 .(pg. no. 1- 4)	PowerPoint presentation and discussion
	Techniques used in Lipidomics- Mass Spectroscopy, TLC, HPLC, GC and Capillary electrophoresis, MALDI.	04	Analytical Techniques in Lipidomics: State of the Art- by Kamil Jurowski. CRITICAL REVIEWS IN ANALYTICAL CHEMISTRY, 2017, VOL. 0, NO. 0, 1–20 REF- Lipidomics-Technologies and Applications- by Dr. Kim Ekroos (2012), Wiley WCH Publications .(pg. no.233- 236)	PowerPoint presentation and discussion
	Technique used in MetabolomIcs Mass Spectroscopy, Electrophoresis, chromatography- GC, LC & NMR.	03	Clinical Metabolomics-Methods and Protocols- by Martin Giera. Center for Proteomics and Metabolomics, Leiden University Medical Center, Leiden, The Netherlands (pg no. 6- 16)	PowerPoint presentation & discussion
	Technique used in Transcriptomics Next generation sequencing, northern blotting, DDRT- PCR, microarrays, gel free assays like biolayer interference, SPR.	04	Concepts and Techniques in Genomics and Proteomics- Nachimuthu Saraswathy and Ponnusamy Ramalingam. Biohealthcare Publishing (Oxford) Limited(pg. no. 125-143)	PowerPoint presentation & Discussion
	Applications of transcriptomics, metabolomics and lipidomics in human diseases: screening, testing and treatment of diseases.(in clinical applications,	04	Metabolomics-A Powerful Tool in Systems Biology - Jens Nielsen • Michael C. Jewett (Eds.) .(pg. no. 1-5)	PowerPoint presentation & Discussion

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	personalised medicine, infectious diseases)		Integration of Omics Approaches and Systems Biology for Clinical Applications- by Antonia Vlahou , HaraldMischak, Jerome Zoidakis, FulvioMagni. (Wiley publications) . (pg. no. 49-60, 174-182, 187)	

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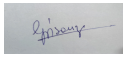
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: MSC II SEMESTER:IV

MONTH: March to May ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:
Explain the role of nutraceuticals and functional foods
Discuss the role of probiotics and prebiotics
Discuss the various aspects of blue biotechnology
Discuss the various aspects of food security, food preservation, Chemopreservation , food processing ,food packaging

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 404 Paper IV- Unit III: Food Biotechnology- Nutraceuticals	Nutraceuticals and functional foods Definition, characteristic features, and classification, phytonutraceuticals	05	Handbook of Nutraceuticals and Functional Foods, Edited ByRobert E.C. Wildman, Robert Wildman, Taylor C. Wallace, Edition 2nd Edition, CRC Press, DOI https://doi.org/10.1201/9781420006186 eBook ISBN 9780429195563 https://www.researchgate.net/publication/322658329_Nutraceuticals_and_Functional_Foods	Power point presentation and topic related videos



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	Prebiotics and Probiotics, Sources (with examples e.g., microbes, plants, algae, animals), blue biotechnology	05	Handbook of Probiotics and Prebiotics, Second Edition, Editor(s): Yuan Kun Lee Seppo Salminen Print ISBN:9780470135440 |Online ISBN:9780470432624 |DOI:10.1002/9780470432624 Page 55 of 61 2009 John Wiley & Sons, Inc. https://onlinelibrary.wiley.com/doi/pdf/10.1002/9780470432624.fmatter https://media.wiley.com/product_data/excerpt/82/35273413/3527341382-38.pdf Blue Biotechnology: Production and Use of Marine Molecules Stephane La Barre (Editor), Stephen S. Bates (Editor) ISBN: 978-3-527-34138-2	Power point presentation and topic related videos
	food security, food preservation, Chemopreservation Food processing (animal and sea food), food packaging	05	https://www.elsevier.com/books/encyclopedia-of-food-security-and-sustainability/ferranti/978-0-12-812687-5 http://www.fao.org/fileadmin/templates/ERP/uni/FIMI.pdf Handbook of food processing food preservation (PDFDrive).pdf http://www.cold.org.gr/library/downloads/Docs/Handbook%20of%20Food%20Preservation.PDF	Power point presentation and topic related videos

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			Introduction to Seafood Processing By-products, DOI: 10.1007/978-1-4614-9590-1_1 https://www.researchgate.net/publication/270286739_Introduction_to_Seafood_Processing_By-products#fullTextFileContent https://agrimoon.com/wp-content/uploads/Food-Packaging-Technology.pdf 1992_Bookmatter_AHandbookOfFoodPackaging.pdf	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: S.Y.B.Sc SEMESTER: III MONTH: **DECEMBER** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S: The objective of this course is to have a firm foundation of the fundamentals and applications of current biophysical theories.
The learners will be able to: Develop an understanding of the different aspects of classical Physics.
Be able to relate principles of Physics to applications and techniques in the field of Biology such as Electrophoresis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT301: BIOPHYSICS UNIT III: ELECTROPHORETIC TECHNIQUES	Migration of Ions in an applied electric field;Factors affecting Electrophoretic Mobility;Moving Boundary Electrophoresis	03	BIOPHYSICAL CHEMISTRY, UPADHYAY,UPADHYAY,NATH	POWERPOINT PRESENTATION, TEACHING AIDS
	Principle of Electrophoresis; Supporting Matrix;	02	SAME AS ABOVE	TEACHING AIDS, POWERPOINT PRESENTATION
	Paper Electrophoresis; AGE; Native and SDS PAGE (reducing and non-reducing, continuous and discontinuous)	05	SAME AS ABOVE	POWERPOINT PRESENTATION, TEACHING AIDS
	IEF and 2D PAGE. Staining and Detection Methods; Gel-Documentation. Applications in Biology	05	SAME AS ABOVE	POWERPOINT PRESENTATION, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: S.Y.B.Sc SEMESTER: IV MONTH: **MARCH** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S: The objective of this course is to gain awareness about bioremediation strategies.
The learners will be able to: Develop an understanding of applications of different life forms in bioremediation technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT404: ENVIRONMENTAL BIOTECHNOLOGY UNIT III: BIOREMEDIATION	Concept of Bioremediation	02	Environmental Biotechnology Indu shekar Thakur IK International (Basic concepts and applications)	TEACHING AIDS
	Microorganisms in Bioremediation, Mycoremediation and Phytoremediation	03	SAME AS ABOVE	TEACHING AIDS, PROJECTOR
	Bioremediation Technologies. Measuring Bioremediation in the Field.	05	SAME AS ABOVE	PROJECTOR, TEACHING AIDS
	Bioaugmentation and Biostimulation. Monitoring the Efficacy of Bioremediation.	05	SAME AS ABOVE	PROJECTOR, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_____ CLASS: SY_ ___ SEMESTER: III

MONTH: -_August_ ACADEMIC YEAR:___2021-22_

LEARNING OBJECTIVE/S: Principles of Physics to applications and techniques in the field of Biology such as Microscopy, Spectroscopy__

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 1	**Optics** **Lasers** **Electromagnetics Radiation** **Spectroscopy** **Microscopy: Electron** **Microscopy and Fluorescence** **Microscopy**	15	Practical Biochemitry – Wilson and Walker Optics	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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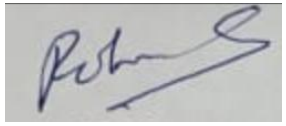
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: S.Y.B.Sc

SEMESTER: IV MONTH: December - March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- understand concept of entrepreneur
- know need and importance of entrepreneurship
- state the meaning of entrepreneurship
- describe the importance of entrepreneurship
- outline the qualities of a successful entrepreneur
- state the functions of an entrepreneur
- distinguish between entrepreneur and promoter
- explain the issues and problems faced by entrepreneur
-



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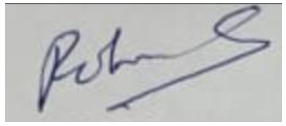
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VII **Unit I** **Introduction to Entrepreneurship development**	Concept of Entrepreneur; Entrepreneurship; Need and Importance; Factors Influencing Entrepreneurship; Essentials of a Successful Entrepreneur	15	Towards Entrepreneurship- Dr. M. R. Kurup	Mind Map PowerPoint presentation Infographics

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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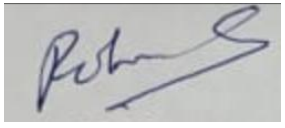
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: F.Y.B.Sc

SEMESTER: II MONTH: January - April ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- acquaint students with Physiological Processes in Plants and Animals
- impart the knowledge of Physiology and Ecology



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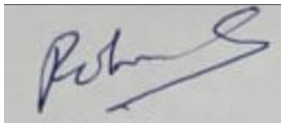
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VII **Unit I** **Globalisation and Indian Society and Human Rights**	**Reaction Kinetics:** Rate of Reaction, Rate Constant, Measurement of Reaction Rates Order & Molecularity of Reaction, Integrated Rate Equation of First and Second order reactions (with equal initial concentration of reactants). (Numericals expected) **Determination of Order of Reaction by** a) Integration Method b) Graphical Method c) Ostwald's Isolation Method d) Half Time Method. (Numericals expected).	15	11th std. Chemistry part I textbook	PowerPoint presentation Infographics Mind Map

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vikas Gupta DEPARTMENT: BIOTECHNOLOGY. CLASS: T.Y.B.Sc

SEMESTER: __VI_____ MONTH: November -March ACADEMIC YEAR: 2021-22

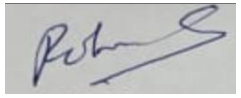
LEARNING OBJECTIVE/S:

The learners will be able to :

- Be knowledgeable about various renewable sources of energy such as Wind, Solar, Geo-thermal, Hydro and Biomass, the means to trap them and the need to replace non-renewable energy sources by renewable ones.
- Understand the concepts of Biogas technology-biogas plant and types, biogas production, and biodigester.
- Learn about fuel ethanol production from various raw materials such as corn and ligno-cellulosic biomass-advantages and disadvantages associated with the process.
- Learn microbial hydrogen, biodiesel production processes and petrocrops as alternative and promising sources of energy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 604, UNIT I, RENEWABLE SOURCES OF ENERGY	Energy sources renewable-solar energy, wind power, geothermal energy and hydropower, biomass energy	5	Environment Biotechnology by Fulekar	Lectures in the classroom./Occasional use of videos available online
	Biogas technology-biogas plant and types, biodigester. Biogas –composition, production and factors affecting production, uses.	5	Environmental Biotechnology by Jogdand	Lectures in the classroom./Occasional use of videos available online
	Biofuels-Ethanol production, Microbial hydrogen production, Biodiesel and Petrocrops.	5	Environment Biotechnology by Fulekar	Lectures in the classroom./Occasional use of videos available online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_____ CLASS: TY_____ SEMESTER: V

MONTH: -_August_ ACADEMIC YEAR:___2021-22_

LEARNING OBJECTIVE/S: Techniques and tools used in rDNA Technology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Unit 3	**Cloning vectors**-Plasmids (pUC series), Cosmids, phagemids M13, shuttle vectors, YAC vectors, expression vectors pET **Gene Cloning** **Libraries**: Types. Genomic & cDNA libraries **Screening and Selection** **Chromosome mapping and expression**	15	iGenetics – Peter Russell Biochemistry by Lehninger	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI _____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: F. Y. B. Sc_____SEMESTER: II_____MONTH: NOV. TO MARCH ACADEMIC YEAR: 2021-2022_____

LEARNING OBJECTIVE/S:
The learners will be able to :

- Acquire scientific communication skills both verbal and non-verbal.
- Have practical experience in scientific poster making and presentation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 205, III, SCIENTIFIC WRITING AND COMMUNICATION SKILLS	Communication skills: Introduction to communication—Elements, definition, scope of communication and communication as part of science. Communication elements—Verbal and non-verbal communications.	4	Communication Skill by S. Kumar and Pushp Lata	Online teaching with relevant published articles using PowerPoint.
	Principles of effective communications, oral presentations, Scientific reading, writing and presentations.	3	Scientific Writing by Jennifer Peat	Online teaching with relevant published articles using PowerPoint.
	Scientific writing – process of scientific writing: Thinking, planning, rough drafts and revising contents	3	Scientific Writing by Jennifer Peat	Online teaching with relevant published articles using PowerPoint.
	Introduction to scientific reports and writings, Compilation of experimental data, communication methods in science.	2	Scientific Writing by Jennifer Peat	Classroom teaching with relevant published articles using PowerPoint.
	Examples of scientific and unscientific writings, writing papers, reviews, bibliography. Plagiarism – Introduction to plagiarism, Examples of plagiarism	3	Scientific Writing by Jennifer Peat	Classroom teaching with relevant published articles using PowerPoint.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____ CLASS: M. Sc._II_____SEMESTER: _IV_____MONTH: JAN –MAY [Mid] ACADEMIC YEAR: 2021-2022_____

LEARNING OBJECTIVE/S: To develop skills for the processing and analysis of scientific data, To enable students to present their research results in the format of oral or poster presentations at conferences, to write scientific publications (theses, articles) and to prepare applications for scientific grants (research proposals), To inculcate good scientific writing practices.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 404, I, Basic Scientific writing and plagiarism	Introduction to scientific writing. Basic scientific writing skills: style and language, spelling, grammar, syntax, jargon and sentence structure.	3	Jennifer Peat, Elizabeth Elliott, Louise Baur, and Victoria Keena. (2002). Scientific Writing (BMJ Books).	Online teaching using PowerPoint and Google Classroom.
	Elements of a scientific paper: abstract, introduction, materials & methods, results, discussion, references and drafting titles. Scientific writing process: thinking, planning, rough draft, revision of content.	5	Scientific writing booklet, compiled by Mark Tischler, Uni. Arizona	Online teaching using PowerPoint and Google Classroom.
	Processing data & application of statistics Displaying data: text, table, graph and defining terms and abbreviations. Statistical analysis and tools for experimental data. Referencing software: Mendeley, Endnote.	3	Successful Scientific writing by Janice and Robert.3rd Edition	Classroom teaching using MS PowerPoint and Google classroom
	Plagiarism: Definition, Common types of plagiarism, Intentional and Unintentional plagiarism, Detection of plagiarism by antiplagiarism tools (Turnitin, Duplichecker, Viper, Copyleaks), Penalties for plagiarism, Avoiding plagiarism.	4	Successful Scientific writing by Janice and Robert.3rd Edition	Classroom teaching using MS PowerPoint and Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____ CLASS: M. Sc._II_____SEMESTER: _IV_____MONTH: JAN –MAY [Mid]ACADEMIC YEAR: 2021-2022_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concepts of writing biomedical research/review articles for publications.
- Have knowledge of plagiarism, and ethics of writing.
- Learn the art of written skills for various scientific write ups..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 404, II, Advanced Scientific writing	Guidelines for medical writing. Scientific writing skills: Writing a research paper for biomedical journal	5	Shoukir A. A. Arab J. Urology. 2014, 12: 71-78	Online teaching using PowerPoint and Google Classroom.
	Writing science research papers and articles, writing a research proposal, research report, popular reports. Writing thesis and dissertation. Writing clinical study reports	5	Scientific writing booklet, compiled by Mark Tischler, Uni. Arizona	Online teaching using PowerPoint and Google Classroom.
	Presentation skills: Oral presentation, Poster preparation and presentation PowerPoint presentations	3	Successful Scientific writing by Janice and Robert.3rd Edition	Online teaching using PowerPoint and Google Classroom.
	Research ethics and scientific misconducts	2	Successful Scientific writing by Janice and Robert.3rd Edition	Successful Scientific writing by Janice and Robert.3rd Edition

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI_____ DEPARTMENT: BIOTECHNOLOGY_____ CLASS: M. Sc. I _____SEMESTER: I_____MONTH: Aug. to Dec.__ACADEMIC YEAR: 2021-2022_____

LEARNING OBJECTIVE/S: The learners will be able to:

- Understand the concepts of functional genomics and proteomics at the advanced level including next generation sequencing platforms.
- Have profound knowledge in electrophoretic and mass spectrometric techniques.
- Gain an insight to relatively novel concepts such as lipidomics, metagenomics, metabolomics and systems biology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 104, I, Functional Genomics and Proteomics	Genomics: Gene expression by SAGE. Microarrays- Construction of microarrays- genomic arrays, cDNA arrays, oligoarrays and its applications, NGS platforms, high and low read sequences	4	Microarray bioinformatics by Dov Sketel	Online teaching using PowerPoint & occasional use of online videos and/or images
	Proteomics; Separation and identification of proteins 2D-PAGE, isoelectric focussing, Edman reaction protein tryptic digestion and peptide mass finger printing mass spectrometry MALDI-TOF	3	Introduction to human molecular genetics by Jack Pasternak	Online teaching using PowerPoint & occasional use of online videos and/or images
	Protein expression profiling; Protein microarrays/protein chips: Types and applications	2	Introduction to human molecular genetics by Jack Pasternak	Online teaching using PowerPoint & occasional use of online videos and/or images
	Gel-based quantitative proteomics: Difference in Gel Electrophoresis [DIGE], Gel free based quantitative proteomics: Surface Plasmon Resonance, MS based used with stable-isotope tagging	3	Introduction to human molecular genetics by Jack Pasternak	Online teaching using PowerPoint & occasional use of online videos and/or images
	In vivo labelling: SILAC, In vitro labelling-ICAT, Clinical and biomedical applications of proteomics, Introduction to metabolomics, lipidomics, metagenomics and systems biology	3	Microarray and microplates: Applications in biomedical sciences by Ye and Day	Online teaching using PowerPoint & occasional use of online videos and/or images

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: M. Sc. I_____SEMESTER: II_____MONTH: JAN-MAY_____ ACADEMIC YEAR:2021-2022_____

LEARNING OBJECTIVE/S: The learners will be able to:

- Gain theoretical and practical knowledge in isolation and selection of microorganisms of commercial interest.
- Understand the principles and scientific rationales behind strain improvement programme adopted by the industry and academia.
- Understand media formulation and its optimization using design of experiment software
- Have knowledge of aeration and agitation in requirements in a bioreactor and measurement and control of process parameters.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 203, I, Basic principles of Biochemical engineering	Sources of Microorganisms used in biotechnology: Literature search and culture collection supply, Isolation *de novo* of organisms producing metabolites of economic importance	3	Modern industrial microbiology and biotechnology by Nduka Okafor	Online Teaching/ Microsoft PowerPoint and online videos
	Strain Improvement: Selection from naturally occurring variants, Manipulation of the genome of industrial microorganisms in strain improvement	4	Modern industrial microbiology and biotechnology by Nduka Okafor	Online Teaching/ Microsoft PowerPoint and online videos
	Bioreactor design and analysis: Media formulation and optimization methods, sterilization of bioreactors	3	Principles of fermentation technology by Stanbury & Whitaker	Classroom Teaching/ Microsoft PowerPoint /Google classroom
	Aeration and agitation in bioreactors, Kla value [factors affecting and methods of determination].	2	Principles of fermentation technology by Stanbury & Whitaker	Classroom Teaching/ Microsoft PowerPoint /Google classroom
	Heat transfer in bioprocess, measurement and control of bioprocess parameters, bioprocess economics	3	Principles of fermentation technology by Stanbury & Whitaker	Classroom Teaching/ Microsoft PowerPoint /Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____ CLASS: M. Sc._II_____SEMESTER: III_____MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn a larger perspective of enzyme applications in various industries.
- Understand enzyme based detoxification for human and animal nutrition.
- Have a learning experience in the use of biosensors as diagnostic tools.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 304, III, Industrial and medical applications of enzymes	Textile industry, Detergent industry, Pulp and paper industry, Animal feed industry	4	Industrial enzyme applications. Ed. Vogel & May	Online using PowerPoint, online videos and Google classroom
	Enzyme technology for detoxification of mycotoxins in animal feed. Phytases for feed applications and leather industry. Enzyme Application for human and animal nutrition	5	Industrial enzyme applications. Ed. Vogel & May	Online using PowerPoint, online videos and Google classroom
	Biosensors-introduction. Instrumentation, types and examples. Enzyme based sensors as diagnostic tools. Biosensors for blood glucose, urea in blood and urine.	3	Biochemistry by Satyanarayna and Chakrapani	Online using PowerPoint, online videos and Google classroom
	Biosensors for uric acid, arginine, asparginine, and creatinine. Biosensors for cholesterol,. Allosteric enzyme based biosensors	3	Biochemistry by Satyanarayna and Chakrapani	Online using PowerPoint, online videos and Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____ CLASS: M. Sc._II_____SEMESTER: _IV_____MONTH: JAN –MAY [Mid] ACADEMIC YEAR: 2021-2022_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concepts of clinical data management.
- Have knowledge of data sources and types and practical data handling.
- Learn the prediction modeling technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 403, IV, Clinical Data Science	Data management in clinical research: An overview.	5	Krishnankutty et al. Ind. J. Pharmacol. 2012, 44, 168-172	Online teaching using PowerPoint and Google Classroom.
	Data sources and data types, Standards in healthcare data, Research data stewardship for Healthcare professionals.	5	Fundamentals of clinical data science. Ed. Kubben, Dumontier, & Dekker	Online teaching using PowerPoint and Google Classroom.
	Preparing data for prediction model development. Prediction modelling methodology, Clinical Decision support system	5	Fundamentals of clinical data science. Ed. Kubben, Dumontier, & Dekker	Classroom teaching using PowerPoint and Google Classroom.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI DEPARTMENT: BIOTECHNOLOGY

CLASS: S. Y. B. Sc_____SEMESTER: III_____MONTH: JULY TO OCT. ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand basic skills applied in fermentation technology and build a foundation for more advanced studies in bioprocess technology.
- Have an understanding of principles underlying design of a fermentor and fermentation process control.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 306, II, FERMENTOR AND FERMENTATION PROCESS	Design of a Fermentor: Stirred tank fermentor-basic design; parts of a typical industrial fermentor. Fermentation media: Components; design and optimization	4	Principles of Fermentation Technology by Stanbury, Whitaker & Hall	Online teaching using PowerPoint and videos at times
	Sterilization: Sterilization of fermentor and fermentation media. Process parameters: pH, temperature, aeration, agitation, foam etc.	4	Principles of Fermentation Technology by Stanbury, Whitaker & Hall	Online teaching using PowerPoint and videos at times
	Types of Fermentation: Surface and submerged; Batch and continuous, Aerobic and anaerobic.	2	Industrial Microbiology by Casida	Online teaching using PowerPoint and videos at times
	Product isolation and purification	3	Principles of Fermentation Technology by Stanbury, Whitaker & Hall	Online teaching using PowerPoint and videos at times
	Study of representative fermentation process: Outline of penicillin and ethanol production by fermentation with a flow diagram	2	Industrial Microbiology by Casida	Online teaching using PowerPoint and videos at times

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. SAMEER A. S. MAPARI_____ DEPARTMENT: BIOTECHNOLOGY_____ CLASS: ___TY_____SEMESTER: _____VI_____MONTH: OCT.-MARCH____ ACADEMIC YEAR:_2021-2022_____

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of Inoculum build up for various industrial production microorganisms.
- Learn the fermentation process of industrially useful metabolites.
- Learn biotransformation processes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 602 Industrial Microbiology U3-Fermentation Process	Introduction to inoculum development	2	Industrial Microbiology by Casida	Online teaching using ICT Tools such as PowerPoint and Google Classroom
	Bacterial and fungal inoculum development with one example each . Scale up and scale down	4	Industrial Microbiology by Casida	Online teaching using ICT Tools such as PowerPoint and Google Classroom
	Production of Streptomycin, Protease, Musrooms	3	Industrial Microbiology by Casida	Online teaching using ICT Tools such as PowerPoint and Google Classroom
	Production of glutamic acid, and lysine,	2	Industrial Microbiology by Casida	Online teaching using ICT Tools such as PowerPoint and Google Classroom
	Production of ethanol, and semi-synthetic penicillin. Biotransformation , examples hormones and vinegar.	4	Industrial Microbiology by Casida	Online teaching using ICT Tools such as PowerPoint and Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr, SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: T.Y.B.Sc_____SEMESTER: __V_____MONTH: JULY TO OCT. ACADEMIC YEAR: 2021-22_____

LEARNING OBJECTIVE/S: The learners will be able to:

- Understand the functioning of Marine ecosystem and its rare flora and fauna. Bioprospecting of marine habitat.
- Learn that marine habitat can be explored for novel bioactive compounds

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 504, UNIT I, MARINE BIOTECHNOLOGY, INTRODUCTION AND BIOPROSPECTING	Introduction to Marine Biotechnology	1	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online
	The marine ecosystem and its functioning: Intertidal, Estuarine, Salt marsh, Mangrove, Coral Reef, Coastal and deep sea ecosystems. Hydrothermal vents	5	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online
	Bioprospecting, Marine Microbial Habitats, and their biotechnologically relevant microorganisms	2	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online
	Methods for Microbial Bioprospecting in Marine Environments, Biotechnological potential of marine microbes	3	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online
	Bioactive compounds from other marine organisms: Fungi, Microalgae, Seaweeds, Actinomycetes and sponges	4	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr, SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: T.Y.B.Sc_____SEMESTER: __V_____MONTH: JULY TO SEPT. ACADEMIC YEAR: 2021-22_____

LEARNING OBJECTIVE/S: The learners will be able to:

- Learn that marine habitat can be explored for potential functional foods and nutraceuticals.
- Learn the potential of marine-based bioactive compounds that include well-known compounds such as carotenoids, collagen/gelatin as well as novel compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 504, UNIT III, MARINE FUNCTIONAL FOODS AND NUTRACEUTICALS	Marine Functional Foods: Marine sources as healthy foods or reservoirs of functional ingredients	3	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online
	Marine derived ingredients with biological properties	3	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online
	Functional foods incorporating marine-derived ingredients	2	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online
	Marine Nutraceuticals: Marine bioactives as potential nutracuticals, functional carbohydrates, polyunsaturated fatty acids	3	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online
	Carotenoids, soluble calcium, fish collagen and gelatin, marine probiotics	4	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_____ CLASS: TY_____ SEMESTER: V

MONTH: -_August_ ACADEMIC YEAR:___2021-22_

LEARNING OBJECTIVE/S: Techniques and tools used in rDNA Technology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Unit 3	**Cloning vectors**-Plasmids (pUC series), Cosmids, phagemids M13, shuttle vectors, YAC vectors, expression vectors pET **Gene Cloning** **Libraries**: Types. Genomic & cDNA libraries **Screening and Selection** **Chromosome mapping and expression**	15	iGenetics – Peter Russell Biochemistry by Lehninger	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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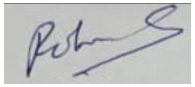
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: S.Y.B.Sc

SEMESTER: III MONTH: Sept.-Dec. ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- check on harmful biological agents, toxins, chemicals, and radiation.
- understand the importance of ensuring public and environmental safety.
- aware of the rules, regulations, and monitoring bodies



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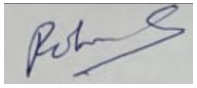
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper V Unit IV Biosafety in Biotechnology	**Regulating Food and Food Ingredients.** **Chymosin,Tryptophan,Bovine somatotropin** **Genetically modified crops** **Genetically engineered livestock** **Contemporary issues in Bioethics** **Concepts on biosafety in Biotechnology** **Regulating rDNA technology** **Deliberate release of GMOs**	15	Molecular Biotechnology -Principles and Applications of Recombinant DNA Glick, B.R, Pasternak, J.J Patten, C.L 3rd edition ASM press pg 903-910, 898-901 Biosafety in Microbiological and Biomedical Laboratories - 5th Edition, L. Casey Chosewood Deborah E. Wilson U.S. Department of Health and Human Services Centers for Disease Control and Prevention National Institutes of Health. Centers for Disease Control and Prevention National Institutes of Health	Mind map PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: F.Y.B.Sc

SEMESTER: III MONTH: September - December ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- understand some basic concepts of research and its methodologies
- identify appropriate research topics
- select and define appropriate research problem and parameters
- prepare a project proposal (to undertake a project)
- organize and conduct research (advanced project) in a more appropriate manner
- write a research report and thesis
- write a research proposal

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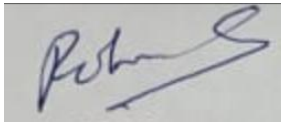
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VII Unit I Introduction to research methodology	**Meaning of Research, Objectives of Research Motivation in Research, Types of Research, Research approaches, Significance of Research, Research Methods versus Methodology, Research Process, Criteria of good research, Problems encountered by researchers in India, What is a Research Problem?, Selecting the Problem, Necessity of defining the problem,Technique involved in defining a problem.**	15	Research methodology-CR.Kothari, 3rd Ed. Pg.	Mind Map PowerPoint presentation Infographics

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: S.Y.B.Sc

SEMESTER: III MONTH: September - December ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- understand nucleophile and electrophile groups and their properties.
- define enzyme, apoenzyme, holoenzyme, cofactor (coenzyme)
- define 'micronutrient'
- explain the types and benefits of micronutrients

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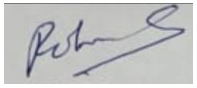
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I Organic Chemistry	Types of organic reactions - **Addition Reactions, Elimination Reactions, Substitution Reactions** **Essential and Non-essential Elements in Biological Systems.** **Role of Metal Ions in Biological Systems.** **Metal Coordination in Biological Systems: Enzymes, Apoenzymes, Holoenzymes and coenzymes** **Biological Role of Metalloenzymes wrt Myoglobins, Haemoglobin.** **Biological Role of Carboxypeptidases, Catalses, Peroxidases** **Structure and Function :Dioxygen Binding, Transfer and Utilization, Metal Complexes in Medicines.**	15	Advanced organic chemistry- Reinhard Bruckner Pg. 86-123,129-158,43-65;169-216 Biochemistry- Satyanarayan 4th Edition Pg. 403-421 Textbook of Biochemistry- Lehninger, 4th Edition Pg. 208-214 Fundamentals of Biochemistry (Jain and Jain) Pg. 343-345 Principles of Biochemistry (McGraw Hill) White et al. Principles of Biochemistry (McGraw Hill) White et al.	Infographics PowerPoint presentation Mind Map

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: F.Y.B.Sc

SEMESTER: I MONTH: .-Dec. ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- understand the multi-religious, multilingual nature and caste dimension in Indian society.
- acquaint the students with concepts of Societal Awareness
- impart knowledge of Society and make students aware about the Problems in Society
- understand the pluralistic nature of Indian society
- understand the multi-religious, multilingual nature and caste dimension in Indian society
- bring out the significance of gender as a demographic variable
- analyze the regional variations and problems of rural, urban and tribal areas.

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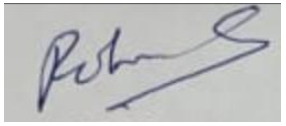
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VII Unit I Overview of Indian society	**Introduction overview of Indian society** **Objectives** **Understand the multi-cultural diversity of Indian society through its demographic composition of India** **Population distribution according to religion** **Multi-linguism** **Caste system in India** **Gender- A Demographic analysis** **Regional variations of urban,rural and tribal areas and its characteristics**	15	Foundation course-I sem I & II Pg 5	PowerPoint presentation Infographics Mind Map

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY CLASS: T.Y.B.Sc

SEMESTER: V MONTH: **OCTOBER** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S: The aim of this course is to provide students with basic understanding of marine pharmaceutical products, their antimicrobial properties and challenges faced when using marine extremozymes.
The learners will be able to: learn the uses of marine toxins, their antiviral and antimicrobial activity.

Understand pharmaceutical importance of marine drugs.

Gain knowledge of marine extremozymes and their current use as well as challenges of using marine products.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 504 UNIT II: MARINE DRUGS AND ENZYMES	Drugs from Marine organisms: Pharmaceutical compounds from marine flora and fauna – marine toxins, antiviral and antimicrobial agents	04	Kim, S.K. Springer Handbook of Marine Biotechnology; Springer: Berlin, Germany; Heidelberg, Germany, 2015.	POWERPOINT PRESENTATION, TEACHING AIDS
	Approved Marine Drugs as Pharmaceuticals	02	SAME AS ABOVE	POWERPOINT PRESENTATION, TEACHING AIDS
	Marine Natural products and its Challenges	02	SAME AS ABOVE	POWERPOINT PRESENTATION
	Marine Microbial Enzymes- Marine Extremozymes and Their Significance, Current Use of Marine Microbial Enzymes	07	SAME AS ABOVE	POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY CLASS: T.Y.B.Sc

SEMESTER: VI MONTH: **MARCH** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S: The aim of this course to make students aware of techniques of dairy technology and production processes of associated fermented products.
The learners will be able to: Understand the enumeration methods in milk and factors affecting milk quality.

Learn various methods of preservation of milk.

Learn the production processes and spoilage of fermented milk products.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT602 UNIT I: DAIRY TECHNOLOGY	Milk: Normal flora, changes in raw milk, Enumeration, Factors affecting bacteriological quality, Dairy technology Preservation methods, Pasteurization	07	Fundamentals of microbiology by Martin Frobisher	CHALK BOARD METHOD, PROJECTOR
	Starter Cultures	02	Applied Dairy Microbiology Elmer H Marth and James L Steele Mercel Dekker Inc New York, 2nd edition	CHALK BOARD METHOD
	Fermented products-Production process and spoilage of Cheese:Swiss and Cheddar	02	Microbial Technology Peppler,H.J and Perlman	PROJECTOR, CHALK BOARD METHOD, TEACHING AIDS
	Butter	02	Applied Dairy Microbiology Elmer H Marth and James L Steele Mercel Dekker Inc New York, 2nd edition	PROJECTOR, CHALK BOARD METHOD, TEACHING AIDS
	Yogurt, Buttermilk	02	SAME AS ABOVE	CHALK BOARD METHOD, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **VICTORIA MANORANJITHAM**

DEPARTMENT: **BIOTECHNOLOGY** CLASS: **S.Y.BSc** SEMESTER: **IV** MONTH: **DECEMBER - MARCH** ACADEMIC YEAR: **2021- 2022**

LEARNING OBJECTIVE/S:

- The learners will be able to:
- Understand the difference between an infection and disease
- Differentiate the different types of infection
- Understand developmental stages of a disease and the transmission of disease
- Understand epidemiology and various epidemiological markers
- Understand Koch's postulates and the exceptions of Koch's postulates.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 403 UNIT 1 **Infectious Diseases**	Host Parasite Relationship: Normal Flora; Factors Affecting the Course of Infection and Disease; Mechanisms of Infection and Virulence Factors.	05	Microbiology by Tortora 5th edition and 3rd edition	on - class lecturing (using power-point presentations). Discussions, Activities and homework.
	Infection: Patterns of Infection; Types of Infections; Signs and Symptoms; Epidemiology and	05	Microbiology–6th Edition (2006), Pelczar M.J., Chan	on - class lecturing (using power-point presentations). Discussions, Activities and homework.

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	Epidemiological Markers.		E.C.S., Krieg N.R., The McGraw Hill Companies Inc. NY	
	Diseases: Origin of Pathogens; Vectors; Acquisition of Infection; Koch's Postulates.	05	Presscott's Microbiology, 8th edition (2010), Joanne M Willey, Joanne Willey, Linda Sherwood, Linda M Sherwood, Christopher J Woolverton, Chris Woolverton, McGrawHil Science Enginering, USA	. on - class lecturing (using power-point presentations). Discussions, Activities and homework.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **VICTORIA MANORANJITHAM**

DEPARTMENT: **BIOTECHNOLOGY** CLASS: **S.Y.BSc** SEMESTER: **IV** MONTH: **DECEMBER - MARCH** ACADEMIC YEAR: **2021- 2022**

LEARNING OBJECTIVE/S:

- The learners will be able to:
- Understand Entrepreneurship
- Various strategies, steps, rules and norms band necessities to be followed and fulfilled to set up an enterprise.
- Role of Government and Financial Institutions in Entrepreneurship Development
- Writing up a business plan

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 407 UNIT II Setting-up of an Enterprise and Planning	Location of Enterprise; Real Estate and Human Resource Planning,	04	Entrepreneurship – Kurup Handbook of Entrepreneurship development- Basotia and Sharma	on - class lecturing (using power-point presentations). Discussions, Activities and homework.
	Financial planning: Role of Government and Financial Institutions in Entrepreneurship	08	Handbook of Entrepreneurship	on - class lecturing (using power-point presentations). Discussions, Activities and

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	Development; Raising Money from Venture Capitalists, Government Grants, Product Selection and Ideas; Project Planning and Formulation; Project Feasibility Assessment; Regulatory Affairs, Corporate Laws, Innovation, IPR generation and Protection,		development- Basotia and Sharma	homework.
	Preparation of a Business Plan, Characteristics and Importance of Planning;	03		. on - class lecturing (using power-point presentations). Discussions, Activities and homework.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_ _____ CLASS: FY_ ___ SEMESTER: I_ ____ MONTH: -_August_ ACADEMIC YEAR: ___2021-22_

LEARNING OBJECTIVE/S: To acquaint the students with basic concepts of Chemistry like Classification and Nomenclature of Chemical compounds__

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2	**Chemical Bonds**: Ionic Bond: Nature of Ionic Bond, Structure of NaCl, KCl and CsCl, factors influencing the formation of Ionic Bond. **Covalent Bond**: Nature of Covalent Bond, Structure of CH4, NH3, H2O, Shapes of BeCl2, BF3 **Coordinate Bond**: Nature of Coordinate Bond Non Covalent Bonds: Van Der Waal's forces: dipole - dipole, dipole – induced dipole. **Hydrogen Bond**: Theory of Hydrogen Bonding and Types of Hydrogen Bonding (with examples of RCOOH, ROH, Salicylaldehyde, Amides and Polyamides).	15	Concise Inorganic Chemistry: by J.D. Lee NCERT Textbook. HSC TextBooks	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_ _____ CLASS: FY_ ___ SEMESTER: I_ ____ MONTH: -_August_ ACADEMIC YEAR: ___2021-22_

LEARNING OBJECTIVE/S: To acquaint the students with basic concepts of Chemistry like Classification and Nomenclature of Chemical compounds__

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2	**Chemical Bonds**: Ionic Bond: Nature of Ionic Bond, Structure of NaCl, KCl and CsCl, factors influencing the formation of Ionic Bond. **Covalent Bond**: Nature of Covalent Bond, Structure of CH4, NH3, H2O, Shapes of BeCl2, BF3 **Coordinate Bond**: Nature of Coordinate Bond Non Covalent Bonds: Van Der Waal's forces: dipole - dipole, dipole – induced dipole. **Hydrogen Bond**: Theory of Hydrogen Bonding and Types of Hydrogen Bonding (with examples of RCOOH, ROH, Salicylaldehyde, Amides and Polyamides).	15	Concise Inorganic Chemistry: by J.D. Lee NCERT Textbook. HSC TextBooks	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_____ CLASS: FY_____ SEMESTER: I

MONTH: -_August_ ACADEMIC YEAR:___2021-22_

LEARNING OBJECTIVE/S: To acquaint the students with basic concepts of Chemistry like Classification and Nomenclature of Chemical compounds

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 3	**Chemistry of Water:** **Solutions** **Basic concepts in calculation** **Buffers**	15	Biochemistry – Lehninger4th Edition FYBSc Textbook, Himalaya publication	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **VICTORIA MANORANJITHAM**

DEPARTMENT: : **BIOTECHNOLOGY** CLASS: **F.Y. BSc** SEMESTER: **I** MONTH: **AUGUST** ACADEMIC YEAR: **2021- 2022**

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 103 UNIT 3 Bacteria and Viruses	Bacteria : Classification, Types, Morphology (Size, Shape and Arrangement)	02	Microbiology by Pelczar- 5th edition. page no- 73-94,	online-class lecturing using powerpoint presentations
	Cultivation of Bacteria.	02	99-114	
	Reproduction and Growth (Binary Fission, Conjugation and Endospore formation) Growth Kinetics,	03	115-133	
	Isolation and Preservation. Significance of Bacteria	03		
	Viruses :General Characters, Classification (Plant, Animal and Bacterial Viruses) Structure and Characterization of Viruses and Significance	05	415-450	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_ _____ CLASS: FY_ ___ SEMESTER: II_ ___ MONTH: -_December_ ACADEMIC YEAR: ___2021-22_

LEARNING OBJECTIVE/S: To impart the knowledge of Classification, Structure and Characterization of Biomolecules__

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 201 Bioorganic Chemistry	**Carbohydrates**: Structure, Function, Classification, Characteristic Reactions, Physical and Chemical Properties, D & L Glyceraldehydes, structure of Monosaccharide, Disaccharides, and Polysaccharides. Isomers of Monosaccharides, Chemical/Physical Properties of Carbohydrate, Chemical reactions for Detection of Mono., Di and Polysaccharides, **Lipids:** Classification of Lipids, Properties of Saturated, Unsaturated Fatty Acids, Rancidity, and Hydrogenation of Oils Phospholipids: Lecithin Cephalin, Plasmalogen Triacylglycerol-Structure and Function **Sterols**: Cholesterol: Structure and Function , Lipoproteins: Structure and Function, Storage Lipids, Structural Lipids, Action of Phospholipases, Steroids	15	Biochemistry – Lehninger Biochemistry – Conn & Stumph Biochemistry by Satyanarayanan	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_ _____ CLASS: FY_ ___ SEMESTER: II MONTH: -_December_

ACADEMIC YEAR:___2021-22_

LEARNING OBJECTIVE/S: To acquaint the students with basic concepts of Thermodynamics__

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 202 Unit 1 Thermodynamics	System, Surrounding, Boundaries Sign Conventions, State Functions, Internal Energy and Enthalpy: Significance, examples, Laws of Thermodynamics and its Limitations, Mathematical expression. Qualitative discussion of Carnot Cycle for ideal Gas and Mechanical Efficiency. Laws of Thermodynamics as applied to Biochemical Systems. Concept of Entropy, Entropy for Isobaric, Isochoric and Isothermal Processes.	15	FYBSc Textbook, Himalaya publication NCERT Textbook	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: FYBSC SEMESTER:II

MONTH: January to April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Explain the role of body systems and mechanisms in maintaining homeostasis

Discuss about different types of animal tissue culture techniques

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 203 **Life Sciences-I: Physiology and Ecology** **Unit II** **Animal Physiology**	Physiology of Digestion Movement of Food and Absorption, Secretary functions of Alimentary Canal, Digestion and Absorption, assimilation in Gut of Mammals Anatomy of Mammalian Kidney, Structure of Nephron, Physiology of Urine Formation and Role of Kidney in Excretion and Osmoregulation	05	Applegate Anatomy and Physiology - Learning System Medical physiology by Guyton	power point presentation and topic related videos
	Physiology of Respiration, Mechanism of Respiration Principles of Gaseous Exchange in the Blood and Body Fluids Blood and Circulation: Blood Composition, Structure and Function of its Constituents Blood Coagulation and Anti-Coagulants Hemoglobin and its Polymorphism Regulation of the Circulation Mechanism and working of Heart in Human.	06	Applegate Anatomy and Physiology - Learning System Medical physiology by Guyton	power point presentation and topic related videos

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	Blood and Circulation: Blood Composition, Structure and Function of its Constituents Blood Coagulation and Anti-Coagulants Hemoglobin and its Polymorphism Regulation of the Circulation Mechanism and working of Heart in Human.	04	Applegate Anatomy and Physiology - Learning System Medical physiology by Guyton	power point presentation and topic related videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: FYBSC SEMESTER:II

MONTH: January to April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Explain the role of body systems and mechanisms in maintaining homeostasis

Discuss about different types of animal tissue culture techniques

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 203 **Life Sciences-I: Physiology and Ecology** **Unit II** **Animal Physiology**	Physiology of Digestion Movement of Food and Absorption, Secretary functions of Alimentary Canal, Digestion and Absorption, assimilation in Gut of Mammals Anatomy of Mammalian Kidney, Structure of Nephron, Physiology of Urine Formation and Role of Kidney in Excretion and Osmoregulation	05	Applegate Anatomy and Physiology - Learning System Medical physiology by Guyton	power point presentation and topic related videos
	Physiology of Respiration, Mechanism of Respiration Principles of Gaseous Exchange in the Blood and Body Fluids Blood and Circulation: Blood Composition, Structure and Function of its Constituents Blood Coagulation and Anti-Coagulants Hemoglobin and its Polymorphism Regulation of the Circulation Mechanism and working of Heart in Human.	06	Applegate Anatomy and Physiology - Learning System Medical physiology by Guyton	power point presentation and topic related videos

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	Blood and Circulation: Blood Composition, Structure and Function of its Constituents Blood Coagulation and Anti-Coagulants Hemoglobin and its Polymorphism Regulation of the Circulation Mechanism and working of Heart in Human.	04	Applegate Anatomy and Physiology - Learning System Medical physiology by Guyton	power point presentation and topic related videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **VICTORIA MANORANJITHAM** DEPARTMENT: **BIOTECHNOLOGY**

CLASS: **S.Y.BSc** SEMESTER: **V** MONTH: **AUGUST- NOVEMBER** ACADEMIC YEAR: **2021- 2022**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Analyze any observations or results obtained in their research study and interpret them relating it to other related studies.
- Write down a proper step wise report, that will be understandable to any reader, keeping him hooked on to the report till the end and make him relate the study to other researches till thus adding on awareness and knowledge and pave way for further research studies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 307 UNIT 3 Interpretation and Report Writing	Meaning of Interpretation, Why Interpretation?, Technique of Interpretation, Precautions in Interpretation, ,	04	Research methodology by C.R. Kothari Chapter 14	• On – line class lecturing using powerpoint presentations, • Activities on reviewing research articles and summarizing threm / writing down an abstract of the same.
	Significance of Report Writing, Different Steps in Writing Report, Layout of the Research Report, Types of Reports, Oral Presentation,	07	Research methodology by C.R. Kothari Chapter 14	

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	Mechanics of Writing a Research Report, Precautions for Writing Research Reports	04	Research methodology by C.R. Kothari Chapter 14	.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_ _____ CLASS: SY_ ___ SEMESTER: IV MONTH: - _December_

ACADEMIC YEAR:___2021-22_

LEARNING OBJECTIVE/S: Principles of Physics to applications and techniques in the field of Biology such as Microscopy, Spectroscopy__

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 401 UNIT II Amino Acid Metabolism	**Amino Acid Breakdown :** Deamination, Transamination, Urea Cycle, Breakdown of Glucogenic and Ketogenic Amino Acids. **Amino Acids as Biosynthetic Precursors :** Biosynthesis of Epinephrine, Dopamine, Serotonin, GABA, Histamine, Glutathione.	15	Biochemistry by Satyanarayanan Biochemitry by Lehninger	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **VICTORIA MANORANJITHAM**

DEPARTMENT: **BIOTECHNOLOGY** CLASS: **T.Y.BSc** SEMESTER: **V** MONTH: **AUGUST** ACADEMIC YEAR: **2021- 2022**

LEARNING OBJECTIVE/S:
The learners will be able to : Understand cancer causation and it's types, the concept of metastasis, the complex nature of tumorigenesis and the prevention and treatment of cancer.

- The learners will be able to :
- Define carcinogenesis and describe and differentiate between types of tumours.
- Compare and contrast invasion and metastasis.
- Discuss cancer as a multi-step process that results from the accumulation mutations and genetic damage to cells and thus describe tumorigenesis.
- Recognize other factors inducing tumours (ex. Age, exposure carcinogens, etc.)
- Describe mode of action of hormones and genes (ex. Tumour suppressor genes) involved in cancer causing.
- Discuss different viruses causing cancer.
- Understand the prevention and treatment of cancer.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 501 UNIT 4 CANCER	Introduction, Cancer as a microevolutionary process.	04	'The cell' – by Bruce Alberts (5th edition)	on - class lecturing (using power-point presentations). Discussions, Activities and homework.
	Molecular genetics of cancer	06	The cell' – by Bruce Alberts (5th edition)	on - class lecturing (using power-point presentations). Discussions, Activities and homework.
	Cancer and Viruses, Cancer diagnosis and chemotherapy.	05	Rediscovering Biology Cell Biology and Cancer Molecular to Global Perspectives By Leland Hartwell	on - class lecturing (using power-point presentations). Discussions, Activities and homework.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_ _____ CLASS: TY_ ___ SEMESTER: VI MONTH: - _December_

ACADEMIC YEAR:___2021-22_

LEARNING OBJECTIVE/S: Techniques and tools used in rDNA Technology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 601 Unit 1 – Protein Biochemistry	**Protein structure**: Protein Tertiary and Quaternary Structures; **Protein Denaturation and Folding**; Protein Function: Reversible Binding of a Protein to a Ligand: Oxygen-Binding Proteins; **Complementary Interactions between Proteins and Ligands:** Immunoglobulins; **Protein Interactions Modulated by Chemical Energy**: Actin, Myosin, and Molecular Motors; **Protein purification**.	15	Biochemistry by Lehninger	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_ _____ CLASS: TY_ ___ SEMESTER: VI MONTH: - _December_

ACADEMIC YEAR:___2021-22_

LEARNING OBJECTIVE/S: Techniques and tools used in rDNA Technology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 601 Unit 1 – Protein Biochemistry	**Protein structure**: Protein Tertiary and Quaternary Structures; **Protein Denaturation and Folding**; Protein Function: Reversible Binding of a Protein to a Ligand: Oxygen-Binding Proteins; **Complementary Interactions between Proteins and Ligands:** Immunoglobulins; **Protein Interactions Modulated by Chemical Energy**: Actin, Myosin, and Molecular Motors; **Protein purification**.	15	Biochemistry by Lehninger	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: TYBSC SEMESTER: VI

MONTH: January to April ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

Gain an understanding of the characteristics of wastes of each type of industry
Gain an understanding of the treatment methods of each type of industry waste

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT604 Environmental Biotechnology UNIT IV Hazardous waste Management	Biodegradation of waste from tanning industry - ; petroleum industry	04	Environmental Biotechnology Indu shekar Thakur IK International (Basic concepts and applications)	Power point presentation & Topic related videos
	paper & pulp industry; Dairy; Distillery; Dye	07	Environmental Biotechnology Indu shekar Thakur IK International (Basic concepts and applications)	Power point presentation & Topic related videos
	Antibiotic industry; Removal of oil spillage & grease deposits	04	Environmental Biotechnology Indu shekar Thakur IK International (Basic concepts and applications)	Power point presentation & Topic related videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: F.Y.B.Sc. SEMESTER: I MONTH: SEP-DEC ACADEMIC YEAR: 2020-21
LEARNING OBJECTIVE/S: To acquaint students with concepts of stereochemistry.
The learners will have: acquired knowledge of the structural isomers and stereoisomers of different types and their representation using projection formulae.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-2 Unit-1: Stereochemistry	Isomerism – Types of Isomerism: Constitutional Isomerism (Chain, Position and Functional) and Stereoisomerism, Chirality	15	Organic Chemistry by Bahl and Bahl	Google Meet, MS PowePoint presentations
	Geometric Isomerism and Optical Isomerism: Enantiomers, Diastereomers, and Racemic mixtures Cis-Trans, Threo, Erythro and Meso isomers. Diastereomerism (Cis-Trans Isomerism) in Alkenes and Cycloalkanes (3 and 4 membered ring)		Organic Chemistry by Paula Bruicel	
	Conformation: Conformations of Ethane. Difference between Configuration and Conformation		Stereochemistry of organic compounds by P.S. Kalsi	
	Configuration, Asymmetric Carbon Atom, Stereogenic/ Chiral Centres, Chirality, Representation of Configuration by —Flying Wedge Formula			
	Projection formulae – Fischer, Newman and Sawhorse. The Interconversion of the Formulae			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: I MONTH: OCTOBER-NOVEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To impart knowledge of handling of basic Analytical Techniques along with Methods of Separation.
The learners will be able to : Gain the principle concepts in using analytical and preparatory techniques.

Learn various analytical techniques like Chromatography and Colorimetry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 102 BASIC CHEMISTRY II UNIT III ANALYTICAL TECHNIQUES	Methods of Separation -Precipitation, Filtration, Distillation and Solvent Extraction.	06	Fundamentals of Analytical chemistry, 7th edition, skoog, West, Holler and Crouch	PRESENTATION, YOUTUBE VIDEOS AND QUIZZES
	Analytical Techniques Chromatography - Definition, Principles, Types	02	SAME AS ABOVE	
	Introduction to Paper Chromatography, Thin Layer Chromatography, Column Chromatography and its Applications.	03	SAME AS ABOVE	
	Colorimetry - Principle, Beer-Lambert's Law, Measurement of Extinction, Derivation of E = kcl, Limitations of Beer-Lambert's Law,	03	Instrumental Methods of Chemical Analysis, Gurdeep Chatwal and Sham Anand	
	Filter Selection	01	Fundamentals of Analytical chemistry, 7th edition, skoog, West, Holler and Crouch	

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **F.Y.B.Sc.**

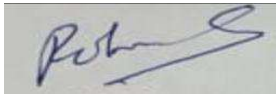
SEMESTER: **I** MONTH: **OCTOBER-JANUARY** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the different processes of cultivation of microorganism
- Gain knowledge on the concept of enumeration of microorganisms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Basic Life Sciences-II : Microbial Techniques **Unit III** **Nutrition, Cultivation and Enumeration of Microorganisms**	Nutritional Requirements: Carbon, Oxygen, Hydrogen, Nitrogen, Phosphorus, Sulphur and Growth Factors.	02	Willey, J. M., Sherwood, L., & Woolverton, C. J. (2011). *Prescott's microbiology* (Vol. 7). New York: McGraw-Hill. Pelczar, M. J., Chan, E. C. S., Krieg, N. R., Edwards, D. D., & Pelczar, M. F. (1993). *Microbiology: concepts and applications* (Vol. 182). New York: McGraw-Hill.	Powerpoint Presentation supplemented with Youtube videos
	Classification of Different Nutritional Types of Organisms.	01		
	Design and Types of Culture Media. Simple Medium, Differential, Selective and Enriched Media	02		
	Concept of Isolation and Methods of Isolation. Pure Culture Techniques	02		
	Growth Phases, Growth Curve. Arithmetic Growth and Growth Yield.	02		
	Measurement of Growth. Chemostat and Turbidostat	01		
	Enumeration of Microorganisms- Direct and Indirect Methods	02		
	Preservation of Cultures- Principle and Methods. Cryogenic Preservation Advantages and Limitations	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_____ CLASS: FY_____ SEMESTER: I_____

MONTH: -_August_ ACADEMIC YEAR: ___2020-21_

LEARNING OBJECTIVE/S: To acquaint the students with basic concepts of Chemistry like Classification and Nomenclature of Chemical compounds__

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2	**Chemical Bonds**: Ionic Bond: Nature of Ionic Bond, Structure of NaCl, KCl and CsCl, factors influencing the formation of Ionic Bond. **Covalent Bond**: Nature of Covalent Bond, Structure of CH4, NH3, H2O, Shapes of BeCl2, BF3 **Coordinate Bond**: Nature of Coordinate Bond Non Covalent Bonds: Van Der Waal's forces: dipole - dipole, dipole – induced dipole. **Hydrogen Bond**: Theory of Hydrogen Bonding and Types of Hydrogen Bonding (with examples of RCOOH, ROH, Salicylaldehyde, Amides and Polyamides).	15	Concise Inorganic Chemistry: by J.D. Lee NCERT Textbook. HSC TextBooks	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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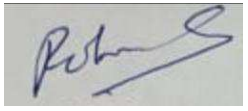
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_____ CLASS: FY_____ SEMESTER: I

MONTH: -_August_ ACADEMIC YEAR:___2020-21_

LEARNING OBJECTIVE/S: To acquaint the students with basic concepts of Chemistry like Classification and Nomenclature of Chemical compounds

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 3	**Chemistry of Water:** **Solutions** **Basic concepts in calculation** **Buffers**	15	Biochemistry – Lehninger4th Edition FYBSc Textbook, Himalaya publication	Online



TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: F. Y. B.Sc. SEMESTER: I MONTH: Nov-Jan ACADEMIC YEAR: 20-21

LEARNING OBJECTIVE/S:

The learners will be able to: Learn to classify the inorganic as well as organic compounds.

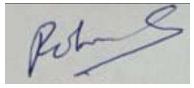
Get acquainted with IUPAC naming system of organic compounds.

Draw the Structures of the inorganic as well as organic compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Basic Chemistry I	Nomenclature and Classification of Inorganic Compounds: Oxides, Salts, Acids, Bases, Ionic, Molecular and Coordination Compounds	4	Organic chemistry by Stanely and Pine	**Google classroom & PPT**
UNIT II	Alkanes, Alkenes, Alkynes, Cyclic hydrocarbons, Aromatic compounds, Alcohols and Ethers	4	NCERT 11th and 12th Text book	**Google classroom & PPT**

Nomenclature and classification	Aldehydes and Ketones, Carboxylic acids and its derivatives, Amines, Amides	4		**Google classroom & PPT**
	Nomenclature and Classification of: Alkyl halides and Heterocyclic compounds	3		**Google classroom & PPT**

ALLOCATED TO THE UNIT: 15



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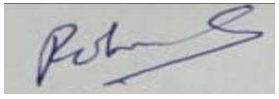
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: F.Y.B.Sc. SEMESTER: I MONTH: SEP-DEC ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: to acquaint students with DNA replication, repair and genetic engineering.
The learners will have: developed an understanding of different types of mutations and mutation repair mechanisms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-6 Unit-2: Mutation and DNA Repair	Definition and Types of Mutations	15	Genetics – B.D. Singh	Google Meet, MS PowePoint presentations, Quizizz.
	Mutagenesis and Mutagens. (Examples of Physical, Chemical and Biological Mutagens)		Genetics – Peter Russell 5th edition	
	Types of Point Mutations		Genetic Engineering – Sandhya Mitra	
	DNA REPAIR. Photoreversal, Base Excision Repair, Nucleotide Excision Repair, Mismatch Repair, SOS Repair and Recombination Repair			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

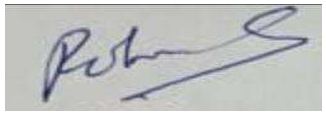
NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_____ CLASS: FY_ ___ SEMESTER: II_ ___

MONTH: -_December_ ACADEMIC YEAR: ___2020-21_

LEARNING OBJECTIVE/S: To impart the knowledge of Classification, Structure and Characterization of Biomolecules__

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 201 Bioorganic Chemistry	**Carbohydrates**: Structure, Function, Classification, Characteristic Reactions, Physical and Chemical Properties, D & L Glyceraldehydes, structure of Monosaccharide, Disaccharides, and Polysaccharides. Isomers of Monosaccharides, Chemical/Physical Properties of Carbohydrate, Chemical reactions for Detection of Mono., Di and Polysaccharides, **Lipids:** Classification of Lipids, Properties of Saturated, Unsaturated Fatty Acids, Rancidity, and Hydrogenation of Oils Phospholipids: Lecithin Cephalin, Plasmalogen Triacylglycerol-Structure and Function **Sterols**: Cholesterol: Structure and Function , Lipoproteins: Structure and Function, Storage Lipids, Structural Lipids, Action of Phospholipases, Steroids	15	Biochemistry – Lehninger Biochemistry – Conn & Stumph Biochemistry by Satyanarayana n	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT-15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_____ CLASS: FY_____ SEMESTER: II

MONTH: -_December_ ACADEMIC YEAR:___2020-21_

LEARNING OBJECTIVE/S: To acquaint the students with basic concepts of Thermodynamics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 202 Unit 1 Thermodynamics	System, Surrounding, Boundaries Sign Conventions, State Functions, Internal Energy and Enthalpy: Significance, examples, Laws of Thermodynamics and its Limitations, Mathematical expression. Qualitative discussion of Carnot Cycle for ideal Gas and Mechanical Efficiency. Laws of Thermodynamics as applied to Biochemical Systems. Concept of Entropy, Entropy for Isobaric, Isochoric and Isothermal Processes.	15	FYBSc Textbook, Himalaya publication NCERT Textbook	Online

TOTAL NUMBER OF LECTURES ALLOCATED -15

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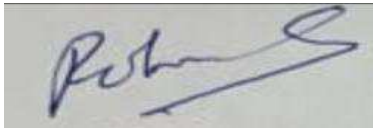
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: F.Y.B.Sc. SEMESTER: II MONTH: NOVEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: to acquaint the students with the genetics fundamentals.
The learners will have: comprehended the Mendel□s law of heredity and examples of modifications and deviations of Mendel□s law.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Unit 1 - Genetics Fundamentals	Mendel□s Laws of Heredity, Monohybrid Cross: Principle of Dominance and Segregation. Dihybrid Cross: Principle of Independent Assortment. Application of Mendel□s Principles. Punnett Square.	15	iGenetics by Russell	Google Meet
	Mendel□s Principle in Human Genetics. Incomplete Dominance and Co-dominance.			PowerPoint presentation
	Multiple Alleles. Allelic series. Variations among the effect of the Mutation.			
	Genotype and Phenotype. Environmental effect on the expression of the Human Genes. Gene Interaction. Epistasis.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

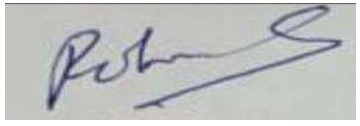
NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_____ CLASS: SY_ ___ SEMESTER: III

MONTH: -_August_ ACADEMIC YEAR:___2020-21_

LEARNING OBJECTIVE/S: Principles of Physics to applications and techniques in the field of Biology such as Microscopy, Spectroscopy__

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 1	**Optics** **Lasers** **Electromagnetics Radiation** **Spectroscopy** **Microscopy: Electron** **Microscopy and Fluorescence** **Microscopy**	15	Practical Biochemitry – Wilson and Walker Optics	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: S.Y.B.Sc. SEMESTER: III MONTH: AUG-DEC ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To acquaint the students with cytogenetics, chromosomal aberration and genetic linkage & mapping.
The learners will have: developed an understanding of cytogenetics, chromosomal aberration and genetic linkage & mapping.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Unit 3 - Cytogenetics	Cytogenetics: Structure of Chromosome - Heterochromatin, Euchromatin, Polytene Chromosomes	15	iGenetics- Molecular approach by Peter Russell	Google Meet, MS PowePoint presentations, Quizizz
	Variation in Chromosomal Structure and Number: Deletion, Duplication, Inversion, Translocation, Aneuploidy, Euploidy and Polyploidy and Syndromes- Klinefelter, Turner, Cri-du-Chat, Trisomy -21, Trisomy 18 and Trisomy 13		Genetics: From Genes to Genomes 6th edition by Hartwell et al	
	Sex Determination and Sex Linkage: Mechanisms of Sex Determination (XX-XY, ZZ-ZW, XX-XO) Dosage Compensation and Barr Body			
	Genetic Linkage, Crossing Over and Chromosomal Mapping: Tetrad Analysis; Two-point Cross; Three-point Cross; Pedigree Analysis			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: S. Y. B.Sc. SEMESTER: III MONTH: **Aug-Dec** ACADEMIC YEAR: 20-21

LEARNING OBJECTIVE/S: The learners will be able to: Learn the elaborate concept of Translation of proteins and consecutive post translation modifications and protein sorting.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MOLECULAR BIOLOGY UNIT II Gene expression-Translation	Nature of Genetic Code, Wobble Hypothesis.	2	i-Genetics: A Molecular Approach (III Edition) -Russell	**Google classroom & PPT**
	Translation: Process of Protein Synthesis (Initiation, Elongation, Translocation, Termination)	4+3+3		**Google classroom, PPT Animation videos**
	Post Translation Modifications.	1		**Google classroom & PPT**
	Protein sorting.	2		**Google classroom & PPT**

LECTURES ALLOCATED TO THE UNIT: 15

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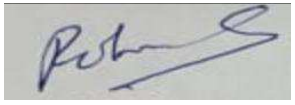
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: S.Y.B.Sc. SEMESTER: III MONTH: AUG-DEC ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: to have an insight into mechanism of regulation of gene expression.
The learners will have: learned the fundamentals of mechanisms of regulation of gene expression in both prokaryotes and eukaryotes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5 Unit 3 - Regulation of Gene Expression	In Prokaryotes: In Bacteria: lac Operon of E. coli; trp Operon of E. coli. In Viruses: Lytic / Lysogenic Regulation	15	iGenetics-Molecular approach by Peter Russell	Google Meet, MS PowePoint presentations, Quizizz
	In Eukaryotes: Operons in Eukaryotes; Control of Transcriptional Initiation; Gene Silencing and Genomic Imprinting; Post-Transcriptional Control; RNA Interference			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

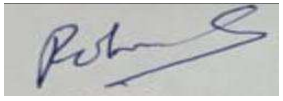
NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_____ CLASS: SY_ ___ SEMESTER: IV

MONTH: -_December_ ACADEMIC YEAR:___2020-21_

LEARNING OBJECTIVE/S: Principles of Physics to applications and techniques in the field of Biology such as Microscopy, Spectroscopy__

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 401 UNIT II Amino Acid Metabolism	**Amino Acid Breakdown :** Deamination, Transamination, Urea Cycle, Breakdown of Glucogenic and Ketogenic Amino Acids. **Amino Acids as Biosynthetic Precursors :** Biosynthesis of Epinephrine, Dopamine, Serotonin, GABA, Histamine, Glutathione.	15	Biochemistry by Satyanarayana n Biochemitry by Lehninger	Online

TOTAL NUMBER OF LECTURES ALLOCATED - 15



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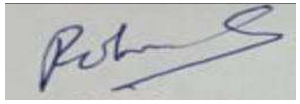
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: NOVEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: to acquaint the students with basics of nanomaterials and polymers.
The learners will have: comprehended with basics of nanomaterials and polymers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit 3 – Polymers and nanomaterials	Polymers: Introduction to Polymers. Types of Polymers - Monomer, Polymer, Homopolymer, Copolymer, Thermoplastics and Thermosets, Addition and Condensation Polymers (Examples and Uses) Stereochemistry of Polymers. Biodegradable Polymers	15	Textbook of Organic Chemistry for T.Y.B.Sc	Google Meet
	Nanomaterials: Introduction to Nanomaterials. Forms of Nanomaterials: Nanoparticles, Nanofilms and Nanotubes Synthesis and Characterization of Nanomaterials. Applications of Nanomaterials		Nanomaterials by B. Viswanathan	PowerPoint presentation
			Nanotechnology by Sulabha Kulkarni	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: to acquaint the students with the fundamentals of bioinformatics and biological databases.
The learners will have: acquired knowledge about the fundamentals of bioinformatics and biological databases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5 Unit 1 - Introduction to Computers and Biological Databases	Computer Basics: Organization of a Computer; I/O Units; Computer Memory; Processor; Binary Arithmetic; Logic Circuit; Architecture; Operating System	15	Choudhuri - Bioinformatics for Beginners	Chalk board method
	Internet Basics: Connecting to the Internet, E-mail, FTP, www, Difference between www and Internet		Attwood - Introduction to Bioinformatics	PowerPoint presentation
	Biological Databases: Classification of Databases - Raw and Processed Databases; Primary (NCBI), Secondary (PIR) and Tertiary or Composite (KEGG) Databases; Structure and Sequence Databases. Specialized Databases - Protein Pattern Databases; Protein Structure and Classification Databases (CATH/SCOP)		Pevsner - Bioinformatics and Functional Genomics 3rd	
	Genome Information Resources: DNA Sequence Databases Specialized Genomic Resources. Protein Databases based on Composition, Motifs and Patterns			
	Protein Structure Visualization Software			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. ROHAN GAVANKAR **DEPARTMENT: Biotechnology CLASS: T.Y.B.Sc**

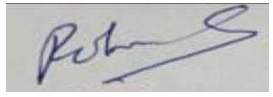
SEMESTER: V (FIVE) **MONTH: AUGUST-DECEMBER** **ACADEMIC YEAR: 2020-21**

LEARNING OUTCOMES:
The learners will be able to:

- To describe the process of cell cycle and its role in embryonic development
- To justify the process of apoptosis

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 501 Cell Biology	Cell cycle Introduction: Prokaryotic and Eukaryotic-	05	• Molecular Biology of the Cell, 5th Edition (2007) Bruce Alberts, Alexander Johnson, Julian Lewis, Martin Raff, Keith Roberts, Peter Walter. Garland Science, USA • Cell Biology, 6th edition, (2010) Gerald Karp. John Wiley & Sons., USA	Powerpoint presentations, Quizziz, Whiteboard.
	The Early Embryonic Cell Cycle and the Role of MPF	02		
	Yeasts and the Molecular Genetics of Cell-Cycle Control	02		
UNIT I: Cell cycle	Apoptosis	04		
	Cell-Division Controls in Multicellular Animals	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Sharvil Shringarpure **DEPARTMENT: Biotechnology CLASS: T.Y.B.Sc**

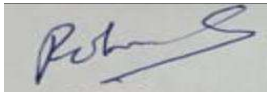
SEMESTER: V (FIVE) **MONTH: AUGUST-DECEMBER** **ACADEMIC YEAR: 2020-21**

LEARNING OUTCOMES:
The learners will be able to:

- To describe the process of cell Signaling
- To justify the process of apoptosis

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 501 Cell Biology **UNIT II: Cell Signaling**	Cell signalling and signal transduction:Introduction General Principles of Cell Signaling	03	• Molecular Biology of the Cell, 5th Edition (2007) Bruce Alberts, Alexander Johnson, Julian Lewis, Martin Raff, Keith Roberts, Peter Walter. Garland Science, USA • Cell Biology, 6th edition, (2010) Gerald Karp. John Wiley & Sons., USA	Powerpoint presentations, Quizziz, Online games
	Signaling via G-Protein-linked Cell-Surface Receptors -	03		
	Signaling via Enzyme-linked Cell-Surface Receptors -	03		
	Target-Cell Adaptation, The Logic of Intracellular	03		
	Signaling: Lessons from Computer-based "Neural Networks	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

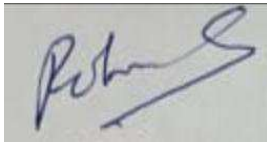
NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_ _____ CLASS: TY_ ___ SEMESTER: V

MONTH: -_August_ ACADEMIC YEAR:___2020-21_

LEARNING OBJECTIVE/S: Techniques and tools used in rDNA Technology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Unit 3	**Cloning vectors**-Plasmids (pUC series), Cosmids, phagemids M13, shuttle vectors, YAC vectors, expression vectors pET **Gene Cloning** **Libraries**: Types. Genomic & cDNA libraries **Screening and Selection** **Chromosome mapping and expression**	15	iGenetics – Peter Russell Biochemistry by Lehninger	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

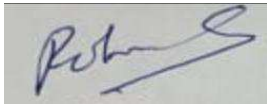
NAME OF THE STAFF: Girish Jamnekar_____DEPARTMENT: Biotechnology_____ CLASS: TY_____ SEMESTER: VI

MONTH: -_December_ ACADEMIC YEAR:___2020-21_

LEARNING OBJECTIVE/S: Techniques and tools used in rDNA Technology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 601 Unit 1 – Protein Biochemistry	**Protein structure**: Protein Tertiary and Quaternary Structures; **Protein Denaturation and Folding**; Protein Function: Reversible Binding of a Protein to a Ligand: Oxygen-Binding Proteins; **Complementary Interactions between Proteins and Ligands:** Immunoglobulins; **Protein Interactions Modulated by Chemical Energy**: Actin, Myosin, and Molecular Motors; **Protein purification**.	15	Biochemistry by Lehninger	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Sharvil Shringarpure **DEPARTMENT: Biotechnology** **CLASS: T.Y.B.Sc**

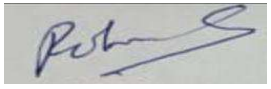
SEMESTER: VI **MONTH:** **ACADEMIC YEAR: 2020-21**

LEARNING OUTCOMES:
The learners will be able to:

- Know the metabolic cycle of carbohydrates and define their function.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 601 Biochemistry UNIT II: Metabolism	Carbohydrate biosynthesis and its regulation: Peptidoglycan in Bacteria - Ls; Starch and sucrose in Plants -; Glycogen in Animals -; Biosynthesis and regulation of Cholesterol, Atherosclerosis	15	• Lehninger Principles of Biochemistry - Albert Lester Lehninger(5th edition) • Biochemistry , 4th edition (2010), Voet and Voet, John Wiley and sons, USA	Powerpoint presentations, Quizziz, Online games

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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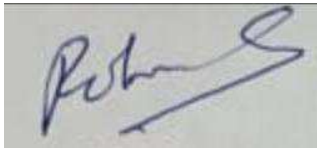
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: T.Y.B.Sc. SEMESTER: VI MONTH: NOVEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: to acquaint the students with neurobiology and neurochemistry.
The learners will have: gained knowledge of anatomy of nervous system, neuronal processes associated with special senses and neurochemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Unit 4 - Neurochemistry	Anatomy and functioning of the brain	15	Textbook of Medical Physiology by Guyton 11th edition	Google Meet
	Neuronal pathways		Biochemistry by Metzler	PowerPoint presentation
	Propagation of nerve impulses, Neuronal excitation and inhibition			
	Synapses and gap junctions			
	Action of Neuro toxins and neurotransmitters			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **F.Y.B.Sc.**

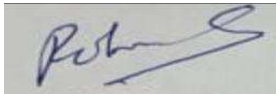
SEMESTER: **I** MONTH: **OCTOBER-JANUARY** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the different processes of cultivation of microorganism
- Gain knowledge on the concept of enumeration of microorganisms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Basic Life Sciences-II : Microbial Techniques **Unit III** **Nutrition, Cultivation and Enumeration of Microorganisms**	Nutritional Requirements: Carbon, Oxygen, Hydrogen, Nitrogen, Phosphorus, Sulphur and Growth Factors.	02	Willey, J. M., Sherwood, L., & Woolverton, C. J. (2011). *Prescott's microbiology* (Vol. 7). New York: McGraw-Hill. Pelczar, M. J., Chan, E. C. S., Krieg, N. R., Edwards, D. D., & Pelczar, M. F. (1993). *Microbiology: concepts and applications* (Vol. 182). New York: McGraw-Hill.	Powerpoint Presentation supplemented with Youtube videos
	Classification of Different Nutritional Types of Organisms.	01		
	Design and Types of Culture Media. Simple Medium, Differential, Selective and Enriched Media	02		
	Concept of Isolation and Methods of Isolation. Pure Culture Techniques	02		
	Growth Phases, Growth Curve. Arithmetic Growth and Growth Yield.	02		
	Measurement of Growth. Chemostat and Turbidostat	01		
	Enumeration of Microorganisms- Direct and Indirect Methods	02		
	Preservation of Cultures- Principle and Methods. Cryogenic Preservation Advantages and Limitations	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **F.Y.B.Sc**.

SEMESTER: **II** MONTH: **DECEMBER - MARCH** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the different processes of genetic material transfer in bacteria.
- Gain knowledge on the concept of Transposable elements

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 Life Sciences-II Genetics **Unit II Microbial Genetics**	Genetic analysis in Bacteria- Prototrophs, Auxotrophs. Replica plate technique	02	**Microbiology** By Pelc□ ar And iGenetics by Peter Russell	Powerpoint presentation with motion path animations. Videos
	Mechanism of Genetic Exchange in Bacteria: Conjugation	05		
	Transformation;	02		
	Bacteriophages: Lytic and Lysogenic Development of Phage.	01		
	Transduction; Generali□ ed Transduction,	01		
	Speciali□ ed Transduction	01		
	Bacterial Transposable Elements	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. BASIL D□MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **S.Y.B.Sc**.

SEMESTER: **III** MONTH: AUGUST **- DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the role of different effector molecules and effector mechanisms in immunology.
- Gain insights in the antigen processing pathways and their role in immune response.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Immunology **UNIT II Cell Receptors**	MHC Classes - General Organization and Inheritance;	01	Goldsby, R. A., Kindt, T. J., Osborne, B. A., & Kuby, J. (2003). Immunology 5th edition. W. H.	Powerpoint presentations with use of motion animations to simplify the concepts
	Structures and Peptide Interactions; Class I and II Diversity	01		
	MHC Polymorphism;	01		
	Antigen Presentation - Endocytic and Exocytic Pathways;	03		
	Self MHC Restriction.	02		
	T-cell Receptor Complex: Structure and Activation.	03		
	B-cell Receptor: Structure, Maturation and Activation	03		
	B-T Cell Interaction (B-T cell Cooperation).	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Sharvil Shringarpure** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **S.Y.B.Sc**.

SEMESTER: **III** MONTH: AUGUST **- DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the role of different effector molecules and effector mechanisms in immunology.
- Gain insights in the antigen processing pathways and their role in immune response.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Immunology **UNIT III Immuno-techniques**	Immunoprecipitation, Immunoelectrophoresis	01	Kuby, J. (2003). Immunology 5th edition. W. H.	Powerpoint presentations with use of motion animations to simplify the concepts
	CIEP, Rocket Electrophoresis	01		
	2-D Immunoelectrophoresis	01		
	Agglutination Reactions :Passive, Reverse Passive	03		
	Agglutination Inhibition	02		
	RIA, ELISA ELISPOT, Chemiluminescence,	03		
	Western Blot, Immunofluorescence,	03		
	Flow Cytometry, Alternatives to Antigen-Antibody Reactions	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **S.Y.B.Sc**.

SEMESTER: **IV** MONTH: **JANUARY-APRIL** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the etiology and pathophysiology of Skin, respiratory system and Urinary tract infections.
- Gain knowledge about the different Organisms causing Skin, respiratory system and Urinary tract infections.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit II Medical Microbiology- Causative Organisms- I	Skin : *S. aureus, S. pyogenes.*	4	Tortora, G. J., Funke, B. R., Case, C. L., Weber, D., & Bair, W. (2004). *Microbiology: an introduction* (Vol. 9). San Francisco, CA: Benjamin Cummings. Ananthanarayan, R. (2006). *Ananthanarayan and Paniker's textbook of microbiology*. Orient Blackswan.	Powerpoint presentation Youtube videos TedEd videos
	Respiratory Tract Infections : *S. pneumoniae*	1		
	M. tuberculosis (Characteristics Transmission, Course of Infection, Lab Diagnosis, Management of TB, Prevention and Control, Immuno and Chemoprophylaxis, DOTS and MDR).	5		
	Urinary Tract Infections :*E.coli* : Characteristics, Virulence, Clinical disease, and *E.coli* Infections.	3		
	Proteus.	2		

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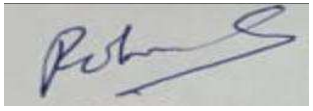
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. BASIL D□MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **T.Y.B.Sc**.

SEMESTER: **V** MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand the concept of cosmetic formulation and application of marine biotechnology in the field of cosmetics.**
- **Gain knowledge about the marine resources used in cosmetic products, available therapies and bioresources.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4- MARINE BIOTECHNOLOGY UNIT-IV MARINE BIORESOURCES AND COSMETICS	Cosmetics from Marine Sources: Scenario of Marine Sources in the Cosmetic Industry, Cosmetics: Definition and Regulations, Cosmeceuticals	02	Kim, S.K. Springer Handbook of Marine Biotechnology; Springer: Berlin, Germany; Heidelberg, Germany, 2015.	Powerpoint Presentation, Youtube videos.
	Target Organs and Cosmetics Delivery Systems, Components of Cosmetics,	03		
	Major Functions of Some Marine Components in Cosmetics and Cosmeceuticals	03		
	Treatments Based on Marine Resources, Products Based on Marine Resources	03		
	Marine Bioresources, Marine Secondary Metabolites, Marine Proteins, Marine Lipids	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. BASIL D□MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **T.Y.B.Sc.**

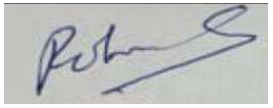
SEMESTER: **VI** MONTH: **JANUARY-APRIL** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of downstream processing.
- Gain knowledge about the different downstream processing methods that are available.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit 2 Downstream processing	Introduction to DSP	1	Stanbury, P. F., Whitaker, A., & Hall, S. J. (2013). Principles of fermentation technology. Elsevier.	Powerpoint presentation Videos Animations
	Foam separation, Types of precipitation	2		
	Filtration	3		
	Centrifugation	2		
	Cell disruption	2		
	Chromatography	2		
	Solvent recovery, Membrane processes, Drying, Crystalization and whole broth processing	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. Rohan Gavankar** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **T.Y.B.Sc.**

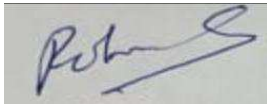
SEMESTER: **VI** MONTH: **JANUARY - MARCH** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: The learners will be able to :

- Understand the concept of GMP, QA and QC
- Gain clarity regarding the need of Good Manufacturing Practices in pharmaceutical industries.
- Attain knowledge about regulatory requirements and implementation of QA and QC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II- Industrial Microbiology **UNIT IV: QA-QC**	Concept of GMP	01	**Hugo and Russell's Pharmaceutical Microbiology, Seventh Edition**	Powerpoint presentations
	Requirements of GMP implementation	02		
	Documentation of GMP practices	02		
	Regulatory certification of GMP	02		
	Quality Control (QC): Concept of QC	02		
	Requirements for implementing QC	02		
	QA concepts: Concept of QA	02		
	Requirements for implementing	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Bhanupriya Ch

DEPARTMENT: Biotechnology

CLASS: FY B.Sc **SEMESTER:** I

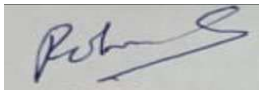
MONTH: October 2020 – January 2021 **ACADEMIC YEAR:** 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to: Structure of DNA, Various enzymes applicable for DNA replication, to gain knowledge about both prokaryotic and eukaryotic DNA replication and basic recombination method.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VI, Unit I, Replication	DNA Replication in Prokaryotes and Eukaryotes- Semi-conservative DNA replication, DNA Polymerases and its role, E.coli Chromosome Replication, BidirectionalReplication of Circular DNA molecules. Rolling Circle Replication, DNA Replication in Eukaryotes DNA Recombination – Holliday Model for Recombination Transformation	15	Peter Russell iGenetics – Replication chapter	Online mode of teaching using different ICT tools

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Bhanupriya Ch

DEPARTMENT: Biotechnology

CLASS: TY B.Sc **SEMESTER:** V

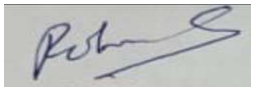
MONTH: August 2020 – December 2021 **ACADEMIC YEAR:** 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to: The various physical, chemical and biological plant transformation methods and its application.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit I: Genetic engineering of plants	Genetic engineering of plants; Methodology. Plant transformation with the Ti plasmid of *A.tumefaciens*, Ti plasmid derived vector system. Transgenic plants: Physical methods of transferring genes to plants : electroporation, microprojectile bombardment, liposome mediated, protoplast fusion**;** Vectors for plant cells**;** Improvement of seed quality protein.	15	Molecular Biotechnology by Glick & Pasternak 4th Edition; Vectors f or plant cells -Biotechnology - Fundamentals and Applications by S.S.Purohit Improvement of seed quality protein - Glick & Pasternak 4th Edition	Online mode of teaching using different ICT tools

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Bhanupriya Ch

DEPARTMENT: Biotechnology

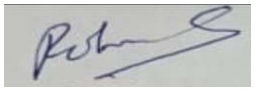
CLASS: TY B.Sc **SEMESTER:** V

MONTH: August 2020 – December 2021 **ACADEMIC YEAR:** 2020-21

LEARNING OBJECTIVE/S: The learners will be able to: The various gene sequencing methods both classic and advanced. The concept of human genome project and the various engineered nucleases available.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit IV: Gene sequencing and editing	Maxam Gilbert's method, Sanger's dideoxy method, Automated DNA sequencing, Pyrosequencing, Human genome mapping and it's implications in health and disease; RNAi, ZNF(Zinc finger nucleases), TALENS(Transcription Activator Like Effector Nucleases), CRISPER/Cas system(Clustered Regularly Interspersed Repeats)	15	Gene Cloning and DNA Analysis 2ndEdition T.A. Brown. Genomics Cantor C.R., and Smith C.L. John Wiley & Sons. (1999) https/ www.neb.com Researchgate, Science mag.org, Ncbi.nlm.nih, The Scientist (Oct 25 2017)	Online mode of teaching using different ICT tools

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **VICTORIA MANORANJITHAM**

DEPARTMENT: **BIOTECHNOLOGY** CLASS: **S.Y.BSc** SEMESTER: **IV** MONTH: **DECEMBER - MARCH** ACADEMIC YEAR: **2020- 2021**

LEARNING OBJECTIVE/S:

- The learners will be able to:
- Understand the difference between an infection and disease
- Differentiate the different types of infection
- Understand developmental stages of a disease and the transmission of disease
- Understand epidemiology and various epidemiological markers
- Understand Koch's postulates and the exceptions of Koch's postulates.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 403 UNIT 1 **Infectious Diseases**	Host Parasite Relationship: Normal Flora; Factors Affecting the Course of Infection and Disease; Mechanisms of Infection and Virulence Factors.	05	Microbiology by Tortora 5th edition and 3rd edition	on - class lecturing (using power-point presentations). Discussions, Activities and homework.
	Infection: Patterns of Infection; Types of Infections; Signs and Symptoms; Epidemiology and	05	Microbiology–6th Edition (2006), Pelczar M.J., Chan	on - class lecturing (using power-point presentations). Discussions, Activities and homework.

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	Epidemiological Markers.		E.C.S., Krieg N.R., The McGraw Hill Companies Inc. NY	
	Diseases: Origin of Pathogens; Vectors; Acquisition of Infection; Koch's Postulates.	05	Presscott's Microbiology, 8th edition (2010), Joanne M Willey, Joanne Willey, Linda Sherwood, Linda M Sherwood, Christopher J Woolverton, Chris Woolverton, McGrawHil Science Enginering, USA	. on - class lecturing (using power-point presentations). Discussions, Activities and homework.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **VICTORIA MANORANJITHAM**

DEPARTMENT: **BIOTECHNOLOGY** CLASS: **S.Y.BSc** SEMESTER: **IV** MONTH: **DECEMBER - MARCH** ACADEMIC YEAR: **2020- 2021**

LEARNING OBJECTIVE/S:

- The learners will be able to:
- Understand Entrepreneurship
- Various strategies, steps, rules and norms band necessities to be followed and fulfilled to set up an enterprise.
- Role of Government and Financial Institutions in Entrepreneurship Development
- Writing up a business plan

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 407 UNIT II Setting-up of an Enterprise and Planning	Location of Enterprise; Real Estate and Human Resource Planning,	04	Entrepreneurship – Kurup Handbook of Entrepreneurship development- Basotia and Sharma	on - class lecturing (using power-point presentations). Discussions, Activities and homework.

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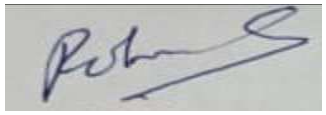
	Financial planning: Role of Government and Financial Institutions in Entrepreneurship Development; Raising Money from Venture Capitalists, Government Grants, Product Selection and Ideas; Project Planning and Formulation; Project Feasibility Assessment; Regulatory Affairs, Corporate Laws, Innovation, IPR generation and Protection,	08	Handbook of Entrepreneurship development- Basotia and Sharma	on - class lecturing (using power-point presentations). Discussions, Activities and homework.
	Preparation of a Business Plan, Characteristics and Importance of Planning;	03		. on - class lecturing (using power-point presentations). Discussions, Activities and homework.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____**VICTORIA MANORANJITHAM** _____

DEPARTMENT: _____: **BIOTECHNOLOGY** CLASS: **F.Y. BSc** SEMESTER: **I** MONTH: **AUGUST** ACADEMIC YEAR: **2020- 2021**

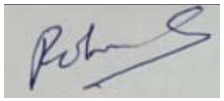
LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 103 UNIT 3 Bacteria and Viruses	Bacteria : Classification, Types, Morphology (Size, Shape and Arrangement)	02	Microbiology by Pelczar- 5th edition. page no- 73-94,	online-class lecturing using powerpoint presentations
	Cultivation of Bacteria.	02	99-114	
	Reproduction and Growth (Binary Fission, Conjugation and Endospore formation) Growth Kinetics,	03	115-133	
	Isolation and Preservation. Significance of Bacteria	03		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Viruses :General Characters, Classification (Plant, Animal and Bacterial Viruses) Structure and Characterization of Viruses and Significance	05	415-450	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____**VICTORIA MANORANJITHAM** _____

DEPARTMENT: _____: **BIOTECHNOLOGY** CLASS: **F.Y. BSc** SEMESTER: **I** MONTH: **AUGUST** ACADEMIC YEAR: **2020- 2021**

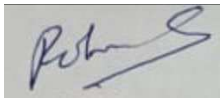
LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 103 UNIT 3 Bacteria and Viruses	Bacteria : Classification, Types, Morphology (Size, Shape and Arrangement)	02	Microbiology by Pelczar- 5th edition. page no- 73-94,	online-class lecturing using powerpoint presentations
	Cultivation of Bacteria.	02	99-114	
	Reproduction and Growth (Binary Fission, Conjugation and Endospore formation) Growth Kinetics,	03	115-133	
	Isolation and Preservation. Significance of Bacteria	03		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Viruses :General Characters, Classification (Plant, Animal and Bacterial Viruses) Structure and Characterization of Viruses and Significance	05	415-450	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Swati Chaudhari DEPARTMENT: Biotechnology

CLASS: F.Y.B.Sc SEMESTER: I

MONTH: September-December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Understand and describe the ultrastructure of prokaryotic and eukaryotic cells.

Describe basic differences between prokaryotic and eukaryotic cells.

Describe structure and function of different eukaryotic organelles.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT-103 Basic Life Sciences: Biodiversity and Cell Biology Unit II: Ultrastructure of Prokaryotic and Eukaryotic Cell.	Comparison of Prokaryotic And Eukaryotic Cells, Concept of Cell Shape and Size	1	Microbiology– 6th Edition (2006), Pelczar M.J., Chan E.C.S., Krieg N.R., The McGraw Hill Companies Inc. NY Presscott's Microbiology,	Power point Presentations Teaching aids Animations You tube Videos
	Detail Structure of Slime Layer, Capsule	1		
	Flagella, Pilli (Prokaryotic) External Cell Coverings: Cilia And Flagella (Eukaryotic)	2		
	Cell Wall(Gram Positive and Negative),	2		
	Cell Membrane(Prokaryotic and Eukaryotic)	1		
	Cytoplasm and Genetic Material (Prokaryotic) Cytoplasmic Matrix (Eukaryotic)	1		

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	Storage Bodies and Spores	1	8th edition (2010), Joanne M Willey, Joanne Willey, Linda Sherwood, Linda M Sherwood, Christopher J Woolverton, Chris Woolverton, McGrawHil Science Enginering, USA	
	Microfilaments, Intermediate Filaments, and Microtubules	1		
	Nucleus –Nuclear Structure, Nucleolus Organelles of the Biosynthetic-Endoplasmic Reticulum & Golgi Apparatus. Proteasome , Eucaryotic Ribosomes,	2		
	Lysosome, Endocytosis, Phagocytosis, Autophagy	1		
	Mitochondria and Chloroplasts	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: FYBSC SEMESTER:I

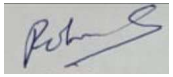
MONTH: October to December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Identify various physical and chemical agents of controlling microorganisms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 104 Basic Life Sciences-II: Microbial Techniques Unit II Sterilization Techniques	Definition: Sterilization and Disinfection. Types and Applications Dry Heat, Steam under pressure, Gases, Radiation and Filteration	04	Microbiology by Pelczar, Chan & Krieg 5th E	Power point presentation and topic related videos
	Chemical Agents and their Mode of Action - Aldehydes, Halogens, Quaternary Ammonium Compounds, Phenol and Phenolic Compounds, Heavy Metals, Alcohol, Dyes, and Detergents	04	Microbiology by Pelczar, Chan & Krieg 5th E	Power point presentation and topic related videos
	Ideal Disinfectant. Examples of Disinfectants and Evaluation of Disinfectant	02	Fundamentals of Microbiology by Frobisher 9th Ed	Power point presentation and topic related videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: FYBSc SEMESTER: I

MONTH: October –December 2020 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To Acquaint students with various fields of Biotechnology and their applications.
The learners will be able to: know the various fields of Biotechnology and scope of biotechnology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5: Biotechnology-I: Introduction to Biotechnology. Unit 1: Scope and Introduction to Biotechnology	History and Introduction to Biotechnology. What is Biotechnology? Definition of Biotechnology.	3	Advanced Biotechnology by R.C. Dubey	Google Meet, power point presentation. Brain storming method.
	Traditional and Modern Biotechnology, Branches of Biotechnology. Animal Biotechnology, Marine Biotechnology, Agricultural Biotechnology, Healthcare, Industrial Biotechnology, Pharmaceutical Biotechnology, Environmental Biotechnology,	4	Biotechnology by B.D Singh	Google Meet, power point presentation. Quiz method. Project based on innovative Start up ideas for biotechnology
	Biotechnology Research in India, Biotechnology Institution in India (public and Private Sector),	2	Advanced Biotechnology By R. C Dubey & Biotechnology by B.D Singh	Google Meet, power point presentation.
	Biotechnology Success Stories , Biotech Policy Initiatives	3	Advanced Biotechnology :By R.C Dubey & Biotechnology by John E. Smith.	Google Meet, power point presentation..
	Biotechnology in context of Developing World, Public Perception of Biotechnology	3	Biotechnology by John E. Smith.	Google Meet, power point presentation.

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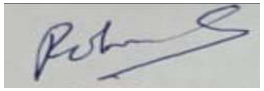

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: FYBSc SEMESTER: I

MONTH: October –December 2020 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To Acquaint students with various fields of Biotechnology and their applications.
The learners will be able to: know the various fields of Biotechnology and scope of biotechnology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5: Biotechnology-I: Introduction to Biotechnology. Unit 1: Scope and Introduction to Biotechnology	History and Introduction to Biotechnology. What is Biotechnology? Definition of Biotechnology.	3	Advanced Biotechnology by R.C. Dubey	Google Meet, power point presentation. Brain storming method.
	Traditional and Modern Biotechnology, Branches of Biotechnology. Animal Biotechnology, Marine Biotechnology, Agricultural Biotechnology, Healthcare, Industrial Biotechnology, Pharmaceutical Biotechnology, Environmental Biotechnology,	4	Biotechnology by B.D Singh	Google Meet, power point presentation. Quiz method. Project based on innovative Start up ideas for biotechnology
	Biotechnology Research in India, Biotechnology Institution in India (public and Private Sector),	2	Advanced Biotechnology By R. C Dubey & Biotechnology by B.D Singh	Google Meet, power point presentation.
	Biotechnology Success Stories , Biotech Policy Initiatives	3	Advanced Biotechnology :By R.C Dubey & Biotechnology by John E. Smith.	Google Meet, power point presentation..
	Biotechnology in context of Developing World, Public Perception of Biotechnology	3	Biotechnology by John E. Smith.	Google Meet, power point presentation.

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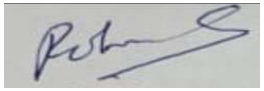

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Sharvil Shringarpure DEPARTMENT: Biotechnology CLASS: FYBSc SEMESTER: I

MONTH: October –December 2020 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To Acquaint students with various fields of Biotechnology and their applications.
The learners will be able to: know the various fields of Biotechnology and scope of biotechnology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5: Biotechnology-I: Introduction to Biotechnology. Unit 1: Scope and Introduction to Biotechnology	Applications of Biotechnology in Agriculture : GM Food, GM Papaya, GM Tomato.	3	Advanced Biotechnology by R.C. Dubey	Google Meet, power point presentation.
	Fungal and Insect Resistant Plants BT Crops, BT Cotton and BT Brinjal Pros and Cons Biotechnological applications in Crop.	4	Advanced Biotechnology By R. C Dubey & Biotechnology by B.D Singh	Google Meet, power point presentation. Quiz method.
	Livestock Improvements Modifications in Plant Quality Golden Rice.	2	Advanced Biotechnology By R. C Dubey & Biotechnology by B.D Singh	Google Meet, power point presentation.
	Molecular Pharming, Plant Based Vaccines	3	Advanced Biotechnology :By R.C Dubey &	Google Meet, power point presentation..
	Ethics in Biotechnology and IPR	3	Biotechnology by B.D Singh	Google Meet, power point presentation.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Sharvil Shringarpure DEPARTMENT: Biotechnology CLASS: FYBSc SEMESTER: I

MONTH: October –December 2020 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To Acquaint students with various fields of Biotechnology and their applications.
The learners will be able to: know the various fields of Biotechnology and scope of biotechnology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5: Biotechnology-I: Introduction to Biotechnology. Unit 1: Scope and Introduction to Biotechnology	Applications of Biotechnology in Agriculture : GM Food, GM Papaya, GM Tomato.	3	Advanced Biotechnology by R.C. Dubey	Google Meet, power point presentation.
	Fungal and Insect Resistant Plants BT Crops, BT Cotton and BT Brinjal Pros and Cons Biotechnological applications in Crop.	4	Advanced Biotechnology By R. C Dubey & Biotechnology by B.D Singh	Google Meet, power point presentation. Quiz method.
	Livestock Improvements Modifications in Plant Quality Golden Rice.	2	Advanced Biotechnology By R. C Dubey & Biotechnology by B.D Singh	Google Meet, power point presentation.
	Molecular Pharming, Plant Based Vaccines	3	Advanced Biotechnology :By R.C Dubey &	Google Meet, power point presentation..
	Ethics in Biotechnology and IPR	3	Biotechnology by B.D Singh	Google Meet, power point presentation.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR, SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: F. Y. B. Sc._____SEMESTER: I_____MONTH: November. TO January ACADEMIC YEAR: 2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Gain fundamental knowledge in food and fermentation technology.
- Have an understanding of the principles underlying food processing and fermentative production of industrial fine chemicals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 105, III, FOOD AND FERMENTATION BIOTECHNOLOGY	Food Biotechnology: Biotechnological applications in enhancement of food quality, Unit operations in food processing, Quality factors in pre-processed food	3	European Food Information council web information	Classroom teaching
	Food deterioration and its control, Rheology of food products, Microbial role in food products-yeast, bacterial and other microorganisms based process and products	3	Food Science by N. N. Potter	Classroom teaching
	Modern biotechnological regulatory aspects in Food industries, Biotechnology and food-social appraisal	2	Web information	Classroom teaching
	Fermentation Technology- Definition, applications of fermentation technology. Microbial fermentations,	2	Industrial Microbiology by Casida	Classroom teaching
	Overview of industrial production of chemicals [acetic acid, citric acid and ethanol], antibiotics, enzymes and beverages	5	Industrial Microbiology by Casida	Classroom teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR, SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: F. Y. B. Sc._____SEMESTER: I_____MONTH: November. TO January ACADEMIC YEAR: 2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Gain fundamental knowledge in food and fermentation technology.
- Have an understanding of the principles underlying food processing and fermentative production of industrial fine chemicals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 105, III, FOOD AND FERMENTATION BIOTECHNOLOGY	Food Biotechnology: Biotechnological applications in enhancement of food quality, Unit operations in food processing, Quality factors in pre-processed food	3	European Food Information council web information	Classroom teaching
	Food deterioration and its control, Rheology of food products, Microbial role in food products-yeast, bacterial and other microorganisms based process and products	3	Food Science by N. N. Potter	Classroom teaching
	Modern biotechnological regulatory aspects in Food industries, Biotechnology and food-social appraisal	2	Web information	Classroom teaching
	Fermentation Technology- Definition, applications of fermentation technology. Microbial fermentations,	2	Industrial Microbiology by Casida	Classroom teaching
	Overview of industrial production of chemicals [acetic acid, citric acid and ethanol], antibiotics, enzymes and beverages	5	Industrial Microbiology by Casida	Classroom teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Amol Samant DEPARTMENT: Biotechnology CLASS: F.Y.B.Sc. SEMESTER: I

MONTH: Jun-Nov ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Experiments which proved DNA as a transforming element and RNA as a genetic material.

2. Role of different enzymes used in genetic engineering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT106 UNIT III GENETIC ENGINEERING	Experimental evidences for DNA as transforming element and RNA as Genetic Material. Cloning Vectors - Plasmids Isolation and Purification of DNA	15	Genetics - Peter A Textbook o f Russell 5th edition, 292-299. A Textbook of Biotechnology S.S. Purohit ... R. C. Dubey S. Chand Publishing	Ppt, Google form, Animation video, Demo video
	Enzymes- DNA Polymerases, Restriction Endonucleases, Ligases, Reverse Transcriptases, Nucleases, Terminal Transferases, Phosphatases			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: F.Y.B.Sc

SEMESTER: I MONTH: NOv.-Dec. ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- understand the multi-religious, multilingual nature and caste dimension in Indian society.
- acquaint the students with concepts of Societal Awareness
- impart knowledge of Society and make students aware about the Problems in Society
- understand the pluralistic nature of Indian society
- understand the multi-religious, multilingual nature and caste dimension in Indian society
- bring out the significance of gender as a demographic variable
- analyze the regional variations and problems of rural, urban and tribal areas.

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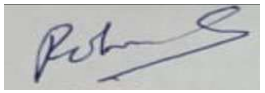
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VII Unit I Overview of Indian society	**Introduction overview of Indian society** **Objectives** **Understand the multi-cultural diversity of Indian society through its demographic composition of India** **Population distribution according to religion** **Multi-linguism** **Caste system in India** **Gender- A Demographic analysis** **Regional variations of urban,rural and tribal areas and its characteristics**	15	Foundation course-I sem I & II Pg 5	PowerPoint presentation Infographics Mind Map

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: I MONTH: OCTOBER-NOVEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To impart knowledge of societal awareness.
The learners will be able to : Understand the philosophy and the structure of the Constitution of India.
Learn the party system and the role played by women in Indian politics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 107 SOCIETAL AWARENESS UNIT III THE INDIAN CONSTITUTION AND SIGNIFICANT ASPECTS OF POLITICAL PROCESSES	The Indian Constitution Philosophy of the Constitution as set out in the Preamble; The structure of the Constitution-the Preamble, Main Body and Schedules;	04	Foundation Course – I Manan Prakashan	Presentation
	Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution	05		
	Significant Aspects of Political Processes The party system in Indian politics; Local self government in urban and rural areas;	03		
	the 73rd and 74th Amendments and their implications for inclusive politics; Role and significance of women in politics	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

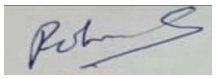
NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: F. Y. B.Sc. SEMESTER: II MONTH: November- March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Learn in detail about classification and properties of amino acids and proteins.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Bioorganic chemistry **Unit II Proteins and amino acids**	Classification, preparation and properties of amino acids, reactions of amino acids	4	Lehninger, principles of biochemistry, 4th edition Textbook of Biochemistry by- Styanarayan, 3rd edition	Flip classroom method
	Titration curve of amino acids, Sorenson's titration, concept of isoelectric pH and zwitterion.	4		Chalk board method
	Proteins classification based on structure and functions Primary structure prediction N-terminal and C-terminal method	6		Flip classroom method
	Glycoproteins	1		Chalk board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: F.Y.B.Sc

SEMESTER: II MONTH: January - April ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- discuss rate order and reaction kinetics

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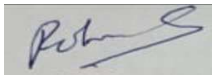
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II Reaction kinetics	**Reaction Kinetics:** Rate of Reaction, Rate Constant, Measurement of Reaction Rates Order & Molecularity of Reaction, Integrated Rate Equation of First and Second order reactions (with equal initial concentration of reactants). (Numericals expected) **Determination of Order of Reaction by** a) Integration Method b) Graphical Method c) Ostwald's Isolation Method d) Half Time Method. (Numericals expected).	15	11th std. Chemistry part I textbook	PowerPoint presentation Infographics Mind Map

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: II MONTH: DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To acquaint students Knowledge of Redox reaction.
The learners will be able to : Understand the relationship between oxidation and reduction.

Learn to assign oxidation numbers to different elements and compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 202 PHYSICAL CHEMISTRY UNIT III OXIDATION REDUCTION REACTIONS	Principles of Oxidation & Reduction Reactions Oxidising and Reducing Agents, Oxidation Number	02	XI STD MAH.STATE BOARD TEXT BOOK	PRESENTATION
	Rules to assign Oxidation Numbers with examples Ions like Oxalate, Permanganate and Dichromate	06		
	Balancing Redox Reactions by Ion Electron Method	05		
	Oxidation, Reduction, Addition and Substitution and Elimination Reactions.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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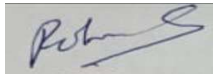
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Sharvil Shringarpure DEPARTMENT: Biotechnology CLASS: FY.B.Sc. SEMESTER: II

MONTH: ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To impart the knowledge of Physiology and Ecology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3: Life Sciences-I : Physiology and Ecology Unit 2: Plant Physiology	Photosynthesis, Intracellular Organization of Photosynthetic System. Fundamental Reactions of Photosynthesis, Photosynthetic Pigments, Role of Light. Hill Reaction and its Significance, Light Reactions, Cyclic and Non-Cyclic Photo induced Electron Flow, Energetics of Photosynthesis, Photorespiration, Dark Phase of Photosynthesis, Calvin Cycle, C-3, C-4 pathways Plant hormones - Auxin ,Gibbrellins, Cytokinins, Ethylene, Abscissic acid Introduction to Secondary Metabolites	15	Text book of plant physiology - V. Verma ane's edition.	Google Meet, powerpoint presentation and illustrations. Quizzes, Baamboozle.com



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: FYBSC SEMESTER:II

MONTH: January to April ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

Explain the role of body systems and mechanisms in maintaining homeostasis

Discuss about different types of animal tissue culture techniques

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 203 Life Sciences-I: Physiology and Ecology Unit II Animal Physiology	Physiology of Digestion Movement of Food and Absorption, Secretary functions of Alimentary Canal, Digestion and Absorption, assimilation in Gut of Mammals Anatomy of Mammalian Kidney, Structure of Nephron, Physiology of Urine Formation and Role of Kidney in Excretion and Osmoregulation	05	Applegate Anatomy and Physiology - Learning System Medical physiology by Guyton	power point presentation and topic related videos
	Physiology of Respiration, Mechanism of Respiration Principles of Gaseous Exchange in the Blood and Body Fluids Blood and Circulation: Blood Composition, Structure and Function of its Constituents Blood Coagulation and Anti-Coagulants Hemoglobin and its Polymorphism Regulation of the Circulation	06	Applegate Anatomy and Physiology - Learning System Medical physiology by Guyton	power point presentation and topic related videos

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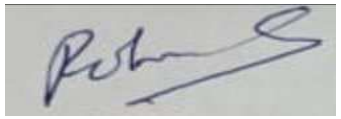
	Mechanism and working of Heart in Human.			
	Blood and Circulation: Blood Composition, Structure and Function of its Constituents Blood Coagulation and Anti-Coagulants Hemoglobin and its Polymorphism Regulation of the Circulation Mechanism and working of Heart in Human.	04	Applegate Anatomy and Physiology - Learning System Medical physiology by Guyton	power point presentation and topic related videos
USBT 205 Biotechnology-I : Tissue Culture &Scientific Writing and Communication Skills Unit II Animal Tissue Culture	**Basics of Animal Tissue Culture** Introduction Cell Culture Techniques, Equipment and Sterilization Methodology.	04	Culture of Animal cells 5th Edition R.Ian Freshney	power point presentation and topic related videos
	Introduction to Animal Cell Cultures:Nutritional and Physiological: Growth Factors and Growth Parameters. General Metabolism and Growth Kinetics	06	Culture of Animal cells 5th Edition R.Ian Freshney	
	Primary Cell Cultures: Establishment and Maintenance of Primary Cell Cultures of Adherent and Non-Adherent Cell Lines with examples. Application of Cell Cultures	05	Principles and Practice of Animal Tissue Culture Sudha Gangal	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: FYBSc SEMESTER: I

MONTH: August 2020 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: Objective of this course is to acquaint student with concept of Biodiversity with respect to Plant, Animals and Microorganism. The learners will be able to: Discuss origin of Life, Biodiversity. Explain Classification of Plants, Animals and Microorganism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3: Basic Life Sciences-I: Biodiversity and Cell Biology. Unit 1: Origin of Life and Biodiversity (Animals, Plants, Microorganisms)	Origin of Life, Chemical and Biological Evolution, Origin of Eukaryotic Cell.	1	Cell Biology, Genetics, Molecular Biology, Evolution and Ecology by P.S. Verma.	Chalk and Board ,
	Concept of Biodiversity, Taxonomical, Ecological and Genetic Diversity & its Significance	2	Cell Biology, Genetics, Molecular Biology, Evolution and Ecology by P.S. Verma.	Chalk and Board Projector (power point presentation)
	Introduction to Plant Diversity: Algae, Fungi, Bryophyte, Pteridophytes, Gymnosperms and Angiosperms.	4		Chalk and Board
	Introduction to Animal Diversity: Non-Chordates (with at least one representative example). And chordates	4	Invertebrate Zoology by Jordan and Verma.	Chalk and Board. Projector (power point presentation)
	Introduction to Microbial Diversity: Archaebacteria, Eubacteria, Blue-green Algae, Actinomycetes, Eumycota. Habitats, Examples and Applications.	4	Microbiology by Pelczar.	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: FYBSc SEMESTER: II

MONTH: January 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To acquaint the students with basic concepts of Ecosystem and Interactions.
The learners will be able to: Explain components, and importance and different types of Ecosystem. Summarize different types of biogeochemical cycles and interactions within Ecosystem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Life Science-I: Physiology and Ecology. Unit 3:Ecosystem and Interactions	Ecology and Biogeography: Ecosystems, Definition and Components.	1	Cell Biology, Genetics, Molecular Biology, Evolution and Ecology by P.S. Verma.	Chalk and Board
	Structure and functions of Ecosystems. Aquatic and Terrestrial Ecosystems, Biotic and Abiotic Factors.	2	Same as above	Chalk and Board Projector (power point presentation)
	Tropical Levels, Food Chain and Food Web.	2	Same as above	Chalk and Board Projector (power point presentation)
	Ecological Pyramids (Energy, Biomass and Number)	2	Same as above	Chalk and Board Projector (power point presentation)
	Nutrient Cycle and Biogeochemical Cycles: Water, Carbon, Oxygen, Nitrogen and Sulphur.	4	Same as above	Chalk and Board Projector (power point presentation)
	Interactions: Commensalism, Mutualism, Predations and Antibiosis, Parasitism.	4	Cell Biology, Genetics, Molecular Biology,	Chalk and Board

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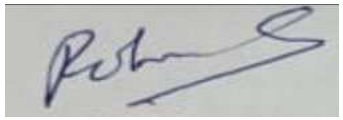
			Evolution and Ecology by P.S. Verma.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: II MONTH: DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The objective of this course is to make students aware of the branches of genetics and its importance
The learners will be able to : Understand the genetics structure of populations.

Learn the genetic variations and its measurements at protein and DNA level.

Gain knowledge about various factors that lead to study of population genetics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT204: GENETICS UNIT III: POPULATION GENETICS	Genetic structure of populations – genotypic frequencies and allelic frequencies,	05	IGenetics: A Mendelian approach, P. J. Russell	CHALK BOARD METHOD
	Hardy- Weinberg law and its assumptions	03	SAME AS ABOVE	CHALK BOARD METHOD
	Genetic variations in populations- Measuring genetic variation at protein level and measuring genetic variations at DNA level	03	SAME AS ABOVE	CHALK BOARD METHOD, TEACHING AIDS
	Natural Selection. Genetic Drift Speciation Role of population genetics in Consevation biology	04	SAME AS ABOVE	CHALK BOARD METHODS, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Amol Samant DEPARTMENT: Biotechnology CLASS: F.Y.B.Sc. SEMESTER: II

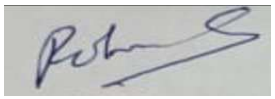
MONTH: Jan-Apr ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To acquaint students with Techniques of Plant Tissue Culture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT106 **UNIT I** **Plant Tissue Culture**	Cell Theory, Concept of Cell Culture, Cellular Totipotency, Organization of Plant Tissue Culture Laboratory : Equipments and Instruments Aseptic Techniques: Washing of Glassware, Media Sterilization, Aseptic Workstation, Precautions to maintain Aseptic Conditions.	15	Introduction to plant tissue culture 2nd ed M K Razdan	Ppt, Google form, Animation video, Demo video
	Culture Medium: Nutritional requirements of the explants, PGR's and their in-vitro roles, Media Preparation Callus Culture Technique: Introduction, Principle and Protocols			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15___



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TEACHING PLAN (UNIT PLAN)

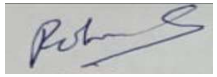
NAME OF THE STAFF: MRS. GLENYS D'SOUZA DEPARTMENT: BIOTECHNOLOGY

CLASS: S.Y.B.Sc SEMESTER: II MONTH: JULY ACADEMIC YEAR: 20-21

LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 205: ANIMAL TISSUE CULTURE	Basics of Animal Tissue Culture Introduction Cell Culture Techniques, Equipment and Sterilization	04	Animal tissue culture by Sudha Gangal & Animal tissue culture by Ian Freshney	Power point presentation and discussion
	Methodology. Introduction to Animal Cell Cultures:Nutritional and Physiological: Growth Factors and Growth Parameters.	04	Animal tissue culture by Sudha Gangal & Animal tissue culture by Ian Freshney	Power point presentation and discussion
	Growth Kinetics Primary Cell Cultures : Establishment and Maintenance of Primary Cell	04	Animal tissue culture by Sudha Gangal & Animal tissue culture by Ian Freshney	Power point presentation and discussion
	Cultures of Adherent and Non-Adherent Cell Lines with examples. Application of Cell Cultures	03	Animal tissue culture by Sudha Gangal & Animal tissue culture by Ian Freshney	Power point presentation and discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI _____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: F. Y. B. Sc_____SEMESTER: II_____MONTH: NOV. TO MARCH ACADEMIC YEAR: 2020-2021_____

LEARNING OBJECTIVE/S:
The learners will be able to :

- Acquire scientific communication skills both verbal and non-verbal.
- Have practical experience in scientific poster making and presentation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 205, III, SCIENTIFIC WRITING AND COMMUNICATION SKILLS	Communication skills: Introduction to communication—Elements, definition, scope of communication and communication as part of science. Communication elements—Verbal and non-verbal communications.	4	Communication Skill by S. Kumar and Pushp Lata	Online teaching with relevant published articles using PowerPoint.
	Principles of effective communications, oral presentations, Scientific reading, writing and presentations.	3	Scientific Writing by Jennifer Peat	Online teaching with relevant published articles using PowerPoint.
	Scientific writing – process of scientific writing: Thinking, planning, rough drafts and revising contents	3	Scientific Writing by Jennifer Peat	Online teaching with relevant published articles using PowerPoint.
	Introduction to scientific reports and writings, Compilation of experimental data, communication methods in science.	2	Scientific Writing by Jennifer Peat	Online teaching with relevant published articles using PowerPoint.
	Examples of scientific and unscientific writings, writing papers, reviews, bibliography. Plagiarism – Introduction to plagiarism, Examples of plagiarism	3	Scientific Writing by Jennifer Peat	Online teaching with relevant published articles using PowerPoint.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs.Swati Chaudhari

DEPARTMENT: Biotechnology

CLASS:F.Y.B.Sc

SEMESTER: Sem II

MONTH: December- March

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Understand what are enzymes? Different physical and chemical properties of enzymes.

Enzyme kinetics and effect of different parameters on enzyme activity.

Different types of enzyme inhibitios

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 206 Enzymology, Immunology And Biostatistics Unit 1	Definition, Classification, Nomenclature, Chemical Nature, Properties of Enzymes,	3	Biochemistry, 4nd edition (2017), Satyanarayana and Chakrapani, Books & Allied (P) Ltd	Online videos Powerpoint presentations Animations
	Mechanism of Enzyme Action, Active Sites, Enzyme Specificity, Effect of pH, Temperature, Substrate Concentration on Enzyme Activity,	6		
	Enzyme Kinetics, Michelis-Menten Equation, Types of Enzyme Inhibitions-Competitive, Uncompetitive, Non-Competitive	5		
	Allosteric Modulators Co-Factors,Zymogens,	1		

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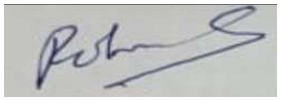
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____**VICTORIA MANORANJITHAM** _____

DEPARTMENT: _____: **BIOTECHNOLOGY** CLASS: **F.Y. BSc** SEMESTER: **II** MONTH: **DECEMBER - MARCH** ACADEMIC YEAR: **2020- 2021**

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 103 UNIT 3 Bacteria and Viruses	Overview of Immune Systems, Cell and Organs involved, T and B cells. Innate Immunity, Acquired Immunity, Local and Herd Immunity, Humoral and Cellular Immunity - Factors Influencing and Mechanisms of each.	02 04	Text book of Medical Microbiology, Anantnarayan	online-class lecturing using powerpoint presentations
	Antigens and Antibodies: Types of Antigens, General Properties of Antigens, Haptens and Superantigens Discovery and Structure of Antibodies (Framework region) Classes of Immunoglobulins, Antigenic Determinants.	02 02	Text book of Medical Microbiology, Anantnarayan	online-class lecturing using powerpoint presentations

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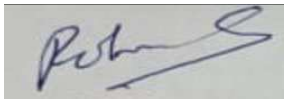
	Antigen-Antibody Interactions	02	Text book of Medical Microbiology, Anantnarayan	online-class lecturing using powerpoint presentations
	Monoclonal Antibodies,	01	Text book of Medical Microbiology, Anantnarayan	online-class lecturing using powerpoint presentations
	Vaccines (Live, Killed) and Toxoid Problems with Traditional Vaccines, Impact of Biotechnology on Vaccine Development.	02	IMUNOLOGY BY KUBY 5TH EDITION	online-class lecturing using powerpoint presentations

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Nikhil Paradkar DEPARTMENT: Biotechnology CLASS: FYBSc

SEMESTER: **SEM II** MONTH: December - March ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To acquaint students with concepts in biostatistics and impart the skills required for biostatistics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 206 Biotechnology UNIT 3: Enzymology, Immunology and Biostatistics	● **Biostatistics**. ○ Definition & Importance of Statistics in Biology ○ Types of Data, Normal and Frequency Distribution ○ Representation of Data and Graph ○ Measure of Central Tendency ○ Measure of Dispersion ○ Standard Deviation & Standard Error.	15	**1.** Methods in Biostatistics- B. K. Mahajan – Jaypee Brothers **2**. Introductory Biostatistics. 1 st edition. (2003), Chap T. Le. John Wiley, USA	Blended Approach - Using Flipped classroom and direct instruction method. Powerpoint Presentation - To present the content

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: II MONTH: DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To acquaint the students with concepts of Ecology and Environment
The learners will be able to : Understand the interconnection between Environment and Ecology.

Learn the impact of environmental degradation on human life and the concept of Sustainable development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 207 GLOBALIZATION, ECOLOGY AND SUSTAINABLE DEVELOPMENT UNIT II ECOLOGY AND SUSTAINABLE DEVELOPMENT	Importance of Environment Studies in the current developmental context;	03	Foundation Course – II Manan Prakashan	PRESENTATION
	Understanding concepts of Environment, Ecology and their interconnectedness;	03		
	Environment as natural capital and connection to quality of human life;	04		
	Environmental Degradation causes and impact on human life; Sustainable development, concept and components; poverty and environment	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: F.Y.B.Sc

SEMESTER: II MONTH: November - December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- acquaint the students with concepts of Globalization, Ecology and Environment
- impart knowledge of Globalization make students aware about the Problems in Society

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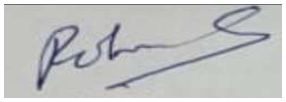
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VII **Unit I** **Globalisation and Indian Society and Human Rights**	Globalisation and Indian Society Understanding the concepts of liberalization, privatization and globalization;Growth of information technology and communication and its impact manifested in everyday life; Impact of globalization on industry: changes in employment and increasing migration; Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides. **Human Rights-**Concept of Human Rights; origin and evolution of the concept; The Universal Declaration of Human Rights;Human Rights constituents with special reference to Fundamental Rights stated in the Constitution	15	Foundation course-II II	PowerPoint presentation Infographics Mind Map

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

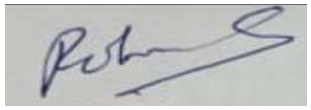
NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: S.Y.B.Sc SEMESTER: III MONTH: AUGUST ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The objective of this course is to have a firm foundation of the fundamentals and applications of current biophysical theories.
The learners will be able to: Develop an understanding of the different aspects of classical Physics.
Be able to relate principles of Physics to applications and techniques in the field of Biology such as Electrophoresis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT301: BIOPHYSICS UNIT III: ELECTROPHORETIC TECHNIQUES	Migration of Ions in an applied electric field;Factors affecting Electrophoretic Mobility;Moving Boundary Electrophoresis	03	BIOPHYSICAL CHEMISTRY, UPADHYAY,UPADHYAY, NATH	POWERPOINT PRESENTATION, TEACHING AIDS
	Principle of Electrophoresis; Supporting Matrix;	02	SAME AS ABOVE	TEACHING AIDS, POWERPOINT PRESENTATION
	Paper Electrophoresis; AGE; Native and SDS PAGE (reducing and non-reducing, continuous and discontinuous)	05	SAME AS ABOVE	POWERPOINT PRESENTATION, TEACHING AIDS
	IEF and 2D PAGE. Staining and Detection Methods; Gel-Documentation. Applications in Biology	05	SAME AS ABOVE	POWERPOINT PRESENTATION, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: S.Y.B.Sc

SEMESTER: III MONTH: Sept.-Dec. ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- understand nucleophile and electrophile groups and their properties.
- define enzyme, apoenzyme, holoenzyme, cofactor (coenzyme)
- define 'micronutrient'
- explain the types and benefits of micronutrients

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I Organic Chemistry	Types of organic reactions - **Addition Reactions, Elimination Reactions, Substitution Reactions** **Essential and Non-essential Elements in Biological Systems.** **Role of Metal Ions in Biological Systems.** **Metal Coordination in Biological Systems: Enzymes, Apoenzymes, Holoenzymes and coenzymes** **Biological Role of Metalloenzymes wrt Myoglobins, Haemoglobin.** **Biological Role of Carboxypeptidases, Catalses, Peroxidases** **Structure and Function :Dioxygen Binding, Transfer and Utilization, Metal Complexes in Medicines.**	15	Advanced organic chemistry- Reinhard Bruckner Pg. 86-123,129-158,43-65;169-216 Biochemistry- Satyanarayan 4th Edition Pg. 403-421 Textbook of Biochemistry- Lehninger, 4th Edition Pg. 208-214 Fundamentals of Biochemistry (Jain and Jain) Pg. 343-345 Principles of Biochemistry (McGraw Hill) White et al. Principles of Biochemistry (McGraw Hill) White et al.	Infographics PowerPoint presentation Mind Map

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Amol Samant DEPARTMENT: Biotechnology CLASS: S.Y.B.Sc. SEMESTER: III

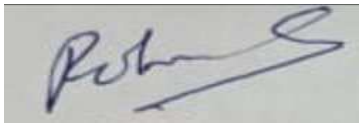
MONTH: Jun-Nov ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Basic concept of types of selectivity base organic reaction
2. Microwave and ultrasound assisted organic synthesis
3. Concept of Retrosynthesis

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT302 Applied Chemistry- **UNIT-II**	Ideal criteria of organic synthesis, types of selectivity, multicomponent reaction, Microwave and ultrasound assisted organic synthesis, Solid phase peptide synthesis, Retrosynthesis	15	College Organic Chemistry for T.Y. B.Sc. 181-85, 186-89 (Himalaya Publishing House)	Ppt, Google form, Animation video

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: S.Y.B.Sc SEMESTER: III MONTH: AUGUST ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: The objective of this course is to have a firm foundation of the fundamentals and applications of Organic and Green Chemistry.
The learners will be able to : Learn the role of Green Chemistry and its application in Industry.
Understand the different aspects of Green Chemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 302 APPLIED CHEMISTRY-I UNIT III GREEN CHEMISTRY AND SYNTHESIS	Green Chemistry and Synthesis: Introduction to Green Chemistry;	02	College Organic Chemistry of T.Y. B.Sc Organic Synthesis - V. K. Ahluwalia	WHITE BOARD METHOD, PRESENTATION
	Need and Relevance of Green Chemistry;	02	SAME AS ABOVE	WHITE BOARD METHOD, PRESENTATION
	Principles of Green Chemistry	03	SAME AS ABOVE	WHITE BOARD METHOD, PRESENTATION
	Green Synthesis in Industry: Green Materials,Green Reagents, Green Solvents and Green Catalysts.	08	SAME AS ABOVE	WHITE BOARD METHOD, PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: SYBSC SEMESTER: II

MONTH: August to December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the role of different types of cells, effector molecules and effector mechanisms in immunology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT303 IMMUNOLOGY UNIT I Effectors of Immune Response	Haematopoiesis; Cells of the Immune System; Primary and Secondary Lymphoid Organs.	10	Immunology by Janis Kuby, 5th edition Kuby Immunology, 7th edition	Power point presentation & Topic related videos
	Complement System- Classical, Alternate and Lectin; Regulation and Biological Effects of Complement System; Deficiencies of Complement System	05	Textbook of microbiology by Ananthnarayan and paniker, 8th ed	Power point presentation & Topic related videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: SYBSc SEMESTER: III

MONTH: August –December 2020 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: Objective of this is to have a firm foundation in the fundamental of cell Biology with respect to cell membrane.
The learners will be able to: Develop an understanding of Cell Membrane and Explain Structure, Function and different types of transportation across cell membrane.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Cell Biology and Cytogenetics. Unit 2: Cell Membrane	Cell Membrane: Uptake of Nutrients by Prokaryotic Cells, Cell Permeability.	1	Cell and Molecular Biology- Concepts and Experiments- Karp- Wiley International.	Google Meet, power point presentation
	Principles of Membrane Transport- Transporter and Channels; Active Transport, Passive Transport.	4	Same as above	Google Meet, power point presentation
	Types of Transporters; Types of ATP Drive Pumps- Na^+- K^+ Pump.	4	Same as above	Google Meet, power point presentation)
	Cell Junctions; Cell Adhesion and Extracellular Material Microvilli; Tight junctions; Gap junctions;	4	Same as above	Google Meet, power point presentation
	Cell Coat and Cell Recognition.	2	Cell and Molecular Biology-De Roberti's-Lippincott Williams & Wilkins.	Google Meet, power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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NAME OF THE STAFF: Dr Bhanupriya Ch

DEPARTMENT: Biotechnology

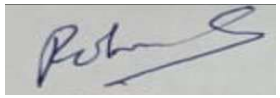
CLASS: SY B.Sc **SEMESTER:** III

MONTH: August 2020 – December 2021 **ACADEMIC YEAR:** 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of gene transcription in prokaryotes. Synthesis and processing of mRNA in eukaryotes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper V, Unit I, Gene expression Transcription	**Gene Expression- an Overview.** **Transcription Process in Prokaryotes :** RNA Synthesis; Promoters and Enhancers; Initiation of Transcription at Promoters; Elongation and Termination of an RNA Chain. **Transcription in Eukaryotes :** Eukaryotic RNA Polymerases; Eukaryotic Promoters; Transcription of Protein Coding Genes by RNA Polymerase; Eukaryotic mRNA's; Transcription of other genes; Spliceosomes; RNA editing.	15	Peter Russell iGenetics – Transcription chapter	Online mode of teaching using different ICT tools

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Swati Chaudhari

DEPARTMENT: Biotechnology

CLASS: S.Y.B.Sc

SEMESTER: III

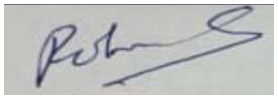
MONTH: September- December

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Describe different primary screening technique for isolation of industrially important microorganisms, discuss secondary screening approaches and different preservation techniques used for microbial strains.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 306 Bioprocess Technology Unit I Microorganisms in Industrial Processes	Types of Microorganisms used in Industrial Processes : Bacteria, Actinomycetes, Fungi and Algae.	3	Industrial Microbiology- A. H. Patel Industrial Microbiology- L. E. Casida- John Wiley & Sons	Powerpoint Presentation Youtube Videos Mind Maps
	Primary Screening and Secondary Screening;	7		
	Cultivation; Preservation of Industrially Important Microbial Strains.	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Swati Chaudhari

DEPARTMENT: Biotechnology

CLASS: S.Y.B.Sc

SEMESTER: III

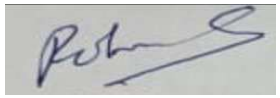
MONTH: September- December

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Describe chemical and biological assay methods, Bioavailability and Bioequivalence concept.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III *In-vivo* and *Invitro* Assay of Industrial Products	Assay of Industrial Products: Chemical - Types and Subtypes; Kinetics. Advantages and Disadvantages.	6	Industrial Microbiology- A. H. Patel Industrial Microbiology- L. E. Casida- John Wiley & Sons	Power point Presentation Mind Map You Tube Videos Teaching Aids
	Biological; Types and Subtypes; Kinetics. Advantages and Disadvantages.	6		
	Bioavailability and Bioequivalence Studies	2		
	Half-Life Determination of Pharmacological Products.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI DEPARTMENT: BIOTECHNOLOGY

CLASS: S. Y. B. Sc_____SEMESTER: III_____MONTH: JULY TO OCT. ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand basic skills applied in fermentation technology and build a foundation for more advanced studies in bioprocess technology.
- Have an understanding of principles underlying design of a fermentor and fermentation process control.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 306, II, FERMENTOR AND FERMENTATION PROCESS	Design of a Fermentor: Stirred tank fermentor-basic design; parts of a typical industrial fermentor. Fermentation media: Components; design and optimization	4	Principles of Fermentation Technology by Stanbury, Whitaker & Hall	Online teaching using PowerPoint and videos at times
	Sterilization: Sterilization of fermentor and fermentation media. Process parameters: pH, temperature, aeration, agitation, foam etc.	4	Principles of Fermentation Technology by Stanbury, Whitaker & Hall	Online teaching using PowerPoint and videos at times
	Types of Fermentation: Surface and submerged; Batch and continuous, Aerobic and anaerobic.	2	Industrial Microbiology by Casida	Online teaching using PowerPoint and videos at times
	Product isolation and purification	3	Principles of Fermentation Technology by Stanbury, Whitaker & Hall	Online teaching using PowerPoint and videos at times
	Study of representative fermentation process: Outline of penicillin and ethanol production by fermentation with a flow diagram	2	Industrial Microbiology by Casida	Online teaching using PowerPoint and videos at times

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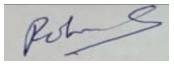
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____



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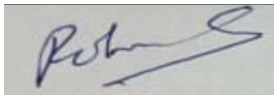
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: F.Y.B.Sc

SEMESTER: III MONTH: Sept.-Dec. ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- understand some basic concepts of research and its methodologies
- identify appropriate research topics
- select and define appropriate research problem and parameters
- prepare a project proposal (to undertake a project)
- organize and conduct research (advanced project) in a more appropriate manner
- write a research report and thesis
- write a research proposal



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VII Unit I Introduction to research methodology	**Meaning of Research, Objectives of Research** **Motivation in Research, Types of Research, Research approaches, Significance of Research, Research Methods versus Methodology, Research Process, Criteria of good research, Problems encountered by researchers in India, What is a Research Problem?, Selecting the Problem, Necessity of defining the problem,Technique involved in defining a problem.**	15	Research methodology-CR.Kothari, 3rd Ed. Pg. 1-2	Mind Map PowerPoint presentation Infographics Infographics

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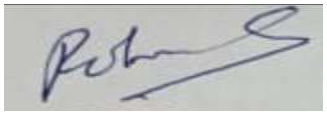
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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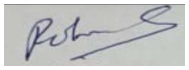
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Rohan Gavankar DEPARTMENT: Biotechnology CLASS: SYBSc

SEMESTER: **SEM III** MONTH: October - December ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To understand a general definition of research design and identify the overall process of designing a research study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT307 Research Methodology, Research Design and Data Collection	**Meaning of Research Design**; ● Need for Research Design; Features of a Good Design; Important Concepts Relating to Research Design; Different Research Designs; Basic Principles of Experimental Designs; ● Developing a Research Plan ● Collection of Primary Data; Observation Method; Interview Method; Collection of Data through Questionnaires; Collection of Data through Schedules; Other Methods of Data Collection, Collection of Secondary Data, Selection of Appropriate Method for Data Collection, Case Study Method	15	Research methodology- C.R. Kothari	Blended Approach - Using Flipped classroom and direct instruction method. Powerpoint Presentation - To present the content



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **VICTORIA MANORANJITHAM**

DEPARTMENT: **BIOTECHNOLOGY** CLASS: **T.Y.BSc** SEMESTER: **V** MONTH: **AUGUST** ACADEMIC YEAR: **2020- 2021**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Analyze any observations or results obtained in their research study and interpret them relating it to other related studies.
- Write down a proper step wise report, that will be understandable to any reader, keeping him hooked on to the report till the end and make him relate the study to other researches till thus adding on awareness and knowledge and pave way for further research studies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 307 UNIT 3 interpretation & report writing	Meaning of Interpretation, Why Interpretation?, Technique of Interpretation, Precautions in Interpretation, ,	04	Research methodology by C.R. Kothari Chapter 14	• On – line class lecturing using powerpoint presentations, • Activities on reviewing research articles and summarizing threm / writing down an abstract of the same.
	Significance of Report Writing, Different Steps in Writing Report,	07		

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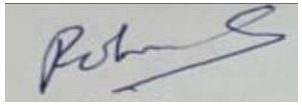
	Layout of the Research Report, Types of Reports, Oral Presentation,			
	Mechanics of Writing a Research Report, Precautions for Writing Research Reports	04		.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

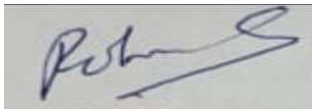
NAME OF THE STAFF: Dr. Amol Samant_____ DEPARTMENT: BIOTECHNOLOGY_____ CLASS: ___SY_____SEMESTER: _____IV_____MONTH: Nov.-March____ ACADEMIC YEAR:_2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of lipid metabolism
- Learn nucleotide metabolism pathway

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 604 BIOCHEMISTRY U3-LIPID METABOLISM	Mobilization, Transport of Fatty Acids.	2	Lehninger principles of biochemistry, 4th edition, Nelson and Cox	Online teaching using ICT Tools such as PowerPoint and Google Classroom
	Beta, Alpha and Omega Oxidation of Saturated Fatty Acids; Oxidation of Unsaturated Fatty Acids; Oxidation of Odd Chain Fatty Acids. Energy Yield, Ketone Body Breakdown to Yield Energy.	9		
	Nucleotide Metabolism : Degradation of Purines and Pyrimidines.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: S. Y. B.Sc. SEMESTER: IV MONTH: June- October ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Learn the concept of Carbohydrate Metabolism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Biochemistry **UNIT I** Carbohydrate Metabolism	Carbohydrate Metabolism: Glycolytic Pathway and its Regulation, Homolactic Fermentation; Alcoholic Fermentation; Energetics of Fermentation.	5	Lehninger Principles of biochemistry 4th edition Biochemistry by Satyanarayan and Chakrapani Biochemistry by Voet & Voet	Online teaching using PowerPoint and demonstration videos and animations.
	Citric Acid Cycle and its Regulation; Gluconeogenesis; Pentose Phosphate Pathway; Glyoxalate Pathway; Reductive TCA.	3		
	Electron Transport System: Electron Transport and Oxidative Phosphorylation. Inhibitors of ETS.	3		
	Energy Rich Compounds: ATP as Energy Currency, Structure of ATP, Hydrolysis, Other Energy Rich Compounds other than ATP like PEP, Creatine Phosphate, etc.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: S.Y.B.Sc SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: The objective of this course is to have a firm foundation of the fundamentals and applications of current Chemical Theories for the Physical World.
The learners will be able to : Understand the different aspects of Analytical Chemistry.

Gain knowledge about various separation techniques.

Learn the benefits and limitations of different sampling strategies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT402 APPLIED CHEMISTRY-II UNIT I SAMPLING AND SEPARATION TECHNIQUES	Sampling : Importance of Sampling and Sampling Techniques Types of Sampling - Random and Non-Random Sampling of Solids, Liquids and Gases.	06	Text Book of T.Y. B.Sc Analytical Chemistry Revised Syllabus	PRESENTATION, YOU TUBE VIDEOS AND QUIZZES
	Separation Techniques : Types of Separation Techniques - Filtration, Zone Refining, Distillation, Vacuum Distillation.	03	S.Y.B.Sc Analytical Chemistry Text Book- Sheth Publishers	
	Solvent Extraction - Partition Coefficient and Distribution Ratio, Extraction Efficiency, Separation Factor,	02		
	Role of Complexing Agents, Chelation, Ion Pair Formation, Solvation, and Soxhlation.	02		
	Centrifugation - Basic Principles of Sedimentation.	02	Fundamentals of Bioanalytical Techniques and	

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			Instrumentation - A. K.SRIVASTAVA	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: S. Y. B. Sc_____SEMESTER: ____IV_____MONTH: NOV. TO MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- Gain knowledge of natural product chemistry and related acquired skills.
- Understand the principle, working, and applications of various chromatographic techniques used for the natural product analysis.
- Distinguish the various classes of natural products and their organic synthesis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 402, II, NATURAL PRODUCT CHEMISTRY	Natural Product Chemistry: Primary and secondary metabolites. Classification of natural products based on biosynthesis	2	College Organic Chemistry – III By Rao *et al.*	Online teaching using PowerPoint and online videos
	Classification of natural products based on structure-Alkaloids, Phenolics, Essential oils and Steroids	4	College Organic Chemistry – III, By Rao *et al.,* Plant Physiology by Taiz and Zeiger	Online teaching using PowerPoint and online videos
	Structure determination of natural products, Commercial synthesis of natural products	3	College Organic Chemistry – III By Rao *et al.*	Online teaching using PowerPoint and online videos
	Chromatographic separation of natural products: Gas Chromatography and its applications. Liquid Chromatography: HPLC and its applications	4	Techniques in Biochemistry and Molecular Biology by Wilson and Walker	Online teaching using PowerPoint and online videos
	HPTLC for separation and analysis of natural products	2	Techniques in Biochemistry and Molecular Biology by Wilson and Walker	Online teaching using PowerPoint and online videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs.Swati Chaudhari

DEPARTMENT: Biotechnology

CLASS: S.Y.B.Sc

SEMESTER: Sem IV

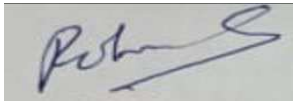
MONTH: December- March

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 403 **Medical Microbiology** Unit III **Medical Microbiology - Causative Organisms- II**	**GI Tract Infections :** *Salmonella And Shigella Spps. (*Characteristics, Virulence-Pathogenesis And Immunity,Clinical Disease, Carriers Lab Diagnosis,Phage Typing Prophylaxis And Treatment).	10	Text book of Medical Microbiology, Anantnarayan	Online videos Powerpoint presentations Animations
	Sexually Transmitted Diseases : Syphilis And Gonorrhoea.	3		
	Nosocomial Infections : *Ps. Aeruginosa*	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: SYBSC SEMESTER: II

MONTH: January to April ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Gain an understanding of the causes, types and control methods for environmental pollution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT303 IMMUNOLOGY UNIT I Effectors of Immune Response	**Sources of Pollution.** **Air Pollution:** Types; Sources; Classification of Air Pollutants; Air Pollution Monitoring and Control.	05	Environmental Biotechnology Indu shekar Thakur IK International (Basic concepts and applications)	Power point presentation & Topic related videos
	Water Pollution: Causes, Types and Classification; Eutrophication; Assessment of Water Quality-Pollutant Monitoring and Control;		Environmental Biotechnology Indu shekar Thakur IK International (Basic concepts and applications)	Power point presentation & Topic related videos
	Soil and Solid Waste Pollution: Characteristics of Wastes, Impacts of Solid	05	Environmental Biotechnology	Power point presentation & Topic related videos

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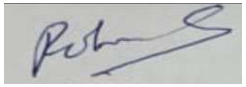
	waste on Health, Occupational Hazards and Control. **Soil Erosion :** Concept, Causes and Effects.		Indu shekar Thakur IK International (Basic concepts and applications)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

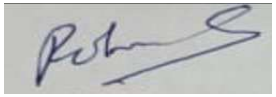
NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: S.Y.B.Sc SEMESTER: IV MONTH: DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The objective of this course is to gain awareness bout bioremediation strategies.
The learners will be able to: Develop an understanding of applications of different life forms in bioremediation technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT404: ENVIRONMENTAL BIOTECHNOLOGY UNIT III: BIOREMEDIATION	Concept of Bioremediation	02	Environmental Biotechnology Indu shekar Thakur IK International (Basic concepts and applications)	TEACHING AIDS
	Microorganisms in Bioremediation, Mycoremediation and Phytoremediation	03	SAME AS ABOVE	TEACHING AIDS, PROJECTOR
	Bioremediation Technologies. Measuring Bioremediation in the Field.	05	SAME AS ABOVE	PROJECTOR, TEACHING AIDS
	Bioaugmentation and Biostimulation. Monitoring the Efficacy of Bioremediation.	05	SAME AS ABOVE	PROJECTOR, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vikas Gupta DEPARTMENT: BIOTECHNOLOGY. CLASS: T.Y.B.Sc

SEMESTER: __VI_____ MONTH: November -March ACADEMIC YEAR:__2020-21

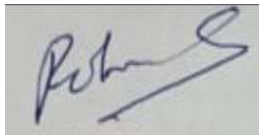
LEARNING OBJECTIVE/S:

The learners will be able to :

- Be knowledgeable about various renewable sources of energy such as Wind, Solar, Geo-thermal, Hydro and Biomass, the means to trap them and the need to replace non-renewable energy sources by renewable ones.
- Understand the concepts of Biogas technology-biogas plant and types, biogas production, and biodigester.
- Learn about fuel ethanol production from various raw materials such as corn and ligno-cellulosic biomass-advantages and disadvantages associated with the process.
- Learn microbial hydrogen, biodiesel production processes and petrocrops as alternative and promising sources of energy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 604, UNIT I, RENEWABLE SOURCES OF ENERGY	Energy sources renewable-solar energy, wind power, geothermal energy and hydropower, biomass energy	5	Environment Biotechnology by Fulekar	Lectures in the classroom./Occasional use of videos available online
	Biogas technology-biogas plant and types, biodigester. Biogas – composition, production and factors affecting production, uses.	5	Environmental Biotechnology by Jogdand	Lectures in the classroom./Occasional use of videos available online
	Biofuels-Ethanol production, Microbial hydrogen production, Biodiesel and Petrocrops.	5	Environment Biotechnology by Fulekar	Lectures in the classroom./Occasional use of videos available online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs.Swati Chaudhari

DEPARTMENT: Biotechnology

CLASS: S.Y.B.Sc

SEMESTER: Sem IV

MONTH: December- March

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: What is greenhouse effects and its effects.

Ozone depletion and regulations to control emission of ozone depleting gases

Effects of UV radiation

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 404 ENVIRONMENTAL BIOTECHNOLOGY Unit III Global Environmental Problems and Issues	Green House Effect : Factors Responsible for Green House Effect;Green House Gases.Global Warming;	6	Environmental Biotechnology Indu shekar Thakur IK International (Basic concepts and applications)	Online videos Powerpoint presentations Animations
	Ozone Depletion; Kyoto Protocol;	5		
	UV Radiation; Acid Rain.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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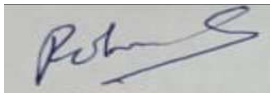
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Sharvil Shringarpure DEPARTMENT: Biotechnology CLASS: SY.B.Sc. SEMESTER: IV

MONTH: ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: By the end of the course the student will be able to: x gain an understanding of the basic concepts of Bioinformatics and Biostatistics. x understand the tools used in bioinformatics. x apply the various statistical tools for analysis of biological data

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5: BIOINFORMATICS and BIOSTATISTICS **Unit 2:** BLAST and Sequence Alignment	BLAST and Sequence Alignment : BLAST and its Types; Retrieving Sequence using BLAST. Pairwise Alignment : Identity and Similarity; Global and Local Alignment; Pairwise Database Searching. Multiple Sequence Alignment: Goal of Multiple Sequence Alignment; Computational Complexity; Manual Methods; Simultaneous Methods; Progressive Methods; Databases of Multiple Alignment; Secondary Database Searching; Analysis Packages; MSA and phylogenetic trees.	15	Xiong - Essential Bioinformatics Attwood, Parry-Smith - Introduction to Bioinformatics	Google Meet, powerpoint presentation and illustrations.



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TEACHING PLAN (UNIT PLAN)

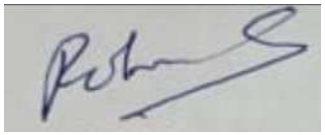
NAME OF THE STAFF: Mr. Nikhil Paradkar DEPARTMENT: Biotechnology CLASS: SYBSc

SEMESTER: **SEM IV** MONTH: January - April ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: Apply the various statistical tools for the analysis of biological data.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT405 Bioinformatics and Biostatistics	**Biostatistics:** ● Theory and Problems based on- Coefficient of ● Correlation and Regression Analysis; Steps in ● Testing Statistical Hypothesis; Parametric ● Tests:- Z Test – Single Mean and Two Means, t- ● Test – Single Mean, Paired and Unpaired; Chi-square test	15	**1.** Methods in Biostatistics- B. K. Mahajan – Jaypee Brothers **2.** Introductory Biostatistics. 1st edition. (2003), Chap T. Le. John Wiley, USA	Blended Approach - Using Flipped classroom and direct instruction method. Powerpoint Presentation - To present the content

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Sneha More DEPARTMENT: Biotechnology CLASS: SY B.Sc Biotechnology SEMESTER:IV

MONTH: August 2020 - December 2021 ACADEMIC YEAR:2020 - 21

LEARNING OBJECTIVE/S:
The learners will be able to : know the history and use of Molecular Diagnostics. They gain knowledge about the basic and conceptual study about the mechanism of Molecular Diagnostics technique and its principal and there use .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 406 UNIT I Basics of Molecular Diagnostics	Introduction to Molecular Diagnostics : Overview of Molecular Diagnostics; History of Molecular Diagnostics; Molecular Diagnostics in post genomic era; Areas used in Molecular Diagnostics; Future prospects - Commercialising Molecular Diagnostics, personalized medicine, Theranostics.	05	. Molecular Diagnostics George Patrinos Wilhelm Ansorg	PowerPoint presentation
	Characterisation and analysis of Nucleic -acids and Proteins : Extraction, Isolation and Detection of DNA, RNA and Proteins; Restriction Endonucleases and restriction enzyme mappmg.	05	Molecular Diagnostics: Fundamentals, Methods and Clinical Applications	PowerPoint presentation

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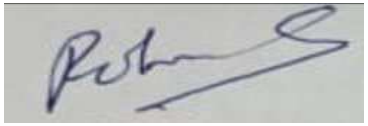
	Hybridisation techniques : Southern, Northern, Western and FISH; Markers, probes and its Clinical applications.	05	Lela Buckingham & Maribeth Flaws 2007 FA Davis	PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Bhanupriya Ch DEPARTMENT: Biotechnology CLASS: SY B.Sc Biotechnology SEMESTER:IV

MONTH: August 2020 - December 2021 ACADEMIC YEAR:2020 - 21

LEARNING OBJECTIVE/S:
The learners will be able to : A basic and conceptual study about the mechanism of polymerase chain reaction, its principal and types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 406 UNIT II Nucleic acid amplification Methods	Target amplification : PCR - General Principle; Components of a Typical PCR Reaction; Experimental Design; Primer Designing; Control of PCR Contamination and Mispriming; PCR Product Clean-up and Detection. PCR Types : Reverse Transcriptase and Real Time PCR. Probe amplification : Ligase Chain Reaction	15	. Molecular diagnostics Lela Buckingham	PowerPoint presentation and Google jamboard teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Bhanupriya Ch DEPARTMENT: Biotechnology CLASS: SY B.Sc Biotechnology SEMESTER:IV

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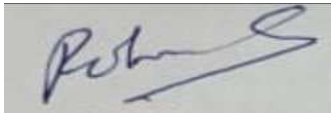
MONTH: June 2020 - December 2021 ACADEMIC YEAR:2020 - 21

LEARNING OBJECTIVE/S:
The learners will be able to : get a knowledge about what is molecular dignmostics, its applications, techniques such as PCR and its types, RFLP and molecular testing of diseases and genetic testing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 406 UNIT III Molecular Biology based Diagnostics	DNA Polymorphism and Identification: RFLP and Parentage Testing; RFLP and Sickle-Cell Anaemia. Molecular Diagnostics for Infectious Diseases Molecular Testing for Neisseria, Molecular Diagnosis for HIV-1; Genetic Counselling and Molecular Diagnosis Genetic Testing- Need and Uses; genetic Counselling. Case Studies- Diagnostic Testing for Cystic Fibrosis; Fragile X Diagnostic and Carrier Testing. Ethical, Social and Legal Issues to Molecular - Genetic Testing	15	. Molecular diagnostics William Coleman	PowerPoint presentation and Google jamboard teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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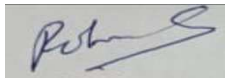
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Rohan Gavankar DEPARTMENT: Biotechnology CLASS: SYBSc

SEMESTER: **SEM IV** MONTH:January - April ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To understand a general definition of marketing, sales, advertising and International market research and identify the overall process of marketing, sales, advertising and International market research.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT407 Entrepreneurship development, Marketing, Sales, Advertising and International Market research.	• Marketing Plan for an Entrepreneur; Marketing, Strategic Alliances, Advertising and Sales Promotion; Market Assessment, Need for International Market Research, Domestic vs. International Market research, Cost and Methodology of Market Research, Desk and Field Research	15	Handbook of Entrepreneurship Development - Basotia and Sharma	Blended Approach - Using Flipped classroom and direct instruction method. Powerpoint Presentation - To present the content



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: S.Y.B.Sc

SEMESTER: IV MONTH: January- May ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- understand concept of entrepreneur
- know need and importance of entrepreneurship
- state the meaning of entrepreneurship
- describe the importance of entrepreneurship
- outline the qualities of a successful entrepreneur
- state the functions of an entrepreneur
- distinguish between entrepreneur and promoter
- explain the issues and problems faced by entrepreneur

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VII **Unit I** **Introduction to Entrepreneurship development**	Concept of Entrepreneur; Entrepreneurship; Need and Importance; Factors Influencing Entrepreneurship; Essentials of a Successful Entrepreneur	15	Towards Entrepreneurship- Dr. M. R. Kurup	Mind Map PowerPoint presentation Infographics Whiteboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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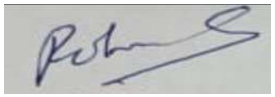

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: T. Y. B.Sc. SEMESTER: V MONTH: June- October ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Learn the basic concept of zygote formation and the various stages of the embryonic development.

Acquire the knowledge about pattern formation in embryo and the role of cytoplasmic determinants in pattern formation.

Get acquainted with various model organisms in developmental biology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cell Biology **Unit III: Developmental Biology**	Overview of how the modern era of developmental biology emerged through multidisciplinary approaches	5	Developmental Biology; Scott Gilbert; 9th Edition Principles of Developmental Biology, Lewis Wolpert Developmental Biology, Werner A. Muller	Chalk board method
	Stages of development- zygote, blastula, gastrula, neurula cell fate & commitment – potency- concept of embryonic stem cells	3		Chalk board method Flip classroom
	differential gene expression, terminal differentiation, lineages of three germ layers, fate map	3		Flip classroom
	Mechanisms of differentiation- cytoplasmic determinants, embryonic induction, concept of morphogen, mosaic and regulative development Pattern formation-- axis specification, positional identification.	3		Flip classroom
	Model organisms in Developmental biology	1		Chalk board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____**VICTORIA MANORANJITHAM** _____

DEPARTMENT: **BIOTECHNOLOGY** CLASS: **T.Y.BSc** SEMESTER: **V** MONTH: **AUGUST** ACADEMIC YEAR: **2020- 2021**

LEARNING OBJECTIVE/S:
The learners will be able to : Understand cancer causation and it's types, the concept of metastasis, the complex nature of tumorigenesis and the prevention and treatment of cancer.

- The learners will be able to :
- Define carcinogenesis and describe and differentiate between types of tumours.
- Compare and contrast invasion and metastasis.
- Discuss cancer as a multi-step process that results from the accumulation mutations and genetic damage to cells and thus describe tumorigenesis.
- Recognize other factors inducing tumours (ex. Age, exposure carcinogens, etc.)
- Describe mode of action of hormones and genes (ex. Tumour suppressor genes) involved in cancer causing.
- Discuss different viruses causing cancer.
- Understand the prevention and treatment of cancer.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 501 UNIT 4 CANCER	Introduction, Cancer as a microevolutionary process.	04	'The cell' – by Bruce Alberts (5th edition)	on - class lecturing (using power-point presentations). Discussions, Activities and homework.
	Molecular genetics of cancer	06	The cell' – by Bruce Alberts (5th edition)	on - class lecturing (using power-point presentations). Discussions, Activities and homework.
	Cancer and Viruses, Cancer diagnosis and chemotherapy.	05	Rediscovering Biology Cell Biology and Cancer Molecular to Global Perspectives By Leland Hartwell	on - class lecturing (using power-point presentations). Discussions, Activities and homework.

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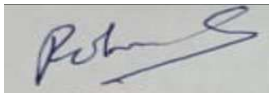
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Amol Samant DEPARTMENT: Biotechnology CLASS: T.Y.B.Sc. SEMESTER: V

MONTH: Jun-Nov ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Basic concept, working principle of Affinity chromatography, Size-exclusion chromatography, ion-exchange chromatography
2. HPLC method validation
3. Radioisotopes and detection system

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT502 Cell biology + Medical Microbiology and Instrumentation **Unit III**	IR Spectroscopy, FL spectroscopy, Luminometry AA Spectroscopy, Light Scattering	15	Principles and techniques of biochemistry and molecular biology, 7th ed - Wilson Walker Step-by-Step Analytical Methods Validation and Protocol in the Quality System Compliance industry - Institute of Validation Technology (WHO) by Gulam A. Shabir	Ppt, Google form, Animation video
USBT502 Cell biology + Medical Microbiology and Instrumentation **Unit IV**	Affinity Chromatography, SE Chromatography, IE Chromatography, Isotope Biology, GM Counter, Scintillation Counter, Autoradiography, Tracer Technique, HPLC METHOD VALIDATION	15	Principles and techniques of biochemistry and molecular biology, 7th ed - Wilson Walker Principles and techniques of biochemistry and molecular 5th edition	Ppt, Google form, Animation video Chromatography demo video

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____30_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: TYBSC SEMESTER:V

MONTH: August to December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Classify various antimicrobial agents based on their mode of action

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Medical Microbiology & Instrumentation Unit II Chemotherapeutic drugs	Discovery and Design of antimicrobial agents; Classification of Antibacterial agents, Selective toxicity, MIC, MLC Inhibition of cell wall synthesis (Mode of action for): Beta lactam antibiotics: Penicillin, Cephalosporins; Glycopeptides: Vancomycin; Polypeptides: Bacitracin Injury to Plasma membrane: Polymyxin; Inhibition of protein synthesis Aminoglycosides, Tetracyclines Chloramphenicol, Macrolides-Erythromycin	08	Prescott 5th ed Mim's Med Micro 5th ed Med Micro 18th ed Jawetz 22nd ed	Powerpoint presentation & topic related videos
	Inhibition of Nucleic acid synthesis: Quinolones, Rifampicin, Metronidazole; Antimetabolites: Sulphonamides, Trimethoprim;	05	Murray 5th Ed/ Jawetz	Powerpoint presentation & topic related videos

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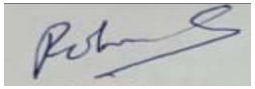
	Drug Resistance: Mechanism, Origin and transmission of drug resistance; Use and misuse of antimicrobial agents		Mim's Med Micro 5th Ed	
	Antifungal drugs, Antiviral drugs – 2 lectures	2	Mim's Med Micro Prescott 5th Ed	Powerpoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Swati Chaudhari DEPARTMENT: Biotechnology

CLASS: T.Y.B.Sc SEMESTER: V

MONTH: August- December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Describe general properties of virus, classification schemes, cultivation systems and virus purification and assay.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 502 Medical Microbiology and Instrumentation Unit 1- Virology	Introduction to viruses-Position in biological spectrum; Virus properties -	2	Foundations In Microbiology by Talaro and Talaro Third edition W.C Brown. Understanding Viruses by Teri Shors II Microbiology by Prescott	Powerpoint Presentations Mind Maps Youtube Videos Teaching Aids
	General structure of viruses Baltimore Classification and Taxonomy(ICTV) -	2		
	Cultivation of viruses	2		
	Reproduction of ds DNA phages Hepatitis /ss RNA (influenza), animal viruses and plant (TMV)virus	4		
	Virus purification and assays	2		
	Cytocidal infections and cell damage	2		

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	Viroids and Prions	1	Harley and Klein 5th edition Mc Graw Hill	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: TYBSc SEMESTER: V

MONTH: August –october 2020 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: Objective of this course is to provide students with the basic understanding of Transgenic Animals and to aware them about the different techniques and methodology used for the production of Transgenic Animals.
The learners will be able to: describe Transgenic Animals. Discuss and explain different methods used for the production of Transgenic Animals. Explain the use and importance of Transgenic Animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Genomics and Molecular Biology Unit 2: Transgenic Animals	Transgenic mice- Methodology- Retroviral method, DNA microinjection, ES method	5	Molecular Biotechnology- Principles and Applications of Recombinant DNA Technology 3rd Edition Glick B.R., Pasternak J.J., Patten C.L.	Google meet. power point presentation
	Genetic manipulation with cre-loxP	2	Molecular Biotechnology- Principles and Applications of Recombinant DNA Technology 3rd Edition Glick B.R., Pasternak J.J., Patten C.L.	Google meet. power point presentation

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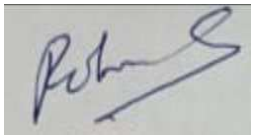
	Vectors for animals cells. Transgenic animals recombination system	4	Same as above	Google meet. power point presentation
	Cloning live stock by nuclear transfer	2	Same as above	Google meet. power point presentation
	Green Fluorescent Protein	1	Same as above	Google meet. power point presentation
	Transgenic Fish	1	Same as above	Google meet. power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15.



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: T.Y.B.Sc SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The aim of this course is to provide students with basic understanding of marine pharmaceutical products, their antimicrobial properties and challenges faced when using marine extremozymes.
The learners will be able to: learn the uses of marine toxins, their antiviral and antimicrobial activity.

Understand pharmaceutical importance of marine drugs.

Gain knowledge of marine extremozymes and their current use as well as challenges of using marine products.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 504 UNIT II: MARINE DRUGS AND ENZYMES	Drugs from Marine organisms: Pharmaceutical compounds from marine flora and fauna – marine toxins, antiviral and antimicrobial agents	04	Kim, S.K. Springer Handbook of Marine Biotechnology; Springer: Berlin, Germany; Heidelberg, Germany, 2015.	POWERPOINT PRESENTATION, TEACHING AIDS
	Approved Marine Drugs as Pharmaceuticals	02	SAME AS ABOVE	POWERPOINT PRESENTATION, TEACHING AIDS
	Marine Natural products and its Challenges	02	SAME AS ABOVE	POWERPOINT PRESENTATION

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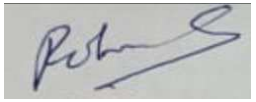
	Marine Microbial Enzymes- Marine Extremozymes and Their Significance, Current Use of Marine Microbial Enzymes	07	SAME AS ABOVE	POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr, SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: T.Y.B.Sc_____SEMESTER: __V_____MONTH: JULY TO OCT. ACADEMIC YEAR: 2020-21_____

LEARNING OBJECTIVE/S: The learners will be able to:

- Understand the functioning of Marine ecosystem and its rare flora and fauna. Bioprospecting of marine habitat.
- Learn that marine habitat can be explored for novel bioactive compounds

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 504, UNIT I, MARINE BIOTECHNOLOGY, INTRODUCTION AND BIOPROSPECTING	Introduction to Marine Biotechnology	1	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online
	The marine ecosystem and its functioning: Intertidal, Estuarine, Salt marsh, Mangrove, Coral Reef, Coastal and deep sea ecosystems. Hydrothermal vents	5	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online
	Bioprospecting, Marine Microbial Habitats, and their biotechnologically relevant microorganisms	2	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online
	Methods for Microbial Bioprospecting in Marine Environments, Biotechnological potential of marine microbes	3	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online
	Bioactive compounds from other marine organisms: Fungi, Microalgae, Seaweeds, Actinomycetes and sponges	4	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr, SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: T.Y.B.Sc_____SEMESTER: __V_____MONTH: JULY TO SEPT. ACADEMIC YEAR: 2020-21_____

LEARNING OBJECTIVE/S: The learners will be able to:

- Learn that marine habitat can be explored for potential functional foods and nutraceuticals.
- Learn the potential of marine-based bioactive compounds that include well-known compounds such as carotenoids, collagen/gelatin as well as novel compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 504, UNIT III, MARINE FUNCTIONAL FOODS AND NUTRACEUTICALS	Marine Functional Foods: Marine sources as healthy foods or reservoirs of functional ingredients	3	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online
	Marine derived ingredients with biological properties	3	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online
	Functional foods incorporating marine-derived ingredients	2	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online
	Marine Nutraceuticals: Marine bioactives as potential nutracuticals, functional carbohydrates, polyunsaturated fatty acids	3	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online
	Carotenoids, soluble calcium, fish collagen and gelatin, marine probiotics	4	Handbook of marine biotechnology by Kim, S. K.	Online lecture using PowerPoint./Occasional use of videos available online

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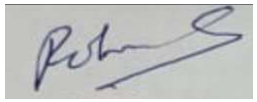

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: T. Y. B.Sc. SEMESTER: VI MONTH: November- March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Learn classification of hormones and their mode of action.

Learn the hormones of Hypothalamus, Pituitary gland, Thyroid gland, Adrenal gland, Pancreas, male and female gonads in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Biochemistry **Unit III Hormones**	Mechanism of action of group I and II hormones Structure, storage, release, transport, biochemical functions and disorders associated with hormones secreted by: Hypothalamus	2	Fundamentals of Biochemistry by J L Jain Textbook of Biochemistry by- Styanarayan	Online teaching using PowerPoint & demonstration videos and animations
	Anterior Pituitary gland - GH, stimulating hormones Posterior Pituitary gland – oxcytocin and vasopressin	2		Online teaching using PowerPoint
	Thyroid gland – Thyroxine, calcitonin Parathyroid gland – PTH Adrenal medulla – epinephrine and norepinehprine ; Adrenal cortex – Glucocortocoids	5		Online teaching using PowerPoint and demonstration videos
	Pancreas – insulin and glucagon	2		Online teaching using PowerPoint and demonstration videos and animations
	Hormones of: Female Gonads – estrogen and progesterone; Male gonads – testosterone; Placenta – hCG.	4		Online teaching using PowerPoint and demonstration videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs.Swati Chaudhari

DEPARTMENT: Biotechnology

CLASS:T.Y.B.Sc

SEMESTER: Sem VI

MONTH: December- March

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Understand what are vitamins and different types of vitamins.

Dietary sources, bioactive form, functions and disorders associated with vitamins.

Physiological and biochemical functions of elements.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 601 Biochemistry Unit IV- Nutrition	Dietary sources, bioactive form, functions and disorders associated with fat soluble (A D E K).	5	Harper's Illustrated Biochemistry, 27th edition, RK Murray, DK Granner, PA Mayes and VW Rodwell, McGraw Hills publication. Biochemistry, 4nd edition (2017), Satyanarayana	Online videos Powerpoint presentations Animations
	Dietary sources, bioactive form, functions and disorders associated with water soluble vitamins.	6		
	Minerals - physiological and biochemical functions of principal and trace elements.	3		
	Malnutrition – Over nutrition (obesity) and PEM (Kwashiorkor and Marasmus)	1		

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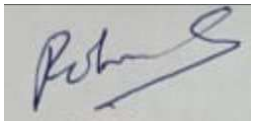
			and Chakrapani, Books & Allied (P) Ltd Nutrition Science, 6th edition (2017), Srilakshmi, new age international publishers	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: T.Y.B.Sc SEMESTER: VI MONTH: DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The aim of this course to make students aware of techniques of dairy technology and production processes of associated fermented products. The learners will be able to:

Understand the enumeration methods in milk and factors affecting milk quality.
Learn various methods of preservation of milk.

Learn the production processes and spoilage of fermented milk products.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT602 UNIT I: DAIRY TECHNOLOGY	Milk: Normal flora, changes in raw milk, Enumeration, Factors affecting bacteriological quality, Dairy technology Preservation methods, Pasteurization	07	Fundamentals of microbiology by Martin Frobisher	CHALK BOARD METHOD, PROJECTOR
	Starter Cultures	02	Applied Dairy Microbiology Elmer H Marth and James L Steele Mercel Dekker Inc New York, 2nd edition	CHALK BOARD METHOD
	Fermented products-Production process and spoilage of Cheese:Swiss and Cheddar	02	Microbial Technology Peppler,H.J and Perlman	PROJECTOR, CHALK BOARD METHOD, TEACHING AIDS

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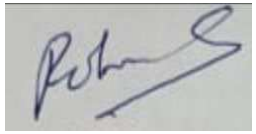
	Butter	02	Applied Dairy Microbiology Elmer H Marth and James L Steele Mercel Dekker Inc New York, 2nd edition	PROJECTOR, CHALK BOARD METHOD, TEACHING AIDS
	Yogurt, Buttermilk	02	SAME AS ABOVE	CHALK BOARD METHOD, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

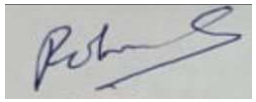
NAME OF THE STAFF: Dr. SAMEER A. S. MAPARI_____ DEPARTMENT: BIOTECHNOLOGY_____ CLASS: ___TY_____SEMESTER: _____VI_____MONTH: Nov.-March____ ACADEMIC YEAR:_2020-21_____

LEARNING OBJECTIVE/S: The learners will be able to :

- Understand the concept of Inoculum build up for various industrial production microorganisms.
- Learn the fermentation process of industrially useful metabolites.
- Learn biotransformation processes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 602 Industrial Microbiology U3-Fermentation Process	Introduction to inoculums development	2	Industrial Microbiology by Casida	Online teaching using ICT Tools such as PowerPoint and Google Classroom
	Bacterial and fungal inoculums development with one example each . Scale up and scale down	4	Industrial Microbiology by Casida	Online teaching using ICT Tools such as PowerPoint and Google Classroom
	Production of Streptomycin, Protease, Musrooms	3	Industrial Microbiology by Casida	Online teaching using ICT Tools such as PowerPoint and Google Classroom
	Production of glutamic acid, and lysine,	2	Industrial Microbiology by Casida	Online teaching using ICT Tools such as PowerPoint and Google Classroom
	Production of ethanol, and semi-synthetic penicillin. Biotransformation , examples hormones and vinegar.	4	Industrial Microbiology by Casida	Online teaching using ICT Tools such as PowerPoint and Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____



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TEACHING PLAN (UNIT PLAN)

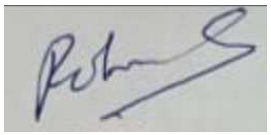
NAME OF THE STAFF: Dr Bhanupriya Ch DEPARTMENT: Biotechnology CLASS: TY B.Sc Biotechnology SEMESTER: VI

MONTH: August 2020 - December 2021 ACADEMIC YEAR:2020 - 21

LEARNING OBJECTIVE/S:
The learners will be able to : Gain Knowledge about the mechanism of drug absorption and its various routes of administration.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Absorption of drugs from the alimentary tract - 2 Lectures; factors affecting rate of gastrointestinal absorption - 2 Lectures; absorption of drugs from lungs - 1 Lecture; skin - 1 Lecture; absorption of drugs after parenteral administration factors influencing drug distribution - 2 Lectures; binding of drugs to plasma proteins - 2 Lectures; Physiological barriers to drug distribution - 3 Lectures.	15	Pharmacology Craig	PPT and Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: TYBSc SEMESTER: VI

MONTH: February 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To acquaint the students with basic concepts of toxicology, cause and treatment of poisoning.
The learners will be able to: Understand the term in basic toxicology. Discuss Causes allergy to drugs and effects of prolonged drug administration for e.g on organ and effect on reproductive system. Understand Deliberate and Self-poisoning and explain the principles of treatment for the same. Explain principles of treatment for specific poisonings with examples: heavy metals, herbicides, pesticides, biological substances and incapacitating agents.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Basic Pharmacology and Neurochemistry. Unit 3: Basic Toxicology and Regulatory Toxicology	Background Definitions. Toxicology Causation: Degrees of certainty Classification	2	Clinical Pharmacology Bennet, P.N. Brown, M.J, Sharma, P 11th edition Elsevier.	Chalk and Board Projector (power point presentation)
	Causes Allergy in response to drug and effect of prolonged administration.	2	Clinical Pharmacology Bennet, P.N. Brown, M.J, Sharma, P 11th edition Elsevier.	Chalk and Board Projector (power point presentation)
	Adverse effects of drugs on reproduction	1	Clinical Pharmacology Bennet, P.N. Brown, M.J, Sharma, P 11th edition Elsevier.	Chalk and Board Projector (power point presentation)
	Deliberate and accidental self-poisoning. Principles of treatment of poison- specific measures and general measures	2	Clinical Pharmacology Bennet, P.N. Brown, M.J, Sharma, P 11th edition Elsevier.	Chalk and Board Projector (power point presentation)

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	Specific poisoning by cyanide, methanol, ethylene glycol, hydrocarbon, volatile solvents, heavy metals, Nonmedical use of drugs	4	Clinical Pharmacology Bennet, P.N. Brown, M.J, Sharma, P 11th edition Elsevier.	Chalk and Board Projector (power point presentation)
	Herbicides and pesticides, biological substances. Incapacitating agent.	4	Clinical Pharmacology Bennet, P.N. Brown, M.J, Sharma, P 11th edition Elsevier.	Chalk and Board Projector (power point presentation)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: T.Y.B.Sc SEMESTER: V MONTH: JANUARY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To understand concepts related to the general principles of pharmacology.
The learners will be able to : Understand the general mechanisms of the drug action and effect in the human body.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 603 BASIC PHARMACOLOGY AND NEUROCHEMISTRY UNIT I GENERAL PRINCIPLES OF PHARMACOLOGY	Mechanism of drug action , drug receptors and biological responses	04	Modern Pharmacology with clinical Applications Craig,C.R, Stitzel,R.E 5th edition	PRESENTATION, YOUTUBE VIDEOS
	second-messenger systems, the chemistry of drug–receptor binding, dose–response relationship: therapeutic index	05		
	ED, LD; Potency and Intrinsic Activity	04		
	Drug antagonism	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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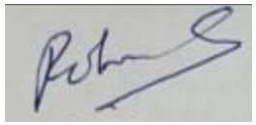
TEACHING PLAN (UNIT PLAN)

AME OF THE STAFF: Mr Nikhil Paradkar DEPARTMENT: Biotechnology CLASS: TYBSc

SEMESTER: **SEM VI** MONTH: January - April ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To understand a general definition of research design and identify the overall process of designing a research study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT604 Environmental Biotechnology UNIT 2 Industrial effluent treatment	**Industrial effluent treatment**; ● Biological processes for industrial effluent treatment, aerobic biological treatment- activated sludge process, CASP, advanced activated sludge processes (any two) Biological filters, RBC, FBR ● Anaerobic biological treatment- contact digesters, packed bed reactors, anaerobic baffled digesters, UASB ● Solid waste treatment ● Pollution indicators & biosensors ● Biodegradation of xenobiotics- persistent compounds, chemical properties influencing biodegradability, microorganisms in biodegradation ● Use of immobilized enzymes or microbial cells for treatment	5 Lectures 3 Lectures 2 Lectures 2 Lectures 2 Lectures 1 Lecture	**1.**Environmental Biotechnology (Basic concepts and applications) Indu Shekar Thakur IK International **2.** Environmental Biotechnology Allan Scragg Oxford University press	Blended Approach - Using Flipped classroom and direct instruction method. Powerpoint Presentation - To present the content Videos



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Amol Samant_____ DEPARTMENT: BIOTECHNOLOGY_____ CLASS: ___TY_____SEMESTER: _____VI_____MONTH: Nov.-March____ ACADEMIC YEAR:_2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of wastewater treatment system
- Learn how microbes can be used in wastewater treatment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 604 Environmental Biotechnology U3-Wastewater treatment	Wastewater treatment- introduction, biological treatment, impact of pollutants on biotreatment, use of packaged organisms and genetically engineered organisms in waste treatment	5	Environmental Biotechnology (Industrial pollution management) S.D. Jogdand Himalaya Publishing House	Online teaching using ICT tools such as PowerPoint and Google Classroom
	Heavy metal pollution – sources, microbial systems for heavy metal accumulation, techniques used for heavy metal removal	5	Environmental Biotechnology (Industrial pollution management) S.D. Jogdand Himalaya Publishing House Environmental Biotechnology (Basic concepts and applications) Indu Shekar Thakur IK International	

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	biosorption by bacteria, fungi and algae, factors affecting biosorption limitations of biosorption	5	Environmental Biotechnology (Industrial pollution management) S.D. Jogdand Himalaya Publishing House Environmental Biotechnology (Basic concepts and applications) Indu Shekar Thakur IK International	
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____				

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: TYBSC SEMESTER: VI

MONTH: January to April ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Gain an understanding of the characteristics of wastes of each type of industry
Gain an understanding of the treatment methods of each type of industry waste

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT604 Environmental Biotechnology UNIT IV Hazardous waste Management	Biodegradation of waste from tanning industry - **;** petroleum industry	04	Environmental Biotechnology Indu shekar Thakur IK International (Basic concepts and applications)	Power point presentation & Topic related videos
	paper & pulp industry**;** Dairy**;** Distillery**;** Dye	07	Environmental Biotechnology Indu shekar Thakur IK International (Basic concepts and applications)	Power point presentation & Topic related videos
	Antibiotic industry**;** Removal of oil spillage & grease deposits	04	Environmental Biotechnology Indu shekar Thakur IK	Power point presentation & Topic related videos

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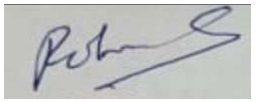
			International (Basic concepts and applications)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

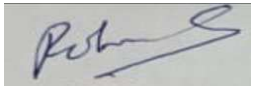
NAME OF THE STAFF: Mr Nikhil Paradkar DEPARTMENT: Biotechnology CLASS: TYBSc

SEMESTER: **SEM V** MONTH: October - December ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To understand the component of Biosafety and to develop an understanding detection and testing of contaminants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT AC 501 UNIT 3 Applied component, Biosafety, Detection and testing of contaminants	• Microbial Contamination in food and pharma products. • Some common microbial contaminants. • Microbiological Assays for pharmaceutical products. • Regulatory Microbiological testing in pharmaceuticals.	15	**1.** Pharmaceutical Microbiology - Hugo, W.B, Russell, A.D 6th edition Oxford Black Scientific Publishers. **2.** Biosafety in Microbiological and Biomedical Laboratories - 5th Edition, L. Casey Chosewood Deborah E. Wilson U.S. Department of Health and Human Services Centers for Disease Control and Prevention National Institutes of Health.	Blended Approach - Using Flipped classroom and direct instruction method. Powerpoint Presentation - To present the content

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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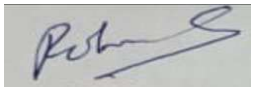
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: T.Y.B.Sc

SEMESTER: III MONTH: Sept.-Dec. ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- check on harmful biological agents, toxins, chemicals, and radiation.
- understand the importance of ensuring public and environmental safety.
- aware of the rules, regulations, and monitoring bodies



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 501 Paper V Unit IV Biosafety in Biotechnology	**Regulating Food and Food Ingredients.** **Chymosin,Tryptophan,Bovine somatotropin** **Genetically modified crops** **Genetically engineered livestock** **Contemporary issues in Bioethics** **Concepts on biosafety in Biotechnology** **Regulating rDNA technology** **Deliberate release of GMOs**	15	Molecular Biotechnology -Principles and Applications of Recombinant DNA Glick, B.R, Pasternak, J.J Patten, C.L 3rd edition ASM press pg 903-910, 898-901 Biosafety in Microbiological and Biomedical Laboratories - 5th Edition, L. Casey Chosewood Deborah E. Wilson U.S. Department of Health and Human Services Centers for Disease Control and Prevention National Institutes of Health. Centers for Disease Control and Prevention National Institutes of Health	Mind map PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

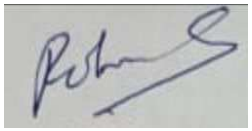
NAME OF THE STAFF: Mr. Sharvil Shringarpure DEPARTMENT: Biotechnology CLASS: T. Y. B.Sc.

SEMESTER: VI MONTH: November- March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Learn the greenhouse technology and be able to describe different types of greenhouses.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied component **Unit I** Precision Agriculture and Agriculture systems	Introduction to Agriculture and Agriculture systems-; Green house Technology-- Types of green house, importance, functions and features of greenhouse, Design criteria and calculation; Construction material, covering material and its characteristics, growing media, greenhouse irrigation system. nutrient management -; Greenhouse heating, cooling and shedding and ventilation system, Computer controlled environment , Phytotrons, fertigation and roof system; Precision Cultivation- tools, sensors for information acquisition -	15	P. Parvatha Reddy (auth.) - Sustainable Crop Protection under Protected Cultivation- Springer Singapore (2016)	Online teaching using PowerPoint and demonstration videos and animations.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

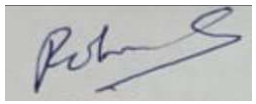
NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: T. Y. B.Sc. SEMESTER: VI MONTH: November- March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to: Learn classification of hormones and their mode of action.
Learn the hormones of Hypothalamus, Pituitary gland, Thyroid gland, Adrenal gland, Pancreas, male and female gonads in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied component **Unit III**	Abiotic stress –Physiological and molecular responses of plants to water stress, salinity stress, temperature stress – heat and cold	2	Responses of Plants to Environmental Stress **chapter 13**	Online teaching using PowerPoint and demonstration videos and animations.
	Photooxidative stress, stress perception and stress signaling pathways, Ionic and osmotic homeostasis, reactive oxygen species scavenging	2		
	Biotic stress - plant interaction with bacterial, viral and fungal pathogens, plant responses to pathogen–biochemical and molecular basis of host-plant resistance	4	Biotic Interactions and 1 Plant–Pathogen Associations M.J. Jeger	
	Toxins of fungi and bacteria , systemic and induced resistance –pathogen derived resistance, signalling	4	Plant parasite microorganisms Yu. T. Dyakov, S. V. Zinovyeva	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Victoriya Manoranjitham DEPARTMENT: BIOTECHNOLOGY

CLASS: S. Y. B. Sc_____SEMESTER: IV_____MONTH: November to March. ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understanding the genome, polymorphism and the need for markers in genome analysis and plant breeding.
- Learn different types of DNA markers and their application.
- Knowledge on new generation markers – for ex. SNPs for whole genome analysis.
- Understanding QTL mapping – strategies and methods
- Knowledge on Plant DNA barcoding, the marers used in barcoding, it's advancement and limitations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 607, (APPLIED COMPONENT) Unit III: Molecular Markers in Plant Breeding	Genetic markers in plant breeding-- Classical markers, DNA markers (RFLP, RAPD, AFLP, SSR, SNP)	4	Altieri, Miguel A.Farrell, John G- Agroecology- The Science Of Sustainable Agriculture, Second Edition-CRC Press (2018)	Online teaching using PowerPoint and videos at times
	Application of Molecular Markers to Plant Breeding [quantitative trait locus (QTL) mapping]	4	Arie Altman, Paul Michael Hasegawa- Plant Biotechnology and Agriculture_ Prospects for the 21st Century-Academic Press (2011)	Online teaching using PowerPoint a
	Plant DNA Barcoding- Barcoding Markers (matK, rbcl, ITS, tmHpsbA),	4	M. Ajmal Ali, G. Gyulai, F. Al-Hemaid -Plant DNA Barcoding and Phylogenetics, LAP	Online teaching using PowerPoint

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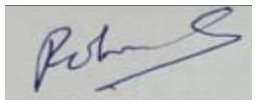
	steps, recent advances,		Lambert Academic Publishing (2015)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____12_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Amol Samant_____ DEPARTMENT: BIOTECHNOLOGY_____ CLASS: ___TY_____SEMESTER: _____VI_____MONTH: Nov.-March____ ACADEMIC YEAR:_2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to :

- Learn how microbes can be used in improving crop yield
- Learn biofertilizer and pesticide processes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Component Agri Biotechnology U4 Biofertilizers and Pesticides	Biofertilizer: Nitrogen-fixing Rhizobacteria - Symbiotic Nitrogen Fixers	2	Travis R. Glare, Maria E. Moran-Diez - Microbial-Based Biopesticides_ Methods and Protocols (2016, Humana Press) Altieri, Miguel A.Farrell, John G-Agroecology- The Science Of Sustainable Agriculture, Second Edition-CRC Press (2018) Arie Altman, Paul Michael Hasegawa-Plant Biotechnology and Agriculture_ Prospects for the 21st Century-Academic Press (2011)	Online teaching using ICT tools such as PowerPoint and Google Classroom
	Nonsymbiotic Nitrogen Fixers Plant Growth Promoting Microorganisms-Phosphate-Solubilizing Microbes (PSM), Phytohormones and Cytokinins, Induced Systemic Resistance-	2		
	Plant Growth Promotion by Fungi-- Mycorrhizae Arbuscular Mycorrhizae Ectomycorrhizae	2		
	Microbial Inoculants -- Inocula,Carriers, and Applications, Monoculture and Co-culture	3		

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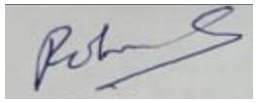
	Inoculant Formulations Biocontrol, Polymicrobial Inoculant Formulations			
	Biopesticides – types, Bacillus thuringiensis, insect viruses and entomopathogenic fungi (characteristics, physiology, mechanism of action and application)	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____12_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: T.Y.B.Sc SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To develop the practical competence often within their area of specialization.
The learners will be able to : Learn the importance of Standard Operating Procedures, the relevance of qualified personnel , Recognize common chemical safety hazards, the reasons for using a laboratory notebook, and the use of proper documentation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT AC-501 APPLIED COMPONENT	Concept of GLP; Practicing GLP; Guidelines to GLP	04	Handbook of Good Laboratory Practice By World health organization	PRESENTATION, YOUTUBE VIDEOS AND QUIZZES
	Documentation of Laboratory work; Preparation of SOPs	03	SAME AS ABOVE	
	Calibration records; Validation of methods	02	SAME AS ABOVE	
	Documentation of results; Audits & Audit reports	03	SAME AS ABOVE	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: I MONTH: OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The aim of this course is to enlighten students about various microbial techniques.
The learners will be able to: Understand different microscopes and their applications.

Differentiate between different stains and dyes along with types of them.

Learn variety of staining techniques used in the field of microbiology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT104: MICROBIAL TECHNIQUES UNIT I: MICROSCOPY AND STAINS	Microscope- Simple and Compound: Principle. Parts, functions and applications.	04	Prescott's microbiology by Wiley, Sherwood and Woolverton	POWERPOINT PRESENTATION, TEACHING AIDS
	Dark field and Phase contrast microscope	03	SAME AS ABOVE	TEACHING AIDS, POWERPPOINT PRESENTATION
	Stains and staining solutions-Definition of dye and chromogen. Structure of dye and chromophore.	03	Fundamental principles of bacteriology, A.J.Salle	POWERPOINT PRESENTATION
	Functions of mordant and fixative. Natural and synthetic dyes.	02	SAME AS ABOVE	POWERPOINT PRESENTATION
	Simple staining, Differential staining and acid fast staining with specific examples	03	SAME AS ABOVE	TEACHING AIDS, POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr Nikhil Paradkar DEPARTMENT: Biotechnology CLASS: FYBSc

SEMESTER: **SEM I** MONTH: November - December ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To impart knowledge of Globalization make students aware of the problems in society

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Ability Enhancement Course 1, USBT107 - Societal Awareness, Concept of Disparity	**Concept of Disparity- I:** ● Understand the concept of disparity as arising out of stratification and inequality. ● Explore the disparities arising out of gender with special reference to violence against women, female foeticide (declining sex ratio), and portrayal of women in media. ● Appreciate the inequalities faced by people with disabilities and understand the issues of people with physical and mental disabilities. **Concept of Disparity-II** ● Examine inequalities manifested due to the caste system and inter-group conflicts arising thereof. ● Understand inter-group conflicts arising out of communalism; ● Examine the causes and effects of conflicts arising out of regionalism and linguistic differences.	15	Foundation Course Semester 1 & 2	Blended Approach - Using Flipped classroom and direct instruction method. Powerpoint Presentation - To present the content

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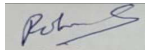
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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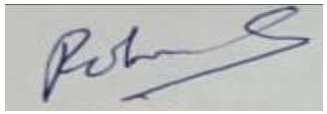
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Bhanupriya Ch
DEPARTMENT: Biotechnology
CLASS: FY B.Sc **SEMESTER:** II
MONTH: July 2020 – December 2021 **ACADEMIC YEAR:** 2020 - 21
LEARNING OBJECTIVE/S:
The learners will be able to: Structure of DNA and RNA, Types of nucleic acids and timeline of DNA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Biomolecules: Nucleic Acids	Nucleic Acids: Structure, Function of Nucleic Acids, Properties and Types of DNA, RNA. Structure of Purine and Pyrimidine Bases Hydrogen Bonding between Nitrogeneous Bases in DNA Differences between DNA and RNA, Structure of Nucleosides, Nucleotides and Polynucleotides.	15	iGenetics by Peter Russell.	PPT and Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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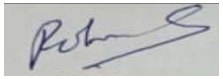
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Rohan Vilas Gavankar DEPARTMENT: Biotechnology CLASS: FYBSc

SEMESTER: **SEM II** MONTH: January - April ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To make students aware about the Problems in Society and imparting their knowledge towards understanding and managing stress and conflicts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT207 Understanding and Managing Stress and Conflict in Contemporary Society	• Understanding Stress and Conflict: Causes of stress and conflict in individuals and society; Agents of socialization and the role played by them in developing the individual; Significance of values, ethics and prejudices in developing the individual; Stereotyping and prejudice as significant factors in causing conflicts in society. Aggression and violence as the public expression of conflict. • Managing Stress and Conflict in Society: Types of conflicts and use of coping mechanisms for managing individual stress; Maslow's theory of self-actualisation;Different methods of responding to conflicts in society; Conflict-resolution and efforts towards building peace and harmony in society	15	Foundation Course Semester 1 & 2	Blended Approach - Using Flipped classroom and direct instruction method. Powerpoint Presentation - To present the content



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Bhanupriya Ch DEPARTMENT: Biotechnology CLASS: TY B.Sc Biotechnology SEMESTER: V

MONTH: June 2019 - December 2020 ACADEMIC YEAR:2019 - 20

LEARNING OBJECTIVE/S:
The learners will be able to : get a knowledge about mechanism of drug absorption and its various routes of administration.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Absorption of drugs from the alimentary tract - 2 Lectures; factors affecting rate of gastrointestinal absorption - 2 Lectures; absorption of drugs from lungs - 1 Lecture; skin - 1 Lecture; absorption of drugs after parenteral administration factors influencing drug distribution - 2 Lectures; binding of drugs to plasma proteins - 2 Lectures; Physiological barriers to drug distribution - 3 Lectures.	15	Pharmacology Craig	PPT and Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: S. Y. B.Sc. SEMESTER: IV MONTH: June- October ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Learn the concept and applications of green chemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Chemistry-I **UNIT III Green Chemistry and Synthesis**	Carbohydrate Metabolism: Glycolytic Pathway and its Regulation, Homolactic Fermentation; Alcoholic Fermentation; Energetics of Fermentation.	5	Lehninger Principles of biochemistry 4th edition Biochemistry by Satyanarayan and Chakrapani Biochemistry by Voet & Voet	Online teaching using PowerPoint and demonstration videos and animations.
	Citric Acid Cycle and its Regulation; Gluconeogenesis; Pentose Phosphate Pathway; Glyoxalate Pathway; Reductive TCA.	3		
	Electron Transport System: Electron Transport and Oxidative Phosphorylation. Inhibitors of ETS.	3		
	Energy Rich Compounds: ATP as Energy Currency, Structure of ATP, Hydrolysis, Other Energy Rich Compounds other than ATP like PEP, Creatine Phosphate, etc.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology CLASS: T. Y. B.Sc.

SEMESTER: V MONTH: June- October ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Learn the basic concept of zygote formation and the various stages of the embryonic development.

Acquire the knowledge about pattern formation in embryo and the role of cytoplasmic determinants in pattern formation.

Get acquainted with various model organisms in developmental biology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cell Biology **Unit III: Developmental Biology**	Overview of how the modern era of developmental biology emerged through multidisciplinary approaches	5	Developmental Biology; Scott Gilbert; 9th Edition Principles of Developmental Biology, Lewis Wolpert Developmental Biology, Werner A. Muller	Chalk board method
	Stages of development- zygote, blastula, gastrula, neurula cell fate & commitment – potency- concept of embryonic stem cells	3		Chalk board method Flip classroom
	differential gene expression, terminal differentiation, lineages of three germ layers, fate map	3		Flip classroom
	Mechanisms of differentiation- cytoplasmic determinants, embryonic induction, concept of morphogen, mosaic and regulative development Pattern formation-- axis specification, positional identification.	3		Flip classroom
	Model organisms in Developmental biology	1		Chalk board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Bhanupriya Ch DEPARTMENT: Biotechnology CLASS: SY B.Sc Biotechnology SEMESTER:III

MONTH: June 2019 - December 2020 ACADEMIC YEAR:2019 - 20

LEARNING OBJECTIVE/S:
The learners will be able to : A basic and conceptual study about the mechanism of transcription in both prokaryotes and eukaryotes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Gene Expression- an Overview. Transcription Process in Prokaryotes : RNA Synthesis; Promoters and Enhancers; Initiation of Transcription at Promoters; Elongation and Termination of an RNA Chain. Transcription in Eukaryotes : Eukaryotic RNA Polymerases; Eukaryotic Promoters; Transcription of Protein Coding Genes by RNA Polymerase; Eukaryotic mRNA's; Transcription of other genes; Spliceosomes; RNA editing.	15	iGenetics by Peter Russell	PowerPoint presentation and chalkboard method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Bhanupriya Ch DEPARTMENT: Biotechnology CLASS: TY B.Sc Biotechnology SEMESTER: V

MONTH: June 2019 - December 2020 ACADEMIC YEAR:2019 - 20

LEARNING OBJECTIVE/S:
The learners will be able to : get a knowledge about agricultural biotechnology specifically focused on various plant transformation methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Genetic engineering of plants; Methodology. Plant transformation with the Ti plasmid of A.tumefaciens, Ti plasmid derived vector system - 4 Lectures; Transgenic plants: Physical methods of transferring genes to plants : electroporation, microprojectile bombardment, liposome mediated, protoplast fusion- 5 Lectures; Vectors for plant cells - 4 Lectures; Improvement of seed quality protein - 2 Lectures	15	Biotechnology Glick	PPT and Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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NAME OF THE STAFF: Dr Bhanupriya Ch DEPARTMENT: Biotechnology CLASS: TY B.Sc Biotechnology SEMESTER: V

MONTH: June 2019 - December 2020 ACADEMIC YEAR:2019 - 20

LEARNING OBJECTIVE/S:
The learners will be able to : get a knowledge about various techniques of DNA sequencing and significance of human genome project. Primarily focused on Genome editing tools like CRISPR cas9

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Maxam Gilbert's method, Sanger's dideoxy method, Automated DNA sequencing, Pyrosequencing - 6 Lectures; Human genome mapping and it's implications in health and disease - 3 Lectures; RNAi, ZNF(Zinc finger nucleases), TALENS(Transcription Activator Like Effector Nucleases), CRISPER/Cas system(Clustered Regularly Interspersed Repeats) - 6 Lectures	15	University prescribed	PPT and Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI_____ DEPARTMENT: BIOTECHNOLOGY_____

CLASS: M. Sc. I _____SEMESTER: I_____MONTH: AUG. to NOV.__ACADEMIC YEAR: 2019-20_____

LEARNING OBJECTIVE/S: The learners will be able to:

- Understand the concepts of functional genomics and proteomics at the advanced level including next generation sequencing platforms.
- Have profound knowledge in electrophoretic and mass spectrometric techniques.
- Gain an insight to relatively novel concepts such as lipidomics, metagenomics, metabolomics and systems biology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 104, I, Functional Genomics and Proteomics	Genomics: Gene expression by SAGE. Microarrays- Construction of microarrays- genomic arrays, cDNA arrays, oligoarrays and its applications, NGS platforms, high and low read sequences	4	Microarray bioinformatics by Dov Sketel	Classroom teaching with occasional use of online videos and/or images
	Proteomics; Separation and identification of proteins 2D-PAGE, isoelectric focussing, Edman reaction protein tryptic digestion and peptide mass finger printing mass spectrometry MALDI-TOF	3	Introduction to human molecular genetics by Jack Pasternak	Classroom teaching with occasional use of online videos and/or images
	Protein expression profiling; Protein microarrays/protein chips: Types and applications	2	Introduction to human molecular genetics by Jack Pasternak	Classroom teaching with occasional use of online videos and/or images
	Gel-based quantitative proteomics: Difference in Gel Electrophoresis [DIGE], Gel free based quantitative proteomics: Surface Plasmon Resonance, MS based used with stable- isotope tagging	3	Introduction to human molecular genetics by Jack Pasternak	Classroom teaching with occasional use of online videos and/or images
	In vivo labelling: SILAC, In vitro labelling-ICAT, Clinical and biomedical applications of proteomics, Introduction to metabolomics, lipidomics, metagenomics and systems biology	3	Microarray and microplates: Applications in biomedical sciences by Ye and Day	Classroom teaching with occasional use of online videos and/or images

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: M. Sc. I_____SEMESTER: II_____MONTH: JAN-MAY_____ ACADEMIC YEAR:2019-20_____

LEARNING OBJECTIVE/S: The learners will be able to:

- Gain theoretical and practical knowledge in isolation and selection of microorganisms of commercial interest.
- Understand the principles and scientific rationales behind strain improvement programme adopted by the industry and academia.
- Understand media formulation and its optimization using design of experiment software
- Have knowledge of aeration and agitation in requirements in a bioreactor and measurement and control of process parameters.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 203, I, Basic principles of Biochemical engineering	Sources of Microorganisms used in biotechnology: Literature search and culture collection supply, Isolation *de novo* of organisms producing metabolites of economic importance	3	Modern industrial microbiology and biotechnology by Nduka Okafor	Online Teaching/ Microsoft powerpoint
	Strain Improvement: Selection from naturally occurring variants, Manipulation of the genome of industrial microorganisms in strain improvement	4	Modern industrial microbiology and biotechnology by Nduka Okafor	Classroom & Online Teaching/ Microsoft powerpoint
	Bioreactor design and analysis: Media formulation and optimization methods, sterilization of bioreactors	3	Principles of fermentation technology by Stanbury & Whitaker	Online Teaching/ Microsoft powerpoint
	Aeration and agitation in bioreactors, Kla value [factors affecting and methods of determination].	2	Principles of fermentation technology by Stanbury & Whitaker	Online Teaching/ Microsoft powerpoint
	Heat transfer in bioprocess, measurement and control of bioprocess parameters, bioprocess economics	3	Principles of fermentation technology by Stanbury & Whitaker	Online Teaching/ Microsoft powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: M. Sc. I_____SEMESTER: II_____MONTH: JAN-MAY_____ ACADEMIC YEAR:2019-20_____

LEARNING OBJECTIVE/S: The learners will be able to:

- Have a specialized knowledge of applications of enzymes in food industry.
- Understand the mechanisms of enzyme functionality and their specific reactions in food processes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 203, III, Applications of enzyme technology in food processing	Introduction and Scope: Enzymes sourced from animals and plants used in food manufacturing technology, enzyme usage in food applications	4	Enzymes in food technology by Whitehurst & M, V. Oort	Online Teaching/ Microsoft PowerPoint
	Mechanism of enzyme function and reactions in food processes: Starch processing and related carbohydrates, lipases for the production of food components: inter-estrified fats	4	Enzymes in food technology by Whitehurst & M, V. Oort	Online Teaching/ Microsoft PowerPoint
	Enzymes in protein modification: Hydrolyzed protein, enzymes in bread making-flavour, texture and keeping quality	3	Enzymes in food technology by Whitehurst & M, V. Oort	Online Teaching/ Microsoft PowerPoint
	Enzymes in dairy product manufacture, Enzymes in fruit and vegetable processing and juice extraction	2	Enzymes in food technology by Whitehurst & M, V. Oort	Online Teaching/ Microsoft PowerPoint
	Enzymes in fish and meat processing, beer production using immobilized cell technology	2	Enzymes in food technology by Whitehurst & M, V. Oort	Online Teaching/ Microsoft PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: M. Sc._II_____SEMESTER: III_____MONTH: AUG-NOV ACADEMIC YEAR: 2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Have specialized knowledge in animal tissue culture techniques such as primary culture and cell lines.
- Gain both theoretical and practical knowledge of tissue disaggregation techniques such as trypsinization along with staining of animal cells.
- Have a learning experience in toxicological assays such as radical scavenging assay and MTT assay.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 301, IV, PTC and **ATC**	Primary culture: Types, isolation of tissues, culturing of different cells.	4	Culture of animal cells by Ian Freshney	Classroom teaching.
	Cell lines: Development, subculture and propagation, immortalization of cell lines, cell line designation, selection of cell lines, routine maintenance.	7	Culture of animal cells by Ian Freshney	Classroom teaching.
	Cytotoxicity, Transformation, and culture of tumour cells	4	Culture of animal cells by Ian Freshney	Classroom teaching.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: M. Sc._II_____SEMESTER: _IV_____MONTH: JAN –MAY ACADEMIC YEAR: 2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concepts and principles underlying biodegradation of wastes from various industries such as food, textile, pulp and paper etc.
- Have knowledge of biological detoxification and removal of oil spillage and grease deposits.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 402, IV, GMO AND ENVIRONMENT	Biodegradation of food, textile, paper, and petrochemical industries	8	Environmental Biotechnology by Indu Shekhar Thakur	Online/Classroom teaching.
	Biological Detoxification	3	Environmental Biotechnology by Indu Shekhar Thakur	Online/Classroom teaching.
	Removal of oil spillage and grease deposits	4	Environmental Biotechnology by Indu Shekhar Thakur	Online/Classroom teaching.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI DEPARTMENT: BIOTECHNOLOGY

CLASS: S. Y. B. Sc_____SEMESTER: III_____MONTH: JULY TO OCT. ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand basic skills applied in fermentation technology and build a foundation for more advanced studies in bioprocess technology.
- Have an understanding of principles underlying design of a fermentor and fermentation process control.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 306, II, FERMENTOR AND FERMENTATION PROCESS	Design of a Fermentor: Stirred tank fermentor-basic design; parts of a typical industrial fermentor. Fermentation media: Components; design and optimization	4	Principles of Fermentation Technology by Stanbury, Whitaker & Hall	Classroom teaching
	Sterilization: Sterilization of fermentor and fermentation media. Process parameters: pH, temperature, aeration, agitation, foam etc.	4	Principles of Fermentation Technology by Stanbury, Whitaker & Hall	Classroom teaching
	Types of Fermentation: Surface and submerged; Batch and continuous, Aerobic and anaerobic.	2	Industrial Microbiology by Casida	Classroom teaching
	Product isolation and purification	3	Principles of Fermentation Technology by Stanbury, Whitaker & Hall	Classroom teaching
	Study of representative fermentation process: Outline of penicillin and ethanol production by fermentation with a flow diagram	2	Industrial Microbiology by Casida	Classroom teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr, SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: T.Y.B.Sc_____SEMESTER: __V_____MONTH: JULY TO SEPT. ACADEMIC YEAR: 2019-20_____

LEARNING OBJECTIVE/S: The learners will be able to:

- Learn that marine habitat can be explored for potential functional foods and nutraceuticals.
- Learn the potential of marine-based bioactive compounds that include well-known compounds such as carotenoids, collagen/gelatin as well as novel compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 504, UNIT III, MARINE FUNCTIONAL FOODS AND NUTRACEUTICALS	Marine Functional Foods: Marine sources as healthy foods or reservoirs of functional ingredients	3	Handbook of marine biotechnology by Kim, S. K.	Lectures in the classroom./Occasional use of videos available online
	Marine derived ingredients with biological properties	3	Handbook of marine biotechnology by Kim, S. K.	Lectures in the classroom./Occasional use of videos available online
	Functional foods incorporating marine-derived ingredients	2	Handbook of marine biotechnology by Kim, S. K.	Lectures in the classroom./Occasional use of videos available online
	Marine Nutraceuticals: Marine bioactives as potential nutracuticals, functional carbohydrates, polyunsaturated fatty acids	3	Handbook of marine biotechnology by Kim, S. K.	Lectures in the classroom./Occasional use of videos available online
	Carotenoids, soluble calcium, fish collagen and gelatin, marine probiotics	4	Handbook of marine biotechnology by Kim, S. K.	Lectures in the classroom./Occasional use of videos available online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr, SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: T.Y.B.Sc_____SEMESTER: VI_____MONTH: NOV. TO MARCH ACADEMIC YEAR: 2019-20_____

LEARNING OBJECTIVE/S:

The learners will be able to :

- Be knowledgeable about various renewable sources of energy such as Wind, Solar, Geo-thermal, Hydro and Biomass, the means to trap them and the need to replace non-renewable energy sources by renewable ones.
- Understand the concepts of Biogas technology-biogas plant and types, biogas production, and biodigester.
- Learn about fuel ethanol production from various raw materials such as corn and ligno-cellulosic biomass-advantages and disadvantages associated with the process.
- Learn microbial hydrogen, biodiesel production processes and petrocrops as alternative and promising sources of energy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 604, UNIT I, RENEWABLE SOURCES OF ENERGY	Energy sources renewable-solar energy, wind power, geothermal energy and hydropower, biomass energy	5	Environment Biotechnology by Fulekar	Lectures in the classroom./Occasional use of videos available online
	Biogas technology-biogas plant and types, biodigester. Biogas – composition, production and factors affecting production, uses.	5	Environmental Biotechnology by Jogdand	Lectures in the classroom./Occasional use of videos available online
	Biofuels-Ethanol production, Microbial hydrogen production, Biodiesel and Petrocrops.	5	Environment Biotechnology by Fulekar	Lectures in the classroom./Occasional use of videos available online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR, SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

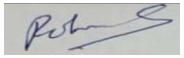
CLASS: F. Y. B. Sc._____SEMESTER: I_____MONTH: AUG. TO NOVEMBER ACADEMIC YEAR: 2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Gain fundamental knowledge in food and fermentation technology.
- Have an understanding of the principles underlying food processing and fermentative production of industrial fine chemicals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 105, III, FOOD AND FERMENTATION BIOTECHNOLOGY	Food Biotechnology: Biotechnological applications in enhancement of food quality, Unit operations in food processing, Quality factors in pre-processed food	3	European Food Information council web information	Classroom teaching
	Food deterioration and its control, Rheology of food products, Microbial role in food products-yeast, bacterial and other microorganisms based process and products	3	Food Science by N. N. Potter	Classroom teaching
	Modern biotechnological regulatory aspects in Food industries, Biotechnology and food-social appraisal	2	Web information	Classroom teaching
	Fermentation Technology- Definition, applications of fermentation technology. Microbial fermentations,	2	Industrial Microbiology by Casida	Classroom teaching
	Overview of industrial production of chemicals [acetic acid, citric acid and ethanol], antibiotics, enzymes and beverages	5	Industrial Microbiology by Casida	Classroom teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR, SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: F. Y. B. Sc._____SEMESTER: I_____MONTH: AUG. TO NOVEMBER ACADEMIC YEAR: 2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Gain fundamental knowledge in biodiversity of microorganisms with respect to bacteria and viruses.
- Have an understanding of the principles underlying cultivation of bacteria, and general characteristics, classification and significance of viruses.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 103, III, BACTERIA AND VIRUSES	Bactera: Classification, types, morphology [shape, size and arrangement], cultivation of bacteria	3	Microbiology by Pelczar	Classroom teaching
	Reproduction and growth [binary fission, conjugation and endospore formation].	3	Microbiology by Pelczar	Classroom teaching
	Groeth kinetics, isolation and preservation, significance of bacteria	3	Microbiology by Pelczar	Classroom teaching
	Viruses: General characters, Classification [plant, animal and bacterial viruses]	3	Microbiology by Presscott	Classroom teaching
	Structure and characterization of viruses and significance	3	Microbiology by Pelczar	Classroom teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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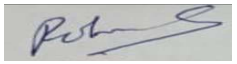

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI _____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: F. Y. B. Sc_____SEMESTER: II_____MONTH: NOV. TO MARCH ACADEMIC YEAR: 2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to :

- Acquire scientific communication skills both verbal and non-verbal.
- Have practical experience in scientific poster making and presentation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 205, III, SCIENTIFIC WRITING AND COMMUNICATION SKILLS	Communication skills: Introduction to communication—Elements, definition, scope of communication and communication as part of science. Communication elements—Verbal and non-verbal communications.	4	Scientific Writing by Jennifer Peat	Classroom teaching with relevant published articles
	Principles of effective communications, oral presentations, Scientific reading, writing and presentations.	3	Scientific Writing by Jennifer Peat	Classroom teaching with relevant published articles
	Scientific writing – process of scientific writing: Thinking, planning, rough drafts and revising contents	3	Scientific Writing by Jennifer Peat	Classroom teaching with relevant published articles
	Introduction to scientific reports and writings, Compilation of experimental data, communication methods in science.	2	Scientific Writing by Jennifer Peat	Classroom teaching with relevant published articles
	Examples of scientific and unscientific writings, writing papers, reviews, bibliography. Plagiarism – Introduction to plagiarism, Examples of plagiarism	3	Scientific Writing by Jennifer Peat	Classroom teaching with relevant published articles

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: I MONTH: JULY ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To impart knowledge of societal awareness.
The learners will be able to : Understand the philosophy and the structure of the Constitution of India.
Learn the party system and the role played by women in Indian politics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 107 SOCIETAL AWARENESS UNIT III THE INDIAN CONSTITUTION AND SIGNIFICANT ASPECTS OF POLITICAL PROCESSES	The Indian Constitution Philosophy of the Constitution as set out in the Preamble; The structure of the Constitution-the Preamble, Main Body and Schedules;	04	Foundation Course – I Manan Prakashan	TEACHING AIDS
	Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution	05	SAME AS ABOVE	GROUP DISCUSSION, TEACHING AIDS
	Significant Aspects of Political Processes The party system in Indian politics; Local self government in urban and rural areas;	03	SAME AS ABOVE	GROUP DISCUSSION, TEACHING AIDS
	the 73rd and 74th Amendments and their implications for inclusive politics; Role and significance of women in politics	03	SAME AS ABOVE	GROUP DISCUSSION, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: II MONTH: DECEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To acquaint the students with concepts of Ecology and Environment
The learners will be able to : Understand the interconnection between Environment and Ecology.

Learn the impact of environmental degradation on human life and the concept of Sustainable development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 207 GLOBALIZATION, ECOLOGY AND SUSTAINABLE DEVELOPMENT UNIT II ECOLOGY AND SUSTAINABLE DEVELOPMENT	Importance of Environment Studies in the current developmental context;	03	Foundation Course – II Manan Prakashan	GROUP DISCUSSION, TEACHING AIDS
	Understanding concepts of Environment, Ecology and their interconnectedness;	03	SAME AS ABOVE	GROUP DISCUSSION, TEACHING AIDS,
	Environment as natural capital and connection to quality of human life;	04	SAME AS ABOVE	TEACHING AIDS
	Environmental Degradation causes and impact on human life; Sustainable development, concept and components; poverty and environment	05	SAME AS ABOVE	TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: II MONTH: DECEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To acquaint students Knowledge of Redox reaction.
The learners will be able to : Understand the relationship between oxidation and reduction.
Learn to assign oxidation numbers to different elements and compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 202 PHYSICAL CHEMISTRY UNIT III OXIDATION REDUCTION REACTIONS	Principles of Oxidation & Reduction Reactions Oxidising and Reducing Agents, Oxidation Number	02	XI STD MAH.STATE BOARD TEXT BOOK	CHALKBOARD METHOD, TEACHING AIDS
	Rules to assign Oxidation Numbers with examples Ions like Oxalate, Permanganate and Dichromate	06	SAME AS ABOVE	CHALKBOARD METHOD, TEACHING AIDS,
	Balancing Redox Reactions by Ion Electron Method	05	SAME AS ABOVE	CHALKBOARD METHOD, TEACHING AIDS
	Oxidation, Reduction, Addition and Substitution and Elimination Reactions.	02	SAME AS ABOVE	CHALKBOARD METHOD, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY CLASS: F.Y.B.Sc SEMESTER: I MONTH: JULY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The aim of this course is to enlighten students about various microbial techniques.
The learners will be able to : Understand different microscopes and their applications.

Differentiate between different stains and dyes along with types of them.

Learn variety of staining techniques used in the field of microbiology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT104: MICROBIAL TECHNIQUES UNIT I: MICROSCOPY AND STAINS	Microscope- Simple and Compound: Principle. Parts, functions and applications.	04	Prescott's microbiology by Wiley, Sherwood and Woolverton	CHALK BOARD METHOD, TEACHING AIDS
	Dark field and Phase contrast microscope	03	SAME AS ABOVE	TEACHING AIDS, PROJECTOR
	Stains and staining solutions-Definition of dye and chromogen. Structure of dye and chromophore.	03	Fundamental principles of bacteriology, A.J.Salle	CHALK BARD METHOD
	Functions of mordant and fixative. Natural and synthetic dyes.	02	SAME AS ABOVE	PROJECTOR, CHALK BOARD METHOD
	Simple staining, Differential staining and acid fast staining with specific examples	03	SAME AS ABOVE	TEACHING AIDS, PROJECTOR, CHALK BOARD METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: II MONTH: DECEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The objective of this course is to make students aware of the branches of genetics and its importance
The learners will be able to : Understand the genetics structure of populations.

Learn the genetic variations and its measurements at protein and DNA level.

Gain knowledge about various factors that lead to study of population genetics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT204: GENETICS UNIT III: POPULATION GENETICS	Genetic structure of populations – genotypic frequencies and allelic frequencies,	05	IGenetics: A Mendelian approach, P. J. Russell	CHALK BOARD METHOD
	Hardy- Weinberg law and its assumptions	03	SAME AS ABOVE	CHALK BOARD METHOD
	Genetic variations in populations- Measuring genetic variation at protein level and measuring genetic variations at DNA level	03	SAME AS ABOVE	CHALK BOARD METHOD, TEACHING AIDS
	Natural Selection. Genetic Drift Speciation Role of population genetics in Consevation biology	04	SAME AS ABOVE	CHALK BOARD METHODS, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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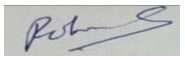
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: F.Y.B.Sc. SEMESTER: I MONTH: SEP-DEC ACADEMIC YEAR: 2018-19
LEARNING OBJECTIVE/S: To acquaint students with concepts of stereochemistry.
The learners will have: acquired knowledge of the structural isomers and stereoisomers of different types and their representation using projection formulae.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-2 Unit-1: Stereochemistry	Isomerism – Types of Isomerism: Constitutional Isomerism (Chain, Position and Functional) and Stereoisomerism, Chirality	15	Organic Chemistry by Bahl and Bahl	Chalkboard, Ball and stick models for molecular structure
	Geometric Isomerism and Optical Isomerism: Enantiomers, Diastereomers, and Racemic mixtures Cis-Trans, Threo, Erythro and Meso isomers. Diastereomerism (Cis-Trans Isomerism) in Alkenes and Cycloalkanes (3 and 4 membered ring)		Organic Chemistry by Paula Bruicel	
	Conformation: Conformations of Ethane. Difference between Configuration and Conformation		Stereochemistry of organic compounds by P.S. Kalsi	
	Configuration, Asymmetric Carbon Atom, Stereogenic/ Chiral Centres, Chirality, Representation of Configuration by —Flying Wedge Formula			
	Projection formulae – Fischer, Newman and Sawhorse. The Interconversion of the Formulae			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: F.Y.B.Sc. SEMESTER: I MONTH: SEP-DEC ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: to acquaint students with DNA replication, repair and genetic engineering.
The learners will have: developed an understanding of different types of mutations and mutation repair mechanisms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-6 Unit-2: Mutation and DNA Repair	Definition and Types of Mutations	15	Genetics – B.D. Singh	Chalkboard
	Mutagenesis and Mutagens. (Examples of Physical, Chemical and Biological Mutagens)		Genetics – Peter Russell 5th edition	
	Types of Point Mutations		Genetic Engineering – Sandhya Mitra	
	DNA REPAIR. Photoreversal, Base Excision Repair, Nucleotide Excision Repair, Mismatch Repair, SOS Repair and Recombination Repair			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: F.Y.B.Sc. SEMESTER: II MONTH: NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To acquaint the students with fundamentals on nucleic acids.
The learners will have: Acquired knowledge about nucleic acids types, their components and properties.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 3 - Biomolecules: Nucleic Acids	Structure, Function of Nucleic Acids	15	Fundamentals of Biochemistry by Jain & Jain 6th edition	Google Meet, MS PowePoint presentations, Quizizz.
	Properties and Types of DNA, RNA		Biochemistry by Satyanarayan 3rd edition	
	Structure of Purine and Pyrimidine Bases Hydrogen Bonding between Nitrogenous Bases in DNA		Biochemistry by Conn & Stumpf 5th edition	
	Differences between DNA and RNA			
	Structure of Nucleosides, Nucleotides and Polynucleotides			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: F.Y.B.Sc. SEMESTER: II MONTH: NOVEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To acquaint the students with fundamentals on nucleic acids.
The learners will have: Acquired knowledge about nucleic acids types, their components and properties.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5 Unit 2 - Animal Tissue Culture	Introduction: Cell Culture Techniques, Equipment and Sterilization Methodology	15	Culture of animal cells by Ian Freshney 5th edition	Google Meet, MS PowePoint presentations
	Introduction to Animal Cell Cultures: Nutritional and Physiological: Growth Factors and Growth Parameters		Animal tissue culture by Sudha Gangal	
	General Metabolism and Growth Kinetics			
	Primary Cell Cultures: Establishment and Maintenance of Primary Cell Cultures of Adherent and Non-Adherent Cell Lines with examples			
	Application of Cell Cultures			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Bhanupriya Ch

DEPARTMENT: Biotechnology

CLASS: FY B.Sc **SEMESTER:** I

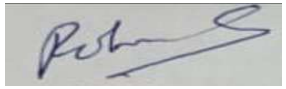
MONTH: July 2019 – December 2020 **ACADEMIC YEAR:** 2019 - 20

LEARNING OBJECTIVE/S:

The learners will be able to: Structure of DNA, Various enzymes applicable for DNA replication, to gain knowledge about both prokaryotic and eukaryotic DNA replication and basic recombination method.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VI, Unit I, Replication	DNA Replication in Prokaryotes and Eukaryotes- Semi-conservative DNA replication, DNA Polymerases and its role, E.coli Chromosome Replication, BidirectionalReplication of Circular DNA molecules. Rolling Circle Replication, DNA Replication in Eukaryotes DNA Recombination – Holliday Model for Recombination Transformation	15	Peter Russell iGenetics – Replication chapter	Online mode of teaching using different ICT tools

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: F.Y.B.Sc

SEMESTER: II MONTH: December - April ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- acquaint the students with concepts of Globalization, Ecology and Environment
- impart knowledge of Globalization make students aware about the Problems in Society

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VII **Unit I** **Globalisation and Indian Society and Human Rights**	Globalisation and Indian Society Understanding the concepts of liberalization, privatization and globalization;Growth of information technology and communication and its impact manifested in everyday life; Impact of globalization on industry: changes in employment and increasing migration; Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides. **Human Rights-**Concept of Human Rights; origin and evolution of the concept; The Universal Declaration of Human Rights;Human Rights constituents with special reference to Fundamental Rights stated in the Constitution	15	Foundation course-II II	PowerPoint presentation Infographics Mind Map Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: F.Y.B.Sc

SEMESTER: I MONTH: August- November ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- understand the multi-religious, multilingual nature and caste dimension in Indian society.
- acquaint the students with concepts of Societal Awareness
- impart knowledge of Society and make students aware about the Problems in Society
- understand the pluralistic nature of Indian society
- understand the multi-religious, multilingual nature and caste dimension in Indian society
- bring out the significance of gender as a demographic variable
- analyze the regional variations and problems of rural, urban and tribal areas.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VII Unit I Overview of Indian society	**Introduction overview of Indian society** **Objectives** **Understand the multi-cultural diversity of Indian society through its demographic composition of India** **Population distribution according to religion** **Multi-linguism** **Caste system in India** **Gender- A Demographic analysis** **Regional variations of urban,rural and tribal areas and its characteristics**	15	Foundation course-I sem I & II Pg 5	PowerPoint presentation Infographics Mind Map

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr Nikhil Paradkar DEPARTMENT: Biotechnology CLASS: FYBSc

SEMESTER: SEM I MONTH: November - December ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To impart knowledge of Globalization make students aware of the problems in society

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Ability Enhancement Course 1, USBT107 - Societal Awareness, Concept of Disparity	**Concept of Disparity- I:** ● Understand the concept of disparity as arising out of stratification and inequality. ● Explore the disparities arising out of gender with special reference to violence against women, female foeticide (declining sex ratio), and portrayal of women in media. ● Appreciate the inequalities faced by people with disabilities and understand the issues of people with physical and mental disabilities. **Concept of Disparity-II** ● Examine inequalities manifested due to the caste system and inter-group conflicts arising thereof. ● Understand inter-group conflicts arising out of communalism; ● Examine the causes and effects of conflicts arising out of regionalism and linguistic differences.	15	Foundation Course Semester 1 & 2	Direct instruction method.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr Nikhil Paradkar DEPARTMENT: Biotechnology CLASS: FYBSc

SEMESTER: SEM II MONTH: January - April ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To make students aware about the Problems in Society and imparting their knowledge towards understanding and managing stress and conflicts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT207 Understanding and Managing Stress and Conflict in Contemporary Society	• Understanding Stress and Conflict: Causes of stress and conflict in individuals and society; Agents of socialization and the role played by them in developing the individual; Significance of values, ethics and prejudices in developing the individual; Stereotyping and prejudice as significant factors in causing conflicts in society. Aggression and violence as the public expression of conflict. • Managing Stress and Conflict in Society: Types of conflicts and use of coping mechanisms for managing individual stress; Maslow's theory of self-actualisation;Different methods of responding to conflicts in society; Conflict-resolution and efforts towards building peace and harmony in society	15	Foundation Course Semester 1 & 2	Direct instruction method.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: M.Sc. SEMESTER: I MONTH: AUGUST ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The aim of this course is to enlighten students about basic and advanced microscopic techniques.
The learners will be able to: Understand various microscopy techniques.

Learn about advanced microscopic techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT104: EMERGING TECHNOLOGIES AND MOLECULAR DIAGNOSTICS UNIT II: BASIC AND ADVANCED MICROSCOPY	Light Microscopy: lenses and microscopes, resolution: Rayleigh's Approach, Darkfield; Phase Contrast; Differential Interference Contrast, fluorescence and fluorescence microscopy: what is fluorescence, what makes a molecule fluorescent, fluorescence microscope; optical arrangement, light source; filter sets: excitation filter, dichroic mirror, and barrier, optical layout for image capture; CCD cameras; back illumination, binning; recording color; three CCD elements with dichroic beamsplitters, boosting the signal. Confocal	05	Serdyuk, I. N., Zaccai, N. R., & Zaccai, G. (2007). Methods in Molecular Biophysics: Structure, Dynamics, Function. Cambridge: Cambridge University Press	CHALK BOARD METHOD, TEACHING AIDS

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	microscopy. Advanced fluorescence techniques: FLIM, FRET, and FCS, Fluorescence Lifetime, Fluorescence Resonant Energy Transfer (FRET), Fluorescence Correlation Spectroscopy (FCS),			
	Evanescent Wave Microscopy; Near-Field and Evanescent Waves, Total Internal Reflection Microscopy; Near-Field Microscopy; Beyond the Diffraction Limit: Stimulated Emission Depletion (STED)	05	Huang, B., Bates, M., & Zhuang, X. (2009). Super-Resolution Fluorescence Microscopy. Annual Review of Biochemistry, 78(1), 993-1016. doi:10.1146/annurev.biochem.77.061906.092014.	TEACHING AIDS, PROJECTOR
	Super-Resolution Summary, SuperResolution Imaging with Stochastic Optical Reconstruction Microscopy (STORM) and Photoactivated Localization Microscopy (PALM).	05	SAME AS ABOVE	CHALK BARD METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: M.Sc. SEMESTER: II MONTH: DECEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The aim of this course is to enlighten students about intellectual property rights.
The learners will be able to: Understand various terminologies in IPR.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT204: INTELLECTUAL PROPERTY RIGHTS AND BIOETHICS UNIT I: INTRODUCTION TO IPR	Introduction to intellectual property;	01	Ganguli, P. (2001). Intellectual Property Rights: Unleashing the Knowledge Economy. Tata McGraw-Hill Publishing Company	CHALK BOARD METHOD, TEACHING AIDS
	types of IP: Introduction to patents, trademarks, trade secrets, copyright & related IPR rights, industrial design, geographical indications	07	SAME AS ABOVE	TEACHING AIDS, PROJECTOR
	Biodiversity importance and legislation, International convention and treaties; plant variety protection and farmers rights act. , traditional knowledge.	07	SAME AS ABOVE	CHALK BARD METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: M.Sc. SEMESTER: II MONTH: DECEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The aim of this course is to enlighten students about intellectual property rights.
The learners will be able to: Understand various terminologies in IPR.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT204: INTELLECTUAL PROPERTY RIGHTS AND BIOETHICS UNIT II: PATENTS	Basics of patents: eligibility criteria, classification of Patents, categories, special patents and patenting biological products. Patentable and Non-patentable inventions in India and abroad.	05	Kshitij Kumar Singh (auth.) - Biotechnology and Intellectual Property Rights_ Legal and Social Implications- Springer India (2015)	CHALK BOARD METHOD, TEACHING AIDS
	Process of Patenting, Patent Search and Inventor's homework, drafting patent applications, patenting systems	05	SAME AS ABOVE	TEACHING AIDS, PROJECTOR
	Rights of the patent holder, assignment and licensing of patents and patent Infringement, case studies. Patent Agent.	05	SAME AS ABOVE	CHALK BARD METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: M.Sc. SEMESTER: III MONTH: JUNE ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The aim of this course is to enlighten students about principles of cryopreservation of animal cells.
The learners will be able to: Understand types of cryopreservation methods.

Learn about transgenic plants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT301: PTC AND ATC UNIT III: CRYOPRESERVATION	Cryopreservation -Principle and types,	05	Principles and Practice of Animal Tissue Culture (2007), Sudha Gangal	CHALK BOARD METHOD, TEACHING AIDS
	Germplasm conservation	05	SAME AS ABOVE	TEACHING AIDS, PROJECTOR
	Transgenic plants-Edible vaccine, Golden rice	05	SAME AS ABOVE	CHALK BARD METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: M.Sc. PART-I SEMESTER: I MONTH: AUGUST ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To acquaint the students with mutation and its types and role of transposable elements in tumorigenesis.
The learners will have: acquired the knowledge about mutation and its types and role of transposable elements in tumorigenesis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Unit 4 - Genome instability and cell transformation	Mutations, proto-oncogenes, oncogenes and tumour suppressor genes, physical, chemical and biological mutagens	15	Genetics by Peter Russell 5th edition	Chalk board method
	types of mutations; epigenetic mutations intragenic and inter-genic suppression; transpositions - transposable genetic elements in prokaryotes and eukaryotes, role of transposons in genome			
	viral and cellular oncogenes; tumour suppressor genes			
	structure, function and mechanism of action; activation and suppression of tumour suppressor genes			
	oncogenes as transcriptional activators			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: M.Sc. PART-I SEMESTER: II MONTH: JANUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To acquaint the students with the fundamentals of bioinformatics and DNA sequence analysis.
The learners will have: acquired the knowledge about the fundamentals of bioinformatics and DNA sequence analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit 1 - Basics of Bioinformatics and DNA sequence analysis	Bioinformatics basics: Computers in biology and medicine; Introduction to Unix and Linux systems and basic commands	15	Baxevanis, Ouellette - Bioinformatics 2nd edition	Google Meet
	Database concepts; Protein and nucleic acid databases; Structural databases; Biological XML DTD's; pattern matching algorithm basics		Lesk - Introduction to bioinformatics 4th edition	PowerPoint presentation
	databases and search tools: biological background for sequence analysis; Identification of protein sequence from DNA sequence; searching of databases similar sequence; NCBI; publicly available tools; resources at EBI; resources on web; database mining tools		Pevsner - Bioinformatics and Functional Genomics 3rd edition	
	DNA sequence analysis: gene bank sequence database; submitting DNA sequences to databases and database searching; sequence alignment; pairwise alignment techniques			
	motif discovery and gene prediction; local structural variants of DNA, their relevance in molecular level processes, and their identification; assembly of data from genome sequencing			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: M.Sc. PART-II SEMESTER: III MONTH: AUGUST ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To acquaint the students with fundamentals of animal tissue culture.
The learners will have: comprehended the fundamentals of animal tissue culture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 3 – Animal tissue culture basics	Biology of cultured cells	15	Culture of animal cells by Ian Freshney 5th edition	Chalk board method
	Culture vessels, Culture Media			PowerPoint presentation
	Microbial contamination, cross contamination			
	Cryopreservation			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: M.Sc. PART-II SEMESTER: III MONTH: AUGUST ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To acquaint the students with techniques of animal tissue culture.
The learners will have: acquired knowledge of techniques of animal tissue culture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 4 – Animal tissue culture techniques	Primary culture: Types, isolation of tissues, culturing of different cells	15	Culture of animal cells by Ian Freshney 5th edition	Chalk board method
	Cell lines: Development, Subculture and propagation, immortalization of cell line, cell line designation, selection of cell lines, routine maintenance			PowerPoint presentation
	Cytotoxicity Transformation			
	Culture of tumour cells			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: M.Sc. PART-II SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: to acquaint the students with the basics of nanotechnology and nanomaterial synthesis and characterization.
The learners will have: developed an understanding of the basics of nanotechnology and nanomaterial synthesis and characterization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 1 - Introduction to nanotechnology	Introduction	15	Nanotechnology by Sulabha Kulkarni	Google Meet
	Synthesis of nanomaterials, biological methods, use of microbial system & plant extracts, use of proteins & templates like DNA		Cao - Nanostructures and Nanomaterials	PowerPoint presentation
	Characterization of nanomaterials, analysis techniques			
	Properties of nanomechanical, optical, magnetic properties, electrical conductivity, thermal conductivity			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: M.Sc. PART-II SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: to acquaint the students with the applications of nanotechnology in various fields.
The learners will have: comprehended the applications of nanotechnology in various fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 4 - Applications of nanomaterials	Application of nanomaterials in food, cosmetics, agriculture, environment management	15	Nanotechnology by Sulabha Kulkarni	Google Meet
				PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: S.Y.B.Sc SEMESTER: III MONTH: JUNE ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: The objective of this course is to have a firm foundation of the fundamentals and applications of Organic and Green Chemistry.
The learners will be able to : Learn the role of Green Chemistry and its application in Industry.
Understand the different aspects of Green Chemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 302 APPLIED CHEMISTRY-I UNIT III GREEN CHEMISTRY AND SYNTHESIS	Green Chemistry and Synthesis: Introduction to Green Chemistry;	02	College Organic Chemistry of T.Y. B.Sc Organic Synthesis - V. K. Ahluwalia	CHALKBOARD METHOD, TEACHING AIDS, PROJECTOR
	Need and Relevance of Green Chemistry;	02	SAME AS ABOVE	CHALKBOARD METHOD, TEACHING AIDS, PROJECTOR
	Principles of Green Chemistry	03	SAME AS ABOVE	CHALKBOARD METHOD, TEACHING AIDS
	Green Synthesis in Industry: Green Materials,Green Reagents, Green Solvents and Green Catalysts.	08	SAME AS ABOVE	CHALKBOARD METHOD, TEACHING AIDS, PROJECTOR

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: FYBSc SEMESTER: I

MONTH: July –August 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: Objective of this course is to acquaint student with concept of Biodiversity with respect to Plant, Animals and Microorganism. The learners will be able to: Discuss origin of Life, Biodiversity. Explain Classification of Plants, Animals and Microorganism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3: Basic Life Sciences-I: Biodiversity and Cell Biology. Unit 1: Origin of Life and Biodiversity (Animals, Plants, Microorganisms)	Origin of Life, Chemical and Biological Evolution, Origin of Eukaryotic Cell.	1	Cell Biology, Genetics, Molecular Biology, Evolution and Ecology by P.S. Verma.	Chalk and Board ,
	Concept of Biodiversity, Taxonomical, Ecological and Genetic Diversity & its Significance	2	Cell Biology, Genetics, Molecular Biology, Evolution and Ecology by P.S. Verma.	Chalk and Board Projector (power point presentation)
	Introduction to Plant Diversity: Algae, Fungi, Bryophyte, Pteridophytes, Gymnosperms and Angiosperms.	4		Chalk and Board
	Introduction to Animal Diversity: Non-Chordates (with at least one representative example). And chordates	4	Invertebrate Zoology by Jordan and Verma.	Chalk and Board. Projector (power point presentation)
	Introduction to Microbial Diversity: Archaebacteria, Eubacteria, Blue-green Algae, Actinomycetes, Eumycota. Habitats, Examples and Applications.	4	Microbiology by Pelczar.	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: FYBSc SEMESTER: II

MONTH: January- February 2020 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To acquaint the students with basic concepts of Ecosystem and Interactions.
The learners will be able to: Explain components, and importance and different types of Ecosystem. Summarize different types of biogeochemical cycles and interactions within Ecosystem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Life Science-I: Physiology and Ecology. Unit 3:Ecosystem and Interactions	Ecology and Biogeography: Ecosystems, Definition and Components.	1	Cell Biology, Genetics, Molecular Biology, Evolution and Ecology by P.S. Verma.	Chalk and Board
	Structure and functions of Ecosystems. Aquatic and Terrestrial Ecosystems, Biotic and Abiotic Factors.	2	Same as above	Chalk and Board Projector (power point presentation)
	Tropical Levels, Food Chain and Food Web.	2	Same as above	Chalk and Board Projector (power point presentation)
	Ecological Pyramids (Energy, Biomass and Number)	2	Same as above	Chalk and Board Projector (power point presentation)
	Nutrient Cycle and Biogeochemical Cycles: Water, Carbon, Oxygen, Nitrogen and Sulphur.	4	Same as above	Chalk and Board Projector (power point presentation)
	Interactions: Commensalism, Mutualism, Predations and Antibiosis, Parasitism.	4	Cell Biology, Genetics, Molecular Biology, Evolution and Ecology by P.S. Verma.	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: MSc-I SEMESTER: I

MONTH: July–August 2020 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: Objective of this course is to provide student with the understanding of cellular processes.
The learners will be able to: Explain various cellular processes like cell signaling, transport and trafficking, neurotransmitters.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3Cell Biology. Unit 2: Cellular signalling, transport and trafficking.	Cellular signalling Molecular mechanisms of membrane transport,;	1	Albert, B., Johnson, A., Lewis, J., Raff, M., Robert, K., & Walter, P. (2002). Molecular Biology of the Cell. New York: Garland Science.	Chalk and board
	Nuclear transport, transport across mitochondria and chloroplast	4	Same as above	Chalk and board, whatsaap image circulation.
	Intracellular vesicular trafficking from endoplasmic reticulum through Golgi apparatus to lysosomes/ cell exterior.	4	Same as above	Chalk and board, Projector Power point presentation.
	Cell signalling- intercellular communications- nerve impulses	4	Harsin, J., Bertoni, G., Kleinsmith, L. J., & Becker's World of the Cell. Boston: Benjamin Cummings.	Chalk and board Projector Power point presentation
	Neurotransmitters; agonist and antagonist reactions	2	Harsin, J., Bertoni, G., Kleinsmith, L. J., &	Chalk and board

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			Becker's World of the Cell. Boston: Benjamin Cummings.	Projector Power point presentation

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: MSc-I SEMESTER: II

MONTH: March –April 2020 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: Objective of this course is to provide student with the basic understanding and application of transgenic plants.
The learners will be able to: gain fundamental knowledge in plant biotechnology and their applications. Understands principles, practices and application of plant tissue culture, genetic transformation of plants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2: Plant and Animal Biotechnology. Unit 2: Plant Genetic Manipulations.	Genetic engineering: Agrobacterium-plant interaction; virulence; Ti and Ri plasmids; opines and their significance;	1	Glick B.R., & Pasternak J.J., (2010). Molecular Biotechnology-Principles and Applications of Recombinant DNA Technology. Washington, D.C.: ASM Press	Webinar online teaching by power point presentation.
	T-DNA transfer; disarmed Ti plasmid;	2	Glick B.R., & Pasternak J.J., (2010). Molecular Biotechnology-Principles and Applications of Recombinant DNA Technology. Washington, D.C.: ASM Press	Webinar online teaching by power point presentation.

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	Genetic transformation- Agrobacterium-mediated gene delivery; cointegrate and binary vectors and their utility;	2	Same as above	Webinar online teaching by power point presentation.
	Direct gene transfer- PEG-mediated, electroporation, particle bombardment and alternative methods; screenable and selectable markers;	3	Same as above	Webinar online teaching by power point presentation.
	Characterization of transgenic; chloroplast transformation; marker-free methodologies; advance methodologies-cigenesis, intragenesis and genome editing.	3	Same as above	Webinar online teaching by power point presentation.
	Molecular pharming- concept of plant as biofactories, production of industrial enzymes and pharmaceutically important compounds.	4	Introduction to Plant Biotechnology, 3rd Edition by H.S. Chawla	Webinar online teaching by power point presentation.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: MSc-II SEMESTER: III

MONTH: July –August 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: Objective of this course is to provide student with the basic understating of principles of developmental biology.
The learners will be able to: Understand principles of developmental biology. Explain the post fertilization events. Describe Multi-cellularity, Embryonic germ layer.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4:Developmental Biology. Unit 2.	Post fertilization events: early Embryonic development.	4	Gilbert, S. F. (2010). Developmental Biology, 9th Edition. Massachusetts USA: Sinauer Associates, Inc, Sunderland.	Chalk and board & Projector power point presentation.
	Establishing Multi-cellularity, formation of blastula.	5	Gilbert, S. F. (2010). Developmental Biology, 9th Edition. Massachusetts USA: Sinauer Associates, Inc, Sunderland.	Chalk and board & Projector power point presentation.
	Embryonic germ layer	4	Same as above	Chalk and board & Projector power point presentation.
	Tracking of migrating cells.	2	Same as above	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: SYBSc SEMESTER: III

MONTH: June –July 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: Objective of this is to have a firm foundation in the fundamental of cell Biology with respect to cell membrane.
The learners will be able to: Develop an understanding of Cell Membrane and Explain Structure, Function and different types of transportation across cell membrane.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Cell Biology and Cytogenetics. Unit 2: Cell Membrane	Cell Membrane: Uptake of Nutrients by Prokaryotic Cells, Cell Permeability.	1	Cell and Molecular Biology-Concepts and Experiments-Karp- Wiley International.	Chalk and Board ,
	Principles of Membrane Transport- Transporter and Channels; Active Transport, Passive Transport.	4	Same as above	Chalk and Board
	Types of Transporters; Types of ATP Drive Pumps- Na^+- K^+ Pump.	4	Same as above	Chalk and Board , projector (power point presentation)
	Cell Junctions; Cell Adhesion and Extracellular Material Microvilli; Tight junctions; Gap junctions;	4	Same as above	Chalk and Board Projector (power point presentation)
	Cell Coat and Cell Recognition.	2	Cell and Molecular Biology-De Roberti's-Lippincott Williams & Wilkins.	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: TYBSc SEMESTER: V

MONTH: June –July 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: Objective of this course is to provide student with the basic understanding of Transgenic Animals and to aware them about the different techniques and methodology used for the production of Transgenic Animals.
The learners will be able to: describe Transgenic Animals. Discuss and explain different methods used for the production of Transgenic Animals. Explain the use and importance of Transgenic Animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Genomics and Molecular Biology Unit 2: Transgenic Animals	Transgenic mice- Methodology- Retroviral method, DNA microinjection, ES method	5	Molecular Biotechnology- Principles and Applications of Recombinant DNA Technology 3rd Edition Glick B.R., Pasternak J.J., Patten C.L.	Chalk and Board , Projector(power point presentation)
	Genetic manipulation with cre-loxP	2	Molecular Biotechnology- Principles and Applications of Recombinant DNA Technology 3rd Edition Glick B.R., Pasternak J.J., Patten C.L.	Chalk and Board Projector (power point presentation)
	Vectors for animals cells. Transgenic animals recombination system	4	Same as above	Chalk and Board Projector (power point presentation)

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	Cloning live stock by nuclear transfer	2	Same as above	Chalk and Board
	Green Fluorescent Protein	1	Same as above	Chalk and Board
	Transgenic Fish	1	Same as above	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: TYBSc SEMESTER: VI

MONTH: January –February 2020 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To acquaint the students with basic concepts of toxicology, cause and treatment of poisoning.
The learners will be able to: Understand the term in basic toxicology. Discuss Causes allergy to drugs and effects of prolonged drug administration for e.g on organ and effect on reproductive system. Understand Deliberate and Self-poisoning and explain the principles of treatment for the same. Explain principles of treatment for specific poisonings with examples: heavy metals, herbicides, pesticides, biological substances and incapacitating agents.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Basic Pharmacology and Neurochemistry. Unit 3: Basic Toxicology and Regulatory Toxicology	Background Definitions. Toxicology Causation: Degrees of certainty Classification	2	Clinical Pharmacology Bennet, P.N. Brown, M.J, Sharma, P 11th edition Elsevier.	Chalk and Board Projector (power point presentation)
	Causes Allergy in response to drug and effect of prolonged administration.	2	Clinical Pharmacology Bennet, P.N. Brown, M.J, Sharma, P 11th edition Elsevier.	Chalk and Board Projector (power point presentation)
	Adverse effects of drugs on reproduction	1	Clinical Pharmacology Bennet, P.N. Brown, M.J,	Chalk and Board Projector (power point presentation)

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			Sharma, P 11th edition Elsevier.	
	Deliberate and accidental self-poisoning. Principles of treatment of poison- specific measures and general measures	2	Clinical Pharmacology Bennet, P.N. Brown, M.J, Sharma, P 11th edition Elsevier.	Chalk and Board Projector (power point presentation)
	Specific poisoning by cyanide, methanol, ethylene glycol, hydrocarbon, volatile solvents, heavy metals, Nonmedical use of drugs	4	Clinical Pharmacology Bennet, P.N. Brown, M.J, Sharma, P 11th edition Elsevier.	Chalk and Board Projector (power point presentation)
	Herbicides and pesticides, biological substances. Incapacitating agent.	4	Clinical Pharmacology Bennet, P.N. Brown, M.J, Sharma, P 11th edition Elsevier.	Chalk and Board Projector (power point presentation)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: TYBSc SEMESTER: VI

MONTH: February-March 2020 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To acquaint the students with basic concepts of Molecular Markers, Different types of Genetic markers and their use in plant breeding.
The learners will be able to: Explain different types of Genetic Markers and their use in plant breeding. Discuss the application of Markers in Quantitative trait locus Mapping. Explain plant DNA Barcoding their steps, advances, benefits, limitations for the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied component. Agri Biotechnology. Paper 3: Molecular Markers in Plant Breeding	Genetic markers in plant breeding-Classical markers, DNA markers (RFLP, RAPD, AFLP, SSR, SNP).	4	S.B Anderson (ed.), Plant Breeding from Laboratories to Fields, InTech, 2013.	Chalk and Board Projector (power point presentation)
	Application of Molecular Markers to Plant Breeding (quantitative trait locus (QTL) mapping).	4	Introduction to QTL mapping in plants, Article in Annals of Plant Sciences by Rukam Singh Tomar	Chalk and Board Projector (power point presentation)

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	Plant DNA Barcoding- Barcoding Markers (matK, rbck, ITS, tmH-psbA), steps, recent advances, Benefits, Limitations.	4	1) Ali, M. A., & Pandey, A. K. (2015). Plant DNA Barcoding and Phylogenetics. *LAMBERT Academic publishing*, 1-14 2) Singh, B. D., & Singh, A. K. (2015). *Marker-Assisted Plant Breeding: Principles and Practices.* New Delhi: Springer.	Chalk and Board Projector (power point presentation)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: S.Y.B.Sc SEMESTER: III MONTH: JUNE ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The objective of this course is to have a firm foundation of the fundamentals and applications of current biophysical theories.
The learners will be able to: Develop an understanding of the different aspects of classical Physics.
Be able to relate principles of Physics to applications and techniques in the field of Biology such as Electrophoresis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT301: BIOPHYSICS UNIT III: ELECTROPHORETIC TECHNIQUES	Migration of Ions in an applied electric field;Factors affecting Electrophoretic Mobility;Moving Boundary Electrophoresis	03	BIOPHYSICAL CHEMISTRY, UPADHYAY,UPADHYAY, NATH	CHALK BOARD METHOD, TEACHING AIDS
	Principle of Electrophoresis; Supporting Matrix;	02	SAME AS ABOVE	TEACHING AIDS, PROJECTOR
	Paper Electrophoresis; AGE; Native and SDS PAGE (reducing and non-reducing, continuous and discontinuous)	05	SAME AS ABOVE	PROJECTOR, CHALK BOARD METHOD, TEACHING AIDS
	IEF and 2D PAGE. Staining and Detection Methods; Gel-Documentation. Applications in Biology	05	SAME AS ABOVE	PROJECTOR, CHALK BOARD METHOD, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: S.Y.B.Sc. SEMESTER: III MONTH: JUNE ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To acquaint the students with cytogenetics, chromosomal aberration and genetic linkage & mapping.
The learners will have: developed an understanding of cytogenetics, chromosomal aberration and genetic linkage & mapping.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Unit 3 - Cytogenetics	Cytogenetics: Structure of Chromosome - Heterochromatin, Euchromatin, Polytene Chromosomes	15	iGenetics- Molecular approach by Peter Russell	Chalk board method
	Variation in Chromosomal Structure and Number: Deletion, Duplication, Inversion, Translocation, Aneuploidy, Euploidy and Polyploidy and Syndromes- Klinefelter, Turner, Cri-du-Chat, Trisomy -21, Trisomy 18 and Trisomy 13			
	Sex Determination and Sex Linkage: Mechanisms of Sex Determination (XX-XY, ZZ-ZW, XX-XO) Dosage Compensation and Barr Body			
	Genetic Linkage, Crossing Over and Chromosomal Mapping: Tetrad Analysis; Two-point Cross; Three-point Cross; Pedigree Analysis			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: S.Y.B.Sc. SEMESTER: III MONTH: JUNE ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: to have an insight into mechanism of regulation of gene expression.
The learners will have: learned the fundamentals of mechanisms of regulation of gene expression in both prokaryotes and eukaryotes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5 Unit 3 - Regulation of Gene Expression	In Prokaryotes: In Bacteria: lac Operon of *E. coli*; trp Operon of *E. coli*. In Viruses: Lytic / Lysogenic Regulation	15	iGenetics-Molecular approach by Peter Russell	Chalk board method
	In Eukaryotes: Operons in Eukaryotes; Control of Transcriptional Initiation; Gene Silencing and Genomic Imprinting; Post-Transcriptional Control; RNA Interference			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: S.Y.B.Sc

SEMESTER: III MONTH: July - October ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- understand nucleophile and electrophile groups and their properties.
- define enzyme, apoenzyme, holoenzyme, cofactor (coenzyme)
- define 'micronutrient'
- explain the types and benefits of micronutrients

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I Organic Chemistry	Types of organic reactions - **Addition Reactions, Elimination Reactions, Substitution Reactions** **Essential and Non-essential Elements in Biological Systems.** **Role of Metal Ions in Biological Systems.** **Metal Coordination in Biological Systems: Enzymes, Apoenzymes, Holoenzymes and coenzymes** **Biological Role of Metalloenzymes wrt Myoglobins, Haemoglobin.** **Biological Role of Carboxypeptidases, Catalses, Peroxidases** **Structure and Function :Dioxygen Binding, Transfer and Utilization, Metal Complexes in Medicines.**	15	Advanced organic chemistry- Reinhard Bruckner Pg. 86-123,129-158,43-65;169-216 Biochemistry- Satyanarayan 4th Edition Pg. 403-421 Textbook of Biochemistry- Lehninger, 4th Edition Pg. 208-214 Fundamentals of Biochemistry (Jain and Jain) Pg. 343-345 Principles of Biochemistry (McGraw Hill) White et al. Principles of Biochemistry (McGraw Hill) White et al.	Infographics PowerPoint presentation Mind Map

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: F.Y.B.Sc

SEMESTER: III MONTH: July- October ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- understand some basic concepts of research and its methodologies
- identify appropriate research topics
- select and define appropriate research problem and parameters
- prepare a project proposal (to undertake a project)
- organize and conduct research (advanced project) in a more appropriate manner
- write a research report and thesis
- write a research proposal

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VII Unit I Introduction to research methodology	**Meaning of Research, Objectives of Research** **Motivation in Research, Types of Research, Research approaches, Significance of Research, Research Methods versus Methodology, Research Process, Criteria of good research, Problems encountered by researchers in India, What is a Research Problem?, Selecting the Problem, Necessity of defining the problem,Technique involved in defining a problem.**	15	Research methodology-CR.Kothari, 3rd Ed. Pg. 1-2	Mind Map PowerPoint presentation Infographics Infographics

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr Nikhil Paradkar DEPARTMENT: Biotechnology CLASS: SYBSc

SEMESTER: SEM III MONTH: October - December ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To understand a general definition of research design and identify the overall process of designing a research study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT307 Research Methodology, Research Design and Data Collection	**Meaning of Research Design**; ● Need for Research Design; Features of a Good Design; Important Concepts Relating to Research Design; Different Research Designs; Basic Principles of Experimental Designs; ● Developing a Research Plan ● Collection of Primary Data; Observation Method; Interview Method; Collection of Data through Questionnaires; Collection of Data through Schedules; Other Methods of Data Collection, Collection of Secondary Data, Selection of Appropriate Method for Data Collection, Case Study Method	15	Research methodology- C.R. Kothari	Direct instruction method.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: T.Y.B.Sc SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To develop the practical competence often within their area of specialization.
The learners will be able to : Learn the importance of Standard Operating Procedures, the relevance of qualified personnel , Recognize common chemical safety hazards, the reasons for using a laboratory notebook, and the use of proper documentation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
APPLIED COMPONENT UNIT II GOOD LABORATORY PRACTICES	Concept of GLP; Practicing GLP; Guidelines to GLP	04	Handbook of Good Laboratory Practice By World health organization	CHALK BOARD METHOD, TEACHING AIDS, PROJECTOR
	Documentation of Laboratory work; Preparation of SOPs	03	SAME AS ABOVE	CHALK BOARD METHOD, TEACHING AIDS
	Calibration records; Validation of methods	02	SAME AS ABOVE	CHALK BOARD METHOD, TEACHING AIDS,PROJECTOR
	Documentation of results; Audits & Audit reports	03	SAME AS ABOVE	CHALK BOARD METHOD, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: FYBSC SEMESTER:I

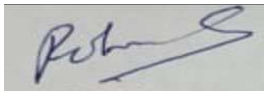
MONTH: June to October ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

Identify various physical and chemical agents of controlling microorganisms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 104 Basic Life Sciences-II : Microbial Techniques Unit II Sterilization Techniques	Definition : Sterilization and Disinfection. Types and Applications Dry Heat, Steam under pressure, Gases, Radiation and Filteration	7	Microbiology by Pelczar, Chan & Krieg 5th E	Chalk and board
	Chemical Agents and their Mode of Action - Aldehydes, Halogens, Quaternary Ammonium Compounds, Phenol and Phenolic Compounds, Heavy Metals, Alcohol, Dyes, and Detergents	6	Microbiology by Pelczar, Chan & Krieg 5th E	Chalk and board
	Ideal Disinfectant. Examples of Disinfectants and Evaluation of Disinfectant	2	Fundamentals of Microbiology by Frobisher 9th Ed	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: FYBSC SEMESTER: II

MONTH: November to March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

Explain the role of body systems and mechanisms in maintaining homeostasis

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 203 **Life Sciences-I: Physiology and Ecology** **Unit II** **Animal Physiology**	Physiology of Digestion Movement of Food and Absorption, Secretary functions of Alimentary Canal, Digestion and Absorption, assimilation in Gut of Mammals Anatomy of Mammalian Kidney, Structure of Nephron, Physiology of Urine Formation and Role of Kidney in Excretion and Osmoregulation	05	Applegate Anatomy and Physiology - Learning System Medical physiology by Guyton	Chalk and board and power point presentation
	Physiology of Respiration, Mechanism of Respiration Principles of Gaseous Exchange in the Blood and Body Fluids Blood and Circulation : Blood Composition, Structure and Function of its Constituents Blood Coagulation and Anti-Coagulants Hemoglobin and its Polymorphism Regulation of the Circulation Mechanism and working of Heart in Human.	06	Applegate Anatomy and Physiology - Learning System Medical physiology by Guyton	Chalk and board and power point presentation
	Blood and Circulation : Blood Composition, Structure and Function of its Constituents Blood Coagulation and Anti-Coagulants Hemoglobin and its Polymorphism Regulation of the Circulation Mechanism and working of Heart in Human.	04	Applegate Anatomy and Physiology - Learning System Medical physiology by Guyton	Chalk and board and power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: SYBSC SEMESTER: III

MONTH: June to October ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the role of different types of cells, effector molecules and effector mechanisms in immunology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT303 IMMUNOLOGY UNIT I Effectors of Immune Response	Haematopoiesis; Cells of the Immune System; Primary and Secondary Lymphoid Organs.	10	Immunology by Janis Kuby, 5th edition Kuby Immunology, 7th edition	Chalk and board
	Complement System- Classical, Alternate and Lectin; Regulation and Biological Effects of Complement System; Deficiencies of Complement System	05	Textbook of microbiology by Ananthnarayan and paniker, 8th ed	Chalk and board and power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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LEARNING OBJECTIVE/S:
The learners will be able to:

Discuss the various aspects of bioprocess technology.
Discuss the various methods of screening and maintenance of industrially important strains.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT306 BIOPROCESS TECHNOLOGY UNIT I Microorganisms in Industrial Processes	**Types of Microorganisms used in Industrial Processes:** Bacteria, Actinomycetes, Fungi and Algae.	05	Casida	Chalk and board
	Screening and maintenance of strains: Primary Screening and Secondary Screening; Cultivation; Preservation of Industrially Important Microbial Strains.	05	AH Patel	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: TYBSC SEMESTER:V

MONTH: June to October ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

Classify various antimicrobial agents based on their mode of action

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 502 Medical Microbiology & Instrumentation Unit II Chemotherapeutic drugs	Discovery and Design of antimicrobial agents; Classification of Antibacterial agents, Selective toxicity, MIC, MLC Inhibition of cell wall synthesis (Mode of action for): Beta lactam antibiotics: Penicillin, Cephalosporins; Glycopeptides: Vancomycin; Polypeptides: Bacitracin	08	Prescott 5th ed Mim's Med Micro 5th ed Med Micro 18th ed Jawetz 22nd ed	Chalk and board

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	Injury to Plasma membrane: Polymyxin; Inhibition of protein synthesis Aminoglycosides, Tetracyclines Chloramphenicol, Macrolides- Erythromycin			
	Inhibition of Nucleic acid synthesis: Quinolones, Rifampicin, Metronidazole; Antimetabolites: Sulphonamides, Trimethoprim; Drug Resistance: Mechanism, Origin and transmission of drug resistance; Use and misuse of antimicrobial agents	05	Murray 5th Ed/ Jawetz Mim's Med Micro 5th Ed	Chalk and board
	Antifungal drugs, Antiviral drugs – 2 lectures	2	Mim's Med Micro Prescott 5th Ed	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: TYBSC SEMESTER:VI

MONTH: November to March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

Discuss anerobic and anaerobic industrial effluent treatment methods

Discuss various methods for treatment of solid waste

Describe the role of biosensors

Discuss the role of pollution indicators in pollution monitoring

Discuss the role of immobilized enzymes or microbial cells for treatment of pollutants

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT604 Environmental Biotechnology Unit II Industrial effluent treatment	Biological processes for industrial effluent treatment, aerobic biological treatment- activated sludge process, CASP, advanced activated sludge processes (any two) Biological filters, RBC, FBR**;** Anaerobic biological treatment- contact digesters, packed bed reactors, anaerobic baffled digesters, UASB**;**	08	Environmental biotechnology (Industrial pollution management) By S. N. Jogdand	Chalk and board

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	Solid waste treatment**;** pollution indicators & biosensors**;** biodegradation of xenobiotics- persistent compounds, chemical properties influencing biodegradability, microorganisms in biodegradation**;**	06	Environmental biotechnology basic concepts and applications by Indushekhar Thakur Environmental biotechnology by Alan Scragg 2 nd ed, 2005	Chalk and board
	Use of immobilized enzymes or microbial cells for treatment	01	Environmental biotechnology (Industrial pollution management) By S. N. Jogdand	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: MSC II SEMESTER:III

MONTH: October to January ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:
Discuss the various aspects of internal and chemical organization of the cell
Discuss the various aspects of dynamics of DNA and chromatin control
Discuss the various aspects of gene transcription and silencing
Discuss the various aspects of replication, transcription and translation machineries

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 103 Paper III- Cell Biology UNIT I- Dynamics and organization of cell	Universal features of cells; cell chemistry and biosynthesis: chemical organization of cells; internal organization of the cell - cell membranes and cell organelle;	05	Universal features of cells; Molecular biology of the cell by Albert, Johnson, Lewis, Raff, Roberts, Walter. 4th edition. Part 1. Chapter I. p.g 3 -13 Cell chemistry and Biosynthesis:	Power point presentation and topic related videos

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			Chemical organisation of cell Molecular biology of the cell by Albert, Johnson, Lewis, Raff, Roberts, Walter . 4th edition. Part 1. Chapter 2. p.g 47 -58 Internal organization of the cell: Cell membrane Cell organelle Molecular biology of the cell by Albert, Johnson, Lewis, Raff, Roberts, Walter . 4th edition. Part IV.Chapter 10 583-…….. Molecular Cell Biology 6th edition by Lodish. Part III. 372 to 379.	

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	dynamics of DNA and mechanisms based on central dogma; chromatin control: gene transcription and silencing by chromatin Writers, -Readers and –Erasers;	06	Dynamics of DNA and mechanism based on central dogma;Genetics by Russell 5th Edi. Chromatin control: gene transcription and silencing by chromatin Writers, -Readers and –Eraser; Genetics by Russell 5th Edi.	Power point presentation and topic related videos
	replication, transcription and translation machineries mitochondrial genetic code translation product cleavage, modification and activation.	04	Replication, transcription and translation machineries Genetics by Russell 5th Edi. Mitochondrial genetic code translation product cleavage, Modification and activation. Genetics by Russell 5th Edi.	Power point presentation and topic related videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **F.Y.B.Sc**.

SEMESTER: **II** MONTH: **DECEMBER - MARCH** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the different processes of genetic material transfer in bacteria.
- Gain knowledge on the concept of Transposable elements

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 **Life Sciences-II** **Genetics** **Unit II** **Microbial Genetics**	Genetic analysis in Bacteria- Prototrophs, Auxotrophs. Replica plate technique	02	**Microbiology** By Pelczar And iGenetics by Peter Russell	Chalk Board and Teaching aids- working Models
	Mechanism of Genetic Exchange in Bacteria: Conjugation	05		
	Transformation;	02		
	Bacteriophages: Lytic and Lysogenic Development of Phage.	01		
	Transduction; Generalized Transduction,	01		
	Specialized Transduction	01		
	Bacterial Transposable Elements	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **M.Sc.**

SEMESTER: **I** MONTH: **AUGUST - DECEMBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concept of MHC and antigen presentation.
- Gain insights on role of MHC and T cells in autoimmunity.
- Learn about the immunogenetics of MHC and Immunoglobulin genes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Immunology **UNIT III Immunogenetics**	Major histocompatibility complex genes and their role in autoimmune and infectious diseases,	02	Kuby Immunology 5th Edition	Chalk Board
	HLA typing, human major histocompatibility complex (MHC),	01		
	Complement genes of the human major histocompatibility complex:	01		
	Implication for linkage disequilibrium and disease associations,	01		
	Genetic studies of autoimmunity; types of autoimmune diseases;	02		
	Mechanism and role of CD4+ T cells;	01		
	MHC and TCR in autoimmunity;	01		
	treatment of autoimmune diseases; rheumatoid arthritis, systemic lupus erythematosus and multiple sclerosis,	02		
	genetics of human immunoglobulin,	02		
	immunogenetics of spontaneous control of HIV, KIR complex.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **M.Sc.**

SEMESTER: **II** MONTH: **FEBRUARY - MAY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concept and processes involved in plant tissue culture and Animal cell culture.
- Gain insights on applications of PTC and ATC.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II- Plant and Animal Biotechnology **Unit 1 Plant tissue culture and Animal Cell culture**	Plant tissue culture: historical perspective; totipotency;	1	Chawla, H. S. (2000). Introduction to Plant Biotechnology. Enfield, NH: Science Culture of Animal Cells: A Manual of Basic Technique and Specialized Applications, Sixth Edition	PowerPoint presentation YouTube videos
	culture and organogenesis; Somatic embryogenesis;	1		
	establishment of – callus culture, cell suspension culture,	1		
	media culture preparation – nutrients and plant hormones; sterilization techniques;	1		
	applications of tissue culture -micropropagation; somaclonal variation;	1		
	androgenesis and its applications in genetics and plant breeding;	1		
	germplasm conservation and cryopreservation;	1		
	synthetic seed production; protoplast culture and somatic hybridization - protoplast isolation;	1		
	somatic hybridization - methods and applications;	1		
	cybrids and somatic cell genetics; plant cell cultures for secondary metabolite production.	1		
	brief history of animal cell culture; cell culture media and reagents; culture of mammalian cells, tissues and organs;	1		
	primary culture, secondary culture, continuous cell lines, suspension cultures;	1		
	application of animal cell culture for virus isolation and *in vitro* testing of drugs,	1		
	testing of toxicity of environmental pollutants in cell culture	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **M.Sc**.

SEMESTER: **II** MONTH: **FEBRUARY - MAY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concept of bioethics and its need.
- Gain insights on bioterrorism

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Intellectual property rights and Bioethics **Unit IV Bioethics**	Introduction, bioethics in health care-	1	Helga Kuhse_ Udo Schüklenk_ Peter Singer_ (eds.) - Bioethics_ An Anthology-Wiley-Blackwell (2016)	PowerPoint Presentation
	Euthanasia,	1		
	Artificial reproductive technologies, prenatal diagnosis,	2		
	Genetic screening, gene therapy, organ transplantation.	2		
	Ethics of clinical research,	1		
	Bioethics in research –cloning and stem cell research,	1		
	Human and animal experimentation,	1		
	Agricultural biotechnology -	1		
	Genetically engineered food, environmental risk, labelling and public opinion.	2		

	Bioterrorism	3	Goel, D., & Parashar, S. (2013). *IPR, Biosafety and Bioethics*. Pearson Education India.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **M.Sc.**

SEMESTER: **III** MONTH: **AUGUST - NOVEMBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept and process of biofilm formation.
- Gain insights on properties of biofilms and their ability to carry out quorum sensing.
- Learn about the different medical device associated infections caused by biofilms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Medical Microbiology **UNIT IV Biofilms in Medicine**	Introduction, Biofilm structure and phenotype	01	Medical Biofilms (Detection, Prevention and Control) - Jass et al (2003) Wolfe, H. F. (2005). Biofilm plaque formation on tooth and root surfaces. *Periodontology, Stuttgart: Thieme*, 24-30. Donlan, R. M. (2001). Biofilms and device-associated infections. *Emerging infectious diseases*, *7*(2), 277.	Chalk Board
	Biofilm formation process	01		
	Factors affecting biofilm formation	01		
	Properties of biofilms	04		
	Helicobacter Biofilm, *Pseudomonas* Biofilm	02		
	Candida Biofilm, Dental plaque	03		
	Biofilms and device-associated infections	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **M.Sc.**

SEMESTER: **IV** MONTH: **JANUARY – APRIL** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concept and process of Microarray.
- Gain insights on gene expression profiling and bioinformatics tools used for it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Bioinformatics **UNIT III**	Gene expression profiling and its applications.	02	Bioinformatics Methods and Applications: Genomics Proteomics and Drug Discovery 3rd Ed.	Chalk Board Projector for PowerPoint presentation YouTube videos
	Microarray technology and basics.	03		
	Microarray analysis	03		
	Organization of data	02		
	SAGE	02		
	Human genome analysis	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **M.Sc.**

SEMESTER: **IV** MONTH: **JANUARY – APRIL** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concept and process of proteomic analysis.
- Gain insights on bioinformatics tools used for genomics studies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Bioinformatics UNIT IV	Proteomics.	03	Bioinformatics Methods and Applications: Genomics Proteomics and Drug Discovery 3rd Ed.	Chalk Board Projector for PowerPoint presentation YouTube videos
	Exploration of data bases,	01		
	Retrieval of desired data, BLAST	03		
	Gene clusters and fusions,	03		
	Consensus sequences	01		
	Exon intron finder,	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **S.Y.B.Sc.**

SEMESTER: **III** MONTH: **JUNE - SEPTEMBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the role of different effector molecules and effector mechanisms in immunology.
- Gain insights in the antigen processing pathways and their role in immune response.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Immunology **UNIT II Cell Receptors**	MHC Classes - General Organization and Inheritance;	01	Goldsby, R. A., Kindt, T. J., Osborne, B. A., & Kuby, J. (2003). Immunology 5th edition. W. H.	Chalk Board
	Structures and Peptide Interactions; Class I and II Diversity	01		
	MHC Polymorphism;	01		
	Antigen Presentation - Endocytic and Exocytic Pathways;	03		
	Self MHC Restriction.	02		
	T-cell Receptor Complex: Structure and Activation.	03		
	B-cell Receptor: Structure, Maturation and Activation	03		
	B-T Cell Interaction (B-T cell Cooperation).	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **S.Y.B.Sc.**

SEMESTER: **IV** MONTH: **NOVEMBER - MARCH** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to :

- Gain an understanding of the basic principles used in molecular diagnosis.
- Gain critical thinking and analytical skills to understand new diagnostic methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 6 MOLECULAR DIAGNOSTICS **UNIT I Basics of Molecular Diagnostics**	Overview of Molecular Diagnostics; History of Molecular Diagnostics;	01	Buckingham, Lela. Molecular diagnostics: fundamentals, methods and clinical applications. FA Davis, 2019.	Chalk Board
	Molecular Diagnostics in Post Genomic Era; Areas used in Molecular Diagnostics; Future Prospects	01		
	Commercialising Molecular Diagnostics, Personalized Medicine, Theranostics.	01		
	Extraction, Isolation and Detection of DNA,	03		
	Extraction, Isolation and Detection of RNA and Proteins;	02		
	Restriction Endonucleases and Restriction Enzyme Mapping.	01		
	Hybridisation Techniques: Southern, Northern, Western	03		
	FISH -Markers, Probes and its Clinical Applications.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **T.Y.B.Sc.**

SEMESTER: **V** MONTH: **JUNE - SEPTEMBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand the concept of cosmetic formulation and application of marine biotechnology in the field of cosmetics.**
- **Gain knowledge about the marine resources used in cosmetic products, available therapies and bioresources.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4- MARINE BIOTECHNOLOGY UNIT-IV MARINE BIORESOURCES AND COSMETICS	Cosmetics from Marine Sources: Scenario of Marine Sources in the Cosmetic Industry, Cosmetics: Definition and Regulations, Cosmeceuticals	02	Kim, S.K. Springer Handbook of Marine Biotechnology; Springer: Berlin, Germany; Heidelberg, Germany, 2015.	Chalk Board
	Target Organs and Cosmetics Delivery Systems, Components of Cosmetics,	03		
	Major Functions of Some Marine Components in Cosmetics and Cosmeceuticals	03		
	Treatments Based on Marine Resources, Products Based on Marine Resources	03		
	Marine Bioresources, Marine Secondary Metabolites, Marine Proteins, Marine Lipids	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **T.Y.B.Sc.**

SEMESTER: **VI** MONTH: **DECEMBER - MARCH** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of GMP, QA and QC
- Gain clarity regarding the need of Good Manufacturing Practices in pharmaceutical industries.
- Attain knowledge about regulatory requirements and implementation of QA and QC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II- Industrial Microbiology **UNIT IV: QA-QC**	Concept of GMP	01	**Hugo and Russell's Pharmaceutical Microbiology, Seventh Edition**	Chalk Board
	Requirements of GMP implementation	02		
	Documentation of GMP practices	02		
	Regulatory certification of GMP	02		
	Quality Control (QC): Concept of QC	02		
	Requirements for implementing QC	02		
	QA concepts: Concept of QA	02		
	Requirements for implementing	02		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: F. Y. B.Sc. SEMESTER: I MONTH: June- October ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Learn to classify the inorganic as well as organic compounds.

Get acquainted with IUPAC naming system of organic compounds.

Draw the Structures of the inorganic as well as organic compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Basic Chemistry I **UNIT II Nomenclature and classification**	Nomenclature and Classification of Inorganic Compounds: Oxides, Salts, Acids, Bases, Ionic, Molecular and Coordination Compounds	4	**Organic chemistry by Stanely and Pine** NCERT 11th and 12th Text book	Chalk board method Flip classroom method
	Alkanes, Alkenes, Alkynes, Cyclic hydrocarbons, Aromatic compounds, Alcohols and Ethers	4		Chalk board method
	Aldehydes and Ketones, Carboxylic acids and its derivatives, Amines, Amides	4		Chalk board method
	Nomenclature and Classification of: Alkyl halides and Heterocyclic compounds	3		Flip classroom method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: F. Y. B.Sc. SEMESTER: II MONTH: November- March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Learn in detail about classification and properties of amino acids and proteins.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Bioorganic chemistry **Unit II Proteins and amino acids**	Classification, preparation and properties of amino acids, reactions of amino acids	4	Lehninger, principles of biochemistry, 4th edition Textbook of Biochemistry by- Styanarayan, 3rd edition	Flip classroom method
	Titration curve of amino acids, Sorenson's titration, concept of isoelectric pH and zwitterion.	4		Chalk board method
	Proteins classification based on structure and functions Primary structure prediction N-terminal and C-terminal method	6		Flip classroom method
	Glycoproteins	1		Chalk board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: F. Y. B.Sc. SEMESTER: II MONTH: November- March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Learn in detail about classification and properties of amino acids and proteins.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Bioorganic chemistry **Unit II Proteins and amino acids**	Classification, preparation and properties of amino acids, reactions of amino acids	4	Lehninger, principles of biochemistry, 4th edition Textbook of Biochemistry by- Satyanarayan, 3rd edition	Flip classroom method
	Titration curve of amino acids, Sorenson's titration, concept of isoelectric pH and zwitterion.	4		Chalk board method
	Proteins classification based on structure and functions Primary structure prediction N-terminal and C-terminal method	6		Flip classroom method
	Glycoproteins	1		Chalk board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: M.Sc. SEMESTER: I MONTH: July – December ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Learn the detain concept behind protein folding and various pathways of protein folding.

Get insight into the concept of protein misfolding and diseases.

Learn the various protein degradation pathways in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Biochemistry **Unit II** **Protein Folding**	Denaturation and Renaturation of proteins; Denaturants and their mode of action; Anfinsen's classical experiment;	3	Lehninger, principles of biochemistry, 4th edition **Cooper, G. M., & Hausman, R. E. (2013). The Cell: a Molecular Approach (6thEd.). Washington: ASM; Sunderland.**	Flip classroom method
	Folding curves and transitions; Types of protein folding and intermediates; Models of protein folding; Assisted protein folding (Chaperones)	6		Flip classroom method
	Misfolding and diseases.	2		Chalk board method
	Protein degradation: Ubiquitin-proteasome pathway and lysosomal proteolysis.	4		Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: S. Y. B.Sc. SEMESTER: III MONTH: June- October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Learn the elaborate concept of Translation of proteins and consecutive post translation modifications and protein sorting.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MOLECULAR BIOLOGY **UNIT II Gene expression-Translation**	Nature of Genetic Code, Wobble Hypothesis.	2	**i-Genetics:** A Molecular Approach (III Edition) **-Russell**	Chalk board method
	Translation: Process of Protein Synthesis (Initiation, Elongation, Translocation, Termination)	4+3+3		Chalk board method Animation
	Post Translation Modifications.	1		Flip classroom
	Protein sorting.	2		Flip classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology CLASS: T. Y. B.Sc.

SEMESTER: VI MONTH: November- March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Learn classification of hormones and their mode of action.

Learn the hormones of Hypothalamus, Pituitary gland, Thyroid gland, Adrenal gland, Pancreas, male and female gonads in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Biochemistry **Unit III Hormones**	Mechanism of action of group I and II hormones Structure, storage, release, transport, biochemical functions and disorders associated with hormones secreted by: Hypothalamus	2	Fundamentals of Biochemistry by J L Jain Textbook of Biochemistry by- Styanarayan	Chalk board method Flip classroom method
	Anterior Pituitary gland - GH, stimulating hormones Posterior Pituitary gland – oxcytocin and vasopressin	2		Chalk board method
	Thyroid gland – Thyroxine, calcitonin Parathyroid gland – PTH Adrenal medulla – epinephrine and norepinehprine ; Adrenal cortex – Glucocortocoids	5		Chalk board method
	Pancreas – insulin and glucagon	2		Flip classroom method
	Hormones of: Female Gonads – estrogen and progesterone; Male gonads – testosterone; Placenta – hCG.	4		Flip classroom method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: T. Y. B.Sc. SEMESTER: VI MONTH: November- March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Learn tertiary and quaternary structure of proteins in detail.

Get acquainted with concept of Protein Denaturation and Folding.

Learn the Reversible Binding of a Proteins and Protein Interactions.

Get the knowledge about Protein purification.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Biochemistry **Unit I Protein Biochemistry**	Protein structure: Protein Tertiary and Quaternary Structures	2	Lehninger, principles of biochemistry, 4th edition **Biochemistry , 4th edition (2010), Voet and Voet**	Flip classroom method
	Protein Denaturation and Folding	3		Chalk board method
	Protein Function: Reversible Binding of a Protein to a Ligand: Oxygen-Binding Complementary Interactions between Proteins and Ligands: Immunoglobulins; Protein Interactions Modulated by Chemical Energy: Actin, Myosin, and Molecular Motors Proteins	6		Chalk board method
	Protein purification	4		Flip classroom method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY CLASS:

T.Y.B.Sc SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The aim of this course is to provide students with basic understanding of marine pharmaceutical products, their antimicrobial properties and challenges faced when using marine extremozymes.
The learners will be able to: learn the uses of marine toxins, their antiviral and antimicrobial activity.

Understand pharmaceutical importance of marine drugs.

Gain knowledge of marine extremozymes and their current use as well as challenges of using marine products.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 504 UNIT II: MARINE DRUGS AND ENZYMES	Drugs from Marine organisms: Pharmaceutical compounds from marine flora and fauna – marine toxins, antiviral and antimicrobial agents	04	Kim, S.K. Springer Handbook of Marine Biotechnology; Springer: Berlin, Germany; Heidelberg, Germany, 2015.	CHALK BOARD METHOD POWERPOINT PRESENTATION
	Approved Marine Drugs as Pharmaceuticals	02	SAME AS ABOVE	CHALK BOARD METHOD
	Marine Natural products and its Challenges	02	SAME AS ABOVE	CHALK BOARD METHOD
	Marine Microbial Enzymes- Marine Extremozymes and Their Significance, Current Use of Marine Microbial Enzymes	07	SAME AS ABOVE	POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: T.Y.B.Sc SEMESTER: VI MONTH: DECEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The aim of this course to make students aware of techniques of dairy technology and production processes of associated fermented products.
The learners will be able to: Understand the enumeration methods in milk and factors affecting milk quality.

Learn various methods of preservation of milk.

Learn the production processes and spoilage of fermented milk products.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT602 UNIT I: DAIRY TECHNOLOGY	Milk: Normal flora, changes in raw milk, Enumeration, Factors affecting bacteriological quality, Dairy technology Preservation methods, Pasteurization	07	Fundamentals of microbiology by Martin Frobisher	CHALK BOARD METHOD, PROJECTOR
	Starter Cultures	02	Applied Dairy Microbiology Elmer H Marth and James L Steele Mercel Dekker Inc New York, 2nd edition	CHALK BOARD METHOD
	Fermented products-Production process and spoilage of Cheese:Swiss and Cheddar	02	Microbial Technology Peppler,H.J and Perlman	PROJECTOR, CHALK BOARD METHOD, TEACHING AIDS
	Butter	02	Applied Dairy Microbiology	PROJECTOR, CHALK BOARD METHOD,

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			Elmer H Marth and James L Steele Mercel Dekker Inc New York, 2nd edition	TEACHING AIDS
	Yogurt, Buttermilk	02	SAME AS ABOVE	CHALK BOARD METHOD, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: T.Y.B.Sc. SEMESTER: VI MONTH: NOVEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: to acquaint the students with neurobiology and neurochemistry.
The learners will have: gained knowledge of anatomy of nervous system, neuronal processes associated with special senses and neurochemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Unit 4 - Neurochemistry	Anatomy and functioning of the brain	15	Textbook of Medical Physiology by Guyton 11th edition	Chalkboard method
	Neuronal pathways		Biochemistry by Metzler	PowerPoint presentation
	Propagation of nerve impulses, Neuronal excitation and inhibition			
	Synapses and gap junctions			
	Action of Neuro toxins and neurotransmitters			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: S.Y.B.Sc

SEMESTER: III MONTH: July- October ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- check on harmful biological agents, toxins, chemicals, and radiation.
- understand the importance of ensuring public and environmental safety.
- aware of the rules, regulations, and monitoring bodies

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper V Unit IV Biosafety in Biotechnology	**Regulating Food and Food Ingredients.** **Chymosin,Tryptophan,Bovine somatotropin** **Genetically modified crops** **Genetically engineered livestock** **Contemporary issues in Bioethics** **Concepts on biosafety in Biotechnology** **Regulating rDNA technology** **Deliberate release of GMOs**	15	Molecular Biotechnology -Principles and Applications of Recombinant DNA Glick, B.R, Pasternak, J.J Patten, C.L 3rd edition ASM press pg 903-910, 898-901 Biosafety in Microbiological and Biomedical Laboratories - 5th Edition, L. Casey Chosewood Deborah E. Wilson U.S. Department of Health and Human Services Centers for Disease Control and Prevention National Institutes of Health. Centers for Disease Control and Prevention National Institutes of Health	Mind map PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr Nikhil Paradkar DEPARTMENT: Biotechnology CLASS: TYBSc

SEMESTER: SEM V MONTH: July - October ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To understand the component of Biosafety and to develop an understanding detection and testing of contaminants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT507 Applied component, Biosafety, Detection and testing of contaminants	• Microbial Contamination in food and pharma products. • Some common microbial contaminants. • Microbiological Assays for pharmaceutical products. • Regulatory Microbiological testing in pharmaceuticals.	15	**1.** Pharmaceutical Microbiology - Hugo, W.B, Russell, A.D 6th edition Oxford Black Scientific Publishers. **2.** Biosafety in Microbiological and Biomedical Laboratories - 5th Edition, L. Casey Chosewood Deborah E. Wilson U.S. Department of Health and Human Services Centers for Disease Control and Prevention National Institutes of Health.	Direct instruction method.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr Nikhil Paradkar DEPARTMENT: Biotechnology CLASS: TYBSc

SEMESTER: SEM VI MONTH: December - March ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To make students aware of Hazardous waste management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT604 Environmental Biotechnology, Hazardous waste management.	• Biodegradation of waste from tanning industry; petroleum industry; paper & pulp industry; Dairy; Distillery; Dye -; Antibiotic industry -; Removal of oil spillage & grease deposits	15	Environmental Biotechnology (Industrial pollution management) S.D. Jogdand Himalaya Publishing House	Direct instruction method.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: FYBSc SEMESTER: I

MONTH: July –August 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: Objective of this course is to acquaint student with concept of Biodiversity with respect to Plant, Animals and Microorganism. The learners will be able to: Discuss origin of Life, Biodiversity. Explain Classification of Plants, Animals and Microorganism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3: Basic Life Sciences-I: Biodiversity and Cell Biology. Unit 1: Origin of Life and Biodiversity (Animals, Plants, Microorganisms)	Origin of Life, Chemical and Biological Evolution, Origin of Eukaryotic Cell.	1	Cell Biology, Genetics, Molecular Biology, Evolution and Ecology by P.S. Verma.	Chalk and Board ,
	Concept of Biodiversity, Taxonomical, Ecological and Genetic Diversity & its Significance	2	Cell Biology, Genetics, Molecular Biology, Evolution and Ecology by P.S. Verma.	Chalk and Board Projector (power point presentation)
	Introduction to Plant Diversity: Algae, Fungi, Bryophyte, Pteridophytes, Gymnosperms and Angiosperms.	4		Chalk and Board
	Introduction to Animal Diversity: Non-Chordates (with at least one representative example). And chordates	4	Invertebrate Zoology by Jordan and Verma.	Chalk and Board. Projector (power point presentation)
	Introduction to Microbial Diversity: Archaebacteria, Eubacteria, Blue-green Algae, Actinomycetes, Eumycota. Habitats, Examples and Applications.	4	Microbiology by Pelczar.	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15.

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: FYBSc SEMESTER: II

MONTH: January- February 2020 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To acquaint the students with basic concepts of Ecosystem and Interactions.
The learners will be able to: Explain components, and importance and different types of Ecosystem. Summarize different types of biogeochemical cycles and interactions within Ecosystem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Life Science-I: Physiology and Ecology. Unit 3:Ecosystem and Interactions	Ecology and Biogeography: Ecosystems, Definition and Components.	1	Cell Biology, Genetics, Molecular Biology, Evolution and Ecology by P.S. Verma.	Chalk and Board
	Structure and functions of Ecosystems. Aquatic and Terrestrial Ecosystems, Biotic and Abiotic Factors.	2	Same as above	Chalk and Board Projector (power point presentation)
	Tropical Levels, Food Chain and Food Web.	2	Same as above	Chalk and Board Projector (power point presentation)
	Ecological Pyramids (Energy, Biomass and Number)	2	Same as above	Chalk and Board Projector (power point presentation)
	Nutrient Cycle and Biogeochemical Cycles: Water, Carbon, Oxygen, Nitrogen and Sulphur.	4	Same as above	Chalk and Board Projector (power point presentation)
	Interactions: Commensalism, Mutualism, Predations and Antibiosis, Parasitism.	4	Cell Biology, Genetics, Molecular Biology, Evolution and Ecology by P.S. Verma.	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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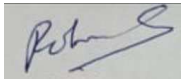
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Dr Bhanupriya Ch DEPARTMENT:Biotechnology CLASS: FY B.Sc Biotechnology SEMESTER:I MONTH: June 2018 - December 2019 ACADEMIC YEAR:2018 - 19

LEARNING OBJECTIVE/S:
The learners will be able to : A typical prokaryotic and eukaryotic cell structure along with a thorough study on cell organelles and their functioning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Ultrastructure of Prokaryotic Cell: Concept of Cell Shape and Size.Detail Structure of Slime Layer, Capsule, Flagella, Pilli, Cell Wall(Gram Positive and Negative), Cell Membrane, Cytoplasm and Genetic Material Storage Bodies and Spores Ultrastructure of Eukaryotic Cell: Plasma membrane, Cytoplasmic Matrix, Microfilaments, Intermediate Filaments, and Microtubules Organelles of the BiosyntheticEndoplasmic Reticulum & Golgi Apparatus. Lysosome, Endocytosis, Phagocytosis, Autophagy, Proteasome Eucaryotic Ribosomes, Mitochondria and Chloroplasts Nucleus –Nuclear Structure, Nucleolus External Cell Coverings: Cilia And Flagella Comparison of Prokaryotic And Eukaryotic Cells	15	microbiology Pelczar, Advanced Biotechnology RC Dubey. Cell and molecular biology - Karp	Powerpoint presentation and Chalkboard teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Bhanupriya Ch DEPARTMENT: Biotechnology CLASS: SY B.Sc Biotechnology SEMESTER:I

MONTH: June 2018 - December 2019 ACADEMIC YEAR:2018 - 19

LEARNING OBJECTIVE/S:
The learners will be able to : A basic and conceptual study about the mechanism of transcription in both prokaryotes and eukaryotes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Gene Expression- an Overview. Transcription Process in Prokaryotes : RNA Synthesis; Promoters and Enhancers; Initiation of Transcription at Promoters; Elongation and Termination of an RNA Chain. Transcription in Eukaryotes : Eukaryotic RNA Polymerases; Eukaryotic Promoters; Transcription of Protein Coding Genes by RNA Polymerase; Eukaryotic mRNA's; Transcription of other genes; Spliceosomes; RNA editing.	15	iGenetics by Peter Russell	PowerPoint presentation and chalkboard method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

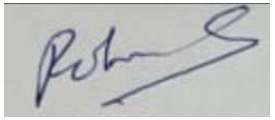
NAME OF THE STAFF: Dr Bhanupriya Ch DEPARTMENT: Biotechnology CLASS: SY B.Sc Biotechnology SEMESTER:I

MONTH: June 2018 - December 2019 ACADEMIC YEAR:2018 - 19

LEARNING OBJECTIVE/S:
The learners will be able to : A basic and conceptual study about the mechanism of translation in both prokaryotes and eukaryotes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Nature of Genetic Code. Wobble Hypothesis. Translation : Process of Protein Synthesis (Initiation, Elongation, Translocation, Termination); Post Translation Modifications. Protein sorting.	15	iGenetics by Peter Russell	PowerPoint presentation and chalkboard method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Bhanupriya Ch DEPARTMENT: Biotechnology CLASS: TY B.Sc Biotechnology SEMESTER:I

MONTH: June 2018 - December 2019 ACADEMIC YEAR:2018 - 19

LEARNING OBJECTIVE/S:
The learners will be able to : get a knowledge about what is molecular dignmostics, its applications, techniques such as PCR and its types, RFLP and molecular testing of diseases and genetic testing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Introduction to Molecular Diagnostics : Overview of Molecular Diagnostics; History of Molecular Diagnostics; Molecular Diagnostics in Post Genomic Era; Areas used in Molecular Diagnostics; Future Prospects - Commercialising Molecular Diagnostics, Personalized Medicine, Theranostics. Characterisation and analysis of Nucleic – Acids and Proteins : Extraction, Isolation and Detection of DNA, RNA and Proteins; Restriction Endonucleases and Restriction Enzyme Mapping. Hybridisation Techniques : Southern, Northern, Western and FISH; Markers, Probes and its Clinical Applications.	15	Molecular diagnostics Patrinos. Molecular diagnostics Lela Buckingham	PowerPoint presentation and chalkboard teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Bhanupriya Ch DEPARTMENT: Biotechnology CLASS: TY B.Sc Biotechnology SEMESTER:I

MONTH: June 2018 - December 2019 ACADEMIC YEAR:2018 - 19

LEARNING OBJECTIVE/S:
The learners will be able to : get a knowledge about what is molecular dignmostics, its applications, techniques such as PCR and its types, RFLP and molecular testing of diseases and genetic testing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Target amplification : PCR - General Principle; Components of a Typical PCR Reaction; Experimental Design; Primer Designing; Control of PCR Contamination and Mispriming; PCR Product Clean-up and Detection. PCR Types : Reverse Transcriptase and Real Time PCR. Probe amplification : Ligase Chain Reaction	15	. Molecular diagnostics Lela Buckingham	PowerPoint presentation and chalkboard teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

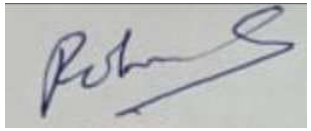
NAME OF THE STAFF: Dr Bhanupriya Ch DEPARTMENT: Biotechnology CLASS: TY B.Sc Biotechnology SEMESTER:I

MONTH: June 2018 - December 2019 ACADEMIC YEAR:2018 - 19

LEARNING OBJECTIVE/S:
The learners will be able to : get a knowledge about what is molecular dignmostics, its applications, techniques such as PCR and its types, RFLP and molecular testing of diseases and genetic testing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	DNA Polymorphism and Identification: RFLP and Parentage Testing; RFLP and Sickle-Cell Anaemia. Molecular Diagnostics for Infectious Diseases Molecular Testing for Neisseria, Molecular Diagnosis for HIV-1; Genetic Counselling and Molecular Diagnosis Genetic Testing- Need and Uses; genetic Counselling. Case Studies- Diagnostic Testing for Cystic Fibrosis; Fragile X Diagnostic and Carrier Testing. Ethical, Social and Legal Issues to Molecular - Genetic Testing	15	. Molecular diagnostics William Coleman	PowerPoint presentation and chalkboard teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

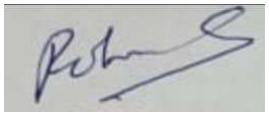
NAME OF THE STAFF: Dr Bhanupriya Ch DEPARTMENT: Biotechnology CLASS: TY B.Sc Biotechnology SEMESTER: V

MONTH: June 2018 - December 2019 ACADEMIC YEAR:2018 - 19

LEARNING OBJECTIVE/S:
The learners will be able to : get a knowledge about agricultural biotechnology specifically focused on various plant transformation methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Genetic engineering of plants; Methodology. Plant transformation with the Ti plasmid of A.tumefaciens, Ti plasmid derived vector system - 4 Lectures; Transgenic plants: Physical methods of transferring genes to plants : electroporation, microprojectile bombardment, liposome mediated, protoplast fusion- 5 Lectures; Vectors for plant cells - 4 Lectures; Improvement of seed quality protein - 2 Lectures	15	Biotechnology Glick	PPT and Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

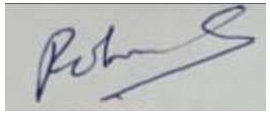
NAME OF THE STAFF: Dr Bhanupriya Ch DEPARTMENT: Biotechnology CLASS: TY B.Sc Biotechnology SEMESTER: VI

MONTH: June 2018 - December 2019 ACADEMIC YEAR:2018 - 19

LEARNING OBJECTIVE/S:
The learners will be able to : get a knowledge about agricultural biotechnology specifically focused on various molecular markers for improvement of agriculture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Genetic markers in plant breeding-- Classical markers, DNA markers (RFLP, RAPD, AFLP, SSR, SNP)-; Application of Molecular Markers to Plant Breeding [quantitative trait locus (QTL) mapping]; Plant DNA Barcoding- Barcoding Markers (matK, rbcl, ITS, tmHpsbA), steps, recent advances, Benefits, Limitations .	15	University prescribed references	PPT and Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: Ms. Ashwini Patil
DEPARTMENT: Biotechnology CLASS: F. Y. B.Sc. SEMESTER: I
MONTH: June- October ACADEMIC YEAR: 2018-19

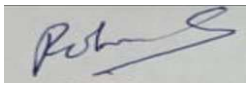
LEARNING OBJECTIVE/S:
The learners will be able to: Learn to classify the inorganic as well as organic compounds.

Get acquainted with IUPAC naming system of organic compounds.

Draw the Structures of the inorganic as well as organic compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Basic Chemistry I **UNIT II Nomenclature and classification**	Nomenclature and Classification of Inorganic Compounds: Oxides, Salts, Acids, Bases, Ionic, Coordination Compounds	4	**Organic chemistry by Stanely and Pine** NCERT 11th and 12th Text book	Flip classroom method
	Alkanes, Alkenes, Alkynes, Cyclic hydrocarbons, Aromatic compounds, Alcohols and Ethers	4		Chalk board method
	Aldehydes and Ketones, Carboxylic acids and its derivatives, Amines, Amides	4		Chalk board method
	Nomenclature and Classification of: Alkyl halides and Heterocyclic compounds	3		Flip classroom method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR, SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: F. Y. B. Sc._____SEMESTER: I_____MONTH: AUG. TO NOVEMBER ACADEMIC YEAR: 2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Gain fundamental knowledge in food and fermentation technology.
- Have an understanding of the principles underlying food processing and fermentative production of industrial fine chemicals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 105, III, FOOD AND FERMENTATION BIOTECHNOLOGY	Food Biotechnology: Biotechnological applications in enhancement of food quality, Unit operations in food processing, Quality factors in pre-processed food	3	European Food Information council web information	Classroom teaching
	Food deterioration and its control, Rheology of food products, Microbial role in food products-yeast, bacterial and other microorganisms based process and products	3	Food Science by N. N. Potter	Classroom teaching
	Modern biotechnological regulatory aspects in Food industries, Biotechnology and food-social appraisal	2	Web information	Classroom teaching
	Fermentation Technology- Definition, applications of fermentation technology. Microbial fermentations,	2	Industrial Microbiology by Casida	Classroom teaching
	Overview of industrial production of chemicals [acetic acid, citric acid and ethanol], antibiotics, enzymes and beverages	5	Industrial Microbiology by Casida	Classroom teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: M. Sc. I_____SEMESTER: I_____MONTH: AUG. TO NOV. ACADEMIC YEAR: 2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Have understanding of principles, working and applications of advanced optical and electron microscopic techniques.
- Be knowledgeable about image processing methods in microscopy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 104, I, MICROSCOPIC TECHNIQUES	Atomic Force Microscopy [AFM], Fluorescence microscopy, Confocal microscopy.	4	Principles and Techniques of Biochemistry and Molecular Biology by Wilson and Walker	Classroom teaching
	Cryotomy Scanning and transmission microscopes, Different fixation and staining techniques in EM, Freeze-etch and freeze-fracture methods for EM.	5	Principles and Techniques of Biochemistry and Molecular Biology by Wilson and Walker	Classroom teaching
	Image processing methods in microscopy, Single cell imaging.	4	Principles and Techniques of Biochemistry and Molecular Biology by Wilson and Walker	Classroom teaching
	Environmental SEM and its advantages	2	Principles and Techniques of Biochemistry and Molecular Biology by Wilson and Walker	Classroom teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: M. Sc. I_____SEMESTER: I_____MONTH: AUG. TO NOV. ACADEMIC YEAR: 2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Have understanding of principles, working and applications of advanced spectroscopic techniques.
- Be knowledgeable about molecular structure determination using X-ray diffraction, X-ray crystallography and molecular analysis by light scattering .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 104, II, SPECTROSCOPY	Introduction, Principle and analysis using UV/Visible spectrophotometer, Fluorescence spectroscopy,	3	Principles and Techniques of Biochemistry and Molecular Biology by Wilson and Walker	Classroom teaching
	Circular dichroism, , ORD, NMR and ESR spectroscopy,	4	Principles and Techniques of Biochemistry and Molecular Biology by Wilson and Walker	Classroom teaching
	Molecular structure determination using X-ray diffraction, X-ray crystallography and NMR, Molecular analysis using light scattering	4	Principles and Techniques of Biochemistry and Molecular Biology by Wilson and Walker	Classroom teaching
	Mass spectrometry, and LC-MS, GC-MS, and surface plasma resonance methods, IR	4	Principles and Techniques of Biochemistry and Molecular Biology by Wilson and Walker	Classroom teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: M. Sc. I_____SEMESTER: II_____MONTH: JAN-MAY_____ ACADEMIC YEAR:2018-19_____

LEARNING OBJECTIVE/S: The learners will be able to:

- Have a specialized knowledge of strain improvement of production microorganism and media formulation.
- Understand various modes of fermentation and design of fermentors as per the fermentation process requirement.
- Have a basic understanding of plant and animal cell cultivation at large scale.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 203, I, Concepts of Basic Mode of Fermentation Proceses	Strain improvement for increased yield and other desirable characteristics. Upstream processing: Media formulation, sterilization	4	Principles of fermentation technology by Stanbury & Whitaker	Classroom teaching
	Bioreactor designs; Classification of fermentors, Batch, fed batch and continuous, Conventional fermentation vs. biotransformation	3	Principles of fermentation technology by Stanbury & Whitaker	Classroom teaching
	Solid substrate, surface and submerged fermentation. Fermentor design-mechanically agitated,; Pneumatic and hydrodynamic fermentors	3	Principles of fermentation technology by Stanbury & Whitaker	Classroom teaching
	Large scale animal and plant cell cultivation	2	Principles of fermentation technology by Stanbury & Whitaker	Classroom teaching
	Aeration and agitation in bioprocess, Measurement and control of bioprocess parameters	3	Principles of fermentation technology by Stanbury & Whitaker	Classroom teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: M. Sc. I_____SEMESTER: II_____MONTH: JAN-MAY_____ ACADEMIC YEAR:2018-19_____

LEARNING OBJECTIVE/S:The learners will be able to:

- Have understanding of various unit operations employed in downstream processing in a fermentation process.
- Acquire chromatographic separation and purification techniques.
- Understand the principles underlying effluent treatment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 203, II, DOWNSTREAM PROCESSING	Bioseparation: Filtration, centrifugation, sedimentation, flocculation.	4	Principles of fermentation technology by Stanbury & Whitaker	Classroom teaching
	Cell disruption: Liquid-liquid extraction, Purification by chromatographic techniques	5	Principles of fermentation technology by Stanbury & Whitaker	Classroom teaching
	Reverse osmosis and ultra-filtration, drying: Crystallizatio, Storage and packaging,	3	Principles of fermentation technology by Stanbury & Whitaker	Classroom teaching
	Treatment of effluent and its disposal	3	Principles of fermentation technology by Stanbury & Whitaker	Classroom teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: M. Sc._II_____SEMESTER: III_____MONTH: AUG-NOV ACADEMIC YEAR: 2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Have specialized knowledge in animal tissue culture techniques such as primary culture and cell lines.
- Gain both theoretical and practical knowledge of tissue disaggregation techniques such as trypsinization along with staining of animal cells.
- Have a learning experience in toxicological assays such as radical scavenging assay and MTT assay.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 301, IV, PTC and **ATC**	Primary culture: Types, isolation of tissues, culturing of different cells.	4	Culture of animal cells by Ian Freshney	Classroom teaching.
	Cell lines: Development, subculture and propagation, immortalization of cell lines, cell line designation, selection of cell lines, routine maintenance.	7	Culture of animal cells by Ian Freshney	Classroom teaching.
	Cytotoxicity, Transformation, and culture of tumour cells	4	Culture of animal cells by Ian Freshney	Classroom teaching.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: M. Sc._II_____SEMESTER: _IV_____MONTH: JAN –MAY ACADEMIC YEAR: 2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concepts and principles underlying biodegradation of wastes from various industries such as food, textile, pulp and paper etc.
- Have knowledge of biological detoxification and removal of oil spillage and grease deposits.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 402, IV, GMO AND ENVIRONMENT	Biodegradation of food, textile, paper, and petrochemical industries	8	Environmental Biotechnology by Indu Shekhar Thakur	Classroom teaching.
	Biological Detoxification	3	Environmental Biotechnology by Indu Shekhar Thakur	Classroom teaching.
	Removal of oil spillage and grease deposits	4	Environmental Biotechnology by Indu Shekhar Thakur	Classroom teaching.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI DEPARTMENT: BIOTECHNOLOGY

CLASS: S. Y. B. Sc_____SEMESTER: III_____MONTH: JULY TO OCT. ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand basic skills applied in fermentation technology and build a foundation for more advanced studies in bioprocess technology.
- Have an understanding of principles underlying design of a fermentor and fermentation process control.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 306, II, FERMENTOR AND FERMENTATION PROCESS	Design of a Fermentor: Stirred tank fermentor-basic design; parts of a typical industrial fermentor. Fermentation media: Components; design and optimization	4	Principles of Fermentation Technology by Stanbury, Whitaker & Hall	Classroom teaching
	Sterilization: Sterilization of fermentor and fermentation media. Process parameters: pH, temperature, aeration, agitation, foam etc.	4	Principles of Fermentation Technology by Stanbury, Whitaker & Hall	Classroom teaching
	Types of Fermentation: Surface and submerged; Batch and continuous, Aerobic and anaerobic.	2	Industrial Microbiology by Casida	Classroom teaching
	Product isolation and purification	3	Principles of Fermentation Technology by Stanbury, Whitaker & Hall	Classroom teaching
	Study of representative fermentation process: Outline of penicillin and ethanol production by fermentation with a flow diagram	2	Industrial Microbiology by Casida	Classroom teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr, SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: T.Y.B.Sc_____SEMESTER: __V_____MONTH: July-Sept.___ACADEMIC YEAR:__2018-19_____

LEARNING OBJECTIVE/S: The learners will be able to:

- Learn that marine habitat can be explored for potential functional foods and nutraceuticals.
- Learn the potential of marine-based bioactive compounds that include well-known compounds such as carotenoids, collagen/gelatin as well as novel compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 504, UNIT III, MARINE FUNCTIONAL FOODS AND NUTRACEUTICALS	Marine Functional Foods: Marine sources as healthy foods or reservoirs of functional ingredients	3	Handbook of marine biotechnology by Kim, S. K.	Lectures in the classroom./Occasional use of videos available online
	Marine derived ingredients with biological properties	3	Handbook of marine biotechnology by Kim, S. K.	Lectures in the classroom./Occasional use of videos available online
	Functional foods incorporating marine-derived ingredients	2	Handbook of marine biotechnology by Kim, S. K.	Lectures in the classroom./Occasional use of videos available online
	Marine Nutraceuticals: Marine bioactives as potential nutracuticals, functional carbohydrates, polyunsaturated fatty acids	3	Handbook of marine biotechnology by Kim, S. K.	Lectures in the classroom./Occasional use of videos available online
	Carotenoids, soluble calcium, fish collagen and gelatin, marine probiotics	4	Handbook of marine biotechnology by Kim, S. K.	Lectures in the classroom./Occasional use of videos available online

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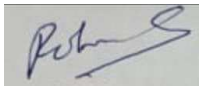

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr, SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: T.Y.B.Sc_____SEMESTER: __V_____MONTH: July-Sept.___ACADEMIC YEAR:__2018-19_____

LEARNING OBJECTIVE/S: The learners will be able to:

- Understand the mode of action of antimicrobial drugs
- Have practical knowledge of antibiotic sensitivity tests including MIC and MLC.
- Understand the mechanisms of drug resistance and use/misuse of drugs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 502, UNIT II, CHEMOTHERAPEUTIC DRUGS	Discovery and design of antimicrobial agents, Classification of antibacterial agents, selective toxicity, MIC, MLC.	3	Mim's Medical Microbiology, 5th Edn.	Lectures in the classroom
	Inhibition of cell wall synthesis [mode of action for] beta lactam antibiotics: Penicillins, cephalosporins, glycopeptides, vancomycins; Polypeptides bacitracin, Injury to plasma membrane: polymyxin	3	Medical Microbiology by Jawetz *et al.*	Lectures in the classroom
	Inhibition of protein synthesis, Aminoglycosides, tetracyclines, cloramphenicol, Macrolides, erythromycins	3	Microbiology by Prescott, Harley, and Klein	Lectures in the classroom
	Inhibition of nucleic acid synthesis; quinolones,rifampicin, metronidazole. Antimetabolites: Sulphonamides and trimethoprim	3	Medical Microbiology by Patrick Murray	Lectures in the classroom
	Drug Resistance: Mechanism, origin and transmission of drug resistance. Use and misuse of antimicrobial agents. Antifungal drugs, antiviral drugs.	3	Microbiology by Prescott, Harley, and Klein	Lectures in the classroom

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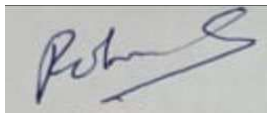

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr, SAMEER A. S. MAPARI_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: T.Y.B.Sc_____SEMESTER: __VI_____MONTH: Nov-March___ACADEMIC YEAR:__2018-19_____

LEARNING OBJECTIVE/S:

The learners will be able to :

- Be knowledgeable about various renewable sources of energy such as Wind, Solar, Geo-thermal, Hydro and Biomass, the means to trap them and the need to replace non-renewable energy sources by renewable ones.
- Understand the concepts of Biogas technology-biogas plant and types, biogas production, and biodigester.
- Learn about fuel ethanol production from various raw materials such as corn and ligno-cellulosic biomass-advantages and disadvantages associated with the process.
- Learn microbial hydrogen, biodiesel production processes and petrocrops as alternative and promising sources of energy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 604, UNIT I, RENEWABLE SOURCES OF ENERGY	Energy sources renewable-solar energy, wind power, geothermal energy and hydropower, biomass energy	5	Environment Biotechnology by Fulekar	Lectures in the classroom./Occasional use of videos available online
	Biogas technology-biogas plant and types, biodigester. Biogas – composition, production and factors affecting production, uses.	5	Environmental Biotechnology by Jogdand	Lectures in the classroom./Occasional use of videos available online
	Biofuels-Ethanol production, Microbial hydrogen production, Biodiesel and Petrocrops.	5	Environment Biotechnology by Fulekar	Lectures in the classroom./Occasional use of videos available online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr, SAMEER A. S. MAPARI _____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: _T. Y. B. Sc_____SEMESTER: VI_____MONTH: Nov-March_____ACADEMIC YEAR: 2018-19_____

LEARNING OBJECTIVE/S:

The learners will be able to:

- Understand in details the process of industrial effluent treatment and the biotechnological process involved with it such as aerobic biological treatment-activated sludge process, and anaerobic biological treatment-contact digesters, various reactors etc.
- Learn the biological treatment of solid wastes, biological pollution indicators and role of biosensors in monitoring environmental pollution.
- Know the prevalence of xenobiotics in the environment and their biodegradation using various microorganisms.
- Learn bioreactor based technology for the industrial effluent treatment using immobilized microbial cells and/or enzymes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 604, UNIT II, INDUSTRIAL EFFLUENT TREATMENT	Biological processes for industrial effluent treatment, aerobic biological treatment-Activated sludge process, CASP, advanced activated sludge process, biological filters, RBC, FBR	5	Environmental Biotechnology by S. D. Jogdand	Lectures in the classroom./Occasional use of videos available online
	Anaerobic biological treatment-Contact digesters, Packed bed reactors, Anaerobic baffled digestors, UASB	3	Environmental Biotechnology by S. D. Jogdand	Lectures in the classroom./Occasional use of videos available online
	Solid waste treatment	2	Environmental Biotechnology by Indu Shekhar Thakur	Lectures in the classroom./Occasional use of videos available online
	Pollution indicators and biosensors	2	Environmental Biotechnology by Allan Scragg	Lectures in the classroom./Occasional use of videos available online

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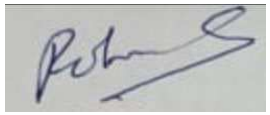
	Biodegradation of xenobiotics-persistent compounds, chemical properties influencing biodegradability, microorganisms in biodegradation	2	Environmental Biotechnology by Indu Shekhar Thakur	Lectures in the classroom./Occasional use of videos available online
	Use of immobilized enzymes or microbial cells for treatment	1	Environmental Biotechnology by S. D. Jogdand	Lectures in the classroom./Occasional use of videos available online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMEER A. S. MAPARI _____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: F. Y. B. Sc_____SEMESTER: II_____MONTH: NOV. TO MARCH ACADEMIC YEAR: 2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Have a basic understanding of Enzymology.
- Have both theoretical and practical experience in enzyme kinetics and the effect of various parameters on enzyme activity.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 206, I, ENZYMES	Definition, classification, nomenclature, chemical nature, properties of enzymes	3	Biochemistry by Satyanarayan	Classroom teaching
	Mechanisms of enzyme action, active sites, enzyme specificity	3	Outlines of Biochemistry by Conn and Stumf	Classroom teaching
	Effect of pH, temperature, substrate concentration on enzyme activity	3	Biochemistry by Satyanarayan	Classroom teaching
	Enzyme kinetics, Michealis-Menten equation	2	Outlines of Biochemistry by Conn and Stumf	Classroom teaching
	Types of enzyme inhibitions: Competitive, Non-competitive, Uncompetitive, allosteric modulators, Co-factors, zymogens.	4	Outlines of Biochemistry by Conn and Stumf	Classroom teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. SAMEER A. S. MAPAR_____DEPARTMENT: BIOTECHNOLOGY_____

CLASS: S. Y. B. Sc_____SEMESTER: ____IV_____MONTH: NOV. TO MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Gain knowledge of natural product chemistry and related acquired skills.
- Understand the principle, working, and applications of various chromatographic techniques used for the natural product analysis.
- Distinguish the various classes of natural products and their organic synthesis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 402, II, NATURAL PRODUCT CHEMISTRY	Natural Product Chemistry: Primary and secondary metabolites. Classification of natural products based on biosynthesis	2	College Organic Chemistry - III	Classroom teaching
	Classification of natural products based on structure-Alkaloids, Phenolics, Essential oils and Steroids	4	College Organic Chemistry – III, Plant Physiology by Taiz and Zeiger	Classroom teaching
	Structure determination of natural products, Commercial synthesis of natural products	3	College Organic Chemistry - III	Classroom teaching
	Chromatographic separation of natural products: Gas Chromatography and its applications. Liquid Chromatography: HPLC and its applications	4	Techniques in Biochemistry and Molecular Biology by Wilson and Walker	Classroom teaching
	HPTLC for separation and analysis of natural products	2	Techniques in Biochemistry and Molecular Biology by Wilson and Walker	Classroom teaching

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: I MONTH: JULY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: To impart knowledge of handling of basic Analytical Techniques along with Methods of Separation.
The learners will be able to : Gain the principle concepts in using analytical and preparatory techniques.

Learn various analytical techniques like Chromatography and Colorimetry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 102 BASIC CHEMISTRY II UNIT III ANALYTICAL TECHNIQUES	Methods of Seperation -Precipitation, Filtration, Distillation and Solvent Extraction.	06	Fundamentals of Analytical chemistry, 7th edition, skoog, West, Holler and Crouch	CHALK BOARD METHOD, TEACHING AIDS, PROJECTOR
	Analytical Techniques Chromatography - Definition, Principles, Types	02	SAME AS ABOVE	CHALK BOARD METHOD, TEACHING AIDS
	Introduction to Paper Chromatography, Thin Layer Chromatography, Column Chromatography and its Applications.	03	SAME AS ABOVE	CHALK BOARD METHOD, TEACHING AIDS, PROJECTOR
	Colorimetry - Principle, Beer-Lambert's Law, Measurement of Extinction, Derivation of E = kcl, Limitations of Beer-Lambert's Law,	03	Instrumental Methods of Chemical Analysis, Gurdeep Chatwal and Sham Anand	CHALKBOARD METHOD, TEACHING AIDS
	Filter Selection	01	Fundamentals of Analytical chemistry, 7th edition, skoog, West, Holler and Crouch	CHALKBOARD METHOD, TEACHING AIDS

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: II MONTH: DECEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: To acquaint students Knowledge of Redox reaction.
The learners will be able to : Understand the relationship between oxidation and reduction.

Learn to assign oxidation numbers to different elements and compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 202 PHYSICAL CHEMISTRY UNIT III OXIDATION REDUCTION REACTIONS	Principles of Oxidation & Reduction Reactions Oxidising and Reducing Agents, Oxidation Number	02	XI STD MAH.STATE BOARD TEXT BOOK	CHALKBOARD METHOD, TEACHING AIDS
	Rules to assign Oxidation Numbers with examples Ions like Oxalate, Permanganate and Dichromate	06	SAME AS ABOVE	CHALKBOARD METHOD, TEACHING AIDS,
	Balancing Redox Reactions by Ion Electron Method	05	SAME AS ABOVE	CHALKBOARD METHOD, TEACHING AIDS
	Oxidation, Reduction, Addition and Substitution and Elimination Reactions.	02	SAME AS ABOVE	CHALKBOARD METHOD, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: II MONTH: DECEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: To acquaint the students with concepts of Ecology and Environment
The learners will be able to : Understand the interconnection between Environment and Ecology.

Learn the impact of environmental degradation on human life and the concept of Sustainable development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 207 GLOBALIZATION, ECOLOGY AND SUSTAINABLE DEVELOPMENT UNIT II ECOLOGY AND SUSTAINABLE DEVELOPMENT	Importance of Environment Studies in the current developmental context;	03	Foundation Course – II Manan Prakashan	GROUP DISCUSSION, TEACHING AIDS
	Understanding concepts of Environment, Ecology and their interconnectedness;	03	SAME AS ABOVE	GROUP DISCUSSION, TEACHING AIDS,
	Environment as natural capital and connection to quality of human life;	04	SAME AS ABOVE	TEACHING AIDS
	Environmental Degradation causes and impact on human life; Sustainable development, concept and components; poverty and environment	05	SAME AS ABOVE	TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: I MONTH: JULY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The aim of this course is to enlighten students about various microbial techniques.
The learners will be able to: Understand different microscopes and their applications.

Differentiate between different stains and dyes along with types of them.

Learn variety of staining techniques used in the field of microbiology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT104: MICROBIAL TECHNIQUES UNIT I: MICROSCOPY AND STAINS	Microscope- Simple and Compound: Principle. Parts, functions and applications.	04	Prescott's microbiology by Wiley, Sherwood and Woolverton	CHALK BOARD METHOD, TEACHING AIDS
	Dark field and Phase contrast microscope	03	SAME AS ABOVE	TEACHING AIDS, PROJECTOR
	Stains and staining solutions-Definition of dye and chromogen. Structure of dye and chromophore.	03	Fundamental principles of bacteriology, A.J.Salle	CHALK BARD METHOD
	Functions of mordant and fixative. Natural and synthetic dyes.	02	SAME AS ABOVE	PROJECTOR, CHALK BOARD METHOD
	Simple staining, Differential staining and acid fast staining with specific examples	03	SAME AS ABOVE	TEACHING AIDS, PROJECTOR, CHALK BOARD METHOD

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: F.Y.B.Sc SEMESTER: II MONTH: DECEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The objective of this course is to make students aware of the branches of genetics and its importance.
The learners will be able to: Understand the genetics structure of populations.

Learn the genetic variations and its measurements at protein and DNA level.

Gain knowledge about various factors that lead to study of population genetics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT204: GENETICS UNIT III: POPULATION GENETICS	Genetic structure of populations – genotypic frequencies and allelic frequencies,	05	IGenetics: A Mendelian approach, P. J. Russell	CHALK BOARD METHOD
	Hardy- Weinberg law and its assumptions	03	SAME AS ABOVE	CHALK BOARD METHOD
	Genetic variations in populations- Measuring genetic variation at protein level and measuring genetic variations at DNA level	03	SAME AS ABOVE	CHALK BOARD METHOD, TEACHING AIDS
	Natural Selection. Genetic Drift Speciation Role of population genetics in Consevation biology	04	SAME AS ABOVE	CHALK BOARD METHODS, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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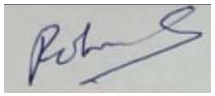

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: F.Y.B.Sc. SEMESTER: I MONTH: SEP-DEC ACADEMIC YEAR: 2018-19
LEARNING OBJECTIVE/S: To acquaint students with concepts of stereochemistry.
The learners will have: acquired knowledge of the structural isomers and stereoisomers of different types and their representation using projection formulae.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-2 Unit-1: Stereochemistry	Isomerism – Types of Isomerism: Constitutional Isomerism (Chain, Position and Functional) and Stereoisomerism, Chirality	15	Organic Chemistry by Bahl and Bahl	Chalk board, 3D models
	Geometric Isomerism and Optical Isomerism: Enantiomers, Diastereomers, and Racemic mixtures Cis-Trans, Threo, Erythro and Meso isomers. Diastereomerism (Cis-Trans Isomerism) in Alkenes and Cycloalkanes (3 and 4 membered ring)		Organic Chemistry by Paula Bruicel	
	Conformation: Conformations of Ethane. Difference between Configuration and Conformation		Stereochemistry of organic compounds by P.S. Kalsi	
	Configuration, Asymmetric Carbon Atom, Stereogenic/ Chiral Centres, Chirality, Representation of Configuration by —Flying Wedge Formula			
	Projection formulae – Fischer, Newman and Sawhorse. The Interconversion of the Formulae			

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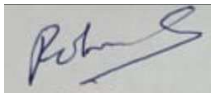
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT- 15



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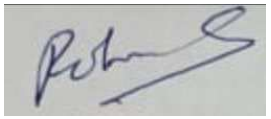
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: F.Y.B.Sc. SEMESTER: I MONTH: SEP-DEC ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: to acquaint students with DNA replication, repair and genetic engineering.
The learners will have: developed an understanding of different types of mutations and mutation repair mechanisms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-6 Unit-2: Mutation and DNA Repair	Definition and Types of Mutations	15	Genetics – B.D. Singh	Chalkboard
	Mutagenesis and Mutagens. (Examples of Physical, Chemical and Biological Mutagens)		Genetics – Peter Russell 5th edition	
	Types of Point Mutations		Genetic Engineering – Sandhya Mitra	
	DNA REPAIR. Photoreversal, Base Excision Repair, Nucleotide Excision Repair, Mismatch Repair, SOS Repair and Recombination Repair			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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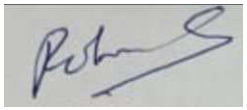
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: F.Y.B.Sc. SEMESTER: II MONTH: NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To acquaint the students with fundamentals on nucleic acids.
The learners will have: Acquired knowledge about nucleic acids types, their components and properties.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 3 - Biomolecules: Nucleic Acids	Structure, Function of Nucleic Acids	15	Fundamentals of Biochemistry by Jain & Jain 6th edition	Chalkboard method
	Properties and Types of DNA, RNA		Biochemistry by Satyanarayan 3rd edition	PowerPoint presentation
	Structure of Purine and Pyrimidine Bases Hydrogen Bonding between Nitrogenous Bases in DNA		Biochemistry by Conn & Stumpf 5th edition	
	Differences between DNA and RNA			
	Structure of Nucleosides, Nucleotides and Polynucleotides			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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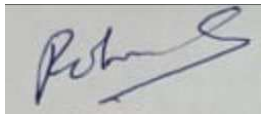
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: F.Y.B.Sc

SEMESTER: II MONTH: December - April ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- acquaint students with Physiological Processes in Plants and Animals
- impart the knowledge of Physiology and Ecology



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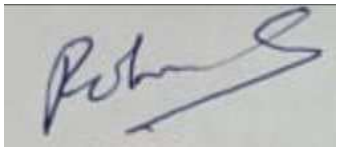
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VII **Unit I** **Globalisation and Indian Society and Human Rights**	**Reaction Kinetics:** Rate of Reaction, Rate Constant, Measurement of Reaction Rates Order & Molecularity of Reaction, Integrated Rate Equation of First and Second order reactions (with equal initial concentration of reactants). (Numericals expected) **Determination of Order of Reaction by** a) Integration Method b) Graphical Method c) Ostwald's Isolation Method d) Half Time Method. (Numericals expected).	15	11th std. Chemistry part I textbook	Blackboard PowerPoint presentation Infographics Mind Map

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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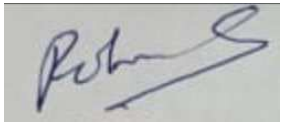
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: F.Y.B.Sc

SEMESTER: II MONTH: December- April ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- acquaint the students with concepts of Globalization, Ecology and Environment
- impart knowledge of Globalization make students aware about the Problems in Society



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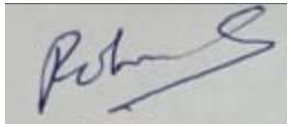
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VII **Unit I** **Globalisation and Indian Society and Human Rights**	Globalisation and Indian Society Understanding the concepts of liberalization, privatization and globalization;Growth of information technology and communication and its impact manifested in everyday life; Impact of globalization on industry: changes in employment and increasing migration; Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides. **Human Rights-**Concept of Human Rights; origin and evolution of the concept; The Universal Declaration of Human Rights;Human Rights constituents with special reference to Fundamental Rights stated in the Constitution	15	Foundation course-II II	PowerPoint presentation Infographics Mind Map Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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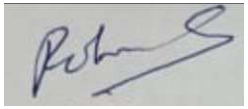
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: F.Y.B.Sc

SEMESTER: I MONTH: August - November ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- understand the multi-religious, multilingual nature and caste dimension in Indian society.
- acquaint the students with concepts of Societal Awareness
- impart knowledge of Society and make students aware about the Problems in Society
- understand the pluralistic nature of Indian society
- understand the multi-religious, multilingual nature and caste dimension in Indian society
- bring out the significance of gender as a demographic variable
- analyze the regional variations and problems of rural, urban and tribal areas.



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VII Unit I Overview of Indian society	**Introduction overview of Indian society** **Objectives** **Understand the multi-cultural diversity of Indian society through its demographic composition of India** **Population distribution according to religion** **Multi-linguism** **Caste system in India** **Gender- A Demographic analysis** **Regional variations of urban,rural and tribal areas and its characteristics**	15	Foundation course-I sem I & II Pg 5	PowerPoint presentation Infographics Mind Map

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: M.Sc. PART 1 SEMESTER: **II** MONTH: DECEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: To impart knowledge of biosafety and risk assessment of products derived from biotechnology and regulation of such products.
The learners will be able to : Gain knowledge of biosafety and risk assessment of products derived from recombinant DNA.
Learn to identify the role of the Biosafety Professional in Biomedical Research Laboratories.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT 204 IPR & BIOSAFETY UNIT IV BIOSAFETY	Historical Background; Introduction to Biological Safety Cabinets; Primary Containment for Biohazards;	03	Laboratory Biosafety Manual, 3rd ed.(WHO)	CHALKBOARD METHOD, TEACHING AIDS, PROJECTOR
	Biosafety Levels of Specific Microorganisms; Recommended Biosafety Levels for Infectious Agents and Infected Animals;	03	SAME AS ABOVE	CHALKBOARD METHOD, TEACHING AIDS, PROJECTOR
	Biosafety guidelines - Government of India;	02	SAME AS ABOVE	CHALKBOARD METHOD, TEACHING AIDS,PROJECTOR
	Definition of GMOs & LMOs; Roles of Institutional Biosafety Committee, RCGM, GEAC etc. for GMO applications in food and agriculture;	04	SAME AS ABOVE	CHALKBOARD METHOD, TEACHING AIDS, PROJECTOR
	Environmental release of GMOs; Risk Analysis; Risk Assessment; Risk management and communication.	03	SAME AS ABOVE	CHALKBOARD METHOD, TEACHING AIDS, PROJECTOR

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: M.Sc. SEMESTER: I MONTH: AUGUST ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The aim of this course is to enlighten students about various immunotechniques.
The learners will be able to: Understand different immunotechniques involved in generation of antibodies.

Learn the principles of histochemical techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT104: BIOCHEMICAL AND BIOPHYSICAL TECHNIQUES UNIT IV: HISTOCHEMICAL AND IMMUNOTECHNIQUES	Antibody generation	02	Monoclonal Antibody Technology: The Production and Characterization of Rodent and Human Hybridomas, Alisa Campbell	CHALK BOARD METHOD, TEACHING AIDS
	blotting techniques	03	SAME AS ABOVE	TEACHING AIDS, PROJECTOR
	Immunoprecipitation, Flow cytometry and immunofluorescence	05	Principles and Techniques of Biochemistry and Molecular Biology,7th	CHALK BARD METHOD

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			edition Wilson K.M., Walker J.M.	
	detection of antigens in living cells	02	SAME AS ABOVE	PROJECTOR, CHALK BOARD METHOD
	in situ localization by techniques such as FISH and GISH.	03	SAME AS ABOVE	TEACHING AIDS, PROJECTOR,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: M.Sc. SEMESTER: II MONTH: DECEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The aim of this course is to enlighten students about Intellectual property rights.
The learners will be able to: Understand different terminologies used in IPR.

Learn to relate IPR with Biotechnology inventions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT204: IPR AND BIOSAFETY UNIT I: INTRODUCTION TO INTELLECTUAL PROPERTY	Patents, Trademarks, Copyright & Related Rights, Industrial Design, Traditional Knowledge, Geographical Indications	05	Ganguli, P. (2001). Intellectual Property Rights: Unleashing the Knowledge Economy. Tata McGraw-Hill Publishing Company	CHALK BOARD METHOD, TEACHING AIDS
	Protection of New GMOs; International framework for the protection of IP	04	SAME AS ABOVE	TEACHING AIDS, PROJECTOR
	Biotechnology & the law: objective, evolution, basic structure of gene techniques, applications	03	David Castle - The Role of Intellectual Property Rights in	CHALK BARD METHOD

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			Biotechnology Innovation (2011)	
	commercial potential of biotech inventions, rational for IPR protection.	03	SAME AS ABOVE	PROJECTOR, CHALK BOARD METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: M.Sc. SEMESTER: III MONTH: JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The aim of this course is to enlighten students about culture media and cryopreservation techniques used in ATC
The learners will be able to: Understand structure and functions of cultured cells.

Learn about contamination and cryopreservation of animal cells.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSBT301: PTC AND ATC UNIT III: ATC	Biology of cultured cells,	04	Culture of Animal Cells : A Manual Of Basic Techniques (4TH Edition, 2000), R. Ian Freshney	CHALK BOARD METHOD, TEACHING AIDS
	Culture vessels, Culture Media	03	SAME AS ABOVE	TEACHING AIDS, PROJECTOR
	Microbial contamination, cross contamination.	05	Principles and Practice of Animal Tissue Culture (2007), SudhaGangal	CHALK BARD METHOD
	Cryopreservation	03	SAME AS ABOVE	PROJECTOR, CHALK BOARD METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: M.Sc. PART-I SEMESTER: I MONTH: AUGUST ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To have insight into storage of carbohydrates, their structure and functions
The learners will have: developed an understanding of storage of carbohydrates, their structure and functions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 1 - Storage of Carbohydrates- Structure and Function	Starch and Glycogen, Cellulose, Chitin, Glycosaminoglycans- Heparin	15	Lehninger - Principles of Biochemistry 5th Edition	Chalk board method
	Chondroitin sulphate, Dermatan sulphate, Keratan sulphate		Biochemistry by Jeremy Berg 7th Edition	
	Formation structure and functions of Eicosanoid: Prostaglandins and Thromboxanes		Fundamentals of Biochemistry by Voet & Voet 3rd edition	
	Glycoproteins (N-, O-, GPI- linked and proteoglycans) & Glycolipids, and Lectins.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: M.Sc. PART-I SEMESTER: I MONTH: AUGUST ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: to acquaint the students with neurobiology and neurochemistry.
The learners will have: gained knowledge of anatomy of nervous system, neuronal processes associated with special senses and neurochemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 4 – Neurobiology-neurochemistry	Structure and functions of neuron	15	Guyton, Text book of Medical Physiology 12th edition	Chalk board method
	Types and physiologic anatomy of the Synapse, transmission of nerve impulses			PowerPoint presentation
	Ion channels, neurotransmitters and neuropeptides, neurotoxins			
	Electrical events during neuronal excitation and inhibition			
	Special senses - taste, vision, odour, hearing			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: M.Sc. PART-II SEMESTER: III MONTH: AUGUST ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To acquaint the students with fundamentals of animal tissue culture.
The learners will have: comprehended the fundamentals of animal tissue culture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 3 – Animal tissue culture basics	Biology of cultured cells	15	Culture of animal cells by Ian Freshney 5th edition	Chalk board method
	Culture vessels, Culture Media			PowerPoint presentation
	Microbial contamination, cross contamination			
	Cryopreservation			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: M.Sc. PART-II SEMESTER: III MONTH: AUGUST ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To acquaint the students with techniques of animal tissue culture.
The learners will have: acquired knowledge of techniques of animal tissue culture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 4 – Animal tissue culture techniques	Primary culture: Types, isolation of tissues, culturing of different cells	15	Culture of animal cells by Ian Freshney 5th edition	Chalk board method
	Cell lines: Development, Subculture and propagation, immortalization of cell line, cell line designation, selection of cell lines, routine maintenance			PowerPoint presentation
	Cytotoxicity Transformation			
	Culture of tumour cells			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: M.Sc. PART-II SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: to acquaint the students with the basics of nanotechnology and nanomaterial synthesis and characterization.
The learners will have: developed an understanding of the basics of nanotechnology and nanomaterial synthesis and characterization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 1 – Introduction to nanotechnology	Introduction	15	Nanotechnology by Sulabha Kulkarni	Chalk board method
	Synthesis of nanomaterials, biological methods, use of microbial system & plant extracts, use of proteins & templates like DNA		Cao - Nanostructures and Nanomaterials	PowerPoint presentation
	Characterization of nanomaterials, analysis techniques			
	Properties of nanomechanical, optical, magnetic properties, electrical conductivity, thermal conductivity			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: M.Sc. PART-II SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: to acquaint the students with the applications of nanotechnology in various fields.
The learners will have: comprehended the applications of nanotechnology in various fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 4 – Applications of nanomaterials	Application of nanomaterials in food, cosmetics, agriculture, environment management	15	Nanotechnology by Sulabha Kulkarni	Chalk board method
				PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA PATIL DEPARTMENT: BIOTECHNOLOGY

CLASS: S.Y.B.Sc SEMESTER: IV MONTH: DECEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: The objective of this course is to have a firm foundation of the fundamentals and applications of current Chemical Theories for the Physical World.
The learners will be able to : Understand the different aspects of Analytical Chemistry.

Gain knowledge about various separation techniques.

Learn the benefits and limitations of different sampling strategies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT402 APPLIED CHEMISTRY-II UNIT I SAMPLING AND SEPARATION TECHNIQUES	Sampling : Importance of Sampling and Sampling Techniques Types of Sampling - Random and Non-Random Sampling of Solids, Liquids and Gases.	06	Text Book of T.Y. B.Sc Analytical Chemistry Revised Syllabus	CHALK BOARD METHOD, TEACHING AIDS, PROJECTOR
	Separation Techniques : Types of Separation Techniques - Filtration, Zone Refining, Distillation, Vacuum Distillation.	03	S.Y.B.Sc Analytical Chemistry Text Book- Sheth Publishers	CHALK BOARD METHOD, TEACHING AIDS, PROJECTOR
	Solvent Extraction - Partition Coefficient and Distribution Ratio, Extraction Efficiency, Separation Factor,	02	SAME AS ABOVE	CHALK BOARD METHOD, TEACHING AIDS
	Role of Complexing Agents, Chelation, Ion Pair Formation, Solvation, and Soxhlation.	02	SAME AS ABOVE	CHALK BOARD METHOD, TEACHING AIDS
	Centrifugation - Basic Principles of Sedimentation.	02	Fundamentals of Bioanalytical Techniques and	CHALK BOARD METHOD, TEACHING AIDS

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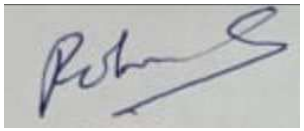
			Instrumentation - A. K.SRIVASTAVA	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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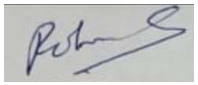
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: S.Y.B.Sc

SEMESTER: III MONTH: July - October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- check on harmful biological agents, toxins, chemicals, and radiation.
- understand the importance of ensuring public and environmental safety.
- aware of the rules, regulations, and monitoring bodies



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper V Unit IV Biosafety in Biotechnology	**Regulating Food and Food Ingredients.** **Chymosin,Tryptophan,Bovine somatotropin** **Genetically modified crops** **Genetically engineered livestock** **Contemporary issues in Bioethics** **Concepts on biosafety in Biotechnology** **Regulating rDNA technology** **Deliberate release of GMOs**	15	Molecular Biotechnology -Principles and Applications of Recombinant DNA Glick, B.R, Pasternak, J.J Patten, C.L 3rd edition ASM press pg 903-910, 898-901 Biosafety in Microbiological and Biomedical Laboratories - 5th Edition, L. Casey Chosewood Deborah E. Wilson U.S. Department of Health and Human Services Centers for Disease Control and Prevention National Institutes of Health. Centers for Disease Control and Prevention National Institutes of Health	Mind map PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: FYBSc SEMESTER: I

MONTH: July –August 2018 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: Objective of this course is to acquaint student with concept of Biodiversity with respect to Plant, Animals and Microorganism. The learners will be able to: Discuss origin of Life, Biodiversity. Explain Classification of Plants, Animals and Microorganism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3: Basic Life Sciences-I: Biodiversity and Cell Biology. Unit 1: Origin of Life and Biodiversity (Animals, Plants, Microorganisms)	Origin of Life, Chemical and Biological Evolution, Origin of Eukaryotic Cell.	1	Cell Biology, Genetics, Molecular Biology, Evolution and Ecology by P.S. Verma.	Chalk and Board ,
	Concept of Biodiversity, Taxonomical, Ecological and Genetic Diversity & its Significance	2	Cell Biology, Genetics, Molecular Biology, Evolution and Ecology by P.S. Verma.	Chalk and Board Projector (power point presentation)
	Introduction to Plant Diversity: Algae, Fungi, Bryophyte, Pteridophytes, Gymnosperms and Angiosperms.	4		Chalk and Board
	Introduction to Animal Diversity: Non-Chordates (with at least one representative example). And chordates	4	Invertebrate Zoology by Jordan and Verma.	Chalk and Board. Projector (power point presentation)
	Introduction to Microbial Diversity: Archaebacteria, Eubacteria, Blue-green Algae, Actinomycetes, Eumycota. Habitats, Examples and Applications.	4	Microbiology by Pelczar.	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: FYBSc SEMESTER: II

MONTH: January- February 2019 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: To acquaint the students with basic concepts of Ecosystem and Interactions.
The learners will be able to: Explain components, and importance and different types of Ecosystem. Summarize different types of biogeochemical cycles and interactions within Ecosystem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Life Science-I: Physiology and Ecology. Unit 3:Ecosystem and Interactions	Ecology and Biogeography: Ecosystems, Definition and Components.	1	Cell Biology, Genetics, Molecular Biology, Evolution and Ecology by P.S. Verma.	Chalk and Board
	Structure and functions of Ecosystems. Aquatic and Terrestrial Ecosystems, Biotic and Abiotic Factors.	2	Same as above	Chalk and Board Projector (power point presentation)
	Tropical Levels, Food Chain and Food Web.	2	Same as above	Chalk and Board Projector (power point presentation)
	Ecological Pyramids (Energy, Biomass and Number)	2	Same as above	Chalk and Board Projector (power point presentation)
	Nutrient Cycle and Biogeochemical Cycles: Water, Carbon, Oxygen, Nitrogen and Sulphur.	4	Same as above	Chalk and Board Projector (power point presentation)
	Interactions: Commensalism, Mutualism, Predations and Antibiosis, Parasitism.	4	Cell Biology, Genetics, Molecular Biology,	Chalk and Board

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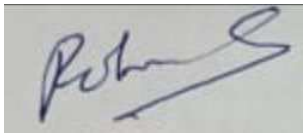
			Evolution and Ecology by P.S. Verma.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: MSc-II SEMESTER: III

MONTH: July –August 2018 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: Objective of this course is to provide student with the basic understating of principles of developmental biology.
The learners will be able to: Understand principles of developmental biology. Explain the events during fertilization, sperm antigen and their functional significance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4:Developmental Biology. Unit I	Human Embryonic development: Events during Fertilization.	5	Gilbert, S. F. (2010). Developmental Biology, 9th Edition. Massachusetts USA: Sinauer Associates, Inc, Sunderland.	Chalk and board & Projector power point presentation.
	In-vitro fertilization	2	Gilbert, S. F. (2010). Developmental Biology, 9th Edition. Massachusetts USA: Sinauer Associates, Inc, Sunderland.	Chalk and board & Projector power point presentation.
	Zonapellucidaa, glycoprotein, Oelemma protein and their role in fertilization.	4	Same as above	Chalk and board & Projector power point presentation.
	Sperm antigen and their functional significance, Molecular and Biochemical events during sperm function.	4	Same as above	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: MSc-II SEMESTER: IV

MONTH: February –March 2019 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: To provide student with the basic understanding of Biostatistics and to use various tools to analyze the data.
The learners will be able to: Revise the basic concepts of biostatistics and to learn the various tools to analyze the data.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Biostatistics Unit I.	Statistical population, sample from population.	1	BK Mahajan, Methods in Biostatistics (7th Edition), published December 1st 2008 by JP Medical Ltd.	Chalk and Board ,
	Random sampling and systemic sampling.	3	BK Mahajan, Methods in Biostatistics (7th Edition), published December 1st 2008 by JP Medical Ltd.	Chalk and Board , Projector (Power point presentation)
	Mean Median and Mode.	2	Same as above	Chalk and Board
	Standard deviation.	4	Same as above	Chalk and Board Projector (Power point presentation)
	Confidence intervals	1	Same as above	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: MSc SEMESTER: II

MONTH: July –August 2018 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: To provide student with the basic understanding of Biostatistics and to use various tools to analyze the data.
The learners will be able to: Revise the basic concepts of biostatistics and to learn the various tools to analyze the data.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Biostatistics and Bioinformatics. Unit 3: Biostatistics.	Introduction and Scope of Statistics in biological studies and basic concepts.	1	BK Mahajan, Methods in Biostatistics (7th Edition), published December 1st 2008 by JP Medical Ltd.	Chalk and Board ,
	Collections of data, by different sampling methods: simple random sampling stratifies random sampling and systemic sampling.	3	BK Mahajan, Methods in Biostatistics (7th Edition), published December 1st 2008 by JP Medical Ltd.	Chalk and Board , Projector (Power point presentation)
	Measure of central tendency; Mean, Median and Mode.	2	Same as above	Chalk and Board
	Measures of Dispersion: Variance/ standard deviation, coefficient of variation and standard error.	4	Same as above	Chalk and Board
	Confidence limits for Mean and proportions	1	Same as above	Chalk and Board
	Probability and Basic concepts: Normal and binomial distribution. Correlation and regression analysis for a bivariate data: Scatter diagram.	4	S.P Gupta, Statistical Methods, (45th Revised Edition), Publisher SCHAND.	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: SYBSc SEMESTER: III

MONTH: June –July 2018 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: Objective of this is to have a firm foundation in the fundamental of cell Biology with respect to cell membrane.
The learners will be able to: develop an understanding of Cell Membrane and Explain Structure, Function and different types of transportation across cell membrane.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Cell Biology and Cytogenetics. Unit 2: Cell Membrane	Cell Membrane: Uptake of Nutrients by Prokaryotic Cells, Cell Permeability.	1	Cell and Molecular Biology- Concepts and Experiments- Karp- Wiley International.	Chalk and Board ,
	Principles of Membrane Transport- Transporter and Channels; Active Transport, Passive Transport.	4	Same as above	Chalk and Board
	Types of Transporters; Types of ATP Drive Pumps- Na^+- K^+ Pump.	4	Same as above	Chalk and Board Projector (power point presentation)
	Cell Junctions; Cell Adhesion and Extracellular Material Microvilli; Tight junctions; Gap junctions;	4	Same as above	Chalk and Board Projector (power point presentation)
	Cell Coat and Cell Recognition.	2	Cell and Molecular Biology-De Roberti's- Lippincott Williams & Wilkins.	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: TYBSc SEMESTER: V

MONTH: June –July 2018 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: Objective of this course is to provide student with the basic understanding of Transgenic Animals and to aware them about the different techniques and methodology used for the production of Transgenic Animals.
The learners will be able to: Describe Transgenic Animals. Discuss and explain different methods used for the production of Transgenic Animals. Explain the use and importance of Transgenic Animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Genomics and Molecular Biology Unit 2: Transgenic Animals	Transgenic mice- Methodology- Retroviral method, DNA microinjection, ES method	5	Molecular Biotechnology- Principles and Applications of Recombinant DNA Technology 3rd Edition Glick B.R., Pasternak J.J., Patten C.L.	Chalk and Board , Projector (power point presentation)
	Genetic manipulation with cre-loxP	2	Molecular Biotechnology- Principles and Applications of Recombinant DNA Technology 3rd Edition Glick B.R., Pasternak J.J., Patten C.L.	Chalk and Board Projector (power point presentation)

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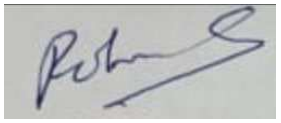
	Vectors for animals cells. Transgenic animals recombination system	4	Same as above	Chalk and Board Projector ((power point presentation)
	Cloning live stock by nuclear transfer	2	Same as above	Chalk and Board
	Green Fluorescent Protein	1	Same as above	Chalk and Board
	Transgenic Fish	1	Same as above	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15.



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: TYBSc SEMESTER: VI

MONTH: February-March 2019 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: To acquaint the students with basic concepts of toxicology, cause and treatment of poisoning.
The learners will be able to: Understand the term in basic toxicology. Discuss Causes allergy to drugs and effects of prolonged drug administration for e.g on organ and effect on reproductive system. Understand Deliberate and Self-poisoning and explain the principles of treatment for the same. Explain principles of treatment for specific poisonings with examples: heavy metals, herbicides, pesticides, biological substances and incapacitating agents.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Basic Pharmacology and Neurochemistry. Unit 3: Basic Toxicology and Regulatory Toxicology	Background Definitions. Toxicology Causation: Degrees of certainty Classification	2	Clinical Pharmacology Bennet,P.N. Brown, M.J, Sharma, P 11th edition Elsevier.	Chalk and Board Projector (power point presentation)
	Causes Allergy in response to drug and effect of prolonged administration.	2	Clinical Pharmacology Bennet,P.N. Brown, M.J, Sharma, P 11th edition Elsevier.	Chalk and Board Projector ((power point presentation)
	Adverse effects of drugs on reproduction	1	Clinical Pharmacology Bennet,P.N. Brown, M.J, Sharma, P 11th edition Elsevier.	Chalk and Board Projector (power point presentation)
	Deliberate and accidental self-poisoning. Principles of treatment of poison- specific measures and general measures	2	Clinical Pharmacology Bennet,P.N. Brown, M.J,	Chalk and Board Projector (power point presentation)

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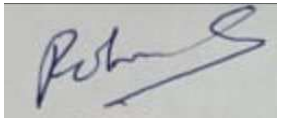
			Sharma, P 11th edition Elsevier.	
	Specific poisoning by cyanide, methanol, ethylene glycol, hydrocarbon, volatile solvents, heavy metals, Nonmedical use of drugs	4	Clinical Pharmacology Bennet,P.N. Brown, M.J, Sharma, P 11th edition Elsevier.	Chalk and Board Projector (power point presentation)
	Herbicides and pesticides, biological substances. Incapacitating agent.	4	Clinical Pharmacology Bennet,P.N. Brown, M.J, Sharma, P 11th edition Elsevier.	Chalk and Board Projector ((power point presentation))

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15.



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sneha Shriram More. DEPARTMENT: Biotechnology CLASS: TYBSc SEMESTER: VI

MONTH: January –February 2019 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: the objective of this unit is make the student aware about the Neurochemistry of Brain, in terms of Neuronal pathways.
The learners will be able to: Explain anatomy and functioning of the brain, neuronal pathways, and propagation of nerve impulses. Neuronal excitation and inhibition. Synapses and gap junctions. Explain about neurotoxins and neurotransmitters.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Anatomy and Functioning of the brain	2	Biochemistry Metzler, D.E. Elsevier.	Chalk and Board Projector (power point presentation)

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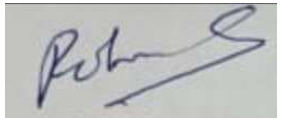
Paper 3: Basic pharmacology and Neurochemistry. Unit IV: Neurochemistry	Neuronal Pathways	2	Biochemistry Metzler, D.E. Elsevier.	Chalk and Board Projector (power point presentation)
	Propagation of nerve impulses	2	Biochemistry Metzler, D.E. Elsevier.	Chalk and Board Projector (power point presentation)
	Neuronal excitation and inhibition	3	Hardin, J., Bertoni, G., Kleinsmith, L.J., & Becker, W.M. (2012). Becker's World of the Cell. Boston: Benjamin Cummings.	Chalk and Board Projector (power point presentation)
	Synapses and gap junctions. Action of Neuro toxins and neurotransmitters.	6	Biochemistry Metzler, D.E. Elsevier.	Chalk and Board Projector (power point presentation)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15.



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TEACHING PLAN (UNIT PLAN)

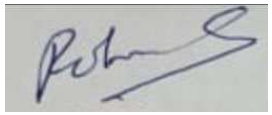
NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: S.Y.B.Sc SEMESTER: III MONTH: JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The objective of this course is to have a firm foundation of the fundamentals and applications of current biophysical theories.
The learners will be able to: Develop an understanding of the different aspects of classical Physics.
Be able to relate principles of Physics to applications and techniques in the field of Biology such as Electrophoresis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT301: BIOPHYSICS UNIT III: ELECTROPHORETIC TECHNIQUES	Migration of Ions in an applied electric field;Factors affecting Electrophoretic Mobility;Moving Boundary Electrophoresis	03	BIOPHYSICAL CHEMISTRY, UPADHYAY,UPADHYAY, NATH	CHALK BOARD METHOD, TEACHING AIDS
	Principle of Electrophoresis; Supporting Matrix;	02	SAME AS ABOVE	TEACHING AIDS, PROJECTOR
	Paper Electrophoresis; AGE; Native and SDS PAGE (reducing and non-reducing, continuous and discontinuous)	05	SAME AS ABOVE	PROJECTOR, CHALK BOARD METHOD, TEACHING AIDS
	IEF and 2D PAGE. Staining and Detection Methods; Gel-Documentation. Applications in Biology	05	SAME AS ABOVE	PROJECTOR, CHALK BOARD METHOD, TEACHING AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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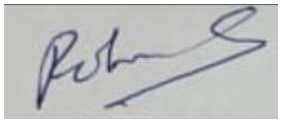
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: S.Y.B.Sc. SEMESTER: III MONTH: JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: to have an insight into mechanism of regulation of gene expression.
The learners will have: learned the fundamentals of mechanisms of regulation of gene expression in both prokaryotes and eukaryotes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5 Unit 3 - Regulation of Gene Expression	In Prokaryotes: In Bacteria: lac Operon of *E. coli*; trp Operon of *E. coli*. In Viruses: Lytic / Lysogenic Regulation	15	iGenetics-Molecular approach by Peter Russell	Chalk board method
	In Eukaryotes: Operons in Eukaryotes; Control of Transcriptional Initiation; Gene Silencing and Genomic Imprinting; Post-Transcriptional Control; RNA Interference			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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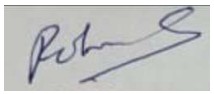
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: to acquaint the students with basics of nanomaterials and polymers.
The learners will have: comprehended with basics of nanomaterials and polymers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit 3 - Polymers and Nanomaterials	Polymers: Introduction to Polymers. Types of Polymers - Monomer, Polymer, Homopolymer, Copolymer, Thermoplastics and Thermosets, Addition and Condensation Polymers (Examples and Uses) Stereochemistry of Polymers. Biodegradable Polymers	15	Textbook of Organic Chemistry for T.Y.B.Sc	Chalkboard method
	Nanomaterials: Introduction to Nanomaterials. Forms of Nanomaterials: Nanoparticles, Nanofilms and Nanotubes Synthesis and Characterization of Nanomaterials. Applications of Nanomaterials		Nanomaterials by B. Viswanathan	PowerPoint presentation
			Nanotechnology by Sulabha Kulkarni	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: to acquaint the students with the fundamentals of bioinformatics and biological databases.
The learners will have: acquired knowledge about the fundamentals of bioinformatics and biological databases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5 Unit 1 - Introduction to Computers and Biological Databases	Computer Basics: Organization of a Computer; I/O Units; Computer Memory; Processor; Binary Arithmetic; Logic Circuit; Architecture; Operating System	15	Choudhuri - Bioinformatics for Beginners	Chalkboard method
	Internet Basics: Connecting to the Internet, E-mail, FTP, www, Difference between www and Internet		Attwood - Introduction to Bioinformatics	PowerPoint presentation
	Biological Databases: Classification of Databases - Raw and Processed Databases; Primary (NCBI), Secondary (PIR) and Tertiary or Composite (KEGG) Databases; Structure and Sequence Databases. Specialized Databases - Protein Pattern Databases; Protein Structure and Classification Databases (CATH/SCOP)		Pevsner - Bioinformatics and Functional Genomics 3rd	
	Genome Information Resources: DNA Sequence Databases Specialized Genomic Resources. Protein Databases based on Composition, Motifs and Patterns			
	Protein Structure Visualization Software			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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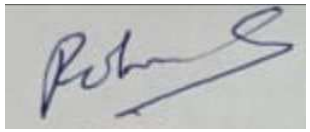
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: to acquaint the students with the sequence alignment techniques.
The learners will have: gained an understanding of the sequence alignment techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5 Unit 2 - BLAST and Sequence Alignment	BLAST and Sequence Alignment: BLAST and its Types; Retrieving Sequence using BLAST	15	Attwood - Introduction to Bioinformatics	Chalk board method
	Pairwise Alignment: Identity and Similarity; Global and Local Alignment; Pairwise Database Searching		Choudhuri - Bioinformatics for Beginners	PowerPoint presentation
	Multiple Sequence Alignment: Goal of Multiple Sequence Alignment; Computational Complexity; Manual Methods; Simultaneous Methods; Progressive Methods; Databases of Multiple Alignment; Secondary Database Searching; Analysis Packages; MSA and Phylogenetic Trees		Pevsner - Bioinformatics and Functional Genomics 3rd	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

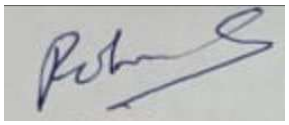
NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: S.Y.B.Sc

SEMESTER: IV MONTH: December - March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to :

- understand importance of sampling and sampling techniques
- understand principles of sedimentation.
- learn solvent extraction techniques
- explain types of separation techniques
- explain the types of sampling



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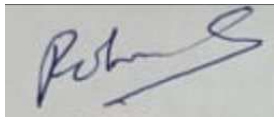
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT I Sampling and Separation Techniques	**Sampling:** Importance of Sampling and Sampling Techniques **Types of Sampling** - Random and Non-Random Sampling of Solids, Liquids and Gases. **Separation Techniques :** **Types of Separation Techniques** -Filtration, Zone Refining, Distillation, Vacuum Distillation. **Solvent Extraction** - Partition Coefficient and Distribution Ratio, Extraction Efficiency, Separation Factor, Role of Complexing Agents, Chelation, Ion Pair Formation, Salvation, and Soxhlation. **Centrifugation** **Basic Principles of Sedimentation.**	15	Vogel's Textbook of Quantitative Chemical Analysis, 6th Edition, 158-208, Text Book of T.Y. B.Sc Analytical Chemistry Revised Syllabus Unit Operation 641-45 of Chemical Engineering, 6th Edition S.Y.B.Sc Analytical Chemistry Text Book-Sheth Publishers Basic Concepts of analytical chemistry- S.M. Khopkar, 77-96 Bioanalytical Techniques, M. L. Srivastava, 67-33	Infographics PowerPoint presentation Mind Map Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: S.Y.B.Sc

SEMESTER: III MONTH: July - October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- understand nucleophile and electrophile groups and their properties.
- define enzyme, apoenzyme, holoenzyme, cofactor (coenzyme)
- define 'micronutrient'
- explain the types and benefits of micronutrient

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I Organic Chemistry	Types of organic reactions - **Addition Reactions, Elimination Reactions, Substitution Reactions** **Essential and Non-essential Elements in Biological Systems.** **Role of Metal Ions in Biological Systems.**	15	Advanced organic chemistry- Reinhard Bruckner Pg. 86-123,129-158,43-65;169-216 Biochemistry- Satyanarayan 4th Edition Pg. 403-421 Textbook of Biochemistry-	Infographics

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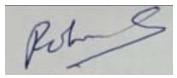
	Metal Coordination in Biological Systems: Enzymes, Apoenzymes, Holoenzymes and coenzymes **Biological Role of Metalloenzymes wrt Myoglobins, Haemoglobin.** **Biological Role of Carboxypeptidases, Catalses, Peroxidases** **Structure and Function :Dioxygen Binding, Transfer and Utilization, Metal Complexes in Medicines.**		Lehninger, 4th Edition Pg. 208-214 Fundamentals of Biochemistry (Jain and Jain) Pg. 343-345 Principles of Biochemistry (McGraw Hill) White et al. Principles of Biochemistry (McGraw Hill) White et al.	PowerPoint presentation Mind Map

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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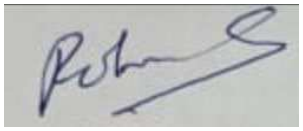
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: S.Y.B.Sc

SEMESTER: IV MONTH: December - March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- understand concept of entrepreneur
- know need and importance of entrepreneurship
- state the meaning of entrepreneurship
- describe the importance of entrepreneurship
- outline the qualities of a successful entrepreneur
- state the functions of an entrepreneur
- distinguish between entrepreneur and promoter
- explain the issues and problems faced by entrepreneur



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VII **Unit I** **Introduction to Entrepreneurship development**	Concept of Entrepreneur; Entrepreneurship; Need and Importance; Factors Influencing Entrepreneurship; Essentials of a Successful Entrepreneur	15	Towards Entrepreneurship- Dr. M. R. Kurup	Mind Map PowerPoint presentation Infographics Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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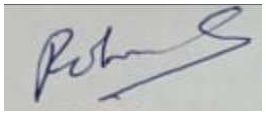

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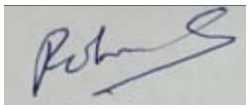
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: S.Y.B.Sc

SEMESTER: IV MONTH: December - March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- understand human resource planning,
- know about location of enterprise
- understand financial planning;
- learn about role of government and financial institutions in entrepreneurship development;
- define characteristics and importance of planning
- describe IPR generation



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VII Unit II Setting-up of an Enterprise and Planning	Location of Enterprise; Real Estate and Human Resource Planning, Financial Planning;Role of Government and Financial Institutions in Entrepreneurship Development; Raising Money from Venture Capitalists, Government Grants, Product Selection and Ideas; Project Planning and Formulation; Project Feasibility Assessment; Regulatory Affairs,.Corporate Laws, Innovation, IPR generation and Protection, Preparation of a Business Plan, Characteristics and Importance of Planning;	15	Towards Entrepreneurship- Dr. M. R. Kurup Handbook of Entrepreneurship Development -Basotia and Sharma	Mind Map PowerPoint presentation Infographics Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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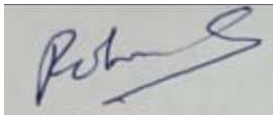

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIKAS L. GUPTA DEPARTMENT: BIOTECHNOLOGY CLASS: F.Y.B.Sc

SEMESTER: III MONTH: July- October. ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- understand some basic concepts of research and its methodologies
- identify appropriate research topics
- select and define appropriate research problem and parameters
- prepare a project proposal (to undertake a project)
- organize and conduct research (advanced project) in a more appropriate manner
- write a research report and thesis
- write a research proposal

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper VII Unit I Introduction to research methodology	**Meaning of Research, Objectives of Research** **Motivation in Research, Types of Research, Research approaches, Significance of Research, Research Methods versus Methodology, Research Process, Criteria of good research, Problems encountered by researchers in India, What is a Research Problem?, Selecting the Problem, Necessity of defining the problem,Technique involved in defining a problem.**	15	Research methodology-CR.Kothari, 3rd Ed. Pg. 1-2	Mind Map PowerPoint presentation Infographics Infographics

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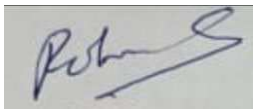
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: FYBSC SEMESTER:II

MONTH: November to March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

Explain the role of body systems and mechanisms in maintaining homeostasis

Discuss about different types of animal tissue culture techniques

Apply the communication skills in day to day life

Apply the knowledge of Scientific writing to read scientific journals, research papers etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 203 Life Sciences-I: Physiology and Ecology Unit II Animal Physiology	Physiology of Digestion Movement of Food and Absorption, Secretary functions of Alimentary Canal, Digestion and Absorption, assimilation in Gut of Mammals Anatomy of Mammalian Kidney, Structure of Nephron, Physiology of Urine Formation and Role of Kidney in Excretion and Osmoregulation	05	Applegate Anatomy and Physiology - Learning System Medical physiology by Guyton	Chalk and board and power point presentation
	Physiology of Respiration, Mechanism of Respiration Principles of Gaseous Exchange in the Blood and Body Fluids	06	Applegate Anatomy and Physiology - Learning System	Chalk and board and power point presentation

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	Blood and Circulation: Blood Composition, Structure and Function of its Constituents Blood Coagulation and Anti-Coagulants Hemoglobin and its Polymorphism Regulation of the Circulation Mechanism and working of Heart in Human.		Medical physiology by Guyton	
	Blood and Circulation: Blood Composition, Structure and Function of its Constituents Blood Coagulation and Anti-Coagulants Hemoglobin and its Polymorphism Regulation of the Circulation Mechanism and working of Heart in Human.	04	Applegate Anatomy and Physiology - Learning System Medical physiology by Guyton	Chalk and board and power point presentation
USBT 205 Biotechnology-I : Tissue Culture &Scientific Writing and Communication Skills Unit II Animal Tissue Culture	**Basics of Animal Tissue Culture** Introduction Cell Culture Techniques, Equipment and Sterilization Methodology.	04	Culture of Animal cells 5th Edition R.Ian Freshney	Chalk and board and power point presentation
	Introduction to Animal Cell Cultures:Nutritional and Physiological: Growth Factors and Growth Parameters. General Metabolism and Growth Kinetics	06	Culture of Animal cells 5th Edition R.Ian Freshney	
	Primary Cell Cultures: Establishment and Maintenance of Primary Cell Cultures of Adherent and Non-Adherent Cell Lines with examples. Application of Cell Cultures	05	Principles and Practice of Animal Tissue Culture Sudha Gangal	

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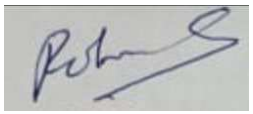
USBT 205 Biotechnology-I : Tissue Culture &Scientific Writing and Communication Skills Unit III Scientific Writing and Communication Skills	**Communication Skills** Introduction to Communication --Elements, Definitions, Scope of Communication and Communication as part of Science Communication Elements --Verbal and Non-Verbal Communications. Principles of Effective Communication, Oral Presentations Scientific Reading, Writing & Presentation	07	Business communication DR. Sushmita Dey Handbook of Science communication Vijay Kumar Singh	Chalk and board and power point presentation
	Scientific Writing Process of Scientific Writing: Thinking, Planning, Rough Drafts and Revising Contents. Introduction to Scientific Reports and Writings Compilation of Experimental Data, Communication Methods in Science, Examples of Scientific and Unscientific Writing. Writing Papers, Reviews, Bibliography Plagiarism--Introduction to Plagiarism, Examples of Plagiarism	08	Scientific Writing._Easy when you know how Jennifer Peat BMJ Books	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: FYBSC SEMESTER:I

MONTH: June to October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

Identify various physical and chemical agents of controlling microorganisms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Basic Life Sciences-II : Microbial Techniques Unit II Sterilization Techniques	Definition : Sterilization and Disinfection. Types and Applications Dry Heat, Steam under pressure, Gases, Radiation and Filteration	7	Microbiology by Pelczar, Chan & Krieg 5th E	Chalk and board
	Chemical Agents and their Mode of Action - Aldehydes, Halogens, Quaternary Ammonium Compounds, Phenol and Phenolic Compounds, Heavy Metals, Alcohol, Dyes, and Detergents	6	Microbiology by Pelczar, Chan & Krieg 5th E	Chalk and board
	Ideal Disinfectant. Examples of Disinfectants and Evaluation of Disinfectant	2	Fundamentals of Microbiology by Frobisher 9th Ed	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: SYBSC SEMESTER: III

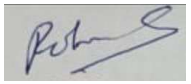
MONTH: June to October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the role of different types of cells, effector molecules and effector mechanisms in immunology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
IMMUNOLOGY UNIT I Effectors of Immune Response	Haematopoiesis; Cells of the Immune System; Primary and Secondary Lymphoid Organs.	10	Immunology by Janis Kuby, 5th edition Kuby Immunology, 7th edition	Chalk and board
	Complement System- Classical, Alternate and Lectin; Regulation and Biological Effects of Complement System; Deficiencies of Complement System	05	Textbook of microbiology by Ananthnarayan and paniker, 8th ed	Chalk and board and power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: TYBSC SEMESTER:V

MONTH: June to October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

Identify various contaminants in food and pharma products

Discuss about microbiological Assays for pharmaceutical products

Describe about Regulatory Microbiological testing in pharmaceuticals

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Component: Biosafety Unit III: Detection and testing of contaminants	Microbial Contamination in food and pharma product; Some common microbial contaminants	06	Pharmaceutical Microbiology - Hugo, W.B, Russell, A.D 8th edition Oxford Black Scientific Publishers	Chalk and board
	Microbiological Assays for pharmaceutical products	03	Pharmaceutical Microbiology - Hugo, W.B, Russell, A.D 8th edition	Chalk and board

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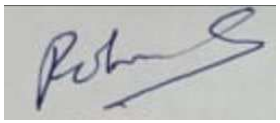
	Regulatory Microbiological testing in pharmaceuticals	03	Pharmaceutical Microbiology - Hugo, W.B, Russell, A.D 8th edition	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLENYS MANUEL DSOUZA DEPARTMENT: BIOTECHNOLOGY CLASS: TYBSC SEMESTER:VI

MONTH: November to March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

Discuss about biofertilizers and their use in agriculture

Discuss about biopesticides and their use in agriculture

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Component: Agri Biotechnology Unit IV: Biofertilizers and Biopesticides	Biofertilizer: Nitrogen-fixing Rhizobacteria - Symbiotic Nitrogen Fixers Nonsymbiotic Nitrogen Fixers Plant Growth Promoting Microorganisms-Phosphate-Solubilizing Microbes (PSM), Phytohormones and Cytokinins, Induced Systemic Resistance	04	Arie Altman, Paul Michael Hasegawa-Plant Biotechnology and Agriculture_ Prospects for the 21st Century- Academic Press (2011	Chalk and board
	Plant Growth Promotion by Fungi-- Mycorrhizae Arbuscular Mycorrhizae	05	Arie Altman, Paul Michael	Chalk and board

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	Ectomycorrhizae**;** Microbial Inoculants -- Inocula, Carriers, and Applications, Monoculture and Co-culture Inoculant Formulations Biocontrol, Polymicrobial Inoculant Formulations		Hasegawa-Plant Biotechnology and Agriculture_ Prospects for the 21st Century- Academic Press (2011	
	Biopesticides – types, Bacillus thuringiensis, insect viruses and entomopathogenic fungi (characteristics, physiology, mechanism of action and application)	03	Travis R. Glare, Maria E. Moran-Diez - Microbial-Based Biopesticides_ Methods and Protocols (2016, Humana Press)	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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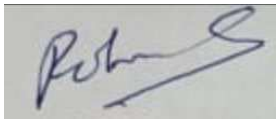

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **F.Y.B.Sc.**

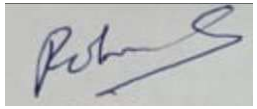
SEMESTER: **I** MONTH: **JULY-OCTOBER** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the classification of Bacteria and their reproduction
- Gain knowledge about the classification, structure and significance of viruses.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3 **Basic Life Sciences-I : Biodiversity and Cell Biology** **Unit III** **Bacteria and Viruses**	Bacteria : Classification, Types, Morphology (Size, Shape and Arrangement)	01	**Microbiology** By Pelczar	Chalk Board
	Bacterial Reproduction and Growth (Binary Fission, Conjugation and Endospore formation)	03		
	Viruses: General Characteristics	02		
	Classification of Plant, Animal and Bacterial Viruses	03		
	Structure and Characterization of Viruses and Significance	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **F.Y.B.Sc.**

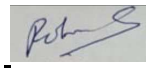
SEMESTER: **II** MONTH: **DECEMBER - MARCH** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the different processes of genetic material transfer in bacteria.
- Gain knowledge on the concept of Transposable elements

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 Life Sciences-II Genetics **Unit II Microbial Genetics**	Genetic analysis in Bacteria- Prototrophs, Auxotrophs. Replica plate technique	02	**Microbiology** By Pelczar And iGenetics by Peter Russell	Chalk Board and Teaching aids- working Models
	Mechanism of Genetic Exchange in Bacteria: Conjugation	05		
	Transformation;	02		
	Bacteriophages: Lytic and Lysogenic Development of Phage.	01		
	Transduction; Generalized Transduction,	01		
	Specialized Transduction	01		
	Bacterial Transposable Elements	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **M.Sc.**

SEMESTER: **I** MONTH: **AUGUST - NOVEMBER** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the role of different effector molecules and effector mechanisms in immunology.
- Gain insights in the antigen processing pathways and their role in immune response.
- Describe the T and B-cell Activation pathways and their role in eliciting immune response

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Immunology **UNIT II Molecular immunology**	T and B cell (antigenic properties, receptors and activation)	05	Goldsby, R. A., Kindt, T. J., Osborne, B. A., & Kuby, J. (2003). Immunology 5th edition. W. H.	Chalk Board
	Generation of antibody diversity,	03		
	MHC – classes, role and experimental evidence	01		
	Antigen presentation- Exogenous and Endogenous pathway	02		
	Non-peptide antigen presentation	01		
	Polymorphism	01		
	Transplantation	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **M.Sc.**

SEMESTER: **I** MONTH: **AUGUST - NOVEMBER** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the role of different effector molecules and effector mechanisms in immunology.
- Gain insights on mucosal membranes and their role in immune response.
- Learn the different cell mediated immune responses and their regulation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Immunology **UNIT IV Effector mechanisms**	Mucosal immunity: Peyer's patches, gut barriers,	06	Fundamental Immunology 5th edition (2003): by William E., Md. Paul, Janeway's Immunobiology 8 Kuby, J. (2003). Immunology 5th edition.	Chalk Board
	oral immunization, Oral tolerance,	01		
	Cytotoxic response, ADCC, NK cells, CTL, Th,	01		
	T cell regulation, Immunoregulation,	02		
	Anergy, tolerance, anti-idiotype,	03		
	Mechanisms of antiviral innate immune response	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **M.Sc.**

SEMESTER: **II** MONTH: **FEBRUARY - APRIL** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the process of tumor progression and effector mechanisms in cancer immunology.
- Gain insights in the therapies for cancer.
- Learn how the immune system and the nervous system are interlinked and can affect the health of an individual.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Immunology **Unit IV Cancer Immunology and Psychoneuroimmunology**	Types of cancer, malignant transformation of cells,	02	Kuby Immunology 5th Edition Maier, S. F., Watkins, L. R., & Fleshner, M. (1994). Psychoneuroimmunology: The interface between behavior, brain, and immunity. *American psychologist*, *49*(12), 1004.	Chalk Board
	Tumour antigens,	02		
	immune response to cancer	01		
	immunotherapy.	01		
	Connections of CNS to immune system and *vice versa.*	02		
	Psychological modulation of immunity, stress and immunity, implication for diseases,	02		
	functional significance: inflammation and acute phase response,	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **M.Sc.**

SEMESTER: **III** MONTH: **AUGUST - NOVEMBER** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept and process of biofilm formation.
- Gain insights on properties of biofilms and their ability to carry out quorum sensing.
- Learn about the different medical device associated infections caused by biofilms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II Medical Microbiology **UNIT IV Biofilms in Medicine**	Introduction, Biofilm structure and phenotype	01	Medical Biofilms (Detection, Prevention and Control) - Jass et al (2003) Wolfe, H. F. (2005). Biofilm plaque formation on tooth and root surfaces. *Periodontology, Stuttgart: Thieme*, 24-30. Donlan, R. M. (2001). Biofilms and device-associated infections. *Emerging infectious diseases*, *7*(2), 277.	Chalk Board
	Biofilm formation process	01		
	Factors affecting biofilm formation	01		
	Properties of biofilms	04		
	Helicobacter Biofilm, *Pseudomonas* Biofilm	02		
	Candida Biofilm, Dental plaque	03		
	Biofilms and device-associated infections	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **M.Sc.**

SEMESTER: **IV** MONTH: **JANUARY – APRIL** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concept and process of Microarray.
- Gain insights on gene expression profiling and bioinformatics tools used for it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Bioinformatics **UNIT III**	Gene expression profiling and its applications.	02	Bioinformatics Methods and Applications: Genomics Proteomics And Drug Discovery 3rd Ed.	Chalk Board Projector for Powerpoint presentation Youtube videos
	Microarray technology and basics.	03		
	Microarray analysis	03		
	organization of data	02		
	SAGE	02		
	Human genome analysis	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **S.Y.B.Sc.**

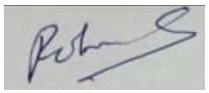
SEMESTER: **III** MONTH: **JUNE - SEPTEMBER** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the role of different effector molecules and effector mechanisms in immunology.
- Gain insights in the antigen processing pathways and their role in immune response.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III Immunology **UNIT II Cell Receptors**	MHC Classes - General Organization and Inheritance;	01	Goldsby, R. A., Kindt, T. J., Osborne, B. A., & Kuby, J. (2003). Immunology 5th edition. W. H.	Chalk Board
	Structures and Peptide Interactions; Class I and II Diversity	01		
	MHC Polymorphism;	01		
	Antigen Presentation - Endocytic and Exocytic Pathways;	03		
	Self MHC Restriction.	02		
	T-cell Receptor Complex: Structure and Activation.	03		
	B-cell Receptor: Structure, Maturation and Activation	03		
	B-T Cell Interaction (B-T cell Cooperation).	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **T.Y.B.Sc.**

SEMESTER: **V** MONTH: **JUNE - SEPTEMBER** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand the concept of cosmetic formulation and application of marine biotechnology in the field of cosmetics.**
- **Gain knowledge about the marine resources used in cosmetic products, available therapies and bioresources.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4- MARINE BIOTECHNOLOGY UNIT-IV MARINE BIORESOURCES AND COSMETICS	Cosmetics from Marine Sources: Scenario of Marine Sources in the Cosmetic Industry, Cosmetics: Definition and Regulations, Cosmeceuticals	02	Kim, S.K. Springer Handbook of Marine Biotechnology; Springer: Berlin, Germany; Heidelberg, Germany, 2015.	Chalk Board
	Target Organs and Cosmetics Delivery Systems, Components of Cosmetics,	03		
	Major Functions of Some Marine Components in Cosmetics and Cosmeceuticals	03		
	Treatments Based on Marine Resources, Products Based on Marine Resources	03		
	Marine Bioresources, Marine Secondary Metabolites, Marine Proteins, Marine Lipids	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **T.Y.B.Sc.**

SEMESTER: **VI** MONTH: **DECEMBER - JANUARY** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of GMP, QA and QC
- Gain clarity regarding the need of Good Manufacturing Practices in pharmaceutical industries.
- Attain knowledge about regulatory requirements and implementation of QA and QC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II- Industrial Microbiology **UNIT IV: QA-QC**	Concept of GMP	01	**Hugo and Russell's Pharmaceutical Microbiology, Seventh Edition**	Chalk Board
	Requirements of GMP implementation	02		
	Documentation of GMP practices	02		
	Regulatory certification of GMP	02		
	Quality Control (QC): Concept of QC	02		
	Requirements for implementing QC	02		
	QA concepts: Concept of QA	02		
	Requirements for implementing	02		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. BASIL D'MELLO** DEPARTMENT: **BIOTECHNOLOGY** CLASS: **T.Y.B.Sc.**

SEMESTER: **VI** MONTH: **January - March** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concept of precision agriculture and its need in modern agriculture
- Gain knowledge about different technologies employed in precision agriculture

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
APPLIED COMPONENT-Agribiotechnology **UNIT I Precision Agriculture and Agriculture systems**	Introduction to Agriculture and Agriculture systems	01	Sustainable Crop Protection under Protected Cultivation by P. Parvatha Reddy	Chalk Board and Power point Presentation projected using LCD projector
	Green house Technology-- Types of green house, importance, functions and features of green house, Design criteria and calculation	02		
	Construction material, covering material and its characteristics, growing media, green house irrigation system. Nutrient management	03		
	Greenhouse heating, cooling and shedding and ventilation system, Computer controlled environment	03		
	Phytotrons, fertigation and roof system	01	Intelligent Environmental Sensing	

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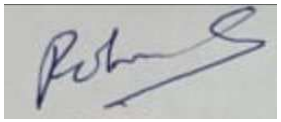
	Precision Cultivation- tools, sensors for information acquisition	02	Henry Leung, Subhas Chandra Mukhopadhyay (eds.)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)NAME OF THE STAFF: Ms. Ashwini Patil
DEPARTMENT: Biotechnology CLASS: F. Y. B.Sc. SEMESTER: I
MONTH: June- October ACADEMIC YEAR: 2018-19

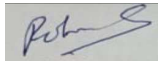
LEARNING OBJECTIVE/S:
The learners will be able to: Learn to classify the inorganic as well as organic compounds.

Get acquainted with IUPAC naming system of organic compounds.

Draw the Structures of the inorganic as well as organic compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Basic Chemistry I **UNIT II Nomenclature and classification**	Nomenclature and Classification of Inorganic Compounds: Oxides, Salts, Acids, Bases, Ionic, Coordination Compounds	4	**Organic chemistry by Stanely and Pine** NCERT 11th and 12th Text book	Flip classroom method
	Alkanes, Alkenes, Alkynes, Cyclic hydrocarbons, Aromatic compounds, Alcohols and Ethers	4		Chalk board method
	Aldehydes and Ketones, Carboxylic acids and its derivatives, Amines, Amides	4		Chalk board method
	Nomenclature and Classification of: Alkyl halides and Heterocyclic compounds	3		Flip classroom method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

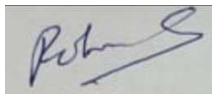
NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: F. Y. B.Sc. SEMESTER: II MONTH: November- March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Learn in detail about classification and properties of amino acids and proteins.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Bioorganic chemistry **Unit II Proteins and amino acids**	Classification, preparation and properties of amino acids, reactions of amino acids	4	Lehninger, principles of biochemistry, 4th edition Textbook of Biochemistry by- Styanarayan, 3rd edition	Flip classroom method
	Titration curve of amino acids, Sorenson's titration, concept of isoelectric pH and zwitterion.	4		Chalk board method
	Proteins classification based on structure and functions Primary structure prediction N-terminal and C-terminal method	6		Flip classroom method
	Glycoproteins	1		Chalk board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: F. Y. B.Sc. SEMESTER: I MONTH: June- October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Learn chemistry of water

Get acquainted with concept behind preparation of standard solutions, and to solve numericals.

Learn concept of buffer and acid-base concept and to solve numericals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Basic Chemistry I Unit II Water and Buffers	Chemistry of Water: Properties of Water, Interaction of Water with solutes (Polar, Non-polar, Charged), hydrophobic effect, role of water in biomolecular structure and function and water as a medium for life	4	**Textbook of Physical chemistry F.Y.B.Sc.** **NCERT 11th std Text book** **Maharashtra state board 11th std Text book**	Chalk board method Flip classroom method
	Solutions: Normality, Molarity, Molality, Mole fraction, Mole concept, Solubility, Weight ratio, Volume ratio, Weight to volume ratio, ppb, ppm, millimoles, milliequivalents Preparation of standard solutions Principle of Volumetric Analysis.	4		Chalk board method
	Acids and Bases: Lowry-Bronsted and Lewis Concepts. Strong and Weak Acids and Bases - Ionic product of Water - pH, pKa, pKb.	2		Chalk board method
	Buffer solutions – Concept of Buffers, Types of buffers, Derivation of Henderson equation for acidic and Basic buffers, Buffer action, Buffer capacity. (Numericals expected.) pH of buffer solution	5		Flip classroom method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: M.Sc. SEMESTER: II MONTH: December - April ACADEMIC YEAR: 2018-`19

LEARNING OBJECTIVE/S:
The learners will be able to: Get insight into the acid base balance in human physiology and mineral metabolism in details.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Developmental Biology **Unit III**	Regulation of acid-base balance, types and functions of acid-base buffers, respiratory mechanism of acid-base balance, renal control of acid base balance	4	Textbook of Physiology, Guyton **Textbook of Human Biochemistry 6 Ed. Aq G. P. Talwar**	Chalk board method
	clinical abnormalities associated with acid base imbalance. Water and electrolyte balance, clinical abnormalities	4		Flip class method
	Mineral metabolism: Dietary macro elements Calcium, Phosphorus, Iron, Magnesium. Trace elements- Iron, Iodine, Zinc, Copper.	7		Flip class method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: M. B.Sc. SEMESTER: II MONTH: December - April ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Get insight into the concept of in-vitro fertilization and embryo transfer technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Developmental Biology **Unit III**	Molecular mechanism of sex hormone action and regulation of gene expression.	3	Developmental Biology; Scott Gilbert; 9th Edition	Chalk board method
	Implantation and endometrium antigens involved in implantation. Immunology of pregnancy	6		Flip class method
	Superovulation, embryo culture and embryo transfer technology.	6		Flip class method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: S. Y. B.Sc. SEMESTER: III MONTH: June- October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Learn the concept and applications of green chemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Chemistry-I **UNIT III Green Chemistry and Synthesis**	Green Chemistry and Synthesis: Introduction to Green Chemistry; Need and Relevance of Green Chemistry; Principles of Green Chemistry	5	Organic chemistry for T.Y.B.Sc. – Himalaya publication	Chalk board method
	Green Synthesis in Industry: Green Materials	3		Chalk board method
	Green Reagents	3		Chalk board method
	Green Solvents and Green Catalysts.	3		Flip classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: T. Y. B.Sc. SEMESTER: V MONTH: June- October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Learn the basic concept of zygote formation and the various stages of the embryonic development.

Acquire the knowledge about pattern formation in embryo and the role of cytoplasmic determinants in pattern formation.

Get acquainted with various model organisms in developmental biology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cell Biology **Unit III: Developmental Biology**	Overview of how the modern era of developmental biology emerged through multidisciplinary approaches	5	Developmental Biology; Scott Gilbert; 9th Edition Principles of Developmental Biology, Lewis Wolpert Developmental Biology, Werner A. Muller	Chalk board method
	Stages of development- zygote, blastula, gastrula, neurula cell fate & commitment – potency- concept of embryonic stem cells	3		Chalk board method Flip classroom
	differential gene expression, terminal differentiation, lineages of three germ layers, fate map	3		Flip classroom
	Mechanisms of differentiation- cytoplasmic determinants, embryonic induction, concept of morphogen, mosaic and regulative development Pattern formation-- axis specification, positional identification.	3		Flip classroom
	Model organisms in Developmental biology	1		Chalk board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Ashwini Patil DEPARTMENT: Biotechnology

CLASS: T. Y. B.Sc. SEMESTER: VI MONTH: November- March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Learn the carbohydrate metabolism in bacteria, plants and animals in detail.

Learn the Biosynthesis and regulation of Cholesterol, disorders related to it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Biochemistry **Unit II Metabolism**	Carbohydrate biosynthesis and its regulation: Peptidoglycan in Bacteria	2	Lehninger, principles of biochemistry, 4th edition	Chalk board method Flip classroom method
	Starch and sucrose in Plants	4		Chalk board method
	Glycogen in Animals	4		Chalk board method
	Biosynthesis and regulation of Cholesterol, Atherosclerosis	5		Flip classroom method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: T.Y.B.Sc SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The aim of this course is to provide students with basic understanding of marine pharmaceutical products, their antimicrobial properties and challenges faced when using marine extremozymes.
The learners will be able to: learn the uses of marine toxins, their antiviral and antimicrobial activity.

Understand pharmaceutical importance of marine drugs.

Gain knowledge of marine extremozymes and their current use as well as challenges of using marine products.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT 504 UNIT II: MARINE DRUGS AND ENZYMES	Drugs from Marine organisms: Pharmaceutical compounds from marine flora and fauna – marine toxins, antiviral and antimicrobial agents	04	Kim, S.K. Springer Handbook of Marine Biotechnology; Springer: Berlin, Germany; Heidelberg, Germany, 2015.	CHALK BOARD METHOD POWERPOINT PRESENTATION
	Approved Marine Drugs as Pharmaceuticals	02	SAME AS ABOVE	CHALK BOARD METHOD
	Marine Natural products and its Challenges	02	SAME AS ABOVE	CHALK BOARD METHOD
	Marine Microbial Enzymes- Marine Extremozymes and Their Significance, Current Use of Marine Microbial Enzymes	07	SAME AS ABOVE	POWERPOINT PRESENTATION

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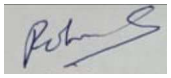

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: T.Y.B.Sc SEMESTER: VI MONTH: DECEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The aim of this course to make students aware of techniques of dairy technology and production processes of associated fermented products.
The learners will be able to: Understand the enumeration methods in milk and factors affecting milk quality.

Learn various methods of preservation of milk.

Learn the production processes and spoilage of fermented milk products.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT602 UNIT I: DAIRY TECHNOLOGY	Milk: Normal flora, changes in raw milk, Enumeration, Factors affecting bacteriological quality, Dairy technology Preservation methods, Pasteurization	07	Fundamentals of microbiology by Martin Frobisher	CHALK BOARD METHOD, PROJECTOR
	Starter Cultures	02	Applied Dairy Microbiology Elmer H Marth and James L Steele Mercel Dekker Inc New York, 2nd edition	CHALK BOARD METHOD
	Fermented products-Production process and spoilage of Cheese:Swiss and Cheddar	02	Microbial Technology Peppler,H.J and Perlman	PROJECTOR, CHALK BOARD METHOD, TEACHING AIDS

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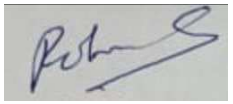
	Butter	02	Applied Dairy Microbiology Elmer H Marth and James L Steele Mercel Dekker Inc New York, 2nd edition	PROJECTOR, CHALK BOARD METHOD, TEACHING AIDS
	Yogurt, Buttermilk	02	SAME AS ABOVE	CHALK BOARD METHOD, TEACHIiNG AIDS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MAITHILEE PRAVIN RAUT DEPARTMENT: BIOTECHNOLOGY

CLASS: T.Y.B.Sc SEMESTER: VI MONTH: DECEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The aim of this course to make students aware about fundamentals of downstream processing and wholebroth processing.
The learners will be able to: Learn basics of various techniques involved in downstream processing.

Understand the processes in whole broth processing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USBT602 UNIT II: DOWN STREAM PROCESSING	Introduction of DSP, Foam separation, Types of Precipitation	04	Fermentation technology by Stanbury and Whittkar	CHALK BOARD METHOD
	Filtration, Centrifugation, Chromatography in DSP	05	SAME AS ABOVE	PROJECTOR
	Cell disruption- physical and chemical methods	02	SAME AS ABOVE	PROJECTOR
	Solvent recovery, Membrane processes, Drying	02	SAME AS ABOVE	PROJECTOR, CHALK BOARD METHOD
	Crystallization and Whole broth processing	02	SAME AS ABOVE	POWERPOINT PRESETATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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VIVA COLLEGE, Virar (W)
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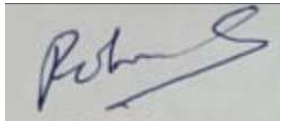
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAIKH MOHAMMED MUBEEN DEPARTMENT: BIOTECHNOLOGY
CLASS: T.Y.B.Sc. SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: to understand the basics of biosafety in biotechnology and regulation of rDNA technology and associated bioethics.
The learners will have: comprehended the fundamentals of biosafety and regulation and bioethics associated with rDNA technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied component Unit 4 - Biosafety in Biotechnology	Concepts on biosafety in Biotechnology	12	Molecular Biotechnology by Glick	Chalk board method
	Regulating rDNA technology			
	Regulating food and food ingredients			
	Genetically engineered crops, livestock Bioethics			
	Contemporary issues in Bioethics			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Accounts

Class: FYBMS(A+B+C)

Semester: I

Name of Teacher: Kadambari Agaskar

Unit No.	Topic	No. Of Lectures Required
Unit-1 Introduction	Meaning, Scope, Principles,	
	Accounting Standard, IFRS, Accounting in Computerized environment	06
Unit -II Accounting Transaction	Journal, Ledger, Subsidiary books, Triple Column Cash book, Bank Reconciliation Statement, Expenditure & receipts	12
Unit – III Depreciation Accounting & Trial Balance	Practical sums on Depreciation, Preparation of Trial Balance	07
Unit – IV Final Accounts	Introduction, Manufacturing A/c , Trading A/c , P & L A/c, Balance Sheet	07
Total		32

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Advertising

Class: SYBMS (Marketing)

Semester: SEM III

Name of Teacher: Prof. Swati D. Patil

Unit No.	Topic	No. Of Lectures Required
Unit 1	• Introduction to Advertising : Definition, Evolution, Importance, Features, 5 M's • Types of Advertising • Theories of Advertising • Ethics and Laws in Advertising • Social, cultural and Economic Impact of Advertising, Impact of Ads on kids & women	10
Unit 2	• Strategy and Planning Process in Advertising • Advertising Planning Process & Strategy • Role of Advertising in Marketing Mix • Advertising Agencies	8
Unit 3	• Creativity in Advertising • definition, importance, creative process, Creative strategy development – Advertising Campaign • Role of different elements of ads • Creating the TV commercial • Creating Radio Commercial • Copywriting	10
Unit 4	• Budget, Evaluation, Current Trends and Careers in Advertising	7

	• Advertising Budget-Evaluation of Advertising Effectiveness • Current Trends in Advertising • Careers in Advertising	
Total		35

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Corporate Communication and Public Relations

Class: TYBMS (MKT+ FIN+HR)

Semester: V

Name of Teacher: Prof. Akshata Puralkar

Unit No.	Topic	No. Of Lectures Required
1	Foundations of Corporate Communications a) Scope and Relevance b) Key concepts c) Ethics and Law	10
2	Understanding Public Relations a) Fundamentals of PR b) Emergence of PR c) PR Environment d) Theories used in PR	8
3	Functions of Corporate Communications and Public Relations a) Media Relations b) Employee Communication c) Crisis Communication d) Financial Communication	10
4	Emerging Technology in Corporate Communications and Public Relations a) Contribution of Technology b) Information Technology in Corporate Communication c) Corporate Blogging	7
Total		**35**

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: FC III - Environmental Management

Class: SYBMS (MKT + FIN + HR)

Semester: III

Name of Teacher: Prof. Akshata Puralkar

Unit No.	Topic	No. Of Lectures Required
1	Environmental Concepts Environment , Biogeochemical cycles, Ecosystem and Ecology, Resources	5
2	Environment Degradation Degradation,Pollution, Global Warming, Disaster Management, Waste Management	10
3	Sustainability and Role of Business Sustainability Environmental Clearance, EIA, ISO 14001, Environmental Auditing, Salient Features of Water Act,Air Act and Wildlife Protection Act	9
4	Innovations in Business - An Environmental Perspective Non-Conventional Energy Sources, Innovative Business Models	6
Total		**30**

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: accounting for managerial accounts

Class: SYBMS

Semester: III

Name of Teacher: kadambari Agaskar

Unit No.	Topic	No. Of Lectures Required
1	Analysis and interpretation of financial analysis- vertical income statement and balance sheet, comparative analysis, common size statement and trend analysis	9
2	Ratio analysis- balance sheet ratio, income statement ratios, composite ratios	9
3	Cash flow statement- identifying cash from operation, investment and financing activities and effect of change in working capital	8
4	Working capital- concept, estimation of requirements of cash of trading and manufacturing organization. Receivables management- meaning, credit policy variables, methods of credit evaluation, monitoring the debtors techniques.	8
Total		34

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: MOTIVATION AND LEADERSHIP

Class: SYBMS (HR)

Semester: III

Name of Teacher: Mrs. Amruta V Ghorpade

Unit No.	Topic	No. Of Lectures Required
UNIT 1	Introduction and Theories of Motivation	10
UNIT 2	East v/s West & Work Life Balance	05
UNIT 3	Leadership	10
UNIT 4	Contemporary Leadership	10
Total		35

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: PERFORMANCE MANAGEMENT

Class: TYBMS (HR)

Semester: V

Name of Teacher: Mrs. Amruta V Ghorpade

Unit No.	Topic	No. Of Lectures Required
UNIT 1	Performance Management	10
UNIT 2	Performance Management process.	10
UNIT 3	Ethics under performance and key issues in Performance Management	08
UNIT 4	Career planning and development	07
Total		35

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: RECRUITMENT & SELECTION

Class: SYBMS (HR)

Semester: III

Name of Teacher: Mrs. Amruta V Ghorpade

Unit No.	Topic	No. Of Lectures Required
UNIT 1	Recruitment, Job analysis and Job Design	15
UNIT 2	Selection.	09
UNIT 3	Induction	05
UNIT 4	Interview Preparation Guide and Social & Soft skills.	06
Total		35

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: STRESS MANAGEMENT

Class: TYBMS (HR)

Semester: V

Name of Teacher: Mrs. Amruta V Ghorpade

Unit No.	Topic	No. Of Lectures Required
UNIT 1	Understanding Stress	10
UNIT 2	Managing stress I	10
UNIT 3	Managing stress II	08
UNIT 4	Stress Management leading to success	07
Total		35

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Consumer Behaviour

Class: SYBMS (MKT)

Semester: III

Name of Teacher: Anand Singh Rajawat

Unit No.	Topic	No. Of Lectures Required
1	• Introduction to Consumer Behaviour • Consumer profiling • Consumer involvement • Consumer decision making	2 3 2 2
2	• Consumer need and motivation • Personality • Self-Concept, Consumer perception • Learning and attitude	2 2 2 3
3	• Family and social class • Group Dynamics • Culture	3 2 2
4	• Consumer decision making models • Diffusion of Innovation and adoption • E-Buying Behaviour	3 3 3
Total		34

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Foundational Of Human Skills

Class: FYBMS

Semester: I

Name of Teacher: Anand Singh Rajawat

Unit No.	Topic	No. Of Lectures Required
1	• Individual Behaviour • Personality & Perception • Learning	4 3 2
2	• Groups And Teams • Power & Politics • Organizational Conflict & Resolution	3 3 3
3	• Organizational Culture • Motivation	3 4
4	• Organizational Change & Creativity • Organizational Development • Organizational Stress	3 3 3
Total		33

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

SUBJECT : AUDIT

CLASS: SYBMS (FIN) **SPECIALIZATION: AUDITING** **SEM.: IV**

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	**Introduction to Auditing:** Basics, Errors & Frauds, Principles of Audit, Types of Audit	5
2	II	**Audit Planning, Procedures and Documentation :** Audit Planning, Audit program, Auditbworking papers, Audit notebook	4
3	III	**Audit Techniques and Internal Audit** Introduction : Test check, Audit sampling, Internal control, Internal audit	4
4	IV	**Audit Techniques : Vouching & Verification :** 1. Audit of Income, 2. Audit of Expenditure, Audit of Assets Book Debts / Debtors , Stock 3. Audit of Liabilities	5
		Total Lectures	18

Teacher Name: Prof. SACHIN ARJUN KADAM **Date : 01/ 01/ 2021**

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Business Communication-1 (BC-1)

Class: FYBMS

Semester: Sem-1

Name of Teacher: Janhavi V. Raut

Unit No.	Topic	No. Of Lectures Required
Unit 1	Theory of communication	10 lectures
Unit 2	Obstacles to communication in business world	10 lectures
Unit 3	Business correspondence	6 lectures
Unit 4	Paragraph writing	6 lectures
Total		32 lectures

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: FYBMS SEM.: II

SUBJECT : Business Communication-II (BC-II)

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Presentation Skills	2
2	II	Group Discussion & Interviews	4
3	II	Meeting	4
4	II	Conference	3
5	II	Public Relations	3
6	III	Trade Letters	2
7	III	Sales Letters	2
8	III	Consumer Guidance Grievance Letters	2
9	III	Right to Information (RTI) Act	2
10	IV	Report Writing	2
11	IV	Summarization	2
		TOTAL	**28**

Submitted By : Janhavi V. Raut

Date : 01.01.2021

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: FYBMS DIV: A+B+C SUBJECT: Business Envt SEM.: II

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Business	3
2	I	Business environment	2
3	I	Micro and Macro Environment	4
4	II	Political Institutions	3
5	II	Economic Environment	2
6	II	Impact of Business on Private Sector, Public Sector and Joint Sector	1
7	II	Sunrise sectors and Challenges of Indian Economy	1
8	III	Social and Cultural Environment	2
9	III	Technological Environment	1
10	III	Competitive Environment	2
11	IV	International Environment	4
12	IV	Challenges faced by International Business and Investment Opportunities for Indian Industry	2
		TOTAL	27

Submitted By: Swati Sonagra
Date: 01/01/2021

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ACADEMIC YEAR 2022-23 (TERM II)

TEACHING PLAN

CLASS: TYBMS SPECIALIZATION: Marketing SEM.: VI SUBJECT: Brand Management (BM)

Course Outcomes: The Learners will be able to:

The students would be able :

Course Outcomes:

- The course will help students understand how a new product is developed and maintained.
- Enhance students' ability to apply creative and critical strategies and tactics involved in developing, positioning, leveraging, managing a brand, and measuring its value.
- Apply branding principles and marketing communication concepts and frameworks to achieve brand management goals and improve marketing performance.

UNIT	TOPIC	No. of Lectures
I	Introduction to Brand Management: Meaning of Brand, Branding, Brand Management, Importance, Brands v/s Products, Scope,Branding, Challenges and Opportunities, CBBE, Sources of Brand Equity, Brand Building Blocks, Brand Positioning	09
II	Planning and Implementing Brand Marketing Programs Brand Elements, Integrating Marketing Programs and Activities, Personalising Marketing, Product Strategy, Pricing Strategy: Setting Prices to Build Brand Equity, Channel Strategy: Direct, Indirect Channels, Promotion Strategy: Developing Integrated Marketing Communication Programs, Leveraging Secondary Brand Associations to Build Brand Equity	10
III	Measuring and Interpreting Brand Performance	11

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	The Brand Value Chain, Measuring Sources of Brand Equity, Comparison, Brand Personality and Values: The Big Five, Quantitative Research Techniques, Brand Awareness, Brand Image, Brand Responses, Young and Rubicam's Brand Asset Valuator, Measuring Outcomes of Brand Equity, Comparative Methods: Brand based Comparative Approaches, Marketing, Holistic Methods: Residual Approaches, Valuation Approaches: Historical Perspectives and Interbrand's Brand Valuation Methodology	
IV	Growing and Sustaining Brand Equity, Designing & Implementing, Brand ArchitectureThe Brand-Product Matrix, Brand Hierarchy, Cause Marketing,Brand Extensions, Managing Brands, Reinforcing Brands, Revitalising Brands, Building Global Customer Based Brand Equity	10
	TOTAL	**40**

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ACADEMIC YEAR 2022-23 (TERM I)

TEACHING PLAN

CLASS: SYBMS SPECIALIZATION: Marketing+HR+FinanceSEM.: III SUBJECT: BP & ENT

Course Outcomes: The Learners will be able to:

The students would be able :

Course Outcomes:

- students will explore entrepreneurial skills and management function of a company with special reference to SME sector.
- Students will identify the type of entrepreneur and the steps involved in an entrepreneurial venture
- students will understand various steps involved in starting a venture and to explore marketing methods & new trends in entrepreneurship.
- Students will understand about the Foundation of Entrepreneurship Development and its theories.

Unit No.	Topic	No. Of Lectures Required
Unit 1	● Foundations of entrepreneurship Development: Concept, need, importance, significance, Characteristics and qualities of entrepreneur ● Theories of Entrepreneurship ● External Influences on Entrepreneurship Development: Socio-Cultural, Political, Economical, Personal. Role of Entrepreneurial Culture	10
Unit 2	Types and Classification of Entrepreneurs ● Intrapreneur, Women Entrepreneur, Social entrepreneurship ● Entrepreneurial development Program (EDP) ● Option available to Entrepreneurs. (Ancillarisation, BPO, Franchise, M&A)	9
Unit 3	Entrepreneur Project Development & Business Plan ● Innovation, Invention, Creativity, Business Idea, Opportunities through change ● Idea generation	10

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	● Environmental scanning and SWOT analysis ● Entrepreneurial Venture ● Business Plan ● Critical Risk Contingencies of the proposal, Scheduling and milestones	
Unit 4	Venture Development ● Steps involved in starting of Venture ● Institutional support ● Venture funding ● Marketing ● New trends in entrepreneurship	6
	Total	35

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VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Business Planning and Entrepreneurship Management

Class: SYBMS (Finance, Marketing & Human Resources)

Semester: SEM III

Name of Teacher: Prof. Swati D. Patil

Unit No.	Topic	No. Of Lectures Required
Unit 1	• Foundations of entrepreneurship Development: Concept, need, importance, significance, Characteristics and qualities of entrepreneur • Theories of Entrepreneurship • External Influences on Entrepreneurship Development: Socio-Cultural, Political, Economical, Personal. Role of Entrepreneurial Culture	10
Unit 2	Types and Classification of Entrepreneurs • Intrapreneur, Women Entrepreneur, Social entrepreneurship • Entrepreneurial development Program (EDP) • Option available to Entrepreneur. (Ancillarisation, BPO, Franchise, M&A)	9
Unit 3	Entrepreneur Project Development & Business Plan • Innovation, Invention, Creativity, Business Idea,	10

	Opportunities through change • Idea generation • Environmental scanning and SWOT analysis • Entrepreneurial Venture • Business Plan • Critical Risk Contingencies of the proposal, Scheduling and milestones	
Unit 4	Venture Development • Steps involved in starting of Venture • Institutional support • Venture funding • Marketing • New trends in entrepreneurship	6
Total		35

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: TYBMS **SPECIALIZATION: MARKETING** **SEM.: VI**

SUBJECT: BRAND MANAGEMENT

Sr. No.	UNIT	TOPIC	No. of Lectures
1	1	**Introduction to Brand Management:** • Meaning of Brand • Brand Management • Importance of Branding to Consumers, Firms • Brands v/s Products • Scope of Branding • Strategic Brand Management Process, • Customer Based Brand Equity model (CBBE), • Steps of Brand Building including Brand Building Blocks • Brand Positioning	8
2	2	**Planning and Implementing Brand Marketing Programs:** • Brand Elements: Meaning, Types of Brand Elements • Integrating Marketing Programs and Activities • Personalizing Marketing: Experiential Marketing, One to One Marketing, Permission Marketing • Product Strategy: Perceived Quality and Relationship Marketing • Pricing Strategy: Setting Prices to Build Brand Equity Channel Strategy: Direct, Indirect Channels Promotion Strategy: Developing Integrated Marketing Communication Programs • Leveraging Secondary Brand Associations to Build Brand Equity.	7
3	3	**Measuring and Interpreting Brand Performance** • The Brand Value Chain • Measuring Sources of Brand Equity • Young and Rubicam's Brand Asset Valuator	8

		• Measuring Outcomes of Brand Equity	
4	4	Growing and Sustaining Brand Equity • Designing & Implementing Branding Strategies: • Brand Extensions: λ Meaning, Advantages, Disadvantages, Brand Extension and Brand Equity • Managing Brands over Time • Building Global Customer Based Brand Equity	7
		TOTAL	**30**

SUBMITTED BY: DILIP MAHENDRA JAIN
DATE: 01/01/2021

VIVA COLLEGE

DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: SYBMS **SPECIALIZATION: Fin, Mkt & HR** **SEM.: IV**

SUBJECT: Business Research Methods (BRM)

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Introduction to BRM- Meaning, Objectives, types, concepts	4
2	I	Stages, characteristics, hypothesis, Research design, sampling	4
3	II	Data Collection & Processing- Types & Methods of data	3
4	II	Survey, Survey Instrument, Scaling Techniques	4
5	III	Data Analysis & Interpretation- Processing, Analysis & interpretation	4
6	III	Multivariate Analysis, testing hypothesis	3
7	IV	Advanced techniques in report writing- Report Writing	3
8	IV	Ethics in research	2
9	IV	Objectivity, confidentiality & anonymity in research, Plagiarism	3
		TOTAL	**30**

Submitted By: Swati Patil
Date: 01-01-2021

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ACADEMIC YEAR 2022-23 (TERM II)
TEACHING PLAN

CLASS: SYBMS **SPECIALIZATION: Mkt & HR** **SEM.: IV**

SUBJECT: Business Research Methods (BRM)

Course Outcomes: The Learners will be able to:

The students would be able :
Course Outcomes:

- To develop understanding of the basic framework of the research process.
- To develop an understanding of various research designs and techniques.
- To identify various sources of information for literature review and data collection.
- understand some basic concepts of research and its methodologies organize and conduct research in a more appropriate manner
- write a research proposal

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Introduction to BRM- Meaning, Objectives, types, concepts	4
2	I	Stages, characteristics, hypothesis, Research design, sampling	6
3	II	Data Collection & Processing- Types & Methods of data	4
4	II	Survey, Survey Instrument, Scaling Techniques	6

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5	III	Data Analysis & Interpretation- Processing, Analysis & interpretation	6
6	III	Multivariate Analysis, testing hypothesis	4
7	IV	Advanced techniques in report writing- Report Writing	4
8	IV	Ethics in research	3
9	IV	Objectivity, confidentiality & anonymity in research, Plagiarism	3
		TOTAL	**40**

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VIVA COLLEGE

DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2021 - 2022 (TERM II)

TEACHING PLAN

CLASS: SYBMS **SPECIALIZATION: Fin, Mkt & HR** **SEM.: IV**

SUBJECT: Business Research Methods (BRM)

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Introduction to BRM- Meaning, Objectives, types, concepts	4
2	I	Stages, characteristics, hypothesis, Research design, sampling	4
3	II	Data Collection & Processing- Types & Methods of data	3
4	II	Survey, Survey Instrument, Scaling Techniques	4
5	III	Data Analysis & Interpretation- Processing, Analysis & interpretation	4
6	III	Multivariate Analysis, testing hypothesis	3
7	IV	Advanced techniques in report writing- Report Writing	3
8	IV	Ethics in research	2
9	IV	Objectivity, confidentiality & anonymity in research, Plagiarism	3
		TOTAL	**30**

Submitted By: Delcy Lopes

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Padma Chari_____ DEPARTMENT: _____BMS_____ CLASS: ___TYBMS_____ SEMESTER: ___V_____ MONTH: _____June2022_____ ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: To ensure that the learner understand show to hedge his risks, diversifying his portfolio. • To enable the leaner to understand global diversification and hedging against inflation and deflation. • To understand complex financial instruments that are used for various purposes, including hedging.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-I	Unit-I Basics **1. Introduction to Commodites Market and Derivatives Market (15 Lec.)** (a) Introduction to Commodites Market : Meaning, History and Origin, Types of Commodities Traded, Structure of Commodities Market in India, Participants in Commodities Market, Trading in Commodities in India (Cash and Derivative Segment), Commodity Exchanges in India and Abroad, Reasons for Investing in Commodities (b) Introduction to Derivatives Market : Meaning, History and Origin, Elements of a Derivative Contract, Factors Driving Growth of Derivatives Market, Types of Derivatives, Types of Underlying Assets, Participants in Derivatives Market,	10	Commodity & Derivative Market by Vipul prakashan	Offline-Chalk & board Case studies

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	Advantages and Disadvantages of Trading in Derivatives Market, Current Volumes of Derivative Trade in India, Difference Between Forwards and Futures			
	Unit-II Futures **2. Futures and Hedging (15 Lec.)** (a) Futures : Futures Contract Specification, Terminologies, Concept of Convergence, Relationship Between Futures Price and Expected Spot Price, Basis and Basis Risk, Pricing of Futures Contract, Cost of Carry Model (b) Hedging : Speculation and Arbitrage using Futures, Long Hedge – Short Hedge, Cash and Carry Arbitrage, Reverse Cash and Carry Arbitrage, Payoff Charts and Diagrams for Futures Contract, Perfect and Imperfect Hedge	10		
	Unit-III Options **3. Options and Option Pricing Models (15 Lec.)** (a) Options : Options Contract Specifications, Terminologies, Call Option, Put Option, Difference Between Futures and Options, Trading of Options, Valuation of Options Contract, Factors affecting Option Premium, Payoff Charts and Diagrams for Options Contract, Basic Understanding of Options Strategies (b) Option Pricing Models : Binomial Option Pricing Model, Black-Scholes Option Pricing Model	10		
	Unit-IV **Trading, Clearing and Settlement in Derivatives Market and Types of Risk (15 Lec.)**	10		

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	(a) Trading, Clearing and Settlement in Derivatives Market: Meaning and Concept, SEBI Guidelines, Trading Mechanism – Types of Orders, Clearing Mechanism – NSCCL – Its Objectives and Functions, Settlement Mechanism – Types of Settlement (b) Types of Risk : Value at Risk, Methods of calculating VaR, Risk Management Measures, Types of Margins, SPAN Margin			
	—	40		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___40___

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VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Cost Accounting

Class: SYBMS (Fin)

Semester: III

Name of Teacher: Prof. SACHIN ARJUN KADAM

Unit No.	Topic	No. Of Lectures Required
1	Chapter 1 Introduction to Cost Accounting Meaning, define, Importance, Advantages, Disadvantages, Difference between Financial Accounting vs Cost Accounting Chapter 2 Process Costing Meaning, Define, format, Basic calculations, practical problems	10
2	Chapter 3 Material costing Meaning, define, advantages, disadvantages, FIFO, Weighted average method, Basic calculations and practical problems Chapter 4 Labour Costing Meaning, bifurcation of labour, Methods of Remuneration and Incentives method, practical problems Chapter 5 Overhead costing Meaning, define, format of primary distribution and secondary distribution, practical problems	12
3	Chapter 6 Cost sheet Meaning, Definition, format, practical problems	9

	Chapter 7 Reconciliation of Cost and Financial statement Meaning, Need, format, practical problems.	
4	Chapter 8 Emerging cost concept Uniform costing, inter comparison, benchmarking, target costing, balance score card	4
Total - 35		

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Consumer Behaviour

Class: SYBMS (MKT)

Semester: III

Name of Teacher: Anand Singh Rajawat

Unit No.	Topic	No. Of Lectures Required
1	• Introduction to Consumer Behaviour • Consumer profiling • Consumer involvement • Consumer decision making	2 3 2 2
2	• Consumer need and motivation • Personality • Self-Concept, Consumer perception • Learning and attitude	2 2 2 3
3	• Family and social class • Group Dynamics • Culture	3 2 2
4	• Consumer decision making models • Diffusion of Innovation and adoption • E-Buying Behaviour	3 3 3
Total		34

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Corporate Communication and Public Relations

Class: TYBMS (MKT+ FIN+HR)

Semester: V

Name of Teacher: Prof. Claretta Lopes

Unit No.	Topic	No. Of Lectures Required
1	Foundations of Corporate Communications a) Scope and Relevance b) Key concepts c) Ethics and Law	10
2	Understanding Public Relations a) Fundamentals of PR b) Emergence of PR c) PR Environment d) Theories used in PR	8
3	Functions of Corporate Communications and Public Relations a) Media Relations b) Employee Communication c) Crisis Communication d) Financial Communication	10
4	Emerging Technology in Corporate Communications and Public Relations a) Contribution of Technology b) Information Technology in Corporate Communication c) Corporate Blogging	7
Total		**35**

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: CORPORATE FINANCE

Class: SYBMS (FINANCE)

Semester: III

Name of Teacher: Prof. Delcy Lopes

Unit No.	Topic	No. Of Lectures Required
1. Introduction	A. Introduction to Corporate Finance – meaning, principles, significance, capitalization – over-capitalisation & under-capitalisation, fixed capital & working capital funds B. Introduction to Ownership Securities – ordinary shares, preference shares, creditorship securities, debtors & bonds, types of debentures, private placement of securities	8
2. Capital Structure & Leverage	A. Introduction to capital structure theories, EBIT-EPS analysis for capital structure decisions B. Cost of Capital – cost of debt, cost of preference shares, cost of equity shares & cost of retained earnings, calculation of weighted cost of capital C. Introduction to concept of Leverage – operating leverage, financial leverage & combined leverage	13
3. Time Value of Money	A. Introduction to Time Value of Money – compounding & discounting B. Introduction to basics of Capital Budgeting – Net Present Value & Internal Rate of Return	9

	C. Importance of Risk & Return analysis in corporate finance	
4. Mobilisation of Funds	A. Public deposits & RBI regulations, company deposits & SEBI regulations, protection of depositors, RBI & public deposits with NBFCs B. Foreign capital & collaborations, Foreign Direct Investments (FDI) C. Emerging trends in FDI D. Global Depository Receipts, policy development, capital flows & equity debt E. Brief introduction & sources of short-term finance – bank overdraft, cash credit, factoring	5
Total		35 lectures

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

SUBJECT : CHANGE MANAGEMENT

CLASS:SYBMS **SPECIALIZATION: HR** **SEM.: IV**

Sr. No.	UNIT	TOPIC	No. of Lectures
1	1	Introduction to Change	10
2	2	Impact of Change	10
3	3	Overcoming Resistance to Change	09
4	4	Effective Implementation of Change	09
		TOTAL	**38**

SUBMITTED BY: Prof AMRUTA V GHORPADE.

DATE: 01/01/2021.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

ACADEMIC YEAR 2022-23 (TERM II)
TEACHING PLAN

CLASS: SYBMS **SPECIALIZATION: Marketing** **SEM.: IV**

SUBJECT: Consumer Behaviour
Course Outcomes: The Learners will be able to:

The students would be able :
Course Outcomes:

- Identify the major influences in consumer behaviour
- Establish the relevance of consumer behaviour theories and concepts to marketing decisions
- Implement appropriate combinations of theories and concepts
- Able to define the importance of group effects in consumer behavior
- Able to explain the consumer purchasing decision process.

Unit No.	Topic	No. Of Lectures Required
Unit 1	Introduction To Consumer Behaviour: Meaning of Consumer Behaviour, Features and Importance Types , Profiling the consumer and understanding their needs, Consumer Involvement ,Application of Consumer Behaviour knowledge in Marketing, Consumer Decision Making Process, Behaviour, factors affecting each stage, and Need recognition	09
Unit 2	Individual- Determinants of Consumer Behaviour: Theories - Maslow, Mc Cleland, Personality – Concept, Nature of personality, Freudian, non - Freudian, Self Concept,Consumer Perception, Learning , Attitude	09

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Unit No.	Topic	No. Of Lectures Required
Unit 3	Environmental Determinants of Consumer Behaviour: Family Influences, Roles of different members, Factors affecting the need, Social Class and Influences, Group Dynamics group versus out-group influences, role of opinion, Cultural Influences on Consumer Behaviour	09
Unit 4	Consumer decision making models and NewTrends: Consumer Decision making models: Howard Sheth Model, Engel Blackwell, Miniard Model, Nicosia Models of Consumer Decision Making, Diffusion of innovations Process,E-Buying behaviour	08
	Total	**35**

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VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2018 - 2019

Subject: Foundation of Human Skills

Class: FYBMS Semester: I

Unit No.	Topic	No. Of Lectures Required
I	• Individual Behaviour	3
	• Personality, Perception	3
	• Johari Window	1
	• Attitude, Emotion & thinking	3
	• Learning & Intelligence	3
II	• Influence of groups	2
	• Team effectiveness & Goal Setting	2
	• Power & Politics	1
	• Organizational Conflict & Resolution	2
III	• Organizational Culture	3
	• Motivation at workplace	3
IV	• Organizational Change & Creativity	2
	• Organizational Development	3
	• Organizational Stress	3

Total No. Of Lectures: 34

Name Of Teacher: Anand S Rajawat Sign:

Date: 11/06/18

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2018 - 2019

Subject: Business Statistics

Class: FYBMS Semester: I

Unit No.	Topic	No. Of Lectures Required
1.	a) Introduction	
	b) Data	
	c) Presentation of Data	
	d) Measures of Central Tendency	10
2.	a) Measures of Dispersion	
	b) Co-Relation	
	c) Linear Regression	6
3.	a) Time Series	
	b) Index Number	8
4.	a) Probability and Concept	
	b) Decision Theory	10
	c) Non-Probability	
	d) Probabilistics (Decision Making under risk)	
	e) Decision Tree	
	Total No. Of Lectures	34

Name Of Teacher: Sarita Panigrahy Sign:

Date: 11/06/18

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2018 -19

Subject: Foundation Course -I

Class: FYBMS Semester: I

Unit No.	Topic	No. Of Lectures Required
I	Overview of Indian Society. - Understanding multi-cultural diversity. - Regional variation diversity.	06.
II	Concept of Disparity -I - Stratification, inequality, gender disparities, understanding the issues of people with disabilities.	06
III	Concept of Disparity -II Caste, inter-group conflicts, communalism, Regionalism	06.
IV	The Indian Constitution Philosophy, structure, main- Body, schedules, duties of Indian citizens.	06
V	Significant aspects of political process. party system, self-govt, 73rd & 74th And I.-	06
VI	Growing, social problem in India Substance abuse, HIV-Awareness prevention	06
	Total No. Of Lectures	36

Name Of Teacher: Dipika Chavan Sign: Chavan

Date: 11/06/18

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2018-19

Subject: Business communication-I

Class: FYBMS Semester: I

Unit No.	Topic	No. Of Lectures Required
I	Theory of communication:-	
	(1) Concept of communication.	03
	(2) Channels & objectives	03
	(3) methods & modes.	03
II	Obstacles to communication:-	
	(1) problems in communication	03
	(2) Listening:	02
	(3) Introduction to Business Ethics	02
III	Business Correspondence	
	(1) Theory of Business letter writing	03
	(2) personnel correspondence	02
IV	Language & writing skills:-	
	(1) Commonly used terms in Business communication	04
	(2) Paragraph writing:-	05
	Total No. Of Lectures:	30

Name Of Teacher: Alisha Rodrigues Sign: for Swati

Date: 11/06/18.

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2018-19

Subject: Introduction to Fin. A/c

Class: FYBMS. Semester: I

Unit No.	Topic		No. Of Lectures Required
1.	Introduction – meaning & scope	2	~~2~~
	Accounting principle and stds	4	08.
	IFRS & Computerised environment	2	
2.	Accounting transaction – types of a/c,		
	Journal, ledger, subsidiary books	8	~~16~~ 20
	Cash book, Bank Reconciliation	8	
	Expenditure/Revenue & Capital Receipts	2	
	Trial Balance	2	
3	Depreciation A/c and trial Balance		08
	Methods of depreciation WDV & SLM.		
4	Final Accounts		
	Rectification of errors	4	08
	Manufacturing, trading A/c		
	P&L A/c, Balance sheet		
	Total No. Of Lectures		44

Name Of Teacher: Kadambari Agaskar Sign: Agaskar

Date: 1/06/18

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2018-19

Subject: Business Economics I

Class: FYBMS Semester: Ist

Unit No.	Topic	No. Of Lectures Required
1	Introduction	
	Scope, Meaning, Functional Relationship	
	(MR, TR) Incremental concepts	
	Demand & Supply, Equilibrium	10
2)	Demand Analysis	
	Demand Function, Nature of curve	
	under diff market structure,	
	elasticity & Types, Forecasting Methods	12
3)	Supply & Production Decisions	
	Law of variable, Law of Return to scale	
	Isoquants Long-Run & Short-Run production	
	function, Types of cost, Long Run & Short Run	
	cost curves, learning Curve, Breakeven	12
4)	Market structure & it types & curves	
	(perfect, Monopolistic, Monopoly, Oligopoly	
	Cartel, Price Rigidity	12
5)	Pricing Methods	
	Cost plus, Margenal cost, discriminating	
	pricing, Transfer Pricing	3
	Total No. Of Lectures:	49

Name Of Teacher: Mang Hurep Sign: Hurep

Date: 11/06/18

VIVA COLLEGE

BMS/~~BMM~~ DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2018-2019

Subject: Business Law

Class: F.Y.B.M.S. Semester: I

Unit No.	Topic	No. Of Lectures Required
I	1) The Indian Contract Act 1872 - Agreement Contract, essential elements, capacity to contract, free consent, consideration, lawful object/consideration, Breach of Contract, remedies for Breach of Contract 2) The sale of Goods Act 1930 - sale & Agreement to sell, essentials, conditions, implied conditions, warranties & implied warranties, Unpaid seller rights.	10
II	1) The Negotiable Instrument Act 1881 - characteristics, promissory note, Bill of Exchange, cheque, dishonour of cheque 2) The Consumer protection Act 1986 object, Introduction, Consumer, Definations, Councils	10
III	The Companies Act 1956 (2013) - nature, feature, incorporation, types, MOA, AOA, prospectus, meeting, membership.	10
IV	Intellectual property Rights - IPR, Definations, Objectives, Patent, Trademark, copyright, Geographical indication	10
	Total	40

Name Of Teacher: Prof. Sharmila J. Palit Sign: Spatil 11/08/2018

Date: 11/08/2018

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Accounts

Class: FYBMS(A+B+C)

Semester: I

Name of Teacher: Delcy Justin Lopes

Unit No.	Topic	No. Of Lectures Required
Unit-1 Introduction	Meaning, Scope, Principles,	
	Accounting Standard, IFRS, Accounting in Computerized environment	06
Unit -II Accounting Transaction	Journal, Ledger, Subsidiary books, Triple Column Cash book, Bank Reconciliation Statement, Expenditure & receipts	12
Unit – III Depreciation Accounting & Trial Balance	Practical sums on Depreciation, Preparation of Trial Balance	07
Unit – IV Final Accounts	Introduction, Manufacturing A/c , Trading A/c , P & L A/c, Balance Sheet	07
Total		32

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Finance For HR

Class: TYBMS (HR)

Semester: V

Name of Teacher: Delcy Justin Lopes

Unit No.	Topic	No. Of Lectures Required
Unit I Compensation Plans & HR Professionals	Meaning, Objective, Role, Types, Tools, 3P's Compensation, Benefits, Pay Structure, Compensation Scenario in India	6
Unit II Incentives & Wages	Incentive Plan, Types, Wage Differentials, Factors, types, Importance, Elements, Theories	7
Unit III Compensation to Special Groups & Recent Trends	Compensation to Special Groups, Human Resource Accounting, Meaning Features, Objective, Recent Trends	8
Unit – IV Legal & Ethical Issues in Compensation	Legal Framework, Wage Policy, Pay Commission, Wage Board, Adjudication, Legal Consideration, COBRA, Ethics	10
Total		31

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Investment Analysis &Portfolio Management

Class: TYBMS (Finance) (A+B)

Semester: V

Name of Teacher: Delcy Justin Lopes

Unit No.	Topic	No. Of Lectures Required
Unit – I Introduction to Investment Environment	Introduction, process, Types Capital Market in India – Concept, Role, NASDAQ, SDL,NSDL	7
Unit – II Risk-Return Relationship	Meaning, Types, Beta, Standard Deviation, Variance, Practical sums	8
Unit – III Portfolio Management & Security Analysis	Meaning, Concept, Process, Security Analysis-Principles, Charts	8
Unit – IV Theories, CAPM & Portfolio Performance Measurement	Theories, Capital Asset Pricing Model, CML, SML, Portfolio Evaluation, Sharpe's Ratio, Treynor's Ratio & Jensen's Differential Measure	9
Total		32

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Service Marketing

Class: TYBMS (MKT)

Semester: V

Name of Teacher: Prof. Dilip Jain

Unit No.	Topic	No. Of Lectures Required
1	**Introduction of Services Marketing** • Services Marketing Concept, Distinctive Characteristics of Services, Services Marketing Triangle, Purchase Process for Services, Marketing Challenges of Services • Role of Services in Modern Economy • Goods vs Services Marketing, Goods Services Continuum • Consumer Behaviour, Positioning • Type of Contact: High Contact Services and Low Contact Services	10
2	**Key Elements of Services Marketing Mix** • The Service Marketing Mix Mapping Flowcharting	7
3	**Managing Quality Aspects of Services Marketing** • Improving Service Quality and Productivity • Service Quality – GAP Model, Benchmarking, Improving Service Quality • The SERVQUAL Model • Defining Productivity • Demand and Capacity Alignment	7
4	**Marketing of Services** • International and Global Strategies in Services Marketing: • Factors Favouring Transnational Strategy • Elements of Transnational Strategy • Recent Trends in Marketing Of Services in • Ethics in Services Marketing: Meaning, Importance, Unethical Practices in Service Sector	8
Total		32

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Strategic Management

Class: SYBMS (FIN + MKT + HR)

Semester: III

Name of Teacher: Prof. Dilip Jain

Unit No.	Topic	No. Of Lectures Required
1	**Introduction** • Business Policy - Meaning, Nature, Importance • Strategy - Meaning, Definition • Strategic Management - Meaning, Definition, Importance, Strategic Management • Process & Levels of Strategy and Concept and importance of Strategic Business Units (SBU's) • Strategic Intent	8
2	**Strategy Formulation** • Environment Analysis and Scanning (SWOT) • Corporate Level Strategy • Business Level Strategy • Functional Level Strategy	7
3	**Strategic Implementation** • Models of Strategy making • Strategic Analysis & Choices & Implementation BCG Matrix, GE 9 Cell, Porter 5 Forces, 7S Frame Work • Implementation: Meaning, Steps and implementation	8
4	**Strategic Evaluation & Control** • Strategic Evaluation & Control – Meaning, Steps of Evaluation & Techniques of Control • Synergy : Concept, Types, evaluation of Synergy. Synergy as a Component of Strategy & its Relevance. • Change Management	7
Total		30

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Business Economics – I

Class: FYBMS

Semester: I

Name of Teacher: Manoj Kurup

Unit No.	Topic	No. Of Lectures Required
1	Introduction Scope, Meaning, Functional Relationship (MR,TR), Demand & supply equilibrium	10
2	Demand Function, nature of curve under different market structure , elasticity and types of forecasting	10
3	Law of variables , Law of returns to scale , isoquants , Short and long run production function , types of cost and cost curve relationships	10
4	Market structure and its types and curves (perfect competition monopoly and monopolistic competition and oligopoly) Marginal cost discriminating pricing .	10
Total		40

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

SUBJECT : ECONOMICS-II

CLASS: SYBMS SPECIALIZATION: FIN, MKT,HR SEM.: IV

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Introduction to Macro Economics National Income Calculations	3
2	I	Business Cycles	1
3	I	Demand For Money, Supply of Money	2
4	I	Consumption Function	1
5	II	Traditional & Modern Theory of Money	2
6	II	Monetary Policy	2
7	III	Fiscal Policy	2
8	III	Tool of Fiscal Policy	1
9	IV	International Trade Theory	3
10	IV	Free Trade and Protectionism	1
11	IV	BOP	2
12	IV	Foreign Exchange Market	2
			22

Submitted By: Manoj Kurup
Date : 01/01/2021

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Padma Chari_____ DEPARTMENT: _____BMS_____ CLASS: ___TYBMS(Mkt)_____ SEMESTER: ___V_____ MONTH: _____June2022_____ ACADEMIC YEAR: _____2022-23 Sub-ecommerce_____

LEARNING OBJECTIVE/S:
The learners will be able to :

To provide knowledge about E Commerce and to prepare the student for vocational competency including training and development of skill. • To encourage the students to do content writing. • To create awareness about the trends and future of E commerce and Digital marketing

The learner can write a blog. • The learner can put up content on social media. • The learner understands the importance of E Commerce

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-I	Unit-I • Ecommerce- Meaning, Features of E-commerce, Categories of E-Commerce, Advantages &Limitations of E-Commerce, Traditional Commerce &E-Commerce • Ecommerce Environmental Factors: Economic, Technological, Legal, Cultural & Social • Factors Responsible for Growth of E-Commerce, Issues in Implementing ECommerce, Myths of E-Commerce • Impact of E-Commerce on Business, Ecommerce in India • Trends in E-Commerce in Various Sectors: Retail, Banking, Tourism, Government, Education Basis of	10	ECommerce by Vipul Prakashan R. Kalokota, Andrew V. Winston, Electronic Commerce - A Manger's Guide, Pearson Education • Tripathi, E-	Offline chalk & board

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	Product management in E commerce Online Offline – Phygital store Concept of MVP (Minimum Viable Product)		Commerce, Jaico Publishing House, Mumbai, Edn. 2010.	
	Unit-II E-Business: Meaning, Launching an E-Business, Different phases of Launching an EBusiness • Important Concepts in E-Business: Data Warehouse, Customer Relationship Management, Enterprise Resource Planning • Bricks and Clicks business models in E-Business: Applications: E-Procurement, ECommunication, EDelivery, E-Auction, E-Trading. • Electronic Data Interchange (EDI) in E-Business: Meaning of EDI, Benefits of EDI, Drawbacks of EDI, Applications of EDI. • Website: Design and Development of Website, Advantages of Website, Principles of Web Design, Life Cycle Approach for Building a Website, Different Ways of Building a Website LinkedIn content strategy Selling on Online platforms	10		
	Unit-III Issues Relating to Privacy and Security in E-Business • Electronic Payment Systems: Features, Different Payment Systems: Debit Card, Credit Card, Smart Card, E-cash, E-Cheque, E-wallet, Electronic Fund Transfer. • Payment Gateway: Introduction, Payment Gateway Process, Payment Gateway Types, Types of Transaction Security •	10		

	E-Commerce Laws: Need for E-Commerce laws, E-Commerce laws in India, Legal			
	Unit-IV Introduction to Digital Marketing, • Various Activities of Digital Marketing: Search Engine Optimization, Search Engine Marketing, Content Marketing & Content Influencer Marketing, Campaign Marketing, Email Marketing, Display Advertising, Blog Writing, Viral Marketing, Podcasts & Vodcasts. • Digital Marketing on various Social Media platforms. • Online Advertisement, Online Marketing Research, Online PR • Web Analytics • Promoting Web Traffic • Latest developments and Strategies in Digital Marketing	10		
	—	40		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___40__

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VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: SYBMS **SPECIALIZATION: MKT +HR** **SEM.: IV**

SUBJECT: FC-IV (Ethics and Governance)

Sr No	Unit	Topic	No.of lectures
1	1	**Introduction to Ethics and Business Ethics& Business Ethics**	
2	1	A)Ethics	2
3	1	B)Business Ethics	2
4	2	**Ethics in Marketing,Finance and HRM**	
5	2	A) Ethics in Marketing	2
6	2	B) Ethics in Finance	3
7	2	C) Ethics in HRM	2
8	3	**Corporate Governance**	
9	3	Concepts etc	1
10	3	Significance etc	2
11	3	Theories etc	1
12	3	Models etc	2
13	4	**Corporate Social Responsibility**	
14	4	Meaning,Evolution etc	1
15	4	Aspects,Need,Principles,Issues in CSR	3
16	4	Social Accounting,Tata's Rating Framework	1
17	4	Ethical Issues in International Business	1
18	4	Sachar Committee Report on CSR	1
19	4	Future Of CSR etc.	3
		Total	**27**

Submitted By: Prof.Akshata Puralkar

Date: 01.01.2021

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Foundation Course-1 (FC-1)

Class: FYBMS

Semester: Sem-1

Name of Teacher: Janhavi V. Raut

Unit No.	Topic	No. Of Lectures Required
Unit 1	Overview of Indian Society	6 lectures
Unit 2	Concept of Disparity-1	8 lectures
Unit 3	Concept of Disparity-2	6 lectures
Unit 4	The Indian Constitution	6 lectures
Unit 5	Significant aspect of Political processes	6 lectures
Total		32 lectures

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: FYBMS SEM.: II

SUBJECT: Foundation Course-II (FC-II)

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Globalization & Indian Society	5
2	II	Human Rights	6
3	III	Ecology	6
4	IV	Understanding Stress & Conflict	5
5	V	Managing Stress & Conflict in Contemporary Society	5
		TOTAL	**27**

Submitted By : Janhavi V. Raut

Date : 01.01.2021

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: FC III - Environmental Management

Class: SYBMS (MKT + FIN + HR)

Semester: III

Name of Teacher: Prof. Sneha Pingulkar & Prof. Claretta Lopes & Prof Swati Sonagra

Unit No.	Topic	No. Of Lectures Required
1	Environmental Concepts Environment , Biogeochemical cycles, Ecosystem and Ecology, Resources	5
2	Environment Degradation Degradation,Pollution, Global Warming, Disaster Management, Waste Management	10
3	Sustainability and Role of Business Sustainability Environmental Clearance, EIA, ISO 14001, Environmental Auditing, Salient Features of Water Act,Air Act and Wildlife Protection Act	9
4	Innovations in Business - An Environmental Perspective Non-Conventional Energy Sources, Innovative Business Models	6
Total		**30**

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: SYBMS **SPECIALIZATION: FINANCE** **SEM.:IV**

SUBJECT: FC -IV

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Introduction to Ethics	2
2	I	Nature of Ethics & Types	2
3	I	Business Ethics, Role of Govt.	3
4	II	Ethics in Marketing	2
5	II	Ethics in Finance	3
6	II	Ethics in HR	2
7	III	Corporate Governance	3
8	III	Theories of CG	2
9	III	Models of CG	2
10	III	Corporate Governance India	1
11	IV	Corporate Social Responsibility	2
12	IV	Aspect of CSR, Needs for CSR	2
13	IV	Issues of CSR, Recent Guidelines	3
		Total	**29**

Submitted By: Delcy Justin Lopes
Date: 01/01/2021

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2021-22 (TERM II)
TEACHING PLAN

CLASS: SYBMS **SPECIALIZATION: FINANCE** **SEM.:IV**

SUBJECT: FC -IV

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Introduction to Ethics	2
2	I	Nature of Ethics & Types	2
3	I	Business Ethics, Role of Govt.	3
4	II	Ethics in Marketing	2
5	II	Ethics in Finance	3
6	II	Ethics in HR	2
7	III	Corporate Governance	3
8	III	Theories of CG	2
9	III	Models of CG	2
10	III	Corporate Governance India	1
11	IV	Corporate Social Responsibility	2
12	IV	Aspect of CSR, Needs for CSR	2
13	IV	Issues of CSR, Recent Guidelines	3
		Total	**29**

Submitted By: Janhavi Raut

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022(Term – I)

Subject: Foundational Of Human Skills

Class: FYBMS

Semester: I

Name of Teacher: Anand Singh Rajawat

Unit No.	Topic	No. Of Lectures Required
1	• Individual Behaviour • Personality & Perception • Learning	4 3 2
2	• Groups And Teams • Power & Politics • Organizational Conflict & Resolution	3 3 3
3	• Organizational Culture • Motivation	3 4
4	• Organizational Change & Creativity • Organizational Development • Organizational Stress	3 3 3
Total		33

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: SYBMS **SPECIALIZATION: FINANCE** **SEM.: IV**
SUBJECT: FINANCIAL INSTITUTIONS & MARKETS

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Financial System Theoretical Settings	2
2	I	Structure of Indian Financial System	4
3	I	Microfinance	3
4	II	Financial Regulators	3
5	II	Financial Institutions	3
6	II	Specialized Financial Institutions	2
7	III	Indian Money Market	2
8	III	Indian Capital Market	3
9	III	Introduction to Commodities & Derivatives Market	2
10	III	Insurance & Mutual Funds – An Introduction	2
11	IV	Financial System Design	1
12	IV	Financial System Design at Global Level	1
		TOTAL	**28**

Submitted By – Nikita Sunil Jogle
Date: 01/01/2021

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Finance For HR

Class: TYBMS (HR)

Semester: V

Name of Teacher: Delcy Justin Lopes

Unit No.	Topic	No. Of Lectures Required
Unit I Compensation Plans & HR Professionals	Meaning, Objective, Role, Types, Tools, 3P's Compensation, Benefits, Pay Structure, Compensation Scenario in India	6
Unit II Incentives & Wages	Incentive Plan, Types, Wage Differentials, Factors, types, Importance, Elements, Theories	7
Unit III Compensation to Special Groups & Recent Trends	Compensation to Special Groups, Human Resource Accounting, Meaning Features, Objective, Recent Trends	8
Unit – IV Legal & Ethical Issues in Compensation	Legal Framework, Wage Policy, Pay Commission, Wage Board, Adjudication, Legal Consideration, COBRA, Ethics	10
Total		31

Late Shri. Vishnu Waman Thakur Charitable Trust's

Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

Department of Management Studies (BMS)
Teaching Plan (Term-II, 2022-2023)

Name of the Teacher: Swati Sonagra

Class & Specialization: FYBMS

Semester: II

Subject: Business Environment

Date:

Course Outcomes: The Learners will be able to:

The students would be able :

Course Outcomes:

- Introduction to Business Environment
- Political and Legal environment
- Social and Cultural Environment, Technological environment and Competitive Environment
- International Environment

Unit No.	Topics	No. of Lectures Allotted
I	**Introduction to Business Environment** • Business: Meaning, Definition, Nature & Scope, Types of Business Organizations • Business Environment: Meaning, Characteristics, Scope and Significance, Components of Business Environment • Micro and Macro Environment: Definition, Differentiation, Analysis of Business Environment, SWOT Analysis. • Introduction to Micro-Environment: ♣ Internal Environment: Value system, Mission, Objectives, Organizational Structure, Organizational Resources, Company Image, Brand Equity ♣ External Environment: Firm, customers, suppliers, distributors, Competitors, Society • Introduction to Macro Components: Demographic, Natural, Political, Social, Cultural, Economic, Technological, International and Legal)	15
II	**Political and Legal environment** • Political Institutions: Legislature, Executive, Judiciary, Role of government in Business, Legal framework in India. • Economic environment: economic system and economic policies. Concept of Capitalism, Socialism and Mixed Economy • Impact of business on Private sector, Public sector and Joint sector • Sun-rise sectors of India Economy. Challenges of Indian economy.	15
III	**Social and Cultural Environment, Technological environment and Competitive Environment** • Social and Cultural Environment: Nature, Impact of foreign culture on Business, Traditional Values and its Impact, Social Audit - Meaning and Importance of Corporate Governance and Social Responsibility of Business • Technological environment: Features, impact of technology on Business • Competitive Environment: Meaning, Michael Porter's Five Forces Analysis, Competitive Strategies	15
IV	**International Environment**	15

	• International Environment – ♣ GATT/ WTO: Objective and Evolution of GATT, Uruguay round, GATT v/s WTO, Functions of WTO, Pros and Cons of WTO. ♣ Globalization: Meaning, Nature and stages of Globalization, features of Globalization, Foreign Market entry strategies, LPG model. ♣ MNCs: Definition, meaning, merits, demerits, MNCs in India ♣ FDI: Meaning, FDI concepts and functions, Need for FDI in developing countries, Factors influencing FDI, FDI operations in India, • Challenges faced by International Business and Investment Opportunities for Indian Industry.	
		60

Signature of the staff **Signature of the H.O.D**

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-2020

Subject: Foundation of Human Skills

Class: FYBMS Semester: I

Unit No.	Topic	No. Of Lectures Required
I	• Individual Behaviour	3
	• Personality, Perception	3
	• Johari Window	1
	• Attitude, Emotion & thinking	3
	• Learning & Intelligence	3
II	• Influence of groups	2
	• Team Effectiveness & Goal Setting	2
	• Power & Politics	1
	• Organizational Conflict & Resolution	2
III	• Organizational Culture	3
	• Motivation at workplace	3
IV	• Organizational Change & Creativity	2
	• Organizational Development	3
	• Organizational Stress	3

Total No. Of Lectures: 34

Name Of Teacher: Anand S Rajawat Sign:

Date: 07/06/19

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: Business Communication Semester: I

Class: FYBMS

Unit No.	Topic	No. Of Lectures Required
I.	Theory of communication:- concept	03
	-channels & objectives	04
	-Methods and modes	03
	-	
II.	Obstacles to communication in Business world:- problem / Barriers	03
	- listening	02
	- Introduction to Business Ethics	04
III.	Business Correspondence:-	
	-Theory of Business letter writing	03.
	-personnel Correspondence	04.
IV.	Language and writing skills	
	- commercial terms used in comm^n.	02
	- paragraph writing	02
	- Activities	03
	Total No. Of Lectures:	33

Name Of Teacher: Mrs. Claretta Lopes Sign: Lopes

Date: 07/6/19

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: Business Statistics Semester: I

Class: FYBMS

Unit No.	Topic	No. Of Lectures Required
1.	a) Introduction	
	b) Data	
	c) Presentation Of Data	
	d) Measures of Central Tendency	10
2.	a) Measures of Dispersion	
	b) Co-Relation:	6
	c) line Regression	
3.	a) Time Series	8
	b) Index Number	
4.	a) Probability and Concept	
	b) Decision Theory	
	c) Non-Probability	
	d) Non-Probability	10
	e) Decision Theo	
	Total No. Of Lectures:	34

Name Of Teacher: Sarita Panigrahy Sign:

Date: 07/06/19

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: Foundation Course-I

Semester: I

Class: FYBMS

Unit No.	Topic	No. Of Lectures Required
I.	Overview of Indian Society	06
	- understanding multi-cultural diversity	
	- Regional variations - Diversity	
II	Concept of Disparity - I	06
	- stratification, inequality, gender disparities, understanding the issues of people with disabilities	
III	Concept of Disparity - II	06
	caste, inter-group conflicts, communalism, Regionalism	
IV	The Indian Constitution	06
	philosophy, structure, main-Body, Schedules, duties of Indian citizens	
V	Significant Aspects of political process	06
	Party system, self-govt, 73rd & 74th Amdt	
VI	Growing Social problems in India	06
	Substance abuse, HIV-Awareness, Poverty	
	Total No. Of Lectures	36

Name Of Teacher: Mrs. Claretta Lopes Sign:

Date: 07/6/19

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: Introduction to Fin. A/c

Class: FYBMS

Semester: I

Unit No.	Topic	No. Of Lectures Required
1	Introduction - meaning and scope	
	Accounting principles and standards	08
	IFRS & Computerised environments	
2.	Accounting transaction - Types of A/c,	
	Journal, Ledger, subsidiary books,	20
	Cash book, Bank reconciliation	
	Expenditure & receipts - Capital / revenue	
3.	Depreciation A/c and trial balance	08
	methods of depreciation WDV & SLM	
4.	Final A/c	
	Rectification of error	
	manufacturing and Trading A/c	10
	Profit and loss A/c, Balance	
	sheet preparation	
	Total	46

Total No. Of Lectures: _____

Name Of Teacher: Kadambari Agaskar Sign: Agaskar

Date: 07/06/19.

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-2020

Subject: Business Law

Class: F.Y.B.M.S.

Semester: I

Unit No.	Topic	No. Of Lectures Required
I	1) The Indian Contract Act 1872 - Agreement Contract essentials, capacity to contract, free consent, consideration, lawful object/ consideration, Breach of contract, remedies. 2) The Sale of Goods Act 1930 - Sale & Agreement to sell, essentials conditions, implied conditions, warranties, implied warranties, Unpaid seller, rights	10
II	1) The Negotiable Instrument Act 1881 - characteristics, promissory note, Bill of Exchange, cheque, dishonour of cheque 2) The Consumer protection Act 1986 - object, introduction consumer, Definations, Council	10
III	The Companies Act 1956 (2013) - Nature features, incorporation, types, MoA AoA, prospectus, meeting, membership	10
IV	Intellectual property Rights - IPR, objectives, patent, Copyright, Trademarks, Geographical indications	10
	Total No. Of Lectures:	40

Name Of Teacher: prof. Shamila J. Patil

Sign: Spatil 25/07/2019

Date: 07/06/2019

VIVA COLLEGE
BMS/BMM DEPARTMENT TEACHING PLAN
ACADEMIC YEAR 2019-20

Subject: Business Economics -(I) Semester: I st
Class: FYBMS

Unit No.	Topic	No. Of Lectures Required
1	Introduction Scope, Meaning, Functional Relationship (MR, TR) Incremental concept Demand & Supply, Equilibrium	10
2	Demand Analysis Demand Function, Nature of curve under diff market structure. elasticity & Types, Forecasting Methods	12
3	Supply & Production & Cost Decision Law of variables, Law of Return to scale Isoquants, Long-Run & Short-Run Produc-tion function, Types of cost & cost curves Learning & Breakeven	12
4	Market structure & its types & curves (perfect, Monopolistic, Monopoly, Oligopoly) cartel Price Rigidity	10
5	Pricing, Methods Cost plus, Marginal cost, discrimenating Pricing, Transfer Pricing	3
	Total No. Of Lectures:	47

Sign: Mkurup

Name Of Teacher: Mary Kurup

Date: 07/06/19

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject : POM

Class: FYBMS A+B+C. Semester: II

Unit No	Topic	No. of Lect Required
1.	Nature of Management concept,	4
	Significance, Role, Skills, levels,	
	POPSCORB, Managerial Grid	10
	Evolution of Mgmt thoughts	
2.	Planning and Decision making -	
	Planning - Meaning, Imp, process, limitat^n, MBO	4
	Decision Making - Meaning, Imp, process	4.
	Techniques,	
3.	Organising - Concept, structure.	3
	Department, Centralisation V/S Decent	7.
	Delegat^n of authority & responsibility	
4	Directing, Leadership, co-ordi^n,	8
	Controlling	
	Recent Trends	2
	Total no. of Lectures	42

Name of Teacher: Kadambari Agaskar Sign: Agaskar

Date: 02/12/2019

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-2020

Subject : Marketing

Class: FYBMS (A+B+C)

Semester:

Unit No	Topic	No. of Lect Required
1.	• Introduction to Marketing	3
	• Concepts of Marketing	3
	• Orientations of a firm	3
2.	• Micro Environment of business	3
	• Macro environment	2
	• Marketing research & MIS	3
	• Consumer Behavior	3
3	• Product mix & branding	4
	• Pricing	2
	• Physical distribution	2
	• Promotion	2
4	• Segmentation	3
	• Targeting	3
	• Positioning	3
	• New trends in marketing	3
	Total no. of Lectures	42

Name of Teacher: Anand S Rajawat

Sign:

Date: 02/12/19.

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject : BE

Class: FYBMS (A+B+C) Semester: IInd

Unit No	Topic	No. of Lect Required
I	Introduction to Business Envt :- Business, Bus. Envt, Micro & Macro Envt, Introduction to Micro Envt, Introduction to Macro- Envt.	12
II	Political & Legal Envt Political Institutions, Economic Envt, Impact of Business on Private, Public & Joint sector. Sun-rise Sectors & Challenges of Indian Economy.	10
III	Social & Cultural Envt, Technological Envt and Competitive Envt.	10
IV	International Envt GATT/WTO, Globalization, MNCs, FDI Challenges faced by Int. Business & Investment Opportunities for Indian Inds.	9
	Total no. of Lectures	41

Name of Teacher: Swati Sonagera Sign: Swati

Date: 02/12/2019

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019 - 2020

Subject : FC II

Class: FYBMS A + B + C

Semester: II

Unit No	Topic	No. of Lect Required
1.	Globalisation & Indian Society → Concept of	5
	LPG, Growth & impact of IT & communication,	
	Impact of Globalisation on industry,	
	employment & migration, agrarian sector	
2	Human Rights → Concept, origin, evolution	6
	Universal declaration of Human rights,	
	constituents with special reference to	
	Fundamental Rights stated in constitution.	
3	Ecology → Importance of Enviroment studies	10
	concepts, Ecology & their interconnectedness,	
	Environmental Degradation, sustainable develop.	
	Poverty & Environment	
4	Understanding stress and conflict →	10
	causes of stress & conflict, Agents of	
	socialization & it's role in developing individual,	
	significance of values, ethics, prejudices,	
	stereotyping & prejudice as significant factor	
5	Managing stress & conflict in contemporary	5
	society → Types of conflict, Maslow's theory	
	Different methods & conflict resolutions.	
	Total no. of Lectures	36

Name of Teacher: Janhavi Raut

Sign: JRaut

Date: 2/12/2019

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject : Maths

Class: A+B+C - FYBMS

Semester: IInd

Unit No	Topic	No. of Lect Required
01	1. Simple and Compound Intrest	04
	2. Depreciation of Assets	04
	3. function	02
	4. Permutation and Combination	02
02.	1. Matrices	02
	2. Determinants of Matrix	02
	3. Cramer's Rule and Properties	04
	4. Inverse of Matrix [Adjoint Method and Matrix inversion method]	02
	5. Input Output Matrix	01
03	1. Introduction and Concept (Derivative)	02
	2. Rules of Derivatives	02
	3. Application of Derivatives	04
04.	1. Introduction and Concept for Numerical Analysis	05
	2. Backward and Forward Interpolation	04
	Total no. of Lectures	40

Name of Teacher: Sarita Panigrahy

Sign:

Date: 02/12/2019

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: BC

Class: FYBMS A, B, C

Semester: II

Unit No	Topic	No. of Lect Required
1	Presentation skill	1
2.	Interviews	3
2.	Meetings	4
	Conference	2
	Public Relations	3
3.	Inquiry letter	4
	Complaints	2
	Adjustments	2
	Sales and Promotional leaflets	3
	consumer Grievance	3
	(RTI) Act	3
4.	Reports	3
	Summarisation	2
	Total no. of Lectures	35

Name of Teacher: Prof. Muriel Rumao

Sign:

Date: 02-12-19

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-2020

Subject : Law

Class: F.Y.B.M.S.

Semester: II

Unit No	Topic	No. of Lect Required
(I)(1)	Industrial Disputes Act, 1947 – Introduction object, Definations. Authorities, Conciliation, Adjudication, Unfair labour practices	12
(2)	The Trade Union Act, 1926 – Introduction, Scope Registration, privileges, funds, powers	
(II)(1)	Factories Act, 1948 – Introduction Definations Health, Safety, welfare	11
(2)	Employees (workmen) Compensation Act 1923 – Introduction, Defenses Orteines, liabilities, compensation obligation	
(III)(1)	The Employees state Insurance Act 1948 – Introduction, Definations Contribution, benefits, obligations	10
(2)	The Employees provident fund & miscellaneous provisions Act 1952 – Introduction, Definations provident fund, pension	
(IV)(1)	The payment of wages Act 1936 – Introduction, deductions –	
(2)	The payment of Bonus Act 1965 – Introduction, Bonus	
(3)	The payment of Gratuity Act 1972 – Introduction, Gratuity	
	Total no. of Lectures	

Name of Teacher: Mrs. Shamila J. Patil

Sign: Spatil 27/01/2020

Date: 02/12/2019

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: T.Y.BMS **SPECIALIZATION: HR** **SEM.: VI**

Subject: HRM - Global Perspective

Sr. No.	UNIT	TOPIC	No. of Lectures
1	1	**International HRM- An Overview**	
2	1	A)International HRM	1
3	1	B)Approaches to IHRM	2
4	1	C)Components of IHRM	2
5	1	Managing Diversity , Dealing with Cultural Shock.	2
6	2	**Global HRM Functions**	
7	2	A)International Recruitment and Selection	2
8	2	B) International Compensation	2
9	2	C) HRM Perspectives in Training and Development.	1
10	2	D)International Performance Management	2
11	2	E)Motivation and Reward System	1
12	2	F)International Industrial Relations	1
13	3	**Managing Expatriation and Repatriation**	
14	3	Concepts of PCNs, TCNs, HCNs	1
15	3	Expatriation , Repatriation	3
16	4	**International HRM Trends and Challenges**	
17	4	Offshoring	1
18	4	International Business Ethics and IHRM	1
19	4	Managing international Projects and Teams	2
20	4	IHRM and Virtual Organizations	1
21	4	Growth Strategic Alliances and Impact of IHRM	2
22	4	Knowledge Management and IHRM	1
		Total	**28**

Submitted By: Prof.Akshata Puralkar

Date: 01.01.2021

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: T.Y.BMS **SPECIALIZATION: HR** **SEM.: VI**

Subject:- HRM in Service Sector Management.

Sr. No.	UNIT	TOPIC	No. of Lectures
1	1	**Service Sector Management - An Overview**	
2	1	Services	1
3	1	Service Sector Management	1
4	1	Service Organization	1
5	1	Service Culture in Organization	1
6	1	Relationship Marketing	2
7	1	Role of Customers in service process	1
8	1	Service Encounter and Moment Of Truth	1
9	2	**Managing Human Element in Service Sector**	
10	2	Human Element in service sector	2
11	2	Front Line Employees / Boundary Spanners	2
12	2	Emotional Labour	1
13	2	Recruitment in Service Sector	1
14	2	Selection of Employees in Service Sector	2
15	2	Empowerment Of Service Workers	1
16	3	**Issues and Challenges of HR in Service Sector**	
17	3	Quality issues in services	2
18	3	Delivering services through Agents and Brokers	2
19	3	Issues and Challenges of HR in Specific Services	3
20	3	Social and charitable Services	1
21	4	**HRP Evaluation , Attrition, Retention and Globalisation**	
22	4	Human Resource Planning Evaluation in Service	2
23	4	Service Leadership	1
24	4	Attrition in service sector	2
25	4	Retaining the Best people in service sector	1
26	4	Globalization of Services	1
		Total	**32**

Submitted By: Prof.Akshata Puralkar

Date: 01.01.2021

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Investment Analysis &Portfolio Management

Class: TYBMS (Finance) (A+B)

Semester: V

Name of Teacher: Delcy Justin Lopes

Unit No.	Topic	No. Of Lectures Required
Unit – I Introduction to Investment Environment	Introduction, process, Types Capital Market in India – Concept, Role, NASDAQ, SDL,NSDL	7
Unit – II Risk-Return Relationship	Meaning, Types, Beta, Standard Deviation, Variance, Practical sums	8
Unit – III Portfolio Management & Security Analysis	Meaning, Concept, Process, Security Analysis-Principles, Charts	8
Unit – IV Theories, CAPM & Portfolio Performance Measurement	Theories, Capital Asset Pricing Model, CML, SML, Portfolio Evaluation, Sharpe's Ratio, Treynor's Ratio & Jensen's Differential Measure	9
Total		32

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

SUBJECT: INDIAN ETHOS IN MANAGEMENT

CLASS: TYBMS **SPECIALIZATION: HR** **SEM.: VI**

Sr. No.	UNIT	TOPIC	No. of Lectures
1	1	Indian Ethos-An Overview	10
2	2	Work Ethos and Values	10
3	3	Stress Management	08
4	4	Indian Systems of Learning	10
		TOTAL	**38**

SUBMITTED BY: Prof AMRUTA V GHORPADE.

DATE: 01/01/2021.

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

SUBJECT: IF

CLASS: TYBMS **SPECIALIZATION: Finance** **SEM.: VI**

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Introduction to BOP	1
	I	Basic Numerical	2
	II	Arbitrage	2
	III	Interest Rate Arbitrage	2
	III	Libor, Hedging	1
			8

Submitted By : Manoj Kurup
Date : 01.01.2021

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

SUBJECT: IF

CLASS: TYBMS **SPECIALIZATION: Finance** **SEM.: VI**

Sr. No.	UNIT	TOPIC	No. of Lectures
1	III	World financial market & Institutions & Risks, Euro Currency Market	4
2	III	International Equity Market, International Financial Market & International capital Budgeting	4
3	IV	Foreign Exchange Risk Management	2
4	IV	International tax Environment	3
5	IV	International Project Appraisal	3

Submitted By: Prof. Padma Chari
Date: 01-01-2021

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

SUBJECT : IFS

CLASS: TYBMS **SPECIALIZATION: Finance** **SEM.: VI**

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Financial Services, Fund Based & Fee Financial Services	2
2	I	Factoring, Forfeiting & Bill Discounting	5
3	II	Issue Management & Intermediaries, Stock Broking	3
4	II	Securitization	3
5	III	Lease & Hire Purchase, Housing Finance	5
6	III	Venture Capital	2
7	IV	Consumer Finance & Credit rating	4
8	IV	Plastic Money	2

Submitted By: Prof. Padma Chari
Date: 01-01-2021

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: TYBMS SPECIALIZATION: Marketing SEM.: VI
Subject- International Marketing

Sr. No.	UNIT	TOPIC	No. of Lectures
1	1	Introduction to international marketing and trade- different modes of entering the foreign markets, different approaches	8
2	2	International marketing environment and marketing research	7
3	3	International marketing mix Product mix decision, packaging decision, promotion decision, pricing decision and policies	12
4	4	Development in international marketing Recent trends	5
			30

Submitted by- Kadambari Agaskar

Date- 01/01/2021

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: SYBMS **SPECIALIZATION: Marketing** **SEM.: IV**

SUBJECT: Integrated Marketing Communication (IMC)

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Introduction to IMC- Meaning, features, evolution, reasons for growth	3
2	I	Promotional Tools, IMC Planning process, Role	2
3	I	Communication process, Hierarchy models	3
4	I	Establishing objectives & budgeting	3
5	II	Elements of IMC-I –Advertising-features, role, advantages & disadvantages, Types	3
6	II	Sales Promotion: Scope, role, Reasons, advantages & disadvantages, types, Strategies, evaluation	3
7	III	Elements of IMC-II-Direct Marketing-Role, objectives, components, tools	3
8	III	Public Relation & Publicity- Role, advantages & disadvantages, Types, tools, Sponsorship	3
9	III	Personal Selling-Features, role, advantages & disadvantages, importance	2
10	IV	Evaluating an integrated marketing program	3
11	IV	Ethics & marketing communication	2
12	IV	Current trends in IMC	2
		TOTAL	**32**

Submitted By: Swati Patil
Date: 01-01-2021

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

ACADEMIC YEAR 2022-23 (TERM II)

TEACHING PLAN

CLASS: SYBMS **SPECIALIZATION: Marketing** **SEM.: IV**

SUBJECT: Integrated Marketing Communication (IMC)
Course Outcomes: The Learners will be able to:

The students would be able :
Course Outcomes:

- Choose a marketing communication mix to achieve the communications and behavioural objectives of the IMC campaign plan.
- Develop an integrated cross-media strategy and creative message and concept to reach the target audience and deliver the brand promise through an IMC campaign.
- Measure and critically evaluate the communications effects and results of an IMC campaign to determine its success.

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Introduction to IMC- Meaning, features, evolution, reasons for growth	4
2	I	Promotional Tools, IMC Planning process, Role	3
3	I	Communication process, Hierarchy models	3
4	I	Establishing objectives & budgeting	3
5	II	Elements of IMC-I –Advertising-features, role, advantages & disadvantages, Types	4

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

6	II	Sales Promotion: Scope, role, Reasons, advantages & disadvantages, types, Strategies, evaluation	3
7	III	Elements of IMC-II-Direct Marketing-Role, objectives, components, tools	4
8	III	Public Relation & Publicity- Role, advantages & disadvantages, Types, tools, Sponsorship	3
9	III	Personal Selling-Features, role, advantages & disadvantages, importance	3
10	IV	Evaluating an integrated marketing program	4
11	IV	Ethics & marketing communication	3
12	IV	Current trends in IMC	3
		TOTAL	**40**

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____padma R chari_____BMS_____ DEPARTMENT: _____ CLASS: __TYBMS_____ SEMESTER: _____VI_____ MONTH: _____December_____ ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S:
The learners will be able to : The objective of this course is to familiarize the student with the fundamental aspects of various issues associated with International Finance The course aims to give a comprehensive overview of International Finance as a separate area in International Business & to introduce the basic concepts, functions, process, techniques and create an awareness of the role, functions and functioning of International Finance in this Globalized Market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Unit-I a) Introduction to International Finance: • Meaning/ Importance of International Finance, Scope of International Finance, Globalization of the World Economy, Goals of International Finance, The Emerging Challenges in International Finance b) Balance of Payment: • Introduction to Balance of Payment, Accounting Principles in Balance of Payment, Components of Balance of Payments, Balance of Payment Identity Indian Heritage in Business, Management, Production and Consumption. c) International Monetary	10	Vipul Prakashan	Offline Chalk & board

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	Systems: • Evolution of International Monetary System , Gold Standard System , Bretton Woods System, Flexible Exchange Rate Regimes – 1973 to Present, Current Exchange Rate Arrangements, European Monetary System, Fixed & Flexible Exchange Rate System d) An introduction to Exchange Rates: • Foreign Bank Note Market, Spot Foreign Exchange Market • Exchange Rate Quotations Direct & Indirect Rates Cross Currency Rates Spread & Spread % • Factors Affecting Exchange Rates 2 Foreign Exchange Markets, Exchange Rate			
	Unit-II Foreign Exchange Markets, Exchange Rate Determination & Currency Derivatives a) Foreign Exchange Markets: • Introduction to Foreign Exchange Markets, Structure of Foreign Exchange Markets, Types of Transactions & Settlement Date, Exchange Rate Quotations & Arbitrage, Forward Quotations (Annualized Forward Margin) b) International Parity Relationships & Foreign Exchange Rate: • Interest Rate Parity, Purchasing Power Parity & Fishers Parity, Forecasting Exchange Rates (Efficient Market Approach, Fundamental Approach, Technical Approach, Performance of the Forecasters), Global Financial Markets & Interest Rates (Domestic & Offshore Markets, Money Market Instruments) c) Currency & Interest Rate Futures: • Introduction to Currency Options (Option on Spot, Futures & Futures Style Options), Futures Contracts, Markets & the Trading Process,	10		

	Hedging & Speculation with Interest Rate Futures, Currency Options in India			
	UnitWorld Financial Markets & Institutions & Risks a) Euro Currency Bond Markets: • Introduction to Euro Currency Market, Origin of Euro Currency Market, Euro Bond Market (Deposit, Loan, Notes Market), Types of Euro Bonds, Innovation in the Euro Bond Markets, Competitive Advantages of Euro Banks, Control & Regulation of Euro Bond Market b) International Equity Markets & Investments: • Introduction to International Equity Market, International Equity Market Benchmarks, Risk & Return from Foreign Equity Investments, Equity Financing in the International Markets, Depository Receipts – ADR,GDR,IDR c) International Foreign Exchange Markets: • Meaning of International Foreign Exchange Market, FERA v/s FEMA, Scope & Significance of Foreign Exchange Markets, Role of Forex Manager, FDI v/s FPI, Role of FEDAI in Foreign Exchange Market d) International Capital Budgeting: • Meaning of Capital Budgeting, Capital Budgeting Decisions, Incremental Cash Flows, Cash Flows at Subsidiary and Parent Company, Repatriation of Profits, Capital Budgeting Techniques – NPV -III	10		
	Unit-IV	10		

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	a) Foreign Exchange Risk Management: • Introduction to Foreign Exchange Risk Management, Types of Risk, Trade & Exchange Risk, Portfolio Management in Foreign Assets, Arbitrage & Speculation b) International Tax Environment: • Meaning of International Tax Environment, Objectives of Taxation, Types of Taxation, Benefits towards Parties doing Business Internationally, Tax Havens, Tax Liabilities c) International Project Appraisal: • Meaning of Project Appraisal, Review of Net Present Value Approach (NPV), Option Approach to Project Appraisal, Project Appraisal in the International Context, Practice of Investment Appraisal			
		40		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _40_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Information Technology-I

Class: SYBMS

Semester: III

Name of Teacher: Sneha Pingulkar

Unit No.	Topic	No. Of Lectures Required
I	1. Basic Concepts & Introduction to Information Systems. 2. Information Technology and Management. 3. Digital Economy and Digital Organization. 4. IT Resources.	08
II	5. Introduction to MS-Office. 6. MS-Word. 7. MS-Excel. 8. Advance Excel. 9. MS-PowerPoint.	08
III	10. Internet and Email. 11. MS-Outlook. 12. Bulk Email Software – Introduction. 13. Networking and Infrastructure. 14. E-Commerce and M-Commerce.	09
IV	15. Cyber Threats, Security and Management. 16. Enterprise-wide security framework. 17. Information Security Environment in India.	18
Total		43

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: SYBMS SPECIALIZATION: FIN + MKT +HR SEM.: IV

SUBJECT: INFORMATION TECHNOLOGY-II

Sr. No.	UNIT	TOPIC	No. of Lectures
01	I	MIS (Management Information System)	08
02		Understanding major functional systems	
03		DSS (Decision Support System)	
04	II	ERP (Enterprise Resource Planning)	08
05		CRM (Customer Relationship Management)	
06		SCM (Supply Chain Management)	
07	III	DBMS (Database Management System)	05
08		Data warehousing & Data Mining	
09	IV	Introduction to Outsourcing	08
10		BPO (Business Process Outsourcing)	
11		KPO (Knowledge Process Outsourcing)	

Submitted By: PROF. SNEHA PINGULKAR
Date: 01-01-2021

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Business Communication-1 (BC-1)

Class: FYBMS

Semester: Sem-1

Name of Teacher: Janhavi V. Raut

Unit No.	Topic	No. Of Lectures Required
Unit 1	Theory of communication	10 lectures
Unit 2	Obstacles to communication in business world	10 lectures
Unit 3	Business correspondence	6 lectures
Unit 4	Paragraph writing	6 lectures
Total		32 lectures

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Foundation Course-1 (FC-1)

Class: FYBMS

Semester: Sem-1

Name of Teacher: Janhavi V. Raut

Unit No.	Topic	No. Of Lectures Required
Unit 1	Overview of Indian Society	6 lectures
Unit 2	Concept of Disparity-1	8 lectures
Unit 3	Concept of Disparity-2	6 lectures
Unit 4	The Indian Constitution	6 lectures
Unit 5	Significant aspect of Political processes	6 lectures
Total		32 lectures

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: accounting for managerial accounts

Class: SYBMS

Semester: III

Name of Teacher: kadambari Agaskar

Unit No.	Topic	No. Of Lectures Required
1	Analysis and interpretation of financial analysis- vertical income statement and balance sheet, comparative analysis, common size statement and trend analysis	9
2	Ratio analysis- balance sheet ratio, income statement ratios, composite ratios	9
3	Cash flow statement- identifying cash from operation, investment and financing activities and effect of change in working capital	8
4	Working capital- concept, estimation of requirements of cash of trading and manufacturing organization. Receivables management- meaning, credit policy variables, methods of credit evaluation, monitoring the debtors techniques.	8
Total		34

VIVA COLLEGE

DEPARTMENT OF MANAGEMENT STUDIES

ACADEMIC YEAR 2020 – 21 (TERM II)

TEACHING PLAN

CLASS:F.Y.B.M.S. SPECIALIZATION: INDUSTRIAL LAW SEM: II

SR. NO.	UNIT	TOPIC	NO. OF LECTURES	
1.	Unit I	Chapter 1) Industrial Disputes Act, 1947 -Object, Scope, Definitions, Authorities for Settlement, Strike, Lock-out, Retrenchment, Lay-off, Closure, Unfair Labour Practices, Collective Bargaining Chapter 2) The Trade Union Act, 1926 -Scope, Coverage, Definitions, Registration of Trade Union, Rights and Privileges, Recognition, Object for which General Fund may be spent, Fund for Political Purpose, Amalgamation of Trade Union, Power of Registrar.	15	
2.	Unit II	Chapter 3) Factories Act, 1948 – Extent, Application, Definitions, Occupier, Certifying Surgeon, Health Provisions, Safety Provisions, Provisions relating to Welfare. Chapter 4) Employees (Workmen's) Compensation Act , 1923 -Defences available to Employees before passing of the Act, Principles governing Compensation, Definitions, Employees Compensation, Amount of Compensation, Penalty for default, Review Medical Examination, Notional Extension of Employers Premises, Contracting out, Obligations of Employers and Workmen's, Defences available to Employer	15	
3.	Unit III	Chapter 5) The Employees State Insurance Act, 1948 - Object, Applicability, Exceptions, Definitions, Contributions, Types of Benefits, The Employees State Insurance (Amendment) Act, 2008, Principal Officer, Staff , Obligations of Employers and Employees. Chapter 6) The Employees Provident Fund and Miscellaneous Provisions Act, 1952 – Scope, Object, Application, Definitions, The Employees Provident Fund Scheme, Contribution, Benefits, Employees Pension Scheme and Fund, Employees Deposit- Linked Insurance	15	

		Scheme and Fund, Benefits, Inspectors, Nomination, Transfer Account slip, Obligations of Employers and Employees		
4.	UNIT IV	Chapter 7) Payment of Wages Act, 1936 – Object, Definitions, Fixation of Wage Period, Method of payment, Deductions from Wages, Maintenance of Register and Records, Enforcement of Act, Inspector, Appointment of Authority, Appeal, Penalties and Offences, Display by Notice of Abstract of Act, Obligations of Employers Chapter 8) The Payment of Bonus Act, 1965 – Object, Eligibility for Bonus, Act not applies to certain categories of person, Power of Exemption, Definitions, Determination of Bonus, Minimum Bonus, Maximum Bonus, Set-on, Set-off, Special Provisions with respect to certain Establishments, Inspectors, Penalties, Offences Chapter 9) The Payment of Gratuity Act, 1972 – Object, Scope, Definitions, Payment of Gratuity, Forfeiture of Gratuity, Mode of payment of Gratuity, Compulsory Insurance, Nomination, Determination of amount of Gratuity, Inspectors, Recovery of Gratuity, Obligations and Rights of Employers and Employees ----------	15	
		TOTAL	**60**	

Submitted by :- Prof. Mrs. Sharmila J. Patil

Date :- 01/01/2021

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Business Law

Class: F.Y B.M.S.

Semester: I

Name of Teacher: Prof. Mrs. Sharmila J. Patil.

Unit No.	Topic	No. Of Lectures Required
Unit I Module I – The Indian Contract Act , 1872 Module II -The Sale of Goods Act , 1930	Agreement, Contract, Essentials of Contract, Classification, Offer, Acceptance, Consideration Capacity to Contract, Free Consent ,Void Agreements , Discharge of Contract, Remedies for Breach of Contract. Definitions , Formation of Contract , Destruction of Goods , Conditions , Implied Conditions , Warranties , Implied Warranties , Caveat Emptor , Unpaid Seller , Rights of Unpaid Seller.	12
Unit II Module III – The Negotiable Instruments Act , 1881.	Negotiable Instrument , Characteristics , Classification , Promissory Note, Essentials, Kinds, Bill of Exchange , Essentials , Kinds , Acceptor Acceptance , Cheque , Essentials , Types , Statutory Protection to Banker , Criminal Penalties , Drafts and Letters of Credit .	06
Module IV- The Consumer Protection Act , 1986	Reasons for Enacting , Objects and Reasons , Appropriate Laboratory , Complainant , Complaint ,	

	Consumer , Defect , Deficiency , Manufacturer , Person , Service , Unfair Trade Practice , District Council , State Council , Central Council.	
Unit III Module V – The Companies Act , 2013 .	Company, Characteristics , Advantages , Disadvantages , Lifting the Corporate Veil , Formation of Company , Classification , Conversion , Memorandum of Association , Contents , Alteration , Doctrine of Ultra Vires , Articles Of Association , Contents , Alteration , Doctrines , Prospectus , Legal Requirements , Contents , Private Placement , Public Deposits , Meetings , Kinds , Legal Rules , Quorum , Voting , Resolution , Minutes , Member , Acquisition, Procedure for Transfer Transmission , of Shares , Register , Rights and Liabilities.	12
Unit IV Module VI – Intellectual Property Rights (IPR)	Intellectual Property Rights, Nature , Patent , Procedure , Remedies , Copyright , Rights , Infringement , Remedies ,Patentable , Not Patentable Procedure , Trademark , Functions , Types , Rights, Procedure , Infringement , Remedies , Passing off , Geographical Indications , Designs , Plant Varieties.	06
Total		36

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Logistics & SCM

Class: TYBMS

Semester: V

Name of Teacher: NITIN KULKARNI

Unit No.	Topic	No. Of Lectures Required
I	1. Introduction to Logistics 2. Supply Chain Management 3. Customer Service 4. Demand Forecasting	3 3 3 3
II	5. Transportation 6. Warehousing 7. Maternal Handling 8. Packaging	3 3 2 2
III	9. Inventory Management 10. Logistical Costing 11. Logistical Performance Management 12. Logistical Network Analysis	4 2 2 2
IV	13. Logistics Information System 14. Modern Logistics Infrastructure 15. Logistical Outsourcing 16. Logistics in Global Environment	2 2 2 2
		40
Total		

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Business Economics – I

Class: FYBMS

Semester: I

Name of Teacher: Manoj Kurup

Unit No.	Topic	No. Of Lectures Required
1	Introduction Scope, Meaning, Functional Relationship (MR,TR), Demand & supply equilibrium	10
2	Demand Function, nature of curve under different market structure , elasticity and types of forecasting	10
3	Law of variables , Law of returns to scale , isoquants , Short and long run production function , types of cost and cost curve relationships	10
4	Market structure and its types and curves (perfect competition monopoly and monopolistic competition and oligopoly) Marginal cost discriminating pricing .	10
Total		40

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: FYBMS SUBJECT : BUSINESS MATHEMATICS SEM.: II

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Simple and compound Interest	2
2	I	Annuity	2
3	I	Depreciation of Assets	2
4	I	Function	2
5	I	Permutation and Combination	3
6	II	Matrix	2
7	II	Determinants of a matrix	2
8	II	Linear Equation	2
9	II	Ad-joint matrix and Inversion method	3
10	II	Input and Output analysis	3
11	III	Derivative (Introduction and Concept)	2
12	III	Rule of derivatives	2
13	III	Second order derivatives	2
14	III	Application of derivative	3
15	IV	Numerical Analysis (Introduction and Concept)	3
16	IV	Forward and Backward difference operator with interpolation formula	3
		TOTAL	38

Submitted By: Sarita Panigrahy
Date: 01-01-2021

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Business Statistic

Class: FYBMS

Semester: I

Name of Teacher: Sarita Panigrahy

Unit No.	Topic	No. Of Lectures Required
I	Introduction To Statistic, Presentation Of Data, Measures Of Central Tendency	10
II	Measures Of Dispersion,Co-relation, Linear Regression	10
III	Time series and Index Number	8
IV	Probability and Decision Theory	8
Total		36

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: MOTIVATION AND LEADERSHIP

Class: SYBMS (HR)

Semester: III

Name of Teacher: Mrs. Amruta V Ghorpade

Unit No.	Topic	No. Of Lectures Required
UNIT 1	Introduction and Theories of Motivation	10
UNIT 2	East v/s West & Work Life Balance	05
UNIT 3	Leadership	10
UNIT 4	Contemporary Leadership	10
Total		35

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: TYBMS **SPECIALIZATION: Marketing** **SEM.: VI**

Sub: Media Planning & Management

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Overview of Media	2
2	I	Overview of Media Planning	2
3	I	Media Research	2
4	II	Media Mix	2
5	II	Media Choices	3
6	II	Emerging Media	1
7	II	Media Strategy	2
8	III	Media Budget	2
9	III	Media Buying	2
10	III	Scheduling	1
11	IV	Media Measurement	3
12	IV	Benchmarking Metrics	1
13	IV	Plan Metrics	2
14	IV	Evaluating media Buys	2
		Total	27

Submitted By,

Anand Singh Rajawat
Date: 01-01-2021

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

ACADEMIC YEAR 2022-23 (TERM II)

TEACHING PLAN

CLASS: TYBMS SPECIALIZATION: Marketing SEM.: VI SUBJECT: Media Planning & Management (MPM)

Course Outcomes: The Learners will be able to:

The students would be able :

Course Outcomes:

- Students will perceive about Media Planning, Strategy and Management with reference to current business scenario
- Students absorb the information related to the basic characteristics of all media
- students will comprehend an insight on Media Planning, Budgeting, Scheduling and Evaluating the Different Media Buys
- Students will be able to analyze international and domestic marketing and media metrics.

UNIT	TOPIC	No. of Lectures
I	Overview of Media and Media Planning: Meaning of Media & Features of Media, Meaning of Media Planning , Scope, Elements, Role , Process, Impact of Marketing Objectives, Factors Influencing, Role and Importance of Media in Consumer Buying Decision, Role of Media Planner, Challenges of, Organization Structure, Regulatory Framework, Legal Aspects Media Research:Meaning, Role and Importance, Sources of Media Research	11
II	Media Mix and Media Strategy Meaning, Need, Identifying Audience for Mass Media , Factors Affecting, Types, Media Choices, Print, Television, Radio, Out of Home (OOH), Emerging Media Media Strategy:Meaning, Need, Situation Analysis, Steps in Formulating Media Strategies	09
III	Media Budgeting, Buying & Scheduling: Importance, Methods, Factors, Meaning, Role, Buying Process,Buying brief, Criteria, Scheduling Patterns, Scheduling Strategies, Emphasis, Multiple Spotting, Teasers	11

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

IV	Developments in International Marketing: Media Measurement, Basic Metrics,Television Metrics,Radio Metrics Print Metrics, OOH Metrics, Benchmarking Metrics, Plan Metrics, Evaluating Media Buys, Evaluating Print Media Buying, Evaluating Other Media Buys	09
	TOTAL	**40**

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: CORPORATE FINANCE

Class: SYBMS (FINANCE)

Semester: III

Name of Teacher: NIKITA JOGLE

Unit No.	Topic	No. Of Lectures Required
1. Introduction	A. Introduction to Corporate Finance – meaning, principles, significance, capitalization – over-capitalisation & under-capitalisation, fixed capital & working capital funds B. Introduction to Ownership Securities – ordinary shares, preference shares, creditorship securities, debtors & bonds, types of debentures, private placement of securities	8
2. Capital Structure & Leverage	A. Introduction to capital structure theories, EBIT-EPS analysis for capital structure decisions B. Cost of Capital – cost of debt, cost of preference shares, cost of equity shares & cost of retained earnings, calculation of weighted cost of capital C. Introduction to concept of Leverage – operating leverage, financial leverage & combined leverage	13
3. Time Value of Money	A. Introduction to Time Value of Money – compounding & discounting B. Introduction to basics of Capital Budgeting – Net Present Value & Internal Rate of Return	9

	C. Importance of Risk & Return analysis in corporate finance	
4. Mobilisation of Funds	A. Public deposits & RBI regulations, company deposits & SEBI regulations, protection of depositors, RBI & public deposits with NBFCs B. Foreign capital & collaborations, Foreign Direct Investments (FDI) C. Emerging trends in FDI D. Global Depository Receipts, policy development, capital flows & equity debt E. Brief introduction & sources of short-term finance – bank overdraft, cash credit, factoring	5
Total		35 lectures

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Logistics & SCM

Class: TYBMS

Semester: V

Name of Teacher: NITIN KULKARNI

Unit No.	Topic	No. Of Lectures Required
I	1. Introduction to Logistics 2. Supply Chain Management 3. Customer Service 4. Demand Forecasting	3 3 3 3
II	5. Transportation 6. Warehousing 7. Maternal Handling 8. Packaging	3 3 2 2
III	9. Inventory Management 10. Logistical Costing 11. Logistical Performance Management 12. Logistical Network Analysis	4 2 2 2
IV	13. Logistics Information System 14. Modern Logistics Infrastructure 15. Logistical Outsourcing 16. Logistics in Global Environment	2 2 2 2
		40
Total		

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

SUBJECT: OPERATIONS RESEARCH

CLASS: TYBMS SPECIALIZATION: FIN, MKT & HR SEM.: VI

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Introduction To Operations Research	2
2	I	Introduction To Linear Programming	2
3	I	Linear Programming : Graphical Method	3
4	I	Linear Programming: Simplex Method	3
5	II	Transportation Problems	4
6	II	Assignment Problems	2
7	III	Critical Path Method	2
8	III	Project Crashing	2
9	III	Program Evaluation & Review Technique	2
10	IV	Job Sequencing Problems	2
11	IV	Theory of Games	2
		TOTAL	**26**

Submitted By: PROF. NITIN KULKARNI
Date: 01-01-2021

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

SUBJECT: ORGANISATIONAL DEVELOPMENT

CLASS: TYBMS **SPECIALIZATION: HR** **SEM.: VI**

Sr. No.	UNIT	TOPIC	No. of Lectures
1	1	Organizational Development-An Overview	09
2	2	Organizational Diagnosis, Renewal and Change	09
3	3	Organizational Development Interventions	10
4	4	Organizational Development Effectiveness	10
		TOTAL	**38**

SUBMITTED BY: Prof AMRUTA V GHORPADE.

DATE: 01/01/2021.

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Risk Management

Class: TYBMS(FIN)

Semester: V

Name of Teacher: Prof.Padma.R. Chari

Unit No.	Topic	No. Of Lectures Required
I	Introduction, Risk Measurement & Control, Principles of Risk	10
II	Risk Hedging instrument	10
III	Risk Governance, risk Assurance, Risk & Stakeholders Expectation	10
IV	Insurance Industry, Players of Insurance Business, Claim management	12
Total		42

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Commodity & Derivative market

Class: TYBMS(FIN)

Semester: V

Name of Teacher: Prof.Padma.R. Chari

Unit No.	Topic	No. Of Lectures Required
I	Introduction to Commodity Market, Introduction to Derivative market	10
II	Futures & Hedging	10
III	Options & Options Pricing Models	12
IV	Trading, Clearing & settlement in Derivative market	10
Total		42

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: E-Commerce & Digital Marketing

Class: TYBMS(Mkt)

Semester: V

Name of Teacher: Prof.Padma.R. Chari

Unit No.	Topic	No. Of Lectures Required
I	Introduction to E-Commerce, Trends in M-commerce	12
II	E-Business, Important Concepts, Various Business Models, EDI, Website	12
III	Payment Security, privacy& legal issues in E-commerce	10
IV	Digital marketing, various Activities in Digital Marketing	10
Total		44

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

SUCJECT: PM

CLASS: TYBMS **SPECIALIZATION: Finance** **SEM.: VI**

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Introduction to Project Management	2
2	I	Organizational Structure, Project Selection, Capital Budgeting	6
3	II	Project Feasibility Analysis, Market Analysis, Technical analysis	3
4	II	Technical Analysis & Operational analysis	3
5	III	Budgeting, Cost estimation in Project Management	4
6	III	Cost Benefit Analysis, Leverage	4
7	IV	New Dimensions in Project Management	6

Submitted By: Prof, Padma Chari
Date: 01-01-2021

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 20201-2022 (Term – I)

Subject: PERFORMANCE MANAGEMENT

Class: TYBMS (HR)

Semester: V

Name of Teacher: Mrs. Amruta V Ghorpade

Unit No.	Topic	No. Of Lectures Required
UNIT 1	Performance Management	10
UNIT 2	Performance Management process.	10
UNIT 3	Ethics under performance and key issues in Performance Management	08
UNIT 4	Career planning and development	07
Total		35

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____padma R chari_____BMS_____ DEPARTMENT: _____ CLASS: __TYBMS_____ SEMESTER: _____VI_____ MONTH: _____December_____ ACADEMIC YEAR: ____2022-23 _____

LEARNING OBJECTIVE/S:The objective of this course is to familiarize the learners with the fundamental aspects of various issues associated with Project Management and To give a comprehensive overview of Project Management as a separate area of Management also to introduce the basic concepts, functions, process, techniques and create an awareness of the role, functions and functioning of Project Management

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Unit-I Introduction to Project Management & Project Initiation a) Introduction to Project Management: • Meaning/Definition of Project & Project Management, Classification of Projects, Why Project Management, Characteristics/Importance of Project Management, Need for Project Management (Objectives), History of Project Management b) Organizational Structure (Project Organization): • Meaning/Definition of Organizational Structure, Organizational Work Flow, Developing Work Integration Positions, Types of Organizational Structure, Forms of Organization, Strategic Business Units (SBU) in Project Management. c) Project Initiation: • Project	10	Vipul Prakashan	Offline-Chalk & Board

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Selection-Meaning of Project Selection, Importance of Project Selection, Criteria for Project Selection (Models), Types of Project Selection, Understanding Risk & Uncertainty in Project Selection • Project Manager-Meaning of Project Manager, Role of Project Manager, Importance of Project Manager, Role of Consultants in Project Management, Selecting Criteria for Project Manager • Project Planning-Importance of Project Planning, Functions of Project Planning, System Integration, Project Management Life Cycle, Conflicts & Negotiation			
	Unit-II Analyzing Project Feasibility a) Project Feasibility Analysis: • Meaning/Definition of Project Feasibility, Importance of Project Feasibility, Scope of Project Feasibility • Types of Project Feasibility- Market Feasibility, Technical Feasibility, Financial Feasibility, Economic Viability, Operational Feasibility • SWOT Analysis (Environment Impact Assessment, Social Cost Benefit Analysis) b) Market Analysis: • Meaning of Market Analysis, Demand Forecasting, Product Mix Analysis, Customer Requirement Analysis c) Technical Analysis: • Meaning of Technical Analysis, Use of Various Informational Tools for Analyzing, Advancement in the Era of E- Commerce in Project Management d) Operational Analysis: • Meaning of Operation Management, Importance of Operation Management,	10		

	Operation Strategy - Levels of Decisions, Production Planning & Control, Material Management - Work Study & Method Study, Lean Operations			
	Unity-III 3 Budgeting, Cost & Risk Estimation in Project Management a) Funds Estimation in Project: • Means of Financing, Types of Financing, Sources of Finance, Government Assistance towards Project Management for Start ups, Cost Control (Operating Cycle, Budgets & Allocations), Determining Financial Needs for Projects, Impact of Leveraging on Cost of Finance b) Risk Management in Projects: • What is Risk, Types of Risk in Projects, Risk Management Process, Risk Analysis & Identification, Impact of Risk Handling Measures, Work break Down Structure, New Venture Valuation (Asset Based, Earnings Based, Discounted Cash flow Models) c) Cost Benefit Analysis in Projects • Introduction to Cost Benefit Analysis, Efficient Investment Analysis, Cash - Flow Projections, Financial Criteria for Capital Allocation, Strategic Investment	10		
	Unit-IV New Dimensions in Project Management a) Modern Development in Project Management: • Introduction to Modern Development in Project Management, Project Management Maturity Model (PMMM), Continuous Improvement, Developing Effective Procedural	10		

	Documentation, Capacity Planning b) Project Monitoring & Controlling: • Introduction to Project Monitoring & Controlling, The Planning – MonitoringControlling Cycle, Computerized Project Management Information System (PMIS), Balance in Control System in Project Management, Project Auditing – Life Cycle c) Project Termination & Solving Project Management Problems: • Meaning of Project Termination, Reasons for Termination of Projects, Process for Terminating Projects, Strategy/ Ways to Solve Project Management Problems, Project Review & Administrative Aspects, Execution Tools for Closing of Projects			
		40		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT32___40___

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: FYBMS **SPECIALIZATION: N.A.** **SEM.: II**

Sub: Principles of Marketing

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Introduction to marketing	2
2	I	Concepts of Marketing	1
3	I	Orientations of a firm	2
4	II	Marketing environment	2
5	II	Marketing Research	3
6	II	Consumer Behaviour	2
7	III	Product-mix, Branding	3
8	III	Pricing	2
9	III	Distribution	2
10	III	Promotion	1
11	IV	Segmentation	3
12	IV	Targeting	1
13	IV	Positioning	2
14	IV	Recent Trends	2
		Total	28

Submitted By,

Anand Singh Rajawat
Date: 01-01-2021

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: FYBMS SPECIALIZATION: SEM.: II

Subject- Principles of Management

Sr. No.	UNIT	TOPIC	No. of Lectures
1	1	Nature of Management Evolution of Management	6
2	2	Planning and decision making Process of planning and decision-making MBO	8
3	3	Organising Departmentation, centralization and decentralization	8
4	4	Directing, leadership, coordinating and controlling	8
			30

Submitted by: Kadambari Agaskar
Date- 01/01/2021

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: SYBMS SPECIALIZATION: FIN, MKT & HR SEM.: IV

SUBJECT: PTQM

Sr. No.	UNIT	TOPIC	No. of Lectures
1	1	Production Management: Objectives, Components – Manufacturing Systems	3
2	1	Production Management: Product Development, Classification and Product Design.	3
3	1	Plant Location and Plant Layout Principles of Good Product Layout, Types of Layout	3
4	1	Importance of Purchase Management.	2
5	2	Materials Management Concept, Importance of Materials Management, Various Types of Material Handling Systems.	5
6	2	Inventory Management Importance – Inventory Control Techniques EOQ Simple Numerical on EOQ	5
7	3	Basics of Productivity Modes of Calculating Productivity. Factors Affecting Quality; TQM – Concept and Importance, Cost of Quality, Philosophies.	4
8	3	SERVQUAL Characteristics of Quality, Quality Circle Ishikawa Fish Bone	4
9	4	Quality Improvement Strategies and Certifications Lean Thinking Kepner-Tregor Methodology of Problem Solving Six Sigma Features ISO 9000, ISO 1400, QS 9000. Malcolm Baldrige National Quality Award (MBNQA), Deming's Application Prize.	4
		Total	33

SUBMITTED BY: DILIP MAHENDRA JAIN
DATE: 01/01/2021

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: TYBMS SPECIALIZATION: MKT SUB: RETAIL MGT SEM.: VI

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Retail Management	2
2	I	Retail Formats	1
3	I	Emerging Trends in Retailing	2
4	I	Green Retailing and Airport Retailing	2
5	II	Retail Consumer	1
6	II	CRM in Retail	2
7	II	Retail Strategy	2
8	II	Store Location Selection	1
9	II	HRM in Retail	1
10	III	Merchandise Management	2
11	III	Buying Function	1
12	III	Concept of Lifestyle Merchandising	1
13	III	Private Label	1
14	III	Retail Pricing	2
15	IV	Retail store operations	1
16	IV	Store Design and Layout	2
17	IV	Visual Merchandising and Display	2
18	IV	Mall Management	1
19	IV	Legal and Ethical aspects of Retailing	1
		TOTAL	28

Submitted By: Swati Sonagra
Date: 01/01/2021

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Padma Chari_____ DEPARTMENT: _____BMS_____ CLASS: ___TYBMS_____ SEMESTER: ___V_____ MONTH: _____June2022_____ ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S:
The learners will be able to :

To familiarize the student with the fundamental aspects of risk 12 management and control To give a comprehensive overview of risk governance and assurance with special reference to insurance sector To introduce the basic concepts, functions, process, techniques of risk management Outcomes: This curriculum is designed to help students understand and assess various types of risk and identify methods to reduce or mitigate the risk._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-I	(a) Foundation of Corporate Communication Definition, Risk Process, Risk Organization, Key Risks – Interest, Market, Credit, Currency, Liquidity, Legal, Operational (b) Risk Management vs. Risk Measurement Risk Management vs. Risk Measurement, Managing Risk, Diversification, Investment Strategies and Introduction to Quantitative Risk Measurement and its Limitations (c) Principals of Risk Principals of Risk, Alpha, Beta, R squared, Standard Deviation, Risk Exposure Analysis, Risk Immunization, Risk and Summary Measures –	10	Risk Mgt by Vipul prakashan	Offline-Chalk & board

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Simulation Method, Duration Analysis, Linear and Other Statistical Techniques for Internal Control			
	Unit-II/Derivatives & ERM (a) Risk Hedging Instruments and Mechanism: Forwards, Futures, Options, Swaps and Arbitrage Techniques, Risk Return Trade-off, Markowitz Risk Return Model, Arbitrage Theory, System Audit Significance in Risk Mitigation (b) Enterprise Risk Management: Risk Management vs. Enterprise Risk Management, Integrated Enterprise Risk Management, ERM	10		
	Unit-III/Risk Governance & Risk assurance (a) Risk Governance: Importance and Scope of Risk Governance, Risk and Three Lines of Defense, Risk Management and Corporate Governance (b) Risk Assurance: Purpose and Sources of Risk Assurance, Nature of Risk Assurance, Reports and Challenges of Risk (c) Risk and Stakeholders' Expectations: Identifying the Range of Stakeholders and Responding to Stakeholders' Expectations	10		
	Insurance Industry (a) Insurance Industry: Global Perspective, Regulatory Framework in India, IRDA – Reforms, Powers, Functions and Duties. Role and Importance of Actuary (b) Players of Insurance Business: Life and Non-life Insurance, Reinsurance, Bancassurance, Alternative Risk Trance,	10		

	Insurance Securitization, Pricing of Insurance Products, Expected Claim Costs, Risk Classification (c) Claim Management: General Guidelines, Life Insurance, Maturity, Death, Fire, Marine, Motor Insurance and Calcula			
	—	40		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____40___

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: SYBMS SPECIALIZATION: MKT SUB: RURAL MKT SEM.: IV

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Introduction	2
2	I	Emerging Profile of Rural markets in India	1
3	I	Problems of rural market	1
4	I	Constraints in Rural Mkt and Strategies to overcome constraints	2
5	II	Rural Consumer Vs Urban Consumer	1
6	II	Rural Market Environment	2
7	II	Rural Consumer Behaviour	2
8	III	Product Strategies	2
9	III	Pricing Strategies	2
10	III	Promotion Strategies	1
11	III	Segmentation, Targeting and Positioning for rural market	3
12	IV	Distribution Strategies for rural Consumers	3
13	IV	Communication Strategy	2
		TOTAL	24

Submitted By: Swati Sonagra
Date: 01/01/2021

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Risk Management

Class: TYBMS(FIN)

Semester: V

Name of Teacher: Prof.Padma.R. Chari

Unit No.	Topic	No. Of Lectures Required
I	Introduction, Risk Measurement & Control, Principles of Risk	10
II	Risk Hedging instrument	10
III	Risk Governance, risk Assurance, Risk & Stakeholders Expectation	10
IV	Insurance Industry, Players of Insurance Business, Claim management	12
Total		42

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Commodity & Derivative market

Class: TYBMS(FIN)

Semester: V

Name of Teacher: Prof.Padma.R. Chari

Unit No.	Topic	No. Of Lectures Required
I	Introduction to Commodity Market, Introduction to Derivative market	10
II	Futures & Hedging	10
III	Options & Options Pricing Models	12
IV	Trading, Clearing & settlement in Derivative market	10
Total		42

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: E-Commerce & Digital Marketing

Class: TYBMS(Mkt)

Semester: V

Name of Teacher: Prof.Padma.R. Chari

Unit No.	Topic	No. Of Lectures Required
I	Introduction to E-Commerce, Trends in M-commerce	12
II	E-Business, Important Concepts, Various Business Models, EDI, Website	12
III	Payment Security, privacy& legal issues in E-commerce	10
IV	Digital marketing, various Activities in Digital Marketing	10
Total		44

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: RECRUITMENT & SELECTION

Class: SYBMS (HR)

Semester: III

Name of Teacher: Mrs. Amruta V Ghorpade

Unit No.	Topic	No. Of Lectures Required
UNIT 1	Recruitment, Job analysis and Job Design	15
UNIT 2	Selection.	09
UNIT 3	Induction	05
UNIT 4	Interview Preparation Guide and Social & Soft skills.	06
Total		35

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Sales and Distribution

Class: TYBMS- MKT

Semester: V

Name of Teacher: Swati Sonagra

Unit No.	Topic	No. Of Lectures Required
1	Introduction a) Sales Management b) Distribution Management c) Integration of Marketing, Sales and Distribution	9
2	Market Analysis and Selling a) Market Analysis b) Selling	9
3	Distribution Channel Management	9
4	Performance Evaluation, Ethics and Trends a) Evaluation and Control of Sales Performance b) Measuring Distribution Channel Performance c) Ethics in Sales Management d) New Trends in Sales and Distribution Management	10
Total		37

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Cost Accounting

Class: SYBMS (Fin)

Semester: III

Name of Teacher: Prof. SACHIN ARJUN KADAM

Unit No.	Topic	No. Of Lectures Required
1	Chapter 1 Introduction to Cost Accounting Meaning, define, Importance, Advantages, Disadvantages, Difference between Financial Accounting vs Cost Accounting Chapter 2 Process Costing Meaning, Define, format, Basic calculations, practical problems	10
2	Chapter 3 Material costing Meaning, define, advantages, disadvantages, FIFO, Weighted average method, Basic calculations and practical problems Chapter 4 Labour Costing Meaning, bifurcation of labour, Methods of Remuneration and Incentives method, practical problems Chapter 5 Overhead costing Meaning, define, format of primary distribution and secondary distribution, practical problems	12
3	Chapter 6 Cost sheet Meaning, Definition, format, practical problems	9

	Chapter 7 Reconciliation of Cost and Financial statement Meaning, Need, format, practical problems.	
4	Chapter 8 Emerging cost concept Uniform costing, inter comparison, benchmarking, target costing, balance score card	4
Total - 35		

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Business Statistic

Class: FYBMS

Semester: I

Name of Teacher: Sarita Panigrahy

Unit No.	Topic	No. Of Lectures Required
I	Introduction To Statistic, Presentation Of Data, Measures Of Central Tendency	10
II	Measures Of Dispersion,Co-relation, Linear Regression	10
III	Time series and Index Number	8
IV	Probability and Decision Theory	8
Total		36

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

CLASS: TYBMS **SPECIALIZATION: FINANCE** **SEM.:VI**

SUBJECT: STRATEGIC FINANCIAL MANAGEMENT

Sr. No.	UNIT	TOPIC	No. of Lectures
1	I	Meaning & forms of Dividend, MM Approach	3
2	I	Walter Model, Gordon Model	3
3	I	Factors & Types of Dividend Policy, XBRL	2
4	II	Risk & Uncertainty in Capital Budgeting	2
5	II	RADR, Certainty Equivalent Method, Sensitivity	3
6	II	Probability, S.D., Decision Tree	3
7	II	Capital Rationing	2
8	III	Shareholder Value & Corporate Governance	2
9	III	EVA & MVA Approach, Theories of Corporate Governance	2
10	III	Corporate Restructuring	2
11	III	Effect of Merger on EPS & MPS	3
12	IV	Financial Management in Banking Sector	2
13	IV	NPA & Provisions, Capital Adequacy Norms	2
14	IV	Working Capital Financing, MPBF,	2
15	IV	Issue of Commercial Paper	1
		Total	**34**

Submitted By: Delcy Justin Lopes
Date: 01/01/2021

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Business Law

Class: F.Y B.M.S.

Semester: I

Name of Teacher: Prof. Mrs. Sharmila J. Patil.

Unit No.	Topic	No. Of Lectures Required
Unit I Module I – The Indian Contract Act , 1872 Module II -The Sale of Goods Act , 1930	Agreement, Contract, Essentials of Contract, Classification, Offer, Acceptance, Consideration Capacity to Contract, Free Consent ,Void Agreements , Discharge of Contract, Remedies for Breach of Contract. Definitions , Formation of Contract , Destruction of Goods , Conditions , Implied Conditions , Warranties , Implied Warranties , Caveat Emptor , Unpaid Seller , Rights of Unpaid Seller.	12
Unit II Module III – The Negotiable Instruments Act , 1881.	Negotiable Instrument , Characteristics , Classification , Promissory Note, Essentials, Kinds, Bill of Exchange , Essentials , Kinds , Acceptor Acceptance , Cheque , Essentials , Types , Statutory Protection to Banker , Criminal Penalties , Drafts and Letters of Credit .	06
Module IV- The Consumer Protection Act , 1986	Reasons for Enacting , Objects and Reasons , Appropriate Laboratory , Complainant , Complaint ,	

	Consumer , Defect , Deficiency , Manufacturer , Person , Service , Unfair Trade Practice , District Council , State Council , Central Council.	
Unit III Module V – The Companies Act , 2013 .	Company, Characteristics , Advantages , Disadvantages , Lifting the Corporate Veil , Formation of Company , Classification , Conversion , Memorandum of Association , Contents , Alteration , Doctrine of Ultra Vires , Articles Of Association , Contents , Alteration , Doctrines , Prospectus , Legal Requirements , Contents , Private Placement , Public Deposits , Meetings , Kinds , Legal Rules , Quorum , Voting , Resolution , Minutes , Member , Acquisition, Procedure for Transfer Transmission , of Shares , Register , Rights and Liabilities.	12
Unit IV Module VI – Intellectual Property Rights (IPR)	Intellectual Property Rights, Nature , Patent , Procedure , Remedies , Copyright , Rights , Infringement , Remedies ,Patentable , Not Patentable Procedure , Trademark , Functions , Types , Rights, Procedure , Infringement , Remedies , Passing off , Geographical Indications , Designs , Plant Varieties.	06
Total		36

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Strategic Human Resource Management and HR Policies

Class: TYBMS- HR

Semester: V

Name of Teacher: Swati Sonagra

Unit No.	Topic	No. Of Lectures Required
1	SHRM- An Overview a) SHRM b) HR Environment c) Linking SHRM and Business Performance	10
2	HR Strategies	8
3	HR Policies	8
4	Recent Trends in SHRM a) Mentoring b) Employee Engagement c) Contemporary Approaches to HR Evaluation d) Competency based HRM e) Human Capital Management f) New Approaches to Recruitment g) Strategic International Human Resource Management	9
Total		35

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Strategic Management

Class: SYBMS (FIN + MKT + HR)

Semester: III

Name of Teacher: Prof. Dilip Jain

Unit No.	Topic	No. Of Lectures Required
1	**Introduction** • Business Policy - Meaning, Nature, Importance • Strategy - Meaning, Definition • Strategic Management - Meaning, Definition, Importance, Strategic Management • Process & Levels of Strategy and Concept and importance of Strategic Business Units (SBU's) • Strategic Intent	8
2	**Strategy Formulation** • Environment Analysis and Scanning (SWOT) • Corporate Level Strategy • Business Level Strategy • Functional Level Strategy	7
3	**Strategic Implementation** • Models of Strategy making • Strategic Analysis & Choices & Implementation BCG Matrix, GE 9 Cell, Porter 5 Forces, 7S Frame Work • Implementation: Meaning, Steps and implementation	8
4	**Strategic Evaluation & Control** • Strategic Evaluation & Control – Meaning, Steps of Evaluation & Techniques of Control • Synergy : Concept, Types, evaluation of Synergy. Synergy as a Component of Strategy & its Relevance. • Change Management	7
Total		30

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: Strategic Marketing Management

Class: TYBMS- MKT

Semester: V

Name of Teacher: Swati Sonagra

Unit No.	Topic	No. Of Lectures Required
1	Introduction to SMM a) Marketing b) Strategic Decisions c) Identifying the market d) The 7 tactics of Marketing mix e) Business Model and Strategic Marketing Planning	9
2	Segmenting, Targeting, Positioning and Creation of Value in the context of Strategic Marketing a) Segmentation b) Identifying Target Customers c) Creating Customer Value through Positioning	10
3	Strategic Decisions in Product, Services and Branding a) Managing Product and Services b) Managing Product Lines c) Brand Tactics	9
4	Strategic Decisions in Pricing, Promotion and Distribution and strategic growth management a) Managing price b) Managing promotions and incentives c) Managing distribution d) Strategic growth management e) Defending market position	10
Total		38

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Information Technology-I

Class: SYBMS

Semester: III

Name of Teacher: Sneha Pingulkar

Unit No.	Topic	No. Of Lectures Required
I	1. Basic Concepts & Introduction to Information Systems. 2. Information Technology and Management. 3. Digital Economy and Digital Organization. 4. IT Resources.	08
II	5. Introduction to MS-Office. 6. MS-Word. 7. MS-Excel. 8. Advance Excel. 9. MS-PowerPoint.	08
III	10. Internet and Email. 11. MS-Outlook. 12. Bulk Email Software – Introduction. 13. Networking and Infrastructure. 14. E-Commerce and M-Commerce.	09
IV	15. Cyber Threats, Security and Management. 16. Enterprise-wide security framework. 17. Information Security Environment in India.	18
Total		43

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2021-2022 (Term – I)

Subject: STRESS MANAGEMENT

Class: TYBMS (HR)

Semester: V

Name of Teacher: Mrs. Amruta V Ghorpade

Unit No.	Topic	No. Of Lectures Required
UNIT 1	Understanding Stress	10
UNIT 2	Managing stress I	10
UNIT 3	Managing stress II	08
UNIT 4	Stress Management leading to success	07
Total		35

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Advertising

Class: SYBMS (Marketing)

Semester: SEM III

Name of Teacher: Prof. Swati D. Patil

Unit No.	Topic	No. Of Lectures Required
Unit 1	• Introduction to Advertising : Definition, Evolution, Importance, Features, 5 M's • Types of Advertising • Theories of Advertising • Ethics and Laws in Advertising • Social, cultural and Economic Impact of Advertising, Impact of Ads on kids & women	10
Unit 2	• Strategy and Planning Process in Advertising • Advertising Planning Process & Strategy • Role of Advertising in Marketing Mix • Advertising Agencies	8
Unit 3	• Creativity in Advertising • definition, importance, creative process, Creative strategy development – Advertising Campaign • Role of different elements of ads • Creating the TV commercial • Creating Radio Commercial • Copywriting	10
Unit 4	• Budget, Evaluation, Current Trends and Careers in Advertising	7

	• Advertising Budget-Evaluation of Advertising Effectiveness • Current Trends in Advertising • Careers in Advertising	
Total		35

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Business Planning and Entrepreneurship Management

Class: SYBMS (Finance, Marketing & Human Resources)

Semester: SEM III

Name of Teacher: Prof. Swati D. Patil

Unit No.	Topic	No. Of Lectures Required
Unit 1	• Foundations of entrepreneurship Development: Concept, need, importance, significance, Characteristics and qualities of entrepreneur • Theories of Entrepreneurship • External Influences on Entrepreneurship Development: Socio-Cultural, Political, Economical, Personal. Role of Entrepreneurial Culture	10
Unit 2	Types and Classification of Entrepreneurs • Intrapreneur, Women Entrepreneur, Social entrepreneurship • Entrepreneurial development Program (EDP) • Option available to Entrepreneur. (Ancillarisation, BPO, Franchise, M&A)	9
Unit 3	Entrepreneur Project Development & Business Plan • Innovation, Invention, Creativity, Business Idea,	10

	Opportunities through change • Idea generation • Environmental scanning and SWOT analysis • Entrepreneurial Venture • Business Plan • Critical Risk Contingencies of the proposal, Scheduling and milestones	
Unit 4	Venture Development • Steps involved in starting of Venture • Institutional support • Venture funding • Marketing • New trends in entrepreneurship	6
Total		35

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Strategic Human Resource Management and HR Policies

Class: TYBMS- HR

Semester: V

Name of Teacher: Swati Sonagra

Unit No.	Topic	No. Of Lectures Required
1	SHRM- An Overview a) SHRM b) HR Environment c) Linking SHRM and Business Performance	10
2	HR Strategies	8
3	HR Policies	8
4	Recent Trends in SHRM a) Mentoring b) Employee Engagement c) Contemporary Approaches to HR Evaluation d) Competency based HRM e) Human Capital Management f) New Approaches to Recruitment g) Strategic International Human Resource Management	9
Total		35

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Sales and Distribution

Class: TYBMS- MKT

Semester: V

Name of Teacher: Swati Sonagra

Unit No.	Topic	No. Of Lectures Required
1	Introduction a) Sales Management b) Distribution Management c) Integration of Marketing, Sales and Distribution	9
2	Market Analysis and Selling a) Market Analysis b) Selling	9
3	Distribution Channel Management	9
4	Performance Evaluation, Ethics and Trends a) Evaluation and Control of Sales Performance b) Measuring Distribution Channel Performance c) Ethics in Sales Management d) New Trends in Sales and Distribution Management	10
Total		37

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

Academic year 2020-2021 (Term – I)

Subject: Strategic Marketing Management

Class: TYBMS- MKT

Semester: V

Name of Teacher: Swati Sonagra

Unit No.	Topic	No. Of Lectures Required
1	Introduction to SMM a) Marketing b) Strategic Decisions c) Identifying the market d) The 7 tactics of Marketing mix e) Business Model and Strategic Marketing Planning	9
2	Segmenting, Targeting, Positioning and Creation of Value in the context of Strategic Marketing a) Segmentation b) Identifying Target Customers c) Creating Customer Value through Positioning	10
3	Strategic Decisions in Product, Services and Branding a) Managing Product and Services b) Managing Product Lines c) Brand Tactics	9
4	Strategic Decisions in Pricing, Promotion and Distribution and strategic growth management a) Managing price b) Managing promotions and incentives c) Managing distribution d) Strategic growth management e) Defending market position	10
Total		38

Late Shri. Vishnu Waman Thakur Charitable Trust's
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

Department of Management Studies (BMS)
Teaching Plan (Term-I, 2022-2023)

Name of the Teacher: Swati Sonagra

Class & Specialization: SYBMS (MKT)

Semester: III

Subject: Advertising

Date:

Course Outcomes: The Learners will be able to:

The students would be able :

Course Outcomes:

- To understand and examine the growing importance of advertising
- To understand the construction of an effective advertisement
- To understand the role of advertising in contemporary scenario
- To understand the future and career in advertising

Unit No.	Topics	No. of Lectures Allotted
I	Introduction to Advertising • Definition, Evolution of Advertising, Importance, Scope, Features, Benefits, Five M's of Advertising • Types of Advertising –consumer advertising, industrial advertising, institutional advertising, classified advertising, national advertising, generic advertising • Theories of Advertising : Stimulus Theory, AIDA, Hierarchy Effects Model, Means – End Theory, Visual Verbal Imaging, Cognitive Dissonance • Ethics and Laws in Advertising : Puffery, Shock Ads, Subliminal Advertising, Weasel Claim, Surrogate Advertising, Comparative Advertising Code of Ethics, Regulatory Bodies, Laws and Regulation – CSR, Public Service Advertising, Corporate Advertising, Advocacy Advertising • Social, cultural and Economic Impact of Advertising, the impact of ads on Kids, Women and Advertising	15
II	Strategy and Planning Process in Advertising • Advertising Planning process & Strategy : Introduction to Marketing Plan, Advertising Plan- Background, situational analysis related to Advertising issues, Marketing Objectives, Advertising Objectives, Target Audience, Brand Positioning (equity, image personality), creative Strategy, message strategy, media strategy, Integration of advertising with other communication tools • Role of Advertising in Marketing Mix : Product planning, product brand policy, price, packaging, distribution, Elements of Promotion, Role of Advertising in PLC • Advertising Agencies – Functions – structure – types - Selection criteria for Advertising agency – Maintaining Agency–client relationship, Agency Compensation.	15
III	Creativity in Advertising • Introduction to Creativity – definition, importance, creative process , Creative strategy development – Advertising Campaign – determining the message theme/major selling ideas – introduction to USP – positioning strategies – persuasion and types of advertising appeals – role of source in ads and celebrities as source in Indian ads – execution styles of presenting ads. • Role of different	15

	elements of ads – logo, company signature, slogan, tagline, jingle, illustrations, etc – • Creating the TV commercial – Visual Techniques, Writing script, developing storyboard, other elements (Optical, Soundtrack, Music) • Creating Radio Commercial – words, sound, music – scriptwriting the commercial – clarity, coherence, pleasantness, believability, interest, distinctiveness • Copywriting: Elements of Advertisement copy – Headline, sub-headline, Layout, Body copy, slogans. Signature, closing idea, Principles of Copywriting for print, OOH, essentials of good copy, Types of Copy, Copy Research	
IV	Budget, Evaluation, Current trends and careers in Advertising • Advertising Budget – Definition of Advertising Budget, Features, Methods of Budgeting • Evaluation of Advertising Effectiveness – Pre-testing and Post testing Objectives, Testing process for Advertising effectiveness, Methods of Pretesting and Post-testing, Concept testing v/s Copy testing • Current Trends in Advertising : Rural and Urban Advertising, Digital Advertising, Content Marketing (Advertorials), retail advertising, lifestyle advertising, Ambush Advertising, Global Advertising – scope and challenges – current global trends • Careers in Advertising : careers in Media and supporting firms, freelancing options for career in advertising, role of Advertising Account Executives, campaign Agency family tree – topmost advertising agencies and the famous advertisements designed by them	15
		60

Signature of the staff **Signature of the H.O.D**

Late Shri. Vishnu Waman Thakur Charitable Trust's
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

Department of Management Studies (BMS)
Teaching Plan (Term-I, 2022-2023)

Name of the Teacher: Swati Sonagra

Class & Specialization: SYBMS (MKT)

Semester: III

Subject: FC III (Environmental Management)

Date:

Course Outcomes: The Learners will be able to:

The students would be able :
Course Outcomes:

- To understand and examine the growing importance of environment
- To understand the role of resources in contemporary scenario

Unit No.	Topics	No. of Lectures Allotted
I	**Environmental Concepts:** • Environment: Definition and composition, Lithosphere, Atmosphere, Hydrosphere, Biosphere • Biogeochemical cycles - Concept and water cycle • Ecosystem & Ecology; Food chain, food web & Energy flow pyramid • Resources: Meaning, classification(Renewable & non-renewable), types & Exploitation of Natural resources in sustainable manner	15
II	**Environment degradation** • Degradation-Meaning and causes, degradation of land, forest and agricultural land and its remedies • Pollution – meaning, types, causes and remedies (land, air, water and others) • Global warming: meaning, causes and effects. • Disaster Management: meaning, disaster management cycle. • Waste Management: Definition and types -solid waste management anthropogenic waste, e-waste & biomedical waste (consumerism as a cause of waste)	15
III	**Sustainability and role of business** • Sustainability: Definition, importance and Environment Conservation. • Environmental clearance for establishing and operating Industries in India. • EIA, Environmental auditing, ISO 14001 • Salient features of Water Act, Air Act and Wildlife Protection Act. • Carbon bank & Kyoto protocol	15
IV	**Innovations in business**- an environmental perspective Non-Conventional energy sources- Wind, Bio-fuel, Solar, Tidal and Nuclear Energy. Innovative Business Models: Eco-tourism, Green marketing, Organic farming, Ecofriendly packaging, Waste management projects for profits ,other business projects for greener future	15
		60

Signature of the staff **Signature of the H.O.D**

Late Shri. Vishnu Waman Thakur Charitable Trust's
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

Department of Management Studies (BMS)
Teaching Plan (Term-II, 2022-2023)

Name of the Teacher: Swati Sonagra

Class & Specialization: SYBMS (MKT)

Semester: IV

Subject: Rural Marketing

Date:

Course Outcomes: The Learners will be able to:

The students would be able :

Course Outcomes:

- The objective of this course is to explore the students to the Agriculture and Rural Marketing environment so that they can understand consumer's and marketing characteristics of the same for understanding and contributing to the emerging challenges in the upcoming global economic scenario.

Unit No.	Topics	No. of Lectures Allotted
I	**Introduction** • Introduction to Rural Market, Definition &Scope of Rural Marketing. • Rural Market in India-Size & Scope, Rural development as a core area, Efforts put for Rural development by government (A brief Overview). • Emerging Profile of Rural Markets in India, • Problems of rural market. • Constraints in Rural Marketing and Strategies to overcome constraints	15
II	**Rural Market** • Rural Consumer Vs Urban Consumers– a comparison. • Characteristics of Rural Consumers. • Rural Market Environment: a)Demographics– Population, Occupation Pattern, Literacy Level; b)Economic Factors-Income Generation, Expenditure Pattern, Rural Demand and Consumption Pattern, Rural Market Index; Land Use Pattern, c)Rural Infrastructure -Rural Housing, Electrification, Roads • Rural Consumer Behaviour: meaning, Factors affecting Rural Consumer Behaviour-Social factors, Cultural factors, Technological factors, Lifestyle, Personality.	15
III	**Rural Marketing Mix** • Relevance of Marketing mix for Rural market/Consumers. • Product Strategies, Rural Product Categories-FMCGs, Consumer Durables, Agriculture Goods &Services; Importance of Branding, Packaging and Labelling. • Nature of Competition in Rural Markets, the problem of Fake Brands • Pricing Strategies & objectives • Promotional Strategies. Segmentation, Targeting & Positioning for rural market.	15
IV	**Rural Marketing Strategies** • Distribution Strategies for Rural consumers. Channels of Distribution- HAATS, Mandis, Public Distribution System, Cooperative society, Distribution Models of FMCG, Companies HUL, ITC etc. Distribution networks, Ideal distribution model for rural markets (Case study based) • Communication Strategy. Challenges in Rural	15

	Communication, Developing Effective Communication, Determining Communication Objectives, Designing the Message, Selecting the Communication Channels. Creating Advertisements for Rural Audiences. Rural Media- Mass media, Non-Conventional Media, Personalized media;	
		60

Signature of the staff **Signature of the H.O.D**

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: Information Technology I Semester: Sem III

Class: SYBMS

Unit No.	Topic	No. Of Lectures Required
01	Data, CBIS, BPR, TQM, KMS, ERP, OLAP, IA, IS, digital economy, digital organisation	09
02	Practicals on MS-office	06
03	internet, emails, Ecommerce, HTTP, search engine, HTML, network infra & Topology	09
04.	E-security, theart, IT risk, PPT methodology Real time, online and Batch Processing	10
	Total No. Of Lectures:	34

Name Of Teacher: Neha Pingulkar Sign: Pingulkar

Date: 07/06/19

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN (BP & EN)

ACADEMIC YEAR 2019-20

Subject: Business Planning & Entrepreneurship Management

Class: SYBMS (Fin/MKT THR) Semester: III

Unit No.	Topic	No. Of Lectures Required
1.	Foundation of Entrepreneurship Development: Theories of Entrepreneurship/ External Influences on Entrepreneurship Development	10
2.	Types and classification of ENT. Entrapreneur/Women Ent/ Social Ent/ EDP	10
3.	Entrepreneur Project Development Innovation, Invention, Environment Scanning, SWOT, Business planning, Process, Critical Risk, Business Plan	10
4.	Venture Development steps in starting of venture, Venture Funding, Marketing. New Trends in Intrapreneurship	08
		38
	Total No. Of Lectures:	38

Name Of Teacher: Ms. Swati Patil Sign: Patil

Date: 07/06/19

VIVA COLLEGE
BMS/BMM DEPARTMENT TEACHING PLAN
ACADEMIC YEAR 2019-20.

Subject: FC-III Semester: III.
Class: SYBMS (MKT + HR).

Unit No.	Topic	No. Of Lectures Required
1.	Environmental Concepts. a) Environment b) Biogeochemical cycles. c) Ecosystem and Ecology. d) Resources.	12.
2.	Environment Degradation. a) Degradation b) Pollution c) Global warming c) Disaster mgt d) Waste Mgt	10.
3.	Sustainability and Role of Business. a) Sustainability. b) EIA c) ISO14001 d) Features of Water Act, Air Act, & Wildlife Protection Act. d) Carbon Bank & Kyoto Protocol.	10.
4.	Innovations in Business - An Envt. Perspective. a) Non-Conventional Energy Sources. b) Innovative Business Models.	9.
	Total No. Of Lectures	41

Name Of Teacher: Swati Sonagra. Sign: Swati

Date: 07/06/19

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: FC-III [EVM]

Class: SYBMS [finance] Semester: Sem III

Unit No.	Topic	No. Of Lectures Required
1	Environmental concepts:- - environment. - Biogeochemical cycles - Ecosystem and Ecology - resources.	10
2.	Environment Degradation - degradation, pollution, global warming, disaster mangt, waste management.	10
03.	Sustainability & Role of Business EIA, ISO 14001, features of water act, air act, wild life, protection act	10
04	Innovation in Business → Non-conventional energy sources. innovative Business models	10
	Total No. Of Lectures	40

Name Of Teacher: Sneha Pingulkar Sign: Pingulkar

Date: 07/06/19

VIVA COLLEGE
BMS/BMM DEPARTMENT TEACHING PLAN
ACADEMIC YEAR 2019-20

Subject: STRATEGIC MGMT.

Class: S.Y.BMS (FIN+MKTG+HR) Semester: II

Unit No.	Topic	No. Of Lectures Required
1.	INTRODUCTION.	10
	BUSINESS POLICY.	
	STRATEGY, STRATEGIC MGMT.	
	STRATEGIC INTENT.	
2.	STRATEGY FORMULATION	10
	ENVIRONMENTAL ANALYSIS, CORPORATE LEVEL	
	BUSINESS LEVEL, FUNCTIONAL LEVEL.	
3.	STRATEGIC IMPLEMENTATION.	10
	MODELS, STRATEGIC ANALYSIS, PORTERS	
	5 FORCES, 7'S FRAMEWORK,	
	STEPS IN IMPLEMENTATION.	
4.	STRATEGIC EVALUATION, AND CONTROL	10
	MEANING STEPS, SYNERGY,	
	CHANGE MGMT.	
	Total No. Of Lectures:	40

Name Of Teacher: DEEP. M. JAIN. Sign:

Date: 07/06/19

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019 - 2020

Subject: Accounts for Managerial Decision Semester: III

Class: SYBMS (Finance)

Unit No.	Topic	No. Of Lectures Required
1	Analysis & Interpretation of financial Statement → Vertical Form of B/Sheet Income statement, Commonsize Statement Comparative Statement & Trend Analysis	15
2	Ratio Analysis & Interpretation Balance sheet ratio, Income Statement Ratio & Combined Ratio	06
3	Cash Flow statement. Direct Method & indirect Method	06
4	Working Capital Estimation of requirements in Trading & Mfg co. Receivable Management → Meaning importance, Monitoring the Debtors Technique	08
	Total No. Of Lectures:	35

Name Of Teacher: Deky Lopes Sign: DLopes

Date: 07/06/19

VIVA COLLEGE
BMS/BMM DEPARTMENT TEACHING PLAN
ACADEMIC YEAR 2019-20

Subject: COST ACCOUNTING
Semester: III
Class: S.Y. B.M.S.

Unit No.	Topic	No. Of Lectures Required
1.	Cost Accounting (Introduction) :- Meaning, scope, Nature, objective, advantage, disadvantages, classification, elements of cost, Process accounting.	8 lec
2.	Elements of cost Material costing - Stock valuation (FIFO & weighted average method), EOQ, calculation of stock level, (Pratical Problem). Labour costing. Bonus & Incentive plans (pratical problems). Overhead costing (primary & secondary Distribution).	14 lec
3.	Cost Projection - cost sheet (Intro) cost sheet and reconciliation of financial A/c and cost A/c (Pratical Problems).	14 lec
4.	Emerging cost concepts Uniform cost & Interfirm comparison target costing, JIT, The Balanced Scorecard, implementation of Bal scorecard	8 lec
	Total No. Of Lectures	44 lec

Name Of Teacher: Prof. SACHIN. ARJUN KADAM Sign:

Date: 07/06/19

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019 - 20

Subject: Corporate finance Semester: III

Class: SYBMS (Finance)

Unit No.	Topic	No. Of Lectures Required
1	CH 1 - Introduction to Corporate Finance & Introduction to Ownership Securities	6
	- Meaning & Significance of Corp Fin, Under Capitalization, Over Capitalization, - Fixed Capital - meaning, features, sources, Working Capital - Source, Working Capital Cycle, Ownership Securities - Equity Share, Pref Share, Creditorship Securities - Debentures, Private Placement of Securities.	
2	CH-2 - Capital Structure - Introduction to Cap Structure Theories, EBIT-EPS analysis, Sums.	8
	CH3 - Cost of Capital - Cost of Debt, Cost of Pref Sh, Cost of Eq. Sh, Cost of Retained Earnings, Calⁿ of Weighted Avg Cost of Capital, Sums.	8

Total No. Of Lectures

Name Of Teacher: Sign:

Date:

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019 - 20

Subject: Corporate Finance

Class: SYBMS (Finance)

Semester: III

Unit No.	Topic	No. Of Lectures Required
2	CH-4 Leverages - Operating Leverage, Financial Leverage, Combined Lev, Sums	6
3	CH-5 Time Value of Money - Compounding, Discounting, Present Value, Future Value, Sums	6
	CH-6 - Introduction to Capital Budgeting - NPV, IRR, Sums.	6.
	CH-7 - Risk & Return Analysis - Problems based on Expected Returns, Standard Deviation, Variance.	6

Total No. Of Lectures: 46

Name Of Teacher: Nikita Jogle

Sign:

Date: 07/06/2019

VIVA COLLEGE
BMS/BMM DEPARTMENT TEACHING PLAN
ACADEMIC YEAR 2019-2020

Subject: Consumer Behaviour Semester: III

Class: SYBMS (MKT)

Unit No.	Topic	No. Of Lectures Required
I	• Introduction to Consumer Behaviour	2
	• Consumer Profiling, Involvement	3
	• Consumer Decision making	2
	• Consumer Need & motivation	3
II	• Personality	2
	• Self Concept, Consumer Perception	3
	• Learning & Attitude	2
	• Family & Social Class	3
III	• Group Dynamics	3
	• Culture	3
	• Consumer decision making models	2
IV	• Diffusion of Innovation & Adoption	3
	• E-Buying Behaviour	3

Total No. Of Lectures: 34

Name Of Teacher: Anand S Rajawat Sign:

Date: 07/06/19

VIVA COLLEGE
BMS/BMM DEPARTMENT TEACHING PLAN
ACADEMIC YEAR 2019-20

Subject: Advertising Semester: III
Class: SYBMS – Marketing

Unit No.	Topic	No. Of Lectures Required
1.	Introduction to Advertising Definition / Features / Types / Theories / Ethics & Law / Social, Economic, cultural Impact / Women & kids in Advertising Impact	09
2.	Strategy & planning process Ad planning Process / Strategy / Role of marketing mix / Advertising Agencies	10
3.	Creativity in Advertising Introduction to creativity / Role of diffnt elements / TV commercial / Radio Commercial / Copy Writing	09
4.	Budget, Evaluation, current trends & career in advertising Ad Budget / Evaluation of Ad / effectiveness / current trends / Career in Advertising	10
		38

Total No. Of Lectures: 38

Name Of Teacher: Ms. Swati Patil Sign: Patil

Date: 07/06/19

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-2020

Subject: Recruitment & Selection. Semester: III

Class: SYBMS.

Unit No.	Topic	No. Of Lectures Required
I]	Concepts of Recruitment, Job Analysis, Job Design, Source of Type of Recruitment Technique of Recruitment, Evaluation of Recruitment (Recruitment).	12
II)	selection, screening, Interviewing, Selection Hurdles (selection).	06
III)	Induction Orientation & Onboarding Socialisation, current trends in Recruitment & Selection strategies (Induction).	07
IV]	Soft Skills :- Preparing Biodata & C.V. Social & Soft Skills - GD & personal Interview, video & Telecon ferencing skill presentation & Negotiation.	08

Total No. Of Lectures: 33

Name Of Teacher: Amruta V Ghorpade Sign:

Date: 07/06/19

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20.

Subject: Accounting for Managerial Decision

Class: SYBMS (MKT&HR) Semester: III.

Unit No.	Topic	No. Of Lectures Required
1.	Analysis and Interpre~~presentation~~ of Financial Analysis - vertical Incomestatement and Balancesheet.	10
2)	Ratio Analysis - Balance Sheet Ratio Income statement ratio and combined ratio	10
3.	Cash flow statement - Identifying cash from operation, Investment & Financing activities & working Capital statement.	8.
4)	Working capital - concept, estimation of requirements in case of trading & manufacturing organisation	6
	Receivables mgmt = meaning, Credit policy variables, methods of Credit evaluation, monitoring the debtors technique	6
	Total No. Of Lectures	40.

Name Of Teacher: Kadambari Agaskar Sign: Agaskar

Date: 07/06/19

VIVA COLLEGE
BMS/BMM DEPARTMENT TEACHING PLAN
ACADEMIC YEAR 2019 / 2020

Subject: Motivation & Leadership Semester: III

Class: SYBMS

Unit No.	Topic	No. Of Lectures Required
I]	Motivation I : Concept, Importance, Tools of Motivation, Theory Z, Equity theory, Process, Vrooms Expectancy, Valence four drive model.	06
II]	Motivation II : East v/s West, motivating workers, The Indian scene. basic difference WLB, concept, difference, generation. HPS.	06
III]	Leadership I : Meaning, Traits, Styles, theories : Trait, Behavioural, Path Goal theory Transactional v/s Transformational leaders, Strategic leaders : Meaning qualities, Charismatic leaders : Meaning, qualities, characteristics, types of charismatic leaders	10
IV]	Leadership II : Great leaders, style, activities & Skills (Ratan Tata, Narayan Murthy, Dhirubhai, Ambani, Bill Gates, Zuckerberg, Donald Trump). Contemparary leadership, Mentoring Skill: Self leadership, Online. Creating effective leader	10
	Total No. Of Lectures:	32

Name Of Teacher: Amruta V Ghorpade Sign:

Date: 07/06/19

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: PTQM

Class: S.Y.BMS.

Semester: IV

Unit No	Topic	No. of Lect Required
1.	PRODUCTION MANAGEMENT. OBJECTIVES, MANUFACTURING SYSTEM PRODUCT DEVELOPMENT, PLANT LOCATION PLANT LAYOUT. PURCHASE MANAGEMENT	10.
2.	MATERIALS MANAGEMENT. CONCEPT, OBJECTIVES IMPORTANCE. INVENTORY CONTROL TECHNIQUES. EOQ. PRACTICAL.	06.
3.	BASICS OF PRODUCTIVITY & TQM. MODES OF CALCULATING PRODUCTIVITY, TQM CONCEPT, APPROACHES. SERVQUAL DIMENSION, FISH BONE ANALYSIS.	08.
4.	QUALITY IMPROVEMENT STRATEGIES LEAN THINKING, SIX SIGMA, KEPNER TREGOE.	07.
	Total no. of Lectures	31

Name of Teacher: DILIP. M. JAGN.

Sign:

Date: 02/12/2019

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: Eco

Class: SYBMS SEM IV

Semester:

Unit No	Topic	No. of Lect Required
I	Macroeconomics, Circular Flow of Income	
	(Four sectors), National Income, Trade	
	cycles, Keynesian Theory (ADP & ASP)	
	Effective Demand	10
II	Determinants of Money Supply	
	Demand for Money, Inflation	
	cause & effects, Monetary Policy	
	objective & instruments.	12
III	Public Goods - Sound finance	
	Fiscal policy - Meaning, objectives	
	Instruments, Cannons of Taxation	
	Public Expenditure, Public Debt	
	Union Budget	12
IV	International Trade, Foregin	
	Investment, BOP payments	
	Disequilibrium of BOP	
	Foregin exchange Rate	08
	Total no. of Lectures	42

Name of Teacher: Mang Kurp

Sign: Kurp

Date: 02/12/19

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019 - 2020

Subject : FC IV

Semester: IV

Class: SYBMS (Fin)

Unit No	Topic	No. of Lect Required
1	Introduction to Ethics & Bus. Ethics, Concept, nature, Objectives, scope, types, Scope of bus. ethics, Role of Govt, Principles of ethics 3 C's of ethics.	15
2	Ethics in Marketing, finance & HRM, Ethical issues in Mkt mix unethical practice, Ethics in advertising Ethics in taxation, Corporate Crime, Imp of workplace ethics.	10
3	Corporate Governance - Concept Need, advantage, Theories of CG Models, Emerging Trends.	10
4	Corporate Social Responsibility Meaning, needs, Issues, social accounting, Principles & Strategy Future of CSR	10
	Total no. of Lectures	45

Name of Teacher: Delcy Lopes

Sign: Dlops

Date: 02/12/2019

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: FC IV

Class: SY - MKT & HR

Semester: IV

Unit No	Topic	No. of Lect Required
1	Introduction to Ethic & Business Ethics Ethics - Concept, Evolution, Types, Scope Business Ethics - Meaning, Objective purpose, Principles, Myths, Role of Govt	10
2	Ethics in Marketing Ethics in Finance Ethics in HR.	08
3.	Corporate Governance Concept, Need, Significance, Principles, Issues, theories, emerging trends, Models, Insider Trading	08
4.	Corporate Social Responsibility Meaning, Evolution, Types, Aspects of CSR, Need, Issues, Social Accounting, Tata group's CSR, Sachar Commitee Report Ethical Issues in International Business Recent Guidlines in CSR, Society's Expectations, Futun of CSR	10
	Total no. of Lectures:	36

Name of Teacher: Akshata Puralkar

Sign: Apuralkar

Date: 02.12.19

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-2020

Subject : BRM

Class: SYBMS (Mkt + Fin + HR)

Semester: IV

Unit No	Topic	No. of Lect Required
01	Introduction to Business Research Method 1) Meaning, objectives, Types, Concept 2) Stages, characteristics, Hypothesis 3) Research Design, Sampling	10
02	Data collection and Processing 1) Types of data & Sources 2) Methods of Data Collection 3) Survey / Survey Instrument 4) Scaling Techniques	08
03	Data Analysis & Interpretation 1) Processing of data 2) Analysis of data 3) Interpretation / Multivariate Analysis 4) Testing Hypothesis	08
04	Advanced Techniques in Report Writing 1) Report Writing 3) objectivity 2) Ethics & Research 4) Plagiarism	10
	Total no. of Lectures	36

Name of Teacher: Asst. Prof Swati Patil

Sign:

Date: 02/12/2019

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject : IT

Class: SYBMS [HR+Marketing+Finance A&B] Semester: IV

Unit No	Topic	No. of Lect Required
	MIS	
01	1. Management Information system	5
	2. understanding functional system	5
	3. Decision support system	5
02.	1. Enterprise resource Planning	5
	2. customer relationship management	3
	3. supply chain Management.	3
03.	1. Database Management System.	5
	2. Data warehousing and data Mining	5
04.	1. introduction to outsourcing	2
	2. Business process outsourcing	3
	3. Knowledge Process outsourcing.	2
	Total no. of Lectures	43

Name of Teacher: Sneha S. Pingulkar Sign: Sneha

Date: 02/12/2019

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-2020

Subject: Financial Institutions & Markets.

Class: SYBMS (fin) Semester: IV

Unit No	Topic	No. of Lect Required
1	Financial System in India	
-	fin System - Meaning Importance, functions, Indian fin system, Role of govt in fin development, Phases of Indian financial system,	5
-	Structure of Ind fin system - fin Institutions, fin. Markets, fin Instruments financial Services.	4
-	Microfinance - Origin, definition, Advantages, microfinance models in India	1
2.	Financial Regulators & Institutions in India	
-	Financial Regulators - Ministry of finance, RBI, Ministry of Corporate Affairs, SEBI, PFRDA, IRDA.	3
-	fin Institutions - Roles, classification, of Comm^n banks, functions, IFCI, IDBI, ICICI, SFC, Inv Institutions (LIC, GIC), NBFC Services	2
	Total no. of Lectures	

Name of Teacher: Nikita Jogle Sign:

Date: 02/12/2019

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-2020

Subject: Financial Institutions & Markets.

Class: SYBMS (Fin) Semester: IV

Unit No	Topic	No. of Lect Required
	- Specialized fin Inst^n - EXIM, NABARD, SIDBI, NHB, SIDC, SIDBA, IIFCL, IWRFC (Their role, functions)	2
3	Indi Financial Markets	
	- Indian Money Market - Meaning, features, functions, importance, defects, participants, components & reforms	2
	- Indian Capital Market - Meaning, features, functions, importance, participants, instruments, reforms in primary & secondary markets, stock indices, NSE, BSE, ADR & GDR.	2
	- Introduction of Commodity & Derivatives Mkt	1
	- Insurance & Mutual funds - An introduction	3
4.	Managing Financial System Design	
	- Financial System Design - Meaning, stakeholder under conflict, manager stock holder conflict, Conflict Resolution & fin Sys Design, Bank Oriented Systems & Market oriented System (adv & drawbacks), Dimensions of well functioning fin system	2
	Total no of Lectures	

Name of Teacher: Nikita Jogle Sign:

Date: 02/12/2019

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019 - 2020

Subject : Audit

Class: SYBMS

Semester: IV

Unit No	Topic	No. of Lect Required
I.	Introduction to Auditing :-	08
	Basics, Errors & Frauds, Principle of	
	Audit, Type of Audit	
II	Audit Planning, Procedures &	08
	Documentation :-	
	Audit Planning, Audit Program	
	Audit working papers, Audit	
	Notebook	
III	Auditing Techniques and Internal	12
	Audit Introduction:	
	Test check, Audit Sampling,	
	Internal control, Internal	
	Audit	
IV	Auditing Techniques : Vouching	08
	& Verification :-	
	Audit of Income, Audit of	
	Expenditure, Audit of Assets	
	Book debts / Debtors, stocks,	
	Audit of Liabilities	
☆	Discussion of Last 2 years	
	Board papers Total no. of Lectures	36

Name of Teacher: PROF. SACHIN. A. KADAM Sign: Kadam

Date: 02/12/2019

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject : Rural MKt

Semester: IV

Class: SYBMS - MKt

Unit No	Topic	No. of Lect Required
I	Introduction.	8
	Intro, Def^n & Scope	
	Efforts put for rural dev^p by govt,	
	Emerging profile & problems of rural	
	mkt, Constraints in Rural mkt &	
	strategies to overcome constraints.	
II	Rural Market	8
	Rural Vs Urban consumer	
	Rural MKt Envt	
	Rural Consumer Behaviour.	
III	Rural Marketing Mix	9
IV	Rural Marketing Strategies	8
	Distribution Strategies for Rural	
	Consumers	
	Communication Strategy.	
	Total no. of Lectures	33

Name of Teacher: Swati Sonagra

Sign: Swati

Date: 02/12/2019

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-2020

Subject : IMC

Semester: IV

Class: SYBMS Marketing

Unit No	Topic	No. of Lect Required
01	Introduction to IMC 1) Meaning, Features, Evolution, Reasons 2) Promotional Tools, Role of IMC 3) Commn Process | Hierarchy Model 4) Objectives & Budgeting | DAGMAR	10
02	Elements of IMC – I 1) Advertising : Features, Advantage Disadvantage, Types, Types of Media 2) Sales Promotion : scope, role, reason Types, advantage, disadvantage, Strategy	08
03	Elements of IMC – II 1) Direct Marketing 2) Public Relations & Publicity 3) Personal selling : Features | Role | advantage | Disadvantages.	10
04	Evaluation and Ethics 1) Evaluating an IMC 2) Ethics and Marketing Commn 3) Current trends in IMC	09
	Total no. of Lectures	37

Name of Teacher: Ast. Prof Swati Pahil

Sign: Pahil

Date: 02/12/2019

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-2020

Subject: Change Mgt

Semester: Sem IV

Class: SYBMS HR

Unit No	Topic	No. of Lect Required
I)	Introduction of Change, organizational culture & change, Types & Models of change	10
II	Impact of Change, change & its Implementation, Team change, change and its impact	10
III	Resistance to Change, overcoming Resistance to change, Minimizing RTC, OD Intervention, T-group, Managing role & Stress	08
IV	Effective Implementation of change, systematic approach to change, Basic skills of leaders, Case study on smart change leader	07
	Total no. of Lectures	35

Name of Teacher: Smeeta V Gharpade

Sign:

Date: 2/12/19

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-2020

Subject: Training & Dev.

Class: SYBMS HR

Semester: Sem IV

Unit No	Topic	No. of Lect Required
I	Overview of Training overview of Training, Process of Training, Assessment, Criteria & designing	12
II	Overview of Development Overview of Development, Counseling, Career Development	08
III	Concept of Management Development MDP, Process of MDP, programs, Importance, Evaluating of MDP	05
IV	Performance Measurement, Talent Management & Knowledge Mgmt Performance Apraisal, Talent Mgmt, Anteceders of KM, KM what is & what is Not?	10
	Total no. of Lectures	35

Name of Teacher: Amruta V Gherpade

Sign: Amruta

Date: 2/12/2019.

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2020-21 (TERM II)
TEACHING PLAN

SUBJECT TRAINING AND DEVELOPMENT

CLASS: SYBMS **SPECIALIZATION: HR** **SEM.: IV**

Sr. No.	UNIT	TOPIC	No. of Lectures
1	1	Overview of Training	09
2	2	Overview of Development	09
3	3	Management Development Programme	09
4	4	Performance Appraisal	12
		TOTAL	**39**

SUBMITTED BY: Prof AMRUTA V GHORPADE.

DATE: 01/01/2021.

VIVA COLLEGE
DEPARTMENT OF MANAGEMENT STUDIES (BMS)

ACADEMIC YEAR 2021-2022 (TERM II)
TEACHING PLAN

SUBJECT TRAINING AND DEVELOPMENT

CLASS: SYBMS **SPECIALIZATION: HR** **SEM.: IV**

Sr. No.	UNIT	TOPIC	No. of Lectures
1	1	Overview of Training	09
2	2	Overview of Development	09
3	3	Management Development Programme	09
4	4	Performance Appraisal	12
		TOTAL	**39**

SUBMITTED BY: Prof AMRUTA V GHORPADE.

Late Shri. Vishnu Waman Thakur Charitable Trust's
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

Department of Management Studies (BMS)
Teaching Plan (Term-II, 2019-2020)

Name of the Teacher: SWATI SONAGRA

Class & Specialization: TYBMS (MKT)

Semester:VI

Subject: RETAIL MANAGEMENT

Date:

Course Outcomes: The Learners will be able to:

The students would be able :

Course Outcomes:

- To familiarize the students with retail management concepts and operations
- To provide understanding of retail management and types of retailers
- To develop an understanding of retail management terminology including merchandize management, store management and retail strategy.
- To acquaint the students with legal and ethical aspects of retail management
- To create awareness about emerging trends in retail management

Unit No.	Topics	No. of Lectures Allotted
I	**Retail Management- An overview** a) Retail Management: • Introduction and Meaning, Significance, Factors Influencing Retail Management, Scope of Retail Management b) Retail Formats: • Concept of Organized Retailing: Factors Responsible for the Growth of Organized Retail in India, Multichannel Retailing: Meaning and Types, E-tailing: Meaning, Advantages and Limitations c) Emerging Trends in Retailing • Impact of Globalization on Retailing • I.T in Retail: Importance, Advantages and Limitations, Applications of I.T. in Retail: EDI, Bar Coding, RFID Tags, Electronic Surveillance, Electronic Shelf Labels • FDI in Retailing: Meaning, Need for FDI in Indian Retail Scenario • Franchising: Meaning, Types, Advantages and Limitations, Franchising in India • Green Retailing • Airport Retailing	15
II	**Retail Consumer and Retail Strategy** a) Retail Consumer/Shopper: • Meaning of Retail Shopper, Factors Influencing Retail Shoppers, Changing Profile of Retail Shoppers, Market Research as a Tool for Understanding Retail Markets and Shoppers b) CRM in Retail: • Meaning, Objectives • Customer Retention Approaches: Frequent Shopper Programme, Special Customer Services, Personalization, Community c) Retail Strategy: • Meaning, Steps in Developing Retail Strategy, Retail Value Chain d) Store Location Selection: • Meaning, Types of Retail Locations, Factors Influencing Store Location e) HRM in Retail: • Meaning, Significance, Functions • Organization Structure in Retail: Meaning, Factors Influencing Designing Organization Structure, Organization Structure for Small Stores/Single Stores/Independent Retailers and Retail Store Chain/Department Store	15
III	**Merchandise Management and Pricing** a) Merchandise Management • Concept, Types of Merchandise, Principles of	15

	Merchandising, Merchandise Planning- Meaning and Process, Merchandise Category – Meaning, Importance, Components, Role of Category Captain, Merchandise Procurement/SourcingMeaning, Process, Sources for Merchandise b) Buying Function: • Meaning, Buying Cycle, Factors Affecting Buying Functions, Functions of Buying for Different Types of Organizations Young and Rubicam's Brand Asset Valuator- Independent Store, Retail Chain, Non-store Retailer c) Concept of Lifestyle Merchandising d) Private Label • Meaning, Need and Importance, Private Labels in India e) Retail Pricing • Meaning, Considerations in Setting Retail Pricing • Pricing Strategies: High/ Low Pricing: Meaning, Benefits, Everyday Low Pricing: Meaning, Benefits, Market Skimming, Market Penetration, Leader Pricing, Odd Pricing, Single Pricing, Multiple Pricing, Anchor Pricing • Variable Pricing and Price Discrimination- Meaning Types: ♣ Individualized Variable Pricing/First Degree Price ♣ Self-Selected Variable Pricing/ Second Degree Price DiscriminationClearance and Promotional Markdowns, Coupons, Price Bundling, Multiple – Unit Pricing ♣ Variable Pricing by Market Segment/ Third Degree Price Discrimination	
IV	**Managing and Sustaining Retail** a) Retail Store Operations: • Meaning, Responsibilities of Store Manager, The 5 S's of Retail Operations (Systems, Standards, Stock, Space, Staff) b) Store Design and Layout: • Store Design- Meaning, Objectives, Principles, Elements of Exterior and Interior Store Design, Store Atmospherics and Aesthetics • Store Layout- Meaning, Types: Grid, Racetrack, Free Form • Signage and Graphics: Meaning, Significance, Concept of Digital Signage • Feature Areas: Meaning, Types: Windows, Entrances, Freestanding Displays, End Caps, Promotional Aisles, Walls, Dressing Rooms, Cash Wraps c) Visual Merchandising and Display: • Visual Merchandising- Meaning, Significance, Tools Used for Visual Merchandising • The Concept of Planogram • Display- Meaning, Methods of Display, Errors in Creating Display d) Mall Management • Meaning and Components: Positioning, Zoning, Promotion and Marketing, Facility Management, Finance Management e) Legal and Ethical Aspects of Retailing • Licenses/Permissions Required to Start Retail Store in India • Ethical Issues in Retailing Career Options in Retailing	15
		60

Signature of the staff **Signature of the H.O.D**

Late Shri. Vishnu Waman Thakur Charitable Trust's
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

Department of Management Studies (BMS)
Teaching Plan (Term-I, 2019-2020)

Name of the Teacher: Swati Sonagra

Class & Specialization: TYBMS (MKT)

Semester:V

Subject: Sales and Dist

Date:

Course Outcomes: The Learners will be able to:

The students would be able :

Course Outcomes:

- To develop understanding of the sales & distribution processes in organizations
- To get familiarized with concepts, approaches and the practical aspects of the key decision making variables in sales management and distribution channel management

Unit No.	Topics	No. of Lectures Allotted
I	**Introduction** a) Sales Management: • Meaning, Role of Sales Department, Evolution of Sales Management • Interface of Sales with Other Management Functions • Qualities of a Sales Manager • Sales Management: Meaning, Developments in Sales ManagementEffectiveness to Efficiency, Multidisciplinary Approach, Internal Marketing, Increased Use of Internet, CRM, Professionalism in Selling. • Structure of Sales Organization – Functional, Product Based, Market Based, Territory Based, Combination or Hybrid Structure b) Distribution Management: • Meaning, Importance, Role of Distribution, Role of Intermediaries, Evolution of Distribution Channels. c) Integration of Marketing, Sales and Distribution	15
II	**Market Analysis and Selling** a) Market Analysis: • Market Analysis and Sales Forecasting, Methods of Sales Forecasting • Types of Sales Quotas – Value Quota, Volume Quota, Activity Quota, Combination Quota • Factors Determining Fixation of Sales Quota • Assigning Territories to Salespeople b) Selling: • Process of Selling, Methods of Closing a Sale, Reasons for Unsuccessful Closing • Theories of Selling – Stimulus Response Theory, Product Orientation Theory, Need Satisfaction Theory • Selling Skills – Communication Skill, Listening Skill, Trust Building Skill, Negotiation Skill, Problem Solving Skill, Conflict Management Skill • Selling Strategies – Softsell Vs. Hardsell Strategy, Client Centered Strategy, Product-Price Strategy, Win-Win Strategy, Negotiation Strategy • Difference Between Consumer Selling and Organizational Selling • Difference Between National Selling and International Selling	15
III	**Distribution Channel Management** • Management of Distribution Channel – Meaning & Need • Channel Partners- Wholesalers, Distributors and Retailers & their Functions in Distribution Channel, Difference Between a Distributor and a Wholesaler • Choice of Distribution System – Intensive, Selective, Exclusive • Factors Affecting Distribution Strategy –	15

	Locational Demand, Product Characteristics, Pricing Policy, Speed or Efficiency, Distribution Cost • Factors Affecting Effective Management Of Distribution Channels ♣ Channel Design ♣ Channel Policy ♣ Channel Conflicts: Meaning, Types – Vertical, Horizontal, Multichannel, Reasons for Channel Conflict ♣ Resolution of Conflicts: Methods – Kenneth Thomas's Five Styles of Conflict Resolution ♣ Motivating Channel Members ♣ Selecting Channel Partners ♣ Evaluating Channels ♣ Channel Control	
IV	**Performance Evaluation, Ethics and Trends** a) Evaluation & Control of Sales Performance: • Sales Performance – Meaning • Methods of Supervision and Control of Sales Force • Sales Performance Evaluation Criteria- Key Result Areas (KRAs) • Sales Performance Review • Sales Management Audit b) Measuring Distribution Channel Performance: • Evaluating Channels- Effectiveness, Efficiency and Equity • Control of Channel – Instruments of Control – Contract or Agreement, Budgets and Reports, Distribution Audit c) Ethics in Sales Management d) New Trends in Sales and Distribution Management	15
		60

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

Department of Management Studies (BMS)
Teaching Plan (Term-I, 2019-2020)

Name of the Teacher: SWATI SONAGRA

Class & Specialization: TYBMS (HR)

Semester:V

Subject: STRATEGIC HUMAN RESOURCE MGT

Date:

Course Outcomes: The Learners will be able to:

The students would be able :

- To understand human resource management from a strategic perspective
- To link the HRM functions to corporate strategies in order to understand HR as a strategic resource
- To understand the relationship between strategic human resource management and organizational performance
- To apply the theories and concepts relevant to strategic human resource management in contemporary organizations
- To understand the purpose and process of developing Human Resource policies

Unit No.	Topics	No. of Lectures Allotted
I	**SHRM - An Overview** • Strategic Human Resource Management (SHRM) – Meaning, Features, Evolution, Objectives, Advantages, Barriers to SHRM, SHRM v/s Traditional HRM, Steps in SHRM, Roles in SHRM - Top Management, Front-line Management, HR, Changing Role of HR Professionals, Models of SHRM – High Performance Working Model, High Commitment Management Model, High Involvement Management Model • HR Environment –Environmental trends and HR Challenges • Linking SHRM and Business Performance	15
II	**HR Strategies** • Developing HR Strategies to Support Organisational Strategies, Resourcing Strategy – Meaning and Objectives, Strategic HR Planning – Meaning, Advantages, Interaction between Strategic Planning and HRP, Managing HR Surplus and Shortages, Strategic Recruitment and Selection – Meaning and Need, Strategic Human Resource Development – Meaning, Advantages and Process, Strategic Compensation as a Competitive Advantage, Rewards Strategies – Meaning, Importance, Employee Relations Strategy, Retention Strategies, Strategies for Enhancing Employee Work Performance	15
III	**HR Policies** • Human Resource Policies – Meaning, Features, Purpose of HR Policies, Process of Developing HR Policies, Factors affecting HR Policies, Areas of HR Policies in Organisation, Requisites of a Sound HR Policies – Recruitment, Selection, Training and Development, Performance Appraisal, Compensation, Promotion, Outsourcing, Retrenchment, Barriers to Effective Implementation of HR Policies and Ways to Overcome These Barriers, Need for Reviewing and Updating HR Policies, Importance of Strategic HR Policies to Maintain Workplace Harmony	15

IV	**Recent Trends in SHRM** • i.e. Mentoring • Employee Engagement – Meaning, Factors Influencing Employee Engagement, Strategies for Enhancing Employee Engagement • Contemporary Approaches to HR Evaluation – Balance Score Card, HR Score Card, Benchmarking and Business Excellence Model • Competency based HRM – Meaning, Types of Competencies, Benefits of Competencies for Effective Execution of HRM Functions. • Human Capital Management –Meaning and Role • New Approaches to Recruitment – Employer Branding, Special Event Recruiting, Contest Recruitment, e - Recruitment • Strategic International Human Resource Management – Meaning and Features, International SHRM Strategic Issues, Approaches to Strategic International HRM.	15
		60

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

Department of Management Studies (BMS)
Teaching Plan (Term-I, 2022-2023)

Name of the Teacher: Swati Sonagra

Class & Specialization: TYBMS (MKT)

Semester: V

Subject: Strategic Marketing Management

Date:

Course Outcomes: The Learners will be able to:

The students would be able :

Course Outcomes:

- To understand marketing strategies and their impact on business models
- To learn strategic marketing tactics related to product, price, service, brand, positioning, incentives and communication for business growth.
- To learn the various marketing strategies adopted by Companies to create a competitive advantage

Unit No.	Topics	No. of Lectures Allotted
I	**Introduction to Strategic Marketing Management** • Marketing: Nature of Marketing, marketing as an art, science and business discipline, marketing as a value creation process • Strategic decisions: Nature of strategy, the marketing strategy interface, difference between marketing planning and strategic planning • Identifying the market: The five C framework-customer, company, collaborator, competitor, context • The 7 tactics of Marketing mix: Product, service, brand, price ,incentives, communication and distribution • Business Model and Strategic Marketing Planning: Meaning, Role of Business models in marketing management, Strategies for developing a business models: top-down business model generation, bottom up business model generation, The G-STIC frame work for marketing planning: Goal-Strategy-Tactics-Implementation-control	15
II	**Segmenting, Targeting, Positioning and Creation of Value in the context of Strategic Marketing:** • Segmentation: Essence of segmentation, Factors to be considered while segmenting, key segmenting principles- relevance, similarity, exclusivity • Identifying Target Customers: Factors to be considered while targeting, targeting strategies-One for all strategy, one for each strategy, Strategic Targeting criteria: target attractiveness, target compatibility Essential strategic assets for target compatibility: business infrastructure, collaborator networks, human capital, intellectual property, strong brands, established customer base, synergistic offerings, access to scarce resources and capital. • Creating Customer Value through Positioning: Role of strategic positioning, strategic positioning options: The quality option, value option, the pioneer, a narrow product focus, target segment focus; strategies for creating superior customer value. Creating Company Value: Understanding Company Value: Monetary, functional and psychological value; strategically managing profits--increasing sales revenue-through volume, optimizing price, lowering costs Creating Collaborator Value: Meaning of	15

	collaborators, collaboration as business process, advantages and drawbacks of collaboration, levels of strategic collaboration: explicit, implicit; alternatives to collaboration: horizontal and vertical integration, managing collaborator relations; gaining collaborator power: offering differentiation; collaborator size, strategic importance, switching costs	
III	**Strategic Decisions in Product, Services and Branding** • Managing Product and Services: factors affecting product and service decisionsperformance, consistency, reliability, durability, compatibility, ease of use, technological design, degree of customization, physical aspects, style, packaging. Managing New Products: Forecasting new product demand using Primary Data and secondary data: offering specific forecasting, forecasting by analogy, category based forecasting. New product adoption: Understanding new product adoption, factors influencing diffusion of new offering, new product development process, managing risk in new products- market risk and technological risk, Moore's Model of adoption of new technologies, managing product life cycle at various stages, extending Product lifecycle. • Managing Product Lines: Managing vertical, upscale, downscale, horizontal product-Line Extensions, Managing Product Line Cannibalization, Managing Product lines to gain and defend market position-The Fighting Brand Strategy, The sandwich strategy, The Goodbetter-best strategy • Brand Tactics: Brand: Meaning, brand identity, brand as value creation process brand hierarchy-Individual and umbrella branding, brand extension: vertical and horizontal, brand equity and brand power, measuring brand equity-cost based approach, market based approach and financial based approach.	15
IV	**Strategic Decisions in Pricing, Promotion and Distribution and strategic growth management** A) Managing Price: Major approaches to strategic pricing-cost based pricing, competitive pricing, demand pricing; Price sensitivity: meaning, psychological pricing, Five psychological pricing effects: reference price effects, price quantity effects, price tier effects, price ending effects, product line effects; Understanding competitive pricing and price wars: factors affecting price wars, Approach for developing a strategic response to competitors price cut, Other pricing strategies-captive pricing, cross price elasticity, deceptive pricing, everyday low pricing, experience curve pricing, loss leader pricing, horizontal price fixing, price signalling. B) Managing Promotions and incentives: Promotion mix strategy, Factors affecting strategic decisions in promotion mix, Promotion expenditure strategy, Methods to determine promotion expenditure-Breakdown Method, Buildup Method, Push and Pull promotions. Managing incentives as a value creation process, Goals of using customer incentives, Monetary incentives for customers, Non monetary incentives for customers. Collaborator incentives meaning, monetary incentives-slotting allowance, stocking allowance, cooperative advertising allowance, market development allowance, display allowance, spiffs C) Managing distribution: Distribution as value creation process, distribution channel design process-Channel structure: Direct, indirect and hybrid channel; channel coordination-common ownership, contractual relationship, implicit channel coordination; channel type, channel coverage, channel exclusivity D) Strategic Growth Management: Gaining market position: strategies to gain market position: steal share strategy, market growth strategy, market innovation strategy; Pioneering new markets: Meaning, Types of Pioneers: technology, product, business model, markets; benefits and drawbacks of being a Pioneer. Defending market position: Strategies to defend market position- ignoring competitors' action, repositioning the existing offer- repositioning to increase value for current customers, repositioning to attract new customers.	15
		60

Signature of the staff **Signature of the H.O.D**

VIVA COLLEGE

BMS/~~BMM~~ DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: LOGISTICS

Semester: V

Class: TYBMS

Unit No.	Topic	No. Of Lectures Required
I		
1.	Intro. to Logistics	2
2.	Intro. to SCM	2
3.	Customer Service	2
4.	Demand Forecasting	2
II		
5.	Transportation	2
6.	Warehousing	2
7.	Material Handling	2
8.	Packaging	2
III		
9.	Inventory	4
10.	Log. Costing	2
11.	Log. Performance Measurement	2
12.	Log. Network Analysis	2
IV		
13.	Log. Info. System	2
14.	Log. Outsourcing	2
15.	Modern & Global Logistics	2
	Total No. Of Lectures:	32

Name Of Teacher: Nitin Kulkarni

Sign:

Date: 06/06/2019

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: Corporate Communication and Public Relations (CCPR)

Class: TYBMS (FIN+MKT+HR). Semester: V

Unit No.	Topic	No. Of Lectures Required
1	Foundation of Corporate Communication	
a)	Corporate Communication: Scope & Relevance	2
b)	Key concepts in Corporate Communication	4
c)	Ethics & Law in Corporate Communication	4
2	Understanding Public Relations	
a)	Fundamental of Public Relations	2
b)	Emergence of Public Relations	2
c)	Public Relations Enviornment	3
d)	Theories used in public Relations	3
3	Functions of Corporate Communication & PR	
a)	Media Relations	4
b)	Employee Communication	2
c)	Crisis Communication	3
d)	Financial Communication	2
4	Emerging Technology in CCPR	
a)	Contribution of technology to Corporate communication (CC)	3
b)	Information Technology in CC	2
c)	Corporate Blogging	2

Total No. Of Lectures: 38

Name Of Teacher: Akshata Puralkar Sign: Apuralkar.

Date: 03/06/19

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: Wealth Management

Class: TYBMS (Finance)

Semester: V th

Unit No.	Topic	No. Of Lectures Required
1	Meaning, Scope, Components, Process code of ethics of WM, Financial Literacy, Goals & planning, Life cycle, Cash flow, Interest Rate, Yield, Indicators	12
2	Meaning, Principles, Functions, Features Right & Responsibilities, Types of Insurance Belth Method, Risk Types, Asset Allocation Goal Base Financial Planning	10
3	CAGR, Total Asset, Networth, Financial Ratios, Tax planning, Tax slabs, TDS Life cycle planning, Will, Trust	12
4	Salary Components, Purpose & Need of Life cycle, Financial objectives of retirement, Post retirement strategy Pension, Annuities & Types.	12
		46
	Total No. Of Lectures: 46	46

Name Of Teacher: Manoj Murup

Sign: Murup

Date: 07/06/19

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: Commodity & Derivative Mkt. Semester: V

Class: TYBMS

Unit No.	Topic	No. Of Lectures Required
I	UNIT I - Intro to CM, - Types of Commodity trade, Participants, Reason Intro to DM - Types of derivatives, participants of DM, Ad. & Disad. of Trading in DM	10
II	Futures & Hedging - (a) Future - Concept, Basis, Convergence Hedging - Speculation & Arbitrage using Futures Arbitrage, PAYOFF CHARTS	10
III	OPTIONS & OPTIONS PRICING MODELS. OPTIONS - Terminologies, Trading of options, Payoff charts, Basic Understanding of US Option Pricing Models: Binomial option Pricing Model, Black & Scholes Option Pricing Model.	10
IV	Trading, clearing & Settlement in DM. Trading, clearing & Settlement in DM, Types of Risk.	10
	Total No. Of Lectures:	40

Name Of Teacher: Padma R. Char Sign: Pa

Date: 07/06/19

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: Risk Mgt. Semester: V

Class: TYBMS (BM)

Unit No.	Topic	No. Of Lectures Required
I	Intro to Risk Management, Risk Measure & Control, Risk Process, Quantitative Risk Measurement, Principles of Risk Summary Measures, Duration Analysis	10
II	Risk Avoidance & ERM, Risk Hedging Instruments & Mechanism, Enterprise Risk Mgt.	10
III	Risk Governance & Assurance, Risk Governance, Risk Assurance	10
IV	Risk Mgt in Insurance, Insurance, Players in Insurance Business, Claim Mgt.	10
		40

Total No. Of Lectures:

Name Of Teacher: Padma R. Cha Sign: Pcha

Date: 07/06/19.

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019 - 20

Subject: Investment Analysis & Portfolio Management

Semester: V

Class: TYBMS (Finance)

Unit No.	Topic	No. Of Lectures Required
1	Introduction to Investment Environment Investment Process, types factors Capital Mkt in India → Stock Mkt, NASDAQ, SDL, NSDL, Online trading	07
2	Risk, Return Relationship Types of risk Measurement of Beta, S.D Variance, Practical Problems	09
3	Portfolio Management & Security Anal. Meaning, concept, factors, process Principles, fundamental Analysis, Economic, Co Technical Analysis	08
4	Theories, CAPM & Portfolio Measurement → Dow Jones Theory, Elliot Wave theory, Efficient Mkt Theory, CAPM Model, Sharpe's Ratio, Treynor's Ratio, Jensens Differential Return	09
	Total No. Of Lectures	33

Name Of Teacher: Delcy Lopes

Sign: DLopes

Date: 07/06/19

VIVA COLLEGE
BMS/BMM DEPARTMENT TEACHING PLAN
ACADEMIC YEAR: 2019-20.

Subject: Sales & Distribution.
Class: TYBMS (MKT). Semester: V.

Unit No.	Topic	No. Of Lectures Required
1.	Introduction. a) Sales Mgt b) Distribution Mgt. c) Integration of Mkt, Sales & Distn	10.
2	Market Analysis and selling. a) Market Analysis. b) Selling.	9.
3	Distribution Channel Mgt. Mgt of distn channel, channel partners, choice of distn system, Factors affecting distn strategy, Factors affecting mgt of distn channels.	9
4.	Performance Evaluation, Ethics & Trends. a) Evaluation and Control of Sales Performance. b) Measuring Distn Channel Performance. c) Ethics in Sales Mgt. d) New trends in Sales & distn mgt	10.

Total No. Of Lectures: 38

Name Of Teacher: Swati Sonagra. Sign: Swati

Date: 07/06/19.

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR _____

Subject: SERVICES MARKETING. Semester: V

Class: T.Y.BMS (MKTG)

Unit No.	Topic	No. Of Lectures Required
1.	INTRODUCTION, CHARACTERISTICS, CLASSIFICATN SERVICE MKTG TRIANGLE, PURCHASE PROCESS, GOODS V/S SERVICES, CONSUMER BEHAVIOUR, TYPES OF CONTACT, SERVICE MKTG ENVT.	08
2.	SERVICE MKTG MIX EXTENDED 3 P's FLOWCHARTING. BRANDING	08
3.	SERVICE QUALITY AND PRODUCTIVITY GAP MODEL, BENCHMARKING, SERVQUAL, DEMAND AND CAPACITY ALIGNMENT.	08
4.	INTERNATIONAL STRATEGIES, SERVICES IN GLOBAL ECONOMY, FACTORS FAVORING TRANSNATIONAL, RECENT TRENDS	08
	Total No. Of Lectures:	32

Name Of Teacher: DEEP M. JAIN. Sign:

Date: 07/06/19.

VIVA COLLEGE
BMS/BMM DEPARTMENT TEACHING PLAN
ACADEMIC YEAR 2019-20

Subject: E-Comm Semester: VI

Class: TYBMS

Unit No.	Topic	No. Of Lectures Required
I	Intro to E-Comm - factors which affect E-Com, Growth factors, Impact of E-Comm, Trends, M-Comm	10
II	E-Business & Application. E-Business, Concepts, Business Models, EDI in Business, Website design & development.	10
III	Payment Security & Legal issues in E-Comm. EPS, Payment Gateway, Types of Transaction Security, E-Com Laws	10
IV	Digital Marketing Activities in Digital Mkt., Web Analytics, Online Ad, Online PR, Developments in DM	10
		40

Total No. Of Lectures:

Name Of Teacher: Padma. R. Chan Sign: Pa

Date: 07/06/19

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20.

Subject: Strategic MKt Mgt.

Semester: V

Class: TYBMS (MKT)

Unit No.	Topic	No. Of Lectures Required
1.	Introduction to SMM. Marketing, Strategic decisions, Identifying the market, The tactics of marketing mix, Business Model & Strategic MKt Planning.	10
2.	Segmentation, Identifying Target Customers, Essential strategic assets for target competitiveness, Creating customer value ~~for~~ through Positioning, Creating Company & Collaborator Value.	11
3.	Managing Product & Services, New products, New Product adoption, Managing Product lines, Brand Tactics.	10.
4.	Managing Price; Managing Promotions & incentives. Managing distribution. Strategic Growth Mgt. Defending market position.	11.

Total No. Of Lectures: 42.

Name Of Teacher: Swati Sonagra

Sign: Swati

Date: 07/06/19

VIVA COLLEGE

BMS/BMM DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: Finance for HR Professionals & Compensation Managem

Semester: V

Class: TYBMS (HR)

Unit No.	Topic	No. Of Lectures Required
1	Compensation Plans & HR Professionals Meaning, objective, Role, Types, factors. Compensation tools → Job based, skill based, Labour Model, 3PS compensation, Pay structure Meaning, feature, factors	10
2	Incentives & wages → Incentive Plan, Meaning, types. Wage Differentials → Concept, factors, Types, importance, elements Theories of wages.	06
3	Compensation to special groups & IHRA, Recent Trends.	06
4	Legal & Ethical issues in compensation, Legal framework of compensation, Pay commission, COBRA, Ethics in Comp	08
	Total No. Of Lectures:	30

Name Of Teacher: Deley Lopes

Sign: DLopes

Date: 07/06/19

VIVA COLLEGE
BMS/BMM DEPARTMENT TEACHING PLAN
ACADEMIC YEAR 2019-20

Subject: SHRM

Class: TYBMS - HR

Semester: V

Unit No.	Topic	No. Of Lectures Required
1.	SHRM - An Overview. SHRM, Roles in SHRM, Changing Role of HR Professionals, Models of SHRM, HR Audit, Linking SHRM & Bus. Performance.	10.
2.	HR Strategies. Developing HR Strategies to Support org. Strategies, Resourcing strategies, Strategic HR planning, Strategic recruitment & Selection, Strategic HRD, Reward Strategies.	09
3.	HR Policies. HR Policies, Requisites of sound HR policies, Barriers to effective Implementation of HR policies & ways to overcome, Importance of SHRP to maintain workplace harmony.	10
4.	Recent Trends in SHRM. Mentoring, Employee Engagement, Contemporary approaches to HR evaluation, competency based HRM, Human capital Mgt, New approaches to recruitment, Strategic International HRM.	10.
	Total No. Of Lectures:	39.

Name Of Teacher: Swati Sonagra

Sign: Swati

Date: 07/06/19

VIVA COLLEGE
BMS/BMM DEPARTMENT TEACHING PLAN
ACADEMIC YEAR 2019/2020

Subject: Stress Management
Semester: V
Class: TYBMS

Unit No.	Topic	No. Of Lectures Required
I]	Understanding Stress Stress, Potential Sources of stress, Consequences of stress, Stress at workplace, Burnout	08
II	Managing Stress - I Anxiety, Relaxation, Time Mgmt, Stress Mgmt, Approaches to Manage stress	08
III	Managing Stress - II Models of Stress Mgmt, General Adaption Syndrome, Measurement of stress, Reaction, Stress prevention mechanism, Intervention, Meditation	10
IV]	Stress Mgmt leading to Success Eustress, Stress Management Therapy, Stress Counselling, Assessment of stress.	10
	Total No. Of Lectures: 36	

Name Of Teacher: Amruta V Ghorpade
Sign:
Date: 07/06/19

VIVA COLLEGE
BMS/BMM DEPARTMENT TEACHING PLAN
ACADEMIC YEAR 2019-2020

Subject: Performance Mgmt
Class: IYBMS.
Semester: V

Unit No.	Topic	No. Of Lectures Required
I]	Performance Meaning :- Meaning, Components Evolution, Need & Importance, Process, Linkage of PM with HR, cycle, Best Practices, future, Role of Technology.	10
II]	Performance Management Process :- Performance Planning, performance Managing performance Appraisal, Performance Monitoring, performance Mgmt Implementation	08
III]	Ethics under performance, Key issue in PM, Ethical performance Mgmt, potential appraisal, Pay criteria.	
iv]	Career planning & Development Career planning, Career Development, Role of Technology in Career planning, Career Model	
	Total No. Of Lectures	

Name Of Teacher: Amruta V Ghorpade
Sign:
Date: 07/06/19

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject : OR OPERATIONS RESEARCH

Class: TYBMS (FIN, MKT, HR) Semester: VI

Unit No	Topic	No. of Lect Required
I	1. Introduction to O.R.	02
	2. LPP Formulation	02
	3. LPP Graphical Method	04
	4. LPP Simplex Method	04
II	1. Assignment Problems	04
	2. Transportation Problems	06
III	1. Network Analysis	02
	2. CPM	02
	3. Project Crashing	02
	4. PERT	02
IV	1. Job Sequencing Problems	04
	2. Theory of Games	02
	Total no. of Lectures	36

Name of Teacher: NITIN KULKARNI Sign:

Date: 02/12/2019

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject : IFS

Semester: VI

Class: TYBMS

Unit No	Topic	No. of Lect Required
I	Intro to traditional financial Services - Financial Services, Factoring & forfaiting & Bill Discounting	10
II	Issue Management & Securitization - Issue Mgt. & Intermediaries, Stock Broking, Securitization	10
III	Financial Services & its Mechanism - Lease & Hire Purchase, Housing Finance, Venture Capital	10
IV	Consumer Finance & Credit Rating - Consumer finance, Plastic Money, Credit Rating	10
	Total no. of Lectures	40

Name of Teacher: Padma R. Chari

Sign: Padm

Date: 02/12/2019

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-2020

Subject : SFM

Class: TYBMS (Fin) Semester: VI

Unit No	Topic	No. of Lect Required
1	Dividend Decision → Meaning, MM Model, Walter model, Gordon Model, factors, types. XBRL → Meaning, advantages, featu	10
2	Capital Budgeting → Risk & uncertainty, Certainty equivalent model, Sensitivity Technique, S.D, Co-efficient. Decision tree. Capital Rationing	12
3)	Shareholder Value & Corporate Governance, EVA, MVA, Theories of C.G., Practices. Corporate Restructuring.	08
4)	Financial Management in banking sector, NPA & their provision, Working Capital financing, MPBF → Tondon Com	10
	Total no. of Lectures	40

Name of Teacher: Delcy Lopes Sign: DLopes

Date: 02/12/2019

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject : PM

Semester: Sem VI

Class: TYBMS

Unit No	Topic	No. of Lect Required
I	Intro to Project Management Organisational Str., Project Initiation Project Planning	10
II	Analyzing Project feasibility Market Analysis, Technical Analysis, Technical Analysis, Operational Analysis	10
III	Budget, Cost & Risk Estimation in Project Mgt. Fund Estimation in Project Risk Management in Project Cost Benefit Analysis in Project	10
IV	New Dimension in Project Mgt Modern Development in PM, Project Monitoring & Controlling Project Termination & Solving Project Management Problems	10
	Total no. of Lectures	40

Name of Teacher: Padma. R. Chari

Sign: Padma

Date: 02/12/2019

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject : IF

Class: IY BMS (SEM MI)

Semester:

Unit No	Topic	No. of Lect Required
I	Meaning, scope of IF, Emerging challenges in IF. BOP components Evolution of IMS, Gold and its standard Direct & indirect quote	10
II	Foreign Exchange Rate, structure Types of Transactions, Forward quotation, PPP, Global Finance MKT	8
III	options & futures	9
III	Euro Currency, Euro Bonds, Types of Bonds, International equity ADR, GDR, IDR, FERA/FEMA FDI v/s FPI, FEDAI	9
IV	Types of Risk, Arbitrage & speculation International Tax Environment, NPV, option Approach to Project Numericals	10
	Total no. of Lectures	38

Name of Teacher: Mangy. K

Sign: [signature]

Date: 02/12/19

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-2020

Subject: Media Planning & Management

Semester:

Class: TYBMS

Unit No	Topic	No. of Lect Required
1.	• Overview of media & media Planning	4
	• Media Research	4
2	• Media Mix	3
	• Media Choices	4
	• Emerging media	2
	• Media Strategy	3
3.	• Media Budget	3
	• Media Buying	4
	• Media Scheduling	4
4.	• Media Measurement	3
	• Benchmarking Metrics	3
	• Plan metrics	3
	• Evaluating media Buys	3
	Total no. of Lectures	43

Name of Teacher: Anand S Rajawat

Sign:

Date: 02/12/19

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject : Retail Mgt

Semester: VI

Class: TYBMS - ~~Sc~~ MKt

Unit No	Topic	No. of Lect Required
I	Retail Mgt - An overview Retail Mgt Retail Formats Emerging Trends in Retailing.	12
II	Retail Consumer & Retail Strategy Retail Consumer, CRM in Retail, Retail Strategy, Store location selection, HRM in Retail.	11
III	Merchandise Mgt & Pricing. Merchandise Mgt, Buying Function, Lifestyle Merch., Private Label, Retail Pricing	10
IV	Managing & Sustaining Retail. Retail Store operations, Store design and layout, Visual Merch. & display, Mall Mgt, Legal & Ethical aspects of retailing.	10
	Total no. of Lectures	43

Name of Teacher: Swati Sonagra

Sign: Swati

Date: 02/12/19.

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: Brand

Semester: VI

Class: T.Y. BMS (MKTG.)

Unit No	Topic	No. of Lect Required
1.	INTROD^N. STRATEGIC BRAND MGMT.	06.
	BRAND POSITIONING.	
		07.
2.	BRAND ELEMENTS	
	IM PROGRAMS AND PERSONALIZING	
	4P's	
	LEVERAGING SECONDARY BRAND ASSOC.	
		07.
3.	BRAND VALUE CHAIN	
	MEASURING SOURCES OF BRAND EQUITY	
	BAV MODEL.	
	MEASURING OUTCOME OF B. EQUITY	
		06
4.	BRAND STRATEGIES	
	CAUSE RELATED MKTG.	
	BRAND EXTENSION.	
	MANAGING BRANDS OVER TIME	
	Total no. of Lectures	26.

Name of Teacher: DILIP. M. JAIN.

Sign: D. M. Jain.

Date: 02/12/2019.

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 19-20

Subject : IM

Class: T4BMS-Marketing

Semester: VI

Unit No	Topic	No. of Lect Required
1.	Introduction to International Marketing & Trade.	
	a) Introduction to International Mkt^g	5
	b) Introduction to Int. Trade	5
2.	International Mkt^g enviromt & Mkt^g Research.	
	Economic, political & legal, culture	10
	Marketing Research	4
3.	International Marketing mix.	10.
	Product decision, pricing, Distribut^n, promotional decision	
4.	Developments in International Mkt^g.	5.
	Total no. of Lectures	39

Name of Teacher: Kadambari Agaskar

Sign: KAgaskar

Date: 02/12/2019.

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019 - 2020

Subject : IMTP

Semester: Sem VI

Class: TYBMS HR

Unit No	Topic	No. of Lect Required
1	Indian Ethos - An Overview. Indian Ethos, Management Lessons from scriptures.	10
2)	Work Ethos & values. Work Ethos, Values for Managers, Trans - cultural Secular V/S Spiritual values.	08
3)	Stress Management. Stress Management, Techniques, Meditation, Leadership, Motivation.	06
4)	Indian Systems of Learning. Learning, Guruful System of learning. Karma, Laws of Karma, Corporate Karma, self - Management, personality Development.	10
	Total no. of Lectures	34.

Name of Teacher: Amruta V Gharpad

Sign:

Date: 2/12/19.

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019 - 2020

Subject : OD

Semester: Sem VI

Class: TYBMS HR

Unit No	Topic	No. of Lect Required
I)	Organisational Development : An overview OD, OD Practitioner, Emerging Trend in OD, OD in Global Setting	10
II)	Organisational Diagnosis, Renewal & change Organisational Diagnosis, Org-Renewal, Organisational change, Change Agent	10
III)	OD Interventions. OD Interventions, Types of Intervention, Techniques of OD Intervention, Evaluation of OD Intervention.	08
IV)	OD Effectiveness. Issues faced in OD, Values in OD, Ethics in OD, Organisational Effectiveness	08
	Total no. of Lectures	36

Name of Teacher: Amruta V Ghorpade.

Sign: Amruta

Date: 2/12/19

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 2019-20

Subject: GP

Class: TY-HR

Semester: VI

Unit No	Topic	No. of Lect Required
1	International HRM - Overview	08
	IHRM, Approches, Components,	
	Managing Diversity, Dealing with	
	cultural Shock	
2	Global HRM Functions	10
	International Recruitment & Selection,	
	Compensation, T&D, Performance	
	management, Motivation & Rewards	
	Industrial Relations	
3	Managing Expatriation & Repatriation	08
	Concept of PCN, TCN, HCN	
	Expatriation Process	
	Repatriation Process	
4	International HRM trends & challenges	10
	Emerging trends, Offshoring,	
	International Business Ethics & IHRM	
	Managing International Projects & Teams	
	HR in MNCs, Role of Technology	
	IHRM & Virtual Organization	
	Total no. of Lectures	36

Name of Teacher: Akshata Puralker

Sign: Apuralker

Date: 02/12/19

VIVA COLLEGE

BMS DEPARTMENT TEACHING PLAN

ACADEMIC YEAR 19-20

Subject : SSM

Class: T4-HR Semester: VI

Unit No	Topic	No. of Lect Required
1	Service Sector Management	08
	Services, Service Sector Management,	
	Service Organization & Service Culture	
	Relationship Management & Marketing	
	Role of Service Employee, Role of customer	
	Service Encounter	
2	Managing Human Element in Service	10
	Sector - Human Element, Service	
	Triangle, Frontline Employees, Emotional	
	Labour, Recruitment in Service Sectors,	
	Section in Service Sectors, Develop,	
	compensate, motivating, Empowerment	
3.	Issues & Challenges - Quality Issue,	10
	Services through Agents & Brokers,	
	HR in specific Sectors.	
4	HRP Evaluation, Attrition, Retention	08
	& Globalization	
	HRP Planning Evaluation, Service leader,	
	Attrition, Retaining, Globalization	
	of Services	
	Total no. of Lectures	36

Name of Teacher: Akshata Puralkn Sign: Apuralkon

Date: 02-12-19

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa VermaDEPARTMENT: BotanyCLASS: S.Y.B.Sc. (CB & BZ)
SEMESTER: **III**MONTH: October – December ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S: To understand and differentiate about different preservation method
To understand about techniques of microscopy
To differentiate about different chromatographic techniques
To understand about electrophoresis technique as a separation technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit – III**	**Modern Techniques to Study Plant Diversity** Preservation methods :Dry and Wet method	03	A new course in botany – Sheth Publication Principles of Instrumental Analysis - by Douglas A. Skoog	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Microscopy – Principle and working of Light, and electron microscope.	04		
	Chromatography- Principles and techniques in paper and thin layer chromatography.	04		
	Principles and techniques of Horizontal and Vertical electrophoresis.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Botany CLASS: T.Y. B.Sc. (Botany and BZ) SEMESTER: V
MONTH: August ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S:
The learners will be able to: Students will gain in depth information about different methods of protoplast fusion and its application in agriculture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit IV Plant tissue culture	**Protoplast fusion and somatic hybridization**		Plant tissue culture, by, Purohit, S.S	Google meet, Power point presentation
	Concepts, definition, and various methods of protoplast fusion	3		
	Application of somatic hybridization in agriculture	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: BotanyCLASS: T.Y.B.Sc. (BOTANY)
SEMESTER: **V** MONTH: October – December ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S: To learn principles and application of commonly used techniques in instrumentation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit – III	**Instrumentation** Colorimetry and Spectrophotometry (Visible, UV and IR) - Introduction–	01	Principles of Instrumental Analysis - by Douglas A. Skoog An Introduction to Practical Biochemistry- by David Plummer	Lectures on Google Meet, PowerPoint, Pdfs, Youtube videos, Animation Upload of learning material on Google Classroom
	Instrumentation, working, principle and applications. of Colorimeter	02		
	Instrumentation, working, principle and applications. of Spectrophotometer	02		
	Chromatography: General account of Column chromatography.,	03		
	Principle and bedding material involved in adsorption and partition chromatography	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Vidhya Dayanand Patil College of Arts
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa VermaDEPARTMENT: BotanyCLASS: F.Y.B.Sc.
SEMESTER: **II** ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S: To study important medicinal plants

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II **Unit – III**	MEDICINAL BOTANY 1 Concept of primary and secondary metabolites, difference between primary and secondary metabolites.	05	A new course in botany – Sheth Publication Principles of Instrumental Analysis - by Douglas A. Skoog	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	2 Grandma's pouch: Following plants have to be studies with respect to botanical source, part of the plant used, active constituents present and medicinal uses: Oscimum sanctum, Adathoda vasica, Zinziber officinale, Curcuma longa, Santalum album, Aloe vera.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Botany CLASS: S.Y. B.Sc. SEMESTER: IV
MONTH: August ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S:
The learners will be able to: Students will gain in depth information about different methods of protoplast fusion and its application in agriculture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit II : Biotechnology	Introduction to plant tissue culture o Laboratory organization and techniques in plant tissue culture o Totipotency o Organogenesis	07	Biotechnology: Susan R. Barnum	Chalk and duster
	o Organ culture – root cultures, meristem cultures, anther and pollen culture, embryo culture. □	03		
	R-DNA technology o Gene cloning o Enzymes involved in Gene cloning o Vectors used for Gene cloning.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: BotanyCLASS: T.Y.B.Sc.
SEMESTER: **V** ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S: To learn principles and application of commonly used techniques in instrumentation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV **Unit – III**	Ecological anatomy Hydrophytes – submerged, floating, rooted	05	Textbook of Botany" by Singh, Pandey, and Jain	Chalk and Duster Upload of learning material on Google Classroom
	Hygrophytes - Typha Mesophytes	04		
	Sciophytes Halophytes	03		
	Epiphytes Xerophytes	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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VIVA COLLEGE, Virar (W)
TEACHING PLAN (UNIT PLAN)

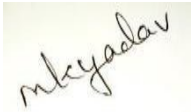
NAME OF THE STAFF: **Dr. Rohan Gavankar** DEPARTMENT: **Botany** CLASS: **F.Y. B.Sc** SEMESTER: I
MONTH: **-SEPT-OCT-NOV** ACADEMIC YEAR: **2020-2021**
LEARNING OBJECTIVE: To acquire the knowledge about concepts in genetics
The learners will be able to: 1. Describe the principles of inheritance based on Mendel experiments
2. Describe types of gene interactions with suitable examples.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit III **Genetics**	Phenotype/Genotype, Mendelian Genetics- monohybrid, dihybrid; test cross; back cross ratios.	05	igenetics by Peter Russell	Google classroom White board Google slides
	2 Epistatic and non epistatic interactions; multiple alleles.	10	igenetics by Peter Russell	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF



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VIVA COLLEGE, Virar (W)

NAME OF THE STAFF: **Dr. Rohan Gavankar** DEPARTMENT: **Botany** CLASS: **S.Y. B.Sc** SEMESTER: III
MONTH: **AUG-SEPT-OCT-NOV** ACADEMIC YEAR: **2020-2021**
LEARNING OBJECTIVE: To acquire the knowledge on cytogenetics
The learners will be able to: 1. Describe the chromosomal aberrations
2. explain various methods of sex determination

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit I Cytogenetics	Variation in Chromosome structure (Chromosomal Aberrations) Definition, Origin, Cytological and Genetic Effects of the following: Deletions, Duplications, Inversions and Translocations.	05	igenetics by Peter Russell Cell biology- Alberts	Google classroom White board Quizziz Google slides
	Sex determination, Sex linked, sex influenced and sex limited traits : Sex determination- Chromosomal Methods: heterogametic males and heterogametic females. Sex determination in monoecious and dioecious plants. Genic Balance Theory of sex determination in Drosophila, Lyon's Hypothesis of X chromosome inactivation. Sex linked- eye colour in Drosophila, Haemophilia, colour blindness Sex influenced- baldness in man	06	igenetics by Peter Russell Genetics - Winchester	
	Extranuclear Genetics Organelle heredity Chloroplast determines heredity - Plastid transmission in plants, Streptomycin resistance in Chlamydomonas. o Male sterility in maize	04	igenetics by Peter Russell	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

NAME OF THE STAFF: **Dr. Rohan Gavankar** DEPARTMENT: **Botany** CLASS: **T.Y. B.Sc** SEMESTER: V
MONTH: **AUG-SEPT-OCT-NOV** ACADEMIC YEAR: **2020-2021**
LEARNING OBJECTIVE: To acquire the knowledge about cell biology and molecular biology
The learners will be able to: 1. Describe the structure and function of nucleus
2. Describe the structure and function of vacuole
3. explain the process of translation in prokaryotes and eukaryotes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit I Cytology and Molecular Biology	Structure and function of nucleus Structure and function of vacuole Structure and function of giant chromosomes	03	igenetics by Peter Russell Cell biology- Alberts	Google classroom White board Quizziz Google slides
	The genetic code: Characteristics of the genetic code	03	igenetics by Peter Russell	Google classroom White board Quizziz Google slides
	Translation in Prokaryotes and Eukaryotes.	04+ 05 =09	igenetics by Peter Russell	Google classroom White board Quizziz Google slides

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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VIVA COLLEGE, Virar (W)

SIGNATURE OF THE STAFF

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. Rohan Gavankar** DEPARTMENT: **Botany** CLASS: S**.Y. B.Sc** SEMESTER: IV
MONTH: **-SEPT-OCT-NOV** ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE: To acquire the knowledge about concepts in biostatistics
The learners will be able to: 1. Describe the principles of inheritance based on Mendel experiments

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III : Biostatistics and Bioinformatics	Biostatistics: o The chi square test. o Correlation – Calculation of coefficient of correlation.	05	Introduction to Biostatistics by Dr. Pranab Kumar Banerjee	Google classroom White board Google slides
	Bioinformatics o Information technology: History and tools of IT, Internet and its uses. o Introduction to Bioinformatics- goal, need, scope and Limitation o Aims of Bioinformatics: Data organization, Tools of Bioinformatics- tools for web search, Data retrieval tools- Entrez, o BLAST o Bioinformatics programme in India.	10	Biostatistics by Veer Bala Rastogi Methods in Biostatistics by BK Mahajan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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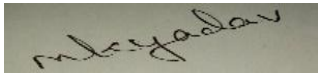

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VIVA COLLEGE, Virar (W)

NAME OF THE STAFF: **Dr. Rohan Gavankar** DEPARTMENT: **Botany** CLASS: **T.Y. B.Sc** SEMESTER: VI
MONTH: **FEB-MAR-APR** ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE: To acquire the knowledge about Three point cross mapping and mutation

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit III **GENETICS**	Genetic mapping in eukaryotes: discovery of genetic linkage, gene recombination, construction of genetic maps, three- point crosses and mapping chromosomes, problems based on the same	06	Igeneticsby Peter Russell	Google classroom White board Google slides
	Gene mutations: definition, types of mutations, causes of mutations, induced mutations, the Ame's test	06	igenetics by Peter Russell	Google classroom White board Google slides
	Metabolic disorders– enzymatic and non-enzymatic: Gene control of enzyme structure Garrod's hypothesis of inborn errors of metabolism, Phenyl ketone urea.	03	igenetics by Peter Russell	Google classroom White board Quizziz Google slides

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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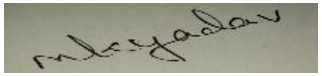

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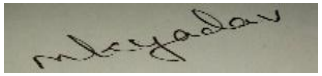
NAME OF THE STAFF: **Dr. Rohan Gavankar** DEPARTMENT: **Botany** CLASS: **T.Y. B.Sc** SEMESTER: VI
MONTH: **FEB-MAR-APR** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: students will understand the concepts of biostatistics and bioinformatics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV: BIOINFORMATICS	Organization of biological data, databases Exploration of data bases, retrieval of desired data, BLAST. 	05	Introduction to Biostatistics by Dr. Pranab Kumar Banerjee	Google classroom White board Google slides
	Protein structure analysis and application Multiple sequence analysis and phylogenetic analysis	10	Biostatistics by Veer Bala Rastogi Methods in Biostatistics by BK Mahajan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

DEPARTMENT OF BOTANY

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL CLASS: F.Y BSc SEMESTER: II

MONTH 4 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to learners will be able to relate primary growth in internal stem and root structure with function and appreciate the salient features of the root and stem

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit II Anatomy	Introduction of Anatomy and its importance in biology	1	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns Introductory plant Biology** edition 12 Mcgraw Hills	Presentation and Board
	Simple Tissue: Parenchymatous Tissue, Collenchymatous Tissue and Sclerenchymatous tissue	2		Presentation and Board
	Complex Tissue: Xylem, Phloem	2		Presentation and Board
	Epidermal Outgrowth, Stomata, Hairs and Specialized cells	1		Presentation and Board
	T.S of Stem, Root and Leaf of Both Dicot and Monocot	1		Presentation and Board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

TEACHING PLAN (UNIT PLAN)

DEPARTMENT Of BOTANY

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL CLASS: S.Y BSc SEMESTER: IV

MONTH 4 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to relate secondary growth in internal stem and root structure with function and appreciate the salient features of the root and stem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit I Anatomy	Introduction and basics of plant anatomy	2	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns Introductory plant Biology** edition: 12 Mcgraw Hills	Presentation and Board
	Normal secondary growth in Dicotyledonous stem and root.	3		Presentation and Board
	Growth ring, Periderm, lenticel, Tylosis, Heart wood and sap wood	5		Presentation and Board
	T girdles, Monocot Root, Salvia stem, Typha leaf, T.S of Monocot Stem.	4		Presentation and Board
	Types of Vascular Bundles	1		Presentation and Board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

DEPARTMENT OF BOTANY

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL CLASS: T.Y. BSc SEMESTER: VI

MONTH 4 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The students would be able: To understand the different aspects and importance of Biodiversity and utilize them for conservation of species so as to prevent further loss or extinction of Biodiversity and preserve the existing for future generations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Phytogeographical regions of India.	4	Revised Survey of Forest of India, by Champion and Smith Delhi manager publication.	Presentation and Board
	Definition, diversity of flora found in various forest types of India	4		Presentation and Board
	Levels of biodiversity	3		Presentation and Board
	Importance and status of biodiversity Loss of biodiversity	2		Presentation and Board
	Conservation of biodiversity Genetic diversity- Molecular characteristics	2		Presentation and Board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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NAAC accredited "B" Grade, 2.69 CGPA
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: S.Y BSc SEMESTER: III

MONTH: September to December ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to provide knowledge about environmental factors, Biodiversity, Crops, Spices and natural resources of India and their importance in sustainable development

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit II Forestry and Economic Botany	Forestry: outline types of forest in India	1	**Golatkar** V. et .al **The new Course in Botany** S.YB.Sc Sem 3 and 4 Sheath Prakashan	Presentation and Board
	Forestry: Agroforestry, Urban Forestry, Organic farming, Silviculture	2		Presentation and Board
	Economic Botany: Types of fibres, Jute and Cotton Current trend in fibres industries	2		Presentation and Board
	Spices and Condiments: Saffron and Cardamom	1		Presentation and Board
	Commercial market of spices	1		Presentation and Board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: T.Y. BSc SEMESTER: V

MONTH August - December ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The students would be able: To relate anomalies in internal stem structure with function and appreciate the salient features of the root stem transition zone. To get exposure to plant anatomy and learn to apply it in various fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit III Anatomy	Introduction to Anomalous secondary growth	2	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns Introductory plant Biology** edition 12 Mcgraw Hills	Presentation and Board
	Anomalous secondary growth in the Stems of *Bignonia,Salvadora, Achyranthes, Dracaena.*	6		Presentation and Board
	Storage roots of Beet, Radish	3		Presentation and Board
	Root stem transition	2		Presentation and Board
	Types of Stomata– Anomocytic, Anisocytic, Diacytic, Paracytic, and Graminaceous	2		Presentation and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: FY (CBZ / BIOCHEMISTRY) SEMESTER: IMONTH: OCTOBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Gain knowledge about the general characters of class Hepaticaceae. And learn about the structure, life cycle and systematic position of *Riccia*.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1, Unit 3 BRYOPHYTA	1) General characters of Hepaticae	03	A New Course in Botany, by Sheth Publications.	Online Lectures PPT Video clips
	2) Structure, life cycle and systematic position of *Riccia*.	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: SY (CB/BZ) SEMESTER: IIIMONTH: JULY

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the salient features of two major groups of bryophytes, their life cycle patterns with suitable example; to be able to identify them

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 1 THALLOPHYTA (ALGAE) AND BRYOPHYTA	1) General account of class Anthocerotae and Musci	3	A New course in Botany by Sheth Publications	Online Lectures PPT Video Clips
	2) Structure, life cycle and systematic position of *Anthoceros* and *Funaria*	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: SY (CB/BZ) SEMESTER: IIIMONTH: JULY

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Gain knowledge about Taxonomy in relation to Embryology, Cytology and Ecology. They will be able to learn about vegetative, floral characters and economic importance of the families Leguminosae and Asteraceae.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2 ANGIOSPERMS	1) Taxonomy in relation to: Embryology, Cytology, Ecology	3	A New course in Botany by Sheth Publications	Online Lectures PPT
	2) With the help of Bentham and Hooker's system of classification for flowering plants, study of families Leguminosae and Asteraceae	5	Plant Taxonomy by O P Sharma	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: TY (BOTANY) SEMESTER: VMONTH: JULY

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the salient features of three major groups of algae, their life cycle patterns with suitable example; to be able to identify them

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2 ALGAE	1) Classification and General Characters: Distribution, Cell structure, pigments, reserve food, range of thallus, reproduction: asexual and sexual, Alternation of Generations, Economic importance of Divisions Rhodophyta, Xanthophyta and Bacillariophyta.	05	College Botany Vol II by Gangulee Das and Dutta	Online Lectures PPT
	2) Structure, life cycle and systematic position of *Polysiphonia, Batrachospermum, Vaucheria* and *Pinnularia.*	10	Crytogamic Botany Vol I by G M Smith	
			Botany for Degree Students- Algae by B R Vashistha.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: TY (BOTANY/ BZ/CB) SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Get exposure to pollen study and learn to apply it in various fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit 4 PALYNOLOGY	1) 1) Pollen Morphology	03	Embryology of Plants by Bhojwani and Bhatnagar	Online Lectures PPT
	2) Pollen viability- storage	02	An introduction to embryology of Angiosperms by P Maheshwari	
	3) Germination and growth of pollen	02		
	4)Application of Palynology in honey industry, coal and oil exploration, Aerobiology and pollen allergies, forensic science.	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Madhvi. Rane DEPARTMENT: BotanyCLASS: T.Y.B.Sc. (Horticulture)
SEMESTER: **V** ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S: To study Horticultural practices

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 PROPAGATION PRACTICES	• By Seeds Advantages and disadvantages, method of seed propagation Production of seeds, Handling, Collection and Storage Sowing, Transplanting of seedlings and Hardening Seed treatment to control diseases Seedling diseases and their control. • By specialized Vegetative structures Bulbs, Tubers, Corms, Rhizomes, Root stock, runners, Offsets and suckers.	07	**Horticulture-Principles and Practices" by George Acquaah**	Chalk and Duster
	• Artificial methods of plant propagation o Cutting– Root cutting, Stem cuttings, and leaf cuttings. Use of PGR's for rooting. o Layering – Definition, Types: Simple,	08		

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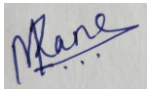
	compound, (Serpentine) Tip, Trench, Mound, Air Layering. o Grafting-Definition, advantages and disadvantages. Types: Splice, Whip/ Tongue, side, veneer, cleft, bark, epicotyls, approach, repair grafting – enarching, bridge and bracing. o Budding – Definition, advantages and disadvantages. Types: T- budding, shield, patch , ring budding. o Developing new varieties: Technique of Emasculation and bagging, role of polyploidy n production of seedless varieties inplants. • Application of Tissue Culture in relation to Horticulture.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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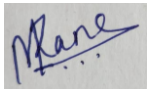
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Madhvi. Rane DEPARTMENT: Botany CLASS: T.Y. B.Sc.
SEMESTER: V ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S:
The learners will be able to: Students will gain in depth information about different methods of protoplast fusion and its application in agriculture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-3 MAURES, FERTILIZERS AND DISEASES	• Manures: Definition, importance, important manures FYM(compost), oil cakes, green manure, organic manures and vermicompost. • Fertilizers: Definition, Types – Straight, Compound and mixed. Nitrogenous (NH4)2 SO4, Urea, Ca (NO3)2, NH4Cl, Phosphatic (Superphosphate, Bone meal), Potassic (Muriate of potash, K2SO4 • Biofertilizers: Bacteria, Cyanobacteria, Mycorrhiza, Sea weeds.	07	**Horticulture-Principles and Practices" by George Acquaah**	Chalk and duster
	□• Diseases: Horticultural plant diseases and their control. Fungal diseases- Rust, Smut, Powdery mildew.Bacterial –	08		



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	Citrus canker, Bacterial wilt.			
	Viral – TMV, Leaf curl. • Pests – common pests on horticultural crops – Aphids, beetle, stem borer, caterpillars and rats. • Friends of farmers: Eartworm, snakes and predaceous fungi.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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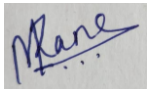
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Madhvi. Rane DEPARTMENT: BotanyCLASS: F.Y.B.Sc.
SEMESTER: **II** ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S: To study Horticultural practices

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, UNIT II GYMNOSPERMS	Economic importance	05	**N.C Kumar, The text book of** Botany, Himalaya publication House 2008	Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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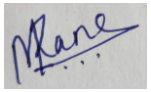
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Madhvi. Rane DEPARTMENT: Botany CLASS: T.Y. B.Sc.
SEMESTER: V ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S:
The learners will be able to: Students will gain in depth information about different methods of protoplast fusion and its application in agriculture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I, UnitIII Bryophytes and Pteridophytes: Applied Aspects	1. Ecology of Bryophytes 2. Economic importance of Bryophytes 3. Bryophytes as indicators	05	Economic Botany (A.F. Hill) Textbook of Pteridophyta (Vashishtha)	Chalk and duster
	4. Evolution of Sporophyte and Gametophyte 5. Economic importance of Pteridophytes	05		
	6. Diversity and distribution of Indian Pteridophytes 7. Types of sori and evolution of sori	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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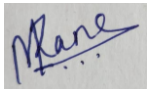
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Madhvi. Rane DEPARTMENT: Botany CLASS: T.Y. B.Sc.
SEMESTER: VI ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S:
The learners will be able to:
Describe different techniques of storage
Differentiate between natural and artificial method of storage

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – IV, Unit – IV, Post Harvest Technology	**Storage of Plant Produce –** Preservation of Fruits and Vegetables Drying (Dehydration) – Natural conditions – Sun drying, Artificial Drying – Hot Air Drying, Vacuum Drying, Osmotically Dried Fruits, Crystallized or Candied Fruits, Fruit Leather, Freeze Drying) Freezing (Cold Air Blast System, Liquid Immersion method, Plate Freezers, Cryogenic	15	http://ecoursesonline.iasri.res.in/course/view.php?id=608	Chalk board method



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	Freezing, Dehydro-Freezing, FreezeDrying), Canning Pickling (in Brine, in Vinegar, Indian Pickles) Sugar Concentrates (Jams, Jellies, Fruit juices) Food Preservatives Use of Antioxidants in Preservation			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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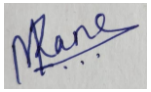
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Madhvi. Rane DEPARTMENT: Botany CLASS: T.Y. B.Sc.
SEMESTER: VI ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S: The learners will be able to: Describe different techniques of storage

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 POST HARVEST TECHNOLOGY & ENTREPRENEURSHIP IN HORTICULTURE	• Maturity- Factors responsible for maturity & ripening methods used fordelaying ripening. • Harvest- Time of harvest, harvesting and handling of harvested products • Storage of fresh produce- Types of storage of fruits & vegetables	**07**	**Basics of Horticulture by K V Peter**	Chalk board method
	• Fruit & vegetables preservation technology.	**08**		



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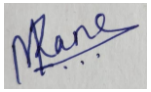
	• Marketing- grading, packing & transportation. Ways of increasing the market value and shelf life of horticultural produce. • Horticultural business, management and Entrepreneurship development Horticulture as a business definition and nature, organization, planning and operation of Horticulture farm business.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___



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TEACHING PLAN (UNIT PLAN)

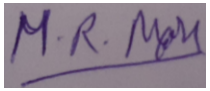
NAME OF THE STAFF: MANSI RAMESH MOREDEPARTMENT: BOTANY CLASS: FY (CBZ / BIOCHEMISTRY)

SEMESTER: I MONTH: OCTOBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Gain knowledge about the general characters of class Thallophyta (Algae). And learn about the structure, life cycle and systematic position of *Nostoc* and *Spirogyra.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1, Unit 1 ALGAE	1) General characters of Algae	03	A New Course in Botany, by Sheth Publications.	Online Lectures PPT Video clips
	2) Structure, life cycle and systematic position of *Nostoc*.	04		
	3) Structure, life cycle and systematic position of *Spirogyra.*	04		
	4) Revision	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

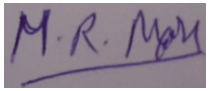
NAME OF THE STAFF: MANSI RAMESH MORE DEPARTMENT: BOTANY CLASS: SY (CB/BZ)

SEMESTER: III MONTH: JULY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the usage of different plants at Industrial level. Also help them to understand plants are important for environment as well as economic way by knowing their sources and different benefits like health, industrial and medicinal, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit III INDUSTRY BASED ON PLANT PRODUCTS	1) General information	01	A New course in Botany by Sheth Publications	Online Lectures, PPT Video Clips
	2) Aromatherapy, classification and examples	04		
	3) Botanicals and Nutraceuticals with Examples	04		
	4) Enzymes Industry	04		
	5) Biofuel	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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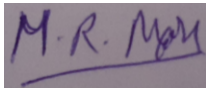
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI RAMESH MORE DEPARTMENT: BOTANY CLASS: TY (BOTANY)

SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Gain knowledge about different diseases occurred on plants caused by particular pathogen. Also help them to study the respective causative agent of disease, symptoms, predisposing factors, disease cycle and control measures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit IV PLANT PATHOLOGY	1) General introduction of Plant pathology.	01	A New course in Botany by Sheth Publications	Online Lectures PPT
	2) Disease cycle of White rust - *Albugo candida*	02	plant pathology book from Library	
	3) Tikka disease of Groundnut - *Cercospora*	02		
	4) Damping off disease - Pythium	02		
	5) Citrus canker - Xanthomonas axonopodiis pv. citri	02		
	6) Leaf curl - leaf curl virus in Papaya	02		
	7) control methods - Physical, Chemical and Biological.	04		



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI RAMESH MORE DEPARTMENT: BOTANY CLASS: TY (BOT/BZ) SEMESTER: V

MONTH: JULY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Acquire knowledge of different fossils and understand their role in evolution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I PALEOBOTANY	1) General introduction of Paleobotany, fossil forms & their roles	02	Botany for Degree Students- Algae by B R Vashistha.	Online Lectures PPT
	2) Lepidodendron and its parts	03		
	3) Lyginopteris and all form of genera	03		
	4) Pentoxylon - all form of genera	02		
	5) Contribution of Birbal Sahni, Birbal Sahni Institute of Paleobotany, Lucknow			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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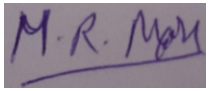

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV KAMALAKAR SATVI DEPARTMENT: Botany CLASS: F.Y.BSc SEMESTER: II

MONTH: January ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to: understand the classification, structure, function, ecology, life cycle: of Gymnosperms eg; Cycas

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, UNIT II GYMNOSPERMS	Structure life cycle systematic position and alternation of generations in Cycas	10	**N.C Kumar, The text book of** Botany, Himalaya publication House 2008	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: S.Y BSc SEMESTER: III

MONTH: September to December ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: Understand Thallophyta and Bryophyta

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I : Thallophyta (Algae) & Bryophyta	General Characters of Division Phaeophyta:Distribution, Cell structure, range of thallus, Economic Importance.	05	**Golatkar** V. et .al **The new Course in Botany** S.YB.Sc Sem 3 and 4 Sheath Prakashan	Chalk and board
	Structure, life cycle and systematic position of Sargassum	03		
	GeneralAccount of Class Anthocerotae and Musci	03		
	Structure, life cycle and systematic position of o Anthoceros o Funaria	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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VIVA COLLEGE, Virar (W)
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: T.Y. BSc SEMESTER: VI

MONTH August - December ACADEMIC YEAR:2022-2023

LEARNING OBJECTIVE/S: Have a deep understand in Bryophyta.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I: Bryophytes	Life cycle of Marchantia	5	Botany for degree students B.R. Vashishta A.K. Sinha College Botany Vol. II Gangulee and Kar	Chalk and board
	Life cycle of Pelia	5		
	Life cycle of Sphagnum	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: T.Y. BSc SEMESTER: VI

MONTH August - December ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: Have a deep understand in Plant Physiology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II PLANT PHYSIOLOGY II	□ □ NITROGEN METABOLISM: Nitrogen cycle, root nodule formation, and leg haemoglobin, nitrogenase activity, assimilation of nitrates, (NR, NiR activity), assimilation of ammonia, (amination and transamination reactions), nitrogen assimilation and carbohydrate utilisation.	10	Botany for degree students B.R. Vashishta A.K. Sinha College Botany Vol. II Gangulee and Kar	Chalk and board
	□□ Physiological effects and commercial applications ofAuxins, Gibberillins, Cytokinins and Abscisic acid	5		
	□			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **FYBSc** SEMESTER: I
MONTH: **July to November** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S: To acquire the knowledge about working and functioning of the environment and its component.
The learners will be able to : To understand the basic component of environment, their interconnections and importance to maintain the balance between each other. That means Mediation of energy through the environmental distribution and utilization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II **ECOLOGY**	Energy pyramids, energy flow in an ecosystem.	04	Ecology by E P Odum IGNTU eContent NPTEL ePGPathshala	PowerPoint presentations Jamboard White board Google Class room Online quiz Diagram construction Models.
	Types of ecosystems: aquatic and terrestrial.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **SYBSc** SEMESTER: III
MONTH: **July to November** ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S: To acknowledge about molecules existing in plants, their role in metabolic reaction.

The learners will be able to: Understand what exactly the biological molecules are, their structures, synthesis process including regulation, and their role in metabolism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II **Unit 3** **Molecular Biology**	**DNA replication** : Modes of Replication, Messelson and Stahl Experiment, **DNA replication in prokaryotes and eukaryotes-** enzymes involved and molecular mechanism of replication.	08	Textbook by sheth publication *i*GENETICS: *A molecular approach* by Peter J. Russell	Computer Systems PowerPoint presentation Internet Service Google classroom
	. **Protein Synthesis**: ○ Central dogma of Protein synthesis ○ Transcription in prokaryotes and eukaryotes: promoter sites, initiation, elongation and termination. ○RNA processing: Adenylation & Capping.	07	Textbook by sheth publication *i*GENETICS : *A molecular approach* by Peter J. Russell	Computer Systems PowerPoint presentation Internet Service Google classroom

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **TYBSc** SEMESTER: V
MONTH: **July to November** ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S: To acquire the knowledge about the physiological system of plant working and functioning.
The learners will be able to : To enables the understanding about water and mineral uptake and distribution in to plant system. Also to relate the physical factors of which are responsible for its distribution. To evaluate the Tissue/ cell system functioning and working factors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II Plant Physiology I	**Water relations:** Potential, osmosis, transpiration, imbibition,	04	Introduction to Plant Physiology by Noggle and Fritz, Prentice Hall Publishers(2002), Plant Physiology by Salisbury and Ross CBS Publishers, Plant Physiology by Taiz and Zeiger Sinauer Associates Inc. Publishers,2002 Biology Discussion website IGNTU eContent NPTEL ePGPathshala	Chalk and Board Method, Model Construction and Demonstration, Experimental Simulation, Diagram Charts PowerPoint presentations
	Solute transport: Transport of ions across cell membranes, active and passive transport, carriers, channels and pumps.	04		
	Translocation of solutes: Composition of phloem sap, girdling experiment.	04		
	Pressure flow model (Munch's hypothesis): Phloem loading and unloading, anatomy of sieve tube elements and mechanisms of sieve tube translocation.	04		
	Mineral Nutrition: Role of Macro and Micro nutrients, physiological functions and deficiency symptoms.	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **TYBSc** SEMESTER: V
MONTH: **July to November** ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S: To understand basic importance of conserving the genetic information about an organism and its genetic charecters.

The learners will be able to : It enable to understand about genetic information and its processing thus ultimately how it can conserve into digital as well as other physical form. Also helps to evaluate the methods for analysis of the genetic materials and related data types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit II: Plant Biotechnology I	Construction of genomic DNA libraries, Chromosome libraries and c- DNA libraries.	06	An introduction to Genetic analysis Griffith Freeman and Company(2000)	Chalk and Board method, Computer Systems PowerPoint presentation, Internet Service, Software, Projects, Protocol Charts
	Identification of specific cloned sequences in c-DNA libraries and Genomic libraries	04	Plant Biotechnology by K. Ramawat	
	Analysis of genes and gene transcripts – Restriction enzyme, analysis of cloned DNA sequences. Hybridization(Southern Hybridization)	06	Genetics by Russel Peter Adison Wesley Longman Inc.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: F. Y. B. Sc. (CBZ-A, B, Biochemistry) SEMESTER: II MONTH: January- April ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: Gain information on the basis of Angiosperm morphology which will serve as the baseline for understanding this topic in S.Y and T.Y. They will also gain information on the diversity of lifeforms in Angiosperms, its evolution, and their morphological peculiarities which aids in identifying and classifying plants. Studies of Plant Families will help them know the respective family in and out and also give information on economically valuable plants from that family which could be used as a tool for research and other purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III, Angiosperm (Unit Shared)	Introduction to Angiosperm	01		Chalk and Talk
	Defining A leaf	01		
	Simple Leaf, Leaf Incision	01	WILLIAM T. STEARN (1983). BOTANICAL LATIN, History, Grammar Syntax, Terminology and	
	Compound leaf	01		
	Leaf stipules, Leaf margin, Leaf Apex	01		

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	Leaf venation	01	Vocabulary Third edition, revised DAVID & CHARLES Newton Abbot London North Pomfret (Vt).	
	Leaf phyllotaxy, Leaf Base	01		
	Leaf shapes	01		
	Modifications of leaf: spine, tendril, hooks, phyllode, pitcher, Drosera or insectivorous plants	02	A New Course in Botany, (F.Y. B.Sc.) Sem I & II	
	Malvaceae	02	Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical Plant families Identification Handbook, Second edition	
	Revision	01		
	Doubt solving Quiz and Question bank discussion	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: S. Y. B. Sc. (BZ, CB) SEMESTER: IV MONTH: November-March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: enlarge their horizon for obtaining jobs as horticulture is an ever increasing and trending field which yields good quality jobs. the basic knowledge of this topic will help the students gain the level of analyzing the type of plants to grow, soil content, climatic conditions etc. in making a garden for a company, industry, private sector etc. Studies on Botanical gardens and National Park will enlighten the students in conservation of the natural habitat, and also promote a scientific attitude towards nature. It will also promote research impetus into the students.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit I,	Introduction to Horticulture	01	A New Course in Botany	Chalk and Talk

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Horticulture and Gardening	Branches of Horticulture Gardening	02	(S.Y.B.Sc.) (Sem III & IV)	
	Locations in the garden- edges, hedges, lawn, flower beds, avenue, water garden, Focal point.	03		
	Types of garden: Formal and informal gardens	02		
	National Park: Sanjay Gandhi National Park.	01		
	Botanical Garden: Veer Mata JijabaiUdyan (Victoria Garden)	02		
	Presentations by the students	02		
	Revision, Question bank Discussion	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: T. Y. B. Sc. (BZ, Botany) SEMESTER: VI MONTH: November-April ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to: Gain a deep insight in the classification system of Hutchinson's classification with its pros and cons which will help them to follow it with more clear understanding. Studies of Plant Families will help them know the respective family in and out and also give information on economically valuable plants from that family which could be used as a tool for research and other purposes. Study of Botanical Survey of India will give the students an insight into the activities that they conduct on a National scale to provide to the knowledge of plant taxonomy and the varied type of work the do. The knowledge of Botanical gardens in India aid in increasing their knowledge on the plants and their importance to be conserved.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit I, Angiosperms II	Rhamnaceae	02	Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical Plant families Identification Handbook, Second edition	Chalk and Talk
	Combretaceae	02		
	Asclepiadaceae	02		
	Labiatae	02		
	Euphorbiaceae	02		
	Cannaceae	02		
	Hutchinson's classification – merits and demerits	02	Biological discussions online	
	Botanical survey of India and regional branches of India	02	www.bsi.gov.in	
	Indian Botanic Garden, Howrah	02	Wikipedia BSI	
	National Botanic Garden (NBRI) Lucknow	02		
	Lloyd Botanic Garden, Darjeeling & Lalbaugh or Mysore State Botanic Garden Bangalore	01		

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	Revision	01		
	Quiz/Test	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana DEPARTMENT: Botany CLASS: T.Y.B.Sc. (BOTANY)

SEMESTER: **V** MONTH: August - September ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S: To understand succession in plant communities and study remediation technologies in order to apply knowledge acquired for cleanup of polluted sites.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit – I	Ethnobotany - Definition, history, sources of data and methods of study. Applications of ethnobotany 1)Ethnomedicines 2) Agriculture 3) Edible plants 4) Famine related plants, 5) Toxic plants and Antidotes. Traditional medicines as used by tribal in Maharashtra towards i) Skin ailments: Rubia cordfolia, Sandalwood ii) Liver ailments : Phyllanthus , Andrographis iii) Wound healing and ageing: Centella,	15	• https://krishijagran.com/agripedia/a-complete-guide-to-profitable-mushroom-farming-in-india-read-composting-harvesting-techniques/ • https://www.krishisewa.com/crop-production/46-technology-for-mushroom-cultivation.html • Mushroom growing – Sc Dey - Agrobios	PowerPoint, Pdfs, Upload of learning material on Google Classroom https://www.youtube.com/watch?v=oiVZ2APGSNQ

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	Typha, Terminalia, Tridax iv) Fever : Vitex negundo, Tinospora cordifolia leaves v) Diabetis: Momordica charantia, Syzygium cuminii Mushroom industry: i)Detail general account of production of mushrooms with respect to methods of Composting, spawning, casing, harvesting of mushroom. Cultivation of Pleurotus, Agaricus, Volvariella Mushroom to be studied in detail. ii)General account of mushrooms: Nutritional value, picking and packaging, economic importance.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana DEPARTMENT: Botany CLASS: S.Y.B.Sc. (CB & BZ)

SEMESTER: **III** MONTH: August - September ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:

- To understand the importance of pharmacopeia
- Identify adulterants and its different types
- Identify and differentiate primary and secondary metabolite

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III **Unit – I**	**Pharmacognosy and phytochemistry** • Introduction to pharmacopoeia • Indian pharmacopoeia, Indian Herbal Pharmacopoeia and Ayurvedic Pharmacopoeia • Study of Monograph from pharmacopoeia • Secondary Metabolites: Sources, properties, uses and adulterants, regional and seasonal variations • Adulterants: *Saraca asoca, Polyalthia longifolia Terminalia arjuna, Terminalia tomentosa Bacopa monnieri, Centella asiatica Abrus, Glycyrrhiza Phyllanthus amarus (Bhuiamla)*	15	A new course in botany – Sheth Publication	Pdfs, Upload of learning material on Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV KAMALAKAR SATVI DEPARTMENT: Botany CLASS: F.Y.BSc SEMESTER: I

MONTH: November to December ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: understand the classification, structure, function, ecology, life cycle of the fungi. *Examples Aspergillus* and *Rhizopus* are common fungi and uses of the fungi.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II Fungi	Introduction and classification of Fungi	1	**N.C Kumar, The text book of** Botany, Himalaya publication House 2008 **Singh V et al, text book of Botany,** Global media, 2009	Chalk and board
	Structure, life cycle and systematic position of *Rhizopus* and *Aspergillus*	2		
	Economic importance of Fungi.	1		
	Modes of nutrition in Fungi (Saprophytism and Parasitism).	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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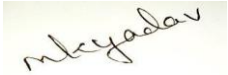

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TEACHING PLAN (UNIT PLAN)

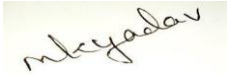
NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: S.Y BSc SEMESTER: III

MONTH: September to December ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Ultra Structure and functions of cell organelles: Mitochondrion (membranes, cristae, F1 particles and matrix) , Peroxisomes and Glyoxysomes, Ribosomes (prokaryotic, eukaryotic and subunits)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II Cell Biology	Ultra Structure and functions of the cell organelles:	1	**Golatkar** V. et .al **The new Course in Botany** S.YB.Sc Sem 3 and 4 Sheath Prakashan	Chalk and board
	Mitochondrion(membranes, cristae, F1 particles and matrix)	2		
	Peroxisomes and Glyoxysomes Ribosomes (prokaryotic, eukaryotic and subunits)	2		
	Cell Cycle, structure of Interphase Nucleus (nuclear envelop, chromatin network, nucleolus and nucleoplasm) Mitosis & Meiosis Differences between Mitosis and Meiosis	3		
	Nucleic Acids: Types, structure and functions of DNA and RNA	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09



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-TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: T.Y. BSc SEMESTER: V

MONTH August - December ACADEMIC YEAR:2022-23

23LEARNING OBJECTIVE/S: The students would be able: study Fungi, Classification and general characters of Basidiomycetes, life cycle of *Agaricus*, Life cycle of *Puccinia*, Classification and general characters of Deutromycetes and life cycle of *Alternaria*.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III Fungi	, Classification and general characters of Basidiomycetes	2	Botany for degree students Fungi B.R. Vashishta A.K. Sinha College Botany Vol. II Gangulee and Kar	Chalk and board
	Life cycle of Puccinia	6		
	Life cycle of Agaricus	3		
	Classification and general characters of Deutromycetes	2		
	life cycle of Alternaria.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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-TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: T.Y. BSc SEMESTER: V

MONTH August - December ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To understand succession in plant communities and study remediation technologies in order to apply knowledge acquired for cleanup of polluted sites.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper III Unit – III	Bioremediation: Principles, factors responsible and microbial population in bioremediation. Phytoremediation: Metals, Organic pollutants Plant succession: Hydrosere and Xerosere – Formation of Barren Space, Succession on the Land Citing Different Seres leading up to the Climax, Succession in Water, Ecesis, Poly and Mono-climax theories.	15	https://www.nap.edu/read/2131/chapter/4#18 https://www.biologydiscussion.com/plants/plant-succession/plant-succession-introduction-process-and-types-botany/15330	Lectures on Google Meet, PowerPoint, Pdfs, Upload of learning material on Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: F. Y. B. Sc. (CBZ-A) SEMESTER: IMONTH: AUGUST-OCTOBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: Gain knowledge about Introduction to the anatomy, morphology and habitat of Bryophytes, it will also aid the students in identifying bryophytes, and how to analyze and connect them on an evolutionary basis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit I, Cell Biology	Introduction to Cell	02	A New Course in Botany, (F.Y. B.Sc.) Sem I & II	Chalk and Talk
	General structure of plant cell: cell wall	02		
	Plasma membrane (bilayer lipid structure)	02		
	Plasma membrane (fluid mosaic model)	02		
	Ultra structure and functions of Endoplasmic reticulum	02		

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	Ultra structure and functions of Chloroplast	02		
	Revision	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: S. Y. B. Sc. (BZ, CB) SEMESTER: III MONTH: JULY-SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit II, Angiosperms (Unit Shared)	Taxonomy in relation to Anatomy	01	A New Course in Botany by V.V. Golatkar, Dr. Behnaz Patel, Dr. Neeraja S. Tutakne & Dr. Rachana R. Birje	Chalk and Talk
	Taxonomy in relation to Palynology	01		

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	Taxonomy in relation to Chemical	01		
	Taxonomy in relation to Embryology	01		
	Taxonomy in relation to Cytology	01		
	Taxonomy in relation to Ecology	01		
	Plant systematics: objective and Goals	01		
	Plant Nomenclature: Principles of ICN, Author citation, Priority, Type concept	04	Turland, N.J., et al. 2018. International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China,	
	Amaranthaceae: Overview, General Characters, Plants of economic importance	02	Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical Plant families Identification Handbook, Second edition	
	Palmae: Overview, General Characters, Plants of economic importance	02		
	Leguminosae	06		
	Asteraceae	02		

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	Amaranthaceae	02		
	Palmae	02		
	Revision	01		

The learners will be able to: analyze plants technically with the help of systematic study including morphology, Nomenclature, classification, and identification. Furthermore, Studies of Plant Families will help them know the respective family in and out and also give information on economically valuable plants from that family which could be used as a tool for research and other purposes.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

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CLASS: T. Y. B. Sc. (BZ, Botany) SEMESTER: V MONTH: JULY-OCTOBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to: Gain a deep insight in the classification system of Bentham and Hooker with its pros and cons which will help them to follow it with more clear understanding. The extensive morphological information on flower and fruit (along with the information on leaf and Inflorescence from F.Y) will serve as the baseline for studying plants in detail in the present year and future helping them to identify, classify and diagnose plants more discreetly. Studies of Plant Families will help them know the respective family in and out and also give information on economically valuable plants from that family which could be used as a tool for research and other purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit II, Angiosperms I	Angiosperm-introduction to the stars of Angiosperms Flower Morphology - Bracts and Calyx Types	01	WILLIAM T. STEARN (1983). BOTANICAL LATIN, History, Grammar Syntax, Terminology and Vocabulary Third edition, revised DAVID & CHARLES Newton Abbot London North Pomfret (Vt).	Chalk and Talk
	Flower Morphology - Calyx Types	01		
	Flower Morphology - Corolla Types	01		

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	Flower Morphology - Corolla appendages & Perianth Types	01		
	Flower Morphology - Androecium: No. of Stamens, Attachment of anther, Type of Anthers	01		
	Flower Morphology - Androecium: Cohesion, Adhesion	01		
	Flower Morphology - Androecium: Length and insertion of stamens; Gynoecium - Basic definitions	01		
	Flower Morphology - Gynoecium	01		
	Bentham and Hooker System of Classification: Polypetalae	01	Bentham, G. 1883.Genera Plantarum by Bentham, G. and Hooker, J.D. Reeve, London.	
	Bentham and Hooker System of Classification: Gamopetalae, Apetalae, Monocots	01		
	Bentham and Hooker System of Classification: overview, merits and demerits	01		
	Capparidaceae: Introduction, History, General characters	01	Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical Plant families Identification Handbook, Second	
	Cucurbitaceae: General Characters, distinguishing characters, fruit type, representative plants	01		

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	Cucurbitaceae: Plants of Economic Importance; Cucurbitaceae: Introduction, Current Status, General Characters	01	edition	
	Cucurbitaceae: L.S. of Flower and T.S. of Ovary; Cucurbitaceae: General Characters, Distinguishing characters, Fruit type, Plants found in Mumbai	01		
	Cucurbitaceae: Revision of General characters; Plants of economic Importance (found in Mumbai)	01		
	Apiaceae: Overview, General characters	01		
	Apiaceae: Fruit Plants of Economic Importance	01		
	Rubiaceae: current statistics, General characters, striking characters, plants of economic importance	01		
	Rubiaceae: plants of economic importance; Poaceae: current statistics, general characters	02		
	Poaceae: Plants of economic importance; Solanaceae: Statistics, general characters, etc.	02		
	Solanaceae: Plant of economic importance; Commelinaceae: general characters and current stats	01		
	Revision	01		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: T. Y. B. Sc. (BZ, Botany) SEMESTER: V MONTH: JULY-OCTOBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to: Will gain insight into the details of pharmacognosy and the pharmaceutical monographs. They will be made aware about the importance of plants for human health and how it is used in their entire methodology and its details. The topic will generate research aura in students to study plants for their uses in order to cure more and more diseases.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV, Unit IV, Pharmacognosy and Medicinal Botany	Introduction to Pharmacognosy; History of medicine	02	Wikipedia; Pharmacognosy by Kokate, Purohit and Gokhale, Nirali Publications	Chalk and Talk
	Quiz on History of Medicine; Clove	01		
	Clove and Revision	02		
	Senna and Quiz;	01		
	Curcuma and Quiz	02		
	Vekhand and Quiz	01		
	Garlic and Quiz	02		
	Garlic and Kuchla & Quiz	02		
	Revision	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana **DEPARTMENT: Botany**

CLASS: F.Y. B.Sc. – CBZ & Biochem **SEMESTER: II** **MONTH: January - March** **ACADEMIC YEAR: 2022-2023**

LEARNING OBJECTIVE/S:

The learners will be able to:

- Define Anatomy
- Elaborate and differentiate on simple and complex tissue
- Identify, describe and mention the functions of epidermal outgrowth
- Understand the complex anatomical structure of monocot root, stem and leaves and diccot root, stem and leaves
- Differentiate between monocot root, stem and leaves and diccot root, stem and leaves

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper II, Unit II Anatomy	Introduction of Anatomy and its importance in biology	1	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns Introductory plant Biology** edition 12 Mcgraw Hills	Chalk board Google classroom
	Simple Tissue: Parenchymatous Tissue, Collenchymatous Tissue and Sclerenchymatous tissue	4		Chalk board Google classroom
	Complex Tissue: Xylem, Phloem	4		Chalk board Google classroom
	Epidermal Outgrowth, Stomata, Hairs and Specialized cells	2		Chalk board Google classroom
	T.S of Stem, Root and Leaf of Both Dicot and Monocot	4		Chalk board Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana **DEPARTMENT: Botany**

CLASS: S.Y. B.Sc. – BZ & CB **SEMESTER: IV** **MONTH: December-January** **ACADEMIC YEAR: 2022-2023**

LEARNING OBJECTIVE/S:

The learners will be able to:

- Define ecology
- Describe biogeochemical cycles like Carbon, Nitrogen and Water.
- Discuss the concepts of environmental factors
- Explain soil as edaphic factor
- Explain the process of soil formation and describe soil profile
- Define community and community ecology
- Describe the quantitative and qualitative characters of community

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – II, Unit – III, **Ecology and Environmental Botany**	**Biogeochemical Cycles**- Carbon, Nitrogen and Water.	**05**	**A new course in Botany, Sheth Publication** https://www.khanacademy.org/science/high-school-biology/hs-ecology/hs-biogeochemical-cycles/v/carbon-cycle https://www.khanacademy.org/science/high-school-biology/hs-ecology/hs-biogeochemical-cycles/v/nitrogen-cycle	Chalk board Upload of learning material on Google Classroom
	Ecological factors: Concept of environmental factors. Soil as an edaphic factor, Soil composition, types of soil, soil formation, soil profile.	**06**	**A new course in Botany, Sheth Publication**	Chalk board Upload of learning material on Google Classroom

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	Community ecology- Characters of community - Quantitative characters and qualitative characters	**04**	**A new course in Botany, Sheth Publication**	Chalk board Upload of learning material on Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana **DEPARTMENT: Botany**

CLASS: T.Y.B.Sc. **SEMESTER: VI** **MONTH: January-March** **ACADEMIC YEAR: 2022-2023**

LEARNING OBJECTIVE/S:

The learners will be able to:

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper IV – Unit – III – Economic Botany	**Essential Oils:** Extraction, perfumes, perfume oils, oil of rose, sandalwood, patchouli, champaca, grass oils: Citronella, vetiver. □ **Fatty oils:**Drying oil (linseed and soyabean oil), semidrying oils (cotton seed, sesame oil) and non-drying oils (olive oil and peanut oil), □ **Vegetable Fats:**Coconut and Palm oil		Pharamcognosy – Kokate Pharamcognosy – Qadari	• https://www.youtube.com/watch?v=OVQC-6qIq-Y • https://www.youtube.com/watch?v=wvacR3rTgFU • https://www.youtube.com/watch?v=aieNV3V4b_s • https://www.youtube.com/watch?v=eJsuVz1yVrg • https://www.youtube.com/watch?v=eZ8wEc53c8c • https://www.youtube.com/watch?v=xKKt7P5tvdc

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **FYBSc** SEMESTER: II
MONTH: **December to April** ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S: To understand the capturing of light energy and utilizing it for making consumable food for every lif form on earth.

The learners will be able to : How energy transfer takes place from sun to earth and further to chemical energy, which is ultimately responsible. It enables to understand the phase transfer of the energy and how it is converted to various chemical form and ultimately to glucose.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II **Unit II** **PHYSIOLOGY**	Photosynthesis:	02	Textbook by sheth publication Plant Physiology by Taiz and Zeiger IGNTU eContent NPTEL ePGPathshala	PowerPoint presentations Jamboard White board Google Class room Diagram ConstructionModels.
	Light reactions, photolysis of water, photophosphorylation (cyclic and non cyclic),	06		
	Carbon fixation phase (C3, C4 and CAM pathways).	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TTEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **SYBSc** SEMESTER: IV
MONTH: **December to April** ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S: To gain the knowledge of physiological mechanism related to the respiration in plants and specific responses given by plants towards the Photosynthetic region of light spectrum.

The learners will be able to : To understand about the mechanism of the respiration and its machinery in both type of organism. Also to evaluate the working conditions of phytochromes and their physiological action.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II **Unit II : Plant Physiology and Plant Biochemistry**	**Respiration: Aerobic:** Glycolysis, TCA Cycle, ETS & Energetic of respiration; Anaerobic respiration.	10	Textbook by sheth publication Economic Botany: Kochar or Verma Biology Discussion website IGNTU eContent NPTEL ePGPathshala	PowerPoint presentations Jamboard White board Google Class room Diagram ConstructionModels.
	Photorespiration	01		
	Photoperiodism: Phytochrome Response and Vernalization with reference to flowering in higher plants, Physico-chemical properties of phytochrome, Pr-Pfr interconversion, role of phytochrome in flowering of SDPs and LDPs;	05		
	Vernalization mechanisms and applications.	02		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **TYBSc** SEMESTER: VI
MONTH: **December to April** ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S: To aware the hyphened techniques usages for molecular technology currently using in the field of Plant Biotechnology.

The learners will be able to : To know the principles of sequencing the DNA material. To know how to artificially enhances the quantity of small scale genetic information to produce a significant amount of DNA artificially. To understand the basics of barcoding technology for taxonomic distribution of plant on the molecular levels.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit I: Plant Biotechnology II	**DNA sequence analysis**– Maxam – Gilbert Method and Sanger's method, Pyro Sequencing.	04	Genetics by Russel Peter Adison Wesley Longman Inc.	Chalk and Board method, Computer Systems PowerPoint presentation,
	Polymerase Chain Reaction (PCR).	04	Bioinstrumentation by Gupta	

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	DNA barcoding: Basic features, nuclear genome sequence, chloroplast genome sequence, *rbc*L gene sequence, *mat* K gene sequence, present status of barcoding in plants.	06	DNA barcoding plants: taxonomy in a new perspective 2010. K Vijayan and C H Tsou, Current Science, 1530 –1541.	Internet Service, Software, Projects, Protocol Charts

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **TYBSc** SEMESTER: VI
MONTH: **December to April** ACADEMIC YEAR:**2022-2023**

LEARNING OBJECTIVE/S: To get your hands on about the virtual techniques to analyze the vast amount of data produced through molecular experiments.

The learners will be able to : To explore the newly emerging field or molecular biology. To understand and utilization of Bioinformatics tools and databases to deposit, retrieve, modify, interpret and analyses the virtual data types of genetic information. To construct taxonomic relation between the organism using this data types. To construct the 3D structures of Biomolecules using visualization software.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit IV: Bioinformatics	Organization of biological data, databases	04	Bioinformatics by Sunder Rajan Instant Notes on Bioinformatics by Westhead (2002), Taylor Francis Publications. Bioinformatics by Ignasimuthu	Chalk and Board method, Computer Systems PowerPoint presentation, Internet Service, Software, Projects, Protocol Charts
	Exploration of data bases, retrieval of desired data, BLAST.	04		
	Protein structure analysis and application	04		
	Multiple sequence analysis and phylogenetic analysis	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI RAMESH MORE DEPARTMENT: BOTANY CLASS: FY (CBZ/ BIOCHEMISTRY)

SEMESTER: II MONTH: JANUARY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : to understand the salient features of Pteridophytes and similarity of the same with cryptogamic and phanerogamic plants, also explains the entire Life cycle of Nephrolepis and its Morphology, economic importance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 1 PTERIDOPHYTES	1) General characters of Pteridophytes, similarity between cryptogams and phanerogams	02	A New course in Botany by Sheth Publications.	Chalk and Talk PPT
	2) External morphology of *Nephrolepis*	01		
	3) Anatomy of *Nephrolepis*	06		
	4) Life cycle of *Nephrolepis*	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI RAMESH MORE DEPARTMENT: BOTANY CLASS: SY (CB/ BZ)

SEMESTER: IV MONTH: NOVEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to : understand the classification of Gymnospermic plants according to their general characteristics, also understand the economic importance of conifers and the detail study of fossil plant - *Cordaites.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit III Gymnosperms	1)General characters of Gymnosperms	2	A New Course in Botany by Sheth Publications.	Chalk and Talk PPT
	2) Classification of Gymnosperms up to orders	2		
	3) Structure of life cycle and systematic position of the form genus- *Cordaites*	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI RAMESH MORE DEPARTMENT: BOTANY CLASS: TY BOTANY

SEMESTER: VI MONTH: NOVEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to: Identify, describe and study in detail the life cycles of three Pteridophytes. And study the economic importance of Pteridophytes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 3 Pteridophytes	1) Life cycle of *Adiantum* & Classification	03	College Botany Textbooks	Chalk and Talk PPT
	2) Life cycle of *Lycopodium*, Classification	04	Botany for Degree students Pteridophytes by P C Vashishta	
	3) Life cycle of *Equisetum*, Classification	04		
	4) Life cycle of *Marselia*, Classification	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANSI RAMESH MORE DEPARTMENT: BOTANY CLASS: TY (BOT/ BZ/Biochem)

SEMESTER: VI MONTH: NOVEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Understand development of plant in relation to propagation, post plantation care, harvesting, post harvesting care, management and varieties.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
APPLIED COMPONENT Unit 3 COMMERCIAL PRODUCTION	1) Tubers	02	Internet	chalk and duster method
	2) Vegetables	02		
	3) Fruits	05		
	4) Spices/ Condiments	02		
	5) Medicinal plants	02		
	6) Aromatic plants	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **FYBSc** SEMESTER: I

MONTH: **July to November** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To acquire the knowledge about working and functioning of the environment and its component.
The learners will be able to : To understand the basic component of environment, their interconnections and importance to maintain the balance between each other. That means Mediation of energy through the environmental distribution and utilization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II **ECOLOGY**	Energy pyramids, energy flow in an ecosystem.	04	1. Ecology by E P Odum 2. IGNTU eContent 3. NPTEL 4. ePGPathshala	1. PowerPoint presentations 2. Jamboard 3. White board 4. Google Class room 5. Google Meet 6. Online quiz 7. Diagram construction 8. Models.
	Types of ecosystems: aquatic and terrestrial.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **SYBSc** SEMESTER: III
MONTH: **July to November** ACADEMIC YEAR: **2021-2022**
LEARNING OBJECTIVE/S: To being able to understand the economic values of some plants with respect to medicinal benefits.

The learners will be able to : To understand the commercial values of plant for earning capital. Better use of some medicinal herbs with its aromatheroptic uses and their health benefits. To understand the plant based new energy sources for traditional hydrocarbon fuels.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PaperIII Unit 3 Industry based on plant products	Aromatherapy- Introduction, Uses with few examples. Jojoba, lemon, jasmin	05	1. Textbook by sheth publication 2. Economic Botany: Kochar or Verma 3. Biology Discussion website 4. IGNTU eContent 5. NPTEL 6. ePGPathshala	1. PowerPoint presentations 2. Jamboard 3. White board 4. Google Class room 5. Google Meet 6. Online quiz 7. Diagram 8. Construction 9. Models.
	Botanical and nutraceuticals -Spirulina, Vanillin, Garcinia indica/ Garcinia cambogia, Chlorella, and Kale.	08		
	Enzymes industry: Cellulases, Papain, Bromelain	04		
	Biofuels.	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **TYBSc** SEMESTER: V

MONTH: **July to November** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To acquire the knowledge about the physiological system of plant working and functioning.
The learners will be able to : To enables the understanding about water and mineral uptake and distribution in to plant system. Also to relate the physical factors of which are responsible for its distribution. To evaluate the Tissue/ cell system functioning and working factors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II Plant Physiology I	**Water relations:** Potential, osmosis, transpiration, imbibition,	04	1. Introduction to Plant Physiology by Noggle and Fritz, Prentice Hall Publishers(2002), 2. Plant Physiology by Salisbury and Ross CBS Publishers, 3. Plant Physiology by Taiz and Zeiger Sinauer Associates Inc. Publishers,2002 1. Biology Discussion website 2. IGNTU eContent 3. NPTEL 4. ePGPathshala	Chalk and Board Method, Model Construction and Demonstration, Experimental Simulation, Diagram Charts PowerPoint presentations Jamboard, White board , Google Class room, Google Meet, Online quiz, Diagram, Construction, Models.
	Solute transport: Transport of ions across cell membranes, active and passive transport, carriers, channels and pumps.	04		
	Translocation of solutes: Composition of phloem sap, girdling experiment.	04		
	Pressure flow model (Munch's hypothesis): Phloem loading and unloading, anatomy of sieve tube elements and mechanisms of sieve tube translocation.	04		
	Mineral Nutrition: Role of Macro and Micro nutrients, physiological functions and deficiency symptoms.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **TYBSc** SEMESTER: V

MONTH: **July to November** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To understand basic importance of conserving the genetic information about an organism and its genetic charecters.

The learners will be able to : It enable to understand about genetic information and its processing thus ultimately how it can conserve into digital as well as other physical form. Also helps to evaluate the methods for analysis of the genetic materials and related data types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit II: Plant Biotechnology I	Construction of genomic DNA libraries, Chromosome libraries and c- DNA libraries.	06	An introduction to Genetic analysis Griffith Freeman and Company(2000)	1. Chalk and Board method, 2. Computer Systems 3. PowerPoint presentation, 4. Internet Service, 5. Software, 6. Projects, 7. Protocol Charts
	Identification of specific cloned sequences in c-DNA libraries and Genomic libraries	04	Plant Biotechnology by K. Ramawat	
	Analysis of genes and gene transcripts –Restriction enzyme, analysis of cloned DNA sequences. Hybridization(Southern Hybridization)	06	Genetics by Russel Peter Adison Wesley Longman Inc.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Swarupa Vishal Agnihotri DEPARTMENT: Botany CLASS: T.Y. B.Sc. (Botany and BZ) SEMESTER: V

MONTH: August 2020 ACADEMIC YEAR: 20-21

LEARNING OBJECTIVE/S:
The learners will be able to: Students will gain in depth information about different methods of protoplast fusion and its application in agriculture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit IV Plant tissue culture	**Protoplast fusion and somatic hybridization**		Plant tissue culture, by, Purohit, S.S	Google meet, Power point presentation
	Concepts, definition, and various methods of protoplast fusion	3		
	Application of somatic hybridization in agriculture	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Swarupa V. Agnihotri **DEPARTMENT**: Botany CLASS: T.Y.B.Sc. Botany SEMESTER: VMONTH: August ACADEMIC YEAR: 20-21

LEARNING OBJECTIVE/S:
The learners will be able to: Learners will able to know about types of microbes and their life cycles. Students will gain the information about colony characters and staining procedure for microbes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit I, Microbiology	Types of microbes: Viruses, Bacteria, Algae, Fungi, Protozoa, Mycoplasma and Actinomycetes	6	Introduction to microbiology by Pelczar,JR., Chan, O.S., Krieg, H.R. Fundamental principles of bacteriology, by, Salle, A.J.	Google meet, Power point presentations
	Sterilization, media, staining, colony characters	6		Google meet, Power point presentations
	Pure culture	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV KAMALAKAR SATVI DEPARTMENT: Botany CLASS: F.Y.BSc SEMESTER: I

MONTH: November to December ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: understand the classification, structure, function, ecology, life cycle of the fungi. *Examples Aspergillus* and *Rhizopus* are common fungi and uses of the fungi.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II Fungi	Introduction and classification of Fungi	1	**N.C Kumar, The text book of** Botany, Himalaya publication House 2008 **Singh V et al, text book of Botany,** Global media, 2009	Chalk and board
	Structure, life cycle and systematic position of *Rhizopus* and *Aspergillus*	2		
	Economic importance of Fungi.	1		
	Modes of nutrition in Fungi (Saprophytism and Parasitism).	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: S.Y BSc SEMESTER: III

MONTH: September to December ACADEMIC YEAR: 2021-2022

- LEARNING OBJECTIVE/S: Ultra Structure and functions of cell organelles: Mitochondrion (membranes, cristae, F1 particles and matrix) , Peroxisomes and Glyoxysomes, Ribosomes (prokaryotic, eukaryotic and subunits)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II Cell Biology	Ultra Structure and functions of the cell organelles:	1	**Golatkar** V. et .al **The new Course in Botany** S.YB.Sc Sem 3 and 4 Sheath Prakashan	Chalk and board
	Mitochondrion(membranes, cristae, F1 particles and matrix)	2		
	Peroxisomes and Glyoxysomes Ribosomes (prokaryotic, eukaryotic and subunits)	2		
	Cell Cycle, structure of Interphase Nucleus (nuclear envelop, chromatin network, nucleolus and nucleoplasm) Mitosis & Meiosis Differences between Mitosis and Meiosis	3		
	Nucleic Acids: Types, structure and functions of DNA and RNA	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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-TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: T.Y. BSc SEMESTER: V

MONTH August - December ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The students would be able: study Fungi, Classification and general characters of Basidiomycetes, life cycle of *Agaricus*, Life cycle of *Puccinia*, Classification and general characters of Deutromycetes and life cycle of *Alternaria*.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III Fungi	, Classification and general characters of Basidiomycetes	2	Botany for degree students Fungi B.R. Vashishta A.K. Sinha College Botany Vol. II Gangulee and Kar	Chalk and board
	Life cycle of Puccinia	6		
	Life cycle of Agaricus	3		
	Classification and general characters of Deutromycetes	2		
	life cycle of Alternaria.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: F. Y. B. Sc. (CBZ-A) SEMESTER: IMONTH: ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: Gain knowledge about Introduction to the anatomy, morphology and habitat of Bryophytes, it will also aid the students in identifying bryophytes, and how to analyze and connect them on an evolutionary basis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III, Bryophyta	Introduction to plant kingdom, applications of studying Bryophyta, basic information on Bryophyta	02	A New Course in Botany, (F.Y. B.Sc.) Sem I & II	Google slides, Jamboard
	General terminologies in Bryophyta, Introduction to Hepaticae	02		
	General Characters of Hepaticae	01		
	External Morphology of Riccia	02		
	Internal Morphology of Riccia	02		
	Riccia Reproduction	02		

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	Riccia Sexual reproduction and Life cycle	02		
	Revision	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: S. Y. B. Sc. (BZ, CB) SEMESTER: III MONTH: JULY-SEPTEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: analyze plants technically with the help of systematic study including morphology, Nomenclature, classification, and identification. Furthermore, Studies of Plant Families will help them know the respective family in and out and also give information on economically valuable plants from that family which could be used as a tool for research and other purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit II, Angiosperms (Unit Shared)	Taxonomy in relation to Anatomy	01	A New Course in Botany by V.V. Golatkar, Dr. Behnaz Patel, Dr. Neeraja S. Tutakne & Dr. Rachana R. Birje	Google slides, Jamboard, Slido
	Taxonomy in relation to Palynology	01		
	Taxonomy in relation to Chemical	01		

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	Taxonomy in relation to Embryology	01		
	Taxonomy in relation to Cytology	01		
	Taxonomy in relation to Ecology	01		
	Plant systematics: objective and Goals	01		
	Plant Nomenclature: Principles of ICN, Author citation, Priority, Type concept	04	Turland, N.J., et al. 2018. International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China,	
	Amaranthaceae: Overview, General Characters, Plants of economic importance	02	Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical Plant families Identification Handbook, Second edition	
	Palmae: Overview, General Characters, Plants of economic importance	02		
	Revision	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: S. Y. B. Sc. (BZ, CB) SEMESTER: III MONTH: JULY-SEPTEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to: analyze lower groups technically with the help of systematic study including morphology, classification, and identification. Furthermore, the students will obtain a sound knowledge on evolutionary trends in Algae.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper I, Unit I, Algae (Thallophyta) (Unit Shared)	Introduction to Algae; History of Classification; Brown algae; Distribution of Brown algae	01	Cryptogamic Botany By G.M.Smith A New Course in Botany by V.V. Golatkar, Dr. Behnaz Patel, Dr. Neeraja S. Tutakne & Dr. Rachana R. Birje	Google slides, Jamboard, Slido
	General Characters of Phaeophyta up to Vegetative reproduction	01		
	Vegetative, Sexual and Asexual reproduction in Phaeophyta	01		
	Phaeophyta general characters and Occurrence of Sargassum	01		
	Sargassum basic info, occurrence, basic morphology and stem anatomy	01		
	Sargassum: Vegetative structures anatomy; Sexual Repro: Antheridia, Conceptacle, Receptacle	01		
	Sargassum: Oogonia, Fertilization, Alternation of Generation	01		
	Sargassum: alternation of generation; Systematic positioning; Economic importance; species identification and microhabitat of sargassum	01		
	Revision	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: T. Y. B. Sc. (BZ, Botany) SEMESTER: V MONTH: JULY-SEPTEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

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The learners will be able to: Gain a deep insight in the classification system of Bentham and Hooker with its pros and cons which will help them to follow it with more clear understanding. The extensive morphological information on flower and fruit (along with the information on leaf and Inflorescence from F.Y) will serve as the baseline for studying plants in detail in the present year and future helping them to identify, classify and diagnose plants more discreetly. Studies of Plant Families will help them know the respective family in and out and also give information on economically valuable plants from that family which could be used as a tool for research and other purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit II, Angiosperms I	Angiosperm-introduction to the stars of Angiosperms Flower Morphology - Bracts and Calyx Types	01	WILLIAM T. STEARN (1983). BOTANICAL LATIN, History, Grammar Syntax, Terminology and Vocabulary Third edition, revised DAVID & CHARLES Newton Abbot London North Pomfret (Vt).	Google slides, Jamboard, Slido
	Flower Morphology - Calyx Types	01		
	Flower Morphology - Corolla Types	01		
	Flower Morphology - Corolla appendages & Perianth Types	01		
	Flower Morphology - Androecium: No. of Stamens, Attachment of anther, Type of Anthers	01		
	Flower Morphology - Androecium: Cohesion, Adhesion	01		

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	Flower Morphology - Androecium: Length and insertion of stamens; Gynoecium - Basic definitions	01		
	Flower Morphology - Gynoecium	01		
	Bentham and Hooker System of Classification: Polypetalae	01	Bentham, G. 1883.Genera Plantarum by Bentham, G. and Hooker, J.D. Reeve, London.	
	Bentham and Hooker System of Classification: Gamopetalae, Apetalae, Monocots	01		
	Bentham and Hooker System of Classification: overview, merits and demerits	01		
	Capparidaceae: Introduction, History, General characters	01	Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical Plant families Identification Handbook, Second edition	
	Cucurbitaceae: General Characters, distinguishing characters, fruit type, representative plants	01		
	Cucurbitaceae: Plants of Economic Importance; Cucurbitaceae: Introduction, Current Status, General Characters	01		
	Cucurbitaceae: L.S. of Flower and T.S. of Ovary; Cucurbitaceae: General Characters, Distinguishing characters, Fruit type, Plants found in Mumbai	01		
	Cucurbitaceae: Revision of General characters; Plants of economic Importance (found in Mumbai)	01		
	Apiaceae: Overview, General characters	01		

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	Apiaceae: Fruit Plants of Economic Importance	01		
	Rubiaceae: current statistics, General characters, striking characters, plants of economic importance	01		
	Rubiaceae: plants of economic importance; Poaceae: current statistics, general characters	02		
	Poaceae: Plants of economic importance; Solanaceae: Statistics, general characters, etc.	02		
	Solanaceae: Plant of economic importance; Commelinaceae: general characters and current stats	01		
	Revision	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: T. Y. B. Sc. (BZ, Botany) SEMESTER: V MONTH: JULY-SEPTEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: Will gain insight into the details of pharmacognosy and the pharmaceutical monographs. They will be made aware about the importance of plants for human health and how it is used in their entire methodology and its details. The topic will generate research aura in students to study plants for their uses in order to cure more and more diseases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV, Unit IV, Pharmacognosy and Medicinal Botany	Introduction to Pharmacognosy; History of medicine	02	Wikipedia; Pharmacognosy by Kokate, Purohit and Gokhale, Nirali Publications	Google slides, Jamboard, Slido
	Quiz on History of Medicine; Clove	01		
	Clove and Revision	02		
	Senna and Quiz;	01		

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	Curcuma and Quiz	02		
	Vekhand and Quiz	01		
	Garlic and Quiz	02		
	Garlic and Kuchla & Quiz	02		
	Revision	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana DEPARTMENT: Botany CLASS: T.Y.B.Sc. (BOTANY & BZ)

SEMESTER: **V** MONTH: August - September ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To understand succession in plant communities and study remediation technologies in order to apply knowledge acquired for cleanup of polluted sites.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit – III	Bioremediation: Principles, factors responsible and microbial population in bioremediation. Phytoremediation: Metals, Organic pollutants Plant succession: Hydrosere and Xerosere – Formation of Barren Space, Succession on the Land Citing Different Seres leading up to the Climax, Succession in Water, Ecesis, Poly and Mono-climax theories.	15	https://www.nap.edu/read/2131/chapter/4#18 https://www.biologydiscussion.com/plants/plant-succession/plant-succession-introduction-process-and-types-botany/15330	Lectures on Google Meet, PowerPoint, Pdfs, Upload of learning material on Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana DEPARTMENT: Botany CLASS: S.Y.B.Sc. (CB & BZ)

SEMESTER: **III** MONTH: August - September ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:

- To understand the importance of pharmacopeia
- Identify adulterants and its different types
- Identify and differentiate primary and secondary metabolite

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III **Unit – I**	**Pharmacognosy and phytochemistry** • Introduction to pharmacopoeia • Indian pharmacopoeia, Indian Herbal Pharmacopoeia and Ayurvedic Pharmacopoeia • Study of Monograph from pharmacopoeia • Secondary Metabolites: Sources, properties, uses and adulterants, regional and seasonal variations • Adulterants: *Saraca asoca, Polyalthia longifolia Terminalia arjuna, Terminalia tomentosa Bacopa monnieri, Centella asiatica Abrus, Glycyrrhiza Phyllanthus amarus (Bhuiamla)*	15	A new course in botany – Sheth Publication	Lectures on Google Meet, PowerPoint, Pdfs, Upload of learning material on Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan Gavankar DEPARTMENT: Botany CLASS: S.Y.B.Sc. (CB & BZ)

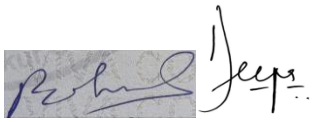
SEMESTER: **I** MONTH: October – December ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:

- To understand and differentiate about different preservation method
- To understand about techniques of microscopy
- To differentiate about different chromatographic techniques
- To understand about electrophoresis technique as a separation technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit – III	**GENETICS** **1 Phenotype/Genotype, Mendelian**	05	A new course in botany – Sheth Publication Principles of Instrumental Analysis - by Douglas A. Skoog	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Genetics- monohybrid, dihybrid; test cross; back cross ratios.	05		
	2 Epistatic and non epistatic interactions; multiple alleles.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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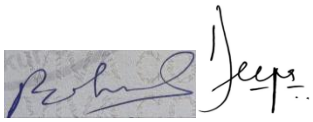
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan Gavankar DEPARTMENT: Botany CLASS: T.Y.B.Sc. (BOTANY)

SEMESTER: **III** MONTH: October – December ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To learn principles and application of commonly used techniques in instrumentation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit – III	Unit III : Cytogenetics Variation in Chromosome structure (Chromosomal Aberrations) Definition, Origin, Cytological and Genetic Effects of the following: Deletions, Duplications, Inversions and Translocations.	04	Principles of Instrumental Analysis - by Douglas A. Skoog An Introduction to Practical Biochemistry- by David Plummer	Lectures on Google Meet, PowerPoint, Pdfs, Youtube videos, Animation Upload of learning material on Google Classroom
	Sex determination, Sex linked, sex influenced and sex limited traits : Sex determination- Chromosomal Methods: heterogametic males and heterogametic females. Sex determination in monoecious and dioecious plants. Genic Balance Theory of sex determination in Drosophila, Lyon's Hypothesis of X chromosome inactivation. Sex linked- eye colour in Drosophila, Haemophilia, colour blindness	06		



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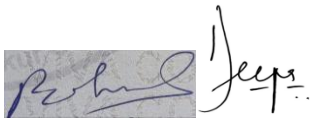
	Sex influenced- baldness in man			
	Extranuclear Genetics	01		
	Organelle heredity- o Chloroplast determines heredity - Plastid transmission in plants,	02		
	Streptomycin resistance in Chlamydomonas. o Male sterility in maize	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan Gavankar DEPARTMENT: Botany CLASS: S.Y.B.Sc. (CB & BZ)

SEMESTER: **V** MONTH: October – December ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:

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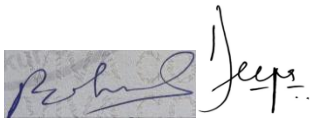
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I : CYTOLOGY AND MOLECULAR BIOLOGY	**Structure and function of nucleus**	**02**		
	Structure and function of vacuole	**03**		
	Structure and function of giant chromosomes	**05**		
	The genetic code: Characteristics of the genetic code **Transcription and Translation in Eukaryotes**	**05**		



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Botany CLASS: S.Y.B.Sc. (CB & BZ)

SEMESTER: **III** MONTH: October – December ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:

- To understand and differentiate about different preservation method
- To understand about techniques of microscopy
- To differentiate about different chromatographic techniques
- To understand about electrophoresis technique as a separation technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit – III**	**Modern Techniques to Study Plant Diversity** Preservation methods :Dry and Wet method	03	A new course in botany – Sheth Publication Principles of Instrumental Analysis - by Douglas A. Skoog	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Microscopy – Principle and working of Light, and electron microscope.	04		
	Chromatography- Principles and techniques in paper and thin layer chromatography.	04		
	Principles and techniques of Horizontal and Vertical electrophoresis.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Botany CLASS: T.Y.B.Sc. (BOTANY)

SEMESTER: **V** MONTH: October – December ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To learn principles and application of commonly used techniques in instrumentation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit – III	**Instrumentation** Colorimetry and Spectrophotometry (Visible, UV and IR) - Introduction–	01	Principles of Instrumental Analysis - by Douglas A. Skoog An Introduction to Practical Biochemistry- by David Plummer	Lectures on Google Meet, PowerPoint, Pdfs, Youtube videos, Animation Upload of learning material on Google Classroom
	Instrumentation, working, principle and applications. of Colorimeter	02		
	Instrumentation, working, principle and applications. of Spectrophotometer	02		
	Chromatography: General account of Column chromatography.,	03		
	Principle and bedding material involved in adsorption and partition chromatography	03		
	ion exchange chromatography, molecular sieve chromatography.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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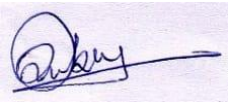
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ATUL DUBEYDEPARTMENT: BOTANY CLASS: FY [CBZ(B-div.), Biochemistry] SEMESTER: I MONTH:

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: Get exposure to pollen study and learn to apply it in various fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit 1 CELL BIOLOGY	1) General structure of plant cell: ● Cell wall ● Plasma membrane (bilayer lipid structure, fluid mosaic model)	03 06	A New Course in Botany - Sheth Publication	Google Slides
			Cell Biology by De Robertis	Google Slides
	2) Ultra structure and functions of the following cell organelles: ● Endoplasmic reticulum ● Chloroplast	03 03	Cell and Molecular biology by Karp	Google Slides



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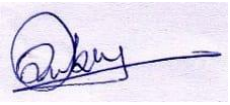
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ATUL DUBEYDEPARTMENT: BOTANY CLASS: SY (CB/ BZ) SEMESTER: III MONTH: ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: Get exposure to pollen study and learn to apply it in various fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit 3 MOLECULAR BIOLOGY	1) DNA Replication: ● Modes of Replication ● Messelson and Stahl experiment	02 02	Botany textbook – Sheth Publication	Google Slides
	2) DNA Replication in prokaryotes and eukaryotes- ● Enzymes involved ● Molecular mechanism of replication	01 03	iGenetics by Russell	Google Slides

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ATUL DUBEYDEPARTMENT: BOTANY CLASS: TY (BOTANY/ BZ) SEMESTER: V MONTH: JUNE

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: Get exposure to pollen study and learn to apply it in various fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit 4 PALYNOLOGY	1) Pollen Morphology	03	Embryology of Plants by Bhojwani and Bhatnagar	Google Slides
	2) Pollen viability- storage	02	An introduction to embryology of Angiosperms by P Maheshwari	Google Slides
	3) Germination and growth of pollen	02		Google Slides

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

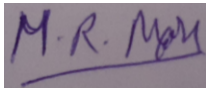
NAME OF THE STAFF: Ms. Mansi Ramesh More DEPARTMENT: Botany CLASS: T. Y. B. Sc. (Botany)

SEMESTER: V MONTH: JUL-SEP ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: understand the meaning of the term Ethnobotany, different branches of it, how folk people used plants in different ways, applications of plants and ethnobotany study and different plants used by ethno-people to cure diseases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV, Unit I, Ethnobotany (Unit Shared)	Introduction to Ethnobotany : Definition, history, sources of data and methods of study	03	Internet and previous notes	Powerpoint presentation, google slides.
	Applications of ethnobotany: Ethno-medicines, Agriculture, Edible plants	02		
	Traditional medicines used by tribals in diseases = skin ailments, liver ailments, wound healing and ageing, fever and diabetes.	02		
	Revision	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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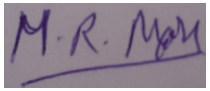
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mansi Ramesh More DEPARTMENT: Botany CLASS: T. Y. B. Sc. (Botany, BZ, Biochemistry)

SEMESTER: V MONTH: JULY-SEPTEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: understand the term Horticulture, its importance, objectives, main goals and the allied branches of horticulture, also help to provide the information of some institutions which help to promote different strategic plantation, the plan of Lakhibaug yojana.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper Horticulture, Unit I, Introduction to Horticulture	Definition, importance and objectives of Horticulture, Branches of horticulture	01	Internet, different journals related to horticulture, S.Y.B.Sc. textbook, You tube videos	Google slides, powerpoint presentation, you tube videos
	Apiculture	02		
	Sericulture	02		
	Social forestry	01		
	Kokan krishi vidyapeeth, Dapoli	02		



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	HTC, CPTRI	02		
	National Research Centre for grapes, Regional fruit Research centre, Pune	02		
	Lakhibaug Yojana	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

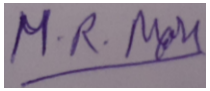
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mansi Ramesh More DEPARTMENT: Botany CLASS: T. Y. B. Sc. (BZ, Botany, Biochemistry)

SEMESTER: V MONTH: JULY-SEPTEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to: analyze the different organic fertilizers to increase the yield of agricultural crops, types of diseases occurs on horticultural crops and their control measures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Horticulture Unit III, Manures, fertilizers and	Manures:Definition, importance, important manures FYM	02	Internet, different journals related to organic farming, slideshare.net	powerpoint presentation.
	Fertilizers: Definition and types	02		



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diseases	Bio-fertilizers: bacteria, cyanobacteria, mycorrhizae, sea weeds.	01		
	Diseases; Viral, Fungal, Bacterial	02		
	Pests: insect and non-insect pests.	02		
	Friends of farmers: Earthworm, snakes, predaceous fungi	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

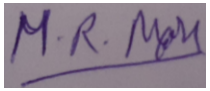
NAME OF THE STAFF: Ms. Mansi Ramesh More DEPARTMENT: Botany CLASS: T. Y. B. Sc. (BZ, BotanyBiochemistry)

SEMESTER: V MONTH: JULY-SEPTEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to: understand the planting methods for different plants and the propagation practices carried out by different methods, also help to understand the method and applications of tissue culture.

PAPER,	SUBTOPICS	NO OF	REFERENCE/S	TEACHING METHOD/ ICT



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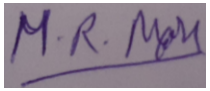
UNIT, TITLE		LECTURES ALLOTTED		TOOLS USED
Horticulture Unit II, Propagation practices	By seeds: advantages and disadvantages, method of propagation, production of seeds, handling, collection and storage, sowing, transplanting and marketing.	04	Internet, different journals related to organic farming, slideshare.net	powerpoint presentation.
	by specialized vegetative structures: bulbs, tubers, corms, rhizomes, root stock, runners, offsets and suckers	02		
	artificial methods of plant propagation: cuttings, layering, grafting, budding	02		
	application of tissue culture in relation to horticulture	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

Teaching



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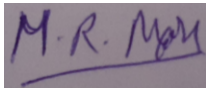

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TEACHING PLAN (UNIT PLAN)

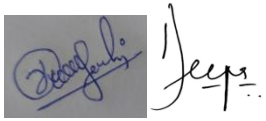
NAME OF THE STAFF: **MR. KIRAN GANGADHAR CHAKRAL** DEPARTMENT: BOTANY CLASS: FY.BSc SEMESTER: I

MONTH: ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to: understand the classification, structure, function, ecology, life cycle of the fungi. *Examples Aspergillus* and *Rhizopus* are common fungi and understand commercial the industrial uses of the fungi.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II Fungi	Introduction and classification of Fungi	1	**N.C Kumar,The text book of** Botany, Himalaya publication House 2008 **Singh V et al, text book of Botany,** Global media, 2009 **Campbells,Reece** et al Biology Eight edition Bejamin Cummings	Google slides, Quezziz, google jamboard
	Structure, life cycle and systematic position of *Aspergillus*	1		Google slides, Quezziz, google jamboard
	Economic importance of Fungi.	1		Google slides, Quezziz, google jamboard
	Modes of nutrition in Fungi (Saprophytism and Parasitism).	1		Google slides, Quezziz, google jamboard



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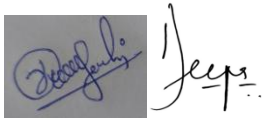
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4



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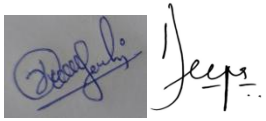
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: S.Y BSc SEMESTER: III

MONTH: July to September ACADEMIC YEAR: 2021-22s

LEARNING OBJECTIVE/S: The learners will be able to provide knowledge about environmental factors and natural resources and their importance in sustainable development

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit II Forestry and Economic Botany	Forestry: outline types of forest in India	3	**Golatkar** V. et .al **The new Course in Botany** S.YB.Sc Sem 3 and 4 Sheath Prakashan	Google slides, Quizizz, google jamboard
	Forestry: Agroforestry, Urban Forestry, Organic farming, Silviculture	4		Google slides, Quizizz, google jamboard
	Economic Botany: Types of fibres, Jute and Cotton Current trend in fibres industries	3		Google slides, Quizizz, google jamboard
	Spices and Condiments: Saffron and Cardamom	3		Google slides, Quizizz, google jamboard
	Commercial market of spices	2		Google slides, Quizizz, google jamboard



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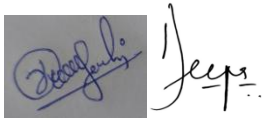
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

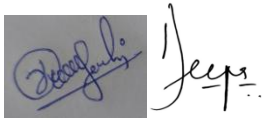
NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: T.Y. BSc SEMESTER: V

MONTH: July to September ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The students would be able: To relate anomalies in internal stem structure with function and appreciate the salient features of the root stem transition zone. To get exposure to plant anatomy and learn to apply it in various fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit III Anatomy	Introduction to Anomalous secondary growth	2	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns Introductory plant Biology** edition 12 Mcgraw Hills	Power point presentation and chalk and board
	Anomalous secondary growth in the Stems of *Bignonia,Salvadora, Achyranthes, Dracaena.*	6		Power point presentation and chalk and board
	Storage roots of Beet, Radish	3		Power point presentation and chalk and board
	Root stem transition	2		Power point presentation and chalk and board
	Types of Stomata– Anomocytic, Anisocytic, Diacytic, Paracytic, and Graminaceous	2		Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15



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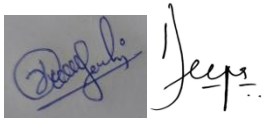

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **FYBSc** SEMESTER: I

MONTH: **July to November** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To acquire the knowledge about working and functioning of the environment and its component.
The learners will be able to : To understand the basic component of environment, their interconnections and importance to maintain the balance between each other. That means Mediation of energy through the environmental distribution and utilization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II **ECOLOGY**	Energy pyramids, energy flow in an ecosystem.	04	1. Ecology by E P Odum 2. IGNTU eContent 3. NPTEL 4. ePGPathshala	1. PowerPoint presentations 2. Jamboard 3. White board 4. Google Class room 5. Google Meet 6. Online quiz 7. Diagram construction 8. Models.
	Types of ecosystems: aquatic and terrestrial.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **SYBSc** SEMESTER: III
MONTH: **July to November** ACADEMIC YEAR: **2021-2022**
LEARNING OBJECTIVE/S: To being able to understand the economic values of some plants with respect to medicinal benefits.

The learners will be able to : To understand the commercial values of plant for earning capital. Better use of some medicinal herbs with its aromatheroptic uses and their health benefits. To understand the plant based new energy sources for traditional hydrocarbon fuels.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PaperIII Unit 3 Industry based on plant products	Aromatherapy- Introduction, Uses with few examples. Jojoba, lemon, jasmin	05	1. Textbook by sheth publication 2. Economic Botany: Kochar or Verma 3. Biology Discussion website 4. IGNTU eContent 5. NPTEL 6. ePGPathshala	1. PowerPoint presentations 2. Jamboard 3. White board 4. Google Class room 5. Google Meet 6. Online quiz 7. Diagram 8. Construction 9. Models.
	Botanical and nutraceuticals -Spirulina, Vanillin, Garcinia indica/ Garcinia cambogia, Chlorella, and Kale.	08		
	Enzymes industry: Cellulases, Papain, Bromelain	04		
	Biofuels.	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **TYBSc** SEMESTER: V

MONTH: **July to November** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To acquire the knowledge about the physiological system of plant working and functioning.
The learners will be able to : To enables the understanding about water and mineral uptake and distribution in to plant system. Also to relate the physical factors of which are responsible for its distribution. To evaluate the Tissue/ cell system functioning and working factors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II Plant Physiology I	**Water relations:** Potential, osmosis, transpiration, imbibition,	04	1. Introduction to Plant Physiology by Noggle and Fritz, Prentice Hall Publishers(2002), 2. Plant Physiology by Salisbury and Ross CBS Publishers, 3. Plant Physiology by Taiz and Zeiger Sinauer Associates Inc. Publishers,2002 1. Biology Discussion website 2. IGNTU eContent 3. NPTEL 4. ePGPathshala	Chalk and Board Method, Model Construction and Demonstration, Experimental Simulation, Diagram Charts PowerPoint presentations Jamboard, White board , Google Class room, Google Meet, Online quiz, Diagram, Construction, Models.
	Solute transport: Transport of ions across cell membranes, active and passive transport, carriers, channels and pumps.	04		
	Translocation of solutes: Composition of phloem sap, girdling experiment.	04		
	Pressure flow model (Munch's hypothesis): Phloem loading and unloading, anatomy of sieve tube elements and mechanisms of sieve tube translocation.	04		
	Mineral Nutrition: Role of Macro and Micro nutrients, physiological functions and deficiency symptoms.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **TYBSc** SEMESTER: V

MONTH: **July to November** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To understand basic importance of conserving the genetic information about an organism and its genetic charecters.

The learners will be able to : It enable to understand about genetic information and its processing thus ultimately how it can conserve into digital as well as other physical form. Also helps to evaluate the methods for analysis of the genetic materials and related data types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit II: Plant Biotechnology I	Construction of genomic DNA libraries, Chromosome libraries and c- DNA libraries.	06	An introduction to Genetic analysis Griffith Freeman and Company(2000)	1. Chalk and Board method, 2. Computer Systems 3. PowerPoint presentation, 4. Internet Service, 5. Software, 6. Projects, 7. Protocol Charts
	Identification of specific cloned sequences in c-DNA libraries and Genomic libraries	04	Plant Biotechnology by K. Ramawat	
	Analysis of genes and gene transcripts –Restriction enzyme, analysis of cloned DNA sequences. Hybridization(Southern Hybridization)	06	Genetics by Russel Peter Adison Wesley Longman Inc.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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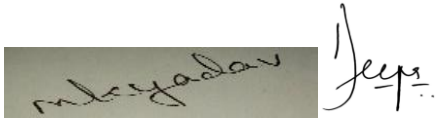
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: FY (CBZ / BIOCHEMISTRY) SEMESTER: IMONTH: OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: Gain knowledge about the general characters of class Hepaticaceae. And learn about the structure, life cycle and systematic position of *Riccia*.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1, Unit 3 BRYOPHYTA	1) General characters of Hepaticae	03	A New Course in Botany, by Sheth Publications.	Online Lectures PPT Video clips
	2) Structure, life cycle and systematic position of *Riccia*.	12		



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

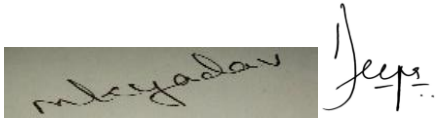
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: SY (CB/BZ) SEMESTER: III MONTH: JULY

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the salient features of two major groups of bryophytes, their life cycle patterns with suitable example; to be able to identify them

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 1 THALLOPHYTA (ALGAE) AND BRYOPHYTA	1) General account of class Anthocerotae and Musci	3	A New course in Botany by Sheth Publications	Online Lectures PPT Video Clips
	2) Structure, life cycle and systematic position of *Anthoceros* and *Funaria*	5		



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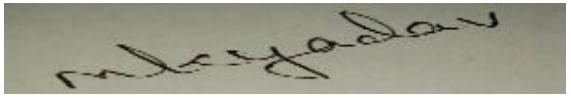
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8



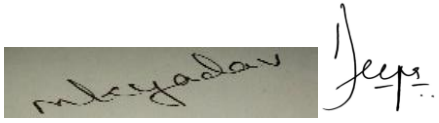
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: SY (CB/BZ) SEMESTER: III MONTH: JULY

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: Gain knowledge about Taxonomy in relation to Embryology, Cytology and Ecology. They will be able to learn about vegetative, floral characters and economic importance of the families Leguminosae and Asteraceae.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2 ANGIOSPERMS	1) Taxonomy in relation to: Embryology, Cytology, Ecology	3	A New course in Botany by Sheth Publications	Online Lectures PPT
	2) With the help of Bentham and Hooker's system of classification for flowering plants, study of families Leguminosae and Asteraceae	5	Plant Taxonomy by O P Sharma	



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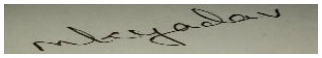


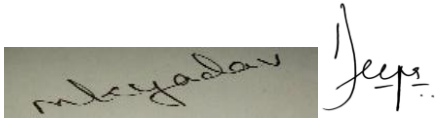
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: TY (BOTANY) SEMESTER: VMONTH: JULY

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The learners will be able to: Understand the salient features of three major groups of algae, their life cycle patterns with suitable example; to be able to identify them

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2 ALGAE	1) Classification and General Characters: Distribution, Cell structure, pigments, reserve food, range of thallus, reproduction: asexual and sexual, Alternation of Generations, Economic importance of Divisions Rhodophyta, Xanthophyta and Bacillariophyta.	05	College Botany Vol II by Gangulee Das and Dutta	Online Lectures PPT



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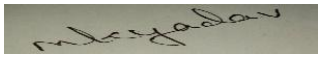
	2) Structure, life cycle and systematic position of *Polysiphonia, Batrachospermum, Vaucheria* and *Pinnularia.*	10	Crytogamic Botany Vol I by G M Smith	
			Botany for Degree Students- Algae by B R Vashistha.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

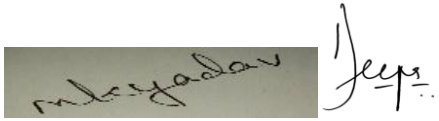


TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: TY (BOTANY/ BZ/CB) SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: Get exposure to pollen study and learn to apply it in various fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit 4 PALYNOLOGY	1) 1) Pollen Morphology	03	Embryology of Plants by Bhojwani and Bhatnagar	Online Lectures PPT



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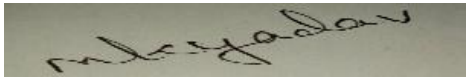
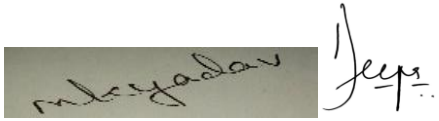
	2) Pollen viability- storage	02	An introduction to embryology of Angiosperms by P Maheshwari	
	3) Germination and growth of pollen	02		
	4)Application of Palynology in honey industry, coal and oil exploration, Aerobiology and pollen allergies, forensic science.	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari**

DEPARTMENT: **Botany**

CLASS: **F.Y. B.Sc. (CBZ & Biochemistry)** SEMESTER: I

MONTH: **October to January** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE: To acquire the knowledge about entire life cycle of an Algae and their ecological & economic importance.

The learners will be able to: understand the importance of Algae in different fields (ecosystem, pharmaceutical, food, as primary producers etc.), their forms & flourishment and also it's importance as ancestors in evolution of plants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I **ALGAE**	Structure, life cycle and systematic position of ***Nostoc* and *Spirogyra*.**	12	Textbook by sheth publication College Botany Volume II (Gangulee & Kar)	Power point presentation Google classroom
	Economic importance of Algae.	02	Textbook by sheth publication College Botany Volume II (Gangulee & Kar)	Power point presentation Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari**

DEPARTMENT: **Botany**

CLASS: **S.Y. B.Sc. (BZ & CB)** SEMESTER: III

MONTH: **July to November** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To acknowledge about molecules existing in plants, their role in metabolic reaction.

The learners will be able to: understand what exactly the biological molecules are, their structures, synthesis process including regulation, and their role in metabolism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit 3 Molecular Biology	**DNA replication** : Modes of Replication, Messelson and Stahl Experiment, **DNA replication in prokaryotes and eukaryotes-** enzymes involved and molecular mechanism of replication.	07	Textbook by sheth publication *i*GENETICS: *A molecular approach* by Peter J. Russell	Power point presentation Google classroom
	. **Protein Synthesis**: ○ Central dogma of Protein synthesis ○ Transcription in prokaryotes and eukaryotes: promoter sites, initiation, elongation and termination. ○RNA processing: Adenylation & Capping.	08	Textbook by sheth publication *i*GENETICS : *A molecular approach* by Peter J. Russell	Power point presentation Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari**

DEPARTMENT: **Botany**

CLASS: **T.Y. B.Sc. (BZ, Botany)** SEMESTER: V

MONTH: **July to November** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: Awareness about harmful pathological diseases in economic important plants.

The learners will be able to : study about different pathological diseases in plants, causal organisms that cause diseases, symptoms of diseases, affected parts of plants, effect of it on plant process, disease cycle (how disease spread and effect to entire plant and their mechanism) & control/ preventive measures of pathological diseases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit IV **Plant Pathology**	**Study of plant diseases**: Causative organism, symptoms, predisposing factors, disease cycle and control measures of the following. ,	01	College Botany Volume II (Gangulee & Kar)	Power point presentation Google classroom
	➢ White Rust – *Albugo sp.* ➢ Tikka disease of ground nut: *Cercospora* ➢ Damping off disease: *Pythium* ➢ Citrus canker – *Xanthomonas* sp. ➢ Leaf curl – leaf curl virus	08		
	Study of Physical, chemical and biological control methods of plant diseases.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari**

DEPARTMENT: **Botany**

CLASS: **T.Y. B.Sc. (BZ, Botany & Biochemistry)** SEMESTER: V

MONTH: **July to November** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: Garden operation

The learners will be able to : Gain knowledge about gardening, Caring for plants, weeds compete and different wonderful way to bring beauty in the world which not only enhance the natures beauty but also important for environmental health.s

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Horticulture Paper I Unit 4 Garden operation	Selection of site, Preparation of soils for garden Mulching, top- dressing, blanching Sowing, transplanting, tree transplanting, Irrigation, - Overhead, Surface, Underground Weeding and pruning, - Principles, Objectives and general technique. Water management and conservation through horticulture, Dry land Horticulture. **Organic Farming** Definition, Scope, Indian	15		Power point presentation Google classroom

	scenario, Future scope			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANT CLASS: F.Y BSc SEMESTER: II

MONTH : ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to learners will be able to relate primary growth in internal stem and root structure with function and appreciate the salient features of the root and stem

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit II Anatomy	Introduction of Anatomy and its importance in biology	2	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns**	Google Jamboard, Google slides, Quizizz
	Simple Tissue: Parenchymatous Tissue, Collenchymatous Tissue and Sclerenchymatous tissue	4		Google Jamboard, Google slides, Quizizz
	Study of Complex Tissue: Xylem and Phloem	4		Google Jamboard, Google slides, Quizizz
	Primary structure of Dicot stem and monocot, Root, Stem and Leaf	3		Google Jamboard, Google slides, Quizizz

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	Dicot and monocot Stomata, epidermal outgrowth, Glandular hair , Stinging hair.	2	**Introductory plant Biology** edition 12 Mcgraw Hills	Google Jamboard, Google slides, Quizizz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: S.Y BSc SEMESTER: IV

MONTH : ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to relate secondary growth in internal stem and root structure with function and appreciate the salient features of the root and stem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit I Anatomy	Introduction and basics of plant anatomy	2	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication	Google Jamboard, Google slides, Quizizz
	Normal secondary growth in Dicotyledonous stem and root.	3		Google Jamboard, Google slides, Quizizz
	Growth ring	1		Google Jamboard, Google slides, Quizizz
	Periderm, lenticel, Tylosis, Heart wood and sap wood	4		Google Jamboard, Google slides, Quizizz

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	I girdle, Sharing stress, Types of vascular bundle	5	2010. **Sterns Introductory plant Biology** edition 12 Mcgraw Hills	Google Jamboard, Google slides, Quizizz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

DEPARTMENT OF BOTANY

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL CLASS: T.Y. BSc SEMESTER: VI
MONTH : ACADEMIC YEAR: 2021ss-22

LEARNING OBJECTIVE/S: The students would be able: To understand the different aspects and importance of Biodiversity and utilize them for conservation of species so as to prevent further loss or extinction of Biodiversity and preserve the existing for future generations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit: 4 Plant Geography	Phytogeographical regions of India.	4	Revised Survey of Forest of India, by Champion and Smith Delhi manager publication.	Google Slides and Google Jamboard
	Definition, diversity of flora found in various forest types of India	4		Google Slides and Google Jamboard
	Levels of biodiversity	3		Google Slides and Google Jamboard
	Importance and status of biodiversity Loss of biodiversity	2		Google Slides and Google Jamboard
	Conservation of biodiversity Genetic diversity- Molecular characteristics	2		Google Slides and Google Jamboard

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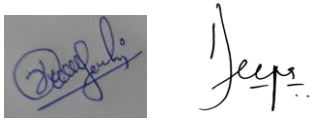

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari**

DEPARTMENT: **Botany**

CLASS: **F.Y. B.Sc. (CBZ & Biochemistry)** SEMESTER: II

MONTH: **February to April** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To understand the importance of light energy and their utilization for preparation of food in green plants that act as primary energy sources for every life form on earth.

The learners will be able to: understand how energy transfer takes place from sun to earth and further converted to chemical energy. It enables to understand the phase transfer of the energy its conversion to various chemical form, and also this shows the biotic abiotic interaction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II PHYSIOLOGY	Photosynthesis:	02	Textbook by sheth publication Plant Physiology by Taiz and Zeiger	Power point presentation Google classroom
	Light reactions, photolysis of water, photophosphorylation (cyclic and non cyclic),	06	Textbook by sheth publication Plant Physiology by Taiz and Zeiger	Power point presentation Google classroom
	Carbon fixation phase (C3, C4 and CAM pathways).	06	Textbook by sheth publication Plant Physiology by Taiz and Zeiger	Power point presentation Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari**

DEPARTMENT: **Botany**

CLASS: **S.Y. B.Sc. (CB, BZ)** SEMESTER: IV

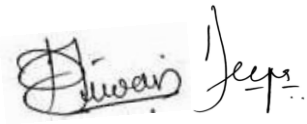
MONTH: **November to March** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To gain the knowledge of physiological mechanism related to the respiration in plants and specific responses given by plants towards the Photosynthetic region of light spectrum.

The learners will be able to: To understand about respiration mechanism and its machinery in an organism. To evaluate the working conditions of phytochromes and their physiological action.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II **Plant Physiology and Plant Biochemistry**	**Respiration: Aerobic:** Glycolysis, TCA Cycle, ETS & Energetic of respiration; Anaerobic respiration.	10	Textbook by sheth publication, Plant Physiology by Taiz and Zeiger	Power point presentation Google classroom
	Photorespiration	01	Textbook by sheth publication, Plant Physiology by Taiz and Zeiger	Power point presentation Google classroom
	Photoperiodism: Phytochrome Response and Vernalization with reference to flowering in higher plants, Physico-chemical properties of phytochrome, Pr-Pfr interconversion, role of phytochrome in flowering of SDPs and LDPs;	06	Textbook by sheth publication, Plant Physiology by Taiz and Zeiger	Power point presentation Google classroom
	Vernalization mechanisms and applications.	02	Textbook by sheth publication, Plant Physiology by Taiz and Zeiger	Power point presentation Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari**

DEPARTMENT: **Botany**

CLASS: **T.Y. B.Sc. (CB, BZ & Botany)** SEMESTER: VI

MONTH: **November to March** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To study about nitrogen metabolism, enzymes involved in nitrogen metabolism and phytohormones.

The learners will be able to: To gain insight into the Nitrogen and plant hormone metabolism with applications of the same in agriculture and horticulture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit II Plant Physiology II	**Nitrogen Metabolism:** Nitrogen cycle, root nodule formation, and leghaemoglobin, nitrogenase activity, assimilation of nitrates, (NR, NiR activity), assimilation of ammonia, (amination and transamination reactions), nitrogen assimilation and carbohydrate utilization. Physiological effects and commercial applications of Auxins, Gibberillins, Cytokinins and Abscisic acid	15	Plant Physiology by Taiz and Zeiger Sinauer Associates Inc. Publishers,2002	Power point presentation Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari**

DEPARTMENT: **Botany**

CLASS: **T.Y. B.Sc. (CB, BZ, Botany & Biochemistry)** SEMESTER: VI

MONTH: **November to March**

ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To study about Post harvest technology & enterpreneurship in horticulture

The learners will be able to: How to meet food requirement of growing population by eliminating avoidable losses making it more nutritive food items from low grade raw commodity by proper processing and fortification.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Horticulture **Paper I** **Unit IV** **Post harvest technology & entrepreneurship in horticulture**	• **Maturity**- Factors responsible for maturity & ripening methods used for delaying ripening. • **Harvest**- Time of harvest, harvesting and handling of harvested products • **Storage of fresh produce**- Types of storage of fruits & vegetables • **Fruit & vegetables preservation technology**. • **Marketing**- grading, packing & transportation. Ways of increasing the market value and shelf life of horticultural produce. • **Horticultural business, management and Entrepreneurship**	15		Power point presentation Google classroom

	development Horticulture as a business definition and nature, organization, planning and operation of Horticulture farm business.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mansi Ramesh More DEPARTMENT: Botany CLASS: T. Y. B. Sc. (Botany)

SEMESTER: VI MONTH: DEC- APR ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: understand the different classes of Pteridophytic plants, characteristics of Pteridophytes and Life cycle of Adiantum, Equisetum, Lycopodium and Marselia.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I,UnitII, Pteridophyte	Characteristics of Pteridophytes	01	Internet, College Botany for Degree and previous notes	Powerpoint presentation, google slides.
	Life cycle of Adiantum	03		
	Life cycle of Equisetum	03		
	Life cycle of Lycopodium	03		
	Life cycle of Marselia	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mansi Ramesh More DEPARTMENT: Botany CLASS: T. Y. B. Sc. (Botany, BZ, Biochemistry)

SEMESTER: VI MONTH: DEC - APR ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: understand the Types of garden, different features in garden and indoor garden types. Also helps to understand the management of Lawn and Soil manipulation according to different types of plants. Important gardens situated in India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper Horticulture, Unit I, Landscape Gardening	Principles of landscaping & garden design	01	Internet, different journals related to horticulture, S.Y.B.Sc. textbook, You tube videos	Google slides, powerpoint presentation, you tube videos
	Indoor plants & Indoor gardens	02		
	Important garden features	01		
	Lawn management & soil manipulation	02		
	Mughal, Buddhist, Botanical garden, Vertical wall garden & Theme park	02		
	Important Gardens of India	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mansi Ramesh More DEPARTMENT: Botany CLASS: T. Y. B. Sc. (Botany)

SEMESTER: VI MONTH: DEC - APR ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to: understand the different theories of fertility and sterility of the sporophyte and different characteristics of Bryophytes & Pteridophytes. Also helps to understand the economic importance of and evolution in different Genus of Pteridophytes and Bryophytes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit III, Bryophytes & Pteridophytes: Applied aspects	Economic importance of Bryophytes	03	Internet, different journals related to organic farming, slideshare.net	powerpoint presentation.
	Economic importance of Pteridophytes	04		
	Types of Sporophytes in Bryophytes	04		
	Types of Sori and Soral arrangement in Pteridophytes	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mansi Ramesh More DEPARTMENT: Botany CLASS: F. Y. B. Sc. (CBZ & Biochemistry)

SEMESTER: II MONTH: DEC - APR ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to: understand the different importance of Pteridophytes. Also helps to understand the economic importance of and stelar evolution in different Genus of Pteridophytes. Also study the different stages of Life cycle of Nephrolepis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit I, Pteridophytes	Economic importance of Pteridophytes	02	F.Y. textbook (SHETH publication), College botany and Pteridophytes for degree students.	powerpoint presentation & chalk and board method.
	Life cycle of Nephrolepis	06		
	Stelar evolution	04		
	Revision	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BOTANY** CLASS: **S.Y.B.Sc.**

SEMESTER: **IV** MONTH: **JANUARY-APRIL** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able to define Biostatistics and its applications.

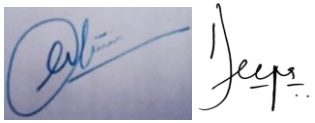
The learners will be able to understand the concept of correlation and its types.

The learner will be able to get an insight on measures of correlation.

The learner will be able to understand the concept of Chi-square test and its applications.

The learners will be able to solve sums based on chi-square test and calculation of coefficient of correlation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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PAPER III (USBO403) Current trends in Botany Unit 3 **Title:** Biostatistics and Bioinformatics	The Chi-square test Correlation- calculation of coefficient of correlation.	7	Biostatistics by Veer Bala Rastogi Methods in Biostatistics by BK Mahajan Introduction to Biostatistics by Dr. Pranab Kumar Banerjee	Google classroom, Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BOTANY** CLASS: **T.Y.B.Sc.**

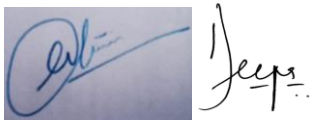
SEMESTER: **VI** MONTH: **DECEMBER-APRIL** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able to define Biostatistics and its applications.

The learners will be able to understand the difference between paired and unpaired t Test.

The learner will be able to get an insight on Regression analysis.

The learner will be able understand the one-way ANOVA and its applications.



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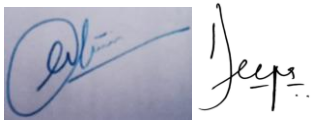
The learners will be able to solve sums based on Regression Analysis, t-Test and One-way ANOVA.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (USBOP603) Form and Function-III Unit 4 **Title:** Biostatistics	t-test (paired and unpaired) Problems based on the regression analysis. ANOVA (One way)	15	Biostatistics by Veer Bala Rastogi Methods in Biostatistics by BK Mahajan Introduction to Biostatistics by Dr. Pranab Kumar Banerjee	Google classroom, Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. Rohan Gavankar** DEPARTMENT: **Botany** CLASS: **T.Y. B.Sc** SEMESTER: VI

MONTH: **FEB-MAR-APR** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE: To acquire the knowledge about Three point cross mapping and mutation
The learners will be able to: 1. Construct genetic map based on three point cross 2. Describe the types of mutation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit III **GENETICS**	Genetic mapping in eukaryotes: discovery of genetic linkage, gene recombination, construction of genetic maps, three- point crosses and mapping chromosomes, problems based on the same	06	igenetics by Peter Russell	1. Google classroom 2. White board 3. Quizziz 4. Google slides

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	Gene mutations: definition, types of mutations, causes of mutations, induced mutations, the Ame's test	06	igenetics by Peter Russell	1. Google classroom 2. White board 3. Quizziz 4. Google slides
	Metabolic disorders– enzymatic and non-enzymatic: Gene control of enzyme structure Garrod's hypothesis of inborn errors of metabolism, Phenyl ketone urea.	03	igenetics by Peter Russell	1. Google classroom 2. White board 3. Quizziz 4. Google slides

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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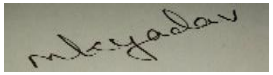
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: FY (CBZ/ BIOCHEMISTRY) SEMESTER: IIMONTH: JANUARY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Learn about different types Leaves and their modifications, types of inflorescence and about family Malvaceae and Amaryllidaceae.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 3 ANGIOSPERMS	1)Leaf: Simple leaf, types of compound leaves, incision of leaf, venation, phyllotaxy, types of stipules, leaf apex, leaf margin, leaf base, leaf shapes. Modification of leaf: spine, tendril, hooks, phyllode, pitcher, *Drosera* or insectivorous plants.	5	A New course in Botany by Sheth Publications.	Chalk and Talk PPT
	2) Inflorescence: Racemose: simple raceme, spike, catkin, spadix, panicle. Cymose: monochasial, dichasial, polychasial. Compound: corymb, umbel, cyathium, capitulum, verticellaster, hypanthodium.	5		
	3) Study of family Malvaceae, Amaryllidaceae.	4		



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

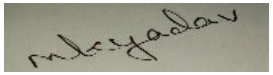
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: SY (CB/ BZ) SEMESTER: IVMONTH: NOVEMBER

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The learners will be able to : Gain knowledge about salient features and classification of divisions Psilophyta and Lepidophyta. Study about the systematic position, structure and life cycle of pteridophyte *Selaginella*. Learn about the geological time scale, formation and types of fossils. Study about fossil pteredophyte *Rhynia*.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2 PTERIDOPHYTA AND PALEOBOTANY PTEREDOPHYTE	1) Salient features and classification upto order (with examples of each) of Psilophyta and Lepidophyta.	4	A New Course in Botany by Sheth Publications.	Chalk and Talk PPT
	2) Structure, life cycle and systematic position of *Selaginella.*	6		
	3) Paleobotany- The geological time scale; Formation and types of fossils; Structure and systematic position of form genus *Rhynia*.	5	Botany for Degree students Pteredophyta by A K Sinha, Anil Kumar and P C	



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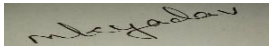
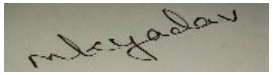
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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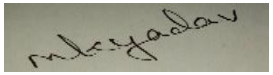
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: TY BOTANY SEMESTER: VIMONTH: NOVEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The learners will be able to: Identify, describe and study in detail the life cycles of three Gymnosperms. And study the economic importance of Gymnosperms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 4 GYMNOSPERMS	1) Life cycle of *Biota* (*Thuja*), Classification	04	College Botany by Gangulee and Kar	Chalk and Talk PPT
	2) Life cycle of *Gnetum*, Classification	04	Botany for Degree students Gymnosperms by P C Vashishta	
	3) Life cycle of *Ephedra*, Classification	04		
	4) Economic importance of Gymnosperms.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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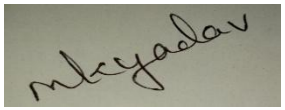

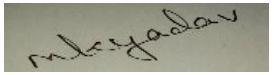

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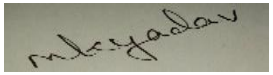
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAV DEPARTMENT: BOTANY CLASS: TY (BOTANY/ BZ/CB) SEMESTER: VIMONTH: NOVEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: Understand development of plant male and female gametophyte, embryonic structure and development

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit 3 EMBRYOLOGY	1) Microsporogenesis.	05	Embryology of Plants by Bhojwani and Bhatnagar	Chalk and Talk
	2) Megasporogenesis- Development of monosporic type, examples of all embryo sacs.	04	An introduction to embryology of Angiosperms by P Maheshwari	
	3)Types of ovules.	01		
	4) Double fertilization.	02		
	5) Development of embryo- *Capsella*	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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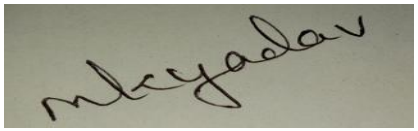

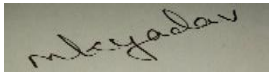

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana DEPARTMENT: Botany

CLASS: S.Y. B.Sc. – BZ & CB SEMESTER: IV MONTH: December-January ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to:

- Define ecology
- Describe biogeochemical cycles like Carbon, Nitrogen and Water.
- Discuss the concepts of environmental factors
- Explain soil as edaphic factor
- Explain the process of soil formation and describe soil profile
- Define community and community ecology
- Describe the quantitative and qualitative characters of community

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – II, Unit – III, **Ecology and Environmental Botany**	**Biogeochemical Cycles- Carbon, Nitrogen and Water.**	**05**	**A new course in Botany, Sheth Publication** **https://www.khanacademy.org/science/high-school-biology/hs-ecology/hs-biogeochemical-cycles/v/carbon-cycle** **https://www.khanacademy.org/science/high-school-biology/hs-ecology/hs-biogeochemical-cycles/v/nitrogen-cycle**	Lectures on Google Meet, PowerPoint, Pdfs, Upload of learning material on Google Classroom
	Ecological factors: Concept of environmental factors. Soil as an edaphic factor, Soil composition, types of soil, soil formation, soil profile.	**06**	**A new course in Botany, Sheth Publication**	Lectures on Google Meet, PowerPoint, Pdfs, Upload of learning material on Google Classroom

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	Community ecology- Characters of community - Quantitative characters and qualitative characters	**04**	**A new course in Botany, Sheth Publication**	Lectures on Google Meet, PowerPoint, Pdfs, Upload of learning material on Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Mr. Vinodkumar Didwana_____ DEPARTMENT: _____Botany_____

CLASS: _T.Y. B.Sc. – Botany____ SEMESTER: ____VI_____ MONTH: ____December-January__ ACADEMIC YEAR: 2021-2022_____

LEARNING OBJECTIVE/S:

The learners will be able to:

·To enlist sources of plants which can be used to extract economically important product like essential oils, fatty oils and vegetable fats
·See the opportunity to set themselves entrepreneurs in this field.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper – IV, Unit – III, Economic Botany	**Essential Oils: Extraction, perfumes, perfume oils, oil of Rose,** **Sandalwood, *Patchouli*, *Champaca*, grass oils: *Citronella*, Vetiver.** **· Fatty oils: Drying oil (Linseed and Soyabean oil), semidrying oils (Cotton seed, Sesame oil) and non-drying oils (Olive oil and Peanut oil),** **· Vegetable Fats: Coconut and Palm oil**	**15**	**Pharmacognosy by C. K. Kokate, Mr. S. B. Gokhale, A. P. Purohit , Nirali Prakashan**	Lectures on Google Meet, PowerPoint, Pdfs, Upload of learning material on Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Mr. Vinodkumar Didwana_____ DEPARTMENT: _____Botany_____

CLASS: _T.Y. B.Sc. – Botany____ SEMESTER: ____VI_____ MONTH: ___January-February___ ACADEMIC YEAR: ___2021-2022_____

LEARNING OBJECTIVE/S:

The learners will be able to:

·Describe different techniques of storage
·Differentiate between natural and artificial method of storage
·Enlist and explain different storage techniques

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – IV, Unit – IV, Post Harvest Technology	**Storage of Plant Produce – Preservation of Fruits and Vegetables** **·Drying (Dehydration) – Natural conditions – Sun drying,**	15	**http://ecoursesonline.iasri.res.in/course/view.php?id=608**	Lectures on Google Meet, PowerPoint, Pdfs, Upload of learning material on Google Classroom

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	·Artificial Drying – Hot Air Drying, Vacuum Drying, ·Osmotically Dried Fruits, Crystallized or Candied Fruits, FruitLeather, Freeze Drying Freezing (Cold Air Blast System, Liquid Immersion method, Plate Freezers, Cryogenic Freezing, Dehydro-Freezing, Freeze Drying), Canning Pickling (in Brine, in Vinegar, Indian Pickles) Sugar Concentrates (Jams, Jellies, Fruit juices) Food Preservatives Use of Antioxidants in Preservation			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV KAMALAKAR SATVI DEPARTMENT: Botany CLASS: F.Y.BSc SEMESTER: II

MONTH: January ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The learners will be able to: understand the classification, structure, function, ecology, life cycle: of Gymnosperms eg; Cycas

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, UNIT II GYMNOSPERMS	Structure life cycle systematic position and alternation of generations in Cycas	10	**N.C Kumar, The text book of** Botany, Himalaya publication House 2008	Chalk and board
	Economic importance of Gymnosperms	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: S.Y BSc SEMESTER: III

MONTH: September to December ACADEMIC YEAR: 2021-2022

- LEARNING OBJECTIVE/S: Understand Thallophyta and Bryophyta

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I : Thallophyta (Algae) & Bryophyta	General Characters of Division Phaeophyta: Distribution, Cell structure, range of thallus, Economic Importance.	05	**Golatkar** V. et .al **The new Course in Botany** S.YB.Sc Sem 3 and 4 Sheath Prakashan	Chalk and board
	Structure, lifecycle and systematic position of Sargassum	03		
	General Account of Class Anthocerotae and Musci	03		
	Structure, life cycle and systematic position of o Anthoceros o Funaria	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: T.Y. BSc SEMESTER: VI

MONTH August - December ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: Have a deep understand in Bryophyta.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I: Bryophytes	Life cycle of Marchantia	5	Botany for degree students B.R. Vashishta A.K. Sinha College Botany Vol. II Gangulee and Kar	Chalk and board
	Life cycle of Pelia	5		
	Life cycle of Sphagnum	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **FYBSc** SEMESTER: II

MONTH: **December to April** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To understand the capturing of light energy and utilizing it for making consumable food for every lif form on earth.

The learners will be able to : How energy transfer takes place from sun to earth and further to chemical energy, which is ultimately responsible. It enables to understand the phase transfer of the energy and how it is converted to various chemical form and ultimately to glucose.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II PHYSIOLOGY	Photosynthesis:	02	1. Textbook by sheth publication 2. Plant Physiology by Taiz and Zeiger 3. IGNTU eContent 4. NPTEL 5. ePGPathshala	1. PowerPoint presentations 2. Jamboard 3. White board 4. Google Class room 5. Google Meet 6. Online quiz 7. Diagram 8. Construction 9. Models.
	Light reactions, photolysis of water, photophosphorylation (cyclic and non cyclic),	06		
	Carbon fixation phase (C3, C4 and CAM pathways).	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **SYBSc** SEMESTER: IV

MONTH: **December to April** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To gain the knowledge of physiological mechanism related to the respiration in plants and specific responses given by plants towards the Photosynthetic region of light spectrum.

The learners will be able to : To understand about the mechanism of the respiration and its machinery in both type of organism. Also to evaluate the working conditions of phytochromes and their physiological action.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II : Plant Physiology and Plant Biochemistry	**Respiration: Aerobic:** Glycolysis, TCA Cycle, ETS & Energetic of respiration; Anaerobic respiration.	10	1. Textbook by sheth publication 2. Economic Botany: Kochar or Verma 3. Biology Discussion website 4. IGNTU eContent 5. NPTEL 6. ePGPathshala	1. PowerPoint presentations 2. Jamboard 3. White board 4. Google Class room 5. Google Meet 6. Online quiz 7. Diagram 8. Construction 9. Models.
	Photorespiration	01		
	Photoperiodism: Phytochrome Response and Vernalization with reference to flowering in higher plants, Physico-chemical properties of phytochrome, Pr-Pfr interconversion, role of phytochrome in flowering of SDPs and LDPs;	05		
	Vernalization mechanisms and applications.	02		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **SYBSc** SEMESTER: IV

MONTH: **December to April** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To make aware about the hyphened techniques of molecular biology that help to improve the information availability.

The learners will be able to : To acquire the use of biostatistician tools for analyze, relate, solve and interpret the data generated through the biological experiments. To understand the importance and uses of bioinformatics and day to day need of it in various genetic experiments and discoveries.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit III : Biostatistics and Bioinformatics	**Biostatistics:** ○ The chi square test. ○ Correlation – Calculation of coefficient of correlation.	08	Textbook by Sheth publication, Biostatistical methods, Introduction to Bioinformatics Biology Discussion website IGNTU eContent NPTEL ePGPathshala	Chalk and Board method, Standard Bio statistical Charts, Calculators and Software PowerPoint presentations Jamboard, White board , Google Class room, Google Meet Online quiz, Diagram, Construction, Models.
	Bioinformatics ○ Information technology: History and tools of IT, Internet and its uses**.**	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **TYBSc** SEMESTER: VI

MONTH: **December to April** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To aware the hyphened techniques usages for molecular technology currently using in the field of Plant Biotechnology.

The learners will be able to : To know the principles of sequencing the DNA material. To know how to artificially enhances the quantity of small scale genetic information to produce a significant amount of DNA artificially. To understand the basics of barcoding technology for taxonomic distribution of plant on the molecular levels.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit I: Plant Biotechnology II	**DNA sequence analysis**– Maxam – Gilbert Method and Sanger's method, Pyro Sequencing.	04	Genetics by Russel Peter Adison Wesley Longman Inc.	1. Chalk and Board method, 2. Computer Systems 3. PowerPoint presentation, 4. Internet Service, 5. Software, 6. Projects, 7. Protocol Charts
	Polymerase Chain Reaction (PCR).	04	Bioinstrumentation by Gupta	
	DNA barcoding: Basic features, nuclear genome sequence, chloroplast genome sequence, *rbc*L gene sequence, *mat* K gene sequence, present status of barcoding in plants.	06	DNA barcoding plants: taxonomy in a new perspective 2010. K Vijayan and C H Tsou, Current Science, 1530 –1541.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **FY B.Sc** SEMESTER: I

MONTH: **November to December** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: To acquire the knowledge about the entire life cycle of an Algae and their ecological & economic importance.

The learners will be able to: Understand the importance of Algae in different fields (ecosystem, pharmaceutical, food, as primary producers etc.), their forms & flourishment and also its importance as a primitive stage in evolution of plants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I **ALGAE**	Structure, life cycle and systematic position of *Nostoc* and *Spirogyra*.	12	Textbook by sheth publication College Botany Volume II (Gangulee & Kar)	1. PowerPoint presentation 2. Google classroom
	Economic importance of Algae.	02	Textbook by sheth publication College Botany Volume II (Gangulee & Kar)	1. PowerPoint presentation 2. Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **SY B.Sc** SEMESTER: III

MONTH: **September to December** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To acknowledge about molecules existing in plants, their role in metabolic reaction.

The learners will be able to: Understand what exactly the biological molecules are, their structures, synthesis process including regulation, and their role in metabolism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit 3 Molecular Biology	**DNA replication** : Modes of Replication, Messelson and Stahl Experiment, **DNA replication in prokaryotes and eukaryotes**- enzymes involved and molecular mechanism of replication.	08	Textbook by sheth publication *i*GENETICS: *A molecular approach* by Peter J. Russell	1. Computer Systems 2. PowerPoint presentation 3. Internet Service 4. Google classroom
	. **Protein Synthesis**: ○ Central dogma of Protein synthesis ○ Transcription in prokaryotes and eukaryotes: promoter sites, initiation, elongation and termination. ○RNA processing: Adenylation & Capping.	07	Textbook by sheth publication *i*GENETICS : *A molecular approach* by Peter J. Russell	1. Computer Systems 2. PowerPoint presentation 3. Internet Service 4. Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **TY B.Sc** SEMESTER: V

MONTH: **August to December** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: Awareness about harmful pathological diseases in economic important plants.

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The learners will be able to : Study about different harmful pathological diseases in plants, causal organisms that cause diseases, symptoms of diseases, affected parts of plants, effect of it on plant process, disease cycle (how disease spread and effect to entire plant and their mechanism & control/ preventive measures of such harmful diseases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit IV** **Plant Pathology**	Study of plant diseases: Causative organism, symptoms, predisposing factors, disease cycle and control measures of the following.,	01	College Botany Volume II (Gangulee & Kar)	1. Computer Systems 2. PowerPoint presentation 3. Internet Service 4. Google classroom
	White Rust – *Albugo sp.* Tikka disease of ground nut: *Cercospora* Damping off disease: *Pythium* Citrus canker – *Xanthomonas* sp. Leaf curl – leaf curl virus	10		
	Study of Physical, chemical and biological control methods of plant diseases.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **TY B.Sc** SEMESTER: V

MONTH: **August to December** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To understand basic importance of conserving the genetic information about an organism and its genetic charecters.

The learners will be able to: It enables to understand about genetic information and how it can be conserved into digital, physicalaand other form. Also helps to evaluate the methods for analysis of the genetic materials and related data types.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit II: Plant Biotechnology I	Construction of genomic DNA libraries, Chromosome libraries and c- DNA libraries.	06	An introduction to Genetic analysis Griffith Freeman and Company(2000)	1. Computer Systems 2. Power point presentation, 3. Internet Service, 4. Google classroom
	Identification of specific cloned sequences in c-DNA libraries and Genomic libraries	04	Plant Biotechnology by K. Ramawat	
	Analysis of genes and gene transcripts –Restriction enzyme, analysis of cloned DNA sequences. Hybridization(Southern Hybridization)	06	Genetics by Russel Peter Adison Wesley Longman Inc.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF STAFF **SIGNATURE OF H.O.D**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **FYBSc** SEMESTER: I

MONTH: **July to November** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To acquire the knowledge about working and functioning of the environment and its component.
The learners will be able to : To understand the basic component of environment, their interconnections and importance to maintain the balance between each other. That means Mediation of energy through the environmental distribution and utilization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II **ECOLOGY**	Energy pyramids, energy flow in an ecosystem.	04	1. Ecology by E P Odum 2. IGNTU eContent 3. NPTEL 4. ePGPathshala	1. PowerPoint presentations 2. Jamboard 3. White board 4. Google Class room 5. Google Meet 6. Online quiz 7. Diagram construction 8. Models.
	Types of ecosystems: aquatic and terrestrial.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **FYBSc** SEMESTER: II

MONTH: **December to April** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To understand the capturing of light energy and utilizing it for making consumable food for every lif form on earth.

The learners will be able to : How energy transfer takes place from sun to earth and further to chemical energy, which is ultimately responsible. It enables to understand the phase transfer of the energy and how it is converted to various chemical form and ultimately to glucose.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II PHYSIOLOGY	Photosynthesis:	02	1. Textbook by sheth publication 2. Plant Physiology by Taiz and Zeiger 3. IGNTU eContent 4. NPTEL 5. ePGPathshala	1. PowerPoint presentations 2. Jamboard 3. White board 4. Google Class room 5. Google Meet 6. Online quiz 7. Diagram 8. Construction 9. Models.
	Light reactions, photolysis of water, photophosphorylation (cyclic and non cyclic),	06		
	Carbon fixation phase (C3, C4 and CAM pathways).	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **SYBSc** SEMESTER: III
MONTH: **July to November** ACADEMIC YEAR: **2020-2021**
LEARNING OBJECTIVE/S: To being able to understand the economic values of some plants with respect to medicinal benefits.

The learners will be able to : To understand the commercial values of plant for earning capital. Better use of some medicinal herbs with its aromatheroptic uses and their health benefits. To understand the plant based new energy sources for traditional hydrocarbon fuels.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PaperIII Unit 3 Industry based on plant products	Aromatherapy- Introduction, Uses with few examples. Jojoba, lemon, jasmin	05	1. Textbook by sheth publication 2. Economic Botany: Kochar or Verma 3. Biology Discussion website 4. IGNTU eContent 5. NPTEL 6. ePGPathshala	1. PowerPoint presentations 2. Jamboard 3. White board 4. Google Class room 5. Google Meet 6. Online quiz 7. Diagram 8. Construction 9. Models.
	Botanical and nutraceuticals -Spirulina, Vanillin, Garcinia indica/ Garcinia cambogia, Chlorella, and Kale.	08		
	Enzymes industry: Cellulases, Papain, Bromelain	04		
	Biofuels.	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **SYBSc** SEMESTER: IV

MONTH: **December to April** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To gain the knowledge of physiological mechanism related to the respiration in plants and specific responses given by plants towards the Photosynthetic region of light spectrum.

The learners will be able to : To understand about the mechanism of the respiration and its machinery in both type of organism. Also to evaluate the working conditions of phytochromes and their physiological action.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II : Plant Physiology and Plant Biochemistry	**Respiration: Aerobic:** Glycolysis, TCA Cycle, ETS & Energetic of respiration; Anaerobic respiration.	10	1. Textbook by sheth publication 2. Economic Botany: Kochar or Verma 3. Biology Discussion website 4. IGNTU eContent 5. NPTEL 6. ePGPathshala	1. PowerPoint presentations 2. Jamboard 3. White board 4. Google Class room 5. Google Meet 6. Online quiz 7. Diagram 8. Construction 9. Models.
	Photorespiration	01		
	Photoperiodism: Phytochrome Response and Vernalization with reference to flowering in higher plants, Physico-chemical properties of phytochrome, Pr-Pfr interconversion, role of phytochrome in flowering of SDPs and LDPs;	05		
	Vernalization mechanisms and applications.	02		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **SYBSc** SEMESTER: IV

MONTH: **December to April** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To make aware about the hyphened techniques of molecular biology that help to improve the information availability.

The learners will be able to : To acquire the use of biostatistician tools for analyze, relate, solve and interpret the data generated through the biological experiments. To understand the importance and uses of bioinformatics and day to day need of it in various genetic experiments and discoveries.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit III : Biostatistics and Bioinformatics	**Biostatistics:** ○ The chi square test. ○ Correlation – Calculation of coefficient of correlation.	08	Textbook by Sheth publication, Biostatistical methods, Introduction to Bioinformatics Biology Discussion website IGNTU eContent NPTEL ePGPathshala	Chalk and Board method, Standard Bio statistical Charts, Calculators and Software PowerPoint presentations Jamboard, White board , Google Class room, Google Meet Online quiz, Diagram, Construction, Models.
	Bioinformatics ○ Information technology: History and tools of IT, Internet and its uses**.**	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **TYBSc** SEMESTER: V

MONTH: **July to November** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To acquire the knowledge about the physiological system of plant working and functioning.
The learners will be able to : To enables the understanding about water and mineral uptake and distribution in to plant system. Also to relate the physical factors of which are responsible for its distribution. To evaluate the Tissue/ cell system functioning and working factors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II Plant Physiology I	**Water relations:** Potential, osmosis, transpiration, imbibition,	04	1. Introduction to Plant Physiology by Noggle and Fritz, Prentice Hall Publishers(2002), 2. Plant Physiology by Salisbury and Ross CBS Publishers, 3. Plant Physiology by Taiz and Zeiger Sinauer Associates Inc. Publishers,2002 7. Biology Discussion website	Chalk and Board Method, Model Construction and Demonstration, Experimental Simulation, Diagram Charts PowerPoint presentations Jamboard, White board , Google Class room, Google Meet, Online quiz, Diagram, Construction, Models.
	Solute transport: Transport of ions across cell membranes, active and passive transport, carriers, channels and pumps.	04		
	Translocation of solutes: Composition of phloem sap, girdling experiment.	04		
	Pressure flow model (Munch's hypothesis): Phloem loading and unloading, anatomy of sieve tube elements and mechanisms of sieve tube translocation.	04		
	Mineral Nutrition: Role of Macro and Micro nutrients, physiological functions and deficiency symptoms.	04		

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			8. IGNTU eContent 9. NPTEL 10. ePGPathshala	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **TYBSc** SEMESTER: V

MONTH: **July to November** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To understand basic importance of conserving the genetic information about an organism and its genetic charecters.

The learners will be able to : It enable to understand about genetic information and its processing thus ultimately how it can conserve into digital as well as other physical form. Also helps to evaluate the methods for analysis of the genetic materials and related data types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit II: Plant Biotechnology I	Construction of genomic DNA libraries, Chromosome libraries and c- DNA libraries.	06	An introduction to Genetic analysis Griffith Freeman and Company(2000)	1. Chalk and Board method, 2. Computer Systems 3. PowerPoint presentation, 4. Internet Service, 5. Software, 6. Projects, 7. Protocol Charts
	Identification of specific cloned sequences in c-DNA libraries and Genomic libraries	04	Plant Biotechnology by K. Ramawat	
	Analysis of genes and gene transcripts –Restriction enzyme, analysis of cloned DNA sequences. Hybridization(Southern Hybridization)	06	Genetics by Russel Peter Adison Wesley Longman Inc.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **TYBSc** SEMESTER: VI

MONTH: **December to April** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To aware the hyphened techniques usages for molecular technology currently using in the field of Plant Biotechnology.

The learners will be able to : To know the principles of sequencing the DNA material. To know how to artificially enhances the quantity of small scale genetic information to produce a significant amount of DNA artificially. To understand the basics of barcoding technology for taxonomic distribution of plant on the molecular levels.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit I: Plant Biotechnology II	**DNA sequence analysis**– Maxam – Gilbert Method and Sanger's method, Pyro Sequencing.	04	Genetics by Russel Peter Adison Wesley Longman Inc.	1. Chalk and Board method, 2. Computer Systems 3. PowerPoint presentation, 4. Internet Service, 5. Software, 6. Projects, 7. Protocol Charts
	Polymerase Chain Reaction (PCR).	04	Bioinstrumentation by Gupta	
	DNA barcoding: Basic features, nuclear genome sequence, chloroplast genome sequence, *rbc*L gene sequence, *mat* K gene sequence, present status of barcoding in plants.	06	DNA barcoding plants: taxonomy in a new perspective 2010. K Vijayan and C H Tsou, Current Science, 1530 –1541.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **TYBSc** SEMESTER: VI

MONTH: **December to April** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To get your hands on about the virtual techniques to analyze the vast amount of data produced through molecular experiments.

The learners will be able to : To explore the newly emerging field or molecular biology. To understand and utilization of Bioinformatics tools and databases to deposit, retrieve, modify, interpret and analyses the virtual data types of genetic information. To construct taxonomic relation between the organism using this data types. To construct the 3D structures of Biomolecules using visualization software.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit IV: Bioinformatics	Organization of biological data, databases	04	1. Bioinformatics by Sunder Rajan 2. Instant Notes on Bioinformatics by Westhead (2002), Taylor Francis Publications. 3. Bioinformatics by Ignasimuthu	1. Chalk and Board method, 2. Computer Systems 3. PowerPoint presentation, 4. Internet Service, 5. Software, 6. Projects, 7. Protocol Charts
	Exploration of data bases, retrieval of desired data, BLAST.	04		
	Protein structure analysis and application	04		
	Multiple sequence analysis and phylogenetic analysis	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Swarupa V. Agnihotri DEPARTMENT: Botany CLASS: FY. CBZ A SEMESTER: IMONTH: October ACADEMIC YEAR: 20-21

LEARNING OBJECTIVE/S:
The learners will be able to: Learners will able to get knowledge about differences between eukaryotic and prokaryotic cell and will obtain in depth information on the structure of a plant cell wall and plasma membrane.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I Cell Biology	General structure of plant cell: Eukaryotic and Prokaryotic cells	3	A New Course in Botany (F.Y.B.Sc) Sem I and II	Power point presentation, Google meet
	Cell wall structure: Primary cell wall, Middle lamella, Secondary cell wall	3		Power point presentation, Google meet
	Plasma membrane (Composition)	1		Power point presentation, Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Swarupa Vishal Agnihotri DEPARTMENT: Botany CLASS: T.Y. B.Sc. (Botany and BZ) SEMESTER: V

MONTH: August 2020 ACADEMIC YEAR: 20-21

LEARNING OBJECTIVE/S:
The learners will be able to: Students will gain in depth information about different methods of protoplast fusion and its application in agriculture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit IV Plant tissue culture	**Protoplast fusion and somatic hybridization**		Plant tissue culture, by, Purohit, S.S	Google meet, Power point presentation
	Concepts, definition, and various methods of protoplast fusion	3		
	Application of somatic hybridization in agriculture	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Swarupa V. Agnihotri **DEPARTMENT**: Botany CLASS: T.Y.B.Sc. Botany SEMESTER: VMONTH: August ACADEMIC YEAR: 20-21

LEARNING OBJECTIVE/S:
The learners will be able to: Learners will able to know about types of microbes and their life cycles. Students will gain the information about colony characters and staining procedure for microbes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit I, Microbiology	Types of microbes: Viruses, Bacteria, Algae, Fungi, Protozoa, Mycoplasma and Actinomycetes	6	Introduction to microbiology by Pelczar,JR., Chan, O.S., Krieg, H.R. Fundamental principles of bacteriology, by, Salle, A.J.	Google meet, Power point presentations
	Sterilization, media, staining, colony characters	6		Google meet, Power point presentations
	Pure culture	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV KAMALAKAR SATVI DEPARTMENT: Botany CLASS: F.Y.BSc SEMESTER: I

MONTH: November to December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: understand the classification, structure, function, ecology, life cycle of the fungi. *Examples Aspergillus* and *Rhizopus* are common fungi and uses of the fungi.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II Fungi	Introduction and classification of Fungi	1	**N.C Kumar, The text book of** Botany, Himalaya publication House 2008 **Singh V et al, text book of Botany,** Global media, 2009	Online lecture, Jam Board and Google slides
	Structure, life cycle and systematic position of *Rhizopus* and *Aspergillus*	2		
	Economic importance of Fungi.	1		
	Modes of nutrition in Fungi (Saprophytism and Parasitism).	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: S.Y BSc SEMESTER: III

MONTH: September to December ACADEMIC YEAR: 2020-2021

- LEARNING OBJECTIVE/S: Ultra Structure and functions of cell organelles: Mitochondrion (membranes, cristae, F1 particles and matrix) , Peroxisomes and Glyoxysomes, Ribosomes (prokaryotic, eukaryotic and subunits)

 Cell Division and its significance Cell Cycle, structure of Interphase Nucleus(nuclear envelop, chromatin network, nucleolus and nucleoplasm) , Mitosis & Meiosis oDifferences between Mitosis and Meiosis

 Nucleic Acids: Types, structure and functions of DNA and RNA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II Cell Biology	Ultra Structure and functions of the cell organelles:	1	**Golatkar** V. et .al **The new Course in Botany** S.YB.Sc Sem 3 and 4 Sheath Prakashan	Online Lecture, Google slides
	Mitochondrion(membranes, cristae, F1 particles and matrix)	2		
	Peroxisomes and Glyoxysomes Ribosomes (prokaryotic, eukaryotic and subunits)	2		

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	Cell Cycle, structure of Interphase Nucleus (nuclear envelop, chromatin network, nucleolus and nucleoplasm) Mitosis & Meiosis Differences between Mitosis and Meiosis	3		and Jam board
	Nucleic Acids: Types, structure and functions of DNA and RNA	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: T.Y. BSc SEMESTER: V

MONTH August - December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: The students would be able: study Fungi, Classification and general characters of Basidiomycetes, life cycle of *Agaricus*, Life cycle of *Puccinia*, Classification and general characters of Deutromycetes and life cycle of *Alternaria*.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III Anatomy	, Classification and general characters of Basidiomycetes	2	Botany for degree students Fungi B.R. Vashishta A.K. Sinha College Botany Vol. II Gangulee and Kar	Online lecture, Jam Board and Google slides
	Life cycle of Puccinia	6		
	Life cycle of Agaricus	3		
	Classification and general characters of Deutromycetes	2		
	life cycle of Alternaria.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana DEPARTMENT: Botany CLASS: T.Y.B.Sc. (BOTANY & BZ)

SEMESTER: **V** MONTH: October – December ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To understand succession in plant communities and study remediation technologies in order to apply knowledge acquired for cleanup of polluted sites.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit – III	Bioremediation: Principles, factors responsible and microbial population in bioremediation. Phytoremediation: Metals, Organic pollutants Plant succession: Hydrosere and Xerosere – Formation of Barren Space, Succession on the Land Citing Different Seres leading up to the Climax, Succession in Water, Ecesis, Poly and Mono-climax theories.	15	https://www.nap.edu/read/2131/chapter/4#18 https://www.biologydiscussion.com/plants/plant-succession/plant-succession-introduction-process-and-types-botany/15330	Lectures on Google Meet, PowerPoint, Pdfs, Upload of learning material on Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana DEPARTMENT: Botany CLASS: S.Y.B.Sc. (CB & BZ)

SEMESTER: **III** MONTH: October – December ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:

- To understand the importance of pharmacopeia
- Identify adulterants and its different types
- Identify and differentiate primary and secondary metabolite

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III **Unit – I**	**Pharmacognosy and phytochemistry** • Introduction to pharmacopoeia • Indian pharmacopoeia, Indian Herbal Pharmacopoeia and Ayurvedic Pharmacopoeia • Study of Monograph from pharmacopoeia • Secondary Metabolites: Sources, properties, uses and adulterants, regional and seasonal variations • Adulterants: *Saraca asoca, Polyalthia longifolia Terminalia arjuna, Terminalia tomentosa Bacopa monnieri, Centella asiatica Abrus, Glycyrrhiza Phyllanthus amarus (Bhuiamla)*	15	A new course in botany – Sheth Publication	Lectures on Google Meet, PowerPoint, Pdfs, Upload of learning material on Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: F. Y. B. Sc. (CBZ-A) SEMESTER: IMONTH: OCTOBER-NOVEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Gain knowledge about Introduction to the anatomy, morphology and habitat of Bryophytes, it will also aid the students in identifying bryophytes, and how to analyze and connect them on an evolutionary basis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III, Bryophyta	Introduction to Bryophytes	02	A New Course in Botany, (F.Y. B.Sc.) Sem I & II	Google slides, Jamboard
	Structure, external and Internal of *Riccia*	02		Google slides, Jamboard
	Antheridia and Archegonia study along with fertilization events	03		Google slides, Jamboard
	Summary of the entire life cycle	01		Google slides, Jamboard
	Systematic position of Riccia	01		Google slides, Jamboard
	General characters of *Hepaticae*	01		Google slides, Jamboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: S. Y. B. Sc. (BZ, CB) SEMESTER: III MONTH: SEPTEMBER-DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: analyze plants technically with the help of systematic study including morphology, Nomenclature, classification, and identification. Furthermore, Studies of Plant Families will help them know the respective family in and out and also give information on economically valuable plants from that family which could be used as a tool for research and other purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit II, Angiosperms (Unit Shared)	Plant Nomenclature	02	Turland, N.J., et al. 2018. International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China,	Google slides, Jamboard, Slido
	Amaranthaceae	01	Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical	Google slides, Jamboard, Slido

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	Palmae	01	Plant families Identification Handbook, Second edition	Google slides, Jamboard, Slido

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: S. Y. B. Sc. (BZ, CB) SEMESTER: III MONTH: SEPTEMBER-DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to: analyze lower groups technically with the help of systematic study including morphology, classification, and identification. Furthermore the students will obtain a sound knowledge on evolutionary trends in Algae.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit I, Algae (Thallophyta) (Unit Shared)	Introduction to Algae	01	A New Course in Botany by V.V. Golatkar, Dr. Behnaz Patel, Dr. Neeraja S. Tutakne & Dr. Rachana R. Birje	Google slides, Jamboard, Slido
	General Characters of Phaeophyta	03		Google slides, Jamboard, Slido
	Sargassum	04		Google slides, Jamboard, Slido

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: T. Y. B. Sc. (BZ, Botany) SEMESTER: V MONTH: AUGUST-DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Gain a deep insight in the classification system of Bentham and Hooker with its pros and cons which will help them to follow it with more clear understanding. The extensive morphological information on flower and fruit (along with the information on leaf and Inflorescence from F.Y) will serve as the baseline for studying plants in detail in the present year and future helping them to identify, classify and diagnose plants more discreetly. Studies of Plant Families will help them know the respective family in and out and also give information on economically valuable plants from that family which could be used as a tool for research and other purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit II,	Morphology of flower	09	WILLIAM T. STEARN (1983). BOTANICAL LATIN, History,	Google slides, Jamboard, Slido

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Angiosperms I			Grammar Syntax, Terminology and Vocabulary Third edition, revised DAVID & CHARLES Newton Abbot London North Pomfret (Vt).	Google slides, Jamboard, Slido
	Complete classification of Bentham and Hooker (only for prescribed families), Merits and demerits	03	Bentham, G. 1883.Genera Plantarum by Bentham, G. and Hooker, J.D. Reeve, London.	Google slides, Jamboard, Slido
	Capparidaceae	04	Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical Plant families Identification Handbook, Second edition	Google slides, Jamboard, Slido
	Umbelliferae	02		Google slides, Jamboard, Slido
	Cucurbitaceae	02		Google slides, Jamboard, Slido
	Rubiaceae	02		Google slides, Jamboard, Slido
	Solanaceae	02		Google slides, Jamboard, Slido
	Commelinaceae	02		Google slides, Jamboard, Slido
	Gramineae	02		Google slides, Jamboard, Slido

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: T. Y. B. Sc. (BZ, Botany) SEMESTER: V MONTH: AUGUST-DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Will gain insight into the details of pharmacognosy and the pharmaceutical monographs. They will be made aware about the importance of plants for human health and how it is used in their entire methodology and its details. The topic will generate research aura in students to study plants for their uses in order to cure more and more diseases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV, Unit IV, Pharmacognosy and Medicinal Botany (Unit Shared)	Monographs of drugs with reference to biological sources, geographical distribution, common varieties, macro and microscopic characters, chemical constituents, therapeutic uses, adulterants	01	Pharmacognosy by Kokate, Purohit and Gokhale, Nirali Publications	Google slides, Jamboard, Slido
	Strychnos seeds	01		Google slides, Jamboard, Slido
	Senna leaves	01		Google slides, Jamboard, Slido

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	Clove buds	01		Google slides, Jamboard, Slido
	Curcuma	01		Google slides, Jamboard, Slido
	Vekhand	01		Google slides, Jamboard, Slido
	Garlic	01		Google slides, Jamboard, Slido

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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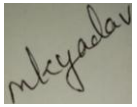
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: FY (CBZ / BIOCHEMISTRY) SEMESTER: IMONTH: NOVEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Gain knowledge about the general characters of class Hepaticaceae. And learn about the structure, life cycle and systematic position of *Riccia*.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1, Unit 3 BRYOPHYTA	1) General characters of Hepaticae	03	A New Course in Botany, by Sheth Publications.	Online Lectures PPT Video clips
	2) Structure, life cycle and systematic position of *Riccia*.	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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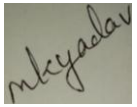

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TEACHING PLAN (UNIT PLAN)

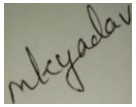
NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: SY (CB/BZ) SEMESTER: IIIMONTH: AUGUST

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the salient features of two major groups of bryophytes, their life cycle patterns with suitable example; to be able to identify them

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 1 THALLOPHYTA (ALGAE) AND BRYOPHYTA	1) General account of class Anthocerotae and Musci	3	A New course in Botany by Sheth Publications	Online Lectures PPT Video Clips
	2) Structure, life cycle and systematic position of *Anthoceros* and *Funaria*	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8



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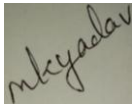

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TEACHING PLAN (UNIT PLAN)

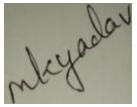
NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: SY (CB/BZ) SEMESTER: IIIMONTH: AUGUST

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Gain knowledge about Taxonomy in relation to Embryology, Cytology and Ecology. They will be able to learn about vegetative, floral characters and economic importance of the families Leguminosae and Asteraceae.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2 ANGIOSPERMS	1) Taxonomy in relation to: Embryology, Cytology, Ecology	3	A New course in Botany by Sheth Publications	Online Lectures PPT
	2) With the help of Bentham and Hooker's system of classification for flowering plants, study of families Leguminosae and Asteraceae	5	Plant Taxonomy by O P Sharma	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8



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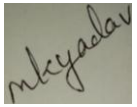
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: TY (BOTANY) SEMESTER: VMONTH: AUGUST ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the salient features of three major groups of algae, their life cycle patterns with suitable example; to be able to identify them

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2 ALGAE	1) Classification and General Characters: Distribution, Cell structure, pigments, reserve food, range of thallus, reproduction: asexual and sexual, Alternation of Generations, Economic importance of Divisions Rhodophyta, Xanthophyta and Bacillariophyta.	05	College Botany Vol II by Gangulee Das and Dutta	Online Lectures PPT
	2) Structure, life cycle and systematic position of *Polysiphonia, Batrachospermum, Vaucheria* and *Pinnularia.*	10	Crytogamic Botany Vol I by G M Smith	
			Botany for Degree Students- Algae by B R Vashistha.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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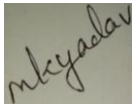

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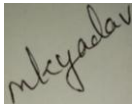
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: TY (BOTANY/ BZ) SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Get exposure to pollen study and learn to apply it in various fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit 4 PALYNOLOGY	1) Application of Palynology in honey industry, coal and oil exploration, Aerobiology and pollen allergies, forensic science.	08	Embryology of Plants by Bhojwani and Bhatnagar	Online Lectures PPT
			An introduction to embryology of Angiosperms by P Maheshwari	
	.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: F.Y.BSc SEMESTER: I

MONTH: November to December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: understand the classification, structure, function, ecology, life cycle of the fungi. *Examples Aspergillus* and *Rhizopus* are common fungi and understand commercial the industrial uses of the fungi.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II Fungi	Introduction and classification of Fungi	1	**N.C Kumar,The text book of** Botany, Himalaya publication House 2008 **Singh V et al, text book of Botany,** Global media, 2009 **Campbells, Reece** et al Biology Eight edition Bejamin Cummings	Jam Board and Google slides
	Structure, life cycle and systematic position of *Rhizopus* and *Aspergillus*	2		Jam Board and Google slides
	Economic importance of Fungi.	1		Jam Board and Google slides
	Modes of nutrition in Fungi (Saprophytism and Parasitism).	1		Jam Board and Google slides

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: S.Y BSc SEMESTER: III

MONTH: September to December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: The learners will be able to provide knowledge about environmental factors, Biodiversity, Crops, Spices and natural resources of India and their importance in sustainable development

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit II Forestry and Economic Botany	Forestry: outline types of forest in India	1	**Golatkar** V. et .al **The new Course in Botany** S.YB.Sc Sem 3 and 4 Sheath Prakashan	Google slides and Jam board
	Forestry: Agroforestry, Urban Forestry, Organic farming, Silviculture	2		Google slides and Jam board
	Economic Botany: Types of fibres, Jute and Cotton Current trend in fibres industries	2		Google slides and Jam board
	Spices and Condiments: Saffron and Cardamom	1		Google slides and Jam board
	Commercial market of spices	1		Google slides and Jam board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: T.Y. BSc SEMESTER: V

MONTH August - December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: The students would be able: To relate anomalies in internal stem structure with function and appreciate the salient features of the root stem transition zone. To get exposure to plant anatomy and learn to apply it in various fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit III Anatomy	Introduction to Anomalous secondary growth	2	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns Introductory plant Biology** edition 12 Mcgraw Hills	Jam Board and Google slides
	Anomalous secondary growth in the Stems of *Bignonia,Salvadora, Achyranthes, Dracaena.*	6		Jam Board and Google slides
	Storage roots of Beet, Radish	3		Jam Board and Google slides
	Root stem transition	2		Jam Board and Google slides
	Types of Stomata– Anomocytic, Anisocytic, Diacytic, Paracytic, and Graminaceous	2		Jam Board and Google slides

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: Applied component (Horticulture) CLASS: T.Y BSc

SEMESTER: V MONTH: August to December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/*:* To explore the natural and artificial propagation and their use in commercial production.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 PROPAGATION PRACTICES	**By Seeds** Advantages and disadvantages, method of seed propagation Production of seeds, Handling, Collection and Storage Sowing and transplantation.	2	**P.Parvatha Reddy Sustainable Crop protection under protected cultivation** Springer E book, **W J Lewis Grafting and Budding a** practical guide for fruit crops and ornamental plant second edition.	Jam Board and Google Slides
	By specialized Vegetative structures Bulbs, Tubers, Corms, Rhizomes, Root stock, runners, Offsets and suckers.	2		Jam Board and Google Slides
	Artificial methods of plant propagation Cutting– Root **cutting**, Stem cuttings, and leaf cuttings. rooting. **Layering** – Definition, Types: Simple, compound, (Serpentine) Tip, Trench, Mound, Air Layering. **Grafting-**Definition, advantages and disadvantages. Types: **Budding** – Definition, advantages and disadvantages. Types: T- budding, shield, Patch, ring budding.	3		Jam Board and Google Slides
	Developing new varieties: Technique of Emasculation	1		Jam Board and Google Slides

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: Applied component (Horticulture) CLASS: T.Y BSc

SEMESTER: V MONTH: September-December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/STThe students would be able: To get exposure to Organic farming and learn to apply it in the field.
To gain the proficiency in use of garden tools in Garden operations like Mulching, Top Dressing, Pruning and Harvesting.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit IV, Garden operations for Horticulture	Site selection and preparation of soil for garden, Mulching, Top Dressing, Blanching.	2	**P.Parvatha Reddy Sustainable Crop protection under protected cultivation** Springer E book,	Google slides and Jam board
	Sowing transplanting, Tree Transplanting	2		Google slides and Jam board
	Irrigation: Over Head, Surface Irrigation, Underground, Weeding, Pruning, Principle, Objective and General Technique Water Management and Conservation through horticulture, Dry land Horticulture Organic farming: Definition, Indian Scenario and Future Scope	3		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Botany CLASS: T.Y.B.Sc. (BOTANY)

SEMESTER: **V** MONTH: October – December ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To learn principles and application of commonly used techniques in instrumentation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit – III	**Instrumentation** Colorimetry and Spectrophotometry (Visible, UV and IR) - Introduction–	01	Principles of Instrumental Analysis - by Douglas A. Skoog An Introduction to Practical Biochemistry- by David Plummer	Lectures on Google Meet, PowerPoint, Pdfs, Youtube videos, Animation Upload of learning material on Google Classroom
	Instrumentation, working, principle and applications. of Colorimeter	02		
	Instrumentation, working, principle and applications. of Spectrophotometer	02		
	Chromatography: General account of Column chromatography.,	03		
	Principle and bedding material involved in adsorption and partition chromatography	03		
	ion exchange chromatography, molecular sieve chromatography.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Botany CLASS: S.Y.B.Sc. (CB & BZ)

SEMESTER: **III** MONTH: October – December ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:

- To understand and differentiate about different preservation method
- To understand about techniques of microscopy
- To differentiate about different chromatographic techniques
- To understand about electrophoresis technique as a separation technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit – III**	**Modern Techniques to Study Plant Diversity** Preservation methods :Dry and Wet method	03	A new course in botany – Sheth Publication Principles of Instrumental Analysis - by Douglas A.	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Microscopy – Principle and working of Light, and electron microscope.	04		
	Chromatography- Principles and techniques in paper and thin layer chromatography.	04		

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	Principles and techniques of Horizontal and Vertical electrophoresis.	04	Skoog	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. Rohan Gavankar** DEPARTMENT: **Botany** CLASS: **T.Y. B.Sc** SEMESTER: V

MONTH: **AUG-SEPT-OCT-NOV** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: To acquire the knowledge about cell biology and molecular biology
The learners will be able to: 1. Describe the structure and function of nucleus 2. Describe the structure and function of vacuole
3. explain the process of translation in prokaryotes and eukaryotes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit I Cytology and Molecular Biology	Structure and function of nucleus Structure and function of vacuole Structure and function of giant chromosomes	03	igenetics by Peter Russell Cell biology- Alberts	1. Google classroom 2. White board 3. Quizziz 4. Google slides
	The genetic code: Characteristics of the genetic code	03	igenetics by Peter Russell	5. Google classroom 6. White board 7. Quizziz 8. Google slides

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. Rohan Gavankar** DEPARTMENT: **Botany** CLASS: **S.Y. B.Sc** SEMESTER: III

MONTH: **AUG-SEPT-OCT-NOV** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: To acquire the knowledge on cytogenetics
The learners will be able to: 1. Describe the chromosomal aberrations
2. explain various methods of sex determination

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit I	Variation in Chromosome structure (Chromosomal Aberrations) Definition, Origin, Cytological and Genetic Effects of the following: Deletions, Duplications, Inversions and Translocations.	05	igenetics by Peter Russell Cell biology- Alberts	1. Google classroom 2. White board 3. Quizziz 4. Google slides
Cytogenetics	Sex determination, Sex linked, sex influenced and sex limited traits : Sex determination- Chromosomal Methods: heterogametic males and heterogametic	06	igenetics by Peter Russell Genetics - winchester	

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	females. Sex determination in monoecious and dioecious plants. Genic Balance Theory of sex determination in Drosophila, Lyon's Hypothesis of X chromosome inactivation. Sex linked- eye colour in Drosophila, Haemophilia, colour blindness Sex influenced- baldness in man			
	Extranuclear Genetics Organelle heredity Chloroplast determines heredity - Plastid transmission in plants, Streptomycin resistance in Chlamydomonas. o Male sterility in maize	04	igenetics by Peter Russell Genetics - Sarin	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. Rohan Gavankar** DEPARTMENT: **Botany** CLASS: **F.Y. B.Sc** SEMESTER: I

MONTH: **-SEPT-OCT-NOV** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: To acquire the knowledge about concepts in genetics
The learners will be able to: 1. Describe the principles of inheritance based on Mendel experiments
2. Describe types of gene interactions with suitable examples.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit III **Genetics**	Phenotype/Genotype, Mendelian Genetics-monohybrid, dihybrid; test cross; back cross ratios.	05	igenetics by Peter Russell	1. Google classroom 2. White board 3. Quizziz 4. Google slides
	2 Epistatic and non epistatic interactions; multiple alleles.	10	igenetics by Peter Russell	

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_DEPARTMENT: _Botany_ CLASS: _F.Y.B.Sc (CBZ & Biochemistry) SEMESTER: _IMONTH: _June to October_ ACADEMIC YEAR: 2020-21___

LEARNING OBJECTIVE/S:
The learners will be able to_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper–II, Unit-I Cell Biology	1.General structure of plant cell: Cell wall, Plasma membrane (Bilayer lipid structure, fluid mosaic model)	15	F.Y.B.Sc. Textbook	PowerPoint Presentations and Chalk-Board method
	2.Ultra structure and functions of the following cell organelles: Endoplasmic reticulum and Chloroplast			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____ CLASS: _F.Y.B.Sc (CBZ & Biochemistry) SEMESTER: _II___ MONTH: November to March_ ACADEMIC YEAR: 2020-21___

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper–I, Unit–II Pteridophyta	1.Structure, life cycle, systematic position and alternation of generations in *Nephrolepis*	15	F.Y.B.Sc. Textbook	PowerPoint Presentations and Chalk-Board method
	2.Stelar evolution.			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____ CLASS: _S.Y.B.Sc (CB & BZ) SEMESTER: _III__ MONTH: _June to October_ ACADEMIC YEAR: 2020-21___

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED		REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I, Unit-I Thallophyta (Algae) and Bryophyta	1.General Account of Class Anthocerotae and Musci	02		S.Y.B.Sc. Textbook	PowerPoint Presentations and Chalk-Board method
	2.Structure, life cycle and systematic position of a. *Anthoceros* b. *Funaria*	05			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __8____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany____ CLASS: _S.Y.B.Sc (CB & BZ)

SEMESTER: _IV___MONTH: November to March_ ACADEMIC YEAR: 2020-21___

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I, UnitIII Gymnosperms	1.Salient features, classification up to orders (with examples of each) and economic importance of Coniferophyta (Chamberlain's system of classification).	15	S.Y.B.Sc. Textbook	PowerPoint Presentations and Chalk-Board method
	2.Structure, life cycle and systematic position of *Pinus*			
	3.Structure and systematic position of the form genus *Cordaites.*			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15____

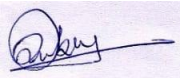
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____CLASS: _T.Y.B.Sc (Botany & BZ)

SEMESTER: _V__ MONTH: _June to October_ ACADEMIC YEAR: 2020-21___

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II, Unit-I Paleobotany	1.*Calamites* – All form genera Stem, leaf, male and female fructification.	15	Cryptogamic Botany Vol. - I & II (G.M. Smith, Mcg raw Hill)	PowerPoint Presentations and Chalk-Board method



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	2.*Lepidodendron* – All form genera Stem, leaf, male and female fructification.		College botany Vol. – II (Gangulee, Das and Dutta)	
	3.*Lyginopteris*– All form genera Stem, leaf, male and female fructification.			
	4.*Pentoxylon* - – All form genera			
	5.Contribution of Birbal Sahni, Birbal Sahni Institute of Pleobotany, Lucknow.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____

CLASS: _T.Y.B.Sc (Botany & BZ) SEMESTER: _V__ MONTH: _June to October_ ACADEMIC YEAR: 2020-21___

LEARNING OBJECTIVE/S:
The learners will be able to :_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV, Unit-I Ethnobotany and Mushroom Industry	Mushroom Industry: 1.Detail general account of production of mushrooms with respect to methods of Composting, spawning, casing, harvesting of mushroom. Cultivation of *Pleurotus, Agaricus, Volvariella* Mushroom to be studied in detail.	7		PowerPoint Presentations
	2.General account of mushrooms: Nutritional value, picking and packaging, economic importance.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____7_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____CLASS: T.Y.B.Sc (Botany & BZ)

SEMESTER: _VI__ MONTH: _ November to March_ ACADEMIC YEAR: 2020-21___

LEARNING OBJECTIVE/S:
The learners will be able to : _____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I, UnitIII Bryophytes and Pteridophytes: Applied Aspects	1.Ecology of Bryophytes	15	Economic Botany (A.F. Hill)	PowerPoint Presentations and ChalkBoard method
	2.Economic importance of Bryophytes		Textbook of Pteridophyta (Vashishtha)	
	3.Bryophytes as indicators			
	4.Evolution of Sporophyte and Gametophyte			

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	5.Economic importance of Pteridophytes			
	6.Diversity and distribution of Indian Pteridophytes			
	7.Types of sori and evolution of sori			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____ CLASS: _T.Y.B.Sc (Botany & BZ)

SEMESTER: _VI__ MONTH: _November to March_ ACADEMIC YEAR: 2018-19___

LEARNING OBJECTIVE/S:
The learners will be able to : _____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III, Unit-I Plant	Enzymes: Nomenclature, classification, mode of action, Enzyme kinetics, Michaelis Menten Equation, competitive, non-competitive and uncompetitive inhibitors.	8	Practical Biochemistry (David Plummer)	PowerPoint Presentations and Chalk-Board method

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Biochemistry			Principles of Biochemistry (David Nelson and Michael Cox)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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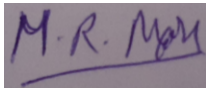
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mansi Ramesh More DEPARTMENT:Botany CLASS:_T.Y.B.Sc.(BZ, Botany, Biochemistry)

SEMESTER: VI MONTH: DEC- APR ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : To study the principles of landscaping, gardening and different types of gardens, garden features with plant examples, indoor gardens and plants, and important gardens of India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HORTICULTURE	UNIT 1= LANDSCAPE GARDENING	15	PREVIOUS NOTES, slideshares, google, youtube videos	POWERPOINT PRESENTATION
	Principles of landscaping & garden design, indoor plants and indoor gardens, important garden features			
	Lawn- purpose, method, management of lawn & lawn plants			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	Soil manipulation for plantation of desirable varieties, important gardens of India			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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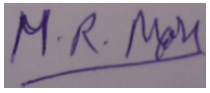
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mansi Ramesh More DEPARTMENT:Botany CLASS:F.Y.B.Sc.(Botany) SEMESTER-II MONTH: JAN- APR ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S:
The learners will be able to understand the general characteristics of Pteridophytic plants, systematic position and morphology of Nephrolepis plant, anatomy and reproduction, life cycle of Nephrolepis plant, Different types of steles present in plants

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 1 Pteridophytes	UNIT 1= Pteridophytes	15	Textbook Botany (Sheth publication)	POWERPOINT PRESENTATION
	1. Structure, life cycle, systematic position and alternation of generations in Nephrolepis			
	2. Stelar evolution			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___



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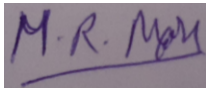
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mansi Ramesh More DEPARTMENT: Botany CLASS: T..Y.B.Sc.(Botany, BZ,Biochemistry) SEMESTER: VI MONTH: DEC- MAR ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S:

The learners will be able to : how commercial crops propagated, post plantation care must be taken, harvesting of plants, post harvest management and different varieties of plants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Horticulture unit3	UNIT 3= Commercial production	15	Previous notes	POWERPOINT PRESENTATION
	Tubers (potato), vegetables (tomato)		Internet services	
	Fruits (coconut), spices (chilly)		slideshare	



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	Medicinal plants (aloe vera, stevia)			
	Aromatic plants (citronella, patchouli)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BOTANY** CLASS: **S.Y.B.Sc.**

SEMESTER: **IV** MONTH: **JANUARY-APRIL** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able to define Biostatistics and its applications.

The learners will be able to understand the concept of correlation and its types.

The learner will be able to get an insight on measures of correlation.

The learner will be able understand the concept of Chi-square test and its applications.

The learners will be able to solve sums based on chi-square test and calculation of coefficient of correlation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

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PAPER III (USBO403) Current trends in Botany Unit 3 **Title:** Biostatistics and Bioinformatics	The Chi-square test Correlation- calculation of coefficient of correlation.	7	Biostatistics by Veer Bala Rastogi Methods in Biostatistics by BK Mahajan Introduction to Biostatistics by Dr. Pranab Kumar Banerjee	Google classroom, Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BOTANY** CLASS: **T.Y.B.Sc.**

SEMESTER: **VI** MONTH: **JANUARY-APRIL** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able to define Biostatistics and its applications.

The learners will be able to understand the difference between paired and unpaired t Test.

The learner will be able to get an insight on Regression analysis.

The learner will be able understand the one-way ANOVA and its applications.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (USBOP603) Form and Function-III Unit 4 **Title:** Biostatistics	t-test (paired and unpaired) Problems based on the regression analysis. ANOVA (One way)	15	Biostatistics by Veer Bala Rastogi Methods in Biostatistics by BK Mahajan Introduction to Biostatistics by Dr. Pranab Kumar Banerjee	Google classroom, Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

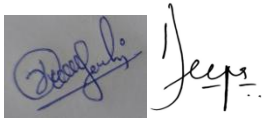
DEPARTMENT OF BOTANY

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL CLASS: FY.BSc: Div:B SEMESTER: II

MONTH: 4 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: understand the classification, structure, function, ecology, life cycle of the Gymnosperms. *Examples Cycas* common garden plant and understand commercial the industrial uses of the Gymnosperms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II Fungi	Structure life cycle systematic position	5	Gymnosperms by Chhaya Biswas, BM Johari, Springer-Verlag Berlin Heidelberg ISBN 978-3-662-13166-4-	Google Slides, Jamboard,
	alternation of generations in Cycas	2		Google Slides, Jamboard,
	Economic importance of Gymnosperms	2		Google Slides, Jamboard,



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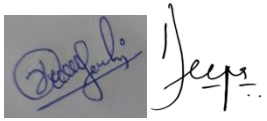
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9



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TEACHING PLAN (UNIT PLAN)

DEPARTMENT OF BOTANY

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL CLASS: F.Y BSc (Div: A) SEMESTER: II

MONTH 4 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to learners will be able to relate primary growth in internal stem and root structure with function and appreciate the salient features of the root and stem

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit II Anatomy	Introduction of Anatomy and its importance in biology	1	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns Introductory plant Biology** edition 12 Mcgraw	Google Slides, Jamboard
	Simple Tissue: Parenchymatous Tissue, Collenchymatous Tissue and Sclerenchymatous tissue	3		Google Slides, Jamboard
	Complex Tissue: Xylem, Phloem	3		Google Slides, Jamboard
	Epidermal Outgrowth, Stomata, Hairs and Specialized cells	3		Google Slides, Jamboard
	T.S of Stem, Root and Leaf of Both Dicot and Monocot	3		Google Slides, Google Jamboard

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			Hills	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

TEACHING PLAN (UNIT PLAN)

DEPARTMENT: BOTANY

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL CLASS: S.Y BSc: BZ SEMESTER: IV

MONTH 4 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to provide knowledge about Fungi and Lichens and their importance in sustainable development and preventive measures of pathogens.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: I Unit I : Thallophyta: Fungi, Plant Pathology and Lichens Fungi	General characters of Ascomycetae	3	**Golatkar** V. et .al **The new Course in Botany** S.YB.Sc Sem 3 and 4 Sheath Prakashan	Google Slides, Google Jamboard
	Structure, life cycle and systematic position of Erysiphe and Xylaria	4		Google Slides, Google Jamboard
	Plant Pathology- Symptoms, causative organism, disease cycle and control measures of o Powdery mildew and Late blight of potato	3		Google Slides, Google Jamboard

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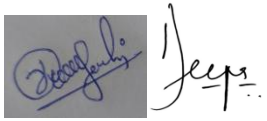
	Lichens- Classification, Structure, Method of Reproduction, Economic Importance and Ecological Significance of Lichens.	4		Google Slides, Google Jamboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

DEPARTMENT Of BOTANY

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL CLASS: S.Y BSc (CB) SEMESTER: IV

MONTH 4 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to relate secondary growth in internal stem and root structure with function and appreciate the salient features of the root and stem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit I Anatomy	Introduction and basics of plant anatomy	2	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns Introductory plant Biology** edition: 12 Mcgraw	Google Slides and Google Jamboard
	Normal secondary growth in Dicotyledonous stem and root.	2		Google Slides and Google Jamboard
	Growth ring, Periderm, lenticel, Tylosis, Heart wood and sap wood	4		Google Slides and Google Jamboard
	T girdles, Monocot Root, Salvia stem, Typha leaf, T.S of Monocot Stem.	4		Google Slides and Google Jamboard.
	Types of Vascular Bundles	1		Google Slides and Google Jamboard.

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

			Hills	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

TEACHING PLAN (UNIT PLAN)

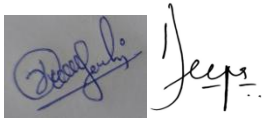
DEPARTMENT OF BOTANY

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL CLASS: T.Y. BSc SEMESTER: VI

MONTH 4 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The students would be able: To understand the different aspects and importance of Biodiversity and utilize them for conservation of species so as to prevent further loss or extinction of Biodiversity and preserve the existing for future generations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Phytogeographical regions of India.	4	Revised Survey of Forest of India, by Champion and Smith Delhi	Google Slides and Google Jamboard
	Definition, diversity of flora found in various forest types of India	4		Google Slides and Google Jamboard



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	Levels of biodiversity	3	manager publication.	Google Slides and Google Jamboard
	Importance and status of biodiversity Loss of biodiversity	2		Google Slides and Google Jamboard
	Conservation of biodiversity Genetic diversity- Molecular characteristics	2		Google Slides and Google Jamboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

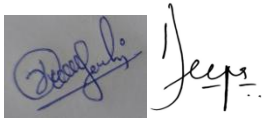
TEACHING PLAN (UNIT PLAN)
DEPARTMENT OF BOTANY

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL CLASS: T.Y BSc (Applied component; Horticulture) SEMESTER: VI

MONTH 4 ACADEMIC YEAR: 2020-21

- LEARNING OBJECTIVE/SThe students would be able: To gain insight into the green House technology: Layout, types, Irrigation and construction with applications in agriculture and horticulture and to learn about the commercial production fruits and vegetables in relation to propagation, post plantation care, harvesting and post-harvest management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit 2 PROPAGATION	High –tech Horticultural production- Green house technology- Meaning, types, layout & construction, irrigation systems. Care	6	**P.Parvatha Reddy Sustainable Crop**	Google Slides and Google Jamboard



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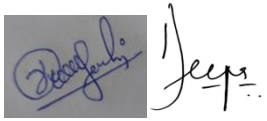
PRACTICES	& attention. Hardening of plants. Space gardens.		**protection under protected cultivation** Springer E book, **E Course Krishi shiksha, green** house management Agriculture Engineering.	
	Floriculture – Scope & importance, soil and climatic requirement and cultivation practices and Economics of greenhouse production of Gerbera, Carnation, Roses, Orchids. Propagation techniques, packing and marketing, enhancing and delaying period of bloom by special methods. Floral decoration, Florist shop management.	9		Google Slides and Google Jamboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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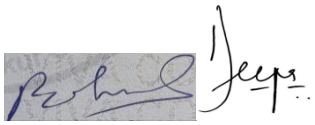
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. Rohan Gavankar** DEPARTMENT: **Botany** CLASS: **T.Y. B.Sc** SEMESTER: VI

MONTH: **FEB-MAR-APR** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: To acquire the knowledge about Three point cross mapping and mutation
The learners will be able to: 1. Construct genetic map based on three point cross
2. Describe the types of mutation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit III **GENETICS**	Genetic mapping in eukaryotes: discovery of genetic linkage, gene recombination, construction of genetic maps, three- point crosses and mapping chromosomes, problems based on the same	06	igenetics by Peter Russell	1. Google classroom 2. White board 3. Quizziz 4. Google slides
	Gene mutations: definition, types of mutations, causes of mutations, induced mutations, the Ame's	06		1. Google classroom



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	test		igenetics by Peter Russell	2. White board 3. Quizziz 4. Google slides
	Metabolic disorders– enzymatic and non-enzymatic: Gene control of enzyme structure Garrod's hypothesis of inborn errors of metabolism, Phenyl ketone urea.	03	igenetics by Peter Russell	1. Google classroom 2. White board 3. Quizziz 4. Google slides

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa VermaDEPARTMENT: BotanyCLASS: F.Y.B.Sc.
SEMESTER: **II** ACADEMIC YEAR: **2020-2021**
LEARNING OBJECTIVE/S: To study important medicinal plants

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II **Unit – III**	MEDICINAL BOTANY 1 Concept of primary and secondary metabolites, difference between primary and secondary metabolites.	05	A new course in botany – Sheth Publication Principles of Instrumental Analysis - by Douglas A. Skoog	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	2 Grandma's pouch: Following plants have to be studies with respect to botanical source, part of the plant used, active constituents present and medicinal uses: Oscimum sanctum, Adathoda vasica, Zinziber officinale, Curcuma longa, Santalum album, Aloe vera.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Botany CLASS: S.Y. B.Sc. SEMESTER: IV
MONTH: August ACADEMIC YEAR: **2020-2021**
LEARNING OBJECTIVE/S:
The learners will be able to: Students will gain in depth information about different methods of protoplast fusion and its application in agriculture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit II : Biotechnology	Introduction to plant tissue culture o Laboratory organization and techniques in plant tissue culture o Totipotency o Organogenesis	07	Biotechnology: Susan R. Barnum	Chalk and duster
	o Organ culture – root cultures, meristem cultures, anther and pollen culture, embryo culture. □	03		
	R-DNA technology o Gene cloning o Enzymes involved in Gene cloning o Vectors used for Gene cloning.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: BotanyCLASS: T.Y.B.Sc.
SEMESTER: **V** ACADEMIC YEAR: **2020-2021**
LEARNING OBJECTIVE/S: To learn principles and application of commonly used techniques in instrumentation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit – III	Ecological anatomy Hydrophytes – submerged, floating, rooted	05	Textbook of Botany" by Singh, Pandey, and Jain	Chalk and Duster Upload of learning material on Google Classroom
	Hygrophytes - Typha Mesophytes	04		
	Sciophytes Halophytes	03		
	Epiphytes Xerophytes	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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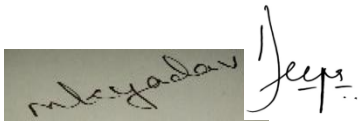
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: FY (CBZ/ BIOCHEMISTRY) SEMESTER: IIMONTH: NOVEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Learn about different types Leaves and their modifications, types of inflorescence and about family Malvaceae and Amaryllidaceae.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 3 ANGIOSPERMS	1)Leaf: Simple leaf, types of compound leaves, incision of leaf, venation, phyllotaxy, types of stipules, leaf apex, leaf margin, leaf base, leaf shapes. Modification of leaf: spine, tendril, hooks, phyllode, pitcher, *Drosera* or insectivorous plants.	5	A New course in Botany by Sheth Publications.	Chalk and Talk PPT
	2) Inflorescence: Racemose: simple raceme, spike, catkin, spadix, panicle. Cymose: monochasial, dichasial, polychasial. Compound: corymb, umbel, cyathium, capitulum, verticellaster, hypanthodium.	5		
	3) Study of family Malvaceae, Amaryllidaceae.	4		



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

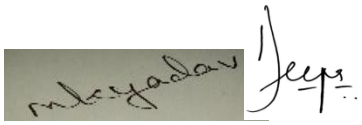
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: SY (CB/ BZ) SEMESTER: IVMONTH: NOVEMBER

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: The learners will be able to : Gain knowledge about salient features and classification of divisions Psilophyta and Lepidophyta. Study about the systematic position, structure and life cycle of pteridophyte *Selaginella*. Learn about the geological time scale, formation and types of fossils. Study about fossil pteredophyte *Rhynia*.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2 PTERIDOPHYTA AND PALEOBOTANY PTEREDOPHYTE	1) Salient features and classification upto order (with examples of each) of Psilophyta and Lepidophyta.	4	A New Course in Botany by Sheth Publications.	Chalk and Talk PPT
	2) Structure, life cycle and systematic position of *Selaginella.*	6		
	3) Paleobotany- The geological time scale; Formation and types of fossils; Structure and systematic position of form genus *Rhynia*.	5	Botany for Degree students Pteredophyta by A K Sinha, Anil Kumar and P C	



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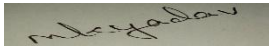
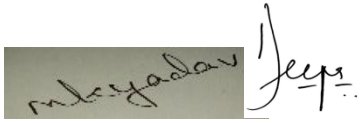
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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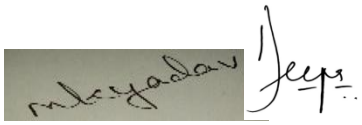
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: TY BOTANY SEMESTER: VIMONTH: NOVEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: The learners will be able to: Identify, describe and study in detail the life cycles of three Gymnosperms. And study the economic importance of Gymnosperms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 4 GYMNOSPERMS	1) Life cycle of *Biota* (*Thuja*), Classification	04	College Botany by Gangulee and Kar	Chalk and Talk PPT
	2) Life cycle of *Gnetum*, Classification	04	Botany for Degree students Gymnosperms by P C Vashishta	
	3) Life cycle of *Ephedra*, Classification	04		
	4) Economic importance of Gymnosperms.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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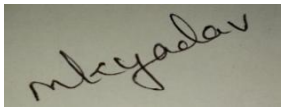

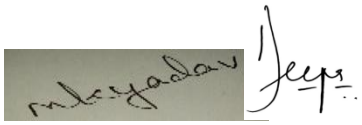

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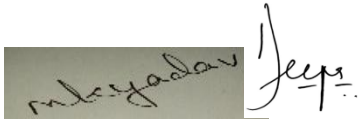
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAV DEPARTMENT: BOTANY CLASS: TY (BOTANY/ BZ) SEMESTER: VIMONTH: NOVEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Understand development of plant male and female gametophyte, embryonic structure and development

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit 3 EMBRYOLOGY	1) Microsporogenesis.	05	Embryology of Plants by Bhojwani and Bhatnagar	Chalk and Talk
	2) Megasporogenesis- Development of monosporic type, examples of all embryo sacs.	04	An introduction to embryology of Angiosperms by P Maheshwari	
	3)Types of ovules.	01		
	4) Double fertilization.	02		
	5) Development of embryo- *Capsella*	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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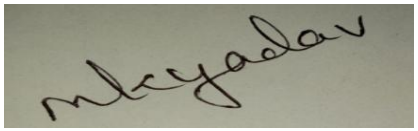

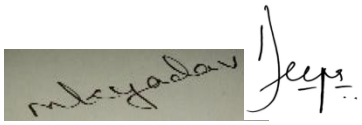

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Swarupa V. Agnihotri DEPARTMENT: Botany CLASS: FY. CBZ B and Biochemistry

SEMESTER: **II** MONTH: January ACADEMIC YEAR: 20-21

LEARNING OBJECTIVE/S:
The learners will be able to: Learners will able to get knowledge about internal structural organization of plant organs. Learners can differentiate plants according to the arrangement of tissues.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I Plant anatomy	Types of tissues: Simple and Complex	5	A New Course in Botany (F.Y.B.Sc) Sem I and II	Power point presentation, Google meet
	Epidermal outgrowths: Hairs, scales, colleters and vesicles	3		Power point presentation, Google meet
	Types of stomata: Dicot and monocot	2		Power point presentation, Google meet
	Study of T.S. of dicot and monocot, root, stem and leaf.	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Swarupa Vishal Agnihotri DEPARTMENT: Botany CLASS: T.Y. B.Sc. (Botany) SEMESTER: VI

MONTH: January 2021 ACADEMIC YEAR: 20-21

LEARNING OBJECTIVE/S:
The learners will be able to: Students will gain in depth information about different pteridophytes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit II Pteridophytes	Study of *Lycopodium* : Classification, Habit, Habitat, Anatomy, Reproductive structures and life cycle.	4	Pteridophyta Vascular Cryptogams (Botany for Degree Students) by B.R. Vashishta and	Google meet, Power point presentation
	Study of *Equisetum* : Classification, Habit, Habitat, Anatomy, Reproductive structures and life cycle.	4		
	Study of *Adiantum* : Classification, Habit, Habitat, Anatomy, Reproductive structures and life cycle.	4		

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	Study of *Marsilea*: Classification, Habit, Habitat, Anatomy, Reproductive structures and life cycle.	3	P.C. Vashishta	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Swarupa V. Agnihotri **DEPARTMENT**: Botany CLASS: S.Y.B.Sc. (BZ) Botany

SEMESTER: III MONTH: January ACADEMIC YEAR: 20-21

LEARNING OBJECTIVE/S:
The learners will be able to: Learners will able to know about types tissues, their organization and importance in plant. Students will also learn about secondary growth in root and stem of the dicot plant.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit II	Secondary growth in dicot stem and root, growth rings, periderm and tylosis	5	A new course in Botany (S.Y.	Google meet, Power point presentations

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Plant anatomy	Types of tissues, Study of mechanical tissues	5	B.sc.)	Google meet, Power point presentations
	Concept of I girder	3		
	Types of vascular bundle	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Mr. Vinodkumar Didwana_____ DEPARTMENT: _____Botany_____

CLASS: _S.Y. B.Sc. – BZ & CB____ SEMESTER: ____IV_____ MONTH: ____January____ ACADEMIC YEAR: ___2020-2021_____

LEARNING OBJECTIVE/S:

The learners will be able to:

·Define ecology
·Describe biogeochemical cycles like Carbon, Nitrogen and Water.
·Discuss the concepts of environmental factors
·Explain soil as edaphic factor
·Explain the process of soil formation and describe soil profile
·Define community and community ecology
·Describe the quantitative and qualitative characters of community

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – II, Unit – III, **Ecology and Environmental Botany**	**Biogeochemical Cycles- Carbon, Nitrogen and Water.**	**05**	**A new course in Botany, Sheth Publication** **https://www.khanacademy.org/science/high-school-biology/hs-ecology/hs-biogeochemical-cycles/v/carbon-cycle** **https://www.khanacademy.org/science/high-school-biology/hs-ecology/hs-biogeochemical-cycles/v/nitrogen-cycle**	Lectures on Google Meet, PowerPoint, Pdfs, Upload of learning material on Google Classroom
	Ecological factors: Concept of environmental factors. Soil as an edaphic factor, Soil composition, types of soil, soil formation, soil profile.	**06**	**A new course in Botany, Sheth Publication**	Lectures on Google Meet, PowerPoint, Pdfs, Upload of learning material on Google Classroom

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	Community ecology- Characters of community - Quantitative characters and qualitative characters	**04**	**A new course in Botany, Sheth Publication**	Lectures on Google Meet, PowerPoint, Pdfs, Upload of learning material on Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Mr. Vinodkumar Didwana_____ DEPARTMENT: _____Botany_____

CLASS: _T.Y. B.Sc. – Botany____ SEMESTER: ____VI_____ MONTH: ____January____ ACADEMIC YEAR: ___2020-2021_____

LEARNING OBJECTIVE/S:

The learners will be able to:

·To enlist sources of plants which can be used to extract economically important product like essential oils, fatty oils and vegetable fats
·See the opportunity to set themselves entrepreneurs in this field.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper – IV, Unit – III, Economic Botany	**Essential Oils: Extraction, perfumes, perfume oils, oil of Rose,** **Sandalwood, *Patchouli*, *Champaca*, grass oils: *Citronella*, Vetiver.** **· Fatty oils: Drying oil (Linseed and Soyabean oil), semidrying oils (Cotton seed, Sesame oil) and non-drying oils (Olive oil and Peanut oil),** **· Vegetable Fats: Coconut and Palm oil**	**15**	**Pharmacognosy by C. K. Kokate, Mr. S. B. Gokhale, A. P. Purohit , Nirali Prakashan**	Lectures on Google Meet, PowerPoint, Pdfs, Upload of learning material on Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Mr. Vinodkumar Didwana_____ DEPARTMENT: _____Botany_____

CLASS: _T.Y. B.Sc. – Botany____ SEMESTER: ____VI_____ MONTH: ___January____ ACADEMIC YEAR: ___2020-2021_____

LEARNING OBJECTIVE/S:

The learners will be able to:

·Describe different techniques of storage
·Differentiate between natural and artificial method of storage
·Enlist and explain different storage techniques

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – IV, Unit – IV, Post Harvest Technology	**Storage of Plant Produce – Preservation of Fruits and Vegetables** **·Drying (Dehydration) – Natural conditions – Sun drying,**	15	**http://ecoursesonline.iasri.res.in/course/view.php?id=608**	Lectures on Google Meet, PowerPoint, Pdfs, Upload of learning material on Google Classroom

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	·Artificial Drying – Hot Air Drying, Vacuum Drying, ·Osmotically Dried Fruits, Crystallized or Candied Fruits, FruitLeather, Freeze Drying Freezing (Cold Air Blast System, Liquid Immersion method, Plate Freezers, Cryogenic Freezing, Dehydro-Freezing, Freeze Drying), Canning Pickling (in Brine, in Vinegar, Indian Pickles) Sugar Concentrates (Jams, Jellies, Fruit juices) Food Preservatives Use of Antioxidants in Preservation		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany___CLASS: _F.Y.B.Sc (CBZ & Biochemistry) SEMESTER: _II___ MONTH: November to March_ ACADEMIC YEAR: 2020-21___

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper–I, Unit–II Pteridophyta	1.Structure, life cycle, systematic position and alternation of generations in *Nephrolepis*	8	F.Y.B.Sc. Textbook	PowerPoint Presentations and Chalk-Board method
	2.Stelar evolution.	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Atul Dubey DEPARTMENT: Botany CLASS: S.Y.B.Sc (CB & BZ) SEMESTER: IV MONTH: November to March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to
:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I, UnitIII Gymnosperms	1.Salient features, classification up to orders (with examples of each) and economic importance of Coniferophyta (Chamberlain's system of classification).	5	S.Y.B.Sc. Textbook	PowerPoint Presentations and Chalk-Board method
	2.Structure, life cycle and systematic position of *Pinus*	7		
	3.Structure and systematic position of the form genus *Cordaites.*	3		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____ CLASS: T.Y.B.Sc (Botany & BZ) SEMESTER: _VI__ MONTH: _November to April_ ACADEMIC YEAR: 2020-21___

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I, UnitIII Bryophytes and Pteridophytes: Applied Aspects	1.Ecology of Bryophytes	15	Economic Botany (A.F. Hill)	PowerPoint Presentations and ChalkBoard method
	2.Economic importance of Bryophytes		Textbook of Pteridophyta (Vashishtha)	
	3.Bryophytes as indicators			

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	4.Evolution of Sporophyte and Gametophyte			
	5.Economic importance of Pteridophytes			
	6.Diversity and distribution of Indian Pteridophytes			
	7.Types of sori and evolution of sori			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15____

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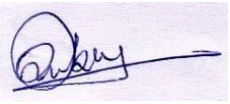
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany____CLASS: __T.Y.B.Sc (Botany & BZ)

SEMESTER: _VI__ MONTH: _November to April_ ACADEMIC YEAR: 2020-21___

LEARNING OBJECTIVE/S:
The learners will be able to : _____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III, Unit-I Plant	Biomolecules: Carbohydrates (Sugars, Starch, Cellulose, Pectin) Lipids (Fatty acids and Glycerol) Proteins (Amino acids)	6	Practical Biochemistry (David Plummer)	PowerPoint Presentations and Chalk-Board method



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Biochemistry	Enzymes: Nomenclature, classification, mode of action, Enzyme kinetics, Michaelis Menten Equation, competitive, non-competitive and uncompetitive inhibitors.	9	Principles of Biochemistry (David Nelson and Michael Cox)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: F. Y. B. Sc. (CBZ-A, B, Biochemistry) SEMESTER: II MONTH: January- April ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Gain information on the basis of Angiosperm morphology which will serve as the baseline for understanding this topic in S.Y and T.Y. They will also gain information on the diversity of lifeforms in Angiosperms, its evolution, and their morphological peculiarities which aids in identifying and classifying plants. Studies of Plant Families will help them know the respective family in and out and also give information on economically valuable plants from that family which could be used as a tool for research and other purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III, Angiosperm (Unit Shared)	Introduction to Angiosperm; Introduction to inflorescence; Raceme & Cyme Difference; Raceme: Dense, lax	2	WILLIAM T. STEARN (1983). BOTANICAL LATIN, History, Grammar Syntax, Terminology and Vocabulary Third edition, revised DAVID &	Google slides
	Raceme inflorescence: Panicle, spadix, spike, catkin	1		Google slides
	Raceme inflorescence: Corymb, Umbel, Capitulum	1		Google slides
	Cyme inflorescence: Solitary, Monochasial - Scorpoid & Helicoid, Dichasial, Polychasial	1		Google slides

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	Special inflorescence: Verticellaster; Hypanthodium and Cyathium; Leaves: Basic Morphology	1	CHARLES Newton Abbot London North Pomfret (Vt). A New Course in Botany, (F.Y. B.Sc.) Sem I & II Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical Plant families Identification Handbook, Second edition	Google slides
	Leaf: Phyllotaxy	1		Google slides
	Leaf: Types: Based on origin, Simple and Compound basic difference	1		Google slides
	Leaf Types: Classification based on structure: Simple and Compound	1		Google slides
	Leaf Types: Classification based on organ of origin and Structure (Repeat)	2		Google slides
	leaf shape	1		Google slides
	Leaf: Shapes and Stipules	1		Google slides
	Leaf: Base, Apex, Margin, venation	2		Google slides
	Leaf Modifications: Spines, Tendrils, Hooks, Phyllode, Succulents, Coloured leaves	1		Google slides
	Leaf Modifications: Carnivorous plants & Classification of Families	1		Google slides
	Malvaceae & Amaryllidaceae (brief intro; Distinguishing characters; plants of economic importance)	1		Google slides

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	Discussion of important pointers for examination	1		Google slides, Mindomo

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: S. Y. B. Sc. (BZ, CB) SEMESTER: IV MONTH: January-April ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: enlarge their horizon for obtaining jobs as horticulture is an ever increasing and trending field which yields good quality jobs. the basic knowledge of this topic will help the students gain the level of analyzing the type of plants to grow, soil content, climatic conditions etc. in making a garden for a company, industry, private sector etc. Studies on Botanical gardens and National Park will enlighten the students in conservation of the natural habitat, and also promote a scientific attitude towards nature. It will also promote research impetus into the students.

PAPER, UNIT,	SUBTOPICS	NO OF	REFERENCE/S	TEACHING METHOD/ ICT

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TITLE		LECTURES ALLOTTED		TOOLS USED
Paper III, Unit I, Horticulture and Gardening	Introduction to Horticulture	01	A New Course in Botany (S.Y.B.Sc.) (Sem III & IV)	Google slides, Personal Photos of Horticulture, Mindomo
	Branches of Horticulture Gardening	02		Google slides, Personal Photos of Horticulture, Mindomo
	Locations in the garden- edges, hedges, lawn, flower beds, avenue, water garden, Focal point.	05		Google slides, Personal Photos of Horticulture, Mindomo
	Types of garden: Formal and informal gardens	01		Google slides, Personal Photos of Horticulture, Mindomo
	National Park: Sanjay Gandhi National Park.	01		Google slides, Personal Photos of Horticulture, Mindomo
	Botanical Garden: VeerMata JijabaiUdyan (Victoria Garden)	02		Google slides, Personal Photos of Horticulture, Mindomo
	Revision, Question bank Discussion	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: T. Y. B. Sc. (BZ, Botany) SEMESTER: VI MONTH: January-April ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Gain a deep insight in the classification system of Hutchinson's classification with its pros and cons which will help them to follow it with more clear understanding. Studies of Plant Families will help them know the respective family in and out and also give information on

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economically valuable plants from that family which could be used as a tool for research and other purposes. Study of Botanical Survey of India will give the students an insight into the activities that they conduct on a National scale to provide the knowledge of plant taxonomy and the varied type of work the do. The knowledge of Botanical gardens in India aid in increasing their knowledge on the plants and their importance to be conserved.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit I, Angiosperms II	Angiosperm Introduction, Asclepiadaceae: Current status, general characters	1	Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical Plant families Identification Handbook, Second edition Biological discussions online www.bsi.gov.in Wikipedia BSI	Google slides
	Asclepiadaceae: General Characters,	1		Google slides
	Asclepiadaceae: Androecium & Gynoecium, Fruit, Systematic Position, Floral Formula, Floral Diagram, Plants of Economic Importance	1		Google slides
	Asclepiadaceae Revision; Lamiaceae: Introduction, General Characters	1		Google slides
	Lamiaceae: General Characters	1		Google slides
	Lamiaceae: Androecium & Gynoecium, Fruit, Systematic Position, Floral Formula, Floral Diagram	1		Google slides
	Lamiaceae: Plants of Economic Importance; Combretaceae: Current status, General Characters	1		Google slides
	Combretaceae: General Characters, Classification, F.F., Plants of Economic Importance	1		Google slides

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	Botanical Survey of India	1		bsi.gov.in
	Rhamnaceae	1		Google slides
	Euphorbiaceae: General characters, Classification, distinguishing characters	1		Google slides
	Euphorbiaceae: plants of economic importance, Cannaceae: general characters	1		Google slides
	Hutchinson's classification; Cannaceae: Plants of economic imp, Classification, Fruit	1		Google slides
	Major Botanic Gardens India: AJCB Botanic Garden, Howrah; National Botanic Garden NBRI, Lucknow	1		Google slides
	Major Botanic Gardens India: Darjeeling botanic garden and Lalbaugh Botanic garden; BSI major regional circles	1		Google slides
	Revision and discussion of important pointers for the examination	1		Mindomo, Google slides

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_DEPARTMENT: _Botany_ CLASS: _F.Y.B.Sc (CBZ & Biochemistry) SEMESTER: _IMONTH: _June to October_ ACADEMIC YEAR: 2019-20___

LEARNING OBJECTIVE/S:
The learners will be able to_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper–II, Unit-I Cell Biology	1.General structure of plant cell: Cell wall, Plasma membrane (Bilayer lipid structure, fluid mosaic model)	15	F.Y.B.Sc. Textbook	PowerPoint Presentations and Chalk-Board method
	2.Ultra structure and functions of the following cell organelles: Endoplasmic reticulum and Chloroplast			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____ CLASS: _F.Y.B.Sc (CBZ & Biochemistry) SEMESTER: _II___ MONTH: November to March_ ACADEMIC YEAR: 2019-20___

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper–I, Unit–II Pteridophyta	1.Structure, life cycle, systematic position and alternation of generations in *Nephrolepis*	15	F.Y.B.Sc. Textbook	PowerPoint Presentations and Chalk-Board method
	2.Stelar evolution.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____ CLASS: _S.Y.B.Sc (CB & BZ) SEMESTER: _III__ MONTH: _June to October_ ACADEMIC YEAR: 2019-20___

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED		REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I, Unit-I	1.General Account of Class Anthocerotae and Musci	02		S.Y.B.Sc. Textbook	PowerPoint Presentations and Chalk-Board method
Thallophyta (Algae) and Bryophyta	2.Structure, life cycle and systematic position of a. *Anthoceros* b. *Funaria*	05			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __8____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany___ CLASS: _S.Y.B.Sc (CB & BZ)

SEMESTER: _IV___MONTH: November to March_ ACADEMIC YEAR: 2019-20___

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I, UnitIII Gymnosperms	1.Salient features, classification up to orders (with examples of each) and economic importance of Coniferophyta (Chamberlain's system of classification).	15	S.Y.B.Sc. Textbook	PowerPoint Presentations and Chalk-Board method
	2.Structure, life cycle and systematic position of *Pinus*			
	3.Structure and systematic position of the form genus *Cordaites.*			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____CLASS: _T.Y.B.Sc (Botany & BZ)

SEMESTER: _V__ MONTH: _June to October_ ACADEMIC YEAR: 2019-20___

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II, Unit-I Paleobotany	1.*Calamites* – All form genera Stem, leaf, male and female fructification.	15	Cryptogamic Botany Vol. - I & II (G.M. Smith, Mcg raw Hill)	PowerPoint Presentations and Chalk-Board method
	2.*Lepidodendron* – All form genera Stem, leaf, male and female fructification.		College botany Vol. – II (Gangulee, Das and Dutta)	
	3.*Lyginopteris*– All form genera Stem, leaf, male and female fructification.			
	4.*Pentoxylon* - – All form genera			

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	5.Contribution of Birbal Sahni, Birbal Sahni Institute of Pleobotany, Lucknow.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____

CLASS: _T.Y.B.Sc (Botany & BZ) SEMESTER: _V__ MONTH: _June to October_ ACADEMIC YEAR: 2019-20___

LEARNING OBJECTIVE/S:
The learners will be able to :_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV, Unit-I Ethnobotany and Mushroom Industry	Mushroom Industry: 1.Detail general account of production of mushrooms with respect to methods of Composting, spawning, casing, harvesting of mushroom. Cultivation of *Pleurotus, Agaricus, Volvariella* Mushroom to be studied in detail.	7		PowerPoint Presentations
	2.General account of mushrooms: Nutritional value, picking and packaging, economic importance.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____7_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____CLASS: T.Y.B.Sc (Botany & BZ)

SEMESTER: _VI__ MONTH: _ November to March_ ACADEMIC YEAR: 2019-20___

LEARNING OBJECTIVE/S:
The learners will be able to : _____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I, UnitIII Bryophytes and Pteridophytes: Applied Aspects	1.Ecology of Bryophytes	15	Economic Botany (A.F. Hill)	PowerPoint Presentations and ChalkBoard method
	2.Economic importance of Bryophytes		Textbook of Pteridophyta (Vashishtha)	
	3.Bryophytes as indicators			
	4.Evolution of Sporophyte and Gametophyte			
	5.Economic importance of Pteridophytes			

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	6.Diversity and distribution of Indian Pteridophytes			
	7.Types of sori and evolution of sori			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____ CLASS: _T.Y.B.Sc (Botany & BZ)

SEMESTER: _VI__ MONTH: _November to March_ ACADEMIC YEAR: 2018-19___

LEARNING OBJECTIVE/S:
The learners will be able to : _____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III, Unit-I Plant Biochemistry	Enzymes: Nomenclature, classification, mode of action, Enzyme kinetics, Michaelis Menten Equation, competitive, non-competitive and uncompetitive inhibitors.	8	Practical Biochemistry (David Plummer)	PowerPoint Presentations and Chalk-Board method
			Principles of Biochemistry (David Nelson and Michael Cox)	

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: FY.BSc SEMESTER: I

MONTH : ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: understand the classification, structure, function, ecology, life cycle of the fungi. *Examples Aspergillus* and *Rhizopus* are common fungi and understand commercial the industrial uses of the fungi

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II Fungi	Introduction and classification of Fungi	3	**N.C Kumar,The text book of** Botany, Himalaya publication House 2008 **Singh V et al, text book of Botany,** Global media, 2009 **Campbells,Reece** et al Biology Eight edition Bejamin Cummings	Power point presentation and chalk and board
	Structure, life cycle and systematic position of *Rhizopus* and *Aspergillus*	8		Power point presentation and chalk and board
	Economic importance of Fungi.	2		Power point presentation and chalk and board
	Modes of nutrition in Fungi (Saprophytism and Parasitism).	2		Power point presentation and chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANT CLASS: F.Y BSc SEMESTER: II

MONTH 4 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: The learners will be able to learners will be able to relate primary growth in internal stem and root structure with function and appreciate the salient features of the root and stem

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit II Anatomy	Introduction of Anatomy and its importance in biology	1	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns Introductory plant Biology** edition 12 Mcgraw Hills	Power point presentation and chalk and board
	Simple Tissue: Parenchymatous Tissue, Collenchymatous Tissue and Sclerenchymatous tissue	3		Power point presentation and chalk and board
	Complex Tissue: Xylem, Phloem	3		Power point presentation and chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: S.Y BSc SEMESTER: III

MONTH 4 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: The learners will be able to provide knowledge about environmental factors and natural resources and their importance in sustainable development

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit II Forestry and Economic Botany	Forestry: outline types of forest in India	3	**Golatkar** V. et .al **The new Course in Botany** S.YB.Sc Sem 3 and 4 Sheath Prakashan	Power point presentation and chalk and board
	Forestry: Agroforestry, Urban Forestry, Organic farming, Silviculture	4		Power point presentation and chalk and board
	Economic Botany: Types of fibres, Jute and Cotton Current trend in fibres industries	3		Power point presentation and chalk and board
	Spices and Condiments: Saffron and Cardamom	3		Power point presentation and chalk and board
	Commercial market of spices	2		Power point presentation and chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: S.Y BSc SEMESTER: IV

MONTH 4 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: The learners will be able to relate secondary growth in internal stem and root structure with function and appreciate the salient features of the root and stem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit I Anatomy	Introduction and basics of plant anatomy	1	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns Introductory plant Biology** edition 12 Mcgraw Hills	Chalk and Board
	Normal secondary growth in Dicotyledonous stem and root.	2		Power point presentation and chalk and board
	Growth ring	1		Power point presentation and chalk and board
	Periderm, lenticel, Tylosis, Heart wood and sap wood	3		Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: T.Y. BSc SEMESTER: V

MONTH 4 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: The students would be able: To relate anomalies in internal stem structure with function and appreciate the salient features of the root stem transition zone. To get exposure to plant anatomy and learn to apply it in various fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit III Anatomy	Introduction to Anomalous secondary growth	2	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns Introductory plant Biology** edition 12 Mcgraw Hills	Power point presentation and chalk and board
	Anomalous secondary growth in the Stems of *Bignonia,Salvadora, Achyranthes, Dracaena.*	6		Power point presentation and chalk and board
	Storage roots of Beet, Radish	3		Power point presentation and chalk and board
	Root stem transition	2		Power point presentation and chalk and board
	Types of Stomata– Anomocytic, Anisocytic, Diacytic, Paracytic, and Graminaceous	2		Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: T.Y BSc SEMESTER: VI

MONTH 4 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: The learners will be able to study in detail classification and general characters of Pteridophytes and identify as well as describe the life cycles of *Marselia* and *Adiantum*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II Pteridophyta (G. M. Smith Classification System to be followed)	Introduction to Pteridophyta	1	**Singh V et al, text book of Botany,** Global media, 2009 **Bendre. Kumar A text book of** Practical Botany 1 Rastogi publication 2010. **Michael G Simpson Plant systematics** Elsevier Publication 2006	Chalk and Board
	Introduction to G. M. Smith Classification System	1		Power Point Presentation
	Pterophyta - Classification, general characters; Life cycle of *Adiantum*	2		Power point presentation and chalk and board
	Pterophyta - Classification, general characters; Life cycle of *Marselia*	3		Power point presentation and chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: Applied component (Horticulture) CLASS: T.Y BSc

SEMESTER: V MONTH 4 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/: To explore the natural and artificial propagation and their use in commercial production.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit 2 PROPAGATION PRACTICES	**By Seeds** Advantages and disadvantages, method of seed propagation Production of seeds, Handling, Collection and Storage Sowing and transplantation.	2	**P.Parvatha Reddy Sustainable Crop protection under protected cultivation** Springer E book, **W J Lewis Grafting and Budding a** practical guide for fruit crops and ornamental plant second edition.	Power point presentation and chalk and board
	By specialized Vegetative structures Bulbs, Tubers, Corms, Rhizomes, Root stock, runners, Offsets and suckers.	2		Power point presentation and chalk and board
	Artificial methods of plant propagation Cutting– Root **cutting**, Stem cuttings, and leaf cuttings. rooting. **Layering** – Definition, Types: Simple, compound, (Serpentine) Tip, Trench, Mound, Air Layering. **Grafting**-Definition, advantages and disadvantages. Types: **Budding** – Definition, advantages and disadvantages. Types: T- budding, shield, Patch, ring budding.	08		Power point presentation and chalk and board
	Developing new varieties: Technique of Emasculation	3		Power point presentation and chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: Applied component (Horticulture) CLASS: T.Y BSc

SEMESTER: VI MONTH 4 ACADEMIC YEAR: 2019-2020

- LEARNING OBJECTIVE/SThe students would be able: To gain insight into the green House technology: Layout, types, Irrigation and construction with applications in agriculture and horticulture and to learn about the commercial production fruits and vegetables in relation to propagation, post plantation care, harvesting and post-harvest management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit 2 PROPAGATION PRACTICES	High –tech Horticultural production- Green house technology- Meaning, types, layout & construction, irrigation systems. Care & attention. Hardening of plants. Space gardens.	6	**P.Parvatha Reddy Sustainable Crop protection under protected cultivation** Springer E book, **E Course Krishi shiksha, green** house management Agriculture Engineering.	Power Point Presentation chalk and Board
	Floriculture – Scope & importance, soil and climatic requirement and cultivation practices and Economics of greenhouse production of Gerbera, Carnation, Roses, Orchids. Propagation techniques, packing and marketing, enhancing and delaying period of bloom by special methods. Floral decoration, Florist shop management.	9		Power Point Presentation And chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mansi Ramesh More DEPARTMENT: Botany CLASS:_T.Y.B.Sc.(BZ, Botany, Biochemistry)

SEMESTER: V MONTH: Jul-Nov ACADEMIC YEAR:2019-20

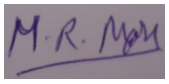
LEARNING OBJECTIVE/S:
The learners will be able to : understand the importance of horticulture and its branches, apiculture, life cycle of silkworm, various institutes provides the knowledge of horticulture,

Different types of fertilizers used in agriculture.

Study of pests occurs on horticultural crops and plant diseases and their control measures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HORTICULTURE	UNIT 1= INTRODUCTION TO HORTICULTURE	15	PREVIOUS NOTES	POWERPOINT PRESENTATION
	Branches of horticulture, apiculture, sericulture, KKV,HTC,Lakhibaug yojana			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mansi Ramesh More DEPARTMENT: Botany CLASS:_T.Y.B.Sc.(BZ, Botany, Biochemistry)

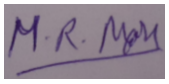
SEMESTER: V MONTH: Jul-Nov ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Understand Different types of fertilizers used in agriculture.

Study of pests occurs on horticultural crops and plant diseases and their control measures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HORTICULTURE	UNIT 3 = PLANT DISEASES, PESTS, FERTILIZERS	15	PREVIOUS NOTES	POWERPOINT PRESENTATION
	Green manures, biofertilizers, chemical fertilizers, pests, friends of farmers,			
	plant dieseas			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___



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TEACHING PLAN (UNIT PLAN)

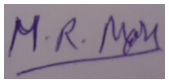
NAME OF THE STAFF: Ms. Mansi Ramesh More DEPARTMENT: Botany CLASS:_T.Y.B.Sc.(BZ, Botany, Biochemistry)

SEMESTER: V**I** MONTH: Dec- Feb ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Understand Different types of gardens, garden features with 2 examples of plant, preparation of Bonsai, hanging basket garden, Dish garden, etc., Indian & Western floral arrangements, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HORTICULTURE	UNIT 1 = LANDSCAPE GARDENING	15	PREVIOUS NOTES	POWERPOINT PRESENTATION
	Different types of gardens, garden features with 2 examples of plant,			
	preparation of Bonsai, hanging basket garden, Dish garden, etc			
	Indian & Western floral arrangements, etc.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___



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TEACHING PLAN (UNIT PLAN)

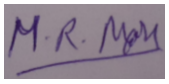
NAME OF THE STAFF: Ms. Mansi Ramesh More DEPARTMENT: Botany CLASS:_T.Y.B.Sc.(BZ, Botany, Biochemistry)

SEMESTER: V**I** MONTH: Dec- Feb ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Understand Different types of horticultural crops, their propogation method, irrigation techniques, harvesting, pests and diseasesoccur on horticultural crops, uses, varieties.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HORTICULTURE	UNIT 3 = COMMERCIAL IMPORATANT CROPS	15	PREVIOUS NOTES	POWERPOINT PRESENTATION
	Different types of horticultural crops			
	their propogation method, irrigation techniques			
	harvesting, pests and diseasesoccur on horticultural crops			
	uses, varieties			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___



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TEACHING PLAN (UNIT PLAN)

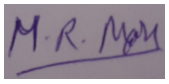
NAME OF THE STAFF: Ms. Mansi Ramesh More DEPARTMENT:Botany CLASS:_S.Y.B.Sc.(Botany)

SEMESTER: III MONTH: JUN - OCT ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S: The learners will be able to : Understand the general characteristics of Pheophyta and Thallophyta, Systematic position of Sargassum, occurrence, thallus structure, cell structure,

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 1 Algae	UNIT 1= ALGAE	08	Textbook Botany (Sheth publication)	POWERPOINT PRESENTATION & chalk board method
	Life cycle of Sargassum, systematic position, occurrence, thallus structure, anatomy of the thallus,reproduction,			
	reproduction, alternation of generation,			
	Economic importance, General features of Pheophyta.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___



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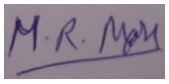

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Botany CLASS: S.Y.B.Sc. (CB & BZ)

SEMESTER: **III** MONTH: October – December ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:

- To understand and differentiate about different preservation method
- To understand about techniques of microscopy
- To differentiate about different chromatographic techniques
- To understand about electrophoresis technique as a separation technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit – III**	**Modern Techniques to Study Plant Diversity** Preservation methods :Dry and Wet method	03	A new course in botany – Sheth Publication Principles of Instrumental Analysis - by Douglas A. Skoog	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Microscopy – Principle and working of Light, and electron microscope.	04		
	Chromatography- Principles and techniques in paper and thin layer chromatography.	04		
	Principles and techniques of Horizontal and Vertical electrophoresis.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Botany CLASS: T.Y.B.Sc. (BOTANY)

SEMESTER: **V** MONTH: October – December ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: To learn principles and application of commonly used techniques in instrumentation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit – III	**Instrumentation** Colorimetry and Spectrophotometry (Visible, UV and IR) - Introduction–	01	Principles of Instrumental Analysis - by Douglas A. Skoog An Introduction to Practical Biochemistry- by David Plummer	Lectures on Google Meet, PowerPoint, Pdfs, Youtube videos, Animation Upload of learning material on Google Classroom
	Instrumentation, working, principle and applications. of Colorimeter	02		
	Instrumentation, working, principle and applications. of Spectrophotometer	02		
	Chromatography: General account of Column chromatography.,	03		
	Principle and bedding material involved in adsorption and partition chromatography	03		
	ion exchange chromatography, molecular sieve chromatography.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **F.Y. B.Sc.** SEMESTER: I

MONTH: **July to November** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE: To acquire the knowledge about entire life cycle of an Algae and their ecological & economic importance.

The learners will be able to: understand the importance of Algae in different fields (ecosystem, pharmaceutical, food, as primary producers etc.), their forms & flourishment and also its importance as ancestors in evolution of plants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I **ALGAE**	Structure, life cycle and systematic position of ***Nostoc* and *Spirogyra*.**	12	Textbook by sheth publication College Botany Volume II (Gangulee & Kar)	Chalk & Board method. Power point presentation
	Economic importance of Algae.	02	Textbook by sheth publication College Botany Volume II (Gangulee & Kar)	Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **F.Y. B.Sc.** SEMESTER: II

MONTH: **December to April** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: To understand the importance of light energy and their utilization for preparation of food in green plants that act as primary energy sources for every life form on earth.

The learners will be able to: understand how energy transfer takes place from sun to earth and further converted to chemical energy. It enables to understand the phase transfer of the energy its conversion to various chemical form, and also this shows the biotic abiotic interaction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II PHYSIOLOGY	Photosynthesis:	02	Textbook by sheth publication Plant Physiology by Taiz and Zeiger	Chalk & Board method. Diagram construction. Models
	Light reactions, photolysis of water, photophosphorylation (cyclic and non cyclic),	06	Textbook by sheth publication Plant Physiology by Taiz and Zeiger	Chalk & Board method. Diagram construction. Models
	Carbon fixation phase (C3, C4 and CAM pathways).	06	Textbook by sheth publication Plant Physiology by Taiz and Zeiger	Chalk & Board method. Diagram construction. Models

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **S.Y. B.Sc.** SEMESTER: III

MONTH: **July to November** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: To acknowledge about molecules existing in plants, their role in metabolic reaction.

The learners will be able to: understand what exactly the biological molecules are, their structures, synthesis process including regulation, and their role in metabolism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II **Unit 3** **Molecular Biology**	**DNA replication** : Modes of Replication, Messelson and Stahl Experiment, **DNA replication in prokaryotes and eukaryotes**-enzymes involved and molecular mechanism of replication.	07	Textbook by sheth publication *i*GENETICS: *A molecular approach* by Peter J. Russell	Chalk and Board method, Power point presentation,
	. **Protein Synthesis**: ○ Central dogma of Protein synthesis ○ Transcription in prokaryotes and eukaryotes: promoter sites, initiation, elongation and termination. ○RNA processing: Adenylation & Capping.	08	Textbook by sheth publication *i*GENETICS : *A molecular approach* by Peter J. Russell	Chalk and Board method, Power point presentation,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **S.Y. B.Sc.** SEMESTER: IV

MONTH: **December to April** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: To gain the knowledge of physiological mechanism related to the respiration in plants and specific responses given by plants towards the Photosynthetic region of light spectrum.

The learners will be able to: understand about respiration mechanism and its machinery in an organism. To evaluate the working conditions of phytochromes and their physiological action.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II : Plant Physiology and Plant Biochemistry	**Respiration: Aerobic:** Glycolysis, TCA Cycle, ETS & Energetic of respiration; Anaerobic respiration.	10	Textbook by sheth publication, Plant Physiology by Taiz and Zeiger	Chalk and Board method, Powerpoint presentation,
	Photorespiration	01	Textbook by sheth publication, Plant Physiology by Taiz and Zeiger	Chalk and Board method, Powerpoint presentation,
	Photoperiodism: Phytochrome Response and Vernalization with reference to flowering in higher plants, Physico-chemical properties of phytochrome, Pr-Pfr interconversion, role of phytochrome in flowering of SDPs and LDPs;	05	Textbook by sheth publication, Plant Physiology by Taiz and Zeiger	Chalk and Board method, Powerpoint presentation,
	Vernalization mechanisms and applications.	02	Textbook by sheth publication, Plant Physiology by Taiz and Zeiger	Chalk and Board method, Powerpoint presentation,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **T.Y. B.Sc.** SEMESTER: V

MONTH: **July to November** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: Awareness about harmful pathological diseases in economic important plants.
The learners will be able to: study about different pathological diseases in plants, causal organisms that cause diseases, symptoms of diseases, affected parts of plants, effect of it on plant process, disease cycle (how disease spread and effect to entire plant and their mechanism) & control/ preventive measures of pathological diseases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit IV** **Plant Pathology**	**Study of plant diseases**: Causative organism, symptoms, predisposing factors, disease cycle and control measures of the following.,	01	College Botany Volume II (Gangulee & Kar)	1. Chalk and Board Method, 2. Power Point Presentation
	White Rust – *Albugo sp.* Tikka disease of ground nut: *Cercospora* Damping off disease: *Pythium* Citrus canker – *Xanthomonas* sp. Leaf curl – leaf curl virus	08		
	Study of Physical, chemical and biological control methods of plant diseases.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **T.Y. B.Sc.** SEMESTER: V

MONTH: **July to November** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: To study the structure & functions of cell, organelles & molecules in an organisms, synthesis of molecules (mRNA & proteins) in the cell.

The learners will be able to: understand detailed structure, functions of cell and its components, synthesis mechanism of molecules and enzymes help in molecular synthesis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III **Unit I** **Cytology And Molecular Biology**	Structure and function of nucleus Structure and function of vacuole Structure and function of giant chromosomes	03	Gene VIII Benjamin lewin Molecular cell biology Textbook by David Baltimore and Harvey lodish	1. Chalk and Board method, 2. PowerPoint presentation,
	The genetic code: Characteristics of the genetic code	02	Genetics by Russel Peter Adison Wesley Longman Inc. (5th edition)	
	Transcription and Translation in Eukaryotes	06	Genetics by Russel Peter Adison Wesley Longman Inc. (5th edition)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **T.Y. B.Sc.** SEMESTER: VI

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MONTH: **December to April** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: To study about entire life cycle of Bryophytes and also help to acknowledge about the evolution in plants.

The learners will be able to : understand about the evolution in plants (as bryophytes mark the transition to land & origin of vascular plants therefore it link seed & vascular plants to their algal ancestors), morphology and anatomical structure of thallus, various reproduction methods, generations of bryophytes and their interrelationship.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit I** **Bryophyta**	• Life cycle of *Marchantia*	04	Textbook of Bryophyta (Vashishtha) College Botany Volume II (Gangulee & Kar)	1. Chalk and Board method, 2. PowerPoint presentation,
	• Life cycle of *Pelia*	04		
	• Life cycle of *Sphagnum*	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **T.Y. B.Sc.** SEMESTER: VI

MONTH: **December to April** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: To study about the chemical characteristics of plants and their reactions.

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The learners will be able to: understand the structure of biomolecules (carbohydrates, lipids, proteins) and their role in plants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III **Unit I** **PLANT BIOCHEMISTRY**	Structure of biomolecules: • Carbohydrates (sugars, starch, cellulose, pectin) • Lipids (fatty acids and glycerol), • Proteins (amino acids)	08	Lehninger: Principles of biochemistry Practical Biochemistry (David Plummer)	1. Chalk and Board method, 2. PowerPoint presentation,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: FY (CBZ / BIOCHEMISTRY) SEMESTER: IMONTH: JULY ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: Gain knowledge about the general characters of class Hepaticaceae. And learn about the structure, life cycle and systematic position of *Riccia*.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1, Unit 3 BRYOPHYTA	1) General characters of Hepaticae	03	A New Course in Botany, by Sheth Publications.	Chalk and Talk
	2) Structure, life cycle and systematic position of *Riccia*.	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: FY (CBZ/ BIOCHEMISTRY) SEMESTER: IIMONTH: NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Learn about different types of inflorescence and study about family Amaryllidaceae of monocots.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 3 ANGIOSPERMS	1) Inflorescence: Racemose: simple raceme, spike, catkin, spadix, panicle. Cymose: monochasial, dichasial, polychasial. Compound: corymb, umbel, cyathium, capitulum, verticellaster, hypanthodium.	5	A New course in Botany by Sheth Publications.	Chalk and Talk PPT
	2) Study of family Amaryllidaceae.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: SY (CB/BZ) SEMESTER: IIIMONTH: JUNE

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: Gain knowledge about Taxonomy in relation to Embryology, Cytology and Ecology. They will be able to learn about vegetative, floral characters and economic importance of the families Leguminosae and Asteraceae.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2 ANGIOSPERMS	1) Taxonomy in relation to: Embryology, Cytology, Ecology	3	A New course in Botany by Sheth Publications	Chalk and Talk Plant material (flowering twigs of the plants of respective families)
	2) With the help of Bentham and Hooker's system of classification for flowering plants, study of families Leguminosae and Asteraceae	5	Plant Taxonomy by O P Sharma	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: SY (CB/ BZ) SEMESTER: IVMONTH: NOVEMBER

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: The learners will be able to : Gain knowledge about salient features and classification of divisions Psilophyta and Lepidophyta. Study about the systematic position, structure and life cycle of pteridophyte *Selaginella*. Learn about the geological time scale, formation and types of fossils. Study about fossil pteredophyte *Rhynia*.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2 PTERIDOPHYTA AND PALEOBOTANY PTEREDOPHYTE	1) Salient features and classification upto order (with examples of each) of Psilophyta and Lepidophyta.	4	A New Course in Botany by Sheth Publications.	Chalk and Talk PPT
	2) Structure, life cycle and systematic position of *Selaginella.*	6		
	3) Paleobotany- The geological time scale; Formation and types of fossils; Structure and systematic position of form genus *Rhynia*.	5	Botany for Degree students Pteredophyta by A K Sinha, Anil Kumar and P C Vashistha	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: TY (BOTANY) SEMESTER: VMONTH: JUNE

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the salient features of three major groups of algae, their life cycle patterns with suitable example; to be able to identify them

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2 ALGAE	1) Classification and General Characters: Distribution, Cell structure, pigments, reserve food, range of thallus, reproduction: asexual and sexual, Alternation of Generations, Economic importance of Divisions Rhodophyta, Xanthophyta and Bacillariophyta.	05	College Botany Vol II by Gangulee Das and Dutta	Chalk and Talk PPT
	2) Structure, life cycle and systematic position of *Polysiphonia, Batrachospermum, Vaucheria* and *Pinnularia.*	10	Crytogamic Botany Vol I by G M Smith	
			Botany for Degree Students- Algae by B R Vashistha.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: TY (BOTANY/ BZ) SEMESTER: V

MONTH: JUNE ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: Get exposure to pollen study and learn to apply it in various fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit 4 PALYNOLOGY	1) Pollen Morphology	03	Embryology of Plants by Bhojwani and Bhatnagar	Chalk and Talk PPT Video clip
	2) Pollen viability- storage	02	An introduction to embryology of Angiosperms by P Maheshwari	
	3) Germination and growth of pollen	02		
	4) Application of Palynology in honey industry, coal and oil exploration, Aerobiology and pollen allergies, forensic science.	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAVDEPARTMENT: BOTANY CLASS: TY BOTANY SEMESTER: VIMONTH: NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: The learners will be able to: Identify, describe and study in detail the life cycles of three Gymnosperms. And study the economic importance of Gymnosperms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 4 GYMNOSPERMS	1) Life cycle of *Biota* (*Thuja*), Classification	04	College Botany by Gangulee and Kar	Chalk and Talk PPT
	2) Life cycle of *Gnetum*, Classification	04	Botany for Degree students Gymnosperms by P C Vashishta	
	3) Life cycle of *Ephedra*, Classification	04		
	4) Economic importance of Gymnosperms.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAV DEPARTMENT: BOTANY CLASS: TY (BOTANY/ BZ) SEMESTER: VIMONTH: NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to: Understand development of plant male and female gametophyte, embryonic structure and development

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit 3 EMBRYOLOGY	1) Microsporogenesis.	05	Embryology of Plants by Bhojwani and Bhatnagar	Chalk and Talk
	2) Megasporogenesis- Development of monosporic type, examples of all embryo sacs.	04	An introduction to embryology of Angiosperms by P Maheshwari	
	3)Types of ovules.	01		
	4) Double fertilization.	02		
	5) Development of embryo- *Capsella*	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Mr. Vinodkumar Didwana_____DEPARTMENT: _____Botany_____

CLASS: _S.Y. B.Sc. – BZ and CB____ SEMESTER: ____III_____MONTH: ____June____ ACADEMIC YEAR: ___2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Define pharmacopoeia and identity different pharmacopoeia used in India.
- Describe the use of pharmacopeia in pharmaceutical and drug manufacturing industry.
- Recall the importance of pharmacopeia for identification of drug, purity and testing for adulteration.
- Describe Monograph
- Write down what are secondary metabolites, identify its sources; discuss its properties, uses and adulterants; and describe regional and seasonal variations.
- Identify and describe adulterants of the selected plants

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III – Unit – I - Pharmacognosy and phytochemistry	Introduction to pharmacopoeia	02	• Pharmacognosy by C. K. Kokate, Mr. S. B. Gokhale, A. P. Purohit ,	• Chalk and board method • Study the morphological, anatomical and powder characters *Phyllanthus amarus, Saraca asoka,*
	Indian pharmacopoeia, Indian Herbal Pharmacopoeia and Ayurvedic Pharmacopoeia	02		
	Study of Monograph from pharmacopoeia	03		

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	Secondary Metabolites: Sources, properties, uses and adulterants, regional and seasonal variations	03	Nirali Prakashan • A new course in Botany – Sheth publications	*Bacopa monieri* so thatcan identify their peculiar characters and test for adulteration.
	Adulterants: *Saraca asoca, Polyalthia longifolia* *Terminalia arjuna, Terminalia tomentosa* *Bacopa monnieri, Centella asiatica* *Abrus, Glycyrrhiza* *Phyllanthus amarus (Bhuiamla)*	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana DEPARTMENT: Botany

CLASS: T.Y. B.Sc. – Botany SEMESTER: V MONTH: June ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

- Identify and describe various steps involved (spwan, pin head stage and mature stage) in mushroom cultivation.
- Develop entrepreneurship skills with respect to mushroom cultivation.
- Define ethnobotany and describe its principles, applications
- Utilize the knowledge of indigenous plant for the cure of human diseases

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – IV, Unit – I, Ethnobotany and Mushroom Industry	**Ethnobotany-** Definition, history, sources of data and methods of study. · **Applications of ethnobotany:** □ Ethno-medicines. □ Agriculture. □ Edible plants. · **Traditional medicines** used by tribals in Maharashtra towards □ Skin ailments: *Rubia cordfolia, Sandalwood* □ Liver ailments: *Phyllanthus, Andrographis* □ Wound healing and ageing: *Centella, Typha, Terminalia,*	08	https://sg.inflibnet.ac.in/bitstream/10603/86421/9/09chapter%203.pdf	Chalk and board method

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	Tridax. □ Fever: *Vitex negundo, Tinospora cordifolia* leaves □ Diabetes: *Momordica charantia, Syzygium cuminii*			
	Mushroom industry: □ Detail general account of production of mushrooms with respect to methods of Composting, spawning, casing, harvesting of mushroom. Cultivation of *Pleurotus, Agaricus, Volvariella* mushroom. □ General account of mushrooms: Nutritional value, picking and packaging, economic importance	07	Mushroom Growing – S.C. Dey - Agrobios	Chalk and board method Youtube Video: https://www.youtube.com/watch?v=oormRweSf3E

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana DEPARTMENT: Botany

CLASS: T.Y. B.Sc. – Botany SEMESTER: V MONTH: June ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

- Describe the macroscopic and microscopic characters
- Identification of active constituent by performing chemical tests and TLCs.
- Describe the therapeutic uses of medicinal plants
- Experiment TLC, identify the spots and calculate Rf Values

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – IV, Unit – IV, Pharmacognosy, Pharmacology & Medicinal Botany	Monographs of drugs with reference to biological sources, geographical distribution, common varieties, macro and microscopic characters, chemical constituents, therapeutic uses, adulterants- *Strychnos* seeds, *Senna* leaves, Clove buds, *Allium sativum*, *Acorus calamus* and *Curcuma longa*	15	• Pharmacognosy by C. K. Kokate, Mr. S. B. Gokhale, A. P. Purohit , Nirali Prakashan • Practical Pharamoconosy Dr. K. R. Khandelwal -	• Chalk and board method • Students will perform experiment to describe macroscopic and microscopic characters; Identify active constituent by performing chemical

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			Nirali Prakashan	tests and TLCs.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana DEPARTMENT: Botany

CLASS: F.Y. B.Sc. - Biochemistry SEMESTER: II MONTH: November ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

- Define Pharamconosy
- Define and give examples of primary and secondary metabolites
- Compare and contrast between primary and secondary metabolites
- Explain the role of primary and secondary metabolites in plants
- Discuss the importance of secondary metabolites for humans as a source of medicine.
- Identify grandma's pouch as a source of medicinal plants.
- Identify the botanical source, describe the part of plant used, and write the active constituents present and medicinal uses: *Oscimum sanctum, Adathoda vasica, Zinziber officinale, Curcuma longa, Santalum album, Aloe vera*.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – II Unit – III - MEDICINAL BOTANY	Concept of primary and secondary metabolites, difference between primary and secondary metabolites.	5	Pharmacognosy by C. K. Kokate, Mr. S. B. Gokhale, A. P. Purohit ,	Chalk and board method

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			Nirali Prakashan	
	Grandma's pouch: Following plants have to be studies with respect to botanical source, part of the plant used, active constituents present and medicinal uses: *Oscimum sanctum, Adathoda vasica, Zinziber officinale, Curcuma longa, Santalum album, Aloe vera*.	10	A new course in Botany, Sheth Publication	Live specimens are shown during practicals

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana DEPARTMENT: Botany

CLASS: S.Y. B.Sc. – BZ & CB SEMESTER: IV MONTH: November ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

- Define ecology
- Describe biogeochemical cycles like Carbon, Nitrogen and Water.
- Discuss the concepts of environmental factors
- Explain soil as edaphic factor
- Perform mechanical analysis of soil and identify type of soil
- Test soil pH
- Explain the process of soil formation and describe soil profile
- Define community and community ecology
- Describe the quantitative and qualitative characters of community
- Identify the ecological instruments
- Estimate quantitatively the organic matter of the soil by Walkley and Blacks Rapid titration method.
- Study the vegetation pattern is by list quadrat method

PAPER, UNIT,	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT

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TITLE		ALLOTED		TOOLS USED
Paper – II, Unit – III, Ecology and Environmental Botany	Biogeochemical Cycles- Carbon, Nitrogen and Water.	05	A new course in Botany, Sheth Publication	• Chalk and board method
	Ecological factors: Concept of environmental factors. Soil as an edaphic factor, Soil composition, types of soil, soil formation, soil profile.	06	Same as above	• Chalk and board method • Students are shown the • Ecological Instruments like Soil thermometer, Soil testing kit, Soil pH, Wind anemometer. • Students perform mechanical analysis of soil by the sieve method to check the soil type • Students experiment to check pH of soil and its role is explained. • Students will experiment to estimate quantitatively the organic matter of the soil by Walkley and Blacks Rapid titration method.

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	Community ecology- Characters of community - Quantitative characters and qualitative characters	04	Same as above	• Chalk and board method • Vegetation pattern is by list quadrat method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Mr. Vinodkumar Didwana_____DEPARTMENT: _____Botany_____

CLASS: _T.Y. B.Sc. – Botany____ SEMESTER: ____VI_____MONTH: ____November____ ACADEMIC YEAR: ___2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- To enlist sources of plants which can be used to extract economically important product like essential oils, fatty oils and vegetable fats
- See the opportunity as to set themselves entrepreneurs in this field.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – IV, Unit – III, Economic Botany	**Essential Oils:** Extraction, perfumes, perfume oils, oil of Rose, Sandalwood, *Patchouli*, *Champaca*, grass oils: *Citronella*, Vetiver. · **Fatty oils:** Drying oil (Linseed and Soyabean oil), semidrying oils (Cotton seed, Sesame oil) and non-drying oils (Olive oil and Peanut oil), · **Vegetable Fats**: Coconut and Palm oil	15	Pharmacognosy by C. K. Kokate, Mr. S. B. Gokhale, A. P. Purohit , Nirali Prakashan	Chalk board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana DEPARTMENT: Botany

CLASS: T.Y. B.Sc. – Botany SEMESTER: VI MONTH: November ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

- Describe different techniques of storage
- Differentiate between natural and artificial method of storage

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – IV, Unit – IV, Post Harvest Technology	**Storage of Plant Produce –**Preservation of Fruits and Vegetables ● Drying (Dehydration) – Natural conditions – Sun drying, ● Artificial Drying – Hot Air Drying, Vacuum Drying, ● Osmotically Dried Fruits, Crystallized or Candied Fruits, Fruit ● Leather, Freeze Drying) ● Freezing (Cold Air Blast System, Liquid Immersion method, ● Plate Freezers, Cryogenic Freezing, Dehydro-Freezing, Freeze ● Drying), ● Canning ● Pickling (in Brine, in Vinegar, Indian Pickles) ● Sugar Concentrates (Jams, Jellies, Fruit juices) ● Food Preservatives	15	http://ecourseonline.iasri.res.in/course/view.php?id=608	Chalk board method

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	• Use of Antioxidants in Preservation			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: F. Y. B. Sc. (CBZ-A) SEMESTER: IMONTH: July-September ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Gain knowledge about Introduction to the anatomy, morphology and habitat of Bryophytes, it will also aid the students in identifying bryophytes, and how to analyze and connect them on evolutionary basis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III, Bryophyta	Introduction to Bryophytes	02	A New Course in Botany, (F.Y. B.Sc.) Sem I & II	Chalk and Talk
	Structure, external and Internal of *Riccia*	02		Chalk and Talk
	Antheridia and Archegonia study along with fertilization events	03		Chalk and Talk
	Summary of the entire life cycle	01		Chalk and Talk
	Systematic position of Riccia	01		Chalk and Talk
	General characters of *Hepaticae*	01		Chalk and Talk
	Revision	02		Chalk and Talk
	Doubt solving session	01		Chalk and Talk
	Quiz and Question bank discussion	02		Grouping and discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: F. Y. B. Sc. (CBZ-A, B, Biochemistry) SEMESTER: II MONTH: November- March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Gain information on the basis of Angiosperm morphology which will serve as the baseline for understanding this topic in S.Y and T.Y. They will also gain information on the diversity of lifeforms in Angiosperms, its evolution, and their morphological peculiarities which aids in identifying and classifying plants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III, Angiosperm (Unit Shared)	Introduction to Angiosperm	01		Chalk and talk
	Defining A leaf	01		Chalk and talk, PowerPoint Presentation, Images through field experience shown.
	Simple Leaf, Leaf Incision	01	WILLIAM T. STEARN (1983). BOTANICAL LATIN, History, Grammar Syntax, Terminology and Vocabulary Third edition, revised DAVID &	Chalk and talk, PowerPoint Presentation, Images through field experience shown, Sharing of Real-life experience w.r.t. the topic so that the students can connect with the subject.
	Compound leaf	01		Chalk and talk, PowerPoint Presentation, Images through field experience shown.

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	Leaf stipules, Leaf margin, Leaf Apex	01	CHARLES Newton Abbot London North Pomfret (Vt).	Chalk and talk, PowerPoint Presentation, Images through field experience shown.
	Leaf venation	01		Chalk and talk, PowerPoint Presentation, Images through field experience shown.
	Leaf phyllotaxy, Leaf Base	01		Chalk and talk, PowerPoint Presentation, Images through field experience shown.
	Leaf shapes	01		Chalk and talk, PowerPoint Presentation, Images through field experience shown.
	Modifications of leaf: spine, tendril, hooks, phyllode, pitcher, Drosera or insectivorous plants	02	A New Course in Botany, (F.Y. B.Sc.) Sem I & II	Documentary on Carnivores plants, Chalk and Talk, PowerPoint Presentation, Images through field experience shown.
	Malvaceae	02	Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical Plant families Identification Handbook, Second edition	Chalk and talk, PowerPoint Presentation, Writing.
	Revision	01		Chalk and talk
	Doubt solving Quiz and Question bank discussion	01		Grouping and discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: S. Y. B. Sc. (BZ, CB) SEMESTER: III MONTH: June-September ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: analyze plants technically with the help of systematic study including morphology, Nomenclature, classification, and identification. Furthermore, Studies of Plant Families will help them know the respective family in and out and also give information on economically valuable plants from that family which could be used as a tool for research and other purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit II, Angiosperms (Unit Shared)	Objectives and Goals of Plant systematic	02	Turland, N.J., et al. 2018. International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress	Chalk and Talk
	Plant Nomenclature	02		Chalk and Talk

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			Shenzhen, China,	
	Amaranthaceae	02	Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical Plant families Identification Handbook, Second edition	Chalk and Talk, Power point presentation
	Palmae	02		Chalk and Talk, Power point presentation
	Revision and question bank Discussion	01		Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: S. Y. B. Sc. (BZ, CB) SEMESTER: IV MONTH: November-February ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: enlarge their horizon for obtaining jobs as horticulture is an ever increasing and trending field which yields good quality jobs. the basic knowledge of this topic will help the students gain the level of analyzing the type of plants to grow, soil content, climatic conditions etc. in making a garden for a company, industry, private sector etc. Studies on Botanical gardens and National Park will enlighten the students in conservation of the natural habitat, and also promote a scientific attitude towards nature. It will also promote research impetus into the students.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit I, Horticulture and Gardening	Introduction to Horticulture	01	A New Course in Botany (S.Y.B.Sc.) (Sem III & IV)	Chalk and Talk, Power point presentation
	Branches of Horticulture Gardening	02		Chalk and Talk, Power point presentation
	Locations in the garden- edges, hedges, lawn, flower beds, avenue, water garden, Focal point.	03		Chalk and Talk, Power point presentation
	Types of garden: Formal and informal gardens	02		Chalk and Talk, Power point presentation, Drawing of the Gardens

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	National Park: Sanjay Gandhi National Park.	01		Chalk and Talk
	Botanical Garden: Veer Mata JijabaiUdyan (Victoria Garden)	02		Chalk and Talk
	Presentations by the students	02		Oral Presentations
	Revision, Question bank Discussion	01		Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: T. Y. B. Sc. (BZ, Botany) SEMESTER: V MONTH: June-October ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Gain a deep insight in the classification system of Bentham and Hooker with its pros and cons which will help them to follow it with more clear understanding. The extensive morphological information on flower and fruit (along with the information on leaf and Inflorescence from F.Y) will serve as the baseline for studying plants in detail in the present year and future helping them to identify, classify and diagnose plants more discreetly. Studies of Plant Families will help them know the respective family in and out and also give information on economically valuable plants from that family which could be used as a tool for research and other purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit II, Angiosperms I	Morphology of flower	04	WILLIAM T. STEARN (1983). BOTANICAL LATIN, History, Grammar Syntax, Terminology and Vocabulary Third edition, revised DAVID & CHARLES Newton Abbot London North Pomfret (Vt).	Chalk and talk, Live material display and analysis, PowerPoint presentation
	Complete classification of Bentham and Hooker (only for prescribed families), Merits and demerits	03	Bentham, G. 1883.Genera Plantarum by Bentham, G. and Hooker, J.D. Reeve, London.	Chalk and talk

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	Capparidaceae	02	Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical Plant families Identification Handbook, Second edition	Chalk and talk, Live material display and analysis, PowerPoint presentation
	Umbelliferae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Cucurbitaceae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Rubiaceae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Solanaceae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Commelinaceae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Graminae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Revision	01		Chalk and talk
	Quiz	01		Chalk and talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: T. Y. B. Sc. (BZ, Botany) SEMESTER: V MONTH: June-October ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Will gain insight into the details of pharmacognosy and the pharmaceutical monographs. They will be made aware about the importance of plants for human health and how it is used their entire methodology and its details. The topic will generate research aura in students to study plants for their uses in order to cure more and more diseases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV, Unit IV, Pharmacognosy and Medicinal Botany (Unit Shared)	Monographs of drugs with reference to biological sources, geographical distribution, common varieties, macro and microscopic characters, chemical constituents, therapeutic uses, adulterants	01	Pharmacognosy by Kokate, Purohit and Gokhale, Nirali Publications	Talk
	Strychnos seeds	02		PowerPoint presentation
	Senna leaves	02		PowerPoint presentation
	Clove buds	02		PowerPoint presentation
	Revision	01		PowerPoint presentation
	Quiz/Test	01		Chalk and talk

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: T. Y. B. Sc. (BZ, Botany) SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Gain a deep insight in the classification system of Hutchinson's classification with its pros and cons which will help them to follow it with more clear understanding. Studies of Plant Families will help them know the respective family in and out and also give information on economically valuable plants from that family which could be used as a tool for research and other purposes. Study of Botanical Survey of India will give the students an insight into the activities that they conduct on a National scale to provide to the knowledge of plant taxonomy and the varied type of work the do. The knowledge of Botanical gardens in India aid in increasing their knowledge on the plants and their importance to be conserved.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit I, Angiosperms II	Rhamnaceae	02	Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical Plant families Identification Handbook, Second edition	Chalk and talk, Live material display and analysis, PowerPoint presentation
	Combretaceae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Asclepiadaceae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Labiatae	02		Chalk and talk, Live material display and analysis, PowerPoint

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				presentation
	Euphorbiaceae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Cannaceae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Hutchinson's classification – merits and demerits	02	Biological discussions online	Chalk and talk
	Botanical survey of India and regional branches of India	02	www.bsi.gov.in	Website study, chalk and talk
	Indian Botanic Garden, Howrah	02	Wikipedia BSI	chalk and talk, PowerPoint presentation
	National Botanic Garden (NBRI) Lucknow	02		chalk and talk, PowerPoint presentation
	Lloyd Botanic Garden, Darjeeling & Lalbaugh or Mysore State Botanic Garden Bangalore	01		chalk and talk, PowerPoint presentation
	Revision	01		chalk and talk
	Quiz/Test	01		chalk and talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Bioanalytical Science

CLASS: M.Sc. Part I SEMESTER: I MONTH: October-December ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: help the students in getting basic information on how to start with plant analysis to obtain drugs and products form human usage. It will explain the proper and authentic methodology to be considered to proceed with research in understanding and drawing proper conclusion for plant-based products and drugs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III, Pharmacognosy	Introduction, Plants parts and their medicinal uses, example of one plant to be given	02		PowerPoint Presentation
	Concepts of Ethnobotany, Ethnomedicine and pharmacology.	03	Importance Of Ethnobotanical Investigation by Melvin R. Gzlmore	PowerPoint Presentation
	Phytogeography regions to be explained with respect to endemism and hotspots (explain only concepts)	02		PowerPoint Presentation
	Herbaria evaluation to include plant collection, Authentication, storage and drying techniques, photomicrography – digital herbarium – camera	03	www.rbg.ca How to Collect Herbarium Specimens A guide prepared by the Western	PowerPoint Presentation

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	lucida		Australian Herbarium February 2008	
	Raw material evaluation to include, Microbial load, Raw material characterization, Proximate evaluation,	04		PowerPoint Presentation
	Concepts of GAP, & GHP for medicinal plant- Only introduction	01	Good Agricultural and Collection Practices and Good Manufacturing Practices for Botanical Materials. 2017 TNAU Agri Tech Portal_GAP	PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Bioanalytical Science

CLASS: M.Sc. Part I SEMESTER: II MONTH: January-April ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: gain basic knowledge on the type of phytoconstituents a plant can hold and the basic differences and details of the same. How to extract them-the entire process so as to aid in research for new drug discoveries and support present knowledge on plant phytoconstituents

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II, Phytochemistry	Natural drug substances from plants (primary and secondary metabolites)	02	Wikipedia	PowerPoint Presentation
	Nitrogenous	02		PowerPoint Presentation
	Non nitrogenous and Isoprenoids	01		PowerPoint Presentation
	Secondary drug metabolite production with special reference with integrated pathway	02		PowerPoint Presentation
	Key Factors affecting synthesis of secondary metabolites	02		PowerPoint Presentation
	Choice of solvent for extraction of phytoconstituents	02		PowerPoint Presentation

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	Extraction Techniques of Crude plant material w.r.t maceration, Types- Kwatha and Swarasa	02	Unique methods of (Juice) extraction in Ayurveda Swarasa Shingadiya RK, et al.	PowerPoint Presentation
	Extraction Techniques of Crude plant material: percolation and steam distillation	02		PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Bioanalytical Science

CLASS: M.Sc. Part I SEMESTER: II MONTH: January-April ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: gain intensive knowledge on the mode of drug action and how it affects the human body. from the Route of entry, Absorption and Distribution, Metabolism & elimination, etc. everything will be understood. So that the students obtain information required to treat various ailments with various types of Drugs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV, Unit III, Basic Pharmacokinetics, Pharmacodynamics and Drug properties	Basic concepts of Pharmacokinetcs & pharmacodynamics	01	2013. D. M. Brahamankar & Sunil B. Jaiswal. Biopharmaceutics and Pharmacokinetics A Treatise.	PowerPoint Presentation
	Different pharmacokinetic & pharmacodynamics parameters and their meanings	02		PowerPoint Presentation
	Basic techniques of evaluating Pharmacokinetic & pharmacodynamics parameters	02		PowerPoint Presentation
	Basic types of models in pharmacokinetics & pharmacodynamics	01		PowerPoint Presentation
	General classification of Drugs and their formulations	02		PowerPoint Presentation

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	Drug – Route of entry, Absorption and Distribution with examples	04		PowerPoint Presentation
	Concepts of Drug Metabolism & elimination with examples	02		PowerPoint Presentation
	Adverse Drug reactions (ADRs) and Serious Adverse Events (SAEs)	01		PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV KAMALAKAR SATVI DEPARTMENT: Botany CLASS: F.Y.BSc SEMESTER: I

MONTH: November to December ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: understand the classification, structure, function, ecology, life cycle of the fungi. *Examples Aspergillus* and *Rhizopus* are common fungi and uses of the fungi.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II Fungi	Introduction and classification of Fungi	1	**N.C Kumar, The text book of** Botany, Himalaya publication House 2008 **Singh V et al, text book of Botany,** Global media, 2009	Chalk and Board Diagrams
	Structure, life cycle and systematic position of *Rhizopus* and *Aspergillus*	2		
	Economic importance of Fungi.	1		
	Modes of nutrition in Fungi (Saprophytism and Parasitism).	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: S.Y BSc SEMESTER: III

MONTH: September to December ACADEMIC YEAR: 2019-2020

- LEARNING OBJECTIVE/S: Ultra Structure and functions of cell organelles: Mitochondrion (membranes, cristae, F1 particles and matrix) , Peroxisomes and Glyoxysomes, Ribosomes (prokaryotic, eukaryotic and subunits)

 Cell Division and its significance Cell Cycle, structure of Interphase Nucleus(nuclear envelop, chromatin network, nucleolus and nucleoplasm) ,

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II Cell Biology	Ultra Structure and functions of the cell organelles:	1	**Golatkar** V. et .al **The new Course in Botany** S.YB.Sc Sem 3 and 4 Sheath Prakashan	Chalk and Board Diagrams
	Mitochondrion(membranes, cristae, F1 particles and matrix)	2		
	Peroxisomes and Glyoxysomes Ribosomes (prokaryotic, eukaryotic and subunits)	2		
	Cell Cycle, structure of Interphase Nucleus (nuclear envelop, chromatin network, nucleolus and nucleoplasm) Mitosis & Meiosis Differences between Mitosis and Meiosis	3		
	Nucleic Acids: Types, structure and functions of DNA and RNA	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: T.Y. BSc SEMESTER: V

MONTH August - December ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: The students would be able: study Fungi, Classification and general characters of Basidiomycetes, life cycle of *Agaricus*, Life cycle of *Puccinia*, Classification and general characters of Deutromycetes and life cycle of *Alternaria*.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III Fungi	Basidiomycetes: Classification and General characters	2	Botany for degree students Fungi B.R. Vashishta A.K. Sinha College Botany Vol. II Gangulee and Kar	Chalk and Board Diagram
	Life cycle of Agaricus	4		
	Life cycle of Puccinia	4		
	Deuteromycetae: Classification and General Characters	2		
	Life cycle of Alternaria	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: T.Y. BSc SEMESTER: V

MONTH August - December ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: The students would be able: Learn about bioremediation, phytoremediation, plant succession

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
Paper III, Unit III, Environmental Botany	Bioremediation: Principles, factors responsible and microbial population in bioremediation.	2	Ecology and Envirnment by P.D.Sharma	Chalk and Board
	Phytoremediation: Metals, Organic pollutants	2		
	Plant succession: Hydrosere and Xerosere – Formation of Barren Space,	4		
	Succession on the Land Citing Different Seres leading up to the Climax,	4		
	Succession in Water, Ecesis, Poly and Mono-climax theories	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Swarupa V. Agnihotri DEPARTMENT: Botany CLASS: FY. CBZ A SEMESTER: IMONTH: October ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Learners will able to get knowledge about differences between eukaryotic and prokaryotic cell and will obtain in depth information on the structure of a plant cell wall and plasma membrane.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit III Genetics	1 Phenotype/Genotype, Mendelian	5	A New Course in Botany (F.Y.B.Sc) Sem I and II	Power point presentation, Google meet
	Genetics- monohybrid, dihybrid; test cross; back cross ratios.	5		Power point presentation, Google meet
	Epistatic and non epistatic interactions; multiple alleles.	5		Power point presentation, Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: Dr. Swarupa Vishal Agnihotri DEPARTMENT: Botany CLASS: T.Y. B.Sc. (Botany and BZ) SEMESTER: V

MONTH: August ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Students will gain in depth information about different methods of protoplast fusion and its application in agriculture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit IV Plant tissue culture	**Protoplast fusion and somatic hybridization**		Plant tissue culture, by, Purohit, S.S	Google meet, Power point presentation
	Concepts, definition, and various methods of protoplast fusion	3		
	Application of somatic hybridization in agriculture	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: Dr. Swarupa V. Agnihotri **DEPARTMENT**: Botany CLASS: T.Y.B.Sc. Botany SEMESTER: VMONTH: August ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Learners will able to know about types of microbes and their life cycles. Students will gain the information about colony characters and staining procedure for microbes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit I, Microbiology	Types of microbes: Viruses, Bacteria, Algae, Fungi, Protozoa, Mycoplasma and Actinomycetes	6	Introduction to microbiology by Pelczar,JR., Chan, O.S., Krieg, H.R. Fundamental principles of bacteriology, by, Salle, A.J.	Google meet, Power point presentations
	Sterilization, media, staining, colony characters	6		Google meet, Power point presentations
	Pure culture	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **FYBSc** SEMESTER: I

MONTH: **July to November** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: To acquire the knowledge about working and functioning of the environment and its component.
The learners will be able to : To understand the basic component of environment, their interconnections and importance to maintain the balance between each other. That means Mediation of energy through the environmental distribution and utilization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II **ECOLOGY**	Energy pyramids, energy flow in an ecosystem.	04	1. Ecology by E P Odum 2. IGNTU eContent 3. NPTEL 4. ePGPathshala	1. PowerPoint presentations 2. Chalk and Board
	Types of ecosystems: aquatic and terrestrial.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **SYBSc** SEMESTER: III
MONTH: **July to November** ACADEMIC YEAR: **2019-2020**
LEARNING OBJECTIVE/S: To being able to understand the economic values of some plants with respect to medicinal benefits.

The learners will be able to : To understand the commercial values of plant for earning capital. Better use of some medicinal herbs with its aromatheroptic uses and their health benefits. To understand the plant based new energy sources for traditional hydrocarbon fuels.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PaperIII Unit 3 Industry based on plant products	Aromatherapy- Introduction, Uses with few examples. Jojoba, lemon, jasmin	05	1. Textbook by sheth publication 2. Economic Botany: Kochar or Verma 3. Biology Discussion website 4. IGNTU eContent 5. NPTEL 6. ePGPathshala	1. PowerPoint presentations 2. Diagram 3. Chalk and Board
	Botanical and nutraceuticals -Spirulina, Vanillin, Garcinia indica/ Garcinia cambogia, Chlorella, and Kale.	08		
	Enzymes industry: Cellulases, Papain, Bromelain	04		
	Biofuels.	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **TYBSc** SEMESTER: V

MONTH: **July to November** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: To acquire the knowledge about the physiological system of plant working and functioning.
The learners will be able to : To enables the understanding about water and mineral uptake and distribution in to plant system. Also to relate the physical factors of which are responsible for its distribution. To evaluate the Tissue/ cell system functioning and working factors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II Plant Physiology I	**Water relations:** Potential, osmosis, transpiration, imbibition,	04	1. Introduction to Plant Physiology by Noggle and Fritz, Prentice Hall Publishers(2002), 2. Plant Physiology by Salisbury and Ross CBS Publishers, 3. Plant Physiology by Taiz and Zeiger Sinauer Associates Inc. Publishers,2002 1. Biology Discussion website 2. IGNTU eContent 3. NPTEL 4. ePGPathshala	Chalk and Board Method, Model Construction and Demonstration, Experimental Simulation, Diagram Charts PowerPoint presentations
	Solute transport: Transport of ions across cell membranes, active and passive transport, carriers, channels and pumps.	04		
	Translocation of solutes: Composition of phloem sap, girdling experiment.	04		
	Pressure flow model (Munch's hypothesis): Phloem loading and unloading, anatomy of sieve tube elements and mechanisms of sieve tube translocation.	04		
	Mineral Nutrition: Role of Macro and Micro nutrients, physiological functions and deficiency symptoms.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **TYBSc** SEMESTER: V

MONTH: **July to November** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: To understand basic importance of conserving the genetic information about an organism and its genetic charecters.

The learners will be able to : It enable to understand about genetic information and its processing thus ultimately how it can conserve into digital as well as other physical form. Also helps to evaluate the methods for analysis of the genetic materials and related data types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit II: Plant Biotechnology I	Construction of genomic DNA libraries, Chromosome libraries and c- DNA libraries.	06	An introduction to Genetic analysis Griffith Freeman and Company(2000)	1. Chalk and Board method, 2. Computer Systems 3. PowerPoint presentation, 4. Internet Service, 5. Software, 6. Projects, 7. Protocol Charts
	Identification of specific cloned sequences in c-DNA libraries and Genomic libraries	04	Plant Biotechnology by K. Ramawat	
	Analysis of genes and gene transcripts –Restriction enzyme, analysis of cloned DNA sequences. Hybridization(Southern Hybridization)	06	Genetics by Russel Peter Adison Wesley Longman Inc.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_DEPARTMENT: _Botany_ CLASS: _F.Y.B.Sc (CBZ & Biochemistry) SEMESTER: _IMONTH: _June to October_ ACADEMIC YEAR: 2018-19___

LEARNING OBJECTIVE/S:
The learners will be able to_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper–II, Unit-I Cell Biology	1.General structure of plant cell: Cell wall, Plasma membrane (Bilayer lipid structure, fluid mosaic model)	15	F.Y.B.Sc. Textbook	PowerPoint Presentations and Chalk-Board method
	2.Ultra structure and functions of the following cell organelles: Endoplasmic reticulum and Chloroplast			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15____

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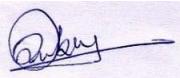
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____ CLASS: _F.Y.B.Sc (CBZ & Biochemistry) SEMESTER: _II___ MONTH: November to March_ ACADEMIC YEAR: 2018-19___

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper–I, Unit–II Pteridophyta	1.Structure, life cycle, systematic position and alternation of generations in *Nephrolepis*	15	F.Y.B.Sc. Textbook	PowerPoint Presentations and Chalk-Board method
	2.Stelar evolution.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Atul Dubey DEPARTMENT: Botany CLASS: S.Y.B.Sc (CB & BZ) SEMESTER: III MONTH: June to October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED		REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I, Unit-I	1.General Account of Class Anthocerotae and Musci	02		S.Y.B.Sc. Textbook	PowerPoint Presentations and Chalk-Board method
Thallophyta (Algae) and Bryophyta	2.Structure, life cycle and systematic position of a. *Anthoceros* b. *Funaria*	05			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany___ CLASS: _S.Y.B.Sc (CB & BZ)

SEMESTER: _IV___MONTH: November to March_ ACADEMIC YEAR: 2018-19___

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I, UnitIII Gymnosperms	1.Salient features, classification up to orders (with examples of each) and economic importance of Coniferophyta (Chamberlain's system of classification).	15	S.Y.B.Sc. Textbook	PowerPoint Presentations and Chalk-Board method
	2.Structure, life cycle and systematic position of *Pinus*			
	3.Structure and systematic position of the form genus *Cordaites.*			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____CLASS: _T.Y.B.Sc (Botany & BZ)

SEMESTER: _V__ MONTH: _June to October_ ACADEMIC YEAR: 2018-19___

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II, Unit-I Paleobotany	1.*Calamites* – All form genera Stem, leaf, male and female fructification.	15	Cryptogamic Botany Vol. - I & II (G.M. Smith, Mcg raw Hill)	PowerPoint Presentations and Chalk-Board method
	2.*Lepidodendron* – All form genera Stem, leaf, male and female fructification.		College botany Vol. – II (Gangulee, Das and Dutta)	
	3.*Lyginopteris*– All form genera Stem, leaf, male and female fructification.			
	4.*Pentoxylon* - – All form genera			
	5.Contribution of Birbal Sahni, Birbal Sahni Institute of Pleobotany, Lucknow.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____

CLASS: _T.Y.B.Sc (Botany & BZ) SEMESTER: _V__ MONTH: _June to October_ ACADEMIC YEAR: 2018-19___

LEARNING OBJECTIVE/S:
The learners will be able to :_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV, Unit-I Ethnobotany and Mushroom Industry	Mushroom Industry: 1.Detail general account of production of mushrooms with respect to methods of Composting, spawning, casing, harvesting of mushroom. Cultivation of *Pleurotus, Agaricus, Volvariella* Mushroom to be studied in detail.	7		PowerPoint Presentations
	2.General account of mushrooms: Nutritional value, picking and packaging, economic importance.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____7_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____CLASS: T.Y.B.Sc (Botany & BZ)

SEMESTER: _VI__ MONTH: _November to March_ ACADEMIC YEAR: 2018-19___

LEARNING OBJECTIVE/S:
The learners will be able to : _____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I, UnitIII Bryophytes and Pteridophytes: Applied Aspects	1.Ecology of Bryophytes	15	Economic Botany (A.F. Hill)	PowerPoint Presentations and ChalkBoard method
	2.Economic importance of Bryophytes		Textbook of Pteridophyta (Vashishtha)	
	3.Bryophytes as indicators			
	4.Evolution of Sporophyte and Gametophyte			
	5.Economic importance of Pteridophytes			
	6.Diversity and distribution of Indian Pteridophytes			
	7.Types of sori and evolution of sori			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Atul Dubey_____DEPARTMENT: _Botany_____ CLASS: _T.Y.B.Sc (Botany & BZ)

SEMESTER: _VI__ MONTH: _ November to March_ ACADEMIC YEAR: 2018-19___

LEARNING OBJECTIVE/S:
The learners will be able to : _____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III, Unit-I Plant Biochemistry	Enzymes: Nomenclature, classification, mode of action, Enzyme kinetics, Michaelis Menten Equation, competitive, non-competitive and uncompetitive inhibitors.	8	Practical Biochemistry (David Plummer)	PowerPoint Presentations and Chalk-Board method
			Principles of Biochemistry (David Nelson and Michael Cox)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: FY.BSc SEMESTER: I

MONTH : ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: understand the classification, structure, function, ecology, life cycle of the fungi. *Examples Aspergillus* and *Rhizopus* are common fungi and understand commercial the industrial uses of the fungi

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II Fungi	Introduction and classification of Fungi	3	**N.C Kumar,The text book of** Botany, Himalaya publication House 2008 **Singh V et al, text book of Botany,** Global media, 2009 **Campbells,Reece** et al Biology Eight edition Bejamin Cummings	Power point presentation and chalk and board
	Structure, life cycle and systematic position of *Rhizopus* and *Aspergillus*	8		Power point presentation and chalk and board
	Economic importance of Fungi.	2		Power point presentation and chalk and board
	Modes of nutrition in Fungi (Saprophytism and Parasitism).	2		Power point presentation and chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANT CLASS: F.Y BSc SEMESTER: II

MONTH 4 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The learners will be able to learners will be able to relate primary growth in internal stem and root structure with function and appreciate the salient features of the root and stem

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit II Anatomy	Introduction of Anatomy and its importance in biology	1	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns Introductory plant Biology** edition 12 Mcgraw Hills	Power point presentation and chalk and board
	Simple Tissue: Parenchymatous Tissue, Collenchymatous Tissue and Sclerenchymatous tissue	3		Power point presentation and chalk and board
	Complex Tissue: Xylem, Phloem	3		Power point presentation and chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: S.Y BSc SEMESTER: III

MONTH 4 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The learners will be able to provide knowledge about environmental factors and natural resources and their importance in sustainable development

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit II Forestry and Economic Botany	Forestry: outline types of forest in India	3	**Golatkar** V. et .al **The new Course in Botany** S.YB.Sc Sem 3 and 4 Sheath Prakashan	Power point presentation and chalk and board
	Forestry: Agroforestry, Urban Forestry, Organic farming, Silviculture	4		Power point presentation and chalk and board
	Economic Botany: Types of fibres, Jute and Cotton Current trend in fibres industries	3		Power point presentation and chalk and board
	Spices and Condiments: Saffron and Cardamom	3		Power point presentation and chalk and board
	Commercial market of spices	2		Power point presentation and chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: S.Y BSc SEMESTER: IV

MONTH 4 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The learners will be able to relate secondary growth in internal stem and root structure with function and appreciate the salient features of the root and stem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit I Anatomy	Introduction and basics of plant anatomy	1	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns Introductory plant Biology** edition 12 Mcgraw Hills	Chalk and Board
	Normal secondary growth in Dicotyledonous stem and root.	2		Power point presentation and chalk and board
	Growth ring	1		Power point presentation and chalk and board
	Periderm, lenticel, Tylosis, Heart wood and sap wood	3		Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: T.Y. BSc SEMESTER: V

MONTH 4 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The students would be able: To relate anomalies in internal stem structure with function and appreciate the salient features of the root stem transition zone. To get exposure to plant anatomy and learn to apply it in various fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit III Anatomy	Introduction to Anomalous secondary growth	2	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns Introductory plant Biology** edition 12 Mcgraw Hills	Power point presentation and chalk and board
	Anomalous secondary growth in the Stems of *Bignonia,Salvadora, Achyranthes, Dracaena.*	6		Power point presentation and chalk and board
	Storage roots of Beet, Radish	3		Power point presentation and chalk and board
	Root stem transition	2		Power point presentation and chalk and board
	Types of Stomata– Anomocytic, Anisocytic, Diacytic, Paracytic, and Graminaceous	2		Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: T.Y BSc SEMESTER: VI

MONTH 4 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The learners will be able to study in detail classification and general characters of Pteridophytes and identify as well as describe the life cycles of *Marselia* and *Adiantum*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II Pteridophyta (G. M. Smith Classification System to be followed)	Introduction to Pteridophyta	1	**Singh V et al, text book of Botany,** Global media, 2009 **Bendre. Kumar A text book of** Practical Botany 1 Rastogi publication 2010. **Michael G Simpson Plant systematics** Elsevier Publication 2006	Chalk and Board
	Introduction to G. M. Smith Classification System	1		Power Point Presentation
	Pterophyta - Classification, general characters; Life cycle of *Adiantum*	2		Power point presentation and chalk and board
	Pterophyta - Classification, general characters; Life cycle of *Marselia*	3		Power point presentation and chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: Applied component (Horticulture) CLASS: T.Y BSc

SEMESTER: V MONTH 4 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/: To explore the natural and artificial propagation and their use in commercial production.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit 2 PROPAGATION PRACTICES	**By Seeds** Advantages and disadvantages, method of seed propagation Production of seeds, Handling, Collection and Storage Sowing and transplantation.	2	**P.Parvatha Reddy Sustainable Crop protection under protected cultivation** Springer E book, **W J Lewis Grafting and Budding a** practical guide for fruit crops and ornamental plant second edition.	Power point presentation and chalk and board
	By specialized Vegetative structures Bulbs, Tubers, Corms, Rhizomes, Root stock, runners, Offsets and suckers.	2		Power point presentation and chalk and board
	Artificial methods of plant propagation Cutting– Root **cutting**, Stem cuttings, and leaf cuttings. rooting. **Layering** – Definition, Types: Simple, compound, (Serpentine) Tip, Trench, Mound, Air Layering. **Grafting**-Definition, advantages and disadvantages. Types: **Budding** – Definition, advantages and disadvantages. Types: T- budding, shield, Patch, ring budding.	08		Power point presentation and chalk and board
	Developing new varieties: Technique of Emasculation	3		Power point presentation and chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: Applied component (Horticulture) CLASS: T.Y BSc

SEMESTER: VI MONTH 4 ACADEMIC YEAR: 2018-19

- LEARNING OBJECTIVE/STThe students would be able: To gain insight into the green House technology: Layout, types, Irrigation and construction with applications in agriculture and horticulture and to learn about the commercial production fruits and vegetables in relation to propagation, post plantation care, harvesting and post-harvest management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit 2 PROPAGATION PRACTICES	High –tech Horticultural production- Green house technology- Meaning, types, layout & construction, irrigation systems. Care & attention. Hardening of plants. Space gardens.	6	**P.Parvatha Reddy Sustainable Crop protection under protected cultivation** Springer E book, **E Course Krishi shiksha, green** house management Agriculture Engineering.	Power Point Presentation chalk and Board
	Floriculture – Scope & importance, soil and climatic requirement and cultivation practices and Economics of greenhouse production of Gerbera, Carnation, Roses, Orchids. Propagation techniques, packing and marketing, enhancing and delaying period of bloom by special methods. Floral decoration, Florist shop management.	9		Power Point Presentation And chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAV DEPARTMENT: BOTANY CLASS: FY (CBZ / BIOCHEMISTRY)

SEMESTER: I MONTH: JULY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: Gain knowledge about the general characters of class Hepaticaceae. And learn about the structure, life cycle and systematic position of *Riccia*.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1, Unit 3 BRYOPHYTA	1) General characters of Hepaticae	03	A New Course in Botany, by Sheth Publications.	Chalk and Talk
	2) Structure, life cycle and systematic position of *Riccia*.	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAV DEPARTMENT: BOTANY CLASS: FY (CBZ/ BIOCHEMISTRY) SEMESTER:II

MONTH: NOVEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: Learn about different types of inflorescence and study about family Amaryllidaceae of monocots.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 3 ANGIOSPERMS	1) Inflorescence: Racemose: simple raceme, spike, catkin, spadix, panicle. Cymose: monochasial, dichasial, polychasial. Compound: corymb, umbel, cyathium, capitulum, verticellaster, hypanthodium.	5	A New course in Botany by Sheth Publications.	Chalk and Talk PPT
	2) Study of family Amaryllidaceae.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAV DEPARTMENT: BOTANY CLASS: SY (CB/BZ) SEMESTER: III

MONTH: JUNE ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: Gain knowledge about Taxonomy in relation to Embryology, Cytology and Ecology. They will be able to learn about vegetative, floral characters and economic importance of the families Leguminosae and Asteraceae.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2 ANGIOSPERMS	1) Taxonomy in relation to: Embryology, Cytology, Ecology	3	A New course in Botany by Sheth Publications	Chalk and Talk Plant material (flowering twigs of the plants of respective families)
	2) With the help of Bentham and Hooker's system of classification for flowering plants, study of families Leguminosae and Asteraceae	5	Plant Taxonomy by O P Sharma	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: MADHULIKA YADAV DEPARTMENT: BOTANY CLASS: SY (CB/ BZ) SEMESTER:IV

MONTH: NOVEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: The learners will be able to : Gain knowledge about salient features and classification of divisions Psilophyta and Lepidophyta. Study about the systematic position, structure and life cycle of pteridophyte *Selaginella*. Learn about the geological time scale, formation and types of fossils. Study about fossil pteredophyte *Rhynia*.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2 PTERIDOPHYTA AND PALEOBOTANY PTEREDOPHYTE	1) Salient features and classification upto order (with examples of each) of Psilophyta and Lepidophyta.	4	A New Course in Botany by Sheth Publications.	Chalk and Talk PPT
	2) Structure, life cycle and systematic position of *Selaginella.*	6		
	3) Paleobotany- The geological time scale; Formation and types of fossils; Structure and systematic position of form genus *Rhynia*.	5	Botany for Degree students Pteredophyta by A K Sinha, Anil Kumar and P C Vashistha	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAV DEPARTMENT: BOTANY CLASS: TY (BOTANY) SEMESTER: V

MONTH: JUNE ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the salient features of three major groups of algae, their life cycle patterns with suitable example; to be able to identify them

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2 ALGAE	1) Classification and General Characters: Distribution, Cell structure, pigments, reserve food, range of thallus, reproduction: asexual and sexual, Alternation of Generations, Economic importance of Divisions Rhodophyta, Xanthophyta and Bacillariophyta.	05	College Botany Vol II by Gangulee Das and Dutta	Chalk and Talk PPT
	2) Structure, life cycle and systematic position of *Polysiphonia, Batrachospermum, Vaucheria* and *Pinnularia.*	10	Crytogamic Botany Vol I by G M Smith	
			Botany for Degree Students- Algae by B R Vashistha.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAV DEPARTMENT: BOTANY CLASS: TY (BOTANY/ BZ) SEMESTER: V

MONTH: JUNE ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: Get exposure to pollen study and learn to apply it in various fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit 4 PALYNOLOGY	1) Pollen Morphology	03	Embryology of Plants by Bhojwani and Bhatnagar	Chalk and Talk PPT Video clip
	2) Pollen viability- storage	02	An introduction to embryology of Angiosperms by P Maheshwari	
	3) Germination and growth of pollen	02		
	4) Application of Palynology in honey industry, coal and oil exploration, Aerobiology and pollen allergies, forensic science.	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAV DEPARTMENT: BOTANY CLASS: TY BOTANY SEMESTER: VI

MONTH: NOVEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: The learners will be able to: Identify, describe and study in detail the life cycles of three Gymnosperms. And study the economic importance of Gymnosperms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 4 GYMNOSPERMS	1) Life cycle of *Biota* (*Thuja*), Classification	04	College Botany by Gangulee and Kar	Chalk and Talk PPT
	2) Life cycle of *Gnetum*, Classification	04	Botany for Degree students Gymnosperms by P C Vashishta	
	3) Life cycle of *Ephedra*, Classification	04		
	4) Economic importance of Gymnosperms.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MADHULIKA YADAV DEPARTMENT: BOTANY CLASS: TY (BOTANY/ BZSEMESTER: VI

MONTH: NOVEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:The learners will be able to: Understand development of plant male and female gametophyte, embryonic structure and development

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ ICT TOOLS USED
Paper 2 Unit 3 EMBRYOLOGY	1) Microsporogenesis.	05	Embryology of Plants by Bhojwani and Bhatnagar	Chalk and Talk
	2) Megasporogenesis- Development of monosporic type, examples of all embryo sacs.	04	An introduction to embryology of Angiosperms by P Maheshwari	
	3)Types of ovules.	01		
	4) Double fertilization.	02		
	5) Development of embryo- *Capsella*	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **F.Y. B.Sc.** SEMESTER: I

MONTH: **July to November** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE: To acquire the knowledge about entire life cycle of an Algae and their ecological & economic importance.

The learners will be able to: understand the importance of Algae in different fields (ecosystem, pharmaceutical, food, as primary producers etc.), their forms & flourishment and also its importance as ancestors in evolution of plants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I **ALGAE**	Structure, life cycle and systematic position of ***Nostoc* and *Spirogyra*.**	12	Textbook by sheth publication College Botany Volume II (Gangulee & Kar)	Chalk & Board method. Power point presentation
	Economic importance of Algae.	02	Textbook by sheth publication College Botany Volume II (Gangulee & Kar)	Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **F.Y. B.Sc.** SEMESTER: II

MONTH: **December to April** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: To understand the importance of light energy and their utilization for preparation of food in green plants that act as primary energy sources for every life form on earth.

The learners will be able to: understand how energy transfer takes place from sun to earth and further converted to chemical energy. It enables to understand the phase transfer of the energy its conversion to various chemical form, and also this shows the biotic abiotic interaction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II PHYSIOLOGY	Photosynthesis:	02	Textbook by sheth publication Plant Physiology by Taiz and Zeiger	Chalk & Board method. Diagram construction. Models
	Light reactions, photolysis of water, photophosphorylation (cyclic and non cyclic),	06	Textbook by sheth publication Plant Physiology by Taiz and Zeiger	Chalk & Board method. Diagram construction. Models
	Carbon fixation phase (C3, C4 and CAM pathways).	06	Textbook by sheth publication Plant Physiology by Taiz and Zeiger	Chalk & Board method. Diagram construction. Models

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **S.Y. B.Sc.** SEMESTER: III

MONTH: **July to November** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: To acknowledge about molecules existing in plants, their role in metabolic reaction.

The learners will be able to: understand what exactly the biological molecules are, their structures, synthesis process including regulation, and their role in metabolism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II **Unit 3** **Molecular Biology**	**DNA replication** : Modes of Replication, Messelson and Stahl Experiment, **DNA replication in prokaryotes and eukaryotes**-enzymes involved and molecular mechanism of replication.	07	Textbook by sheth publication *i*GENETICS: *A molecular approach* by Peter J. Russell	Chalk and Board method, Power point presentation,
	. **Protein Synthesis**: ○ Central dogma of Protein synthesis ○ Transcription in prokaryotes and eukaryotes: promoter sites, initiation, elongation and termination. ○RNA processing: Adenylation & Capping.	08	Textbook by sheth publication *i*GENETICS : *A molecular approach* by Peter J. Russell	Chalk and Board method, Power point presentation,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **S.Y. B.Sc.** SEMESTER: IV

MONTH: **December to April** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: To gain the knowledge of physiological mechanism related to the respiration in plants and specific responses given by plants towards the Photosynthetic region of light spectrum.

The learners will be able to: understand about respiration mechanism and its machinery in an organism. To evaluate the working conditions of phytochromes and their physiological action.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II : Plant Physiology and Plant Biochemistry	**Respiration: Aerobic:** Glycolysis, TCA Cycle, ETS & Energetic of respiration; Anaerobic respiration.	10	Textbook by sheth publication, Plant Physiology by Taiz and Zeiger	Chalk and Board method, Powerpoint presentation,
	Photorespiration	01	Textbook by sheth publication, Plant Physiology by Taiz and Zeiger	Chalk and Board method, Powerpoint presentation,
	Photoperiodism: Phytochrome Response and Vernalization with reference to flowering in higher plants, Physico-chemical properties of phytochrome, Pr-Pfr interconversion, role of phytochrome in flowering of SDPs and LDPs;	05	Textbook by sheth publication, Plant Physiology by Taiz and Zeiger	Chalk and Board method, Powerpoint presentation,
	Vernalization mechanisms and applications.	02	Textbook by sheth publication, Plant Physiology by Taiz and Zeiger	Chalk and Board method, Powerpoint presentation,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **T.Y. B.Sc.** SEMESTER: V

MONTH: **July to November** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: Awareness about harmful pathological diseases in economic important plants.
The learners will be able to: study about different pathological diseases in plants, causal organisms that cause diseases, symptoms of diseases, affected parts of plants, effect of it on plant process, disease cycle (how disease spread and effect to entire plant and their mechanism) & control/ preventive measures of pathological diseases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit IV** **Plant Pathology**	**Study of plant diseases**: Causative organism, symptoms, predisposing factors, disease cycle and control measures of the following.,	01	College Botany Volume II (Gangulee & Kar)	1. Chalk and Board Method, 2. Power Point Presentation
	White Rust – *Albugo sp.* Tikka disease of ground nut: *Cercospora* Damping off disease: *Pythium* Citrus canker – *Xanthomonas* sp. Leaf curl – leaf curl virus	08		
	Study of Physical, chemical and biological control methods of plant diseases.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **T.Y. B.Sc.** SEMESTER: V

MONTH: **July to November** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: To study the structure & functions of cell, organelles & molecules in an organisms, synthesis of molecules (mRNA & proteins) in the cell.

The learners will be able to: understand detailed structure, functions of cell and its components, synthesis mechanism of molecules and enzymes help in molecular synthesis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III **Unit I** **Cytology And Molecular Biology**	Structure and function of nucleus Structure and function of vacuole Structure and function of giant chromosomes	03	Gene VIII Benjamin lewin Molecular cell biology Textbook by David Baltimore and Harvey lodish	1. Chalk and Board method, 2. PowerPoint presentation,
	The genetic code: Characteristics of the genetic code	02	Genetics by Russel Peter Adison Wesley Longman Inc. (5th edition)	
	Transcription and Translation in Eukaryotes	06	Genetics by Russel Peter Adison Wesley Longman Inc. (5th edition)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **T.Y. B.Sc.** SEMESTER: VI

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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MONTH: **December to April** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: To study about entire life cycle of Bryophytes and also help to acknowledge about the evolution in plants.

The learners will be able to : understand about the evolution in plants (as bryophytes mark the transition to land & origin of vascular plants therefore it link seed & vascular plants to their algal ancestors), morphology and anatomical structure of thallus, various reproduction methods, generations of bryophytes and their interrelationship.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit I** **Bryophyta**	• Life cycle of *Marchantia*	04	Textbook of Bryophyta (Vashishtha) College Botany Volume II (Gangulee & Kar)	1. Chalk and Board method, 2. PowerPoint presentation,
	• Life cycle of *Pelia*	04		
	• Life cycle of *Sphagnum*	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. Pooja S. Tiwari** DEPARTMENT: **Botany** CLASS: **T.Y. B.Sc.** SEMESTER: VI

MONTH: **December to April** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: To study about the chemical characteristics of plants and their reactions.

The learners will be able to: understand the structure of biomolecules (carbohydrates, lipids, proteins) and their role in plants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III **Unit I** **PLANT BIOCHEMISTRY**	Structure of biomolecules: • Carbohydrates (sugars, starch, cellulose, pectin) • Lipids (fatty acids and glycerol), • Proteins (amino acids)	08	Lehninger: Principles of biochemistry Practical Biochemistry (David Plummer)	1. Chalk and Board method, 2. PowerPoint presentation,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BOTANY** CLASS: **S.Y.B.Sc.**

SEMESTER: **IV** MONTH: **JANUARY-APRIL** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to define Biostatistics and its applications.

The learners will be able to understand the concept of correlation and its types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (USBO403) Current trends in Botany Unit 3 **Title:** Biostatistics and Bioinformatics	The Chi-square test Correlation- calculation of coefficient of correlation.	7	Biostatistics by Veer Bala Rastogi Methods in Biostatistics by BK Mahajan Introduction to Biostatistics by Dr. Pranab Kumar Banerjee	Google classroom, Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. NIKHIL CHANDRAKANT TELI** DEPARTMENT: **BOTANY** CLASS: **T.Y.B.Sc.**

SEMESTER: **VI** MONTH: **JANUARY-APRIL** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to define Biostatistics and its applications.

The learners will be able to understand the difference between paired and unpaired t Test..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III (USBOP603) Form and Function-III Unit 4 **Title:** Biostatistics	t-test (paired and unpaired) Problems based on the regression analysis. ANOVA (One way)	15	Biostatistics by Veer Bala Rastogi Methods in Biostatistics by BK Mahajan Introduction to Biostatistics by Dr. Pranab Kumar Banerjee	Google classroom, Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: F.Y.BSc

SEMESTER: I ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: understand the classification, structure, function, ecology, life cycle of the fungi. *Examples Aspergillus* and *Rhizopus* are common fungi and understand and commercial the industrial uses of the fungi

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II Fungi	Introduction and classification of Fungi	3	**N.C Kumar,The text book of** Botany, Himalaya publication House 2008 **Singh V et al, text book of Botany,** Global media, 2009 **Campbells,Reece** et al Biology Eight edition Bejamin Cummings	Power point presentation and chalk and board
	Structure, life cycle and systematic position of *Rhizopus* and *Aspergillus*	8		Power point presentation and chalk and board
	Economic importance of Fungi.	2		Power point presentation and chalk and board
	Modes of nutrition in Fungi (Saprophytism and Parasitism).	2		Power point presentation and chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: F.Y BSc

SEMESTER: II ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: The learners will be able to relate primary growth in internal stem and root structure with function and appreciate the salient features of the root and stem

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit II Anatomy	Introduction of Anatomy and its importance in biology	1	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns Introductory plant Biology** edition 12 Mcgraw Hills	Power point presentation and chalk and board
	Simple Tissue: Parenchymatous Tissue, Collenchymatous Tissue and Sclerenchymatous tissue	3		Power point presentation and chalk and board
	Complex Tissue: Xylem, Phloem	3		Power point presentation and chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: S.Y BSc

SEMESTER: III ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: The learners will be able to provide knowledge about environmental factors and natural resources and their importance in sustainable development

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit II Forestry and Economic Botany	Forestry: outline types of forest in India	3	**Golatkar** V. et .al **The new Course in Botany** S.YB.Sc Sem 3 and 4 Sheath Prakashan	Power point presentation and chalk and board
	Forestry: Agroforestry, Urban Forestry, Organic farming, Silviculture	4		Power point presentation and chalk and board
	Economic Botany: Types of fibres, Jute and Cotton Current trend in fibres industries	3		Power point presentation and chalk and board
	Spices and Condiments: Saffron and Cardamom	3		Power point presentation and chalk and board
	Commercial market of spices	2		Power point presentation and chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: S.Y BSc

SEMESTER: IV ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: The learners will be able to relate secondary growth in internal stem and root structure with function and appreciate the salient features of the root and stem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit I Anatomy	Introduction and basics of plant anatomy	1	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns Introductory plant Biology** edition 12 Mcgraw Hills	Chalk and Board
	Normal secondary growth in Dicotyledonous stem and root.	2		Power point presentation and chalk and board
	Growth ring	1		Power point presentation and chalk and board
	Periderm, lenticel, Tylosis, Heart wood and sap wood	3		Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY CLASS: T.Y. BSc

SEMESTER: V ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: The students would be able: To relate anomalies in internal stem structure with function and appreciate the salient features of the root stem transition zone. To get exposure to plant anatomy and learn to apply it in various fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit III Anatomy	Introduction to Anomalous secondary growth	2	**Singh.V,et.al plant anatomy and embryology**, Global media 2009. **Bendre. Kumar A text book of** Practical Botany 2 Rastogi publication 2010. **Sterns Introductory plant Biology** edition 12 Mcgraw Hills	Power point presentation and chalk and board
	Anomalous secondary growth in the Stems of *Bignonia,Salvadora, Achyranthes, Dracaena.*	6		Power point presentation and chalk and board
	Storage roots of Beet, Radish	3		Power point presentation and chalk and board
	Root stem transition	2		Power point presentation and chalk and board
	Types of Stomata– Anomocytic, Anisocytic, Diacytic, Paracytic, and Graminaceous	2		Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: BOTANY

CLASS: T.Y BSc SEMESTER: VI ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: The learners will be able to study in detail classification and general characters of Pteridophytes and identify as well as describe the life cycles of *Marselia* and *Adiantum*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II Pteridophyta (G. M. Smith Classification System to be followed)	Introduction to Pteridophyta	1	**Singh V et al, text book of Botany,** Global media, 2009 **Bendre. Kumar A text book of** Practical Botany 1 Rastogi publication 2010. **Michael G**	Chalk and Board
	Introduction to G. M. Smith Classification System	1		Power Point Presentation
	Pterophyta - Classification, general characters; Life cycle of *Adiantum*	2		Power point presentation and chalk and board
	Pterophyta - Classification, general characters; Life cycle of *Marselia*	3		Power point presentation and chalk and board

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			Simpson Plant systematics Elsevier Publication 2006	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: Applied component (Horticulture) CLASS: T.Y BSc

SEMESTER: V ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE): To explore the natural and artificial propagation and their use in commercial production.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit 2 PROPAGATION PRACTICES	**By Seeds** Advantages and disadvantages, method of seed propagation Production of seeds, Handling, Collection and Storage Sowing and transplantation.	3	**P.Parvatha Reddy Sustainable Crop protection under protected cultivation**	Power point presentation and chalk and board
	By specialized Vegetative structures Bulbs, Tubers, Corms, Rhizomes, Root stock, runners, Offsets and suckers.	2		Power point presentation and chalk and board

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	Artificial methods of plant propagation Cutting– Root **cutting**, Stem cuttings, and leaf cuttings. rooting. **Layering** – Definition, Types: Simple, compound, (Serpentine) Tip, Trench, Mound, Air Layering. **Grafting**-Definition, advantages and disadvantages. Types: **Budding** – Definition, advantages and disadvantages. Types: T- budding, shield, Patch, ring budding.	08	Springer E book, **W J Lewis Grafting and Budding a** practical guide for fruit crops and ornamental plant second edition.	Power point presentation and chalk and board
	Developing new varieties: Technique of Emasculation	2		Power point presentation and chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. KIRAN GANGADHAR CHAKRAL DEPARTMENT: Applied component (Horticulture) CLASS: T.Y BSc

SEMESTER: VI ACADEMIC YEAR: 2018-2019

- LEARNING OBJECTIVE/SThe students would be able: To gain insight into the green House technology: Layout, types, Irrigation and construction with applications in agriculture and horticulture and to learn about the commercial production fruits and vegetables in relation to propagation, post plantation care, harvesting and post-harvest management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper I, Unit 2 PROPAGATION PRACTICES	High –tech Horticultural production- Green house technology- Meaning, types, layout & construction, irrigation systems. Care & attention. Hardening of plants. Space gardens.	6	**P.Parvatha Reddy Sustainable Crop protection under protected cultivation** Springer E book, **E Course Krishi shiksha, green** house management Agriculture Engineering.	Power Point Presentation chalk and Board
	Floriculture – Scope & importance, soil and climatic requirement and cultivation practices and Economics of greenhouse production of Gerbera, Carnation, Roses, Orchids. Propagation techniques, packing and marketing, enhancing and delaying period of bloom by special methods. Floral decoration, Florist shop management.	9		Power Point Presentation And chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Botany CLASS: S.Y.B.Sc. (CB & BZ)

SEMESTER: **III** MONTH: October – December ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:

- To understand and differentiate about different preservation method
- To understand about techniques of microscopy
- To differentiate about different chromatographic techniques
- To understand about electrophoresis technique as a separation technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I **Unit – III**	**Modern Techniques to Study Plant Diversity** Preservation methods :Dry and Wet method	03	A new course in botany – Sheth Publication Principles of Instrumental Analysis - by Douglas A. Skoog	Lectures on Google Meet, PowerPoint, Youtube videos, Pdfs, Upload of learning material on Google Classroom
	Microscopy – Principle and working of Light, and electron microscope.	04		
	Chromatography- Principles and techniques in paper and thin layer chromatography.	04		
	Principles and techniques of Horizontal and Vertical electrophoresis.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Deepa Verma DEPARTMENT: Botany CLASS: T.Y.B.Sc. (BOTANY)

SEMESTER: **V** MONTH: October – December ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S: To learn principles and application of commonly used techniques in instrumentation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit – III	**Instrumentation** Colorimetry and Spectrophotometry (Visible, UV and IR) - Introduction–	01	Principles of Instrumental Analysis - by Douglas A. Skoog An Introduction to Practical Biochemistry- by David Plummer	Lectures on Google Meet, PowerPoint, Pdfs, Youtube videos, Animation Upload of learning material on Google Classroom
	Instrumentation, working, principle and applications. of Colorimeter	02		
	Instrumentation, working, principle and applications. of Spectrophotometer	02		
	Chromatography: General account of Column chromatography.,	03		
	Principle and bedding material involved in adsorption and partition chromatography	03		
	ion exchange chromatography, molecular sieve chromatography.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **FYBSc** SEMESTER: I

MONTH: **July to November** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S: To acquire the knowledge about working and functioning of the environment and its component.
The learners will be able to : To understand the basic component of environment, their interconnections and importance to maintain the balance between each other. That means Mediation of energy through the environmental distribution and utilization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II **ECOLOGY**	Energy pyramids, energy flow in an ecosystem.	04	1. Ecology by E P Odum 2. IGNTU eContent 3. NPTEL 4. ePGPathshala	1. PowerPoint presentations 2. Chalk and Board
	Types of ecosystems: aquatic and terrestrial.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **SYBSc** SEMESTER: III
MONTH: **July to November** ACADEMIC YEAR: **2018-19**
LEARNING OBJECTIVE/S: To being able to understand the economic values of some plants with respect to medicinal benefits.

The learners will be able to : To understand the commercial values of plant for earning capital. Better use of some medicinal herbs with its aromatheroptic uses and their health benefits. To understand the plant based new energy sources for traditional hydrocarbon fuels.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PaperIII Unit 3 Industry based on plant products	Aromatherapy- Introduction, Uses with few examples. Jojoba, lemon, jasmin	05	1. Textbook by sheth publication 2. Economic Botany: Kochar or Verma 3. Biology Discussion website 4. IGNTU eContent 5. NPTEL 6. ePGPathshala	1. PowerPoint presentations 2. Diagram 3. Chalk and Board
	Botanical and nutraceuticals -Spirulina, Vanillin, Garcinia indica/ Garcinia cambogia, Chlorella, and Kale.	08		
	Enzymes industry: Cellulases, Papain, Bromelain	04		
	Biofuels.	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **TYBSc** SEMESTER: V

MONTH: **July to November** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S: To acquire the knowledge about the physiological system of plant working and functioning.
The learners will be able to : To enables the understanding about water and mineral uptake and distribution in to plant system. Also to relate the physical factors of which are responsible for its distribution. To evaluate the Tissue/ cell system functioning and working factors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II Plant Physiology I	**Water relations:** Potential, osmosis, transpiration, imbibition,	04	1. Introduction to Plant Physiology by Noggle and Fritz, Prentice Hall Publishers(2002), 2. Plant Physiology by Salisbury and Ross CBS Publishers, 3. Plant Physiology by Taiz and Zeiger Sinauer Associates Inc. Publishers,2002 1. Biology Discussion website 2. IGNTU eContent 3. NPTEL 4. ePGPathshala	Chalk and Board Method, Model Construction and Demonstration, Experimental Simulation, Diagram Charts PowerPoint presentations
	Solute transport: Transport of ions across cell membranes, active and passive transport, carriers, channels and pumps.	04		
	Translocation of solutes: Composition of phloem sap, girdling experiment.	04		
	Pressure flow model (Munch's hypothesis): Phloem loading and unloading, anatomy of sieve tube elements and mechanisms of sieve tube translocation.	04		
	Mineral Nutrition: Role of Macro and Micro nutrients, physiological functions and deficiency symptoms.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Pratik Bhagwan Jagtap** DEPARTMENT: **Botany** CLASS: **TYBSc** SEMESTER: V

MONTH: **July to November** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S: To understand basic importance of conserving the genetic information about an organism and its genetic charecters.

The learners will be able to : It enable to understand about genetic information and its processing thus ultimately how it can conserve into digital as well as other physical form. Also helps to evaluate the methods for analysis of the genetic materials and related data types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit II: Plant Biotechnology I	Construction of genomic DNA libraries, Chromosome libraries and c- DNA libraries.	06	An introduction to Genetic analysis Griffith Freeman and Company(2000)	1. Chalk and Board method, 2. Computer Systems 3. PowerPoint presentation, 4. Internet Service, 5. Software, 6. Projects, 7. Protocol Charts
	Identification of specific cloned sequences in c-DNA libraries and Genomic libraries	04	Plant Biotechnology by K. Ramawat	
	Analysis of genes and gene transcripts –Restriction enzyme, analysis of cloned DNA sequences. Hybridization(Southern Hybridization)	06	Genetics by Russel Peter Adison Wesley Longman Inc.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Swarupa V. Agnihotri DEPARTMENT: Botany CLASS: FY. CBZ A SEMESTER: IMONTH: October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Learners will able to get knowledge about differences between eukaryotic and prokaryotic cell and will obtain in depth information on the structure of a plant cell wall and plasma membrane.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit III Genetics	1 Phenotype/Genotype, Mendelian	5	A New Course in Botany (F.Y.B.Sc) Sem I and II	Power point presentation, Google meet
	Genetics- monohybrid, dihybrid; test cross; back cross ratios.	5		Power point presentation, Google meet
	Epistatic and non epistatic interactions; multiple alleles.	5		Power point presentation, Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Swarupa Vishal Agnihotri DEPARTMENT: Botany CLASS: T.Y. B.Sc. (Botany and BZ) SEMESTER: V

MONTH: August ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Students will gain in depth information about different methods of protoplast fusion and its application in agriculture.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit IV Plant tissue culture	**Protoplast fusion and somatic hybridization**		Plant tissue culture, by, Purohit, S.S	Google meet, Power point presentation
	Concepts, definition, and various methods of protoplast fusion	3		
	Application of somatic hybridization in agriculture	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Swarupa V. Agnihotri **DEPARTMENT**: Botany CLASS: T.Y.B.Sc. Botany SEMESTER: VMONTH: August ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Learners will able to know about types of microbes and their life cycles. Students will gain the information about colony characters and staining procedure for microbes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit I, Microbiology	Types of microbes: Viruses, Bacteria, Algae, Fungi, Protozoa, Mycoplasma and Actinomycetes	6	Introduction to microbiology by Pelczar,JR., Chan, O.S., Krieg, H.R. Fundamental principles of bacteriology, by, Salle, A.J.	Google meet, Power point presentations
	Sterilization, media, staining, colony characters	6		Google meet, Power point presentations
	Pure culture	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV KAMALAKAR SATVI DEPARTMENT: Botany CLASS: F.Y.BSc SEMESTER: I

MONTH: November to December ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: understand the classification, structure, function, ecology, life cycle of the fungi. *Examples Aspergillus* and *Rhizopus* are common fungi and uses of the fungi.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II Fungi	Introduction and classification of Fungi	1	**N.C Kumar, The text book of** Botany, Himalaya publication House 2008 **Singh V et al, text book of Botany,** Global media, 2009	Chalk and Board Diagrams
	Structure, life cycle and systematic position of *Rhizopus* and *Aspergillus*	2		
	Economic importance of Fungi.	1		
	Modes of nutrition in Fungi (Saprophytism and Parasitism).	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: S.Y BSc SEMESTER: III

MONTH: September to December ACADEMIC YEAR: 2018-19

- LEARNING OBJECTIVE/S: Ultra Structure and functions of cell organelles: Mitochondrion (membranes, cristae, F1 particles and matrix) , Peroxisomes and Glyoxysomes, Ribosomes (prokaryotic, eukaryotic and subunits)

 Cell Division and its significance Cell Cycle, structure of Interphase Nucleus(nuclear envelop, chromatin network, nucleolus and nucleoplasm) ,

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II Cell Biology	Ultra Structure and functions of the cell organelles:	1	**Golatkar** V. et .al **The new Course in Botany** S.YB.Sc Sem 3 and 4 Sheath Prakashan	Chalk and Board Diagrams
	Mitochondrion(membranes, cristae, F1 particles and matrix)	2		
	Peroxisomes and Glyoxysomes Ribosomes (prokaryotic, eukaryotic and subunits)	2		
	Cell Cycle, structure of Interphase Nucleus (nuclear envelop, chromatin network, nucleolus and nucleoplasm) Mitosis & Meiosis Differences between Mitosis and Meiosis	3		
	Nucleic Acids: Types, structure and functions of DNA and RNA	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: T.Y. BSc SEMESTER: V

MONTH August - December ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The students would be able: study Fungi, Classification and general characters of Basidiomycetes, life cycle of *Agaricus*, Life cycle of *Puccinia*, Classification and general characters of Deutromycetes and life cycle of *Alternaria*.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III Fungi	Basidiomycetes: Classification and General characters	2	Botany for degree students Fungi B.R. Vashishta A.K. Sinha College Botany Vol. II Gangulee and Kar	Chalk and Board Diagram
	Life cycle of Agaricus	4		
	Life cycle of Puccinia	4		
	Deuteromycetae: Classification and General Characters	2		
	Life cycle of Alternaria	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. VAIBHAV K. SATVI DEPARTMENT: BOTANY CLASS: T.Y. BSc SEMESTER: V

MONTH August - December ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The students would be able: Learn about bioremediation, phytoremediation, plant succession

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
Paper III, Unit III, Environmental Botany	Bioremediation: Principles, factors responsible and microbial population in bioremediation.	2	Ecology and Envirnment by P.D.Sharma	Chalk and Board
	Phytoremediation: Metals, Organic pollutants	2		
	Plant succession: Hydrosere and Xerosere – Formation of Barren Space,	4		
	Succession on the Land Citing Different Seres leading up to the Climax,	4		
	Succession in Water, Ecesis, Poly and Mono-climax theories	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: F. Y. B. Sc. (CBZ-A) SEMESTER: IMONTH: July-September ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Gain knowledge about Introduction to the anatomy, morphology and habitat of Bryophytes, it will also aid the students in identifying bryophytes, and how to analyze and connect them on evolutionary basis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III, Bryophyta	Introduction to Bryophytes	02	A New Course in Botany, (F.Y. B.Sc.) Sem I & II	Chalk and Talk
	Structure, external and Internal of *Riccia*	02		Chalk and Talk
	Antheridia and Archegonia study along with fertilization events	03		Chalk and Talk
	Summary of the entire life cycle	01		Chalk and Talk
	Systematic position of Riccia	01		Chalk and Talk
	General characters of *Hepaticae*	01		Chalk and Talk
	Revision	02		Chalk and Talk
	Doubt solving session	01		Chalk and Talk
	Quiz and Question bank discussion	02		Grouping and discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: F. Y. B. Sc. (CBZ-A, B, Biochemistry) SEMESTER: II MONTH: November- March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to: Gain information on the basis of Angiosperm morphology which will serve as the baseline for understanding this topic in S.Y and T.Y. They will also gain information on the diversity of lifeforms in Angiosperms, its evolution, and their morphological peculiarities which aids in identifying and classifying plants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III, Angiosperm (Unit Shared)	Introduction to Angiosperm	01		Chalk and talk
	Defining A leaf	01		Chalk and talk, PowerPoint Presentation, Images through field experience shown.
	Simple Leaf, Leaf Incision	01	WILLIAM T. STEARN (1983). BOTANICAL LATIN, History, Grammar Syntax, Terminology and Vocabulary Third edition, revised DAVID &	Chalk and talk, PowerPoint Presentation, Images through field experience shown, Sharing of Real-life experience w.r.t. the topic so that the students can connect with the subject.
	Compound leaf	01		Chalk and talk, PowerPoint Presentation, Images through field experience shown.

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	Leaf stipules, Leaf margin, Leaf Apex	01	CHARLES Newton Abbot London North Pomfret (Vt).	Chalk and talk, PowerPoint Presentation, Images through field experience shown.
	Leaf venation	01		Chalk and talk, PowerPoint Presentation, Images through field experience shown.
	Leaf phyllotaxy, Leaf Base	01		Chalk and talk, PowerPoint Presentation, Images through field experience shown.
	Leaf shapes	01		Chalk and talk, PowerPoint Presentation, Images through field experience shown.
	Modifications of leaf: spine, tendril, hooks, phyllode, pitcher, Drosera or insectivorous plants	02	A New Course in Botany, (F.Y. B.Sc.) Sem I & II	Documentary on Carnivores plants, Chalk and Talk, PowerPoint Presentation, Images through field experience shown.
	Malvaceae	02	Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical Plant families Identification Handbook, Second edition	Chalk and talk, PowerPoint Presentation, Writing.
	Revision	01		Chalk and talk
	Doubt solving Quiz and Question bank discussion	01		Grouping and discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: S. Y. B. Sc. (BZ, CB) SEMESTER: III MONTH: June-September ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: analyze plants technically with the help of systematic study including morphology, Nomenclature, classification, and identification. Furthermore, Studies of Plant Families will help them know the respective family in and out and also give information on economically valuable plants from that family which could be used as a tool for research and other purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit II, Angiosperms (Unit Shared)	Objectives and Goals of Plant systematic	02	Turland, N.J., et al. 2018. International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress	Chalk and Talk
	Plant Nomenclature	02		Chalk and Talk

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			Shenzhen, China,	
	Amaranthaceae	02	Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical Plant families Identification Handbook, Second edition	Chalk and Talk, Power point presentation
	Palmae	02		Chalk and Talk, Power point presentation
	Revision and question bank Discussion	01		Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: S. Y. B. Sc. (BZ, CB) SEMESTER: IV MONTH: November-February ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: enlarge their horizon for obtaining jobs as horticulture is an ever increasing and trending field which yields good quality jobs. the basic knowledge of this topic will help the students gain the level of analyzing the type of plants to grow, soil content, climatic conditions etc. in making a garden for a company, industry, private sector etc. Studies on Botanical gardens and National Park will enlighten the students in conservation of the natural habitat, and also promote a scientific attitude towards nature. It will also promote research impetus into the students.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit I, Horticulture and Gardening	Introduction to Horticulture	01	A New Course in Botany (S.Y.B.Sc.) (Sem III & IV)	Chalk and Talk, Power point presentation
	Branches of Horticulture Gardening	02		Chalk and Talk, Power point presentation
	Locations in the garden- edges, hedges, lawn, flower beds, avenue, water garden, Focal point.	03		Chalk and Talk, Power point presentation
	Types of garden: Formal and informal gardens	02		Chalk and Talk, Power point presentation, Drawing of the Gardens

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	National Park: Sanjay Gandhi National Park.	01		Chalk and Talk
	Botanical Garden: Veer Mata JijabaiUdyan (Victoria Garden)	02		Chalk and Talk
	Presentations by the students	02		Oral Presentations
	Revision, Question bank Discussion	01		Chalk and Talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: T. Y. B. Sc. (BZ, Botany) SEMESTER: V MONTH: June-October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Gain a deep insight in the classification system of Bentham and Hooker with its pros and cons which will help them to follow it with more clear understanding. The extensive morphological information on flower and fruit (along with the information on leaf and Inflorescence from F.Y) will serve as the baseline for studying plants in detail in the present year and future helping them to identify, classify and diagnose plants more discreetly. Studies of Plant Families will help them know the respective family in and out and also give information on economically valuable plants from that family which could be used as a tool for research and other purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit II, Angiosperms I	Morphology of flower	04	WILLIAM T. STEARN (1983). BOTANICAL LATIN, History, Grammar Syntax, Terminology and Vocabulary Third edition, revised DAVID & CHARLES Newton Abbot London North Pomfret (Vt).	Chalk and talk, Live material display and analysis, PowerPoint presentation
	Complete classification of Bentham and Hooker (only for prescribed families), Merits and demerits	03	Bentham, G. 1883.Genera Plantarum by Bentham, G. and Hooker, J.D. Reeve, London.	Chalk and talk

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	Capparidaceae	02	Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical Plant families Identification Handbook, Second edition	Chalk and talk, Live material display and analysis, PowerPoint presentation
	Umbelliferae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Cucurbitaceae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Rubiaceae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Solanaceae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Commelinaceae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Graminae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Revision	01		Chalk and talk
	Quiz	01		Chalk and talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: T. Y. B. Sc. (BZ, Botany) SEMESTER: V MONTH: June-October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Will gain insight into the details of pharmacognosy and the pharmaceutical monographs. They will be made aware about the importance of plants for human health and how it is used their entire methodology and its details. The topic will generate research aura in students to study plants for their uses in order to cure more and more diseases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV, Unit IV, Pharmacognosy and Medicinal Botany (Unit Shared)	Monographs of drugs with reference to biological sources, geographical distribution, common varieties, macro and microscopic characters, chemical constituents, therapeutic uses, adulterants	01	Pharmacognosy by Kokate, Purohit and Gokhale, Nirali Publications	Talk
	Strychnos seeds	02		PowerPoint presentation
	Senna leaves	02		PowerPoint presentation
	Clove buds	02		PowerPoint presentation
	Revision	01		PowerPoint presentation
	Quiz/Test	01		Chalk and talk

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Botany

CLASS: T. Y. B. Sc. (BZ, Botany) SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Gain a deep insight in the classification system of Hutchinson's classification with its pros and cons which will help them to follow it with more clear understanding. Studies of Plant Families will help them know the respective family in and out and also give information on economically valuable plants from that family which could be used as a tool for research and other purposes. Study of Botanical Survey of India will give the students an insight into the activities that they conduct on a National scale to provide to the knowledge of plant taxonomy and the varied type of work the do. The knowledge of Botanical gardens in India aid in increasing their knowledge on the plants and their importance to be conserved.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit I, Angiosperms II	Rhamnaceae	02	Timothy Utteridge & Gemma Bramley. 2015. The Kew. Tropical Plant families Identification Handbook, Second edition	Chalk and talk, Live material display and analysis, PowerPoint presentation
	Combretaceae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Asclepiadaceae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Labiatae	02		Chalk and talk, Live material display and analysis, PowerPoint

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				presentation
	Euphorbiaceae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Cannaceae	02		Chalk and talk, Live material display and analysis, PowerPoint presentation
	Hutchinson's classification – merits and demerits	02	Biological discussions online	Chalk and talk
	Botanical survey of India and regional branches of India	02	www.bsi.gov.in	Website study, chalk and talk
	Indian Botanic Garden, Howrah	02	Wikipedia BSI	chalk and talk, PowerPoint presentation
	National Botanic Garden (NBRI) Lucknow	02		chalk and talk, PowerPoint presentation
	Lloyd Botanic Garden, Darjeeling & Lalbaugh or Mysore State Botanic Garden Bangalore	01		chalk and talk, PowerPoint presentation
	Revision	01		chalk and talk
	Quiz/Test	01		chalk and talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Bioanalytical Science

CLASS: M.Sc. Part I SEMESTER: I MONTH: October-December ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: help the students in getting basic information on how to start with plant analysis to obtain drugs and products form human usage. It will explain the proper and authentic methodology to be considered to proceed with research in understanding and drawing proper conclusion for plant-based products and drugs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III, Pharmacognosy	Introduction, Plants parts and their medicinal uses, example of one plant to be given	02		PowerPoint Presentation
	Concepts of Ethnobotany, Ethnomedicine and pharmacology.	03	Importance Of Ethnobotanical Investigation by Melvin R. Gzlmore	PowerPoint Presentation
	Phytogeography regions to be explained with respect to endemism and hotspots (explain only concepts)	02		PowerPoint Presentation
	Herbaria evaluation to include plant collection, Authentication, storage and drying techniques, photomicrography – digital herbarium – camera	03	www.rbg.ca How to Collect Herbarium Specimens A guide prepared by the Western	PowerPoint Presentation

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	lucida		Australian Herbarium February 2008	
	Raw material evaluation to include, Microbial load, Raw material characterization, Proximate evaluation,	04		PowerPoint Presentation
	Concepts of GAP, & GHP for medicinal plant- Only introduction	01	Good Agricultural and Collection Practices and Good Manufacturing Practices for Botanical Materials. 2017 TNAU Agri Tech Portal_GAP	PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Bioanalytical Science

CLASS: M.Sc. Part I SEMESTER: II MONTH: January-April ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: gain basic knowledge on the type of phytoconstituents a plant can hold and the basic differences and details of the same. How to extract them-the entire process so as to aid in research for new drug discoveries and support present knowledge on plant phytoconstituents

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II, Phytochemistry	Natural drug substances from plants (primary and secondary metabolites)	02	Wikipedia	PowerPoint Presentation
	Nitrogenous	02		PowerPoint Presentation
	Non nitrogenous and Isoprenoids	01		PowerPoint Presentation
	Secondary drug metabolite production with special reference with integrated pathway	02		PowerPoint Presentation
	Key Factors affecting synthesis of secondary metabolites	02		PowerPoint Presentation
	Choice of solvent for extraction of phytoconstituents	02		PowerPoint Presentation

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	Extraction Techniques of Crude plant material w.r.t maceration, Types- Kwatha and Swarasa	02	Unique methods of (Juice) extraction in Ayurveda Swarasa Shingadiya RK, et al.	PowerPoint Presentation
	Extraction Techniques of Crude plant material: percolation and steam distillation	02		PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hensal Rodrigues DEPARTMENT: Bioanalytical Science

CLASS: M.Sc. Part I SEMESTER: II MONTH: January-April ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: gain intensive knowledge on the mode of drug action and how it affects the human body. from the Route of entry, Absorption and Distribution, Metabolism & elimination, etc. everything will be understood. So that the students obtain information required to treat various ailments with various types of Drugs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV, Unit III, Basic Pharmacokinetics, Pharmacodynamics and Drug properties	Basic concepts of Pharmacokinetcs & pharmacodynamics	01	2013. D. M. Brahamankar & Sunil B. Jaiswal. Biopharmaceutics and Pharmacokinetics A Treatise.	PowerPoint Presentation
	Different pharmacokinetic & pharmacodynamics parameters and their meanings	02		PowerPoint Presentation
	Basic techniques of evaluating Pharmacokinetic & pharmacodynamics parameters	02		PowerPoint Presentation
	Basic types of models in pharmacokinetics & pharmacodynamics	01		PowerPoint Presentation
	General classification of Drugs and their formulations	02		PowerPoint Presentation

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	Drug – Route of entry, Absorption and Distribution with examples	04		PowerPoint Presentation
	Concepts of Drug Metabolism & elimination with examples	02		PowerPoint Presentation
	Adverse Drug reactions (ADRs) and Serious Adverse Events (SAEs)	01		PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana DEPARTMENT: Botany

CLASS: S.Y. B.Sc. – BZ and CB SEMESTER: III MONTH: June ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

- Define pharmacopoeia and identity different pharmacopoeia used in India.
- Describe the use of pharmacopeia in pharmaceutical and drug manufacturing industry.
- Recall the importance of pharmacopeia for identification of drug, purity and testing for adulteration.
- Describe Monograph
- Write down what are secondary metabolites, identify its sources; discuss its properties, uses and adulterants; and describe regional and seasonal variations.
- Identify and describe adulterants of the selected plants

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III – Unit – I -	Introduction to pharmacopoeia	02	• Pharmacognosy by	• Chalk and board method

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Pharmacognosy and phytochemistry	Indian pharmacopoeia, Indian Herbal Pharmacopoeia and Ayurvedic Pharmacopoeia	02	C. K. Kokate, Mr. S. B. Gokhale, A. P. Purohit , Nirali Prakashan • A new course in Botany – Sheth publications	• Study the morphological, anatomical and powder characters *Phyllanthus amarus, Saraca asoka, Bacopa monieri* so that can identify their peculiar characters and test for adulteration.
	Study of Monograph from pharmacopoeia	03		
	Secondary Metabolites: Sources, properties, uses and adulterants, regional and seasonal variations	03		
	Adulterants: *Saraca asoca, Polyalthia longifolia* *Terminalia arjuna, Terminalia tomentosa* *Bacopa monnieri, Centella asiatica* *Abrus, Glycyrrhiza* *Phyllanthus amarus (Bhuiamla)*	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana DEPARTMENT: Botany

CLASS: T.Y. B.Sc. – Botany SEMESTER: V MONTH: June ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

- Identify and describe various steps involved (spwan, pin head stage and mature stage) in mushroom cultivation.
- Develop entrepreneurship skills with respect to mushroom cultivation.
- Define ethnobotany and describe its principles, applications
- Utilize the knowledge of indigenous plant for the cure of human diseases

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Paper – IV, Unit – I, Ethnobotany and Mushroom Industry	**Ethnobotany** - Definition, history, sources of data and methods of study. **Applications of ethnobotany** 1) Ethnomedicines 2) Agriculture 3) Edible plants 4) Famine related plants, 5) Toxic plants and Antidotes. **Traditional medicines** as used by tribal in Maharashtra towards i) Skin ailments: *Rubia cordfolia*, Sandalwood ii) Liver ailments : *Phyllanthus* , *Andrographis* iii) Wound healing and ageing: *Centella, Typha, Terminalia, Tridax* iv) Fever : *Vitex negundo, Tinospora cordifolia* leaves v) Diabetis: *Momordica charantia, Syzygium cuminii*	08	https://sg.inflibnet.ac.in/bitstream/10603/86421/9/09chapter%203.pdf	Chalk and board method
	Mushroom industry: i)Detail general account of production of mushrooms with respect to methods of Composting, spawning, casing, harvesting of mushroom. Cultivation of *Pleurotus, Agaricus, Volvariella* Mushroom to be studied in detail. ii)General account of mushrooms: Nutritional value, picking and packaging, economic importance.	07	Mushroom Growing – S.C. Dey - Agrobios	Chalk and board method Youtube Video: https://www.youtube.com/watch?v=oormRweSf3E

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Mr. Vinodkumar Didwana_____ DEPARTMENT: _____Botany_____

CLASS: _T.Y. B.Sc. – Botany____ SEMESTER: ____V_____ MONTH: ____June____ ACADEMIC YEAR: ___2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Describe the macroscopic and microscopic characters
- Identification of active constituent by performing chemical tests and TLCs.
- Describe the therapeutic uses of medicinal plants
- Experiment TLC, identify the spots and calculate Rf Values

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper – IV, Unit – IV, Pharmacognosy, Pharmacology & Medicinal Botany	Monographs of drugs with reference to biological sources, geographical distribution, common varieties, macro and microscopic characters, chemical constituents, therapeutic uses, adulterants- *Strychnos* seeds, Senna leaves, Clove buds, *Allium sativum*, *Acorus calamus* and *Curcuma Longa*	15	• Pharmacognosy by C. K. Kokate, Mr. S. B. Gokhale, A. P. Purohit , Nirali Prakashan • Practical Pharamoconosy Dr. K. R. Khandelwal - Nirali Prakashan	• Chalk and board method • Students will perform experiment to describe macroscopic and microscopic characters; Identify active constituent by performing chemical tests and TLCs.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Mr. Vinodkumar Didwana_____ DEPARTMENT: _____Botany_____

CLASS: _F.Y. B.Sc. - Biochemistry____ SEMESTER: ____II_____ MONTH: ____November____ ACADEMIC YEAR: ___2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Define Pharamconosy

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- Define and give examples of primary and secondary metabolites
- Compare and contrast between primary and secondary metabolites
- Explain the role of primary and secondary metabolites in plants
- Discuss the importance of secondary metabolites for humans as a source of medicine.
- Identify grandma's pouch as a source of medicinal plants.
- Identify the botanical source, describe the part of plant used, and write the active constituents present and medicinal uses: *Oscimum sanctum, Adathoda vasica, Zinziber officinale, Curcuma longa, Santalum album, Aloe vera*.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – II Unit – III - MEDICINAL BOTANY	Concept of primary and secondary metabolites, difference between primary and secondary metabolites.	5	Pharmacognosy by C. K. Kokate, Mr. S. B. Gokhale, A. P. Purohit , Nirali Prakashan	Chalk and board method
	Grandma's pouch: Following plants have to be studies with respect to botanical source, part of the plant used, active constituents present and medicinal uses: *Oscimum sanctum, Adathoda vasica, Zinziber officinale, Curcuma longa, Santalum album, Aloe vera*.	10	A new course in Botany, Sheth Publication	Live specimens are shown during practicals

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Mr. Vinodkumar Didwana_____ DEPARTMENT: _____Botany_____

CLASS: _S.Y. B.Sc. – BZ & CB____ SEMESTER: ____IV_____ MONTH: ____November____ ACADEMIC YEAR: ___2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Define ecology
- Describe biogeochemical cycles like Carbon, Nitrogen and Water.
- Discuss the concepts of environmental factors
- Explain soil as edaphic factor
- Perform mechanical analysis of soil and identify type of soil
- Test soil pH
- Explain the process of soil formation and describe soil profile
- Define community and community ecology
- Describe the quantitative and qualitative characters of community

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- Identify the ecological instruments
- Estimate quantitatively the organic matter of the soil by Walkley and Blacks Rapid titration method.
- Study the vegetation pattern is by list quadrat method

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – II, Unit – III,	Biogeochemical Cycles- Carbon, Nitrogen and Water.	05	A new course in Botany, Sheth Publication	• Chalk and board method

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Ecology and Environmental Botany	Ecological factors: Concept of environmental factors. Soil as an edaphic factor, Soil composition, types of soil, soil formation, soil profile.	06	Same as above	• Chalk and board method • Students are shown the • Ecological Instruments like Soil thermometer, Soil testing kit, Soil pH, Wind anemometer. • Students perform mechanical analysis of soil by the sieve method to check the soil type • Students experiment to check pH of soil and its role is explained. • Students will experiment to estimate quantitatively the organic matter of the soil by Walkley and Blacks Rapid titration method.

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	Community ecology- Characters of community - Quantitative characters and qualitative characters	04	Same as above	• Chalk and board method • Vegetation pattern is by list quadrat method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana DEPARTMENT: Botany

CLASS: T.Y. B.Sc. – Botany SEMESTER: VI MONTH: November ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

- To enlist sources of plants which can be used to extract economically important product like essential oils, fatty oils and vegetable fats
- See the opportunity as to set themselves entrepreneurs in this field.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – IV, Unit – III, Economic Botany	**Essential Oils:** Extraction, perfumes, perfume oils, oil of rose, sandalwood, patchouli, champaca, grass oils: *Citronella*, vetiver. · **Fatty oils:** Drying oil (linseed and soyabean oil), semidrying oils (cotton seed, sesame oil) and non-drying oils (olive oil and peanut oil), · **Vegetable Fats**: Coconut and Palm oil	15	Pharmacognosy by C. K. Kokate, Mr. S. B. Gokhale, A. P. Purohit , Nirali Prakashan	Chalk board method

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Vinodkumar Didwana DEPARTMENT: Botany

CLASS: T.Y. B.Sc. – Botany SEMESTER: VI MONTH: November ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

- Describe different techniques of storage
- Differentiate between natural and artificial method of storage

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper – IV, Unit – IV, Post Harvest Technology	**Storage of Plant Produce-Preservation of Fruits and Vegetables** ● Drying (Dehydration)- (Natural conditions – Sun drying; ● Artificial drying- hot air drying, Vacuum drying, Osmotically dried fruits, Crystallized or Candied fruits, Fruit Leather, Freeze Drying), ● Freezing(Cold air blast system, Liquid immersion method, Plate freezers, Cryogenic Freezing, Dehydrofreezing, Freeze drying), ● Canning- ● Pickling - (in Brine, in vinegar, Indian Pickles) ● Sugar Concentrates (Jams, Preserves, Jellies, Fruit juices) ● Food Preservatives ● Use of Anti-oxidants in preservation.	15	http://ecourseonline.iasri.res.in/course/view.php?id=608	Chalk board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____AJITKUMAR INGLE_____DEPARTMENT: _____CHEMISTRY_____CLASS: _TYBSC_____
ACADEMIC YEAR: 2022-23 SEMESTER: _____Vth MONTH: June 2021
LEARNING OBJECTIVE/S:
The learners will be able to :

1. To study redox titration like Construction of the titration curves and calculation of E_{system} in aqueous medium , Theory of redox indicators, Criteria for selection of an indicator in details.

2. To study complexometric titrations in details like construction of titration curve, Use of EDTA as titrant and its standardisation, absolute and conditional formation constants of metal EDTA complexes,Selectivity of EDTA as a titrant,Factors enhancing selectivity with examples,Types of EDTA titrations,Metallochromic indicators, theory, examples and applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER IV UNIT 2 **CLASSICAL METHODS OF ANALYSIS (TITRIMETRY) (3 & 6 UNITS)**	***2.1* Redox Titrations (Numerical and word Problems are expected)** *2.1.1* Introduction 2.1.2 Construction of the titration curves and calculation of E_{system}	08L	Saujanya publicationof analytical chemistry,sheth publication,Himalaya publication textbook,	Online video lecture on Google meet

	in aqueous medium in case of: *(1)* One electron system *(2)* Multielectron system 2.1.3 Theory of redox indicators, Criteria for selection of an indicator Use of diphenyl amine and ferroin as redox indicators			

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	2.2 **Complexometric Titrations** ***2.2.1*** Introduction, construction of titration curve ***2.2.2*** Use of EDTA as titrant and its standardisation, absolute and conditional formation constants of metal EDTA complexes, Selectivity of EDTA as a titrant. Factors enhancing selectivity with examples. Advantages and limitations of EDTA as a titrant. ***2.2.3*** Types of EDTA titrations.	07L	Same as above	Same as above

	2.2.4 Metallochromic indicators, theory, examples and applications			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____AJITKUMAR INGLE_____DEPARTMENT: ____CHEMISTRY__
__CLASS: __TYBSC_____ SEMESTER: _VTH MONTH: June 2021
__ ACADEMIC YEAR: _2022-23
__ LEARNING OBJECTIVE/S:
The learners will be able to :

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1) To study solvent extraction in detail like Factors affecting extraction, Concept of $[pH]_{1/2}$ and its significance, Craig's counter current extraction.

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*2)*To study HPLC instrumentation, working and applications along with detectors. 3)To study HPTLC instrumentation, working and applications in details.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV UNIT IV **METHODS OF SEPARATION – I (6 UNITS)**	***4.1* Solvent Extraction** *4.1.1* Factors affecting extraction: Chelation, Ion pair formation and Solvation *4.1.2* Graph of percent extraction versus pH. Concept of $[pH]_{1/2}$ and its significance (derivation not expected) 4.1.3 Craig's counter current extraction: Principle, apparatus and applications 4.1.4 Solid phase extraction: Principle, process and applications with	06L	Saujanya publication,sheth publication,Himalaya publication textbook of analytical chemistry,	Online video lecture on Google meet

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	special reference to water and industrial effluent analysis. 4.1.5 Comparison of solid phase extraction and solvent extraction.			

	4.2 **High Performance Liquid chromatography (HPLC)** ***4.2.1*** Introduction and Principle Instrumentation- components with their significance: Solvent Reservoir, Degassing system, Pumps-(reciprocating pumps, screw driven- syringe type pumps, pneumatic pumps, advantages and disadvantages of each pump), Precolumn, Sample injection system, HPLC Columns, Detectors(UV – Visible detector, Refractive index detector) ***4.2.2*** Qualitative and Quantitative Applications of HPLC	06L	SAME AS ABOVE	SAME AS ABOVE
	4.3 **High Performance Thin Layer Chromatography (HPTLC)** ***4.3.1*** Introduction and Principle	03L	SAME AS ABOVE	SAME AS ABOVE

	Stationary phase, Sample application and mobile phase 4.3.2 Detectors *a)* Scanning densitometer- Components. Types of densitometer- Single beam and Double beam *b)* Fluorometric Detector *4.3.3* Advantages, disadvantages and applications *4.3.4* Comparison of TLC and HPTLC			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry CLASS: T.Y.B.Sc. SEMESTER: V MONTH: June to September

ACADEMIC YEAR: 2022-23 LEARNING OBJECTIVE/S:

The learners will be able to : Chemistry of inner transition elements with respect to their properties,uses and separation technique like ion exchange and solvent extraction technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCH 502(paper2) Unit 3	3.1 Introduction:: Position in periodic table and electronic configuration of lanthanides and actinides . 3.2 Chemistry of lanthanides with reference to i) lanthanide contraction ii) Oxidation States iii) ability to form complexesiv) magnetic and spectral properties. 3.3 Occurrence , extraction and separation of lanthanides by i) ion exchange method ii) solvent extraction method , applications of lanthanides	15	Himalaya publication textbook ,Sheth Publication textbook	Chalkboard and duster

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USCHACDD 501 Applied component(Drugs and dyes)) unit 1 and 2	1.1 General Introduction to Drugs 1.1.1 definition of a drug , sources of a drugs 1.1.2 nomenclature of Drugs : generic name,brand name , systematic name. 1.1.3 definition of following terms pharmacon,pharmacology,pharmacophore,half life efficiency,LD50,ED50,GI50,theraputic index. 1.1.4 brief idea of the following terms: receptors,agonists,antagonisyd,drug receptor interaction,drug potency,bioavalibility,drug toxicity,drug addiction,spurious drugs,misbrsnded Drugs,adulterated drugs , pharmacopeia. 1.2 Routes of Drug administration and dosage forms. 1.2.1 Oral and parenteral Routes with advantages and disadvantages 1.2.2Formulations and combination formulation,different dosage forms. 1.3 Pharmacodynamic agents 1.3.1 CNS drugs : Classification based on pharmacological actions :CNS depressant and CNS stimulants,concept of sedation and hypnosis , anaestesia 2.1 Analgesic,antipyretics and Anti -inflammatory drugs. 2.1.1 Analgesics and antipyretics 2.1.2 Anti inflammatory drugs 2.2 Antihistamine drugs. 2.3 Cardiovascular Drugs 2.4 Antidiabetic drugs 2.5 Antiparkinsonism drugs	15 15	Himalaya publication textbook,Sheth Publication textbook	Chalkboard and duster

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	2.6 Drugs for respiratory system			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 each

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TEACHING PLAN (UNIT

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry CLASS: M.Sc. SEMESTER: 1 MONTH: August to December

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : learn chacterisation of coordination compounds

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCH102 (paper 2) unit 4	4.1 Formation,thermal studies,conductivity measurements,electonic,spectral and magnetic measurements,IR,NMRand ESR spectroscopic methods. 4.2 Spectral calculations using Tanabe Sugano diagram,calculations of electronic parameters such as delta,B,C nephelauxatic ratio	15	D.Banerjea,Coordination chemistry. F.A Cotton ,G,Wilkinson , Advanced Inorganic chemistry,6th edition,Wiley	Whiteboard marker

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry CLASS: T.Y.B.Sc. Semester: VI MONTH: Nov To March ACADEMIC YEAR: 2022-2023 The learners will be able to : To learn molecular orbital theory For coordination compounds.p properties of coordination compounds,stability of metal complexes,reactivity of metal complexes and electronic spectra of metal complexes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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USCH602(PAPER 2) Unit2	2.1 identification of the central metal orbitals and their symmetry suitable for formation of Sigma bonds with ligand orbitals. 2.2construction of LGO. 2.3constrction of Sigma molecular orbitals of ML6 complexes , effect of pi bonding on complexes. 2.4.Electronic spectra. 2.4.1 origin of electronic spectra. 2.4.2types of electronic transition in coordination compounds 2.4.3 selection rules. 2.4.4electronic configuration and electronic micro states. 2.4.5 determination of terms for P2 and d1 configuration	15	Himalaya publication textbook,Sheth publication textbook	Chalkboard and duster

TOTAL NUMBER OF LECTURES ALLOCAT esED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry CLASS: T.Y.B.Sc. SEMESTER: VI MONTH: November to March 2020 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : learn about chemotherapeutic agents,nanoparyicles in medicinal chemistry and also Drugs and environmental aspects

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCHACDD 601(Drugs and dyes) Unit 5 and 6	5.1 Drugs discovery,design and development. 5.1.1Discovery of lead compound 5.1.2medicinal properties of compounds. 5.1.3 Development of Drug. 5.1.4 structure modification to increase potency. 5.1.5computer assisted drug design. 5.2 Drug metabolism. 5.3Chemotherapeutic agents. 5.3.1 antibiotics and antivirals. 5.3.2 Antimalarials. 5.3.3anthelmintics and antifungal agents. 6.1 antiamoebic. Drugs. 6.2 antitubercular and antileprotic Drugs.	15	Himalaya publication textbook and Sheth Publication textbook	Chalkboard and duster

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	6.3anti-neoplastic Drugs 6.4 anti-HIV drugs 6.5Drugs intermediate: synthesis and uses. 6.nano particles in medicinal chemistry. 6.7 drugs and environmental aspects	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 each

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry CLASS: M.Sc. SEMESTER: II MONTH: Jan to April 2020

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : learn about Organometallic chemistry of transportation metals

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PSCH202(unit2)	2.1Eighteen and sixteen electron rule and electron counting with examples. 2.2preparation and properties of following compounds. A)alkyl and aryl derivatives of Pd and Pt complexes. B) carbenes and carbyenes of Cr,Mo and W. C)alkene derivatives of Pd and Pt. D) alkyne derivatives of Pd and Pt. E)allyl derivatives of Ni. F) sandwich compounds of Fe,Cr and half sandwich compounds of Cr and Mo. 2.3 Structure and bonding on the basis of VBT and MOT of organometallic compounds	15	R.C.Mehrotra and A.singu,Organometallic chemistry,A unified approach,2nd edition	Chalkboard and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK ASHOK PANDEY DEPARTMENT: CHEMISTRY. CLASS: TYBSC SEMESTER: VI

MONTH: JAN-MAy ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: learn the rearrangement reactions and will be able to know new concepts in Carbohydrates.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3 UNIT 2 - Molecular Rearrangement & Carbohydrates	2.1 MOLECULAR REARRANGEMENT 2.1.1. Pinacol-Pinacolone Rearrangement 2.1.2. Beckmann Rearrangement	21	Himalaya publishing house College Organic Chemistry TYBSc	Offline mode - chalk and board method
	2.1.3. Favorski Rearrangement 2.1.4. Michael Addition, Wittig Reaction	21		
	2.2 CARBOHYDRATES 2.2.1. Introduction, Classification, Reducing and non reducing sugars, D L Notation	11		
	2.2.2. Structures of Monosaccharides : Fischer Projection Formula & Haworth formula, interconversion, Chair conformation with stereochemistry	21		
	2.2.3. Stereoisomerism of D glucose 2.2.4.Mutarotation in D glucose 2.2.5. Chain lengthening and chain shortening reactions 2.2.6. Reactions of D glucose	81		

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	2.2.7.Gylcosides			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK ASHOK PANDEY DEPARTMENT: CHEMISTRY. CLASS: MSC Part I SEMESTER: II

MONTH: FEB - APRIL ACADEMIC YEAR: 2023-24

LEARNING OBJECTIVE/S: The learners will be able to : Various Name reactions and rearrangement reactions in this unit

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT 2 Reactions and Rearrangements	2.1. Reactions: Baylis-Hilman reaction, McMurry Coupling, Corey-Fuchs reaction, Nef reaction, Passerini reaction.	3L	Clayden	Offline mode - Chalk and board method
	2.2. Concerted rearrangements: Hofmann, Curtius, Lossen, Schmidt, Wolff, Boulton Katritzky.	3L	Organic Reaction Mechanism V.K.Ahluwalia	
	2.3. Cationic rearrangements: Tiffeneau-Demjanov, Pummerer, Dienone-phenol, Rupe, Wagner-	3L		

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	Meerwein.			
	2.4. Anionic rearrangements: Brook, Neber, Von Richter, Wittig, Gabriel–Colman, Payne.	4L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK ASHOK PANDEY DEPARTMENT: CHEMISTRY. CLASS: MSc II SEMESTER:IV

MONTH: JAN - MAR ACADEMIC YEAR: 2023-24

LEARNING OBJECTIVE/S:

The learners will be able to : learn the safety precautions and measures what should be taken while working in laboratory during different reasearch field.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV UNIT 4 CHEMICAL SAFETY &	Safe working procedure and protective environment, protective apparel, emergency procedure, first aid, laboratory ventilation, safe storage and use of hazardous chemicals, procedure for working with substances that pose hazards, flammable or explosive	12 L	Chemical Safety matters – IUPAC-IPCS, (1992) Cambridge	Online mode - PowerPoint presentation Offline mode - chalk and board method

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ETHICAL HANDLING OF CHEMICALS	hazards, procedures for working with gases at pressures above or below atmospheric pressur, safe storage and disposal of waste chemicals, recovery, recycling and reuse of laboratory chemicals, procedure for laboratory disposal of explosives, identification, verification and segregation of laboratory waste, disposal of chemicals in the sanitary sewer system, incineration and transportation of hazardous chemicals.		University Press. OSU Safety manual 1.01	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures_

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK ASHOK PANDEY DEPARTMENT: CHEMISTRY. CLASS: MSc Part II SEMESTER: IV

MONTH: MAR - MAY ACADEMIC YEAR: 2023-24

LEARNING OBJECTIVE/S:

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The learners will be able to : synthesis of different organic molecules by retrosynthesis via disconnection of carbon carbon bonds and strategies for selection of starting material.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II Designing Organic Synthesis-II	2.1 General strategy: choosing a disconnection- simplification, symmetry, high yielding steps, and recognisable starting material.	4L	Organic Synthesis: The Disconnection Approach, Stuart Warren, John Wiley & Sons, 2004	Offline mode - Chalk and Board
	2.2 One group C-C Disconnections: Alcohols (including stereoslectivity), carbonyls (including regioselectivity), Alkene synthesis, use of acetylenes and aliphatic nitro compounds in organic synthesis.	6L		
	2.3 Two group C-C Disconnections: 1,2- 1,3- 1,4- 1,5- and 1,6-difunctionalized compounds, Diels-Alder reactions, α, β-unsaturated compounds, control in carbonyl condensations, Michael addition and Robinson annelation.	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lecture

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPIKA CHORGHE DEPARTMENT: CHEMISTRY CLASS: MSc. –I SEMESTER: I MONTH: AUGUST TO NOVEMBER ACADEMIC YEAR: 2022--23

LEARNING OBJECTIVE/S: To study quantum chemistry
The learners will be able to: Understand the concept of quantum chemistry and to solve Numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – II QUANTUM CHEMISTRY	Introduction, Schrodinger wave equation, wave function, properties, Normalisation, orthogonality	3L	R. K. Prasad	Chalk-board
	Operators and algebra, Hermitian operator, Hamiltonian operator, Eigen functions, postulates of quantum mechanics	4L	R. K. Prasad	Chalk-board
	Applications of quantum mechanics for free particle, one dimension , two dimension and three dimension box	4L	R. K. Prasad	Chalk-board
	Harmonic oscillator, Hermite polynomials, recursion formula	3L	R. K. Prasad	Chalk-board
	Numericals	1L	R. K. Prasad	Chalk-board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPIKA CHORGHE DEPARTMENT: CHEMISTRY CLASS: MSc. –I SEMESTER: I MONTH: AUGUST TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To study elector-chemistry
The learners will be able to: classify chemical cells and derived the expressions for it and solve numericals

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – IV ELECTRO CHEMISTRY	Introduction, Debye-Huckel theory, limiting law, its extension	3L	S. Glasstone	Chalk-board
	Cunductance, relaxation effect, Onsager equation, its validity, Debye-Falkhagen and Wein effect	4L	S. Glasstone	Chalk-board
	Batteries	3L	S. Glasstone	Chalk-board
	Bio-eelctrochemistry	3L	S. Glasstone	Chalk-board
	Numericals	2L	S. Glasstone	Chalk-board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY CLASS: MSc. –I SEMESTER: I I MONTH: JANUARY TO APRIL ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To study quantum chemistry
The learners will be able to: Understand the concept of quantum chemistry and to solve Numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – II QUANTUM CHEMISTRY	Rigid rotar, Spherical coordinates, theta equation, spherical harmonics	3L	R. K. Prasad	Power point presentation
	Hydogen atom, separation of energy, quantum numbers, probability density functions	4L	R. K. Prasad	Power point presentation
	Application of Schrodinger equation, need for approximate solution, derivation	3L	R. K. Prasad	Power point presentation
	Huckel molecular orbitals	3L	R. K. Prasad	Power point presentation
	Numericals	2L	R. K. Prasad	Chalk-board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPIKA CHORGHE DEPARTMENT: CHEMISTRY CLASS: MSc. –I SEMESTER: I I

MONTH:JANUARY TO APRIL ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To study structures of solids and phase equillibria
The learners will be able to: draw structures of solids and solve numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – IV SOLID STATE CHEMISTRY AND PHASE EQUILLIBRIA	Solid state chemistry	1L	S. Glasstone	Power point presentation
	Structure, types of defects and its stoichiometry	4L	H. V. keer	Power point presentation
	Phase equillibria	4L	H. V. keer	Power point presentation
	Two component system	3L	H. V. keer	Power point presentation
	Three component system	3L	H. V. keer	Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY CLASS: T.Y.BSc._SEMESTER: V MONTH: AUGUST TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To study properties of solid and liquid
The learners will be able to: Write derivations of colligative properties and solve numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – II CHEMICAL THERMODYNAMICS AND CHEMICAL KINETICS	Colligative properties : vapour pressure, measurement – static and dynamic method	2L	Ira Levine	Power point presentation
	Elevation in boiling point, depression in freezing point, and numericals	5L	Ira Levine	Power point presentation
	Thermodynamic derivation of Van't hoff equation, measurement, reverse osmosis, numericals	3L	Ira Levine	Power point presentation
	Collision theory for unimolecular and bimolecular reactions and numericals	3L	K. Laider	Power point presentation
	Classificaton of reactions , numericals	2L	K. Laider	Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY CLASS: T.Y.BSc. SEMESTER: V MONTH: AUGUST TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To study nuclear chemistry.
The learners will be able to: Explain principle, construction and working of nuclear reactors and counters, solve numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – III NUCLEAR CHEMISTRY	Basic terms, Radioactive constants, units, numericals	3L	Ira Levine	Chalk-board
	Detection and measurement of radioactivity, counters, behaviour of ion pairs	3L	Ira Levine	Chalk-board
	Applications of use of radioisotopes as tracers, Nuclear reactions, threshold energy, Q- value, Numericals	4L	Ira Levine	Chalk-board
	Fission process, Nuclear reactors, fusion process	3L	Ira Levine	Chalk-board
	Numericals	2L	Ira Levine	Chalk-board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY CLASS: T.Y.BSc. SEMESTER: VI MONTH:

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JANUARY TO APRIL ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To study electrochemistry.
The learners will be able to : classify chemical cells and derived the expressions for it and solve numericals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – I ELECTRO CHEMISTRY	Introduction, Activity and activity coefficient, Debye-Huckel limiting law, Numericals	4L	S. Glasstone	Chalk-board
	Classification of electrochemical cells, derivation and explanation of each cell, Numericals	4L	S. Glasstone	Chalk-board
	Polarization concept	3L	S. Glasstone	Power point presentation
	Decomposition potential and overvoltage	2L	S. Glasstone	Power point presentation
	Numericals	2L	S. Glasstone	Chalk-board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY CLASS: T.Y.BSc._SEMESTER: VI MONTH: JANUARY TO APRIL ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To study quantum chemistry
The learners will be able to: Understand the concept of quantum chemistry and to solve Numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – III BASICS OF QUANTUM CHEMISTRY	Introduction, basics of quantum chemistry, black body radiation, Compton effect	3L	R.K.Prasad	Power point presentation
	Quantum mechanics, postulates ,Progressive and standing waves, interpretation and properties of wave function	4L	R.K.Prasad	Power point presentation
	State function and significance, operator concept, algebra, eigen value, Numericals	3L	R.K.Prasad	Power point presentation
	Renewable energy sources, solar energy, Silicon solar cell	3L	Ira Levine	Power point presentation
	Hydrogen: fuel of the future, production of hydrogen fuel, advantages.	2L	Ira Levine	Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dipti Gharat, DEPARTMENT:Chemistry , CLASS: T. Y. Bsc, SEMESTER: _V_and VI_ MONTH:

ACADEMIC YEAR: _____2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Learning objectives are statements that define the expected goal of a curriculum, course, lesson or activity in terms of demonstrable skills or knowledge that will be acquired by a student as a result of instruction._____

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II SOLID STATE CHEMISTRY	Sem V Structures of Solids 2.2.1 Explanation of terms viz.crystal lattice, lattice point, unit cell and lattice constants. 2.1.2 Closest packing of rigid spheres (hcp,ccp), packing density in simple cubic, bcc and fcc lattices. Relationship between density, radius of unit cell and lattice parameters.	11	Solid State Chemistry and its Applications" by A R West Google, Himalaya and sheth publication text	Google classroom

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	2.1.3 Stoichiometric Point defects in solids (discussion on Frenkel and Schottky defects expected).		book, you tube video, e-books	
	2.2 Superconductivity. 2.2.1 Discovery of superconductivity. 2.2.2 Explanation of terms like superconductivity, transition temperature, Meissner effect. 2.2.3 Different types of super conductors viz.conventional superconductors, alkali metal fullerides, high temperature super conductors. 2.2.4 Brief application of superconductors.	04	Puri sharma kalia, puri sharma pathania	
	Sem VI			
Paper II Unit III ORGANOMETALLIC CHEMISTRY	3.1 Organometallic Compounds of main group metal 3.1.1General characteristics of various types of organometallic compounds, viz.ionic, □-bonded and electron deficient compounds. 3.1.2 General synthetic methods of organometallic compounds : (i) Oxidative-addition, (ii)Metal-metal exchange(transmetallation), (iii) Carbanion-halide exchange, (iv) Metal-hydrogen exchange(metallation) and (v) Methyleneinsertion reactions. 3.1.3 Some chemical reactions of organometallic compounds:(i) Reactions with oxygen and halogens, (ii) Alkylation and arylation reactions (iii) Reactions with protic reagents, (iv) Redistribution reactions and (v) Complex formation reactions.	06		

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	3.2 Metallocenes Introduction, Ferrocene : Synthesis, properties, structure and bonding on the basis of VBT. 3.3 Catalysis 3.3.1 Comparison between homogeneous and heterogeneous catalysis 3.3.2 Basic steps involved in homogeneous catalysis 3.3.3 Mechanism of Wilkinson's catalyst in hydrogenation of alkenes.	09		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Dipti Gharat _____ DEPARTMENT:Chemistry ____ CLASS: F. Y. Bsc SEMESTER: I and II MONTH:

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Learning objectives are statements that define the expected goal of a curriculum, course, lesson or activity in terms of demonstrable skills or knowledge that will be acquired by a student as a result of instruction._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II Comparative chemistry of Main Group Elements	Sem I			Google classroom
	Metallic and non-metallic nature, oxidation states, electronegativity, anomalous behaviour of second period elements, allotropy, catenation, diagonal relationship.Comparative chemistry of carbides, nitrides, oxides and hydroxides of group I and group II elements. Some important compounds- NaHCO3, Na2CO3, NaCl, NaOH, CaO,	15	Himalaya and sheth publication book, Google, you tube video, e-books	

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Sem II Unit II Chemical Bond and Reactivity	$CaCO_3$; oxides of carbon, oxides and oxyacids of sulphur and nitrogen with respect to environmental aspects.			
	Sem II			Google classroom
	2.1.Types of chemical bond, comparison between ionic and covalent bonds, polarizability (Fajan's Rule), shapes of molecules, Lewis dot structure, Sidgwick Powell Theory, basic VSEPR theory for ABn type molecules with and without lone pair of electrons, isoelectronic principles, applications and limitations of VSEPR theory.	07		
	2.2: Oxidation Reduction Chemistry: a) Reduction potentials b) Redox potentials: half reactions; balancing redox equations.c) Redox stability in wateri) Latimer and Frost Diagramsii) pH dependence of redox potentials.d) Applications of redox chemistry i) Extraction of elements: (example: isolation of copper by auto reduction)ii) Redox reagents in Volumetric analysis: a) I_2; b) $KMnO_4$iii) Titration curves:i) single electron systems (example Ce(IV) against Fe(II)); and ii) Multi electron systems as in $KMnO_4$ against Fe(II))	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Arti Dubey_____DEPARTMENT: Chemistry_____ CLASS: _F.Y.B.Sc._____

SEMESTER: __I_____ MONTH: _ _____ACADEMIC YEAR: ___2022-23_____

LEARNING OBJECTIVE/S:
The learners will be able to :

To gain knowledge about the Nomenclature mono and bi-functional aliphatic compounds .

To understand Bonding and Structure of organic compounds .

To study the Fundamentals of organic reaction mechanism:
To learn Electronic Effects and bond fission.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper-I (General Chemistry) Unit III 3. Basics of Organic Chemistry	**3. Basics of Organic Chemistry** **3.1 Classification and Nomenclature of Organic Compounds:** Review of basic rules of IUPAC nomenclature. Nomenclature of mono and bi-functional aliphatic compounds on the basis of priority order of the following classes of compounds: alkanes, alkenes, alkynes, haloalkanes, alcohols, ethers, aldehydes, ketones, carboxylic acids, carboxylic acid derivatives (acid halides, esters, anhydrides, amides), nitrocompounds, nitriles and amines; including their cyclic analogues. **3.2 Bonding and Structure of organic compounds:** Hybridization: sp^3, sp^2, sp hybridization of carbon and nitrogen; sp^3 and sp^2 hybridizations of oxygen in Organic compounds (alcohol, ether, aldehyde, ketone, carboxylic acid, ester, cyanide, amine and amide)	**(5L)**

	Overlap of atomic orbitals: Overlaps of atomic orbitals to form sigma and pi bonds, shapes of organic molecules. Shapes of molecules; Influence of hybridization on bond properties (as applicable toethane, ethene, ethyne) **3.3 Fundamentals of organic reaction mechanism:** **Electronic Effects:** Inductive, electromeric, resonance and mesomeric effects,hyperconjugation and their applications; Dipole moment; Organic acids and bases; their relative strengths. **Bond fission:** Homolytic and Heterolytic fission with suitable examples. Electrophiles and Nucleophiles; Nucleophilicity and basicity; **Types (primary, secondary, tertiary, allyl, benzyl), shape and their relative stability of reactive intermediates:** Carbocations, Carbanions and Free radicals. **Introduction to types of organic reactions:** Addition, Elimination and Substitution reaction. (With one example of each)	**(6L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Arti Dubey _DEPARTMENT: Chemistry_ CLASS: _F.Y.B.Sc. SEMESTER: __I_____ MONTH_ _____ACADEMIC YEAR: ___2022-23_____

LEARNING OBJECTIVE/S: The learners will be able to : Understand basics of chemical kinetics and predict reaction mechanism.Calculate rate constant of zero, first and second order reaction. The basics of solutions, Colligative properties, and their applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper II (General Chemistry) Unit-I Title- Physical Chemistry	**1.1 Chemical Kinetics:** Rate of reaction, rate constant, measurement of reaction rates, order and molecularity of reaction, integrated rate equation of first and second order reactions (with equal initial concentration of reactants) (Numericals expected) Determination of order of reaction by (a) Integration method (b) Graphical method (c)Ostwald's isolation method (d) Half time method (Numericals expected) **1.2 Liquid State:** Surface tension: Introduction, methods of determination of surface tension by drop number method (Numericals expected) Viscosity: Introduction, coefficient of viscosity, relative viscosity, specific viscosity,reduced viscosity, determination of viscosity by Ostwald viscometer (Numericals expected) Refractive index: Introduction, molar refraction and polarizability, determination of refractive index by Abbe's refractometer (Numericals expected) Liquid crystals: Introduction, classification and structure of thermotropic phases (Nematic,smectic and cholesteric phases), applications of liquid crystals	**(8L)** **(7L)**	Text Book, Reference Book, You tube video	Chalk and talk method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Arti Dubey_____ DEPARTMENT: Chemistry_____ CLASS: _F.Y.B.Sc._____
SEMESTER: __II_____ MONTH: _____ ACADEMIC YEAR: ___2022-23_____

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LEARNING OBJECTIVE/S: The learners will be able to :

Formation of alkanes, Wurtz Reaction,

Wurtz-Fittig Reactions,

Mechanism of E1, E2,E1cb reactions.

Saytzeff and Hofmann eliminations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I (General Chemistry) Unit III 3. Basics of Organic Chemistry	**3. Chemistry of Aliphatic Hydrocarbons** **3.1 Carbon-Carbon sigma bonds:** **Chemistry of alkanes:** Formation of alkanes, Wurtz Reaction, Wurtz-Fittig Reactions,Free radical substitutions: Halogenation - relative reactivity and selectivity. **3.2 Carbon-Carbon pi bonds:** **Formation of alkenes and alkynes by elimination reactions:** Mechanism of E1, E2,E1cb reactions. Saytzeff and Hofmann eliminations. **Reactions of alkenes:** Electrophilic additions their mechanisms (Markownikoff/ AntiMarkownikoff addition),Mechanism of oxymercuration-demercuration, hydroboration-oxidation, ozonolysis,reduction(catalytic and chemical), syn and anti hydroxylation (oxidation). 1, 2-and 1, 4-addition reactions in	**(3L)** **(12L)**	Text Book, Reference Book, You tube video	Chalk and talk method

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	conjugated dienes and, Diels-Alder reaction; Allylic and benzylic bromination using N-bromosuccinimide and mechanism, e.g. propene, 1-butene, toluene,ethylbenzene. **Reactions of alkynes:** Acidity, Electrophilic and Nucleophilic additions. Hydration toform carbonyl compounds, Alkylation of terminal alkynes.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dr.Arti Dubey_____DEPARTMENT: __Chemistry_____CLASS: __F.Y.B.Sc_____

SEMESTER: __II_____ MONTH: ___ACADEMIC YEAR: __2022-23_____

LEARNING OBJECTIVE/S:

The learners will be able to : _

- Understand The fundamentals of ionic equilibrium and its applications
- Learn about the basics of Molecular Spectroscopy .
- Know about the Solid State Chemistry .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Paper II Unit I TITLE Physical Chemistry	**1.1 Ionic Equilibria:** Strong, moderate and weak electrolytes, degree of ionization, factors affecting degree of ionization, ionization constant and ionic product of water, ionization of weak acids and bases, pH scale, common ion effect, dissociation constants of mono-, di and triprotic acid (exact treatment for monoprotic acid) Buffers: Introduction, types of buffers, derivation of Henderson equation for acidic and basic buffers, buffer action, buffer capacity (Numericals expected) **1.2 Molecular Spectroscopy:** Electromagnetic radiation, electromagnetic spectrum, Planck's equation, interaction of electromagnetic radiation with matter: Absorption, emission, scattering, flourescence, electronic, vibrational and rotational transitions, Beer-Lambert's law (Numericals expected) **1.3 Solid State Chemistry** Types of solids, crystal lattice, lattice points, unit cell, space lattice and lattice plane, laws of crystallography: Law of	**(7L)** **(4L)** **(4L)**	Text Book, Reference Book, You tube video	Chalk and talk method
	constancy of interfacial angle, law of symmetry and law of rational indices (Numericals expected)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15 L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr.Arti Dubey_____ DEPARTMENT: _Chemistry_____CLASS: ___S.Y.B.Sc._____

SEMESTER: ___III_____ MONTH: _____ ACADEMIC YEAR: __2022-23_____

LEARNING OBJECTIVE/S:
The learners will be able to :
Know about Chemical Bonding, Non-Directional Bonding, Directional Bonding- Orbital approach, Molecular Orbital Theory .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Course Title: (General Chemistry) Paper-I Unit-II Inorganic Chemistry	**Unit-II** **Chemical Bonding** **2.1 Non-Directional Bonding** 2.1.1 Ionic Bond: Conditions for the Formation of Ionic Bond. 2.1.2 Types of Ionic Crystals 2.1.3 Radius Ratio Rules 2.1.4 Lattice Energy, Borne-Lande Equation 2.1.5 Kapustinski Equation 2.1.6 Born-Haber Cycle and its Application **2.2. Directional Bonding: Orbital Approach.** 2.2.1 Covalent Bonding The Valence Bond Theory-Introduction and basic tenets. 2.2.2 Interaction between two hydrogen atoms and the Potential energy diagram of the resultant system. 2.2.3 Corrections applied to the system of two hydrogen atoms Formation of H_2	**(4L)** **(6L)**	Text Book, Reference Book, You tube video	Chalk and talk method

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	2.2.4 Homonuclear diatomic molecules from He_2 to Ne_2 2.2.5 Resonance and the concept of Formal Charge; Rules for Resonance or Canonical structures. 2.2.6 Bonding in Polyatomic Species: The role of Hybridization. And types of hybrid orbitals-*sp, sp*$_2$*, sp*$_3$*, sp*$_3$*d, sp*$_2$*d*$_2$*and sp*$_2$*d sp*$_3$*d*$_2$*.* 2.2.7 Equivalent and Non-Equivalent hybrid orbitals 2.2.8 Contribution of a given atomic orbital to the hybrid orbitals (with reference to *sp*$_3$ hybridisation as in CH_4, NH_3 and H_2O and series like NH_3, PH_3, AsH_3, BiH_3) 2.3 **Molecular Orbital Theory** 2.3.1. Comparing Atomic Orbitals and Molecular Orbitals. 2.3.2. Linear combination of atomic orbitals. to give molecular orbitals LCAO-MO approach for diatomic homonuclear molecules). 2.3.4. Wave mechanical treatment for molecular orbitals (H_2^+ and H_2) 2.3.4 Molecular orbital Theory and Bond Order and magnetic property: with reference to O_2,O_2^+ O_2^-,O_2^{2-} (Problems and numerical problems expected wherever possible)	**(5L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Arti Dubey_____ DEPARTMENT: _Chemistry_____CLASS: ___S.Y.B.Sc._____

SEMESTER: ___III_____ MONTH: _____ ACADEMIC YEAR: __2022-23_____

LEARNING OBJECTIVE/S:
The learners will be able to :

- To gain knowledge about the Nomenclature of aliphatic, alicyclic and aromatic carbonyl compounds.
- To know about General mechanism of nucleophilic addition reaction.
- To understand the Reactions of aldehydes and ketones
- To learn common reaction mechanisms of Benzoin condensation, Knoevenagel condensation, Claisen-Schmidt and Cannizzaro reaction.
- To gain knowledge about the Keto-enol tautomerism.
- To study the Active methylene compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Course Title: (General Chemistry) Paper-II **Unit III: Organic Chemistry**	**Unit III: Organic Chemistry** **Carbonyl Compounds:** 3.1 Nomenclature of aliphatic, alicyclic and aromatic carbonyl compounds. Structure, reactivity of aldehydes and ketones and methods of preparation; Oxidation of primary and secondary alcohols using PCC, hydration of alkynes, action of Grignard reagent on esters, Rosenmund reduction, Gattermann – Koch formylation and Friedel Craft acylation of arenes 3.2 General mechanism of nucleophilic addition, and acid catalyzed nucleophilic addition reactions. 3.3 Reactions of aldehydes and ketones with $NaHSO_3$, HCN, RMgX, alcohol, amine, phenyl hydrazine, 2,4-Dinitrophenyl hydrazine, $LiAlH_4$ and $NaBH_4$. 3.4 Mechanisms of following reactions: Benzoin condensation, Knoevenagel condensation, Claisen-Schmidt and Cannizzaro	**[15L]**	Text Book, Reference Book, You tube video	Chalk and talk method

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	reaction. 3.5 Keto-enol tautomerism: Mechanism of acid and base catalysed enolization 3.6 Active methylene compounds: Acetylacetone, ethyl acetoacetate diethyl malonate, stabilised enols. Reactions of Acetylacetone and ethyl acetoacetate (alkylation, conversion to ketone, mono- and dicarboxylic acid)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15 L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Arti Dubey_____ DEPARTMENT: _Chemistry_____CLASS: ___S.Y.B.Sc._____

SEMESTER: ___III_____ MONTH: _____ ACADEMIC YEAR: __2022-23_____

LEARNING OBJECTIVE/S:
The learners will be able to : ___

1. Select a method of analysis
2. Decide how to identify a sample and prepare it for analysis
3. Select a procedure for analysis
4. Identify sources of possible errors in the results obtained.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

PAPER –III Unit I Title Analytical Chemistry	Unit **I- Intorduction to Analytical Chemistry and Statistical Treatment of analytical data-I** *(Problems including numericals expected wherever necessary)* **1.1. Role of Analytical Chemistry (9 L)** 1.1.1. Language of analytical chemistry: important terms and their significance in Analytical Chemistry. 1.1.2. Purpose of Chemical Analysis; Analysis Based (i) On the nature of information required: (Proximate, Partial, Trace, Complete Analysis) and (ii) On the size of the sample used (Macro, semi micro and micro analysis) 1.1.3. Classical and Non-Classical Methods of Analysis; their types and importance. **1.2. Significance of Sampling in Analytical Chemistry** 1.2.1. Terms involved in Sampling 1.2.2. Types of Sampling 1.2.3. Sampling techniques	**(9 L)**	Text Book, Reference Book, You tube video	Chalk and talk method

	1.3. Results of Analysis. 1.3.1. Errors in Analysis and their types 1.3.2. Precision and Accuracy in Analysis 1.3.3. Corrections for Determinate Errors *(Problems including Numericals expected wherever required)*	**(6L)**		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __(15 L)_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr.Arti Dubey_____ DEPARTMENT: _Chemistry_____CLASS: ___S.Y.B.Sc._____

SEMESTER: ___IV_____ MONTH: _____ ACADEMIC YEAR: __2022-23_____

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LEARNING OBJECTIVE/S:
The learners will be able to :

To understand the different aspects and importance variable oxidation states, Origin of colour and Magnetic properties for transition metals and their compounds __

To study the Selected topics on Chemistry of Titanium and vanadium.

To gain knowledge about the Coordination Chemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Course Title: (General Chemistry) Paper-I Unit-II Inorganic Chemistry	**Unit-II** **2.1 Comparative Chemistry of the transition metals (9 L)** **2.1.1** Position in the periodic table; Natural occurrence principal ores and minerals; **2.1.2** Significance of special stability of d_0, d_5 and d_{10} leading to variable oxidation states; Unusual oxidation states and their stabilities in aqueous solutions (with special reference to vanadium, and chromium.) **2.1.3** Origin of colour for transition metals and their compounds: such as reflectivity, surface coatings, particle size, packing density for metals and nature of d-orbitals, number of electrons in the d orbitals, geometry, and ability for charge transfer). **2.1.4** Magnetic properties of transition metal compounds: Origin of magnetism-spin and orbital motion of electrons; equation for spin only and spin-orbital magnetism in terms of Bohr magnetons (No derivation of relevant equations expected); Reasons for quenching	**(9 L)**	Text Book, Reference Book, You tube video	Chalk and talk method

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	of orbital moments. **2.1.5** Chemistry of Titanium and vanadium: properties of Oxides and chlorides; use in titrimetric analysis **2.1.6** Qualitative tests for transition metal ions: General considerations in devising tests (with reference to Chromium, Manganese, iron, Cobalt Nickel and Copper) **2.2 Coordination Chemistry :** **2.2.1 Introduction to Chemistry of Coordination Compounds** i. Historical perspectives: Early ideas on coordination compounds ii. Basic terms and nomenclature. iii. Types of ligands iv. Isomerism :General Types with special reference to stereoisomerism of coordination compounds (C.N=6) v. Evidence for the formation of coordination compounds, **2.2.2. Theories of coordination compounds** i. Werner's Theory of coordination compounds, ii. Effective atomic number rule. iii. Eighteen electron Rule **2.2.3. Nature of the Metal-Ligand Bond:** i.) Valence Bond Theory; Hybridisation of the central metal orbitals-sp_3, sd_3/d_3s sp_3d_2/d_2sp_3, sp_2d, ii.) Inner and outer orbital complexes of .(suitable examples of Mn(II) Fe(II),Fe(III),Co(II)/Co(III),Ni(II), Cu(II) Zn(II) complexes with ligands like aqua, ammonia CN^- and halides may be used) iii.) Limitations of V.B.T **2.2.4.** Application of coordination compounds.	**(6 L)**		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15L_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr.Arti Dubey_____ DEPARTMENT: _Chemistry_____CLASS: ___S.Y.B.Sc._____

SEMESTER: ___IV_____ MONTH: _____ _ ACADEMIC YEAR: __2022-23_____

LEARNING OBJECTIVE/S:

The learners will be able to : To gain knowledge about the Nomenclature, Preparation and Reactions of aliphatic, and aromatic compounds. To learn common reaction and mechanisms of Salt Formation, N-acylation, N-alkylation, Hofmann's exhaustive methylation (HEM),Hofmann-elimination reaction, reaction with nitrous acid, carbylamine reaction, Electrophilic substitution in aromatic amines: bromination, nitration and sulphonation. To study about Heterocyclic Compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

PAPER –II Unit III Title: Organic Chemistry	**Unit III: Organic Chemistry** **Nitrogen containing compounds and heterocyclic compounds: 3.1 Amines:** Nomenclature, effect of substituent on basicity of aliphatic and aromatic amines; 3.1.1. Preparation: Reduction ofaromaticnitro compounds using catalytic hydrogenation,chemical reduction using Fe-HCI, Sn-HCl, Zn-acetic acid, reduction of nitriles, ammonolysis of halides, reductive amination , Hofmann bromamide reaction. 3.1.2. Reactions- Salt Formation, N-acylation, N-alkylation, Hofmann's exhaustive methylation (HEM),Hofmann-elimination reaction, reaction with nitrous acid, carbylamine reaction, Electrophilic substitution in aromatic amines: bromination, nitration and sulphonation. **3.2 Diazonium Salts**: Preparation and their reactions/synthetic application - Sandmeyer	**(7 L)**	Text Book, Reference Book, You tube video	Chalk and talk method

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	reaction, Gattermann reaction, Gomberg reaction, Replacement of diazo group by -H,-OH. Azo coupling with phenols, naphthols and aromatic amines, reduction of diazonium salt to aryl hydrazine and hydroazobenzene **3.3 Heterocyclic Compounds:** 3.3.1. Classification, nomenclature, electronic structure, aromaticity in 5-numbered and 6-membered rings containing one heteroatom; 3.3.2. Synthesis of Furan, Pyrrole (Paal-Knorr synthesis, Knorr pyrrole synthesis, and Hantzsch synthesis), Thiophene, Pyridine (Hantzsch synthesis), 3.3.3. Reactivity of furan, pyrrole and thiophene towards electrophilic substitution reactions on the basis of stability of intermediate and of pyridine on the basis of electron distribution. Reactivity of pyridine towards nucleophilic substitution on the basis of electron distribution. 3.3.4. Reactions of furan, pyrrole and thiophene: halogenation, nitration, sulphonation, Vilsmeier-Haack reaction, Friedel-Crafts reaction. Furan: Diels-Alder reaction, Ring opening. Pyrrole: Acidity and basicity of pyrrole. Comparison of basicity of pyrrole and pyrrolidine. 3.3.5. Pyridine: Basicity. Comparison of basicity of pyridine, pyrrole and piperidine. Sulphonation of pyridine (with and without catalyst), reduction and action of sodamide (Chichibabin reaction).	**(8 L)**		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr.Arti Dubey_____ DEPARTMENT: _Chemistry_____CLASS: ___S.Y.B.Sc._____

SEMESTER: ___IV_____ MONTH: _____ ACADEMIC YEAR: __2022-23_____

LEARNING OBJECTIVE/S:
The learners will be able to understand :

- The importance of separation in sample treatment
- Various methods of separations
- How to select a method of separation of an analyte from the matrix
- How a solute gets distributed between two immiscible phases
- Principle of solvent extraction and various terms involved therein
- Effect of various parameters on solvent extraction of a solute
- Classification of Chromatographic methods
- Paper and thin layer chromatography and using them in practice.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER –III Unit I Title: analytical Chemistry	**1. Separation Techniques in Analytical Chemistry** **1.1.** An Introduction to Analytical Separations and its importance in analysis. **1.2.** Estimation of an analyte without effecting separation. **1.3.** Types of separation methods **1.3.1.** Based on Solubilities (Precipitation, Filtration Crystallisation) **1.3.2.** Based on Gravity- Centrifugation **1.3.3.** Based on volatility-Distillation ; **1.3.4.** Based on Electrical effects-Electrophoresis **1.3.5.** Based on retention capacity of a Stationary Phase - Chromatography; **1.3.6.** Based on distribution in two immiscible phases-Solvent	**(02 L)**	Text Book, Reference Book, You tube video	Chalk and talk method

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	Extraction; **1.3.7.** Based on capacity to exchange with a resin-Ion Exchange; **1.4. Electrophoresis:** Principles, Basic Instrumentation, Working and Application in separation of biomolecules like enzymes and DNA. **1.5. Solvent extraction** 1.5.1. Introduction, Nernst distribution Law, Distribution Ratio, Partition Coefficient. 1.5.2. Conditions of extraction: Equilibration time, Solvent volumes, temperature, pH. 1.5.3. Single step and multi step extraction, Percentage extraction for single step and multistep extraction. Separation factor. 1.5.4. Batch and continuous extraction **1.6. Chromatography** 1.6.1. Introduction to Chromatography 1.6.2. Classification of chromatographic methods based on stationary and mobile phase 1.6.3. Paper Chromatography: Principle, techniques and applications of Paper Chromatography in separation of cations. 1.6.4. Thin layer Chromatography Principle, technique and Applications in determining the purity of a given solute; Following progress of a given reaction .	**(02 L)** **(06 L)** **(05 L)**		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

___15L_____

NAME OF THE STAFF: ___Dr.Arti Dubey_____ DEPARTMENT: Chemistry_____ CLASS: _M.Sc.(Part-I)_____

SEMESTER: ___I_____ MONTH: _ _____ ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to : Understand Materials Chemistry and Nanomaterials

Study about Solid State Chemistry, Structures of Compounds ,Methods of preparation for inorganic solids Preparative methods of Nanomaterials

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

Paper-II Inorganic chemistry Unit-III Title-Materials Chemistry and Nanomaterials	3.1 **Solid State Chemistry** 3.1.1. Electronic structure of solids and band theory, Fermi level, K Space and Brillouin Zones. 3.1.2. Structures of Compounds of the type: AB [nickel arsenide (NiAs)], AB2 [fluorite (CaF2) and anti-fluorite structures, rutile (TiO2) structure and layer structure [cadmium chloride and iodide (CdCl2, CdI2)]. 3.1.3. Methods of preparation for inorganic solids: Ceramic method, precursor method, sol-gel method (applications in Biosensors), microwave synthesis (discussion on principles, examples, merits and demerits are expected) 3.2 **Nanomaterials** 3.2.1. Preparative methods: Chemical methods, Solvothermal, Combustion synthesis, Microwave, Co-precipitation, Langmuir Blodgett(L-B) method, Biological methods: Synthesis using microorganisms. 3.2.2. Applications in the field of semiconductors, solar cells	**[15 L]**	Reference Book, You tube video	Chalk and Talk Method,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___Dr.Arti Dubey_____ DEPARTMENT: __Chemistry_____ CLASS: _M.Sc.(Part-I)_____

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SEMESTER: ___II_____ MONTH: _ _____ ACADEMIC YEAR: __2022-23_____

LEARNING OBJECTIVE/S:
The learners will be able to :
Understand heavy metals
Study about heavy metals and their sources, distribution, speciation, biochemical effects and toxicology, control and treatment.
Learn Itai-itai disease for Cadmium toxicity, and Arsenic Poisoning in the Indo-Bangladesh region
Understand biological implication of radioactive materials. Effect of low level radiation on cells- Its applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Inorganic chemistry Unit-III Title **Environmental Chemistry**	**3.1. Conception of Heavy Metals:** Critical discussion on heavy metals **3.2. Toxicity of metallic species**: Mercury, lead, cadmium, arsenic, copper and chromium, with respect to their sources, distribution, speciation, biochemical effects and toxicology, control and treatment. **3.3. Case Studies**: (a) Itai-itai disease for Cadmium toxicity, (b) Arsenic Poisoning in the Indo-Bangladesh region. **.3.4.Interaction of radiation in context with the environment:**Sources and biological implication of radioactive materials. Effect of low level radiation on cells- Its applications in diagnosis and treatment, Effect of radiation on cell proliferation and cancer.	**[15 L]**	Reference Book, You tube video	Chalk and Talk Method,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

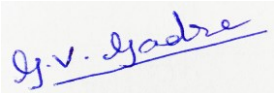
CLASS: T.Y.B.Sc. SEMESTER: V MONTH: August ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study relation between colour and chemical constitution by Armstrong theory, Witt's theory, Valence bond theory and Molecular orbital theory.
2. Unit processes like nitration, sulphonation, diazotization etc.
3. Preparation of various intermediates like benzene derivatives, Anthracene derivatives etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit IV	Unit 4.1- Colour and chemical constitution of dyes	4 L	Introduction to Synthetic Drugs and Dyes, Himalaya publication	Chalk and Board
	Unit 4.2- Unit process and dye intermediates	11 L	Introduction to Synthetic Drugs and Dyes, Himalaya publication	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

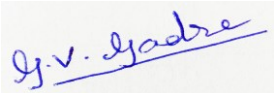
NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: T.Y.B.Sc. SEMESTER: VI MONTH: January ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Learn various non-textile uses of dyes such as their biomedical use, use in food and cosmetics, paper and leather etc.
2. Study of pigments.
3. Growth and development of the Indian dyestuff industry, opportunities and challenges of this industry, Make in India- future prospects of the dye industry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit VIII	Unit 8.1- Non-textile uses of dyes	8 L	Introduction to Synthetic Drugs and Dyes, Himalaya publication	Chalk and board
	Unit 8.2- Pigments	3 L	Introduction to Synthetic Drugs and Dyes, Himalaya publication	Chalk and board



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Unit 8.3- Dyestuff industry- Indian perspective	4 L	Introduction to Synthetic Drugs and Dyes, Himalaya publication	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: I MONTH: August ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Aliphatic nucleophilic substitution reactions: S_N1, S_N2, S_N^i reactions, SET mechanism, S_N reactions involving neighboring group participation (NGP), Aromatic nucleophilic substitution: S_NAr, benzyne mechanism, ipso, cine, tele, vicarious substitution, Ester hydrolysis.
2. Aromaticity: Frost-Musulin diagram, Huckel's (4n+2) and 4n rules, aromatic and antiaromatic compounds upto 18 carbon atoms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit II- Nucleophilic substitution reactions and Aromaticity.	Unit 2.1- Nucleophilic substitution reactions	9 L	Advanced Organic Chemistry, F. A. Carey and R. J. Sundberg.	Chalk and Board
	Unit 2.2- Aromaticity	6 L	Advanced Organic Chemistry: Reactions and mechanism, L.G. Wade, Jr., Maya Shankar Singh.	Chalk and Board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: II MONTH: February ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study Proton magnetic resonance spectroscopy: Principle, chemical shift, spin-spin coupling, coupling constant, karplus equation.
2. ^{13}C NMR spectroscopy: Theory and comparison with proton NMR, proton coupled and decoupled spectra, off-resonance decoupling.
3. Mass spectrometry: Molecular ion peak, base peak, isotopic abundance, Nitrogen rule, fragmentation pattern in various classes of organic compounds.
4. Structure determination involving individual or combined use of the above spectral techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit IV- NMR spectroscopy and Mass spectrometry	Unit 4.1- Proton magnetic resonance spectroscopy	8 L	Introduction to Spectroscopy, Donald L. Pavia.	Chalk and board
	Unit 4.2- ^{13}C NMR spectroscopy	3 L	Organic Spectroscopy- Principles and Applications, Jagmohan.	Chalk and board

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Unit 4.3- Mass spectrometry	4 L	Spectroscopy of Organic Compounds, P.S. Kalsi.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: III MONTH: July ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study Carbohydrates: structure elucidation of Lactose, structural features and applications of various carbohydrates.
2. Natural pigments: structural features and biological importance of various classes of natural pigments like carotenoids, flavones, quinones, porphyrins, structure elucidation of beta-carotene.
3. Insect pheromones: types of pheromones, synthesis of some pheromones.
4. Alkaloids: occurrence and importance of morphine, atropine, coniine.
5. Advanced spectroscopic techniques like DEPT, COSY, HETCOR, NOE, NOESY.
6. Drug discovery, design and development: Important topics of medicinal chemistry like Receptor, Therapeutic index, Drug assay. Basic pharmacokinetics as ADME properties.
7. Discovery of Penicillin and Librium without lead, identification of pharmacophore, functional group modification, structure activity relationship (SAR)

G.V. Gadre

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III- Unit I- Natural Products-I	Unit 1.1- Carbohydrates	5 L	Organic Chemistry Natural Products Volume-II, O. P. Agarwal. Natural products chemistry and applications, Sujata V. Bhat, B.A. Nagasampagi.	Chalk and Board
	Unit 1.2- Natural pigments	5 L		Chalk and Board
	Unit 1.3- Insect pheromones	3 L		Chalk and Board
	Unit 1.4- Alkaloids	2 L		Chalk and Board
Paper III- Unit IV- Advanced spectroscopic techniques-II	Unit 4.1- Advanced NMR techniques	10 L	Introduction to Spectroscopy, Donald L. Pavia. Organic Spectroscopy- Principles and Applications, Jagmohan.	Chalk and Board
	Unit 4.2- Spectral problems	5 L	Spectroscopy of Organic Compounds, P.S. Kalsi.	Chalk and Board

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Paper IV- Unit I- Drug discovery, design and development	Unit 1.1	7 L	Medicinal chemistry, D.Sriram and P. Yogeeswari Principles of medicinal chemistry (Vol. I and II)- S. S. Kadam, K. R. Mahadik.	Power point presentation
	Unit 1.2	8 L	Introduction to Medicinal chemistry by Graham Patrick	Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

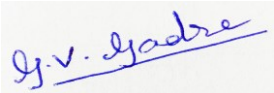
NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study Steroids: Biological role, important structural and stereochemical features of different class of steroids, synthesis of 16-DPA, synthesis of various male and female hormones from 16 DPA.
2. Heterocyclic compounds: Nomenclature of monocyclic, bicyclic/tricyclic heterocycles by common, Hantzsch-Widman and replacement nomenclature method, nucleophilic ring opening reactions of three and four membered heterocyclic compounds, structure, reactivity, synthesis and reactions of some monocyclic, bicyclic, fused heterocycles.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
Paper III- Unit I- Natural Products-III	Unit 1.1- Steroids	5 L	Organic Chemistry Natural Products	Chalk and Board
	Unit 1.2	2 L		Chalk and Board



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
	Unit 1.3	5 L	Volume-II, O. P. Agarwal.	Chalk and Board
	Unit 1.4	3 L	Natural products chemistry and applications, Sujata V. Bhat, B. A. Nagasampagi.	Chalk and Board
Paper III- Unit III- Heterocyclic compounds-I	Nomenclature of heterocyclic compounds	5 L	Heterocyclic Chemistry, Synthesis, Reactions and Mechanisms, R.K. Bansal.	Chalk and board
	Structure, reactivity, synthesis and reactions of monocyclic heterocycles	10 L	Chemistry of Heterocyclic compounds, Rakesh Kumar Parashar, Beena Negi.	Chalk and Board
Paper III- Unit IV- Heterocyclic	Nomenclature of heterocyclic compounds	5 L	Heterocyclic Chemistry, Synthesis,	Chalk and board

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
compounds-II	Nucleophilic ring opening reactions of 3 and 4 membered heterocycles	3 L	Reactions and Mechanisms, R.K. Bansal. Chemistry of Heterocyclic compounds, Rakesh Kumar Parashar, Beena Negi.	Chalk and Board
	Structure, reactivity, synthesis and reactions of fused heterocycles	7 L		Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT**: Chemistry **CLASS**: M.Sc. (I) SEMESTER: I **MONTH**: September

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: derive the wave function of sp, sp^2, sp^3hybridization, understand the concept of resonance and resonance energy, Valence Bond Theory and Molecular orbital theory, weak forces of attraction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, I, **Chemical Bonding**	**1.1** Recapitulation of hybridization. Derivation of wave functions for sp, sp^2, sp^3.	3L	Principles of Inorganic Chemistry.	Google Meet
	1.2 Discussion of involvement of d orbitals in various types of hybridization, concept of resonance, resonance energy derivation.	3L	Principles of Inorganic Chemistry.	Google Meet
	1.3 Critical analysis of VBT	2L	Principles of Inorganic Chemistry.	Google Meet

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	1.4 Molecular Orbital Theory for diatomic species of first transition series	2L	Principles of Inorganic Chemistry.	Google Meet
	1.5 Molecular Orbital Theory for SF_6, CO_2, B_2H_6, I^{3-}	3L	Principles of Inorganic Chemistry.	Google Meet
	1.6 Weak forces of attraction: Hydrogen bonding – concept, types, properties, methods of detection and importance, vander waals forces, ion-dipole, dipole-dipole, London forces	2L	Principles of Inorganic Chemistry.	Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** M.Sc. (I) **SEMESTER:** II **MONTH:** February

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: understand the reaction mechanism of octahedral and square planar complexes, redox reactions, its mechanism and stereochemistry

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, I, **Inorganic Reaction Mechanism**	**1.1** Rate of reactions, factors affecting the rate of reactions, techniques for determination of rate of reaction.	5L	Concise Coordination Chemistry	Google Meet
	1.2 Ligand Substitution reactions of : a) Octahedral complexes without breaking of metal ligand bond. b) Square planar complexes, trans effect, its theories and aplications.	5L	Principles of Inorganic Chemistry.	Google Meet
	1.3 Redox reactions: inner and outer sphere mechanism, complimentary and non-complimentary reactions.	3L	Concise Coordination Chemistry	Google Meet
	1.4 Stereochemistry of substitution reactions of octahedral complexes.	2L	Principles of Inorganic Chemistry.	Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** T.Y.B.Sc. **SEMESTER:** V **MONTH:** August

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: understand the chemistry of non-aqueous solvents, comparative study of group 16 and 17.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, IV, Some Special Topics	**4.1 Chemistry of Non-aqueous Solvents** **4.1.1** Classification of solvents and importance of non-aqueous solvents. **4.1.2** Characteristics and study of liquid ammonia, dinitrogen tetra oxide as non-aqueous solvents with respect to: (i) acid base reactions and (ii) redox reactions.	5L	J. D. Lee, Concise Inorganic Chemistry	Google Meet
	4.2 Comparative Chemistry of Group 16 **4.2.1** Electronic configurations, trends in physical properties, allotropy. **4.2.2** Manufacture of sulphuric acid by Contact process.	5L	J. D. Lee, Concise Inorganic Chemistry	Google Meet
	4.3 Comparative Chemistry of Group 17 **4.3.1** Electronic configuration, General characteristics, anamolous properties of fluorine, comparative study of acidity	5L	J. D. Lee, Concise Inorganic Chemistry	Google Meet
	of oxyacids of chlorine w.r.t acidity, oxidising properties and structures (on the basis of VSEPR theory). **4.3.2** Chemistry of interhalogens with reference to preparations, properties and structures (on the basis of VSEPR theory).			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** T.Y.B.Sc. SEMESTER: VI **MONTH:** Jan

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: learn various methods to extract metals from their ores, introduction of group 18 elements and bioinorganic chemistry.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, IV, **Some Special Topics**	**4.1 Metallurgy** **4.1.1** Types of metallurgies, **4.1.2** General steps of metallurgy; Concentration of ore, calcinations, roasting, reduction and refining. **4.1.3** Metallurgy of copper: occurrence, physicochemical principles, Extraction of copper from pyrites& refining by electrolysis.	7L	Puri, Sharma Kalia Inorganic chemistry.	Google Meet
	4.2 Chemistry of Group 18 **4.2.1** Historical perspectives **4.2.2** General characteristics and trends in physical and chemical properties **4.2.3** Isolation of noble gases	5L	Puri, Sharma Kalia Inorganic chemistry.	Google Meet
	4.2.4 Compounds of Xenon (oxides and fluorides) with respect to preparation and structure (VSEPR) **4.2.5** Uses of noble gases			

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	4.3 Introduction to Bioinorganic Chemistry. **4.3.1**Essential and non-essential elements in biological systems. **4.3.2** Biological importance of metal ions such as Na^{+},K^{+} ,Fe^{+2}/Fe^{+3} and Cu^{+2}(Role of $Na^{+}$and K^{+} w.r.t ion pump)	3L	Puri, Sharma, Kalia Inorganic chemistry.	Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** S.Y.B.Sc. **SEMESTER:** III **MONTH:** August

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: know about ionic bond and covalent bond, resonance, hybridization, valence bond theory and molecular orbital theory, know the various instrumental methods of analysis, advantages of using instruments to make measurements, the various observable properties of a given analyte and the

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stimulus best suited for its analysis, know about a generalized diagram of an analytical instrument, select a suitable instrumental method for analysis, appreciate the basic terms in spectrometry, use the relationship between absorbance (and its variations) and concentration of the analyte, chose a suitable method for photometric titrations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I, II, **Chemical Bonding**	**2.1 Non-Directional Bonding** **2.1.1** Ionic Bond: Conditions for the Formation of Ionic Bond. **2.1.2** Types of Ionic Crystals **2.1.3** Radius Ratio Rules **2.1.4** Lattice Energy, Borne-Lande Equation **2.1.5** Kapustinski Equation **2.1.6** Born-Haber Cycle and its Application	4L	Puri, Sharma Kalia Inorganic chemistry.	Google Meet

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	2.2. Directional Bonding: Orbital Approach. **2.2.1** Covalent Bonding The Valence Bond Theory Introduction and basic tenets. **2.2.2** Interaction between two hydrogen atoms and the Potential energy diagram of the resultant system. **2.2.3** Corrections applied to the system of two hydrogen atoms Formation of H_2 **2.2.4** Homonuclear diatomic molecules from He_2 to Ne_2 **2.2.5** Resonance and the concept of Formal Charge; Rules for Resonance or Canonical structures. **2.2.6** Bonding in Polyatomic Species: The role of Hybridization. And types of hybrid orbitals-*sp, sp^2, sp^3, sp^2d^2, sp^2d and $sp3d^2$* **2.2.7** Equivalent and Non-Equivalent hybrid orbitals **2.2.8** Contribution of a given atomic orbital to the hybrid orbitals (with reference to sp^3hybridisation as in CH_4, $NH_3$and H_2O and series like NH_3, PH_3, AsH_3, BiH_3)	6L	Puri, Sharma Kalia Inorganic chemistry.	Google Meet
	2.3 Molecular Orbital Theory **2.3.1.** Comparing Atomic Orbitals and Molecular Orbitals. **2.3.2**. Linear combination of atomic orbitals to give molecular orbitals LCAO-MO approach for diatomic homonuclear molecules. **2.3.4.** Wave mechanical treatment for molecular orbitals ($H^{2+}$and H) **2.3.4** Molecular orbital Theory and Bond Order and magnetic property: with reference to O_2,O_2^+ O_2^-,O_{22-}	5L	Puri ,Sharma Kalia Inorganic chemistry.	Google Meet

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III, III, **Basic Concepts in Instrumental methods**	**3.1.** Relation between the analyte, stimulus and measurement of change in the observable property. **3.2.** Block Diagram of an Analytical instrument. **3.3.** Types of Analytical Instrumental methods based on i) Optical interactions (e.g. Spectrometry: uv-visible, Polarimetry) ii) Electrochemical interactions (e.g. Potentiometry, Conductometry,) iii) Thermal interactions (e.g. Thermogravimetry)	3L	Instrumental Methods of Chemical Analysis	Google Meet
	3.4. Spectrometry **3.4.1.** Interaction of electromagnetic radiation with matter: Absorption and Emission spectroscopy **3.4.2.** Basic Terms: Radiant Power, Absorbance, Transmittance, Monochromatic light, Polychromatic light, Wavelength of maximum absorbance, Absorptivity and Molar Absorbtivity **3.4.3.** Statement of Beer's Law and Lambert's Law, Combined Mathematical Expression of Beer -Lambert's Law, Validity of Beer-Lambert's Law,Deviations from Beer-Lambert's Law ((Real deviations, Instrumentaldeviations and Chemical deviations) **3.4.4.** Instrumentation for absorption spectroscopy: Colorimeters and Spectrophotometers **3.4.5.** Block Diagrams for Single beam and Colorimeter, and Spectrophotometer (Principles, Construction and working Details of Components expected i.e source ,Sample holder , Filters/Monochromators, Detectors such as Photomultiplier tube)	7L	Instrumental Methods of Chemical Analysis	Google Meet

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	3.4.6. Applications of UV-Visible Spectrophotometry **(02 L)** (a) Qualitative analysis such as Identification of functional groups in Organic compounds , Chromophores and Auxochrome,c*is* and *trans* isomers. (b) Quantitative analysis by Calibration curve method **3.4.7.** Photometric Titrations: Principle, Instrumentation, Types of Photometric titration Curves with examples.	2L 3L	Instrumental Methods of Chemical Analysis	Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT II: 15 L

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT III: 15L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** S.Y.B.Sc. **SEMESTER:** IV **MONTH:** January

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: know the position of elements in periodic table, origin of color and magnetic properties of transition elements, qualitative tests of transition elements and introduction of coordination compounds, its theories, nature and applications, the use of statistical methods in chemical analysis, the nature of indeterminate errors, the randomness of such errors and its distribution around a correct or acceptable result, computation of confidence limits and confidence interval, test for rejection of doubtful result, method to draw best fitting straight line

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I, II, **2.1 Comparative Chemistry of the transition metals**	**2.1.1** Position in the periodic table; Natural occurrence principal ores and minerals; **2.1.2** Significance of special stability of d_0, d_5 and d_{10} leading to variable oxidation states; Unusual oxidation states and their stabilities in aqueous solutions (with special reference to vanadium, and chromium.) **2.1.3** Origin of colour for transition metals and their compounds: such as reflectivity, surface coatings, particle size, packing density for metals and nature of d-orbitals, number of electrons in the d-orbitals, geometry, and ability for charge transfer).	9L	Puri, Sharma, Kalia Inorganic Chemistry.	Google Meet

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2.2 Coordination Chemistry	**2.1.4** Magnetic properties of transition metal compounds: Origin of magnetism-spin and orbital motion of electrons; equation for spin only and spin-orbital magnetism in terms of Bohr magnetons (No derivation of relevant equations expected); Reasons for quenching of orbital moments. **2.1.5** Chemistry of Titanium and vanadium: properties of Oxides and chlorides; use in titrimetric analysis **2.1.6** Qualitative tests for transition metal ions: General considerations in devising tests (with reference to Chromium, Manganese, iron, Cobalt			
	2.2 Coordination Chemistry **2.2.1 Introduction to Chemistry of Coordination Compounds** i. Historical perspectives: Early ideas on coordination compounds ii. Basic terms and nomenclature. iii. Types of ligands iv. Isomerism :General Types with special reference to stereoisomerism of coordination compounds (C.N=6) v. Evidence for the formation of coordination compounds, **2.2.2. Theories of coordination compounds** i. Werner's Theory of coordination compounds, ii. Effective atomic number rule. iii. Eighteen electron Rule **2.2.3. Nature of the Metal-Ligand Bond:** I Valence Bond Theory; Hybridisation of the central metal orbitals-sp^3, sd^3/d^3s, sp^3d^2/d^2sp^3, sp^2d.	6L	Puri, Sharma, Kalia Inorganic chemistry.	Google Meet

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III, III **Statistical Treatment of analytical data --II**	ii. Inner and outer orbital complexes of .(suitable examples of Mn(II), Fe(II),Fe(III),Co(II)/Co(III),Ni(II), Cu(II) Zn(II) complexes with ligands like aqua, ammonia CN-and halides may be used) iii. Limitations of V.B.T **2.2.4.** Application of coordination compounds.			
	3.1.**Nature of Indeterminate Errors:** 3.1.1. The true and acceptable value of a result of analysis 3.1.2. Measures of central tendency: mean, median. mode, average 3.1.3. Measures of dispersion: Absolute deviation, relative deviation, relative average deviation, standard deviation,(s, sigma) variance, coefficient of variation	3L	Modern Analytical Chemistry , David Harvey (page numbers 53 -84)	Google Meet

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	3.2.Distribution of random errors: 3.2.1. Gaussian distribution curve. 3.2.2. Equation and salient features of Gaussian distribution curve **3.3.Concept of Confidence limits and confidence interval and its computation using** (i) Population standard deviation (ii) Student's *t* test (iii) Range **3.4.Criteria for rejection of doubtful result** (i) 2.5 d rule (ii) 4.0 d rule (iii) Q test **3.5.Test of Significance** **(02 L)**	2L 3L 2L	Modern Analytical Chemistry , David Harvey (page numbers 53 -84)	Google Meet

	(i) Null hypothesis (ii) F-test (variance ratio test) **3.6. Graphical representation of data and obtaining best fitting straight line (03 L)** (a) For line passing through origin (b) For line not passing through origin	2L 3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT II: 15 L

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT III: 15L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. SHEETAL R. POWAR**

SEMESTER: V

LEARNING OBJECTIVE/S:

The learners will be able to:

i. Understand the mechanisms of important reactions

ii. Understand the important concept of green chemistry and apply it.

DEPARTMENT: CHEMISTRY MONTH: August to November

CLASS: TYBSc

ACADEMIC YEAR: 2022-2023

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III (Organic Chemistry) Unit II 2.1 Stereochemistry I	2.1.1 Molecular chirality and elements of symmetry: Mirror plane symmetry, inversion center, roation -reflection (alternating) axis. 2.1.2 Chirality of compounds without a stereo genic center: cummulenes and biphenyls.	(5 L)	Stereochemistry P.S.Kalsi	Power point (Online)

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2.2 Agrochemicals	2.2.1 General introduction & scope, meaning & examples of insecticides, herbicides, fungicide, rodenticide, pesticides, plant growth regulators. 2.2.2 Advantages & disadvantages of agrochemicals 2.2.3 Synthesis & application of IAA (Indole Acetic Acid) & Endosulphan, 2.2.4 Bio pesticides – Neem oil & Karanj oil.	(4 L)	Agrochemicals and pesticides: A.Jadhav and T.V.Sathe	Power point (Online)

2.3 Heterocyclic chemistry:	2.3.1 Reactivity of pyridine-N-oxide, quinoline and iso-quionoline. 2.3.2 Preparation of pyridine-N-oxide, quinoline (Skraup synthesis) and iso-quinoline (BischlerNapieralski synthesis). 2.3.3 Reactions of pyridine-N-oxide: halogenation, nitration and reaction with NaNH2/liq.NH3, n-BuLi. 2.3.4 Reactions of quinoline and isoquinoline; oxidation,reduction,nitration,halogenation and reaction with NaNH2/liq.NH3,n-BuLi.	(6 L)	Heterocyclic Chemistry, John A. Joule and Keith Mills, Wiley	Power point (Online)
Unit III 3.1 IUPAC	IUPAC Systematic nomenclature of the following classes of compounds (including compounds upto two substituents / functional groups): 3.1.1 Bicyclic compounds – spiro, fused and bridged (upto 11 carbon atoms) – saturated and unsaturated compounds. 3.1.2 Biphenyls 3.1.3 Cummulenes with upto 3 double bonds 3.1.4 Quinolines and isoquinolines.	(5 L)	IUPAC nomenclature by S.C.Pal.	Power point (Online)

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3.2 Synthesis of organic compounds	3.2.1 Introduction: Linear and convergent synthesis, criteria for an ideal synthesis, concept of chemo selectivity and regioselectivity with examples, calculation of yields 3.2.2 Multicomponent Synthesis: Mannich reaction and Biginelli reaction. Synthesis with examples (no mechanism) 3.2.3 Green chemistry and synthesis: Introduction: Twelve principles of green chemistry, concept of atom economy and E-factor, calculations and their significance, numerical examples. i) Green reagents: dimethyl carbonate. ii) Green starting materials : D-glucose iii) Green solvents : supercritical CO2 iv) Green catalysts: Bio catalysts. 3.2.4 Planning of organic synthesis i) synthesis of nitroanilines. (o&p) ii) synthesis of halobenzoic acid.(o&p) iii) Alcohols (primary / secondary / tertiary) using Grignard reagents. iv) Alkanes (using organo lithium compounds)	(10L)	Green chemistry: V. K. Ahluwalia	Power point (Online)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L each

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. SHEETAL R. POWAR** DEPARTMENT: CHEMISTRY CLASS: TYBSc SEMESTER: VI MONTH: Jan to April

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

i. Understand the mechanisms of important reactions

ii. Understand the concept of stereochemistry chemistry

iii. Understand the concept of spectroscopy and interpret spectra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III (Organic Chemistry) Unit I	1.1.1 Stereoselectivity and stereospecificity: Idea of enantioselectivity (ee) and diastereoselectivity (de) , Topicity : enantiotopic and diasterotopic atoms, groups and faces. 1.1.2 Stereochemistry of – i) Substitution reactions : SNi (reaction of alcohol with thionyl chloride) ii) Elimination reactions: E2–Base induced dehydrohalogenation of1-	(10 L)	Stereochemistry by Kalsi	Power point (Online)
1.1 Stereochemistry II	bromo-1,2- diphenylpropane. iii) Addition reactions to olefins: a) bromination (electrophilic anti addition) b) syn hydroxylation with OsO4 and KMnO4 c) epoxidation followed by hydrolysis. References:			

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1.2 Amino acids & Proteins	1.2.1 α-Amino acids: General Structure, configuration, and classification based on structure and nutrition. Properties: pH dependency of ionic structure, isoelectric point and zwitter ion. Methods of preparations: Strecker synthesis, Gabriel phthalamide synthesis. 1.2.2 Polypeptides and Proteins: nature of peptide bond. Nomenclature and representation of polypeptides (di-and tri-peptides) with examples Merrifield solid phase polypeptide synthesis. .Protiens:general idea of primary,secondary,tertiary & quaternary structure	(5 L)	Name Reactions – Jie Jack Li, 4th Edition, Springer Pub	Power point (Online)
Unit III 3.1 Spectroscopy II	3.1.1 IR Spectroscopy: Basic theory, nature of IR spectrum, selection rule, fingerprint region. 3.1.2 PMR Spectroscopy: Basic theory of PMR, nature of PMR spectrum, chemical shift (δ unit), standard for PMR, solvents used. Factors affecting chemical shift: (1) inductive effect (2) anisotropic effect (with reference to C=C, C≡C, C=O and benzene ring). Spin- spin coupling and coupling constant. application of deuterium exchange technique. application of PMR in structure determination. 3.1.3 Spectral characteristics of following classes of organic compounds, including benzene and monosubstituted benzenes, with respect to IR and PMR: (1) alkanes (2) alkenes (3) alkynes (4) haloalkanes (5) alcohols (6) carbonyl compounds (7) ethers (8) amines (broad regions characteristic of different groups are expected). Problems of structure elucidation of simple organic compounds using	(10 L)	Organic spectroscopy Jag Mohan	Power point (Online)

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	individual or combined use of UV-Vis, IR, Mass and NMR spectroscopic technique are expected.			
3.2 Nucleic Acids	Controlled hydrolysis of nucleic acids. sugars and bases in nucleic acids. Structures of nucleosides and nucleotides in DNA and RNA. Structures of nucleic acids (DNA and RNA) including base pairing.	(5 L)	Organic chemistry Morrison and Boyd S.H.Pine, organic chemistry 4th edition. McGraw Hill	Power point (Online)

TOTAL NUMBER OF LECTURES ALLOCATED TO UNIT : 15 L EACH

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[Document title]

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. JAYASHRI GOPAL NAPHADE, DEPARTMENT: _CHEMISTRY, CLASS: _M.SC II (ORGANIC CHEMISTRY), SEMESTER: III, MONTH: _July_____, ACADEMIC YEAR: 2022-2023.

LEARNING OBJECTIVE/S:
The learners will be able to: understand the concept of QSAR factor and how to relatedto drug design.Also understand the synthesis of some drug.they understand the concept of drug.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit II: Drug Design, Develepment And Synthesis	2.1: QSAR Parameter Steric Factor , Talf Equation	5L	1.Medicinal Chemistry,Sriram &Yogeeswari,2nd edition 2.A Introduction to drug design,Pandeya and Dimmock.	White Board and Markar
	2.2: Mordern method of drug design & synthesis	3L		
	2.3: Concept of prodrug & soft drug	3L		
	2.4: Synthesis and application of the drug	4L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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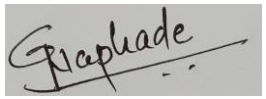
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. JAYASHRI GOPAL NAPHADE, DEPARTMENT: _CHEMISTRY, CLASS: _M.SC II (ORGANIC CHEMISTRY), SEMESTER: III, MONTH: __July_____, ACADEMIC YEAR: 2022-2023.

LEARNING OBJECTIVE/S:
The learners will be able to: understand the Pericyclic reactions and it's different types.Also understand the Selectivity of cycloaddition reaction and sigmatropic reaction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit II: Pericyclic Reaction	2.1: Cycloaddition Reaction & Other Cycloaddition Reaction	7L	1.Pericyclic Reaction, Ian Fleming 2.Pericyclic Reaction- A mechanistic Approach, S. M. Mukharji.	White Board and Markar
	2.2: Cycloaddition Reaction	3L		
	2.3: Sigmatropic Rearrangement	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

SIGNATURE OF THE STAFF 

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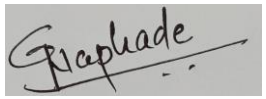
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.JAYASHRI GOPAL NAPHADE___DEPARTMENT: __CHEMISTRY_ CLASS: _M.Sc II (ORGANIC CHEMISTRY) SEMESTER: ___IV_____ MONTH: _____January_____ ACADEMIC YEAR: ___2022-2023_____

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the how the protection of group is necessary in organic synthesis also understand the concept of Umpolung.they also understand the concept of retrosynthetic an d how to plan the retrosynthetic apporoach.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERANCES	TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT-I Desiging Organic Synthesis-i	1.1:Protectin group in organic Synthesis	3L	1.Protective groups in Organic synthesis,Greene and Wuts 2.Principle of organic synthesis, R.O.C. Norman & Coxon. 3.Organic Synthesis:The Disconnection Approach,Stuart Warren.	White Board & Marker
	1.2: Concept of Umpolung	3L		
	1.3:Introduction to Retrosynthetic analysis & synthetic planning	9L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

SIGNATURE OF THE STAFF  **SIGNATURE OF THE H.O.D.**

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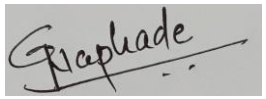
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr.JAYASHRI GOPAL NAPHADE ___DEPARTMENT: __CHEMISTRY_CLASS: _M.Sc.II(ORGANIC CHEMISTRY) SEMESTER: _IV_ MONTH: __January_____ ACADEMIC YEAR: ___2022-2023_____

LEARNING OBJECTIVE/S:
The learners will be able to: understand the different sources use in research .some information about journals.They understand different resources used during research.like information technology and library.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV UNIT-I RESEARCH METHODOLOGY	1.1: Print: Primary, Secondary,Tertiary sources	5L	Research methodology,C.R.Kothari	Projector
	1.2::Journals	5L		
	1.3:Information Technology & Library Resources	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. JAYASHRI GOPAL NAPHADE __DEPARTMENT: __CHEMISTRY___

CLASS: ___S.Y.B.Sc (PC-CZ)__ SEMESTER: __III_____ MONTH: ___July_____

ACADEMIC YEAR: ___2022-2023_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the nomenclature ,structure ,preparation and reactions aof aldehyde and ketones.Also understand mechanism of some name reaction._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT –III Carbonyl componnd	3.1: Nomencluture,structure,reactivity & method of Preparation of aldehyde & Ketone	6L	S.Y.B.Sc ORGANIC CHEMISTRY TEXT BOOK (HIMALAYA PUBLICATION)	Chalk -Board
	3.2: General mechanism of nuclophilic addition	1L		
	3.3: Reactions of aldehyde and ketones	3L		
	3.4: Mechanism of some name Reactions	2L		
	3.5: Keto-enol tautomerisation 3.6: Active Methylene compound	1L 2L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr.JAYASHRI GOPAL NAPHADE____DEPARTMENT: __CHEMISTRY_____CLASS: __ S.Y.B.Sc (PC-CZ)__ _____ SEMESTER: _____IV_____ MONTH: __December_____ ACADEMIC YEAR: _____2022-2023_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the nomenclature and preparation and reaction of Amines and Diazonium salt.They also understand what is heterocyclic compound it's nomenclature,preparation and reaction of furan.Pyrrole,Thiophene and Pyridine.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/
PAPER-II UNIT –III Nitrogen Containing compound & Heterocyclic compound	3.1:Amines: Nomencluture , preparation and Reactions	4L	S.Y.B.Sc ORGANIC CHEMISTRY TEXT BOOK (HIMALAYA PUBLICATION	Chalk - Board
	3.2: Diazonium Salt: Preparation,reactions & synthetic application	3L		
	3.3:Hetrocyclic compound :3.3.1:classification,nomenclature,structure	8L		
	3.3.2:synthesis of furan,pyrrole,Thiophene,pyridine 3.3.3:Reactivityof furan,pyrrole,Thiophene,pyridine			
	3.3.4:Reactions of furan,pyrrole,Thiophene 3.3.5: Pyridine:Basicity,Reaction			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Dr.JAYASHRI GOPAL NAPHADE ---DEPARTMENT: ___CHEMISTRY_____

CLASS: ____T.Y.B.Sc___ SEMESTER: ____V___ MONTH: __July_____ ACADEMIC YEAR: _____2022-2023_____

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concept of Dyestuff ,it's type ,nomenclature and application.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DRUG AND DYES UNIT-III CHEMISTRY OF DYESTUFF	3.1:Introduction to the Dyestuff Induestries	5L	T.Y.B.Sc DRUG &DYES TEXT BOOK (HIMALAYA PUBLICATION)	Chalk and Board
	3.2: Substrates for Dyes : Types of fibres	3L		
	3.3: classification of Dyes based on Applications and Dyeing methods	7L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

SIGNATURE OF THE STAFF Naphade

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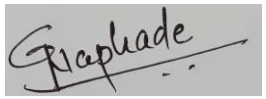
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr.JAYASHRI GOPAL NAPHADE____DEPARTMENT: _CHEMISTRY_ CLASS: __T.Y.B.Sc_ SEMESTER: _____VI_____ MONTH: _December_____ ACADEMIC YEAR: _____2022-2023_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the classification of dyes and synthesis of some dyes.Also understand the hards of synthetic dyes on health and environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DRUG AND DYES UNIT-VII CHEMISTRY OF DYE STUFF	7.1:Classification of dyes based on chemical constitution & synthesis of selected dyes.	12 L	T.Y.B.Sc DRUG &DYES TEXT BOOK (HIMALAYA PUBLICATION)	Chalk and Board
	7.2: Health and Environmental Hazards of synthetic dyes & their remediation process.	3 L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

SIGNATURE OF THE STAFF 

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **HANISHA RAJENDRA GHUDE**

DEPARTMENT: CHEMISTRY CLASS: **FYBSc CBZ A DIVISION** SEMESTER: **I** MONTH: **Aug-Sep** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able to : •To understand 3D structure of molecules.

•To study different spacial arrangement of atoms in a molecule.

• To study the relationship between stereoisomers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Semester 1 Paper 2 Unit 3 Stereochemistry 1	a) Projection formulae: Flying Wedge projection, Fischer Projection, Newman and Sawhorse Projection formulae (of erythro, threo isomers of tartaric acid and 2,3 - dichlorobutane) and their interconversions	03	Himalaya Publications FYBSc textbook	Blackboard Chalk & Duster
	b) Geometrical isomerism in alkene and cycloalkanes: cis–trans and syn-anti isomerism E/Z notations with C.I.P rules.	04	Himalaya Publications FYBSc textbook	Blackboard Chalk & Duster

	c) Optical Isomerism: Optical Activity, Specific Rotation, Chirality/Asymmetry, Enantiomers, Molecules with two similar and dissimilar chiral-centres, Diastereoisomers, meso structures, racemic mixture and resolution.	04	Himalaya Publications FYBSc textbook	Blackboard Chalk & Duster

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	d) Relative and absolute configuration: D/L and R/S designations. Conformational analysis of alkanes (ethane, propane and n-butane); Relative stability with energy diagrams	04	Himalaya Publications FYBSc textbook	Blackboard Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **HANISHA RAJENDRA GHUDE**

DEPARTMENT: **CHEMISTRY** CLASS: **FYBSc CBZ A DIVISION** SEMESTER: **II** MONTH: **JAN- FEB** ACADEMIC YEAR: **2022-2023**

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VIVA COLLEGE, Virar (W)

NAAC accredited "B" Grade, 2.69 CGPA

LEARNING OBJECTIVE/S:

The learners will be able to : •To understand the different conformations of cycloalkanes

• It is useful to understand the structure, stability, spectroscopy, magnetic properties, and chemical reactivity of many compounds

PAPER, UNIT , TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
Semester 2 Paper 2 Unit 3 Stereochemistry - II	**3.1 Stereochemistry II** Cycloalkanes and Conformational Analysis: Types of cycloalkanes and their relative stability, Baeyer strain theory, Conformational analysis of cyclohexane: Chair, Boat and Twist boat forms; Relative stability with energy diagram	05	Himalaya Publications FYBSc textbook	Blackboard Chalk & Duster

	3.2 Aromatic Hydrocarbons: Aromaticity: Hückel's rule, anti-aromaticity, aromatic character of arenes, cyclic carbocations/carbanions and heterocyclic compounds with suitable examples. Electrophilic aromatic substitution: halogenation, nitration, sulphonation and FriedelCrafts alkylation/acylation with their mechanism, Directing effects of the groups.	10	Himalaya Publications FYBSc textbook	Blackboard Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **HANISHA RAJENDRA GHUDE**

DEPARTMENT: **CHEMISTRY** CLASS: **MSc PART 2 ANALYTICAL CHEMISTRY** SEMESTER:**III** MONTH: **Aug-Sep** ACADEMIC YEAR: **2022-2023**

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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LEARNING OBJECTIVES/S:
The learner will able to : • To study the principle, Instrumentation, types & applications of different Chromatographic techniques

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

Paper 1 Unit 4 Chromatographic techniques-II	4.1 Supercritical fluid Chromatography: Theory, concept of critical state of matter and supercritical state, types of supercritical fluids, instrumentation, applications to environmental, food, pharmaceuticals and polymeric analysis.	06	Skoog	Blackboard chalk & Duster
	4.2 Affinity Chromatography: principle,instrumentation and applications	05	Skoog	Blackboard chalk & Duster
	4.3 Optimum pressure liquid chromatography (OPLC)	04	Skoog	Blackboard chalk & Duster

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: HANISHA RAJENDRA GHUDE**

DEPARTMENT**: CHEMISTRY** CLASS**: MSc PART 2 ANALYTICAL CHEMISTRY** SEMESTER**:IV** MONTH**: Jan-Feb** ACADEMIC YEAR**: 2022-2023**

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

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Waman Thakur College of Science Yashvant
Keshav Patil College of Commerce Vidhya

LEARNING OBJECTIVES/S:

The learner will able to : • safe design and sustainable development of nanomaterials with potential environmental benefits

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 4 Advanced techniques	4.1 Electrophoresis: introduction, factors affecting migration rate,supporting media (gel, paper, cellulose, acetate, starch, polyacrylamide,agarose, sephedax and thin layers)	05	Skoog	Blackboard Chalk & Duster
	4.2 Techniques of Electrophoresis: low and high voltage, sds page,continuous electrophoresis, capillary electrophoresis, zone, gel, isoelectricfocusing, isotaechophoresis and miceller electro kinetic capillary chromatography, instrumentation, detection and applications.	04	Skoog	Blackboard Chalk & Duster
	4.3 Introduction to Nanotechnology: Analytical techniques in nanotechnology, consequences of the nanoscale, (nanoparticlesmorphology, electronic structure, optical properties) one dimensional nanomaterials (nanofilms, nanolayers), two dimensional nanomaterials (nanotubes, nanowires), three dimensional nanomaterials (nanoparticles and quantum dots).	06	Skoog	Blackboard Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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VIVA COLLEGE, Virar (W)

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **HANISHA RAJENDRA GHUDE**

DEPARTMENT: **CHEMISTRY** CLASS:**MSc PART 2 ANALYTICAL CHEMISTRY** SEMESTER: **IV** MONTH: **JAN- FEB** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able to : • To study the identification and collection of genuine drugs and discard of the exhausted, adulterated drugs.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 2 Separation, Analysis and Standardizatio n of Herbal based products	2.1 Herbs as a raw material: Defination of herb, herbal medicine, herbal Medicinal products, herbal drug preparation. Sources of herbs. Selection, identification and authentication of herbal materials, drying and processing of herbal raw materials,drying and processing of herbal raw material.	06	Skoog	Blackboard Chalk & Duster
	2.2 Extraction of herbal materials: Choice of solvent for extraction, methods used for extraction and principles involved in extraction	05	Skoog	Blackboard Chalk & Duster
	2.3 Standardization of herbal formulation and herbal extracts: Standardization of herbal extract as per WHO cGMP guidelines, Physical,Chemical,Spectral and toxilogical standardization,qualitative and quantitative esimations	04	Skoog	Blackboard Chalk & Duster

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **HANISHA RAJENDRA GHUDE**

DEPARTMENT: **CHEMISTRY** CLASS:**TYBSc(6 UNITS)** SEMESTER: **VI** MONTH: **Nov-Dec** ACADEMIC YEAR: **2022-2023**

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LEARNING OBJECTIVE/S:

The learners will be able to : •To study the different methods to prevent growth of microorganisms on food

• To understand the analysis of various cosmetic products.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Unit 3 Food & Cosmetic Analysis	**3.1 Introduction to food chemistry** 3.1.1 Food processing and preservation: Introduction, need, chemical methods, action of chemicals(sulphur dioxide, boric acid, sodium benzoate, acetic acid, sodium chloride and sugar) and pH control Physical methods (Pasteurization and Irradiation)	03	TYBSc analytical chemistry textbook	Blackboard Chalk & Duster

	3.1.2 Determination of boric acid by titrimetry and sodium benzoate by HPLC.	02	TYBSC analytical chemistry textbook	Blackboard Chalk & Duster
	3.1.3 Study and analysis of food products and detection of adulterants	04	TYBSC analytical chemistry	Blackboard Chalk & Duster

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	1) Milk:Composition & nutrients, types of milk (fat free, organic and lactose milk) Analysis of milk for lactose by Lane Eynon's Method 2) Honey: Composition Analysis of reducing sugars in honey by Coles Ferricyanide method 3) Tea: Composition, types (green tea and mixed tea) Analysis of Tannin by Lowenthal's method 4) Coffee: Constituents and composition, Role of Chicory Analysis of caffeine by Bailey Andrew method		textbook	
	3.2 Cosmetics 3.2.1 Introduction and sensory properties	01	TYBSC analytical chemistry textbook	Blackboard Chalk & Duster
	3.2.2 Study of cosmetic products – 1) Face powder:	05	TYBSC analytical chemistry	Blackboard Chalk & Duster

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	Composition Estimation of calcium and magnesium by complexometric titration 2) Lipstick: Constituents Ash analysis for water soluble salts: borates, carbonates and zinc oxide 3) Deodorants and Antiperspirants: Constituents, properties Estimation of zinc by gravimetry		textbook	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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VIVA COLLEGE, Virar (W)

Teaching plan (UNIT PLAN)

NAME OF THE STAFF: _____Kirti Pankaj Mhatre_____DEPARTMENT: ____Chemistry_____CLASS: ____TyBsc._____ SEMESTER: _VTH MONTH: June-July- Aug

ACADEMIC YEAR: ____2022-2023_____

LEARNING OBJECTIVE/S:

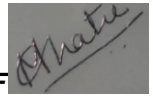
The learners will be able to :

1.To study quality in analytical chemistry like Concepts of Quality, Quality Control and Quality Assurance.

2.To study the chemical calculations like inter conversion of various concentration units and Percent composition of elements in chemical compounds.

3..To study how to do the sampling of solids and liquid and gases alogwith the Collection, preservation and dissolution of the sample..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF 

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Analytical chemistry Paper IV UNIT I :INTRODUCTION TO QUALITYCONCEPTS,CHEMICAL CALCULATIONS AND SAMPLING	1.1 Quality in Analytical Chemistry 1.1.1 Concepts of Quality, Quality Control and Quality Assurance 1.1.2 Importance of Quality concepts in Industry 1.1.3 Chemical Standards and Certified	05L	Saujanya publication,sheath publication,Himalaya publication textbook of analytical chemistry,	chalk and board,powerpoint presentation

	Reference Materials; Importance in chemical analysis Quality of material: Various grades of laboratory reagents			

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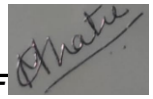
	1.2 Chemical Calculations (Numericals and word problems are expected) 1.2.1.Inter conversion of various concentration units. (Conversion of concentration from one unit to another unit with examples) 1.2.2 Percent composition of elements in chemical compounds	04	Same as above	chalk and board,powerpoint presentation
	1.3 Sampling 1.3.1 Purpose, significance and difficulties encountered in sampling 1.3.2 Sampling of solids: Sample size - bulk ratio, size to weight ratio, multistage and sequential sampling, size reduction methods,	06L	Same as above	chalk and board,powerpoint presentation

SIGNATURE OF THE STAFF 

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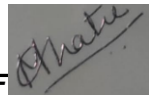
	sampling of compact solids, equipments and methods of sampling *of compact solids, sampling of particulate solids, methods and equipments used for sampling of particulate solids.* *1.3.3 Sampling of liquids: Homogeneous and heterogeneous, Static and* *flowing liquids.* *1.3.4 Sampling of gases: Ambient and stack sampling: Apparatus and methods for sampling of gases.* *1.3.5 Collection, preservation and dissolution of the sample.*			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_L____

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Kirti Pankaj Mhatre_____DEPARTMENT: CHEMISTRY_____

CLASS: _Tybsc_____- SEMESTER: _Vth MONTH: Aug-Sept-Oct
_____

ACADEMIC YEAR: _-2022-2023_____

LEARNING OBJECTIVE/S:

The learners will be able to :

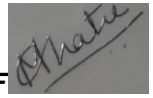
1. To study AAS like instrumentation, working and applications in detail.

2.To study AES like instrumentation, working and applications in detail.

3.To study Molecular Fluorescence and Phosphorescence Spectroscopy like instrumentation, working and applications in details.

4.To study turbidimetry and nephelometry like instrumentation, working and applications in details.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ANALYTICAL CHEMISTRY PAPER-IV	**3.1Atomic Spectroscopy: Flame Emission spectroscopy(FES) and** **Atomic Absorption Spectroscopy(AAS)**		SAUJNYA PRAKASHAN TEXTBOOK,	chalk and board,powerpoint presentation

SIGNATURE OF THE STAFF 

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UNIT-3 OPTICAL METHODS(6UNITS)	3.1.1 Introduction, Energy level diagrams, Atomic spectra, Absorption and Emission Spectra 3.1.2 Flame Photometry – Principle, Instrumentation (Flame atomizers,	07L	SHETH PUBLICATION TEXTBOOK, HIMALAYA PUBLICATION TEXTBOOK	

	types of Burners, Wavelength selectors, Detectors) 3.1.3 Atomic Absorption Spectroscopy – Principle, Instrumentation (Source, Chopper, Flame and Electrothermal Atomiser) 3.1.4 Quantification methods of FES and AAS – Calibration curve method, Standard addition method and Internal standard method 3.1.5 Comparison between FES and AAS 3.1.6 Applications, Advantages and Limitations			

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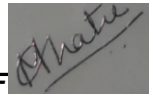
	3.2 Molecular Fluorescence and Phosphorescence Spectroscopy *3.2.1 Introduction and Principle* *3.2.2 Relationship of Fluorescence intensity with concentration* *3.2.3 Factors affecting Fluorescence and Phosphorescence* *3.2.4 Instrumentation and applications*	*04L*	*SAME AS ABOVE*	*chalk and board,powerpoint presentation*

SIGNATURE OF THE STAFF 

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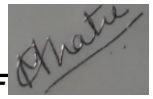
	3.2.5 Comparison of Fluorimetry and Phosphorimetry 3.2.6 Comparison with Absorption methods			
	3.3 Turbidimetry and Nephelometry 3.3.1 Introduction and Principle 3.3.2 Factors affecting scattering of Radiation: Concentration, particle size, wavelength, refractive index 3.3.3 Instrumentation and applications	04L	SAME AS ABOVE	chalk and board,powerpoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_____

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _KIRTI PANKAJ MHATRE_____DEPARTMENT: _____CHEMISTRY_____CLASS: _FYBSC_____ SEMESTER: ____I^ST^ MONTH: _AUG-SEPT-Oct-Nov

ACADEMIC YEAR: _2022-2023_____

LEARNING OBJECTIVE/S:

The learners will be able to : _1.To study the thermodynamics concepts like systems,zeroth law,first law calculations of heat (q), work (w), internal energy (U), and enthalpy (H) (Numericals)Thermochemistry: Heats of reactions, standard states, enthalpy of formation of molecules,enthalpy of combustion and its applications, calculation of bond energy, bond dissociation energy and resonance energy from thermochemical data, Kirchhoff's equation(Numericals) in detail.

2.To study chemical calculations with the help of numericals of Normality, molality, molarity, formality, mole

fractions, weight ratio, volume ratio, weight to volume ratio, ppm, ppb, millimoles.

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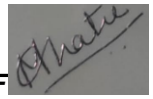
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF 

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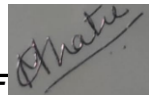
Paper 1 **Unit 1** **Chemical**	**Thermodynamic terms:** System, surrounding, boundaries, open, closed and isolated system, intensive and extensive properties, state functions and path functions, zeroth law	10L	HIMALAYA PUBLICATIONS TEXTBOOK, SHETH	chalk and board,powerpoint presentation

Thermodynamics, **1.2 Chemical Calculations**	of thermodynamics First law of thermodynamics: concept of heat (q), work (w), internal energy (U), statement of first law, enthalpy, relation between heat capacities, sign conventions, calculations of heat (q), work (w), internal energy (U), and enthalpy (H) (Numericals expected) Thermochemistry: Heats of reactions, standard states, enthalpy of formation of molecules, enthalpy of combustion and its applications, calculation of bond energy, bond dissociation energy and resonance energy from thermochemical data, Kirchhoff's equation		PUBLICATIONS TEXTBOOK	

SIGNATURE OF THE STAFF 

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	(Numericals expected)			

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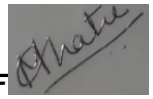
	1.2 Chemical Calculations *Expressing concentration of solutions: Normality, molality, molarity, formality, mole* *fractions, weight ratio, volume ratio, weight to volume ratio, ppm, ppb, millimoles,* *milliequivalents (Numericals expected)*	*05L*	*SAME AS ABOVE*	*chalk and board,powerpoint presentation*

SIGNATURE OF THE STAFF 

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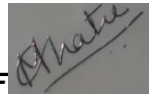
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L_____

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____Kirti Pankaj Mhatre _____DEPARTMENT: _____CHEMISTRY_____CLASS: ____TYBSC_____ SEMESTER: _VITH MONTH:. Dec-Jan

ACADEMIC YEAR: ___2022-2023_____

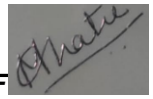
LEARNING OBJECTIVE/S:

The learners will be able to :

1.To study the polarography concepts like polarography H shaped polarographic cell, DME (construction, working,advantages and limitations), DC polarogram: Terms involved - Residual current, Diffusion current, Limiting current, Half-Wave Potential Role and selection of supporting electrolyte, Interference of oxygen, Half wave potential $E_{1/2}$,Factors affecting $E_{1/2}$ Ilkovic equations: various terms involved in it (No derivation)along with numericals.

2.To study Principle, Rotating Platinum Electrode(Construction, advantages and limitations)Titration curves with example, Advantages and limitations of amperometric titrations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF 

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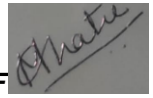
PAPER IV UNIT-1 **ELECTRO ANALYTICAL TECHNIQUES(3 & 6 UNITS)**	**1.1 Polarography (Numerical and word problems are expected)** 1.1.1 Difference between potentiometry and voltammetry, Polarizable and non-polarizable electrodes 1.1.2 Basic principle of polarography	11L	SAUJNYA PRAKASHAN TEXTBOOK, SHETH PUBLICATION TEXTBOOK, HIMALAYA	chalk and board,powerpoint presentation

SIGNATURE OF THE STAFF 

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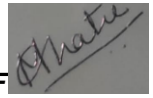
	H shaped polarographic cell, DME (construction, *working, advantages and limitations)* *1.1.3 DC polarogram: Terms involved - Residual current, Diffusion* *current, Limiting current, Half-Wave Potential* *Role and selection of supporting electrolyte, Interference of oxygen* *and its removal, polarographic Maxima and Maxima Suppressors* *Qualitative aspects of Polarography: Half wave potential $E_{1/2}$,* *Factors affecting $E_{1/2}$* *Quantitative aspects of polarography: Ilkovic equations: various* *terms involved in it (No derivation)* *1.1.4 Quantification* *1) Wave height – Concentration plots*		*PUBLICATION TEXTBOOK*	

SIGNATURE OF THE STAFF 

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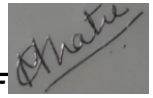
	(working plots/calibration) *2) Internal standard (pilot ion) method*			

SIGNATURE OF THE STAFF 

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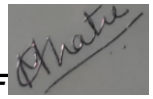
	3) Standard addition method *1.1.5 Applications advantages and limitations*			
	1.2Amperometric Titrations *1.1.1Principle, Rotating Platinum Electrode(Construction, advantages* *and limitations)* *1.2.2 Titration curves with example* *1.2.3 Advantages and limitations*	*04L*	*SAME AS ABOVE*	*chalk and board,powerpoint presentation*

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _KIRTI PANKAJ MHATRE_____DEPARTMENT: _____CHEMISTRY_____CLASS: ____TYBSC_____ SEMESTER: ____VITH MONTH: Jan-Feb

ACADEMIC YEAR: _2022-2023_____

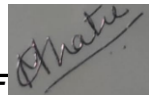
LEARNING OBJECTIVE/S:

The learners will be able to :

1._To study the gas chromatography Principle, Theory and terms involved Block diagram and components,types of columns,stationary phases in GSC and GLC, Detectors: TCD, FID, ECD, Qualitative, Quantitative analysis and applications Comparison between GSC and GLC along with calculations.

2.To study ion exchange chromatography Principle, Types of Ion Exchangers , Ideal properties of resin, Ion Exchange equilibria and mechanism, selectivity coefficient and separation factor,Factors affecting separation of ion,Ion exchange capacity and its determination for cation and anion,Exchangers,Applications of Ion Exchange Chromatography in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF 

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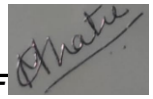
PAPER IV *UNIT-2* ***METHODS OF SEPARATION - II (3 & 6***	***2.1 Gas Chromatography (Numerical and word problems are expected)*** *2.1.1 Introduction, Principle, Theory and terms involved* *2.1.2 Instrumentation: Block diagram and components, types of columns,* *stationary phases in GSC and GLC, Detectors: TCD, FID,*	*09L*	*SAUJNYA PRAKASHAN TEXTBOOK,* *SHETH PUBLICATION TEXTBOOK,* *HIMALAYA*	*Chalk and Board, Powerpoint Presentation*

UNITS)	*ECD* *2.1.3 Qualitative, Quantitative analysis and applications* *2.1.4 Comparison between GSC and GLC*		*PUBLICATION TEXTBOOK*	

SIGNATURE OF THE STAFF 

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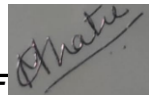
	2.2 Ion Exchange Chromatography *2.2.1 Introduction, Principle.* *2.2.2 Types of Ion Exchangers , Ideal properties of resin* *2.2.3 Ion Exchange equilibria and mechanism, selectivity coefficient and separation factor,Factors affecting separation of ions* *2.2.4* *Ion exchange capacity and its determination for cation and anion* *exchangers.* *2.2.5 Applications of Ion Exchange Chromatography with reference to Preparation of demineralised water, Separation of amino acids*	*06L*	*SAME AS ABOVE*	*Chalk and board*

SIGNATURE OF THE STAFF 

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_____

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SIGNATURE OF THE H.O.D.

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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _KIRTI PANKAJ MHATRE_____DEPARTMENT: _CHEMISTRY_____

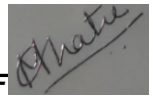
CLASS: _____FYBSC_____ SEMESTER: _IIND MONTH: ___Feb- Mar-Apr_____

ACADEMIC YEAR: _2022-2023_____
LEARNING OBJECTIVE/S:
The learners will be able to : 1. To study the gaseous state related laws and (Numericals) ,Deviation from ideal gas laws, reasons for deviation from ideal gas laws, Van der Waals equation of state, Joule-Thomson effect: qualitative discussion and experimentation,inversion temperature. (Numericals expected) in detail.

2.To study chemical equilibria and thermodynamics concepts like Reversible and irreversible reactions, law of mass action, dynamic equilibria, equilibrium

constant, (K_c and K_p), relationship between K_c and K_p, Le Chatelier's principle, factors affecting chemical equilibrium (Numericals)Statement of second law of thermodynamics, concepts of entropy and free energy,spontaneity and physical significance of free energy, thermodynamic derivation of. (Numericals).

_PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF 

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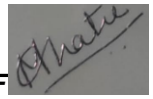
Paper 1 ***Unit 1*** ***1.1 Gaseous State:*** ***1.2 Chemical***	***1.1 Gaseous State:*** *Ideal gas laws, kinetic theory of gases, Maxwell-Boltzmann's distribution of velocities* *(qualitative discussion), ideal gases, real gases, compressibility factor, Boyle's*	*08L*	*HIMALAYA PUBLICATIONS TEXTBOOK,* *SHETH PUBLICATIONS TEXTBOOK*	*Chalk and board,Powerpoint presentation*

Equilibria and Thermodynamic Parameters:	*temperature (Numericals expected)* *Deviation from ideal gas laws, reasons for deviation from ideal gas laws, Van der Waals* *equation of state, Joule-Thomson effect: qualitative discussion and experimentation,* *inversion temperature. (Numericals expected)*			

SIGNATURE OF THE STAFF 

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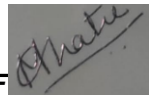
	1.2 Chemical Equilibria and Thermodynamic Parameters: *Reversible and irreversible reactions, law of mass action, dynamic equilibria, equilibrium* *constant, (K_c and K_p), relationship between K_c and K_p, Le Chatelier's principle, factors* *affecting chemical equilibrium (Numericals expected)* *Statement of second law of thermodynamics, concepts of entropy and free energy,spontaneity and physical significance of free energy, thermodynamic derivation of. (Numericals expected)*	*07L*	*SAME AS ABOVE*	*Chalk and board, Powerpoint Presentation*

SIGNATURE OF THE STAFF 

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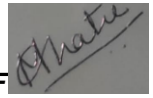
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

SIGNATURE OF THE STAFF 

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: June 2022 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand UV – Visible spectroscopy, its basic theory and applications.
Study mass spectrometry, determination of molecular formula and its applications.
Learn natural products like terpenoids, alkaloids in detail.
To gain knowledge of hormones like adrenaline.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III, Organic Chemistry **UNIT-IV, Spectroscopy-I And Natural Products**	Electromagnetic spectrum, units of wavelength and frequency, UV – Visible spectroscopy: Basic theory, solvents, nature of UV-Visible spectrum, concept of chromophore, auxochrome.	02	Introduction to spectroscopy (third edition), Pavia	Blackboard and ppt.
	Mass spectrometry: Basic theory. Nature of mass spectrum. General rules of fragmentation. Importance of molecular ion peak, isotopic peaks, base peak, nitrogen rule, rule of 13 for determination of empirical formula and molecular formula	03	Spectral identification of organic molecules by Silverstein.	Blackboard and ppt.
	Natural products: terpenoids, their introduction, isoprene rule, special isoprene rule, structural determination of citral,	04	Textbook, Himalaya publication	Blackboard and ppt.

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	Alkaloids introduction and occurrence, structural determination of nicotine,	04	Textbook, Himalaya publication	Blackboard and ppt.
	Hormones: Introduction, structure of adrenaline (epinephrine), physiological action of adrenaline.	02	Organic chemistry by Morrision and Boyd,7th edition	Blackboard and ppt. .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: III MONTH: June 2022 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

Study role of radicals in organic synthesis and their applications in detail.
Learn generation, stability, reactivity and structural and stereochemical properties of free radicals,.
Study characteristic reactions and applications of radicals in synthesis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

PAPER-II, Synthetic Organic Chemistry-I **UNIT-II, Radicals in organic synthesis**	Stability, reactivity and structural and stereochemical properties of free radicals, Persistent and charged radicals, Electrophilic and nucleophilic radicals. Radical Initiators: azobisisobutyronitrile (AIBN) and dibenzoyl peroxide.	04	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J. Sundberg, 5th Edition,	Blackboard and ppt.
	Characteristic reactions - free radical substitution, addition to multiple bonds. Radical chain reactions, radical halogenation of hydrocarbons (regioselectivity),radical cyclizations, autoxidations	04	Organic Chemistry, Clayden Greeves Warren and Wothers,	Blackboard and ppt.
	Radicals in synthesis: Inter and intra molecular C-C bond formation via mercuric hydride, tin hydride, thiol donors. Cleavage of C-X, C-Sn, C-Co, C-S, O-O bonds. Oxidative coupling, C-C bond formation in aromatics: $S_{RN}Ar$ reactions.	04	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press (2002).	Blackboard and ppt.
	Hunsdiecker reaction, Pinacol coupling, McMurry coupling, Sandmeyer reaction, Acyloin condensation.	03	Organic reactions and their mechanisms, 3rd revisededition, P.S. Kalsi, New Age International Publishers	Blackboard and ppt.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: III MONTH: June 2022 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

Study enamines, their generation & application in organic synthesis with mechanistic pathways.
Learn phosphorus, sulfur and nitrogen ylides; preparation and their synthetic applications along with their stereochemical aspects.
Study α-C-H functionalization by nitro, sulfoxide, sulfone and phosphonate groups.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic Organic Chemistry-I **UNIT-III, Enamines, Ylides and α-C-H functionalization**	Enamines**:** Generation & application in organic synthesis with mechanistic pathways, Stork enamine reaction. Reactivity, comparison between enamines and enolates. Synthetic reactions of enamines including asymmetric reactions of chiral enamines derived from chiral secondary amines.	04	Name Reactions and Reagents in Organic Synthesis**,** 2nd Edn., Bradford P. Mundy, Michael G. Ellard,	Blackboard and ppt.
	Phosphorus, Sulfur and Nitrogen Ylides: Preparation and their synthetic applications along with their stereochemical aspects.	03	Organic Chemistry, Clayden Greeves	Blackboard and ppt.

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			Warren and Wothers,	
	Wittig reaction, Horner-Wadsworth-Emmons Reaction, Barton-Kellogg olefination.	03	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press (2002).	Blackboard and ppt.
	α-C-H functionalization: By nitro, sulfoxide, sulfone and phosphonate groups: generation of carbanions by strong bases (LDA/n-butyl lithium) and applications in C-C bond formation.	03	Organic reactions and their mechanisms, 3rd revisededition, P.S. Kalsi, New Age International Publishers	Blackboard and ppt.
	Bamford-Stevens reaction, Julia olefination and its modification, Seyferth–Gilbert homologation, Steven's Rearrangement.	02	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Sundberg,	Blackboard and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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VIVA COLLEGE, Virar (W)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: III MONTH: June 2022 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand importance of organosilicons, organoboron and organotin compounds in organic synthesis.
Study application of mercury, selenium in organic synthesis.
Study application of silyl enol ethers in organic synthesis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic Organic Chemistry-I **UNIT-IV, Metals / Non-metals in organic synthesis**	Mercury in organic synthesis: Mechanism and regiochemistry of oxymercuration and demercuration of alkenes, mercuration of aromatics, transformation of aryl mercurials to aryl halides. Organomercurials as carbene transfer reagents.	03	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press	Blackboard and ppt.
	Organoboron compounds: Mechanism and regiochemistry of hydroboration of alkenes and alkynes, asymmetric hydroboration using chiral boron reagents, 9-BBN hydroboration, oxazaborolidine (CBS catalyst) and functional group reduction by diborane.	03	Organic Chemistry, Clayden Greeves Warren and Wothers,	Blackboard and ppt.
	Organosilicons: Salient features of silicon governing the reactivity of organosilicons, preparation and important bond-forming reactions of alkyl silanes, alkenyl silanes, aryl silanes and allyl silanes. β-silyl cations as intermediates. Iodotrimethylsilane in organic synthesis.	03	Modern Methods of Organic Synthesis, 4th Edition, W. Carruthers and Iain Coldham,.	Blackboard and ppt.

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	Silyl enol ethers: Application: As nucleophiles (Michael reaction, Mukaiyama aldol reaction), in ring contraction reactions.	02	Moder Organic Synthesis: An Introduction, G.S. Zweifel and M.H. Nantz,	Blackboard and ppt.
	Organotin compounds: Preparation of alkenyl and allyl tin compounds; application in C-C bond formation, in replacement of halogen by H at the same C atom. Selenium in organic synthesis: Preparation of selenols/selenoxide, selenoxide elimination to create unsaturation, selenoxide and seleno acetals as α-C-H activating groups	04	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J. Sundberg,	Blackboard and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: III MONTH: June 2022 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand primary and secondary metabolites and the building blocks.
Study Acetate pathway: Biosynthesis of malonylCoA.
Study Shikimic Acid pathway and mevalonate pathway.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER-IV, Medicinal , Biogenesis and green chemistry **UNIT-III, Biogenesis and biosynthesis of natural products**	Primary and secondary metabolites and the building blocks, general pathway of amino acid biosynthesis.	03	Natural product chemistry, A mechanistic, biosynthetic and ecological approach, Kurt B. G. Torssell, Apotekarsocieteten – Swedish pharmaceutical press.	Blackboard and ppt.
	Acetate pathway: Biosynthesis of malonylCoA, saturated fatty acids, prostaglandins from arachidonic acid, aromatic polyketides.	04	Organic Chemistry, Clayden Greeves Warren and Wothers,	Blackboard and ppt.
	Shikimic Acid pathway: Biosynthesis of shikimic acid, aromatic amino acids, cinnamic acid and its derivatives, lignin and lignans, benzoic acid and its derivatives, flavonoids and isofalvonoids.	04	Natural products Chemistry and applications, Sujata V Bhat, B.A. Nagasampagi and S. Meenakshi, Narosa Publishing House.,.	Blackboard and ppt.
	Mevalonate pathway: Biosynthesis of mevalonic acid, monoterpenes – geranyl cation and its derivatives, sesquiterpenes – farnesyl cation and its derivatives and diterpenes.	04	Natural Product Chemistry Vol.1 and 2, K. Nakanishi J. Goto. S.Ito Majori and S. Nozoo, Academic Press, 1974	Blackboard and ppt.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: T.Y.B.Sc. SEMESTER: VI MONTH: Dec-22 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

Study polymers, their classification, stereochemistry and applications.
Understand concept of biodegradable polymers
Learn catalysts and reagents with respect to functional group transformations and selectivity.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III, Organic Chemistry	Terms; monomer, polymer, homopolymer, copolymer, thermo plastics and thermosets. Addition polymers: polyethylene, polypropylene, teflon, polystyrene, PVC, Uses. Condensation polymers: polyesters, polyamides, polyurethanes, polycarbonates, phenol formaldehyde resins.Uses	03	Textbook, Himalaya publication	Blackboard and ppt.
UNIT-IV, Polymer, Catalysts and Reagents	Stereochemistry of polymers: Tacticity, mechanism of stereochemical control of polymerization using Ziegler Natta catalysts. Natural and synthetic rubbers: Polymerisation of isoprene: 1,2 and 1,4 addition (cis and trans), Styrene butadiene copolymer. Additives to polymers: Plasticisers, stabilizers and fillers.	03	Polymer science – a text book by Ahluwalia and Mishra	Blackboard and ppt.

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	Biodegradable polymers: Classification and uses. polylactic acid structure, properties and use for packaging and medical purposes.,	02	Textbook, Himalaya publication	Blackboard and ppt.
	Catalysts for hydrogenation: a. Raney Nickel b. Pt and PtO_2 (C=C, CN, NO_2, aromatic ring) c. Pd/C : C=C, COCl→CHO (Rosenmund) d. Lindlar catalyst: alkynes,	04	Oranic chemistry by Carey and Sundberg, Part A & B	Blackboard and ppt.
	Reagents**:** a. $LiAlH_4$ (reduction of CO, COOR, CN,NO_2) b. $NaBH_4$ (reduction of CO) c. SeO_2 (Oxidation of CH_2 alpha to CO) d. mCPBA (epoxidation of C=C) e. NBS (allylic and benzylic bromination)	03	Organic chemistry by Morrision and Boyd,7th edition	Blackboard and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: IV MONTH: /January 2022 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

Study principles of physical organic chemistry and structural effects and reactivity.
Study linear free energy relationship (LFER) in determination of organic reaction mechanism.
Learn uses of Hammett equation.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, Theoretical organic chemistry-II **UNIT-I, Physical organic chemistry**	Asymmetric synthesis: Principles of asymmetric synthesis: Introduction, the chiral pool in Nature, methods of asymmetric induction – substrate, reagent and catalyst controlled reactions.	03	Organic Chemistry, J. Clayden, S. Warren, N. Greeves, P. Wothers, 1st Edition, Oxford University Press (2001).	Chalk/ marker pen and board
	Synthesis of L-DOPA [Knowles's Mosanto process]. Asymmetric reactions with mechanism: Aldol and related reactions, Cram's rule, Felkin-Anh model,	04	A guide to mechanism in Organic Chemistry, 6th edition, 2009, Peter Sykes,	Chalk/ marker pen and board
	Sharpless enantioselective epoxidation, hydroxylation, aminohydroxylation, Diels-Alder reaction, reduction of prochiral carbonyl compounds and olefins.	05	Advanced Organic Chemistry: Reaction Mechanisms, R. Bruckner, Academic Press	Chalk/ marker pen and board
	Use of chiral auxiliaries in diastereoselective reductions, asymmetric amplification. Use of chiral BINOLs, BINAPs and chiral oxazolines asymmetric transformations.	03	Organic Chemistry, Part A and B, Fifth	Chalk/ marker pen and board.

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			edition,2007, Francis A. Carey and Richard J. Sundberg,	
	Grunwald-Winstein equation, Dimroth's E_T parameter, Solvatochromism Zscale, Spectroscopic Correlations, Thermodynamic Implications.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: IV MONTH: January 2022 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

UNDERSTAND CONCEPTS OF Electro-organic chemistry IN DETAIL.
Study cathodic reduction and anodic oxidation and its application in organic synthesis with mechanistic pathways.
Learn organocatalysts and Pd catalysed cycloaddition reactions
Study applications of selected methods of organic synthesis like crown ethers, cryptands, micelles

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II,	Electrode potential, cell parameters, electrolyte, working electrode, choice of solvents, supporting electrolytes.	02	Advanced Organic Chemistry, Part	Blackboard and ppt.

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Synthetic organic chemistry-II **UNIT-III, Electro-organic chemistry and Selected methods of Organic synthesis**			A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J. Sundberg,	
	Cathodic reduction: Reduction of alkyl halides, aldehydes, ketones, Nitro compounds, olefins, arenes, electro-dimerization.	02	Organic Chemistry, Clayden Greeves Warren and Wothers,	Blackboard and ppt.
	Anodic oxidation: Oxidation of alkylbezene, Kolbe reaction, Non-Kolbe oxidation, Shono oxidation..	03	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press (2002).	Blackboard and ppt.
	Selected Methods of Organic synthesis, Applications of the following in organic synthesis: Crown ethers, cryptands, micelles, cyclodextrins, catenanes. Organocatalysts: Proline, Imidazolidinone. Pd catalysed cycloaddition reactions: Stille reaction, Saeguse-Ito oxidation to enones, Negishi coupling	05	Organic reactions and their mechanisms, 3rd revisededition, P.S. Kalsi, New Age International Publishers	Blackboard and ppt.
	Use of Sc(OTf), and Yb(OTf) as water tolerant Lewis acid catalyst in aldol condensation, Michael reaction, Diels-Alder reaction, Friedel – Crafts reaction.	03	Chem.Rev. 2002, 102, 2227-2302, Rare Earth Metal Triflates in	Blackboard and ppt.

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			Organic Synthesis, S. Kobayashi.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: IV MONTH: January 2022 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

To gain knowledge of basic concepts of organometalic chemistry.
Understand importance of palladium in organic synthesis.
Study application of Ce, Sm, Ni, Co, Fe, Rh, and Cr in organic synthesis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic organic chemistry-II **UNIT-IV,**	Introduction to basic concepts: 18 electron rule, bonding in transition metal complexes, C-H activation, oxidative addition, reductive elimination, migratory insertion.	03	Moder Organic Synthesis: An Introduction, G.S. Zweifel and M.H. Nantz, W.H. Freeman and Company, (2007).	Blackboard and ppt.

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Transition and rare earth metals in organic synthesis	Palladium in organic synthesis: π-bonding of Pd with olefins, applications in C-C bond formation, carbonylation, alkene isomerisation, cross-coupling of organometallics and halides.	03	Organic Chemistry, Clayden Greeves Warren and Wothers,	Blackboard and ppt.
	Heck reaction, Suzuki-Miayura coupling, Sonogashira reaction and Wacker oxidation. Heteroatom coupling for bond formation between aryl/vinyl groups and N, S, or P atoms. Olefin metathesis using Grubb's catalyst.	03	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press	Blackboard and ppt.
	Application of Ni, Co, Fe, Rh, and Cr carbonyls in organic synthesis.	04	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J. Sundberg,	Blackboard and ppt.
	Application of samarium iodide including reduction of organic halides, aldehydes and ketones, α-functionalised carbonyl and nitro compounds. Application of Ce(IV) in synthesis of heterocyclic quinoxaline derivatives and its role as a de-protecting agent.	02	Modern Methods of Organic Synthesis, 4th Edition, W. Carruthers and Iain Coldham,	Blackboard and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____FY BSc_____ SEMESTER: __I_____MONTH: _____ ACADEMIC YEAR: _2022- 23_____

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN THE ATOMIC STRUCTURE IN DETAIL AND ALSO LEARN PERIODIC TABLE AND THE PERIODICITY OF THE ELEMENTS____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I **UNIT II** **INORGANIC CHEMISTRY**	**2.1 Atomic structure:** (Qualitative treatment only; it is expected that the learner knows the mathematical statements and understands their physical significance after completing this topic. No derivations of the mathematical equations required) a) Historical perspectives of the atomic structure; Rutherford's Atomic Model, Bohr's theory, its limitations and atomic spectrum of hydrogen atom. Structure of hydrogen atom. b) Hydrogenic atoms: 1. Simple principles of quantum mechanics; 2. Atomic orbitals	**(10L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

Bpriya

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	i) Hydrogenic energy levels ii) Shells, subshells and orbitals iii) Electron spin iv) Radial shapes of orbitals v) Radial distribution function vi) Angular shapes of orbitals. 3. Many Electron Atoms i) Penetration and shielding ii) Effective nuclear charge 4. Aufbau principle			
	2.2: Periodic Table and periodicity : Long form of Periodic Table; Classification for elements as main group, transition and inner transition elements; Periodicity in the following properties : Atomic and ionic size; electron gain enthalpy; ionization enthalpy, effective nuclear charge (Slater's rule); electronegativity ; Pauling, Mulliken and Alred Rochow electronegativities (Numerical problems expected, wherever applicable.) **Unit III**	**(5L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____FY BSc_____ SEMESTER: __II_____MONTH: _____ ACADEMIC YEAR: _2022- 23_____

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN THE BASICS OF THE PERIODIC TABLE AND THE VARIOUS ACID BASE THEORIES_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I **UNIT II** **INORGANIC CHEMISTRY**	**2.1 Concept of Qualitative Analysis:** a) Testing of Gaseous Evolutes, Role of Papers impregnated with Reagents in qualitative analysis (with reference to papers impregnated with starch iodide, potassium dichromate, lead acetate, dimethylglyoxime and oxine reagents). b) Precipitation equilibria, effect of common ions, uncommon ions, oxidation states, buffer action, complexing agents on precipitation of ionic compounds. (Balanced chemical equations and numerical problems expected.)	**(7L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION
	2.2 Acid Base Theories	**(8L**	TEXT BOOKS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

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	Arrhenius, Lowry- Bronsted, Lewis, Solvent – Solute concept of acids and bases, Hard and Soft acids and bases. Applications of HSAB Applications of acid base chemistry in: i) Understanding organic reactions like Friedel Craft's (acylation/alkylation)reaction ii) Volumetric analysis with special reference to calculation of titration curveinvolving strong acid and strong base.		REFFERENCE BOOKS U TUBE VIDEOS	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_ CHEMISTRY_____

CLASS: _____FY BSc_____ SEMESTER: __I_____MONTH: _____ ACADEMIC YEAR: _2022- 23_____

LEARNING OBJECTIVE/S:

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The learners will be able to : LEARN THE STEREO CHEMISTRY OF ALKANES THEIR OPTICALV ACTIVITY__THEIR CENTERS_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III **ORGANIC CHEMISTRY**	**3. Stereochemistry I: (15L)** Fischer Projection, Newman and Sawhorse Projection formulae (of erythro, threo isomers of tartaric acid and 2,3 dichlorobutane) and their interconversions Geometrical isomerism in alkene and cycloalkanes: cis–trans and syn-anti isomerism E/Z notations with C.I.P rules. Optical Isomerism: Optical Activity, Specific Rotation, Chirality/Asymmetry, Enantiomers, Molecules with two similar and dissimilar chiral-centres, Distereoisomers, meso structures, racemic mixture and resolution (methods of resolution not expected). Relative and absolute configuration: D/L and R/S designations. Conformation analysis of alkanes (ethane, propane and n-butane); Relative stability withenergy diagrams.	15	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_ CHEMISTRY_____

CLASS: _____FY BSc_____ SEMESTER: __II_____MONTH: _____ ACADEMIC YEAR: _2022- 23_____

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LEARNING OBJECTIVE/S:
The learners will be able to : LEARN STREOCHEMISTRY OF CYCLO ALKANE AND ALL ABOUT THE AROMATIC HYDROCARBONS_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III **ORGANIC CHEMISTRY**	**3.1 Stereochemistry-II: Cycloalkanes and Conformational Analysis:** Types of cycloalkanes and their relative stability, Baeyer strain theory, Conformation analysis of cyclohexane: Chair, Boat and Twist boat forms; Relative stability with energy.	**(5L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION
	3.2Aromatic Hydrocarbons Aromaticity: Hückel's ruleanti-aromaticity, aromatic character of arenes, cycliccarbocations/carbanions and heterocyclic compounds with suitable examples. Electrophilic aromatic substitution: halogenation, nitration, sulphonation and Friedel-Craftalkylation/acylation with their mechanism. , Hammond's postulate, Directing effects of the groups.	**(10L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_ CHEMISTRY_____

CLASS: _____SY BSc_____ SEMESTER: __III_____MONTH: _____ ACADEMIC YEAR: _2022- 23_____

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar

LEARNING OBJECTIVE/S:
The learners will be able to : CHEMICAL THERMODYNAMICS IN WHICH FREE ENERGIES AND THE ELECTROCHEMISTRY WITH THE BASIC CONCEPTS OF ELECTROCHEMISTRYY_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I **UNIT I** **PHYSICAL CHEMISTRY**	**1.1 Chemical Thermodynamics-II** 1.1.1 Free Energy Functions: Helmholtz Free Energy, Gibb's Free Energy, Variation of Gibb's free energy with Pressure and Temperature. 1.1.2 Gibbs-Helmholtz equation, van't Hoff reaction isotherm and van't Hoff reaction isochore. (Numericals expected). 1.1.3 Thermodynamics of Open System: Partial Molal Properties, Chemical Potential and its variation with Pressure and Temperature, Gibb's Duhem equation. 1.1.4 Concept of Fugacity and Activity	**(8L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION
	1.2 Electrochemistry: 1.2.1 Conductivity, equivalent and molar conductivity and their variation with dilution for weak and strong electrolytes. 1.2.2 Kohlrausch law of independent migration of ions. 1.2.3 Applications of conductance measurements: determination of degree of ionization and ionization constant of weak electrolyte, solubility and solubility product of sparingly soluble salts, ionic product of water. (Numericals expected).	**(7L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

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	1.2.4 Transference number and its experimental determination using Moving boundary method. (Numericals expected). Factors affecting transference number.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____SY BSc_____ SEMESTER: __IV_____MONTH: _____ ACADEMIC YEAR: _2022- 23_____

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN ELETROCHEMISTRY II GIVES THEM THE IDEA ABOUT THE REVERSIBLE AND IRRIVERSIBLE CELL ALSO GIVE THE KNOWLEDGE OF PHASE EQUILIBRIA__

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER I **UNIT I** **PHYSICAL CHEMISTRY**	**1.1Electrochemistry-II:** 1.1.1 Electrochemical conventions, Reversible and irreversible cells. 1.1.2 Nernst equation and its importance, Types of electrodes, Standard electrode potential, Electrochemical series (Numericals expected). 1.1.3 Thermodynamics of a reversible cell, calculation of thermodynamic properties: ΔG, ΔH and ΔS from EMF data. (Numericals expected) 1.1.4 Calculation of equilibrium constant from EMF data. (Numericals expected) 1.1.5 Concentration cells with transference and without transference. Liquid junction potential and salt bridge. 1.1.6 pH determination using hydrogen electrode and quinhydrone electrode.(Numericals expected)	**(8 L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION
	1.2 Phase Equilibria: 1.2.1 Phases, components and degrees of freedom of a system, criteria of phase equilibrium. Gibbs Phase Rule and its thermodynamic derivation. 1.2.2 Derivation of Clausius – Clapeyron equation and its importance in phase equilibria. (numericals expected)	**(7L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

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	1.2.3 Phase diagrams of one-component systems (water and sulphur). 1.2.4 Two component systems involving eutectics, congruent and incongruent melting points (lead-silver system).			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____SY BSc_____ SEMESTER: __III_____MONTH: _____ ACADEMIC YEAR: _2022- 23_____

LEARNING OBJECTIVE/S:

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The learners will be able to : LEARN ABOUT THE P BLOCK ELEMENTS LIKE BORON FAMILY,NITROGEN FAMILY AND SILICON FAMILY ELEMENTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II **INORGANIC CHEMISTRY**	**2. Selected topics on p block elements** **2.1 Chemistry of Boron compounds** 2.1.1 Electron deficient compounds – BH_3, BF_3, BCl_3 with respect to Lewis acidity and applications. 2.1.2 Preparation of simple boranes like diborane and tetraborane. 2.1.3 Structure and bonding in diborane and tetraborane (2e-3c bonds) 2.1.4 Synthesis of Borax.	5	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION
	2.2 Chemistry of Silicon and Germanium 2.2.1 Silicon compounds: Occurrence , Structure and inertness of SiO_2 2.2.2 Preparation of structure of $SiCl_4$ 2.2.3 Occurrence and extraction of Germanium 2.2.4 Preparation of extra pure Silicon and Germanium	5	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION
	2.3 Chemistry of Nitrogen family 2.3.1 Trends in chemical reactivity - Formation of hydrides, halides, oxides with special reference to oxides of nitrogen. 2.3.2 Oxides of nitrogen with respect to preparation and structure of NO, NO_2, N_2O and N_2O_4. 2.3.3 Synthesis of ammonia by Bosch – Haber process	5	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

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CLASS: _____SY BSc_____ SEMESTER: __IV_____MONTH: _____ ACADEMIC YEAR: _2022- 23_____

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN THE ACIDY AND BASUCITY OF CATION AND ANION WITH THE HELP OF DIGRAMS ALSO THEY WILL STUDY THE USES OF ENVIRONMENTAL CHEMISTRY OF VOLATILE OXIDES AND OXO ACIDS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II **UNIT II** **INORGANIC CHEMISTRY**	**2 Ions in aqeous medium** 2.1. Acidity of Cations and Basicity of Anions i. Hydration of Cations; Hydrolysis of Cations predicting degree of hydrolysis of Cations-effect of Charge and Radious. ii. Latimer Equation. Relationship between pKa, acidity and z_2/r ratios of metal ions graphical Presentation iii. Classification of cations on the basis of acidity category – Non acidic, Moderately acidic, strongly acidic, very strongly acidic with pKa values range and examples iv. Hydration of Anions; Effect of Charge and Radius; Hydration of anions- concept, diagram classification on the basis of basicity ii. Uses and environments aspects of these acids	10	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION
	2.2. Uses and Environmental Chemistry of volatile Oxides and oxo-acids i. Physical properties of concentrated oxo-acids like sulfuric, Nitric and Phosphoric acid	5	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

TEACHING PLAN (UNIT PLAN

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NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____SY BSc_____ SEMESTER: ___III_____MONTH: _____ ACADEMIC YEAR: _2022- 23_____

LEARNING OBJECTIVE/S:
The learners will be able to : On completing the learning of this unit the learner is expected to

- Know the various instrumental methods of analysis
- Advantages of using instruments to make measurements
- The various observable properties of a given analyte and the stimulus best suited for its analysis
- Know about a generalized diagram of an analytical instrument
- Select a suitable instrumental method for analysis
- Appreciate the basic terms in spectrometry
- Use the relationship between absorbance (and its variations) and concentration of the analyte.
- Chose a suitable method foe photometric titrations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III **UNIT III** **ANALYTICAL CHEMISTRY**	**Instrumental Methods-I [15 L]** **3. Basic Concepts in Instrumental methods 03** **3.1.** Relation between the Analyte, Stimulus and measurement of change in the observable property. **3.2.** Block Diagram of an Analytical instrument. **3.3.** Types of Analytical Instrumental methods based on i. Optical interactions (eg. Spectrometry: uv-visible, Polarimetry) ii. Electrochemical interactions (eg. Potentiometry, Conductometry,) iii. Thermal interactions (eg. Thermogravimetry)	15	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

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	3.4. Spectrometry (07 L) 3.4.1. Interaction of electromagnetic radiation with matter: Absorption and Emission spectroscopy 3.4.2. Basic Terms: Radiant Power, Absorbance, Transmittance, Monochromatic light, Polychromatic light, Wavelength of maximum absorbance, Absorptivity and Molar Absorbtivity 3.4.3. Statement of Beer's Law and Lambert's Law, Combined Mathematical Expression of Beer -Lambert's Law, Validity of Beer-Lambert's Law, Deviations from Beer-Lambert's Law ((Real deviations, Instrumental deviations and Chemical deviations) (Numerical problems based on Beer-Lambert's Law) 3.4.4. Instrumentation for absorption spectroscopy: Colorimeters and Spectrophotometers 3.4.5. Block Diagrams for Single beam and Colorimeter, and Spectrophotometer (Principles, Construction and working-Details of Components expected i.e , source ,Sample holder , Filters/Monochromators, Detectors such as Photomultiplier tube) 3.4.6. Applications of UV-Visible Spectrophotometry **(02 L)** (a) Qualitative analysis such as Identification of functional groups in Organic compounds ,Chromophores and Auxochrome,c*is* and *trans* isomers (b) Quantitative analysis by Calibration curve method and 3.4.7. Photometric Titrations: Principle ,Instrumentation, Types of Photometric titration Curves with examples.			

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____SY BSc_____ SEMESTER: __IV_____MONTH: _____ ACADEMIC YEAR: _2022- 23_____

LEARNING OBJECTIVE/S:
The learners will be able to : On completing this unit the learner is expected to understand
i) The use of statistical methods in chemical analysis.
ii) The nature of indeterminate errors
iii) The randomness of such errors and its distribution around a correct or acceptable result
iv) Computation of Confidence limits and confidence interval
v) Test for rejection of doubtful result
vi) Method to draw best fitting straight line

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III **UNIT III** **ANALYTICAL CHEMISTRY**	**Statistical Treatment of analytical data --II (15 L)** Objectives: 3.1.**Nature of Indeterminate Errors:** 3.1.1. The true and acceptable value of a result of analysis 3.1.2. Measures of central tendency: mean, median. mode, average 3.1.3. Measures of dispersion: Absolute deviation, relative deviation, relative average deviation, standard deviation,(s,sigma) variance, coefficient of variation	**(03L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION
	3.2.**Distribution of random errors:** 3.2.1. Gaussian distribution curve. 3.2.2. Equation and salient features of Gaussian distribution curve	**(02L)**	TEXT BOOKS REFFERENCE BOOKS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

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	3.3.Concept of Confidence limits and confidence interval and its computation using) (i) Population standard deviation (ii) Student's *t* test (iii) Range	**(03 L**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION
	3.4.Criteria for rejection of doubtful result (i) 2.5 d rule (ii) 4.0 d rule (iii) Q test	**(02 L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION
	3.5.Test of Significance (i) Null hypothesis (ii) F-test (variance ratio test)	**(02 L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION
	3.6. Graphical representation of data and obtaining best fitting straight line (a) For line passing through origin (b) For line not passing through origin [Numerical problems wherever possible, expected	**(03 L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____MSc PART II_____ SEMESTER: __III_____MONTH: __AUGUST TO DECEMBER ACADEMIC YEAR: _2022- 23_____

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III **UNIT III** **ORGANIC CHEMISTRY**	**Advanced spectroscopic techniques-I [15L]** 3.1 **Proton NMR spectroscopy:** Recapitulation, chemical and magnetic equivalence of protons, First order, second order, Spin system notations (A2, AB, AX, AB2, AX2, AMX and A2B2-A2X2 spin systems with suitable	[7L]	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

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	examples). Long range coupling (Allylic coupling, 'W' coupling and Coupling in aromatic and heteroaromatic systems), Temperature effects, Simplification of complex spectra, nuclear magnetic double resonance, chemical shift reagents.			
	3.2 **13C –NMR spectroscopy:** Recapitulation, equivalent and non-equivalent carbons (examples of aliphatic and aromatic compounds), **13**C- chemical shifts, calculation of 13C- chemical shifts of aromatic carbons, heteronuclear coupling of carbon to 19F and **31**P.	[4L]	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION
	3.3 Spectral problems based on UV, IR, 1HNMR and 13CNMR and Massspectroscopy	4L	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: T.Y.Bsc. SEMESTER: V

MONTH: July- August ACADEMIC YEAR: 202 2 -202 3

LEARNING OBJECTIVE/S:
The learners will be able to :

To learn - the meaning of dipole moment, polarization of a bond, bond moment, derivation for Rotational spectroscopy, Vibrational spectroscopy, To learn- Rotational-Vibrational spectroscopy, Raman spectroscopy, solve the numerical problems based on this top

PAPER, UNIT, TITLE	***SUBTOPICS***	***NO OF LECTURES ALLOTED***	***REFERENCE/S***	***TEACHING METHOD/ ICT TOOLS USED***
PAPER-I, UNIT-I *TITLE: MOLECULAR SPECTROSCOPY*	*1. Rotational Spectrum*	*04*	*1) T.Y.Bsc Physical Chemistry Text book by Sheth Pub. and by Himalaya Pub.* *2) Principles of Physical Chemistry B.R. Puri, L.R. Sharma, M.S. Pathania, VISHAL*	*Blackboard* Power Point Presentations
	2. Vibrational Spectrum	*04*		
	3. Vibrational-Rotational spectrum of diatomic molecule	*04*		

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	4. Raman Spectroscopy	*03*	*PUB., 2008.*	

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: T.Y.Bsc.
SEMESTER: V MONTH: August-September ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

To know- Adsorption and its types, Langmuir and B.E.T adsorption isotherm, Terms like Emulsion, Gel, Sol.

To learn- Origin of charges on colloidal particles, Concept of electrical double layer, zeta potential, Helmholtz and Stern model, Electro-kinetic phenomena.

To know- micelle formation, Classification and applications of surfactants in detergents and food industry..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -I, UNIT-IV	1. Adsorption	05	1) T.Y.Bsc Physical Chemistry Text book by Sheth Pub. and by Himalaya Pub. 2) Principles of Physical Chemistry B.R. Puri, L.R. Sharma, M.S. Pathania, VISHAL PUB., 2008	Blackboard Power Point Presentations

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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VIVA COLLEGE, Virar(W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: M.Sc-I SEMESTER: I MONTH: August-September ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

To learn - State function and exact differentials. Maxwell equations, Maxwell thermodynamic Relations.
To learn- Joule Thomson experiment, Joule Thomson coefficient, inversion temperature, Joule Thomson coefficient in terms of Vander Waals constants.
To know - Third law of Thermodynamics.
To learn - Entropy change for a phase transition, absolute entropies, determination of absolute entropies in terms of heat capacity, standard molar entropies and their dependence on molecular mass and molecular structure, residual entropy.

PAPER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I,	1. Maxwell equations	05	1) Peter Atkins and Julio de Paula,	Blackboard
UNIT-I:	2. Joule Thomson experiment	04	Atkin's Physical Chemistry, 7th Edn., Oxford University Press, 2002.	Power Point Presentations

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TITLE	*3. Third law of Thermodynamics*	*02*		
Thermodynamics-I	*4. Entropy change for a phase transition*	*04*		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: M.Sc-I

SEMESTER: I MONTH: October-December ACADEMIC YEAR: 2022-2023 LEARNING OBJECTIVE/S:

The learners will be able to :

To learn - Rate laws, Differential rate equations, Consecutive reactions, Steady state Approximation, formation and decomposition of phosgene, decomposition of ozone, Reaction between Hydrogen and Bromine, Decomposition of ethane, decomposition of acetaldehyde, Reaction between hydrogen and oxygen, Semenov - Hinshelwood and Thompson mechanism, Explosion limits and factors affecting explosion limits. To learn - Kinetics of stepwise polymerization, Kinetics of free radical chain polymerization.
To know- Unimolecular Reactions: Lindeman-Hinshelwood theory, Rice-Ramsperger-Kasssel (RRK) theory, Rice-Ramsperger-Kassel Marcus (RRKM) theory.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-III TITLE:	1. Composite Reactions	08	K.J. Laidler and J.H. Meiser, Physical Chemistry, 2nd Ed., CBS Publishers and Distributors, New Delhi, 1999.	Blackboard Power Point Presentations
	2. Polymerization	03		

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Chemical Dynamics-I	*reactions*			
	3. Reaction in GasPhase	*04*		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS:

T.Y.Bsc. SEMESTER: VI MONTH: N o v e m b e r - December ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

To know - Basic terms like macromolecule, monomer, repeat unit, degree of polymerization, Classification of polymers. To learn- Number average, Weight average, Viscosity average molar mass, Viscosity method using Ostwald Viscometer for determining molar masses of polymers,
To learn- Characteristics, Method of preparation and applications of Light Emitting Polymers, Antioxidants , Ultraviolet stabilizers, Colourants, Antistatic agents and Curing agents.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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	1. Basic terms	02	1) T.Y.Bsc Physical Chemistry Text	
PAPER-I,	2. Classification of polymers	03	book by Sheth Pub. and by Himalaya	
UNIT-II	3. Method of determining molar masses of polymers	04	Pub.	Blackboard
TITLE:	4. Light Emitting Polymers	03	2) Principles of Physical Chemistry POLYMERS B.R. Puri, L.R. Sharma, M.S. Pathania, VISHAL PUB 2008 5. Antioxidants and Stabilizers03v	Power PointPresentations

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS:

T.Y.Bsc. SEMESTER: VI MONTH: January - February ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

To Learn - Principle of NMR, Nuclear spin, magnetic moment, nuclear 'g' factor, energy levels, Larmor precession, Relaxation processes in NMR i.e. spin -spin relaxation and spin - lattice relaxation, Instrumentation of NMR Spectrometer,
To learn -Principle of ESR, fundamental equation, g-value –dimensionless constant or electron g-factor, hyperfine splitting, Instrumentation of ESR spectrometer, ESR spectrum of hydrogen and deuterium.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER-I, *UNIT-IV* *TITLE:* *NMR and ESR*	*1. NUCLEAR MAGNETIC RESONANCE*	*07*	*1) T.Y.Bsc Physical Chemistry Text book by Sheth Pub. and by Himalaya Pub.* *2) Principles of Physical Chem*	
	2. ELECTRON SPIN RESONANCE SPECTROSCOPY	*08*		Blackboard Power PointPresentations

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 1 5

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: M.Sc-I

SEMESTER: II MONTH: February -March ACADEMIC YEAR:2022-2023 The learners will be able to :

To learn - Fugacity of real gases, Determination of fugacity of real gases using graphical method and from equation of state. Equilibrium constant for real gases in terms of fugacity. Gibbs energy of mixing, entropy and enthalpy of mixing.
To learn - Chemical potential in non ideal solutions excess functions of non ideal solution, Gibbs Duhem Margules equation. To learn - Laplace equation,Kelvin equation, Gibbs adsorption isotherm, BET isotherm.
To learn- standard free energy change in biochemical reactions, exergonic, endergonic. Hydrolysis of ATP, synthesis of ATP from ADP

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER-I, *UNIT-I* *TITLE:* *Thermodynamics -II*	*1. Fugacity*	*05*	*Peter Atkins and Julio de Paula, Atkin's Physical Chemistry, 7th Edn., Oxford University Press, 2002*	Blackboard Power PointPresentations
	2. Real solutions	*03*		
	3. Thermodynamics of surfaces	*04*		
	4. Bioenergetics	*03*		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY

CLASS: M.Sc-I. SEMESTER: II MONTH: MARCH - APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

To study- Solvent Effects on reaction rates, Reactions between ions- influence of solvent Dielectric constant, influence of ionic strength, Linear free energy relationships Enzyme action
To learn - Michaelis-Menten analysis, Lineweaver-Burk and Eadie Analyses.
To learn- Competitive, Noncompetitive and Uncompetitive Inhibition. Effect of pH, Enzyme activation by metal ions, Regulatory enzymes. To study- The parabolic rate law, The first order rate Law, the contracting sphere rate law, Contracting area rate law, some examples of kinetic studies.

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PAPER, UNIT, TITLE	*SUBTOPICS*	*NO OF LECTURES ALLOTED*	*REFERENCE/S*	*TEACHING METHOD/ ICT TOOLS USED*
PAPER-I, *UNIT-III TITLE:* *Chemical Kinetics and Molecular Reaction Dynamics*	*1. Elementary Reactions in Solution*	*04*	*Peter Atkins and* *Julio de Paula, Atkin "s physical chemistry 7th Edn., Oxford University Press, 2002.*	Blackboard Power PointPresentations
	2. Kinetics of reactions catalyzed	*03*		
	by enzymes *3. Inhibition of Enzyme action*	*04*		
	4. Kinetics of reactions in the	*04*		
	Solid State			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry CLASS: SY BSc (PC-CZ)

SEMESTER: III MONTH: July- October ACADEMIC YEAR: 2022 -2023

LEARNING OBJECTIVE/S:
The learners will be able to :
To make the learner proficient in analysing the various observations and chemical phenomena presented to him during the course.
To impart various skills of handling chemicals, reagents, apparatus, instruments and the care and safety aspects involved in such handling

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I, Physical Chemistry Thermodynamics-II, Electrochemistry	1.1.1 Free Energy Functions: Helmholtz Free Energy, Gibb's Free Energy, Variation of Gibb's free energy with Pressure and Temperature.	2	Textbook of Himalaya Publication	Black Board
	1.1.2 Gibbs-Helmholtz equation, van't Hoff reaction isotherm and van't Hoff reaction isochore	2	Textbook of Himalaya Publication	Black Board
	1.1.3 Thermodynamics of Open System: Partial Molal Properties, Chemical Potential and its variation with Pressure and Temperature, Gibb's Duhem equation.	2	Textbook of Himalaya Publication	Black Board
	1.1.4 Concept of Fugacity and Activity	2	Textbook of Himalaya Publication	Black Board
	1.2.1 Conductivity, equivalent and molar conductivity and their variation with dilution for weak and strong electrolytes.	2	Textbook of Himalaya Publication	Black Board
	1.2.2 Kohlrausch law of independent migration of ions.	1	Textbook of Himalaya Publication	Black Board

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	1.2.3 Applications of conductance measurements: determination of degree of ionization and ionization constant of weak electrolyte, solubility and solubility product of sparingly soluble salts, ionic product of water.	2	Textbook of Himalaya Publication	Black Board
	1.2.4 Transference number and its experimental determination using Moving boundary method. Factors affecting transference number.	2	Textbook of Himalaya Publication	Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: SY BSc (PC-CZ) SEMESTER: IV MONTH: Dec-March ACADEMIC YEAR: 2022 -2023

LEARNING OBJECTIVE/S:
The learners will be able to :
To make the learner proficient in analysing the various observations and chemical phenomena presented to him during the course.
To make the learner capable of solving problems in the various units of this course

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
Paper I Unit I, Physical Chemistry Electrochemistry-II, Phase Equilibria	1.1.1 Electrochemical conventions, Reversible and irreversible cells.	2	Textbook of Himalaya Publication	BLACK BOARD	
	1.1.2 Nernst equation and its importance, Types of electrodes, Standard electrode potential, Electrochemical series	3	Textbook of Himalaya Publication	BLACK BOARD	
	1.1.3 Thermodynamics of a reversible cell, calculation of thermodynamic properties: ΔG, ΔH and ΔS from EMF data	3	Textbook of Himalaya Publication	BLACK BOARD	
	1.1.4 Calculation of equilibrium constant from EMF data.	1	Textbook of Himalaya Publication	BLACK BOARD	

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	1.1.5 Concentration cells with transference and without transference. Liquid junction potential and salt bridge.	3	Textbook of Himalaya Publication	BLACK BOARD	
	1.1.6 pH determination using hydrogen electrode and quinhydrone electrode.	3	Textbook of Himalaya Publication	BLACK BOARD	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: MS Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: SY BSc (PC-CZ) SEMESTER: III MONTH: July -Oct ACADEMIC YEAR: 2022 -2023

LEARNING OBJECTIVE/S:
The learners will be able to : ideas about chemistry of Boron compounds, Chemistry of Silicon and Germanium and chemistry of Nitrogen family .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
Paper II, Unit II ,Inorganic chemistry Selected topics on p block elements	2.1.1 Electron deficient compounds – BH_3, BF_3, BCl_3 with respect to Lewis acidity and applications.	2	Textbook of Himalaya Publication	BLACK BOARD	
	2.1.2 Preparation of simple boranes like diborane and tetraborane.	2	Textbook of Himalaya Publication	BLACK BOARD	
	2.1.3 Structure and bonding in diborane and tetraborane (2e-3c bonds)	2	Textbook of Himalaya Publication	BLACK BOARD	
	2.1.4 Synthesis of Borax.	1	Textbook of Himalaya Publication	BLACK BOARD	
	2.2.1 Silicon compounds: Occurrence , Structure and inertness of SiO_2	1	Textbook of Himalaya Publication	BLACK BOARD	
	2.2.2 Preparation of structure of $SiCl_4$	1	Textbook of Himalaya Publication	BLACK BOARD	
	2.2.3 Occurrence and extraction of Germanium	2	Textbook of Himalaya Publication	BLACK BOARD	
	2.2.4 Preparation of extra pure Silicon and Germanium	1	Textbook of Himalaya Publication	BLACK BOARD	

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	2.3.1 Trends in chemical reactivity - Formation of hydrides, halides, oxides with special reference to oxides of nitrogen	1	Textbook of Himalaya Publication	BLACK BOARD	
	2.3.2 Oxides of nitrogen with respect to preparation and structure of NO, NO_2, N_2O and N_2O_4	1	Textbook of Himalaya Publication	BLACK BOARD	
	2.3.3 Synthesis of ammonia by Bosch – Haber process.	1	Textbook of Himalaya Publication	BLACK BOARD	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: SY BSc (PC-CZ) SEMESTER: IV MONTH: Dec-March ACADEMIC YEAR: 2022 -2023

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LEARNING OBJECTIVE/S:

The learners will be able to : Have ideas about Ions in aqueous medium, acidity of Cations and Basicity of Anions and uses and Environmental chemistry of volatile oxides and Oxo-acids .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit II ,Inorganic chemistry Ions in aqueous medium Uses and Environmental Chemistry of volatile Oxides and oxo-acids	Hydration of Cations; Hydrolysis of Cations predicting degree of hydrolysis of Cations-effect of Charge and Radius.	2	Textbook of Himalaya Publication	BLACK BOARD
	Latimer Equation. Relationship between pKa, acidity and z^2/r ratios of metal ions graphical Presentation	2	Textbook of Himalaya Publication	BLACK BOARD
	Classification of cations on the basis of acidity category – Non acidic, Moderately acidic, strongly acidic, very strongly acidic with pKa values range and examples	3	Textbook of Himalaya Publication	BLACK BOARD
	Hydration of Anions; Effect of Charge and Radius; Hydration of anions- concept, diagram classification on the basis of basicity	3	Textbook of Himalaya Publication	BLACK BOARD
	Physical properties of concentrated oxo-acids like sulfuric, Nitric and Phosphoric acid	2	Textbook of Himalaya Publication	BLACK BOARD
	Uses and environments aspects of these acids	3	Textbook of Himalaya	BLACK BOARD

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			Publication	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: TY BSc SEMESTER: V MONTH: July -Oct ACADEMIC YEAR: 2022 -2023

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LEARNING OBJECTIVE/S:
The learners will be able to : Learn Various symmetry operations and have ideas about various point groups and have ideas about Molecular Orbital Theory for heteronuclear diatomic molecules and polyatomic species.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit I ,Inorganic chemistry	1.1.1 Introduction and Importance of Symmetry in Chemistry	2	Textbook of Himalaya Publication	BLACK BOARD
	1.1.2 Symmetry elements and Symmetry operations	2	Textbook of Himalaya Publication	BLACK BOARD
	1.1.3 Concept of a Point Group with illustrations using the following point groups :(i)C∞V (ii) D∞h (iii) C2V (iv) C3v (v)C2h and (vi)D3h	2	Textbook of Himalaya Publication	BLACK BOARD
	1.2.1 Comparison between homonuclear and heteronuclear diatomic molecules	3	Textbook of Himalaya Publication	BLACK BOARD
	1.2.2. Heteronuclear diatomic molecules like CO, NO and HCl, appreciation of modified MO diagram for CO.	2	Textbook of Himalaya Publication	BLACK BOARD
	1.2.3 Molecular orbital theory for H3 and H3+ (correlation diagram expected).	2	Textbook of Himalaya Publication	BLACK BOARD
	1.2.4. Molecular shape to molecular orbital approach in AB2 molecules. Application of symmetry concepts for linear and angular species considering σ- bonding only. (Examples like : i) BeH2, ii) H2O)	2	Textbook of Himalaya Publication	BLACK BOARD

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: TY BSc SEMESTER: VI MONTH: Nov -March YEAR: 2022 -2023

LEARNING OBJECTIVE/S:
The learners will be able to : Learn Crystal Field Theory of metal-ligand bond, its merits and demerits.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit I ,Inorganic chemistry	1.1 Limitations of Valence Bond Theory.	1	Textbook of Himalaya Publication	BLACK BOARD
	1.2 Crystal Field Theory and effect of crystal field on central metal valence orbitals in various geometries from linear to octahedral(from coordination number 2 to coordination number 6)	3	Textbook of Himalaya Publication	BLACK BOARD
	1.3 Splitting of d orbitals in octahedral, square planar and tetrahedral crystal fields.	2	Textbook of Himalaya Publication	BLACK BOARD
	1.4 Distortions from the octahedral geometry : (i) effect of ligand field and (ii) Jahn-Teller distortions	2	Textbook of Himalaya Publication	BLACK BOARD
	1.5 Crystal field splitting parameters Δ ; its calculation and factors affecting it in octahedral complexes, Spectrochemical series	2	Textbook of Himalaya Publication	BLACK BOARD
	1.6 Crystal field stabilization energy(CFSE), calculation of CFSE for octahedral complexes with d0 to d10 metal ion configurations.	2	Textbook of Himalaya Publication	BLACK BOARD
	1.7 Consequences of crystal field splitting on various properties such as ionic radii, hydration energy and enthalpies of formation of metal complexes of the first transition series.	2	Textbook of Himalaya Publication	BLACK BOARD
	1.8 Limitations of CFT : Evidences for covalence in metal complexes (i) intensities of d-d transitions, (ii) ESR spectrum of [IrCl6] 2- (iii) Nephelauxetic effect.	1	Textbook of Himalaya Publication	BLACK BOARD

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: MSc Part I SEMESTER:I MONTH: Aug - Dec ACADEMIC YEAR: 2022 -2023

LEARNING OBJECTIVE/S:
The learners will be able to : Learn Molecular Symmetry, Group Theory and application of Group Theory

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit II Molecular Symmetry and Group Theory	2.1. Symmetry criterion of optical activity, symmetry restrictions on dipole moment. A systematic procedure for symmetry classification of molecules.	3	F. A. Cotton, Chemical Applications of Group Theory, 2nd Edition, Wiley Eastern Ltd., 1989 and R. L. Carter, Molecular Symmetry and Group Theory, John Wiley & Sons, New York, 1998	BLACK BOARD
	2.2. Concepts of Groups, Sub-groups, Classes of Symmetry operations, Group Multiplication Tables. Abelian and non-Abelian point groups	3	F. A. Cotton, Chemical Applications of Group Theory, 2nd Edition, Wiley Eastern Ltd., 1989 and R. L. Carter, Molecular Symmetry and Group Theory, John Wiley & Sons, New York, 1998	BLACK BOARD

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	2.3. Representation of Groups: Matrix representation of symmetry operations, reducible and irreducible representations. The Great Orthogonality Theorem and its application in construction of character tables for point groups C2v, C3v and D2h, structure of character tables.	3	F. A. Cotton, Chemical Applications of Group Theory, 2nd Edition, Wiley Eastern Ltd., 1989 and R. L. Carter, Molecular Symmetry and Group Theory, John Wiley & Sons, New York, 1998	BLACK BOARD
	2.4. Applications of Group Theory (a) Symmetry adapted linear combinations (SALC), symmetry aspects of MO theory, sigma bonding in ABn (Ammonia, CH4) molecule. (b) Determination of symmetry species for translations and rotations. (c) Mulliken's notations for irreducible representations. (d) Reduction of reducible representations using reduction formula. (e) Group-subgroup relationships. (f) Descent and ascent in symmetry correlation diagrams showing relationship between different groups.	6	F. A. Cotton, Chemical Applications of Group Theory, 2nd Edition, Wiley Eastern Ltd., 1989 and R. L. Carter, Molecular Symmetry and Group Theory, John Wiley & Sons, New York, 1998	BLACK BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry CLASS: MSc Part I

SEMESTER:II MONTH: Jan – April ACADEMIC YEAR: 2022 -2023

LEARNING OBJECTIVE/S:

The learners will be able to : Have an idea about bioinorganic chemistry , biological oxygen carrier and various enzymes and metal ion transport and storage.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit IV Bioinorganic Chemistry	4.1. Biological oxygen carriers; hemoglobin, hemerythrene and hemocyanine- structure of metal active center and differences in mechanism of oxygen binding, Differences between hemoglobin and myoglobin: Cooperativity of oxygen binding in hemoglobin and Hill equation, pH dependence of oxygen affinity in hemoglobin and myoglobin and it's implications	5	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	BLACK BOARD
	4.2. Activation of oxygen in biological system with examples of mono-oxygenases, and oxidases- structure of the metal center and mechanism of oxygen activation by these enzymes.	4	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	BLACK BOARD
	4.3. Copper containing enzymes- superoxide dismutase, tyrosinase and laccase: catalytic reactions and the structures of the metal binding site	3	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	BLACK BOARD
	4.4. Nitrogen fixation-nitrogenase, hydrogenases	1	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	BLACK BOARD

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	4.5. Metal ion transport and storage:Ionophores, transferrin, ferritin and metallothionins	1	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	BLACK BOARD
	4.6. Medicinal applications of cis-platin and related compounds	1	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	BLACK BOARD

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur. DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: III

MONTH: June ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Immunological Methods	General processes of immune response, antigen-antibody.reactions,	3L		Offline mode – Chalk and board method
	precipitation reactions, radio, enzyme and fluoro-immunoassays	3L		
	Human Nutrition: Biological values	3L		
	estimation of enzymes,carbohydrates,	3L		
	proteins, essential amino acids and lipids.	3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur. DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: III

MONTH: June ACADEMIC YEAR: 2022-23

Signature of the staff

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

LEARNING OBJECTIVE/S

CPAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Food Analysis - I	Fuel value of food and importance of food nutrients	**2L**		Offline mode – Chalk and board method
	Food Additives – General idea about Food processing and preservation, Chemical preservatives, fortifying agents	**2L**		
	emulsifiers,texturizing agents, flavours, colours, artificial sweeteners	**3L**		
	enzymes Analysis of food products for flavoring agents and colourartificial sweeteners, enzymes. Analysis of food products for flavoring agents and colour	3L		
	Food Contaminants– Trace metals and pesticide residues,contaminants from industrial wastestoxicants formed during food processin veterinary drug residues and melaminecontaminants.	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur. DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: III

MONTH: June ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to: learn how to write a project report and scientific papers.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Food Analysis - II	Food packaging – Introduction, types of packing materials,properties and industrial requirements.	3L		Offline mode – Chalk and bo method
	Processing and Quality requirements of Milk and milk products(cheese, butter and ice cream)	3L		
	vegetables and fruits, meat and meatproducts.	2L		
	Analysis of Milk – Fat content, proteins, acidity, bacteriological quality and milk adulterants. Analysis of Oils and Fats – acid value, sap value, iodine value. Determination of rancidity and antioxidants	4L		
	Analysis of spices (cloves, cinnamon, pepper, mustard) Determination of volatile oils and fixed oils.	3L		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur. DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: III

MONTH: June ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Electroanalytical Methods	Current Sampled (TAST) Polarography, Normal and Differential PulsePolarography	3L		Offline mode – Chalk and board method
	Potential Sweep methods- Linear Sweep Voltammetry and Cyclic voltammetry.	3L		
	Potenti Step method- Chronoamperomertry Controlled potential technique- Chronopotentiometry	4L		
	Stripping Voltammetry- anodic, cathodic, and adsorption	2L		
	Chemically and electrolytically modified electrodes and ultramicroelectrodes	3L		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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NAME OF THE STAFF: Ruchita thakur. DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: III

MONTH: June ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Chromatographic Techniques - I	exchange chromatography: Ion exchange equilibria, breakthroughcapacity, inorganic ion exchangers, synthetic ion exchangers	3L		Offline mode – Chalk and board method
	chelating resins and their applications for separation of inorganic and organic compounds.	3L		
	chromatography: Principle, instrumentation with special reference to separation and suppressor columns, applications.	3L		
	Exclusion chromatography : Theory, instrumentation and applications of gel permeation chromatography, retention behavior,	3L		
	inorganic molecular sieves, determination of molecular weight of polymers,	3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: IV

MONTH: JANUARY-APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 UNIT 3- Methods of scientific research and writing scientific papers	Reporting practical and project work Writing literature surveys and reviews	3L	*Practical skills in Chemistry,*2nd Ed.,Prentice Hall, Harlow	Offline mode – Chalk and board method
	Organizing a poster display Giving an oral presentation	3L		
	Writing Scientific Papers: Justification for scientific contributions	3L		
	bibliography, description of methods, conclusions	3L		
	the need for illustration, style, publications of scientific work, writing ethics, avoiding plagiarism.	3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: IV

MONTH: JANUARY-APRIL ACADEMIC YEAR:2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 UNIT 1-	Primary .	1L	Dean J. R., Jones, A. M., Holmes, D.,Reed,R.,Weyers, J., & Jones, A	Offline mode – Chalk and board method
	Secondary and Tertiary	2L		
	Journal abbreviations, abstracts, current titles, reviews, monographs, dictionaries, text-books, current contents,	2L		
	Introduction to Chemical Abstracts and Beilstein, Subject Index, Substance Index, Author Index, Formula Index, and other Indices with examples.	3L		
	.Web sources, E-journals, Journal access, TOC alerts, Hot articles, Citation Index, Impact factor, H-index,	3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: Ruchita thakur DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: IV

MONTH: JANUARY-APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4	E-consortium, UGC infonet, E-books, Internet discussion groups and communities, Blogs, preprint servers, Search engines, Scirus, Google Scholar, ChemIndustry, Wiki-databases, ChemSpider, Science Direct, SciFinder, Scopus	3L	Google.com Youtube	Offline mode – Chalk and board method
	The Internet and World wide web, Internet resources for Chemistry, finding and citing published information.	2L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: IV

MONTH: JANUARY-APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II: DATA ANALYSIS	Making and recording Measurements, SI units and their use, Scientific methods and design of experiments.	3L	Google.com Youtube *Quantative Chemical Analysis* 6th Ed	Offline mode – Chalk and board method
	Descriptive statistics, choosing and using statistical tests, Chemometrics, Analysis of Variance (ANOVA),	3L		
	Correlation and regression, curve fitting, fitting of linear equations, simple linear cases, weighted linear case, analysis of residuals,	4L		
	general polynomial fitting, linearizing transformations, exponential function fit, r and its abuse, basic aspects of multiple linear regression analysis.	5L		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: IV

MONTH: JANUARY- APRIL ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit IV: CHEMICAL SAFETY & ETHICAL HANDLING OF CHEMICALS	Safe working procedure and protective environment, protective apparel, emergency procedure, first aid, laboratory ventilation, safe storage and use of hazardous chemicals,	3L	Google.com Youtube Chemical Safety matters – IUPAC-IPCS, (1992) Cambridge University Press	Offline mode – Chalk and board method
	procedure for working with substances that pose hazards, flammable or explosive hazards, procedures for working with gases at pressures above or below atmospheric pressur, safe storage and disposal of waste chemicals, recovery, recycling	3L 3L		Outer cover of chemicals bottle for symbols study
	reuse of laboratory chemicals, procedure for laboratory disposal of explosives,	3L		SAFTEY CHART OF Lab
	Identification, verification and segregation of laboratory waste,	3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur DEPARTMENT: CHEMISTRY CLASS: M.Sc. PART-1 (ANALYTICAL CHEMISTRY) SEMESTER: II

MONTH: JANUARY-APRIL ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: The Students will able to understand the different terms involved in Chromatography technique and also principle, instrumentation, working, application of Gas chromatography as well HPLC technique

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV IV Unit-I Chromatograph y	1.1 Recapitulation basic concepts in Chromatography	4L	Google.com Youtube Skoog,Holler	Offline mode – Chalk and board method
	1.2 Concept of plate and rate theories in chromatography	2L		
	1.3 Gas Chromatography: Principle, instrumentation, working and Application	6L		
	1.4 High performance liquid chromatography	2L		
	1.4.1 Principle, instrumentation, working and Application	5L		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 19 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: __CHEMISTRY _____ CLASS: _____FYBSC_(PCM)_____ SEMESTER: _____1_____ MONTH: _OCT 2022_____ ACADEMIC YEAR: _____2022-2023_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To understand basics of ORGANIC CHEMISTRY
- To study hybridization sp, sp2, sp3,
- Shapes of ORGANIC molecules
- Differentate between Homolytic and Heterolytic.
- To study types of Reactions

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• Paper 1 • Unit 3	Alkanes,Alkenes,Alkanes,Alcohol,Aldehydes and ketones,Anhydride,Nitro Compounds	3	Clayden	Google Classroom

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• Basics of ORGANIC CHEMISTRY	Hybridization of ORGANIC compounds	3	Clayden	Google Classroom
	Overlaping of Atomic Orbital,Bonding-Sigma and Pi,Shapes of Molecules,Properties-Ethane,Ethene,Ethyne.	2	Clayden	Google Classroom
	Electronic Effect Inductive,Electronic,Resonance,Mesomeric,Hyperconjugation,Dipole moment,Relative Strengths	3	Clayden,Text book	Google Classroom

	Homolytic and Heterolytic fission,Nucleophilicity and Basicity	2	Clayden	Google Classroom
	Carbonation,carbanion,free radical.Types of Reactions Addition,Elimination,Substitution	2	Clayden,Text book	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: ___RUTUJA HEMANT SAWANT _____ DEPARTMENT: _CHEMISTRY _____ CLASS: FYBSC (PCM)_____ SEMESTER: ____1_____ MONTH: OCT 2022_____ ACADEMIC YEAR: _2022-2023_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To understand about Chemical Kinetics in detail
- To differentiate between Order and Molecularity
- To find the Rate of Reactions by different methods
- To learn about different methods
- To study of solids

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• Paper 2 • Unit 1	Rate of Reactions- 1st and 2nd reactions, Order and Molecularity, integrated and grapical methods.	4	Text Books, Principal of	Google Classroom

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• CHMEICAL KINETICS AND LIQUID STATE			Chemical Kinetics	
	Ostwald's isolation, Half time And Drop number method, Surface tension, Viscosity	4	Text Books, Principal of Chemical Kinetics	Google Classroom
	Ostwald's viscometer, Refrective index, Molar Refraction.	3	Text Books, Principal of Chemical Kinetics	Google Classroom
	Polarizability, Abbe's Refractometer, Numericals	2	Text Books, Principal of Chemical Kinetics	Google Classroom
	Liquid crystals, classification and structure, Application of liquid crystal	2	Text Books, Principal of Chemical Kinetics	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: __CHEMISTRY _____ CLASS: _____FYBSC_(CBZ-A)_____ SEMESTER: _____1_____ MONTH: _OCT

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2022_____ ACADEMIC YEAR: _____2022-2023_____

LEARNING OBJECTIVE/S:

- The learners will be able to : _To understand basics of ORGANIC CHEMISTRY
- To study hybridization sp, sp2, sp3,
- Shapes of ORGANIC molecules
- Differentate between Homolytic and Heterolytic.
- To study types of Reactions

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• Paper 1 • Unit 3 • Basics of ORGANIC CHEMISTRY	Alkanes,Alkenes,Alkanes,Alcohol,Aldehydes and ketones,Anhydride,Nitro Compounds Hybridization of ORGANIC compounds Overlaping of Atomic Orbital,Bonding-Sigma and Pi,Shapes of Molecules,Properties-Ethane,Ethene,Ethyne. EffectInductive,Electronic,Resonance,Mesomeric,Hyperconjugation,Dipole moment,Relative Strengths Homolytic and Heterolytic fission,Nucleophilicity and Basicity Carbonation,carbanion,free radical.Types of Reactions Addition,Elimination,Substitution	3 3 2 3 2 2	Text Book,Clayden	Google Classroom
			Text Book,Clayden	Google Classroom
			Text Book,Clayden	Google Classroom

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			Text Book,Clayden	Google Classroom

			Text Book,Clayden	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

TEACHING PLAN (UNIT P

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: CHEMISTRY _____ CLASS: _____SYBSC (PC-CZ)_____ SEMESTER: _____3_____ MONTH: __JULY 2022_____ ACADEMIC YEAR: _2022-2023_____

LEARNING OBJECTIVE/S:

- The learners will be able to : __TO learn the chemistry of HALOGENTED HYDROCARBON
- To study about nucleophilic substitution
- To study about reactions with ALCOHOL,PHENOL,EPOXIDE.
- TO understand different types of reagents and it's uses in reaction.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER 1 • UNIT 3 • REACTIONS AND REACTIVITY OF HALOGENATED	Alkyl Halides-SN1,SN2,SNi, reactions, Factors affecting reactions, Aryl Halides-substitution reaction, SnAr, addition-elimination, benzyne mechanism	7	Text Book, Clayden.	Google Classroom
	Preparation using alkyl and Aryl halide, cyanide, and epoxides. Alcohols-Reaction of Aldehydes and Ketones, Acidity and reaction of alcohols	5	Text Book, Clayden	Google Classroom
HYDROCARBON	Phenols-Preparation, Physical Properties, strength of acidic nature of alcohol and phenol, Resonance stabilization of phenoixde ion, Reactions of phenol.	3	Text Book, Clayden	Google Classroom

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	Epoxides-Reactivity, Ring opening, reaction with halogen halide, alcohol and Hydrogen Cyanide	3	Text Book, Clayden	Google Classroom
	In neutral or basic conditions- Ammonia, Amines, grignard reagent, alkoxide	2	Text Book, Clayden	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __RUTUJA HEMANT SAWANT _____ DEPARTMENT: _____CHEMISTRY _____ CLASS: _____MSC PART 1_____ SEMESTER: _____1_____ MONTH: ____SEP 2022_____ ACADEMIC YEAR: ___2022-2023_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To learn about various THERMAL METHODS.
- To differentiate between DSC and DTA.
- To learn about the instrumentation and working of different instruments
- To understand need for automation in modern life.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER- 4	Recapitulation of thermal methods, thermoanalytical methods, types of curves, TGA VS DTA, TGA	4	Vogal, Skoog, Instrumentati on	Google Classroom
	DSC- Instrumentation, working, block diag, Factors affecting curve, types of DSC	4	Vogal, Skoog, Instrumentation in Analytical Chemistry	Google Classroom
	DTA- Working, Principal, Instrumentation, Application, comparison to DSC	3	Vogal, Skoog, Instrumentation in Analytical Chemistry	Google Classroom
	Application's of DSC, Automation of Chemical Analysis- Need and Objectives of Automation, flow injections and discrete automated system	5	Vogal, Skoog, Instrumentation in Analytical Chemistry	Google Classroom

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	Multiplayer films, Gas monitoring equipment, Automatic titrators and benifits	4	Vogal, Skoog, Instrumentation in Analytical Chemistry	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __RUTUJA HEMANT SAWANT _____ DEPARTMENT: ____CHEMISTRY _____ CLASS: ____FYBSC (PCM)_____ SEMESTER: ___2_____ MONTH: _JAN 2023_____ ACADEMIC YEAR: __2022-2023_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To learn about Carbon Bonding.

- To study about reaction and mechanism of various compounds
- To study about hydrocarbon it's , properties and reactions.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER- 1 • UNIT- 3 • ALIPHATIC HYDROCARBON	C-C Sigma bond, Chemistry of alkanes- formation, Wurtz reaction, free radical halogenation- Wurtz fitting reactions. C-C Pi bond, formation of alkenes and alkynes, E1 and E2 reaction	4	Clayden	Google Classroom
	E1cb, Satzeff, Hoffman eliminations, Markownikoff and Anti- Markownikoff addition, Oxy and Demercuration, Hydroboration oxidation, Ozonolysis	5	Clayden	Google Classroom
	Syn-Anti Hydroxylation, 1,2 and 1,4 addition, Diels's Alder reaction, Allylic and Benzylic Bromination	3	Clayden	Google Classroom
	Propen, 1-butene, toluene, ethyl-benzene Reactions of Alkyenes- Acidic, Electrophilic, Nucleophilic Additions	3	Clayden	Google Classroom
	Hydration to form carbon compounds, Alkylation of Terminal Alkyenes	2	Clayden	Google Classroom

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: _____CHEMISTRY _____ CLASS: ___FYBSC (PCM)_____ SEMESTER: _____2_____ MONTH: ___JAN 2023_____ ACADEMIC YEAR: _2022-2023_____

LEARNING OBJECTIVE/S:

- The learners will be able to : _To understand about ionic equilibria
- To understand about pH and buffer and their uses in reaction
- To learn about MOLECULAR SPECTROSCOPY
- To study about solids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER- 2 • UNIT- 1 • Ionic Equilibria,	Types of electrolytes, Degree of Ionization and factors affecting It, ionization constant, ionization product of water, ionization of weak acids and base, pH scale, common ion effect.	5	J. Butler, Text Book	Google Classroom

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• Molecular Spectroscopy, • Solid State Chemistry.	Buffers- Types, Henderson equations for acid and base, Buffer action, Buffer capacity, Numericals	3	J. Butler, Text Book	Google Classroom
	Molecular Spectroscopy- EMR and spectrum, planks equation, absorption, emission, scattering, fluorescence, electronic. Vibrational and Rotational transition and Numericals	4	C.N Banwell, Text Book	Google Classroom
	Solid State Chemistry- Types of solids, Crystal lattice, lattice points, unit cell, space lattice, lattice plan.	2	A.R WEST, Text Book	Google Classroom

	Crystallography- Law of Constancy, interfacial Angel, Law of symmetry, Law of Rational indices	3	Text Book, A.R WEST	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: _____CHEMISTRY _____ CLASS: _____FYBSC (CBZ-A)_____ SEMESTER: _____2_____ MONTH: __JAN 2023_____ ACADEMIC YEAR: ___2022-2023_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To learn about Carbon Bonding.
- To study about reaction and mechanism of various compounds
- To study about hydrocarbon it's , properties and reactions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER- 1 • UNIT- 3 • Aliphatic Hydrocarbon	C-C Sigma bond, Chemistry of alkanes- formation, Wurtz reaction, free radical halogenation- Wurtz fitting reactions.	4	John C Kotz, Text Book	Google Classroom
	C-C Pi bond, formation of alkenes and alkynes, E1 and E2 reaction	5	John C Kotz, Text Book	Google Classroom

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	E1cb, Satzeff, Hoffman eliminations, Markownikoff and Anti- Markownikoff addition, Oxy and Demercuration,	3	Clayden Text Book	Google Classroom

	Hydroboration oxidation, Ozonolysis			
	Syn-Anti Hydroxylation, 1,2 and 1,4 addition, Diels's Alder reaction, Allylic and Benzylic Bromination	2	Clayden Text Book	Google Classroom
	Propen, 1-butene, toluene, ethyl-benzene Reactions of Alkyenes- Acidic, Electrophilic, Nucleophilic Additions Hydration to form carbon compounds, Alkylation of Terminal Alkyenes	1	Clayden Text Book	Google Classroom

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____RUTUJA HEMANT SAWANT _____ DEPARTMENT: _____CHEMISTRY _____ CLASS: _____SYBSC (PC-CZ)_____ SEMESTER: _____4_____ MONTH: NOV 2022_____ ACADEMIC YEAR: ___2022-2023_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To study about Carboxylic Acid.
- To study about Carboxylic Acid Derivatives.
- To study about Sulphonic Acid and it's Derivatives
- To learn about Preparation and Uses of Derivatives .

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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• PAPER-1 • UNIT- 3 • Carboxylic Acid and their Derivatives • Sulphonic Acids.	Nomenclature, Structure, physical properties, Acidity of carboxylic Acid, effects of substitute on acid strength of aliphatic aromatic carboxylic Acid, prep of carboxylic acid	3	Clayden Text Book	Google Classroom
	Carbonation of Grignard, Hydrolysis of nitriles, Acidity, Salt formation, decarboxylation, HVZ. Conversion- To acid chloride, ester, amides, acid anhydride	4	Clayden Text Book	Google Classroom
	Mechanism of Nucleophile Acyl and acid catalysed substitution, Interconversion of acid derivatives by Nucleophile substitution, Claisen and Dieckmann Condensation	5	Clayden Text Book	Google Classroom
	Sulphonic Acid- Preparation by sulphonation of benzene toluene and naphthalene,Acidity of arenes Sulphonic Acids, comparative acidity of carboxylic and Sulphonic acid	3	Clayden Text Book	Google Classroom
	Salt formation, desulphonation, reactions with alcohol and PCL5, IPSO substitution	2	Clayden Text Book	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____RUTUJA__HEMANT SAWANT_____ DEPARTMENT: CHEMISTRY _____ CLASS: ___MSC PART 1_____ SEMESTER: _____2_____ MONTH: JAN 2022_____ ACADEMIC YEAR: ___2022-2023_____

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LEARNING OBJECTIVE/S:

- The learners will be able to : To learn about various ELECTRO-ANALYTICAL METHODS
- To study about ELECTROGRAVIMETERY as a concept.
- To study about COULOMETRY it's principals, types, Applications.
- To explore new techniques in Analytical Chemistry on whole.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER – 4 • UNIT- 4 • ELECTO ANALYTICA	Ion Selective Potentiometery and it's types of electrodes, Solid-State, Precipitate, Liquid-Liquid, Enzyme and Gas sensing electrodes	4	Vogal, Skoog, Principals in Analytical Chemistry	Google Classroom

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L METHODS	Ion Selective Field Effect Transistors, Biocatalytic Membrane Electrode, Enzyme Based Bio-Sensor, Sums. Polarography- Intro, Principal, Nature of Wave	3	Vogal, Skoog, Principles in Analytical Chemistry	Google Classroom
	Ilkovic eq, Derivation with Cotteral eq,Effect of complex formation on polarographic wave, Sums Electrogravimetery-Introduction, Principal	3	Vogal, Skoog, Principles in Analytical Chemistry	Google Classroom
	Instrumentation, constant current and constant potential electrolysis, factors affecting nature of deposit, application's. Coulometery- Intro, Principal, Types- Controlled Potienal, Controlled Current.	4	Vogal, Skoog, Principals in Analytical Chemistry	Google Classroom
	Applications of Coulometery, Advantages and Numericals entire chapter	3	Vogal, Skoog, Principal in Analytical Chemistry	Google Classroom

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.Sc. SEMESTER: I MONTH: August 2022 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand thermodynamic terms and state functions and path functions.
Study first law of thermodynamics in detail.
Study calculation of bond energy, bond dissociation energy and resonance energy from thermochemical data.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Chemistry Paper-I **UNIT-I Chemical Thermodynamics And Chemical Calculations**	Thermodynamic terms: System, surrounding, boundaries, open, closed and isolated system, intensive and extensive properties, state functions and path functions, zeroth law of thermodynamics	03	Text book Himalaya publication	Black board and ppt
	First law of thermodynamics: concept of heat (q), work (w), internal energy (U), statement of first law, enthalpy, relation between heat capacities, sign conventions, calculations of heat (q), work (w), internal energy (U), and enthalpy (H)	03	Atkins P.W. and Paula J.de, Atkin's Physical Chemistry, 10th Ed.	Black board and ppt
	Thermochemistry: Heats of reactions, standard states, enthalpy of formation of molecules, enthalpy of combustion and its applications, calculation of bond energy, bond dissociation energy and resonance energy from thermochemical data, Kirchhoff's equation	04	Text book Himalaya publication	Black board and ppt
	Expressing concentration of solutions: Normality, molality, molarity, formality, mole fractions, weight ratio,	02	Text book	Black board and ppt

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			Himalaya publication	
	volume ratio, weight to volume ratio, ppm, ppb, millimoles, milliequivalents , Numericals.	03		Black board and ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: III MONTH: June 2022 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

Introduce classical methods of chemical analysis.
Appreciate the various terms and types of titrimetric analysis.
Ability to select proper titrimetric method
Appreciate the usefulness of the gravimetric method of analysis
Identify a suitable gravimetric method
Perform the required calculations involved in the analysis by titrimetry as well as gravimetry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Titrimetric Methods, Terms involved in Titrimetric methods of analysis. Comparing volumetry and Titrimetry The Conditions suitable for titrimetry Types of titrimetry – Neutralisation (Acidimetry, alkalimetry), Redox, Iodometry, Iodimetry.	02	Text book Himalaya publication	Black board and ppt

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PAPER-Chemistry Paper-III **UNIT-II Classical Methods of Analysis**	Precipitation and Complexometric titrations and indicators used in these titrations, Tools of Titrimetry: Graduated glasswares and Callibration, Standard solutions (Primary and Secondary standards in Titrimetry) and Calculations in Titrimetry.	02	Text book Seth publication	Black board and ppt
	Concept of pH and its importance in Neutralisation Titrations End point and Equivalence point of Neutralisation titrations Determination of End point by using i. Indicators causing colour change ii. Change in potential, (by potentiometry) iii.Change in conductance (by conductometry). Construction of titration curve (on the basis of change in pH)of a titration.	04	Skoog et al. Fundamentals of Analytical chemistry Cengage Learning, Eight Edition, chapter 13, 14 and 15	Black board and ppt
	Types of Gravimetric Methods – Precipitation Gravimetry: i. Steps involved in precipitation gravimetry analysis	02	Text book Seth publication	Black board and ppt
	Conditions for precipitation iii. Completion of precipitation, iv. Role of Digestion, Filtration, Washing, Drying Ignition of precipitate.	02	Text book Himalaya publication	Black board and ppt
	Applications of Gravimetric Analysis: Determination of sulfur in organic compounds; Estimation of Nickel in Cu-Ni alloy using dimethyl glyoxime; Determination of Aluminum by converting it to its oxide.	03		Black board and ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: III MONTH: June 2022 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

To describe the reactions of halogenated and oxygenated organic compounds of aliphatic and aromatic hydrocarbons
To predict the reactivity and stereochemistry of halogenated and oxygenated organic compounds

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-Chemistry Paper-I **UNIT-III Alkyl And Aryl Halides and Compounds Containing Oxygen - Alcohols, Phenols, Ethers, & Epoxides**	Haloalkanes i. Nucleohilic substitution: SN1, SN2 & SNi, Mechanism and Stereochemistry ii. Factors affecting nucleophilic substitution: Substrate, Solvent, Reagent, Leaving group	02	Text book Himalaya publication	Black board and ppt
	Haloarenes i. Reactivity of aryl halides towards nucleophilic substitution ii. Mechanism of nucleophilic aromatic substitution: Addition-Elimination (SNAr); Elimination-Addition (Benzyne)	03	Text book Seth publication	Black board and ppt
	Alcohols & phenols i. Physical properties: Hydrogen bonding (types); effect of Hbonding on properties (o- & p-nitrophenol); comparison of acidity of alcohols & phenols; acidity of substituted phenols ii. Preparation & of alcohols: industrial preparation (fermentation); hydration of alkenes; hydrolysis of alkyl halides	03	Morrison, R. T.; Boyd, R. N. (2012). *Organic Chemistry*. Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).	Black board and ppt
	iii. Reactions of alcohols- with sodium, HX (Lucas test), esterification, Oppenaeur oxidation iv. Preparation of phenol- cumene hydroperoxide method	02	Text book Seth publication	Black board and ppt

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	v. Reactions of phenols: O-alkylation & O-acylation; Schotten-Baumen reaction, Fries rearrangement, Claisen rearrangement			
	Ethers & Epoxides i. Preparation of ethers - Williamson's synthesis ii. Reaction of ethers - cleavage of ethers with HI iii. Preparation of epoxides- peroxyacids (m-CPBA)	02	Text book Himalaya publication	Black board and ppt
	iv. Reactivity & reactions of epoxides- ring opening reactions in acidic (HX, ROH, HCN), basic & neutral conditions (NH3, RMgX & RO-) with reference to regioselectivity	03		Black board and ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: III MONTH: June 2022 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

To study different types of complex chemical reactions and their reaction rates.
To learn the role of different phases in solution equilibrium system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Chemistry Paper-II	Types of Complex Chemical reactions i. Reversible or opposing reactions ii. Consecutive reactions iii. Parallel reactions	03	Text book Himalaya publication	Black board and ppt

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UNIT-I Kinetics and Phase equilibria of solutions	(Derivations not expected) iv. Thermal chain reactions: H and Br reaction. (Kinetic expression not expected).			
	Effect of temperature on the rate of reaction i. Arrhenius equation and its derivation ii. Concept of energy of activation (Ea). (Numerical expected) Theories of reaction rates i. Collision theory of unimolecular reaction(Lindemann's approach) and bimolecular reaction ii. Activated complex theory of bimolecular reactions iii. Comparison of the two theories (Qualitative treatment only)	03	Atkins P. W., and Paula J. De, *Physical Chemistry*, 10th ed., Oxford University, 12 press (2014).	Black board and ppt
	Phase rule & terms involved b) Liquid –liquid mixtures- classification i. Completely miscible liquids ii. Ideal solutions and Raoult's law iii. Deviations from Raoult's law –non-ideal solutions iv. Vapour pressure: composition and temperature; Composition curves of ideal and non-ideal solutions, Numericals	03	Text book Himalaya publication	Black board and ppt
	Partial miscibility of liquids i. Classification on the basis of Critical solution temperature ii. Effect of impurity on partial miscibility of liquids iii. Partially Miscible Liquids with Upper Critical Solution Temperature (Phenol-Water System) iv. Partially Miscible Liquids with Lower Critical Solution Temperature (Triethylamine-Water System) v. Partially Miscible Liquids with Upper and Lower Critical Solution Temperature (Nicotine-Water System)	03	Text book Himalaya publication	Black board and ppt
	Immiscibility of liquids: Principle of steam distillation (Numerical expected)	03	Text book	Black board and ppt

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	e) Nernst distribution law and its applications i. Solvent extraction – method		Himalaya publication	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc Part II SEMESTER: III MONTH: June 2022 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

To study different types of Multi-step synthesis of natural products.
To learn the role of different Prostaglandins, Lipids, Insect growth regulators and Plant growth regulators.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-Chemistry Paper-III **UNIT-II Natural products and Spectroscopy**	Multi-step synthesis of natural products: Synthesis of the following natural products with special reference to reagents used, stereochemistry and functional group transformations: [8L] a) Woodward synthesis of Reserpine from benzoquinone b) Corey synthesis of Longifoline from resorcinol c) Gilbert-Stork synthesis of Griseofulvin from phloroglucinol	04	Text book Himalaya publication	Black board and ppt
	d) Corey's Synthesis of Caryophyllene from 2-Cyclohexenone and Isobutylene e) Synthesis of Juvabione from Limonene f) Synthesis of Taxolii. Activated complex theory of bimolecular reactions iii. Comparison of the two theories (Qualitative treatment only)	04	Atkins P. W., and Paula J. De, *Physical Chemistry*, 10th ed., Oxford University, 12 press (2014).	Black board and ppt

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	Prostaglandins: Classification, general structure and biological importance. Structure elucidation of PGE1.	02	Text book Himalaya publication	Black board and ppt
	Lipids: Classification, role of lipids, Fatty acids and glycerol derived from oils and fats. Insect growth regulators: General idea, structures of JH2 and JH3	03	Text book Himalaya publication	Black board and ppt
	Plant growth regulators: Structural features and applications of arylacetic acids, gibberellic acids and triacontanol. Synthesis of triacontanol (synthesis of stearyl magnesium bromide and 12-bromo-1- tetrahydropyranyloxydodecane expected)	02	Text book Himalaya publication	Black board and ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.Sc. SEMESTER: II MONTH: January 2023 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

Study ideal gas laws, kinetic theory of gases in detail.
Study reversible and irreversible reactions, law of mass action, dynamic equilibria.
Study spontaneity and physical significance of free energy.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- **Chemistry Paper-I** **UNIT-I** **Gaseous State, Electrochemistry and** **Chemical Equilibria and Thermodynamic Parameters**	Ideal gas laws, kinetic theory of gases, Maxwell-Boltzmann's distribution of velocities (qualitative discussion), ideal gases, real gases, compressibility factor, Boyle's Temperature, Numericals.	04	Text book Himalaya publication	Black board and ppt
	Electrochemistry - Conductance, specific conductance, equivalent conductance, molar conductance, Variation of molar conductance with concentration of strong and weak electrolyte.Reversible electrodes, Electrode potential, standard electrode potential, Galvanic cells, Conventions to represent the galvanic cells, Concept of emf of cell. (Numerical problems expected wherever necessary)	05	Text book Seth publication	Black board and ppt
	Statement of second law of thermodynamics, concepts of entropy and free energy, spontaneity and physical significance of free energy, thermodynamic derivation of equilibrium constant, Numericals.	02	Text book Himalaya publication	Black board and ppt
	relationship between Kc and Kp, Le Chatelier's principle, factors affecting chemical equilibrium, Numericals.	02	Text book Himalaya publication	Black board and ppt
	Thermodynamic derivation of equilibrium constant (Numerical problems expected wherever necessary) Unit II	02	Text book Himalaya publication	Black board and ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: November 2022 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

To study nomenclature, structure and physical properties, acidity of carboxylic acids.
To predict the reactivity, nomenclature, and preparation of aromatic sulphonic acids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER Chemistry Paper-I **UNIT-III**	Nomenclature, structure and physical properties, acidity of carboxylic acids, effects of substituents on acid strength of aliphatic and aromatic carboxylic acids. Preparation of carboxylic acids: oxidation of alcohols and alkyl benzene, carbonation of Grignard and hydrolysis of nitriles.	03	Text book Himalaya publication	Black board and ppt
	Reactions: Acidity, salt formation, decarboxylation, Reduction of carboxylic acids with $LiAlH_4$, diborane, Hell-Volhard-Zelinsky reaction,Conversion of carboxylic acid to acid chlorides, esters, amides and acid anhydrides and their relative reactivity.	04	Text book Seth publication	Black board and ppt
	Mechanism of nucleophilic acyl substitution and acid-catalysed nucleophilic acyl substitution. Interconversion of acid derivatives by nucleophilic acyl substitution. Mechanism of Claisen condensation and Dieckmann condensation.	04	Morrison, R. T.; Boyd, R. N. (2012). *Organic Chemistry*. Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).	Black board and ppt

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	Nomenclature, preparation of aromatic sulphonic acids by sulphonation of benzene (with mechanism), toluene and naphthalene, Reactions: Acidity of arene sulfonic acid,	02	Text book Seth publication	Black board and ppt
	Comparative acidity of carboxylic acid and sulfonic acids. Salt formation, desulphonation.Reaction with alcohol, phosphorous pentachloride, IPSO substitution.	02	Text book Himalaya publication	Black board and ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: November 2022 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

To study different Types of catalysis, catalytic activity, specificity and selectivity.
To learn Recapitulation of laws of crystallography and types of crystals

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Chemistry Paper-II **UNIT-I Solid State And Catalysis**	laws of crystallography and types of crystals Characteristics of simple cubic, face centered cubic and body centered cubic systems, interplanar distance in cubic lattice	03	Text book Himalaya publication	Black board and ppt
	Use of X-rays in the study of crystal structure, Bragg's equation (derivation expected), X-rays diffraction method of studying crystal lattice structure, structure of NaCl and KCl. Determination of Avogadro's number, Numericals.	04	Atkins P. W., and Paula J. De, *Physical Chemistry*, 10th	Black board and ppt

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			ed., Oxford University, 12 press (2014).	
	Types of catalysis, catalytic activity, specificity and selectivity, inhibitors, catalyst poisoning and deactivation	03	Text book Himalaya publication	Black board and ppt
	Mechanisms and kinetics of acid-base catalyzed reactions, effect of pH. Mechanisms and kinetics of enzyme catalyzed reactions (Michaelis-Menten equation)	03	Text book Himalaya publication	Black board and ppt
	Effect of particle size and efficiency of nanoparticles as catalyst.	02	Text book Himalaya publication	Black board and ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: November 2022 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

Expected to appreciate the nature of interaction between applied electrical potential and the concentration of the analyte.
The nature of chemical reactions that influence potential of a given cell.
Familiar with the various types of electrodes or half cells.
Appreciate the nature, need and importance of pH.
Expected to know the applications of the various instrumental methods dealt with in this unit.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-Chemistry Paper-III **UNIT-II Instrumental Methods-II**	Instruments based on the electrochemical properties of the analytes Potentiometry: Principle, Role of Reference and indicator electrodes	03	Text book Himalaya publication	Black board and ppt
	Applications in Neutralisation reactions with reference to the titration of a Strong acid against a Strong Base (using quinhydrone electrode, Graphical methods for detection of end points.	02	Text book Seth publication	Black board and ppt
	pHmetry: Principle Types of pH meters.	02	Principles of Instrumental analysis, D. A. Skoog, 3rd Edition, Chapters: 20, 23	Black board and ppt
	Construction Working and Care of Combined Glass electrode Applications in Titrimetry (Strtong acid-Strong Base) biological and environmental analysis	02	Text book Seth publication	Black board and ppt
	Conductometry: Principle , Conductivity cell its construction and care.	03	Text book Himalaya publication	Black board and ppt
	Applications in Neutralisation Titrimetry with respect to i. Strong Acid-Strong Base ii. Strong Acid-Weak Base iii. Strong Base-weak Acid iv. Weak Acid- Weak Base. Advantages & limitations of conductometric titrations.	03		Black board and ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc part II SEMESTER: IV MONTH: January 2023 ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

To study vitamins, their classification, sources and biological importance.
To study Antibiotics their Classification on the basis of activity. Structure elucidation.
To study naturally occurring insecticides: Sources, structure and biological properties.
To study terpenoids, Occurrence, classification, structure elucidation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-Chemistry Paper-III	Vitamins: Classification, sources and biological importance of vitamin B1, B2, B6, folic acid, B12, C, D1, E (α-tocopherol), K1, K2, H (β- biotin). [5L] Synthesis of the following: Vitamin A from β-ionone and bromoester moiety. Vitamin B1 including synthesis of pyrimidine and thiazole moieties Vitamin B2 from 3, 4-dimethylaniline and D(-)ribose	03	Text book Himalaya publication	Black board and ppt
	Vitamin B6 from: 1) ethoxyacetylacetone and cyanoacetamide, 2) ethyl ester of N-formyl-DL-alanine (Harris synthesis) Vitamin E (α-tocopherol) from trimethylquinol and phytyl bromide Vitamin K1 from 2-methyl-1, 4-naphthaquinone and phytol.	02	Text book Seth publication	Black board and ppt

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UNIT-II Natural products-IV	Antibiotics: Classification on the basis of activity. Structure elucidation, spectral data of penicillin-G, cephalosporin-C and chloramphenicol. Synthesis of chloramphenicol (from benzaldehyde and β-nitroethanol)	03	Principles of Instrumental analysis, D. A. Skoog, 3rd Edition, Chapters: 20, 23	Black board and ppt
	penicillin-G and phenoxymethylpenicillin from D-penicillamine and t-butyl phthalimide malonaldehyde (synthesis of D-penicillamine and t-butyl phthalimide malonaldehyde expected).	03	Text book Seth publication	Black board and ppt
	Naturally occurring insecticides: Sources, structure and biological properties of pyrethrums (pyrethrin I), rotenoids (rotenone). Synthesis of pyrethrin I.	02	Text book Himalaya publication	Black board and ppt
	Terpenoids: Occurrence, classification, structure elucidation, stereochemistry, spectral data and synthesis of zingiberene	02		Black board and ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHEETAL JAISWAL DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: IV

MONTH: JANUARY-APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 UNIT 3- Methods of scientific research and writing scientific papers	Reporting practical and project work Writing literature surveys and reviews	3L	*Practical skills in Chemistry,* 2nd Ed.,Prentice Hall, Harlow	Offline mode – Chalk and board method
	Organizing a poster display Giving an oral presentation	3L		
	Writing Scientific Papers: Justification for scientific contributions	3L		
	bibliography, description of methods, conclusions	3L		
	the need for illustration, style, publications of scientific work, writing ethics, avoiding plagiarism.	3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHEETAL JAISWAL DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: IV

MONTH: JANUARY-APRIL ACADEMIC YEAR: 202-2023

LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 UNIT 1-	Primary .	1L	Dean J. R., Jones, A. M., Holmes, D.,Reed,R.,Weyers, J., & Jones, A	Offline mode – Chalk and board method
	Secondary and Tertiary	2L		
	Journal abbreviations, abstracts, current titles, reviews, monographs, dictionaries, text-books, current contents,	2L		
	Introduction to Chemical Abstracts and Beilstein, Subject Index, Substance Index, Author Index, Formula Index, and other Indices with examples.	3L		
	.Web sources, E-journals, Journal access, TOC alerts, Hot articles, Citation Index, Impact factor, H-index,	3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHEETAL JAISWAL DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: IV

MONTH: JANUARY-APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4	E-consortium, UGC infonet, E-books, Internet discussion groups and communities, Blogs, preprint servers, Search engines, Scirus, Google Scholar, ChemIndustry, Wiki-databases, ChemSpider, Science Direct, SciFinder, Scopus	3L	Google.com Youtube	Offline mode – Chalk and board method
	The Internet and World wide web, Internet resources for Chemistry, finding and citing published information.	2L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHEETAL JAISWAL DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: IV

MONTH: JANUARY-APRIL ACADEMIC YEAR: 2022-2023

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LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II: DATA ANALYSIS	Making and recording Measurements, SI units and their use, Scientific methods and design of experiments.	3L	Google.com Youtube *Quantative Chemical Analysis* 6th Ed	Offline mode – Chalk and board method
	Descriptive statistics, choosing and using statistical tests, Chemometrics, Analysis of Variance (ANOVA),	3L		
	Correlation and regression, curve fitting, fitting of linear equations, simple linear cases, weighted linear case, analysis of residuals,	4L		
	general polynomial fitting, linearizing transformations, exponential function fit, r and its abuse, basic aspects of multiple linear regression analysis.	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHEETAL JAISWAL DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: IV

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MONTH: JANUARY- APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit IV: CHEMICAL SAFETY & ETHICAL HANDLING OF CHEMICALS	Safe working procedure and protective environment, protective apparel, emergency procedure, first aid, laboratory ventilation, safe storage and use of hazardous chemicals,	3L	Google.com Youtube Chemical Safety matters – IUPAC-IPCS, (1992) Cambridge University Press	Offline mode – Chalk and board method
	procedure for working with substances that pose hazards, flammable or explosive hazards, procedures for working with gases at pressures above or below atmospheric pressur, safe storage and disposal of waste chemicals, recovery, recycling	3L 3L		Outer cover of chemicals bottle for symbols study
	reuse of laboratory chemicals, procedure for laboratory disposal of explosives,	3L		SAFTEY CHART OF Lab
	Identification, verification and segregation of laboratory waste,	3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: SHEETAL JAISWAL DEPARTMENT: CHEMISTRY CLASS: M.Sc. PART-1 (ANALYTICAL CHEMISTRY) SEMESTER: II

MONTH: JANUARY-APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: The Students will able to understand the different terms involved in Chromatography technique and also principle, instrumentation, working, application of Gas chromatography as well HPLC technique

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV IV Unit-I Chromatograph y	1.1 Recapitulation basic concepts in Chromatography	4L	Google.com Youtube Skoog,Holler	Offline mode – Chalk and board method
	1.2 Concept of plate and rate theories in chromatography	2L		
	1.3 Gas Chromatography: Principle, instrumentation, working and Application	6L		
	1.4 High performance liquid chromatography	2L		
	1.4.1 Principle, instrumentation, working and Application	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 19 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHEETAL JAISWAL DEPARTMENT: CHEMISTRY CLASS: FY BSC PCM SEMESTER: II

MONTH: JANUARY -APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: KTG Theory of gases and Application of free energy with new equation of chemical equilibrium.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 1 UNIT-I.Physical Chemistry	1.1 gaseous State -KTG Theory and relationship between Critical Constant and Van der Waals Constant	6L	Himalaya Publication	Offline mode – Chalk and board method
	1.2 Electrochemistry -I- Different terms used in Conductance and Types of free energy with introduction of entropy	4L		
	1.3 Chemical Equilibrium and Thermodynamics parameters	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - SHRUTIKA VILAS PADHYE. DEPARTMENT: CHEMISTRY. CLASS:FYBSC (PCM) SEMESTER: I

MONTH: AUG2022 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : learn isomerism, different types of projection formula method and configuration.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 UNIT 3 Stereochemistry-I	• Projection formulae: Flying Wedge projection, Fischer Projection, Newman and Sawhorse Projection formulae (of erythro, threo isomers of tartaric acid and 2,3 -dichlorobutane) and their interconversions • Geometrical isomerism in alkene and cycloalkanes: cis–trans and syn-anti isomerism E/Z notations with C.I.P rules • Optical Isomerism: Optical Activity, Specific Rotation, Chirality/Asymmetry, Enantiomers, Molecules with two similar and dissimilar chiral-centres, Diastereoisomers, meso structures, racemic mixture and resolution	10	F.Y.B.SC ORGANIC CHEMISTRY TEXTBOOK (Himalaya publication and sheth publication)	Black board and chalk
	• Relative and absolute configuration: D/L and R/S designations.	05		

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	• Conformational analysis of alkanes (ethane, propane and n-butane); Relative stability with energy diagrams			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - SHRUTIKA VILAS PADHYE. DEPARTMENT: CHEMISTRY. CLASS: FYBSC (PCM) SEMESTER: II

MONTH: JAN 23 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to : 1)study different types of strains,cycloalkanes stability , conformations of cyclohexane

2)Aromaticity and antiaromaticity, electrophilic aromatic substitution reaction and their mechanisms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 UNIT 3 Stereochemistry-II	3.1 STEREOCHEMISTRY-II : CYCLOALKANES AND CONFORMATIONAL ANALYSIS	05	F.Y.B.SC ORGANIC CHEMISTRY TEXTBOOK	Black board and chalk

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	• Types of cycloalkanes and their relative stability, Baeyer strain theory, conformation analysis of cyclohexane: chair , boat and twist boat forms, relative stability with energy		(Himalaya publication and sheth publication)	
	3.2 AROMATIC HYDROCARBONS • Aromaticity - Huckles rule , Hammond postulate, anti-aromaticity , aromatic character of arenes, cyclic carbocations/ carbanions and heterocyclic compounds with suitable examples. Electrophilic aromatic substitution: halogenation , nitration ,sulphonation and Friedel-craft alkylation/acylation with their mechanism. Directing effects of the groups.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - SHRUTIKA VILAS PADHYE. DEPARTMENT: CHEMISTRY. CLASS: TYBSC SEMESTER: V

MONTH: AUGUST 2022. ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Redox Titrations , theory of Redox indicator , Titration curves, Complexometric Titrations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 UNIT 2	2.1 Redox Titrations ● 2.1.1Introduction ● 2.1.2Construction of the titration curves and calculation of Esystem in aqueous medium in case of : (1) One electron system (2) Multielectron system	08	T.Y.B.SC ANALYTICAL CHEMISTRY TEXTBOOK (Himalaya publication)	Blackboard and chalk

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	• 2.1.3Theory of redox indicators, Criteria for selection of an indicator Use of diphenyl amine and ferroin as redox indicators			
	2.2 Complexometric Titrations • 2.2.1Introduction, construction of titration curve • 2.2.2Use of EDTA as titrant and its standardisation, absolute and conditional formation constants of metal EDTA complexes, Selectivity of EDTA as a titrant.Factors enhancing selectivity with examples.Advantages and limitations of EDTA as a titrant • 2.2.3Types of EDTA titrations • 2.2.4Metallochromic indicators, theory, examples and applications	07		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - SHRUTIKA VILAS PADHYE. DEPARTMENT: CHEMISTRY. CLASS: TYBSC SEMESTER:VI

MONTH:JAN 23 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : learn new techniques and applications in Gas chromatography and ion exchange chromatography .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 UNIT 2 Methods of separation - II	2.1 GAS CHROMATOGRAPHY • 2.1.1 Introduction, principle, theory and terms involved • 2.1.2 Instrumentation , Types of columns, stationary phases in GSC and GLC , Detectors- TCD, FID,ECD	09	T.Y.B.SC ANALYTICAL CHEMISTRY TEXTBOOK (Himalaya publication)	Blackboard and Chalk

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	• 2.1.3 Qualitative and quantitative analysis and applications • 2.1.4 Comparison between GSC and GLC			
	2.2 ION EXCHANGECHROMATOGRAPHY • 2.2.1 Introduction and principle • 2.2.2 Types of ion exchanger and properties of resin • 2.2.3 Ion exchange equilibria and mechanism, selectivity coefficient and separation factor and factors affecting separation of ion • 2.2.4 Ion exchange capacity and it's determination for cation and anion exchanger • 2.2.5 Application of ion exchange chromatography	06		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

NAME OF THE STAFF: - SHRUTIKA VILAS PADHYE. DEPARTMENT: CHEMISTRY. CLASS: MSc -II
SEMESTER: III MONTH: AUG 22 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Principle , instrumentation and applications of surface analysis techniques

PAPER,UNIT,TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit 1 Spectral methods -I	1.1 Surface analytical techniques Preparation of the surface, difficulties involved in the surface analysis.	01	Skoog	Whiteboard and marker
	1.2 Principle, instrumentation and applications of the following: a. Secondary Ion mass spectroscopy	04		

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	b. Particle-Induced X-Ray Emission **c. Low-Energy Ion Scattering and Rutherford Backscattering**	**05** **05**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

NAME OF THE STAFF: - SHRUTIKA VILAS PADHYE. DEPARTMENT: CHEMISTRY. CLASS: MSc -II
SEMESTER:IV MONTH:JAN 23 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: learn separation process and their applications

PAPER, UNIT, TITLE	SUBTOPICS	NO PF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED
Paper 1 Unit 1 Separation science	**1.1 Membrane separation processes: operating principles and applications of microfiltration, ultra-filtration, reverse osmosis, dialysis and electro-dialysis**	**08**	**Skoog**	**Whiteboard and marker**
	1.2 Applications of Solvent extraction in AnalyticalChemistryrecapitulation of solvent extraction, roles of	**07**		

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	solvent extraction in analytical chemistry, solvent extraction in sample preparation and pretreatment steps, solvent extraction as a means of analytical determination			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati shreedhar Dhumal._____ DEPARTMENT:

Chemistry_____ CLASS: ____M.Sc. I_____SEMESTER: _____I _st_____ M6ONTH: ___Sep _____ACADEMIC YEAR:

____2022-23_____

LEARNING OBJECTIVE/S:

The learners will be able to : 1) To learn concept of FT technique and it's concept.

2) To understand the concept and application of Molecular Ultraviolet and Visible Spectroscopy 3)

To be able to carry out numerical based on UV Visible spectroscopy.

4) To gain knowledge in concept of Infrared Absorption Spectroscopy, Dual spectrometry , diffuse reflectance spectroscopy.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15L_____

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: _____Swati Shreedhar Dhumal._____ DEPARTMENT:

Chemistry_____ CLASS: ____M.Sc. I_____ SEMESTER: _____II nd_____ MONTH: __Jan ____ACADEMIC YEAR:

____2022-23_____

LEARNING OBJECTIVE/S:

The learners will be able to : ___1) To gain knowledge of concept Scanning Electron Microscopy (SEM) Scanning Tunneling Microscopy (STM) Transmission Electron Microscopy (TEM)Electron Spectroscopy (ESCA and Auger). 2) To understand the concept of AAS.

PAPER, UNIT, TITLE	**SUBTOPIC**			**NO OF LECTURES Alloted**	**REFERENCE**	**TEACHING METHOD/ ICT TOOLS USED**
Paper IV, unit 2, Spectrometry and Radioanalytical Method.	Spectroscopy : principle,instrumention and applications of X-ray Fluorescence, absorption and diffraction spectroscopy			(4L)	Principles of Instrumental Analysis – Skoog, Holler, Nieman, 5th ed., Harcourt College	White board and marker, ppt
	Mass spectrometry: recapitulation, instrumentation, ion sources for molecular Studies, electron impact, field ionization, field absorption, chemical ionization and fast Atom bombardment sources. Mass analyzers: Quadrupole, time of flight and ion trap. Applications.			(6L)		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: ____Swati Shreedhar Dhumal._____ DEPARTMENT: Chemistry_____

CLASS: _____M.Sc. II_____ SEMESTER: ___III rd_____ MONTH: __Aug _ _ACADEMIC YEAR: ___2022-23_____

LEARNING OBJECTIVE/S:

The learners will be able to : _1)__To understand the concept of sampling, types of sample, pretreatment of soil food and cosmetic.___ _2)

To know about sampling plan , sampling of raw material, and finished products.

3) To know about selection of method, criteria for method used , method validation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit- I Quality In Analytical Chemistry - I	Sampling: Definition, types of sample, sampling plan, quality of sample, subsampling, Sampling of raw materials, intermediates and finished products. Sample preparations – dissolution technology and decomposition,	(8 L)	Quality in the analytical chemistry laboratory, E Prichard, John Wiley and sons N.Y 1997.	White board and marker, ppt

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	Selection of the Method: sources of methods, factors to consider when selecting a method, performance criteria for methods used, reasons for incorrect analytical results, method validation, and quality by design (PAT).	(7L)	Quality assurance in analytical Chemistry, W Funk, V Dammann, G. Donnevert VCH Weinheim1995	White board and marker, ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15 L_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____Swati Shreedhar Dhumal. _____ DEPARTMENT: ___Chemistry_____

CLASS: ___M.Sc. II_____ SEMESTER: _____IIIrd_____ MONTH: _Aug __ ACADEMIC YEAR: __2022-23_____

LEARNING OBJECTIVE/S:

The learners will be able to : __1) To understand about measurements of uncertainty.

2) To gain knowledge about signal to noise ratio.

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3) To know about pharmaceutical legislation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper - I Unit - II Quality In Analytical Chemistry – II	Measurement of uncertainty: Definition and evaluation of uncertainty, putting uncertainty to use, interpretation of results and improving the quality of results.	(4L)	Quality in the analytical chemistry laboratory, E Prichard, John Wiley and sons N.Y 1997. Quality assurance in analytical Chemistry, W Funk, V Dammann, G. Donnevert VCH Weinheim1995	White board and marker, ppt
	Signal to noise: Signal to noise ratio, sources of noise in instrumental analysis. Signal to noise enhancement, hardware devices for noise reduction, software methods for noise reduction.	(6L)		White board and marker, ppt

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	Pharmaceutical Legislation: introduction to drug acts, drug rules(schedules), concept of regulatory affairs in pharmaceuticals, review of GLP and GMP and their regulations for analytical labs, roles and responsibilities of personnel, appropriate design and placement of laboratory equipment, requirements for maintenance and calibration.	(5L)		White board and marker, ppt

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati Shreedhar Dhumal._____DEPARTMENT: ___Chemistry_____

CLASS: _____M.Sc. II_____ SEMESTER: ____IIIrd_____ MONTH: ____Aug ACADEMIC YEAR: ___2022- 23_____

LEARNING OBJECTIVE/S:

The learners will be able to : _1) To gain general idea regarding of pharmaceutical industry.

2) To know Role of FDA in pharmaceutical industries.

3) To understand about official method of quality control.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper - IV, Unit - I Pharmaceutical Analysis	General idea regarding the Pharmaceutical Industry, definition and classification of drugs, introduction to pharmaceutical formulations, classification of dosage forms. Role of FDA in pharmaceutical industries.	(7L)	Government of India Publications of Food, Drug and Cosmetic Act and Rules. Google , Wikipedia.	White board and marker, ppt

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	Sources of impurities in pharmaceutical products and raw materials.	(4L)		White board and marker, ppt

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	Standardization of finished products and their characteristics, official methods of quality control.	(4L)		Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15 L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati Shreedhar Dhumal._____DEPARTMENT: ___Chemistry_____ CLASS: _____M.Sc. II_____ SEMESTER: ____IV th_____ MONTH: __Jan _____ ACADEMIC YEAR: ___2022- 23_____

LEARNING OBJECTIVE/S:

The learners will be able to : __1) To understand principle and concept of green chemistry and sustainable development.

2) To be able to calculate atom economic and uneconomic reactions.

3) To provide knowledge of organic solvents.

4) To be able to deal with emerging green technologies.

5) To acquire knowledge in Designing Greener Processes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, unit – III, Green chemistry	Principle and concepts of green chemistry: sustainable development and green chemistry, atom economy, examples of atom economic and atom uneconomic reactions, reducing toxicity.	(7 L)	Green chemistry and catalyst, R. A. Sheldon, Isabella Arends, Ulf Hanefeld Wiley VCH verlag GmB	White board and marker, ppt

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	Organic solvents: environmentally benign solutions, solvent free systems, supercritical fluids (only introduction) Ionic liquids as catalysts and solvents.	(4L)	Sustainable residential development: planning and design for green neighborhoods. Google, Wikipedia.	White board and marker, ppt
	Emerging Green Technologies: photochemical reactions (advantages and challenges), examples. Chemistry using microwaves, sonochemistry and electrochemical synthesis.	(4L)		
	Designing Greener Processes: Inherently Safer Designs (ISD), Process intensification (PI) in-process monitoring.	(4L)		White board and marker, ppt

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati Shreedhar Dhumal._____ DEPARTMENT: _____Chemistry_____

CLASS: ____M.Sc. II _____SEMESTER: _____IV th_____ MONTH: _Jan __ ACADEMIC YEAR: 2022-23_____

LEARNING OBJECTIVE/S:

The learners will be able to : __1) To understand about concept of Mass spectroscopy.

2) To learn concept of Raman spectroscopy.

NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -II Unit -II Spectral method IV	Mass spectroscopy: recapitulation, correlation of mass spectra with molecular structure- interpretation of mass spectra, analytical information derived from mass spectra- molecular identification, metastable peaks, Fragmentation Reactions.	(9L)	Principles of Instrumental Analysis, D. A. Skoog, F. J. Holler and J.A. Niemann 5th Ed. Google, Wikipedia.	White board and marker, ppt

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Raman spectroscopy: Principle Theory Instrumentation , techniques(SERS and Resonance Raman) and Applications of Raman spectroscopy.	(6L)	Principles of Instrumental Analysis, D. A. Skoog, F. J. Holler and J.A. Niemann 5th Ed. Google, Wikipedia.	White board and marker, ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

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. **TEACHING PLAN (UNIT PLAN)**

NAME OF THE STAFF: _____Swati Shreedhar Dhumal_____ DEPARTMENT: Chemistry ___ CLASS: _____M.Sc.

II_____ SEMESTER:_IVth_____ MONTH: Jan _____ ACADEMIC YEAR: ___2022-23_____

LEARNING OBJECTIVE/S:
The learners will be able to : 1) To gain updated knowledge of solid waste management.

2) To acquire knowledge of method and treatment of waste.

3) To know about biomedical waste and its method of disposal.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper -III Unit- II Solid waste management.	Solid waste management: objectives, concept of recycle, reuse and recovery .	(3L)	Solid waste management, K Sasikumar and Sanoop Gopi Krishna PHI publication (2009) Solid waste management, Surendrakumar Northen Book Center (2009) Google , Wikipedia.	White board and marker, ppt

Treatment and disposal of sludge / dry cake	(3L)		White board and marker, ppt
Managing non-decomposable solid wastes.	(2L)		White board and marker, ppt

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Bio- medical waste : Introduction , Classification and methods of disposal	(5L)		White board and marker, ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Tanvi .A. Raul DEPARTMENT: Chemistry

CLASS: F.Y.B.sc (CBZ-A) SEMESTER: I MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop the knowledge about chemical kinetics and liquid state.

To develop the understanding about order of reactions and different instruments used to measure different properties of liquids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Paper II Unit I Physical Chemistry	**1.1 Chemical Kinetics** Rate of reaction, rate constant, measurement of reaction rates, order and molecularity of reaction, integrated rate equation of first and second order reactions (with equal initial concentration of reactants) (Numericals expected) Determination of order of reaction by (a) Integration method (b) Graphical method (c) Ostwald's isolation method (d) Half time method (Numericals expected) **1.2 Liquid State** Surface tension: Introduction, methods of determination of surface tension by drop number method	8 7	Himalaya Publication F.Y.B.sc, Physical chemistry Textbook	Black board and chalk

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	(Numericals expected) Viscosity: Introduction, coefficient of viscosity, relative viscosity, specific viscosity, reduced viscosity, determination of viscosity by Ostwald viscometer (Numericals expected) Refractive index: Introduction, molar refraction and polarizability, determination of refractive index by Abbe's refractometer (Numericals expected) Liquid crystals: Introduction, classification and structure of thermotropic phases (Nematic, smectic and cholesteric phases), applications of liquid crystals :			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI A. RAUL DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.sc (CBZ-A) SEMESTER: II MONTH: JANUARY TO MAY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

To develop knowledge about Ionic Equilibria, Solid state and Molecular spectroscopy.

To develop understanding about different types of electrolytes and electromagnetic waves.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper II Unit I Physical Chemistry	**1.1 Ionic Equilibria** Strong, moderate and weak electrolytes, degree of ionization, factors affecting degree of ionization, ionization constant and ionic product of water, ionization of weak acids and bases, pH scale, common ion effect, dissociation constants of mono di and triprotic acid (exact treatment for monoprotic acid) Buffers: Introduction, types of buffers, derivation of Henderson equation for acidic and basic buffers, buffer action, buffer capacity (Numericals expected) **1.2 Photochemistry** Laws of photochemistry, Quantum yield or efficiency, experimental determination of quantum yield, reasons for	7 4	Himalaya Publication F.Y.B.sc, Physical chemistry Textbook	Black board and chalk

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	low and high quantum yield, primary and secondary processes. Photochemical reactions (with suitable examples), Photosensitizers and photosensitized reactions, fluorescence, phosphorescence and chemiluminescence. **1.3 Molecular Spectroscopy** Electromagnetic radiation, electromagnetic spectrum, Planck's equation, interaction of electromagnetic radiation with matter: Absorption, emission, scattering, flourescence, electronic, vibrational and rotational transitions Beer Lambert's law (Numericals expected)	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.Sc (CBZ-B & BIOCHEM) SEMESTER: I MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

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Develop knowledge about comparative chemistry of main group elements.

To develop understanding about comparative chemistry of main group elements.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit II Chemistry II U	**2.0 Comparative chemistry of Main Group Elements** Metallic and non-metallic nature, oxidation states, electronegativity, anomalous behaviour of second period elements, allotropy, catenation, diagonal relationship. Comparative chemistry of oxides and hydroxides of group I and group II elements. Some important compounds-$NaHCO_3$, Na_2CO_3, CaO, $CaCO_3$; oxides of carbon, oxides of sulphur and nitrogen with respect to environmental aspects like green house effect, photochemical smog and acid rain.	15	Himalaya Publication F.Y.B.sc, Inorganic chemistry textbook	Black board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.sc (CBZ-B & BIOCHEM) SEMESTER: II MONTH: JANUARY TO MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop the knowledge about chemical bond and oxidation reduction chemistry.

To develop understanding about chemical bond and oxidation reduction chemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper II Unit II Inorganic Chemistry	**2.1:Chemical Bond and Reactivity** Types of chemical bond, comparison between ionic and covalent bonds, polarizability(Fajan's Rule), shapes of molecules, Lewis dot structure, Sidgwick Powell Theory, basic VSEPR theory for AB_n type molecules with and without lone pair of electrons, isoelectronic principles, applications and limitations of VSEPR theory. **2.2 Oxidation Reduction Chemistry** a)Reduction potentials b)Redox potentials: half reactions; balancing redox equations. c)Applications of redox chemistry i)Redox reagents in Volumetric analysis: a) I2 b) KMnO4 iii)Titration curves:i) single electron systems (example Ce(IV) against Fe(II)); and ii) Multi electron systems as in KMnO4 against Fe(II))	10 5	Himalaya Publication F.Y.B.sc, Inorganic chemistry textbook	Black board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

AME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.sc (PC-CZ) SEMESTER: III MONTH: JULY TO NOVEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

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Develop knowledge about chemical kinetics and solutions.

To develop understanding about different theories based on chemical kinetics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Physical Chemistry I	**1.1 Chemical Kinetics- II** 1.1.1 Types of complex chemical reactions: Reversible or consecutive and parallel reactions. 1.1.2 Effect of temperature on rate of reaction , Arrhenius equations. 1.1.3 Theories of reaction rate : Collision theory, complex theory of biomolecular reactions etc. **1.2 Solutions** 1.2.1 thermodynamics of ideal solutions: Ideal solution and Raoul's law, deviations from Raoul's law- Non ideal solutions, vapour pressure composition and temperature, Lever rule etc.	7 8	Himalaya publication S.Y.B.sc, Physical chemistry textbook	Black board and chalk

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	1.2.2 Partial miscibility of liquids: Critical solution temperature, effect of impurity on partial miscibility of liquids with respect to Phenol-water, Triethannolamine - water and nicotine - water systems. 1.2.3 Immiscibility of liquids Principle of steam distillation, Nernst distribution law and its applications.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.sc (PC-CZ) SEMESTER: IV MONTH: JANUARY TO MAY ACADEMIC YEAR:2022-2023

LEARNING OBJECTIVE/S:

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The learners will be able to :

Develop the knowledge of solid state and catalysis.

To develop the understanding about state and catalysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Physical Chemistry I	**1.1 Solid state** 1.1.1 Recapitulation of laws of crystallography and types of crystals. 1.1.2 Characteristics of simple cubic, face centered cubic and body centered cubic systems. 1.1.3 Use of X-ray in study of crystal structure, bragg's equation.	7	Himalaya Publication S.Y.B.sc, Physical chemistry textbook	Black board and chalk
	1.2 Catalysis 1.2.1 types of catalysis, catalytic activity, specificity and selectivity, inhibitors, catalyst poisoning and deactivation. 1.2.2 Mechanisms and kinetics and acid base catalyzed reaction. 1.2.3 Mechanisms and kinetics of enzyme catalyzed reaction. 1.2.4 Effect of particle size and efficiency of nano particles as catalyst.	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART II SEMESTER: III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop knowledge of body fluids.

To develop understanding about analysis of different body fluids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper III Unit I Bioanalytical chemistry and food analysis	**Bioanalytical chemistry** **1.1Body Fluids** 1.1.1 Composition of body fluids and detection of abnormal levels of glucose, creatinine, uric acid in blood, protein, ketone bodies and bilirubin in urine leading to diagnosis of diseases. 1.1.2 Physiological and nutritional significance of vitamins (water soluble and fat soluble) and minerals. 1.1.3 Analytical techniques (including microbiological techniques) for vitamins.	5 5 5	General, organic and biological chemistry, H. Stephen Stoker, Cengage Learning.	Black board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART II SEMESTER: III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2022-2023

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LEARNING OBJECTIVE/S:
The learners will be able to :

Develop the knowledge about cosmetics.

To develop understanding about different elements present in cosmetics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit IV Pharmaceutical and Organic Analysis	**Cosmetic Analysis** **4.1 Cosmetics** Introduction. Evaluation of cosmetic materials, raw materials and additives. Formulation, standards and methods of analysis. **4.2 Deodorants and antiperspirant** Al, Zn, Boric acid, chlorides, sulphates, hexachlorophene, methanamine, phenolsulphonates and urea. **4.3 Face powder** Fats, fatty acids, boric acid, barium sulphate, Ca, Mg, Ti, Fe, oxides of Ti, Fe and Al. **4.4 Hair tonic** 2,5-diaminotoluene, potassium borates, sodium perborate, pyrogallol, resorcinol, salicylic acid, dithioglycollic acid (inpermanent wavers).	2 3 3 3	Google	Black board and chalk

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	4.5 Creams and Lotions Types of emulsions, chloroform soluble materials, glycerol, pH emulsion, ash analysis, nonvolatile matter (IR spectroscopy) . **4.6 Lipsticks** General analysis, determination of -nonvolatile matter, lakes and fillers, trichloroethylene-acetone soluble contents.	2 2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART II SEMESTER: IV MONTH: JANUARY TO MAY ACADEMIC YEAR: 2022-2023

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LEARNING OBJECTIVE/S:

The learners will be able to :

Develop knowledge of hyphenated techniques.

To develop understanding of hyphenated techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit IV	**Hyphenated Techniques** 4.1 concept of hyphenation, need for hyphenation, possible hyphenations. 4.2 Interfacing devices and applications of GC – MS, ICP - MS, GC -IR, Tandem Mass Spectrometry, LC – MS: HPLC-MS, CE-MS.	2 13	Principles of Instrumental Analysis, D. A. Skoog, F. J. Holler and J.A. Niemann 5 th Ed.	Black board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART II SEMESTER: IV MONTH: JANUARY TO MAY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop knowledge of effluent treatment.

To develop understanding about different steps involved in effluent treatment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper III Unit I	**Effluent Treatment** 1.1 Effluent treatment plant general construction and process flow charts. 1.2Treatment and disposal of Sewage. 1.3. Effluent parameters for metallurgical industry. 1.4Permissible limits for metal (example Cr, As, Pb, Cd etc) traces in the effluent. 1.5 Recovery of metals from effluent, modern methods – Electrodialysis,Electrodeposition and Ion Exchange etc.	3 3 2 2 3	Water and water pollution (hand book) Ed., Seonard'l Ciacere, Vol I to IV, Marcel Dekker inc. N.Y.(1972)	Black board and chalk

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	1.6Recycle and reuse of process and treated (effluent) water.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____AJITKUMAR INGLE_____DEPARTMENT: _____CHEMISTRY_____CLASS: _TYBSC_____ SEMESTER: _____Vth_____ MONTH: __June 2021 _____

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To study redox titration like Construction of the titration curves and calculation of E_{system} in aqueous medium , Theory of redox indicators, Criteria for selection of an indicator in details.

2. To study complexometric titrations in details like construction of titration curve, Use of EDTA as titrant and its standardisation, absolute and conditional formation constants of metal EDTA complexes,Selectivity of EDTA as a titrant,Factors enhancing selectivity with examples,Types of EDTA titrations,Metallochromic indicators, theory, examples and applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER IV UNIT 2 **CLASSICAL METHODS OF ANALYSIS (TITRIMETRY) (3 & 6 UNITS)**	**2.1 Redox Titrations (Numerical and word Problems are expected)** 2.1.1 Introduction 2.1.2 Construction of the titration curves and calculation of E_{system}	08L	Saujanya publicationof analytical chemistry,sheth publication,Himalaya publication textbook,	Online video lecture on Google meet
	in aqueous medium in case of: *(1)* One electron system *(2)* Multielectron system 2.1.3 Theory of redox indicators, Criteria for selection of an indicator Use of diphenyl amine and ferroin as redox indicators			

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	2.2 Complexometric Titrations 2.2.1 Introduction, construction of titration curve 2.2.2 Use of EDTA as titrant and its standardisation, absolute and conditional formation constants of metal EDTA complexes, Selectivity of EDTA as a titrant. Factors enhancing selectivity with examples. Advantages and limitations of EDTA as a titrant. 2.2.3 Types of EDTA titrations.	07L	Same as above	Same as above

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	2.2.4 Metallochromic indicators, theory, examples and applications			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____AJITKUMAR INGLE_____DEPARTMENT: ___CHEMISTRY_

__CLASS: __TYBSC_____ SEMESTER: __ VTH _____ MONTH: __June 2021 ___

ACADEMIC YEAR: _2021-22__

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To study solvent extraction in detail like Factors affecting extraction, Concept of $[pH]_{1/2}$ and its significance, Craig's counter current extraction.

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2) To study HPLC instrumentation, working and applications along with detectors. 3)To study HPTLC instrumentation, working and applications in details.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV UNIT IV **METHODS OF SEPARATION – I (6 UNITS)**	***4.1* Solvent Extraction** *4.1.1* Factors affecting extraction: Chelation, Ion pair formation and Solvation *4.1.2* Graph of percent extraction versus pH. Concept of $[pH]_{1/2}$ and its significance (derivation not expected) 4.1.3 Craig's counter current extraction: Principle, apparatus and applications 4.1.4 Solid phase extraction: Principle, process and applications with special reference to water and industrial effluent analysis.	06L	Saujanya publication,sheth publication,Himalaya publication textbook of analytical chemistry,	Online video lecture on Google meet

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	4.1.5 Comparison of solid phase extraction and solvent extraction.			
	4.2 High Performance Liquid chromatography (HPLC) 4.2.1 Introduction and Principle Instrumentation- components with their significance: Solvent Reservoir, Degassing system, Pumps-(reciprocating pumps, screw driven- syringe type pumps, pneumatic pumps, advantages and disadvantages of each pump), Precolumn, Sample injection system, HPLC Columns, Detectors(UV — Visible detector, Refractive index detector) 4.2.2 Qualitative and Quantitative Applications of HPLC	06L	SAME AS ABOVE	SAME AS ABOVE

	4.3 **High Performance Thin Layer Chromatography (HPTLC)** *4.3.1* Introduction and Principle	03L	SAME AS ABOVE	SAME AS ABOVE

	Stationary phase, Sample application and mobile phase 4.3.2 Detectors *a)* Scanning densitometer- Components. Types of densitometer- Single beam and Double beam *b)* Fluorometric Detector *4.3.3* Advantages, disadvantages and applications *4.3.4* Comparison of TLC and HPTLC			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: August to November ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to : Chemistry of inner transition elements with respect to their properties,uses and separation technique like ion exchange and solvent extraction technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCH 502(paper2) Unit 3	3.1 Introduction:: Position in periodic table and electronic configuration of lanthanides and actinides . 3.2 Chemistry of lanthanides with reference to i) lanthanide contraction ii) Oxidation States iii) ability to form complexes iv) magnetic and spectral properties. 3.3 Occurrence , extraction and separation of lanthanides by i) ion exchange method ii) solvent extraction method , applications of lanthanides	15	Himalaya publication textbook ,Sheth Publication textbook	Power point : online

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USCHACDD 501 Applied component(Drugs and dyes)) unit 1 and 2	1.1 General Introduction to Drugs 1.1.1 definition of a drug , sources of a drugs 1.1.2 nomenclature of Drugs : generic name,brand name , systematic name. 1.1.3 definition of following terms pharmacon,pharmacology,pharmacophore,half life efficiency,LD50,ED50,GI50,theraputic index. 1.1.4 brief idea of the following terms: receptors,agonists,antagonisyd,drug receptor interaction,drug potency,bioavalibility,drug toxicity,drug addiction,spurious drugs,misbrsnded Drugs,adulterated drugs , pharmacopeia. 1.2 Routes of Drug administration and dosage forms. 1.2.1 Oral and parenteral Routes with advantages and disadvantages 1.2.2Formulations and combination formulation,different dosage forms. 1.3 Pharmacodynamic agents 1.3.1 CNS drugs : Classification based on pharmacological actions :CNS depressant and CNS stimulants,concept of sedation and hypnosis , anaestesia 2.1 Analgesic,antipyretics and Anti -inflammatory drugs. 2.1.1 Analgesics and antipyretics 2.1.2 Anti inflammatory drugs 2.2 Antihistamine drugs. 2.3 Cardiovascular Drugs 2.4 Antidiabetic drugs 2.5 Antiparkinsonism drugs	15 15	Himalaya publication textbook,Sheth Publication textbook	Power point : online

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	2.6 Drugs for respiratory system			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 each

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: 1 MONTH: August to November ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : learn characterization of coordination compounds

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCH102 (paper 2) unit 4	4.1 Formation,thermal studies,conductivity measurements,electonic,spectral and magnetic measurements,IR,NMRand ESR spectroscopic methods. 4.2 Spectral calculations using Tanabe Sugano diagram,calculations of electronic parameters such as delta,B,C nephelauxatic ratio	15	D.Banerjea,Coordination chemistry. F.A Cotton ,G,Wilkinson , Advanced Inorganic chemistry,6th edition,Wiley	Power point : online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry
CLASS: T.Y.B.Sc. Semester: VI MONTH: Jan To April ACADEMIC YEAR: 2021-2022
The learners will be able to : To learn molecular orbital theory For coordination compounds.p properties of coordination compounds,stability of metal complexes,reactivity of metal complexes and electronic spectra of metal complexes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCH602(PAPER 2) Unit2	2.1 identification of the central metal orbitals and their symmetry suitable for formation of Sigma bonds with ligand orbitals. 2.2construction of LGO. 2.3constrction of Sigma molecular orbitals of ML6 complexes , effect of pi bonding on complexes. 2.4.Electronic spectra. 2.4.1 origin of electronic spectra. 2.4.2types of electronic transition in coordination compounds 2.4.3 selection rules. 2.4.4electronic configuration and electronic micro states. 2.4.5 determination of terms for P2 and d1 configuration	15	Himalaya publication textbook,Sheth publication textbook	Power point : online

TOTAL NUMBER OF LECTURES ALLOCAT esED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry

CLASS: T.Y.B.Sc. SEMESTER: VI MONTH: Jan to April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : learn about chemotherapeutic agents,nanoparyicles in medicinal chemistry and also Drugs and environmental aspects

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCHACDD 601(Drugs and dyes) Unit 5 and 6	5.1 Drugs discovery,design and development. 5.1.1Discovery of lead compound 5.1.2medicinal properties of compounds. 5.1.3 Development of Drug. 5.1.4 structure modification to increase potency. 5.1.5computer assisted drug design. 5.2 Drug metabolism. 5.3Chemotherapeutic agents. 5.3.1 antibiotics and antivirals. 5.3.2 Antimalarials. 5.3.3anthelmintics and antifungal agents. 6.1 antiamoebic. Drugs. 6.2 antitubercular and antileprotic Drugs.	15	Himalaya publication textbook and Sheth Publication textbook	Power point : online

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	6.3 anti-neoplastic Drugs 6.4 anti-HIV drugs 6.5 Drugs intermediate: synthesis and uses. 6.nano particles in medicinal chemistry. 6.7 drugs and environmental aspects	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 each

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: II MONTH: Jan to April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : learn about Organometallic chemistry of transportation metals

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCH202(unit2)	2.1 Eighteen and sixteen electron rule and electron counting with examples. 2.2 preparation and properties of following compounds. A)alkyl and aryl derivatives of Pd and Pt complexes. B) carbenes and carbyenes of Cr,Mo and W. C)alkene derivatives of Pd and Pt. D) alkyne derivatives of Pd and Pt. E)allyl derivatives of Ni. F) sandwich compounds of Fe,Cr and half sandwich compounds of Cr and Mo. 2.3 Structure and bonding on the basis of VBT and MOT of organometallic compounds	15	R.C.Mehrotra and A.singu,Organomettalic chemistry,A unified approach,2nd edition	Power point : online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK ASHOK PANDEY DEPARTMENT: CHEMISTRY. CLASS: TYBSC SEMESTER: VI

MONTH: JAN-MAR ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: learn the rearrangement reactions and will be able to know new concepts in Carbohydrates.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3 UNIT 2 - Molecular Rearrangement & Carbohydrates	2.1 MOLECULAR REARRANGEMENT 2.1.1. Pinacol-Pinacolone Rearrangement 2.1.2. Beckmann Rearrangement	21	Himalaya publishing house College Organic Chemistry TYBSc	Online mode - Paper and pen method
	2.1.3. Favorski Rearrangement 2.1.4. Michael Addition, Wittig Reaction	21		
	2.2 CARBOHYDRATES 2.2.1. Introduction, Classification, Reducing and non reducing sugars, D L Notation	11		
	2.2.2. Structures of Monosaccharides : Fischer Projection Formula & Haworth formula, interconversion, Chair conformation with stereochemistry	21		
	2.2.3. Stereoisomerism of D glucose 2.2.4.Mutarotation in D glucose	81		

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	2.2.5. Chain lengthening and chain shortening reactions 2.2.6. Reactions of D glucose 2.2.7.Gylcosides			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK ASHOK PANDEY DEPARTMENT: CHEMISTRY. CLASS: MSC Part I SEMESTER: II

MONTH: FEB - APRIL ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to : Various Name reactions and rearrangement reactions in this unit

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT 2 Reactions and Rearrangements	2.1. Reactions: Baylis-Hilman reaction, McMurry Coupling, Corey-Fuchs reaction, Nef reaction, Passerini reaction.	3L	Clayden	Offline mode - Chalk and board method
	2.2. Concerted rearrangements: Hofmann, Curtius, Lossen, Schmidt, Wolff, Boulton Katritzky.	3L	Organic Reaction Mechanism V.K.Ahluwali	

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	2.3. Cationic rearrangements: Tiffeneau-Demjanov, Pummerer, Dienone-phenol, Rupe, Wagner-Meerwein.	3L		
	2.4. Anionic rearrangements: Brook, Neber, Von Richter, Wittig, Gabriel–Colman, Payne.	4L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13Lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK ASHOK PANDEY DEPARTMENT: CHEMISTRY. CLASS: MSc II SEMESTER:IV

MONTH: JAN - MAR ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to : learn the safety precautions and measures what should be taken while working in laboratory during different reasearch field.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER IV UNIT 4 CHEMICAL SAFETY & ETHICAL HANDLING OF CHEMICALS	Safe working procedure and protective environment, protective apparel, emergency procedure, first aid, laboratory ventilation, safe storage and use of hazardous chemicals, procedure for working with substances that pose hazards, flammable or explosive hazards, procedures for working with gases at pressures above or below atmospheric pressur, safe storage and disposal of waste chemicals, recovery, recycling and reuse of laboratory chemicals, procedure for laboratory disposal of explosives, identification, verification and segregation of laboratory waste, disposal of chemicals in the sanitary sewer system, incineration and transportation of hazardous chemicals.	12 L	Chemical Safety matters – IUPAC-IPCS, (1992) Cambridge University Press. OSU Safety manual 1.01	Online mode - PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK ASHOK PANDEY DEPARTMENT: CHEMISTRY. CLASS: MSc Part II SEMESTER: IV

MONTH: MAR - MAY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : synthesis of different organic molecules by retrosynthesis via disconnection of carbon carbon bonds and strategies for selection of starting material.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II Designing Organic Synthesis-II	2.1 General strategy: choosing a disconnection-simplification, symmetry, high yielding steps, and recognisable starting material.	4L	Organic Synthesis: The Disconnection Approach, Stuart Warren, John Wiley & Sons, 2004	Offline mode - Chalk and Board
	2.2 One group C-C Disconnections: Alcohols (including stereoslectivity), carbonyls (including regioselectivity), Alkene synthesis, use of acetylenes and aliphatic nitro compounds in organic synthesis.	6L		
	2.3 Two group C-C Disconnections: 1,2- 1,3- 1,4- 1,5- and 1,6-difunctionalized compounds, Diels-Alder reactions, α, β-unsaturated compounds, control in	5L		

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	carbonyl condensations, Michael addition and Robinson annelation.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: MSc. –I SEMESTER: I MONTH: AUGUST TO NOVEMBER ACADEMIC YEAR: 2021--22

LEARNING OBJECTIVE/S: To study quantum chemistry
The learners will be able to: Understand the concept of quantum chemistry and to solve Numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – II QUANTUM CHEMISTRY	Introduction, Schrodinger wave equation, wave function, properties, Normalisation, orthogonality	3L	R. K. Prasad	Online (Power point)
	Operators and algebra, Hermitian operator, Hamiltonian operator, Eigen functions, postulates of quantum mechanics	4L	R. K. Prasad	Online (Power point)
	Applications of quantum mechanics for free particle, one dimension , two dimension and three dimension box	4L	R. K. Prasad	Online (Power point)
	Harmonic oscillator, Hermite polynomials, recursion formula	3L	R. K. Prasad	Online (Power point)
	Numericals	1L	R. K. Prasad	Online (Power point)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: MSc. –I SEMESTER: I MONTH: AUGUST TO NOVEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: To study elector-chemistry
The learners will be able to: classify chemical cells and derived the expressions for it and solve numericals

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – IV ELECTRO-CHEMISTRY	Introduction, Debye-Huckel theory, limiting law, its extension	3L	S. Glasstone	Online (Power point)
	Cunductance, relaxation effect, Onsager equation, its validity, Debye-Falkhagen and Wein effect	4L	S. Glasstone	Online (Power point)
	Batteries	3L	S. Glasstone	Online (Power point)
	Bio-eelctrochemistry	3L	S. Glasstone	Online (Power point)
	Numericals	2L	S. Glasstone	Online (Power point)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: MSc. –I SEMESTER: I I MONTH: JANUARY TO APRIL ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: To study quantum chemistry
The learners will be able to: Understand the concept of quantum chemistry and to solve Numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – II QUANTUM CHEMISTRY	Rigid rotar, Spherical coordinates, theta equation, spherical harmonics	3L	R. K. Prasad	Chalk-board
	Hydogen atom, separation of energy, quantum numbers, probability density functions	4L	R. K. Prasad	Chalk-board
	Application of Schrodinger equation, need for approximate solution, derivation	3L	R. K. Prasad	Chalk-board
	Huckel molecular orbitals	3L	R. K. Prasad	Chalk-board
	Numericals	2L	R. K. Prasad	Chalk-board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:__DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: MSc. –I__ SEMESTER: I I MONTH:JANUARY TO APRIL ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: To study structures of solids and phase equillibria
The learners will be able to: draw structures of solids and solve numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – IV SOLID STATE CHEMISTRY AND PHASE EQUILLIBRIA	Solid state chemistry	1L	S. Glasstone	Online (Power point)
	Structure, types of defects and its stoichiometry	4L	H. V. keer	Online (Power point)
	Phase equillibria	4L	H. V. keer	Online (Power point)
	Two component system	3L	H. V. keer	Online (Power point)
	Three component system	3L	H. V. keer	Online (Power point)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

SIGNATURE OF THE STAFF Dchorghe **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: T.Y.BSc._ SEMESTER: V MONTH: AUGUST TO NOVEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: To study properties of solid and liquid
The learners will be able to: Write derivations of colligative properties and solve numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – II CHEMICAL THERMODYNAMICS AND CHEMICAL KINETICS	Colligative properties : vapour pressure, measurement – static and dynamic method	2L	Ira Levine	Online (Power point)
	Elevation in boiling point, depression in freezing point, and numericals	5L	Ira Levine	Online (Power point)
	Thermodynamic derivation of Van't hoff equation, measurement, reverse osmosis, numericals	3L	Ira Levine	Online (Power point)
	Collision theory for unimolecular and bimolecular reactions and numericals	3L	K. Laider	Online (Power point)
	Classificaton of reactions , numericals	2L	K. Laider	Online (Power point)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: T.Y.BSc. SEMESTER: V MONTH: AUGUST TO NOVEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: To study nuclear chemistry.
The learners will be able to: Explain principle, construction and working of nuclear reactors and counters, solve numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – III NUCLEAR CHEMISTRY	Basic terms, Radioactive constants, units, numericals	3L	Ira Levine	Online (Power point)
	Detection and measurement of radioactivity, counters, behaviour of ion pairs	3L	Ira Levine	Online (Power point)
	Applications of use of radioisotopes as tracers, Nuclear reactions, threshold energy, Q- value, Numericals	4L	Ira Levine	Online (Power point)
	Fission process, Nuclear reactors, fusion process	3L	Ira Levine	Online (Power point)
	Numericals	2L	Ira Levine	Online (Power point)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: T.Y.BSc._ SEMESTER: VI MONTH: JANUARY TO APRIL ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: To study electrochemistry.
The learners will be able to : classify chemical cells and derived the expressions for it and solve numericals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – I ELECTRO CHEMISTRY	Introduction, Activity and activity coefficient, Debye-Huckel limiting law, Numericals	4L	S. Glasstone	Online (Power point)
	Classification of electrochemical cells, derivation and explanation of each cell, Numericals	4L	S. Glasstone	Online (Power point)
	Polarization concept	3L	S. Glasstone	Online (Power point)
	Decomposition potential and overvoltage	2L	S. Glasstone	Online (Power point)
	Numericals	2L	S. Glasstone	Online (Power point)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: T.Y.BSc._ SEMESTER: VI MONTH: JANUARY TO APRIL ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: To study quantum chemistry
The learners will be able to: Understand the concept of quantum chemistry and to solve Numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – III BASICS OF QUANTUM CHEMISTRY	Introduction, basics of quantum chemistry, black body radiation, Compton effect	3L	R.K.Prasad	Online (Power point)
	Quantum mechanics, postulates ,Progressive and standing waves, interpretation and properties of wave function	4L	R.K.Prasad	Online(Power point)
	State function and significance, operator concept, algebra, eigen value, Numericals	3L	R.K.Prasad	Online (Power point)
	Renewable energy sources, solar energy, Silicon solar cell	3L	Ira Levine	Online (Power point)
	Hydrogen: fuel of the future, production of hydrogen fuel, advantages.	2L	Ira Levine	Online (Power point)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dipti Gharat, DEPARTMENT:Chemistry , CLASS: T. Y. Bsc, SEMESTER: _V_and VI_ MONTH:

ACADEMIC YEAR: _____2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Learning objectives are statements that define the expected goal of a curriculum, course, lesson or activity in terms of demonstrable skills or knowledge that will be acquired by a student as a result of instruction._____

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II SOLID STATE CHEMISTRY	Sem V Structures of Solids 2.2.1 Explanation of terms viz.crystal lattice, lattice point, unit cell and lattice constants. 2.1.2 Closest packing of rigid spheres (hcp,ccp), packing density in simple cubic, bcc and fcc lattices. Relationship between density, radius of unit cell and lattice parameters. 2.1.3 Stoichiometric Point defects in solids (discussion on	11	Solid State Chemistry and its Applications" by A R West Google, Himalaya and sheth publication text book, you tube	Google classroom

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	Frenkel and Schottky defects expected).		video, e-books	
	2.2 Superconductivity. 2.2.1 Discovery of superconductivity. 2.2.2 Explanation of terms like superconductivity, transition temperature, Meissner effect. 2.2.3 Different types of super conductors viz.conventional superconductors, alkali metal fullerides, high temperature super conductors. 2.2.4 Brief application of superconductors.	04	Puri sharma kalia, puri sharma pathania	
	Sem VI			
Paper II Unit III ORGANOMETALLIC CHEMISTRY	3.1 Organometallic Compounds of main group metal 3.1.1General characteristics of various types of organometallic compounds, viz.ionic, □-bonded and electron deficient compounds. 3.1.2 General synthetic methods of organometallic compounds : (i) Oxidative-addition, (ii)Metal-metal exchange(transmetallation), (iii) Carbanion-halide exchange, (iv) Metal-hydrogen exchange(metallation) and (v) Methyleneinsertion reactions. 3.1.3 Some chemical reactions of organometallic compounds:(i) Reactions with oxygen and halogens, (ii) Alkylation and arylation reactions (iii) Reactions with protic reagents, (iv) Redistribution reactions and (v) Complex	06		

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	formation reactions.			
	3.2 Metallocenes Introduction, Ferrocene : Synthesis, properties, structure and bonding on the basis of VBT. 3.3 Catalysis 3.3.1 Comparison between homogeneous and heterogeneous catalysis 3.3.2 Basic steps involved in homogeneous catalysis 3.3.3 Mechanism of Wilkinson's catalyst in hydrogenation of alkenes.	09		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Dipti Gharat _____ DEPARTMENT:Chemistry ____ CLASS: F. Y. Bsc SEMESTER: I and II MONTH:

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Learning objectives are statements that define the expected goal of a curriculum, course, lesson or activity in terms of demonstrable skills or knowledge that will be acquired by a student as a result of instruction._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II Comparative chemistry of Main Group Elements	Sem I			Google classroom
	Metallic and non-metallic nature, oxidation states, electronegativity, anomalous behaviour of second period elements, allotropy, catenation, diagonal relationship.Comparative chemistry of carbides, nitrides, oxides and hydroxides of group I and group II elements. Some important compounds- NaHCO3, Na2CO3, NaCl, NaOH, CaO, CaCO3;	15	Himalaya and sheth publication book, Google, you tube video, e-books	

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	oxides of carbon, oxides and oxyacids of sulphur and nitrogen with respect to environmental aspects.			
Sem II Unit II Chemical Bond and Reactivity	Sem II			Google classroom
	2.1.Types of chemical bond, comparison between ionic and covalent bonds, polarizability (Fajan's Rule), shapes of molecules, Lewis dot structure, Sidgwick Powell Theory, basic VSEPR theory for ABn type molecules with and without lone pair of electrons, isoelectronic principles, applications and limitations of VSEPR theory.	07		
	2.2: Oxidation Reduction Chemistry: a) Reduction potentials b) Redox potentials: half reactions; balancing redox equations.c) Redox stability in wateri) Latimer and Frost Diagramsii) pH dependence of redox potentials.d) Applications of redox chemistry i) Extraction of elements: (example: isolation of copper by auto reduction)ii) Redox reagents in Volumetric analysis: a) I2; b) KMnO4iii) Titration curves:i) single electron systems (example Ce(IV) against Fe(II)); and ii) Multi electron systems as in KMnO4 against Fe(II))	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: F.Y.B.Sc. SEMESTER: I MONTH: October ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study Rutherford's atomic model, Bohr's theory, simple principles of quantum mechanics, atomic orbitals, Aufbau principle.
2. Detailed study of the periodic table.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II	Unit 2.1- Atomic Structure	10 L	College Inorganic Chemistry, Himalaya publication	Power point presentation-Google meet
	Unit 2.2- Periodic Table and Periodicity	5 L	College Inorganic Chemistry, Himalaya publication	Power point presentation-Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

G.V. Gadre

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: F.Y.B.Sc. SEMESTER: II MONTH: FEBRUARY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Learn testing of gaseous evolutes, role of reagent papers in qualitative analysis, precipitation equilibria.
2. Arrhenius theory, Lowry-Bronsted theory, Lewis concept, hard and soft acids and bases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II	Unit 2.1- Concept of Qualitative Analysis	7 L	College Inorganic Chemistry, Himalaya publication	Power point presentation-Google meet, Chalk and board
	Unit 2.2- Acid-Base Theories	8 L	College Inorganic Chemistry, Himalaya publication	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: I MONTH: SEPTEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Aliphatic nucleophilic substitution reactions: S_N1, S_N2, S_N^i reactions, SET mechanism, S_N reactions involving neighboring group participation (NGP), Aromatic nucleophilic substitution: S_NAr, benzyne mechanism, ipso, cine, tele, vicarious substitution, Ester hydrolysis.
2. Aromaticity: Frost-Musulin diagram, Huckel's (4n+2) and 4n rules, aromatic and antiaromatic compounds upto 18 carbon atoms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit II- Nucleophilic substitution reactions and Aromaticity.	Unit 2.1- Nucleophilic substitution reactions	9 L	Advanced Organic Chemistry, F. A. Carey and R. J. Sundberg.	Power point presentation-Google meet
	Unit 2.2- Aromaticity	6 L	Advanced Organic Chemistry: Reactions and mechanism, L.G. Wade, Jr., Maya Shankar Singh.	Power point presentation-Google meet

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: II MONTH: JANUARY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study Proton magnetic resonance spectroscopy: Principle, chemical shift, spin-spin coupling, coupling constant, karplus equation.
2. ^{13}C NMR spectroscopy: Theory and comparison with proton NMR, proton coupled and decoupled spectra, off-resonance decoupling.
3. Mass spectrometry: Molecular ion peak, base peak, isotopic abundance, Nitrogen rule, fragmentation pattern in various classes of organic compounds.
4. Structure determination involving individual or combined use of the above spectral techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit IV- NMR spectroscopy and Mass spectrometry	Unit 4.1- Proton magnetic resonance spectroscopy	8 L	Introduction to Spectroscopy, Donald L. Pavia.	Power point presentation-Google meet, Chalk and board
	Unit 4.2- ^{13}C NMR spectroscopy	3 L	Organic Spectroscopy-Principles and Applications, Jagmohan.	Chalk and board

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Unit 4.3- Mass spectrometry	4 L	Spectroscopy of Organic Compounds, P.S. Kalsi.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: III MONTH: AUGUST ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study Carbohydrates: structure elucidation of Lactose, structural features and applications of various carbohydrates.
2. Natural pigments: structural features and biological importance of various classes of natural pigments like carotenoids, flavones, quinones, porphyrins, structure elucidation of beta-carotene.
3. Insect pheromones: types of pheromones, synthesis of some pheromones.
4. Alkaloids: occurrence and importance of morphine, atropine, coniine.
5. Synthesis of some natural products.
6. Study of Prostaglandins, Lipids, Insect growth regulators, Plant growth regulators.
7. Advanced spectroscopic techniques like DEPT, COSY, HETCOR, NOE, NOESY.
8. Drug discovery, design and development: Important topics of medicinal chemistry like Receptor, Therapeutic index, Drug assay. Basic pharmacokinetics as ADME properties.
9. Discovery of Penicillin and Librium without lead, identification of pharmacophore, functional group modification, structure activity relationship (SAR)

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III- Unit I- Natural Products-I	Unit 1.1- Carbohydrates	5 L	Organic Chemistry Natural Products Volume-II, O. P. Agarwal.	Power point presentation-Google meet
	Unit 1.2- Natural pigments	5 L		Power point presentation-Google meet
	Unit 1.3- Insect pheromones	3 L		Power point presentation-Google meet
	Unit 1.4- Alkaloids	2 L		Power point presentation-Google meet
Paper III- Unit II- Natural Products-II	Unit 2.1- Multi-step synthesis of natural products	8 L	Natural products chemistry and applications, Sujata V. Bhat, B.A. Nagasampagi.	Power point presentation-Google meet
	Unit 2.2- Prostaglandins	2 L		Power point presentation-Google meet
	Unit 2.3- Lipids	2 L		Power point presentation-Google meet
	Unit 2.4- Insect growth regulators	1 L		Power point presentation-Google meet
	Unit 2.5- Plant growth regulators	2 L		Power point presentation-Google meet
Paper III- Unit IV- Advanced	Unit 4.1- Advanced NMR techniques	10 L	Introduction to Spectroscopy, Donald L. Pavia.	Power point presentation-Google meet

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spectroscopic techniques-II			Organic Spectroscopy-Principles and Applications, Jagmohan.	
	Unit 4.2- Spectral problems	5 L	Spectroscopy of Organic Compounds, P.S. Kalsi.	Power point presentation-Google meet
Paper IV- Unit I- Drug discovery, design and development	Unit 1.1	7 L	Medicinal chemistry, D.Sriram and P. Yogeeswari Principles of medicinal chemistry (Vol. I and II)- S. S. Kadam, K. R. Mahadik.	Power point presentation-Google meet
	Unit 1.2	8 L	Introduction to Medicinal chemistry by Graham Patrick	Power point presentation-Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study Steroids: Biological role, important structural and stereochemical features of different class of steroids, synthesis of 16-DPA, synthesis of various male and female hormones from 16 DPA.
2. Heterocyclic compounds: Nomenclature of monocyclic, bicyclic/tricyclic heterocycles by common, Hantzsch-Widman and replacement nomenclature method, nucleophilic ring opening reactions of three and four membered heterocyclic compounds, structure, reactivity, synthesis and reactions of some monocyclic, bicyclic, fused heterocycles.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
Paper III- Unit I- Natural Products-III	Unit 1.1- Steroids	5 L	Organic Chemistry Natural Products	Power point presentation-Google meet
	Unit 1.2	2 L		Power point presentation-Google meet

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
	Unit 1.3	5 L	Volume-II, O. P. Agarwal.	Power point presentation-Google meet
	Unit 1.4	3 L	Natural products chemistry and applications, Sujata V. Bhat, B. A. Nagasampagi.	Power point presentation-Google meet
Paper III- Unit III- Heterocyclic compounds-I	Nomenclature of heterocyclic compounds	5 L	Heterocyclic Chemistry, Synthesis, Reactions and Mechanisms, R.K. Bansal.	Power point presentation-Google meet, Chalk and board
	Structure, reactivity, synthesis and reactions of monocyclic heterocycles	10 L	Chemistry of Heterocyclic compounds, Rakesh Kumar Parashar, Beena Negi.	Power point presentation-Google meet
Paper III- Unit IV- Heterocyclic compounds-	Nomenclature of heterocyclic compounds	5 L	Heterocyclic Chemistry, Synthesis,	Power point presentation-Google meet, Chalk and board

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
II	Nucleophilic ring opening reactions of 3 and 4 membered heterocycles	3 L	Reactions and Mechanisms, R.K. Bansal. Chemistry of Heterocyclic compounds, Rakesh Kumar Parashar, Beena Negi.	Power point presentation-Google meet
	Structure, reactivity, synthesis and reactions of fused heterocycles	7 L		Power point presentation-Google meet, Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT**: Chemistry **CLASS**: M.Sc. (I) SEMESTER: I **MONTH**: August

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: derive the wave function of sp, sp^2, sp^3 hybridization, understand concept of resonance and resonance energy, Valence Bond Theory and Molecular orbital theory, weak forces of attraction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, I, **Chemical Bonding**	**1.1** Recapitulation of hybridization. Derivation of wave functions for sp, sp^2, sp^3.	3L	Principles of Inorganic Chemistry.	Google Meet
	1.2 Discussion of involvement of d orbitals in various types of hybridization, concept of resonance, resonance energy derivation.	3L	Principles of Inorganic Chemistry.	Google Meet
	1.3 Critical analysis of VBT	2L	Principles of Inorganic Chemistry.	Google Meet

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	1.4 Molecular Orbital Theory for diatomic species of first transition series	2L	Principles of Inorganic Chemistry.	Google Meet
	1.5 Molecular Orbital Theory for SF_6, CO_2, B_2H_6, I^{3-}	3L	Principles of Inorganic Chemistry.	Google Meet
	1.6 Weak forces of attraction: Hydrogen bonding – concept, types, properties, methods of detection and importance, vander waals forces, ion-dipole, dipole-dipole, London forces	2L	Principles of Inorganic Chemistry.	Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** M.Sc. (I) **SEMESTER:** II **MONTH:** January

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: understand the reaction mechanism of octahedral and square planar complexes, redox reactions, its mechanism and stereochemistry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, I, **Inorganic Reaction Mechanism**	**1.1** Rate of reactions, factors affecting the rate of reactions, techniques for determination of rate of reaction.	5L	Concise Coordination Chemistry	Google Meet
	1.2 Ligand Substitution reactions of : a) Octahedral complexes without breaking of metal ligand bond. b) Square planar complexes, trans effect, its theories and aplications.	5L	Principles of Inorganic Chemistry.	Google Meet
	1.3 Redox reactions: inner and outer sphere mechanism, complimentary and non-complimentary reactions.	3L	Concise Coordination Chemistry	Black Board/Chalk
	1.4 Stereochemistry of substitution reactions of octahedral complexes.	2L	Principles of Inorganic Chemistry.	Black Board/Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** T.Y.B.Sc. **SEMESTER:** V **MONTH:** 7th August

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: understand the chemistry of non-aqueous solvents, comparative study of group 16 and 17.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, IV, Some Special Topics	**4.1 Chemistry of Non-aqueous Solvents** **4.1.1** Classification of solvents and importance of non-aqueous solvents. **4.1.2** Characteristics and study of liquid ammonia, dinitrogen tetra oxide as non-aqueous solvents with respect to: (i) acid-base reactions and (ii) redox reactions.	5L	J. D. Lee, Concise Inorganic Chemistry	Google Meet
	4.2 Comparative Chemistry of Group 16 **4.2.1** Electronic configurations, trends in physical properties, allotropy. **4.2.2** Manufacture of sulphuric acid by Contact process.	5L	J. D. Lee, Concise Inorganic Chemistry	Google Meet
	4.3 Comparative Chemistry of Group 17 **4.3.1** Electronic configuration, General characteristics, anamolous properties of fluorine, comparative study of acidity of oxyacids of chlorine w.r.t acidity, oxidising properties and structures (on the basis of VSEPR theory).	5L	J. D. Lee, Concise Inorganic Chemistry	Google Meet

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	4.3.2 Chemistry of interhalogens with reference to preparations, properties and structures (on the basis of VSEPR theory).			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** T.Y.B.Sc. SEMESTER: VI **MONTH:** 1st Jan

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: learn various methods to extract metals from their ores, introduction of group 18 elements and bioinorganic chemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, IV, **Some Special Topics**	**4.1 Metallurgy** **4.1.1** Types of metallurgies, **4.1.2** General steps of metallurgy; Concentration of ore, calcinations, roasting, reduction and refining. **4.1.3** Metallurgy of copper: occurrence, physicochemical principles, Extraction of copper from pyrites& refining by electrolysis.	7L	Puri, Sharma Kalia Inorganic chemistry.	Google Meet
	4.2 Chemistry of Group 18 **4.2.1** Historical perspectives **4.2.2** General characteristics and trends in physical and chemical properties **4.2.3** Isolation of noble gases **4.2.4** Compounds of Xenon (oxides and fluorides) with respect to preparation and structure (VSEPR)	5L	Puri, Sharma Kalia Inorganic chemistry.	Google Meet

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	4.2.5 Uses of noble gases			
	4.3 Introduction to Bioinorganic Chemistry. **4.3.1** Essential and non-essential elements in biological systems. **4.3.2** Biological importance of metal ions such as Na^{+} ,K^{+} ,Fe^{+2}/Fe^{+3} and Cu^{+2}(Role of Na^{+} and K^{+} w.r.t ion pump)	3L	Puri, Sharma, Kalia Inorganic chemistry.	Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** S.Y.B.Sc. **SEMESTER:** III **MONTH:** 7th August

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: know about ionic bond and covalent bond, resonance, hybridization, valence bond theory and molecular orbital theory, know the various instrumental methods of analysis, advantages of using instruments to make measurements, the various observable properties of a given analyte and the stimulus best suited for its analysis, know about a generalized diagram of an analytical instrument, select a suitable instrumental method for analysis, appreciate the basic terms in spectrometry, use the relationship between absorbance (and its variations) and concentration of the analyte, chose a suitable method for photometric titrations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I, II, **Chemical Bonding**	**2.1 Non-Directional Bonding** **2.1.1** Ionic Bond: Conditions for the Formation of Ionic Bond. **2.1.2** Types of Ionic Crystals **2.1.3** Radius Ratio Rules **2.1.4** Lattice Energy, Borne-Lande Equation **2.1.5** Kapustinski Equation **2.1.6** Born-Haber Cycle and its Application	4L	Puri, Sharma Kalia Inorganic chemistry.	Google Meet
	2.2. Directional Bonding: Orbital Approach. **2.2.1** Covalent Bonding The Valence Bond Theory- Introduction and basic tenets.	6L		

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	2.2.2 Interaction between two hydrogen atoms and the Potential energy diagram of the resultant system. **2.2.3** Corrections applied to the system of two hydrogen atoms-Formation of H_2 **2.2.4** Homonuclear diatomic molecules from He_2 to Ne_2 **2.2.5** Resonance and the concept of Formal Charge; Rules for Resonance or Canonical structures. **2.2.6** Bonding in Polyatomic Species: The role of Hybridization. And types of hybrid orbitals-*sp, sp^2, sp^3, sp^2d^2, sp^2d and sp3d^2* **2.2.7** Equivalent and Non-Equivalent hybrid orbitals **2.2.8** Contribution of a given atomic orbital to the hybrid orbitals (with reference to sp^3 hybridisation as in CH_4, $NH_3$and H_2O and series like NH_3, PH_3, AsH_3, BiH_3)		Puri, Sharma Kalia Inorganic chemistry.	Google Meet
	2.3 Molecular Orbital Theory **2.3.1.** Comparing Atomic Orbitals and Molecular Orbitals. **2.3.2.** Linear combination of atomic orbitals to give molecular orbitals LCAO-MO approach for diatomic homonuclear molecules. **2.3.4.** Wave mechanical treatment for molecular orbitals ($H^{2+}$and H) **2.3.4** Molecular orbital Theory and Bond Order and magnetic property: with reference to O_2,O_2^+ O_2^-,O_2^{2-}	5L	Puri ,Sharma Kalia Inorganic chemistry.	Google Meet
III, III, **Basic Concepts in Instrumental methods**	**3.1.** Relation between the analyte, stimulus and measurement of change in the observable property. **3.2.** Block Diagram of an Analytical instrument. **3.3.** Types of Analytical Instrumental methods based on	3L	Instrumental Methods of Chemical Analysis	Google Meet

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	i) Optical interactions (e.g. Spectrometry: uv-visible, Polarimetry) ii) Electrochemical interactions (e.g. Potentiometry, Conductometry,) iii) Thermal interactions (e.g. Thermogravimetry)			
	3.4. Spectrometry **3.4.1.** Interaction of electromagnetic radiation with matter: Absorption and Emission spectroscopy **3.4.2.** Basic Terms: Radiant Power, Absorbance, Transmittance, Monochromatic light, Polychromatic light, Wavelength of maximum absorbance, Absorptivity and Molar Absorbtivity **3.4.3.** Statement of Beer's Law and Lambert's Law, Combined Mathematical Expression of Beer -Lambert's Law, Validity of Beer-Lambert's Law,Deviations from Beer-Lambert's Law ((Real deviations, Instrumentaldeviations and Chemical deviations) **3.4.4.** Instrumentation for absorption spectroscopy: Colorimeters and Spectrophotometers **3.4.5.** Block Diagrams for Single beam and Colorimeter, and Spectrophotometer (Principles, Construction and working-Details of Components expected i.e source ,Sample holder , Filters/Monochromators, Detectors such as Photomultiplier tube)	7L	Instrumental Methods of Chemical Analysis	Google Meet
	3.4.6. Applications of UV-Visible Spectrophotometry **(02 L)** (a) Qualitative analysis such as Identification of functional groups in Organic compounds, Chromophores and Auxochrome,c*is* and *trans* isomers. (b) Quantitative analysis by Calibration curve method	2L 3L	Instrumental Methods of Chemical Analysis	Google Meet

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	3.4.7. Photometric Titrations: Principle, Instrumentation, Types of Photometric titration Curves with examples.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT II: 15 L

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT III: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** S.Y.B.Sc. **SEMESTER:** IV **MONTH:** 1st January

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: know the position of elements in periodic table, origin of color and magnetic properties of transition elements, qualitative tests of transition elements and introduction of coordination compounds, its theories, nature and applications, the use of statistical methods in chemical analysis, the nature of indeterminate errors, the randomness of such errors and its distribution around a correct or acceptable result, computation of confidence limits and confidence interval, test for rejection of doubtful result, method to draw best fitting straight line

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I, II, **2.1 Comparative Chemistry of the transition metals**	**2.1.1** Position in the periodic table; Natural occurrence principal ores and minerals; **2.1.2** Significance of special stability of d_0, d_5 and d_{10} leading to variable oxidation states; Unusual oxidation states and their stabilities in aqueous solutions (with special reference to vanadium, and chromium.) **2.1.3** Origin of colour for transition metals and their compounds: such as reflectivity, surface coatings, particle size, packing density for metals and nature of d-orbitals, number of electrons in the d-orbitals, geometry, and ability for charge transfer). **2.1.4** Magnetic properties of transition metal compounds: Origin of magnetism-spin and orbital motion of electrons; equation for spin only and spin-orbital magnetism in terms of	9L	Puri, Sharma, Kalia Inorganic Chemistry.	Google Meet

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	Bohr magnetons (No derivation of relevant equations expected); Reasons for quenching of orbital moments. **2.1.5** Chemistry of Titanium and vanadium: properties of Oxides and chlorides; use in titrimetric analysis **2.1.6** Qualitative tests for transition metal ions: General considerations in devising tests (with reference to Chromium, Manganese, iron, Cobalt			
2.2 Coordination Chemistry	**2.2 Coordination Chemistry** **2.2.1 Introduction to Chemistry of Coordination Compounds** i. Historical perspectives: Early ideas on coordination compounds ii. Basic terms and nomenclature. iii. Types of ligands iv. Isomerism :General Types with special reference to stereoisomerism of coordination compounds (C.N=6) v. Evidence for the formation of coordination compounds, **2.2.2. Theories of coordination compounds** i. Werner's Theory of coordination compounds, ii. Effective atomic number rule. iii. Eighteen electron Rule **2.2.3. Nature of the Metal-Ligand Bond:** I Valence Bond Theory; Hybridisation of the central metal orbitals-sp^3, sd^3/d^3s, sp^3d^2/d^2sp^3, sp^2d. ii. Inner and outer orbital complexes of .(suitable examples of Mn(II), Fe(II),Fe(III),Co(II)/Co(III),Ni(II), Cu(II) Zn(II) complexes with ligands like aqua, ammonia CN-and halides may be used)	6L	Puri, Sharma, Kalia Inorganic chemistry.	Google Meet

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III, III- **Statistical Treatment of analytical data --II**	iii. Limitations of V.B.T **2.2.4.** Application of coordination compounds.			
	3.1. Nature of Indeterminate Errors: 3.1.1. The true and acceptable value of a result of analysis 3.1.2. Measures of central tendency: mean, median. mode, average 3.1.3. Measures of dispersion: Absolute deviation, relative deviation, relative average deviation, standard deviation,(s, sigma) variance, coefficient of variation	3L	Modern Analytical Chemistry , David Harvey (page numbers 53 -84)	Google Meet
	3.2. Distribution of random errors: 3.2.1. Gaussian distribution curve. 3.2.2. Equation and salient features of Gaussian distribution curve **3.3. Concept of Confidence limits and confidence interval and its computation using** (i) Population standard deviation (ii) Student's *t* test (iii) Range **3.4. Criteria for rejection of doubtful result** (i) 2.5 d rule (ii) 4.0 d rule (iii) Q test **3.5. Test of Significance** **(02 L)** (i) Null hypothesis (ii) F-test (variance ratio test) **3.6. Graphical representation of data and obtaining best fitting straight line (03 L)**	2L 3L 2L 2L	Modern Analytical Chemistry , David Harvey (page numbers 53 -84)	Google Meet

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	(a) For line passing through origin (b) For line not passing through origin	3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT II: 15 L

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT III: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. SHEETAL R. POWAR** DEPARTMENT: CHEMISTRY CLASS: TYBSc SEMESTER: V MONTH: August to November

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

i. Understand the mechanisms of important reactions

ii. Understand the important concept of green chemistry and apply it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III (Organic Chemistry) Unit II 2.1 Stereochemistry I	2.1.1 Molecular chirality and elements of symmetry: Mirror plane symmetry, inversion center, roation -reflection (alternating) axis. 2.1.2 Chirality of compounds without a stereo genic center: cummulenes and biphenyls.	(5 L)	Stereochemistry P.S.Kalsi	Power point (Online)

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2.2 Agrochemicals	2.2.1 General introduction & scope, meaning & examples of insecticides, herbicides, fungicide, rodenticide, pesticides, plant growth regulators. 2.2.2 Advantages & disadvantages of agrochemicals 2.2.3 Synthesis & application of IAA (Indole Acetic Acid) & Endosulphan, 2.2.4 Bio pesticides – Neem oil & Karanj oil.	(4 L)	Agrochemicals and pesticides: A.Jadhav and T.V.Sathe	Power point (Online)

2.3 Heterocyclic chemistry:	2.3.1 Reactivity of pyridine-N-oxide, quinoline and iso-quionoline. 2.3.2 Preparation of pyridine-N-oxide, quinoline (Skraup synthesis) and iso-quinoline (BischlerNapieralski synthesis). 2.3.3 Reactions of pyridine-N-oxide: halogenation, nitration and reaction with NaNH2/liq.NH3, n-BuLi. 2.3.4 Reactions of quinoline and isoquinoline; oxidation,reduction,nitration,halogenation and reaction with NaNH2/liq.NH3,n-BuLi.	(6 L)	Heterocyclic Chemistry, John A. Joule and Keith Mills, Wiley	Power point (Online)
Unit III 3.1 IUPAC	IUPAC Systematic nomenclature of the following classes of compounds (including compounds upto two substituents / functional groups): 3.1.1 Bicyclic compounds – spiro, fused and bridged (upto 11 carbon atoms) – saturated and unsaturated compounds. 3.1.2 Biphenyls 3.1.3 Cummulenes with upto 3 double bonds 3.1.4 Quinolines and isoquinolines.	(5 L)	IUPAC nomenclature by S.C.Pal.	Power point (Online)

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3.2 Synthesis of organic compounds	3.2.1 Introduction: Linear and convergent synthesis, criteria for an ideal synthesis, concept of chemo selectivity and regioselectivity with examples, calculation of yields 3.2.2 Multicomponent Synthesis: Mannich reaction and Biginelli reaction. Synthesis with examples (no mechanism) 3.2.3 Green chemistry and synthesis: Introduction: Twelve principles of green chemistry, concept of atom economy and E-factor, calculations and their significance, numerical examples. i) Green reagents: dimethyl carbonate. ii) Green starting materials : D-glucose iii) Green solvents : supercritical CO2 iv) Green catalysts: Bio catalysts. 3.2.4 Planning of organic synthesis i) synthesis of nitroanilines. (o&p) ii) synthesis of halobenzoic acid.(o&p) iii) Alcohols (primary / secondary / tertiary) using Grignard reagents. iv) Alkanes (using organo lithium compounds)	(10L)	Green chemistry: V. K. Ahluwalia	Power point (Online)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L each

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. SHEETAL R. POWAR** DEPARTMENT: CHEMISTRY CLASS: TYBSc SEMESTER: VI MONTH: Jan to April

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ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

i. Understand the mechanisms of important reactions

ii. Understand the concept of stereochemistry chemistry

iii. Understand the concept of spectroscopy and interpret spectra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III (Organic Chemistry) Unit I	1.1.1 Stereoselectivity and stereospecificity: Idea of enantioselectivity (ee) and diastereoselectivity (de) , Topicity : enantiotopic and diasterotopic atoms, groups and faces. 1.1.2 Stereochemistry of – i) Substitution reactions : SNi (reaction of alcohol with thionyl chloride) ii) Elimination reactions: E2–Base induced dehydrohalogenation of 1-	(10 L)	Stereochemistry by Kalsi	Power point (Online)
1.1 Stereochemistry II	bromo-1,2- diphenylpropane. iii) Addition reactions to olefins: a) bromination (electrophilic anti addition) b) syn hydroxylation with OsO4 and KMnO4 c) epoxidation followed by hydrolysis. References:			

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1.2 Amino acids & Proteins	1.2.1 α-Amino acids: General Structure, configuration, and classification based on structure and nutrition. Properties: pH dependency of ionic structure, isoelectric point and zwitter ion. Methods of preparations: Strecker synthesis, Gabriel phthalamide synthesis. 1.2.2 Polypeptides and Proteins: nature of peptide bond. Nomenclature and representation of polypeptides (di-and tri-peptides) with examples Merrifield solid phase polypeptide synthesis. .Protiens:general idea of primary,secondary,tertiary & quaternary structure	(5 L)	Name Reactions – Jie Jack Li, 4th Edition, Springer Pub	Power point (Online)
Unit III 3.1 Spectroscopy II	3.1.1 IR Spectroscopy: Basic theory, nature of IR spectrum, selection rule, fingerprint region. 3.1.2 PMR Spectroscopy: Basic theory of PMR, nature of PMR spectrum, chemical shift (δ unit), standard for PMR, solvents used. Factors affecting chemical shift: (1) inductive effect (2) anisotropic effect (with reference to C=C, C≡C, C=O and benzene ring). Spin- spin coupling and coupling constant. application of deuterium exchange technique. application of PMR in structure determination. 3.1.3 Spectral characteristics of following classes of organic compounds, including benzene and monosubstituted benzenes, with respect to IR and PMR: (1) alkanes (2) alkenes (3) alkynes (4) haloalkanes (5) alcohols (6) carbonyl compounds (7) ethers (8) amines (broad regions characteristic	(10 L)	Organic spectroscopy Jag Mohan	Power point (Online)

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	of different groups are expected). Problems of structure elucidation of simple organic compounds using			

	individual or combined use of UV-Vis, IR, Mass and NMR spectroscopic technique are expected.			

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3.2 Nucleic Acids	Controlled hydrolysis of nucleic acids. sugars and bases in nucleic acids. Structures of nucleosides and nucleotides in DNA and RNA. Structures of nucleic acids (DNA and RNA) including base pairing.	(5 L)	Organic chemistry Morrison and Boyd S.H.Pine, organic chemistry 4th edition. McGraw Hill	Power point (Online)

TOTAL NUMBER OF LECTURES ALLOCATED TO UNIT : 15 L EACH

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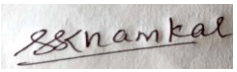
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___DR.SHRADDHA S.KHAMKAR_____ DEPARTMENT: _____CHEMISTRY_____ CLASS: _____M.Sc -1_____ SEMESTER: _____I_____ MONTH: ____AUGUST 2021_____ ACADEMIC YEAR: _____2021-2022_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the thermodynamic and kinetic requirements of organic reaction. They will also be able to determine the mechanism of organic reactions by using various techniques. They will gain new insights into the concepts of acidity and basicity andbthe factors affecting the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – III				

SIGNATURE OF THE STAFF 

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Unit – I Title - Physical Organic Chemistry	1.1- Thermodynamic and Kinetic requirements of a reaction 1.2- Determining mechanism of a reaction 1.3- Acids and Bases	4L 3L 8L	1. Physical Organic Chemistry by Neil Issacs 2. Modern Physical Chemistry by Eric V. Anslyn and Dougherty 3. Organic Synthesis by Jagdamba	Google Classroom Google Meet

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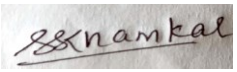
			Singh and L.D.s. Yadav	

SIGNATURE OF THE STAFF 

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

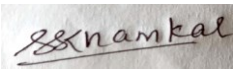
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___DR.SHRADDHA S.KHAMKAR_____ DEPARTMENT: _____CHEMISTRY_____ CLASS: _____M.Sc -1_____ SEMESTER: _____II____ MONTH: JAN-2022_____

ACADEMIC YEAR: __2021-22_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the molecular orbital theory, form the molecular orbital diagrams for organic compounds. They get introduced to HOMO- LUMO concepts. Studecan gain insights into the concepts of spectroscopy techniques such as IR and UV.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – III Unit – III Title –				
	3.1.1 Molecular orbitals 3.1.2 Introduction to FMO's 3.1.3 Applications of FMO concepts	2L 3L	1. Molecular Orbital and Organic	Google Meet

SIGNATURE OF THE STAFF 

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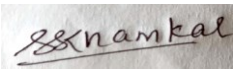
Introduction to Molecular orbital theory for organic Chemistry	3.2 Applications of UV and IR Spectroscopy 3.2.1 Ultraviolet Spectroscopy 3.2.2 Infrared Spectroscopy	2L 4L 4L	chemical reactions by Ian Fleming 2. Introduction to Spectroscopy by Donald Pavia and Gary Lampman 3. Organic Spectroscopy – Principles and Applications by Jagmohan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

SIGNATURE OF THE STAFF 

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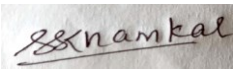
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___DR.SHRADDHA S.KHAMKAR_____ DEPARTMENT: _____CHEMISTRY_____ CLASS: _____M.Sc - II_____ SEMESTER: _____III_____ MONTH: _AUGUST -2021_____

ACADEMIC YEAR: __2021-22_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the thermodynamic and kinetic requirements of organic reaction. They will also be able to determine the mechanism of organic reactions by using various techniques. They will gain new insights into the concepts of acidity and basicity andbthe factors affecting the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – I				

SIGNATURE OF THE STAFF 

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Unit – I Title - Organic Reaction Mechanisms	1.1 – Organic reactive intermediates, method of generation etc 1.2 Neighbouring group Participation 1.3 Role of FMO'S in Organic reactivity 1.4 Pericyclic Reactions – Classification, Woodward Hoffman's rules	5L 3L 2L 5L	1. Advanced Organic Chemistry by Jerry March 2. Mechanism and theory in Organic Chemistry by T. h. Lowry and Richardson 3. Organic Reaction Mechanism by Ahluwalia and Parashar 4. Organic Chemistry Part A and B by Carry and Sundberg.	Google Meet
	3.1 Classification of point groups based on symmetry elements 3.2 Conformational analysis of medium rings	2L 3L	1. Stereochemistry of carbon compounds by D. Nasipuri	Google Meet

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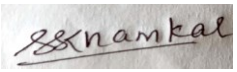
SIGNATURE OF THE STAFF 

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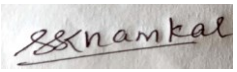
Paper I Unit – 3 Title – Stereochemistry – I	3.3 Stereochemistry of fused and bridged ring compounds 3.4 Anancomeric systems	5L 5L	2. Stereochemistry of organic compounds by Ernest L. Eliel 3. Stereochemistry by P.S. Kalsi 4. Organic Stereochemistry by Robinson	

SIGNATURE OF THE STAFF 

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	4.1 Introduction to basic principles of green chemistry 4.2 Use of green reagents in green chemistry 4.3 Comparison of traditional processes vs green processes 4.4 Green Catalysts	1L 9L 3L 2L	1. Green chemistry by Mike Lancaster 2. New trends in green chemistry by Ahluwalia 3. An introduction to Green Chemistry by V. Kumar 4. Green chemistry by Paul . Anastas and Warner.	Google Meet

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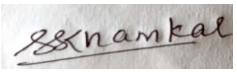
SIGNATURE OF THE STAFF  **SIGNATURE OF THE H.O.D.**

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Paper – 4 Unit – 4 Title – Green Chemistry				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

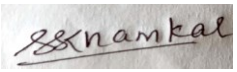
Jun

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___DR.SHRADDHA S.KHAMKAR_____ DEPARTMENT: _____CHEMISTRY_____ CLASS: _____M.Sc - II_____ SEMESTER: _____IV____ MONTH: _____JAN 2022____

ACADEMIC YEAR: _____2021-22_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the thermodynamic and kinetic requirements of organic reaction. They will also be able to determine the mechanism of organic reactions by using various techniques. They will gain new insights into the concepts of acidity and basicity andbthe factors affecting the same.

SIGNATURE OF THE STAFF 

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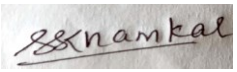
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – 1				

Unit – 2 Title – Supramolecular Chemistry	2.1. – Principles of Molecular associations and organisations 2.2 – Synthetic molecular receptors 2.3 – Structures and properties of Supramolecules Molecular recognition and catalysis	3L 3L 5L 4L	1. Supramoleculer Chemistry by J.M. Lehn 2. Crown ethers and analogous compounds by M. Hiraoka 3. Large ring compounds by J.A. Semlyen	Google Meet

SIGNATURE OF THE STAFF 

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Paper – 1 Unit – 3 Title – Stereochemistry	3.1 Racemisation and Resolution of racemates 3.2 Determination of enantiomer and diastereomer composition 3.3 Correlative method for configurational assignment 3.4 Molecular dissymmetry and chiroptical properties	3L 3L 4L 5L	1. Stereochemistry by P.S Kalsi 2. Organic Stereochemistry by Robinson 3. Stereochemistry of Carbon Compounds by D. Nasipuri	Google Meet
Paper – IV Unit – II Title – Data	The Investigative Approach – Measurements, SI units and their uses, Scientific methods and designing experiments Analysis and presentation of Data – Descriptive statistics, Chemometrics, Correlation regression, Analysis of variance		Google Meet	

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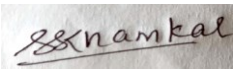
SIGNATURE OF THE STAFF 

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Analysis		15L		

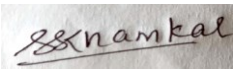
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___DR.SHRADDHA S.KHAMKAR_____ DEPARTMENT: _____CHEMISTRY_____ CLASS: _____F.Y.B.Sc_____ SEMESTER: _____I_____ MONTH: AUGUST-2021

ACADEMIC YEAR: _____2021-22_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the thermodynamic terms . They will be able to understand concentration and also the ways in which the concentration is expressed.

SIGNATURE OF THE STAFF 

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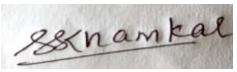
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – 1				

Unit -1 Title – Chemical Thermodynamics	1.1 – Thermodynamic terms First law of Thermodynamics Thermochemistry 1.2 – Chemical Calculations Expressing Concentration if Solutions	10L 5L	College Physical Chemistry by K.B. Baliga , S.A.Zaveri ,Himalaya Publications	Google Meet

SIGNATURE OF THE STAFF 

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___DR.SHRADDHA S.KHAMKAR_____ DEPARTMENT: _____CHEMISTRY_____ CLASS: ___F.Y.B.Sc_____ SEMESTER: _____II____ MONTH: _____JAN - 2022____

ACADEMIC YEAR: _____2021-22_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the laws governing the gases. They understand the chemical equilibrium and Thermodynamic parameters of the reactions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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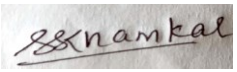
SIGNATURE OF THE STAFF 

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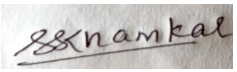
Paper- 1 Unit – 1 Title – Gaseous State				
	1.1 – Gaseous State Ideal gas laws, real gases, ideal gaes, Compressibility factor, Joule- Thomson effect 1.2 – ChemicalEquilibria and Thermodynamic parametrs	8L 7L	College Physical Chemistry by K.B.Baliga , S.A. Zaveri,, Himalaya Publications.	Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15___

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Arti Dubey_DEPARTMENT: Chemistry CLASS: _F.Y.B.Sc._____ SEMESTER: _I_____

MONTH: _ _____ACADEMIC YEAR: ___2021-22_____

LEARNING OBJECTIVE/S: The learners will be able to :To gain knowledge about the Nomenclature mono and bi-functional aliphatic compounds .
To understand Bonding and Structure of organic compounds .

To study the Fundamentals of organic reaction mechanism:
To learn Electronic Effects and bond fission.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I (General Chemistry)	**3. Basics of Organic Chemistry** **3.1 Classification and Nomenclature of Organic Compounds:** Review of basic rules of IUPAC nomenclature. Nomenclature of mono and bi-functional aliphatic compounds on the basis of	**(5L)**	Text Book, Reference Book, You tube video	Google classroom ,Google slide Jamboard, Canva chrome

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Unit III 3. Basics of Organic Chemistry	priority order of the following classes of compounds: alkanes, alkenes, alkynes, haloalkanes, alcohols, ethers, aldehydes, ketones, carboxylic acids, carboxylic acid derivatives (acid halides, esters, anhydrides, amides), nitrocompounds, nitriles and amines; including their cyclic analogues. **3.2 Bonding and Structure of organic compounds:** Hybridization: sp^3, sp^2, sp hybridization of carbon and nitrogen; sp^3 and sp^2 hybridizations of oxygen in Organic compounds (alcohol, ether, aldehyde, ketone, carboxylic acid, ester, cyanide, amine and amide) Overlap of atomic orbitals: Overlaps of atomic orbitals to form sigma and pi bonds, shapes of organic molecules. Shapes of molecules; Influence of hybridization on bond properties (as applicable toethane, ethene, ethyne) **3.3 Fundamentals of organic reaction mechanism:**	**(4L)**			

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	Electronic Effects: Inductive, electromeric, resonance and mesomeric effects,hyperconjugation and their applications; Dipole moment; Organic acids and bases; their relative strengths. **Bond fission:** Homolytic and Heterolytic fission with suitable examples. Electrophiles and Nucleophiles; Nucleophilicity and basicity; **Types (primary, secondary, tertiary, allyl, benzyl), shape and their relative stability of reactive intermediates:** Carbocations, Carbanions and Free radicals. **Introduction to types of organic reactions:** Addition, Elimination and Substitution reaction. (With one example of each)	**(6L)**			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_____

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NAME OF THE STAFF: Dr. Arti Dubey__DEPARTMENT: Chemistry_CLASS: _F.Y.B.Sc. SEMESTER:I MONTH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to :

- Understand basics of chemical kinetics and predict reaction mechanism.
- Calculate rate constant of zero, first and second order reaction.
- The basics of solutions, Colligative properties, and their applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II (General Chemistry) Unit-I Title-Physical	**1.1 Chemical Kinetics:** Rate of reaction, rate constant, measurement of reaction rates, order and molecularity of reaction, integrated rate equation of first and second order reactions (with equal initial concentration of reactants) (Numericals expected) Determination of order of reaction by (a) Integration method (b)	**(8L)**	Text Book, Reference Book, You tube video	Google classroom ,Google slide Jamboard, Canva chrome

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Chemistry	Graphical method (c)Ostwald's isolation method (d) Half time method (Numericals expected) **1.2 Liquid State:** Surface tension: Introduction, methods of determination of surface tension by drop number method (Numericals expected) Viscosity: Introduction, coefficient of viscosity, relative viscosity, specific viscosity,reduced viscosity, determination of viscosity by Ostwald viscometer (Numericals expected) Refractive index: Introduction, molar refraction and polarizability, determination of refractive index by Abbe's refractometer (Numericals expected) Liquid crystals: Introduction, classification and structure of thermotropic phases (Nematic,smectic and cholesteric phases), applications of liquid crystals	**(7L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Arti Dubey_____DEPARTMENT: Chemistry_____ CLASS: _F.Y.B.Sc._____

SEMESTER: _II_____ MONTH: _____ ACADEMIC YEAR: ___2021-22_____

LEARNING OBJECTIVE/S: The learners will be able to :
Formation of alkanes, Wurtz Reaction, Wurtz-Fittig Reactions

Mechanism of E1, E2,E1cb reactions. Saytzeff and Hofmann eliminations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I (General Chemistry) Unit III	**3. Chemistry of Aliphatic Hydrocarbons** **3.1 Carbon-Carbon sigma bonds:** **Chemistry of alkanes:** Formation of alkanes, Wurtz Reaction, Wurtz-Fittig Reactions,Free radical substitutions: Halogenation - relative reactivity and selectivity.	**(3L)**	Text Book, Reference Book, You tube video	Black-board

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3. Basics of Organic Chemistry	**3.2 Carbon-Carbon pi bonds:** **Formation of alkenes and alkynes by elimination reactions:** Mechanism of E1, E2,E1cb reactions. Saytzeff and Hofmann eliminations. **Reactions of alkenes:** Electrophilic additions their mechanisms (Markownikoff/ AntiMarkownikoff addition),Mechanism of oxymercuration-demercuration, hydroboration-oxidation, ozonolysis,reduction(catalytic and chemical), syn and anti-hydroxylation (oxidation). 1, 2-and 1, 4-addition reactions in conjugated dienes and, Diels-Alder reaction; Allylic and benzylic bromination using N-bromosuccinimide and mechanism, e.g. propene, 1-butene, toluene,ethylbenzene. **Reactions of alkynes:** Acidity, Electrophilic and Nucleophilic additions. Hydration toform carbonyl compounds, Alkylation of terminal alkynes.	**(12L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dr.Arti Dubey_____DEPARTMENT: __Chemistry_____CLASS: __F.Y.B.Sc_____

SEMESTER: __II_____ MONTH: ___ACADEMIC YEAR: __2021-22_____

LEARNING OBJECTIVE/S:

The learners will be able to : _

- Understand The fundamentals of ionic equilibrium and its applications
- Learn about the basics of Molecular Spectroscopy **.**
- Know about the Solid State Chemistry .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I	**1.1 Ionic Equilibria:** Strong, moderate and weak electrolytes, degree of ionization, factors affecting degree of ionization, ionization constant and ionic product of water, ionization of weak acids and bases, pH scale, common ion effect, dissociation constants of mono-, di-	**(7L)**	Text Book, Reference Book, You tube video	Google classroom ,Google slide Jamboard, Canva chrome

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TITLE- Physical Chemistry	and triprotic acid (exact treatment for monoprotic acid) Buffers: Introduction, types of buffers, derivation of Henderson equation for acidic and basic buffers, buffer action, buffer capacity (Numericals expected) **1.2 Molecular Spectroscopy:** Electromagnetic radiation, electromagnetic spectrum, Planck's equation, interaction of electromagnetic radiation with matter: Absorption, emission, scattering, flourescence, electronic, vibrational and rotational transitions, Beer-Lambert's law (Numericals expected) **1.3 Solid State Chemistry** Types of solids, crystal lattice, lattice points, unit cell, space lattice and lattice plane, laws of crystallography: Law of constancy of interfacial angle, law of symmetry and law of rational indices (Numericals expected)	**(4L)** **(4L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15 L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dr.Arti Dubey_____ DEPARTMENT: _Chemistry_____CLASS: ___S.Y.B.Sc._____

SEMESTER: ___III_____ MONTH: _____ ACADEMIC YEAR: _2021-22_____

LEARNING OBJECTIVE/S:
The learners will be able to :
Know about Chemical Bonding, Non-Directional Bonding, Directional Bonding- Orbital approach, Molecular Orbital Theory .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Course Title: (General Chemistry) Paper-I	**Unit-II** **Chemical Bonding** **2.1 Non-Directional Bonding** 2.1.1 Ionic Bond: Conditions for the Formation of Ionic Bond. 2.1.2 Types of Ionic Crystals	**(4L)**	Text Book, Reference Book, You tube video	Google classroom ,Google slide Jamboard, Canva chrome Conceptboard

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Unit-II Inorganic Chemistry	2.1.3 Radius Ratio Rules 2.1.4 Lattice Energy, Borne-Lande Equation 2.1.5 Kapustinski Equation 2.1.6 Born-Haber Cycle and its Application **2.2. Directional Bonding: Orbital Approach.** 2.2.1 Covalent Bonding The Valence Bond Theory- Introduction and basic tenets. 2.2.2 Interaction between two hydrogen atoms and the Potential energy diagram of the resultant system. 2.2.3 Corrections applied to the system of two hydrogen atoms- Formation of H_2 2.2.4 Homonuclear diatomic molecules from He_2 to Ne_2 2.2.5 Resonance and the concept of Formal Charge; Rules for Resonance or Canonical structures. 2.2.6 Bonding in Polyatomic Species: The role of Hybridization.	**(6L)**		

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	And types of hybrid orbitals-*sp, sp_2, sp_3, sp_3d, $sp_2d_2$and sp_2d sp_3d_2.* 2.2.7 Equivalent and Non-Equivalent hybrid orbitals 2.2.8 Contribution of a given atomic orbital to the hybrid orbitals (with reference to *sp_3* hybridisation as in CH_4, NH_3 and H_2O and series like NH_3, PH_3, AsH_3, BiH_3) 2.3 **Molecular Orbital Theory** 2.3.1. Comparing Atomic Orbitals and Molecular Orbitals. 2.3.2. Linear combination of atomic orbitals. to give molecular orbitals LCAO-MO approach for diatomic homonuclear molecules). 2.3.4. Wave mechanical treatment for molecular orbitals (H_2^+ and H_2) 2.3.4 Molecular orbital Theory and Bond Order and magnetic property: with reference to O_2,O_2^+ O_2^-,O_2^{2-} (Problems and numerical problems expected wherever possible)	**(5L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Arti Dubey_____ DEPARTMENT: _Chemistry_____CLASS: ___S.Y.B.Sc._____

SEMESTER: ___III_____ MONTH: _____ ACADEMIC YEAR: _2021-22_____

LEARNING OBJECTIVE/S: The learners will be able to :

- To gain knowledge about the Nomenclature of aliphatic, alicyclic and aromatic carbonyl compounds.
- To know about General mechanism of nucleophilic addition reaction.
- To understand the Reactions of aldehydes and ketones
- To learn common reaction mechanisms of Benzoin condensation, Knoevenagel condensation, Claisen-Schmidt and Cannizzaro reaction.
- To gain knowledge about the Keto-enol tautomerism.
- To study the Active methylene compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Course Title: (General Chemistry)	**Unit III: Organic Chemistry** **Carbonyl Compounds:** 3.1 Nomenclature of aliphatic, alicyclic and aromatic carbonyl	**[15L]**	Text Book, Reference Book, You tube video	Google classroom ,Google slide

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Paper-II **Unit III: Organic Chemistry**	compounds. Structure, reactivity of aldehydes and ketones and methods of preparation; Oxidation of primary and secondary alcohols using PCC, hydration of alkynes, action of Grignard reagent on esters, Rosenmund reduction, Gattermann – Koch formylation and Friedel Craft acylation of arenes 3.2 General mechanism of nucleophilic addition, and acid catalyzed nucleophilic addition reactions. 3.3 Reactions of aldehydes and ketones with $NaHSO_3$, HCN, RMgX, alcohol, amine, phenyl hydrazine, 2,4-Dinitrophenyl hydrazine, $LiAlH_4$ and $NaBH_4$. 3.4 Mechanisms of following reactions: Benzoin condensation, Knoevenagel condensation, Claisen-Schmidt and Cannizzaro reaction. 3.5 Keto-enol tautomerism: Mechanism of acid and base catalysed enolization			Jamboard, Canva chrome

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	3.6 Active methylene compounds: Acetylacetone, ethyl acetoacetate diethyl malonate, stabilised enols. Reactions of Acetylacetone and ethyl acetoacetate (alkylation, conversion to ketone, mono- and dicarboxylic acid)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15 L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Arti Dubey_____ DEPARTMENT: _Chemistry_____CLASS: ___S.Y.B.Sc._____

SEMESTER: ___III_____ MONTH: _____ ACADEMIC YEAR: _2021-22_____

LEARNING OBJECTIVE/S:
The learners will be able to : ___

1. Select a method of analysis
2. Decide how to identify a sample and prepare it for analysis
3. Select a procedure for analysis
4. Identify sources of possible errors in the results obtained.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Title-Analytical Chemistry	**1.1. Role of Analytical Chemistry (9 L)** 1.1.1. Language of analytical chemistry: important terms and their significance in Analytical Chemistry. 1.1.2. Purpose of Chemical Analysis; Analysis Based (i) On the nature of information required: (Proximate, Partial, Trace, Complete Analysis) and (ii) On the size of the sample used (Macro, semi-micro and micro analysis) 1.1.3. Classical and Non-Classical Methods of Analysis; their types and importance. **1.2. Significance of Sampling in Analytical Chemistry** 1.2.1. Terms involved in Sampling 1.2.2. Types of Sampling 1.2.3. Sampling techniques	**(6L)**		Jamboard, Canva chrome

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	1.3. Results of Analysis. 1.3.1. Errors in Analysis and their types 1.3.2. Precision and Accuracy in Analysis 1.3.3. Corrections for Determinate Errors *(Problems including Numericals expected wherever required)*			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __(15 L)_____

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Late Shri. Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts VIVA COLLEGE, Virar (W)

NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dr.Arti Dubey_____ DEPARTMENT: _Chemistry_____CLASS: ___S.Y.B.Sc._____

SEMESTER: ___IV_____ MONTH: _____ ACADEMIC YEAR: _2021-22_____

LEARNING OBJECTIVE/S:
The learners will be able to :

To understand the different aspects and importance variable oxidation states, Origin of colour and Magnetic properties for transition metals and their compounds _

To study the Selected topics on Chemistry of Titanium and vanadium.

To gain knowledge about the Coordination Chemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Course Title: (General	**Unit-II** **2.1 Comparative Chemistry of the transition metals (9 L)**	**(9 L)**	Text Book, Reference Book,	Google classroom ,Google slide

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Chemistry) Paper-I Unit-II Inorganic Chemistry	**2.1.1** Position in the periodic table; Natural occurrence principal ores and minerals; **2.1.2** Significance of special stability of d_0, d_5 and d_{10} leading to variable oxidation states; Unusual oxidation states and their stabilities in aqueous solutions (with special reference to vanadium, and chromium.) **2.1.3** Origin of colour for transition metals and their compounds: such as reflectivity, surface coatings, particle size, packing density for metals and nature of d-orbitals, number of electrons in the d-orbitals, geometry, and ability for charge transfer). **2.1.4** Magnetic properties of transition metal compounds: Origin of magnetism-spin and orbital motion of electrons; equation for spin only and spin-orbital magnetism in terms of Bohr magnetons (No derivation of relevant equations expected); Reasons for quenching of orbital moments. **2.1.5** Chemistry of Titanium and vanadium: properties of Oxides and chlorides; use in titrimetric analysis **2.1.6** Qualitative tests for transition metal ions: General		You tube video	Jamboard, Canva chrome Conceptboard Conceptmap and mindmap Testmoz Kahoot Google form quiz Infograph

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	considerations in devising tests (with reference to Chromium, Manganese, iron, Cobalt Nickel and Copper) **2.2 Coordination Chemistry :** **2.2.1 Introduction to Chemistry of Coordination Compounds** i. Historical perspectives: Early ideas on coordination compounds ii. Basic terms and nomenclature. iii. Types of ligands iv. Isomerism :General Types with special reference to stereoisomerism of coordination compounds (C.N=6) v. Evidence for the formation of coordination compounds, **2.2.2. Theories of coordination compounds** i. Werner's Theory of coordination compounds, ii. Effective atomic number rule. iii. Eighteen electron Rule **2.2.3. Nature of the Metal-Ligand Bond:** i.) Valence Bond Theory; Hybridisation of the central metal orbitals-sp_3, sd_3/d_3s sp_3d_2/d_2sp_3, sp_2d,	**(6 L)**		

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	ii.) Inner and outer orbital complexes of .(suitable examples of Mn(II) Fe(II),Fe(III),Co(II)/Co(III),Ni(II), Cu(II) Zn(II) complexes with ligands like aqua, ammonia CN- and halides may be used) iii.) Limitations of V.B.T **2.2.4.** Application of coordination compounds.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15L_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts VIVA COLLEGE, Virar (W)

NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dr.Arti Dubey_____ DEPARTMENT: _Chemistry_____CLASS: ___S.Y.B.Sc._____

SEMESTER: ___IV_____ MONTH: _____ _ ACADEMIC YEAR: _2021-22_____

LEARNING OBJECTIVE/S:

The learners will be able to : To gain knowledge about the Nomenclature, Preparation and Reactions of aliphatic, and aromatic compounds.

To learn common reaction and mechanisms of Salt Formation, N-acylation, N-alkylation, Hofmann's exhaustive methylation (HEM),Hofmann-elimination reaction, reaction with nitrous acid, carbylamine reaction, Electrophilic substitution in aromatic amines: bromination, nitration and sulphonation.

To study about Heterocyclic Compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER –II	**Unit III: Organic Chemistry** **Nitrogen containing compounds and heterocyclic compounds:**	**(7 L)**	Text Book, Reference Book,	Google classroom ,Google slide

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Unit III Title: Organic Chemistry	**3.1 Amines:** Nomenclature, effect of substituent on basicity of aliphatic and aromatic amines; 3.1.1. Preparation: Reduction ofaromaticnitro compounds using catalytic hydrogenation,chemical reduction using Fe-HCI, Sn-HCl, Zn-acetic acid, reduction of nitriles, ammonolysis of halides, reductive amination , Hofmann bromamide reaction. 3.1.2. Reactions- Salt Formation, N-acylation, N-alkylation, Hofmann's exhaustive methylation (HEM),Hofmann-elimination reaction, reaction with nitrous acid, carbylamine reaction, Electrophilic substitution in aromatic amines: bromination, nitration and sulphonation. **3.2 Diazonium Salts**: Preparation and their reactions/synthetic application - Sandmeyer reaction, Gattermann reaction, Gomberg reaction, Replacement of diazo group by -H,-OH. Azo coupling with phenols, naphthols and aromatic amines, reduction of diazonium salt to aryl hydrazine and hydroazobenzene		You tube video	Jamboard, Canva chrome

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	3.3 Heterocyclic Compounds: 3.3.1. Classification, nomenclature, electronic structure, aromaticity in 5-numbered and 6-membered rings containing one heteroatom; 3.3.2. Synthesis of Furan, Pyrrole (Paal-Knorr synthesis, Knorr pyrrole synthesis, and Hantzsch synthesis), Thiophene, Pyridine (Hantzsch synthesis), 3.3.3. Reactivity of furan, pyrrole and thiophene towards electrophilic substitution reactions on the basis of stability of intermediate and of pyridine on the basis of electron distribution. Reactivity of pyridine towards nucleophilic substitution on the basis of electron distribution. 3.3.4. Reactions of furan, pyrrole and thiophene: halogenation, nitration, sulphonation, Vilsmeier-Haack reaction, Friedel-Crafts reaction. Furan: Diels-Alder reaction, Ring opening. Pyrrole: Acidity and basicity of pyrrole. Comparison of basicity of pyrrole	**(8 L)**		

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	and pyrrolidine. 3.3.5. Pyridine: Basicity. Comparison of basicity of pyridine, pyrrole and piperidine. Sulphonation of pyridine (with and without catalyst), reduction and action of sodamide (Chichibabin reaction).			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts VIVA COLLEGE, Virar (W)

NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dr.Arti Dubey_____ DEPARTMENT: _Chemistry_____CLASS: ___S.Y.B.Sc._____

SEMESTER: ___IV_____ MONTH: _____ ACADEMIC YEAR: _2021-22_____

LEARNING OBJECTIVE/S: The learners will be able to understand :

- The importance of separation in sample treatment
- Various methods of separations
- How to select a method of separation of an analyte from the matrix
- How a solute gets distributed between two immiscible phases
- Principle of solvent extraction and various terms involved therein
- Effect of various parameters on solvent extraction of a solute
- Classification of Chromatographic methods
- Paper and thin layer chromatography and using them in practice.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER –III Unit I Title: analytical Chemistry	**1. Separation Techniques in Analytical Chemistry** **1.1.** An Introduction to Analytical Separations and its importance in analysis. **1.2.** Estimation of an analyte without effecting separation. **1.3.** Types of separation methods **1.3.1.** Based on Solubilities (Precipitation, Filtration Crystallisation) **1.3.2.** Based on Gravity- Centrifugation **1.3.3.** Based on volatility-Distillation ; **1.3.4.** Based on Electrical effects-Electrophoresis **1.3.5.** Based on retention capacity of a Stationary Phase - Chromatography; **1.3.6.** Based on distribution in two immiscible phases-Solvent Extraction; **1.3.7.** Based on capacity to exchange with a resin-Ion Exchange;	**(02 L)** **(02 L)**	Text Book, Reference Book, You tube video	Google classroom ,Google slide Jamboard, Canva chrome Infograph

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	1.4. Electrophoresis: Principles, Basic Instrumentation, Working and Application in separation of biomolecules like enzymes and DNA. **1.5. Solvent extraction** 1.5.1. Introduction, Nernst distribution Law, Distribution Ratio, Partition Coefficient. 1.5.2. Conditions of extraction: Equilibration time, Solvent volumes, temperature, pH. 1.5.3. Single step and multi step extraction, Percentage extraction for single step and multistep extraction. Separation factor. 1.5.4. Batch and continuous extraction	**(06 L)** **(05 L)**		

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	1.6. Chromatography 1.6.1. Introduction to Chromatography 1.6.2. Classification of chromatographic methods based on stationary and mobile phase 1.6.3. Paper Chromatography: Principle, techniques and applications of Paper Chromatography in separation of cations. 1.6.4. Thin layer Chromatography Principle, technique and Applications in determining the purity of a given solute; Following progress of a given reaction .			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. JAYASHRI GOPAL NAPHADE, DEPARTMENT: _CHEMISTRY, CLASS: _M.SC II (ORGANIC CHEMISTRY),

SEMESTER: III, MONTH: __Aug_____, ACADEMIC YEAR: 2021-2022.

LEARNING OBJECTIVE/S:
The learners will be able to: understand the concept of QSAR factor and how to related to drug design. Also understand the synthesis of some drug. They understand the concept of drug.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit II: Drug Design, Develepment And Synthesis	2.1: QSAR Parameter Steric Factor , Talf Equation	5L	1.Medicinal Chemistry,Sriram &Yogeeswari,2nd edition 2.A Introduction to drug design,Pandeya and Dimmock.	By Google meet
	2.2: Mordern method of drug design & synthesis	3L		
	2.3: Concept of prodrug & soft drug	3L		
	2.4: Synthesis and application of the drug	4L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

SIGNATURE OF THE STAFF Naphade

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Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. JAYASHRI GOPAL NAPHADE, DEPARTMENT: _CHEMISTRY, CLASS: _M.SC II (ORGANIC CHEMISTRY),

SEMESTER: III, MONTH: _Aug_____, ACADEMIC YEAR: 2021-2022.

LEARNING OBJECTIVE/S:
The learners will be able to: understand the Pericyclic reactions and it's different types. Also understand the Selectivity of cycloaddition reaction and sigmatropic reaction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit II: Pericyclic Reaction	2.1: Cycloaddition Reaction & Other Cycloaddition Reaction	7L	1.Pericyclic Reaction, Ian Fleming 2.Pericyclic Reaction- A mechanistic Approach, S. M. Mukharji.	Google meet
	2.2: Cycloaddition Reaction	3L		
	2.3: Sigmatropic Rearrangement	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

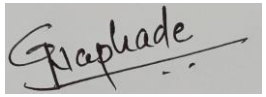
NAME OF THE STAFF: Dr.JAYASHRI GOPAL NAPHADE___DEPARTMENT: __CHEMISTRY_ CLASS: _M.Sc II (ORGANIC CHEMISTRY)

SEMESTER: ___IV_____ MONTH: ____Jan_____ ACADEMIC YEAR: ___2021-2022_____

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the how the protection of group is necessary in organic synthesis also understand the concept of Umpolung.they also understand the concept of retrosynthetic an d how to plan the retrosynthetic apporoach.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED		TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT-I Desiging Organic Synthesis-i	1.1:Protectin group in organic Synthesis	3L	1.Protective groups in Organic synthesis,Greene and Wuts 2.Principle of organic synthesis, R.O.C. Norman & Coxon. 3.Organic Synthesis:The Disconnection Approach,Stuart Warren.	White Board & Marker
	1.2: Concept of Umpolung	3L		
	1.3:Introduction to Retrosynthetic analysis & synthetic planning	9L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

SIGNATURE OF THE STAFF 

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. JAYASHRI GOPAL NAPHADE ___DEPARTMENT: __CHEMISTRY_CLASS: _M.Sc.II(ORGANIC CHEMISTRY)

SEMESTER: _IV_ MONTH: ___January_____ ACADEMIC YEAR: ___2021-2023_____

LEARNING OBJECTIVE/S:
The learners will be able to: understand the different sources use in research .some information about journals.They understand different resources used during research.like information technology and library.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV UNIT-I RESEARCH METHODOLOGY	1.1: Print: Primary, Secondary,Tertiary sources	5L	Research methodology,C.R.Kothari	Google meet
	1.2::Journals	5L		
	1.3:Information Technology & Library Resources	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. JAYASHRI GOPAL NAPHADE __DEPARTMENT: __CHEMISTRY___

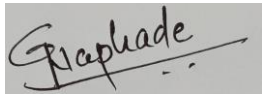
CLASS: ___S.Y.B.Sc (PC-CZ)__ SEMESTER: __III_____ MONTH: _____Aug_____

ACADEMIC YEAR: ___2021-2022_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the nomenclature ,structure ,preparation and reactions aof aldehyde and ketones.Also understand mechanism of some name reaction._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT –III Carbonyl componnd	3.1: Nomencluture,structure,reactivity & method of Preparation of aldehyde & Ketone	6L	S.Y.B.Sc ORGANIC CHEMISTRY TEXT BOOK (HIMALAYA PUBLICATION)	Google meet
	3.2: General mechanism of nuclophilic addition	1L		
	3.3: Reactions of aldehyde and ketones	3L		
	3.4: Mechanism of some name Reactions	2L		
	3.5: Keto-enol tautomerisation 3.6: Active Methylene compound	1L 2L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

SIGNATURE OF THE STAFF 

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. JAYASHRI GOPAL NAPHADE____DEPARTMENT: __CHEMISTRY_____CLASS: __ S.Y.B.Sc (PC-CZ)__ _____ SEMESTER: _____IV_____ MONTH: ___Jan_____ ACADEMIC YEAR: _____2021-2022_____

LEARNING OBJECTIVE/S:1
The learners will be able to : Understand the nomenclature and preparation and reaction of Amines and Diazonium salt. They also understand what is heterocyclic compound it's nomenclature,preparation and reaction of furan.Pyrrole,Thiophene and Pyridine.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT –III Nitrogen Containing compound & Heterocyclic compound	3.1:Amines: Nomencluture , preparation and Reactions	4L	S.Y.B.Sc ORGANIC CHEMISTRY TEXT BOOK (HIMALAYA PUBLICATION	Google meet
	3.2: Diazonium Salt: Preparation,reactions & synthetic application	3L		
	3.3:Hetrocyclic compound :3.3.1:classification,nomenclature,structure	8L		
	3.3.2:synthesis of furan,pyrrole,Thiophene,pyridine 3.3.3:Reactivityof furan,pyrrole,Thiophene,pyridine			
	3.3.4:Reactions of furan,pyrrole,Thiophene 3.3.5: Pyridine:Basicity,Reaction			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Dr.JAYASHRI GOPAL NAPHADE ---DEPARTMENT: ___CHEMISTRY_____

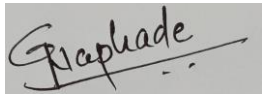
CLASS: ____T.Y.B.Sc___ SEMESTER: ____V___ MONTH: __Aug_____ ACADEMIC YEAR: _____2021-2022_____

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concept of Dyestuff ,it's type ,nomenclature and application.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DRUG AND DYES UNIT-III CHEMISTRY OF DYESTUFF	3.1:Introduction to the Dyestuff Induestries	5L	T.Y.B.Sc DRUG &DYES TEXT BOOK (HIMALAYA PUBLICATION)	Google meet
	3.2: Substrates for Dyes : Types of fibres	3L		
	3.3: classification of Dyes based on Applications and Dyeing methods	7L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

SIGNATURE OF THE STAFF 

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Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr.JAYASHRI GOPAL NAPHADE____DEPARTMENT: _CHEMISTRY_ CLASS: __T.Y.B.Sc_

SEMESTER: _____VI_____ MONTH: ___Jan_____ ACADEMIC YEAR: _____2021-2022_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the classification of dyes and synthesis of some dyes.Also understand the hards of synthetic dyes on health and environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DRUG AND DYES UNIT-VII CHEMISTRY OF DYE STUFF	7.1:Classification of dyes based on chemical constitution & synthesis of selected dyes.	12 L	T.Y.B.Sc DRUG &DYES TEXT BOOK (HIMALAYA PUBLICATION)	Google meet
	7.2: Health and Environmental Hazards of synthetic dyes & their remediation process.	3 L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

SIGNATURE OF THE STAFF Naphade

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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **HANISHA RAJENDRA GHUDE**

DEPARTMENT: CHEMISTRY CLASS: **FYBSc CBZ A DIVISION** SEMESTER: II MONTH: JAN- FEB ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : •To understand more about qualitative analysis

•To study how does various gases evolved

• To study the acid base theories concept

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Semester 2 Paper 1 Unit 2.1 Concept of qualitative analysis	a) Testing of Gaseous Evolutes, Role of Papers impregnated with Reagents in qualitative analysis (with reference to papers impregnated with starch iodide, potassium dichromate, lead acetate, dimethylglyoxime and oxine reagents) b) Precipitation equilibria, effect of common ions, uncommon ions, oxidation states, buffer action, complexing agents on precipitation of ionic compounds. (Balanced chemical equations and numerical problems expected.)	07	Himalaya Publications FYBSc textbook	Blackboard Chalk & Duster

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Unit 2.2 Acid Base Theories	Arrhenius, Lowry- Bronsted, Lewis, Solvent – Solute concept of acids and bases, Hard and Soft acids and bases. Applications of HSAB Applications of acid base chemistry in: i) Understanding organic reactions like Friedel Craft's (acylation/alkylation) reaction ii) Volumetric analysis with special reference to calculation of titration curve involving strong acid and strong base.	08	Himalaya Publications FYBSc textbook	Blackboard Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **HANISHA RAJENDRA GHUDE**

DEPARTMENT: CHEMISTRY CLASS: **MSc PART 2 ANALYTICAL CHEMISTRY** SEMESTER: **IV** MONTH: JAN- FEB ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : • To understand the concept of electrophoresis & methods involved in it

•To study the introduction about nanotechnology & their consequences

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Unit 4 Advanced techniques	4.1 Electrophoresis: introduction, factors affecting migration rate, supporting media (gel, paper, cellulose, acetate, starch, polyacrylamide, agarose, sephedax and thin layers)	04	Skoog	Blackboard Chalk & Duster
	4.2 Techniques of Electrophoresis: low and high voltage, sds-page, continuous electrophoresis, capillary	05	Skoog	Blackboard Chalk & Duster

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	electrophoresis, zone, gel, isoelectric focusing, isotaechophoresis and miceller electro kinetic capillary chromatography, instrumentation, detection and applications			
	4.3 Introduction to Nanotechnology: Analytical techniques in nanotechnology, consequences of the nanoscale, (nanoparticles morphology, electronic structure, optical properties) one dimensional nano materials (nanofilms, nanolayers), two dimensional nanomaterials (nanotubes, nanowires), three dimensional nanomaterials (nanoparticles and quantum dots).	06	Skoog	Blackboard Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **HANISHA RAJENDRA GHUDE**

DEPARTMENT: CHEMISTRY CLASS: **TYBSc(3 UNITS)** SEMESTER: **VI** MONTH: JAN- FEB ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : • To study the basic concept of polarography

•To study the various terms involved in it

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 1.1 ELECTROANALYTICAL TECHNIQUES	**1.1 Polarography** 1.1.1 Difference between potentiometry and voltammetry, Polarizable and non-polarizable electrodes	02	TYBSc analytical chemistry textbook	Google Meet
	1.1.2 Basic principle of polarography H shaped polarographic cell, DME (construction, working,	03	TYBSc analytical chemistry	Google Meet

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	advantages and limitations)		textbook	
	1.1.3 DC polarogram: Terms involved - Residual current, Diffusion current, Limiting current, Half-Wave Potential Role and selection of supporting electrolyte, Interference of oxygen and its removal, polarographic Maxima and Maxima Suppressors Qualitative aspects of Polarography: Half wave potential E1/2, Factors affecting E1/2 Quantitative aspects of polarography: Ilkovic equations: various terms involved in it	04	TYBSc analytical chemistry textbook	Google Meet
	1.1.4 Quantification 1) Wave height – Concentration plots (working plots/calibration) 2) Internal standard (pilot ion) method 3) Standard addition method	02	TYBSc analytical chemistry textbook	Google Meet

	1.1.5 Applications advantages and limitations **<u>1.2 Amperometric titration</u>**	01 03	TYBSc analytical textbook TYBSc analytical chemistry textbook	Google Meet Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **HANISHA RAJENDRA GHUDE**

DEPARTMENT: CHEMISTRY CLASS:**TYBSc(3 UNITS)** SEMESTER: **VI** MONTH: JAN- FEB ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : •To study the introduction of gas chromatography & its principle

•To study the concept of Ion exchange chromatography, types of ion exchangers & its applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Methods of seperation- II	**2.1 Gas Chromatography** 2.1.1 Introduction, Principle, Theory and terms involved	02	TYBSc analytical chemistry textbook	Google Meet
	2.1.2 Instrumentation: Block diagram and components,types of columns, stationary phases in GSC and GLC, Detectors: TCD, FID, ECD	04	TYBSC analytical chemistry textbook	Google Meet

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	2.1.3 Qualitative, Quantitative analysis and applications	02	TYBSC analytical chemistry textbook	Google Meet
	2.1.4 Comparison between GSC and GLC	01	TYBSC analytical chemistry textbook	Google Meet
	2.2 Ion Exchange Chromatography 2.2.1 Introduction, Principle 2.2.2 Types of Ion Exchangers , Ideal properties of resin 2.2.3 Ion Exchange equilibria and mechanism, selectivity coefficient and separation factor Factors affecting separation of ions 2.2.4 Ion exchange capacity and its determination for cation and anion exchangers. 2.2.5 Applications of Ion Exchange Chromatography with reference to Preparation of demineralised water, Separation of amino acids	06	TYBSC analytical chemistry textbook	Google Meet

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Kirti Pankaj Mhatre_____DEPARTMENT: ____Chemistry_____CLASS: ____TyBsc._____ SEMESTER: _VTH MONTH: June-July- Aug

ACADEMIC YEAR: ____2021-2022_____

LEARNING OBJECTIVE/S:

The learners will be able to :

1.To study quality in analytical chemistrty like Concepts of Quality, Quality Control and Quality Assurance.

2.To study the chemical calculations like inter conversion of various concentration units and Percent composition of elements in chemical compounds.

3..To study how to do the sampling of solids and liquid and gases alogwith the Collection, preservation and dissolution of the sample..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Analytical chemistry Paper IV UNIT I :INTRODUCTION TO QUALITYCONCEPTS,CHEMICAL CALCULATIONS AND SAMPLING	1.1 Quality in Analytical Chemistry 1.1.1 Concepts of Quality, Quality Control and Quality Assurance 1.1.2 Importance of Quality concepts in Industry 1.1.3 Chemical Standards and Certified	05L	Saujanya publication,sheath publication,Himalaya publication textbook of analytical chemistry,	Online Google classroom

	Reference Materials; Importance in chemical analysis Quality of material: Various grades of laboratory reagents			

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	1.2 Chemical Calculations (Numericals and word problems are expected) 1.2.1.Inter conversion of various concentration units. (Conversion of concentration from one unit to another unit with examples) 1.2.2 Percent composition of elements in chemical compounds	04	Same as above	Online Google classroom
	1.3 Sampling 1.3.1 Purpose, significance and difficulties encountered in sampling 1.3.2 Sampling of solids: Sample size - bulk ratio, size to weight ratio, multistage and sequential sampling, size reduction methods,	06L	Same as above	Online Google classroom

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	sampling of compact solids, equipments and methods of sampling *of compact solids, sampling of particulate solids, methods and equipments used for sampling of particulate solids.* *1.3.3 Sampling of liquids: Homogeneous and heterogeneous, Static and* *flowing liquids.* *1.3.4 Sampling of gases: Ambient and stack sampling: Apparatus and methods for sampling of gases.* *1.3.5 Collection, preservation and dissolution of the sample.*			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_L____

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Kirti Pankaj Mhatre_____DEPARTMENT: CHEMISTRY_____

CLASS: _Tybsc_____- *SEMESTER: _V^th^* *MONTH: Aug-Sept-Oct*
_____

ACADEMIC YEAR: _-2021-2022_____

LEARNING OBJECTIVE/S:

The learners will be able to :

1. To study AAS like instrumentation, working and applications in detail.

2.To study AES like instrumentation, working and applications in detail.

3.To study Molecular Fluorescence and Phosphorescence Spectroscopy like instrumentation, working and applications in details.

4.To study turbidimetry and nephelometry like instrumentation, working and applications in details.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ANALYTICAL CHEMISTRY PAPER-IV	**3.1Atomic Spectroscopy: Flame Emission spectroscopy(FES) and** **Atomic Absorption Spectroscopy(AAS)**		SAUJNYA PRAKASHAN TEXTBOOK,	Online Google classroom

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UNIT-3 OPTICAL METHODS(6UNITS)	3.1.1 Introduction, Energy level diagrams, Atomic spectra, Absorption and Emission Spectra 3.1.2 Flame Photometry – Principle, Instrumentation (Flame atomizers,	07L	SHETH PUBLICATION TEXTBOOK, HIMALAYA PUBLICATION TEXTBOOK	

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	types of Burners, Wavelength selectors, Detectors) *3.1.3 Atomic Absorption Spectroscopy – Principle, Instrumentation* *(Source, Chopper, Flame and Electrothermal Atomiser)* *3.1.4 Quantification methods of FES and AAS – Calibration curve* *method, Standard addition method and Internal standard method* *3.1.5 Comparison between FES and AAS* *3.1.6 Applications, Advantages and Limitations*			

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	3.2 Molecular Fluorescence and Phosphorescence Spectroscopy *3.2.1 Introduction and Principle* *3.2.2 Relationship of Fluorescence intensity with concentration* *3.2.3 Factors affecting Fluorescence and Phosphorescence* *3.2.4 Instrumentation and applications*	*04L*	*SAME AS ABOVE*	*Online Google classroom*

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	3.2.5 Comparison of Fluorimetry and Phosphorimetry *3.2.6 Comparison with Absorption methods*			
	3.3 Turbidimetry and Nephelometry *3.3.1 Introduction and Principle* *3.3.2 Factors affecting scattering of Radiation:* *Concentration, particle size, wavelength, refractive index* *3.3.3 Instrumentation and applications*	*04L*	*SAME AS ABOVE*	*Online Google classroom*

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_____

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T EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _KIRTI PANKAJ MHATRE_____DEPARTMENT: _____CHEMISTRY_____CLASS: _FYBSC_____ SEMESTER: ____I^ST^ MONTH: _AUG-SEPT-Oct-Nov

ACADEMIC YEAR: _2021-2022_____

LEARNING OBJECTIVE/S:

The learners will be able to : _1.To study the thermodynamics concepts like systems,zeroth law,first law calculations of heat (q), work (w), internal energy (U), and enthalpy (H) (Numericals)Thermochemistry: Heats of reactions, standard states, enthalpy of formation of molecules,enthalpy of combustion and its applications, calculation of bond energy, bond dissociation energy and resonance energy from thermochemical data, Kirchhoff's equation(Numericals) in detail.

2.To study chemical calculations with the help of numericals of Normality, molality, molarity, formality, mole fractions, weight ratio, volume ratio, weight to volume ratio, ppm, ppb, millimoles.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper 1 ***Unit 1*** ***Chemical***	***Thermodynamic terms:*** *System, surrounding, boundaries, open, closed and isolated system, intensive and extensive properties, state functions and path functions, zeroth law*	*10L*	*HIMALAYA PUBLICATIONS TEXTBOOK,* *SHETH*	*Online Google classroom*

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Thermodynamics, ***1.2 Chemical Calculations***	*of thermodynamics* *First law of thermodynamics: concept of heat (q), work (w), internal energy (U), statement* *of first law, enthalpy, relation between heat capacities, sign conventions, calculations of* *heat (q), work (w), internal energy (U), and enthalpy (H) (Numericals expected)* *Thermochemistry: Heats of reactions, standard states, enthalpy of formation of molecules,* *enthalpy of combustion and its applications, calculation of bond energy, bond dissociation* *energy and resonance energy from thermochemical data,* *Kirchhoff's equation* *(Numericals expected)*		*PUBLICATIONS TEXTBOOK*	

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	1.2 Chemical Calculations *Expressing concentration of solutions: Normality, molality, molarity, formality, mole* *fractions, weight ratio, volume ratio, weight to volume ratio, ppm, ppb, millimoles,* *milliequivalents (Numericals expected)*	*05L*	*SAME AS ABOVE*	*Online Google classroom*

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____Kirti Pankaj Mhatre _____DEPARTMENT: _____CHEMISTRY_____CLASS: ____TYBSC_____ SEMESTER: _VITH MONTH:. Dec-Jan

ACADEMIC YEAR: ___2021-2022_____

LEARNING OBJECTIVE/S:

The learners will be able to :

1.To study the polarography concepts like polarography H shaped polarographic cell, DME (construction, working,advantages and limitations), DC polarogram: Terms involved - Residual current, Diffusion current, Limiting current, Half-Wave Potential Role and selection of supporting electrolyte, Interference of oxygen, Half wave potential $E_{1/2}$,Factors affecting $E_{1/2}$ Ilkovic equations: various terms involved in it (No derivation)along with numericals.

2.To study 1Principle, Rotating Platinum Electrode(Construction, advantages and limitations)Titration curves with example, Advantages and limitations of amperometric titrations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER IV *UNIT-1* ***ELECTRO ANALYTICAL TECHNIQUES(3 & 6 UNITS)***	***1.1 Polarography (Numerical and word problems are expected)*** *1.1.1 Difference between potentiometry and voltammetry,* *Polarizable and* *non-polarizable electrodes* *1.1.2 Basic principle of polarography*	*11L*	*SAUJNYA PRAKASHAN TEXTBOOK,* *SHETH PUBLICATION TEXTBOOK,* *HIMALAYA*	*Online Google classroom*

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	H shaped polarographic cell, DME (construction, *working, advantages and limitations)* *1.1.3 DC polarogram: Terms involved - Residual current, Diffusion* *current, Limiting current, Half-Wave Potential* *Role and selection of supporting electrolyte, Interference of oxygen* *and its removal, polarographic Maxima and Maxima Suppressors* *Qualitative aspects of Polarography: Half wave potential $E_{1/2}$,* *Factors affecting $E_{1/2}$* *Quantitative aspects of polarography: Ilkovic equations: various* *terms involved in it (No derivation)* *1.1.4 Quantification*		*PUBLICATION TEXTBOOK*	

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	1) Wave height – Concentration plots *(working plots/calibration)* *2) Internal standard (pilot ion) method*			

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	3) Standard addition method *1.1.5 Applications advantages and limitations*			
	1.2Amperometric Titrations *1.1.1Principle, Rotating Platinum Electrode(Construction, advantages* *and limitations)* *1.2.2 Titration curves with example* *1.2.3 Advantages and limitations*	*04L*	*SAME AS ABOVE*	*Online Google classroom*

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

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T EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _KIRTI PANKAJ MHATRE_____DEPARTMENT: _____CHEMISTRY_____CLASS: ____TYBSC_____ SEMESTER: ____VITH MONTH: Jan-Feb

ACADEMIC YEAR: _2021-2022_____

LEARNING OBJECTIVE/S:
The learners will be able to :

1._To study the gas chromatography Principle, Theory and terms involved Block diagram and components,types of columns,stationary phases in GSC and GLC, Detectors: TCD, FID, ECD, Qualitative, Quantitative analysis and applications Comparison between GSC and GLC along with calculations.

2.To study ion exchange chromatography Principle, Types of Ion Exchangers , Ideal properties of resin, Ion Exchange equilibria and mechanism, selectivity coefficient andseparation factor,Factors affecting separation of ion,Ion exchange capacity and its determination for cation and anion,Exchangers,Applications of Ion Exchange Chromatography in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER IV *UNIT-2* ***METHODS OF SEPARATION - II (3 & 6***	***2.1 Gas Chromatography (Numerical and word problems are expected)*** *2.1.1 Introduction, Principle, Theory and terms involved* *2.1.2 Instrumentation: Block diagram and components, types of columns,* *stationary phases in GSC and GLC, Detectors: TCD, FID,*	*09L*	*SAUJNYA PRAKASHAN TEXTBOOK,* *SHETH PUBLICATION TEXTBOOK,* *HIMALAYA*	*Chalk and Board*

UNITS)	*ECD* *2.1.3 Qualitative, Quantitative analysis and applications* *2.1.4 Comparison between GSC and GLC*		*PUBLICATION TEXTBOOK*	

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	2.2 Ion Exchange Chromatography *2.2.1 Introduction, Principle.* *2.2.2 Types of Ion Exchangers , Ideal properties of resin* *2.2.3 Ion Exchange equilibria and mechanism, selectivity coefficient andseparation factor,Factors affecting separation of ions* *2.2.4* *Ion exchange capacity and its determination for cation and anion* *exchangers.* *2.2.5 Applications of Ion Exchange Chromatography with reference to Preparation of demineralised water, Separation of amino acids*	*06L*	*SAME AS ABOVE*	*Chalk and board*

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T EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _KIRTI PANKAJ MHATRE_____DEPARTMENT: _CHEMISTRY_____

CLASS: _____FYBSC_____ SEMESTER: _II^ND MONTH: ___Feb- Mar-Apr_____

ACADEMIC YEAR: _2021-2022_____
LEARNING OBJECTIVE/S:
The learners will be able to : 1. To study the gaseous state related laws and (Numericals) ,Deviation from ideal gas laws, reasons for deviation from ideal gas laws, Van der Waals equation of state, Joule-Thomson effect: qualitative discussion and experimentation,inversion temperature. (Numericals expected) in detail.

2.To study chemical equilibria and thermodynamics concepts like Reversible and irreversible reactions, law of mass action, dynamic equilibria, equilibrium

constant, (K_c and K_p), relationship between K_c and K_p, Le Chatelier's principle, factorsaffecting chemical equilibrium (Numericals)Statement of second law of thermodynamics, concepts of entropy and free energy,spontaneity and physical significance of free energy, thermodynamic derivation of. (Numericals).

_PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper 1 ***Unit 1*** ***1.1 Gaseous State:*** ***1.2 Chemical***	***1.1 Gaseous State:*** *Ideal gas laws, kinetic theory of gases, Maxwell-Boltzmann's distribution of velocities* *(qualitative discussion), ideal gases, real gases, compressibility factor, Boyle's*	*08L*	*HIMALAYA PUBLICATIONS TEXTBOOK,* *SHETH PUBLICATIONS TEXTBOOK*	*Chalk and board*

Equilibria and Thermodynamic Parameters:	*temperature (Numericals expected)* *Deviation from ideal gas laws, reasons for deviation from ideal gas laws, Van der Waals* *equation of state, Joule-Thomson effect: qualitative discussion and experimentation,* *inversion temperature. (Numericals expected)*			

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	1.2 Chemical Equilibria and Thermodynamic Parameters: *Reversible and irreversible reactions, law of mass action, dynamic equilibria, equilibrium* *constant, (K_c and K_p), relationship between K_c and K_p, Le Chatelier's principle, factors* *affecting chemical equilibrium (Numericals expected)* *Statement of second law of thermodynamics, concepts of entropy and free energy,spontaneity and physical significance of free energy, thermodynamic derivation of. (Numericals expected)*	*07L*	*SAME AS ABOVE*	*Chalk and board*

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: June 2021 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand relation between color and chemical constitution, Armstrong theory, Witt's theory.
Study preparation of the dyes intermediates and its applications.
Get a brief idea of unit processes in dyes and dye intermediates.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Drugs and Dyes, **UNIT-IV, Colour and Chemical Constitution of Dyes**	Absorption of visible light, Colour of wavelength absorbed, Complementary colour. Relation between colour and chemical constitution.	02	Textbook, Himalaya publication	Online google classroom, google meet and ppt.
	Armstrong theory (quinonoid theory) and its limitations. Witt's Theory, Valence Bond theory, comparative study and relation of colour,	02	Textbook, Himalaya publications	Online google classroom, google meet and ppt.
	brief idea of Unit Processes, Introduction to primaries and intermediates, Benzenesulphonic acid; 1,3-Benzenedisulphonic acid; sulphanilic acid; o-, m-, p-chloronitrobenzenes; o-, m-, p-nitroanilines	03	Textbook, Seth publication	Online google classroom, google meet and ppt.
	Preparation of the dyes Intermediates; Benzene derivatives. Schaeffer acid; Tobias acid; Naphthionic acid; N.W. acid; cleve-6-acid; H-acid; Naphthol AS	04	Textbook, Seth publication	Online google classroom, google meet and ppt.
	Preparation of the dyes Intermediates; Naphthalene Derivative, Anthracene Derivative; 1-Nitroanthraquinone; 1-Aminoanthraquinone Anthraquinone-2-sulphonic acid;	04	Textbook, Seth publication	Online google classroom, google meet and ppt.

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	Benzanthrone.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: June 2021 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand UV – Visible spectroscopy, its basic theory and applications.
Study mass spectrometry, determination of molecular formula and its applications.
Learn natural products like terpenoids, alkaloids in detail.
To gain knowledge of hormones like adrenaline.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III, Organic Chemistry	Electromagnetic spectrum, units of wavelength and frequency, UV – Visible spectroscopy: Basic theory, solvents, nature of UV-Visible spectrum, concept of chromophore, auxochrome.	02	Introduction to spectroscopy (third edition), Pavia	Online google classroom, google meet and ppt.
UNIT-IV, Spectroscopy-I And Natural Products	Mass spectrometry: Basic theory. Nature of mass spectrum. General rules of fragmentation. Importance of molecular ion peak, isotopic peaks, base peak, nitrogen rule, rule of 13 for determination of empirical formula and molecular formula	03	Spectral identification of organic molecules by Silverstein.	Online google classroom, google meet and ppt.

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	Natural products: terpenoids, their introduction, isoprene rule, special isoprene rule, structural determination of citral,	04	Textbook, Himalaya publication	Online google classroom, google meet and ppt.
	Alkaloids introduction and occurrence, structural determination of nicotine,	04	Textbook, Himalaya publication	Online google classroom, google meet and ppt.
	Hormones: Introduction, structure of adrenaline (epinephrine), physiological action of adrenaline.	02	Organic chemistry by Morrision and Boyd,7th edition	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: III MONTH: June 2021 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Study role of radicals in organic synthesis and their applications in detail.
Learn generation, stability, reactivity and structural and stereochemical properties of free radicals,.
Study characteristic reactions and applications of radicals in synthesis.

PAPER, UNIT,	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT

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TITLE		ALLOTED		TOOLS USED
PAPER-II, Synthetic Organic Chemistry-I **UNIT-II, Radicals in organic synthesis**	Stability, reactivity and structural and stereochemical properties of free radicals, Persistent and charged radicals, Electrophilic and nucleophilic radicals. Radical Initiators: azobisisobutyronitrile (AIBN) and dibenzoyl peroxide.	04	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J. Sundberg, 5th Edition,	Online google classroom, google meet and ppt.
	Characteristic reactions - free radical substitution, addition to multiple bonds. Radical chain reactions, radical halogenation of hydrocarbons (regioselectivity),radical cyclizations, autoxidations	04	Organic Chemistry, Clayden Greeves Warren and Wothers,	Online google classroom, google meet and ppt.
	Radicals in synthesis: Inter and intra molecular C-C bond formation via mercuric hydride, tin hydride, thiol donors. Cleavage of C-X, C-Sn, C-Co, C-S, O-O bonds. Oxidative coupling, C-C bond formation in aromatics: SRNAr reactions.	04	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press (2002).	Online google classroom, google meet and ppt.
	Hunsdiecker reaction, Pinacol coupling, McMurry coupling, Sandmeyer reaction, Acyloin condensation.	03	Organic reactions and their mechanisms, 3rd revisededition, P.S. Kalsi, New Age International	Online google classroom, google meet and ppt.

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			Publishers	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: III MONTH: June 2021 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Study enamines, their generation & application in organic synthesis with mechanistic pathways.
Learn phosphorus, sulfur and nitrogen ylides; preparation and their synthetic applications along with their stereochemical aspects.
Study α-C-H functionalization by nitro, sulfoxide, sulfone and phosphonate groups.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic Organic Chemistry-I **UNIT-III, Enamines, Ylides and**	Enamines**:** Generation & application in organic synthesis with mechanistic pathways, Stork enamine reaction. Reactivity, comparison between enamines and enolates. Synthetic reactions of enamines including asymmetric reactions of chiral enamines derived from chiral secondary amines.	04	Name Reactions and Reagents in Organic Synthesis**,** 2nd Edn., Bradford P. Mundy, Michael G. Ellard,	Online google classroom, google meet and ppt.

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α-C-H functionalization	Phosphorus, Sulfur and Nitrogen Ylides: Preparation and their synthetic applications along with their stereochemical aspects.	03	Organic Chemistry, Clayden Greeves Warren and Wothers,	Online google classroom, google meet and ppt.
	Wittig reaction, Horner-Wadsworth-Emmons Reaction, Barton-Kellogg olefination.	03	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press (2002).	Online google classroom, google meet and ppt.
	α-C-H functionalization: By nitro, sulfoxide, sulfone and phosphonate groups: generation of carbanions by strong bases (LDA/n-butyl lithium) and applications in C-C bond formation.	03	Organic reactions and their mechanisms, 3rd revisededition, P.S. Kalsi, New Age International Publishers	Online google classroom, google meet and ppt.
	Bamford-Stevens reaction, Julia olefination and its modification, Seyferth–Gilbert homologation, Steven's Rearrangement.	02	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Sundberg,	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: III MONTH: June 2021 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand importance of organosilicons, organoboron and organotin compounds in organic synthesis.
Study application of mercury, selenium in organic synthesis.
Study application of silyl enol ethers in organic synthesis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic Organic Chemistry-I **UNIT-IV, Metals / Non-metals in organic synthesis**	Mercury in organic synthesis: Mechanism and regiochemistry of oxymercuration and demercuration of alkenes, mercuration of aromatics, transformation of aryl mercurials to aryl halides. Organomercurials as carbene transfer reagents.	03	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press	Online google classroom, google meet and ppt.
	Organoboron compounds: Mechanism and regiochemistry of hydroboration of alkenes and alkynes, asymmetric hydroboration using chiral boron reagents, 9-BBN hydroboration, oxazaborolidine (CBS catalyst) and functional group reduction by diborane.	03	Organic Chemistry, Clayden Greeves Warren and Wothers,	Online google classroom, google meet and ppt.
	Organosilicons: Salient features of silicon governing the reactivity of organosilicons, preparation and important bond-forming reactions of alkyl silanes, alkenyl silanes, aryl silanes	03	Modern Methods of Organic Synthesis, 4th	Online google classroom, google meet and ppt.

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	and allyl silanes. β-silyl cations as intermediates. Iodotrimethylsilane in organic synthesis.		Edition, W. Carruthers and Iain Coldham,.	
	Silyl enol ethers: Application: As nucleophiles (Michael reaction, Mukaiyama aldol reaction), in ring contraction reactions.	02	Moder Organic Synthesis: An Introduction, G.S. Zweifel and M.H. Nantz,	Online google classroom, google meet and ppt.
	Organotin compounds: Preparation of alkenyl and allyl tin compounds; application in C-C bond formation, in replacement of halogen by H at the same C atom. Selenium in organic synthesis: Preparation of selenols/selenoxide, selenoxide elimination to create unsaturation, selenoxide and seleno acetals as α-C-H activating groups	04	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J. Sundberg,	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: T.Y.B.Sc. SEMESTER: VI MONTH: Dec-21 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Study polymers, their classification, stereochemistry and applications.
Understand concept of biodegradable polymers
Learn catalysts and reagents with respect to functional group transformations and selectivity.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III, Organic Chemistry **UNIT-IV, Polymer, Catalysts and Reagents**	Terms; monomer, polymer, homopolymer, copolymer, thermo plastics and thermosets. Addition polymers: polyethylene, polypropylene, teflon, polystyrene, PVC, Uses. Condensation polymers: polyesters, polyamides, polyurethanes, polycarbonates, phenol formaldehyde resins.Uses	03	Textbook, Himalaya publication	Online google classroom, google meet and ppt.
	Stereochemistry of polymers: Tacticity, mechanism of stereochemical control of polymerization using Ziegler Natta catalysts. Natural and synthetic rubbers: Polymerisation of isoprene: 1,2 and 1,4 addition (cis and trans), Styrene butadiene copolymer. Additives to polymers: Plasticisers, stabilizers and fillers.	03	Polymer science – a text book by Ahluwalia and Mishra	Online google classroom, google meet and ppt.
	Biodegradable polymers: Classification and uses. polylactic acid structure, properties and use for packaging and medical purposes.,	02	Textbook, Himalaya publication	Online google classroom, google meet and ppt.
	Catalysts for hydrogenation: a. Raney Nickel b. Pt and PtO_2 (C=C, CN, NO_2, aromatic ring)	04	Oranic chemistry by Carey and Sundberg, Part A	Online google classroom, google meet and ppt.

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	c. Pd/C : C=C, COCl→CHO (Rosenmund) d. Lindlar catalyst: alkynes,		& B	
	Reagents**:** a. $LiAlH_4$ (reduction of CO, COOR, CN,NO_2) b. $NaBH_4$ (reduction of CO) c. SeO_2 (Oxidation of CH_2 alpha to CO) d. mCPBA (epoxidation of C=C) e. NBS (allylic and benzylic bromination)	03	Organic chemistry by Morrision and Boyd,7th edition	Chalk/ marker pen and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: IV MONTH: /January 2022 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Study principles of physical organic chemistry and structural effects and reactivity.
Study linear free energy relationship (LFER) in determination of organic reaction mechanism.
Learn uses of Hammett equation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER-I, Theoretical organic chemistry-II **UNIT-I, Physical organic chemistry**	Asymmetric synthesis: Principles of asymmetric synthesis: Introduction, the chiral pool in Nature, methods of asymmetric induction – substrate, reagent and catalyst controlled reactions.	03	Organic Chemistry, J. Clayden, S. Warren, N. Greeves, P. Wothers, 1st Edition, Oxford University Press (2001).	Chalk/ marker pen and board
	Synthesis of L-DOPA [Knowles's Mosanto process]. Asymmetric reactions with mechanism: Aldol and related reactions, Cram's rule, Felkin-Anh model,	04	A guide to mechanism in Organic Chemistry, 6th edition, 2009, Peter Sykes,	Chalk/ marker pen and board
	Sharpless enantioselective epoxidation, hydroxylation, aminohydroxylation, Diels-Alder reaction, reduction of prochiral carbonyl compounds and olefins.	05	Advanced Organic Chemistry: Reaction Mechanisms, R. Bruckner, Academic Press	Chalk/ marker pen and board
	Use of chiral auxiliaries in diastereoselective reductions, asymmetric amplification. Use of chiral BINOLs, BINAPs and chiral oxazolines asymmetric transformations.	03	Organic Chemistry, Part A and B, Fifth edition,2007, Francis A. Carey and Richard J. Sundberg,	Chalk/ marker pen and board.

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	Grunwald-Winstein equation, Dimroth's E_T parameter, Solvatochromism Zscale, Spectroscopic Correlations, Thermodynamic Implications.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: IV MONTH: January 2022 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

UNDERSTAND CONCEPTS OF Electro-organic chemistry IN DETAIL.
Study cathodic reduction and anodic oxidation and its application in organic synthesis with mechanistic pathways.
Learn organocatalysts and Pd catalysed cycloaddition reactions
Study applications of selected methods of organic synthesis like crown ethers, cryptands, micelles

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic organic chemistry-II **UNIT-III, Electro-organic chemistry and**	Electrode potential, cell parameters, electrolyte, working electrode, choice of solvents, supporting electrolytes.	02	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J.	Online google classroom, google meet and ppt.

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Selected methods of Organic synthesis			Sundberg,	
	Cathodic reduction: Reduction of alkyl halides, aldehydes, ketones, Nitro compounds, olefins, arenes, electro-dimerization.	02	Organic Chemistry, Clayden Greeves Warren and Wothers,	Online google classroom, google meet and ppt.
	Anodic oxidation: Oxidation of alkylbezene, Kolbe reaction, Non-Kolbe oxidation, Shono oxidation..	03	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press (2002).	Chalk/ marker pen and board
	Selected Methods of Organic synthesis, Applications of the following in organic synthesis: Crown ethers, cryptands, micelles, cyclodextrins, catenanes. Organocatalysts: Proline, Imidazolidinone. Pd catalysed cycloaddition reactions: Stille reaction, Saeguse-Ito oxidation to enones, Negishi coupling	05	Organic reactions and their mechanisms, 3rd revisededition, P.S. Kalsi, New Age International Publishers	Chalk/ marker pen and board
	Use of Sc(OTf), and Yb(OTf) as water tolerant Lewis acid catalyst in aldol condensation, Michael reaction, Diels-Alder reaction, Friedel – Crafts reaction.	03	Chem.Rev. 2002, 102, 2227-2302, Rare Earth Metal Triflates in Organic Synthesis, S. Kobayashi.	Chalk/ marker pen and board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: IV MONTH: January 2022 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

To gain knowledge of basic concepts of organometalic chemistry.
Understand importance of palladium in organic synthesis.
Study application of Ce, Sm, Ni, Co, Fe, Rh, and Cr in organic synthesis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic organic chemistry-II **UNIT-IV, Transition and rare earth metals in organic synthesis**	Introduction to basic concepts: 18 electron rule, bonding in transition metal complexes, C-H activation, oxidative addition, reductive elimination, migratory insertion.	03	Moder Organic Synthesis: An Introduction, G.S. Zweifel and M.H. Nantz, W.H. Freeman and Company, (2007).	Online google classroom, google meet and ppt.
	Palladium in organic synthesis: π-bonding of Pd with olefins, applications in C-C bond formation, carbonylation, alkene isomerisation, cross-coupling of organometallics and halides.	03	Organic Chemistry, Clayden Greeves Warren and	Online google classroom, google meet and ppt.

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			Wothers,	
	Heck reaction, Suzuki-Miayura coupling, Sonogashira reaction and Wacker oxidation. Heteroatom coupling for bond formation between aryl/vinyl groups and N, S, or P atoms. Olefin metathesis using Grubb's catalyst.	03	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press	Online google classroom, google meet and ppt.
	Application of Ni, Co, Fe, Rh, and Cr carbonyls in organic synthesis.	04	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J. Sundberg,	Online google classroom, google meet and ppt.
	Application of samarium iodide including reduction of organic halides, aldehydes and ketones, α-functionalised carbonyl and nitro compounds. Application of Ce(IV) in synthesis of heterocyclic quinoxaline derivatives and its role as a de-protecting agent.	02	Modern Methods of Organic Synthesis, 4th Edition, W. Carruthers and Iain Coldham,	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____
CLASS: _____FY BSc_____ SEMESTER: I_____MONTH: _____ ACADEMIC YEAR: _2021- 22_____
LEARNING OBJECTIVE/S:
The learners will be able to : LEARN THE ATOMIC STRUCTURE IN DETAIL AND ALSO LEARN PERIODIC TABLE AND THE PERIODICITY OF THE ELEMENTS____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II INORGANIC CHEMISTRY	2.1 Atomic structure: (Qualitative treatment only; it is expected that the learner knows the mathematical statements and understands their physical significance after completing this topic. No derivations of the mathematical equations required) a) Historical perspectives of the atomic structure; Rutherford's Atomic Model, Bohr's theory, its limitations and atomic spectrum of hydrogen atom. Structure of hydrogen atom. b) Hydrogenic atoms: 1. Simple principles of quantum mechanics; 2. Atomic orbitals	(10L)	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	i) Hydrogenic energy levels ii) Shells, subshells and orbitals iii) Electron spin iv) Radial shapes of orbitals v) Radial distribution function vi) Angular shapes of orbitals. 3. Many Electron Atoms i) Penetration and shielding ii) Effective nuclear charge 4. Aufbau principle			
	2.2: Periodic Table and periodicity : Long form of Periodic Table; Classification for elements as main group, transition and inner transition elements; Periodicity in the following properties : Atomic and ionic size; electron gain enthalpy; ionization enthalpy, effective nuclear charge (Slater's rule); electronegativity ; Pauling, Mulliken and Alred Rochow electronegativities (Numerical problems expected, wherever applicable.) Unit III	(5L)		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____
CLASS: _____FY BSc_____ SEMESTER: __II_____MONTH: _____ ACADEMIC YEAR: _2021- 22_____
LEARNING OBJECTIVE/S:
The learners will be able to : LEARN THE BASICS OF THE PERIODIC TABLE AND THE VARIOUS ACID BASE THEORIES_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II INORGANIC CHEMISTRY	2.1 Concept of Qualitative Analysis: a) Testing of Gaseous Evolutes, Role of Papers impregnated with Reagents in qualitative analysis (with reference to papers impregnated with starch iodide, potassium dichromate, lead acetate, dimethylglyoxime and oxine reagents). b) Precipitation equilibria, effect of common ions, uncommon ions, oxidation states, buffer action, complexing agents on precipitation of ionic compounds. (Balanced chemical equations and numerical problems expected.)	(7L)	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	2.2 Acid Base Theories Arrhenius, Lowry- Bronsted, Lewis, Solvent – Solute concept of acids and bases, Hard and Soft acids and bases. Applications of HSAB Applications of acid base chemistry in: i) Understanding organic reactions like Friedel Craft's (acylation/alkylation)reaction ii) Volumetric analysis with special reference to calculation of titration curveinvolving strong acid and strong base.	(8L	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_ CHEMISTRY_____

CLASS: _____FY BSc_____ SEMESTER: I_____MONTH: _____ ACADEMIC YEAR: _2021- 22_____

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN THE STEREO CHEMISTRY OF ALKANES THEIR OPTICALV ACTIVITY_THEIR CENTERS_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III ORGANIC CHEMISTRY	3. Stereochemistry I: (15L) Fischer Projection, Newman and Sawhorse Projection formulae (of erythro, threo isomers of tartaric acid and 2,3 dichlorobutane) and their interconversions Geometrical isomerism in alkene and cycloalkanes: cis–trans and syn-anti isomerism E/Z notations with C.I.P rules. Optical Isomerism: Optical Activity, Specific Rotation, Chirality/Asymmetry, Enantiomers, Molecules with two similar and dissimilar chiral-centres, Distereoisomers, meso structures, racemic mixture and resolution (methods of resolution not expected). Relative and absolute configuration: D/L and R/S designations. Conformation analysis of alkanes (ethane, propane and n-butane); Relative stability withenergy diagrams.	15	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III ORGANIC CHEMISTRY	3.1 Stereochemistry-II: Cycloalkanes and Conformational Analysis: Types of cycloalkanes and their relative stability, Baeyer strain theory, Conformation analysis of cyclohexane: Chair, Boat and Twist boat forms; Relative stability with energy.	(5L)	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	3.2Aromatic Hydrocarbons Aromaticity: Hückel's ruleanti-aromaticity, aromatic character of arenes, cycliccarbocations/carbanions and heterocyclic compounds with suitable examples. Electrophilic aromatic substitution: halogenation, nitration, sulphonation and Friedel-Craftalkylation/acylation with their mechanism. , Hammond's postulate, Directing effects of the groups.	(10L)	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_ CHEMISTRY_____

CLASS: _____FY BSc_____ SEMESTER: __II_____MONTH: _____ ACADEMIC YEAR:_2021- 22_____

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN STREOCHEMISTRY OF CYCLO ALKANE AND ALL ABOUT THE AROMATIC HYDROCARBONS_____
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_ CHEMISTRY_____

CLASS: _____SY BSc_____ SEMESTER: __III_____MONTH: _____ ACADEMIC YEAR: _2021- 22_____

LEARNING OBJECTIVE/S:
The learners will be able to : CHEMICAL THERMODYNAMICS IN WHICH FREE ENERGIES AND THE ELECTROCHEMISTRY WITH THE BASIC CONCEPTS OF ELECTROCHEMISTRYY_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT I PHYSICAL CHEMISTRY	1.1 Chemical Thermodynamics-II 1.1.1 Free Energy Functions: Helmholtz Free Energy, Gibb's Free Energy, Variation of Gibb's free energy with Pressure and Temperature. 1.1.2 Gibbs-Helmholtz equation, van't Hoff reaction isotherm and van't Hoff reaction isochore. (Numericals expected). 1.1.3 Thermodynamics of Open System: Partial Molal Properties, Chemical Potential and its variation with Pressure and Temperature, Gibb's Duhem equation. 1.1.4 Concept of Fugacity and Activity	(8L)	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	1.2 Electrochemistry: 1.2.1 Conductivity, equivalent and molar conductivity and their variation with dilution for weak and strong electrolytes. 1.2.2 Kohlrausch law of independent migration of ions. 1.2.3 Applications of conductance measurements: determination of degree of ionization and ionization constant of weak electrolyte, solubility and solubility product of sparingly soluble salts, ionic product of water. (Numericals expected). 1.2.4 Transference number and its experimental determination using Moving boundary method. (Numericals expected). Factors affecting transference number.	(7L)	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____
CLASS: _____SY BSc_____ SEMESTER: __IV_____MONTH: _____ ACADEMIC YEAR: _2021- 22_____
LEARNING OBJECTIVE/S:
The learners will be able to : LEARN ELETROCHEMISTRY II GIVES THEM THE IDEA ABOUT THE REVERSIBLE AND IRRIVERSIBLE CELL ALSO GIVE THE KNOWLEDGE OF PHASE EQUILIBRIA __

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT I PHYSICAL CHEMISTRY	1.1 Electrochemistry-II: 1.1.1 Electrochemical conventions, Reversible and irreversible cells. 1.1.2 Nernst equation and its importance, Types of electrodes, Standard electrode potential, Electrochemical series (Numericals expected). 1.1.3 Thermodynamics of a reversible cell, calculation of thermodynamic properties: ΔG, ΔH and ΔS from EMF data. (Numericals expected) 1.1.4 Calculation of equilibrium constant from EMF data. (Numericals expected)	(8 L)	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	1.1.5 Concentration cells with transference and without transference. Liquid junction potential and salt bridge. 1.1.6 pH determination using hydrogen electrode and quinhydrone electrode.(Numericals expected)			
	1.2 Phase Equilibria: 1.2.1 Phases, components and degrees of freedom of a system, criteria of phase equilibrium. Gibbs Phase Rule and its thermodynamic derivation. 1.2.2 Derivation of Clausius – Clapeyron equation and its importance in phase equilibria. (numericals expected) 1.2.3 Phase diagrams of one-component systems (water and sulphur). 1.2.4 Two component systems involving eutectics, congruent and incongruent melting points (lead-silver system).	(7L)	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____SY BSc_____ SEMESTER: __III_____MONTH: _____ ACADEMIC YEAR: _2021- 22_____

LEARNING OBJECTIVE/S:

The learners will be able to : LEARN ABOUT THE P BLOCK ELEMENTS LIKE BORON FAMILY,NITROGEN FAMILY AND SILICON FAMILY ELEMENTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II INORGANIC CHEMISTRY	2. Selected topics on p block elements 2.1 Chemistry of Boron compounds 2.1.1 Electron deficient compounds – BH_3, BF_3, BCl_3 with respect to Lewis acidity and applications. 2.1.2 Preparation of simple boranes like diborane and tetraborane. 2.1.3 Structure and bonding in diborane and tetraborane (2e-3c bonds) 2.1.4 Synthesis of Borax.	5	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	2.2 Chemistry of Silicon and Germanium 2.2.1 Silicon compounds: Occurrence , Structure and inertness of SiO_2	5	TEXT BOOKS REFFERENCE BOOKS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	2.2.2 Preparation of structure of $SiCl_4$ 2.2.3 Occurrence and extraction of Germanium 2.2.4 Preparation of extra pure Silicon and Germanium		U TUBE VIDEOS	
	2.3 Chemistry of Nitrogen family 2.3.1 Trends in chemical reactivity - Formation of hydrides, halides, oxides with special reference to oxides of nitrogen. 2.3.2 Oxides of nitrogen with respect to preparation and structure of NO, NO_2, N_2O and N_2O_4. 2.3.3 Synthesis of ammonia by Bosch – Haber process	5	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____
CLASS: _____SY BSc_____ SEMESTER: IV_____MONTH: _____ ACADEMIC YEAR: __2021- 22_____
LEARNING OBJECTIVE/S:
The learners will be able to : LEARN THE ACIDY AND BASUCITY OF CATION AND ANION WITH THE HELP OF DIGRAMS ALSO THEY WILL STUDY THE USES OF ENVIRONMENTAL CHEMISTRY OF VOLATILE OXIDES AND OXO ACIDS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II INORGANIC CHEMISTRY	2 Ions in aqeous medium 2.1. Acidity of Cations and Basicity of Anions i. Hydration of Cations; Hydrolysis of Cations predicting degree of hydrolysis of Cations-effect of Charge and Radious. ii. Latimer Equation. Relationship between pKa, acidity and z_2/r ratios of metal ions graphical Presentation iii. Classification of cations on the basis of acidity category – Non acidic, Moderately acidic, strongly acidic, very strongly acidic with pKa values range and examples iv. Hydration of Anions; Effect of Charge and Radius; Hydration of anions- concept, diagram classification on the basis of basicity ii. Uses and environments aspects of these acids	10	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	2.2. Uses and Environmental Chemistry of volatile Oxides and oxo-acids i. Physical properties of concentrated oxo-acids like sulfuric, Nitric and Phosphoric acid	5	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

TEACHING PLAN (UNIT PLAN

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____SY BSc_____ SEMESTER: _III_____MONTH: _____ ACADEMIC YEAR: _2021- 22_____

LEARNING OBJECTIVE/S:

The learners will be able to : On completing the learning of this unit the learner is expected to

- Know the various instrumental methods of analysis
- Advantages of using instruments to make measurements
- The various observable properties of a given analyte and the stimulus best suited for its analysis
- Know about a generalized diagram of an analytical instrument
- Select a suitable instrumental method for analysis
- Appreciate the basic terms in spectrometry
- Use the relationship between absorbance (and its variations) and concentration of the analyte.
- Chose a suitable method foe photometric titrations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT III ANALYTICAL	Instrumental Methods-I [15 L] 3. Basic Concepts in Instrumental methods 03 3.1. Relation between the Analyte, Stimulus and measurement of change in the observable property.	15	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
CHEMISTRY	3.2. Block Diagram of an Analytical instrument. 3.3. Types of Analytical Instrumental methods based on i. Optical interactions (eg. Spectrometry: uv-visible, Polarimetry) ii. Electrochemical interactions (eg. Potentiometry, Conductometry,) iii. Thermal interactions (eg. Thermogravimetry) 3.4. Spectrometry (07 L) 3.4.1. Interaction of electromagnetic radiation with matter: Absorption and Emission spectroscopy 3.4.2. Basic Terms: Radiant Power, Absorbance, Transmittance, Monochromatic light, Polychromatic light, Wavelength of maximum absorbance, Absorptivity and Molar Absorbtivity 3.4.3. Statement of Beer's Law and Lambert's Law, Combined Mathematical Expression of Beer -Lambert's Law, Validity of Beer- Lambert's Law, Deviations from Beer-Lambert's Law ((Real deviations, Instrumental deviations and Chemical deviations) (Numerical problems based on Beer-Lambert's Law) 3.4.4. Instrumentation for absorption spectroscopy: Colorimeters and Spectrophotometers 3.4.5. Block Diagrams for Single beam and Colorimeter, and Spectrophotometer (Principles, Construction and working- Details of Components expected i.e , source ,Sample holder , Filters/Monochromators, Detectors such as Photomultiplier tube) 3.4.6. Applications of UV-Visible Spectrophotometry (02 L)			
	(a) Qualitative analysis such as Identification of functional groups in Organic compounds ,Chromophores and Auxochrome,cisand transisomers (b) Quantitative analysis by Calibration curve method and 3.4.7. Photometric Titrations: Principle ,Instrumentation, Types of Photometric titration Curves with examples.			

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____SY BSc_____ SEMESTER: IV_____MONTH: _____ ACADEMIC YEAR: _____

LEARNING OBJECTIVE/S:
The learners will be able to : On completing this unit the learner is expected to understand
i) The use of statistical methods in chemical analysis.
ii) The nature of indeterminate errors
iii) The randomness of such errors and its distribution around a correct or acceptable result
iv) Computation of Confidence limits and confidence interval
v) Test for rejection of doubtful result
vi) Method to draw best fitting straight line

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT III ANALYTICAL CHEMISTRY	Statistical Treatment of analytical data --II (15 L) Objectives: 3.1. Nature of Indeterminate Errors: 3.1.1. The true and acceptable value of a result of analysis 3.1.2. Measures of central tendency: mean, median. mode, average	(03L)	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	3.1.3. Measures of dispersion: Absolute deviation, relative deviation, relative average deviation, standard deviation,(s,sigma) variance, coefficient of variation			
	3.2. Distribution of random errors: 3.2.1. Gaussian distribution curve. 3.2.2. Equation and salient features of Gaussian distribution curve	(02L)	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	3.3.Concept of Confidence limits and confidence interval and its computation using) (i) Population standard deviation (ii) Student's ttest (iii) Range	(03 L	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	3.4.Criteria for rejection of doubtful result (i) 2.5 d rule (ii) 4.0 d rule (iii) Q test	(02 L)	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	3.5.Test of Significance (i) Null hypothesis (ii) F-test (variance ratio test)	(02 L)	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	3.6. Graphical representation of data and obtaining best fitting straight line (a) For line passing through origin (b) For line not passing through origin [Numerical problems wherever possible, expected	(03 L)	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: T.Y.Bsc. SEMESTER: V MONTH: July- August ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

To learn - the meaning of dipole moment, polarization of a bond, bond moment, derivation for Rotational spectroscopy, Vibrational spectroscopy,

To learn- Rotational-Vibrational spectroscopy, Raman spectroscopy, solve the numerical problems based on this top

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-I TITLE: MOLECULAR SPECTROSCOPY	1. Rotational Spectrum	04	1) T.Y.Bsc Physical Chemistry Text book by Sheth Pub. and by Himalaya Pub. 2) Principles of Physical Chemistry B.R. Puri, L.R. Sharma, M.S. Pathania, VISHAL PUB., 2008.	Google classrocom
	2. Vibrational Spectrum	04		
	3. Vibrational-Rotational spectrum of diatomic molecule	04		
	4. Raman Spectroscopy	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY

CLASS:T.Y.Bsc. SEMESTER: V MONTH: September - October ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

To know- Adsorption and its types, Langmuir and B.E.T adsorption isotherm, Terms like Emulsion, Gel, Sol.

To learn- Origin of charges on colloidal particles, Concept of electrical double layer, zeta potential, Helmholtz and Stern model, Electro-kinetic phenomena.

To know- micelle formation, Classification and applications of surfactants in detergents and food industry..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -I, UNIT-IV TITLE: SURFACE CHEMISTRY	1. Adsorption	05	1) T.Y.Bsc Physical Chemistry Text book by Sheth Pub. and by Himalaya Pub. 2) Principles of Physical Chemistry B.R. Puri, L.R. Sharma, M.S. Pathania, VISHAL PUB., 2008	Google classrocom
	2. Colloidal State	10		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: M.Sc-I SEMESTER: I MONTH: October November ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

To learn - State function and exact differentials. Maxwell equations, Maxwell thermodynamic Relations.
To learn- Joule Thomson experiment, Joule Thomson coefficient, inversion temperature, Joule Thomson coefficient in terms of Vander Waals constants.
To know - Third law of Thermodynamics.
To learn - Entropy change for a phase transition, absolute entropies, determination of absolute entropies in terms of heat capacity, standard molar entropies and their dependence on molecular mass and molecular structure, residual entropy.

PAPER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I,	1. Maxwell equations	05	1) Peter Atkins and Julio de Paula,	Google classroom
UNIT-I:	2. Joule Thomson experiment	04	Atkin's Physical Chemistry, 7th Edn., Oxford University Press, 2002.	
TITLE	3. Third law of Thermodynamics	02		

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Thermodynamics-I	*4. Entropy change for a phase transition*	*04*		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY

CLASS: M.Sc-I SEMESTER: I MONTH: December- January ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to :

To learn - Rate laws, Differential rate equations, Consecutive reactions, Steady state Approximation, formation and decomposition of phosgene, decomposition of ozone, Reaction between Hydrogen and Bromine, Decomposition of ethane, decomposition of acetaldehyde, Reaction between hydrogen and oxygen, Semenov - Hinshelwood and Thompson mechanism, Explosion limits and factors affecting explosion limits.
To learn - Kinetics of stepwise polymerization, Kinetics of free radical chain polymerization.
To know- Unimolecular Reactions: Lindeman-Hinshelwood theory, Rice-Ramsperger-Kasssel (RRK) theory, Rice-Ramsperger-Kassel Marcus (RRKM) theory.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-III TITLE: Chemical Dynamics-I	1. Composite Reactions	08	K.J. Laidler and J.H. Meiser, Physical Chemistry, 2nd Ed., CBS Publishers and Distributors, New Delhi, 1999.	Google classrocom
	2. Polymerization reactions	03		
	3. Reaction in Gas Phase	04		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY

CLASS: T.Y.Bsc. SEMESTER: VI MONTH: December-January ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

To know - Basic terms like macromolecule, monomer, repeat unit, degree of polymerization, Classification of polymers.
To learn- Number average, Weight average, Viscosity average molar mass, Viscosity method using Ostwald Viscometer for determining molar masses of polymers,
To learn- Characteristics, Method of preparation and applications of Light Emitting Polymers, Antioxidants , Ultraviolet stabilizers, Colourants, Antistatic agents and Curing agents.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-II TITLE:	1. Basic terms	02	1) T.Y.Bsc Physical Chemistry Text book by Sheth Pub. and by Himalaya Pub. 2) Principles of Physical Chemistry	Google classrocom
	2. Classification of polymers	03		
	3. Method of determining molar masses of polymers	04		
	4. Light Emitting Polymers	03		

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	5. Antioxidants and Stabilizers	03	Pathania, VISHAL PUB 2008	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY

CLASS: T.Y.Bsc. SEMESTER: VI MONTH: January - February ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

To Learn - Principle of NMR, Nuclear spin, magnetic moment, nuclear 'g' factor, energy levels, Larmor precession, Relaxation processes in NMR i.e. spin -spin relaxation and spin - lattice relaxation, Instrumentation of NMR Spectrometer,
To learn -Principle of ESR, fundamental equation, g-value –dimensionless constant or electron g-factor, hyperfine splitting, Instrumentation of ESR spectrometer, ESR spectrum of hydrogen and deuterium.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-IV TITLE:	1. NUCLEAR MAGNETIC RESONANCE	07	1) T.Y.Bsc Physical Chemistry Text book by Sheth Pub. and by Himalaya Pub. 2) Principles of	
	2. ELECTRON SPIN RESONANCE SPECTROSCOPY	08		

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NMR and ESR			Physical Chemistry B.R. Puri, L.R.Sharma M. S. Pathaniya vishal pub 2008	Google classrocom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY

CLASS: M.Sc-I SEMESTER: II MONTH: January - February ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to :

To learn - Fugacity of real gases, Determination of fugacity of real gases using graphical method and from equation of state. Equilibrium constant for real gases in terms of fugacity. Gibbs energy of mixing, entropy and enthalpy of mixing.
To learn - Chemical potential in non ideal solutions excess functions of non ideal solution, Gibbs Duhem Margules equation.
To learn - Laplace equation,Kelvin equation, Gibbs adsorption isotherm, BET isotherm.
To learn- standard free energy change in biochemical reactions, exergonic, endergonic. Hydrolysis of ATP, synthesis of ATP from ADP

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-I	1. Fugacity	05	Peter Atkins and Julio de Paula, Atkin's Physical	
	2. Real solutions	03		

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TITLE: Thermodynamics -II	3. Thermodynamics of surfaces	04	Chemistry, 7th Edn., Oxford University Press, 2002	Google classrocom
	4. Bioenergetics	03		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY

CLASS: M.Sc-I. SEMESTER: II MONTH: MARCH - APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

To study- Solvent Effects on reaction rates, Reactions between ions- influence of solvent Dielectric constant, influence of ionic strength, Linear free energy relationships Enzyme action
To learn - Michaelis-Menten analysis, Lineweaver-Burk and Eadie Analyses.

To learn- Competitive, Noncompetitive and Uncompetitive Inhibition. Effect of pH, Enzyme activation by metal ions, Regulatory enzymes.

To study- The parabolic rate law, The first order rate Law, the contracting sphere rate law, Contracting area rate law, some examples of kinetic studies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER-I, UNIT-III TITLE: Chemical Kinetics and Molecular Reaction Dynamics	1. Elementary Reactions in Solution	04	Peter Atkins and Julio de Paula, Atkin "s physical chemistry 7th Edn., Oxford University Press, 2002.	Google classrocom
	2. Kinetics of reactions catalyzed	03		
	3. Inhibition of Enzyme action	04		
	4. Kinetics of reactions in the	04		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: SY BSc (PC-CZ) SEMESTER: III MONTH: July ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :
To make the learner proficient in analysing the various observations and chemical phenomena presented to him during the course.
To impart various skills of handling chemicals, reagents, apparatus, instruments and the care and safety aspects involved in such handling

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I, Physical Chemistry Thermodynamics-II, Electrochemistry	1.1.1 Free Energy Functions: Helmholtz Free Energy, Gibb's Free Energy, Variation of Gibb's free energy with Pressure and Temperature.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.1.2 Gibbs-Helmholtz equation, van't Hoff reaction isotherm and van't Hoff reaction isochore	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.1.3 Thermodynamics of Open System: Partial Molal Properties, Chemical Potential and its variation with Pressure and Temperature, Gibb's Duhem equation.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.1.4 Concept of Fugacity and Activity	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.2.1 Conductivity, equivalent and molar conductivity and their	2	Textbook of Himalaya Publication	Online google classroom, google meet

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	variation with dilution for weak and strong electrolytes.			and ppt.
	1.2.2 Kohlrausch law of independent migration of ions.	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.2.3 Applications of conductance measurements: determination of degree of ionization and ionization constant of weak electrolyte, solubility and solubility product of sparingly soluble salts, ionic product of water.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.2.4 Transference number and its experimental determination using Moving boundary method. Factors affecting transference number.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: SY BSc (PC-CZ) SEMESTER: IV MONTH: November ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :
To make the learner proficient in analysing the various observations and chemical phenomena presented to him during the course.
To make the learner capable of solving problems in the various units of this course

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
Paper I Unit I, Physical Chemistry Electrochemistry-II, Phase Equilibria	1.1.1 Electrochemical conventions, Reversible and irreversible cells.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	1.1.2 Nernst equation and its importance, Types of electrodes, Standard electrode potential, Electrochemical series	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	1.1.3 Thermodynamics of a reversible cell, calculation of thermodynamic properties: ΔG, ΔH and ΔS from EMF data	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	

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	1.1.4 Calculation of equilibrium constant from EMF data.	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	1.1.5 Concentration cells with transference and without transference. Liquid junction potential and salt bridge.	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	1.1.6 pH determination using hydrogen electrode and quinhydrone electrode.	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: SY BSc (PC-CZ) SEMESTER: III MONTH: July ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : ideas about chemistry of Boron compounds, Chemistry of Silicon and Germanium and chemistry of Nitrogen family .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
Paper II, Unit II ,Inorganic chemistry Selected topics on p block elements	2.1.1 Electron deficient compounds – BH_3, BF_3, BCl_3 with respect to Lewis acidity and applications.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.1.2 Preparation of simple boranes like diborane and tetraborane.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.1.3 Structure and bonding in diborane and tetraborane (2e-3c bonds)	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.1.4 Synthesis of Borax.	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.2.1 Silicon compounds: Occurrence , Structure and inertness	1	Textbook of Himalaya Publication	Online google classroom, google	

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	of SiO_2			meet and ppt.	
	2.2.2 Preparation of structure of $SiCl_4$	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.2.3 Occurrence and extraction of Germanium	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.2.4 Preparation of extra pure Silicon and Germanium	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.3.1 Trends in chemical reactivity - Formation of hydrides, halides, oxides with special reference to oxides of nitrogen	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.3.2 Oxides of nitrogen with respect to preparation and structure of NO, NO_2, N_2O and N_2O_4	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.3.3 Synthesis of ammonia by Bosch – Haber process.	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: SY BSc (PC-CZ) SEMESTER: IV MONTH: November ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to : Have ideal about Ions in aqueous medium, acidity of Cations and Basicity of Anions and uses and Environmental chemistry of volatile oxides and Oxo-acids .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit II ,Inorganic chemistry Ions in aqeous medium Uses and Environmental Chemistry of volatile Oxides and oxo-acids	Hydration of Cations; Hydrolysis of Cations predicting degree of hydrolysis of Cations-effect of Charge and Radious.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	Latimer Equation. Relationship between pKa, acidity and z^2/r ratios of metal ions graphical Presentation	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	Classification of cations on the basis of acidity category – Non acidic, Moderately acidic, strongly acidic, very strongly acidic with pKa values range and examples	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	Hydration of Anions; Effect of Charge and Radius; Hydration of anions- concept, diagram classification on the basis of basicity	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.

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	Physical properties of concentrated oxo-acids like sulfuric, Nitric and Phosphoric acid	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	Uses and environments aspects of these acids	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: TY BSc SEMESTER: V MONTH: July ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Learn Various symmetry operations and have ideas about various point groups and have ideas about Molecular Orbital Theory for heteronuclear diatomic molecules and polyatomic species.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit I ,Inorganic chemistry	1.1.1 Introduction and Importance of Symmetry in Chemistry	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.1.2 Symmetry elements and Symmetry operations	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.1.3 Concept of a Point Group with illustrations using the following point groups :(i)C V (ii) D h (iii) C2V (iv) C3v (v)C2h and (vi)D3h	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.2.1 Comparision between homonuclear and heteronuclear diatomic molecules	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.2.2. Heteronuclear diatomic molecules like CO, NO and HCl, appreciation of modified MO diagram for CO.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.2.3 Molecular orbital theory for H3 and H3+ (correlation diagram	2	Textbook of Himalaya	Online google classroom, google meet and ppt.

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	expected).		Publication	
	1.2.4. Molecular shape to molecular orbital approach in AB2 molecules. Application of symmetry concepts for linear and angular species considering σ- bonding only. (Examples like : i) BeH2, ii) H2O)	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: TY BSc SEMESTER: VI MONTH: November YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Learn Crystal Field Theory of metal-ligand bond ,its merits and demerits .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit I ,Inorganic chemistry	1.1 Limitations of Valence Bond Theory.	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.2 Crystal Field Theory and effect of crystal field on central metal valence orbitals in various geometries from linear to octahedral(from coordination number 2 to coordination number 6)	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.3 Splitting of d orbitals in octahedral, square planar and tetrahedral crystal fields.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.4 Distortions from the octahedral geometry : (i) effect of ligand field and (ii) Jahn-Teller distortions	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.5 Crystal field splitting parameters Δ ; its calculation and factors affecting it in octahedral complexes, Spectrochemical series	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.

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	1.6 Crystal field stabilization energy(CFSE), calculation of CFSE for octahedral complexes with d0 to d10 metal ion configurations.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.7 Consequences of crystal field splitting on various properties such as ionic radii, hydration energy and enthalpies of formation of metal complexes of the first transition series.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.8 Limitations of CFT : Evidences for covalence in metal complexes (i) intensities of d-d transitions, (ii) ESR spectrum of [IrCl6] 2- (iii) Nephelauxetic effect.	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: MSc Part I SEMESTER:I MONTH: August ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Learn Molecular Symmetry , Group Theory and application of Group Theory

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit II Molecular Symmetry and Group Theory	2.1. Symmetry criterion of optical activity, symmetry restrictions on dipole moment. A systematic procedure for symmetry classification of molecules.	3	F. A. Cotton, Chemical Applications of Group Theory, 2nd Edition, Wiley Eastern Ltd., 1989 and R. L. Carter, Molecular Symmetry and Group Theory, John Wiley & Sons, New York, 1998	Online google classroom, google meet and ppt.
	2.2. Concepts of Groups, Sub-groups, Classes of Symmetry operations, Group Multiplication Tables. Abelian and non-Abelian point groups	3	F. A. Cotton, Chemical Applications of Group Theory, 2nd Edition, Wiley Eastern Ltd., 1989 and R. L. Carter,	Online google classroom, google meet and ppt.

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			Molecular Symmetry and Group Theory, John Wiley & Sons, New York, 1998	
	2.3. Representation of Groups: Matrix representation of symmetry operations, reducible and irreducible representations. The Great Orthogonality Theorem and its application in construction of character tables for point groups C2v, C3v and D2h, structure of character tables.	3	F. A. Cotton, Chemical Applications of Group Theory, 2nd Edition, Wiley Eastern Ltd., 1989 and R. L. Carter, Molecular Symmetry and Group Theory, John Wiley & Sons, New York, 1998	Online google classroom, google meet and ppt.
	2.4. Applications of Group Theory (a) Symmetry adapted linear combinations (SALC), symmetry aspects of MO theory, sigma bonding in ABn (Ammonia, CH4) molecule. (b) Determination of symmetry species for translations and rotations. (c) Mulliken's notations for irreducible representations. (d) Reduction of reducible representations using reduction formula. (e) Group-subgroup relationships. (f) Descent and ascent in symmetry correlation diagrams showing relationship between different groups.	6	F. A. Cotton, Chemical Applications of Group Theory, 2nd Edition, Wiley Eastern Ltd., 1989 and R. L. Carter, Molecular Symmetry and Group Theory, John Wiley & Sons, New York, 1998	Online google classroom, google meet and ppt.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: MSc Part I SEMESTER:II MONTH: January ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : _Have an idea about bioinorganic chemistry , biological oxygen carrier and various enzymes and metal ion transport and storage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit IV Bioinorganic Chemistry	4.1. Biological oxygen carriers; hemoglobin, hemerythrene and hemocyanine- structure of metal active center and differences in mechanism of oxygen binding, Differences between hemoglobin and myoglobin: Cooperativity of oxygen binding in hemoglobin and Hill equation, pH dependence of oxygen affinity in hemoglobin and myoglobin and it's implications	5	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	Blackboard and chalk
	4.2. Activation of oxygen in biological system with examples of mono-oxygenases, and oxidases- structure of the metal center and mechanism of oxygen activation by these enzymes.	4	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	Blackboard and chalk
	4.3. Copper containing enzymes- superoxide dismutase, tyrosinase and laccase: catalytic reactions and the structures	3	Robert R.Crechton, Biological	Blackboard and chalk

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	of the metal binding site		Inorganic Chemistry – An Introduction, Elsevie	
	4.4. Nitrogen fixation-nitrogenase, hydrogenases	1	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	Blackboard and chalk
	4.5. Metal ion transport and storage:Ionophores, transferrin, ferritin and metallothionins	1	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	Blackboard and chalk
	4.6. Medicinal applications of cis-platin and related compounds	1	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	Blackboard and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Miss Riyan Rocky Gardner_____ DEPARTMENT: ____Chemistry ESTER: __First_____ MONTH: __August_____ ACADEMIC YEAR: __2021-2022_____

LEARNING OBJECTIVE/S:
The learners will be able to : ____Study about atomic structure ,hydrogenicatoms, many electron atoms,shell ,seashells and atomic orbitals.learn about radial shape of atomic orbitals ,Aufbau principle .

Study about periodic table and periodicity ,classification of elements ,electronegativity like Pauling, Alfred and Rochow and Mulliken etc._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 unit 2 Atomic structure and Periodic table and periodicity	1. Atomic structure :Historical perspective of the atomic structure,Rutherford's atomic model,Bohrs atomic model ,it's limitations and atomic spectrum of atomic model,and structure of hydrogen atom. 2. Hydrogenic atom : Simple principle of quantum mechanics, atomic orbitals. Hydrogenic energy level ,shell, subshells and atomic orbitals, electron spin,radial shape of atomic orbitals, radial distribution function, angular shape of orbitals.	10	Himalaya publications F.Y.Bsc textbook	Google classroom

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	3. Many electron atom : penetration and shielding ,effective nuclear charge. 4. Aufbau principle.			
	1. Periodic table and periodicity : Long form of periodic table,classification of elements, periodicity in following properties : atomic and ionic size,ionization enthalpy, electron gain enthalpy, effective nuclear charge ,electronegativity : Pauling, mulliken and Alfred and Rochow electronegativity.	05	Himalaya publications F.Y.Bsc textbook	Google classroom.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Miss Riyan Rocky Gardner_____ DEPARTMENT: __Chemistry CLASS: _F.Y.Bsc_____ SEMESTER: __Second_____ MONTH: _____January ACADEMIC YEAR: 2021-2022_____

LEARNING OBJECTIVE/S:
The learners will be able to : Study about concept of qualitative analysis, various types of gases,role of papers impregnated with qualitative analysis,concept of precipitation equllibria, common in effect, uncommon in effect , buffer action on precipitation equllibria..learn about the acid base theories ,application and limitations of acid base theories ,HSAB concept ,Friedel craft acylation and alkylation

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper 1 unit 2 1.concept of qualitative analysis and 2.Acid base theories.	5. Concept of qualitative analysis : testing of gaseous evaluates, role of papers impregnated with reagent in qualitative analysis. 6. Precipitation equllibria, common ion effects,uncommon ion effect,oxidation state,buffer action ,complexing agents precipitation on ionic compounds.	07	Himalaya publications F.Y.Bsc textbook	Blackboard, chalk and duster
	1. Acid Base theory : Arrhenius, Lowery Bronsted ,Lewis, solvent solute concept of acid and bases, HSAB concept and its application. 2. Application of acid base chemistry in : understanding organic reactions like Friedel craft alkylation and acylation. 3. Volumetric analysis to special reference to titration curve involving strong acid and strong base.	08	Himalaya publications F.Y.Bsc textbook	Blackboard, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Miss Riyan Rocky Gardner_____ DEPARTMENT: __Chemistry CLASS: _Msc part 2 Analytical_____ SEMESTER: ___Third_____ MONTH: August_____ ACADEMIC YEAR: 2021-2022_____

LEARNING OBJECTIVE/S:
The learners will be able to : Study about principle ,instrumentation and application of chemilluminescence techniques, chiropractic optical methods ,photoacoustic spectroscopy and spectroelectrochemisty.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper 2 unit 4 Miscellaneous techniques	4. Principle, instrumentation and application of chemiluminescence techniques 2. Priciple ,instrumentation and application of Chirooptical methods. 3. Priciple ,instrumentation and application of Photoacoustic spectroscopy 4. Principle, instrumentation and application of spectroelectrochemisty	03 05 03 04	Techniques and mechanism of electrochemistry P A chritian and A.Hamnett	Google classroom
	1. Analytical chemistry in forensic science : general idea	02	Lab manual on blood analysis and medical diagnostic by Dr.Gaytree Prakash and S chand and company Ltd ,New Delhi	Google classroom
	2. Foreinsic analysis: blood ,DNA profiling, alcohol in body fluid ,systemic drug identification	05		Google classroom

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Paper 4 unit 3 Forensic science	3. Analytical toxicology: isolation, identification and determination of following: Narcotics, hallucinogens, depressants, stimulants,metabolites of drug in blood and urine . Viscera ,stomach wash and vomit and postmortem blood for poisons.	08		Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Miss Riyan Rocky Gardner_____ DEPARTMENT: __Chemistry CLASS: _Msc part 2 Analytical_____ SEMESTER: ___fourth_____ MONTH: January ACADEMIC YEAR: 2021-2022_____

LEARNING OBJECTIVE/S:
The learners will be able to : Study about classification of plastics and polymers ,metallic impurities in plastic and polymers and their determination .impact of plastic on environment as pollutants ,paints and pigments .learn about the metallurgy,definition of ores and alloys,analysis of ores and alloys, techniques of purification

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper 3 unit 3 Plastic and polymers	2. Classification of plastic, determination of additives, molecular weight distribution, analysis of plastic and polymer . 3. Metallic impurities in plastic and their determination. 4. Impact of plastic on environment as pollutants. 5. Paints and pigments : types of paints, determination of volatile and non volatile pigments in paints ,binders and thinner. 6. Role of organosilicon in paints and their impact on environment.	03 05 03 04	Skoog reference book Skoog reference book Skoog reference book Skoog reference book	Lecture cum demonstration White board ,chalk and duster Lecture cum demonstration White board,chalk and duster Lecture cum demonstration White board, chalk and duster Lecture cum demonstration White board, chalk and duster
	1. Ores and minerals, dressing of ore ,pollution due to metallurgical process	03	Alloying understanding the basics ,edited by joseph R. Davis ASM international (2001)	White board, chalk and duster
	2.Chemical analysis of ores of principle constituents: Galena,Pyrulusite, Bauxite, Hematite ,monozite.	04		

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Paper 3 unit 4 Metallurgy				White board,chalk and duster
	3. definition and analysis of following alloys : Cupronickel ,steel and stainless steel,bronze and gun metal .	04		White board,chalk and duster
	4. Techniques of purification: zone refining, analysis of high purity materials like silicon, vaccum fusion and extraction techniques.	04	Zone refining and allied techniques ,norman L. Parr, G. newness technology and engineering 1916	White board,chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur. DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: III

MONTH: June ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Immunological Methods	General processes of immune response, antigen-antibody.reactions,	3L		Offline mode – Chalk and board method
	precipitation reactions, radio, enzyme and fluoro-immunoassays	3L		
	Human Nutrition: Biological values	3L		
	estimation of enzymes,carbohydrates,	3L		
	proteins, essential amino acids and lipids.	3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur. DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: III

MONTH: June ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S

CPAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Food Analysis - I	Fuel value of food and importance of food nutrients	**2L**		Offline mode – Chalk and board method
	Food Additives – General idea about Food processing and preservation, Chemical preservatives, fortifying agents	**2L**		
	emulsifiers,texturizing agents, flavours, colours, artificial sweeteners	**3L**		
	enzymes Analysis of food products for flavoring agents and colourartificial sweeteners, enzymes. Analysis of food products for flavoring agents and colour	3L		
	Food Contaminants– Trace metals and pesticide residues,contaminants from industrial wastestoxicants formed during food processin veterinary drug residues and melaminecontaminants.	5L		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur. DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: III

MONTH: June ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to: learn how to write a project report and scientific papers

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Food Analysis - II	Food packaging – Introduction, types of packing materials,properties and industrial requirements.	3L		Offline mode – Chalk and board method
	Processing and Quality requirements of Milk and milk products(cheese, butter and ice cream)	3L		
	vegetables and fruits, meat and meatproducts.	2L		

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	Analysis of Milk – Fat content, proteins, acidity, bacteriological quality and milk adulterants. Analysis of Oils and Fats – acid value, sap value, iodin value. Determination of rancidity and antioxidants	4L		
	Analysis of spices (cloves, cinnamon, pepper, mustard) Determination of volatile oils and fixed oils.	3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur. DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: III

MONTH: June ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Electroanalytical Methods	Current Sampled (TAST) Polarography, Normal and Differential PulsePolarography	3L		Offline mode – Chalk and board method
	Potential Sweep methods- Linear Sweep Voltammetry and Cyclic voltammetry.	3L		
	Potenti Step method- Chronoamperomertry Controlled potential technique- Chronopotentiometry	4L		
	Stripping Voltammetry- anodic, cathodic, and adsorption	2L		
	Chemically and electrolytically modified electrodes and ultramicroelectrodes	3L		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur. DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: III

MONTH: June ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Chromatographic Techniques - I	exchange chromatography: Ion exchange equilibria, breakthroughcapacity, inorganic ion exchangers, synthetic ion exchangers	3L		Offline mode – Chalk and board method
	chelating resins and their applications for separation of inorganic and organic compounds.	3L		
	chromatography: Principle, instrumentation with special reference to separation and suppressor columns, applications.	3L		

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	Exclusion chromatography : Theory, instrumentation and applications of gel permeation chromatography, retention behavior,	3L		
	inorganic molecular sieves, determination of molecular weight of polymers,	3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: IV

MONTH: JANUARY-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 UNIT 3- Methods of scientific research and writing scientific papers	Reporting practical and project work Writing literature surveys and reviews	3L	*Practical skills in Chemistry*, 2nd Ed., Prentice Hall, Harlow	Offline mode – Chalk and board method
	Organizing a poster display Giving an oral presentation	3L		
	Writing Scientific Papers: Justification for scientific contributions	3L		
	bibliography, description of methods, conclusions	3L		

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	the need for illustration, style, publications of scientific work, writing ethics, avoiding plagiarism.	3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: IV

MONTH: JANUARY-APRIL ACADEMIC YEAR:2021-2022

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LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 UNIT 1-	Primary .	1L	Dean J. R., Jones, A. M., Holmes, D.,Reed,R.,Weyers, J., & Jones, A	Offline mode – Chalk and board method
	Secondary and Tertiary	2L		
	Journal abbreviations, abstracts, current titles, reviews, monographs, dictionaries, text-books, current contents,	2L		
	Introduction to Chemical Abstracts and Beilstein, Subject Index, Substance Index, Author Index, Formula Index, and other Indices with examples.	3L		
	.Web sources, E-journals, Journal access, TOC alerts, Hot articles, Citation Index, Impact factor, H-index,	3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: IV

MONTH: JANUARY-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4	E-consortium, UGC infonet, E-books, Internet discussion groups and communities, Blogs, preprint servers, Search engines, Scirus, Google Scholar, ChemIndustry, Wiki-databases, ChemSpider, Science Direct, SciFinder, Scopus	3L	Google.com Youtube	Offline mode – Chalk and board method
	The Internet and World wide web, Internet resources for Chemistry, finding and citing published information.	2L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: IV

MONTH: JANUARY-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II: DATA ANALYSIS	Making and recording Measurements, SI units and their use, Scientific methods and design of experiments.	3L	Google.com Youtube *Quantative Chemical Analysis* 6th Ed	Offline mode – Chalk and board method
	Descriptive statistics, choosing and using statistical tests, Chemometrics, Analysis of Variance (ANOVA),	3L		
	Correlation and regression, curve fitting, fitting of linear equations, simple linear cases, weighted linear case, analysis of residuals,	4L		
	general polynomial fitting, linearizing transformations, exponential function fit, r and its abuse, basic aspects of multiple linear regression analysis.	5L		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ANALYTICAL CHEMISTRY) SEMESTER: IV

MONTH: JANUARY- APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit IV: CHEMICAL SAFETY & ETHICAL HANDLING OF CHEMICALS	Safe working procedure and protective environment, protective apparel, emergency procedure, first aid, laboratory ventilation, safe storage and use of hazardous chemicals,	3L	Google.com Youtube Chemical Safety matters – IUPAC-IPCS, (1992) Cambridge University Press	Offline mode – Chalk and board method
	procedure for working with substances that pose hazards, flammable or explosive hazards, procedures for working with gases at pressures above or below atmospheric pressur, safe storage and disposal of waste chemicals, recovery, recycling	3L 3L		Outer cover of chemicals bottle for symbols study
	reuse of laboratory chemicals, procedure for laboratory disposal of explosives,	3L		SAFTEY CHART OF Lab

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	Identification, verification and segregation of laboratory waste,	3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ruchita thakur DEPARTMENT: CHEMISTRY CLASS: M.Sc. PART-1 (ANALYTICAL CHEMISTRY) SEMESTER: II

MONTH: JANUARY-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: The Students will able to understand the different terms involved in Chromatography technique and also principle, instrumentation, working, application of Gas chromatography as well HPLC technique

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper-IV IV Unit-I Chromatograph y	1.1 Recapitulation basic concepts in Chromatography	4L	Google.com Youtube Skoog,Holler	Offline mode – Chalk and board method
	1.2 Concept of plate and rate theories in chromatography	2L		
	1.3 Gas Chromatography: Principle, instrumentation, working and Application	6L		
	1.4 High performance liquid chromatography	2L		
	1.4.1 Principle, instrumentation, working and Application	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 19 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: __CHEMISTRY _____ CLASS: _____FYBSC_(PCM)_____ SEMESTER: _____1_____ MONTH: _OCT 2021_____ ACADEMIC YEAR: _____2021-2022_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To understand basics of ORGANIC CHEMISTRY
- To study hybridization sp, sp2, sp3,
- Shapes of ORGANIC molecules
- Differentate between Homolytic and Heterolytic.
- To study types of Reactions

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• Paper 1 • Unit 3 • Basics of ORGANIC CHEMIS	Alkanes,Alkenes,Alkanes,Alcohol,Aldehydes and ketones,Anhydride,Nitro Compounds	3	Clayden	Google Classroom
	Hybridization of ORGANIC compounds	3	Clayden	Google Classroom
	Overlaping of Atomic Orbital,Bonding-Sigma and Pi,Shapes of Molecules,Properties-Ethane,Ethene,Ethyne.	2	Clayden	Google Classroom

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TRY	Electronic Effect-Inductive,Electronic,Resonance,Mesomeric,Hyperconjugation,Dipole moment,Relative Strengths	3	Clayden,Text book	Google Classroom

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	Homolytic and Heterolytic fission,Nucleophilicity and Basicity	2	Clayden	Google Classroom
	Carbonation,carbanion,free radical.Types of ReactionsAddition,Elimination,Substitution	2	Clayden,Text book	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___RUTUJA HEMANT SAWANT _____ DEPARTMENT: _CHEMISTRY _____ CLASS: FYBSC (PCM)_____ SEMESTER: ____1_____ MONTH: OCT 2021_____ ACADEMIC YEAR: _2021-2022_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To understand about Chemical Kinetics in detail
- To differentiate between Order and Molecularity
- To find the Rate of Reactions by different methods

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- To learn about different methods
- To study of solids

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• Paper 2 • Unit 1	Rate of Reactions- 1st and 2nd reactions, Order and Molecularity, integrated and grapical methods.	4	Text Books, Principal of	Google Classroom

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• CHMEICAL KINETICS AND LIQUID STATE			Chemical Kinetics	
	Ostwald's isolation, Half time And Drop number method, Surface tension, Viscosity	4	Text Books, Principal of Chemical Kinetics	Google Classroom
	Ostwald's viscometer, Refrective index, Molar Refraction.	3	Text Books, Principal of Chemical Kinetics	Google Classroom
	Polarizability, Abbe's Refractometer, Numericals	2	Text Books, Principal of Chemical Kinetics	Google Classroom
	Liquid crystals, classification and structure, Application of liquid crystal	2	Text Books, Principal of Chemical Kinetics	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: __CHEMISTRY _____ CLASS: _____FYBSC_(CBZ-B)_____ SEMESTER: _____1_____ MONTH: _OCT 2021_____ ACADEMIC YEAR: _____2021-2022_____

LEARNING OBJECTIVE/S:

- The learners will be able to : _To understand about the metallic and non-metallic elements.To Learn about anamolous behaviour of elements.
- To study about the ALLOTROPY of group 13
- Diagonal relationship of elements
- To understand about ACID RAIN

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/
		NAAC accredited "B" Grade, 2.69 CGPA		
		ALLOTED		**ICT TOOLS USED**
• • Paper 2 • Unit 2 Comparative chemistry of main group Elements.	Metallic and Non-metallic nature,Oxidation state,Innert pair effect,Anamolous behaviour of different elements-Li,Be,Oxygen,Nitrogen	4	Text Book,Advance inorganic chemistry	Google Classroom
	ALLOTROPY of group 13 and 14,15and 16 elements,Catenation,Diagonal Relationships of carbide,nitrides,oxides.	6	Text Book,Advance inorganic chemistry	Google Classroom

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	Diagonal Relationships of Hydroxide Some important compounds- NaHCO3,Na2CO3,NaCl,NaOH,CaOetc	3	Text Book,Advance inorganic chemistry	Google Classroom
	Oxides of Carbon, Sulphur and Nitrogen- Reaction,Health Hazard,Control Techniques	4	Text Book,Advance inorganic chemistry	Google Classroom
	Oxiyacids of Sulphur and Nitrogen-Reactions and Control Measures, ACID RAIN and GREEN HOUSE EFFECT	3	Text Book,Advanceinorganic chemistry	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

TEACHING PLAN (UNIT P

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: CHEMISTRY _____ CLASS: _____SYBSC (PC-CZ)_____ SEMESTER: _____3_____ MONTH: __JULY 2021_____ ACADEMIC YEAR: _2021-2022_____

LEARNING OBJECTIVE/S:

- The learners will be able to : __TO learn the chemistry of HALOGENTED HYDROCARBON • To study about nucleophilic substitution
- To study about reactions with ALCOHOL,PHENOL,EPOXIDE.

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- TO understand different types of reagents and it's uses in reaction.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER 1 • UNIT 3 • REACTIONS AND REACTIVITY OF HALOGENATED HYDROCARBON	Alkyl Halides-SN1,SN2,SNi, reactions, Factors affecting reactions, Aryl Halides- substitution reaction, SnAr, addition-elimination, benzyne mechanism	7	Text Book, Clayden.	Google Classroom
	Preparation using alkyl and Aryl halide, cyanide, and epoxides. Alcohols-Reaction of Aldehydes and Ketones, Acidity and reaction of alcohols	5	Text Book, Clayden	Google Classroom
	Phenols-Preparation, Physical Properties, strength of acidic nature of alcohol and phenol, Resonance stabilization of phenoixde ion, Reactions of phenol.	3	Text Book, Clayden	Google Classroom
	Epoxides-Reactivity, Ring opening, reaction with halogen halide, alcohol and Hydrogen Cyanide	3	Text Book, Clayden	Google Classroom
	In neutral or basic conditions- Ammonia, Amines, grignard reagent, alkoxide	2	Text Book, Clayden	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __RUTUJA HEMANT SAWANT _____ DEPARTMENT: _____CHEMISTRY _____ CLASS: _____MSC PART 1_____ SEMESTER: _____1_____ MONTH: ____SEP 2021_____ ACADEMIC YEAR: ___2021-2022_____

NAAC accredited "B" Grade, 2.69 CGPA LEARNING

OBJECTIVE/S:

- The learners will be able to : To learn about various THERMAL METHODS.
- To differentiate between DSC and DTA.
- To learn about the instrumentation and working of different instruments
- To understand need for automation in modern life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER- 4 • Unit- 4 • THERMAL METHODS	Recapitulation of thermal methods, thermoanalytical methods, types of curves, TGA VS DTA, TGA-Instrumentation, working factors affecting TGA, Applications.	4	Vogal, Skoog, Instrumentation in Analytical Chemistry	Google Classroom

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	DSC- Instrumentation, working, block diag, Factors affecting curve, types of DSC	4	Vogal, Skoog, Instrumentation in Analytical Chemistry	Google Classroom
	DTA- Working, Principal, Instrumentation, Application, comparison to DSC	3	Vogal, Skoog, Instrumentation in Analytical Chemistry	Google Classroom
	Application's of DSC, Automation of Chemical Analysis- Need and Objectives of Automation, flow injections and discrete automated system	5	Vogal, Skoog, Instrumentation in Analytical Chemistry	Google Classroom
	Multiplayer films, Gas monitoring equipment, Automatic titrators and benifits	4	Vogal, Skoog, Instrumentation in Analytical Chemistry	Google Classroom

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NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __RUTUJA HEMANT SAWANT _____ DEPARTMENT:

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____CHEMISTRY _____ CLASS: ____FYBSC (PCM)_____ SEMESTER: ___2_____ MONTH: _JAN 2022_____ ACADEMIC YEAR: __2021-2022_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To learn about Carbon Bonding.
- To study about reaction and mechanism of various compounds
- To study about hydrocarbon it's , properties and reactions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER- 1 • UNIT- 3 • ALIPHATIC HYDROCARBON	C-C Sigma bond, Chemistry of alkanes- formation, Wurtz reaction, free radical halogenation- Wurtz fitting reactions. C-C Pi bond, formation of alkenes and alkynes, E1 and E2 reaction	4	Clayden	Google Classroom
	E1cb, Satzeff, Hoffman eliminations, Markownikoff and Anti- Markownikoff addition, Oxy and Demercuration, Hydroboration oxidation, Ozonolysis	5	Clayden	Google Classroom
	Syn-Anti Hydroxylation, 1,2 and 1,4 addition, Diels's Alder reaction, Allylic and Benzylic Bromination	3	Clayden	Google Classroom

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	Propen, 1-butene, toluene, ethyl-benzene Reactions of Alkyenes- Acidic, Electrophilic, Nucleophilic Additions	3	Clayden	Google Classroom
	Hydration to form carbon compounds, Alkylation of Terminal Alkyenes	2	Clayden	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: _____CHEMISTRY _____ CLASS: ___FYBSC (PCM)_____ SEMESTER: _____2_____ MONTH: ___JAN 2022_____ ACADEMIC YEAR: _2021-2022_____

LEARNING OBJECTIVE/S:

- The learners will be able to : _To understand about ionic equilibria
- To understand about pH and buffer and their uses in reaction
- To learn about MOLECULAR SPECTROSCOPY
- To study about solids.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER- 2 • UNIT- 1	Types of electrolytes, Degree of Ionization and factors affecting It, ionization constant, ionization product of water,	5	J. Butler, Text Book	Google Classroom

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• Ionic Equilibria, • Molecular Spectroscopy, • Solid State Chemistry.	ionization of weak acids and base, pH scale, common ion effect.			
	Buffers- Types, Henderson equations for acid and base, Buffer action, Buffer capacity, Numericals	3	J. Butler, Text Book	Google Classroom
	Molecular Spectroscopy- EMR and spectrum, planks equation, absorption, emission, scattering, fluorescence, electronic. Vibrational and Rotational transition and Numericals	4	C.N Banwell, Text Book	Google Classroom
	Solid State Chemistry- Types of solids, Crystal lattice, lattice points, unit cell, space lattice, lattice plan.	2	A.R WEST, Text Book	Google Classroom
	Crystallography- Law of Constancy, interfacial Angel, Law of symmetry, Law of Rational indices	3	Text Book, A.R WEST	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: _____CHEMISTRY _____ CLASS: _____FYBSC (CBZ-B)_____ SEMESTER: _____2_____ MONTH: __JAN 2022_____ ACADEMIC YEAR: ___2021-2022_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To understand explore types of various chemical bonding.
- To learn about theories and principles of bonding.
- To study about OXIDATION and REDUCTION chemistry.

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- Applications of OXIDATION AND REDUCTION in daily life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER- 2 • UNIT- 2	Chemical Bonds-Ionic,Covalent,Coordinate,Metallic,Vander wall force,Hydrogen bonding,Nature of bond,Polarization,Lewis Dot Structure and e.g..	5	John C Kotz, Text Book	Google Classroom

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• Chemical Bond and Reactivity • Oxidation and Reduction Chemistry	Sedgwick and Powell theory, VSEPR Theory-Characteristics,Applications,Steric No., Shapes of Molecules and Geometry AB- 1,2,3,4,5,6,7.Molecules with lone pairAB2E,AB3E2 etc.Isoelectronic principles and limitations to VSEPR.	6	John C Kotz, Text Book	Google Classroom
	Reduction Potential,Redox Half Reaction,Balancing Eq by diff methods, Redox Stability of water, Latimer and Forst diag and it's applications	4	Clayden Text Book	Google Classroom
	Applications of Redox, Diff between Iodo and Iodimetery, KMnO4, Titration Curve of Redox System	3	Clayden Text Book	Google Classroom
	Single Electron Multi-Electron System	1	Clayden Text Book	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

TEACHING PLAN (UNIT PLAN)

NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: ____RUTUJA HEMANT SAWANT _____ DEPARTMENT: _____CHEMISTRY _____ CLASS: _____SYBSC (PC-CZ)_____ SEMESTER: _____4_____ MONTH: NOV 2021_____ ACADEMIC YEAR: ___2021-2022_____

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LEARNING OBJECTIVE/S:

- The learners will be able to : To study about Carboxylic Acid.
- To study about Carboxylic Acid Derivatives.
- To study about Sulphonic Acid and it's Derivatives
- To learn about Preparation and Uses of Derivatives .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER-1 • UNIT- 3 • Carboxylic Acid and their Derivatives • Sulphonic Acids.	Nomenclature, Structure, physical properties, Acidity of carboxylic Acid, effects of substitute on acid strength of aliphatic aromatic carboxylic Acid, prep of carboxylic acid	3	Clayden Text Book	Google Classroom
	Carbonation of Grignard, Hydrolysis of nitriles, Acidity, Salt formation, decarboxylation, HVZ. Conversion- To acid chloride, ester, amides, acid anhydride	4	Clayden Text Book	Google Classroom
	Mechanism of Nucleophile Acyl and acid catalysed substitution, Interconversion of acid derivatives by Nucleophile substitution, Claisen and Dieckmann Condensation	5	Clayden Text Book	Google Classroom
	Sulphonic Acid- Preparation by sulphonation of benzene toluene and naphthalene,Acidity of arenes Sulphonic Acids, comparative acidity of carboxylic and Sulphonic acid	3	Clayden Text Book	Google Classroom

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	Salt formation, desulphonation, reactions with alcohol and PCL5, IPSO substitution	2	Clayden Text Book	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____RUTUJA__HEMANT SAWANT_____ DEPARTMENT: CHEMISTRY _____ CLASS: ___MSC PART 1_____ SEMESTER: _____2_____ MONTH: JAN 2022_____ ACADEMIC YEAR: ___2021-2022_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To learn about various ELECTRO-ANALYTICAL METHODS
- To study about ELECTROGRAVIMETERY as a concept.
- To study about COULOMETRY it's principals, types, Applications.
- To explore new techniques in Analytical Chemistry on whole.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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• PAPER – 4 • UNIT- 4 • ELECTOANALYTICAL METHODS	Ion Selective Potentiometery and it's types of electrodes, Solid-State, Precipitate, Liquid-Liquid, Enzyme and Gas sensing electrodes	4	Vogal, Skoog, Principals in Analytical Chemistry	Google Classroom
	Ion Selective Field Effect Transistors, Biocatalytic	3	Vogal, Skoog, Principles in	Google Classroom

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	Membrane Electrode, Enzyme Based Bio-Sensor, Sums. Polarography- Intro, Principal, Nature of Wave		Analytical Chemistry	
	Ilkovic eq, Derivation with Cotteral eq,Effect of complex formation on polarographic wave, Sums Electrogravimetery- Introduction, Principal	3	Vogal, Skoog, Principles in Analytical Chemistry	Google Classroom
	Instrumentation, constant current and constant potential electrolysis, factors affecting nature of deposit, application's. Coulometery- Intro, Principal, Types-Controlled Potienal, Controlled Current.	4	Vogal, Skoog, Principals in Analytical Chemistry	Google Classroom
	Applications of Coulometery, Advantages and Numericals entire chapter	3	Vogal, Skoog, Principal in Analytical Chemistry	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.Sc. SEMESTER: I MONTH: October 2021 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand metallic and non-metallic nature of main group elements.
Study anomalous behavior of second period elements
Study comparative chemistry of carbides, nitrides, oxides and hydroxides of group-i and group-ii elements.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Chemistry Paper-II **UNIT-II Comparative chemistry of Main Group Elements**	Metallic and non-metallic nature, oxidation states, electronegativity,	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Anomalous behaviour of second period elements, allotropy, catenation, diagonal relationship.	03	Lee, J.D. Concise Inorganic Chemistry ELBS, 1991	Online google classroom, google meet and ppt.
	Comparative chemistry of carbides, nitrides, oxides and hydroxides of group I and group II elements.	04	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Some important compounds- $NaHCO_3$, Na_2CO_3, NaCl, NaOH, CaO, $CaCO_3$	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	oxides of carbon, oxides and oxyacids of sulphur and nitrogen with respect to environmental aspects.	03		Online google classroom, google meet and ppt.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.Sc. SEMESTER: I MONTH: October 2020 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand thermodynamic terms and state functions and path functions.
Study first law of thermodynamics in detail.
Study calculation of bond energy, bond dissociation energy and resonance energy from thermochemical data.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Chemistry Paper-I	Thermodynamic terms: System, surrounding, boundaries, open, closed and isolated system, intensive and extensive properties, state functions and path functions, zeroth law of thermodynamics	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
UNIT-I Chemical Thermodynamics And Chemical Calculations	First law of thermodynamics: concept of heat (q), work (w), internal energy (U), statement of first law, enthalpy, relation between heat capacities, sign conventions, calculations of heat (q), work (w), internal energy (U), and enthalpy (H)	03	Atkins P.W. and Paula J.de, Atkin's Physical Chemistry, 10th Ed.	Online google classroom, google meet and ppt.

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	Thermochemistry: Heats of reactions, standard states, enthalpy of formation of molecules, enthalpy of combustion and its applications, calculation of bond energy, bond dissociation energy and resonance energy from thermochemical data, Kirchhoff's equation	04	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Expressing concentration of solutions: Normality, molality, molarity, formality, mole fractions, weight ratio,	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	volume ratio, weight to volume ratio, ppm, ppb, millimoles, milliequivalents , Numericals.	03		Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: III MONTH: July 2021 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Introduce classical methods of chemical analysis.
Appreciate the various terms and types of titrimetric analysis.
Ability to select proper titrimetric method
Appreciate the usefulness of the gravimetric method of analysis
Identify a suitable gravimetric method
Perform the required calculations involved in the analysis by titrimetry as well as gravimetry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER-Chemistry Paper-III **UNIT-II Classical Methods of Analysis**	Titrimetric Methods, Terms involved in Titrimetric methods of analysis. Comparing volumetry and Titrimetry The Conditions suitable for titrimetry Types of titrimetry – Neutralisation (Acidimetry, alkalimetry), Redox, Iodometry, Iodimetry.	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Precipitation and Complexometric titrations and indicators used in these titrations, Tools of Titrimetry: Graduated glasswares and Callibration, Standard solutions (Primary and Secondary standards in Titrimetry) and Calculations in Titrimetry.	02	Text book Seth publication	Online google classroom, google meet and ppt.
	Concept of pH and its importance in Neutralisation Titrations End point and Equivalence point of Neutralisation titrations Determination of End point by using i. Indicators causing colour change ii. Change in potential, (by potentiometry) iii.Change in conductance (by conductometry). Construction of titration curve (on the basis of change in pH)of a titration.	04	Skoog et al. Fundamentals of Analytical chemistry Cengage Learning, Eight Edition, chapter 13, 14 and 15	Online google classroom, google meet and ppt.
	Types of Gravimetric Methods – Precipitation Gravimetry: i. Steps involved in precipitation gravimetry analysis	02	Text book Seth publication	Online google classroom, google meet and ppt.
	Conditions for precipitation iii. Completion of precipitation, iv. Role of Digestion, Filtration, Washing, Drying Ignition of precipitate.	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Applications of Gravimetric Analysis: Determination of sulfur in organic compounds; Estimation of Nickel in Cu-Ni alloy using dimethyl glyoxime; Determination of Aluminum by converting it to its oxide.	03		Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: III MONTH: July 2021 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

To describe the reactions of halogenated and oxygenated organic compounds of aliphatic and aromatic hydrocarbons
To predict the reactivity and stereochemistry of halogenated and oxygenated organic compounds

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-Chemistry Paper-I	Haloalkanes i. Nucleohilic substitution: SN1, SN2 & SNi, Mechanism and Stereochemistry ii. Factors affecting nucleophilic substitution: Substrate, Solvent, Reagent, Leaving group	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Haloarenes i. Reactivity of aryl halides towards nucleophilic substitution ii. Mechanism of nucleophilic aromatic substitution: Addition-Elimination (SNAr); Elimination-Addition (Benzyne)	03	Text book Seth publication	Online google classroom, google meet and ppt.

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UNIT-III Alkyl And Aryl Halides and Compounds Containing Oxygen - Alcohols, Phenols, Ethers, & Epoxides	Alcohols & phenols i. Physical properties: Hydrogen bonding (types); effect of Hbonding on properties (o- & p-nitrophenol); comparison of acidity of alcohols & phenols; acidity of substituted phenols ii. Preparation & of alcohols: industrial preparation (fermentation); hydration of alkenes; hydrolysis of alkyl halides	03	Morrison, R. T.; Boyd, R. N. (2012). *Organic Chemistry*. Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).	Online google classroom, google meet and ppt.
	iii. Reactions of alcohols- with sodium, HX (Lucas test), esterification, Oppenaeur oxidation iv. Preparation of phenol- cumene hydroperoxide method v. Reactions of phenols: O-alkylation & O-acylation; Schotten-Baumen reaction, Fries rearrangement, Claisen rearrangement	02	Text book Seth publication	Online google classroom, google meet and ppt.
	Ethers & Epoxides i. Preparation of ethers - Williamson's synthesis ii. Reaction of ethers - cleavage of ethers with HI iii. Preparation of epoxides- peroxyacids (m-CPBA)	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	iv. Reactivity & reactions of epoxides- ring opening reactions in acidic (HX, ROH, HCN), basic & neutral conditions (NH3, RMgX & RO-) with reference to regioselectivity	03		Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: III MONTH: July 2021 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

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To study different types of complex chemical reactions and their reaction rates.
To learn the role of different phases in solution equilibrium system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-Chemistry Paper-II **UNIT-I Kinetics and Phase equilibria of solutions**	Types of Complex Chemical reactions i. Reversible or opposing reactions ii. Consecutive reactions iii. Parallel reactions (Derivations not expected) iv. Thermal chain reactions: H and Br reaction. (Kinetic expression not expected).	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Effect of temperature on the rate of reaction i. Arrhenius equation and its derivation ii. Concept of energy of activation (Ea). (Numerical expected) Theories of reaction rates i. Collision theory of unimolecular reaction(Lindemann's approach) and bimolecular reaction ii. Activated complex theory of bimolecular reactions iii. Comparison of the two theories (Qualitative treatment only)	03	Atkins P. W., and Paula J. De, *Physical Chemistry*, 10th ed., Oxford University, 12 press (2014).	Online google classroom, google meet and ppt.
	Phase rule & terms involved b) Liquid –liquid mixtures- classification i. Completely miscible liquids ii. Ideal solutions and Raoult's law iii. Deviations from Raoult's law –non-ideal solutions iv. Vapour pressure: composition and temperature; Composition curves of ideal and non-ideal solutions, Numericals	03	Text book Himalaya publication	Online google classroom, google meet and ppt.

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	Partial miscibility of liquids i. Classification on the basis of Critical solution temperature ii. Effect of impurity on partial miscibility of liquids iii. Partially Miscible Liquids with Upper Critical Solution Temperature (Phenol-Water System) iv. Partially Miscible Liquids with Lower Critical Solution Temperature (Triethylamine-Water System) v. Partially Miscible Liquids with Upper and Lower Critical Solution Temperature (Nicotine-Water System)	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Immiscibility of liquids: Principle of steam distillation (Numerical expected) e) Nernst distribution law and its applications i. Solvent extraction – method	03	Text book Himalaya publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.Sc. SEMESTER: II MONTH: March 2022 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Study ideal gas laws, kinetic theory of gases in detail.

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Study reversible and irreversible reactions, law of mass action, dynamic equilibria.
Study spontaneity and physical significance of free energy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-Chemistry Paper-I **UNIT-I Gaseous State And Chemical Equilibria and Thermodynamic Parameters**	Ideal gas laws, kinetic theory of gases, Maxwell-Boltzmann's distribution of velocities (qualitative discussion), ideal gases, real gases, compressibility factor, Boyle's Temperature, Numericals.	04	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Deviation from ideal gas laws, reasons for deviation from ideal gas laws, Van der Waals equation of state, Joule-Thomson effect: qualitative discussion and experimentation, inversion temperature. Numericals.	04	Text book Seth publication	Online google classroom, google meet and ppt.
	Reversible and irreversible reactions, law of mass action, dynamic equilibria, equilibrium constant, (Kc and Kp),	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	relationship between Kc and Kp, Le Chatelier's principle, factors affecting chemical equilibrium, Numericals.	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Statement of second law of thermodynamics, concepts of entropy and free energy, spontaneity and physical significance of free energy, thermodynamic derivation of equilibrium constant, Numericals.	03	Text book Himalaya publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.Sc. SEMESTER: II MONTH: March 2022 ACADEMIC YEAR: 2021-2022

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LEARNING OBJECTIVE/S:
The learners will be able to:

Study ideal gas laws, kinetic theory of gases in detail.
Study reversible and irreversible reactions, law of mass action, dynamic equilibria.
Study spontaneity and physical significance of free energy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-Chemistry Paper-II **UNIT-II Chemical Bond and Reactivity And Oxidation Reduction Chemistry**	Types of chemical bond, comparison between ionic and covalent bonds, polarizability Fajan's Rule, shapes of molecules, Lewis dot structure, Sidgwick Powell Theory	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Basic VSEPR theory for ABn type molecules with and without lone pair of electrons, isoelectronic principles, applications and limitations of VSEPR theory.	04	Atkins, P.W. & Paula, J. Physical Chemistry, 10th Ed., Oxford University Press,	Online google classroom, google meet and ppt.
	Reduction potentials Redox potentials: half reactions; balancing redox equations.	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Redox stability in water i) Latimer and Frost Diagrams ii) pH dependence of redox potentials.	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Applications of redox chemistry i) Extraction of elements: (example: isolation of copper by auto reduction) ii) Redox reagents in Volumetric analysis: a) I2; b) KMnO4 iii) Titration curves:i) single electron systems (example Ce(IV) against Fe(II)); and ii) Multi electron systems as in KMnO4 against Fe(II))	03	Text book Himalaya publication	Online google classroom, google meet and ppt.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: November 2021 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

To study nomenclature, structure and physical properties, acidity of carboxylic acids.
To predict the reactivity, nomenclature, and preparation of aromatic sulphonic acids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER Chemistry Paper-I **UNIT-III**	Nomenclature, structure and physical properties, acidity of carboxylic acids, effects of substituents on acid strength of aliphatic and aromatic carboxylic acids. Preparation of carboxylic acids: oxidation of alcohols and alkyl benzene, carbonation of Grignard and hydrolysis of nitriles.	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Reactions: Acidity, salt formation, decarboxylation, Reduction of carboxylic acids with $LiAlH_4$, diborane, Hell-Volhard-Zelinsky reaction,Conversion of carboxylic acid to acid chlorides, esters, amides and acid anhydrides and their relative reactivity.	04	Text book Seth publication	Online google classroom, google meet and ppt.

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	Mechanism of nucleophilic acyl substitution and acid-catalysed nucleophilic acyl substitution. Interconversion of acid derivatives by nucleophilic acyl substitution. Mechanism of Claisen condensation and Dieckmann condensation.	04	Morrison, R. T.; Boyd, R. N. (2012). *Organic Chemistry*. Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).	Online google classroom, google meet and ppt.
	Nomenclature, preparation of aromatic sulphonic acids by sulphonation of benzene (with mechanism), toluene and naphthalene, Reactions: Acidity of arene sulfonic acid,	02	Text book Seth publication	Online google classroom, google meet and ppt.
	Comparative acidity of carboxylic acid and sulfonic acids. Salt formation, desulphonation.Reaction with alcohol, phosphorous pentachloride, IPSO substitution.	02	Text book Himalaya publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: November 2021 ACADEMIC YEAR: 2021-20222

LEARNING OBJECTIVE/S:
The learners will be able to:

To study different Types of catalysis, catalytic activity, specificity and selectivity.
To learn Recapitulation of laws of crystallography and types of crystals

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER-Chemistry Paper-II **UNIT-I Solid State And Catalysis**	laws of crystallography and types of crystals Characteristics of simple cubic, face centered cubic and body centered cubic systems, interplanar distance in cubic lattice	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Use of X-rays in the study of crystal structure, Bragg's equation (derivation expected), X-rays diffraction method of studying crystal lattice structure, structure of NaCl and KCl. Determination of Avogadro's number, Numericals.	04	Atkins P. W., and Paula J. De, *Physical Chemistry*, 10th ed., Oxford University, 12 press (2014).	Online google classroom, google meet and ppt.
	Types of catalysis, catalytic activity, specificity and selectivity, inhibitors, catalyst poisoning and deactivation	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Mechanisms and kinetics of acid-base catalyzed reactions, effect of pH. Mechanisms and kinetics of enzyme catalyzed reactions (Michaelis-Menten equation)	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Effect of particle size and efficiency of nanoparticles as catalyst.	02	Text book Himalaya publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: November 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

Expected to appreciate the nature of interaction between applied electrical potential and the concentration of the analyte.
The nature of chemical reactions that influence potential of a given cell.
Familiar with the various types of electrodes or half cells.
Appreciate the nature, need and importance of pH.
Expected to know the applications of the various instrumental methods dealt with in this unit.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-Chemistry Paper-III **UNIT-II Instrumental Methods-II**	Instruments based on the electrochemical properties of the analytes Potentiometry: Principle, Role of Reference and indicator electrodes	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Applications in Neutralisation reactions with reference to the titration of a Strong acid against a Strong Base (using quinhydrone electrode, Graphical methods for detection of end points.	02	Text book Seth publication	Online google classroom, google meet and ppt.
	pHmetry: Principle Types of pH meters.	02	Principles of Instrumental analysis, D. A. Skoog, 3rd Edition, Chapters: 20, 23	Online google classroom, google meet and ppt.
	Construction Working and Care of Combined Glass electrode Applications in Titrimetry (Strtong acid-Strong Base) biological and environmental analysis	02	Text book Seth publication	Online google classroom, google meet and ppt.

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	Conductometry: Principle , Conductivity cell its construction and care.	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Applications in Neutralisation Titrimetry with respect to i. Strong Acid-Strong Base ii. Strong Acid-Weak Base iii. Strong Base-weak Acid iv. Weak Acid- Weak Base. Advantages & limitations of conductometric titrations.	03		Online google classroom, google meet and ppt.

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY CLASS: F.Y. BSC CBZ SEMESTER: SEM-I MONTH: OCTOBER

ACADEMIC YEAR: 2021 LEARNING OBJECTIVE/S:

The learners will be able to: 1.The Students will able to understand the basic concept of organic chemistry and Fundamentals of Organic reaction and it's mechanism.

2. The Students will able to know types of organic reactions and it's uses in various field.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Unit-III Basics of Organic Chemistry	3.1 Classification and Nomenclature of Organic Compounds	06	Himalaya Publication textbook	Google meet, Google classroom and Presentation
	3.2 Bonding and Structure of Organic Compounds	04		Google meet, Google classroom and Presentation
	3.3 Fundamentals of Organic reaction and Mechanism	03		Google meet, Google classroom and Presentation
	3.4 Introduction to types of Organic reactions	03		Google meet, Google classroom and Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

SIGNATURE OF THE H.O.D. **SIGNATURE OF THE STAFF**

Late Shri. Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY CLASS: F.Y. BSC CBZ'A' SEMESTER: SEM-II MONTH: JANUARY

ACADEMIC YEAR: 2022 LEARNING OBJECTIVE/S:

The learners will be able to: 1.The Students will able to understand the concept of different types strain in cyclic compound and how the strain in cyclic compound is responsible for it's stability in the space.

2. In Aromatic Hydrocarbons the Students will able to understand the characteristics of Aromatic compounds and it's electrophilic substitution reaction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-III 3.1Stereochemistry -Il 3.2 Aromatic Hydrocarbons	3.1.1 CycloalkaneTypes of Cycloalkanes and their relative stability	02	Himalaya Pub.Text book	Google meet, Google classroom and Presentation
	3.1.2 Confirmation analysis of cyclohexane: chair boat and twist boat form and relative stability with energy	03		Google meet, Google classroom and Presentation
	3.2.1Aromatic,Anti-aromaticity and heterocyclic compound	02		Chalk and Duster, chart Black board
	3.2.2.Electrophilic substitution:Halogenation,Nitration...	06		Chalk and Duster, chart Black board
	3.2.3 Directing effect of the group	02		Chalk and Duster, chart Black board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE H.O.D.
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY CLASS: F.Y. BSC CBZ 'B' SEMESTER: SEM-II MONTH: JANUARY

ACADEMIC YEAR: 2022 LEARNING OBJECTIVE/S:

The learners will be able to: 1.The Students will able to understand the concept of different types strain in cyclic compound and how the strain in cyclic compound is responsible for it's stability in the space.

2. In Aromatic Hydrocarbons the Students will able to understand the characteristics of Aromatic compounds and it's electrophilic substitution reaction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-III 3.1Stereochemistry-Il 3.2 Aromatic Hydrocarbons	3.1.1 CycloalkaneTypes of Cycloalkanes and their relative stability	02	Himalaya Pub.Text book	Google meet, Google classroom and Presentation
	3.1.2 Confirmation analysis of cyclohexane: chair boat and twist boat form and relative stability with energy	03		Google meet, Google classroom and Presentation
	3.2.1Aromatic,Anti-aromaticity and heterocyclic compound	02		Chalk and Duster, chart Black board
	3.2.2.Electrophilic substitution:Halogenation,Nitration...	06		Chalk and Duster, chart Black board
	3.2.3 Directing effect of the group	02		Chalk and Duster, chart Black board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY CLASS: M.SC -I SEMESTER: SEM-I MONTH: SEPTEMBER
ACADEMIC YEAR: 2021 LEARNING OBJECTIVE/S:
The learners will be able to: 1.The learner will able to understand the different terms used in Analytical chemistry.

2. They will able to understand the Principle, working of instruments used in analysis and also concept of Quality Management in industry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Unit-l 1.1.Language of Analytical chemistry 1.2.Quality in Analytical chemistry	1.1.1 Terms involved in Analytical chemistry and types of analytical instruments	05	David Harvey	Google meet, Google classroom and Presentation
	1.1.2 Error: Types of error and method of quantitative analysis	04	Skoog and Holler	Google meet, Google classroom and Presentation
	1.2.1 Quality Management system: Total Quality Management	04	Donna Summers	Google meet, Google classroom and Presentation
	1.2.2 Safety in Laboratories	02	ParagDiwan	Google meet, Google classroom and Presentation
	1.2.3 Accreditation and Good laboratory practices	04	Klimisch	Google meet, Google classroom and Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 19

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY CLASS: MSC-I SEMESTER: SEM-II MONTH: JANUARY ACADEMIC YEAR: 2022 LEARNING OBJECTIVE/S:

The learners will be able to: .The Students will able to understand the different terms involved in Chromatography technique and also principle, instrumentation, working, application of Gas chromatography as well HPLC technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Unit-I Chromatography	1.1 Recapitulation basic concepts in Chromatography	04	Skoog,Holler	Google meet, Google classroom and Presentation
	1.2 Concept of plate and rate theories in chromatography	02	Couch 7th Ed.	Google meet, Google classroom and Presentation
	1.3 Gas Chromatography: Principle, instrumentation, working and Application	06		Google meet, Google classroom and Presentation
	1.4 High performance liquid chromatography	02	Joel .K. Swadesh	Chalk and Duster, chart Black board
	1.4.1 Principle, instrumentation, working and Application	05		Chalk and Duster, chart Black board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 19

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY CLASS: S.Y CZ/PC SEMESTER: SEM-III MONTH: JULY ACADEMIC YEAR: 2021

LEARNING OBJECTIVE/S:

The learners will be able to: 1.The Students will able to understand the terms used in Analytical Chemistry, Methods of chemical analysis and statistical treatment of Analytical data.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-Ill Unit-I Introduction to Analytical Chemistry and Statistical treatment of Analytical data-l	1.1 Role of Analytical Chemistry: terms involved in Analytical Chemistry, Purpose of Chemical Analysis	03	Himalaya Publication Sy. textbook	Google meet, Google classroom and Presentation
	Classical and Non-Classical Methods of analysis	03		Google meet, Google classroom and Presentation
	1.2 Significance of sampling in Analytical Chemistry	02		Google meet, Google classroom and Presentation
	Types of sampling	02		Google meet, Google classroom and Presentation
	1.3 Results of Analysis	05		Google meet, Google classroom and Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY CLASS: S.Y CZ/PC SEMESTER: SEM-III MONTH: JULY ACADEMIC YEAR: 2021

LEARNING OBJECTIVE/S:
The learners will be able to: 1.The learners will able to understand the concept of titrmetry analysis, tools used in analysis and difference steps involved in gravimetric analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Unit-II Classical methods of Analysis	2.1 Titrimetric Methods: types of titrimetry, tools of titrimetry	03	Himalaya Publication sy text book	Google meet, Google classroom and Presentation
	2.2 Standard Solutions and Calculations in Titrimetry	02		Google meet, Google classroom and Presentation
	2.3 Neutralisation Titrations: construction of Titration curve	04		Google meet, Google classroom and Presentation
	2.4 Gravimetric Analysis: steps involved in analysis	03		Google meet, Google classroom and Presentation
	Types and application of gravimetric analysis	03		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___15__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY CLASS: S.Y PC/CZ SEMESTER: SEM-IV MONTH: NOVEMBER
ACADEMIC YEAR: 2021 LEARNING OBJECTIVE/S:
The learners will be able to: 1.The Students will able to understand the types of Separation methods used in chemical analysis and also instrumentation working application of Electrophoresis technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Unit-I Methods of Separation	1.1 Introduction analytical separation and it's importance in analysis	03	Himalaya Publication Sy textbook	Google meet, Google classroom and Presentation
	1.2 Types of Separation methods	04		Google meet, Google classroom and Presentation
	1.3 Electrophoresis: Instrumentation working & Application	03		Google meet, Google classroom and Presentation
	1.4 Solvent Extraction: Condition and methods of extraction	03		Google meet, Google classroom and Presentation
	1.5 Chromatography: Paper Chromatography and Thin layer Chromatography	03		Google meet, Google classroom and Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAF: MISS. SHEETAL ANIL JAISWAL. DEPARTMENT:
CHEMISTRY CLASS: S.Y PC/CZ SEMESTER: SEM-IV MONTH: NOVEMBER
ACADEMIC YEAR: 2021 LEARNING OBJECTIVE/S:
The learners will be able to: The students will able to understand Principle, instrumentation, working and Application of Potentiometer, pH meter, Conductometer

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Unit-II InstrumentalMethods -ll	2.1 Potentiometry: Instrumentation, working and application	05	Himalaya Publication Sy textbook	Google meet, Google classroom and Presentation
	2.2 pH metry: Instrumentation, working and application	04		Google meet, Google classroom and Presentation
	2.3 Conductometry : Instrumentation, working and application	05		Google meet, Google classroom and Presentation
	Advantages and limitations of Conductometric titration	02		Google meet, Google classroom and Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY CLASS: M.SC -II (ANALYTICAL CHEMISTRY) SEMESTER: SEM-III MONTH: AUGUST ACADEMIC YEAR: 2021-22 LEARNING OBJECTIVE/S:

The learners will be able to: 1.The learner will able to understand the different instruments used in spectral method for surface characterization of solid materials.

2. They will able to understand the Principle, working and application of different instruments used in spectral method for surface characterization of samples.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Advance Instrumental Techniques Unit-l Spectral Methods-I	1.1 Surface analytical techniques: Preparation of surface, Difficulties involved in the surface analysis.	02	G.D Christian	Google meet, Google classroom and Presentation
	1.2 Principle, Instrumentation and applications of following: a) Secondary ions mass spectroscopy	04	Skoog and Holler	Google meet, Google classroom and Presentation
	b) Particle Induced X-ray emission	05	J. A. Niemann	Google meet, Google classroom and Presentation
	c) Low energy ion scattering and Rutherford Backscattering	05		Google meet, Google classroom and Presentation

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY CLASS: MSC-II (ANALYTICAL CHEMISTRY) SEMESTER: SEM-IV MONTH: JANUARY
ACADEMIC YEAR: 2021-22 LEARNING OBJECTIVE/S:
The learners will be able to: .The Students will able to understand the what is NAA techniques and different Thermal Methods of analysis and the name of techniques its principles ,working of instrumentation and applications in various fields.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Advance Instrumental Techniques Unit-III Radiochemicals and Thermal Methods	3.1 Activation Analysis-NAA, Radiometric Titration and Radio release methods	10	G. D. Christian	Google meet, Google classroom and Presentation
	3.2 Thermal Analysis-Principle, Interfacing, Instrumentation and Applications of		D. A. Skoog, F.J. Holler	Google meet, Google classroom and Presentation
	a.Simultaneous Thermal Analysis-TG-DTA and TG-DSC	04	H. H. Willard, L.L. Merritt Jr	Chalk and Duster, chart Black board
	b. Evolved gas analysis- TG-MS and TG-FTIR	04		Chalk and Duster, chart Black board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sunny Suresh Baing _____ DEPARTMENT: Chemistry _____

CLASS: TYBSc. 3 Unit ___ SEMESTER: VI _____ MONTH: January to March ACADEMIC YEAR: 2021-22 _____

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Inorganic Chemistry Unit 1	**1.Theories of the metal-ligand bond (I)** 1.1 Limitations of Valence Bond Theory 1.2 Crystal Field Theory and effect of crystal field on central metal valence orbitals in various geometries from linear to octahedral (from coordination number 2 to coordination number 6) 1.3 Splitting of d orbitals in octahedral, square planar and tetrahedral crystal fields. 1.4 Distortions from the octahedral geometry : (i) effect of ligand field and (ii) Jahn-Teller distortions. 1.5 Crystal field splitting parameters Δ ; its calculation and factors affecting it in octahedral complexes, Spectrochemical series.	9L	Himalaya Publication, Inorganic Chemistry text book of TYBSc.	Online Google meet app

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	1.6 Crystal field stabilization energy(CFSE), calculation of CFSE for octahedral complexes with d0 to d10 metal ion configurations.1.6 Crystal field stabilization energy(CFSE), calculation of CFSE for octahedral complexes with d0 to d10 metal ion configurations.			
	1.7 Consequences of crystal field splitting on various properties such as ionic radii, hydration energy and enthalpies of formation of metal complexes of the first transition series.	2L	Himalaya Publication, Inorganic Chemistry text book of TYBSc.	Online Google meet app
	1.8 Limitations of CFT : Evidences for covalence in metal complexes (i) intensities of d-d transitions, (ii) ESR spectrum of [IrCl6]2-(iii) Nephelauxetic effect.	2L	Himalaya Publication, Inorganic Chemistry text book of TYBSc.	Online Google meet app

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: Sunny Suresh Baing _____ DEPARTMENT: Chemistry _____

CLASS: TYBSc. 3 Unit ____ SEMESTER: VI _____ MONTH: January to March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Inorganic Chemistry Unit 2	**2.1 Metallurgy** 1.Types of metallurgies, 2.General steps of metallurgy; Concentration of ore, calcinations, roasting,reduction and refining. 3. Metallurgy of copper: occurrence, Physicochemical principles , Extraction of copper from pyrites& refining by electrolysis.	7L	Himalaya Publication, Inorganic Chemistry text book of TYBSc	Online Google meet app
	2.2 Chemistry of Group 18 1. Historical perspectives 2. General characteristics and trends in physical and	5L	Himalaya Publication, Inorganic Chemistry text	Online Google meet app

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	chemical. 3. Isolation of noble gases. 4. Compounds of Xenon (oxides and fluorides) with respect to preparation and structure (VSEPR) properties		book of TYBSc.	
	2.3 Introduction to Bioinorganic Chemistry. 1. Essential and non essential elements in biological systems. 2. Biological importance of metal ions such as Na+, K+, Fe+2/Fe+3 and Cu+2 (Role of Na+ and K+w.r.t. ion pump.)	3L	Himalaya Publication, Inorganic Chemistry text book of TYBSc	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sunny Suresh Baing DEPARTMENT: Chemistry

CLASS: TYBSc. _ SEMESTER: VI MONTH: January to March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Drugs and Dyes Unit 4	**4.1 Non-textile uses of dyes:** **Biomedical uses of dyes** 1. Dyes used in formulations (Tablets, capsules, syrups etc) Indigo carmine, Sunset yellow, Tartrazine 2. Biological staining agents Methylene blue, Crystal violet and Safranine T 3. DNA markers Bromophenol blue, Orange G, Cresol red 4. Dyes as therapeutics Mercurochrome, Acriflavine, Crystal Violet, Prontosil **Dyes used in food and cosmetics:** i) Properties of dyes used in food and cosmetics ii) Introduction to FDA and FSSAI	8L	Himalaya Publication, Inorganic Chemistry text book of TYBSc	Online Google meet app

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	iii) Commonly used food colours and their limits **Paper and leather dyes** i) Structural features of paper and leather ii) Dyes applicable to paper and leather **Miscellaneous dyes** i) Hair dyes ii) Laser dyes iii) Indicators iv) Security inks iv) Coloured smokes and camouflage colours			
	4.2 Pigments Definition of pigments, examples, properties of pigments, difference between dyes and pigments. Definition of Lakes and Toners	4L	Himalaya Publication, Inorganic Chemistry text book of TYBSc	Online Google meet app
	4.3 Dyestuff Industry - Indian Perspective 1. Growth and development of the Indian Dyestuff Industry 2. Strengths, Weaknesses, Opportunities and Challenges of the Dyestuff industry in India 3. Make in India - Future Prospects of the Dye Industry	3L	Himalaya Publication, Inorganic Chemistry text book of TYBSc	Online Google meet app

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sunny Suresh Baing DEPARTMENT: Chemistry ____

CLASS: FYBSc. SEMESTER: VI _____ MONTH: January to March ACADEMIC YEAR: 2021-22

_____

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 1	**3.1 CARBON- CARBON SIGMA BONDS** 1. Chemistry of alkanes- Formation of Alkanes, wurtz reaction, Wurtz-Fittig reaction,free radical substitutions	3L	Himalaya Publication textbook of	Chalk and Board

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UNIT 3 Chemistry of aliphatic hydrocarbons - II	: halogenation- relative reactivity and selectivity		FYBSc	
	3.2 CARBON-CARBON PI BONDS Formation of Alkenes and Alkynes by elimination reactions- Mechanism of E1,E2 ,E1cb reactions. Saytzeff and Hofmann eliminations Reaction of alkenes- Electrophilic additions their mechanisms (Markownikoff and Anti Markownikoff addition), Mechanism of oxymercuration-demercuration , hydroboration-oxidation , ozonolysis, reduction (catalytic and chemical) , syn and anti- hydroxylation (oxidation). 1,2 - and 1,4-addition reaction,Diels-alder reaction, allylic and benzylic bromination using N-bromosuccinimide and mechanism Reaction of Alkynes- acidity , electrophilic and nucleophilic additions , hydration to form carbonyl compounds, alkylation of terminal Alkynes	12L	Himalaya Publication, textbook of FYBSc.	Chalk and Board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati shreedhar Dhumal._____ DEPARTMENT: Chemistry_____

CLASS: ____M.Sc. I_____SEMESTER: _____I _st_____ MONTH: ___Sep _____ACADEMIC YEAR: ____2021-22_____

LEARNING OBJECTIVE/S:

The learners will be able to : 1) To learn concept of FT technique and it's concept.

2) To understand the concept and application of Molecular Ultraviolet and Visible Spectroscopy 3)

To be able to carry out numerical based on UV Visible spectroscopy.

4) To gain knowledge in concept of Infrared Absorption Spectroscopy, Dual spectrometry , diffuse reflectance spectroscopy.

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PAPER, UNIT, TITLE	SUBTOPICS	LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV, Unit 2 Calculations based on chemical principles	The following topics are to be covered in the form of numerical problems only. a. Concentration of a solution based on volume and mass units. b. Calculations of ppm, ppb and dilution of the solutions, concept of mmol c. Stoichiometry of chemical reactions, concept of kg mol, limiting reactant, theoretical and practical yield. d. Solubility and solubility equilibria,effect of presence of common ion. e. Calculations of pH of acids, bases, acidic and basic buffers. f. Concept of formation constants, stability and instability constants, stepwise formation constants.		3000 solved problems in chemistry, Schaums Solved problem series, David E. Goldbers, Mc Graw Hill international	Google Classroom

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	g. Oxidation number, rules for assigning oxidation number, redox reaction in term of oxidation number, oxidizing and reducing agents, equivalent weight of oxidizing and reducing agents, stoichiometry of redox titration (Normality of a solution of a oxidizing / reducing agent and its relationship with molarity).	**[15 L]**	Editions	Google classroom
Paper – IV, Unit – 3. Optical Methods	Recapitulation and FT Technique : Recapitulation of basic concepts, Electromagnetic spectrum, Sources, Detectors, sample containers. Laser as a source of radiation, Fibre optics. Introduction of Fourier Transform Molecular Ultraviolet and Visible Spectroscopy	**(6L)**	D. A. Skoog, F. J. Holler, T. A. Nieman, Principles of Instrumental Analysis, 5th Edition, Google.	Google classroom
	NUMERICALS ARE EXPECTED Derivation of Beer- Lambert's Law and its limitations, factors affecting molecular absorption, types of transitions [emphasis on charge transfer absorption], pH, temperature, solvent and effect of substituents. Applications of Ultraviolet and Visible spectroscopy: 1) On charge transfer absorption 2) Simultaneous spectroscopy 3) Derivative Spectroscopy	**(3L)** **(6L)**		Google classroom Google classroom

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	Dual spectrometry – Introduction, Principle, Instrumentation and			

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	Applications Infrared Absorption Spectroscopy Instrumentation: Sources, Sample handling, Transducers, Dispersive, non-dispersive instrument FTIR and its advantages Applications of IR [Mid IR, Near IR, Far IR]: Qualitative with emphasis on "Finger print" region, Quantitative analysis, Advantages and Limitations of IR Introduction and basic principles of diffuse reflectance spectroscopy	**(6L)**		Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati Shreedhar Dhumal._____ DEPARTMENT: Chemistry_____

CLASS: ____M.Sc. I_____ SEMESTER: _____II nd_____ MONTH: __Jan ____ACADEMIC YEAR: ____2021-22_____

LEARNING OBJECTIVE/S:

The learners will be able to : ___1) To gain knowledge of concept Scanning Electron Microscopy (SEM) Scanning Tunneling Microscopy (STM) Transmission Electron Microscopy (TEM)Electron Spectroscopy (ESCA and Auger). 2) To understand the concept of AAS.

PAPER, UNIT, TITLE	**SUBTOPIC**			**NO OF LECTURES Alloted**	**REFERENCE**	**TEACHING METHOD/ ICT TOOLS USED**
Paper IV, unit 2, Spectrometry and Radioanalytical Method.	Spectroscopy : principle,instrumention and applications of X-ray Fluorescence, absorption and diffraction spectroscopy			(4L)	Principles of Instrumental Analysis – Skoog, Holler, Nieman, 5th ed., Harcourt College	Google classroom
	Mass spectrometry: recapitulation, instrumentation, ion sources for molecular Studies, electron impact, field ionization, field absorption, chemical ionization and fast Atom bombardment sources. Mass analyzers: Quadrupole, time of flight and ion			(6L)		Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: ____Swati Shreedhar Dhumal._____ DEPARTMENT: Chemistry_____

CLASS: _____M.Sc. II_____ SEMESTER: ___III rd_____ MONTH: __Aug _ _ACADEMIC YEAR: ___2021-22_____

LEARNING OBJECTIVE/S:
The learners will be able to : _1)__To understand the concept of sampling, types of sample, pretreatment of soil food and cosmetic.___ _2)

To know about sampling plan , sampling of raw material, and finished products.

3) To know about selection of method, criteria for method used , method validation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit- I Quality In Analytical Chemistry - I	Sampling: Definition, types of sample, sampling plan, quality of sample, subsampling, Sampling of raw materials, intermediates and finished products. Sample preparations – dissolution technology and decomposition,	(8 L)	Quality in the analytical chemistry laboratory, E Prichard, John Wiley and sons N.Y 1997.	Google classroom
	storage of samples. Pre-treatment of samples: soil, food and cosmetics.		.	

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	Selection of the Method: sources of methods, factors to consider when selecting a method, performance criteria for methods used, reasons for incorrect analytical results, method validation, and quality by design (PAT).	(7L)	Quality assurance in analytical Chemistry, W Funk, V Dammann, G. Donnevert VCH Weinheim1995	Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15 L_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____Swati Shreedhar Dhumal. _____ DEPARTMENT: ___Chemistry_____

CLASS: ___M.Sc. II_____ SEMESTER: _____IIIrd_____ MONTH: _Aug __ ACADEMIC YEAR: __2021-22_____

LEARNING OBJECTIVE/S:

The learners will be able to : __1) To understand about measurements of uncertainty.

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2) To gain knowledge about signal to noise ratio.

3) To know about pharmaceutical legislation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper - I Unit - II Quality In Analytical Chemistry – II	Measurement of uncertainty: Definition and evaluation of uncertainty, putting uncertainty to use, interpretation of results and improving the quality of results.	(4L)	Quality in the analytical chemistry laboratory, E Prichard, John Wiley and sons N.Y 1997. Quality assurance in analytical Chemistry, W Funk, V Dammann, G. Donnevert VCH Weinheim1995	Google classroom
	Signal to noise: Signal to noise ratio, sources of noise in instrumental analysis. Signal to noise enhancement, hardware devices for noise reduction, software methods for noise reduction.	(6L)		Google classroom

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Paper I , unit IV, Chromatographic technique II	Pharmaceutical Legislation: introduction to drug acts, drug rules(schedules), concept of regulatory affairs in pharmaceuticals, review of GLP and GMP and their regulations for analytical labs, roles and responsibilities of personnel, appropriate design and placement of laboratory equipment, requirements for maintenance and calibration.	(5L)		Google classroom
	1. Supercritical fluid Chromatography: Theory, concept of critical state of matter and supercritical state, types of supercritical fluids, instrumentation, applications toenvironmental, food, pharmaceuticals and polymeric analysis. 2 Affinity Chromatography: principle, instrumentation and applications 3.Optimum pressure liquid chromatography (OPLC)	(8 L) (4 L) (3 L)	Supercritical Fluid Extraction, Larry Taylor Wiley publishers N.Y. 1996 Fundamentals of Analytical Chemistry, D. A. Skoog and D. M. West, Saonders,	Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati Shreedhar Dhumal._____DEPARTMENT: ___Chemistry_____

CLASS: _____M.Sc. II_____ SEMESTER: ____IIIrd_____ MONTH: ____Aug ACADEMIC YEAR: ___2021-22_____

LEARNING OBJECTIVE/S:
The learners will be able to : _1) To gain general idea regarding of pharmaceutical industry.

2) To know Role of FDA in pharmaceutical industries.

3) To understand about official method of quality control.

	Standardization of finished products and their characteristics, official methods of quality control.	(4L)		Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15 L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati Shreedhar Dhumal._____DEPARTMENT: ___Chemistry_____ CLASS: _____M.Sc. II_____ SEMESTER: ____IV th_____ MONTH: __Jan _____ ACADEMIC YEAR: ___2021- 22_____

LEARNING OBJECTIVE/S:
The learners will be able to : __1) To understand principle and concept of green chemistry and sustainable development.

2) To be able to calculate atom economic and uneconomic reactions.

3) To provide knowledge of organic solvents.

4) To be able to deal with emerging green technologies.

5) To acquire knowledge in Designing Greener Processes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper - I, Unit - I Separation science	1.Membrane separation processes: operating principles and applications of microfiltration, ultra-filtration, reverse osmosis, dialysis and electro-dialysis.	(7 L)	Solvent extraction and ion exchange, J Marcus and A. S. Kertes Wiley INC 1969.	Google classroom
	.2 Applications of Solvent extraction in Analytical Chemistryrecapitulation of solvent extraction, roles of solvent extraction in analytical chemistry, solvent extraction in sample preparation and pretreatment steps, solvent extraction as a means of analytical determination	(4L)	. Extraction Chromatography, T. Braun, G. Ghersene, Elsevier Publications 1978	Google classroom
	Principle and concepts of green chemistry: sustainable development and green chemistry, atom economy, examples of atom economic and atom uneconomic reactions, reducing toxicity.	(4L)		Google classroom
Paper I, unit – III, Green chemistry	Organic solvents: environmentally benign solutions, solvent free systems, supercritical fluids (only introduction) Ionic liquids as catalysts and solvents.	(4L)	Green chemistry and catalyst, R. A. Sheldon, Isabella Arends, Ulf Hanefeld Wiley VCH verlag GmBH & co. Sustainable residential development: planning and design for green neighborhoods.	Google classroom
	Emerging Green Technologies: photochemical reactions (advantages and challenges), examples. Chemistry using microwaves, sonochemistry and electrochemical synthesis.		Google, Wikipedia.	Google classroom

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	Designing Greener Processes: Inherently Safer Designs (ISD), Process intensification (PI) in-process monitoring.	(3L)		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati Shreedhar Dhumal._____ DEPARTMENT: _____Chemistry_____

CLASS: ____M.Sc. II _____SEMESTER: _____IV th_____ MONTH: _Jan

____ ACADEMIC YEAR: 2021-22_____

LEARNING OBJECTIVE/S:

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The learners will be able to : __1) To understand about concept of Mass spectroscopy.

2) To learn concept of Raman spectroscopy.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -II Unit -II Spectral method IV	Mass spectroscopy: recapitulation, correlation of mass spectra with molecular structure- interpretation of mass spectra, analytical information derived from mass spectra- molecular identification, metastable peaks, Fragmentation Reactions.	(9L)	Principles of Instrumental Analysis, D. A. Skoog, F. J. Holler and J.A. Niemann 5th Ed. Google, Wikipedia.	Google classroom
	Raman spectroscopy: Principle Theory Instrumentation , techniques(SERS and Resonance Raman) and Applications of Raman spectroscopy.	(6L)	Principles of Instrumental Analysis, D. A. Skoog, F. J. Holler and J.A. Niemann 5th Ed. Google, Wikipedia.	Google classroom

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati Shreedhar Dhumal_____ DEPARTMENT: Chemistry ___ CLASS: _____M.Sc. II_____

SEMESTER:_IVth_____ MONTH: Jan _____ ACADEMIC YEAR: ___2021-22_____

LEARNING OBJECTIVE/S:
The learners will be able to : 1) To gain updated knowledge of solid waste management.

2) To acquire knowledge of method and treatment of waste.

3) To know about biomedical waste and its method of disposal.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper -III Unit- II Solid waste management.	Solid waste management: objectives, concept of recycle, reuse and recovery .	(3L)	Solid waste management, K Sasikumar and Sanoop Gopi Krishna PHI publication (2009) Solid waste management, Surendrakumar Northen Book Center (2009) Google , Wikipedia.	Google classroom

				Google classroom
				Google classroom
				Google classroom
				Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Tanvi .A. Raul DEPARTMENT: Chemistry

CLASS: F.Y.B.sc (CBZ-A & B) SEMESTER: I MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop the knowledge about chemical kinetics and liquid state.

To develop the understanding about order of reactions and different instruments used to measure different properties of liquids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I	**1.1 Chemical Kinetics** Rate of reaction, rate constant, measurement of reaction rates, order and molecularity of reaction, integrated rate equation of first and second order reactions (with equal initial concentration of reactants) (Numericals expected) Determination of order of reaction by (a) Integration method (b) Graphical method (c) Ostwald's isolation method (d) Half time method (Numericals expected)	8	Himalaya Publication F.Y.B.sc, Physical chemistry Textbook	Google meet and google classroom
	1.2 Liquid State Surface tension: Introduction, methods of determination of surface tension by drop number method	7		

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	(Numericals expected) Viscosity: Introduction, coefficient of viscosity, relative viscosity, specific viscosity, reduced viscosity, determination of viscosity by Ostwald viscometer (Numericals expected) Refractive index: Introduction, molar refraction and polarizability, determination of refractive index by Abbe's refractometer (Numerical s expected) Liquid crystals: Introduction, classification and structure of thermotropic phases (Nematic, smectic and cholesteric phases), applications of liquid crystals :			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI A. RAUL DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.sc (CBZ-A&B) SEMESTER: II MONTH: JANUARY TO MAY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

To develop knowledge about Ionic Equilibria, Solid state and Molecular spectroscopy.

To develop understanding about different types of electrolytes and electromagnetic waves.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I	**1.1 Ionic Equilibria** Strong, moderate and weak electrolytes, degree of ionization, factors affecting degree of ionization, ionization constant and ionic product of water, ionization of weak acids and bases, pH scale, common ion effect, dissociation constants of mono di and triprotic acid (exact treatment for monoprotic acid) Buffers: Introduction, types of buffers, derivation of Henderson equation for acidic and basic buffers, buffer action, buffer capacity (Numericals expected) **1.2 Molecular Spectroscopy** Electromagnetic radiation, electromagnetic spectrum, Planck's equation, interaction of	7 4	Himalaya Publication F.Y.B.sc, Physical chemistry Textbook	Google meet and google classroom

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	electromagnetic radiation with matter: Absorption, emission, scattering, flourescence, electronic, vibrational and rotational transitions Beer Lambert's law (Numericals expected) **1.3 Solid State Chemistry** Types of solids, crystal lattice, lattice points, unit cell, space lattice and lattice plane, laws of crystallography: Law of constancy of interfacial angle, law of symmetry and law of rational indices (Numericals expected)	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.sc (PC-CZ) SEMESTER: III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR:2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop knowledge about chemical kinetics and solutions.

To develop understanding about different theories based on chemical kinetics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I	**1.1 Chemical Kinetics- II** 1.1.1 Types of complex chemical reactions: Reversible or consecutive and parallel reactions. 1.1.2 Effect of temperature on rate of reaction , Arrhenius equations. 1.1.3 Theories of reaction rate : Collision theory, complex theory of biomolecular reactions etc.	7	Himalaya publication S.Y.B.sc, Physical chemistry textbook	Google meet and google classroom
	1.2 Solutions 1.2.1 thermodynamics of ideal solutions: Ideal solution and Raoul's law, deviations from Raoul's law- Non ideal solutions, vapour pressure composition and temperature, Lever rule etc.	8		

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	1.2.2 Partial miscibility of liquids: Critical solution temperature, effect of impurity on partial miscibility of liquids with respect to Phenol-water, Triethannolamine - water and nicotine - water systems. 1.2.3 Immiscibility of liquids- Principle of steam distillation, Nernst distribution law and its applications.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.sc (PC-CZ) SEMESTER: IV MONTH: JANUARY TO MAY ACADEMIC YEAR:2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop the knpwledge of solid state and catalysis.

To develop the understanding about state and catalysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I	**1.1 Solid state** 1.1.1 Recapitulation of laws of crystallography and types of crystals. 1.1.2 Characteristics of simple cubic, face centered cubic and body centered cubic systems. 1.1.3 Use of X-ray in study of crystal structure, bragg's equation. **1.2 Catalysis** 1.2.1 types of catalysis, catalytic activity, specificity and selectivity, inhibitors, catalyst poisoning and deactivation. 1.2.2 Mechanisms and kinetics and acid base catalyzed reaction. 1.2.3 Mechanisms and kinetics of enzyme catalyzed reaction. 1.2.4 Effect of particle size and efficiency of nano particles as catalyst.	7 8	Himalaya Publication S.Y.B.sc, Physical chemistry textbook	Google meet and google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART II SEMESTER: III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop knowledge of body fluids.

To develop understanding about analysis of different body fluids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit I	**Bioanalytical chemistry** **1.1 Body Fluids** 1.1.1 Composition of body fluids and detection of abnormal levels ofglucose, creatinine, uric acid in blood, protein, ketone bodies and bilirubin in urine leading to diagnosis of diseases.	5	General, organic and biological chemistry, H. Stephen Stoker, Cengage Learning.	Black board and chalk
	1.1.2 Physiological and nutritional significance of vitamins (watersoluble and fat soluble) and minerals.	5		
	1.1.3 Analytical techniques (including microbiological techniques) forvitamins.	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART II SEMESTER: III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop the knowledge about cosmetics.

To develop understanding about different elements present in cosmetics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit IV Pharmaceutical and Organic Analysis	**Cosmetic Analysis** **4.1 Cosmetics** Introduction. Evaluation of cosmetic materials, raw materials and additives. Formulation, standards and methods of analysis.	2	Google	Black board and chalk
	4.2 Deodorants and antiperspirant Al, Zn, Boric acid, chlorides, sulphates, hexachlorophene, methanamine, phenolsulphonates and urea.	3		
	4.3 Face powder Fats, fatty acids, boric acid, barium sulphate, Ca, Mg, Ti, Fe, oxides of Ti, Fe and Al.	3		
	4.4 Hair tonic 2,5-diaminotoluene, potassium borates, sodium perborate, pyrogallol, resorcinol, salicylic acid, dithioglycollic acid (inpermanent wavers).	3		

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	4.5 Creams and Lotions Types of emulsions, chloroform soluble materials, glycerol, pH emulsion, ash analysis, nonvolatile matter (IR spectroscopy) . **4.6 Lipsticks** General analysis, determination of -nonvolatile matter, lakes and fillers, trichloroethylene-acetone soluble contents.	2 2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART II SEMESTER: IV MONTH: JANUARY TO MAY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop knowledge of hyphenated techniques.

To develop understanding of hyphenated techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit IV	**Hyphenated Techniques** 4.1 concept of hyphenation, need for hyphenation, possible hyphenations. 4.2 Interfacing devices and applications of GC – MS, ICP -MS, GC -IR, Tandem Mass Spectrometry, LC – MS: HPLC-MS, CE-MS.	2 13	Principles of Instrumental Analysis, D. A. Skoog, F. J. Holler and J.A. Niemann 5 th Ed.	Google meet and google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART II SEMESTER: IV MONTH: JANUARY TO MAY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop knowledge of effluent treatment.

To develop understanding about different steps involved in effluent treatment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit I	**Effluent Treatment** 1.1 Effluent treatment plant general construction and process flow charts.	3	Water and water pollution (hand book) Ed., Seonard'l Ciacere, Vol I to IV, Marcel Dekker inc. N.Y.(1972)	Google meet and google classroom
	1.2Treatment and disposal of Sewage.	3		
	1.3. Effluent parameters for metallurgical industry.	2		
	1.4 Permissible limits for metal (example Cr, As, Pb, Cd etc) traces in the effluent.	2		
	1.5 Recovery of metals from effluent, modern methods – Electrodialysis,Electrodeposition and Ion Exchange etc.	3		
	1.6 Recycle and reuse of process and treated (effluent) water.	2		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIPAL DEEPAK DOSHI DEPARTMENT: CHEMISTRY CLASS: TYBSC (3UNITS) SEMESTER: VI

MONTH: JAN - FEB ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: learn the various rearrangement reactions. They will able to know the new concepts of carbohydrates and its various structures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3 UNIT 2 – Molecular Rearrangements & Carbohydrates	**2.1 MOLECULAR REARRANGEMENT** 2.1.1. Pinacol-Pinacolone Rearrangement 2.1.2. Beckmann Rearrangement	2	Himalaya Publishing House College Organic Chemistry T.Y.B.Sc.	Online mode – Powerpoint Presentation
	2.1.3. Favorski Rearrangement 2.1.4. Michael Addition, Wittig Reaction	2		
	2.2 CARBOHYDRATES 2.2.1. Introduction, classification, reducing & non reducing sugars, DL notation	1		
	2.2.2. Structures of monosaccharides: Fischer projection & Haworth formula, Interconversion, Chair conformation with stereochemistry of D-glucose	2		
	2.2.3. Stereoisomers of D-glucose 2.2.4. Mutarotation in D-glucose	2		
	2.2.5. Chain lengthening & shortening reactions 2.2.6. Reactions of D-glucose and D-fructose	4		
	2.2.7. Glycosides	1		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14 lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIPAL DEEPAK DOSHI DEPARTMENT: CHEMISTRY CLASS: TYBSC (3 UNITS) SEMESTER: VI

MONTH: FEB-MAR ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: learn new concepts of stereochemistry and reactions involving stereochemistry. The learners will know about Amino acids, Polypeptides and Proteins.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3 UNIT 1- Stereochemistry II & Amino Acids and	1.1 Stereochemistry II 1.1.1 Stereoselectivity and stereospecificity : Idea of enantioselectivity (ee) and diastereoselectivity (de) , Topicity : enantiotopic and diasterotopic atoms, groups and faces.	2	Himalaya Publishing House College Organic Chemistry T.Y.B.Sc.	Online mode – Powerpoint presentation
	1.1.2 Stereochemistry of – i) Substitution reactions : SNi (reaction of alcohol with thionyl chloride) ii) Elimination reactions: E2–Base induced dehydrohalogenation of 1-bromo-1,2- diphenylpropane. iii) Addition reactions to olefins: a) bromination (electrophilic anti addition) b) syn hydroxylation with OsO4 and KMnO4 c) epoxidation followed by hydrolysis.	4		

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	1.2 Amino acids & Proteins (5 L) 1.2.1 α-Amino acids: General Structure, configuration, and classification based on structure and nutrition. Properties: pH dependency of ionic structure, isoelectric point and zwitter ion. Methods of preparations: Strecker synthesis, amido malonate synthesis, Erlenmeyer azlactone synthesis.	3		
	1.2.2 Polypeptides and Proteins: Polypeptides: Peptide bond. Nomenclature and representation of polypeptides (di- and tri-peptides) with examples.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIPAL DEEPAK DOSHI DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ORGANIC CHEMISTRY) SEMESTER: IV

MONTH: JAN-FEB ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: learn the concept of LFER, Hammett equation and its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 1 UNIT 1-	1.1 Structural effects and reactivity: Linear free energy relationship (LFER) in determination of organic reaction mechanism, The Hammett equation, substituent constants,	6L	Modern physical chemistry, Eric V Anslyn, Dennis A.	Online mode – Powerpoint Presentation

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Physical Organic Chemistry	theories of substituent effects, interpretation of σ values, reaction constants ρ, Yukawa-Tsuno equation.		Dougherty, University science books,2006 22	
	1.2 Uses of Hammett equation, deviations from Hammett equation. Dual parameter correlations, Inductive substituent constants. The Taft model, σI and σR scales, steric parameters Es and β. Solvent effects, Okamoto-Brown equation, Swain-Scott equation, Edward and Ritchie correlations, Grunwald-Winstein equation, Dimroth's ET parameter, Solvatochromism Zscale, Spectroscopic Correlations, Thermodynamic Implications.	6L	Physical Organic Chemistry, N. S. Isaacs, ELBS/Longman	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIPAL DEEPAK DOSHI DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ORGANIC CHEMISTRY) SEMESTER: IV

MONTH: FEB-MAR ACADEMIC YEAR: 2021-2022

The learners will be able to : learn about natural products such as vitamins, antibiotics, insecticides and terpenoids and their synthesis

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3	2.1 Vitamins	5L	Organic Chemistry Natural Products Volume-II, O. P.	Offline mode – Chalk and Board method
UNIT 2-	2.2 Antibiotics	6L		

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Natural Products-IV	2.3 Naturally occurring Insecticides	2L	Agarwal, Krishna Prakashan, 2011.	
	2.4 Terpenoids	2L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VIPAL DEEPAK DOSHI DEPARTMENT: CHEMISTRY CLASS: M.Sc. (ORGANIC CHEMISTRY) SEMESTER: IV

MONTH: APRIL-MAY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: learn how to write a project report and scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 UNIT 3- Methods of scientific research and writing scientific papers	Reporting practical and project work Writing literature surveys and reviews	3L	Google.com Youtube	Offline mode – Chalk and board method
	Organizing a poster display Giving an oral presentation	3L		
	Writing Scientific Papers: Justification for scientific contributions	2L		
	bibliography, description of methods, conclusions	2L		

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	the need for illustration, style, publications of scientific work, writing ethics, avoiding plagiarism.	3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____AJITKUMAR INGLE_____DEPARTMENT: _____CHEMISTRY_____CLASS: _TYBSC_____ SEMESTER: _____Vth_____ MONTH: __september and october _____

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

1. *To study redox titration like Construction of the titration curves and calculation of E_{system} in aqueous medium , Theory of redox indicators, Criteria for selection of an indicator in details.*

2. *To study complexometric titrations in details like construction of titration curve, Use of EDTA as titrant and its standardisation, absolute and conditional formation constants of metal EDTA complexes,Selectivity of EDTA as a titrant,Factors enhancing selectivity with examples,Types of EDTA titrations,Metallochromic indicators, theory, examples and applications.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV UNIT 2 **CLASSICAL METHODS OF ANALYSIS (TITRIMETRY) (3 & 6 UNITS)**	**2.1 Redox Titrations (Numerical and word Problems are expected)** 2.1.1 Introduction 2.1.2 Construction of the titration curves and calculation of E_{system}	08L	Saujanya publicationof analytical chemistry,sheth publication,Himalaya publication textbook,	Online video lecture on Google meet

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	in *aqueous medium in case of:* *(1) One electron system* *(2) Multielectron system* *2.1.3 Theory of redox indicators, Criteria for selection of an indicator* *Use of diphenyl amine and ferroin as redox indicators*			
	2.2 Complexometric Titrations *2.2.1 Introduction, construction of titration curve* *2.2.2 Use of EDTA as titrant and its standardisation, absolute and* *conditional formation constants of metal EDTA complexes,* *Selectivity of EDTA as a titrant.* *Factors enhancing selectivity with examples.* *Advantages and limitations of EDTA as a titrant.* *2.2.3 Types of EDTA titrations.*	*07L*	*Same as above*	*Same as above*

	2.2.4 Metallochromic indicators, theory, examples and applications			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____AJITKUMAR INGLE_____DEPARTMENT: _____CHEMISTRY___

__CLASS: ___TYBSC_____ SEMESTER: _VTH _____ MONTH: __november December___

ACADEMIC YEAR: _2020-21___

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To study solvent extraction in detail like Factors affecting extraction, Concept of $[pH]_{1/2}$ and its significance, Craig's counter current

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extraction.

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2) To study HPLC instrumentation, working and applications along with detectors.

3) To study HPTLC instrumentation, working and applications in details.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV UNIT IV **METHODS OF SEPARATION – I (6 UNITS)**	**4.1 Solvent Extraction** 4.1.1 Factors affecting extraction: Chelation, Ion pair formation and Solvation 4.1.2 Graph of percent extraction versus pH. Concept of $[pH]_{1/2}$ and its significance (derivation not expected) 4.1.3 Craig's counter current extraction: Principle, apparatus and applications 4.1.4 Solid phase extraction: Principle, process and applications with special reference to water and industrial effluent analysis.	06L	Saujanya publication,sheth publication,Himalaya publication textbook of analytical chemistry,	Online video lecture on Google meet

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	4.1.5 Comparison of solid phase extraction and solvent extraction.			
	4.2 High Performance Liquid chromatography (HPLC) *4.2.1 Introduction and Principle* *Instrumentation- components with their significance: Solvent* *Reservoir, Degassing system, Pumps-(reciprocating pumps,* *screw driven- syringe type pumps, pneumatic pumps,* *advantages and disadvantages of each pump), Precolumn,* *Sample injection system, HPLC Columns, Detectors(UV –* *Visible detector, Refractive index detector)* *4.2.2 Qualitative and Quantitative Applications of HPLC*	*06L*	*SAME AS ABOVE*	*SAME AS ABOVE*

	4.3 High Performance Thin Layer Chromatography (HPTLC) *4.3.1 Introduction and Principle*	*03L*	*SAME AS ABOVE*	*SAME AS ABOVE*

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	Stationary phase, Sample application and mobile phase *4.3.2 Detectors* *a) Scanning densitometer- Components.* *Types of densitometer- Single beam and Double beam* *b) Fluorometric Detector* *4.3.3 Advantages, disadvantages and applications* *4.3.4 Comparison of TLC and HPTLC*			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: August to December 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to learn Chemistry of inner transition elements with respect to their properties,uses and separation technique like ion exchange and solvent extraction technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCH 502(paper2) Unit 3	3.1 Introduction:: Position in periodic table and electronic configuration of lanthanides and actinides . 3.2 Chemistry of lanthanides with reference to i) lanthanide contraction ii) Oxidation States iii) ability to form complexes iv) magnetic and spectral properties. 3.3 Occurrence , extraction and separation of lanthanides by i) ion exchange method ii) solvent extraction method , applications of lanthanides	15	Himalaya publication textbook ,Sheth Publication textbook	Online mode(Google meet)

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USCHACDD 501 Applied component(Drugs and dyes)) unit 1 and 2	1.1 General Introduction to Drugs 1.1.1 definition of a drug , sources of a drugs 1.1.2 nomenclature of Drugs : generic name,brand name , systematic name. 1.1.3 definition of following terms pharmacon,pharmacology,pharmacophore,half life efficiency,LD50,ED50,GI50,theraputic index. 1.1.4 brief idea of the following terms: receptors,agonists,drug receptor interaction,drug potency,bioavalibility,drug toxicity,drug addiction,spurious drugs,misbrsnded Drugs,adulterated drugs , pharmacopeia. 1.2 Routes of Drug administration and dosage forms. 1.2.1 Oral and parenteral Routes with advantages and disadvantages 1.2.2Formulations and combination formulation,different dosage forms. 1.3 Pharmacodynamic agents 1.3.1 CNS drugs : Classification based on pharmacological actions :CNS depressant and CNS stimulants,concept of sedation and hypnosis , anaestesia 2.1 Analgesic,antipyretics and Anti -inflammatory drugs. 2.1.1 Analgesics and antipyretics 2.1.2 Anti inflammatory drugs 2.2 Antihistamine drugs. 2.3 Cardiovascular Drugs 2.4 Antidiabetic drugs 2.5 Antiparkinsonism drugs 2.6 Drugs for respiratory system	15 15	Himalaya publication textbook,Sheth Publication textbook	Online mode(Google meet)

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 each

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: 1 MONTH: January to April 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : learn chacterisation of coordination compounds by using various techniques

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCH102 (paper 2) unit 4	4.1 Formation,thermal studies,conductivity measurements,electonic,spectral and magnetic measurements,IR,NMRand ESR spectroscopic methods. 4.2 Spectral calculations using Tanabe Sugano diagram,calculations of electronic parameters such as delta,B,C nephelauxatic ratio	15	D.Banerjea,Coordination chemistry. F.A Cotton ,G,Wilkinson , Advanced Inorganic chemistry,6th edition,Wiley	Online mode(Google meet)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry
CLASS: T.Y.B.Sc. Semester: VI MONTH: January To April 2021 Academic year :2020-21

Learners will be able to : To learn molecular orbital theory For coordination compounds.p properties of coordination compounds,stability of metal complexes,reactivity of metal complexes and electronic spectra of metal complexes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCH602(PAPER 2) Unit2	2.1 identification of the central metal orbitals and their symmetry suitable for formation of Sigma bonds with ligand orbitals. 2.2construction of LGO. 2.3constrction of Sigma molecular orbitals of ML6 complexes , effect of pi bonding on complexes. 2.4.Electronic spectra. 2.4.1 origin of electronic spectra. 2.4.2types of electronic transition in coordination compounds 2.4.3 selection rules. 2.4.4electronic configuration and electronic micro states. 2.4.5 determination of terms for P2 and d1 configuration	15	Himalaya publication textbook,Sheth publication textbook	Online mode(Google meet)

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TOTAL NUMBER OF LECTURES ALLOCAT esED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry

CLASS: T.Y.B.Sc. SEMESTER: VI MONTH: January to April 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : learn about chemotherapeutic agents,nanoparticles in medicinal chemistry and also Drugs and environmental aspects

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCHACDD 601(Drugs and dyes) Unit 5 and 6	5.1 Drugs discovery,design and development. 5.1.1Discovery of lead compound 5.1.2medicinal properties of compounds. 5.1.3 Development of Drug. 5.1.4 structure modification to increase potency. 5.1.5computer assisted drug design. 5.2 Drug metabolism. 5.3Chemotherapeutic agents. 5.3.1 antibiotics and antivirals. 5.3.2 Antimalarials. 5.3.3anthelmintics and antifungal agents. 6.1 antiamoebic. Drugs.	15	Himalaya publication textbook and Sheth Publication textbook	Online mode (Google meet)

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	6.2 antitubercular and antileprotic Drugs. 6.3anti-neoplastic Drugs 6.4 anti-HIV drugs 6.5Drugs intermediate: synthesis and uses. 6.nano particles in medicinal chemistry. 6.7 drugs and environmental aspects	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 each

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: II MONTH: May to August 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : learn about Organometallic chemistry of transition metals

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCH202(unit2)	2.1Eighteen and sixteen electron rule and electron counting with examples. 2.2preparation and properties of following compounds. A)alkyl and aryl derivatives of Pd and Pt complexes. B) carbenes and carbyenes of Cr,Mo and W. C)alkene derivatives of Pd and Pt. D) alkyne derivatives of Pd and Pt. E)allyl derivatives of Ni. F) sandwich compounds of Fe,Cr and half sandwich compounds of Cr and Mo. 2.3 Structure and bonding on the basis of VBT and MOT of organometallic compounds	15	R.C.Mehrotra and A.singh,organometalic chemistry,A unified approach,2nd edition	Online mode (Google meet)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: MSc. –I SEMESTER: I MONTH: JANUARY/FEBRUARY ACADEMIC YEAR: 2020 -21

LEARNING OBJECTIVE/S: To study quantum chemistry
The learners will be able to: Understand the concept of quantum chemistry and to solve Numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – II QUANTUM CHEMISTRY	Introduction, Schrodinger wave equation, wave function, properties, Normalisation, orthogonality	3L	R. K. Prasad	Online
	Operators and algebra, Hermitian operator, Hamiltonian operator, Eigen functions, postulates of quantum mechanics	4L	R. K. Prasad	Online
	Applications of quantum mechanics for free particle, one dimension , two dimension and three dimension box	4L	R. K. Prasad	Online
	Harmonic oscillator, Hermite polynomials, recursion formula	3L	R. K. Prasad	Online
	Numericals	1L	R. K. Prasad	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: MSc. –I SEMESTER: I MONTH: FEBRUARY/MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To study elector-chemistry
The learners will be able to: classify chemical cells and derived the expressions for it and solve numericals

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – IV ELECTRO-CHEMISTRY	Introduction, Debye-Huckel theory, limiting law, its extension	3L	S. Glasstone	Online
	Cunductance, relaxation effect, Onsager equation, its validity, Debye-Falkhagen and Wein effect	4L	S. Glasstone	Online
	Batteries	3L	S. Glasstone	Online
	Bio-eelctrochemistry	3L	S. Glasstone	Online
	Numericals	2L	S. Glasstone	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: MSc. –I SEMESTER: I I MONTH: APRIL ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To study quantum chemistry
The learners will be able to: Understand the concept of quantum chemistry and to solve Numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – II QUANTUM CHEMISTRY	Rigid rotar, Spherical coordinates, theta equation, spherical harmonics	3L	R. K. Prasad	Online
	Hydogen atom, separation of energy, quantum numbers, probability density functions	4L	R. K. Prasad	Online
	Application of Schrodinger equation, need for approximate solution, derivation	3L	R. K. Prasad	Online
	Huckel molecular orbitals	3L	R. K. Prasad	Online
	Numericals	2L	R. K. Prasad	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: MSc. –I SEMESTER: I I MONTH: MAY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To study structures of solids and phase equillibria
The learners will be able to: draw structures of solids and solve numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – IV SOLID STATE CHEMISTRY AND PHASE EQUILLIBRIA	Solid state chemistry	1L	S. Glasstone	Online
	Structure, types of defects and its stoichiometry	4L	H. V. keer	Online
	Phase equillibria	4L	H. V. keer	Online
	Two component system	3L	H. V. keer	Online
	Three component system	3L	H. V. keer	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

SIGNATURE OF THE STAFF Dchorghe

SIGNATURE OF THE H.O.D.

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: T.Y.BSc. SEMESTER: V MONTH: SEPTEMBER/OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To study properties of solid and liquid
The learners will be able to: Write derivations of colligative properties and solve numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – II CHEMICAL THERMODYNAMICS AND CHEMICAL KINETICS	Colligative properties : vapour pressure, measurement – static and dynamic method	2L	Ira Levine	Online
	Elevation in boiling point, depression in freezing point, and numericals	5L	Ira Levine	Online
	Thermodynamic derivation of Van't hoff equation, measurement, reverse osmosis, numericals	3L	Ira Levine	Online
	Collision theory for unimolecular and bimolecular reactions and numericals	3L	K. Laider	Online
	Classificaton of reactions , numericals	2L	K. Laider	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: T.Y.BSc. SEMESTER: V MONTH: NOVEMBER/DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To study nuclear chemistry.
The learners will be able to: Explain principle, construction and working of nuclear reactors and counters, solve numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – III NUCLEAR CHEMISTRY	Basic terms, Radioactive constants, units, numericals	3L	Ira Levine	Online
	Detection and measurement of radioactivity, counters, behaviour of ion pairs	3L	Ira Levine	Online
	Applications of use of radioisotopes as tracers, Nuclear reactions, threshold energy, Q- value, Numericals	4L	Ira Levine	Online
	Fission process, Nuclear reactors, fusion process	3L	Ira Levine	Online
	Numericals	2L	Ira Levine	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: T.Y.BSc. SEMESTER: VI MONTH: JANUARY/FEBRUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To study electrochemistry.
The learners will be able to : classify chemical cells and derived the expressions for it and solve numericals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – I ELECTRO CHEMISTRY	Introduction, Activity and activity coefficient, Debye-Huckel limiting law, Numericals	4L	S. Glasstone	Online
	Classification of electrochemical cells, derivation and explanation of each cell, Numericals	4L	S. Glasstone	Online
	Polarization concept	3L	S. Glasstone	Online
	Decomposition potential and overvoltage	2L	S. Glasstone	Online
	Numericals	2L	S. Glasstone	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: T.Y.BSc. SEMESTER: VI MONTH: MARCH/APRIL ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To study quantum chemistry
The learners will be able to: Understand the concept of quantum chemistry and to solve Numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – III BASICS OF QUANTUM CHEMISTRY	Introduction, basics of quantum chemistry, black body radiation, Compton effect	3L	R.K.Prasad	Online
	Quantum mechanics, postulates ,Progressive and standing waves, interpretation and properties of wave function	4L	R.K.Prasad	Online
	State function and significance, operator concept, algebra, eigen value, Numericals	3L	R.K.Prasad	Online
	Renewable energy sources, solar energy, Silicon solar cell	3L	Ira Levine	Online
	Hydrogen: fuel of the future, production of hydrogen fuel, advantages.	2L	Ira Levine	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dipti Gharat, DEPARTMENT:Chemistry , CLASS: T. Y. Bsc, SEMESTER: _V_and VI_ MONTH:

ACADEMIC YEAR: _____2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Learning objectives are statements that define the expected goal of a curriculum, course, lesson or activity in terms of demonstrable skills or knowledge that will be acquired by a student as a result of instruction._____

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II SOLID STATE CHEMISTRY	Sem V Structures of Solids 2.2.1 Explanation of terms viz.crystal lattice, lattice point, unit cell and lattice constants. 2.1.2 Closest packing of rigid spheres (hcp,ccp), packing density in simple cubic, bcc and fcc lattices. Relationship between density, radius of unit cell and lattice parameters. 2.1.3 Stoichiometric Point defects in solids (discussion on	11	Solid State Chemistry and its Applications" by A R West Google, Himalaya and sheth publication text book, you tube	Google classroom

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	Frenkel and Schottky defects expected).		video, e-books	
	2.2 Superconductivity. 2.2.1 Discovery of superconductivity. 2.2.2 Explanation of terms like superconductivity, transition temperature, Meissner effect. 2.2.3 Different types of super conductors viz.conventional superconductors, alkali metal fullerides, high temperature super conductors. 2.2.4 Brief application of superconductors.	04	Puri sharma kalia, puri sharma pathania	
	Sem VI			
Paper II Unit III ORGANOMETALLIC CHEMISTRY	3.1 Organometallic Compounds of main group metal 3.1.1General characteristics of various types of organometallic compounds, viz.ionic, □-bonded and electron deficient compounds. 3.1.2 General synthetic methods of organometallic compounds : (i) Oxidative-addition, (ii)Metal-metal exchange(transmetallation), (iii) Carbanion-halide exchange, (iv) Metal-hydrogen exchange(metallation) and (v) Methyleneinsertion reactions. 3.1.3 Some chemical reactions of organometallic compounds:(i) Reactions with oxygen and halogens, (ii) Alkylation and arylation reactions (iii) Reactions with protic reagents, (iv) Redistribution reactions and (v) Complex	06		

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	formation reactions.			
	3.2 Metallocenes Introduction, Ferrocene : Synthesis, properties, structure and bonding on the basis of VBT. 3.3 Catalysis 3.3.1 Comparison between homogeneous and heterogeneous catalysis 3.3.2 Basic steps involved in homogeneous catalysis 3.3.3 Mechanism of Wilkinson's catalyst in hydrogenation of alkenes.	09		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Dipti Gharat _____ DEPARTMENT:Chemistry ____ CLASS: F. Y. Bsc SEMESTER: I and II MONTH:

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Learning objectives are statements that define the expected goal of a curriculum, course, lesson or activity in terms of demonstrable skills or knowledge that will be acquired by a student as a result of instruction._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II Comparative chemistry of Main Group Elements	Sem I			Google classroom
	Metallic and non-metallic nature, oxidation states, electronegativity, anomalous behaviour of second period elements, allotropy, catenation, diagonal relationship.Comparative chemistry of carbides, nitrides, oxides and hydroxides of group I and group II elements. Some important compounds- NaHCO3, Na2CO3, NaCl, NaOH, CaO, CaCO3;	15	Himalaya and sheth publication book, Google, you tube video, e-books	

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	oxides of carbon, oxides and oxyacids of sulphur and nitrogen with respect to environmental aspects.			
Sem II Unit II Chemical Bond and Reactivity	Sem II			Google classroom
	2.1.Types of chemical bond, comparison between ionic and covalent bonds, polarizability (Fajan's Rule), shapes of molecules, Lewis dot structure, Sidgwick Powell Theory, basic VSEPR theory for ABn type molecules with and without lone pair of electrons, isoelectronic principles, applications and limitations of VSEPR theory.	07		
	2.2: Oxidation Reduction Chemistry: a) Reduction potentials b) Redox potentials: half reactions; balancing redox equations.c) Redox stability in wateri) Latimer and Frost Diagramsii) pH dependence of redox potentials.d) Applications of redox chemistry i) Extraction of elements: (example: isolation of copper by auto reduction)ii) Redox reagents in Volumetric analysis: a) I2; b) KMnO4iii) Titration curves:i) single electron systems (example Ce(IV) against Fe(II)); and ii) Multi electron systems as in KMnO4 against Fe(II))	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. SHEETAL R. POWAR** DEPARTMENT: CHEMISTRY CLASS: FYBSc

SEMESTER: I MONTH: August to December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

i. Understand the basics of Organic Chemistry

ii. Understand and be well versed with the nomenclature of various functional groups

iii. Learn bonding, formation and reactions of organic compounds

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I U-III Basics of Organic Chemistry	Classification and Nomenclature of Organic Compounds: Review of basic rules of IUPAC nomenclature. Nomenclature of mono and bi-functional aliphatic compounds on the basis of priority order of the following classes of compounds: alkanes, alkenes, alkynes, haloalkanes, alcohols, ethers, aldehydes, ketones, carboxylic acids, carboxylic acid derivatives (acid halides, esters, anhydrides, amides), nitro compounds, nitriles and amines; including their cyclic analogues.	(5L)	Morrison and Boyd Organic Chemistry Mc Murry, J.E. Fundamentals of Organic Chemistry	Chalk and Board
	Bonding and Structure of organic compounds: Hybridization: sp3, sp2, sp hybridization of carbon and nitrogen;	(4L)		Chalk and Board

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	sp3 and sp2 hybridizations of oxygen in Organic compounds (alcohol, ether, aldehyde, ketone, carboxylic acid, ester, cyanide, amine and amide) Overlap of atomic orbitals: Overlaps of atomic orbitals to form sigma and pi bonds, shapes of organic molecules. Shapes of molecules; Influence of hybridization on bond properties (as applicable to ethane, ethene, ethyne)			
	Fundamentals of organic reaction mechanism: Electronic Effects: Inductive, electromeric, resonance and mesomeric effects, hyperconjugation and their applications; Dipole moment; Organic acids and bases; their relative strengths. Bond fission: Homolytic and Heterolytic fission with suitable examples. Electrophiles and Nucleophiles; Nucleophilicity and basicity; Types (primary, secondary, tertiary, allyl, benzyl), shape and their relative stability of reactive intermediates: Carbocations, Carbanions and Free radicals. Introduction to types of organic reactions: Addition, Elimination and Substitution reaction.	(6L)		Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAME OF THE STAFF: **Dr. SHEETAL R. POWAR** DEPARTMENT: CHEMISTRY CLASS: FYBSc

SEMESTER: II MONTH: January to May ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

iv. Understand the basics of Organic Chemistry

v. Learn the bonding and reactions of aliphatic compounds.

vi. Learn the mechanisms of certain basic reactions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I U-III Chemistry of Aliphatic Hydrocarbons	3.1 Carbon-Carbon sigma bonds: Chemistry of alkanes: Formation of alkanes, Wurtz Reaction, Wurtz-Fittig Reactions, Free radical substitutions: Halogenation - relative reactivity and selectivity.	(3L))	Morrison and Boyd Organic Chemistry Mc Murry, J.E. Fundamentals of Organic Chemistry	Chalk and Board
	3.2 Carbon-Carbon pi bonds: Formation of alkenes and alkynes by elimination reactions: Mechanism of E1, E2, E1cb reactions. Saytzeff and Hofmann eliminations. Reactions of alkenes: Electrophilic additions their	(12L)		Chalk and Board

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	mechanisms (Markownikoff/ Anti Markownikoff addition), Mechanism of oxymercuration-demercuration, hydroboration-oxidation, ozonolysis, reduction(catalytic and chemical), syn and anti-hydroxylation (oxidation). 1, 2-and 1, 4- addition reactions in conjugated dienes and, Diels-Alder reaction; Allylic and benzylic bromination using N-bromosuccinimide and mechanism, e.g. propene, 1-butene, toluene, ethylbenzene. Reactions of alkynes: Acidity, Electrophilic and Nucleophilic additions. Hydration to form carbonyl compounds, Alkylation of terminal alkynes.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (Sem V and Sem VI 2020-21)

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NAME OF THE STAFF: **Dr. SHEETAL R. POWAR** DEPARTMENT: CHEMISTRY CLASS: TYBSc

SEMESTER: V MONTH: July to September ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

vii. Understand the mechanisms of important reactions

viii. Understand the important concept of green chemistry and apply it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III (Organic Chemistry) Unit II 2.1 Stereochemistry I	2.1.1 Molecular chirality and elements of symmetry: Mirror plane symmetry, inversion center, roation -reflection (alternating) axis. 2.1.2 Chirality of compounds without a stereo genic center: cummulenes and biphenyls.	(5 L)	Stereochemistry P.S.Kalsi	Power point (Online)
2.2 Agrochemicals	2.2.1 General introduction & scope, meaning & examples of insecticides, herbicides, fungicide, rodenticide, pesticides, plant growth regulators. 2.2.2 Advantages & disadvantages of agrochemicals 2.2.3 Synthesis & application of IAA (Indole Acetic Acid) & Endosulphan, 2.2.4 Bio pesticides – Neem oil & Karanj oil.	(4 L)	Agrochemicals and pesticides: A.Jadhav and T.V.Sathe	Power point (Online)
2.3 Heterocyclic chemistry:	2.3.1 Reactivity of pyridine-N-oxide, quinoline and iso-quionoline. 2.3.2 Preparation of pyridine-N-oxide, quinoline (Skraup synthesis) and iso-quinoline (BischlerNapieralski synthesis). 2.3.3 Reactions of	(6 L)	Heterocyclic Chemistry, John A. Joule and Keith	Power point (Online)

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	pyridine-N-oxide: halogenation, nitration and reaction with NaNH2/liq.NH3, n-BuLi. 2.3.4 Reactions of quinoline and isoquinoline; oxidation,reduction,nitration,halogenation and reaction with NaNH2/liq.NH3,n-BuLi.		Mills, Wiley	
Unit III 3.1 IUPAC	IUPAC Systematic nomenclature of the following classes of compounds (including compounds upto two substituents / functional groups): 3.1.1 Bicyclic compounds – spiro, fused and bridged (upto 11 carbon atoms) – saturated and unsaturated compounds. 3.1.2 Biphenyls 3.1.3 Cummulenes with upto 3 double bonds 3.1.4 Quinolines and isoquinolines.	(5 L)	IUPAC nomenclature by S.C.Pal.	Power point (Online)
3.2 Synthesis of organic compounds	3.2.1 Introduction: Linear and convergent synthesis, criteria for an ideal synthesis, concept of chemo selectivity and regioselectivity with examples, calculation of yields 3.2.2 Multicomponent Synthesis: Mannich reaction and Biginelli reaction. Synthesis with examples (no mechanism) 3.2.3 Green chemistry and synthesis: Introduction: Twelve principles of green chemistry, concept of atom economy and E-factor, calculations and their significance, numerical examples. i) Green reagents: dimethyl carbonate. ii) Green starting materials : D-glucose iii) Green solvents : supercritical CO2 iv) Green catalysts: Bio catalysts. 3.2.4 Planning of organic synthesis i) synthesis of nitroanilines. (o&p) ii) synthesis of halobenzoic acid.(o&p) iii) Alcohols (primary / secondary / tertiary) using Grignard reagents. iv) Alkanes (using organo lithium compounds)	(10L)	Green chemistry: V. K. Ahluwalia	Power point (Online)

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L each

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. SHEETAL R. POWAR** DEPARTMENT: CHEMISTRY CLASS: TYBSc

SEMESTER: VI MONTH: Nov to February ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

i. Understand the mechanisms of important reactions
ii. Understand the concept of stereochemistry chemistry
iii. Understand the concept of spectroscopy and interpret spectra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III (Organic	1.1.1 Stereoselectivity and stereospecificity: Idea of enantioselectivity (ee) and diastereoselectivity (de) , Topicity : enantiotopic and	(10 L)	Stereochemistry	Power point (Online)

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Chemistry) Unit I 1.1 Stereochemistry II	diasterotopic atoms, groups and faces. 1.1.2 Stereochemistry of – i) Substitution reactions : SNi (reaction of alcohol with thionyl chloride) ii) Elimination reactions: E2–Base induced dehydrohalogenation of 1-bromo-1,2- diphenylpropane. iii) Addition reactions to olefins: a) bromination (electrophilic anti addition) b) syn hydroxylation with OsO4 and KMnO4 c) epoxidation followed by hydrolysis. References:		by Kalsi	
1.2 Amino acids & Proteins	1.2.1 α-Amino acids: General Structure, configuration, and classification based on structure and nutrition. Properties: pH dependency of ionic structure, isoelectric point and zwitter ion. Methods of preparations: Strecker synthesis, Gabriel phthalamide synthesis. 1.2.2 Polypeptides and Proteins: nature of peptide bond. Nomenclature and representation of polypeptides (di-and tri-peptides) with examples Merrifield solid phase polypeptide synthesis. .Protiens:general idea of primary,secondary,tertiary & quaternary structure	(5 L)	Name Reactions – Jie Jack Li, 4th Edition, Springer Pub	Power point (Online)
Unit III 3.1 Spectroscopy II	3.1.1 IR Spectroscopy: Basic theory, nature of IR spectrum, selection rule, fingerprint region. 3.1.2 PMR Spectroscopy: Basic theory of PMR, nature of PMR spectrum, chemical shift (δ unit), standard for PMR, solvents used. Factors affecting chemical shift: (1) inductive effect (2) anisotropic effect (with reference to C=C, C≡C, C=O and benzene ring). Spin- spin coupling and coupling constant. application of deuterium exchange technique. application of PMR in structure determination. 3.1.3 Spectral characteristics of following classes of organic compounds, including benzene and monosubstituted benzenes, with respect to IR and PMR: (1) alkanes (2) alkenes (3) alkynes (4) haloalkanes (5) alcohols (6) carbonyl compounds (7) ethers (8) amines (broad regions characteristic of different groups are expected).	(10 L)	Organic spectroscopy Jag Mohan	Power point (Online)

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	Problems of structure elucidation of simple organic compounds using individual or combined use of UV-Vis, IR, Mass and NMR spectroscopic technique are expected.			
3.2 Nucleic Acids	Controlled hydrolysis of nucleic acids. sugars and bases in nucleic acids. Structures of nucleosides and nucleotides in DNA and RNA. Structures of nucleic acids (DNA and RNA) including base pairing.	(5 L)	Organic chemistry Morrison and Boyd S.H.Pine, organic chemistry 4th edition. McGraw Hill	Power point (Online)

TOTAL NUMBER OF LECTURES ALLOCATED TO UNIT : 15 L EACH

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: F.Y.B.Sc. SEMESTER: I MONTH: AUGUST ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Revise basic rules of IUPAC nomenclature, name mono and bi-functional aliphatic compounds of various classes.
2. Hybridization, shapes of organic molecules.
3. Fundamentals of organic reaction mechanism, electronic effects, bond fission, types, shapes and relative stability of reactive intermediates like carbocation, carbanions and free radicals, introduction to various types of organic reactions as addition, elimination and substitution reaction.
4. Study Rutherford's atomic model, Bohr's theory, simple principles of quantum mechanics, atomic orbitals, Aufbau principle.
5. Detailed study of the periodic table.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III- Basics of Organic Chemistry	Unit 3.1- Classification and Nomenclature of Organic Compounds	5 L	College Organic Chemistry, Himalaya publication	Power point presentation-Google meet
	Unit 3.2- Bonding and Structure of Organic Compounds	4 L	College Organic Chemistry, Himalaya publication	Power point presentation-Google meet

G.V. Gadre

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Unit 3.3- Fundamentals of Organic Reaction Mechanism	6 L	College Organic Chemistry, Himalaya publication	Power point presentation-Google meet
Paper I, Unit II	Unit 2.1- Atomic Structure	10 L	College Inorganic Chemistry, Himalaya publication	Power point presentation-Google meet
	Unit 2.2- Periodic Table and Periodicity	5 L	College Inorganic Chemistry, Himalaya publication	Power point presentation-Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: F.Y.B.Sc. SEMESTER: II MONTH: JANUARY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study chemistry of alkanes- synthesis and reactions.
2. Alkenes- synthesis, reactions and their mechanism like Markownikoff and anti Markownikoff addition, ozonolysis, reduction, syn and anti-hydroxylation, Diels-Alder reaction.
3. Alkynes - formation by elimination reaction and electrophilic and nucleophilic addition reactions.
4. Learn testing of gaseous evolutes, role of reagent papers in qualitative analysis, precipitation equilibria.
5. Arrhenius theory, Lowry-Bronsted theory, Lewis concept, hard and soft acids and bases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III-Chemistry of Aliphatic Hydrocarbons	Unit 3.1- Carbon-Carbon sigma bonds	3 L	College Organic Chemistry, Himalaya publication	Power point presentation-Google meet
	Unit 3.2- Carbon-Carbon pi bonds	12 L	College Organic Chemistry, Himalaya publication	Power point presentation-Google meet

G.V. Gadre

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II	Unit 2.1- Concept of Qualitative Analysis	7 L	College Inorganic Chemistry, Himalaya publication	Power point presentation-Google meet
	Unit 2.2- Acid-Base Theories	8 L	College Inorganic Chemistry, Himalaya publication	Power point presentation-Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

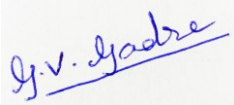
CLASS: M.Sc. SEMESTER: I MONTH: JANUARY/FEBRUARY 21 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Aliphatic nucleophilic substitution reactions: S_N1, S_N2, S_N^i reactions, SET mechanism, S_N reactions involving neighboring group participation (NGP), Aromatic nucleophilic substitution: S_NAr, benzyne mechanism, ipso, cine, tele, vicarious substitution, Ester hydrolysis.

2. Aromaticity: Frost-Musulin diagram, Huckel's (4n+2) and 4n rules, aromatic and antiaromatic compounds upto 18 carbon atoms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit II- Nucleophilic substitution reactions and Aromaticity.	Unit 2.1- Nucleophilic substitution reactions	9 L	Advanced Organic Chemistry, F. A. Carey and R. J. Sundberg.	Power point presentation-Google meet
	Unit 2.2- Aromaticity	6 L	Advanced Organic Chemistry: Reactions and mechanism, L.G. Wade, Jr., Maya Shankar Singh.	Power point presentation-Google meet



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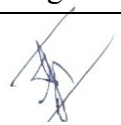

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: II MONTH: APRIL/MAY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study Proton magnetic resonance spectroscopy: Principle, chemical shift, spin-spin coupling, coupling constant, karplus equation.
2. ^{13}C NMR spectroscopy: Theory and comparison with proton NMR, proton coupled and decoupled spectra, off-resonance decoupling.
3. Mass spectrometry: Molecular ion peak, base peak, isotopic abundance, Nitrogen rule, fragmentation pattern in various classes of organic compounds.
4. Structure determination involving individual or combined use of the above spectral techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit IV- NMR spectroscopy and Mass spectrometry	Unit 4.1- Proton magnetic resonance spectroscopy	8 L	Introduction to Spectroscopy, Donald L. Pavia.	Power point presentation-Google meet
	Unit 4.2- ^{13}C NMR spectroscopy	3 L	Organic Spectroscopy-Principles and Applications, Jagmohan.	Power point presentation-Google meet

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Unit 4.3- Mass spectrometry	4 L	Spectroscopy of Organic Compounds, P.S. Kalsi.	Power point presentation-Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

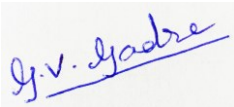
NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: III MONTH: AUGUST ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study Carbohydrates: structure elucidation of Lactose, structural features and applications of various carbohydrates.
2. Natural pigments: structural features and biological importance of various classes of natural pigments like carotenoids, flavones, quinones, porphyrins.
3. Insect pheromones: types of pheromones, synthesis of some pheromones.
4. Alkaloids: occurrence and importance of morphine, atropine, coniine.
5. Synthesis of some natural products.
6. Study of Prostaglandins, Lipids, Insect growth regulators, Plant growth regulators.
7. Drug discovery, design and development: Important topics of medicinal chemistry like Receptor, Therapeutic index, Drug assay. Basic pharmacokinetics as ADME properties.
8. Discovery of Penicillin and Librium without lead, identification of pharmacophore, functional group modification, structure activity relationship (SAR)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III- Unit I-	Unit 1.1- Carbohydrates	5 L	Organic Chemistry	Power point presentation-Google meet



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Natural Products-I	Unit 1.2- Natural pigments	5 L	Natural Products Volume-II, O. P. Agarwal.	Power point presentation-Google meet
	Unit 1.3- Insect pheromones	3 L		Power point presentation-Google meet
	Unit 1.4- Alkaloids	2 L		Power point presentation-Google meet
Paper III- Unit II- Natural Products-II	Unit 2.1- Multi-step synthesis of natural products	8 L	Natural products chemistry and applications, Sujata V. Bhat, B.A. Nagasampagi.	Power point presentation-Google meet
	Unit 2.2- Prostaglandins	2 L		Power point presentation-Google meet
	Unit 2.3- Lipids	2 L		Power point presentation-Google meet
	Unit 2.4- Insect growth regulators	1 L		Power point presentation-Google meet
	Unit 2.5- Plant growth regulators	2 L		Power point presentation-Google meet
Paper IV- Unit I- Drug discovery, design and development	Unit 1.1	7 L	Medicinal chemistry, D.Sriram and P. Yogeeswari Principles of medicinal chemistry (Vol. I and II)- S. S. Kadam, K. R. Mahadik.	Power point presentation-Google meet
	Unit 1.2	8 L	Introduction to Medicinal chemistry by	Power point presentation-Google meet

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			Graham Patrick	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

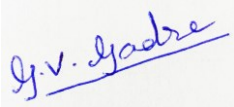
NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study Steroids: Biological role, important structural and stereochemical features of different class of steroids, synthesis of 16-DPA, synthesis of various male and female hormones from 16 DPA.
2. Heterocyclic compounds: Nomenclature of bicyclic/tricyclic heterocycles by common, Hantzsch-Widman and replacement nomenclature method, nucleophilic ring opening reactions of some heterocyclic compounds, structure, reactivity, synthesis and reactions of some fused heterocycles.
3. Research methodology: Reporting practical and project work, organising poster display, giving oral presentation, writing scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
Paper III- Unit I- Natural Products-III	Unit 1.1- Steroids	5 L	Organic Chemistry Natural Products	Power point presentation-Google meet
	Unit 1.2	2 L		Power point presentation-Google meet



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	Unit 1.3	5 L	Volume-II, O. P. Agarwal.	Power point presentation-Google meet
	Unit 1.4	3 L	Natural products chemistry and applications, Sujata V. Bhat, B. A. Nagasampagi.	Power point presentation-Google meet
Paper III- Unit IV- Heterocyclic compounds- II	Nomenclature of heterocyclic compounds	5 L	Heterocyclic Chemistry, Synthesis, Reactions and Mechanisms, R.K. Bansal.	Power point presentation-Google meet
	Nucleophilic ring opening reactions of 3 and 4 membered heterocycles	3 L		Power point presentation-Google meet
	Structure, reactivity, synthesis and reactions of fused heterocycles	7 L	Chemistry of Heterocyclic compounds, Rakesh Kumar Parashar, Beena Negi.	Power point presentation-Google meet
Paper IV, Unit III- Methods of scientific	Methods of scientific research and writing	15 L	Research methodology, C.	Power point presentation-Google meet

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
research and writing scientific papers.	scientific papers.		R. Kothari	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT**: Chemistry **CLASS**: M.Sc. (I) SEMESTER: I **MONTH**: August

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: derive the wave function of sp, sp^2, sp^3 hybridization, understand the concept of resonance and resonance energy, Valence Bond Theory and Molecular orbital theory, and weak forces of attraction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, I, **Chemical Bonding**	**1.1** Recapitulation of hybridization. Derivation of wave functions for sp, sp^2, sp^3.	3L	Principles of Inorganic Chemistry.	Google Meet
	1.2 Discussion of involvement of d orbitals in various types of hybridization, concept of resonance, resonance energy derivation.	3L	Principles of Inorganic Chemistry.	Google Meet
	1.3 Critical analysis of VBT	2L	Principles of Inorganic Chemistry.	Google Meet

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	1.4 Molecular Orbital Theory for diatomic species of first transition series	2L	Principles of Inorganic Chemistry.	Google Meet
	1.5 Molecular Orbital Theory for SF_6, CO_2, B_2H_6, I^{3-}	3L	Principles of Inorganic Chemistry.	Google Meet
	1.6 Weak forces of attraction: Hydrogen bonding – concept, types, properties, methods of detection and importance, vander waals forces, ion-dipole, dipole-dipole, London forces	2L	Principles of Inorganic Chemistry.	Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** M.Sc. (I) **SEMESTER:** II **MONTH:** January

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: understand the reaction mechanism of octahedral and square planar complexes, redox reactions, its mechanism and stereochemistry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, I, **Inorganic Reaction Mechanism**	**1.1** Rate of reactions, factors affecting the rate of reactions, techniques for determination of rate of reaction.	5L	Concise Coordination Chemistry	Google Meet
	1.2 Ligand Substitution reactions of : a) Octahedral complexes without breaking of metal ligand bond. b) Square planar complexes, trans effect, its theories and aplications.	5L	Principles of Inorganic Chemistry.	Google Meet
	1.3 Redox reactions: inner and outer sphere mechanism, complimentary and non-complimentary reactions.	3L	Concise Coordination Chemistry	Google Meet
	1.4 Stereochemistry of substitution reactions of octahedral complexes.	2L	Principles of Inorganic Chemistry.	Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** T.Y.B.Sc. **SEMESTER:** V **MONTH:** 7th August

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: understand the chemistry of non-aqueous solvents, comparative study of group 16 and 17.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, IV, Some Special Topics	**4.1 Chemistry of Non-aqueous Solvents** **4.1.1** Classification of solvents and importance of non-aqueous solvents. **4.1.2** Characteristics and study of liquid ammonia, dinitrogen tetra oxide as non-aqueous solvents with respect to: (i) acid-base reactions and (ii) redox reactions.	5L	J. D. Lee, Concise Inorganic Chemistry	Google Meet
	4.2 Comparative Chemistry of Group 16 **4.2.1** Electronic configurations, trends in physical properties, allotropy. **4.2.2** Manufacture of sulphuric acid by Contact process.	5L	J. D. Lee, Concise Inorganic Chemistry	Google Meet
	4.3 Comparative Chemistry of Group 17 **4.3.1** Electronic configuration, General characteristics, anamolous properties of fluorine, comparative study of acidity	5L	J. D. Lee, Concise Inorganic Chemistry	Google Meet

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	of oxyacids of chlorine w.r.t acidity, oxidising properties and structures (on the basis of VSEPR theory). **4.3.2** Chemistry of interhalogens with reference to preparations, properties and structures (on the basis of VSEPR theory).			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** T.Y.B.Sc. SEMESTER: VI **MONTH:** 1st Jan

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: learn various methods to extract metals from their ores, introduction of group 18 elements and bioinorganic chemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, IV, **Some Special Topics**	**4.1 Metallurgy** **4.1.1** Types of metallurgies, **4.1.2** General steps of metallurgy; Concentration of ore, calcinations, roasting, reduction and refining. **4.1.3** Metallurgy of copper: occurrence, physicochemical principles, Extraction of copper from pyrites& refining by electrolysis.	7L	Puri, Sharma Kalia Inorganic chemistry.	Google Meet
	4.2 Chemistry of Group 18 **4.2.1** Historical perspectives **4.2.2** General characteristics and trends in physical and chemical properties **4.2.3** Isolation of noble gases	5L	Puri, Sharma Kalia Inorganic chemistry.	Google Meet

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	4.2.4 Compounds of Xenon (oxides and fluorides) with respect to preparation and structure (VSEPR) **4.2.5** Uses of noble gases			
	4.3 Introduction to Bioinorganic Chemistry. **4.3.1**Essential and non-essential elements in biological systems. **4.3.2** Biological importance of metal ions such as Na^{+} ,K^{+} ,Fe^{+2}/Fe^{+3} and Cu^{+2}(Role of Na^{+} and K^{+} w.r.t ion pump)	3L	Puri, Sharma, Kalia Inorganic chemistry.	Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** S.Y.B.Sc. **SEMESTER:** III **MONTH:** 7th August

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: know about ionic bond and covalent bond, resonance, hybridization, valence bond theory and molecular orbital theory, know the various instrumental methods of analysis, advantages of using instruments to make measurements, the various observable properties of a given analyte and the stimulus best suited for its analysis, know about a generalized diagram of an analytical instrument, select a suitable instrumental method for analysis, appreciate the basic terms in spectrometry, use the relationship between absorbance (and its variations) and concentration of the analyte, chose a suitable method for photometric titrations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I, II, **Chemical Bonding**	**2.1 Non-Directional Bonding** **2.1.1** Ionic Bond: Conditions for the Formation of Ionic Bond. **2.1.2** Types of Ionic Crystals **2.1.3** Radius Ratio Rules **2.1.4** Lattice Energy, Borne-Lande Equation **2.1.5** Kapustinski Equation **2.1.6** Born-Haber Cycle and its Application	4L	Puri, Sharma Kalia Inorganic chemistry.	Google Meet

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	2.2. Directional Bonding: Orbital Approach. **2.2.1** Covalent Bonding The Valence Bond Theory-Introduction and basic tenets. **2.2.2** Interaction between two hydrogen atoms and the Potential energy diagram of the resultant system. **2.2.3** Corrections applied to the system of two hydrogen atoms-Formation of H_2 **2.2.4** Homonuclear diatomic molecules from He_2 to Ne_2 **2.2.5** Resonance and the concept of Formal Charge; Rules for Resonance or Canonical structures. **2.2.6** Bonding in Polyatomic Species: The role of Hybridization. And types of hybrid orbitals-*sp, sp^2, sp^3, sp^2d^2, sp^2d and sp3d^2* **2.2.7** Equivalent and Non-Equivalent hybrid orbitals **2.2.8** Contribution of a given atomic orbital to the hybrid orbitals (with reference to sp^3 hybridisation as in CH_4, $NH_3$and H_2O and series like NH_3, PH_3, AsH_3, BiH_3)	6L	Puri, Sharma Kalia Inorganic chemistry.	Google Meet
	2.3 Molecular Orbital Theory **2.3.1.** Comparing Atomic Orbitals and Molecular Orbitals. **2.3.2**. Linear combination of atomic orbitals to give molecular orbitals LCAO-MO approach for diatomic homonuclear molecules. **2.3.4.** Wave mechanical treatment for molecular orbitals ($H^{2+}$and H) **2.3.4** Molecular orbital Theory and Bond Order and magnetic property: with reference to O_2,O_2^+ O_2^-,O_2^{2-}	5L	Puri ,Sharma Kalia Inorganic chemistry.	Google Meet

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III, III, **Basic Concepts in Instrumental methods**	**3.1.** Relation between the analyte, stimulus and measurement of change in the observable property. **3.2.** Block Diagram of an Analytical instrument. **3.3.** Types of Analytical Instrumental methods based on i) Optical interactions (e.g. Spectrometry: uv-visible, Polarimetry) ii) Electrochemical interactions (e.g. Potentiometry, Conductometry,) iii) Thermal interactions (e.g. Thermogravimetry)	3L	Instrumental Methods of Chemical Analysis	Google Meet
	3.4. Spectrometry **3.4.1.** Interaction of electromagnetic radiation with matter: Absorption and Emission spectroscopy **3.4.2.** Basic Terms: Radiant Power, Absorbance, Transmittance, Monochromatic light, Polychromatic light, Wavelength of maximum absorbance, Absorptivity and Molar Absorbtivity **3.4.3.** Statement of Beer's Law and Lambert's Law, Combined Mathematical Expression of Beer -Lambert's Law, Validity of Beer-Lambert's Law,Deviations from Beer-Lambert's Law ((Real deviations, Instrumentaldeviations and Chemical deviations) **3.4.4.** Instrumentation for absorption spectroscopy: Colorimeters and Spectrophotometers **3.4.5.** Block Diagrams for Single beam and Colorimeter, and Spectrophotometer (Principles, Construction and working-Details of Components expected i.e source ,Sample holder , Filters/Monochromators, Detectors such as Photomultiplier tube)	7L	Instrumental Methods of Chemical Analysis	Google Meet

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	3.4.6. Applications of UV-Visible Spectrophotometry **(02 L)** (a) Qualitative analysis such as Identification of functional groups in Organic compounds , Chromophores and Auxochrome,*cis* and *trans* isomers. (b) Quantitative analysis by Calibration curve method **3.4.7.** Photometric Titrations: Principle, Instrumentation, Types of Photometric titration Curves with examples.	2L 3L	Instrumental Methods of Chemical Analysis	Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT II: 15 L

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT III: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** S.Y.B.Sc. **SEMESTER:** IV **MONTH:** 1st January

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: know the position of elements in periodic table, origin of color and magnetic properties of transition elements, qualitative tests of transition elements and introduction of coordination compounds, its theories, nature and applications, the use of statistical methods in chemical analysis, the nature of indeterminate errors, the randomness of such errors and its distribution around a correct or acceptable result, computation of confidence limits and confidence interval, test for rejection of doubtful result, method to draw best fitting straight line

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I, II, **2.1 Comparative Chemistry of the transition metals**	**2.1.1** Position in the periodic table; Natural occurrence principal ores and minerals; **2.1.2** Significance of special stability of d_0, d_5 and d_{10} leading to variable oxidation states; Unusual oxidation states and their stabilities in aqueous solutions (with special reference to vanadium, and chromium.) **2.1.3** Origin of colour for transition metals and their compounds: such as reflectivity, surface coatings, particle size, packing density for metals and nature of d-orbitals, number of	9L	Puri, Sharma, Kalia Inorganic Chemistry.	Google Meet

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	electrons in the d-orbitals, geometry, and ability for charge transfer). **2.1.4** Magnetic properties of transition metal compounds: Origin of magnetism-spin and orbital motion of electrons; equation for spin only and spin-orbital magnetism in terms of Bohr magnetons (No derivation of relevant equations expected); Reasons for quenching of orbital moments. **2.1.5** Chemistry of Titanium and vanadium: properties of Oxides and chlorides; use in titrimetric analysis **2.1.6** Qualitative tests for transition metal ions: General considerations in devising tests (with reference to Chromium, Manganese, iron, Cobalt			
2.2 Coordination Chemistry	**2.2 Coordination Chemistry** **2.2.1 Introduction to Chemistry of Coordination Compounds** i. Historical perspectives: Early ideas on coordination compounds ii. Basic terms and nomenclature. iii. Types of ligands iv. Isomerism :General Types with special reference to stereoisomerism of coordination compounds (C.N=6) v. Evidence for the formation of coordination compounds, **2.2.2. Theories of coordination compounds** i. Werner's Theory of coordination compounds, ii. Effective atomic number rule. iii. Eighteen electron Rule **2.2.3. Nature of the Metal-Ligand Bond:**	6L	Puri, Sharma, Kalia Inorganic chemistry.	Google Meet

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III, III- **Statistical Treatment of analytical data --II**	I Valence Bond Theory; Hybridisation of the central metal orbitals-sp^3, sd^3/d^3s, sp^3d^2/d^2sp^3, sp^2d. ii. Inner and outer orbital complexes of .(suitable examples of Mn(II), Fe(II),Fe(III),Co(II)/Co(III),Ni(II), Cu(II) Zn(II) complexes with ligands like aqua, ammonia CN-and halides may be used) iii. Limitations of V.B.T **2.2.4.** Application of coordination compounds.			
	3.1.**Nature of Indeterminate Errors:** 3.1.1. The true and acceptable value of a result of analysis 3.1.2. Measures of central tendency: mean, median. mode, average 3.1.3. Measures of dispersion: Absolute deviation, relative deviation, relative average deviation, standard deviation,(s, sigma) variance, coefficient of variation	3L	Modern Analytical Chemistry , David Harvey (page numbers 53 -84)	Google Meet
	3.2.Distribution of random errors: 3.2.1. Gaussian distribution curve. 3.2.2. Equation and salient features of Gaussian distribution curve **3.3.Concept of Confidence limits and confidence interval and its computation using** (i) Population standard deviation (ii) Student's *t* test (iii) Range **3.4.Criteria for rejection of doubtful result** (i) 2.5 d rule (ii) 4.0 d rule	2L 3L 2L	Modern Analytical Chemistry , David Harvey (page numbers 53 -84)	Google Meet

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	(iii) Q test **3.5.Test of Significance (02 L)** (i) Null hypothesis (ii) F-test (variance ratio test) **3.6. Graphical representation of data and obtaining best fitting straight line (03 L)** (a) For line passing through origin (b) For line not passing through origin	2L 3L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT II: 15 L

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT III: 15 L

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

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Late Shri. Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts VIVA COLLEGE, Virar (W) NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:___DR.SHRADDHA S.KHAMKAR_____DEPARTMENT: _____CHEMISTRY SEMESTER:_____I_____ MONTH:_____AUGUST- _____CLASS: _____M.Sc -1_____

2021_____ ACADEMIC YEAR:_____2020-2021_____

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the thermodynamic and kinetic requirements of organic reaction. They will also be able to determine the mechanism of organic reactions by using various techniques. They will gain new insights into the concepts of acidity and basicity andbthe factors affecting the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – III Unit – I Title -	1.1- Thermodynamic and Kinetic requirements of a reaction 1.2- Determining mechanism of a reaction 1.3- Acids and Bases	4L	1. Physical Organic Chemistry by Neil Issacs 2. Modern	Google Classroom Google Meet

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Physical Organic Chemistry		3L 8L	Physical Chemistry by Eric V. Anslyn and Dougherty 3. Organic Synthesis by Jagdamba	

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			Singh and L.D.s. Yadav	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____15_____

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:___DR.SHRADDHA S.KHAMKAR_____DEPARTMENT: _____CHEMISTRY SEMESTER:_____II____ MONTH: JAN-2022_____

_____CLASS:

_____M.Sc -1_____

ACADEMIC YEAR: __2020-21_____

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the molecular orbital theory, form the molecular orbital diagrams for organic compounds. They get introduced to HOMO- LUMO concepts. Studecan gain insights into the concepts of spectroscopy techniques such as IR and UV.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – III				
Unit – III Title –	3.1.1 Molecular orbitals 3.1.2 Introduction to FMO's 3.1.3 Applications of FMO concepts	2L 3L	1. Molecular Orbital and Organic	Google Meet

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Introduction to Molecular orbital theory for organic Chemistry	3.2 Applications of UV and IR Spectroscopy 3.2.1 Ultraviolet Spectroscopy 3.2.2 Infrared Spectroscopy	2L 4L 4L	chemical reactions by Ian Fleming 2. Introduction to Spectroscopy by Donald Pavia and Gary Lampman 3. Organic Spectroscopy – Principles and Applications by Jagmohan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:___DR.SHRADDHA S.KHAMKAR_____DEPARTMENT: _____CHEMISTRY _____M.Sc - II_____ _____
_____CLASS: ACADEMIC YEAR: __2020-21_____

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SEMESTER:_____III_____ MONTH: _AUGUST -2021_____

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LEARNING OBJECTIVE/S:

The learners will be able to : Understand the thermodynamic and kinetic requirements of organic reaction. They will also be able to determine the mechanism of organic reactions by using various techniques. They will gain new insights into the concepts of acidity and basicity andbthe factors affecting the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – I Unit – I Title - Organic Reaction Mechanisms				
	1.1 – Organic reactive intermediates, method of generation etc 1.2 Neighbouring group Participation 1.3 Role of FMO'S in Organic reactivity 1.4 Pericyclic Reactions – Classification, Woodward Hoffman's rules	5L 3L 2L 5L	1. Advanced Organic Chemistry by Jerry March 2. Mechanism and theory in Organic Chemistry by T. h. Lowry and Richardson 3. Organic Reaction Mechanism by Ahluwalia and Parashar 4. Organic Chemistry Part A and B by Carry and Sundberg.	Google Meet
	3.1 Classification of point groups based on symmetry	2L	1. Stereochemistry of	Google Meet

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	elements 3.2 Conformational analysis of medium rings	3L	carbon compounds by D. Nasipuri	

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	3.3 Stereochemistry of fused and bridged ring compounds 3.4 Anancomeric systems	5L 5L	2. Stereochemistry of organic compounds by Ernest L. Eliel 3. Stereochemistry by P.S. Kalsi 4. Organic Stereochemistry by Robinson	
Paper I Unit – 3 Title – Stereochemistry – I	4.1 Introduction to basic principles of green chemistry 4.2 Use of green reagents in green chemistry 4.3 Comparison of traditional processes vs green processes 4.4 Green Catalysts	1L 9L 3L	1. Green chemistry by Mike Lancaster 2. New trends in green chemistry by Ahluwalia 3. An introduction to Green Chemistry by	Google Meet

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		2L	V. Kumar 4. Green chemistry by Paul . Anastas and Warner.	

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Paper – 4 Unit – 4 Title – Green Chemistry				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____15_____

June

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:___DR.SHRADDHA S.KHAMKAR_____DEPARTMENT: _____CHEMISTRY SEMESTER:_____IV____ MONTH:_____JAN 2022____ _____CLASS:__M.Sc - II_____

ACADEMIC YEAR _____2020-21_____

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LEARNING OBJECTIVE/S:

The learners will be able to : Understand the thermodynamic and kinetic requirements of organic reaction. They will also be able to determine the mechanism of organic reactions by using various techniques. They will gain new insights into the concepts of acidity and basicity andbthe factors affecting the same.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – 1				

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Unit – 2 Title – Supramolecular Chemistry	2.1. – Principles of Molecular associations and organisations 2.2 – Synthetic molecular receptors 2.3 – Structures and properties of Supramolecules Molecular recognition and catalysis	3L 3L 5L 4L	1. Supramoleculer Chemistry by J.M. Lehn 2. Crown ethers and analogous compounds by M. Hiraoka 3. Large ring compounds by J.A. Semlyen	Google Meet
Paper – 1 Unit – 3 Title – Stereochemistry	3.1 Racemisation and Resolution of racemates 3.2 Determination of enantiomer and diastereomer composition 3.3 Correlative method for configurational assignment 3.4 Molecular dissymmetry and chiroptical properties	3L 3L 4L 5L	1. Stereochemistry by P.S Kalsi 2. Organic Stereochemistry by Robinson 3. Stereochemistry of Carbon Compounds by D. Nasipuri	Google Meet

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Paper – IV Unit – II Title – Data	The Investigative Approach – Measurements, SI units and their uses, Scientific methods and designing experiments Analysis and presentation of Data – Descriptive statistics, Chemometrics, Correlation regression, Analysis of variance		Google Meet	

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Analysis		15L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____15_____

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:___DR.SHRADDHA S.KHAMKAR_____DEPARTMENT: _____CHEMISTRY SEMESTER:_____I_____ MONTH: AUGUST-2021

_____CLASS:__F.Y.B.Sc_____

ACADEMIC YEAR:_____2020-21_____

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the thermodynamic terms . They will be able to understand concentration and also the ways in which the concentration is expressed.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – 1				

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Unit -1 Title – Chemical Thermodynamics	1.1 – Thermodynamic terms First law of Thermodynamics Thermochemistry 1.2 – Chemical Calculations Expressing Concentration if Solutions	10L 5L	College Physical Chemistry by K.B. Baliga , S.A.Zaveri ,Himalaya Publications	Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____15_____

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:___DR.SHRADDHA S.KHAMKAR_____DEPARTMENT: _____CHEMISTRY SEMESTER:_____II_____ MONTH:_____JAN - 2022_____

_____CLASS:__F.Y.B.Sc_____

ACADEMIC YEAR:_____2020-21_____

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LEARNING OBJECTIVE/S:

The learners will be able to : Understand the laws governing the gases. They understand the chemical equilibrium and Thermodynamic parameters of the

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reactions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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		ALLOTED		
Paper- 1 Unit – 1 Title – Gaseous State	1.1 – Gaseous State Ideal gas laws, real gases, ideal gaes, Compressibility factor, Joule- Thomson effect 1.2 – ChemicalEquilibria and Thermodynamic parametrs	8L 7L	College Physical Chemistry by K.B.Baliga , S.A. Zaveri,, Himalaya Publications.	Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Dr. Arti Dubey DEPARTMENT: Chemistry CLASS: F.Y.B.Sc. SEMESTER: I MONTH: From 7-8-2020 To 31-12-2020

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to : To gain knowledge about the Nomenclature mono and bi-functional aliphatic compounds . To understand Bonding and Structure of organic compounds .To study the Fundamentals of organic reaction mechanism: To learn Electronic Effects and bond fission.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
Paper-I (General Chemistry) Unit III	**3. Basics of Organic Chemistry** **3.1 Classification and Nomenclature of Organic Compounds:** Review of basic rules of IUPAC nomenclature. Nomenclature of mono and bi-functional aliphatic compounds on the basis of priority order of the following classes of compounds:	**(5L)**	Text Book, Reference Book, You tube video	Google classroom ,Google slide Jamboard, Canva chrome	

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3. Basics of Organic Chemistry	alkanes, alkenes, alkynes, haloalkanes, alcohols, ethers, aldehydes, ketones, carboxylic acids, carboxylic acid derivatives (acid halides, esters, anhydrides, amides), nitrocompounds, nitriles and amines; including their cyclic analogues. **3.2 Bonding and Structure of organic compounds:** Hybridization: sp_3, sp_2, sp hybridization of carbon and nitrogen; sp_3 and sp_2 hybridizations of oxygen in Organic compounds (alcohol, ether, aldehyde, ketone, carboxylic acid, ester, cyanide, amine and amide) Overlap of atomic orbitals: Overlaps of atomic orbitals to form sigma and pi bonds, shapes of organic molecules. Shapes of molecules; Influence of hybridization on bond properties (as applicable toethane, ethene, ethyne) **3.3 Fundamentals of organic reaction mechanism:** **Electronic Effects:** Inductive, electromeric, resonance and mesomeric effects,hyperconjugation and their applications; Dipole moment; Organic acids and bases; their relative strengths. **Bond fission:** Homolytic and Heterolytic fission with suitable	**(4L)**			

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	examples. Electrophiles and Nucleophiles; Nucleophilicity and basicity; **Types (primary, secondary, tertiary, allyl, benzyl), shape and their relative stability of reactive intermediates:** Carbocations, Carbanions and Free radicals. **Introduction to types of organic reactions:** Addition, Elimination and Substitution reaction. (With one example of each)	**(6L)**			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Arti Dubey DEPARTMENT: Chemistry CLASS: F.Y.B.Sc. SEMESTER: I MONTH_From 7-8-2020 To 31-12-2020

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to : Understand basics of chemical kinetics and predict reaction mechanism.Calculate rate constant of zero, first and second order reaction. The basics of solutions, Colligative properties, and their applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II (General Chemistry) Unit-I Title-Physical Chemistry	**1.1 Chemical Kinetics:** Rate of reaction, rate constant, measurement of reaction rates, order and molecularity of reaction, integrated rate equation of first and second order reactions (with equal initial concentration of reactants) (Numericals expected) Determination of order of reaction by (a) Integration method (b) Graphical method (c)Ostwald's isolation method (d) Half time method (Numericals expected)	**(8L)**	Text Book, Reference Book, You tube video	Google classroom ,Google slide Jamboard, Canva chrome

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	1.2 Liquid State: Surface tension: Introduction, methods of determination of surface tension by drop number method (Numericals expected) Viscosity: Introduction, coefficient of viscosity, relative viscosity, specific viscosity,reduced viscosity, determination of viscosity by Ostwald viscometer (Numericals expected) Refractive index: Introduction, molar refraction and polarizability, determination of refractive index by Abbe's refractometer (Numericals expected) Liquid crystals: Introduction, classification and structure of thermotropic phases (Nematic,smectic and cholesteric phases), applications of liquid crystals	**(7L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Arti Dubey DEPARTMENT: Chemistry CLASS: F.Y.B.Sc. SEMESTER: II MONTH: From 1-1-2020 to 31-5-2020

ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S:The learners will be able to : Formation of alkanes, Wurtz Reaction, Wurtz-Fittig Reactions Mechanism of E1, E2,E1cb reactions. Saytzeff and Hofmann eliminations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I (General Chemistry) Unit III 3. Basics of Organic	**3. Chemistry of Aliphatic Hydrocarbons** **3.1 Carbon-Carbon sigma bonds:** **Chemistry of alkanes:** Formation of alkanes, Wurtz Reaction, Wurtz-Fittig Reactions,Free radical substitutions: Halogenation - relative reactivity and selectivity. **3.2 Carbon-Carbon pi bonds:** **Formation of alkenes and alkynes by elimination reactions:** Mechanism of E1, E2,E1cb reactions. Saytzeff and Hofmann	**(3L)**	Text Book, Reference Book, You tube video	Google classroom ,Google slide Jamboard, Canva chrome Conceptboard Conceptmap and mindmap

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Chemistry	eliminations. **Reactions of alkenes:** Electrophilic additions their mechanisms (Markownikoff/ AntiMarkownikoff addition),Mechanism of oxymercuration-demercuration, hydroboration-oxidation, ozonolysis,reduction(catalytic and chemical), syn and anti-hydroxylation (oxidation). 1, 2-and 1, 4-addition reactions in conjugated dienes and, Diels-Alder reaction; Allylic and benzylic bromination using N-bromosuccinimide and mechanism, e.g. propene, 1-butene, toluene,ethylbenzene. **Reactions of alkynes:** Acidity, Electrophilic and Nucleophilic additions. Hydration toform carbonyl compounds, Alkylation of terminal alkynes.	**(12L)**		Testmoz Kahoot Google form quiz Infograph

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dr.Arti Dubey_DEPARTMENT: Chemistry CLASS: F.Y.B.Sc SEMESTER: II MONTH: 1-1-2020 to 31-5-2020

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to : Understand The fundamentals of ionic equilibrium and its applications

- Learn about the basics of Molecular Spectroscopy **.**
- Know about the Solid State Chemistry .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I TITLE-Physical Chemistry	**1.1 Ionic Equilibria:** Strong, moderate and weak electrolytes, degree of ionization, factors affecting degree of ionization, ionization constant and ionic product of water, ionization of weak acids and bases, pH scale, common ion effect, dissociation constants of mono-, di- and triprotic acid (exact treatment for monoprotic acid) Buffers: Introduction, types of buffers, derivation of Henderson	**(7L)**	Text Book, Reference Book, You tube video	Google classroom ,Google slide Jamboard, Canva chrome Conceptboard Conceptmap and mindmap

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	equation for acidic and basic buffers, buffer action, buffer capacity (Numericals expected) **1.2 Molecular Spectroscopy:** Electromagnetic radiation, electromagnetic spectrum, Planck's equation, interaction of electromagnetic radiation with matter: Absorption, emission, scattering, flourescence, electronic, vibrational and rotational transitions, Beer-Lambert's law (Numericals expected) **1.3 Solid State Chemistry** Types of solids, crystal lattice, lattice points, unit cell, space lattice and lattice plane, laws of crystallography: Law of constancy of interfacial angle, law of symmetry and law of rational indices (Numericals expected)	**(4L)** **(4L)**		Testmoz Kahoot Google form quiz Infograph

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15 L_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Arti Dubey DEPARTMENT: Chemistry CLASS: S.Y.B.Sc. SEMESTER: III MONTH: From 7-8-2020 To 31-12-2020

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to :
Know about Chemical Bonding, Non-Directional Bonding, Directional Bonding- Orbital approach, Molecular Orbital Theory .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Course Title: (General Chemistry) Paper-I Unit-II Inorganic	**Unit-II** **Chemical Bonding** **2.1 Non-Directional Bonding** 2.1.1 Ionic Bond: Conditions for the Formation of Ionic Bond. 2.1.2 Types of Ionic Crystals 2.1.3 Radius Ratio Rules 2.1.4 Lattice Energy, Borne-Lande Equation	**(4L)**	Text Book, Reference Book, You tube video	Google classroom ,Google slide Jamboard, Canva chrome Conceptboard

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Chemistry	2.1.5 Kapustinski Equation 2.1.6 Born-Haber Cycle and its Application **2.2. Directional Bonding: Orbital Approach.** 2.2.1 Covalent Bonding The Valence Bond Theory- Introduction and basic tenets. 2.2.2 Interaction between two hydrogen atoms and the Potential energy diagram of the resultant system. 2.2.3 Corrections applied to the system of two hydrogen atoms- Formation of H_2 2.2.4 Homonuclear diatomic molecules from He_2 to Ne_2 2.2.5 Resonance and the concept of Formal Charge; Rules for Resonance or Canonical structures. 2.2.6 Bonding in Polyatomic Species: The role of Hybridization. And types of hybrid orbitals-*sp, sp*$_2$*, sp*$_3$*, sp*$_3$*d, sp*$_2$*d*$_2$*and sp*$_2$*d sp*$_3$*d*$_2$*.* 2.2.7 Equivalent and Non-Equivalent hybrid orbitals 2.2.8 Contribution of a given atomic orbital to the hybrid orbitals	**(6L)**		

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	(with reference to *sp3* hybridisation as in CH_4, NH_3 and H_2O and series like NH_3, PH_3, AsH_3, BiH_3) 2.3 **Molecular Orbital Theory** 2.3.1. Comparing Atomic Orbitals and Molecular Orbitals. 2.3.2. Linear combination of atomic orbitals. to give molecular orbitals LCAO-MO approach for diatomic homonuclear molecules). 2.3.4. Wave mechanical treatment for molecular orbitals (H_2^+ and H_2) 2.3.4 Molecular orbital Theory and Bond Order and magnetic property: with reference to O_2,O_2^+ O_2^-,O_2^{2-} (Problems and numerical problems expected wherever possible)	**(5L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L_____

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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Arti Dubey DEPARTMENT: Chemistry CLASS: S.Y.B.Sc. SEMESTER: III MONTH: From 7-8-2020 To 31-12-2020

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to :

- To gain knowledge about the Nomenclature of aliphatic, alicyclic and aromatic carbonyl compounds.
- To know about General mechanism of nucleophilic addition reaction.
- To understand the Reactions of aldehydes and ketones
- To learn common reaction mechanisms of Benzoin condensation, Knoevenagel condensation, Claisen-Schmidt and Cannizzaro reaction.
- To gain knowledge about the Keto-enol tautomerism.
- To study the Active methylene compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Course Title: (General Chemistry)	**Unit III: Organic Chemistry** **Carbonyl Compounds:** 3.1 Nomenclature of aliphatic, alicyclic and aromatic carbonyl compounds. Structure, reactivity of aldehydes and ketones and	**[15L]**	Text Book, Reference Book, You tube video	Google classroom ,Google slide Jamboard, Canva chrome

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Paper-II **Unit III: Organic Chemistry**	methods of preparation; Oxidation of primary and secondary alcohols using PCC, hydration of alkynes, action of Grignard reagent on esters, Rosenmund reduction, Gattermann – Koch formylation and Friedel Craft acylation of arenes 3.2 General mechanism of nucleophilic addition, and acid catalyzed nucleophilic addition reactions. 3.3 Reactions of aldehydes and ketones with $NaHSO_3$, HCN, RMgX, alcohol, amine, phenyl hydrazine, 2,4-Dinitrophenyl hydrazine, $LiAlH_4$ and $NaBH_4$. 3.4 Mechanisms of following reactions: Benzoin condensation, Knoevenagel condensation, Claisen-Schmidt and Cannizzaro reaction. 3.5 Keto-enol tautomerism: Mechanism of acid and base catalysed enolization			

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	3.6 Active methylene compounds: Acetylacetone, ethyl acetoacetate diethyl malonate, stabilised enols. Reactions of Acetylacetone and ethyl acetoacetate (alkylation, conversion to ketone, mono- and dicarboxylic acid)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15 L_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Arti Dubey DEPARTMENT: Chemistry CLASS:S.Y.B.Sc. SEMESTER: IIIMONTH: From 7-8-2020 To 31-12-2020

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to :
1. Select a method of analysis
2. Decide how to identify a sample and prepare it for analysis
3. Select a procedure for analysis
4. Identify sources of possible errors in the results obtained.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER –III Unit I Title-	Unit **I- Intorduction to Analytical Chemistry and Statistical Treatment of analytical data-I** *(Problems including numericals expected wherever necessary)* **1.1. Role of Analytical Chemistry (9 L)** 1.1.1. Language of analytical chemistry: important terms and their	**(9 L)**	Text Book, Reference Book, You tube video	Google classroom ,Google slide Jamboard, Canva chrome

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Analytical Chemistry	significance in Analytical Chemistry. 1.1.2. Purpose of Chemical Analysis; Analysis Based (i) On the nature of information required: (Proximate, Partial, Trace, Complete Analysis) and (ii) On the size of the sample used (Macro, semi-micro and micro analysis) 1.1.3. Classical and Non-Classical Methods of Analysis; their types and importance. **1.2. Significance of Sampling in Analytical Chemistry** 1.2.1. Terms involved in Sampling 1.2.2. Types of Sampling 1.2.3. Sampling techniques	**(6L)**		

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	1.3. Results of Analysis. 1.3.1. Errors in Analysis and their types 1.3.2. Precision and Accuracy in Analysis 1.3.3. Corrections for Determinate Errors *(Problems including Numericals expected wherever required)*			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __(15 L)_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Arti Dubey DEPARTMENT: Chemistry CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: 1-1-2020 to 31-5-2020

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to : To understand the different aspects and importance variable oxidation states, Origin of colour and Magnetic properties for transition metals and their compounds. To study the Selected topics on Chemistry of Titanium and vanadium.To gain knowledge about the Coordination Chemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Course Title: (General Chemistry) Paper-I Unit-II Inorganic	**Unit-II** **2.1 Comparative Chemistry of the transition metals (9 L)** **2.1.1** Position in the periodic table; Natural occurrence principal ores and minerals; **2.1.2** Significance of special stability of d_0, d_5 and d_{10} leading to variable oxidation states; Unusual oxidation states and their stabilities in aqueous solutions (with special reference to vanadium, and chromium.)	**(9 L)**	Text Book, Reference Book, You tube video	Google classroom ,Google slide Jamboard, Canva chrome Conceptboard Conceptmap and mindmap

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Chemistry	**2.1.3** Origin of colour for transition metals and their compounds: such as reflectivity, surface coatings, particle size, packing density for metals and nature of d-orbitals, number of electrons in the d-orbitals, geometry, and ability for charge transfer). **2.1.4** Magnetic properties of transition metal compounds: Origin of magnetism-spin and orbital motion of electrons; equation for spin only and spin-orbital magnetism in terms of Bohr magnetons (No derivation of relevant equations expected); Reasons for quenching of orbital moments. **2.1.5** Chemistry of Titanium and vanadium: properties of Oxides and chlorides; use in titrimetric analysis **2.1.6** Qualitative tests for transition metal ions: General considerations in devising tests (with reference to Chromium, Manganese, iron, Cobalt Nickel and Copper) **2.2 Coordination Chemistry :** **2.2.1 Introduction to Chemistry of Coordination Compounds** i. Historical perspectives: Early ideas on coordination compounds ii. Basic terms and nomenclature.	**(6 L)**		Testmoz Kahoot Google form quiz Infograph

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	iii. Types of ligands iv. Isomerism :General Types with special reference to stereoisomerism of coordination compounds (C.N=6) v. Evidence for the formation of coordination compounds, **2.2.2. Theories of coordination compounds** i. Werner's Theory of coordination compounds, ii. Effective atomic number rule. iii. Eighteen electron Rule **2.2.3. Nature of the Metal-Ligand Bond:** i.) Valence Bond Theory; Hybridisation of the central metal orbitals-sp_3, sd_3/d_3s sp_3d_2/d_2sp_3, sp_2d, ii.) Inner and outer orbital complexes of .(suitable examples of Mn(II) Fe(II),Fe(III),Co(II)/Co(III),Ni(II), Cu(II) Zn(II) complexes with ligands like aqua, ammonia CN^- and halides may be used) iii.) Limitations of V.B.T **2.2.4.** Application of coordination compounds.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Arti Dubey DEPARTMENT: Chemistry CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: 1-1-2020 to 31-5-2020

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to : To gain knowledge about the Nomenclature, Preparation and Reactions of aliphatic, and aromatic compounds.
To learn common reaction and mechanisms of Salt Formation, N-acylation, N-alkylation, Hofmann's exhaustive methylation (HEM),Hofmann-elimination reaction, reaction with nitrous acid, carbylamine reaction, Electrophilic substitution in aromatic amines: bromination, nitration and sulphonation.

To study about Heterocyclic Compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER –II Unit III	**Unit III: Organic Chemistry** **Nitrogen containing compounds and heterocyclic compounds:** **3.1 Amines:** Nomenclature, effect of substituent on basicity of aliphatic and aromatic amines;	**(7 L)**	Text Book, Reference Book, You tube video	Google classroom ,Google slide Jamboard, Canva chrome

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Title: Organic Chemistry	3.1.1. Preparation: Reduction ofaromaticnitro compounds using catalytic hydrogenation,chemical reduction using Fe-HCI, Sn-HCl, Zn-acetic acid, reduction of nitriles, ammonolysis of halides, reductive amination , Hofmann bromamide reaction. 3.1.2. Reactions- Salt Formation, N-acylation, N-alkylation, Hofmann's exhaustive methylation (HEM),Hofmann-elimination reaction, reaction with nitrous acid, carbylamine reaction, Electrophilic substitution in aromatic amines: bromination, nitration and sulphonation. **3.2 Diazonium Salts**: Preparation and their reactions/synthetic application - Sandmeyer reaction, Gattermann reaction, Gomberg reaction, Replacement of diazo group by -H,-OH. Azo coupling with phenols, naphthols and aromatic amines, reduction of diazonium salt to aryl hydrazine and hydroazobenzene **3.3 Heterocyclic Compounds:** 3.3.1. Classification, nomenclature, electronic structure, aromaticity in 5-numbered and 6-membered rings containing one heteroatom; 3.3.2. Synthesis of Furan, Pyrrole (Paal-Knorr synthesis, Knorr	**(8 L)**		Conceptboard Conceptmap and mindmap Testmoz Kahoot Google form quiz Infograph

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	pyrrole synthesis, and Hantzsch synthesis), Thiophene, Pyridine (Hantzsch synthesis), 3.3.3. Reactivity of furan, pyrrole and thiophene towards electrophilic substitution reactions on the basis of stability of intermediate and of pyridine on the basis of electron distribution. Reactivity of pyridine towards nucleophilic substitution on the basis of electron distribution. 3.3.4. Reactions of furan, pyrrole and thiophene: halogenation, nitration, sulphonation, Vilsmeier-Haack reaction, Friedel-Crafts reaction. Furan: Diels-Alder reaction, Ring opening. Pyrrole: Acidity and basicity of pyrrole. Comparison of basicity of pyrrole and pyrrolidine. 3.3.5. Pyridine: Basicity. Comparison of basicity of pyridine, pyrrole and piperidine. Sulphonation of pyridine (with and without catalyst), reduction and action of sodamide (Chichibabin reaction).			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Arti Dubey DEPARTMENT: Chemistry CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: 1-1-2020 to 31-5-2020

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to understand :

- The importance of separation in sample treatment
- Various methods of separations
- How to select a method of separation of an analyte from the matrix
- How a solute gets distributed between two immiscible phases
- Principle of solvent extraction and various terms involved therein
- Effect of various parameters on solvent extraction of a solute
- Classification of Chromatographic methods
- Paper and thin layer chromatography and using them in practice.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER –III Unit I Title: analytical Chemistry	**1. Separation Techniques in Analytical Chemistry** **1.1.** An Introduction to Analytical Separations and its importance in analysis. **1.2.** Estimation of an analyte without effecting separation. **1.3.** Types of separation methods **1.3.1.** Based on Solubilities (Precipitation, Filtration Crystallisation) **1.3.2.** Based on Gravity- Centrifugation **1.3.3.** Based on volatility-Distillation ; **1.3.4.** Based on Electrical effects-Electrophoresis **1.3.5.** Based on retention capacity of a Stationary Phase - Chromatography; **1.3.6.** Based on distribution in two immiscible phases-Solvent Extraction; **1.3.7.** Based on capacity to exchange with a resin-Ion Exchange; **1.4. Electrophoresis:** Principles, Basic Instrumentation, Working and Application in separation of biomolecules like enzymes and DNA.	**(02 L)** **(02 L)** **(06 L)**	Text Book, Reference Book, You tube video	Google classroom ,Google slide Jamboard, Canva chrome Conceptboard Conceptmap and mindmap Testmoz Kahoot Google form quiz Infograph

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	1.5. Solvent extraction 1.5.1. Introduction, Nernst distribution Law, Distribution Ratio, Partition Coefficient. 1.5.2. Conditions of extraction: Equilibration time, Solvent volumes, temperature, pH. 1.5.3. Single step and multi step extraction, Percentage extraction for single step and multistep extraction. Separation factor. 1.5.4. Batch and continuous extraction **1.6. Chromatography** 1.6.1. Introduction to Chromatography 1.6.2. Classification of chromatographic methods based on stationary and mobile phase 1.6.3. Paper Chromatography: Principle, techniques and applications of Paper Chromatography in separation of cations. 1.6.4. Thin layer Chromatography Principle, technique and Applications in determining the purity of a given solute; Following progress of a given reaction .	**(05 L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. JAYASHRI GOPAL NAPHADE, DEPARTMENT: _CHEMISTRY, CLASS: _M.SC II (ORGANIC CHEMISTRY),

SEMESTER: III, MONTH: __Aug_____, ACADEMIC YEAR: 2020-2021.

LEARNING OBJECTIVE/S:
The learners will be able to: understand the concept of QSAR factor and how to related to drug design. Also understand the synthesis of some drug. They understand the concept of drug.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit II: Drug Design, Develepment And Synthesis	2.1: QSAR Parameter Steric Factor , Talf Equation	5L	1.Medicinal Chemistry,Sriram &Yogeeswari,2nd edition 2.A Introduction to drug design,Pandeya and Dimmock.	By Google meet
	2.2: Mordern method of drug design & synthesis	3L		
	2.3: Concept of prodrug & soft drug	3L		
	2.4: Synthesis and application of the drug	4L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

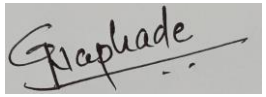
NAME OF THE STAFF: Dr. JAYASHRI GOPAL NAPHADE, DEPARTMENT: _CHEMISTRY, CLASS: _M.SC II (ORGANIC CHEMISTRY),

SEMESTER: III, MONTH: _Aug_____, ACADEMIC YEAR: 2020-2021.

LEARNING OBJECTIVE/S:
The learners will be able to: understand the Pericyclic reactions and it's different types. Also understand the Selectivity of cycloaddition reaction and sigmatropic reaction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit II: Pericyclic Reaction	2.1: Cycloaddition Reaction & Other Cycloaddition Reaction	7L	1.Pericyclic Reaction, Ian Fleming 2.Pericyclic Reaction- A mechanistic Approach, S. M. Mukharji.	Google meet
	2.2: Cycloaddition Reaction	3L		
	2.3: Sigmatropic Rearrangement	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

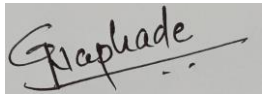
NAME OF THE STAFF: Dr.JAYASHRI GOPAL NAPHADE___DEPARTMENT: __CHEMISTRY_ CLASS: _M.Sc II (ORGANIC CHEMISTRY)

SEMESTER: ___IV_____ MONTH: ____Jan_____ ACADEMIC YEAR: ___2020-2021_____

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the how the protection of group is necessary in organic synthesis also understand the concept of Umpolung.they also understand the concept of retrosynthetic an d how to plan the retrosynthetic apporoach.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED		TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT-I Desiging Organic Synthesis-i	1.1:Protectin group in organic Synthesis	3L	1.Protective groups in Organic synthesis,Greene and Wuts 2.Principle of organic synthesis, R.O.C. Norman & Coxon. 3.Organic Synthesis:The Disconnection Approach,Stuart Warren.	White Board & Marker
	1.2: Concept of Umpolung	3L		
	1.3:Introduction to Retrosynthetic analysis & synthetic planning	9L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. JAYASHRI GOPAL NAPHADE ___DEPARTMENT: __CHEMISTRY_CLASS: _M.Sc.II(ORGANIC CHEMISTRY)

SEMESTER: _IV_ MONTH: ___January_____ ACADEMIC YEAR: ___2020-2021_____

LEARNING OBJECTIVE/S:
The learners will be able to: understand the different sources use in research .some information about journals.They understand different resources used during research.like information technology and library.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV UNIT-I RESEARCH METHODOLOGY	1.1: Print: Primary, Secondary,Tertiary sources	5L	Research methodology,C.R.Kothari	Google meet
	1.2::Journals	5L		
	1.3:Information Technology & Library Resources	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. JAYASHRI GOPAL NAPHADE __DEPARTMENT: __CHEMISTRY___

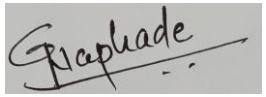
CLASS: ___S.Y.B.Sc (PC-CZ)__ SEMESTER: __III_____ MONTH: _____Aug_____

ACADEMIC YEAR: ___2020-2021_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the nomenclature ,structure ,preparation and reactions aof aldehyde and ketones.Also understand mechanism of some name reaction._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT –III Carbonyl componnd	3.1: Nomencluture,structure,reactivity & method of Preparation of aldehyde & Ketone	6L	S.Y.B.Sc ORGANIC CHEMISTRY TEXT BOOK (HIMALAYA PUBLICATION)	Google meet
	3.2: General mechanism of nuclophilic addition	1L		
	3.3: Reactions of aldehyde and ketones	3L		
	3.4: Mechanism of some name Reactions	2L		
	3.5: Keto-enol tautomerisation 3.6: Active Methylene compound	1L 2L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. JAYASHRI GOPAL NAPHADE____DEPARTMENT: __CHEMISTRY_____CLASS: __ S.Y.B.Sc (PC-CZ)__ _____ SEMESTER: _____IV_____ MONTH: ___Jan_____ ACADEMIC YEAR: _____2020-2021_____

LEARNING OBJECTIVE/S:1
The learners will be able to : Understand the nomenclature and preparation and reaction of Amines and Diazonium salt. They also understand what is heterocyclic compound it's nomenclature,preparation and reaction of furan.Pyrrole,Thiophene and Pyridine.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT –III Nitrogen Containing compound & Heterocyclic compound	3.1:Amines: Nomencluture , preparation and Reactions	4L	S.Y.B.Sc ORGANIC CHEMISTRY TEXT BOOK (HIMALAYA PUBLICATION	Google meet
	3.2: Diazonium Salt: Preparation,reactions & synthetic application	3L		
	3.3:Hetrocyclic compound :3.3.1:classification,nomenclature,structure	8L		
	3.3.2:synthesis of furan,pyrrole,Thiophene,pyridine 3.3.3:Reactivityof furan,pyrrole,Thiophene,pyridine			
	3.3.4:Reactions of furan,pyrrole,Thiophene 3.3.5: Pyridine:Basicity,Reaction			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Dr.JAYASHRI GOPAL NAPHADE ---DEPARTMENT: ___CHEMISTRY_____

CLASS: ____T.Y.B.Sc___ SEMESTER: ____V___ MONTH: __Aug_____ ACADEMIC YEAR: _____2020-2021_____

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concept of Dyestuff ,it's type ,nomenclature and application.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DRUG AND DYES UNIT-III CHEMISTRY OF DYESTUFF	3.1:Introduction to the Dyestuff Induestries	5L	T.Y.B.Sc DRUG &DYES TEXT BOOK (HIMALAYA PUBLICATION)	Google meet
	3.2: Substrates for Dyes : Types of fibres	3L		
	3.3: classification of Dyes based on Applications and Dyeing methods	7L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr.JAYASHRI GOPAL NAPHADE____DEPARTMENT: _CHEMISTRY_ CLASS: __T.Y.B.Sc_

SEMESTER: _____VI_____ MONTH: ___Jan_____ ACADEMIC YEAR: _____2020-2021_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the classification of dyes and synthesis of some dyes.Also understand the hards of synthetic dyes on health and environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DRUG AND DYES UNIT-VII CHEMISTRY OF DYE STUFF	7.1:Classification of dyes based on chemical constitution & synthesis of selected dyes.	12 L	T.Y.B.Sc DRUG &DYES TEXT BOOK (HIMALAYA PUBLICATION)	Google meet
	7.2: Health and Environmental Hazards of synthetic dyes & their remediation process.	3 L		

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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Kirti Pankaj Mhatre_____DEPARTMENT:____Chemistry_____CLASS:

____TyBsc._____ SEMESTER:__VTH_____ MONTH:___August-sept_____

ACADEMIC YEAR:_____2020-2021_____

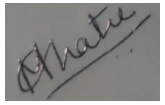
LEARNING OBJECTIVE/S:
The learners will be able to :

1. To study quality in analytical chemistrty like Concepts of Quality, Quality Control and Quality Assurance.

2. To study the chemical calculations like inter conversion of various concentration units and Percent composition of elements in chemical compounds.

3..To study how to do the sampling of solids and liquid and gases alogwith the Collection, preservation and dissolution of the sample..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICTTOOLS USED
Analytical chemistryPaper IV UNIT I :INTRODUCTION TO QUALITYCONCEPTS,CHEMICAL CALCULATIONS AND SAMPLING	1.1 Quality in Analytical Chemistry 1.1.1 Concepts of Quality, Quality Control and Quality Assurance 1.1.2 Importance of Quality concepts in Industry 1.1.3 Chemical Standards and Certified	05L	Saujanya publication,sheath publication,Himalaya publication textbook of analytical chemistry,	Online Google classroom

SIGNATURE OF THE STAFF  **SIGNATURE OF THE HOD**

	Reference Materials; Importance in chemical analysis Quality of material: Various grades of laboratory reagents			
	1.2 Chemical Calculations (Numericals and word problems are expected) 1.2.1.Inter conversion of various concentration units. (Conversion of concentration from one unit to another unit with examples) 1.2.2 Percent composition of elements in chemical compounds	04	Same as above	Online Google classroom
	1.3 Sampling 1.3.1 Purpose, significance and difficulties encountered in sampling 1.3.2 Sampling of solids: Sample size – bulk ratio, size to weight ratio, multistage and sequential sampling, size reduction methods,	06L	Same as above	Online Google classroom

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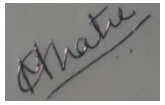
	sampling of compact solids, equipments and methods of sampling *of compact solids, sampling of particulate solids, methods and equipments used for sampling of particulate solids.* *1.3.3 Sampling of liquids: Homogeneous and heterogeneous, Static and* *flowing liquids.* *1.3.4 Sampling of gases: Ambient and stack sampling: Apparatus and methods for sampling of gases.* *1.3.5 Collection, preservation and dissolution of the sample.*			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_15_L_

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:__Kirti Pankaj Mhatre_____DEPARTMENT: CHEMISTRY_____

CLASS: _Tybsc_____-_____ SEMESTER: _Vth _____ MONTH: _____Oct-Nov-,Dec _____

ACADEMIC YEAR:__-2020-2021_____

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To study AAS like instrumentation, working and applications in detail.2.To study AES like instrumentation, working and applications in detail.

3.To study Molecular Fluorescence and Phosphorescence Spectroscopy like instrumentation, working and applications in details.4.To study turbidimetry and nephelometry like instrumentation, working and applications in details.

PAPER, UNIT, TITLE	***SUBTOPICS***	***NO OF LECTURES ALLOTED***	***REFERENCES***	***TEACHING METHOD/ ICT TOOLS USED***
ANALYTICAL CHEMISTRY *PAPER-IV*	***3.1Atomic Spectroscopy: Flame Emission spectroscopy(FES) and*** ***Atomic Absorption Spectroscopy(AAS)***		*SAUJNYA PRAKASHAN TEXTBOOK,*	*Online Google classroom*

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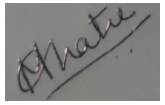
UNIT-3 OPTICAL METHODS(6UNITS)	3.1.1 Introduction, Energy level diagrams, Atomic spectra, Absorption and Emission Spectra 3.1.2 Flame Photometry – Principle, Instrumentation (Flame atomizers,	07L	SHETH PUBLICATION TEXTBOOK, HIMALAYA PUBLICATION TEXTBOOK	

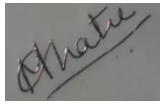
SIGNATURE OF THE STAFF **SIGNATURE OF THE HOD**

	types of Burners, Wavelength selectors, Detectors) *3.1.3 Atomic Absorption Spectroscopy – Principle, Instrumentation* *(Source, Chopper, Flame and Electrothermal Atomiser)* *3.1.4 Quantification methods of FES and AAS – Calibration curve* *method, Standard addition method and Internalstandard method* *3.1.5 Comparison between FES and AAS* *3.1.6 Applications, Advantages and Limitations*			
	3.2 Molecular Fluorescence and PhosphorescenceSpectroscopy *3.2.1 Introduction and Principle* *3.2.2 Relationship of Fluorescence intensity with concentration* *3.2.3 Factors affecting Fluorescence and Phosphorescence* *3.2.4 Instrumentation and applications*	*04L*	*SAME AS ABOVE*	*Online Google classroom*

SIGNATURE OF THE STAFF  ***SIGNATURE OF THE HOD***

	3.2.5 Comparison of Fluorimetry and Phosphorimetry 3.2.6 Comparison with Absorption methods			
	3.3 Turbidimetry and Nephelometry 3.3.1 Introduction and Principle 3.3.2 Factors affecting scattering of Radiation: Concentration, particle size, wavelength, refractiveindex 3.3.3 Instrumentation and applications	04L	SAME AS ABOVE	Online Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:__KIRTI PANKAJ MHATRE_____DEPARTMENT:_____CHEMISTRY_____CLASS: _FYBSC_____ SEMESTER:_____I^ST_____ MONTH:__AUG-SEPT-Oct-Nov-Dec_____

ACADEMIC YEAR: _2020--2021_____

LEARNING OBJECTIVE/S:
The learners will be able to : __1.To study the thermodynamics concepts like systems,zeroth law,first law calculations of heat (q), work (w),internal energy (U), and enthalpy (H) (Numericals)Thermochemistry: Heats of reactions, standard states, enthalpy of formation of molecules,enthalpy of combustion and its applications, calculation of bond energy, bond dissociation energy and resonance energy from thermochemical data, Kirchhoff's equation(Numericals) in detail.

2.To study chemical calculations with the help of numericals of Normality, molality, molarity, formality, molefractions,

weight ratio, volume ratio, weight to volume ratio, ppm, ppb, millimoles.

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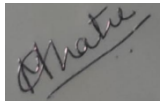
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF 

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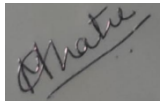
Paper 1 ***Unit 1*** ***Chemical***	***Thermodynamic terms:*** *System, surrounding, boundaries, open, closed and isolated system, intensive and extensive properties, state functions and path functions, zeroth law*	*10L*	*HIMALAYA PUBLICATIONS TEXTBOOK,* *SHETH*	*Online Google classroom*

SIGNATURE OF THE STAFF 

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Thermodynamics, ***1.2 Chemical Calculations***	*of thermodynamics* *First law of thermodynamics: concept of heat (q), work (w), internal energy (U), statement* *of first law, enthalpy, relation between heat capacities, sign conventions, calculations of* *heat (q), work (w), internal energy (U), and enthalpy (H) (Numericals expected)* *Thermochemistry: Heats of reactions, standard states, enthalpy of formation of molecules,* *enthalpy of combustion and its applications, calculationof bond energy, bond dissociation* *energy and resonance energy from thermochemical data, Kirchhoff's equation* *(Numericals expected)*		*PUBLICATIONS TEXTBOOK*	
	1.2 Chemical Calculations *Expressing concentration of solutions: Normality, molality, molarity, formality, mole* *fractions, weight ratio, volume ratio, weight to volume ratio, ppm, ppb, millimoles,* *milliequivalents (Numericals expected)*	*05L*	*SAME AS ABOVE*	*Online Google classroom*

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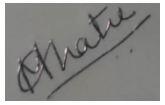
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15L_

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Kirti Pankaj Mhatre_____DEPARTMENT:_____CHEMISTRY_____CLASS: ____TYBSC_____ SEMESTER:__VITH_____ MONTH:_____Jan-Feb_____

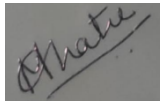
ACADEMIC YEAR:____2020-2021_____

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To study the polarography concepts like polarography H shaped polarographic cell, DME (construction, working,advantages and limitations),DC polarogram: Terms involved - Residual current, Diffusion current, Limiting current, Half-Wave Potential Role and selection of supporting electrolyte, Interference of oxygen, Half wave potential $E_{1/2}$,Factors affecting $E_{1/2}$ Ilkovic equations: various terms involved in it (No derivation)along with numericals.

2. To study 1Principle, Rotating Platinum Electrode(Construction, advantages and limitations)Titration curves with example, Advantages and limitations of amperometric titrations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF 

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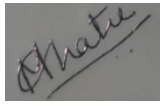
PAPER IV UNIT-1 **ELECTRO ANALYTICAL TECHNIQUES (3 & 6 UNITS)**	**1.1 Polarography (Numerical and word problemsare expected)** 1.1.1 Difference between potentiometry and voltammetry, Polarizable and non-polarizable electrodes 1.1.2 Basic principle of polarography	11L	SAUJNYA PRAKASHAN TEXTBOOK, SHETH PUBLICATION TEXTBOOK, HIMALAYA	Online Google classroom

SIGNATURE OF THE STAFF 

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	H shaped polarographic cell, DME (construction, working, *advantages and limitations)* *1.1.3 DC polarogram: Terms involved - Residual current, Diffusion* *current, Limiting current, Half-Wave Potential* *Role and selection of supporting electrolyte, Interferenceof oxygen* *and its removal, polarographic Maxima and Maxima Suppressors* *Qualitative aspects of Polarography: Half wave potential* $E_{1/2}$, *Factors affecting* $E_{1/2}$ *Quantitative aspects of polarography: Ilkovic equations: various* *terms involved in it (No derivation)* *1.1.4 Quantification* *1) Wave height – Concentration plots (working* *plots/calibration)* *2) Internal standard (pilot ion) method*		*PUBLICATION TEXTBOOK*	

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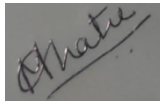
	3) Standard addition method 1.1.5 Applications advantages and limitations			
	1.2Amperometric Titrations 1.1.1Principle, Rotating Platinum Electrode(Construction, advantages and limitations) 1.2.2 Titration curves with example 1.2.3 Advantages and limitations	04L	SAME AS ABOVE	Online Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15L_____

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:__KIRTI PANKAJ MHATRE_____DEPARTMENT:_____CHEMISTRY_____CLASS:

____TYBSC_____ SEMESTER:_____VITH_____ MONTH: _Jan- Feb-Mar-April-May_____

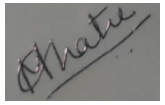
ACADEMIC YEAR: _2020-2021_____

LEARNING OBJECTIVE/S:
The learners will be able to :

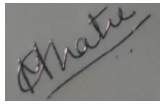
1._To study the gas chromatography Principle, Theory and terms involved Block diagram and components,types of columns,stationary phases inGSC and GLC, Detectors: TCD, FID, ECD, Qualitative, Quantitative analysis and applications Comparison between GSC and GLC along with calculations.

2. To study ion exchange chromatography Principle, Types of Ion Exchangers , Ideal properties of resin, Ion Exchange equilibria and mechanism, selectivity coefficient andseparation factor,Factors affecting separation of ion,Ion exchange capacity and its determination for cation and anion,Exchangers,Applications of Ion Exchange Chromatography in detail.

PAPER, UNIT, TITLE	***SUBTOPICS***	***NO OF LECTURES ALLOTED***	***REFERENCES***	***TEACHING METHOD/ ICT TOOLSUSED***
PAPER IV *UNIT-2* ***METHODS OF SEPARATI***	***2.1 Gas Chromatography (Numerical and word problemsare expected)*** *2.1.1 Introduction, Principle, Theory and terms involved* *2.1.2 Instrumentation: Block diagram and components,types of columns,* *stationary phases in GSC and GLC, Detectors: TCD, FID,*	*09L*	*SAUJNYA PRAKASHAN TEXTBOOK,* *SHETH PUBLICATION TEXTBOOK,* *HIMALAYA*	*Online Google classroom*

SIGNATURE OF THE STAFF  ***SIGNATURE OF THE HOD***

ON ***- II (3 & 6***				

SIGNATURE OF THE STAFF 

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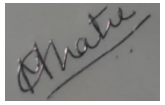
UNITS)	*ECD* *2.1.3 Qualitative, Quantitative analysis and applications* *2.1.4 Comparison between GSC and GLC*		*PUBLICATION TEXTBOOK*	
	2.2 Ion Exchange Chromatography *2.2.1 Introduction, Principle.* *2.2.2 Types of Ion Exchangers , Ideal properties of resin* *2.2.3 Ion Exchange equilibria and mechanism, selectivity coefficient andseparation factor,Factors affecting separation of ions* *2.2.4* *Ion exchange capacity and its determination for cation and anion* *exchangers.* *2.2.5 Applications of Ion Exchange Chromatography with reference to Preparation of demineralised water, Separation of amino acids*	*06L*	*SAME AS ABOVE*	*Online Google classroom*

SIGNATURE OF THE STAFF 

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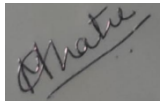
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:__KIRTI PANKAJ MHATRE_____DEPARTMENT:__CHEMISTRY_____

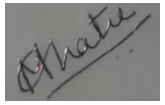
CLASS:_____FYBSC_____ SEMESTER:__IIND_____ MONTH:___Mar-April-May_____

ACADEMIC YEAR:__2020-2021_____

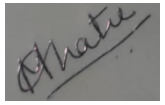
LEARNING OBJECTIVE/S:
The learners will be able to : 1. To study the gaseous state related laws and (Numericals) ,Deviation from ideal gas laws, reasons for deviation from ideal gas laws, Van der Waals equation of state, Joule-Thomson effect: qualitative discussion and experimentation,inversion temperature.(Numericals expected) in detail.

2.To study chemical equilibria and thermodynamics concepts like Reversible and irreversible reactions, law of mass action, dynamic equilibria,equilibrium constant, (K_c and K_p), relationship between K_c and K_p, Le Chatelier's principle, factorsaffecting chemical equilibrium (Numericals)Statement ofsecond law of thermodynamics, concepts of entropy and free energy,spontaneity and physical significance of free energy, thermodynamic derivation of. (Numericals).

_PAPER, UNIT, TITLE	***SUBTOPICS***	***NO OF LECTURES ALLOTED***	***REFERENCES***	***TEACHING METHOD/ ICT TOOLS USED***
Paper 1 ***Unit 1*** ***1.1 Gaseous State:*** ***1.2 Chemical***	***1.1 Gaseous State:*** *Ideal gas laws, kinetic theory of gases, Maxwell-Boltzmann's distribution of velocities* *(qualitative discussion), ideal gases, real gases, compressibility factor, Boyle's*	*08L*	*HIMALAYA PUBLICATIONS TEXTBOOK,* *SHETH PUBLICATIONS TEXTBOOK*	*Online Google classroom*

SIGNATURE OF THE STAFF  ***SIGNATURE OF THE HOD***

Equilibria and Thermodynamic Parameters:	*temperature (Numericals expected)* *Deviation from ideal gas laws, reasons for deviation from ideal gas laws, Van der Waals* *equation of state, Joule-Thomson effect: qualitative discussion and experimentation,* *inversion temperature. (Numericals expected)*			
	1.2 Chemical Equilibria and ThermodynamicParameters: *Reversible and irreversible reactions, law of mass action, dynamic equilibria, equilibrium* *constant, (K_c and K_p), relationship between K_c and K_p, Le Chatelier's principle, factors* *affecting chemical equilibrium (Numericals expected)* *Statement of second law of thermodynamics, concepts of entropy and free energy,spontaneity and physical significance of free energy, thermodynamic derivation of. (Numericals expected)*	*07L*	*SAME AS ABOVE*	*Online Google classroom*

SIGNATURE OF THE STAFF 

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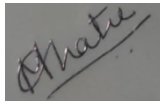
SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: August 2020 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand relation between color and chemical constitution, Armstrong theory, Witt's theory.
Study preparation of the dyes intermediates and its applications.
Get a brief idea of unit processes in dyes and dye intermediates.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Drugs and Dyes, **UNIT-IV, Colour and Chemical Constitution of Dyes**	Absorption of visible light, Colour of wavelength absorbed, Complementary colour. Relation between colour and chemical constitution.	02	Textbook, Himalaya publication	Online google classroom, google meet and ppt.
	Armstrong theory (quinonoid theory) and its limitations. Witt's Theory, Valence Bond theory, comparative study and relation of colour,	02	Textbook, Himalaya publications	Online google classroom, google meet and ppt.
	brief idea of Unit Processes, Introduction to primaries and intermediates, Benzenesulphonic acid; 1,3-Benzenedisulphonic acid; sulphanilic acid; o-, m-, p-chloronitrobenzenes; o-, m-, p-nitroanilines	03	Textbook, Seth publication	Online google classroom, google meet and ppt.
	Preparation of the dyes Intermediates; Benzene derivatives. Schaeffer acid; Tobias acid; Naphthionic acid; N.W. acid; cleve-6-acid; H-acid; Naphthol AS	04	Textbook, Seth publication	Online google classroom, google meet and ppt.
	Preparation of the dyes Intermediates; Naphthalene Derivative, Anthracene Derivative; 1-Nitroanthraquinone; 1-Aminoanthraquinone Anthraquinone-2-sulphonic acid;	04	Textbook, Seth publication	Online google classroom, google meet and ppt.

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	Benzanthrone.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: August 2020 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand UV – Visible spectroscopy, its basic theory and applications.
Study mass spectrometry, determination of molecular formula and its applications.
Learn natural products like terpenoids, alkaloids in detail.
To gain knowledge of hormones like adrenaline.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III, Organic Chemistry	Electromagnetic spectrum, units of wavelength and frequency, UV – Visible spectroscopy: Basic theory, solvents, nature of UV-Visible spectrum, concept of chromophore, auxochrome.	02	Introduction to spectroscopy (third edition), Pavia	Online google classroom, google meet and ppt.
UNIT-IV, Spectroscopy-I And Natural Products	Mass spectrometry: Basic theory. Nature of mass spectrum. General rules of fragmentation. Importance of molecular ion peak, isotopic peaks, base peak, nitrogen rule, rule of 13 for determination of empirical formula and molecular formula	03	Spectral identification of organic molecules by Silverstein.	Online google classroom, google meet and ppt.

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	Natural products: terpenoids, their introduction, isoprene rule, special isoprene rule, structural determination of citral,	04	Textbook, Himalaya publication	Online google classroom, google meet and ppt.
	Alkaloids introduction and occurrence, structural determination of nicotine,	04	Textbook, Himalaya publication	Online google classroom, google meet and ppt.
	Hormones: Introduction, structure of adrenaline (epinephrine), physiological action of adrenaline.	02	Organic chemistry by Morrision and Boyd,7th edition	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: III MONTH: August 2020 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

Study role of radicals in organic synthesis and their applications in detail.
Learn generation, stability, reactivity and structural and stereochemical properties of free radicals,.
Study characteristic reactions and applications of radicals in synthesis.

PAPER, UNIT,	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TITLE		ALLOTED		TOOLS USED
PAPER-II, Synthetic Organic Chemistry-I **UNIT-II, Radicals in organic synthesis**	Stability, reactivity and structural and stereochemical properties of free radicals, Persistent and charged radicals, Electrophilic and nucleophilic radicals. Radical Initiators: azobisisobutyronitrile (AIBN) and dibenzoyl peroxide.	04	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J. Sundberg, 5th Edition,	Online google classroom, google meet and ppt.
	Characteristic reactions - free radical substitution, addition to multiple bonds. Radical chain reactions, radical halogenation of hydrocarbons (regioselectivity),radical cyclizations, autoxidations	04	Organic Chemistry, Clayden Greeves Warren and Wothers,	Online google classroom, google meet and ppt.
	Radicals in synthesis: Inter and intra molecular C-C bond formation via mercuric hydride, tin hydride, thiol donors. Cleavage of C-X, C-Sn, C-Co, C-S, O-O bonds. Oxidative coupling, C-C bond formation in aromatics: SRNAr reactions.	04	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press (2002).	Online google classroom, google meet and ppt.
	Hunsdiecker reaction, Pinacol coupling, McMurry coupling, Sandmeyer reaction, Acyloin condensation.	03	Organic reactions and their mechanisms, 3rd revisededition, P.S. Kalsi, New Age International	Online google classroom, google meet and ppt.

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			Publishers	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: III MONTH: August 2020 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

Study enamines, their generation & application in organic synthesis with mechanistic pathways.
Learn phosphorus, sulfur and nitrogen ylides; preparation and their synthetic applications along with their stereochemical aspects.
Study α-C-H functionalization by nitro, sulfoxide, sulfone and phosphonate groups.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic Organic Chemistry-I **UNIT-III, Enamines, Ylides and**	Enamines**:** Generation & application in organic synthesis with mechanistic pathways, Stork enamine reaction. Reactivity, comparison between enamines and enolates. Synthetic reactions of enamines including asymmetric reactions of chiral enamines derived from chiral secondary amines.	04	Name Reactions and Reagents in Organic Synthesis**,** 2nd Edn., Bradford P. Mundy, Michael G. Ellard,	Online google classroom, google meet and ppt.

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α-C-H functionalization	Phosphorus, Sulfur and Nitrogen Ylides: Preparation and their synthetic applications along with their stereochemical aspects.	03	Organic Chemistry, Clayden Greeves Warren and Wothers,	Online google classroom, google meet and ppt.
	Wittig reaction, Horner-Wadsworth-Emmons Reaction, Barton-Kellogg olefination.	03	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press (2002).	Online google classroom, google meet and ppt.
	α-C-H functionalization: By nitro, sulfoxide, sulfone and phosphonate groups: generation of carbanions by strong bases (LDA/n-butyl lithium) and applications in C-C bond formation.	03	Organic reactions and their mechanisms, 3rd revisededition, P.S. Kalsi, New Age International Publishers	Online google classroom, google meet and ppt.
	Bamford-Stevens reaction, Julia olefination and its modification, Seyferth–Gilbert homologation, Steven's Rearrangement.	02	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Sundberg,	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: III MONTH: August 2020 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand importance of organosilicons, organoboron and organotin compounds in organic synthesis.
Study application of mercury, selenium in organic synthesis.
Study application of silyl enol ethers in organic synthesis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic Organic Chemistry-I **UNIT-IV, Metals / Non-metals in organic synthesis**	Mercury in organic synthesis: Mechanism and regiochemistry of oxymercuration and demercuration of alkenes, mercuration of aromatics, transformation of aryl mercurials to aryl halides. Organomercurials as carbene transfer reagents.	03	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press	Online google classroom, google meet and ppt.
	Organoboron compounds: Mechanism and regiochemistry of hydroboration of alkenes and alkynes, asymmetric hydroboration using chiral boron reagents, 9-BBN hydroboration, oxazaborolidine (CBS catalyst) and functional group reduction by diborane.	03	Organic Chemistry, Clayden Greeves Warren and Wothers,	Online google classroom, google meet and ppt.
	Organosilicons: Salient features of silicon governing the reactivity of organosilicons, preparation and important bond-forming reactions of alkyl silanes, alkenyl silanes, aryl silanes	03	Modern Methods of Organic Synthesis, 4th	Online google classroom, google meet and ppt.

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	and allyl silanes. β-silyl cations as intermediates. Iodotrimethylsilane in organic synthesis.		Edition, W. Carruthers and Iain Coldham,.	
	Silyl enol ethers: Application: As nucleophiles (Michael reaction, Mukaiyama aldol reaction), in ring contraction reactions.	02	Moder Organic Synthesis: An Introduction, G.S. Zweifel and M.H. Nantz,	Online google classroom, google meet and ppt.
	Organotin compounds: Preparation of alkenyl and allyl tin compounds; application in C-C bond formation, in replacement of halogen by H at the same C atom. Selenium in organic synthesis: Preparation of selenols/selenoxide, selenoxide elimination to create unsaturation, selenoxide and seleno acetals as α-C-H activating groups	04	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J. Sundberg,	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: T.Y.B.Sc. SEMESTER: VI MONTH: January 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

Study polymers, their classification, stereochemistry and applications.
Understand concept of biodegradable polymers
Learn catalysts and reagents with respect to functional group transformations and selectivity.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III, Organic Chemistry **UNIT-IV, Polymer, Catalysts and Reagents**	Terms; monomer, polymer, homopolymer, copolymer, thermo plastics and thermosets. Addition polymers: polyethylene, polypropylene, teflon, polystyrene, PVC, Uses. Condensation polymers: polyesters, polyamides, polyurethanes, polycarbonates, phenol formaldehyde resins.Uses	03	Textbook, Himalaya publication	Online google classroom, google meet and ppt.
	Stereochemistry of polymers: Tacticity, mechanism of stereochemical control of polymerization using Ziegler Natta catalysts. Natural and synthetic rubbers: Polymerisation of isoprene: 1,2 and 1,4 addition (cis and trans), Styrene butadiene copolymer. Additives to polymers: Plasticisers, stabilizers and fillers.	03	Polymer science – a text book by Ahluwalia and Mishra	Online google classroom, google meet and ppt.
	Biodegradable polymers: Classification and uses. polylactic acid structure, properties and use for packaging and medical purposes.,	02	Textbook, Himalaya publication	Online google classroom, google meet and ppt.
	Catalysts for hydrogenation: a. Raney Nickel b. Pt and PtO_2 (C=C, CN, NO_2, aromatic ring)	04	Oranic chemistry by Carey and Sundberg, Part A	Online google classroom, google meet and ppt.

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	c. Pd/C : C=C, COCl→CHO (Rosenmund) d. Lindlar catalyst: alkynes,		& B	
	Reagents: a. $LiAlH_4$ (reduction of CO, COOR, CN,NO_2) b. $NaBH_4$ (reduction of CO) c. SeO_2 (Oxidation of CH_2 alpha to CO) d. mCPBA (epoxidation of C=C) e. NBS (allylic and benzylic bromination)	03	Organic chemistry by Morrision and Boyd,7th edition	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: T.Y.B.Sc. SEMESTER: VI MONTH: January 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

Study classification of dyes based on chemical constitution and and synthesis of selected dyes.
Get a brief idea of health and environmental hazards of synthetic dyes and their remediation processes.
Get a brief idea of impact of the textile and leather dye industry on the environment and effluent treatment strategies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Drugs and Dyes,	Classification of Dyes, Nitro Dye: Naphthol Yellow S Nitroso Dye: Gambine Y, Azo dyes,	03	Textbook, Himalaya publication	Online google classroom, google meet and ppt.

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UNIT-III, Classification of Dyes based on Chemical Constitution and Synthesis of Selected Dyes. Health and Environmental Hazards of Synthetic Dyes	Diphenylmethane dye: Auramine O*, Triphenylmethane dye: Diamine series: Malachite Green* Triamine series: Acid Magenta	03	Textbook, Himalaya publications	Online google classroom, google meet and ppt.
	Heterocyclic Dyes:Thiazine dyes, Azine dyes, Quinone Dyes: a) Naphthaquinone: Naphthazarin b) Anthraquinone Dyes:	03	Textbook, Seth publication	Online google classroom, google meet and ppt.
	Indigoid Dyes: Indigo* (from aniline + monochloroacetic acid) Phthalocyanine Dyes: Monastral Fast Blue B	03	Textbook, Seth publication	Online google classroom, google meet and ppt.
	Health and Environmental Hazards of Synthetic Dyes and their Remediation Processes Impact of the textile and leather dye Industry on the environment	03	Textbook, Seth publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: IV MONTH: January 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

Study principles of physical organic chemistry and structural effects and reactivity.
Study linear free energy relationship (LFER) in determination of organic reaction mechanism.
Learn uses of Hammett equation.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, Theoretical organic chemistry-II **UNIT-I, Physical organic chemistry**	Structural effects and reactivity**:** Linear free energy relationship (LFER) in determination of organic reaction mechanism, The Hammett equation.	03	March's Advanced Organic Chemistry, Jerry March,	Online google classroom, google meet and ppt.
	The Hammett equation, substituent constants, theories of substituent effects, interpretation of σ-values, reaction constants ρ, Yukawa-Tsuno equation**.**	04	A guide to mechanism in Organic Chemistry, 6th edition, 2009, Peter Sykes,	Online google classroom, google meet and ppt.
	Uses of Hammett equation, deviations from Hammett equation. Dual parameter correlations, Inductive substituent constants..	02	Advanced Organic Chemistry: Reaction Mechanisms, R. Bruckner, Academic Press	Online google classroom, google meet and ppt.
	The Taft model, σ_I and σ_R scales, steric parameters Es and β. Solvent effects, Okamoto-Brown equation, Swain-Scott equation, Edward and Ritchie correlations,	03	Organic Chemistry, Part A and B, Fifth edition,2007, Francis A. Carey and Richard J. Sundberg,	Online google classroom, google meet and ppt.

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	Grunwald-Winstein equation, Dimroth's E_T parameter, Solvatochromism Zscale, Spectroscopic Correlations, Thermodynamic Implications.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: IV MONTH: January 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

UNDERSTAND CONCEPTS OF Electro-organic chemistry IN DETAIL.
Study cathodic reduction and anodic oxidation and its application in organic synthesis with mechanistic pathways.
Learn organocatalysts and Pd catalysed cycloaddition reactions
Study applications of selected methods of organic synthesis like crown ethers, cryptands, micelles

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic organic chemistry-II **UNIT-III, Electro-organic chemistry and**	Electrode potential, cell parameters, electrolyte, working electrode, choice of solvents, supporting electrolytes.	02	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J.	Online google classroom, google meet and ppt.

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Selected methods of Organic synthesis			Sundberg,	
	Cathodic reduction: Reduction of alkyl halides, aldehydes, ketones, Nitro compounds, olefins, arenes, electro-dimerization.	02	Organic Chemistry, Clayden Greeves Warren and Wothers,	Online google classroom, google meet and ppt.
	Anodic oxidation: Oxidation of alkylbezene, Kolbe reaction, Non-Kolbe oxidation, Shono oxidation..	03	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press (2002).	Online google classroom, google meet and ppt.
	Selected Methods of Organic synthesis, Applications of the following in organic synthesis: Crown ethers, cryptands, micelles, cyclodextrins, catenanes. Organocatalysts: Proline, Imidazolidinone. Pd catalysed cycloaddition reactions: Stille reaction, Saeguse-Ito oxidation to enones, Negishi coupling	05	Organic reactions and their mechanisms, 3rd revisededition, P.S. Kalsi, New Age International Publishers	Online google classroom, google meet and ppt.
	Use of Sc(OTf), and Yb(OTf) as water tolerant Lewis acid catalyst in aldol condensation, Michael reaction, Diels-Alder reaction, Friedel – Crafts reaction.	03	Chem.Rev. 2002, 102, 2227-2302, Rare Earth Metal Triflates in Organic Synthesis, S. Kobayashi.	Online google classroom, google meet and ppt.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: IV MONTH: January 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

To gain knowledge of basic concepts of organometalic chemistry.
Understand importance of palladium in organic synthesis.
Study application of Ce, Sm, Ni, Co, Fe, Rh, and Cr in organic synthesis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic organic chemistry-II **UNIT-IV, Transition and rare earth metals in organic synthesis**	Introduction to basic concepts: 18 electron rule, bonding in transition metal complexes, C-H activation, oxidative addition, reductive elimination, migratory insertion.	03	Moder Organic Synthesis: An Introduction, G.S. Zweifel and M.H. Nantz, W.H. Freeman and Company, (2007).	Online google classroom, google meet and ppt.
	Palladium in organic synthesis: π-bonding of Pd with olefins, applications in C-C bond formation, carbonylation, alkene isomerisation, cross-coupling of organometallics and halides.	03	Organic Chemistry, Clayden Greeves Warren and	Online google classroom, google meet and ppt.

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			Wothers,	
	Heck reaction, Suzuki-Miayura coupling, Sonogashira reaction and Wacker oxidation. Heteroatom coupling for bond formation between aryl/vinyl groups and N, S, or P atoms. Olefin metathesis using Grubb's catalyst.	03	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press	Online google classroom, google meet and ppt.
	Application of Ni, Co, Fe, Rh, and Cr carbonyls in organic synthesis.	04	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J. Sundberg,	Online google classroom, google meet and ppt.
	Application of samarium iodide including reduction of organic halides, aldehydes and ketones, α-functionalised carbonyl and nitro compounds. Application of Ce(IV) in synthesis of heterocyclic quinoxaline derivatives and its role as a de-protecting agent.	02	Modern Methods of Organic Synthesis, 4th Edition, W. Carruthers and Iain Coldham,	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Namrata Amit Kawale *DEPARTMENT:* Chemistry

CLASS: FYBSc CBZ *SEMESTER:* I *MONTH:* Aug- to Dec *ACADEMIC YEAR:* 2020-21

LEARNING OBJECTIVE/S: The_learners_will_be_able_to_learn_basics_of_Stereochemistry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II,U-3 Stereochemistry	1)Flying -wedge ,fischer projection formula 2)Newman and Sawhorse formula	03		Google meet ,Google classroom, PPT
	3) Their interconversions 4)Geometrical isomerism in alkene	02		
	5) E/Z notation with CIP rule 6) optical activity ,specific rotation.	04		
	7) Meso structure ,Racemic mixture 8) D/L and R/S designations	02		

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	9) conformational analysis of alkane	*04*		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Namrata Amit Kawale DEPARTMENT: Chemistry

CLASS: FYBSc PCM SEMESTER: I MONTH: : Aug- to Dec ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to : learn basics of stereochemistry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II,U-3 Stereochemistry	1)Flying -wedge ,fischer projection formula 2)Newman and Sawhorse formula	03		Google meet ,Google classroom, PPT
	3) Their interconversions 4)Geometrical isomerism in alkene	02		
	5) E/Z notation with CIP rule 6) optical activity ,specific rotation.	04		
	7) Meso structure ,Racemic mixture 8) D/L and R/S designations	02		
	9) conformational analysis of alkane	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Namrata Amit Kawale_____ DEPARTMENT:_____Chemistry_____

CLASS:_____TYBSc_____ SEMESTER:_____V_____ MONTH: : Aug- to Dec ACADEMIC YEAR: 2020-21_____

LEARNING OBJECTIVE/S:

The learners will be able to : learn mechanisms of reactions,pericyclic and photochemical reaction

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-3,U-1	Mechanism of organic Reaction- Basic terms and concepts, Neighbouring group participation in nucleophilic reaction	07		Google meet ,Google classroom, PPT
	Pericyclic reactions classification and nomenclature	03		
	Photochemistry-introduction ,reactions of olefins and carbonyl compound	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Namrata Amit Kawale_____DEPARTMENT: Chemistry_____
_ CLASS:____MSc_____ SEMESTER:_____I_____ MONTH:_: jan-feb ACADEMIC YEAR:_2020-21_____

LEARNING OBJECTIVE/S:

The learners will be able to : learn details in stereochemistry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Stereochemistry	3.1 Symmetry operations: Identification of the different axes and planes of symmetry. 3.2 Molecules with tri and tetracoordinate chiral centres:	03		Google meet ,Google classroom, PPT
	3.3. Molecules with two or more chiral centres:	02		
	3.4 Axial and planar chirality: Principles of axial and planar chirality. Stereochemical features and configurational descriptors (R, S)	05		
	3.5 Prochirality: Homotopic, heterotopic and diastereotopic ligands and faces. Identification using substitution and symmetry criteria.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Namrata Amit Kawale_____DEPARTMENT: Chemistry_____

CLASS:_____FYBSc CBZ_____SEMESTER:_____II_MONTH:Jan -May ACADEMIC YEAR:___2020-21_

LEARNING OBJECTIVE/S: The_learners_will_be_able_to_learn_aromatic hydrocarbon

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
P-II,U-3 Stereochemistry	cycloalkanes and their relative stability, Baeyer strain theory, Conformation Analysis of cyclohexane: Chair, Boat and Twist boat forms; Relative stability with energy.	05		Google meet ,Google classroom, PPT
	Aromatic Hydrocarbons Aromaticity; Huckels rule ,anti aromaticity	04		
	Cyclic carbocations/carbanions and heterocyclic compounds with suitable examples.	02		
	Electrophilic aromatic substitution: halogenation, nitration, sulphonation and Friedel-Craft alkylation/acylation with their mechanism.	02		
	Hammond's postulate, Directing effects of groups	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Namrata Amit Kawale_____DEPARTMENT: Chemistry_____

CLASS:_____FYBSc PCM_____ SEMESTER:_____II_____MONTH: Jan -May
*ACADEMIC YEAR:_2020-21_*

LEARNING OBJECTIVE/S: The_learners_will_be_able_to_learn Aromatic hydrocarbons._

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
P-II,U-3 Stereochemistry	cycloalkanes and their relative stability, Baeyer strain theory, Conformation analysis of cyclohexane: Chair, Boat and Twist boat forms; Relative stability with energy.	05		Google meet ,Google classroom, PPT
	Aromatic Hydrocarbons Aromaticity; Huckels rule ,anti aromaticity	04		
	Cyclic carbocations/carbanions and heterocyclic compounds with suitable examples.	02		
	Electrophilic aromatic substitution: halogenation, nitration, sulphonation and Friedel-Craft alkylation/acylation with their mechanism.	02		
	Hammond's postulate, Directing effects of groups	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____Namrata Amit Kawale_____DEPARTMENT: Chemistry_____
CLASS:_____TYBSc _____ SEMESTER:_____II_____MONTH:Jan-May_ ACADEMIC YEAR:_____2020-21_____

LEARNING OBJECTIVE/S: The_learners_will_be_able_to_learn Carbohydrates._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
P-II,U-3 Stereochemistry	Molecular rearrangement-Mechanism with examples and stereochemistry of Pinacol.pinacolone rearrangement,Beckmann, Favorski,Michael,Witting reaarangment.	05		Google meet ,Google classroom, PPT
	Carbohydrates : Classification,structures,interconversions of monosaccharides	03		
	Stereoisomers of D-glucose	02		
	Mutation in D-glucose with mechanism	03		
	Reactions in D-glucose and D-fructose,Glycosides	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Namrata Amit Kawale_____DEPARTMENT: Chemistry_____

_ CLASS:____MSc_____ SEMESTER:_____II_____ MONTH:april-may ACADEMIC YEAR:_____2020-21_____

LEARNING OBJECTIVE/S:

The learners will be able to : learn mechanisms if reactions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-3,U-2 Reactions and Rearrangements:	Mechanisms, stereochemistry (if applicable) and applications of the following: 2.1. Reactions: Baylis-Hilman reaction, McMurry Coupling, Corey-Fuchs reaction, Nefreaction, Passerini reaction.	04		Google meet ,Google classroom, PPT
	2.2. Concerted rearrangements: Hofmann, Curtius, Lossen, Schmidt, Wolff, Boulton-Katritzky.	03		
	2.3. Cationic rearrangements: Tiffeneau-Demjanov, Pummerer, Dienone-phenol, Rupe,Wagner-Meerwein.	04		
	2.4. Anionic rearrangements: Brook, Neber, Von Richter, Wittig, Gabriel-Colman, Payne.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____FY BSc_____ SEMESTER: __I_____MONTH: _August to December_____ ACADEMIC YEAR: _2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN THE ATOMIC STRUCTURE IN DETAIL AND ALSO LEARN PERIODIC TABLE AND THE PERIODICITY OF THE ELEMENTS____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I **UNIT II** **INORGANIC CHEMISTRY**	**2.1 Atomic structure:** (Qualitative treatment only; it is expected that the learner knows the mathematical statements and understands their physical significance after completing this topic. No derivations of the mathematical equations required) a) Historical perspectives of the atomic structure; Rutherford's Atomic Model, Bohr's theory, its limitations and atomic spectrum of hydrogen atom. Structure of hydrogen atom. b) Hydrogenic atoms:	**(10L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION

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	1. Simple principles of quantum mechanics; 2. Atomic orbitals i) Hydrogenic energy levels ii) Shells, subshells and orbitals iii) Electron spin iv) Radial shapes of orbitals v) Radial distribution function vi) Angular shapes of orbitals. 3. Many Electron Atoms i) Penetration and shielding ii) Effective nuclear charge 4. Aufbau principle			
	2.2: Periodic Table and periodicity : Long form of Periodic Table; Classification for elements as main group, transition and inner transition elements; Periodicity in the following properties : Atomic and ionic size; electron gain enthalpy; ionization enthalpy, effective nuclear charge (Slater's rule); electronegativity ; Pauling, Mulliken and Alred Rochow electronegativities (Numerical problems expected, wherever applicable.) **Unit III**	**(5L)**		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15___

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____FY BSc_____ SEMESTER: __II_____MONTH: January to may_____ ACADEMIC YEAR: _2020- 21_____

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN THE BASICS OF THE PERIODIC TABLE AND THE VARIOUS ACID BASE THEORIES_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I **UNIT II** **INORGANIC CHEMISTRY**	**2.1 Concept of Qualitative Analysis:** a) Testing of Gaseous Evolutes, Role of Papers impregnated with Reagents in qualitative analysis (with reference to papers impregnated with starch iodide, potassium dichromate, lead acetate, dimethylglyoxime and oxine reagents). b) Precipitation equilibria, effect of common ions, uncommon ions, oxidation states,	**(7L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION

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	buffer action, complexing agents on precipitation of ionic compounds. (Balanced chemical equations and numerical problems expected.)			
	2.2 Acid Base Theories Arrhenius, Lowry- Bronsted, Lewis, Solvent – Solute concept of acids and bases, Hard and Soft acids and bases. Applications of HSAB Applications of acid base chemistry in: i) Understanding organic reactions like Friedel Craft's (acylation/alkylation)reaction ii) Volumetric analysis with special reference to calculation of titration curveinvolving strong acid and strong base.	**(8L**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_ CHEMISTRY_____

CLASS: _____FY BSc_____ SEMESTER: __I_____MONTH: ___August to December_____ ACADEMIC YEAR: _2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN THE STEREO CHEMISTRY OF ALKANES THEIR OPTICALV ACTIVITY__THEIR CENTERS_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II **UNIT III** **ORGANIC CHEMISTRY**	**3. Stereochemistry I: (15L)** Fischer Projection, Newman and Sawhorse Projection formulae (of erythro, threo isomers of tartaric acid and 2,3 dichlorobutane) and their interconversions Geometrical isomerism in alkene and cycloalkanes: cis–trans and syn-anti isomerism E/Z notations with C.I.P rules.	15	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION

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	Optical Isomerism: Optical Activity, Specific Rotation, Chirality/Asymmetry, Enantiomers, Molecules with two similar and dissimilar chiral-centres, Distereoisomers, meso structures, racemic mixture and resolution (methods of resolution not expected). Relative and absolute configuration: D/L and R/S designations. Conformation analysis of alkanes (ethane, propane and n-butane); Relative stability withenergy diagrams.			

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_ CHEMISTRY_____

CLASS: _____FY BSc_____ SEMESTER: __II_____MONTH: __January to may_____ ACADEMIC YEAR: _2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN STREOCHEMISTRY OF CYCLO ALKANE AND ALL ABOUT THE AROMATIC HYDROCARBONS_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III	**3.1 Stereochemistry-II: Cycloalkanes and Conformational Analysis:** Types of cycloalkanes and their relative stability, Baeyer strain theory, Conformation	**(5L)**	TEXT BOOKS REFFERENCE BOOKS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION

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ORGANIC CHEMISTRY	analysis of cyclohexane: Chair, Boat and Twist boat forms; Relative stability with energy.		U TUBE VIDEOS	
	3.2Aromatic Hydrocarbons Aromaticity: Hückel's ruleanti-aromaticity, aromatic character of arenes, cycliccarbocations/carbanions and heterocyclic compounds with suitable examples. Electrophilic aromatic substitution: halogenation, nitration, sulphonation and Friedel-Craftalkylation/acylation with their mechanism. , Hammond's postulate, Directing effects of the groups.	**(10L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_ CHEMISTRY_____

CLASS: _____SY BSc_____ SEMESTER: __III_____MONTH: ___August to December_____ ACADEMIC YEAR: _2020-2021_____

LEARNING OBJECTIVE/S:
The learners will be able to : CHEMICAL THERMODYNAMICS IN WHICH FREE ENERGIES AND THE ELECTROCHEMISTRY WITH THE BASIC CONCEPTS OF ELECTROCHEMISTRYY_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I **UNIT I** **PHYSICAL CHEMISTRY**	**1.1 Chemical Thermodynamics-II** 1.1.1 Free Energy Functions: Helmholtz Free Energy, Gibb's Free Energy, Variation of Gibb's free energy with Pressure and Temperature. 1.1.2 Gibbs-Helmholtz equation, van't Hoff reaction isotherm and van't Hoff reaction isochore. (Numericals expected). 1.1.3 Thermodynamics of Open System: Partial Molal Properties, Chemical Potential and its variation with Pressure and Temperature, Gibb's Duhem equation. 1.1.4 Concept of Fugacity and Activity	**(8L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	1.2 Electrochemistry: 1.2.1 Conductivity, equivalent and molar conductivity and their variation with dilution for weak and strong electrolytes.	**(7L)**	TEXT BOOKS REFFERENCE BOOKS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION

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	1.2.2 Kohlrausch law of independent migration of ions. 1.2.3 Applications of conductance measurements: determination of degree of ionization and ionization constant of weak electrolyte, solubility and solubility product of sparingly soluble salts, ionic product of water. (Numericals expected). 1.2.4 Transference number and its experimental determination using Moving boundary method. (Numericals expected). Factors affecting transference number.		U TUBE VIDEOS	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____SY BSc_____ SEMESTER: __IV_____MONTH: ____January to may_____ ACADEMIC YEAR: _2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN ELETROCHEMISTRY II GIVES THEM THE IDEA ABOUT THE REVERSIBLE AND IRRIVERSIBLE CELL ALSO GIVE THE KNOWLEDGE OF PHASE EQUILIBRIA__

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I **UNIT I** **PHYSICAL**	**1.1Electrochemistry-II:** 1.1.1 Electrochemical conventions, Reversible and irreversible cells.	**(8 L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION

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CHEMISTRY	1.1.2 Nernst equation and its importance, Types of electrodes, Standard electrode potential, Electrochemical series (Numericals expected). 1.1.3 Thermodynamics of a reversible cell, calculation of thermodynamic properties: ΔG, ΔH and ΔS from EMF data. (Numericals expected) 1.1.4 Calculation of equilibrium constant from EMF data. (Numericals expected) 1.1.5 Concentration cells with transference and without transference. Liquid junction potential and salt bridge. 1.1.6 pH determination using hydrogen electrode and quinhydrone electrode.(Numericals expected)			
	1.2 Phase Equilibria: 1.2.1 Phases, components and degrees of freedom of a system, criteria of phase equilibrium. Gibbs Phase Rule and its thermodynamic derivation. 1.2.2 Derivation of Clausius – Clapeyron equation and its importance in phase equilibria. (numericals expected) 1.2.3 Phase diagrams of one-component systems (water and sulphur). 1.2.4 Two component systems involving eutectics, congruent and incongruent melting points (lead-silver system).	**(7L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____SY BSc_____ SEMESTER: __III_____MONTH: ___August to December_____ ACADEMIC YEAR: _2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN ABOUT THE P BLOCK ELEMENTS LIKE BORON FAMILY,NITROGEN FAMILY AND SILICON FAMILY ELEMENTS

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II **UNIT II** **INORGANIC CHEMISTRY**	**2. Selected topics on p block elements** **2.1 Chemistry of Boron compounds** 2.1.1 Electron deficient compounds – BH_3, BF_3, BCl_3 with respect to Lewis acidity and applications. 2.1.2 Preparation of simple boranes like diborane and tetraborane. 2.1.3 Structure and bonding in diborane and tetraborane (2e-3c bonds) 2.1.4 Synthesis of Borax.	5	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	2.2 Chemistry of Silicon and Germanium 2.2.1 Silicon compounds: Occurrence , Structure and inertness of SiO_2 2.2.2 Preparation of structure of $SiCl_4$ 2.2.3 Occurrence and extraction of Germanium 2.2.4 Preparation of extra pure Silicon and Germanium	5	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	2.3 Chemistry of Nitrogen family 2.3.1 Trends in chemical reactivity - Formation of hydrides, halides, oxides with special reference to oxides of nitrogen. 2.3.2 Oxides of nitrogen with respect to preparation and structure of NO, NO_2, N_2O and N_2O_4. 2.3.3 Synthesis of ammonia by Bosch – Haber process	5	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

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CLASS: _____SY BSc_____ SEMESTER: __IV_____MONTH: _January to may_____ ACADEMIC YEAR: _2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN THE ACIDY AND BASUCITY OF CATION AND ANION WITH THE HELP OF DIGRAMS ALSO THEY WILL STUDY THE USES OF ENVIRONMENTAL CHEMISTRY OF VOLATILE OXIDES AND OXO ACIDS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II **INORGANIC CHEMISTRY**	**2 Ions in aqeous medium** 2.1. Acidity of Cations and Basicity of Anions i. Hydration of Cations; Hydrolysis of Cations predicting degree of hydrolysis of Cations-effect of Charge and Radious. ii. Latimer Equation. Relationship between pKa, acidity and z_2/r ratios of metal ions graphical Presentation iii. Classification of cations on the basis of acidity category – Non acidic, Moderately acidic, strongly acidic, very strongly acidic with pKa values range and examples iv. Hydration of Anions; Effect of Charge and Radius; Hydration of anions- concept, diagram classification on the basis of basicity ii. Uses and environments aspects of these acids	10	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	2.2. Uses and Environmental Chemistry of volatile Oxides and oxo-acids i. Physical properties of concentrated oxo-acids like sulfuric, Nitric and Phosphoric acid	5	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____SY BSc_____ SEMESTER: ___III_____MONTH: _____August to December_____ ACADEMIC YEAR: _2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : On completing the learning of this unit the learner is expected to

- Know the various instrumental methods of analysis
- Advantages of using instruments to make measurements
- The various observable properties of a given analyte and the stimulus best suited for its analysis
- Know about a generalized diagram of an analytical instrument
- Select a suitable instrumental method for analysis
- Appreciate the basic terms in spectrometry
- Use the relationship between absorbance (and its variations) and concentration of the analyte.
- Chose a suitable method foe photometric titrations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III **UNIT III** **ANALYTICAL CHEMISTRY**	**Instrumental Methods-I [15 L]** **3. Basic Concepts in Instrumental methods 03** **3.1.** Relation between the Analyte, Stimulus and measurement of change in the observable property. **3.2.** Block Diagram of an Analytical instrument. **3.3.** Types of Analytical Instrumental methods based on	15	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION

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	i. Optical interactions (eg. Spectrometry: uv-visible, Polarimetry) ii. Electrochemical interactions (eg. Potentiometry, Conductometry,) iii. Thermal interactions (eg. Thermogravimetry) **3.4. Spectrometry (07 L)** 3.4.1. Interaction of electromagnetic radiation with matter: Absorption and Emission spectroscopy 3.4.2. Basic Terms: Radiant Power, Absorbance, Transmittance, Monochromatic light, Polychromatic light, Wavelength of maximum absorbance, Absorptivity and Molar Absorbtivity 3.4.3. Statement of Beer's Law and Lambert's Law, Combined Mathematical Expression of Beer -Lambert's Law, Validity of Beer-Lambert's Law, Deviations from Beer-Lambert's Law ((Real deviations, Instrumental deviations and Chemical deviations) (Numerical problems based on Beer-Lambert's Law) 3.4.4. Instrumentation for absorption spectroscopy: Colorimeters and Spectrophotometers 3.4.5. Block Diagrams for Single beam and Colorimeter, and Spectrophotometer (Principles, Construction and working-Details of Components expected i.e , source ,Sample holder , Filters/Monochromators, Detectors such as Photomultiplier tube) 3.4.6. Applications of UV-Visible Spectrophotometry **(02 L)**			

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	(a) Qualitative analysis such as Identification of functional groups in Organic compounds ,Chromophores and Auxochrome,c*is* and *trans* isomers (b) Quantitative analysis by Calibration curve method and 3.4.7. Photometric Titrations: Principle ,Instrumentation, Types of Photometric titration Curves with examples.			

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____SY BSc_____ SEMESTER: __IV_____MONTH: January to may_____ ACADEMIC YEAR: _2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : On completing this unit the learner is expected to understand
i) The use of statistical methods in chemical analysis.
ii) The nature of indeterminate errors
iii) The randomness of such errors and its distribution around a correct or acceptable result
iv) Computation of Confidence limits and confidence interval
v) Test for rejection of doubtful result
vi) Method to draw best fitting straight line

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT III	**Statistical Treatment of analytical data --II (15 L)** Objectives:	**(03L)**	TEXT BOOKS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION

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ANALYTICAL CHEMISTRY	3.1.**Nature of Indeterminate Errors:** 3.1.1. The true and acceptable value of a result of analysis 3.1.2. Measures of central tendency: mean, median. mode, average 3.1.3. Measures of dispersion: Absolute deviation, relative deviation, relative average deviation, standard deviation,(s,sigma) variance, coefficient of variation		REFFERENCE BOOKS U TUBE VIDEOS	
	3.2.**Distribution of random errors:** 3.2.1. Gaussian distribution curve. 3.2.2. Equation and salient features of Gaussian distribution curve	**(02L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	3.3.Concept of Confidence limits and confidence interval and its computation using) (i) Population standard deviation (ii) Student's *t* test (iii) Range	**(03 L**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	3.4.Criteria for rejection of doubtful result (i) 2.5 d rule (ii) 4.0 d rule (iii) Q test	**(02 L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	3.5.Test of Significance (i) Null hypothesis (ii) F-test (variance ratio test)	**(02 L)**	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION
	3.6. Graphical representation of data and obtaining best fitting straight line (a) For line passing through origin	**(03 L)**	TEXT BOOKS REFFERENCE BOOKS	Google class room, Jamboard Canva. POWERPOINT PRESENTATION

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	(b) For line not passing through origin [Numerical problems wherever possible, expected		U TUBE VIDEOS	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15_____

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TEACHING PLAN (UNITPLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: T.Y.Bsc. SEMESTER : V MONTH : August-September

ACADEMICYEAR: 2020-2021

LEARNINGOBJECTIVE/S:
The learners will be able to:

To learn- dipole moment, polarization of a bond, bond moment, derivation for Rotational spectroscopy, Vibrational spectroscopy,
To learn-Rotational-Vibrational spectroscopy, Raman spectroscopy, solve the numerical problems based on this topic.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICT TOOLSUSED
PAPER-I, UNIT-I TITLE: MOLECULAR SPECTROSCOPY	1.Rotational Spectrum	04	1)T.Y.Bsc Physical Chemistry Text book by Sheth Pub. And by Himalaya Pub. 2)Principles of Physical Chemistry B.R. Puri, L.R. Sharma, M.S. Pathania, VISHAL PUB.,2008.	Google classroom
	2.Vibrational Spectrum	04		
	3.Vibrational Rotational spectrum of diatomic molecule	04		
	4.Raman Spectroscopy	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNITPLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: T.Y.Bsc. SEMESTER : V
MONTH : October November and December ACADEMIC YEAR : 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

To know-Adsorption and its types, Langmuir and B.E.T adsorption isotherm, Terms like Emulsion, Gel, Sol.

To learn-Origin of charges on colloidal particles, Concept of electrical double layer, zeta potential, Helmholtz and Stern model, Electro-kinetic phenomena.

To know-micelle formation, Classification and applications of surfactants in detergents and food industry.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
PAPER-I, UNIT-IV TITLE: SURFACE CHEMISTRY	1.Adsorption	05	1)T.Y. Bsc Physical Chemistry Text book by Sheth Pub. And by Himalaya Pub. 2) Principles of Physical Chemistry B.R. Puri, L.R. Sharma, M.S. Pathania, VISHAL PUB.,2008.	Google classroom
	2.Colloidal State	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: M.Sc-I

SEMESTER: I MONTH: January-February ACADEMIC YEAR: 2020-2021

LEARNINGOBJECTIVE/S:
The learners will be able to:

To learn-State function and exact differentials. Maxwell equations, Maxwell thermodynamic Relations.
To learn-Joule Thomson experiment, Joule Thomson coefficient, inversion temperature, Joule Thomson coefficient in terms of Vander Waals constants.
To know-Third law of Thermodynamics.
To learn-Entropy change for a phase transition, absolute entropies, determination of absolute entropies in terms of heat capacity, standard molar entropies and their dependence on molecular mass and molecular structure, residual entropy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICT TOOLSUSED
PAPER-I, UNIT-I	1.Maxwell equations	05	Atkin's Physical Chemistry, 7th Edn., Oxford University Press, 2002.	Google classroom
TITLE: Thermodynamic s-I	2.Joule Thomson experiment	04		
	3.Third law of Thermodynamics	02		
	4.Entropy change for a phase transition	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: M.Sc-I SEMESTER : I

MONTH : January February ACADEMICYEAR : 2020-2021

LEARNINGOBJECTIVE/S:
The learners will be able to:

To learn-Rate laws, Differential rate equations, Consecutive reactions, Steady state Approximation, formation and decomposition of phosgene, decomposition of ozone, Reaction between Hydrogen and Bromine, Decomposition of ethane, decomposition of acetaldehyde, Reaction between hydrogen and oxygen, Semenov-Hinshelwood and Thompson mechanism, Explosion limits and factors affecting explosion limits.
To learn-Kinetics of step wise polymerization, Kinetics of free radical chain polymerization.
To know-Unimolecular Reactions : Lindeman-Hinshelwood theory, Rice-Ramsperger-Kasssel(RRK)theory, Rice-Ramsperger-Kassel Marcus (RRKM) theory.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD / ICT TOOLS USED
PAPER-I,	1.Composite Reactions	08	K.J. Laidler and J.H. Meiser, Physical Chemistry, 2nd Ed., CBS Publishers and Distributors, New Delhi, 1999.	Google classroom
UNIT-III	2.Polymerization reactions	03		
TITLE : Chemical Dynamics-I	3.Reaction in Gas Phase	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNITPLAN)

NAME OF THE STAFF : PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: T.Y.Bsc.

SEMESTER:VI MONTH: January-February ACADEMICYEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

To know-Basic terms like macromolecule, monomer, repeat unit, degree of polymerization, Classification of polymers.
To learn-Number average, Weight average, Viscosity average molar mass, Viscosity method using Ostwald Viscometer for determining molar masses of polymers,
To learn-Characteristics, Method of preparation and applications of Light Emitting Polymers, Antioxidants, Ultraviolet stabilizers, Colourants, Antistatic agents and Curing agents.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICT TOOLSUSED
PAPER-I, UNIT-II TITLE: POLYMERS	1.Basic terms	02	1)T.Y.Bsc Physical Chemistry Text book by Sheth Pub. And by Himalaya Pub. 2)Principles of Physical Chemistry B.R. Puri, L.R. Sharma, M.S. Pathania, VISHAL PUB.,2008.	Google classroom
	2.Classification of polymers	03		
	3.Method of determining molar masses of polymers	04		
	4.Light Emitting Polymers	03		
	5.Antioxidants and Stabilizers	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

TEACHING PLAN (UNITPLAN)

NAME OF THE STAFF : PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: T.Y.Bsc.

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SEMESTER:VI MONTH: March-April-May ACADEMICYEAR:2020-2021

LEARNINGOBJECTIVE/S:
The learners will be able to:

To Learn-Principle of NMR, Nuclear spin, magnetic moment, nuclear 'g' factor, energy levels, Larmor precession, Relaxation processes in NMR i.e. spin-spin relaxation and spin-lattice relaxation, Instrumentation of NMR Spectrometer,
To learn-Principle of ESR, fundamental equation, g-value–dimensionless constant or electron g-factor, hyperfine splitting, Instrumentation of ESR spectrometer, ESR spectrum of hydrogen and deuterium.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICT TOOLSUSED
PAPER-I, UNIT-IV TITLE: NMRandESR	1.NUCLEAR MAGNETIC RESONANCE	07	1) T.Y.Bsc Physical Chemistry Text book by Sheth Pub. by Himalaya Pub. 2) Principles of Physical Chemistry B.R.Puri, L.R. Sharma, M.S. Pathania, VISHAL PUB.,2008.	Google classroom
	2.ELECTRON SPIN RESONANCE SPECTROSCOPY	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

TEACHINGPLAN(UNITPLAN)

NAME OF THE STAFF : PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: M.Sc-I

SEMESTER: II MONTH: March-April-May ACADEMIC YEAR: 2020-2021

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LEARNINGOBJECTIVE/S:

The learners will be able to:

To learn-Fugacity of real gases, Determination of fugacity of real gases using graphical method and from equation of state. Equilibrium constant for real gases in terms of fugacity. Gibb's energy of mixing, entropy and enthalpy of mixing.
To learn-Chemical potential in nonideal solutions excess functions of nonideal solution, Gibbs Duhem Margules equation.
To learn-Laplace equation, Kelvin equation, Gibb's adsorption isotherm, BET isotherm.
To learn-standard free energy change in biochemical reactions, exergonic, endergonic. Hydrolysis of ATP, synthesis of ATP from ADP.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICT TOOLSUSED
PAPER-I, UNIT-I TITLE: Thermodynamics -II	1.Fugacity	05	Peter Atkins and Juliode Paula, Atkin's Physical Chemistry,7th Edn., Oxford University Press,2002	Google classroom
	2.Real solutions	03		
	3.Thermodynamics of surfaces	04		
	4.Bioenergetics	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

TEACHINGPLAN(UNITPLAN)

NAME OF THE STAFF : PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: M.Sc-I.

SEMESTER: II MONTH: MARCH-APRIL-May ACADEMICYEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

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To study – Solvent Effects on reaction rates, Reactions between ions -influence of solvent Dielectric constant, influence of ionic strength, Linear free energy relationships Enzyme action

To learn-Michaelis-Menten analysis, Lineweaver-Burk and Eadie Analyses.

To learn-Competitive, Non competitive and Uncompetitive Inhibition. Effect of pH, Enzyme activation by metal ions, Regulatory enzymes.

To study-The parabolic rate law, The first order rate Law, the contracting sphere rate law, Contracting area rate law, some examples of kinetic studies.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
PAPER-I, UNIT-III TITLE: Chemical Kinetics and Molecular Reaction Dynamics	1.Elementary Reactions in Solution	04	Peter Atkins and Juliode Paula, Atkin's Physical Chemistry,7th Edn., Oxford University Press,2002.	Google classroom
	2.Kinetics of reactions catalysed by enzymes	03		
	3.Inhibition of Enzyme action	04		
	4.Kinetics of reactions in the Solid State	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: SY BSc (PC-CZ) SEMESTER: III MONTH: July ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :
To make the learner proficient in analysing the various observations and chemical phenomena presented to him during the course.
To impart various skills of handling chemicals, reagents, apparatus, instruments and the care and safety aspects involved in such handling

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I, Physical Chemistry Thermodynamics-II, Electrochemistry	1.1.1 Free Energy Functions: Helmholtz Free Energy, Gibb's Free Energy, Variation of Gibb's free energy with Pressure and Temperature.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.1.2 Gibbs-Helmholtz equation, van't Hoff reaction isotherm and van't Hoff reaction isochore	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.1.3 Thermodynamics of Open System: Partial Molal Properties, Chemical Potential and its variation with Pressure and Temperature, Gibb's Duhem equation.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.1.4 Concept of Fugacity and Activity	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.2.1 Conductivity, equivalent and molar conductivity and their	2	Textbook of Himalaya Publication	Online google classroom, google meet

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	variation with dilution for weak and strong electrolytes.			and ppt.
	1.2.2 Kohlrausch law of independent migration of ions.	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.2.3 Applications of conductance measurements: determination of degree of ionization and ionization constant of weak electrolyte, solubility and solubility product of sparingly soluble salts, ionic product of water.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.2.4 Transference number and its experimental determination using Moving boundary method. Factors affecting transference number.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: SY BSc (PC-CZ) SEMESTER: IV MONTH: November ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :
To make the learner proficient in analysing the various observations and chemical phenomena presented to him during the course.
To make the learner capable of solving problems in the various units of this course

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
Paper I Unit I, Physical Chemistry Electrochemistry-II, Phase Equilibria	1.1.1 Electrochemical conventions, Reversible and irreversible cells.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	1.1.2 Nernst equation and its importance, Types of electrodes, Standard electrode potential, Electrochemical series	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	1.1.3 Thermodynamics of a reversible cell, calculation of thermodynamic properties: ΔG, ΔH and ΔS from EMF data	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	

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	1.1.4 Calculation of equilibrium constant from EMF data.	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	1.1.5 Concentration cells with transference and without transference. Liquid junction potential and salt bridge.	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	1.1.6 pH determination using hydrogen electrode and quinhydrone electrode.	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: SY BSc (PC-CZ) SEMESTER: III MONTH: July ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : ideas about chemistry of Boron compounds, Chemistry of Silicon and Germanium and chemistry of Nitrogen family .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
Paper II, Unit II ,Inorganic chemistry Selected topics on p block elements	2.1.1 Electron deficient compounds – BH_3, BF_3, BCl_3 with respect to Lewis acidity and applications.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.1.2 Preparation of simple boranes like diborane and tetraborane.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.1.3 Structure and bonding in diborane and tetraborane (2e-3c bonds)	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.1.4 Synthesis of Borax.	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.2.1 Silicon compounds: Occurrence , Structure and inertness	1	Textbook of Himalaya Publication	Online google classroom, google	

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	of SiO_2			meet and ppt.	
	2.2.2 Preparation of structure of $SiCl_4$	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.2.3 Occurrence and extraction of Germanium	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.2.4 Preparation of extra pure Silicon and Germanium	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.3.1 Trends in chemical reactivity - Formation of hydrides, halides, oxides with special reference to oxides of nitrogen	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.3.2 Oxides of nitrogen with respect to preparation and structure of NO, NO_2, N_2O and N_2O_4	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	
	2.3.3 Synthesis of ammonia by Bosch – Haber process.	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.	

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: SY BSc (PC-CZ) SEMESTER: IV MONTH: November ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to : Have ideal about Ions in aqueous medium, acidity of Cations and Basicity of Anions and uses and Environmental chemistry of volatile oxides and Oxo-acids .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit II ,Inorganic chemistry Ions in aqeous medium Uses and Environmental Chemistry of volatile Oxides and oxo-acids	Hydration of Cations; Hydrolysis of Cations predicting degree of hydrolysis of Cations-effect of Charge and Radious.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	Latimer Equation. Relationship between pKa, acidity and z^2/r ratios of metal ions graphical Presentation	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	Classification of cations on the basis of acidity category – Non acidic, Moderately acidic, strongly acidic, very strongly acidic with pKa values range and examples	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	Hydration of Anions; Effect of Charge and Radius; Hydration of anions- concept, diagram classification on the basis of basicity	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.

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	Physical properties of concentrated oxo-acids like sulfuric, Nitric and Phosphoric acid	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	Uses and environments aspects of these acids	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: TY BSc SEMESTER: V MONTH: July ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Learn Various symmetry operations and have ideas about various point groups and have ideas about Molecular Orbital Theory for heteronuclear diatomic molecules and polyatomic species.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit I ,Inorganic chemistry	1.1.1 Introduction and Importance of Symmetry in Chemistry	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.1.2 Symmetry elements and Symmetry operations	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.1.3 Concept of a Point Group with illustrations using the following point groups :(i)C∞V (ii) D∞h (iii) C2V (iv) C3v (v)C2h and (vi)D3h	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.2.1 Comparision between homonuclear and heteronuclear diatomic molecules	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.2.2. Heteronuclear diatomic molecules like CO, NO and HCl, appreciation of modified MO diagram for CO.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.2.3 Molecular orbital theory for H3 and H3+ (correlation diagram	2	Textbook of Himalaya	Online google classroom, google meet and ppt.

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	expected).		Publication	
	1.2.4. Molecular shape to molecular orbital approach in AB2 molecules. Application of symmetry concepts for linear and angular species considering σ- bonding only. (Examples like : i) BeH2, ii) H2O)	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: TY BSc SEMESTER: VI MONTH: November YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Learn Crystal Field Theory of metal-ligand bond ,its merits and demerits .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit I ,Inorganic chemistry	1.1 Limitations of Valence Bond Theory.	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.2 Crystal Field Theory and effect of crystal field on central metal valence orbitals in various geometries from linear to octahedral(from coordination number 2 to coordination number 6)	3	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.3 Splitting of d orbitals in octahedral, square planar and tetrahedral crystal fields.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.4 Distortions from the octahedral geometry : (i) effect of ligand field and (ii) Jahn-Teller distortions	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.5 Crystal field splitting parameters Δ ; its calculation and factors affecting it in octahedral complexes, Spectrochemical series	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.

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	1.6 Crystal field stabilization energy(CFSE), calculation of CFSE for octahedral complexes with d0 to d10 metal ion configurations.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.7 Consequences of crystal field splitting on various properties such as ionic radii, hydration energy and enthalpies of formation of metal complexes of the first transition series.	2	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.
	1.8 Limitations of CFT : Evidences for covalence in metal complexes (i) intensities of d-d transitions, (ii) ESR spectrum of [IrCl6] 2- (iii) Nephelauxetic effect.	1	Textbook of Himalaya Publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: MSc Part I SEMESTER:I MONTH: August ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Learn Molecular Symmetry , Group Theory and application of Group Theory

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit II Molecular Symmetry and Group Theory	2.1. Symmetry criterion of optical activity, symmetry restrictions on dipole moment. A systematic procedure for symmetry classification of molecules.	3	F. A. Cotton, Chemical Applications of Group Theory, 2nd Edition, Wiley Eastern Ltd., 1989 and R. L. Carter, Molecular Symmetry and Group Theory, John Wiley & Sons, New York, 1998	Online google classroom, google meet and ppt.
	2.2. Concepts of Groups, Sub-groups, Classes of Symmetry operations, Group Multiplication Tables. Abelian and non-Abelian point groups	3	F. A. Cotton, Chemical Applications of Group Theory, 2nd Edition, Wiley Eastern Ltd., 1989 and R. L. Carter,	Online google classroom, google meet and ppt.

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			Molecular Symmetry and Group Theory, John Wiley & Sons, New York, 1998	
	2.3. Representation of Groups: Matrix representation of symmetry operations, reducible and irreducible representations. The Great Orthogonality Theorem and its application in construction of character tables for point groups C2v, C3v and D2h, structure of character tables.	3	F. A. Cotton, Chemical Applications of Group Theory, 2nd Edition, Wiley Eastern Ltd., 1989 and R. L. Carter, Molecular Symmetry and Group Theory, John Wiley & Sons, New York, 1998	Online google classroom, google meet and ppt.
	2.4. Applications of Group Theory (a) Symmetry adapted linear combinations (SALC), symmetry aspects of MO theory, sigma bonding in ABn (Ammonia, CH4) molecule. (b) Determination of symmetry species for translations and rotations. (c) Mulliken's notations for irreducible representations. (d) Reduction of reducible representations using reduction formula. (e) Group-subgroup relationships. (f) Descent and ascent in symmetry correlation diagrams showing relationship between different groups.	6	F. A. Cotton, Chemical Applications of Group Theory, 2nd Edition, Wiley Eastern Ltd., 1989 and R. L. Carter, Molecular Symmetry and Group Theory, John Wiley & Sons, New York, 1998	Online google classroom, google meet and ppt.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: MSc Part I SEMESTER:II MONTH: January ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : _Have an idea about bioinorganic chemistry , biological oxygen carrier and various enzymes and metal ion transport and storage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit IV Bioinorganic Chemistry	4.1. Biological oxygen carriers; hemoglobin, hemerythrene and hemocyanine- structure of metal active center and differences in mechanism of oxygen binding, Differences between hemoglobin and myoglobin: Cooperativity of oxygen binding in hemoglobin and Hill equation, pH dependence of oxygen affinity in hemoglobin and myoglobin and it's implications	5	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	Online google classroom, google meet and ppt.
	4.2. Activation of oxygen in biological system with examples of mono-oxygenases, and oxidases- structure of the metal center and mechanism of oxygen activation by these enzymes.	4	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	Online google classroom, google meet and ppt.
	4.3. Copper containing enzymes- superoxide dismutase, tyrosinase and laccase: catalytic reactions and the structures	3	Robert R.Crechton, Biological	Online google classroom, google meet and ppt.

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	of the metal binding site		Inorganic Chemistry – An Introduction, Elsevie	
	4.4. Nitrogen fixation-nitrogenase, hydrogenases	1	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	Online google classroom, google meet and ppt.
	4.5. Metal ion transport and storage:Ionophores, transferrin, ferritin and metallothionins	1	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	Online google classroom, google meet and ppt.
	4.6. Medicinal applications of cis-platin and related compounds	1	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	Online google classroom, google meet and ppt.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Miss Riyan Rocky Gardner_____ DEPARTMENT:

____Chemistry ESTER: __First_____ MONTH: __August_____ ACADEMIC YEAR: __2020-2021_____

LEARNING OBJECTIVE/S:
The learners will be able to : ____Study about atomic structure ,hydrogenicatoms, many electron atoms,shell ,seashells and atomic orbitals.learn about radial shape of atomic orbitals ,Aufbau principle .

Study about periodic table and periodicity ,classification of elements ,electronegativity like Pauling, Alfred and Rochow and Mulliken etc._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 unit 2 Atomic structure and Periodic table and periodicity	1. Atomic structure :Historical perspective of the atomic structure,Rutherford's atomic model,Bohrs atomic model ,it's limitations and atomic spectrum of atomic model,and structure of hydrogen atom. 2. Hydrogenic atom : Simple principle of quantum mechanics, atomic orbitals. Hydrogenic energy level ,shell, subshells and atomic orbitals, electron spin,radial shape of atomic orbitals, radial distribution function, angular shape of orbitals. 3. Many electron atom : penetration and shielding ,effective nuclear charge. 4. Aufbau principle.	10	Himalaya publications F.Y.Bsc textbook	Google classroom

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	1. Periodic table and periodicity : Long form of periodic table,classification of elements, periodicity in following properties : atomic and ionic size,ionization enthalpy, electron gain enthalpy, effective nuclear charge ,electronegativity : Pauling, mulliken and Alfred and Rochow electronegativity.	05		Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

NAME OF THE STAFF: _Miss Riyan Rocky Gardner_____ DEPARTMENT: __Chemistry CLASS: _F.Y.Bsc_____ SEMESTER: __Second_____ MONTH: _____January ACADEMIC YEAR: 2020-2021_____

LEARNING OBJECTIVE/S:

The learners will be able to : Study about concept of qualitative analysis, various types of gases,role of papers impregnated with qualitative analysis,concept of precipitation equllibria, common in effect, uncommon in effect , buffer action on precipitation equllibria..learn about the acid base theories ,application and limitations of acid base theories ,HSAB concept ,Friedel craft acylation and alkylation

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Paper 1 unit 2 1.concept of qualitative analysis and 2.Acid base theories.	Concept of qualitative analysis : testing of gaseous evaluates, role of papers impregnated with reagent in qualitative analysis. Precipitation equllibria, common ion effects,uncommon ion effect,oxidation state,buffer action ,complexing agents precipitation on ionic compounds. Acid Base theory : Arrhenius, Lowery Bronsted ,Lewis, solvent solute concept of acid and bases, HSAB concept and its application. Application of acid base chemistry in : understanding organic reactions like Friedel craft alkylation and acylation. Volumetric analysis to special reference to titration curve involving strong acid and strong base.	07 08	Himalaya publications F.Y.Bsc textbook Himalaya publications F.Y.Bsc textbook	Google classroom Google classroom

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

NAME OF THE STAFF: _Miss Riyan Rocky Gardner_____ DEPARTMENT: __Chemistry CLASS: _Msc part 2 Analytical_____ SEMESTER: ___Third_____ MONTH: August_____ ACADEMIC YEAR: 2020-2021_____

LEARNING OBJECTIVE/S:
The learners will be able to : Study about principle ,instrumentation and application of chemilluminescence techniques, chiropractic optical methods ,photoacoustic spectroscopy and spectroelectrochemisty.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 unit 4 Miscellaneous techniques	Principle, instrumentation and application of chemiluminescence techniques 2. Priciple ,instrumentation and application of Chirooptical methods. 3. Priciple ,instrumentation and application of Photoacoustic spectroscopy	03 05 03	Techniques and mechanism of electrochemistry P A chritian and A.Hamnett	Google classroom

	4. Principle, instrumentation and application of spectroelectrochemisty	04		
	Analytical chemistry in forensic science : general idea	02	Lab manual on blood analysis and medical diagnostic by Dr.Gaytree Prakash and S chand and company Ltd ,New Delhi	Google classroom
	2. Foreinsic analysis: blood ,DNA profiling, alcohol in body fluid ,systemic drug identification	05		Google classroom
Paper 4 unit 3 Forensic science	3. Analytical toxicology: isolation, identification and determination of following: Narcotics, hallucinogens, depressants, stimulants,metabolites of drug in blood and urine . Viscera ,stomach wash and vomit and postmortem blood for poisons.	08		Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Miss Riyan Rocky Gardner_____ DEPARTMENT: __Chemistry CLASS: _Msc part 2 Analytical_____ SEMESTER: ___fourth_____ MONTH: January ACADEMIC YEAR: 2020-2021_____

LEARNING OBJECTIVE/S:
The learners will be able to : Study about classification of plastics and polymers ,metallic impurities in plastic and polymers and their determination .impact of plastic on environment as pollutants ,paints and pigments .learn about the metallurgy,definition of ores and alloys,analysis of ores and alloys, techniques of purification

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 unit 3 Plastic and polymers	Classification of plastic, determination of additives, molecular weight distribution, analysis of plastic and polymer . Metallic impurities in plastic and their determination. Impact of plastic on environment as pollutants. Paints and pigments : types of paints, determination of volatile and non volatile pigments in paints ,binders and thinner. Role of organosilicon in paints and their impact on environment.	03 05 03	Skoog reference book Skoog reference book	Google classroom

		04	Skoog reference book Skoog reference book	
	Ores and minerals, dressing of ore ,pollution due to metallurgical process	03	Alloying understanding the basics ,edited by joseph R. Davis ASM international (2001)	Google classroom
Paper 3 unit 4 Metallurgy	2.Chemical analysis of ores of principle constituents: Galena,Pyrulusite, Bauxite, Hematite ,monozite.	04		Google classroom
	3. definition and analysis of following alloys : Cupronickel ,steel and stainless steel,bronze and gun metal .	04		Google classroom
	4. Techniques of purification: zone refining, analysis of high purity materials like silicon, vaccum fusion and extraction techniques.	04		Google classroom

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: __CHEMISTRY _____ CLASS: _____FYBSC_(PCM)_____ SEMESTER: _____1_____ MONTH: _Aug-Dec_____ ACADEMIC YEAR: _____2020-2021_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To understand basics of ORGANIC CHEMISTRY
- To study hybridization sp, sp2, sp3,
- Shapes of ORGANIC molecules
- Differentate between Homolytic and Heterolytic.
- To study types of Reactions

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• Paper 1 • Unit 3 • Basics of ORGANI	Alkanes,Alkenes,Alkanes,Alcohol,Aldehydes and ketones,Anhydride,Nitro Compounds	3	Clayden	Google Classroom
	Hybridization of ORGANIC compounds	3	Clayden	Google Classroom

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C CHEMISTRY	Overlaping of Atomic Orbital,Bonding-Sigma and Pi,Shapes of Molecules,Properties-Ethane,Ethene,Ethyne.	2	Clayden	Google Classroom
	Electronic Effect-Inductive,Electronic,Resonance,Mesomeric,Hyperconjugation,Dipole moment,Relative Strengths	3	Clayden,Text book	Google Classroom
	Homolytic and Heterolytic fission,Nucleophilicity and Basicity	2	Clayden	Google Classroom
	Carbonation,carbanion,free radical.Types of Reactions-Addition,Elimination,Substitution	2	Clayden,Text book	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___RUTUJA HEMANT SAWANT _____ DEPARTMENT: _CHEMISTRY _____ CLASS: FYBSC (PCM)_____ SEMESTER: ____1_____ MONTH: AUG-DEC _____ ACADEMIC YEAR: _2020-2021_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To understand about Chemical Kinetics in detail
- To differentiate between Order and Molecularity

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- To find the Rate of Reactions by different methods
- To learn about different methods
- To study of solids

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• Paper 2 • Unit 1 • CHMEICAL KINETICS AND LIQUID STATE	Rate of Reactions- 1st and 2nd reactions, Order and Molecularity, integrated and grapical methods.	4	Text Books, Principal of Chemical Kinetics	Google Classroom
	Ostwald's isolation, Half time And Drop number method, Surface tension, Viscosity	4	Text Books, Principal of Chemical Kinetics	Google Classroom
	Ostwald's viscometer, Refrective index, Molar Refraction.	3	Text Books, Principal of Chemical Kinetics	Google Classroom
	Polarizability, Abbe's Refractometer, Numericals	2	Text Books, Principal of Chemical Kinetics	Google Classroom
	Liquid crystals, classification and structure, Application of liquid crystal	2	Text Books, Principal of Chemical Kinetics	Google Classroom

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: __CHEMISTRY _____ CLASS: _____FYBSC_(CBZ-B)_____ SEMESTER: _____1_____ MONTH: _AUG-DEC_____ ACADEMIC YEAR: _____2020-2021_____

LEARNING OBJECTIVE/S:

- The learners will be able to : _To understand about the metallic and non-metallic elements.To Learn about anamolous behaviour of elements.
- To study about the ALLOTROPY of group 13
- Diagonal relationship of elements
- To understand about ACID RAIN

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• Paper 2 • Unit 2 • Comparative chemistry of main group Elements.	Metallic and Non-metallic nature,Oxidation state,Innert pair effect,Anamolous behaviour of different elements-Li,Be,Oxygen,Nitrogen	4	Text Book,Advance inorganic chemistry	Google Classroom
	ALLOTROPY of group 13 and 14,15and 16 elements,Catenation,Diagonal Relationships of carbide,nitrides,oxides.	6	Text Book,Advance inorganic chemistry	Google Classroom
	Diagonal Relationships of Hydroxide	3	Text Book,Advance inorganic chemistry	Google Classroom

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	Some important compounds- NaHCO3,Na2CO3,NaCl,NaOH,CaOetc			
	Oxides of Carbon, Sulphur and Nitrogen- Reaction,Health Hazard,Control Techniques	4	Text Book,Advance inorganic chemistry	Google Classroom
	Oxiyacids of Sulphur and Nitrogen-Reactions and Control Measures, ACID RAIN and GREEN HOUSE EFFECT	3	Text Book,Advanceinorganic chemistry	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

TEACHING PLAN (UNIT P

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: CHEMISTRY _____ CLASS: _____SYBSC (PC-CZ)_____ SEMESTER: _____3_____ MONTH: __AUG-DEC_____ ACADEMIC YEAR: _2020-2021_____

LEARNING OBJECTIVE/S:

- The learners will be able to : __TO learn the chemistry of HALOGENTED HYDROCARBON
- To study about nucleophilic substitution
- To study about reactions with ALCOHOL,PHENOL,EPOXIDE.
- TO understand different types of reagents and it's uses in reaction.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER 1 • UNIT 3 • REACTIONS AND REACTIVITY OF HALOGENATED HYDROCARBON	Alkyl Halides-SN1,SN2,SNi, reactions, Factors affecting reactions, Aryl Halides- substitution reaction, SnAr, addition-elimination, benzyne mechanism	7	Text Book, Clayden.	Google Classroom
	Preparation using alkyl and Aryl halide, cyanide, and epoxides. Alcohols-Reaction of Aldehydes and Ketones, Acidity and reaction of alcohols	5	Text Book, Clayden	Google Classroom
	Phenols-Preparation, Physical Properties, strength of acidic nature of alcohol and phenol, Resonance stabilization of phenoixde ion, Reactions of phenol.	3	Text Book, Clayden	Google Classroom
	Epoxides-Reactivity, Ring opening, reaction with halogen halide, alcohol and Hydrogen Cyanide	3	Text Book, Clayden	Google Classroom
	In neutral or basic conditions- Ammonia, Amines, grignard reagent, alkoxide	2	Text Book, Clayden	Google Classroom

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NAME OF THE STAFF: __RUTUJA HEMANT SAWANT _____ DEPARTMENT: _____CHEMISTRY _____ CLASS: _____MSC PART 1_____ SEMESTER: _____1_____ MONTH: ____JAN-FEB_____ ACADEMIC YEAR: ___2020-2021_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To learn about various THERMAL METHODS.
- To differentiate between DSC and DTA.
- To learn about the instrumentation and working of different instruments
- To understand need for automation in modern life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER- 4 • Unit- 4 • THERMAL METHODS	Recapitulation of thermal methods, thermoanalytical methods, types of curves, TGA VS DTA, TGA-Instrumentation, working factors affecting TGA, Applications.	4	Vogal, Skoog, Instrumentation in Analytical Chemistry	Google Classroom
	DSC- Instrumentation, working, block diag, Factors affecting curve, types of DSC	4	Vogal, Skoog, Instrumentation in Analytical Chemistry	Google Classroom

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	DTA- Working, Principal, Instrumentation, Application, comparison to DSC	3	Vogal, Skoog, Instrumentation in Analytical Chemistry	Google Classroom
	Application's of DSC, Automation of Chemical Analysis- Need and Objectives of Automation, flow injections and discrete automated system	5	Vogal, Skoog, Instrumentation in Analytical Chemistry	Google Classroom
	Multiplayer films, Gas monitoring equipment, Automatic titrators and benifits	4	Vogal, Skoog, Instrumentation in Analytical Chemistry	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __RUTUJA HEMANT SAWANT _____ DEPARTMENT: ____CHEMISTRY _____ CLASS: ____FYBSC (PCM)_____ SEMESTER: ___2_____ MONTH: _JAN-MAY_____ ACADEMIC YEAR: __2020-2021_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To learn about Carbon Bonding.
- To study about reaction and mechanism of various compounds

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- To study about hydrocarbon it's , properties and reactions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER- 1 • UNIT- 3 • ALIPHATIC HYDROCARBON	C-C Sigma bond, Chemistry of alkanes- formation, Wurtz reaction, free radical halogenation- Wurtz fitting reactions. C-C Pi bond, formation of alkenes and alkynes, E1 and E2 reaction	4	Clayden	Google Classroom
	E1cb, Satzeff, Hoffman eliminations, Markownikoff and Anti- Markownikoff addition, Oxy and Demercuration, Hydroboration oxidation, Ozonolysis	5	Clayden	Google Classroom
	Syn-Anti Hydroxylation, 1,2 and 1,4 addition, Diels's Alder reaction, Allylic and Benzylic Bromination	3	Clayden	Google Classroom
	Propen, 1-butene, toluene, ethyl-benzene Reactions of Alkyenes- Acidic, Electrophilic, Nucleophilic Additions	3	Clayden	Google Classroom
	Hydration to form carbon compounds, Alkylation of Terminal Alkyenes	2	Clayden	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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LEARNING OBJECTIVE/S:

- The learners will be able to : _To understand about ionic equilibria
- To understand about pH and buffer and their uses in reaction
- To learn about MOLECULAR SPECTROSCOPY
- To study about solids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER- 2 • UNIT- 1 • Ionic Equilibria, • Molecular Spectroscopy, • Solid State Chemistry.	Types of electrolytes, Degree of Ionization and factors affecting It, ionization constant, ionization product of water, ionization of weak acids and base, pH scale, common ion effect.	5	J. Butler, Text Book	Google Classroom
	Buffers- Types, Henderson equations for acid and base, Buffer action, Buffer capacity, Numericals	3	J. Butler, Text Book	Google Classroom
	Molecular Spectroscopy- EMR and spectrum, planks equation, absorption, emission, scattering, fluorescence, electronic.	4	C.N Banwell, Text Book	Google Classroom

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	Vibrational and Rotational transition and Numericals			
	Solid State Chemistry- Types of solids, Crystal lattice, lattice points, unit cell, space lattice, lattice plan.	2	A.R WEST, Text Book	Google Classroom
	Crystallography- Law of Constancy, interfacial Angel, Law of symmetry, Law of Rational indices	3	Text Book, A.R WEST	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: _____CHEMISTRY _____ CLASS: _____FYBSC (CBZ-B)_____ SEMESTER: _____2_____ MONTH: __JAN-MAY_____ ACADEMIC YEAR: ___2020-2021_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To understand explore types of various chemical bonding.
- To learn about theories and principles of bonding.
- To study about OXIDATION and REDUCTION chemistry.
- Applications of OXIDATION AND REDUCTION in daily life.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER- 2 • UNIT- 2 • Chemical Bond and Reactivity • Oxidation and Reduction Chemistry	Chemical Bonds-Ionic,Covalent,Coordinate,Metallic,Vander wall force,Hydrogen bonding,Nature of bond,Polarization,Lewis Dot Structure and e.g..	5	John C Kotz, Text Book	Google Classroom
	Sedgwick and Powell theory, VSEPR Theory-Characteristics,Applications,Steric No., Shapes of Molecules and Geometry AB- 1,2,3,4,5,6,7.Molecules with lone pair-AB2E,AB3E2 etc.Isoelectronic principles and limitations to VSEPR.	6	John C Kotz, Text Book	Google Classroom
	Reduction Potential,Redox Half Reaction,Balancing Eq by diff methods, Redox Stability of water, Latimer and Forst diag and it's applications	4	Clayden Text Book	Google Classroom
	Applications of Redox, Diff between Iodo and Iodimetery, KMnO4, Titration Curve of Redox System	3	Clayden Text Book	Google Classroom
	Single Electron Multi-Electron System	1	Clayden Text Book	Google Classroom

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TEACHING PLAN (UNIT PLAN)

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: ____RUTUJA HEMANT SAWANT _____ DEPARTMENT: _____CHEMISTRY _____ CLASS: _____SYBSC (PC-CZ)_____ SEMESTER: _____4_____ MONTH: JAN-MAY_____ ACADEMIC YEAR: ___2020-2021_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To study about Carboxylic Acid.
- To study about Carboxylic Acid Derivatives.
- To study about Sulphonic Acid and it's Derivatives
- To learn about Preparation and Uses of Derivatives .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER-1 • UNIT- 3 • Carboxylic Acid and their Derivatives • Sulphonic Acids.	Nomenclature, Structure, physical properties, Acidity of carboxylic Acid, effects of substitute on acid strength of aliphatic aromatic carboxylic Acid, prep of carboxylic acid	3	Clayden Text Book	Google Classroom
	Carbonation of Grignard, Hydrolysis of nitriles, Acidity, Salt formation, decarboxylation, HVZ. Conversion- To acid chloride, ester, amides, acid anhydride	4	Clayden Text Book	Google Classroom
	Mechanism of Nucleophile Acyl and acid catalysed substitution, Interconversion of acid derivatives by Nucleophile substitution, Claisen and Dieckmann Condensation	5	Clayden Text Book	Google Classroom

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	Sulphonic Acid- Preparation by sulphonation of benzene toluene and naphthalene,Acidity of arenes Sulphonic Acids, comparative acidity of carboxylic and Sulphonic acid	3	Clayden Text Book	Google Classroom
	Salt formation, desulphonation, reactions with alcohol and PCL5, IPSO substitution	2	Clayden Text Book	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____RUTUJA__HEMANT SAWANT_____ DEPARTMENT: CHEMISTRY _____ CLASS: ___MSC PART 1_____ SEMESTER: _____2_____ MONTH: APRIL-MAY_____ ACADEMIC YEAR: ___2020-2021_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To learn about various ELECTRO-ANALYTICAL METHODS
- To study about ELECTROGRAVIMETERY as a concept.
- To study about COULOMETRY it's principals, types, Applications.
- To explore new techniques in Analytical Chemistry on whole.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER – 4 • UNIT- 4 • ELECTO-ANALYTICAL METHODS	Ion Selective Potentiometery and it's types of electrodes, Solid-State, Precipitate, Liquid-Liquid, Enzyme and Gas sensing electrodes	4	Vogal, Skoog, Principals in Analytical Chemistry	Google Classroom
	Ion Selective Field Effect Transistors, Biocatalytic Membrane Electrode, Enzyme Based Bio-Sensor, Sums. Polarography- Intro, Principal, Nature of Wave	3	Vogal, Skoog, Principles in Analytical Chemistry	Google Classroom
	Ilkovic eq, Derivation with Cotteral eq,Effect of complex formation on polarographic wave, Sums Electrogravimetery-Introduction, Principal	3	Vogal, Skoog, Principles in Analytical Chemistry	Google Classroom
	Instrumentation, constant current and constant potential electrolysis, factors affecting nature of deposit, application's. Coulometery- Intro, Principal, Types-Controlled Potienal, Controlled Current.	4	Vogal, Skoog, Principals in Analytical Chemistry	Google Classroom
	Applications of Coulometery, Advantages and Numericals entire chapter	3	Vogal, Skoog, Principal in Analytical Chemistry	Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.Sc. SEMESTER: I MONTH: August 2020 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand metallic and non-metallic nature of main group elements.
Study anomalous behavior of second period elements
Study comparative chemistry of carbides, nitrides, oxides and hydroxides of group-i and group-ii elements.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Chemistry Paper-II **UNIT-II Comparative chemistry of Main Group Elements**	Metallic and non-metallic nature, oxidation states, electronegativity,	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Anomalous behaviour of second period elements, allotropy, catenation, diagonal relationship.	03	Lee, J.D. Concise Inorganic Chemistry ELBS, 1991	Online google classroom, google meet and ppt.
	Comparative chemistry of carbides, nitrides, oxides and hydroxides of group I and group II elements.	04	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Some important compounds- $NaHCO_3$, Na_2CO_3, NaCl, NaOH, CaO, $CaCO_3$	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	oxides of carbon, oxides and oxyacids of sulphur and nitrogen with respect to environmental aspects.	03		Online google classroom, google meet and ppt.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.Sc. SEMESTER: I MONTH: August 2020 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand thermodynamic terms and state functions and path functions.
Study first law of thermodynamics in detail.
Study calculation of bond energy, bond dissociation energy and resonance energy from thermochemical data.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-Chemistry Paper-I **UNIT-I Chemical Thermodynamics And Chemical Calculations**	Thermodynamic terms: System, surrounding, boundaries, open, closed and isolated system, intensive and extensive properties, state functions and path functions, zeroth law of thermodynamics	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	First law of thermodynamics: concept of heat (q), work (w), internal energy (U), statement of first law, enthalpy, relation between heat capacities, sign conventions, calculations of heat (q), work (w), internal energy (U), and enthalpy (H)	03	Atkins P.W. and Paula J.de, Atkin's Physical Chemistry, 10th Ed.	Online google classroom, google meet and ppt.
	Thermochemistry: Heats of reactions, standard states, enthalpy of formation of molecules, enthalpy of combustion and its applications, calculation of bond energy, bond dissociation energy and resonance energy from	04	Text book Himalaya publication	Online google classroom, google meet and ppt.

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	thermochemical data, Kirchhoff's equation			
	Expressing concentration of solutions: Normality, molality, molarity, formality, mole fractions, weight ratio,	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	volume ratio, weight to volume ratio, ppm, ppb, millimoles, milliequivalents , Numericals.	03		Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: III MONTH: August 2020 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

Introduce classical methods of chemical analysis.
Appreciate the various terms and types of titrimetric analysis.
Ability to select proper titrimetric method
Appreciate the usefulness of the gravimetric method of analysis
Identify a suitable gravimetric method
Perform the required calculations involved in the analysis by titrimetry as well as gravimetry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER-Chemistry Paper-III **UNIT-II Classical Methods of Analysis**	Titrimetric Methods, Terms involved in Titrimetric methods of analysis. Comparing volumetry and Titrimetry The Conditions suitable for titrimetry Types of titrimetry – Neutralisation (Acidimetry, alkalimetry), Redox, Iodometry, Iodimetry.	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Precipitation and Complexometric titrations and indicators used in these titrations, Tools of Titrimetry: Graduated glasswares and Callibration, Standard solutions (Primary and Secondary standards in Titrimetry) and Calculations in Titrimetry.	02	Text book Seth publication	Online google classroom, google meet and ppt.
	Concept of pH and its importance in Neutralisation Titrations End point and Equivalence point of Neutralisation titrations Determination of End point by using i. Indicators causing colour change ii. Change in potential, (by potentiometry) iii.Change in conductance (by conductometry). Construction of titration curve (on the basis of change in pH)of a titration.	04	Skoog et al. Fundamentals of Analytical chemistry Cengage Learning, Eight Edition, chapter 13, 14 and 15	Online google classroom, google meet and ppt.
	Types of Gravimetric Methods – Precipitation Gravimetry: i. Steps involved in precipitation gravimetry analysis	02	Text book Seth publication	Online google classroom, google meet and ppt.
	Conditions for precipitation iii. Completion of precipitation, iv. Role of Digestion, Filtration, Washing, Drying Ignition of precipitate.	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Applications of Gravimetric Analysis: Determination of sulfur in organic compounds; Estimation of Nickel in Cu-Ni alloy using dimethyl glyoxime; Determination of Aluminum by converting it to its oxide.	03		Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF Sradhay.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: III MONTH: August 2020 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

To describe the reactions of halogenated and oxygenated organic compounds of aliphatic and aromatic hydrocarbons
To predict the reactivity and stereochemistry of halogenated and oxygenated organic compounds

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-Chemistry Paper-I **UNIT-III Alkyl And Aryl Halides and Compounds Containing Oxygen - Alcohols, Phenols,**	Haloalkanes i. Nucleohilic substitution: SN1, SN2 & SNi, Mechanism and Stereochemistry ii. Factors affecting nucleophilic substitution: Substrate, Solvent, Reagent, Leaving group	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Haloarenes i. Reactivity of aryl halides towards nucleophilic substitution ii. Mechanism of nucleophilic aromatic substitution: Addition-Elimination (SNAr); Elimination-Addition (Benzyne)	03	Text book Seth publication	Online google classroom, google meet and ppt.
	Alcohols & phenols i. Physical properties: Hydrogen bonding (types); effect of Hbonding on properties (o- & p-nitrophenol); comparison of acidity of alcohols & phenols; acidity of substituted phenols ii. Preparation & of alcohols: industrial preparation (fermentation); hydration of alkenes; hydrolysis of alkyl halides	03	Morrison, R. T.; Boyd, R. N. (2012). *Organic Chemistry*. Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).	Online google classroom, google meet and ppt.

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Ethers, & Epoxides	iii. Reactions of alcohols- with sodium, HX (Lucas test), esterification, Oppenaeur oxidation iv. Preparation of phenol- cumene hydroperoxide method v. Reactions of phenols: O-alkylation & O-acylation; Schotten-Baumen reaction, Fries rearrangement, Claisen rearrangement	02	Text book Seth publication	Online google classroom, google meet and ppt.
	Ethers & Epoxides i. Preparation of ethers - Williamson's synthesis ii. Reaction of ethers - cleavage of ethers with HI iii. Preparation of epoxides- peroxyacids (m-CPBA)	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	iv. Reactivity & reactions of epoxides- ring opening reactions in acidic (HX, ROH, HCN), basic & neutral conditions (NH3, RMgX & RO-) with reference to regioselectivity	03		Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: III MONTH: August 2020 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

To study different types of complex chemical reactions and their reaction rates.
To learn the role of different phases in solution equilibrium system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER-Chemistry Paper-II **UNIT-I Kinetics and Phase equilibria of solutions**	Types of Complex Chemical reactions i. Reversible or opposing reactions ii. Consecutive reactions iii. Parallel reactions (Derivations not expected) iv. Thermal chain reactions: H and Br reaction. (Kinetic expression not expected).	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Effect of temperature on the rate of reaction i. Arrhenius equation and its derivation ii. Concept of energy of activation (Ea). (Numerical expected) Theories of reaction rates i. Collision theory of unimolecular reaction(Lindemann's approach) and bimolecular reaction ii. Activated complex theory of bimolecular reactions iii. Comparison of the two theories (Qualitative treatment only)	03	Atkins P. W., and Paula J. De, *Physical Chemistry*, 10th ed., Oxford University, 12 press (2014).	Online google classroom, google meet and ppt.
	Phase rule & terms involved b) Liquid –liquid mixtures- classification i. Completely miscible liquids ii. Ideal solutions and Raoult's law iii. Deviations from Raoult's law –non-ideal solutions iv. Vapour pressure: composition and temperature; Composition curves of ideal and non-ideal solutions, Numericals	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Partial miscibility of liquids i. Classification on the basis of Critical solution temperature ii. Effect of impurity on partial miscibility of liquids iii. Partially Miscible Liquids with Upper Critical Solution Temperature (Phenol-Water System) iv. Partially Miscible Liquids with Lower Critical Solution Temperature (Triethylamine-Water System)	03	Text book Himalaya publication	Online google classroom, google meet and ppt.

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	v. Partially Miscible Liquids with Upper and Lower Critical Solution Temperature (Nicotine-Water System)			
	Immiscibility of liquids: Principle of steam distillation (Numerical expected) e) Nernst distribution law and its applications i. Solvent extraction – method	03	Text book Himalaya publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.Sc. SEMESTER: II MONTH: January 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

Study ideal gas laws, kinetic theory of gases in detail.
Study reversible and irreversible reactions, law of mass action, dynamic equilibria.
Study spontaneity and physical significance of free energy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER-Chemistry Paper-I **UNIT-I Gaseous State And Chemical Equilibria and Thermodynamic Parameters**	Ideal gas laws, kinetic theory of gases, Maxwell-Boltzmann's distribution of velocities (qualitative discussion), ideal gases, real gases, compressibility factor, Boyle's Temperature, Numericals.	04	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Deviation from ideal gas laws, reasons for deviation from ideal gas laws, Van der Waals equation of state, Joule-Thomson effect: qualitative discussion and experimentation, inversion temperature. Numericals.	04	Text book Seth publication	Online google classroom, google meet and ppt.
	Reversible and irreversible reactions, law of mass action, dynamic equilibria, equilibrium constant, (Kc and Kp),	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	relationship between Kc and Kp, Le Chatelier's principle, factors affecting chemical equilibrium, Numericals.	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Statement of second law of thermodynamics, concepts of entropy and free energy, spontaneity and physical significance of free energy, thermodynamic derivation of equilibrium constant, Numericals.	03	Text book Himalaya publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.Sc. SEMESTER: II MONTH: January 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

Study ideal gas laws, kinetic theory of gases in detail.
Study reversible and irreversible reactions, law of mass action, dynamic equilibria.
Study spontaneity and physical significance of free energy.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-Chemistry Paper-II **UNIT-II Chemical Bond and Reactivity And Oxidation Reduction Chemistry**	Types of chemical bond, comparison between ionic and covalent bonds, polarizability Fajan's Rule, shapes of molecules, Lewis dot structure, Sidgwick Powell Theory	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Basic VSEPR theory for ABn type molecules with and without lone pair of electrons, isoelectronic principles, applications and limitations of VSEPR theory.	04	Atkins, P.W. & Paula, J. Physical Chemistry, 10th Ed., Oxford University Press,	Online google classroom, google meet and ppt.
	Reduction potentials Redox potentials: half reactions; balancing redox equations.	02	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Redox stability in water i) Latimer and Frost Diagrams ii) pH dependence of redox potentials.	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Applications of redox chemistry i) Extraction of elements: (example: isolation of copper by auto reduction) ii) Redox reagents in Volumetric analysis: a) I2; b) KMnO4 iii) Titration curves:i) single electron systems (example Ce(IV) against Fe(II)); and ii) Multi electron systems as in KMnO4 against Fe(II))	03	Text book Himalaya publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: January 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

To study nomenclature, structure and physical properties, acidity of carboxylic acids.
To predict the reactivity, nomenclature, and preparation of aromatic sulphonic acids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER Chemistry Paper-I **UNIT-III**	Nomenclature, structure and physical properties, acidity of carboxylic acids, effects of substituents on acid strength of aliphatic and aromatic carboxylic acids. Preparation of carboxylic acids: oxidation of alcohols and alkyl benzene, carbonation of Grignard and hydrolysis of nitriles.	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Reactions: Acidity, salt formation, decarboxylation, Reduction of carboxylic acids with $LiAlH_4$, diborane, Hell-Volhard-Zelinsky reaction,Conversion of carboxylic acid to acid chlorides, esters, amides and acid anhydrides and their relative reactivity.	04	Text book Seth publication	Online google classroom, google meet and ppt.
	Mechanism of nucleophilic acyl substitution and acid-catalysed nucleophilic acyl substitution. Interconversion of acid derivatives by nucleophilic acyl substitution. Mechanism of Claisen condensation and Dieckmann condensation.	04	Morrison, R. T.; Boyd, R. N. (2012). *Organic Chemistry*. Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).	Online google classroom, google meet and ppt.

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	Nomenclature, preparation of aromatic sulphonic acids by sulphonation of benzene (with mechanism), toluene and naphthalene, Reactions: Acidity of arene sulfonic acid,	02	Text book Seth publication	Online google classroom, google meet and ppt.
	Comparative acidity of carboxylic acid and sulfonic acids. Salt formation, desulphonation.Reaction with alcohol, phosphorous pentachloride, IPSO substitution.	02	Text book Himalaya publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: January 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

To study different Types of catalysis, catalytic activity, specificity and selectivity.
To learn Recapitulation of laws of crystallography and types of crystals

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Chemistry Paper-II **UNIT-I Solid State And Catalysis**	laws of crystallography and types of crystals Characteristics of simple cubic, face centered cubic and body centered cubic systems, interplanar distance in cubic lattice	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Use of X-rays in the study of crystal structure, Bragg's equation (derivation expected), X-rays diffraction method of studying crystal lattice structure, structure of NaCl and KCl. Determination of Avogadro's number, Numericals.	04	Atkins P. W., and Paula J. De, *Physical Chemistry*, 10th ed., Oxford	Online google classroom, google meet and ppt.

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			University, 12 press (2014).	
	Types of catalysis, catalytic activity, specificity and selectivity, inhibitors, catalyst poisoning and deactivation	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Mechanisms and kinetics of acid-base catalyzed reactions, effect of pH. Mechanisms and kinetics of enzyme catalyzed reactions (Michaelis-Menten equation)	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Effect of particle size and efficiency of nanoparticles as catalyst.	02	Text book Himalaya publication	Online google classroom, google meet and ppt.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: January 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

Expected to appreciate the nature of interaction between applied electrical potential and the concentration of the analyte.

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The nature of chemical reactions that influence potential of a given cell.
Familiar with the various types of electrodes or half cells.
Appreciate the nature, need and importance of pH.
Expected to know the applications of the various instrumental methods dealt with in this unit.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-Chemistry Paper-III **UNIT-II Instrumental Methods-II**	Instruments based on the electrochemical properties of the analytes Potentiometry: Principle, Role of Reference and indicator electrodes	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Applications in Neutralisation reactions with reference to the titration of a Strong acid against a Strong Base (using quinhydrone electrode, Graphical methods for detection of end points.	02	Text book Seth publication	Online google classroom, google meet and ppt.
	pHmetry: Principle Types of pH meters.	02	Principles of Instrumental analysis, D. A. Skoog, 3rd Edition, Chapters: 20, 23	Online google classroom, google meet and ppt.
	Construction Working and Care of Combined Glass electrode Applications in Titrimetry (Strtong acid-Strong Base) biological and environmental analysis	02	Text book Seth publication	Online google classroom, google meet and ppt.
	Conductometry: Principle , Conductivity cell its construction and care.	03	Text book Himalaya publication	Online google classroom, google meet and ppt.
	Applications in Neutralisation Titrimetry with respect to i. Strong Acid-Strong Base ii. Strong Acid-Weak Base iii. Strong Base-weak Acid iv. Weak Acid- Weak Base.	03		Online google classroom, google meet and ppt.

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	Advantages & limitations of conductometric titrations.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY

CLASS: F.Y. BSC CBZ'A' SEMESTER: SEM-I MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1.The Students will able to understand the basic concept of stereochemistry and 3D arrangement of atoms and groups in space.

2. The Students will able to know that how optical property of any organic compound is responsible for change in it's physical and chemical properties.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-III Stereochemistry-I	3.1 Introduction of Projection Formulae and their inter conversions	02	Himalaya Publication textbook	Google meet, Google classroom and Presentation
	3.2 Geometrical Isomerism in alkenes and cycloalkanes	02		Google meet, Google classroom and Presentation
	3.3 Optical isomerism	06		Google meet, Google classroom and Presentation
	3.4 Relative and Absolute configuration	02		Google meet, Google classroom and Presentation
	3.5 Conformation analysis of alkanes	03		Google meet, Google classroom and Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY

CLASS: F.Y. BSC CBZ'A' SEMESTER: SEM-II MONTH: JANUARY TO MAY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1.The Students will able to understand the concept of different types strain in cyclic compound and how the strain in cyclic compound is responsible for it's stability in the space.

2. In Aromatic Hydrocarbons the Students will able to understand the characteristics of Aromatic compounds and it's electrophilic substitution reaction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-III 3.1Stereochemistry-Il 3.2 Aromatic Hydrocarbons	3.1.1 CycloalkaneTypes of Cycloalkanes and their relative stability	02	Himalaya Pub.Text book	Google meet, Google classroom and Presentation
	3.1.2 Confirmation analysis of cyclohexane: chair boat and twist boat form and relative stability with energy	03		Google meet, Google classroom and Presentation
	3.2.1Aromatic,Anti-aromaticity and heterocyclic compound	02		Google meet, Google classroom and Presentation
	3.2.2.Electrophilic substitution:Halogenation,Nitration...	06		Google meet, Google classroom and Presentation
	3.2.3 Directing effect of the group	02		Google meet, Google classroom and Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY

CLASS: M.SC -I SEMESTER: SEM-I MONTH: JANUARY TO FEBRUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1.The learner will able to understand the different terms used in Analytical chemistry.

2. They will able to understand the Principle, working of instruments used in analysis and also concept of Quality Management in industry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Unit-1 1.1.Language of Analytical chemistry 1.2.Quality in Analytical chemistry	1.1.1 Terms involved in Analytical chemistry and types of analytical instruments	05	David Harvey	Google meet, Google classroom and Presentation
	1.1.2 Error: Types of error and method of quantitative analysis	04	Skoog and Holler	Google meet, Google classroom and Presentation
	1.2.1 Quality Management system: Total Quality Management	04	Donna Summers	Google meet, Google classroom and Presentation
	1.2.2 Safety in Laboratories	02	ParagDiwan	Google meet, Google classroom and Presentation
	1.2.3 Accreditation and Good laboratory practices	04	Klimisch	Google meet, Google classroom and Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 19

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY

CLASS: MSC-I SEMESTER: SEM-II MONTH: APRIL TO MAY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: .The Students will able to understand the different terms involved in Chromatography technique and also principle, instrumentation, working, application of Gas chromatography as well HPLC technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Unit-I Chromatography	1.1 Recapitulation basic concepts in Chromatography	04	Skoog,Holler	Google meet, Google classroom and Presentation
	1.2 Concept of plate and rate theories in chromatography	02	Couch 7th Ed.	Google meet, Google classroom and Presentation
	1.3 Gas Chromatography: Principle, instrumentation, working and Application	06		Google meet, Google classroom and Presentation
	1.4 High performance liquid chromatography	02	Joel .K. Swadesh	Google meet, Google classroom and Presentation
	1.4.1 Principle, instrumentation, working and Application	05		Google meet, Google classroom and Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 19

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY

CLASS: S.Y CZ/PC SEMESTER: SEM-III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1.The Students will able to understand the terms used in Analytical Chemistry, Methods of chemical analysis and statistical treatment of Analytical data.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-Ill Unit-I Introduction to Analytical Chemistry and Statistical treatment of Analytical data-l	1.1 Role of Analytical Chemistry: terms involved in Analytical Chemistry, Purpose of Chemical Analysis	03	Himalaya Publication Sy. textbook	Google meet, Google classroom and Presentation
	Classical and Non-Classical Methods of analysis	03		Google meet, Google classroom and Presentation
	1.2 Significance of sampling in Analytical Chemistry	02		Google meet, Google classroom and Presentation
	Types of sampling	02		Google meet, Google classroom and Presentation
	1.3 Results of Analysis	05		Google meet, Google classroom and Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY

CLASS: S.Y CZ/PC SEMESTER: SEM-III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1.The learners will able to understand the concept of titrmetry analysis, tools used in analysis and difference steps involved in gravimetric analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Unit-II Classical methods of Analysis	2.1 Titrimetric Methods: types of titrimetry, tools of titrimetry	03	Himalaya Publication sy text book	Google meet, Google classroom and Presentation
	2.2 Standard Solutions and Calculations in Titrimetry	02		Google meet, Google classroom and Presentation
	2.3 Neutralisation Titrations: construction of Titration curve	04		Google meet, Google classroom and Presentation
	2.4 Gravimetric Analysis: steps involved in analysis	03		Google meet, Google classroom and Presentation
	Types and application of gravimetric analysis	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY

CLASS: S.Y PC/CZ SEMESTER: SEM-IV MONTH: JANUARY TO MAY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1.The Students will able to understand the types of Separation methods used in chemical analysis and also instrumentation working application of Electrophoresis technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Unit-I Methods of Separation	1.1 Introduction analytical separation and it's importance in analysis	03	Himalaya Publication Sy textbook	Google meet, Google classroom and Presentation
	1.2 Types of Separation methods	04		Google meet, Google classroom and Presentation
	1.3 Electrophoresis: Instrumentation working & Application	03		Google meet, Google classroom and Presentation
	1.4 Solvent Extraction: Condition and methods of extraction	03		Google meet, Google classroom and Presentation
	1.5 Chromatography: Paper Chromatography and Thin layer Chromatography	03		Google meet, Google classroom and Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAF: MISS. SHEETAL ANIL JAISWAL. DEPARTMENT: CHEMISTRY

CLASS: S.Y PC/CZ SEMESTER: SEM-IV MONTH: JANUARY TO MAY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: The students will able to understand Principle, instrumentation, working and Application of Potentiometer, pH meter, Conductometer

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Unit-II InstrumentalMethods-ll	2.1 Potentiometry: Instrumentation, working and application	05	Himalaya Publication Sy textbook	Google meet, Google classroom and Presentation
	2.2 pH metry: Instrumentation, working and application	04		Google meet, Google classroom and Presentation
	2.3 Conductometry : Instrumentation, working and application	05		Google meet, Google classroom and Presentation
	Advantages and limitations of Conductometric titration	02		Google meet, Google classroom and Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY

CLASS: M.SC -II (ANALYTICAL CHEMISTRY) SEMESTER: SEM-III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1.The learner will able to understand the different instruments used in spectral method for surface characterization of solid materials.

2. They will able to understand the Principle, working and application of different instruments used in spectral method for surface characterization of samples.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Advance Instrumental Techniques Unit-l Spectral Methods-I	1.1 Surface analytical techniques: Preparation of surface, Difficulties involved in the surface analysis.	02	G.D Christian	Google meet, Google classroom and Presentation
	1.2 Principle, Instrumentation and applications of following: a) Secondary ions mass spectroscopy	04	Skoog and Holler	Google meet, Google classroom and Presentation
	b) Particle Induced X-ray emission	05	J. A. Niemann	Google meet, Google classroom and Presentation
	c) Low energy ion scattering and Rutherford Backscattering	05		Google meet, Google classroom and Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY

CLASS: MSC-II (ANALYTICAL CHEMISTRY) SEMESTER: SEM-IV MONTH: JANUARY TO MAY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: .The Students will able to understand the different terms involved in Chromatography technique and also principle, instrumentation, working, application of Gas chromatography as well HPLC technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Advance Instrumental Techniques Unit-I Spectral Methods III	1.1 NMR Spectroscopy: Theory and instrumentation FTNMR, 2D NMR, COSY, total correlation spectroscopy (TOCSY)	11	G. D. Christian	Google meet, Google classroom and Presentation
	1.2 Radio waves in imaging-principle instrumentation and applications of MRI	04	D. A. Skoog, F.J. Holler	Google meet, Google classroom and Presentation
	1.3 Application of NMR to other nuclei c^{13} , P^{31} and F^{19} spectroscopy	03	H. H. Willard, L.L. Merritt Jr	Google meet, Google classroom and Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati shreedhar Dhumal._____ DEPARTMENT: Chemistry_____

CLASS: ____M.Sc. I_____SEMESTER: _____I _st_____ MONTH: ___Jan, Feb,21_____ACADEMIC YEAR: ____2020-21_____

LEARNING OBJECTIVE/S:

The learners will be able to : 1) To learn concept of FT technique and it's concept.

2) To understand the concept and application of Molecular Ultraviolet and Visible Spectroscopy

3) To be able to carry out numerical based on UV Visible spectroscopy.

4) To gain knowledge in concept of Infrared Absorption Spectroscopy, Dual spectrometry , diffuse reflectance spectroscopy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper - IV, Unit - 3. Optical Methods	Recapitulation and FT Technique : Recapitulation of basic concepts, Electromagnetic spectrum, Sources, Detectors, sample containers. Laser as a source of radiation, Fibre optics. Introduction of Fourier Transform.	[3 L]	1. D. A. Skoog, F. J. Holler, T. A. Nieman, Principles of Instrumental Analysis, 5th Edition, Google.	Google classroom

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	Molecular Ultraviolet and Visible Spectroscopy NUMERICALS ARE EXPECTED Derivation of Beer- Lambert's Law and its limitations, factors affecting molecular absorption, types of transitions [emphasis on charge transfer absorption], pH, temperature, solvent and effect of substituents. Applications of Ultraviolet and Visible spectroscopy: 1) On charge transfer absorption 2) Simultaneous spectroscopy 3) Derivative Spectroscopy Dual spectrometry – Introduction, Principle, Instrumentation and Applications	[6 L]		
	Infrared Absorption Spectroscopy Instrumentation: Sources, Sample handling, Transducers, Dispersive, non-dispersive instrument FTIR and its advantages Applications of IR [Mid IR, Near IR, Far IR]: Qualitative with emphasis on "Finger print" region, Quantitative analysis,	[6 L]		

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	Advantages and Limitations of IR Introduction and basic principles of diffuse reflectance spectroscopy			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati Shreedhar Dhumal._____ DEPARTMENT: Chemistry_____

CLASS: ____M.Sc. I_____ SEMESTER: _____II nd_____ MONTH: __April, May 21_____ACADEMIC YEAR: ____2020-21_____

LEARNING OBJECTIVE/S:

The learners will be able to : ___1) To gain knowledge of concept Scanning Electron Microscopy (SEM) Scanning Tunneling Microscopy (STM) Transmission Electron Microscopy (TEM)Electron Spectroscopy (ESCA and Auger). 2) To understand the concept of AAS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper - IV, Unit - 3. Surface Analytical Techniques & Atomic Spectroscopy	Introduction, Principle, Instrumentation and Applications of: Scanning Electron Microscopy (SEM) Scanning Tunneling Microscopy (STM) Transmission Electron Microscopy (TEM) Electron Spectroscopy (ESCA and Auger)	[9 L]	Principles of Instrumental Analysis – Skoog, Holler, Nieman, 5th ed., Harcourt College	Google classroom

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	Advantages and Limitations of AAS Atomic Spectroscopy based on plasma sources – Introduction, Principle, Instrumentation and Applications.	[6L]		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____Swati Shreedhar Dhumal._____ DEPARTMENT: Chemistry_____

CLASS: _____M.Sc. II_____ SEMESTER: ___III rd_____ MONTH: __Aug 20 _ _ACADEMIC YEAR: ___2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : _1)__To understand the concept of sampling, types of sample, pretreatment of soil food and cosmetic.___

_2) To know about sampling plan , sampling of raw material, and finished products.

3) To know about selection of method, criteria for method used , method validation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit- I Quality In Analytical Chemistry - I	Sampling: Definition, types of sample, sampling plan, quality of sample, subsampling, Sampling of raw materials, intermediates and finished products. Sample preparations – dissolution technology and decomposition, storage of samples.	(8 L)	Quality in the analytical chemistry laboratory, E Prichard, John Wiley and sons N.Y 1997. Quality assurance in analytical Chemistry, W Funk, V Dammann, G. Donnevert VCH Weinheim1995	Google classroom

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	Pre-treatment of samples: soil, food and cosmetics.		.	
	Selection of the Method: sources of methods, factors to consider when selecting a method, performance criteria for methods used, reasons for incorrect analytical results, method validation, and quality by design (PAT).	(7L)		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15 L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____Swati Shreedhar Dhumal. _____ DEPARTMENT: ___Chemistry_____

CLASS: ___M.Sc. II_____ SEMESTER: _____IIIrd_____ MONTH: _Sep , Oct 20____ ACADEMIC YEAR: __2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : __1) To understand about measurements of uncertainty.

2) To gain knowledge about signal to noise ratio.

3) To know about pharmaceutical legislation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper - I Unit - II Quality In Analytical Chemistry - II	Measurement of uncertainty: Definition and evaluation of uncertainty, putting uncertainty to use, interpretation of results and improving the quality of results.	(4L)	Quality in the analytical chemistry laboratory, E Prichard, John Wiley and sons N.Y 1997. Quality assurance in analytical Chemistry, W Funk, V Dammann, G. Donnevert VCH Weinheim1995	Google classroom

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	Signal to noise: Signal to noise ratio, sources of noise in instrumental analysis. Signal to noise enhancement, hardware devices for noise reduction, software methods for noise reduction.	(6L)		
	Pharmaceutical Legislation: introduction to drug acts, drug rules(schedules), concept of regulatory affairs in pharmaceuticals, review of GLP and GMP and their regulations for analytical labs, roles and responsibilities of personnel, appropriate design and placement of laboratory equipment, requirements for maintenance and calibration.	(5L)		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati Shreedhar Dhumal._____DEPARTMENT: ___Chemistry_____

CLASS: _____M.Sc. II_____ SEMESTER: ____IIIrd_____ MONTH: ____Oct , Nov 20 _ ACADEMIC YEAR: ___2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : _1) To gain general idea regarding of pharmaceutical industry.

2) To know Role of FDA in pharmaceutical industries.

3) To understand about official method of quality control.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper - IV, Unit - I Pharmaceutical Analysis	General idea regarding the Pharmaceutical Industry, definition and classification of drugs, introduction to pharmaceutical formulations, classification of dosage forms.Role of FDA in pharmaceutical industries.	(7L)	Government of India Publications of Food, Drug and Cosmetic Act and Rules. Google , Wikipedia.	Google classroom
	Sources of impurities in pharmaceutical products and raw materials.	(4L)		

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	Standardization of finished products and their characteristics, official methods of quality control.	(4L)		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15 L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati Shreedhar Dhumal._____DEPARTMENT: ___Chemistry_____

CLASS: _____M.Sc. II_____ SEMESTER: ____IV th_____ MONTH: __Jan 21_____ ACADEMIC YEAR: ___2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : __1) To understand principle and concept of green chemistry and sustainable development.

2) To be able to calculate atom economic and uneconomic reactions.

3) To provide knowledge of organic solvents.

4) To be able to deal with emerging green technologies.

5) To acquire knowledge in Designing Greener Processes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper - I, Unit - III Green chemistry	Principle and concepts of green chemistry: sustainable development and green chemistry, atom economy, examples of atom economic and atom uneconomic reactions, reducing toxicity.	(4L)	Green chemistry and catalyst, R. A. Sheldon, Isabella Arends, Ulf Hanefeld Wiley VCH verlag GmBH & co. Sustainable residential development: planning and design	Google classroom

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			for green neighborhoods. Google, Wikipedia.	
	Organic solvents: environmentally benign solutions, solvent free systems, supercritical fluids (only introduction) Ionic liquids as catalysts and solvents.	(4L)		
	Emerging Green Technologies: photochemical reactions (advantages and challenges), examples. Chemistry using microwaves, sonochemistry and electrochemical synthesis.	(4L)		
	Designing Greener Processes: Inherently Safer Designs (ISD), Process intensification (PI) in-process monitoring.	(3L)		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati Shreedhar Dhumal._____ DEPARTMENT: _____Chemistry_____

CLASS: ____M.Sc. II _____SEMESTER: _____IV th_____ MONTH: _Jan 21_____ ACADEMIC YEAR: 2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : __1) To understand about concept of Mass spectroscopy.

2) To learn concept of Raman spectroscopy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -II Unit -II Spectral method Iv	Mass spectroscopy: recapitulation, correlation of mass spectra with molecular structure- interpretation of mass spectra, analytical information derived from mass spectra- molecular identification, metastable peaks, Fragmentation Reactions.	(9L)	Principles of Instrumental Analysis, D. A. Skoog, F. J. Holler and J.A. Niemann 5th Ed. Google, Wikipedia.	Google classroom
	Raman spectroscopy: Principle Theory Instrumentation , techniques(SERS and Resonance Raman) and Applications of Raman spectroscopy.	(6L)		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati Shreedhar Dhumal_____ DEPARTMENT: Chemistry ___

CLASS: _____M.Sc. II_____ SEMESTER: _____IVth_____ MONTH: Feb 21 _____ ACADEMIC YEAR: ___2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : 1) To gain updated knowledge of solid waste management.

2) To acquire knowledge of method and treatment of waste.

3) To know about biomedical waste and its method of disposal.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III Unit- II Solid waste	Solid waste management: objectives, concept of recycle, reuse and recovery .	(3L)	Solid waste management, K Sasikumar and Sanoop Gopi Krishna PHI publication (2009) Solid waste management, Surendrakumar Northen Book Center	Google classroom

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management.			(2009) Google , Wikipedia.	
	Methods of solid waste disposal	(2L)		
	Treatment and disposal of sludge / dry cake	(3L)		
	Managing non-decomposable solid wastes.	(2L)		
	Bio- medical waste : Introduction , Classification and methods of disposal	(5L)		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Tanvi .A. Raul DEPARTMENT: Chemistry

CLASS: F.Y.B.sc (CBZ-A & B) SEMESTER: I MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop the knowledge about chemical kinetics and liquid state.

To develop the understanding about order of reactions and different instruments used to measure different properties of liquids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I	**1.1 Chemical Kinetics** Rate of reaction, rate constant, measurement of reaction rates, order and molecularity of reaction, integrated rate equation of first and second order reactions (with equal initial concentration of reactants) (Numericals expected) Determination of order of reaction by (a) Integration method (b) Graphical method (c) Ostwald's isolation method (d) Half time method (Numericals expected) **1.2 Liquid State** Surface tension: Introduction, methods of determination of surface tension by drop number method (Numericals expected)	8 7	Himalaya Publication F.Y.B.sc, Physical chemistry Textbook	Google meet and google classroom

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	Viscosity: Introduction, coefficient of viscosity, relative viscosity, specific viscosity, reduced viscosity, determination of viscosity by Ostwald viscometer (Numericals expected) Refractive index: Introduction, molar refraction and polarizability, determination of refractive index by Abbe's refractometer (Numerical s expected) Liquid crystals: Introduction, classification and structure of thermotropic phases (Nematic, smectic and cholesteric phases), applications of liquid crystals :			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI A. RAUL DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.sc (CBZ-A&B) SEMESTER: II MONTH: JANUARY TO MAY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

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To develop knowledge about Ionic Equilibria, Solid state and Molecular spectroscopy.

To develop understanding about different types of electrolytes and electromagnetic waves.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I	**1.1 Ionic Equilibria** Strong, moderate and weak electrolytes, degree of ionization, factors affecting degree of ionization, ionization constant and ionic product of water, ionization of weak acids and bases, pH scale, common ion effect, dissociation constants of mono di and triprotic acid (exact treatment for monoprotic acid) Buffers: Introduction, types of buffers, derivation of Henderson equation for acidic and basic buffers, buffer action, buffer capacity (Numericals expected)	7	Himalaya Publication F.Y.B.sc, Physical chemistry Textbook	Google meet and google classroom
	1.2 Molecular Spectroscopy Electromagnetic radiation, electromagnetic spectrum, Planck's equation, interaction of electromagnetic radiation with matter: Absorption, emission, scattering, flourescence, electronic, vibrational and rotational transitions Beer Lambert's law (Numericals expected)	4		
	1.3 Solid State Chemistry Types of solids, crystal lattice, lattice points, unit cell, space lattice and lattice plane, laws of crystallography: Law of constancy of interfacial angle, law of symmetry and law of	4		

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	rational indices (Numericals expected)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.sc (PC-CZ) SEMESTER: III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR:2020-2021

LEARNING OBJECTIVE/S:

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The learners will be able to :

Develop knowledge about chemical kinetics and solutions.

To develop understanding about different theories based on chemical kinetics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I	**1.1 Chemical Kinetics- II** 1.1.1 Types of complex chemical reactions: Reversible or consecutive and parallel reactions. 1.1.2 Effect of temperature on rate of reaction , Arrhenius equations. 1.1.3 Theories of reaction rate : Collision theory, complex theory of biomolecular reactions etc. **1.2 Solutions** 1.2.1 thermodynamics of ideal solutions: Ideal solution and Raoul's law, deviations from Raoul's law- Non ideal solutions, vapour pressure composition and temperature, Lever rule etc. 1.2.2 Partial miscibility of liquids: Critical solution temperature, effect of impurity on partial miscibility of liquids with respect to Phenol-water, Triethannolamine - water and nicotine - water systems.	7 8	Himalaya publication S.Y.B.sc, Physical chemistry textbook	Google meet and google classroom

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	1.2.3 Immiscibility of liquids- Principle of steam distillation, Nernst distribution law and its applications.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.sc (PC-CZ) SEMESTER: IV MONTH: JANUARY TO MAY ACADEMIC YEAR:2020-2021

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LEARNING OBJECTIVE/S:
The learners will be able to :

Develop the knpwledge of solid state and catalysis.

To develop the understanding about state and catalysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I	**1.1 Solid state** 1.1.1 Recapitulation of laws of crystallography and types of crystals. 1.1.2 Characteristics of simple cubic, face centered cubic and body centered cubic systems. 1.1.3 Use of X-ray in study of crystal structure, bragg's equation. **1.2 Catalysis** 1.2.1 types of catalysis, catalytic activity, specificity and selectivity, inhibitors, catalyst poisoning and deactivation. 1.2.2 Mechanisms and kinetics and acid base catalyzed reaction. 1.2.3 Mechanisms and kinetics of enzyme catalyzed reaction. 1.2.4 Effect of particle size and efficiency of nano particles as catalyst.	7 8	Himalaya Publication S.Y.B.sc, Physical chemistry textbook	Google meet and google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART II SEMESTER: III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop knowledge of body fluids.

To develop understanding about analysis of different body fluids.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit I	**Bioanalytical chemistry** **1.1Body Fluids** 1.1.1 Composition of body fluids and detection of abnormal levels ofglucose, creatinine, uric acid in blood, protein, ketone bodies and bilirubin in urine leading to diagnosis of diseases. 1.1.2 Physiological and nutritional significance of vitamins (watersoluble and fat soluble) and minerals. 1.1.3 Analytical techniques (including microbiological techniques) forvitamins.	5 5 5	General, organic and biological chemistry, H. Stephen Stoker, Cengage Learning.	Black board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART II SEMESTER: III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop the knowledge about cosmetics.

To develop understanding about different elements present in cosmetics

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit IV Pharmaceutical and Organic Analysis	**Cosmetic Analysis** **4.1 Cosmetics** Introduction. Evaluation of cosmetic materials, raw materials and additives. Formulation, standards and methods of analysis.	2	Google	Black board and chalk
	4.2 Deodorants and antiperspirant Al, Zn, Boric acid, chlorides, sulphates, hexachlorophene, methanamine, phenolsulphonates and urea.	3		
	4.3 Face powder Fats, fatty acids, boric acid, barium sulphate, Ca, Mg, Ti, Fe, oxides of Ti, Fe and Al.	3		
	4.4 Hair tonic 2,5-diaminotoluene, potassium borates, sodium perborate, pyrogallol, resorcinol, salicylic acid, dithioglycollic acid (inpermanent wavers).	3		
	4.5 Creams and Lotions Types of emulsions, chloroform soluble materials, glycerol, pH emulsion, ash analysis, nonvolatile matter (IR spectroscopy) .	2		
	4.6 Lipsticks General analysis, determination of -nonvolatile matter, lakes and fillers, trichloroethylene-acetone soluble contents.	2		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART II SEMESTER: IV MONTH: JANUARY TO MAY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop knowledge of hyphenated techniques.

To develop understanding of hyphenated techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper II Unit IV	**Hyphenated Techniques** 4.1 concept of hyphenation, need for hyphenation, possible hyphenations. 4.2 Interfacing devices and applications of GC – MS, ICP -MS, GC -IR, Tandem Mass Spectrometry, LC – MS: HPLC-MS, CE-MS.	2 13	Principles of Instrumental Analysis, D. A. Skoog, F. J. Holler and J.A. Niemann 5 th Ed.	Google meet and google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART II SEMESTER: IV MONTH: JANUARY TO MAY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop knowledge of effluent treatment.

To develop understanding about different steps involved in effluent treatment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper III Unit I	**Effluent Treatment** 1.1 Effluent treatment plant general construction and process flow charts. 1.2Treatment and disposal of Sewage. 1.3. Effluent parameters for metallurgical industry. 1.4Permissible limits for metal (example Cr, As, Pb, Cd etc) traces in the effluent. 1.5 Recovery of metals from effluent, modern methods – Electrodialysis,Electrodeposition and Ion Exchange etc. 1.6Recycle and reuse of process and treated (effluent) water.	3 3 2 2 3 2	Water and water pollution (hand book) Ed., Seonard'l Ciacere, Vol I to IV, Marcel Dekker inc. N.Y.(1972)	Google meet and google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____AJITKUMAR INGLE_____DEPARTMENT: _____CHEMISTRY_____CLASS: _TYBSC_____ SEMESTER: _____Vth_____ MONTH: __JUNE-JULY_____

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

1. *To study redox titration like Construction of the titration curves and calculation of E_{system} in aqueous medium , Theory of redox indicators, Criteria for selection of an indicator in details.*

2. *To study complexomatric titrations in details like construction of titration curve, Use of EDTA as titrant and its standardisation, absolute and conditional formation constants of metal EDTA complexes,Selectivity of EDTA as a titrant,Factors enhancing selectivity with examples,Types of EDTA titrations,Metallochromic indicators, theory, examples and applications.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV UNIT 2 **CLASSICAL METHODS OF ANALYSIS (TITRIMETRY) (3 & 6 UNITS)**	**2.1 Redox Titrations (Numerical and word Problems are expected)** 2.1.1 Introduction 2.1.2 Construction of the titration curves and calculation of E_{system}	08L	Saujanya publicationof analytical chemistry,sheth publication,Himalaya publication textbook,	Chalk and Board

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	in *aqueous medium in case of:* *(1) One electron system* *(2) Multielectron system* *2.1.3 Theory of redox indicators, Criteria for selection of an indicator* *Use of diphenyl amine and ferroin as redox indicators*			
	2.2 Complexometric Titrations *2.2.1 Introduction, construction of titration curve* *2.2.2 Use of EDTA as titrant and its standardisation, absolute and* *conditional formation constants of metal EDTA complexes,* *Selectivity of EDTA as a titrant.* *Factors enhancing selectivity with examples.* *Advantages and limitations of EDTA as a titrant.* *2.2.3 Types of EDTA titrations.*	*07L*	*Same as above*	*Same as above*

	2.2.4 Metallochromic indicators, theory, examples and applications			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____AJITKUMAR INGLE_____DEPARTMENT: _____CHEMISTRY___

__CLASS: ___TYBSC_____ SEMESTER: _VTH _____ MONTH: __AUG-SEPT___

ACADEMIC YEAR: _2019-2020____

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To study solvent extraction in detail like Factors affecting extraction, Concept of $[pH]_{1/2}$ and its significance, Craig's counter current extraction.

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2) To study HPLC instrumentation, working and applications along with detectors.

3) To study HPTLC instrumentation, working and applications in details.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV UNIT IV **METHODS OF SEPARATION – I (6 UNITS)**	**4.1 Solvent Extraction** 4.1.1 Factors affecting extraction: Chelation, Ion pair formation and Solvation 4.1.2 Graph of percent extraction versus pH. Concept of $[pH]_{1/2}$ and its significance (derivation not expected) 4.1.3 Craig's counter current extraction: Principle, apparatus and applications 4.1.4 Solid phase extraction: Principle, process and applications with special reference to water and industrial effluent analysis.	06L	Saujanya publication,sheth publication,Himalaya publication textbook of analytical chemistry,	Chalk and board

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	4.1.5 Comparison of solid phase extraction and solvent			
	extraction.			
	4.2 High Performance Liquid chromatography (HPLC) *4.2.1 Introduction and Principle* *Instrumentation- components with their significance: Solvent* *Reservoir, Degassing system, Pumps-(reciprocating pumps,* *screw driven- syringe type pumps, pneumatic pumps,* *advantages and disadvantages of each pump), Precolumn,* *Sample injection system, HPLC Columns, Detectors(UV –* *Visible detector, Refractive index detector)* *4.2.2 Qualitative and Quantitative Applications of HPLC*	*06L*	*SAME AS ABOVE*	*SAME AS ABOVE*

	4.3 High Performance Thin Layer Chromatography (HPTLC) *4.3.1 Introduction and Principle*	*03L*	*SAME AS ABOVE*	*SAME AS ABOVE*

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	Stationary phase, Sample application and mobile phase *4.3.2 Detectors* *a) Scanning densitometer- Components.* *Types of densitometer- Single beam and Double beam* *b) Fluorometric Detector* *4.3.3 Advantages, disadvantages and applications* *4.3.4 Comparison of TLC and HPTLC*			

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: MSc. –I SEMESTER: I MONTH: SEPTEMBER ACADEMIC YEAR: 2019 -20

LEARNING OBJECTIVE/S: To study quantum chemistry
The learners will be able to: Understand the concept of quantum chemistry and to solve Numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – II QUANTUM CHEMISTRY	Introduction, Schrodinger wave equation, wave function, properties, Normalisation, orthogonality	3L	R. K. Prasad	Power point presentation
	Operators and algebra, Hermitian operator, Hamiltonian operator, Eigen functions, postulates of quantum mechanics	4L	R. K. Prasad	Power point presentation
	Applications of quantum mechanics for free particle, one dimension , two dimension and three dimension box	4L	R. K. Prasad	Power point presentation
	Harmonic oscillator, Hermite polynomials, recursion formula	3L	R. K. Prasad	Power point presentation
	Numericals	1L	R. K. Prasad	Chalk -board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: MSc. –I SEMESTER: I MONTH: OCTOBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To study elector-chemistry
The learners will be able to: classify chemical cells and derived the expressions for it and solve numericals

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – IV ELECTRO-CHEMISTRY	Introduction, Debye-Huckel theory, limiting law, its extension	3L	S. Glasstone	Chalk -board
	Cunductance, relaxation effect, Onsager equation, its validity, Debye-Falkhagen and Wein effect	4L	S. Glasstone	Chalk -board
	Batteries	3L	S. Glasstone	Chalk -board
	Bio-eelctrochemistry	3L	S. Glasstone	Chalk -board
	Numericals	2L	S. Glasstone	Chalk -board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: MSc. –I SEMESTER: I I MONTH: JANUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To study quantum chemistry
The learners will be able to: Understand the concept of quantum chemistry and to solve Numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – II QUANTUM CHEMISTRY	Rigid rotar, Spherical coordinates, theta equation, spherical harmonics	3L	R. K. Prasad	Chalk -board
	Hydogen atom, separation of energy, quantum numbers, probability density functions	4L	R. K. Prasad	Chalk -board
	Application of Schrodinger equation, need for approximate solution, derivation	3L	R. K. Prasad	Chalk -board
	Huckel molecular orbitals	3L	R. K. Prasad	Chalk -board
	Numericals	2L	R. K. Prasad	Chalk -board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: MSc. –I SEMESTER: I I MONTH: MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To study structures of solids and phase equillibria
The learners will be able to: draw structures of solids and solve numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – IV SOLID STATE CHEMISTRY AND PHASE EQUILLIBRIA	Solid state chemistry	1L	S. Glasstone	Chalk -board
	Structure, types of defects and its stoichiometry	4L	H. V. keer	Chalk -board
	Phase equillibria	4L	H. V. keer	Chalk -board
	Two component system	3L	H. V. keer	Chalk -board
	Three component system	3L	H. V. keer	Chalk -board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: T.Y.BSc. SEMESTER: V MONTH: AUGUST/SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To study properties of solid and liquid
The learners will be able to: Write derivations of colligative properties and solve numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – II CHEMICAL THERMODYNAMICS AND CHEMICAL KINETICS	Colligative properties : vapour pressure, measurement – static and dynamic method	2L	Ira Levine	Chalk -board
	Elevation in boiling point, depression in freezing point, and numericals	5L	Ira Levine	Chalk -board
	Thermodynamic derivation of Van't hoff equation, measurement, reverse osmosis, numericals	3L	Ira Levine	Chalk -board
	Collision theory for unimolecular and bimolecular reactions and numericals	3L	K. Laider	Chalk -board
	Classificaton of reactions , numericals	2L	K. Laider	Chalk -board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: T.Y.BSc. SEMESTER: V MONTH: AUGUST/SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To study nuclear chemistry.
The learners will be able to: Explain principle, construction and working of nuclear reactors and counters, solve numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – III NUCLEAR CHEMISTRY	Basic terms, Radioactive constants, units, numericals	3L	Ira Levine	Chalk -board
	Detection and measurement of radioactivity, counters, behaviour of ion pairs	3L	Ira Levine	Chalk -board
	Applications of use of radioisotopes as tracers, Nuclear reactions, threshold energy, Q- value, Numericals	4L	Ira Levine	Chalk -board
	Fission process, Nuclear reactors, fusion process	3L	Ira Levine	Chalk -board
	Numericals	2L	Ira Levine	Chalk -board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: T.Y.BSc. SEMESTER: VI MONTH: DECEMBER/JANUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To study electrochemistry.
The learners will be able to : classify chemical cells and derived the expressions for it and solve numericals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – I ELECTRO CHEMISTRY	Introduction, Activity and activity coefficient, Debye-Huckel limiting law, Numericals	4L	S. Glasstone	Chalk -board
	Classification of electrochemical cells, derivation and explanation of each cell, Numericals	4L	S. Glasstone	Chalk -board
	Polarization concept	3L	S. Glasstone	Chalk -board
	Decomposition potential and overvoltage	2L	S. Glasstone	Chalk -board
	Numericals	2L	S. Glasstone	Chalk -board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: T.Y.BSc. SEMESTER: VI MONTH: DECEMBER/JANUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To study quantum chemistry
The learners will be able to: Understand the concept of quantum chemistry and to solve Numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – III BASICS OF QUANTUM CHEMISTRY	Introduction, basics of quantum chemistry, black body radiation, Compton effect	3L	R.K.Prasad	Chalk -board
	Quantum mechanics, postulates ,Progressive and standing waves, interpretation and properties of wave function	4L	R.K.Prasad	Chalk -board
	State function and significance, operator concept, algebra, eigen value, Numericals	3L	R.K.Prasad	Chalk -board
	Renewable energy sources, solar energy, Silicon solar cell	3L	Ira Levine	Chalk -board
	Hydrogen: fuel of the future, production of hydrogen fuel, advantages.	2L	Ira Levine	Chalk -board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dipti Gharat, DEPARTMENT:Chemistry , CLASS: T. Y. Bsc, SEMESTER: _V_and VI_ MONTH:

ACADEMIC YEAR: _____2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Learning objectives are statements that define the expected goal of a curriculum, course, lesson or activity in terms of demonstrable skills or knowledge that will be acquired by a student as a result of instruction._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II SOLID STATE CHEMISTRY	Sem V Structures of Solids 2.2.1 Explanation of terms viz.crystal lattice, lattice point, unit cell and lattice constants. 2.1.2 Closest packing of rigid spheres (hcp,ccp), packing density in simple cubic, bcc and fcc lattices. Relationship between density, radius of unit cell and lattice parameters. 2.1.3 Stoichiometric Point defects in solids (discussion on Frenkel and Schottky defects expected).	11	Solid State Chemistry and its Applications" by A R West Google, Himalaya and sheth publication text book, you tube video, e-books	Google classroom

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	2.2 Superconductivity. 2.2.1 Discovery of superconductivity. 2.2.2 Explanation of terms like superconductivity, transition temperature, Meissner effect. 2.2.3 Different types of super conductors viz.conventional superconductors, alkali metal fullerides, high temperature super conductors. 2.2.4 Brief application of superconductors.	04	Puri sharma kalia, puri sharma pathania	
	Sem VI			
Paper II Unit III ORGANOMETALLIC CHEMISTRY	3.1 Organometallic Compounds of main group metal 3.1.1General characteristics of various types of organometallic compounds, viz.ionic, □-bonded and electron deficient compounds. 3.1.2 General synthetic methods of organometallic compounds : (i) Oxidative-addition, (ii)Metal-metal exchange(transmetallation), (iii) Carbanion-halide exchange, (iv) Metal-hydrogen exchange(metallation) and (v) Methyleneinsertion reactions. 3.1.3 Some chemical reactions of organometallic compounds:(i) Reactions with oxygen and halogens, (ii) Alkylation and arylation reactions (iii) Reactions with protic reagents, (iv) Redistribution reactions and (v) Complex formation reactions.	06		

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	3.2 Metallocenes Introduction, Ferrocene : Synthesis, properties, structure and bonding on the basis of VBT. 3.3 Catalysis 3.3.1 Comparison between homogeneous and heterogeneous catalysis 3.3.2 Basic steps involved in homogeneous catalysis 3.3.3 Mechanism of Wilkinson's catalyst in hydrogenation of alkenes.	09		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Dipti Gharat _____ DEPARTMENT:Chemistry ____ CLASS: F. Y. Bsc SEMESTER: I and II MONTH:

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Learning objectives are statements that define the expected goal of a curriculum, course, lesson or activity in terms of demonstrable skills or knowledge that will be acquired by a student as a result of instruction._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II Comparative chemistry of Main Group Elements	Sem I			Google classroom
	Metallic and non-metallic nature, oxidation states, electronegativity, anomalous behaviour of second period elements, allotropy, catenation, diagonal relationship.Comparative chemistry of carbides, nitrides, oxides and hydroxides of group I and group II elements. Some important compounds- NaHCO3, Na2CO3, NaCl, NaOH, CaO, CaCO3; oxides of carbon, oxides and oxyacids of sulphur and nitrogen	15	Himalaya and sheth publication book, Google, you tube video, e-books	

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Sem II Unit II Chemical Bond and Reactivity	with respect to environmental aspects.			
	Sem II			Google classroom
	2.1.Types of chemical bond, comparison between ionic and covalent bonds, polarizability (Fajan's Rule), shapes of molecules, Lewis dot structure, Sidgwick Powell Theory, basic VSEPR theory for ABn type molecules with and without lone pair of electrons, isoelectronic principles, applications and limitations of VSEPR theory.	07		
	2.2: Oxidation Reduction Chemistry: a) Reduction potentials b) Redox potentials: half reactions; balancing redox equations.c) Redox stability in wateri) Latimer and Frost Diagramsii) pH dependence of redox potentials.d) Applications of redox chemistry i) Extraction of elements: (example: isolation of copper by auto reduction)ii) Redox reagents in Volumetric analysis: a) I2; b) KMnO4iii) Titration curves:i) single electron systems (example Ce(IV) against Fe(II)); and ii) Multi electron systems as in KMnO4 against Fe(II))	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. SHEETAL R. POWAR** DEPARTMENT: CHEMISTRY CLASS: FYBSc

SEMESTER: I MONTH: July to September ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

i. Understand the basics of Organic Chemistry

ii. Understand and be well versed with the nomenclature of various functional groups

iii. Learn bonding, formation and reactions of organic compounds

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I U-III Basics of Organic Chemistry	Classification and Nomenclature of Organic Compounds: Review of basic rules of IUPAC nomenclature. Nomenclature of mono and bi-functional aliphatic compounds on the basis of priority order of the following classes of compounds: alkanes, alkenes, alkynes, haloalkanes, alcohols, ethers, aldehydes, ketones, carboxylic acids, carboxylic acid derivatives (acid halides, esters, anhydrides, amides), nitro compounds, nitriles and amines; including their cyclic analogues.	(5L)	Morrison and Boyd Organic Chemistry Mc Murry, J.E. Fundamentals of Organic Chemistry	Chalk and Board
	Bonding and Structure of organic compounds:	(4L)		Chalk and Board

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	Hybridization: sp3, sp2, sp hybridization of carbon and nitrogen; sp3 and sp2 hybridizations of oxygen in Organic compounds (alcohol, ether, aldehyde, ketone, carboxylic acid, ester, cyanide, amine and amide) Overlap of atomic orbitals: Overlaps of atomic orbitals to form sigma and pi bonds, shapes of organic molecules. Shapes of molecules; Influence of hybridization on bond properties (as applicable to ethane, ethene, ethyne)			
	Fundamentals of organic reaction mechanism: Electronic Effects: Inductive, electromeric, resonance and mesomeric effects, hyperconjugation and their applications; Dipole moment; Organic acids and bases; their relative strengths. Bond fission: Homolytic and Heterolytic fission with suitable examples. Electrophiles and Nucleophiles; Nucleophilicity and basicity; Types (primary, secondary, tertiary, allyl, benzyl), shape and their relative stability of reactive intermediates: Carbocations, Carbanions and Free radicals. Introduction to types of organic reactions: Addition, Elimination and Substitution reaction.	(6L)		Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. SHEETAL R. POWAR** DEPARTMENT: CHEMISTRY CLASS: FYBSc

SEMESTER: II MONTH: Nov to March ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

iv. Understand the basics of Organic Chemistry

v. Learn the bonding and reactions of aliphatic compounds.

vi. Learn the mechanisms of certain basic reactions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I U-III Chemistry of Aliphatic Hydrocarbons	3.1 Carbon-Carbon sigma bonds: Chemistry of alkanes: Formation of alkanes, Wurtz Reaction, Wurtz-Fittig Reactions, Free radical substitutions: Halogenation - relative reactivity and selectivity.	(3L))	Morrison and Boyd Organic Chemistry Mc Murry, J.E. Fundamentals of Organic Chemistry	Chalk and Board
	3.2 Carbon-Carbon pi bonds:	(12L)		Chalk and Board

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	Formation of alkenes and alkynes by elimination reactions: Mechanism of E1, E2, E1cb reactions. Saytzeff and Hofmann eliminations. Reactions of alkenes: Electrophilic additions their mechanisms (Markownikoff/ Anti Markownikoff addition), Mechanism of oxymercuration-demercuration, hydroboration-oxidation, ozonolysis, reduction(catalytic and chemical), syn and anti-hydroxylation (oxidation). 1, 2-and 1, 4- addition reactions in conjugated dienes and, Diels-Alder reaction; Allylic and benzylic bromination using N-bromosuccinimide and mechanism, e.g. propene, 1-butene, toluene, ethylbenzene. Reactions of alkynes: Acidity, Electrophilic and Nucleophilic additions. Hydration to form carbonyl compounds, Alkylation of terminal alkynes.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. SHEETAL R. POWAR** DEPARTMENT: CHEMISTRY CLASS: TYBSc

SEMESTER: V MONTH: July to September ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

i. Understand the mechanisms of important reactions

ii. Understand the important concept of green chemistry and apply it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III (Organic Chemistry) Unit II 2.1 Stereochemistry I	2.1.1 Molecular chirality and elements of symmetry: Mirror plane symmetry, inversion center, roation -reflection (alternating) axis. 2.1.2 Chirality of compounds without a stereo genic center: cummulenes and biphenyls.	(5 L)	Stereochemistry P.S.Kalsi	Chalk and Board
2.2 Agrochemicals	2.2.1 General introduction & scope, meaning & examples of insecticides, herbicides, fungicide, rodenticide, pesticides, plant growth regulators. 2.2.2 Advantages & disadvantages of agrochemicals 2.2.3 Synthesis & application of IAA (Indole Acetic Acid) & Endosulphan, 2.2.4 Bio pesticides – Neem oil & Karanj oil.	(4 L)	Agrochemicals and pesticides: A.Jadhav and T.V.Sathe	Chalk and Board

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2.3 Heterocyclic chemistry:	2.3.1 Reactivity of pyridine-N-oxide, quinoline and iso-quionoline. 2.3.2 Preparation of pyridine-N-oxide, quinoline (Skraup synthesis) and iso-quinoline (BischlerNapieralski synthesis). 2.3.3 Reactions of pyridine-N-oxide: halogenation, nitration and reaction with NaNH2/liq.NH3, n-BuLi. 2.3.4 Reactions of quinoline and isoquinoline; oxidation,reduction,nitration,halogenation and reaction with NaNH2/liq.NH3,n-BuLi.	(6 L)	Heterocyclic Chemistry, John A. Joule and Keith Mills, Wiley	Chalk and Board
Unit III 3.1 IUPAC	IUPAC Systematic nomenclature of the following classes of compounds (including compounds upto two substituents / functional groups): 3.1.1 Bicyclic compounds – spiro, fused and bridged (upto 11 carbon atoms) – saturated and unsaturated compounds. 3.1.2 Biphenyls 3.1.3 Cummulenes with upto 3 double bonds 3.1.4 Quinolines and isoquinolines.	(5 L)	IUPAC nomenclature by S.C.Pal.	Chalk and Board
3.2 Synthesis of organic compounds	3.2.1 Introduction: Linear and convergent synthesis, criteria for an ideal synthesis, concept of chemo selectivity and regioselectivity with examples, calculation of yields 3.2.2 Multicomponent Synthesis: Mannich reaction and Biginelli reaction. Synthesis with examples (no mechanism) 3.2.3 Green chemistry and synthesis: Introduction: Twelve principles of green chemistry, concept of atom economy and E-factor, calculations and their significance, numerical examples. i) Green reagents: dimethyl carbonate. ii) Green starting materials : D-glucose iii) Green solvents : supercritical CO2 iv) Green catalysts: Bio catalysts. 3.2.4 Planning of organic synthesis i) synthesis of nitroanilines. (o&p) ii) synthesis of halobenzoic acid.(o&p) iii) Alcohols (primary / secondary / tertiary) using Grignard reagents. iv) Alkanes (using organo lithium compounds)	(10L)	Green chemistry: V. K. Ahluwalia	PowerPoint presentation

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L each

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. SHEETAL R. POWAR** DEPARTMENT: CHEMISTRY CLASS: TYBSc

SEMESTER: VI MONTH: Nov to February ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

i. Understand the mechanisms of important reactions
ii. Understand the concept of stereochemistry chemistry
iii. Understand the concept of spectroscopy and interpret spectra

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III (Organic Chemistry)	1.1.1 Stereoselectivity and stereospecificity: Idea of enantioselectivity (ee) and diastereoselectivity (de) , Topicity : enantiotopic and diasterotopic atoms, groups and faces. 1.1.2 Stereochemistry of – i) Substitution reactions : SNi (reaction of alcohol with thionyl chloride)	(10 L)	Stereochemistry by Kalsi	Chalk and Board

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Unit I 1.1 Stereochemistry II	ii) Elimination reactions: E2–Base induced dehydrohalogenation of 1-bromo-1,2- diphenylpropane. iii) Addition reactions to olefins: a) bromination (electrophilic anti addition) b) syn hydroxylation with OsO4 and KMnO4 c) epoxidation followed by hydrolysis. References:			
1.2 Amino acids & Proteins	1.2.1 α-Amino acids: General Structure, configuration, and classification based on structure and nutrition. Properties: pH dependency of ionic structure, isoelectric point and zwitter ion. Methods of preparations: Strecker synthesis, Gabriel phthalamide synthesis. 1.2.2 Polypeptides and Proteins: nature of peptide bond. Nomenclature and representation of polypeptides (di-and tri-peptides) with examples Merrifield solid phase polypeptide synthesis. .Protiens:general idea of primary,secondary,tertiary & quaternary structure	(5 L)	Name Reactions – Jie Jack Li, 4th Edition, Springer Pub	Chalk and Board
Unit III 3.1 Spectroscopy II	3.1.1 IR Spectroscopy: Basic theory, nature of IR spectrum, selection rule, fingerprint region. 3.1.2 PMR Spectroscopy: Basic theory of PMR, nature of PMR spectrum, chemical shift (δ unit), standard for PMR, solvents used. Factors affecting chemical shift: (1) inductive effect (2) anisotropic effect (with reference to C=C, C≡C, C=O and benzene ring). Spin- spin coupling and coupling constant. application of deuterium exchange technique. application of PMR in structure determination. 3.1.3 Spectral characteristics of following classes of organic compounds, including benzene and monosubstituted benzenes, with respect to IR and PMR: (1) alkanes (2) alkenes (3) alkynes (4) haloalkanes (5) alcohols (6) carbonyl compounds (7) ethers (8) amines (broad regions characteristic of different groups are expected). Problems of structure elucidation of simple organic compounds using	(10 L)	Organic spectroscopy Jag Mohan	Chalk and Board

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	individual or combined use of UV-Vis, IR, Mass and NMR spectroscopic technique are expected.			
3.2 Nucleic Acids	Controlled hydrolysis of nucleic acids. sugars and bases in nucleic acids. Structures of nucleosides and nucleotides in DNA and RNA. Structures of nucleic acids (DNA and RNA) including base pairing.	(5 L)	Organic chemistry Morrison and Boyd S.H.Pine, organic chemistry 4th edition. McGraw Hill	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO UNIT : 15 L EACH

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: F.Y.B.Sc. SEMESTER: I MONTH: JULY-OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Revise basic rules of IUPAC nomenclature, name mono and bi-functional aliphatic compounds of various classes.
2. Hybridization, shapes of organic molecules.
3. Fundamentals of organic reaction mechanism, electronic effects, bond fission, types, shapes and relative stability of reactive intermediates like carbocation, carbanions and free radicals, introduction to various types of organic reactions as addition, elimination and substitution reaction.
4. Study Rutherford's atomic model, Bohr's theory, simple principles of quantum mechanics, atomic orbitals, Aufbau principle.
5. Detailed study of the periodic table.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III- Basics of Organic Chemistry	Unit 3.1- Classification and Nomenclature of Organic Compounds	5 L	College Organic Chemistry, Himalaya publication	Chalk and board
	Unit 3.2- Bonding and Structure of Organic Compounds	4 L	College Organic Chemistry, Himalaya publication	Chalk and board

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Unit 3.3- Fundamentals of Organic Reaction Mechanism	6 L	College Organic Chemistry, Himalaya publication	Chalk and board
Paper I, Unit II	Unit 2.1- Atomic Structure	10 L	College Inorganic Chemistry, Himalaya publication	Chalk and board
	Unit 2.2- Periodic Table and Periodicity	5 L	College Inorganic Chemistry, Himalaya publication	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: F.Y.B.Sc. SEMESTER: II MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study chemistry of alkanes- synthesis and reactions.
2. Alkenes- synthesis, reactions and their mechanism like Markownikoff and anti Markownikoff addition, ozonolysis, reduction, syn and anti-hydroxylation, Diels-Alder reaction.
3. Alkynes - formation by elimination reaction and electrophilic and nucleophilic addition reactions.
4. Learn testing of gaseous evolutes, role of reagent papers in qualitative analysis, precipitation equilibria.
5. Arrhenius theory, Lowry-Bronsted theory, Lewis concept, hard and soft acids and bases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit III-Chemistry of Aliphatic Hydrocarbons	Unit 3.1- Carbon-Carbon sigma bonds	3 L	College Organic Chemistry, Himalaya publication	Chalk and board
	Unit 3.2- Carbon-Carbon pi bonds	12 L	College Organic Chemistry, Himalaya publication	Chalk and board

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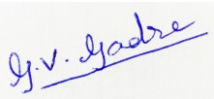
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I, Unit II	Unit 2.1- Concept of Qualitative Analysis	7 L	College Inorganic Chemistry, Himalaya publication	Chalk and board
	Unit 2.2- Acid-Base Theories	8 L	College Inorganic Chemistry, Himalaya publication	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: I MONTH: AUGUST-OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Aliphatic nucleophilic substitution reactions: S_N1, S_N2, S_N^i reactions, SET mechanism, S_N reactions involving neighboring group participation (NGP), Aromatic nucleophilic substitution: S_NAr, benzyne mechanism, ipso, cine, tele, vicarious substitution, Ester hydrolysis.

2. Aromaticity: Frost-Musulin diagram, Huckel's (4n+2) and 4n rules, aromatic and antiaromatic compounds upto 18 carbon atoms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit II- Nucleophilic substitution reactions and Aromaticity.	Unit 2.1- Nucleophilic substitution reactions	9 L	Advanced Organic Chemistry, F. A. Carey and R. J. Sundberg.	Chalk and board
	Unit 2.2- Aromaticity	6 L	Advanced Organic Chemistry: Reactions and mechanism, L.G. Wade, Jr., Maya Shankar Singh.	Chalk and board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: II MONTH: January-March ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study Proton magnetic resonance spectroscopy: Principle, chemical shift, spin-spin coupling, coupling constant, Karplus equation.
2. ^{13}C NMR spectroscopy: Theory and comparison with proton NMR, proton coupled and decoupled spectra, off-resonance decoupling.
3. Mass spectrometry: Molecular ion peak, base peak, isotopic abundance, Nitrogen rule, fragmentation pattern in various classes of organic compounds.
4. Structure determination involving individual or combined use of the above spectral techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit IV- NMR spectroscopy and Mass spectrometry	Unit 4.1- Proton magnetic resonance spectroscopy	8 L	Introduction to Spectroscopy, Donald L. Pavia.	Chalk and board
	Unit 4.2- ^{13}C NMR spectroscopy	3 L	Organic Spectroscopy- Principles and Applications, Jagmohan.	Chalk and board

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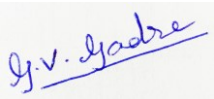
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Unit 4.3- Mass spectrometry	4 L	Spectroscopy of Organic Compounds, P.S. Kalsi.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

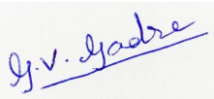
NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: III MONTH: AUGUST-NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study Carbohydrates: structure elucidation of Lactose, structural features and applications of various carbohydrates.
2. Natural pigments: structural features and biological importance of various classes of natural pigments like carotenoids, flavones, quinones, porphyrins.
3. Insect pheromones: types of pheromones, synthesis of some pheromones.
4. Alkaloids: occurrence and importance of morphine, atropine, coniine.
5. Synthesis of some natural products.
6. Study of Prostaglandins, Lipids, Insect growth regulators, Plant growth regulators.
7. Drug discovery, design and development: Important topics of medicinal chemistry like Receptor, Therapeutic index, Drug assay. Basic pharmacokinetics as ADME properties.
8. Discovery of Penicillin and Librium without lead, identification of pharmacophore, functional group modification, structure activity relationship (SAR)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III- Unit I-	Unit 1.1- Carbohydrates	5 L	Organic Chemistry	Chalk and board

SIGNATURE OF THE STAFF  **SIGNATURE OF THE H.O.D.**

Natural Products-I	Unit 1.2- Natural pigments	5 L	Natural Products Volume-II, O. P. Agarwal.	Chalk and board
	Unit 1.3- Insect pheromones	3 L		Chalk and board
	Unit 1.4- Alkaloids	2 L		Chalk and board
Paper III- Unit II- Natural Products-II	Unit 2.1- Multi-step synthesis of natural products	8 L	Natural products chemistry and applications, Sujata V. Bhat, B.A. Nagasampagi.	Chalk and board
	Unit 2.2- Prostaglandins	2 L		Chalk and board
	Unit 2.3- Lipids	2 L		Chalk and board
	Unit 2.4- Insect growth regulators	1 L		Chalk and board
	Unit 2.5- Plant growth regulators	2 L		Chalk and board
Paper IV- Unit I- Drug discovery, design and development	Unit 1.1	7 L	Medicinal chemistry, D.Sriram and P. Yogeeswari Principles of medicinal chemistry (Vol. I and II)- S. S. Kadam, K. R. Mahadik.	Chalk and board
	Unit 1.2	8 L	Introduction to Medicinal chemistry by	Chalk and board

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			Graham Patrick	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: IV MONTH: JANUARY-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study Steroids: Biological role, important structural and stereochemical features of different class of steroids, synthesis of 16-DPA, synthesis of various male and female hormones from 16 DPA.
2. Heterocyclic compounds: Nomenclature of bicyclic/ tricyclic heterocycles by common, Hantzsch-Widman and replacement nomenclature method, nucleophilic ring opening reactions of some heterocyclic compounds, structure, reactivity, synthesis and reactions of some fused heterocycles.
3. Research methodology: Reporting practical and project work, organizing poster display, giving oral presentation, writing scientific papers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
Paper III- Unit I- Natural Products-III	Unit 1.1- Steroids	5 L	Organic Chemistry Natural Products	Chalk and board
	Unit 1.2	2 L		Chalk and board

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
	Unit 1.3	5 L	Volume-II, O. P. Agarwal.	Chalk and board
	Unit 1.4	3 L	Natural products chemistry and applications, Sujata V. Bhat, B. A. Nagasampagi.	Chalk and board
Paper III- Unit IV- Heterocyclic compounds- II	Nomenclature of heterocyclic compounds	5 L	Heterocyclic Chemistry, Synthesis, Reactions and Mechanisms, R.K. Bansal.	Chalk and board
	Nucleophilic ring opening reactions of 3 and 4 membered heterocycles	3 L		Chalk and board
	Structure, reactivity, synthesis and reactions of fused heterocycles	7 L	Chemistry of Heterocyclic compounds, Rakesh Kumar Parashar, Beena Negi.	Chalk and board
Paper IV, Unit III- Methods of scientific	Methods of scientific research and writing	15 L	Research methodology, C.	Power point presentation

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
research and writing scientific papers.	scientific papers.		R. Kothari	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT**: Chemistry **CLASS**: M.Sc. (I) SEMESTER: I **MONTH**: August

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: derive the wave function of sp, sp^2, sp^3 hybridization, understand concept of resonance and resonance energy, Valence Bond Theory and Molecular orbital theory, weak forces of attraction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, I, **Chemical Bonding**	**1.1** Recapitulation of hybridization. Derivation of wave functions for sp, sp^2, sp^3.	3L	Principles of Inorganic Chemistry.	White Board and marker
	1.2 Discussion of involvement of d orbitals in various types of hybridization, concept of resonance, resonance energy derivation.	3L	Principles of Inorganic Chemistry.	White Board and marker
	1.3 Critical analysis of VBT	2L	Principles of Inorganic Chemistry.	White Board and marker

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	1.4 Molecular Orbital Theory for diatomic species of first transition series	2L	Principles of Inorganic Chemistry.	White Board and Marker
	1.5 Molecular Orbital Theory for SF_6, CO_2, B_2H_6, I^{3-}	3L	Principles of Inorganic Chemistry.	White Board and marker
	1.6 Weak forces of attraction: Hydrogen bonding – concept, types, properties, methods of detection and importance, vander waals forces, ion-dipole, dipole-dipole, London forces	2L	Principles of Inorganic Chemistry.	White Board and Marker

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** M.Sc. (I) **SEMESTER:** II **MONTH:** January

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: understand the reaction mechanism of octahedral and square planar complexes, redox reactions, its mechanism and stereochemistry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, I, **Inorganic Reaction Mechanism**	**1.1** Rate of reactions, factors affecting the rate of reactions, techniques for determination of rate of reaction.	5L	Concise Coordination Chemistry	White Board and marker
	1.2 Ligand Substitution reactions of : a) Octahedral complexes without breaking of metal ligand bond. b) Square planar complexes, trans effect, its theories and aplications.	5L	Principles of Inorganic Chemistry.	White Board and marker
	1.3 Redox reactions: inner and outer sphere mechanism, complimentary and non-complimentary reactions.	3L	Concise Coordination Chemistry	White Board and Marker
	1.4 Stereochemistry of substitution reactions of octahedral complexes.	2L	Principles of Inorganic Chemistry.	White Board and Marker

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** T.Y.B.Sc. **SEMESTER:** V **MONTH:** June

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: understand the chemistry of non-aqueous solvents, comparative study of group 16 and 17.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, IV, Some Special Topics	**4.1 Chemistry of Non-aqueous Solvents** **4.1.1** Classification of solvents and importance of non-aqueous solvents. **4.1.2** Characteristics and study of liquid ammonia, dinitrogen tetra oxide as non-aqueous solvents with respect to: (i) acid-base reactions and (ii) redox reactions.	5L	J. D. Lee, Concise Inorganic Chemistry	Black Board and Chalk
	4.2 Comparative Chemistry of Group 16 **4.2.1** Electronic configurations, trends in physical properties, allotropy. **4.2.2** Manufacture of sulphuric acid by Contact process.	5L	J. D. Lee, Concise Inorganic Chemistry	Black Board and Chalk
	4.3 Comparative Chemistry of Group 17 **4.3.1** Electronic configuration, General characteristics, anamolous properties of fluorine, comparative study of acidity of oxyacids of chlorine w.r.t acidity, oxidising properties and structures (on the basis of VSEPR theory).	5L	J. D. Lee, Concise Inorganic Chemistry	Black Board and Chalk

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	4.3.2 Chemistry of interhalogens with reference to preparations, properties and structures (on the basis of VSEPR theory).			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** T.Y.B.Sc. SEMESTER: VI **MONTH:** October

ACADEMIC YEAR: 2019-2020

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LEARNING OBJECTIVE/S:
The learners will be able to: learn various methods to extract metals from their ores, introduction of group 18 elements and bioinorganic chemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, IV, **Some Special Topics**	**4.1 Metallurgy** **4.1.1** Types of metallurgies, **4.1.2** General steps of metallurgy; Concentration of ore, calcinations, roasting, reduction and refining. **4.1.3** Metallurgy of copper: occurrence, physicochemical principles, Extraction of copper from pyrites& refining by electrolysis.	7L	Puri, Sharma Kalia Inorganic chemistry.	Black Board and Chalk
	4.2 Chemistry of Group 18 **4.2.1** Historical perspectives **4.2.2** General characteristics and trends in physical and chemical properties **4.2.3** Isolation of noble gases **4.2.4** Compounds of Xenon (oxides and fluorides) with respect to preparation and structure (VSEPR) **4.2.5** Uses of noble gases	5L	Puri, Sharma Kalia Inorganic chemistry.	Black Board and Chalk
	4.3 Introduction to Bioinorganic Chemistry. **4.3.1**Essential and non-essential elements in biological systems. **4.3.2** Biological importance of metal ions such as Na^{+} ,K^{+} ,Fe^{+2}/Fe^{+3} and Cu^{+2}(Role of Na^{+} and K^{+} w.r.t ion pump)	3L	Puri ,Sharma Kalia Inorganic chemistry.	Black Board and Chalk

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** S.Y.B.Sc. **SEMESTER:** III **MONTH:** July

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: know about ionic bond and covalent bond, resonance, hybridization, valence bond theory and molecular orbital theory, know the various instrumental methods of analysis, advantages of using instruments to make measurements, the various observable properties of a given analyte and the stimulus best suited for its analysis, know about a generalized diagram of an analytical instrument, select a suitable instrumental method for analysis, appreciate

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the basic terms in spectrometry, use the relationship between absorbance (and its variations) and concentration of the analyte, chose a suitable method for photometric titrations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I, II, **Chemical Bonding**	**2.1 Non-Directional Bonding** **2.1.1** Ionic Bond: Conditions for the Formation of Ionic Bond. **2.1.2** Types of Ionic Crystals **2.1.3** Radius Ratio Rules **2.1.4** Lattice Energy, Borne-Lande Equation **2.1.5** Kapustinski Equation **2.1.6** Born-Haber Cycle and its Application	4L	Puri, Sharma Kalia Inorganic chemistry.	Black Board and Chalk
	2.2. Directional Bonding: Orbital Approach. **2.2.1** Covalent Bonding The Valence Bond Theory-Introduction and basic tenets. **2.2.2** Interaction between two hydrogen atoms and the Potential energy diagram of the resultant system. **2.2.3** Corrections applied to the system of two hydrogen atoms-Formation of H_2 **2.2.4** Homonuclear diatomic molecules from He_2 to Ne_2 **2.2.5** Resonance and the concept of Formal Charge; Rules for Resonance or Canonical structures. **2.2.6** Bonding in Polyatomic Species: The role of Hybridization. And types of hybrid orbitals-*sp, sp^2, sp^3, sp^2d^2, sp^2d and sp3d^2*	6L	Puri, Sharma Kalia Inorganic chemistry.	Black Board and Chalk

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	2.2.7 Equivalent and Non-Equivalent hybrid orbitals **2.2.8** Contribution of a given atomic orbital to the hybrid orbitals (with reference to sp^3 hybridisation as in CH_4, $NH_3$and H_2O and series like NH_3, PH_3, AsH_3, BiH_3)			
	2.3 Molecular Orbital Theory **2.3.1.** Comparing Atomic Orbitals and Molecular Orbitals. **2.3.2**. Linear combination of atomic orbitals to give molecular orbitals LCAO-MO approach for diatomic homonuclear molecules. **2.3.4.** Wave mechanical treatment for molecular orbitals ($H^{2+}$and H) **2.3.4** Molecular orbital Theory and Bond Order and magnetic property: with reference to O_2,O_2^+ O_2^-,O_2^{2-}	5L	Puri ,Sharma Kalia Inorganic chemistry.	Black Board and Chalk
III, III, **Basic Concepts in Instrumental methods**	**3.1.** Relation between the analyte, stimulus and measurement of change in the observable property. **3.2.** Block Diagram of an Analytical instrument. **3.3.** Types of Analytical Instrumental methods based on i) Optical interactions (e.g. Spectrometry: uv-visible, Polarimetry) ii) Electrochemical interactions (e.g. Potentiometry, Conductometry,) iii) Thermal interactions (e.g. Thermogravimetry)	3L	Instrumental Methods of Chemical Analysis	Black Board and Chalk
	3.4. Spectrometry **3.4.1.** Interaction of electromagnetic radiation with matter: Absorption and Emission spectroscopy	7L		

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	3.4.2. Basic Terms: Radiant Power, Absorbance, Transmittance, Monochromatic light, Polychromatic light, Wavelength of maximum absorbance, Absorptivity and Molar Absorbtivity **3.4.3.** Statement of Beer's Law and Lambert's Law, Combined Mathematical Expression of Beer -Lambert's Law, Validity of Beer-Lambert's Law,Deviations from Beer-Lambert's Law ((Real deviations, Instrumentaldeviations and Chemical deviations) **3.4.4.** Instrumentation for absorption spectroscopy: Colorimeters and Spectrophotometers **3.4.5.** Block Diagrams for Single beam and Colorimeter, and Spectrophotometer (Principles, Construction and working-Details of Components expected i.e source ,Sample holder , Filters/Monochromators, Detectors such as Photomultiplier tube)		Instrumental Methods of Chemical Analysis	BlackBoard and Chalk
	3.4.6. Applications of UV-Visible Spectrophotometry **(02 L)** (a) Qualitative analysis such as Identification of functional groups in Organic compounds , Chromophores and Auxochrome,*cis* and *trans* isomers. (b) Quantitative analysis by Calibration curve method **3.4.7.** Photometric Titrations: Principle, Instrumentation, Types of Photometric titration Curves with examples.	2L 3L	Instrumental Methods of Chemical Analysis	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT II: 15 L

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT III: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** S.Y.B.Sc. **SEMESTER:** IV **MONTH:** October

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: know the position of elements in periodic table, origin of color and magnetic properties of transition elements, qualitative tests of transition elements and introduction of coordination compounds, its theories, nature and applications, the use of statistical methods in chemical analysis, the nature of indeterminate errors, the randomness of such errors and its distribution around a correct or acceptable result, computation of confidence limits and confidence interval, test for rejection of doubtful result, method to draw best fitting straight line

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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I, II, **2.1 Comparative Chemistry of the transition metals**	**2.1.1** Position in the periodic table; Natural occurrence principal ores and minerals; **2.1.2** Significance of special stability of d_0, d_5 and d_{10} leading to variable oxidation states; Unusual oxidation states and their stabilities in aqueous solutions (with special reference to vanadium, and chromium.) **2.1.3** Origin of colour for transition metals and their compounds: such as reflectivity, surface coatings, particle size, packing density for metals and nature of d-orbitals, number of electrons in the d-orbitals, geometry, and ability for charge transfer). **2.1.4** Magnetic properties of transition metal compounds: Origin of magnetism-spin and orbital motion of electrons; equation for spin only and spin-orbital magnetism in terms of Bohr magnetons (No derivation of relevant equations expected); Reasons for quenching of orbital moments. **2.1.5** Chemistry of Titanium and vanadium: properties of Oxides and chlorides; use in titrimetric analysis **2.1.6** Qualitative tests for transition metal ions: General considerations in devising tests (with reference to Chromium, Manganese, iron, Cobalt	9L	Puri, Sharma, Kalia Inorganic Chemistry.	Black Board and Chalk
2.2 Coordination Chemistry	**2.2 Coordination Chemistry** **2.2.1 Introduction to Chemistry of Coordination Compounds** i. Historical perspectives: Early ideas on coordination compounds ii. Basic terms and nomenclature.	6L	Puri, Sharma, Kalia Inorganic chemistry.	Black Board and Chalk

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	iii. Types of ligands iv. Isomerism :General Types with special reference to stereoisomerism of coordination compounds (C.N=6) v. Evidence for the formation of coordination compounds, **2.2.2. Theories of coordination compounds** i. Werner's Theory of coordination compounds, ii. Effective atomic number rule. iii. Eighteen electron Rule **2.2.3. Nature of the Metal-Ligand Bond:** I Valence Bond Theory; Hybridisation of the central metal orbitals-sp^3, sd^3/d^3s, sp^3d^2/d^2sp^3, sp^2d. ii. Inner and outer orbital complexes of .(suitable examples of Mn(II), Fe(II),Fe(III),Co(II)/Co(III),Ni(II), Cu(II) Zn(II) complexes with ligands like aqua, ammonia CN-and halides may be used) iii. Limitations of V.B.T **2.2.4.** Application of coordination compounds.			
III, III- **Statistical Treatment of analytical data --II**	3.1.**Nature of Indeterminate Errors:** 3.1.1. The true and acceptable value of a result of analysis 3.1.2. Measures of central tendency: mean, median. mode, average 3.1.3. Measures of dispersion: Absolute deviation, relative deviation, relative average deviation, standard deviation,(s, sigma) variance, coefficient of variation	3L	Modern Analytical Chemistry , David Harvey (page numbers 53 -84)	Black Board and Chalk
	3.2.Distribution of random errors: 3.2.1. Gaussian distribution curve.	2L	Modern Analytical Chemistry , David	Black Board and Chalk

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	3.2.2. Equation and salient features of Gaussian distribution curve **3.3.Concept of Confidence limits and confidence interval and its computation using** (i) Population standard deviation (ii) Student's *t* test (iii) Range **3.4.Criteria for rejection of doubtful result** (i) 2.5 d rule (ii) 4.0 d rule (iii) Q test **3.5.Test of Significance (02 L)** (i) Null hypothesis (ii) F-test (variance ratio test) **3.6. Graphical representation of data and obtaining best fitting straight line (03 L)** (a) For line passing through origin (b) For line not passing through origin	3L 2L 2L 3L	Harvey (page numbers 53 -84)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT II: 15 L

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT III: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:___DR.SHRADDHA S.KHAMKAR_____DEPARTMENT:
_____CHEMISTRY SEMESTER:_____I_____ MONTH:_____AUGUST-
_____CLASS:
_____M.Sc -1_____

2021_____ ACADEMIC YEAR:_____2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the thermodynamic and kinetic requirements of organic reaction. They will also be able to determine the mechanism of organic reactions by using various techniques. They will gain new insights into the concepts of acidity and basicity andbthe factors affecting the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – III Unit – I Title -	1.1- Thermodynamic and Kinetic requirements of a reaction 1.2- Determining mechanism of a reaction 1.3- Acids and Bases	4L	1. Physical Organic Chemistry by Neil Issacs 2. Modern	Google Classroom Google Meet

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Physical Organic Chemistry		3L 8L	Physical Chemistry by Eric V. Anslyn and Dougherty 3. Organic Synthesis by Jagdamba	

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			Singh and L.D.s. Yadav	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____15_____

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:___DR.SHRADDHA S.KHAMKAR_____DEPARTMENT: _____CHEMISTRY SEMESTER:_____II____ MONTH: JAN-2019-20_____

_____CLASS:

_____M.Sc -1_____

ACADEMIC YEAR: __2019-20_____

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the molecular orbital theory, form the molecular orbital diagrams for organic compounds. They get introduced to HOMO- LUMO concepts. Studecan gain insights into the concepts of spectroscopy techniques such as IR and UV.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – III				
Unit – III Title –	3.1.1 Molecular orbitals 3.1.2 Introduction to FMO's 3.1.3 Applications of FMO concepts	2L 3L	1. Molecular Orbital and Organic	Google Meet

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Introduction to Molecular orbital theory for organic Chemistry	3.2 Applications of UV and IR Spectroscopy 3.2.1 Ultraviolet Spectroscopy 3.2.2 Infrared Spectroscopy	2L 4L 4L	chemical reactions by Ian Fleming 2. Introduction to Spectroscopy by Donald Pavia and Gary Lampman 3. Organic Spectroscopy – Principles and Applications by Jagmohan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____15_____

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:___DR.SHRADDHA S.KHAMKAR_____DEPARTMENT: _____CHEMISTRY _____M.Sc - II_____ _____
_____CLASS: ACADEMIC YEAR: __2019-20_____

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SEMESTER:_____III_____ MONTH: _AUGUST -2019_____

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LEARNING OBJECTIVE/S:
The learners will be able to : Understand the thermodynamic and kinetic requirements of organic reaction. They will also be able to determine the mechanism of organic reactions by using various techniques. They will gain new insights into the concepts of acidity and basicity andbthe factors affecting the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – I Unit – I Title - Organic Reaction Mechanisms				
	1.1 – Organic reactive intermediates, method of generation etc 1.2 Neighbouring group Participation 1.3 Role of FMO'S in Organic reactivity 1.4 Pericyclic Reactions – Classification, Woodward Hoffman's rules	5L 3L 2L 5L	1. Advanced Organic Chemistry by Jerry March 2. Mechanism and theory in Organic Chemistry by T. h. Lowry and Richardson 3. Organic Reaction Mechanism by Ahluwalia and Parashar 4. Organic Chemistry Part A and B by Carry and Sundberg.	Google Meet
	3.1 Classification of point groups based on symmetry	2L	1. Stereochemistry of	Google Meet

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	elements 3.2 Conformational analysis of medium rings	3L	carbon compounds by D. Nasipuri	

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	3.3 Stereochemistry of fused and bridged ring compounds 3.4 Anancomeric systems	5L 5L	2. Stereochemistry of organic compounds by Ernest L. Eliel 3. Stereochemistry by P.S. Kalsi 4. Organic Stereochemistry by Robinson	
Paper I Unit – 3 Title – Stereochemistry – I	4.1 Introduction to basic principles of green chemistry 4.2 Use of green reagents in green chemistry 4.3 Comparison of traditional processes vs green processes 4.4 Green Catalysts	1L 9L 3L	1. Green chemistry by Mike Lancaster 2. New trends in green chemistry by Ahluwalia 3. An introduction to Green Chemistry by	Google Meet

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		2L	V. Kumar 4. Green chemistry by Paul . Anastas and Warner.	

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Paper – 4 Unit – 4 Title – Green Chemistry				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____15_____

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:___DR.SHRADDHA S.KHAMKAR_____DEPARTMENT: _____CHEMISTRY SEMESTER:_____IV____ MONTH:_____JAN 2020____ _____CLASS:__M.Sc - II_____

ACADEMIC YEAR:_____2019-20_____

_____

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the thermodynamic and kinetic requirements of organic reaction. They will also be able to determine the mechanism of organic reactions by using various techniques. They will gain new insights into the concepts of acidity and basicity andbthe factors affecting the same.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – 1				

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Unit – 2 Title – Supramolecular Chemistry	2.1. – Principles of Molecular associations and organisations 2.2 – Synthetic molecular receptors 2.3 – Structures and properties of Supramolecules Molecular recognition and catalysis	3L 3L 5L 4L	1. Supramoleculer Chemistry by J.M. Lehn 2. Crown ethers and analogous compounds by M. Hiraoka 3. Large ring compounds by J.A. Semlyen	Google Meet
Paper – 1 Unit – 3 Title – Stereochemistry	3.1 Racemisation and Resolution of racemates 3.2 Determination of enantiomer and diastereomer composition 3.3 Correlative method for configurational assignment 3.4 Molecular dissymmetry and chiroptical properties	3L 3L 4L 5L	1. Stereochemistry by P.S Kalsi 2. Organic Stereochemistry by Robinson 3. Stereochemistry of Carbon Compounds by D. Nasipuri	Google Meet

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Paper – IV Unit – II Title – Data	The Investigative Approach – Measurements, SI units and their uses, Scientific methods and designing experiments Analysis and presentation of Data – Descriptive statistics, Chemometrics, Correlation regression, Analysis of variance		Google Meet	

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Analysis		15L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____15_____

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:___DR.SHRADDHA S.KHAMKAR_____DEPARTMENT: _____CHEMISTRY SEMESTER:_____I_____ MONTH: AUGUST-2019

_____CLASS:__F.Y.B.Sc_____

ACADEMIC YEAR:_____2019-20_____

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the thermodynamic terms . They will be able to understand concentration and also the ways in which the concentration is expressed.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – 1				

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Unit -1 Title – Chemical Thermodynamics	1.1 – Thermodynamic terms First law of Thermodynamics Thermochemistry 1.2 – Chemical Calculations Expressing Concentration if Solutions	10L 5L	College Physical Chemistry by K.B. Baliga , S.A.Zaveri ,Himalaya Publications	Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____15_____

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:___DR.SHRADDHA S.KHAMKAR_____DEPARTMENT: _____CHEMISTRY SEMESTER:_____II_____ MONTH:_____JAN - 2020____ _____CLASS:__F.Y.B.Sc_____

ACADEMIC YEAR:_____2019-20_____

_____

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the laws governing the gases. They understand the chemical equilibrium and Thermodynamic parameters of the

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reactions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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		ALLOTED		
Paper- 1 Unit – 1 Title – Gaseous State				
	1.1 – Gaseous State Ideal gas laws, real gases, ideal gaes, Compressibility factor, Joule- Thomson effect 1.2 – ChemicalEquilibria and Thermodynamic parametrs	8L 7L	College Physical Chemistry by K.B.Baliga , S.A. Zaveri,, Himalaya Publications.	Google Meet

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Dr. Arti Dubey DEPARTMENT:Chemistry CLASS:F.Y.B.Sc. SEMESTER: I MONTH: June-OctACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S: The learners will be able to : To gain knowledge about the Nomenclature mono and bi-functional aliphatic compounds . To understand Bonding and Structure of organic compounds . To study the Fundamentals of organic reaction mechanism:To learn Electronic Effects and bond fission.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I (General Chemistry) Unit III 3. Basics of Organic	**3. Basics of Organic Chemistry** **3.1 Classification and Nomenclature of Organic Compounds:** Review of basic rules of IUPAC nomenclature. Nomenclature of mono and bi-functional aliphatic compounds on the basis of priority order of the following classes of compounds: alkanes, alkenes, alkynes, haloalkanes, alcohols, ethers, aldehydes, ketones, carboxylic acids, carboxylic acid derivatives (acid halides, esters, anhydrides, amides), nitrocompounds,	**(5L)**	Text Book, Reference Book, You tube video	Chalk and talk method

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Chemistry	nitriles and amines; including their cyclic analogues. **3.2 Bonding and Structure of organic compounds:** Hybridization: sp_3, sp_2, sp hybridization of carbon and nitrogen; sp_3 and sp_2 hybridizations of oxygen in Organic compounds (alcohol, ether, aldehyde, ketone, carboxylic acid, ester, cyanide, amine and amide) Overlap of atomic orbitals: Overlaps of atomic orbitals to form sigma and pi bonds, shapes of organic molecules. Shapes of molecules; Influence of hybridization on bond properties (as applicable toethane, ethene, ethyne) **3.3 Fundamentals of organic reaction mechanism:** **Electronic Effects:** Inductive, electromeric, resonance and mesomeric effects,hyperconjugation and their applications; Dipole moment; Organic acids and bases; their relative strengths. **Bond fission:** Homolytic and Heterolytic fission with suitable examples. Electrophiles and Nucleophiles; Nucleophilicity and basicity;	**(4L)** **(6L)**			

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	Types (primary, secondary, tertiary, allyl, benzyl), shape and their relative stability of reactive intermediates: Carbocations, Carbanions and Free radicals. **Introduction to types of organic reactions:** Addition, Elimination and Substitution reaction. (With one example of each)				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

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NAME OF THE STAFF: Dr.Arti Dubey DEPARTMENT: Chemistry CLASS: F.Y.B.Sc. SEMESTER: I MONTH: June-Oct ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to :

- Understand basics of chemical kinetics and predict reaction mechanism.
- Calculate rate constant of zero, first and second order reaction.
- The basics of solutions, Colligative properties, and their applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II (General Chemistry) Unit-I Title-Physical	**1.1 Chemical Kinetics:** Rate of reaction, rate constant, measurement of reaction rates, order and molecularity of reaction, integrated rate equation of first and second order reactions (with equal initial concentration of reactants) (Numericals expected) Determination of order of reaction by (a) Integration method (b)	**(8L)**	Text Book, Reference Book, You tube video	Chalk and talk method

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Chemistry	Graphical method (c)Ostwald's isolation method (d) Half time method (Numericals expected) **1.2 Liquid State:** Surface tension: Introduction, methods of determination of surface tension by drop number method (Numericals expected) Viscosity: Introduction, coefficient of viscosity, relative viscosity, specific viscosity,reduced viscosity, determination of viscosity by Ostwald viscometer (Numericals expected) Refractive index: Introduction, molar refraction and polarizability, determination of refractive index by Abbe's refractometer (Numericals expected) Liquid crystals: Introduction, classification and structure of thermotropic phases (Nematic,smectic and cholesteric phases), applications of liquid crystals	**(7L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Dr.Arti Dubey DEPARTMENT: _Chemistry CLASS: S.Y.B.Sc. SEMESTER: III MONTH: June-Oct ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The learners will be able to : Know about Chemical Bonding, Non-Directional Bonding, Directional Bonding- Orbital approach, Molecular Orbital Theory .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Course Title: (General Chemistry) Paper-I Unit-II Inorganic Chemistry	**Unit-II** **Chemical Bonding** **2.1 Non-Directional Bonding** 2.1.1 Ionic Bond: Conditions for the Formation of Ionic Bond. 2.1.2 Types of Ionic Crystals 2.1.3 Radius Ratio Rules 2.1.4 Lattice Energy, Borne-Lande Equation 2.1.5 Kapustinski quation 2.1.6 Born-Haber Cycle and its Application	**(4L)**	Text Book, Reference Book, You tube video	Chalk and Talk Method

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	2.2. Directional Bonding: Orbital Approach. 2.2.1 Covalent Bonding The Valence Bond Theory- Introduction and basic tenets. 2.2.2 Interaction between two hydrogen atoms and the Potential energy diagram of the resultant system. 2.2.3 Corrections applied to the system of two hydrogen atoms- Formation of H_2 2.2.4 Homonuclear diatomic molecules from He_2 to Ne_2 2.2.5 Resonance and the concept of Formal Charge; Rules for Resonance or Canonical structures. 2.2.6 Bonding in Polyatomic Species: The role of Hybridization. And types of hybrid orbitals-*sp, sp*$_2$*, sp*$_3$*, sp*$_3$*d, sp*$_2$*d*$_2$*and sp*$_2$*d sp*$_3$*d*$_2$*.* 2.2.7 Equivalent and Non-Equivalent hybrid orbitals 2.2.8 Contribution of a given atomic orbital to the hybrid orbitals (with reference to *sp*$_3$ hybridisation as in CH_4, NH_3 and H_2O and series like NH_3, PH_3, AsH_3, BiH_3)	**(6L)**		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	2.3 **Molecular Orbital Theory** 2.3.1. Comparing Atomic Orbitals and Molecular Orbitals. 2.3.2. Linear combination of atomic orbitals. to give molecular orbitals LCAO-MO approach for diatomic homonuclear molecules). 2.3.4. Wave mechanical treatment for molecular orbitals (H_2^+ and H_2) 2.3.4 Molecular orbital Theory and Bond Order and magnetic property: with reference to O_2,O_2^+ O_2^-,O_2^{2-} (Problems and numerical problems expected wherever possible)	**(5L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L

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NAME OF THE STAFF: Dr.Arti Dubey DEPARTMENT: Chemistry CLASS: S.Y.B.Sc. SEMESTER: III MONTH: June-Oct ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S: The learners will be able to :

- To gain knowledge about the Nomenclature of aliphatic, alicyclic and aromatic carbonyl compounds.
- To know about General mechanism of nucleophilic addition reaction.
- To understand the Reactions of aldehydes and ketones
- To learn common reaction mechanisms of Benzoin condensation, Knoevenagel condensation, Claisen-Schmidt and Cannizzaro reaction.
- To gain knowledge about the Keto-enol tautomerism.
- To study the Active methylene compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Course Title: (General Chemistry) Paper-II	**Unit III: Organic Chemistry** **Carbonyl Compounds:** 3.1 Nomenclature of aliphatic, alicyclic and aromatic carbonyl compounds. Structure, reactivity of aldehydes and ketones and methods of preparation; Oxidation of primary and secondary	**[15L]**	Text Book, Reference Book, You tube video	Chalk and Talk Method

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Unit III: Organic Chemistry	alcohols using PCC, hydration of alkynes, action of Grignard reagent on esters, Rosenmund reduction, Gattermann – Koch formylation and Friedel Craft acylation of arenes 3.2 General mechanism of nucleophilic addition, and acid catalyzed nucleophilic addition reactions. 3.3 Reactions of aldehydes and ketones with $NaHSO_3$, HCN, RMgX, alcohol, amine, phenyl hydrazine, 2,4-Dinitrophenyl hydrazine, $LiAlH_4$ and $NaBH_4$. 3.4 Mechanisms of following reactions: Benzoin condensation, Knoevenagel condensation, Claisen-Schmidt and Cannizzaro reaction. 3.5 Keto-enol tautomerism: Mechanism of acid and base catalysed enolization 3.6 Active methylene compounds: Acetylacetone, ethyl acetoacetate diethyl malonate, stabilised enols. Reactions of Acetylacetone and ethyl acetoacetate (alkylation, conversion to ketone, mono- and dicarboxylic acid)			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: [15L]

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Arti Dubey DEPARTMENT: Chemistry CLASS: S.Y.B.Sc. SEMESTER: III MONTH: June-Oct ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The learners will be able to : 1. Select a method of analysis 2. Decide how to identify a sample and prepare it for analysis 3. Select a procedure for analysis 4. Identify sources of possible errors in the results obtained.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER –III Unit I Title-Analytical Chemistry	Unit **I- Intorduction to Analytical Chemistry and Statistical Treatment of analytical data-I** *(Problems including numericals expected wherever necessary)* **1.1. Role of Analytical Chemistry** 1.1.1. Language of analytical chemistry: important terms and their significance in Analytical Chemistry. 1.1.2. Purpose of Chemical Analysis; Analysis Based (i) On the nature of information required: (Proximate, Partial, Trace, Complete Analysis) and (ii) On the size of the sample used (Macro, semi-	**(9 L)**	Text Book, Reference Book, You tube video	Chalk and Talk Method

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	micro and micro analysis) 1.1.3. Classical and Non-Classical Methods of Analysis; their types and importance. **1.2. Significance of Sampling in Analytical Chemistry** 1.2.1. Terms involved in Sampling 1.2.2. Types of Sampling 1.2.3. Sampling techniques **1.3. Results of Analysis.** 1.3.1. Errors in Analysis and their types 1.3.2. Precision and Accuracy in Analysis 1.3.3. Corrections for Determinate Errors *(Problems including Numericals expected wherever required)*	**(6L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: (15)

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NAME OF THE STAFF:Dr. Arti Dubey DEPARTMENT: Chemistry CLASS: _F.Y.B.Sc. SEMESTER: II MONTH: Nov-April ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to : Formation of alkanes, Wurtz Reaction, Wurtz-Fittig Reactions Mechanism of E1, E2,E1cb reactions. Saytzeff and Hofmann eliminations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I (General Chemistry) Unit III 3. Basics of Organic	**3. Chemistry of Aliphatic Hydrocarbons** **3.1 Carbon-Carbon sigma bonds:** **Chemistry of alkanes:** Formation of alkanes, Wurtz Reaction, Wurtz-Fittig Reactions,Free radical substitutions: Halogenation - relative reactivity and selectivity. **3.2 Carbon-Carbon pi bonds:** **Formation of alkenes and alkynes by elimination reactions:** Mechanism of E1, E2,E1cb reactions. Saytzeff and Hofmann eliminations.	**(3L)**	Text Book, Reference Book, You tube video	Chalk and talk method

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Chemistry	**Reactions of alkenes:** Electrophilic additions their mechanisms (Markownikoff/ AntiMarkownikoff addition),Mechanism of oxymercuration-demercuration, hydroboration-oxidation, ozonolysis,reduction(catalytic and chemical), syn and anti-hydroxylation (oxidation). 1, 2-and 1, 4-addition reactions in conjugated dienes and, Diels-Alder reaction; Allylic and benzylic bromination using N-bromosuccinimide and mechanism, e.g. propene, 1-butene, toluene,ethylbenzene. **Reactions of alkynes:** Acidity, Electrophilic and Nucleophilic additions. Hydration toform carbonyl compounds, Alkylation of terminal alkynes.	**(12L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Arti Dubey DEPARTMENT: Chemistry CLASS: F.Y.B.Sc SEMESTER: II MONTH: Nov-April ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S: The learners will be able to : Understand The fundamentals of ionic equilibrium and its applications.Learn about the basics of Molecular Spectroscopy .Know about the Solid State Chemistry .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I TITLE-Physical Chemistry	**1.1 Ionic Equilibria:** Strong, moderate and weak electrolytes, degree of ionization, factors affecting degree of ionization, ionization constant and ionic product of water, ionization of weak acids and bases, pH scale, common ion effect, dissociation constants of mono-, di- and triprotic acid (exact treatment for monoprotic acid) Buffers: Introduction, types of buffers, derivation of Henderson	**(7L)**	Text Book, Reference Book, You tube video	Chalk and talk method

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	equation for acidic and basic buffers, buffer action, buffer capacity (Numericals expected) **1.2 Molecular Spectroscopy:** Electromagnetic radiation, electromagnetic spectrum, Planck's equation, interaction of electromagnetic radiation with matter: Absorption, emission, scattering, flourescence, electronic, vibrational and rotational transitions, Beer-Lambert's law (Numericals expected) **1.3 Solid State Chemistry** Types of solids, crystal lattice, lattice points, unit cell, space lattice and lattice plane, laws of crystallography: Law of constancy of interfacial angle, law of symmetry and law of rational indices (Numericals expected)	**(4L)** **(4L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Dr.Arti Dubey DEPARTMENT:Chemistry CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: Nov-April ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S: The learners will be able to : To understand the different aspects and importance variable oxidation states, Origin of colour and Magnetic properties for transition metals and their compounds To study the Selected topics on Chemistry of Titanium and vanadium .To gain knowledge about the Coordination Chemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Course Title: (General Chemistry) Paper-I Unit-II Inorganic	**Unit-II** **2.1 Comparative Chemistry of the transition metals (9 L)** **2.1.1** Position in the periodic table; Natural occurrence principal ores and minerals; **2.1.2** Significance of special stability of d_0, d_5 and d_{10} leading to variable oxidation states; Unusual oxidation states and their stabilities in aqueous solutions (with special reference to vanadium,	**(9 L)**	Text Book, Reference Book, You tube video	Chalk and Talk Method

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Chemistry	and chromium.) **2.1.3** Origin of colour for transition metals and their compounds: such as reflectivity, surface coatings, particle size, packing density for metals and nature of d-orbitals, number of electrons in the d-orbitals, geometry, and ability for charge transfer). **2.1.4** Magnetic properties of transition metal compounds: Origin of magnetism-spin and orbital motion of electrons; equation for spin only and spin-orbital magnetism in terms of Bohr magnetons (No derivation of relevant equations expected); Reasons for quenching of orbital moments. **2.1.5** Chemistry of Titanium and vanadium: properties of Oxides and chlorides; use in titrimetric analysis **2.1.6** Qualitative tests for transition metal ions: General considerations in devising tests (with reference to Chromium, Manganese, iron, Cobalt Nickel and Copper)	**(6 L)**		

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	2.2 Coordination Chemistry : **2.2.1 Introduction to Chemistry of Coordination Compounds** i. Historical perspectives: Early ideas on coordination compounds ii. Basic terms and nomenclature. iii. Types of ligands iv. Isomerism :General Types with special reference to stereoisomerism of coordination compounds (C.N=6) v. Evidence for the formation of coordination compounds, **2.2.2. Theories of coordination compounds** i. Werner's Theory of coordination compounds, ii. Effective atomic number rule. iii. Eighteen electron Rule **2.2.3. Nature of the Metal-Ligand Bond:** i.) Valence Bond Theory; Hybridisation of the central metal orbitals-sp_3, sd_3/d_3s sp_3d_2/d_2sp_3, sp_2d, ii.) Inner and outer orbital complexes of .(suitable examples of Mn(II) Fe(II),Fe(III),Co(II)/Co(III),Ni(II), Cu(II) Zn(II) complexes			

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	with ligands like aqua, ammonia CN- and halides may be used) iii.) Limitations of V.B.T **2.2.4.** Application of coordination compounds.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15L

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NAME OF THE STAFF:Dr.Arti Dubey DEPARTMENT:Chemistry CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: Nov-April ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The learners will be able to : To gain knowledge about the Nomenclature, Preparation and Reactions of aliphatic, and aromatic compounds. To learn common reaction and mechanisms of Salt Formation, N-acylation, N-alkylation, Hofmann's exhaustive methylation (HEM),Hofmann-elimination reaction, reaction with nitrous acid, carbylamine reaction, Electrophilic substitution in aromatic amines: bromination, nitration and sulphonation. To study about Heterocyclic Compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER –II Unit III Title: Organic	**Unit III: Organic Chemistry** **Nitrogen containing compounds and heterocyclic compounds:** **3.1 Amines:** Nomenclature, effect of substituent on basicity of aliphatic and aromatic amines; 3.1.1. Preparation: Reduction ofaromaticnitro compounds using catalytic hydrogenation,chemical reduction using Fe-HCI, Sn-HCl,	**(7 L)**	Text Book, Reference Book, You tube video	Chalk and Talk Method and ICT Tool

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Chemistry	Zn-acetic acid, reduction of nitriles, ammonolysis of halides, reductive amination , Hofmann bromamide reaction. 3.1.2. Reactions- Salt Formation, N-acylation, N-alkylation, Hofmann's exhaustive methylation (HEM),Hofmann-elimination reaction, reaction with nitrous acid, carbylamine reaction, Electrophilic substitution in aromatic amines: bromination, nitration and sulphonation. **3.2 Diazonium Salts**: Preparation and their reactions/synthetic application - Sandmeyer reaction, Gattermann reaction, Gomberg reaction, Replacement of diazo group by -H,-OH. Azo coupling with phenols, naphthols and aromatic amines, reduction of diazonium salt to aryl hydrazine and hydroazobenzene **3.3 Heterocyclic Compounds:** 3.3.1. Classification, nomenclature, electronic structure, aromaticity in 5-numbered and 6-membered rings containing one heteroatom; 3.3.2. Synthesis of Furan, Pyrrole (Paal-Knorr synthesis, Knorr pyrrole synthesis, and Hantzsch synthesis), Thiophene, Pyridine	**(8 L)**		

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	(Hantzsch synthesis), 3.3.3. Reactivity of furan, pyrrole and thiophene towards electrophilic substitution reactions on the basis of stability of intermediate and of pyridine on the basis of electron distribution. Reactivity of pyridine towards nucleophilic substitution on the basis of electron distribution. 3.3.4. Reactions of furan, pyrrole and thiophene: halogenation, nitration, sulphonation, Vilsmeier-Haack reaction, Friedel-Crafts reaction. Furan: Diels-Alder reaction, Ring opening. Pyrrole: Acidity and basicity of pyrrole. Comparison of basicity of pyrrole and pyrrolidine. 3.3.5. Pyridine: Basicity. Comparison of basicity of pyridine, pyrrole and piperidine. Sulphonation of pyridine (with and without catalyst), reduction and action of sodamide (Chichibabin reaction).			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Dr.Arti Dubey DEPARTMENT: Chemistry CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: Nov-April ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S: The learners will be able to understand :

- The importance of separation in sample treatment
- Various methods of separations
- How to select a method of separation of an analyte from the matrix
- How a solute gets distributed between two immiscible phases
- Principle of solvent extraction and various terms involved therein
- Effect of various parameters on solvent extraction of a solute
- Classification of Chromatographic methods
- Paper and thin layer chromatography and using them in practice.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER –III	**1. Separation Techniques in Analytical Chemistry**	**(02 L)**	Text Book, Reference Book,	Chalk and Talk Method and ICT Tool

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Unit I Title: analytical Chemistry	**1.1.** An Introduction to Analytical Separations and its importance in analysis. **1.2.** Estimation of an analyte without effecting separation. **1.3.** Types of separation methods **1.3.1.** Based on Solubilities (Precipitation, Filtration Crystallisation) **1.3.2.** Based on Gravity- Centrifugation **1.3.3.** Based on volatility-Distillation ; **1.3.4.** Based on Electrical effects-Electrophoresis **1.3.5.** Based on retention capacity of a Stationary Phase - Chromatography; **1.3.6.** Based on distribution in two immiscible phases-Solvent Extraction; **1.3.7.** Based on capacity to exchange with a resin-Ion Exchange; **1.4. Electrophoresis:** Principles, Basic Instrumentation, Working and Application in separation of biomolecules like enzymes and DNA. **1.5. Solvent extraction** 1.5.1. Introduction, Nernst distribution Law, Distribution Ratio,	**(02 L)** **(06 L)**	You tube video	

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	Partition Coefficient. 1.5.2. Conditions of extraction: Equilibration time, Solvent volumes, temperature, pH. 1.5.3. Single step and multi step extraction, Percentage extraction for single step and multistep extraction. Separation factor. 1.5.4. Batch and continuous extraction **1.6. Chromatography** 1.6.1. Introduction to Chromatography 1.6.2. Classification of chromatographic methods based on stationary and mobile phase 1.6.3. Paper Chromatography: Principle, techniques and applications of Paper Chromatography in separation of cations. 1.6.4. Thin layer Chromatography Principle, technique and Applications in determining the purity of a given solute; Following progress of a given reaction .	**(05 L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. JAYASHRI GOPAL NAPHADE, DEPARTMENT: _CHEMISTRY, CLASS: _M.SC II (ORGANIC CHEMISTRY), SEMESTER: III, MONTH: __Aug_____, ACADEMIC YEAR: 2019-20220.

LEARNING OBJECTIVE/S:
The learners will be able to: understand the concept of QSAR factor and how to related to drug design. Also understand the synthesis of some drug. They understand the concept of drug.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit II: Drug Design, Develepment And Synthesis	2.1: QSAR Parameter Steric Factor , Talf Equation	5L	1.Medicinal Chemistry,Sriram &Yogeeswari,2nd edition 2.A Introduction to drug design,Pandeya and Dimmock.	Chalk and Board
	2.2: Mordern method of drug design & synthesis	3L		
	2.3: Concept of prodrug & soft drug	3L		
	2.4: Synthesis and application of the drug	4L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. JAYASHRI GOPAL NAPHADE, DEPARTMENT: _CHEMISTRY, CLASS: _M.SC II (ORGANIC CHEMISTRY), SEMESTER: III, MONTH: _Aug_____, ACADEMIC YEAR: 2019-2020.

LEARNING OBJECTIVE/S:
The learners will be able to: understand the Pericyclic reactions and it's different types. Also understand the Selectivity of cycloaddition reaction and sigmatropic reaction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit II: Pericyclic Reaction	2.1: Cycloaddition Reaction & Other Cycloaddition Reaction	7L	1.Pericyclic Reaction, Ian Fleming 2.Pericyclic Reaction- A mechanistic Approach, S. M. Mukharji.	Chalk and Board
	2.2: Cycloaddition Reaction	3L		
	2.3: Sigmatropic Rearrangement	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.JAYASHRI GOPAL NAPHADE___DEPARTMENT: __CHEMISTRY_ CLASS: _M.Sc II (ORGANIC CHEMISTRY) SEMESTER: ___IV_____ MONTH: ____Jan_____ ACADEMIC YEAR: ___2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the how the protection of group is necessary in organic synthesis also understand the concept of Umpolung.they also understand the concept of retrosynthetic an d how to plan the retrosynthetic apporoach.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERANCES	TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT-I Desiging Organic Synthesis-i	1.1:Protectin group in organic Synthesis	3L	1.Protective groups in Organic synthesis,Greene and Wuts 2.Principle of organic synthesis, R.O.C. Norman & Coxon. 3.Organic Synthesis:The Disconnection Approach,Stuart Warren.	White Board & Marker
	1.2: Concept of Umpolung	3L		
	1.3:Introduction to Retrosynthetic analysis & synthetic planning	9L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. JAYASHRI GOPAL NAPHADE ___DEPARTMENT: __CHEMISTRY_CLASS: _M.Sc.II(ORGANIC CHEMISTRY) SEMESTER: _IV_ MONTH: ___January_____ ACADEMIC YEAR: ___2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to: understand the different sources use in research .some information about journals.They understand different resources used during research.like information technology and library.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV UNIT-I RESEARCH METHODOLOGY	1.1: Print: Primary, Secondary,Tertiary sources	5L	Research methodology,C.R.Kothari	Chalk and Board
	1.2::Journals	5L		
	1.3:Information Technology & Library Resources	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. JAYASHRI GOPAL NAPHADE __DEPARTMENT: __CHEMISTRY___ CLASS: ___S.Y.B.Sc (PC-CZ)__ SEMESTER: __III_____ MONTH: _____June_____ ACADEMIC YEAR: ___2019-2020_____LEARNING OBJECTIVE/S:
The learners will be able to : Understand the nomenclature ,structure ,preparation and reactions aof aldehyde and ketones.Also understand mechanism of some name reaction._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT –III Carbonyl componnd	3.1: Nomencluture,structure,reactivity & method of Preparation of aldehyde & Ketone	6L	S.Y.B.Sc ORGANIC CHEMISTRY TEXT BOOK (HIMALAYA PUBLICATION)	Chalk and Board
	3.2: General mechanism of nuclophilic addition	1L		
	3.3: Reactions of aldehyde and ketones	3L		
	3.4: Mechanism of some name Reactions	2L		
	3.5: Keto-enol tautomerisation 3.6: Active Methylene compound	1L 2L		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Dr. JAYASHRI GOPAL NAPHADE____DEPARTMENT: __CHEMISTRY_____CLASS: __ S.Y.B.Sc (PC-CZ)____

SEMESTER: _____IV_____ MONTH: ___Jan_____ ACADEMIC YEAR: _____2019-2020_____

LEARNING OBJECTIVE/S:1 The learners will be able to : Understand the nomenclature and preparation and reaction of Amines and Diazonium salt. They also understand what is heterocyclic compound it's nomenclature,preparation and reaction of furan.Pyrrole,Thiophene and Pyridine.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT –III Nitrogen Containing compound & Heterocyclic compound	3.1:Amines: Nomencluture , preparation and Reactions	4L	S.Y.B.Sc ORGANIC CHEMISTRY TEXT BOOK (HIMALAYA PUBLICATION	Chalk and Board
	3.2: Diazonium Salt: Preparation,reactions & synthetic application	3L		
	3.3:Hetrocyclic compound :3.3.1:classification,nomenclature,structure	8L		
	3.3.2:synthesis of uran,pyrrole,Thiophene,pyridine 3.3.3:Reactivityof furan,pyrrole,Thiophene,pyridine			
	3.3.4:Reactions of furan,pyrrole,Thiophene 3.3.5: Pyridine:Basicity,Reaction			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Dr.JAYASHRI GOPAL NAPHADE ---DEPARTMENT: ___CHEMISTRY_____

CLASS: ____T.Y.B.Sc___ SEMESTER: ____V___ MONTH: __June_____ ACADEMIC YEAR: _____2019-2020_____

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concept of Dyestuff ,it's type ,nomenclature and application.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DRUG AND DYES UNIT-III CHEMISTRY OF DYESTUFF	3.1:Introduction to the Dyestuff Induestries	5L	T.Y.B.Sc DRUG &DYES TEXT BOOK (HIMALAYA PUBLICATION)	Chalk and Board
	3.2: Substrates for Dyes : Types of fibres	3L		
	3.3: classification of Dyes based on Applications and Dyeing methods	7L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

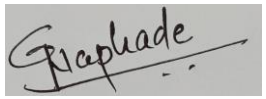
NAME OF THE STAFF: __Dr.JAYASHRI GOPAL NAPHADE____DEPARTMENT: _CHEMISTRY_ CLASS: __T.Y.B.Sc_

SEMESTER: _____VI_____ MONTH: ___Jan_____ ACADEMIC YEAR: _____2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the classification of dyes and synthesis of some dyes.Also understand the hards of synthetic dyes on health and environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DRUG AND DYES UNIT-VII CHEMISTRY OF DYE STUFF	7.1:Classification of dyes based on chemical constitution & synthesis of selected dyes.	12 L	T.Y.B.Sc DRUG &DYES TEXT BOOK (HIMALAYA PUBLICATION)	Chalk and Board
	7.2: Health and Environmental Hazards of synthetic dyes & their remediation process.	3 L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Kirti Pankaj Mhatre_____DEPARTMENT:_____Chemistry_____CLASS:

____TyBsc._____ SEMESTER:__VTH_____ MONTH:____June,July, August_____

ACADEMIC YEAR:_____2019-2020_____

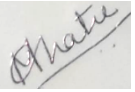
LEARNING OBJECTIVE/S:
The learners will be able to :

1. To study quality in analytical chemistrty like Concepts of Quality, Quality Control and Quality Assurance.

2. To study the chemical calculations like inter conversion of various concentration units and Percent composition of elements in chemical compounds.

3..To study how to do the sampling of solids and liquid and gases alogwith the Collection, preservation and dissolution of the sample..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICTTOOLS USED

SIGNATURE OF THE STAFF 

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Analytical chemistryPaper IV UNIT I :INTRODUCTION TO QUALITYCONCEPTS,CHEMICAL CALCULATIONS AND SAMPLING	1.1 Quality in Analytical Chemistry 1.1.1 Concepts of Quality, Quality Control and Quality Assurance 1.1.2 Importance of Quality concepts in Industry 1.1.3 Chemical Standards and Certified	05L	Saujanya publication,sheth publication,Himalaya publication textbook of analytical chemistry,	Chalk and Board

	Reference Materials; Importance in chemical analysis Quality of material: Various grades of laboratory reagents			
	1.2 Chemical Calculations (Numericals and word problems are expected) 1.2.1.Inter conversion of various concentration units. (Conversion of concentration from one unit to another unit with examples) 1.2.2 Percent composition of elements in chemical compounds	04	Same as above	Chalk and Board
	1.3 Sampling 1.3.1 Purpose, significance and difficulties encountered in sampling 1.3.2 Sampling of solids: Sample size – bulk ratio, size to weight ratio, multistage and sequential sampling, size reduction methods,	06L	Same as above	Chalk and Board

	sampling of compact solids, equipments and methods of sampling *of compact solids, sampling of particulate solids, methods and equipments used for sampling of particulate solids.* *1.3.3 Sampling of liquids: Homogeneous and heterogeneous, Static and* *flowing liquids.* *1.3.4 Sampling of gases: Ambient and stack sampling: Apparatus and methods for sampling of gases.* *1.3.5 Collection, preservation and dissolution of the sample.*			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_15_L_

SIGNATURE OF THE STAFF ***SIGNATURE OF THE H.O.D.***

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:__Kirti Pankaj Mhatre_____DEPARTMENT: CHEMISTRY_____

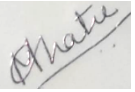
CLASS: _Tybsc_____ SEMESTER: _Vth _____ MONTH: AUG-SEPT _____

ACADEMIC YEAR:__2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To study AAS like instrumentation, working and applications in detail.2.To study AES like instrumentation, working and applications in detail.

3.To study Molecular Fluorescence and Phosphorescence Spectroscopy like instrumentation, working and applications in details.4.To study turbidimetry and nephelometry like instrumentation, working and applications in details.

SIGNATURE OF THE STAFF 

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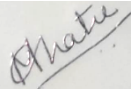
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
ANALYTICAL CHEMISTRY PAPER-IV UNIT-3 OPTICAL METHODS(6UNITS)	**3.1Atomic Spectroscopy: Flame Emission spectroscopy(FES) and** **Atomic Absorption Spectroscopy(AAS)** 3.1.1 Introduction, Energy level diagrams, Atomic spectra, Absorption and Emission Spectra 3.1.2 Flame Photometry – Principle, Instrumentation (Flame atomizers, types of Burners, Wavelength selectors, Detectors) 3.1.3 Atomic Absorption Spectroscopy – Principle, Instrumentation (Source, Chopper, Flame and Electrothermal Atomiser) 3.1.4 Quantification methods of FES and AAS – Calibration curve method, Standard addition method and Internal standard method	07L	SAUJANYA PRAKASHAN TEXTBOOK, SHETH PUBLICATION TEXTBOOK, HIMALAYA PUBLICATION TEXTBOOK	CHALK AND BOARD

SIGNATURE OF THE STAFF  **SIGNATURE OF THE H.O.D.**

	3.1.5 Comparison between FES and AAS			

	3.1.6 Applications, Advantages and Limitations			
	3.2 Molecular Fluorescence and PhosphorescenceSpectroscopy 3.2.1 Introduction and Principle 3.2.2 Relationship of Fluorescence intensity with concentration 3.2.3 Factors affecting Fluorescence and Phosphorescence 3.2.4 Instrumentation and applications 3.2.5 Comparison of Fluorimetry and Phosphorimetry 3.2.6 Comparison with Absorption methods	04L	SAME AS ABOVE	SAME AS ABOVE
	3.3 Turbidimetry and Nephelometry 3.3.1 Introduction and Principle 3.3.2 Factors affecting scattering of Radiation: Concentration, particle size, wavelength, refractive index	04L	SAME AS ABOVE	SAME AS ABOVE

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	3.3.3 Instrumentation and applications			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:__KIRTI PANKAJ MHATRE_____DEPARTMENT:_____CHEMISTRY_____CLASS: _FYBSC_____ SEMESTER:____IST_____ MONTH:__JULY-AUG-SET_____

ACADEMIC YEAR: _2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to : __1.To study the thermodynamics concepts like systems,zeroth law,first law calculations of heat (q), work (w),internal energy (U), and enthalpy (H) (Numericals)Thermochemistry: Heats of reactions, standard states, enthalpy of formation of molecules,enthalpy of combustion and its applications, calculation of bond energy, bond dissociation energy and resonance energy from thermochemical data, Kirchhoff's equation(Numericals) in detail.

2.To study chemical calculations with the help of numericals of Normality, molality, molarity, formality, molefractions,

weight ratio, volume ratio, weight to volume ratio, ppm, ppb, millimoles.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCES	TEACHING METHOD/ ICT TOOLS USED

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		ALLOTED		
Paper 1 **Unit 1** **Chemical Thermodynamics,** **1.2 Chemical Calculations**	**Thermodynamic terms:** System, surrounding, boundaries, open, closed and isolated system, intensive and extensive properties, state functions and path functions, zeroth law of thermodynamics First law of thermodynamics: concept of heat (q), work (w), internal energy (U), statement of first law, enthalpy, relation between heat capacities, sign conventions, calculations of heat (q), work (w), internal energy (U), and enthalpy (H) (Numericals expected) Thermochemistry: Heats of reactions, standard states, enthalpy of formation of molecules, enthalpy of combustion and its applications, calculationof bond energy, bond dissociation energy and resonance energy from thermochemical data, Kirchhoff's equation (Numericals expected)	10L	HIMALAYA PUBLICATIONS TEXTBOOK, SHETH PUBLICATIONS TEXTBOOK	CHALK AND BOARD
	1.2 Chemical Calculations	05L	SAME AS ABOVE	SAME AS ABOVE

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

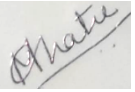
	Expressing concentration of solutions: Normality, molality, molarity, formality, mole *fractions, weight ratio, volume ratio, weight to volume ratio, ppm, ppb, millimoles,* *milliequivalents (Numericals expected)*			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15L_

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Kirti Pankaj Mhatre_____DEPARTMENT:_____CHEMISTRY_____CLASS: ____TYBSC_____ SEMESTER:__VITH_____ MONTH:_____NOV-DEC_____

ACADEMIC YEAR:____2019-2020_____

SIGNATURE OF THE STAFF 

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LEARNING OBJECTIVE/S:

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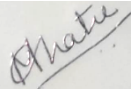
The learners will be able to :

1. To study the polarography concepts like polarography H shaped polarographic cell, DME (construction, working,advantages and limitations),DC polarogram: Terms involved - Residual current, Diffusion current, Limiting current, Half-Wave Potential Role and selection of supporting electrolyte, Interference of oxygen, Half wave potential $E_{1/2}$,Factors affecting $E_{1/2}$ Ilkovic equations: various terms involved in it (No derivation)along with numericals.

2. To study 1Principle, Rotating Platinum Electrode(Construction, advantages and limitations)Titration curves with example, Advantages and limitations of amperometric titrations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF 

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PAPER IV UNIT-1 **ELECTRO ANALYTICAL TECHNIQUES (3 & 6 UNITS)**	**1.1 Polarography (Numerical and word problemsare expected)** 1.1.1 Difference between potentiometry and voltammetry, Polarizable and non-polarizable electrodes 1.1.2 Basic principle of polarography H shaped polarographic cell, DME (construction, working, advantages and limitations) 1.1.3 DC polarogram: Terms involved - Residual current, Diffusion current, Limiting current, Half-Wave Potential	11L	SAUJANYA PRAKASHAN TEXTBOOK, SHETH PUBLICATION TEXTBOOK, HIMALAYA PUBLICATION TEXTBOOK	CHALK AND BOARD

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	Role and selection of supporting electrolyte, Interferenceof oxygen *and its removal, polarographic Maxima and Maxima Suppressors* *Qualitative aspects of Polarography: Half wave potential$E_{1/2}$,* *Factors affecting $E_{1/2}$* *Quantitative aspects of polarography: Ilkovic equations: various* *terms involved in it (No derivation)* *1.1.4 Quantification* *1) Wave height – Concentration plots (working* *plots/calibration)* *2) Internal standard (pilot ion) method* *3) Standard addition method* *1.1.5 Applications advantages and limitations*			

	1.2Amperometric Titrations *1.1.1Principle, Rotating Platinum Electrode(Construction, advantages* *and limitations)* *1.2.2 Titration curves with example* *1.2.3 Advantages and limitations*	*04L*	*SAME AS ABOVE*	*CHALK AND BOARD*

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15L_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:__KIRTI PANKAJ MHATRE_____DEPARTMENT:_____CHEMISTRY_____CLASS: ____TYBSC_____ SEMESTER:_____VITH_____ MONTH: _JAN-FEB_____

ACADEMIC YEAR: _2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to :

1._To study the gas chromatography Principle, Theory and terms involved Block diagram and components,types of columns,stationary phases inGSC and GLC, Detectors: TCD, FID, ECD, Qualitative, Quantitative analysis and applications Comparison between GSC and GLC along with

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calculations.

2. To study ion exchange chromatography Principle, Types of Ion Exchangers , Ideal properties of resin, Ion Exchange equilibria and mechanism, selectivity coefficient andseparation factor,Factors affecting separation of ion,Ion exchange capacity and its determination for cation and anion,Exchangers,Applications of Ion Exchange Chromatography in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLSUSED
PAPER IV UNIT-2 **METHODS OF SEPARATION - II (3 & 6 UNITS)**	**2.1 Gas Chromatography (Numerical and word problemsare expected)** 2.1.1 Introduction, Principle, Theory and terms involved 2.1.2 Instrumentation: Block diagram and components,types of columns, stationary phases in GSC and GLC, Detectors: TCD, FID,ECD 2.1.3 Qualitative, Quantitative analysis and applications 2.1.4 Comparison between GSC and GLC	09L	SAUJANYA PRAKASHAN TEXTBOOK, SHETH PUBLICATION TEXTBOOK, HIMALAYA PUBLICATION TEXTBOOK	CHALK AND BOARD
	2.2 Ion Exchange Chromatography		SAME AS ABOVE	SAME AS ABOVE

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	2.2.1 Introduction, Principle. 2.2.2 Types of Ion Exchangers , Ideal properties of resin	06L		

	2.2.3Ion Exchange equilibria and mechanism, selectivity coefficient andseparation factor,Factors affecting separation of ions 2.2.4 Ion exchange capacity and its determination for cation and anion exchangers. 2.2.5Applications of Ion Exchange Chromatography with reference to Preparation of demineralised water, Separation of amino acids			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:__KIRTI PANKAJ MHATRE_____DEPARTMENT:__CHEMISTRY_____

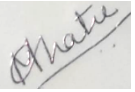
CLASS:_____FYBSC_____ SEMESTER:__IIND_____ MONTH:___DEC-JAN-FEB_____

ACADEMIC YEAR:__2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to : 1. To study the gaseous state related laws and (Numericals) ,Deviation from ideal gas laws, reasons for deviation from ideal gas laws, Van der Waals equation of state, Joule-Thomson effect: qualitative discussion and experimentation,inversion temperature.(Numericals expected) in detail.

2.To study chemical equilibria and thermodynamics concepts like Reversible and irreversible reactions, law of mass action, dynamic equilibria,equilibrium constant, (K_c and K_p), relationship between K_c and K_p, Le Chatelier's principle, factorsaffecting chemical equilibrium (Numericals)Statement ofsecond law of thermodynamics, concepts of entropy and free energy,spontaneity and physical significance of free energy, thermodynamic derivation of. (Numericals).

_PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLSUSED

SIGNATURE OF THE STAFF 

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Paper 1 ***Unit 1***	***1.1 Gaseous State:*** *Ideal gas laws, kinetic theory of gases, Maxwell-Boltzmann's distribution of velocities*	*08L*	*HIMALAYA PUBLICATIONS TEXTBOOK,*	*CHALK AND BOARD*

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1.1 Gaseou sState: ***1.2 Chemical Equilibria and Thermodynam i c Parameters:***	*(qualitative discussion), ideal gases, real gases, compressibility factor, Boyle's* *temperature (Numericals expected)* *Deviation from ideal gas laws, reasons for deviation from ideal gas laws, Van der Waals* *equation of state, Joule-Thomson effect: qualitative discussion and experimentation,* *inversion temperature. (Numericals expected)*		*SHETH PUBLICATIONS TEXTBOOK*	
	1.2 Chemical Equilibria and Thermodynamic Parameters: *Reversible and irreversible reactions, law of mass action, dynamic equilibria, equilibrium* *constant, (K_c and K_p), relationship between K_c and K_p, Le Chatelier's principle, factors* *affecting chemical equilibrium (Numericals expected)* *Statement of second law of thermodynamics, concepts of entropy and free energy,spontaneity and physical significance of free energy, thermodynamic derivation of. (Numericals expected)*	*07L*	*SAME AS ABOVE*	*SAME AS ABOVE*

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: June to September ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to : Chemistry of inner transition elements with respect to their properties,uses and separation technique like ion exchange and solvent extraction technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCH 502(paper2) Unit 3	3.1 Introduction:: Position in periodic table and electronic configuration of lanthanides and actinides . 3.2 Chemistry of lanthanides with reference to i) lanthanide contraction ii) Oxidation States iii) ability to form complexes iv) magnetic and spectral properties. 3.3 Occurrence , extraction and separation of lanthanides by i) ion exchange method ii) solvent extraction method , applications of lanthanides	15	Himalaya publication textbook ,Sheth Publication textbook	Chalkboard and duster

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USCHACDD 501 Applied component(Drugs and dyes)) unit 1 and 2	1.1 General Introduction to Drugs 1.1.1 definition of a drug , sources of a drugs 1.1.2 nomenclature of Drugs : generic name,brand name , systematic name. 1.1.3 definition of following terms pharmacon,pharmacology,pharmacophore,half life efficiency,LD50,ED50,GI50,theraputic index. 1.1.4 brief idea of the following terms: receptors,agonists,antagonisyd,drug receptor interaction,drug potency,bioavalibility,drug toxicity,drug addiction,spurious drugs,misbrsnded Drugs,adulterated drugs , pharmacopeia. 1.2 Routes of Drug administration and dosage forms. 1.2.1 Oral and parenteral Routes with advantages and disadvantages 1.2.2 Formulations and combination formulation,different dosage forms. 1.3 Pharmacodynamic agents 1.3.1 CNS drugs : Classification based on pharmacological actions :CNS depressant and CNS stimulants,concept of sedation and hypnosis , anaestesia 2.1 Analgesic,antipyretics and Anti -inflammatory drugs. 2.1.1 Analgesics and antipyretics 2.1.2 Anti inflammatory drugs 2.2 Antihistamine drugs. 2.3 Cardiovascular Drugs 2.4 Antidiabetic drugs 2.5 Antiparkinsonism drugs 2.6 Drugs for respiratory system	15 15	Himalaya publication textbook,Sheth Publication textbook	Chalkboard and duster

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 each

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: 1 MONTH: August to December ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : learn chacterisation of coordination compounds

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCH102 (paper 2) unit 4	4.1 Formation,thermal studies,conductivity measurements,electonic,spectral and magnetic measurements,IR,NMRand ESR spectroscopic methods. 4.2 Spectral calculations using Tanabe Sugano diagram,calculations of electronic parameters such as delta,B,C nephelauxatic ratio	15	D.Banerjea,Coordination chemistry. F.A Cotton ,G,Wilkinson , Advanced Inorganic chemistry,6th edition,Wiley	Whiteboard marker

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry
CLASS: T.Y.B.Sc. Semester: VI MONTH: Nov To March ACADEMIC YEAR: 2019-2020
The learners will be able to : To learn molecular orbital theory For coordination compounds.p properties of coordination compounds,stability of metal complexes,reactivity of metal complexes and electronic spectra of metal complexes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCH602(PAPER 2) Unit2	2.1 identification of the central metal orbitals and their symmetry suitable for formation of Sigma bonds with ligand orbitals. 2.2 construction of LGO. 2.3 constrction of Sigma molecular orbitals of ML6 complexes , effect of pi bonding on complexes. 2.4. Electronic spectra. 2.4.1 origin of electronic spectra. 2.4.2 types of electronic transition in coordination compounds 2.4.3 selection rules. 2.4.4 electronic configuration and electronic micro states. 2.4.5 determination of terms for P2 and d1 configuration	15	Himalaya publication textbook,Sheth publication textbook	Chalkboard and duster

TOTAL NUMBER OF LECTURES ALLOCAT esED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry

CLASS: T.Y.B.Sc. SEMESTER: VI MONTH: November to March 2020 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : learn about chemotherapeutic agents,nanoparyicles in medicinal chemistry and also Drugs and environmental aspects

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCHACDD 601(Drugs and dyes) Unit 5 and 6	5.1 Drugs discovery,design and development. 5.1.1Discovery of lead compound 5.1.2medicinal properties of compounds. 5.1.3 Development of Drug. 5.1.4 structure modification to increase potency. 5.1.5computer assisted drug design. 5.2 Drug metabolism. 5.3Chemotherapeutic agents. 5.3.1 antibiotics and antivirals. 5.3.2 Antimalarials. 5.3.3 anthelmintics and antifungal agents. 6.1 antiamoebic. Drugs. 6.2 antitubercular and antileprotic Drugs.	15	Himalaya publication textbook and Sheth Publication textbook	Chalkboard and duster

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	6.3 anti-neoplastic Drugs 6.4 anti-HIV drugs 6.5 Drugs intermediate: synthesis and uses. 6.nano particles in medicinal chemistry. 6.7 drugs and environmental aspects	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 each

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: II MONTH: Jan to April 2020 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : learn about Organometallic chemistry of transportation metals

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCH202(unit2)	2.1 Eighteen and sixteen electron rule and electron counting with examples. 2.2 preparation and properties of following compounds. A) alkyl and aryl derivatives of Pd and Pt complexes. B) carbenes and carbyenes of Cr,Mo and W. C) alkene derivatives of Pd and Pt. D) alkyne derivatives of Pd and Pt. E) allyl derivatives of Ni. F) sandwich compounds of Fe,Cr and half sandwich compounds of Cr and Mo. 2.3 Structure and bonding on the basis of VBT and MOT of organometallic compounds	15	R.C.Mehrotra and A.singu,Organomettalic chemistry,A unified approach,2nd edition	Chalkboard and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: June 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand relation between color and chemical constitution, Armstrong theory, Witt's theory.
Study preparation of the dyes intermediates and its applications.
Get a brief idea of unit processes in dyes and dye intermediates.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Drugs and Dyes,	Absorption of visible light, Colour of wavelength absorbed, Complementary colour. Relation between colour and chemical constitution.	02	Textbook, Himalaya publication	Black board/ chalk and duster.
UNIT-IV, Colour and Chemical Constitution of Dyes	Armstrong theory (quinonoid theory) and its limitations. Witt's Theory, Valence Bond theory, comparative study and relation of colour,	02	Textbook, Himalaya publications	Black board/ chalk and duster.
	brief idea of Unit Processes, Introduction to primaries and intermediates, Benzenesulphonic acid; 1,3-Benzenedisulphonic acid; sulphanilic acid; o-, m-, p-chloronitrobenzenes; o-, m-, p-nitroanilines	03	Textbook, Seth publication	Black board/ chalk and duster.

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	Preparation of the dyes Intermediates; Benzene derivatives. Schaeffer acid; Tobias acid; Naphthionic acid; N.W. acid; cleve-6-acid; H-acid; Naphthol AS	04	Textbook, Seth publication	Black board/ chalk and duster.
	Preparation of the dyes Intermediates; Naphthalene Derivative, Anthracene Derivative; 1-Nitroanthraquinone; 1-Aminoanthraquinone Anthraquinone-2-sulphonic acid; Benzanthrone.	04	Textbook, Seth publication	Black board/ chalk and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV *DEPARTMENT: CHEMISTRY*

CLASS: T.Y.B.Sc. *SEMESTER: V* *MONTH: June 2019* *ACADEMIC YEAR: 2019-2020*

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand UV – Visible spectroscopy, its basic theory and applications.
Study mass spectrometry, determination of molecular formula and its applications.
Learn natural products like terpenoids, alkaloids in detail.
To gain knowledge of hormones like adrenaline.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III, Organic Chemistry UNIT-IV, Spectroscopy-I And Natural Products	Electromagnetic spectrum, units of wavelength and frequency, UV – Visible spectroscopy: Basic theory, solvents, nature of UV-Visible spectrum, concept of chromophore, auxochrome.	02	Introduction to spectroscopy (third edition), Pavia	Black board/ chalk and duster.
	Mass spectrometry: Basic theory. Nature of mass spectrum. General rules of fragmentation. Importance of molecular ion peak, isotopic peaks, base peak, nitrogen rule, rule of 13 for determination of empirical formula and molecular formula	03	Spectral identification of organic molecules by Silverstein.	Black board/ chalk and duster.
	Natural products: terpenoids, their introduction, isoprene rule, special isoprene rule, structural determination of citral,	04	Textbook, Himalaya publication	Black board/ chalk and duster.
	Alkaloids introduction and occurrence, structural determination of nicotine,	04	Textbook, Himalaya publication	Black board/ chalk and duster.
	Hormones: Introduction, structure of adrenaline (epinephrine), physiological action of adrenaline.	02	Organic chemistry by Morrision and Boyd,7th edition	Black board/ chalk and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV *DEPARTMENT: CHEMISTRY*

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY *SEMESTER: III* *MONTH: June 2019* *ACADEMIC YEAR: 2019-2020*

LEARNING OBJECTIVE/S:
The learners will be able to:

Study role of radicals in organic synthesis and their applications in detail.
Learn generation, stability, reactivity and structural and stereochemical properties of free radicals,.
Study characteristic reactions and applications of radicals in synthesis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic Organic Chemistry-I UNIT-II, Radicals in organic synthesis	Stability, reactivity and structural and stereochemical properties of free radicals, Persistent and charged radicals, Electrophilic and nucleophilic radicals. Radical Initiators: azobisisobutyronitrile (AIBN) and dibenzoyl peroxide.	04	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J. Sundberg, 5th Edition,	White board/ marker pen and duster.

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	Characteristic reactions - free radical substitution, addition to multiple bonds. Radical chain reactions, radical halogenation of hydrocarbons (regioselectivity),radical cyclizations, autoxidations	04	Organic Chemistry, Clayden Greeves Warren and Wothers,	White board/ marker pen and duster.
	Radicals in synthesis: Inter and intra molecular C-C bond formation via mercuric hydride, tin hydride, thiol donors. Cleavage of C-X, C-Sn, C-Co, C-S, O-O bonds. Oxidative coupling, C-C bond formation in aromatics: $S_{RN}Ar$ reactions.	04	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press (2002).	White board/ marker pen and duster.
	Hunsdiecker reaction, Pinacol coupling, McMurry coupling, Sandmeyer reaction, Acyloin condensation.	03	Organic reactions and their mechanisms, 3rd revisededition, P.S. Kalsi, New Age International Publishers	White board/ marker pen and duster.

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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV *DEPARTMENT: CHEMISTRY*

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY *SEMESTER: III* *MONTH: June 2019* *ACADEMIC YEAR: 2019-2020*

LEARNING OBJECTIVE/S:
The learners will be able to:

Study enamines, their generation & application in organic synthesis with mechanistic pathways.
Learn phosphorus, sulfur and nitrogen ylides; preparation and their synthetic applications along with their stereochemical aspects.
Study a-C-H functionalization by nitro, sulfoxide, sulfone and phosphonate groups.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF ***SIGNATURE OF THE H.O.D.***

PAPER-II, Synthetic Organic Chemistry-I UNIT-III, Enamines, Ylides and	Enamines: Generation & application in organic synthesis with mechanistic pathways, Stork enamine reaction. Reactivity, comparison between enamines and enolates. Synthetic reactions of enamines including asymmetric reactions of chiral enamines derived from chiral secondary amines.	04	Name Reactions and Reagents in Organic Synthesis, 2nd Edn., Bradford P. Mundy, Michael G. Ellard,	Black board/ chalk and duster.

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a-C-H functionalization	*Phosphorus, Sulfur and Nitrogen Ylides: Preparation and their synthetic applications along with their stereochemical aspects.*	*03*	*Organic Chemistry, Clayden Greeves Warren and Wothers,*	*Black board/ chalk and duster.*
	Wittig reaction, Horner-Wadsworth-Emmons Reaction, Barton-Kellogg olefination.	*03*	*Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press (2002).*	*Black board/ chalk and duster.*
	a-C-H functionalization: By nitro, sulfoxide, sulfone and phosphonate groups: generation of carbanions by strong bases (LDA/n-butyl lithium) and applications in C-C bond formation.	*03*	*Organic reactions and their mechanisms, 3rd revisededition, P.S. Kalsi, New Age International Publishers*	*Black board/ chalk and duster.*

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	Bamford-Stevens reaction, Julia olefination and its modification, Seyferth-Gilbert homologation, Steven's Rearrangement.	02	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Sundberg,	Black board/ chalk and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: III MONTH: June 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand importance of organosilicons, organoboron and organotin compounds in organic synthesis.
Study application of mercury, selenium in organic synthesis.
Study application of silyl enol ethers in organic synthesis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic	Mercury in organic synthesis: Mechanism and regiochemistry of		Advanced Organic	White board/ marker pen and duster.

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Organic Chemistry-I UNIT-IV, Metals / Non- metals in organic synthesis	oxymercuration and demercuration of alkenes, mercuration of aromatics, transformation of aryl mercurials to aryl halides. Organomercurials as carbene transfer reagents.	03	Chemistry: Reaction Mechanism, R. Bruckner , Academi c Press	
	Organoboron compounds: Mechanism and regiochemistry of hydroboration of alkenes and alkynes, asymmetric hydroboration using chiral boron reagents, 9-BBN hydroboration, oxazaborolidine (CBS catalyst) and functional group reduction by diborane.	03	Organic Chemistry, Clayden Greeves Warren and Wothers,	White board/ marker pen and duster.
	Organosilicons: Salient features of silicon governing the reactivity of organosilicons, preparation and important bond-forming reactions of alkyl silanes, alkenyl silanes, aryl silanes and allyl silanes. β-silyl cations as intermediates. Iodotrimethylsilane in organic synthesis.	03	Modern Methods of Organic Synthesis, 4th Edition, W. Carruthers and Iain Coldham,.	White board/ marker pen and duster. .
	Silyl enol ethers: Application: As nucleophiles (Michael	02	Moder Organic	White board/ marker pen and

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	reaction, Mukaiyama aldol reaction), in ring contraction reactions.		Synthesis: An Introduction, G.S. Zweifel and M.H. Nantz,	duster.
	Organotin compounds: Preparation of alkenyl and allyl tin compounds; application in C-C bond formation, in replacement of halogen by H at the same C atom. Selenium in organic synthesis: Preparation of selenols/selenoxide, selenoxide elimination to create unsaturation, selenoxide and seleno acetals as a-C-H activating groups	04	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J. Sundberg,	White board/ marker pen and duster.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: T.Y.B.Sc. SEMESTER: VI MONTH: November 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

Study polymers, their classification, stereochemistry and applications.
Understand concept of biodegradable polymers
Learn catalysts and reagents with respect to functional group transformations and selectivity.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III, Organic Chemistry UNIT-IV, Polymer, Catalysts and Reagents	Terms; monomer, polymer, homopolymer, copolymer, thermo plastics and thermosets. Addition polymers: polyethylene, polypropylene, teflon, polystyrene, PVC, Uses. Condensation polymers: polyesters, polyamides, polyurethanes, polycarbonates, phenol formaldehyde resins.Uses	03	Textbook, Himalaya publication	Black board/ chalk and duster.
	Stereochemistry of polymers: Tacticity, mechanism of stereochemical control of polymerization using Ziegler Natta catalysts. Natural and synthetic rubbers: Polymerisation of isoprene: 1,2 and 1,4 addition (cis and trans), Styrene butadiene copolymer. Additives to polymers: Plasticisers, stabilizers and fillers.	03	Polymer science – a text book by Ahluwalia and Mishra	Black board/ chalk and duster.

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	Biodegradable polymers: Classification and uses. polylactic acid structure, properties and use for packaging and medical purposes.,	02	Textbook, Himalaya publication	Black board/ chalk and duster.
	Catalysts for hydrogenation: a. Raney Nickel b. Pt and PtO_2 (C=C, CN, NO_2, aromatic ring) c. Pd/C : C=C, COCl→CHO (Rosenmund) d. Lindlar catalyst: alkynes,	04	Oranic chemistry by Carey and Sundberg, Part A & B	Black board/ chalk and duster.
	Reagents: a. $LiAlH_4$ (reduction of CO, COOR, CN,NO_2) b. $NaBH_4$ (reduction of CO) c. SeO_2 (Oxidation of CH_2 alpha to CO) d. mCPBA (epoxidation of C=C) e. NBS (allylic and benzylic bromination)	03	Organic chemistry by Morrision and Boyd,7th edition	Black board/ chalk and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

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CLASS: T.Y.B.Sc. *SEMESTER: VI* *MONTH: November 2019* *ACADEMIC YEAR: 2019-2020*

LEARNING OBJECTIVE/S:
The learners will be able to:

Study classification of dyes based on chemical constitution and and synthesis of selected dyes.
Get a brief idea of health and environmental hazards of synthetic dyes and their remediation processes.
Get a brief idea of impact of the textile and leather dye industry on the environment and effluent treatment strategies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Drugs and Dyes,	Classification of Dyes, Nitro Dye: Naphthol Yellow S Nitroso Dye: Gambine Y, Azo dyes,	03	Textbook, Himalaya publication	Black board/ chalk and duster.
UNIT-III, Classification of Dyes based on Chemical Constitution and Synthesis of Selected Dyes.	Diphenylmethane dye: Auramine O*, Triphenylmethane dye: Diamine series: Malachite Green* Triamine series: Acid Magenta	03	Textbook, Himalaya publications	Black board/ chalk and duster.
	Heterocyclic Dyes:Thiazine dyes, Azine dyes, Quinone Dyes: a) Naphthaquinone: Naphthazarin b) Anthraquinone Dyes:	03	Textbook, Seth publication	Black board/ chalk and duster.
	Indigoid Dyes: Indigo* (from aniline + monochloroacetic acid) Phthalocyanine Dyes: Monastral Fast Blue B	03	Textbook, Seth publication	Black board/ chalk and duster.
Health and Environmental Hazards of	Health and Environmental Hazards of Synthetic Dyes and their	03	Textbook, Seth publication	Black board/ chalk and duster.

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Synthetic Dyes	Remediation Processes Impact of the textile and leather dye Industry on the environment			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: IV MONTH: November 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

Study principles of physical organic chemistry and structural effects and reactivity.
Study linear free energy relationship (LFER) in determination of organic reaction mechanism.
Learn uses of Hammett equation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, Theoretical organic chemistry-II	Structural effects and reactivity: Linear free energy relationship (LFER) in determination of organic reaction mechanism, The Hammett equation.	03	March's Advanced Organic Chemistry, Jerry March,	White board/ marker pen and duster.

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UNIT-I, **Physical organic chemistry**	The Hammett equation, substituent constants, theories of substituent effects, interpretation of σ- values, reaction constants ρ, Yukawa-Tsuno equation.	04	A guide to mechanism in Organic Chemistry, 6th edition, 2009, Peter Sykes,	White board/ marker pen and duster.
	Uses of Hammett equation, deviations from Hammett equation. Dual parameter correlations, Inductive substituent constants..	02	Advanced Organic Chemistry: Reaction Mechanisms, R. Bruckner, Academic Press	White board/ marker pen and duster.
	The Taft model, σ_I and σ_R scales, steric parameters Es and B. Solvent effects, Okamoto-Brown equation, Swain-Scott equation, Edward and Ritchie	03	Organic Chemistry, Part A and B, Fifth edition,2007, Francis A.	White board/ marker pen and duster.

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	correlations,		Carey and Richard J. Sundberg,	
	Grunwald-Winstein equation, Dimroth's E_T parameter, Solvatochromism Zscale, Spectroscopic Correlations, Thermodynamic Implications.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: IV MONTH: November 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

UNDERSTAND CONCEPTS OF Electro-organic chemistry IN DETAIL.
Study cathodic reduction and anodic oxidation and its application in organic synthesis with mechanistic pathways.
Learn organocatalysts and Pd catalysed cycloaddition reactions
Study applications of selected methods of organic synthesis like crown ethers, cryptands, micelles

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER-II, **Synthetic organic chemistry-II** **UNIT-III,** **Electro-organic chemistry and Selected methods of Organic synthesis**	Electrode potential, cell parameters, electrolyte, working electrode, choice of solvents, supporting electrolytes.	02	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J. Sundberg,	White board/ marker pen and duster.
	Cathodic reduction: Reduction of alkyl halides, aldehydes, ketones, Nitro compounds, olefins, arenes, electro-dimerization.	02	Organic Chemistry, Clayden Greeves Warren and Wothers,	White board/ marker pen and duster.
	Anodic oxidation: Oxidation of alkylbezene, Kolbe reaction, Non-Kolbe oxidation, Shono oxidation..	03	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press (2002).	White board/ marker pen and duster.
	Selected Methods of Organic synthesis, Applications of the following in organic synthesis:	05	Organic reactions and	White board/ marker pen and duster.

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	Crown ethers, cryptands, micelles, cyclodextrins, catenanes. Organocatalysts: Proline, Imidazolidinone. Pd catalysed cycloaddition reactions: Stille reaction, Saeguse-Ito oxidation to enones, Negishi coupling		their mechanisms, 3rd revisededition, P.S. Kalsi, New Age International Publishers	
	Use of Sc(OTf), and Yb(OTf) as water tolerant Lewis acid catalyst in aldol condensation, Michael reaction, Diels-Alder reaction, Friedel – Crafts reaction.	03	Chem.Rev. 2002, 102, 2227-2302, Rare Earth Metal Triflates in Organic Synthesis, S. Kobayashi.	White board/ marker pen and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: IV MONTH: November 2019 ACADEMIC YEAR: 2019-2020

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

LEARNING OBJECTIVE/S:
The learners will be able to:

To gain knowledge of basic concepts of organometalic chemistry.
Understand importance of palladium in organic synthesis.
Study application of Ce, Sm, Ni, Co, Fe, Rh, and Cr in organic synthesis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic organic chemistry-II UNIT-IV, Transition and rare earth metals in organic synthesis	Introduction to basic concepts: 18 electron rule, bonding in transition metal complexes, C-H activation, oxidative addition, reductive elimination, migratory insertion.	03	Moder Organic Synthesis: An Introduction, G.S. Zweifel and M.H. Nantz, W.H. Freeman and Company, (2007).	White board/ marker pen and duster.
	Palladium in organic synthesis: π-bonding of Pd with olefins, applications in C-C bond formation, carbonylation, alkene isomerisation, cross-coupling of organometallics and halides.	03	Organic Chemistry, Clayden Greeves Warren and Wothers,	White board/ marker pen and duster.
	Heck reaction, Suzuki-Miayura coupling, Sonogashira reaction and Wacker oxidation.	03	Advanced Organic	White board/ marker pen and duster.

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	Heteroatom coupling for bond formation between aryl/vinyl groups and N, S, or P atoms. *Olefin metathesis using Grubb's catalyst.*		*Chemistry: Reaction Mechanism, R.* *Bruckner, Academic Press*	
	Application of Ni, Co, Fe, Rh, and Cr carbonyls in organic synthesis.	*04*	*Advanced Organic Chemistry, Part A and Part B: Reaction and* *Synthesis, Francis A. Carey, Richard J. Sundberg,*	*White board/ marker pen and duster.*
	Application of samarium iodide including reduction of organic halides, aldehydes and ketones, a-functionalised carbonyl and nitro compounds. *Application of Ce(IV) in synthesis of heterocyclic quinoxaline derivatives and its role as a de-protecting agent.*	*02*	*Modern Methods of Organic Synthesis, 4th Edition, W. Carruthers* *and Iain Coldham,*	*White board/ marker pen and duster.*

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____Namrata Amit Kawale_____DEPARTMENT: Chemistry_____

CLASS:_____FYBSc CBZ_____ SEMESTER:_____I_____ MONTH: june to sept_____ ACADEMIC YEAR: ____2019-20

LEARNING OBJECTIVE/S:

The learners will be able to learn basics of Stereochemistry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II,U-3 Stereochemistry	1) Flying –wedge ,fischer projection formula 2) Newman and Sawhorse formula	15		Chalk n duster
	3) Their interconversions 4) Geometrical isomerism in alkene			
	5) E/Z notation with CIP rule 6) optical activity ,specific rotation.			
	7) Meso structure ,Racemic mixture 8) D/L and R/S designations			
	9) conformational analysis of alkane			

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Namrata Amit Kawale DEPARTMENT: Chemistry

CLASS: FYBSc PCM SEMESTER: I MONTH: june to sept

LEARNING OBJECTIVE/S: ACADEMIC YEAR: 2019-20

The learners will be able to : learn basics of stereochemistry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II,U-3 Stereochemistry	1) Flying –wedge ,fischer projection formula 2) Newman and Sawhorse formula	15		Chalk and duster
	3) Their interconversions 4) Geometrical isomerism in alkene			
	5) E/Z notation with CIP rule 6) optical activity ,specific rotation.			
	7) Meso structure ,Racemic mixture 8) D/L and R/S designations			
	9) conformational analysis of alkane			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Namrata Amit Kawale_____DEPARTMENT:_____Chemistry_____

CLASS:_____TYBSc_____ SEMESTER:_____V_____ MONTH: june to sept ACADEMIC YEAR: 2019-20_____

LEARNING OBJECTIVE/S:

_____

The learners will be able to : learn chirality optical activity ,agrochemicals and hetrocyclic chemistry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-3,U-1	Mechanism of organic Reaction- Basic terms and concepts, Neighbouring group participation in nucleophilic reaction	05		Chalk and duster
	Pericyclic reactions classification and nomenclature	04		
	Photochemistry-introduction ,reactions of olefins and carbonyl compound	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Namrata Amit Kawale_____DEPARTMENT: Chemistry_____

_ CLASS:____MSc_____ SEMESTER:_____I_____ MONTH: june to sept_ACADEMIC YEAR:__ 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to : learn details in stereochemistry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Stereochemistry	3.1 Symmetry operations: Identification of the different axes and planes of symmetry. 3.2 Molecules with tri and tetracoordinate chiral centres:	03		Chalk and duster
	3.3. Molecules with two or more chiral centres:	02		
	3.4 Axial and planar chirality: Principles of axial and planar chirality. Stereochemical features and configurational descriptors (R, S)	05		
	3.5 Prochirality: Homotopic, heterotopic and diastereotopic ligands and faces. Identification using substitution and symmetry criteria.	05		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____Namrata Amit Kawale_____DEPARTMENT: Chemistry_____

CLASS:_____FYBSc CBZ_____ SEMESTER: _____II_____ MONTH: _ ACADEMIC YEAR:_____2019-20_____
_____oct to feb

LEARNING OBJECTIVE/S: The learners will be able to learn aromatic hydrocarbon_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II,U-3 Stereochemistry	cycloalkanes and their relative stability, Baeyer strain theory, Conformation analysis of cyclohexane: Chair, Boat and Twist boat forms; Relative stability with energy.	05		Chalk n duster
	Aromatic Hydrocarbons Aromaticity; Huckels rule ,anti aromaticity	04		
	Cyclic carbocations/carbanions and heterocyclic compounds with suitable examples.	02		
	Electrophilic aromatic substitution: halogenation, nitration, sulphonation and Friedel-Craft alkylation/acylation with their mechanism.	02		
	Hammond's postulate, Directing effects of groups	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:___Namrata Amit Kawale_____DEPARTMENT: Chemistry_____

CLASS:_____FYBSc PCM_____ SEMESTER:_____II_____MONTH: oct to feb_ ACADEMIC YEAR:____2019-20_____

LEARNING OBJECTIVE/S: The learners will be able to learn Aromatic hydrocarbons._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II,U-3 Stereochemistry	cycloalkanes and their relative stability, Baeyer strain theory, Conformation analysis of cyclohexane: Chair, Boat and Twist boat forms; Relative stability with energy.	05		Chalk n duster
	Aromatic HydrocarbonsAromaticity; Huckels rule ,anti aromaticity	04		
	Cyclic carbocations/carbanions and heterocyclic compounds with suitable examples.	02		
	Electrophilic aromatic substitution: halogenation, nitration, sulphonation and Friedel-Craft alkylation/acylation with their mechanism.	02		
	Hammond's postulate, Directing effects of groups	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Namrata Amit Kawale_____DEPARTMENT:_____Chemistry_____

CLASS:_____TYBSc_____ SEMESTER:_____VI_____

LEARNING OBJECTIVE/S: MONTH: oct to feb
ACADEMIC YEAR: 2019-20

The learners will be able to : learn stereochemistry of nucleophilic reactions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-3,U-1	Molecular rearrangement-Mechanism with examples and stereochemistry of Pinacol.pinacolone rearrangement,Beckmann, Favorski,Michael,Witting reaarangment.	05		Chalk and duster
	Carbohydrates : Classification,structures,interconversions of monosaccharides Stereoisomers of D-glucose	04		
	Mutation in D-glucose with mechanism Reactions in D-glucose and D-fructose,Glycosides	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Namrata Amit Kawale_____DEPARTMENT: Chemistry_____

_ CLASS:___MSc_____ SEMESTER:_____II_ MONTH: oct to febACADEMIC YEAR:____2019-20_____

LEARNING OBJECTIVE/S:

The learners will be able to : learn mechanisms if reactions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-3,U-2 Reactions and Rearrangements:	Mechanisms, stereochemistry (if applicable) and applications of the following: 2.1. Reactions: Baylis-Hilman reaction, McMurry Coupling, Corey-Fuchs reaction, Nef reaction, Passerini reaction.	04		Chalk and duster
	2.2. Concerted rearrangements: Hofmann, Curtius, Lossen, Schmidt, Wolff, Boulton-Katritzky.	03		
	2.3. Cationic rearrangements: Tiffeneau-Demjanov, Pummerer, Dienone-phenol, Rupe,Wagner-Meerwein.	04		
	2.4. Anionic rearrangements: Brook, Neber, Von Richter, Wittig, Gabriel–Colman,Payne.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

*NAME OF THE STAFF:*_____*Priya Sanjay Barve*_____*DEPARTMENT:*_*CHEMISTRY*_____
*CLASS:*_____*FY BSc*_____ *LEARNING OBJECTIVE/S:* *SEMESTER:*_*I*_____*MONTH:* _____ *ACADEMIC YEAR:* _*2019- 20*_____

SIGNATURE OF THE STAFF Bpriya ***Signature of HOD***

The learners will be able to : LEARN THE ATOMIC STRUCTURE IN DETAIL AND ALSO LEARN PERIODIC TABLE AND THE PERIODICITY OF THE ELEMENTS_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I **UNIT II** **INORGANIC CHEMISTRY**	**2.1 Atomic structure:** *(Qualitative treatment only; it is expected that the learner knows the mathematical* *statements and understands their physical significance after completing this topic. No* *derivations of the mathematical equations required)* *a) Historical perspectives of the atomic structure; Rutherford's Atomic Model,*	**(10L)**	*TEXT BOOKS* *REFFERENCE BOOKS* *U TUBE VIDEOS*	*CLALK AND TALK METHOD* *POWERPOINT PRESENTATION*
	Bohr's theory, its limitations and atomic spectrum of hydrogen atom. Structure of *hydrogen atom.* *b) Hydrogenic atoms:* *1. Simple principles of quantum mechanics;* *2. Atomic orbitals* *i) Hydrogenic energy levels* *ii) Shells, subshells and orbitals* *iii) Electron spin* *iv) Radial shapes of orbitals* *v) Radial distribution function* *vi) Angular shapes of orbitals.* *3. Many Electron Atoms* *i) Penetration and shielding* *ii) Effective nuclear charge* *4. Aufbau principle*			

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	2.2: Periodic Table and periodicity : *Long form of Periodic Table; Classification for elements as main group, transition and* *inner transition elements; Periodicity in the following properties : Atomic and ionic size;* *electron gain enthalpy; ionization enthalpy, effective nuclear charge (Slater's rule);* *electronegativity ; Pauling, Mulliken and Alred Rochow electronegativities (Numerical* *problems expected, wherever applicable.)* **Unit III**	**(5L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15___

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____
CLASS:_____FY BSc SEMESTER: II_____MONTH: _____ ACADEMIC YEAR: _2019- 20 _____
_____ LEARNING OBJECTIVE/S:

The learners will be able to : LEARN THE BASICS OF THE PERIODIC TABLE AND THE VARIOUS ACID BASE THEORIES_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I **UNIT II** **INORGANIC CHEMISTRY**	**2.1 Concept of Qualitative Analysis:** *a) Testing of Gaseous Evolutes, Role of Papers impregnated with Reagents in* *qualitative analysis (with reference to papers impregnated with starch iodide,* *potassium dichromate, lead acetate, dimethylglyoxime and oxine reagents).* *b) Precipitation equilibria, effect of common ions, uncommon ions, oxidation states,* *buffer action, complexing agents on precipitation of ionic compounds. (Balanced* *chemical equations and numerical problems expected.)*	**(7L)**	*TEXT BOOKS* *REFFERENCE BOOKS* *U TUBE VIDEOS*	*CLALK AND TALK METHOD* *POWERPOINT PRESENTATION*

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	2.2 Acid Base Theories *Arrhenius, Lowry- Bronsted, Lewis, Solvent – Solute concept of acids and bases, Hard* *and Soft acids and bases. Applications of HSAB* *Applications of acid base chemistry in:* *i) Understanding organic reactions like Friedel Craft's (acylation/alkylation)reaction* *ii) Volumetric analysis with special reference to calculation of titration curveinvolving strong acid and strong base.*	***(8L***	*TEXT BOOKS* *REFFERENCE BOOKS* *U TUBE VIDEOS*	*CLALK AND TALK METHOD* *POWERPOINT PRESENTATION*

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15_____

SIGNATURE OF THE STAFF ***SIGNATURE OF THE H.O.D.***

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Priya Sanjay Barve_____DEPARTMENT:_ CHEMISTRY_____
CLASS:_____FY BSc_____ LEARNING OBJECTIVE/S: *SEMESTER:_I_____MONTH: _____ ACADEMIC YEAR: _2019- 20_____*

The learners will be able to : LEARN THE STEREO CHEMISTRY OF ALKANES THEIR OPTICALV ACTIVITY__THEIR CENTERS_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II **UNIT III** **ORGANIC**	**3. Stereochemistry I: (15L)** Fischer Projection, Newman and Sawhorse Projection formulae (of erythro, threo isomers of tartaric acid and 2,3 dichlorobutane) and their interconversions Geometrical isomerism in alkene and cycloalkanes: cis–trans and syn-anti isomerism E/Z	15	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

SIGNATURE OF THE STAFF ***SIGNATURE OF THE H.O.D.***

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CHEMISTRY	*notations with C.I.P rules.* *Optical Isomerism: Optical Activity, Specific Rotation, Chirality/Asymmetry,* *Enantiomers, Molecules with two similar and dissimilar chiral-centres, Distereoisomers,* *meso structures, racemic mixture and resolution (methods of resolution not expected).* *Relative and absolute configuration: D/L and R/S designations.* *Conformation analysis of alkanes (ethane, propane and n-butane); Relative stability withenergy diagrams.*			

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Priya Sanjay Barve_____DEPARTMENT:_ CHEMISTRY_____
CLASS:_____FY BSc SEMESTER: II_____MONTH: _____ ACADEMIC YEAR: _2019- 20
_____ LEARNING OBJECTIVE/S:

The learners will be able to : LEARN STREOCHEMISTRY OF CYCLO ALKANE AND ALL ABOUT THE AROMATIC HYDROCARBONS_____

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**

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		ALLOTED		
PAPER II **UNIT III** **ORGANIC CHEMISTRY**	**3.1 Stereochemistry-II: Cycloalkanes and Conformational Analysis:** *Types of cycloalkanes and their relative stability, Baeyer strain theory, Conformation* *analysis of cyclohexane: Chair, Boat and Twist boat forms; Relative stability with energy.*	**(5L)**	*TEXT BOOKS* *REFFERENCE BOOKS* *U TUBE VIDEOS*	*CLALK AND TALK METHOD* *POWERPOINT PRESENTATION*
	3.2Aromatic Hydrocarbons *Aromaticity: Hückel's ruleanti-aromaticity, aromatic character of arenes, cycliccarbocations/carbanions and heterocyclic compounds with suitable examples.* *Electrophilic aromatic substitution: halogenation, nitration, sulphonation and Friedel-Craftalkylation/acylation with their mechanism. , Hammond's postulate, Directing effects of* *the groups.*	**(10L)**	*TEXT BOOKS* *REFFERENCE BOOKS* *U TUBE VIDEOS*	*CLALK AND TALK METHOD* *POWERPOINT PRESENTATION*

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15_____

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Priya Sanjay Barve_____DEPARTMENT:_ CHEMISTRY_____
CLASS:_____SY BSc SEMESTER: III _____MONTH: _____ ACADEMIC YEAR: _2019- 20
_____ LEARNING OBJECTIVE/S:

The learners will be able to : CHEMICAL THERMODYNAMICS IN WHICH FREE ENERGIES AND THE ELECTROCHEMISTRY WITH THE BASIC CONCEPTS OF ELECTROCHEMISTRYY_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT I PHYSICAL CHEMISTRY	**1.1 Chemical Thermodynamics-II** 1.1.1 Free Energy Functions: Helmholtz Free Energy, Gibb's Free Energy, Variation of Gibb's free energy with Pressure and Temperature. 1.1.2 Gibbs-Helmholtz equation, van't Hoff reaction isotherm and van't Hoff reaction isochore. (Numericals expected). 1.1.3 Thermodynamics of Open System: Partial Molal Properties, Chemical Potential and its variation with Pressure and Temperature, Gibb's Duhem equation. 1.1.4 Concept of Fugacity and Activity	(8L)	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION
	1.2 Electrochemistry: 1.2.1 Conductivity, equivalent and molar conductivity and their variation with dilution for weak and strong electrolytes. 1.2.2 Kohlrausch law of independent migration of ions.	(7L)	TEXT BOOKS REFFERENCE BOOKS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

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	1.2.3 Applications of conductance measurements: determination of degree of ionization and ionization constant of weak electrolyte, solubility and solubility product of sparingly soluble salts, ionic product of water. (Numericals expected). *1.2.4 Transference number and its experimental determination using Moving boundary method. (Numericals expected). Factors affecting transference number.*		*U TUBE VIDEOS*	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15_____

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____
CLASS:_____SY BSc *SEMESTER:* *IV_____MONTH: _____* *ACADEMIC YEAR: _2019- 20*
_____ LEARNING OBJECTIVE/S:

The learners will be able to : LEARN ELETROCHEMISTRY II GIVES THEM THE IDEA ABOUT THE REVERSIBLE AND IRRIVERSIBLE CELL ALSO GIVE THE KNOWLEDGE OF PHASE EQUILIBRIA

PAPER, UNIT, TITLE	***SUBTOPICS***	***NO OF LECTURES ALLOTED***	***REFERENCE/S***	***TEACHING METHOD/ ICT TOOLS USED***
PAPER I ***UNIT I*** ***PHYSICAL CHEMISTRY***	***1.1 Electrochemistry-II:*** *1.1.1 Electrochemical conventions, Reversible and irreversible cells.* *1.1.2 Nernst equation and its importance, Types of electrodes, Standard electrode potential, Electrochemical series (Numericals expected).* *1.1.3 Thermodynamics of a reversible cell, calculation of thermodynamic properties: ΔG, ΔH and ΔS from EMF data.*	***(8 L)***	*TEXT BOOKS* *REFFERENCE BOOKS* *U TUBE VIDEOS*	*CLALK AND TALK METHOD* *POWERPOINT PRESENTATION*

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	(Numericals expected) *1.1.4 Calculation of equilibrium constant from EMF data. (Numericals expected)* *1.1.5 Concentration cells with transference and without transference. Liquid junction potential and salt bridge.* *1.1.6 pH determination using hydrogen electrode and quinhydrone electrode.(Numericals expected)*			
	1.2 Phase Equilibria: *1.2.1 Phases, components and degrees of freedom of a system, criteria of phase equilibrium. Gibbs Phase Rule and its thermodynamic derivation.* *1.2.2 Derivation of Clausius – Clapeyron equation and its importance in phase equilibria. (numericals expected)* *1.2.3 Phase diagrams of one-component systems (water and sulphur).* *1.2.4 Two component systems involving eutectics, congruent and incongruent melting points (lead-silver system).*	***(7L)***	*TEXT BOOKS* *REFFERENCE BOOKS* *U TUBE VIDEOS*	*CLALK AND TALK METHOD* *POWERPOINT PRESENTATION*

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15_____

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS:_____SY BSc *SEMESTER:* *III _____MONTH: _____* *ACADEMIC YEAR: _2019- 20*

_____ LEARNING OBJECTIVE/S:

The learners will be able to : LEARN ABOUT THE P BLOCK ELEMENTS LIKE BORON FAMILY,NITROGEN FAMILY AND SILICON FAMILY ELEMENTS

PAPER, UNIT, TITLE	***SUBTOPICS***	***NO OF LECTURES ALLOTED***	***REFERENCE/S***	***TEACHING METHOD/ ICT TOOLS USED***
PAPER II		*5*	*TEXT BOOKS*	*CLALK AND TALK METHOD*

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UNIT II	***2. Selected topics on p block elements*** ***2.1 Chemistry of Boron compounds*** *2.1.1 Electron deficient compounds – BH_3, BF_3, BCl_3 with respect to Lewis acidity and applications.* *2.1.2 Preparation of simple boranes like diborane and tetraborane.* *2.1.3 Structure and bonding in diborane and tetraborane (2e-3c bonds)* *2.1.4 Synthesis of Borax.*		*REFFERENCE BOOKS* *U TUBE VIDEOS*	*POWERPOINT PRESENTATION*
INORGANIC CHEMISTRY	***2.2 Chemistry of Silicon and Germanium*** *2.2.1 Silicon compounds: Occurrence , Structure and inertness of SiO_2* *2.2.2 Preparation of structure of $SiCl_4$* *2.2.3 Occurrence and extraction of Germanium* *2.2.4 Preparation of extra pure Silicon and Germanium*	*5*	*TEXT BOOKS* *REFFERENCE BOOKS* *U TUBE VIDEOS*	*CLALK AND TALK METHOD* *POWERPOINT PRESENTATION*
	2.3 Chemistry of Nitrogen family *2.3.1 Trends in chemical reactivity - Formation of hydrides, halides, oxides with special reference to oxides of nitrogen.* *2.3.2 Oxides of nitrogen with respect to preparation and structure of NO, NO_2, N_2O and N_2O_4.* *2.3.3 Synthesis of ammonia by Bosch – Haber process*	*5*	*TEXT BOOKS* *REFFERENCE BOOKS* *U TUBE VIDEOS*	*CLALK AND TALK METHOD* *POWERPOINT PRESENTATION*

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___15_____

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

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CLASS:_____SY BSc SEMESTER: IV _____MONTH: _____ ACADEMIC YEAR: _2019- 20

LEARNING OBJECTIVE/S:

The learners will be able to : LEARN THE ACIDY AND BASUCITY OF CATION AND ANION WITH THE HELP OF DIGRAMS ALSO THEY WILL STUDY THE USES OF ENVIRONMENTAL CHEMISTRY OF VOLATILE OXIDES AND OXO ACIDS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II **UNIT II** **INORGANIC CHEMISTRY**	**2 Ions in aqeous medium** 2.1. Acidity of Cations and Basicity of Anions i. Hydration of Cations; Hydrolysis of Cations predicting degree of hydrolysis of Cations-effect of Charge and Radious. ii. Latimer Equation. Relationship between pKa, acidity and z_2/r ratios of metal ions graphical Presentation iii. Classification of cations on the basis of acidity category – Non acidic, Moderately acidic, strongly acidic, very strongly acidic with pKa values range and examples iv. Hydration of Anions; Effect of Charge and Radius; Hydration of anions- concept, diagram classification on the basis of basicity ii. Uses and environments aspects of these acids	10	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION
	2.2. Uses and Environmental Chemistry of volatile Oxides and oxo-acids	5	TEXT BOOKS	CLALK AND TALK METHOD

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	i. Physical properties of concentrated oxo-acids like sulfuric, Nitric and Phosphoric acid		REFFERENCE BOOKS U TUBE VIDEOS	POWERPOINT PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

TEACHING PLAN (UNIT PLAN

NAME OF THE STAFF:_____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____
CLASS:_____SY BSc_____ LEARNING OBJECTIVE/S: SEMESTER:_III_____MONTH: _____ ACADEMIC YEAR: _2019- 20_____

The learners will be able to : On completing the learning of this unit the learner is expected to
> Know the various instrumental methods of analysis
> Advantages of using instruments to make measurements
> The various observable properties of a given analyte and the stimulus best suited for its analysis
> Know about a generalized diagram of an analytical instrument
> Select a suitable instrumental method for analysis
> Appreciate the basic terms in spectrometry
> Use the relationship between absorbance (and its variations) and concentration of the analyte.
> Chose a suitable method foe photometric titrations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT III	Instrumental Methods-I [15 L]	15	TEXT BOOKS REFFERENCE	CLALK AND TALK METHOD POWERPOINT PRESENTATION

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SIGNATURE OF THE STAFF Priya Signature of HOD

ANALYTICAL CHEMISTRY	***3. Basic Concepts in Instrumental methods 03*** ***3.1.*** *Relation between the Analyte, Stimulus and measurement of change in the observable property.* ***3.2.*** *Block Diagram of an Analytical instrument.* ***3.3.*** *Types of Analytical Instrumental methods based on* *i. Optical interactions (eg. Spectrometry: uv-visible, Polarimetry)* *ii. Electrochemical interactions (eg. Potentiometry, Conductometry,)* *iii. Thermal interactions (eg. Thermogravimetry)* ***3.4. Spectrometry (07 L)*** *3.4.1. Interaction of electromagnetic radiation with matter: Absorption and Emission spectroscopy* *3.4.2. Basic Terms: Radiant Power, Absorbance, Transmittance, Monochromatic* *light, Polychromatic light, Wavelength of maximum absorbance, Absorptivity and Molar Absorbtivity* *3.4.3. Statement of Beer's Law and Lambert's Law, Combined Mathematical* *Expression of Beer -Lambert's Law, Validity of Beer-Lambert's Law,*		*BOOKS* *U TUBE VIDEOS*	

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	Deviations from Beer-Lambert's Law ((Real deviations, Instrumental *deviations and Chemical deviations)* *(Numerical problems based on Beer-Lambert's Law)* *3.4.4. Instrumentation for absorption spectroscopy: Colorimeters and Spectrophotometers* *3.4.5. Block Diagrams for Single beam and Colorimeter, and Spectrophotometer (Principles, Construction and working-Details of Components expected i.e , source ,Sample holder , Filters/Monochromators, Detectors such as Photomultiplier tube)* ***3.4.6.** Applications of UV-Visible Spectrophotometry **(02 L)*** *(a) Qualitative analysis such as Identification of functional groups in Organic compounds ,Chromophores and Auxochrome,cisand transisomers* *(b) Quantitative analysis by Calibration curve method and* *3.4.7. Photometric Titrations: Principle ,Instrumentation, Types of Photometric titration Curves with examples.*			

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Priya Sanjay Barve_____DEPARTMENT:_CHEMISTRY_____

CLASS:_____SY BSc *SEMESTER:* *IV_____MONTH: _____* *ACADEMIC YEAR: _2019- 20*

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SIGNATURE OF THE STAFF Priya ***Signature of HOD***

LEARNING OBJECTIVE/S:
The learners will be able to : On completing this unit the learner is expected to understand
i) The use of statistical methods in chemical analysis.
ii) The nature of indeterminate errors
iii) The randomness of such errors and its distribution around a correct or acceptable result
iv) Computation of Confidence limits and confidence interval
v) Test for rejection of doubtful result
vi) Method to draw best fitting straight line

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III **UNIT III** **ANALYTICAL CHEMISTRY**	**Statistical Treatment of analytical data --II (15 L)** Objectives: **3.1. Nature of Indeterminate Errors:** 3.1.1. The true and acceptable value of a result of analysis 3.1.2. Measures of central tendency: mean, median. mode, average 3.1.3. Measures of dispersion: Absolute deviation, relative deviation, relative average deviation, standard deviation,(s,sigma) variance, coefficient of variation	(03L)	TEXT BOOKS REFFERENCE BOOKS U TUBE VIDEOS	CLALK AND TALK METHOD POWERPOINT PRESENTATION
	3.2. Distribution of random errors: 3.2.1. Gaussian distribution curve. 3.2.2. Equation and salient features of Gaussian distribution	(02L)	TEXT BOOKS REFFERENCE BOOKS	CLALK AND TALK METHOD POWERPOINT PRESENTATION

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	curve		*U TUBE VIDEOS*	
	3.3.Concept of Confidence limits and confidence interval and its computation using) *(i) Population standard deviation* *(ii) Student's ttest* *(iii) Range*	***(03 L***	*TEXT BOOKS* *REFFERENCE BOOKS* *U TUBE VIDEOS*	*CLALK AND TALK METHOD* *POWERPOINT PRESENTATION*
	3.4.Criteria for rejection of doubtful result *(i) 2.5 d rule* *(ii) 4.0 d rule* *(iii) Q test*	***(02 L)***	*TEXT BOOKS* *REFFERENCE BOOKS* *U TUBE VIDEOS*	*CLALK AND TALK METHOD* *POWERPOINT PRESENTATION*
	3.5.Test of Significance *(i) Null hypothesis* *(ii) F-test (variance ratio test)*	***(02 L)***	*TEXT BOOKS* *REFFERENCE BOOKS* *U TUBE VIDEOS*	*CLALK AND TALK METHOD* *POWERPOINT PRESENTATION*
	3.6. Graphical representation of data and obtaining best fitting straight line *(a) For line passing through origin* *(b) For line not passing through origin* *[Numerical problems wherever possible, expected*	***(03 L)***	*TEXT BOOKS* *REFFERENCE BOOKS* *U TUBE VIDEOS*	*CLALK AND TALK METHOD* *POWERPOINT PRESENTATION*

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15_____

SIGNATURE OF THE STAFF Bpriya ***Signature of HOD***

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TEACHING PLAN (UNITPLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: T.Y.Bsc.

SEMESTER : V MONTH : JUNE-JULY ACADEMICYEAR: 2019-2020

LEARNINGOBJECTIVE/S:

The learners will be able to:

To learn- dipole moment, polarization of a bond, bond moment, derivation for Rotational spectroscopy, Vibrational spectroscopy,
To learn-Rotational-Vibrational spectroscopy, Raman spectroscopy, solve the numerical problems based on this topic.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICT TOOLSUSED
PAPER-I, UNIT-I TITLE: MOLECULAR SPECTROSCOPY	1.Rotational Spectrum	04	1)T.Y.Bsc Physical Chemistry Text book by Sheth Pub. And by Himalaya Pub. 2)Principles of Physical Chemistry B.R. Puri, L.R. Sharma, M.S. Pathania, VISHAL PUB.,2008.	Chalk-board
	2.Vibrational Spectrum	04		
	3.Vibrational Rotational spectrum of diatomic molecule	04		
	4.Raman Spectroscopy	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNITPLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: T.Y.Bsc.

SEMESTER : V MONTH : October AUGUST-SEPTEMBER ACADEMICYEAR:2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to:

To know-Adsorption and its types, Langmuir and B.E.T adsorption isotherm, Terms like Emulsion, Gel, Sol.

To learn-Origin of charges on colloidal particles, Concept of electrical double layer, zeta potential, Helmholtz and Stern model, Electro-kinetic phenomena.

To know-micelle formation, Classification and applications of surfactants in detergents and food industry.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
PAPER-I, UNIT-IV TITLE: SURFACE CHEMISTRY	1.Adsorption	05	1)T.Y. Bsc Physical Chemistry Text book by Sheth Pub. And by Himalaya Pub. 2) Principles of Physical Chemistry B.R. Puri, L.R. Sharma, M.S. Pathania, VISHAL PUB.,2008.	Chalk-board
	2.Colloidal State	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: M.Sc-I

SEMESTER: I MONTH: JULY-AUGUST ACADEMICYEAR: 2019-2020

LEARNINGOBJECTIVE/S:
The learners will be able to:

To learn-State function and exact differentials. Maxwell equations, Maxwell thermodynamic Relations.
To learn-Joule Thomson experiment, Joule Thomson coefficient, inversion temperature, Joule Thomson coefficient in terms of Vander Waals constants.
To know-Third law of Thermodynamics.
To learn-Entropy change for a phase transition, absolute entropies, determination of absolute entropies in terms of heat capacity, standard molar entropies and their dependence on molecular mass and molecular structure, residual entropy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICT TOOLSUSED
PAPER-I, UNIT-I	1.Maxwell equations	05	Atkin's Physical Chemistry, 7th Edn., Oxford University Press, 2002.	Chalk-board
TITLE: Thermodynamic s-I	2.Joule Thomson experiment	04		
	3.Third law of Thermodynamics	02		
	4.Entropy change for a phase transition	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: M.Sc-I

SEMESTER : I MONTH :SEPTEMBER–OCTOBER ACADEMICYEAR:2019-2020

LEARNINGOBJECTIVE/S:

The learners will be able to:

To learn-Rate laws, Differential rate equations, Consecutive reactions, Steady state Approximation, formation and decomposition of phosgene, decomposition of ozone, Reaction between Hydrogen and Bromine, Decomposition of ethane, decomposition of acetaldehyde, Reaction between hydrogen and oxygen, Semenov-Hinshelwood and Thompson mechanism, Explosion limits and factors affecting explosion limits.
To learn-Kinetics of step wise polymerization, Kinetics of free radical chain polymerization.
To know-Unimolecular Reactions : Lindeman-Hinshelwood theory, Rice-Ramsperger-Kasssel(RRK)theory, Rice-Ramsperger-Kassel Marcus (RRKM) theory.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD / ICT TOOLS USED
PAPER-I,	1.Composite Reactions	08	K.J. Laidler and J.H. Meiser, Physical Chemistry, 2nd Ed., CBS Publishers and Distributors, New Delhi, 1999.	Chalk-board
UNIT-III	2.Polymerization reactions	03		
TITLE : Chemical Dynamics-I	3.Reaction in Gas Phase	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNITPLAN)

NAME OF THE STAFF : PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: T.Y.Bsc.

SEMESTER:VI MONTH: NOVEMBER-DECEMBER ACADEMICYEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

To know-Basic terms like macromolecule, monomer, repeat unit, degree of polymerization, Classification of polymers.
To learn-Number average, Weight average, Viscosity average molar mass, Viscosity method using Ostwald Viscometer for determining molar masses of polymers,
To learn-Characteristics, Method of preparation and applications of Light Emitting Polymers, Antioxidants, Ultraviolet stabilizers, Colourants, Antistatic agents and Curing agents.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICT TOOLSUSED
PAPER-I, UNIT-II TITLE: POLYMERS	1.Basic terms	02	1)T.Y.Bsc Physical Chemistry Text book by Sheth Pub. And by Himalaya Pub. 2)Principles of Physical Chemistry B.R. Puri, L.R. Sharma, M.S. Pathania, VISHAL PUB.,2008.	Chalk-board
	2.Classification of polymers	03		
	3.Method of determining molar masses of polymers	04		
	4.Light Emitting Polymers	03		
	5.Antioxidants and Stabilizers	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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TEACHING PLAN (UNITPLAN)

NAME OF THE STAFF : PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: T.Y.Bsc.

SEMESTER:VI MONTH: JANUARY-FEBRUARY ACADEMICYEAR:2019-2020

LEARNINGOBJECTIVE/S:

The learners will be able to:

To Learn-Principle of NMR, Nuclear spin, magnetic moment, nuclear 'g' factor, energy levels, Larmor precession, Relaxation processes in NMR i.e. spin-spin relaxation and spin-lattice relaxation, Instrumentation of NMR Spectrometer,
To learn-Principle of ESR, fundamental equation, g-value–dimensionless constant or electron g-factor, hyperfine splitting, Instrumentation of ESR spectrometer, ESR spectrum of hydrogen and deuterium.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICT TOOLSUSED
PAPER-I, UNIT-IV TITLE: NMRandESR	1.NUCLEAR MAGNETIC RESONANCE	07	1) T.Y.Bsc Physical Chemistry Text book by Sheth Pub. by Himalaya Pub. 2) Principles of Physical Chemistry B.R.Puri, L.R. Sharma, M.S. Pathania, VISHAL PUB.,2008.	Chalk-board
	2.ELECTRON SPIN RESONANCE SPECTROSCOPY	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

TEACHINGPLAN(UNITPLAN)

NAME OF THE STAFF : PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: M.Sc-I

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SEMESTER: II MONTH: JANUARY-FEBRUARY ACADEMIC YEAR: 2019-2020

LEARNINGOBJECTIVE/S:

The learners will be able to:

To learn-Fugacity of real gases, Determination of fugacity of real gases using graphical method and from equation of state. Equilibrium constant for real gases in terms of fugacity. Gibb's energy of mixing, entropy and enthalpy of mixing.
To learn-Chemical potential in nonideal solutions excess functions of nonideal solution, Gibbs Duhem Margules equation.
To learn-Laplace equation, Kelvin equation, Gibb's adsorption isotherm, BET isotherm.
To learn-standard free energy change in biochemical reactions, exergonic, endergonic. Hydrolysis of ATP, synthesis of ATP from ADP.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICT TOOLSUSED
PAPER-I, UNIT-I TITLE: Thermodynamics -II	1.Fugacity	05	Peter Atkins and Juliode Paula, Atkin's Physical Chemistry,7th Edn., Oxford University Press,2002	Chalk-board
	2.Real solutions	03		
	3.Thermodynamics of surfaces	04		
	4.Bioenergetics	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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TEACHINGPLAN(UNITPLAN)

NAME OF THE STAFF : PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: M.Sc-I.

SEMESTER: II MONTH: MARCH-APRIL ACADEMICYEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

To study – Solvent Effects on reaction rates, Reactions between ions -influence of solvent Dielectric constant, influence of ionic strength, Linear free energy relationships Enzyme action
To learn-Michaelis-Menten analysis, Lineweaver-Burk and Eadie Analyses.
To learn-Competitive, Non competitive and Uncompetitive Inhibition. Effect of pH, Enzyme activation by metal ions, Regulatory enzymes.
To study-The parabolic rate law, The first order rate Law, the contracting sphere rate law, Contracting area rate law, some examples of kinetic studies.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
PAPER-I, UNIT-III TITLE: Chemical Kinetics and Molecular Reaction Dynamics	1.Elementary Reactions in Solution	04	Peter Atkins and Juliode Paula, Atkin's Physical Chemistry,7th Edn., Oxford University Press,2002.	Chalk-board
	2.Kinetics of reactions catalysed by enzymes	03		
	3.Inhibition of Enzyme action	04		
	4.Kinetics of reactions in the Solid State	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: SY BSc (PC-CZ) SEMESTER: III MONTH: July- October ACADEMIC YEAR: 2019 -2020

LEARNING OBJECTIVE/S:
The learners will be able to :
To make the learner proficient in analysing the various observations and chemical phenomena presented to him during the course.
To impart various skills of handling chemicals, reagents, apparatus, instruments and the care and safety aspects involved in such handling

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit I, Physical Chemistry Thermodynamics-II, Electrochemistry	1.1.1 Free Energy Functions: Helmholtz Free Energy, Gibb's Free Energy, Variation of Gibb's free energy with Pressure and Temperature.	2	Textbook of Himalaya Publication	Black Board
	1.1.2 Gibbs-Helmholtz equation, van't Hoff reaction isotherm and van't Hoff reaction isochore	2	Textbook of Himalaya Publication	Black Board
	1.1.3 Thermodynamics of Open System: Partial Molal Properties, Chemical Potential and its variation with Pressure and Temperature, Gibb's Duhem equation.	2	Textbook of Himalaya Publication	Black Board
	1.1.4 Concept of Fugacity and Activity	2	Textbook of Himalaya Publication	Black Board
	1.2.1 Conductivity, equivalent and molar conductivity and their variation with dilution for weak and strong electrolytes.	2	Textbook of Himalaya Publication	Black Board
	1.2.2 Kohlrausch law of independent migration of ions.	1	Textbook of Himalaya Publication	Black Board
	1.2.3 Applications of conductance measurements: determination of degree of ionization and ionization constant of weak	2	Textbook of Himalaya Publication	Black Board

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	electrolyte, solubility and solubility product of sparingly soluble salts, ionic product of water.			
	1.2.4 Transference number and its experimental determination using Moving boundary method. Factors affecting transference number.	2	Textbook of Himalaya Publication	Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: SY BSc (PC-CZ) SEMESTER: IV MONTH: Dec-March ACADEMIC YEAR: 2019 -2020

LEARNING OBJECTIVE/S:
The learners will be able to :
To make the learner proficient in analysing the various observations and chemical phenomena presented to him during the course.
To make the learner capable of solving problems in the various units of this course

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
Paper I Unit I, Physical Chemistry Electrochemistry-II, Phase Equilibria	1.1.1 Electrochemical conventions, Reversible and irreversible cells.	2	Textbook of Himalaya Publication	BLACK BOARD	
	1.1.2 Nernst equation and its importance, Types of electrodes, Standard electrode potential, Electrochemical series	3	Textbook of Himalaya Publication	BLACK BOARD	
	1.1.3 Thermodynamics of a reversible cell, calculation of thermodynamic properties: ΔG, ΔH and ΔS from EMF data	3	Textbook of Himalaya Publication	BLACK BOARD	
	1.1.4 Calculation of equilibrium constant from EMF data.	1	Textbook of Himalaya Publication	BLACK BOARD	
	1.1.5 Concentration cells with transference and without transference. Liquid junction potential and salt bridge.	3	Textbook of Himalaya Publication	BLACK BOARD	

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	1.1.6 pH determination using hydrogen electrode and quinhydrone electrode.	3	Textbook of Himalaya Publication	BLACK BOARD	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: SY BSc (PC-CZ) SEMESTER: III MONTH: July -Oct ACADEMIC YEAR: 2019 -2020

LEARNING OBJECTIVE/S:
The learners will be able to : idea about chemistry of Born compounds, Chemistry of Silicon and Germanium and chemistry of Nitrogen family .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
Paper II, Unit II ,Inorganic chemistry Selected topics on p block elements	2.1.1 Electron deficient compounds – BH_3, BF_3, BCl_3 with respect to Lewis acidity and applications.	2	Textbook of Himalaya Publication	BLACK BOARD	
	2.1.2 Preparation of simple boranes like diborane and tetraborane.	2	Textbook of Himalaya Publication	BLACK BOARD	
	2.1.3 Structure and bonding in diborane and tetraborane (2e-3c bonds)	2	Textbook of Himalaya Publication	BLACK BOARD	
	2.1.4 Synthesis of Borax.	1	Textbook of Himalaya Publication	BLACK BOARD	
	2.2.1 Silicon compounds: Occurrence , Structure and inertness of SiO_2	1	Textbook of Himalaya Publication	BLACK BOARD	
	2.2.2 Preparation of structure of $SiCl_4$	1	Textbook of Himalaya Publication	BLACK BOARD	
	2.2.3 Occurrence and extraction of Germanium	2	Textbook of Himalaya Publication	BLACK BOARD	

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	2.2.4 Preparation of extra pure Silicon and Germanium	1	Textbook of Himalaya Publication	BLACK BOARD	
	2.3.1 Trends in chemical reactivity - Formation of hydrides, halides, oxides with special reference to oxides of nitrogen	1	Textbook of Himalaya Publication	BLACK BOARD	
	2.3.2 Oxides of nitrogen with respect to preparation and structure of NO, NO_2, N_2O and N_2O_4	1	Textbook of Himalaya Publication	BLACK BOARD	
	2.3.3 Synthesis of ammonia by Bosch – Haber process.	1	Textbook of Himalaya Publication	BLACK BOARD	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: SY BSc (PC-CZ) SEMESTER: IV MONTH: Dec-March ACADEMIC YEAR: 2019 -2020

LEARNING OBJECTIVE/S:

The learners will be able to : Have ideal about Ions in aqueous medium, acidity of Cations and Basicity of Anions and uses and Environmental chemistry of volatile oxides and Oxo-acids .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit II ,Inorganic chemistry Ions in aqeous medium Uses and Environmental Chemistry of volatile Oxides and oxo-acids	Hydration of Cations; Hydrolysis of Cations predicting degree of hydrolysis of Cations-effect of Charge and Radious.	2	Textbook of Himalaya Publication	BLACK BOARD
	Latimer Equation. Relationship between pKa, acidity and z^2/r ratios of metal ions graphical Presentation	2	Textbook of Himalaya Publication	BLACK BOARD
	Classification of cations on the basis of acidity category – Non acidic, Moderately acidic, strongly acidic, very strongly acidic with pKa values range and examples	3	Textbook of Himalaya Publication	BLACK BOARD
	Hydration of Anions; Effect of Charge and Radius; Hydration of anions- concept, diagram classification on the basis of basicity	3	Textbook of Himalaya Publication	BLACK BOARD

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	Physical properties of concentrated oxo-acids like sulfuric, Nitric and Phosphoric acid	2	Textbook of Himalaya Publication	BLACK BOARD
	Uses and environments aspects of these acids	3	Textbook of Himalaya Publication	BLACK BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: TY BSc SEMESTER: V MONTH: July -Oct ACADEMIC YEAR: 2019 -2020

LEARNING OBJECTIVE/S:
The learners will be able to : Learn Various symmetry operation and have idea about various point groups and have idea about Molecular Orbital Theory for heteronuclear diatomic molecules and polyatomic species.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit I ,Inorganic chemistry	1.1.1 Introduction and Importance of Symmetry in Chemistry	2	Textbook of Himalaya Publication	BLACK BOARD
	1.1.2 Symmetry elements and Symmetry operations	2	Textbook of Himalaya Publication	BLACK BOARD
	1.1.3 Concept of a Point Group with illustrations using the following point groups :(i)C∞V (ii) D∞h (iii) C2V (iv) C3v (v)C2h and (vi)D3h	2	Textbook of Himalaya Publication	BLACK BOARD
	1.2.1 Comparision between homonuclear and heteronuclear diatomic molecules	3	Textbook of Himalaya Publication	BLACK BOARD
	1.2.2. Heteronuclear diatomic molecules like CO, NO and HCl, appreciation of modified MO diagram for CO.	2	Textbook of Himalaya Publication	BLACK BOARD
	1.2.3 Molecular orbital theory for H3 and H3+ (correlation diagram expected).	2	Textbook of Himalaya Publication	BLACK BOARD

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	1.2.4. Molecular shape to molecular orbital approach in AB2 molecules. Application of symmetry concepts for linear and angular species considering σ- bonding only. (Examples like : i) BeH2, ii) H2O)	2	Textbook of Himalaya Publication	BLACK BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: TY BSc SEMESTER: VI MONTH: Nov -March YEAR: 2019 -2020

LEARNING OBJECTIVE/S:
The learners will be able to : Learn Crystal Field Theory of metal-ligand bond ,its merits and demerits .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit I ,Inorganic chemistry	1.1 Limitations of Valence Bond Theory.	1	Textbook of Himalaya Publication	BLACK BOARD
	1.2 Crystal Field Theory and effect of crystal field on central metal valence orbitals in various geometries from linear to octahedral(from coordination number 2 to coordination number 6)	3	Textbook of Himalaya Publication	BLACK BOARD
	1.3 Splitting of d orbitals in octahedral, square planar and tetrahedral crystal fields.	2	Textbook of Himalaya Publication	BLACK BOARD
	1.4 Distortions from the octahedral geometry : (i) effect of ligand field and (ii) Jahn-Teller distortions	2	Textbook of Himalaya Publication	BLACK BOARD
	1.5 Crystal field splitting parameters Δ ; its calculation and factors affecting it in octahedral complexes, Spectrochemical series	2	Textbook of Himalaya Publication	BLACK BOARD
	1.6 Crystal field stabilization energy(CFSE), calculation of CFSE for octahedral complexes with d0 to d10 metal ion configurations.	2	Textbook of Himalaya Publication	BLACK BOARD

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	1.7 Consequences of crystal field splitting on various properties such as ionic radii, hydration energy and enthalpies of formation of metal complexes of the first transition series.	2	Textbook of Himalaya Publication	BLACK BOARD
	1.8 Limitations of CFT : Evidences for covalence in metal complexes (i) intensities of d-d transitions, (ii) ESR spectrum of [IrCl6] 2- (iii) Nephelauxetic effect.	1	Textbook of Himalaya Publication	BLACK BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: MSc Part I SEMESTER:I MONTH: Aug - Dec ACADEMIC YEAR: 2019 -2020

LEARNING OBJECTIVE/S:
The learners will be able to : __Learn Molecular Symmetry , Group Theory and application of Group Theory

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 Unit II Molecular Symmetry and Group Theory	2.1. Symmetry criterion of optical activity, symmetry restrictions on dipole moment. A systematic procedure for symmetry classification of molecules.	3	F. A. Cotton, Chemical Applications of Group Theory, 2nd Edition, Wiley Eastern Ltd., 1989 and R. L. Carter, Molecular Symmetry and Group Theory, John Wiley & Sons, New York, 1998	WHITE BOARD
	2.2. Concepts of Groups, Sub-groups, Classes of Symmetry operations, Group Multiplication Tables. Abelian and non-Abelian point groups	3	F. A. Cotton, Chemical Applications of Group Theory, 2nd Edition, Wiley Eastern Ltd., 1989 and R. L. Carter, Molecular	WHITE BOARD

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			Symmetry and Group Theory, John Wiley & Sons, New York, 1998	
	2.3. Representation of Groups: Matrix representation of symmetry operations, reducible and irreducible representations. The Great Orthogonality Theorem and its application in construction of character tables for point groups C2v, C3v and D2h, structure of character tables.	3	F. A. Cotton, Chemical Applications of Group Theory, 2nd Edition, Wiley Eastern Ltd., 1989 and R. L. Carter, Molecular Symmetry and Group Theory, John Wiley & Sons, New York, 1998	WHITE BOARD
	2.4. Applications of Group Theory (a) Symmetry adapted linear combinations (SALC), symmetry aspects of MO theory, sigma bonding in ABn (Ammonia, CH4) molecule. (b) Determination of symmetry species for translations and rotations. (c) Mulliken's notations for irreducible representations. (d) Reduction of reducible representations using reduction formula. (e) Group-subgroup relationships. (f) Descent and ascent in symmetry correlation diagrams showing relationship between different groups.	6	F. A. Cotton, Chemical Applications of Group Theory, 2nd Edition, Wiley Eastern Ltd., 1989 and R. L. Carter, Molecular Symmetry and Group Theory, John Wiley & Sons, New York, 1998	WHITE BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry CLASS: MSc Part I

SEMESTER:II MONTH: Jan – April ACADEMIC YEAR: 2019 -2020

LEARNING OBJECTIVE/S:
The learners will be able to : _Have an idea about bioinorganic chemistry , biological oxygen carrier and various enzymes and metal ion transport and storage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit IV Bioinorganic Chemistry	4.1. Biological oxygen carriers; hemoglobin, hemerythrene and hemocyanine- structure of metal active center and differences in mechanism of oxygen binding, Differences between hemoglobin and myoglobin: Cooperativity of oxygen binding in hemoglobin and Hill equation, pH dependence of oxygen affinity in hemoglobin and myoglobin and it's implications	5	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	WHITE BOARD
	4.2. Activation of oxygen in biological system with examples of mono-oxygenases, and oxidases- structure of the metal center and mechanism of oxygen activation by these enzymes.	4	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	WHITE BOARD
	4.3. Copper containing enzymes- superoxide dismutase, tyrosinase and laccase: catalytic reactions and the structures of the metal binding site	3	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	WHITE BOARD

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	4.4. Nitrogen fixation-nitrogenase, hydrogenases	1	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	WHITE BOARD
	4.5. Metal ion transport and storage:Ionophores, transferrin, ferritin and metallothionins	1	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	WHITE BOARD
	4.6. Medicinal applications of cis-platin and related compounds	1	Robert R.Crechton, Biological Inorganic Chemistry – An Introduction, Elsevie	WHITE BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____ DEPARTMENT: _____

CLASS: _____ SEMESTER: _____ MONTH: _____ ACADEMIC YEAR: _____

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LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Miss Riyan Rocky Gardner_____DEPARTMENT:

____Chemistry ESTER: _First____ MONTH: _August_____ ACADEMIC YEAR: _2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to : ____Study about atomic structure ,hydrogenicatoms, many electron atoms,shell ,seashells and atomic orbitals.learn about radial shape of atomic orbitals ,Aufbau principle .

Study about periodic table and periodicity ,classification of elements ,electronegativity like Pauling, Alfred and Rochow and Mulliken etc._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 unit 2 Atomic structure and Periodic table and periodicity	1. Atomic structure :Historical perspective of the atomic structure,Rutherford's atomic model,Bohrs atomic model ,it's limitations and atomic spectrum of atomic model,and structure of hydrogen atom. 2. Hydrogenic atom : Simple principle of quantum mechanics, atomic orbitals. Hydrogenic energy level ,shell, subshells and atomic orbitals, electron spin,radial shape of atomic orbitals, radial distribution function, angular shape of orbitals.	10	Himalaya publications F.Y.Bsc textbook	Black board ,chalk and duster

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	3. Many electron atom : penetration and shielding ,effective nuclear charge. 4. Aufbau principle.			
	1. Periodic table and periodicity : Long form of periodic table,classification of elements, periodicity in following properties : atomic and ionic size,ionization enthalpy, electron gain enthalpy, effective nuclear charge ,electronegativity : Pauling, mulliken and Alfred and Rochow electronegativity.	05	Himalaya publications F.Y.Bsc textbook	Black board ,chalk and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Miss Riyan Rocky Gardner_____DEPARTMENT: __Chemistry CLASS: _F.Y.Bsc_____ SEMESTER: _Second_____ MONTH: _____January ACADEMIC YEAR: 2019- 2020_____

LEARNING OBJECTIVE/S:
The learners will be able to : Study about concept of qualitative analysis, various types of gases,role of papers impregnated with qualitative analysis,concept of precipitation equllibria, common in effect, uncommon in effect , buffer action on precipitation equllibria..learn about the acid base theories ,application and limitations of acid base theories ,HSAB concept ,Friedel craft acylation and alkylation

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 unit 2	5. Concept of qualitative analysis : testing of gaseous evaluates, role of papers impregnated with reagent in qualitative analysis. 6. Precipitation equllibria, common ion effects,uncommon ion effect,oxidation state,buffer action ,complexing agents precipitation on ionic compounds.	07	Himalaya publications F.Y.Bsc textbook	Blackboard, chalk and duster

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1. concept of qualitative analysis and 2. Acid base theories.	1. Acid Base theory : Arrhenius, Lowery Bronsted ,Lewis, solvent solute concept of acid and bases, HSAB concept and its application. 2. Application of acid base chemistry in : understanding organic reactions like Friedel craft alkylation and acylation. 3. Volumetric analysis to special reference to titration curve involving strong acid and strong base.	08	Himalaya publications F.Y.Bsc textbook	Blackboard, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Miss Riyan Rocky Gardner_____DEPARTMENT: ____Chemistry SEMESTER: __sixth___ MONTH: _january_____ ACADEMIC YEAR: _2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to : ____Study about the thermal methods like TGA ,DTA and thermometric titration . And learn about the analytical method validation and needs and validation parameters

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 unit 4 Thermal Methods and analytical methods validation	7. Thermal methods: introduction to various thermal methods like TGA, DTA ,and thermometric titration 8. Principle, instrumentation and application of TGA.factors affecting thermogram. 9. Principle, instrumentation and application of DTA. Difference between DTA and TGA. 10. Principle and instrumentation of thermometric titration. 2. Analytical method validation : Introduction and need for method of validation.	12	Himalaya publications T.Y.Bsc textbook	Black board ,chalk and duster

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	3. Validation parameters : selectivity ,specificity, linearity, precision, Accuracy and robustness	03	Himalaya publications T.Y.Bsc textbook	Black board ,chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Miss Riyan Rocky Gardner_____DEPARTMENT: __Chemistry CLASS: _Msc part 2 Analytical_____ SEMESTER: ___three_____ MONTH: January ACADEMIC YEAR: 2019- 2020_____

LEARNING OBJECTIVE/S:
The learners will be able to : Study about classification of plastics and polymers ,metallic impurities in plastic and polymers and their determination .impact of plastic on environment as pollutants ,paints and pigments .learn about the metallurgy,definition of ores and alloys,analysis of ores and alloys, techniques of purification

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 unit 3	1. Classification of plastic, determination of additives, molecular weight distribution, analysis of plastic and polymer . 2. Metallic impurities in plastic and their determination. 3. Impact of plastic on environment as pollutants.	03	Skoog reference book	Lecture cum demonstration White board ,chalk and duster

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Plastic and polymers	4. Paints and pigments : types of paints, determination of volatile and non volatile pigments in paints ,binders and thinner. 5. Role of organosilicon in paints and their impact on environment.	05 03 04	Skoog reference book Skoog reference book Skoog reference book	Lecture cum demonstration White board,chalk and duster Lecture cum demonstration White board, chalk and duster Lecture cum demonstration White board, chalk and duster
	1. Ores and minerals, dressing of ore ,pollution due to metallurgical process	03	Alloying understanding the basics ,edited by joseph R. Davis ASM international (2001)	White board, chalk and duster
Paper 3 unit 4	2.Chemical analysis of ores of principle constituents: Galena,Pyrulusite, Bauxite, Hematite ,monozite.	04		White board,chalk and duster
	3. definition and analysis of following alloys : Cupronickel ,steel and stainless steel,bronze and gun metal .	04		White board,chalk and duster

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Metallurgy	4. Techniques of purification: zone refining, analysis of high purity materials like silicon, vaccum fusion and extraction techniques.	04	Zone refining and allied techniques ,norman L. Parr, G. newness technology and engineering 1916	White board,chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Miss Riyan Rocky Gardner_____DEPARTMENT: __Chemistry CLASS: _Msc part 2 Analytical_____ SEMESTER: ___fourth_____ MONTH: January ACADEMIC YEAR: 2019- 2020_____

LEARNING OBJECTIVE/S:
The learners will be able to : Study about classification of plastics and polymers ,metallic impurities in plastic and polymers and their determination .impact of plastic on environment as pollutants ,paints and pigments .learn about the metallurgy,definition of ores and alloys,analysis of ores and alloys, techniques of purification

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 unit 3 Plastic and polymers	6. Classification of plastic, determination of additives, molecular weight distribution, analysis of plastic and polymer . 7. Metallic impurities in plastic and their determination. 8. Impact of plastic on environment as pollutants. 9. Paints and pigments : types of paints, determination of volatile and non volatile pigments in paints ,binders and thinner.	03 05	Skoog reference book Skoog reference book	Lecture cum demonstration White board ,chalk and duster Lecture cum demonstration White board,chalk and duster

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	10. Role of organosilicon in paints and their impact on environment.	03 04	Skoog reference book Skoog reference book	Lecture cum demonstration White board, chalk and duster Lecture cum demonstration White board, chalk and duster
	2. Ores and minerals, dressing of ore ,pollution due to metallurgical process	03	Alloying understanding the basics ,edited by joseph R. Davis ASM international (2001)	White board, chalk and duster
Paper 3 unit 4 Metallurgy	2.Chemical analysis of ores of principle constituents: Galena,Pyrulusite, Bauxite, Hematite ,monozite.	04		White board,chalk and duster
	3. definition and analysis of following alloys : Cupronickel ,steel and stainless steel,bronze and gun metal .	04		White board,chalk and duster
	4. Techniques of purification: zone refining, analysis of high purity materials like silicon, vaccum fusion and extraction techniques.	04	Zone refining and allied techniques ,norman L. Parr, G. newness	White board,chalk and duster

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			technology and engineering 1916	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: __CHEMISTRY _____ CLASS: _____FYBSC_(PCM)_____ SEMESTER: _____1_____ MONTH: _Aug-Sep_____ ACADEMIC YEAR: _____2019-2020_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To understand basics of ORGANIC CHEMISTRY
- To study hybridization sp, sp2, sp3,
- Shapes of ORGANIC molecules
- Differentate between Homolytic and Heterolytic.
- To study types of Reactions

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• Paper 1 • Unit 3 • Basics of ORGANIC CHEMISTRY	Alkanes,Alkenes,Alkanes,Alcohol,Aldehydes and ketones,Anhydride,Nitro Compounds	3	Clayden	Black Board
	Hybridization of ORGANIC compounds	3	Clayden	Black Board
	Overlaping of Atomic Orbital,Bonding-Sigma and Pi,Shapes of Molecules,Properties-Ethane,Ethene,Ethyne.	2	Clayden	Black Board, Picture's

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	Electronic Effect-Inductive,Electronic,Resonance,Mesomeric,Hyperconjugation,Dipole moment,Relative Strengths	3	Clayden,Text book	Black Board
	Homolytic and Heterolytic fission,Nucleophilicity and Basicity	2	Clayden	Black Board
	Carbonation,carbanion,free radical.Types of Reactions-Addition,Elimination,Substitution	2	Clayden,Text book	Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __RUTUJA HEMANT SAWANT _____ DEPARTMENT: _____CHEMISTRY _____ CLASS: _____MSC PART 1_____ SEMESTER: _____1_____ MONTH: ____SEP-DEC_____ ACADEMIC YEAR: ___2019-2020_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To learn about various THERMAL METHODS.
- To differentiate between DSC and DTA.
- To learn about the instrumentation and working of different instruments
- To understand need for automation in modern life.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER- 4 • Unit- 4 • THERMAL METHODS	Recapitulation of thermal methods, thermoanalytical methods, types of curves, TGA VS DTA, TGA-Instrumentation, working factors affecting TGA, Applications.	4	Vogal, Skoog, Instrumentation in Analytical Chemistry	White Board, PPT
	DSC- Instrumentation, working, block diag, Factors affecting curve, types of DSC	4	Vogal, Skoog, Instrumentation in Analytical Chemistry	White Board, PPT
	DTA- Working, Principal, Instrumentation, Application, comparison to DSC	3	Vogal, Skoog, Instrumentation in Analytical Chemistry	White Board, PPT
	Application's of DSC, Automation of Chemical Analysis- Need and Objectives of Automation, flow injections and discrete automated system	5	Vogal, Skoog, Instrumentation in Analytical Chemistry	White Board, PPT
	Multiplayer films, Gas monitoring equipment, Automatic titrators and benifits	4	Vogal, Skoog, Instrumentation in Analytical Chemistry	White Board, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: _____CHEMISTRY _____ CLASS: _____FYBSC (CBZ-B)_____ SEMESTER: _____2_____ MONTH: __DEC-FEB_____ ACADEMIC YEAR: ___2019-2020_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To understand explore types of various chemical bonding.
- To learn about theories and principles of bonding.
- To study about OXIDATION and REDUCTION chemistry.
- Applications of OXIDATION AND REDUCTION in daily life.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: _____CHEMISTRY _____ CLASS: _____FYBSC (CBZ-B)_____ SEMESTER: _____2_____ MONTH: __DEC-FEB_____ ACADEMIC YEAR: ___2019-2020_____

LEARNING OBJECTIVE/S:

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

- The learners will be able to : To understand explore types of various chemical bonding.
- To learn about theories and principles of bonding.
- To study about OXIDATION and REDUCTION chemistry.
- Applications of OXIDATION AND REDUCTION in daily life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER-2 • UNIT- 2 • Chemical Bond and Reactivity • Oxidation and Reduction Chemistry	Chemical Bonds-Ionic,Covalent,Coordinate,Metallic,Vander wall force,Hydrogen bonding,Nature of bond,Polarization,Lewis Dot Structure and e.g..	5	John C Kotz, Text Book	Black Board, Hand made Model's
	Sedgwick and Powell theory, VSEPR Theory-Characteristics,Applications,Steric No., Shapes of Molecules and Geometry AB- 1,2,3,4,5,6,7.Molecules with lone pair-AB2E,AB3E2 etc.Isoelectronic principles and limitations to VSEPR.	6	John C Kotz, Text Book	Black Board PPT
	Reduction Potential,Redox Half Reaction,Balancing Eq by diff methods, Redox Stability of water, Latimer and Forst diag and it's applications	4	Clayden Text Book	Black Board
	Applications of Redox, Diff between Iodo and Iodimetery, KMnO4, Titration Curve of Redox System	3	Clayden Text Book	Black Board
	Single Electron Multi-Electron System	1	Clayden Text Book	Black Board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____RUTUJA__HEMANT SAWANT_____ DEPARTMENT: CHEMISTRY _____ CLASS: ___MSC PART 1_____ SEMESTER: _____2_____ MONTH: JAN-MARCH_____ ACADEMIC YEAR: ___2019-2020_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To learn about various ELECTRO-ANALYTICAL METHODS
- To study about ELECTROGRAVIMETERY as a concept.
- To study about COULOMETRY it's principals, types, Applications.
- To explore new techniques in Analytical Chemistry on whole.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER – 4 • UNIT- 4	Ion Selective Potentiometery and it's types of electrodes, Solid-State, Precipitate, Liquid-Liquid, Enzyme and Gas sensing electrodes	4	Vogal, Skoog, Principals in Analytical Chemistry	White Board, pictures

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• ELECTO-ANALYTICAL METHODS	Ion Selective Field Effect Transistors, Biocatalytic Membrane Electrode, Enzyme Based Bio-Sensor, Sums. Polarography- Intro, Principal, Nature of Wave	3	Vogal, Skoog, Principles in Analytical Chemistry	White Board, pictures
	Ilkovic eq, Derivation with Cotteral eq,Effect of complex formation on polarographic wave, Sums Electrogravimetery-Introduction, Principal	3	Vogal, Skoog, Principles in Analytical Chemistry	White Board, PPT
	Instrumentation, constant current and constant potential electrolysis, factors affecting nature of deposit, application's. Coulometery- Intro, Principal, Types-Controlled Potienal, Controlled Current.	4	Vogal, Skoog, Principals in Analytical Chemistry	White Board, Block Diagram
	Applications of Coulometery, Advantages and Numericals entire chapter	3	Vogal, Skoog, Principal in Analytical Chemistry	White Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____RUTUJA HEMANT SAWANT _____ DEPARTMENT: _____CHEMISTRY _____ CLASS: _____SYBSC (PC-CZ)_____ SEMESTER: _____4_____ MONTH: NOV-FEB_____ ACADEMIC YEAR: ___2019-2020_____

LEARNING OBJECTIVE/S:

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- The learners will be able to : To study about Carboxylic Acid.
- To study about Carboxylic Acid Derivatives.
- To study about Sulphonic Acid and it's Derivatives
- To learn about Preparation and Uses of Derivatives .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER-1 • UNIT- 3 • Carboxylic Acid and their Derivatives • Sulphonic Acids.	Nomenclature, Structure, physical properties, Acidity of carboxylic Acid, effects of substitute on acid strength of aliphatic aromatic carboxylic Acid, prep of carboxylic acid	3	Clayden Text Book	Black Board
	Carbonation of Grignard, Hydrolysis of nitriles, Acidity, Salt formation, decarboxylation, HVZ. Conversion- To acid chloride, ester, amides, acid anhydride	4	Clayden Text Book	Black Board
	Mechanism of Nucleophile Acyl and acid catalysed substitution, Interconversion of acid derivatives by Nucleophile substitution, Claisen and Dieckmann Condensation	5	Clayden Text Book	Black Board
	Sulphonic Acid- Preparation by sulphonation of benzene toluene and naphthalene,Acidity of arenes Sulphonic Acids, comparative acidity of carboxylic and Sulphonic acid	3	Clayden Text Book	Black Board
	Salt formation, desulphonation, reactions with alcohol and PCL5, IPSO substitution	2	Clayden Text Book	Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: _____CHEMISTRY _____ CLASS: ___FYBSC (PCM)_____ SEMESTER: _____2_____ MONTH: ___JAN-MARCH_____ ACADEMIC YEAR: _2019-2020_____

LEARNING OBJECTIVE/S:

- The learners will be able to : _To understand about ionic equilibria
- To understand about pH and buffer and their uses in reaction
- To learn about MOLECULAR SPECTROSCOPY
- To study about solids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER- 2 • UNIT- 1 • Ionic Equilibria, • Molecular Spectroscopy,	Types of electrolytes, Degree of Ionization and factors affecting It, ionization constant, ionization product of water, ionization of weak acids and base, pH scale, common ion effect.	5	J. Butler, Text Book	Black Board
	Buffers- Types, Henderson equations for acid and base, Buffer action, Buffer capacity, Numericals	3	J. Butler, Text Book	Black Board

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• Solid State Chemistry.	Molecular Spectroscopy- EMR and spectrum, planks equation, absorption, emission, scattering, fluorescence, electronic. Vibrational and Rotational transition and Numericals	4	C.N Banwell, Text Book	Black Board, Pictures
	Solid State Chemistry- Types of solids, Crystal lattice, lattice points, unit cell, space lattice, lattice plan.	2	A.R WEST, Text Book	Black Board, Hand made Model's
	Crystallography- Law of Constancy, interfacial Angel, Law of symmetry, Law of Rational indices	3	Text Book, A.R WEST	Black Board, Hand made Model's

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __RUTUJA HEMANT SAWANT _____ DEPARTMENT: ____CHEMISTRY _____ CLASS: ____FYBSC (PCM)_____ SEMESTER: ___2_____ MONTH: _DEC-JAN_____ ACADEMIC YEAR: __2019-2020_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To learn about Carbon Bonding.
- To study about reaction and mechanism of various compounds
- To study about hydrocarbon it's , properties and reactions.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• PAPER- 1 • UNIT- 3 • ALIPHATIC HYDROCARBON	C-C Sigma bond, Chemistry of alkanes- formation, Wurtz reaction, free radical halogenation- Wurtz fitting reactions. C-C Pi bond, formation of alkenes and alkynes, E1 and E2 reaction	4	Clayden	Black Board
	E1cb, Satzeff, Hoffman eliminations, Markownikoff and Anti- Markownikoff addition, Oxy and Demercuration, Hydroboration oxidation, Ozonolysis	5	Clayden	Black Board
	Syn-Anti Hydroxylation, 1,2 and 1,4 addition, Diels's Alder reaction, Allylic and Benzylic Bromination	3	Clayden	Black Board
	Propen, 1-butene, toluene, ethyl-benzene Reactions of Alkyenes- Acidic, Electrophilic, Nucleophilic Additions	3	Clayden	Black Board
	Hydration to form carbon compounds, Alkylation of Terminal Alkyenes	2	Clayden	Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: ___RUTUJA HEMANT SAWANT _____ DEPARTMENT: _CHEMISTRY _____ CLASS: FYBSC (PCM)_____ SEMESTER: ____1_____ MONTH: SEP-OCT_____ ACADEMIC YEAR: _2019-2020_____

LEARNING OBJECTIVE/S:

- The learners will be able to : To understand about Chemical Kinetics in detail
- To differentiate between Order and Molecularity
- To find the Rate of Reactions by different methods
- To learn about different methods
- To study of solids

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• Paper 2 • Unit 1 • CHMEICAL KINETICS AND LIQUID STATE	Rate of Reactions- 1st and 2nd reactions, Order and Molecularity, integrated and grapical methods.	4	Text Books, Principal of Chemical Kinetics	Black Board, Charts
	Ostwald's isolation, Half time And Drop number method, Surface tension, Viscosity	4	Text Books, Principal of Chemical Kinetics	Black Board, PPT
	Ostwald's viscometer, Refrective index, Molar Refraction.	3	Text Books, Principal of Chemical Kinetics	Black Board

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	Polarizability, Abbe's Refractometer, Numericals	2	Text Books, Principal of Chemical Kinetics	Black Board
	Liquid crystals, classification and structure, Application of liquid crystal	2	Text Books, Principal of Chemical Kinetics	Black Board,PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _RUTUJA HEMANT SAWANT _____ DEPARTMENT: __CHEMISTRY _____ CLASS: _____FYBSC_(CBZ-B)_____ SEMESTER: _____1_____ MONTH: _AUG-OCT_____ ACADEMIC YEAR: _____2019-2020_____

LEARNING OBJECTIVE/S:

- The learners will be able to : _To understand about the metallic and non-metallic elements.To Learn about anamolous behaviour of elements.
- To study about the ALLOTROPY of group 13
- Diagonal relationship of elements
- To understand about ACID RAIN

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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• Paper 2 • Unit 2 • Comparative chemistry of main group Elements.	Metallic and Non-metallic nature,Oxidation state,Innert pair effect,Anamolous behaviour of different elements-Li,Be,Oxygen,Nitrogen	4	Text Book,Advance inorganic chemistry	Black Board
	ALLOTROPY of group 13 and 14,15and 16 elements,Catenation,Diagonal Relationships of carbide,nitrides,oxides.	6	Text Book,Advance inorganic chemistry	Black Board,Picture's
	Diagonal Relationships of Hydroxide Some important compounds- NaHCO3,Na2CO3,NaCl,NaOH,CaOetc	3	Text Book,Advance inorganic chemistry	Black Board
	Oxides of Carbon, Sulphur and Nitrogen-Reaction,Health Hazard,Control Techniques	4	Text Book,Advance inorganic chemistry	Black Board
	Oxiyacids of Sulphur and Nitrogen-Reactions and Control Measures, ACID RAIN and GREEN HOUSE EFFECT	3	Text Book,Advanceinorganic chemistry	Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.Sc. SEMESTER: I MONTH: July 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand metallic and non-metallic nature of main group elements.
Study anomalous behavior of second period elements
Study comparative chemistry of carbides, nitrides, oxides and hydroxides of group i and group ii elements.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Chemistry Paper-II UNIT-II Comparative chemistry of Main Group Elements	Metallic and non-metallic nature, oxidation states, electronegativity,	03	Text book Himalaya publication	White board/ marker pen and duster.
	Anomalous behaviour of second period elements, allotropy, catenation, diagonal relationship.	03	Lee, J.D. Concise Inorganic Chemistry ELBS, 1991	White board/ marker pen and duster.
	Comparative chemistry of carbides, nitrides, oxides and hydroxides of group I and group II elements.	04	Text book Himalaya	White board/ marker pen and duster.

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			publication	.
	Some important compounds- $NaHCO_3$, Na_2CO_3, NaCl, NaOH, CaO, $CaCO_3$	02	Text book Himalaya publication	White board/ marker pen and duster.
	oxides of carbon, oxides and oxyacids of sulphur and nitrogen with respect to environmental aspects.	03		White board/ marker pen and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY CLASS: F.Y.B.Sc. SEMESTER: I MONTH: July 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand thermodynamic terms and state functions and path functions.
Study first law of thermodynamics in detail.
Study calculation of bond energy, bond dissociation energy and resonance energy from thermochemical data.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
		ALLOTED		
PAPER- Chemistry Paper-I	Thermodynamic terms: System, surrounding, boundaries, open, closed and isolated system, intensive and extensive properties, state functions and path functions, zeroth law of thermodynamics	03	Text book Himalaya publication	White board/ marker pen and duster.
	First law of thermodynamics: concept of heat (q), work (w), internal energy (U), statement of first law, enthalpy, relation between heat capacities, sign conventions, calculations of heat (q), work (w), internal energy (U), and enthalpy (H)	03	Atkins P.W. and Paula J.de, Atkin's Physical Chemistry, 10th Ed.	White board/ marker pen and duster.
UNIT-I Chemical Thermodynamics	Thermochemistry: Heats of reactions, standard states, enthalpy of formation of molecules, enthalpy of combustion and its applications, calculation of bond energy, bond dissociation energy and resonance energy from thermochemical data, Kirchhoff's equation	04	Text book Himalaya publication	White board/ marker pen and duster. .
And Chemical Calculations	Expressing concentration of solutions: Normality, molality, molarity, formality, mole fractions, weight ratio,	02	Text book Himalaya publication	White board/ marker pen and duster.

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	volume ratio, weight to volume ratio, ppm, ppb, millimoles, milliequivalents , Numericals.	*03*		*White board/ marker pen and duster.*

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: III MONTH: June 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

Introduce classical methods of chemical analysis.
Appreciate the various terms and types of titrimetric analysis.
Ability to select proper titrimetric method
Appreciate the usefulness of the gravimetric method of analysis
Identify a suitable gravimetric method
Perform the required calculations involved in the analysis by titrimetry as well as gravimetry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-	Titrimetric Methods, Terms involved in Titrimetric methods of analysis. Comparing volumetry and Titrimetry The Conditions suitable for titrimetry Types of titrimetry – Neutralisation (Acidimetry, alkalimetry), Redox, Iodometry, Iodimetry.	02	Text book Himalaya publication	Black board/ chalk and duster.
	Precipitation and Complexometric titrations and indicators used in these titrations, Tools of Titrimetry: Graduated glasswares and Callibration, Standard solutions (Primary and Secondary standards in Titrimetry) and Calculations in Titrimetry.	02	Text book Seth publication	Black board/ chalk and duster.

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Chemistry Paper-III	Concept of pH and its importance in Neutralisation Titrations End point and Equivalence point of Neutralisation titrations Determination of End point by using i. Indicators causing colour change ii. Change in potential, (by potentiometry) iii. Change in conductance (by conductometry). Construction of titration curve (on the basis of change in pH)of a titration.	04	Skoog et al. Fundamentals of Analytical chemistry Cengage Learning, Eight Edition, chapter 13, 14 and 15	Black board/ chalk and duster. . .
UNIT-II Classical Methods of Analysis	Types of Gravimetric Methods – Precipitation Gravimetry: i. Steps involved in precipitation gravimetry analysis	02	Text book Seth publication	Black board/ chalk and duster.
	Conditions for precipitation iii. Completion of precipitation, iv. Role of Digestion, Filtration, Washing, Drying Ignition of precipitate.	02	Text book Himalaya publication	Black board/ chalk and duster.
	Applications of Gravimetric Analysis: Determination of sulfur in organic compounds; Estimation of Nickel in Cu-Ni alloy using dimethyl glyoxime; Determination of Aluminum by converting it to its oxide.	03		Black board/ chalk and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: SEEMA JADHAV *DEPARTMENT: CHEMISTRY*

CLASS: S.Y.B.Sc. *SEMESTER: III* *MONTH: June 2019* *ACADEMIC YEAR: 2019-2020*

LEARNING OBJECTIVE/S:
The learners will be able to:

To describe the reactions of halogenated and oxygenated organic compounds of aliphatic and aromatic hydrocarbons
To predict the reactivity and stereochemistry of halogenated and oxygenated organic compounds

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Chemistry Paper-I UNIT-III Alkyl And Aryl	Haloalkanes i. Nucleohilic substitution: SN1, SN2 & SNi, Mechanism and Stereochemistry ii. Factors affecting nucleophilic substitution: Substrate, Solvent, Reagent, Leaving group	02	Text book Himalaya publication	Black board/ chalk and duster.
	Haloarenes i. Reactivity of aryl halides towards nucleophilic substitution ii. Mechanism of nucleophilic aromatic substitution: Addition-Elimination (SNAr); Elimination-Addition (Benzyne)	03	Text book Seth publication	Black board/ chalk and duster.

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Halides and Compounds Containing Oxygen - Alcohols, Phenols, Ethers, & Epoxides	Alcohols & phenols i. Physical properties: Hydrogen bonding (types); effect of Hbonding on properties (o- & p-nitrophenol); comparison of acidity of alcohols & phenols; acidity of substituted phenols ii. Preparation & of alcohols: industrial preparation (fermentation); hydration of alkenes; hydrolysis of alkyl halides	03	Morrison, R. T.; Boyd, R. N. (2012). Organic Chemistry. Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).	Black board/ chalk and duster. . .
	iii. Reactions of alcohols- with sodium, HX (Lucas test), esterification, Oppenaeur oxidation iv. Preparation of phenol- cumene hydroperoxide method v. Reactions of phenols: O-alkylation & O-acylation; Schotten- Baumen reaction, Fries rearrangement, Claisen rearrangement	02	Text book Seth publication	Black board/ chalk and duster.
	Ethers & Epoxides i. Preparation of ethers - Williamson's synthesis ii. Reaction of ethers - cleavage of ethers with HI	02	Text book Himalaya publication	Black board/ chalk and duster.

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	iii. Preparation of epoxides- peroxyacids (m-CPBA)			

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	iv. Reactivity & reactions of epoxides- ring opening reactions in acidic (HX, ROH, HCN), basic & neutral conditions (NH3, RMgX & RO-) with reference to regioselectivity	03		Black board/ chalk and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY CLASS: S.Y.B.Sc. SEMESTER: III MONTH: June 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

To study different types of complex chemical reactions and their reaction rates.
To learn the role of different phases in solution equilibrium system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER- **Chemistry Paper-II**	Types of Complex Chemical reactions i. Reversible or opposing reactions ii. Consecutive reactions iii. Parallel reactions	03	Text book Himalaya publication	White board/ marker pen and duster.
UNIT-I **Kinetics and Phase equilibria of**	(Derivations not expected) iv. Thermal chain reactions: H and Br reaction. (Kinetic expression not expected).			

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solutions	Effect of temperature on the rate of reaction i. Arrhenius equation and its derivation ii. Concept of energy of activation (Ea). (Numerical expected) Theories of reaction rates i. Collision theory of unimolecular reaction(Lindemann's approach) and bimolecular reaction ii. Activated complex theory of bimolecular reactions iii. Comparison of the two theories (Qualitative treatment only)	03	Atkins P. W., and Paula J. De, Physical Chemistry, 10th ed., Oxford University, 12 press (2014).	White board/ marker pen and duster.
	Phase rule & terms involved b) Liquid -liquid mixtures- classification i. Completely miscible liquids ii. Ideal solutions and Raoult's law	03	Text book Himalaya publication	White board/ marker pen and duster. .

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	iii. Deviations from Raoult's law -non-ideal solutions iv. Vapour pressure: composition and temperature; Composition curves of ideal and non-ideal solutions, Numericals			
	Partial miscibility of liquids i. Classification on the basis of Critical solution temperature ii. Effect of impurity on partial miscibility of liquids iii. Partially Miscible Liquids with Upper Critical Solution Temperature (Phenol-Water System) iv. Partially Miscible Liquids with Lower Critical Solution Temperature (Triethylamine-Water System) v. Partially Miscible Liquids with Upper and Lower Critical Solution Temperature (Nicotine-Water System)	03	Text book Himalaya publication	White board/ marker pen and duster.

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	Immiscibility of liquids: Principle of steam distillation *(Numerical expected)* *e) Nernst distribution law and its applications* *i. Solvent extraction – method*	*03*	*Text book* *Himalaya publication*	*White board/ marker pen and duster.*

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV *DEPARTMENT: CHEMISTRY* *CLASS: F.Y.B.Sc.* *SEMESTER: II* *MONTH: November 2019* *ACADEMIC YEAR: 2019-2020*

LEARNING OBJECTIVE/S:
The learners will be able to:

Study ideal gas laws, kinetic theory of gases in detail.
Study reversible and irreversible reactions, law of mass action, dynamic equilibria.
Study spontaneity and physical significance of free energy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER- Chemistry Paper-I	Ideal gas laws, kinetic theory of gases, Maxwell-Boltzmann's distribution of velocities (qualitative discussion), ideal gases, real gases, compressibility factor, Boyle's Temperature, Numericals.	04	Text book Himalaya publication	White board/ marker pen and duster.
UNIT-I Gaseous State And Chemical Equilibria and Thermodynamic Parameters	Deviation from ideal gas laws, reasons for deviation from ideal gas laws, Van der Waals equation of state, Joule-Thomson effect: qualitative discussion and experimentation, inversion temperature. Numericals.	04	Text book Seth publication	White board/ marker pen and duster.
	Reversible and irreversible reactions, law of mass action, dynamic equilibria, equilibrium constant, (Kc and Kp),	02	Text book Himalaya publication	White board/ marker pen and duster.
	relationship between Kc and Kp, Le Chatelier's principle, factors affecting chemical equilibrium, Numericals.	02	Text book Himalaya publication	White board/ marker pen and duster.
	Statement of second law of thermodynamics, concepts of entropy and free energy, spontaneity and physical significance of free energy, thermodynamic derivation of equilibrium constant, Numericals.	03	Text book Himalaya publication	White board/ marker pen and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF SRyadhay.

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NAME OF THE STAFF: SEEMA JADHAV *DEPARTMENT: CHEMISTRY* *CLASS: F.Y.B.Sc.* *SEMESTER: II* *MONTH: November 2019* *ACADEMIC YEAR: 2019-2020*

LEARNING OBJECTIVE/S:
The learners will be able to:

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Study ideal gas laws, kinetic theory of gases in detail.
Study reversible and irreversible reactions, law of mass action, dynamic equilibria.
Study spontaneity and physical significance of free energy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Chemistry Paper-II UNIT-II Chemical Bond and Reactivity And Oxidation Reduction	Types of chemical bond, comparison between ionic and covalent bonds, polarizability Fajan's Rule, shapes of molecules, Lewis dot structure, Sidgwick Powell Theory	03	Text book Himalaya publication	White board/ marker pen and duster.
	Basic VSEPR theory for ABn type molecules with and without lone pair of electrons, isoelectronic principles, applications and limitations of VSEPR theory.	04	Atkins, P.W. & Paula, J. Physical Chemistry, 10th Ed., Oxford University Press,	White board/ marker pen and duster.
	Reduction potentials Redox potentials: half reactions; balancing redox equations.	02	Text book Himalaya publication	White board/ marker pen and duster.

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Chemistry	*Redox stability in water* *i) Latimer and Frost Diagrams*	*03*	*Text book* *Himalaya publication*	*White board/ marker pen and duster.*

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	ii) pH dependence of redox potentials.			
	Applications of redox chemistry *i) Extraction of elements: (example: isolation of copper by auto reduction)* *ii) Redox reagents in Volumetric analysis: a) I2; b) KMnO4* *iii) Titration curves:i) single electron systems (example Ce(IV) against Fe(II)); and ii) Multi electron systems as in KMnO4 against Fe(II))*	*03*	*Text book* *Himalaya publication*	*White board/ marker pen and duster.*

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV *DEPARTMENT: CHEMISTRY*

CLASS: S.Y.B.Sc. *SEMESTER: IV* *MONTH: November 2019* *ACADEMIC YEAR: 2019-2020*

LEARNING OBJECTIVE/S:
The learners will be able to:

To study nomenclature, structure and physical properties, acidity of carboxylic acids.
To predict the reactivity, nomenclature, and preparation of aromatic sulphonic acids.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
		ALLOTED		
PAPER Chemistry Paper-I UNIT-III	Nomenclature, structure and physical properties, acidity of carboxylic acids, effects of substituents on acid strength of aliphatic and aromatic carboxylic acids. Preparation of carboxylic acids: oxidation of alcohols and alkyl benzene, carbonation of Grignard and hydrolysis of nitriles.	03	Text book Himalaya publication	Black board/ chalk and duster.
	Reactions: Acidity, salt formation, decarboxylation, Reduction of carboxylic acids with $LiAlH_4$, diborane, Hell-Volhard-Zelinsky reaction,Conversion of carboxylic acid to acid chlorides, esters, amides and acid anhydrides and their relative reactivity.	04	Text book Seth publication	Black board/ chalk and duster.
	Mechanism of nucleophilic acyl substitution and acid-catalysed nucleophilic acyl substitution. Interconversion of acid derivatives by nucleophilic acyl substitution. Mechanism of Claisen condensation and Dieckmann condensation.	04	Morrison, R. T.; Boyd, R. N. (2012). Organic Chemistry. Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).	Black board/ chalk and duster. . .

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	Nomenclature, preparation of aromatic sulphonic acids by sulphonation of benzene (with mechanism), toluene and naphthalene, Reactions: Acidity of arene sulfonic acid,	*02*	*Text book* *Seth publication*	*Black board/ chalk and duster.*

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	Comparative acidity of carboxylic acid and sulfonic acids. Salt formation, desulphonation.Reaction with alcohol, phosphorous pentachloride, IPSO substitution.	02	Text book Himalaya publication	Black board/ chalk and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: November 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

To study different Types of catalysis, catalytic activity, specificity and selectivity.
To learn Recapitulation of laws of crystallography and types of crystals

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Chemistry Paper-II	laws of crystallography and types of crystals Characteristics of simple cubic, face centered cubic and body centered cubic systems, interplanar distance in cubic lattice	03	Text book Himalaya publication	White board/ marker pen and duster.

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UNIT-I	Use of X-rays in the study of crystal structure, Bragg's equation (derivation expected), X-rays diffraction method of studying crystal lattice structure, structure of NaCl and KCl. Determination	04	Atkins P. W., and Paula J. De, Physical	White board/ marker pen and duster.
Solid State And Catalysis	of Avogadro's number, Numericals.		Chemistry, 10th ed., Oxford University, 12 press (2014).	
	Types of catalysis, catalytic activity, specificity and selectivity, inhibitors, catalyst poisoning and deactivation	03	Text book Himalaya publication	White board/ marker pen and duster. .
	Mechanisms and kinetics of acid-base catalyzed reactions, effect of pH. Mechanisms and kinetics of enzyme catalyzed reactions (Michaelis-Menten equation)	03	Text book Himalaya publication	White board/ marker pen and duster.
	Effect of particle size and efficiency of nanoparticles as catalyst.	02	Text book Himalaya publication	White board/ marker pen and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: November 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

Expected to appreciate the nature of interaction between applied electrical potential and the concentration of the analyte.
The nature of chemical reactions that influence potential of a given cell.
Familiar with the various types of electrodes or half cells.
Appreciate the nature, need and importance of pH.
Expected to know the applications of the various instrumental methods dealt with in this unit.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-	Instruments based on the electrochemical properties of the analytes Potentiometry: Principle, Role of Reference and indicator electrodes	03	Text book Himalaya publication	Black board/ chalk and duster.
	Applications in Neutralisation reactions with reference to the titration of a Strong acid against a Strong Base (using quinhydrone electrode, Graphical methods for detection of end points.	02	Text book Seth publication	Black board/ chalk and duster.

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Chemistry Paper-III UNIT-II Instrumental Methods-II	pHmetry: Principle Types of pH meters.	02	Principles of Instrumental analysis, D. A. Skoog, 3rd Edition, Chapters: 20, 23	Black board/ chalk and duster.
	Construction Working and Care of Combined Glass electrode Applications in Titrimetry (Strtong acid-Strong Base) biological and environmental analysis	02	Text book Seth publication	Black board/ chalk and duster.
	Conductometry: Principle , Conductivity cell its construction and care.	03	Text book Himalaya publication	Black board/ chalk and duster.
	Applications in Neutralisation Titrimetry with respect to i. Strong Acid-Strong Base ii. Strong Acid-Weak Base iii. Strong Base-weak Acid iv. Weak Acid- Weak Base. Advantages & limitations of conductometric titrations.	03		Black board/ chalk and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF Gyadhay.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY

CLASS: F.Y. BSC CBZ'A' SEMESTER: SEM-I MONTH: JULY TO OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: 1.The Students will able to understand the basic concept of stereochemistry and 3D arrangement of atoms and groups in space.

2. The Students will able to know that how optical property of any organic compound is responsible for change in it's physical and chemical properties.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-III Stereochemistry-I	3.1 Introduction of Projection Formulae and their inter conversions	02	Himalaya Publication textbook	Black board, Chalk and duster
	3.2 Geometrical Isomerism in alkenes and cycloalkanes	02		Black board, Chalk and duster
	3.3 Optical isomerism	06		Black board, Chalk and duster
	3.4 Relative and Absolute configuration	02		Black board, Chalk and duster
	3.5 Conformation analysis of alkanes	03		Black board, Chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY

CLASS: F.Y. BSC CBZ'A' SEMESTER: SEM-lI MONTH: November to March ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: 1.The Students will able to understand the concept of different types strain in cyclic compound and how the strain in cyclic compound is responsible for it's stability in the space.

2. In Aromatic Hydrocarbons the Students will able to understand the characteristics of Aromatic compounds and it's electrophilic substitution reaction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-III 3.1Stereochemistry-Il 3.2 Aromatic Hydrocarbons	3.1.1 CycloalkaneTypes of Cycloalkanes and their relative stability	02	Himalaya Pub.Text book	Black board, Chalk and duster
	3.1.2 Confirmation analysis of cyclohexane: chair boat and twist boat form and relative stability with energy	03		Black board, Chalk and duster
	3.2.1Aromatic,Anti-aromaticity and heterocyclic compound	02		Black board, Chalk and duster
	3.2.2.Electrophilic substitution:Halogenation,Nitration...	06		Black board, Chalk and duster
	3.2.3 Directing effect of the group	02		Black board, Chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY

CLASS: M.SC -I SEMESTER: SEM-I MONTH: JULY TO NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: 1.The learner will able to understand the different terms used in Analytical chemistry.

2. They will able to understand the Principle, working of instruments used in analysis and also concept of Quality Management in industry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Unit-l 1.1.Language of Analytical chemistry 1.2.Quality in Analytical chemistry	1.1.1 Terms involved in Analytical chemistry and types of analytical instruments	05	David Harvey	White board, Marker Pen, duster and Chart
	1.1.2 Error: Types of error and method of quantitative analysis	04	Skoog and Holler	White board, Marker Pen, duster and Chart
	1.2.1 Quality Management system: Total Quality Management	04	Donna Summers	White board, Marker Pen, duster and Chart, PPT
	1.2.2 Safety in Laboratories	02	ParagDiwan	White board, Marker Pen, duster and Chart
	1.2.3 Accreditation and Good laboratory practices	04	Klimisch	White board, Marker Pen, duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 19

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY

CLASS: MSC-I SEMESTER: SEM-lI MONTH: NOVEMBER to MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: .The Students will able to understand the different terms involved in Chromatography technique and also principle, instrumentation, working, application of Gas chromatography as well HPLC technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Unit-I Chromatography	1.1 Recapitulation basic concepts in Chromatography	04	Skoog,Holler	White board, marker pen and duster
	1.2 Concept of plate and rate theories in chromatography	02	Couch 7th Ed.	White board , marker pen, chart
	1.3 Gas Chromatography: Principle, instrumentation, working and Application	06		White board marker pen and duster
	1.4 High performance liquid chromatography	02	Joel .K. Swadesh	White board marker pen, and ppt
	1.4.1 Principle, instrumentation, working and Application	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 19

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY

CLASS: S.Y CZ/PC SEMESTER: SEM-III MONTH: JULY TO AUGUST ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: 1.The Students will able to understand the terms used in Analytical Chemistry, Methods of chemical analysis and statistical treatment of Analytical data.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-Ill Unit-I Introduction to Analytical Chemistry and Statistical treatment of Analytical data-l	1.1 Role of Analytical Chemistry: terms involved in Analytical Chemistry, Purpose of Chemical Analysis	03	Himalaya Publication Sy. textbook	Black board, Chalk, duster and chart
	Classical and Non-Classical Methods of analysis	03		Black board, Chalk and duster
	1.2 Significance of sampling in Analytical Chemistry	02		Black board, Chalk and duster
	Types of sampling	02		Black board, Chalk and duster
	1.3 Results of Analysis	05		Black board, Chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY

CLASS: S.Y CZ/PC SEMESTER: SEM-III MONTH: AUGUST TO OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: 1.The learners will able to understand the concept of titrmetry analysis, tools used in analysis and difference steps involved in gravimetric analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Unit-II Classical methods of Analysis	2.1 Titrimetric Methods: types of titrimetry, tools of titrimetry	03	Himalaya Publication sy text book	Black board , chalk and duster
	2.2 Standard Solutions and Calculations in Titrimetry	02		Black board , chalk and duster
	2.3 Neutralisation Titrations: construction of Titration curve	04		Black board , chalk and duster
	2.4 Gravimetric Analysis: steps involved in analysis	03		Black board , chalk and duster
	Types and application of gravimetric analysis	03		Black board , chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MISS. SHEETAL ANIL JAISWAL DEPARTMENT: CHEMISTRY

CLASS: S.Y PC/CZ SEMESTER: SEM-IV MONTH: NOVEMBER TO JANUARY ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: 1.The Students will able to understand the types of Separation methods used in chemical analysis and also instrumentation working application of Electrophoresis technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-Ill Unit-I Methods of Separation	1.1 Introduction analytical separation and it's importance in analysis	03	Himalaya Publication Sy textbook	Black board, Chalk and duster
	1.2 Types of Separation methods	04		Black board, Chalk and duster
	1.3 Electrophoresis: Instrumentation working & Application	03		Black board, Chalk and duster
	1.4 Solvent Extraction: Condition and methods of extraction	03		Black board, Chalk and duster
	1.5 Chromatography: Paper Chromatography and Thin layer Chromatography	03		Black board, Chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAF: MISS. SHEETAL ANIL JAISWAL. DEPARTMENT: CHEMISTRY

CLASS: S.Y PC/CZ SEMESTER: SEM-IV MONTH: JANUARY TO FEBRUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: The students will able to understand Principle, instrumentation, working and Application of Potentiometer, pH meter, Conductometer

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Unit-II InstrumentalMethods-ll	2.1 Potentiometry: Instrumentation, working and application	05	Himalaya Publication Sy textbook	Black board, chalk and duster
	2.2 pH metry: Instrumentation, working and application	04		Black board, chalk and duster
	2.3 Conductometry : Instrumentation, working and application	05		Black board, chalk and duster
	Advantages and limitations of Conductometric titration	02		Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati shreedhar Dhumal._____ DEPARTMENT: Chemistry_____

CLASS: ____Msc. I_____SEMESTER: _____I _st___ MONTH: ___Aug , sep, Oct 19_____

_ACADEMIC YEAR: ____2019-20_____

LEARNING OBJECTIVE/S:

The learners will be able to : 1) To learn concept of FT technique and it's concept.

2) To understand the concept and application of Molecular Ultraviolet and Visible Spectroscopy 3)

To be able to carry out numerical based on UV Visible spectroscopy.

4) To gain knowledge in concept of Infrared Absorption Spectroscopy, Dual spectrometry , diffuse reflectance spectroscopy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper - IV, Unit - 3. Optical Methods	Recapitulation and FT Technique : Recapitulation of basic concepts, Electromagnetic spectrum, Sources, Detectors, sample containers. Laser as a source of radiation, Fibre optics. Introduction of Fourier Transform.	[3 L]	1. D. A. Skoog, F. J. Holler, T. A. Nieman, Principles of Instrumental Analysis, 5th Edition, Google.	Question answers method, Group discussion method, lecture method./ White board and marker

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Molecular Ultraviolet and Visible Spectroscopy NUMERICALS ARE EXPECTED Derivation of Beer- Lambert's Law and its limitations, factors affecting molecular absorption, types of transitions [emphasis on charge transfer absorption], pH, temperature, solvent and effect of substituents. Applications of Ultraviolet and Visible spectroscopy: 1) On charge transfer absorption 2) Simultaneous spectroscopy 3) Derivative Spectroscopy Dual spectrometry – Introduction, Principle, Instrumentation and Applications	[6 L]		

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	Infrared Absorption Spectroscopy Instrumentation: Sources, Sample handling, Transducers, Dispersive, non-dispersive instrument FTIR and its advantages Applications of IR [Mid IR, Near IR, Far IR]: Qualitative with emphasis on "Finger print" region, Quantitative analysis,	[6 L]		

	Advantages and Limitations of IR Introduction and basic principles of diffuse reflectance spectroscopy			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15L_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati shreedhar Dhumal._____ DEPARTMENT: Chemistry_____

CLASS: ____Msc. I_____ SEMESTER: _____II nd____ MONTH: __Jan , Feb 2020_____

__ACADEMIC YEAR: ____2019-20_____

LEARNING OBJECTIVE/S:

The learners will be able to : ___1) To gain knowledge of concept Scanning Electron Microscopy (SEM) Scanning Tunneling Microscopy (STM) Transmission Electron Microscopy (TEM)Electron Spectroscopy (ESCA and Auger). 2) To understand the concept of AAS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Paper - IV, Unit - 3. Surface Analytical Techniques & Atomic Spectroscopy	Introduction, Principle, Instrumentation and Applications of: Scanning Electron Microscopy (SEM) Scanning Tunneling Microscopy (STM) Transmission Electron Microscopy (TEM) Electron Spectroscopy (ESCA and Auger)	[9 L]	Principles of Instrumental Analysis – Skoog, Holler, Nieman, 5th ed., Harcourt College	Question answers method, Group discussion method, lecture method./ White board and marker

	Advantages and Limitations of AAS Atomic Spectroscopy based on plasma sources – Introduction, Principle, Instrumentation and Applications.	[6L]		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____Swati Shreedhar_Dhumal._____ DEPARTMENT: Chemistry_____

CLASS: _____Msc. II_____ SEMESTER: ___III rd_____ MONTH: __Aug 19_____ACADEMIC YEAR: ___2019-20_____

LEARNING OBJECTIVE/S:

The learners will be able to : _1)__To understand the concept of sampling, types of sample, pretreatment of soil food and cosmetic.___ _2)

To know about sampling plan , sampling of raw material, and finished products.

3) To know about selection of method, criteria for method used , method validation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Paper I, Unit- I Quality In Analytical Chemistry - I	Sampling: Definition, types of sample, sampling plan, quality of sample, subsampling, Sampling of raw materials, intermediates and finished products. Sample preparations – dissolution technology and decomposition, storage of samples. Pre-treatment of samples: soil, food and cosmetics.	(8 L)	Quality in the analytical chemistry laboratory, E Prichard, John Wiley and sons N.Y 1997. Quality assurance in analytical Chemistry, W Funk, V Dammann, G. Donnevert VCH Weinheim1995 .	Lecture method, cooperative learning method/ white board and marker.

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	Selection of the Method: sources of methods, factors to consider when selecting a method, performance criteria for methods used, reasons for incorrect analytical results, method validation, and quality by design (PAT).	(7L)		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15 L_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____Swati Shreedhar Dhumal. _____ DEPARTMENT: ___Chemistry_____

CLASS: ___Msc. II_____ SEMESTER: _____IIrd_____ MONTH: _Sep , Oct 19____ ACADEMIC YEAR: __2019-20_____

LEARNING OBJECTIVE/S:

The learners will be able to : __1) To understand about measurements of uncertainty.

2) To gain knowledge about signal to noise ratio.

3) To know about pharmaceutical legislation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Paper - II Unit - II Quality In Analytical Chemistry - II	Measurement of uncertainty: Definition and evaluation of uncertainty,putting uncertainty to use, interpretation of results and improving the quality of results.	(4L)	Quality in the analytical chemistry laboratory, E Prichard, John Wiley and sons N.Y 1997. Quality assurance in analytical Chemistry, W Funk, V Dammann, G. Donnevert VCH Weinheim1995	Problem solving method, lecture method. / White board and marker

	Signal to noise: Signal to noise ratio, sources of noise in instrumental analysis. Signal to noise enhancement, hardware devices for noise reduction,software methods for noise reduction.	(6L)		
	Pharmaceutical Legislation: introduction to drug acts, drug rules(schedules), concept of regulatory affairs in pharmaceuticals, review of GLP and GMP and their regulations for analytical labs, roles and responsibilities ofpersonnel, appropriate design and placement of laboratory equipment, requirements for maintenance and calibration.	(5L)		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati shreedhar Dhumal._____DEPARTMENT: ___Chemistry_____

CLASS: _____Msc. II_____ SEMESTER: ____IIIrd_____ MONTH: ____Oct , Nov 19___ ACADEMIC YEAR: ___2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : _1) To gain general idea regarding of pharmaceutical industry.

2) To know Role of FDA in pharmaceutical industries.

3) To understand about official method of quality control.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper - IV, Unit - I Pharmaceutical Analysis	General idea regarding the Pharmaceutical Industry, definition and classification of drugs, introduction to pharmaceutical formulations, classification of dosage forms. Role of FDA in pharmaceutical industries.	(7L)	Government of India Publications of Food, Drug and Cosmetic Act and Rules. Google , Wikipedia.	Presentation method/ white board and marker.
	Sources of impurities in pharmaceutical products and raw materials.	(4L)		

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	Standardization of finished products and their characteristics, official methods of quality control.	(4L)		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15 L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____swati shreedhar Dhumal._____DEPARTMENT: ___Chemistry_____

CLASS: _____Msc. II_____ SEMESTER: ____IV th_____ MONTH: __Jan 2020_____ ACADEMIC YEAR: ___2019-20_____

LEARNING OBJECTIVE/S:

The learners will be able to : __1) To understand principle and concept of green chemistry and sustainable development.

2) To be able to calculate atom economic and uneconomic rections.

3) To provide knowledge of organic solvents.

4) To be able to deal with emerging green technologies.

5) To acquire knowledge in Designing Greener Processes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper - I, Unit - III Green chemistry	Principle and concepts of green chemistry: sustainable development and green chemistry, atom economy, examples of atom economic and atom uneconomic reactions, reducing toxicity.	(4L)	Green chemistry and catalyst, R. A. Sheldon, Isabella Arends, Ulf Hanefeld Wiley VCH verlag GmBH & co. Sustainable residential development: planning and design for green neighborhoods.	Group discussion method, problem solving method / white board and marker.

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	Organic solvents: environmentally benign solutions, solvent free systems, supercritical fluids (only introduction) Ionic liquids as catalysts and solvents.	(4L)		
	Emerging Green Technologies: photochemical reactions (advantages and challenges), examples. Chemistry using microwaves, sonochemistry and electrochemical synthesis.	(4L)		
	Designing Greener Processes: Inherently Safer Designs (ISD), Process intensification (PI) in-process monitoring.	(3L)		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Swati shreedhar Dhumal._____ DEPARTMENT: _Chemisyry_____ CLASS: ____Msc. II _____ SEMESTER: _____IV th____ MONTH: _Jan 2020___ ACADEMIC YEAR: 2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : __1) To understand about concept of Mass spectroscopy.

2) To learn concept of Raman spectroscopy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -II Unit -II Spectral method Iv	Mass spectroscopy: recapitulation, correlation of mass spectra with molecular structure- interpretation of mass spectra, analytical information derived from mass spectra- molecular identification, metastable peaks, Fragmentation Reactions.	(9L)	Principles of Instrumental Analysis, D. A. Skoog, F. J. Holler and J.A. Niemann 5th Ed. Google, Wikipedia.	Lecture method/ white board and marker.

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	Raman spectroscopy: Principle Theory Instrumentation , techniques(SERS and Resonance Raman) and Applications of Raman spectroscopy.	(6L)		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15L_____

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TEACHING PLAN (UNIT PLAN

NAME OF THE STAFF: _____Swati shreedhar Dhumal_____ DEPARTMENT: Chemistry ___

CLASS: _____Msc II_____ SEMESTER: _____IVth_____ MONTH: Feb 2020___ ACADEMIC YEAR: ___2019-20_____

LEARNING OBJECTIVE/S:

The learners will be able to : 1) To gain updated knowledge of solid waste management.

2) To acquire knowledge of method and treatment of waste.

3) To know about biomedical waste and its method of disposal.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III Unit- II Solid waste management.	Solid waste management: objectives, concept of recycle, reuse and recovery .	(3L)	Solid waste management, K Sasikumar and Sanoop Gopi Krishna PHI publication (2009) Solid waste management, Surendrakumar Northen Book Center (2009) Google , Wikipedia.	Group discussion method, question answer method/ white board and marker.

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	Methods of solid waste disposal	(2L)		
	Treatment and disposal of sludge / dry cake	(2L)		
	Managing non-decomposable solid wastes.	(2L)		
	Bio- medical waste : Introduction , Classification and methods of disposal	(5L)		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___Swati shreedhar Dhumal._____DEPARTMENT: _____Chemistry_____ _

CLASS: ___T.Y.Bsc_____ SEMESTER: _____VI th_____ MONTH: _Feb 2020____ACADEMIC YEAR: __2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : ___1) To understand about food processing and preservation.

2) To acquire knowledge in analysis of food products and detection of adulterants.

3) To know about cosmetic products and it's Composition and analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper- IV Unit- III Food and cosmetic analysis.	Food processing and preservation: Introduction, need, chemical methods, action of chemicals(sulphur dioxide, boric acid, sodium benzoate, acetic acid, sodium chloride and sugar) and pH control Physical methods (Pasteurization and Irradiation)	(10L)	Analytical chemistry (Himalaya publishing house).	Question answers method, cooperative learning method and group discussion method. / Black board and chalk
	Determination of boric acid by titrimetry and sodium benzoate by HPLC.			
	Study and analysis of food products and detection of adulterants 1) Milk: Composition & nutrients, types of milk (fat free, organic and			
	lactose milk) Analysis of milk for lactose by Lane Eynon's Method 2) Honey: Composition,Analysis of reducing sugars in honey by Coles Ferricyanide method. 3) Tea: Composition, types (green tea and mixed tea)Analysis of Tannin by Lowenthal's method4) Coffee: Constituents and composition, Role of Chicory Analysis of caffeine by Bailey Andrew method			

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	Cosmetics : Introduction and sensory properties	(5L)		
	Study of cosmetic products –1) Face powder: Composition Estimation of calcium and magnesium by complexometric titration2) Lipstick: ConstituentsAsh analysis for water soluble salts: borates, carbonates and zinc oxide 3) Deodorants and Antiperspirants: Constituents, properties ,Estimation of zinc by gravimetry.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15L_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Tanvi .A. Raul DEPARTMENT: Chemistry

CLASS: F.Y.B.sc (CBZ-A & B) SEMESTER: I MONTH: July to November ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop the knowledge about chemical kinetics and liquid state.

To develop the understanding about order of reactions and different instruments used to measure different properties of liquids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I	**1.1 Chemical Kinetics** Rate of reaction, rate constant, measurement of reaction rates, order and molecularity of reaction, integrated rate equation of first and second order reactions (with equal initial concentration of reactants) (Numericals expected) Determination of order of reaction by (a) Integration method (b) Graphical method (c) Ostwald's isolation method (d) Half time method (Numericals expected) **1.2 Liquid State** Surface tension: Introduction, methods of determination of surface tension by drop number method	8 7	Himalaya Publication F.Y.B.sc, Physical chemistry Textbook	Black board and chalk

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	(Numericals expected) Viscosity: Introduction, coefficient of viscosity, relative viscosity, specific viscosity, reduced viscosity, determination of viscosity by Ostwald viscometer (Numericals expected) Refractive index: Introduction, molar refraction and polarizability, determination of refractive index by Abbe's refractometer (Numerical s expected) Liquid crystals: Introduction, classification and structure of thermotropic phases (Nematic, smectic and cholesteric phases), applications of liquid crystals :			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI A. RAUL DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.sc (CBZ-A&B) SEMESTER: II MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

To develop knowledge about Ionic Equilibria, Solid state and Molecular spectroscopy.

To develop understanding about different types of electrolytes and electromagnetic waves.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I	**1.1 Ionic Equilibria** Strong, moderate and weak electrolytes, degree of ionization, factors affecting degree of ionization, ionization constant and ionic product of water, ionization of weak acids and bases, pH scale, common ion effect, dissociation constants of mono di and triprotic acid (exact treatment for monoprotic acid) Buffers: Introduction, types of buffers, derivation of Henderson equation for acidic and basic buffers, buffer action, buffer capacity (Numericals expected)	7	Himalaya Publication F.Y.B.sc, Physical chemistry Textbook	Black board and chalk
	1.2 Molecular Spectroscopy Electromagnetic radiation, electromagnetic spectrum, Planck's equation, interaction of electromagnetic radiation with matter: Absorption,	4		

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	emission, scattering, flourescence, electronic, vibrational and rotational transitions Beer Lambert's law (Numericals expected) **1.3 Solid State Chemistry** Types of solids, crystal lattice, lattice points, unit cell, space lattice and lattice plane, laws of crystallography: Law of constancy of interfacial angle, law of symmetry and law of rational indices (Numericals expected)	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.sc (PC-CZ) SEMESTER: III MONTH: JULY TO OCTOBER ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop knowledge about chemical kinetics and solutions.

To develop understanding about different theories based on chemical kinetics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I	**1.1 Chemical Kinetics- II** 1.1.1 Types of complex chemical reactions: Reversible or consecutive and parallel reactions. 1.1.2 Effect of temperature on rate of reaction , Arrhenius equations. 1.1.3 Theories of reaction rate : Collision theory, complex theory of biomolecular reactions etc.	7	Himalaya publication S.Y.B.sc, Physical chemistry textbook	Black board And chalk
	1.2 Solutions 1.2.1 thermodynamics of ideal solutions: Ideal solution and Raoul's law, deviations from Raoul's law- Non ideal solutions, vapour pressure composition and temperature, Lever rule etc.	8		

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	1.2.2 Partial miscibility of liquids: Critical solution temperature, effect of impurity on partial miscibility of liquids with respect to Phenol-water, Triethannolamine - water and nicotine - water systems. 1.2.3 Immiscibility of liquids- Principle of steam distillation, Nernst distribution law and its applications.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.sc (PC-CZ) SEMESTER: IV MONTH: NOVEMBER TO FEBRUARY ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop the knpwledge of solid state and catalysis.

To develop the understanding about state and catalysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I	**1.1 Solid state** 1.1.1 Recapitulation of laws of crystallography and types of crystals. 1.1.2 Characteristics of simple cubic, face centered cubic and body centered cubic systems. 1.1.3 Use of X-ray in study of crystal structure, bragg's equation. **1.2 Catalysis** 1.2.1 types of catalysis, catalytic activity, specificity and selectivity, inhibitors, catalyst poisoning and deactivation. 1.2.2 Mechanisms and kinetics and acid base catalyzed reaction. 1.2.3 Mechanisms and kinetics of enzyme catalyzed reaction. 1.2.4 Effect of particle size and efficiency of nano particles as catalyst.	7 8	Himalaya Publication S.Y.B.sc, Physical chemistry textbook	Black board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART II SEMESTER: III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop knowledge of body fluids.

To develop understanding about analysis of different body fluids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit I	**Bioanalytical chemistry** **1.1 Body Fluids** 1.1.1 Composition of body fluids and detection of abnormal levels ofglucose, creatinine, uric acid in blood, protein, ketone bodies and bilirubin in urine leading to diagnosis of diseases.	5	General, organic and biological chemistry, H. Stephen Stoker, Cengage Learning.	Black board and chalk
	1.1.2 Physiological and nutritional significance of vitamins (watersoluble and fat soluble) and minerals.	5		
	1.1.3 Analytical techniques (including microbiological techniques) forvitamins.	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART II SEMESTER: III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop the knowledge about cosmetics.

To develop understanding about different elements present in cosmetics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit IV Pharmaceutical and Organic Analysis	**Cosmetic Analysis** **4.1 Cosmetics** Introduction. Evaluation of cosmetic materials, raw materials and additives. Formulation, standards and methods of analysis.	2	Google	Black board and chalk
	4.2 Deodorants and antiperspirant Al, Zn, Boric acid, chlorides, sulphates, hexachlorophene, methanamine, phenolsulphonates and urea.	3		
	4.3 Face powder Fats, fatty acids, boric acid, barium sulphate, Ca, Mg, Ti, Fe, oxides of Ti, Fe and Al.	3		
	4.4 Hair tonic 2,5-diaminotoluene, potassium borates, sodium perborate, pyrogallol, resorcinol, salicylic acid, dithioglycollic acid (inpermanent wavers).	3		

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	4.5 Creams and Lotions Types of emulsions, chloroform soluble materials, glycerol, pH emulsion, ash analysis, nonvolatile matter (IR spectroscopy) . **4.6 Lipsticks** General analysis, determination of -nonvolatile matter, lakes and fillers, trichloroethylene-acetone soluble contents.	2 2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART II SEMESTER: IV MONTH: JANUARY TO APRIL ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop knowledge of hyphenated techniques.

To develop understanding of hyphenated techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit IV	**Hyphenated Techniques** 4.1 concept of hyphenation, need for hyphenation, possible hyphenations. 4.2 Interfacing devices and applications of GC – MS, ICP -MS, GC -IR, Tandem Mass Spectrometry, LC – MS: HPLC-MS, CE-MS.	2 13	Principles of Instrumental Analysis, D. A. Skoog, F. J. Holler and J.A. Niemann 5 th Ed.	Black board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART II SEMESTER: IV MONTH: JANUARY TO APRIL ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop knowledge of effluent treatment.

To develop understanding about different steps involved in effluent treatment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit I	**Effluent Treatment** 1.1 Effluent treatment plant general construction and process flow charts.	3	Water and water pollution (hand book) Ed., Seonard'l Ciacere, Vol I to IV, Marcel Dekker inc. N.Y.(1972)	Black board and chalk
	1.2Treatment and disposal of Sewage.	3		
	1.3. Effluent parameters for metallurgical industry.	2		
	1.4 Permissible limits for metal (example Cr, As, Pb, Cd etc) traces in the effluent.	2		
	1.5 Recovery of metals from effluent, modern methods – Electrodialysis,Electrodeposition and Ion Exchange etc.	3		
	1.6 Recycle and reuse of process and treated (effluent) water.	2		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____AJITKUMAR INGLE_____DEPARTMENT: _____CHEMISTRY___

__CLASS: ___TYBSC_____ SEMESTER: _VTH _____ MONTH: __AUG-SEPT ___ ACADEMIC YEAR: _2018-19 ____

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To study solvent extraction in detail like Factors affecting extraction, Concept of $[pH]_{1/2}$ and its significance, Craig's counter current extraction.

2) To study HPLC instrumentation, working and applications along with detectors.

3) To study HPTLC instrumentation, working and applications in details.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV UNIT IV **METHODS OF SEPARATION – I (6 UNITS)**	**4.1 Solvent Extraction** 4.1.1 Factors affecting extraction: Chelation, Ion pair formation and Solvation 4.1.2 Graph of percent extraction versus pH. Concept of $[pH]_{1/2}$ and its significance (derivation not expected)	06L	Saujanya publication,sheth publication,Himalaya publication textbook of analytical chemistry	CHALK AND BOARD

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	4.1.3 Craig's counter current extraction: Principle, apparatus and			
	applications *4.1.4 Solid phase extraction: Principle, process and applications with* *special reference to water and industrial effluent analysis.* *4.1.5 Comparison of solid phase extraction and solvent extraction.*			
	4.2 High Performance Liquid chromatography (HPLC) *4.2.1 Introduction and Principle* *Instrumentation- components with their significance: Solvent* *Reservoir, Degassing system, Pumps-(reciprocating pumps,* *screw driven- syringe type pumps, pneumatic pumps,*	*06L*	*SAME AS ABOVE*	*SAME AS ABOVE*

SIGNATURE OF THE STAFF ***SIGNATURE OF THE H.O.D.***

	advantages and disadvantages of each pump), Precolumn, *Sample injection system, HPLC Columns, Detectors(UV –* *Visible detector, Refractive index detector)*			

	4.2.2 Qualitative and Quantitative Applications of HPLC			
	4.3 High Performance Thin Layer Chromatography (HPTLC) *4.3.1 Introduction and Principle* *Stationary phase, Sample application and mobile phase* *4.3.2 Detectors* *a) Scanning densitometer- Components.* *Types of densitometer- Single beam and Double beam* *b) Fluorometric Detector* *4.3.3 Advantages, disadvantages and applications* *4.3.4 Comparison of TLC and HPTLC*	*03L*	*SAME AS ABOVE*	*SAME AS ABOVE*

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __AJITKUMAR INGLE_____DEPARTMENT: CHEMISTRY_____

CLASS: _Tybsc_____ SEMESTER: _Vth____ MONTH: AUG-SEPT_____

ACADEMIC YEAR: __2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to :

1. *To study AAS like instrumentation, working and applications in detail.*
2. *To study AES like instrumentation, working and applications in detail.*
3. *To study Molecular Fluorescence and Phosphorescence Spectroscopy like instrumentation, working and applications in details.*
4. *To study turbidimetry and nephelometry like instrumentation, working and applications in details.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ANALYTICAL CHEMISTRY PAPER-IV UNIT-3 OPTICAL METHODS(6UNITS)	3.1 **Atomic Spectroscopy: Flame Emission spectroscopy(FES) and** **Atomic Absorption Spectroscopy(AAS)** 3.1.1 Introduction, Energy level diagrams, Atomic spectra, Absorption and Emission Spectra 3.1.2 Flame Photometry – Principle, Instrumentation (Flame atomizers,	07L	SAUJANYA PRAKASHAN TEXTBOOK, SHETH PUBLICATION TEXTBOOK, HIMALAYA PUBLICATION TEXTBOOK	CHALK AND BOARD

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	types of Burners, Wavelength selectors, Detectors) *3.1.3 Atomic Absorption Spectroscopy - Principle, Instrumentation* *(Source, Chopper, Flame and Electrothermal Atomiser)* *3.1.4 Quantification methods of FES and AAS - Calibration curve* *method, Standard addition method and Internal standard method* *3.1.5 Comparison between FES and AAS* *3.1.6 Applications, Advantages and Limitations*			
	3.2 ***Molecular Fluorescence and Phosphorescence Spectroscopy*** *3.2.1 Introduction and Principle* *3.2.2 Relationship of Fluorescence intensity with concentration* *3.2.3 Factors affecting Fluorescence and Phosphorescence* *3.2.4 Instrumentation and applications*	*04L*	*SAME AS ABOVE*	*SAME AS ABOVE*

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	3.2.5 Comparison of Fluorimetry and Phosphorimetry 3.2.6 Comparison with Absorption methods			
	3.3 Turbidimetry and Nephelometry 3.3.1 Introduction and Principle 3.3.2 Factors affecting scattering of Radiation: Concentration, particle size, wavelength, refractive index 3.3.3 Instrumentation and applications	04L	SAME AS ABOVE	SAME AS ABOVE

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __AJITKUMAR INGLE_____DEPARTMENT: _____CHEMISTRY_____

_ CLASS: ____TYBSC_____ SEMESTER: _____VITH_____ MONTH: _DEC-JAN _____

ACADEMIC YEAR: _2018-19_____

LEARNING OBJECTIVE/S:

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The learners will be able to :

1. *_To study the gas chromatography Principle, Theory and terms involved Block diagram and components,types of columns,stationary phases in GSC and GLC, Detectors: TCD, FID, ECD, Qualitative, Quantitative analysis and applications Comparison between GSC and GLC along with calculations.*

2. *To study ion exchange chromatography Principle, Types of Ion Exchangers , Ideal properties of resin, Ion Exchange equilibria and mechanism, selectivity coefficient andseparation factor,Factors affecting separation of ion,Ion exchange capacity and its determination for cation and anion,Exchangers,Applications of Ion Exchange Chromatography in detail.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV UNIT-2 **METHODS OF SEPARATION - II (3 & 6 UNITS)**	**2.1 Gas Chromatography (Numerical and word problems are expected)** 2.1.1 Introduction, Principle, Theory and terms involved 2.1.2 Instrumentation: Block diagram and components,types of columns,stationary phases in GSC and GLC, Detectors: TCD, FID, ECD 2.1.3 Qualitative, Quantitative analysis and applications 2.1.4 Comparison between GSC and GLC	09L	SAUJANYA PRAKASHAN TEXTBOOK, SHETH PUBLICATION TEXTBOOK, HIMALAYA PUBLICATION TEXTBOOK	CHALK AND BOARD
	2.2 Ion Exchange Chromatography	06L	SAME AS ABOVE	SAME AS ABOVE

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	2.2.1 Introduction, Principle. 2.2.2 Types of Ion Exchangers , Ideal properties of resin 2.2.3 Ion Exchange equilibria and mechanism, selectivity coefficient andseparation factor,Factors affecting separation of ions 2.2.4 Ion exchange capacity and its determination for cation and anion exchangers. 2.2.5 Applications of Ion Exchange Chromatography with reference to Preparation of demineralised water, Separation of amino acids			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____AJITKUMAR INGLE_____DEPARTMENT: CHEMISTRY_____

__CLASS: _____TYBSC_____ SEMESTER: _____VITH_____ MONTH: ____JAN-FEB _____ ACADEMIC YEAR: _____2018 -19_____

LEARNING OBJECTIVE/S:
The learners will be able to :

1. *To study thermal methods like tga with basic terms and thermogram,applications.*
2. *To study DTA instrumentations,and applications.*
3. *To study the thermometric titrations in detail with examples.*
4. *To study Introduction and need for validation of a method ,Validation Parameters: Specificity, Selectivity, Precision, Linearity, Accuracy and Robustness.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV UNIT IV THERMAL	4.1 Thermal Methods 4.1.1 Introduction to various thermal methods (TGA, DTA and Thermometric titration)	12L	Saujanya publication,sheth publication,Himalaya publication textbook of analytical	Chalk and board

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METHODS AND ANALYTICAL METHOD VALIDATION ***(6 UNITS)***			*chemistry*	
	4.1.2 ***Thermogravimetric Analysis(TGA)*** *Instrumentation-block diagram,thermobalance (Basic components:* *balance, furnace, temperature measurement and control, recorder)* *Thermogram (TG curve)for$CaC_2O_4..H_2O$ and $CuSO_4.5H_2O$* *Factors affecting thermogram-Instrumental factors and Sample* *characteristics* *Applications:* *Determination of drying and ignition temperature range* *Determination of percent composition of binary mixtures* *(Estimation of Calcium and Magnesium oxalate)* *4.1.3* ***Differential Thermal Analysis (DTA):*** *Principle, Instrumentation, and Reference material used* *Differential thermogram (DTA curve) $CaC_2O_4.H_2O$ and*		*Same as above*	*Same as above*

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	$CuSO_4.5H_2O$ *Applications* *Comparison between TGA and DTA.* *4.1.4* ***Thermometric Titrations*** *- Principle and Instrumentation* *Thermometric titrations of :* *1) HCl v/s NaOH* *2) Boric acid v/s NaOH* *3) Mixture of Ca^{+2} and Mg^{+2} v/s EDTA* *4) Zn^{+2} with Disodium Tartarate.*			
	4.2 Analytical Method Validation *4.2.1 Introduction and need for validation of a method* *4.2.2 Validation Parameters: Specificity, Selectivity, Precision, Linearity,* *Accuracy and Robustness*	*03L*	*Same as above*	*Same as above*

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15L_____

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TEACHING PLAN (UNIT PLAN)

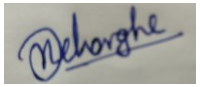
NAME OF THE STAFF: DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: MSc –I SEMESTER: I MONTH: SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To study quantum chemistry
The learners will be able to: Understand the concept of quantum chemistry and to solve Numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – II QUANTUM CHEMISTRY	Introduction, Schrodinger wave equation, wave function, properties, Normalisation, orthogonality	3L	R. K. Prasad	Power point presentation
	Operators and algebra, Hermitian operator, Hamiltonian operator, Eigen functions, postulates of quantum mechanics	4L	R. K. Prasad	Power point presentation
	Applications of quantum mechanics for free particle, one dimension , two dimension and three dimension box	4L	R. K. Prasad	Power point presentation
	Harmonic oscillator, Hermite polynomials, recursion formula	3L	R. K. Prasad	Power point presentation
	Numericals	1L	R. K. Prasad	Chalk -board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

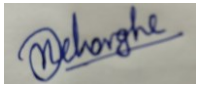
NAME OF THE STAFF: DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: MSc. –I SEMESTER: I MONTH: OCTOBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To study elector-chemistry
The learners will be able to: classify chemical cells and derived the expressions for it and solve numericals

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – IV ELECTRO-CHEMISTRY	Introduction, Debye-Huckel theory, limiting law, its extension	3L	S. Glasstone	Chalk -board
	Cunductance, relaxation effect, Onsager equation, its validity, Debye-Falkhagen and Wein effect	4L	S. Glasstone	Chalk -board
	Batteries	3L	S. Glasstone	Chalk -board
	Bio-eelctrochemistry	3L	S. Glasstone	Chalk -board
	Numericals	2L	S. Glasstone	Chalk -board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

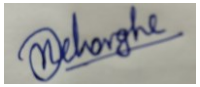
NAME OF THE STAFF: DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: MSc. –I SEMESTER: I I MONTH: JANUARY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To study quantum chemistry
The learners will be able to: Understand the concept of quantum chemistry and to solve Numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – II QUANTUM CHEMISTRY	Rigid rotar, Spherical coordinates, theta equation, spherical harmonics	3L	R. K. Prasad	Chalk -board
	Hydogen atom, separation of energy, quantum numbers, probability density functions	4L	R. K. Prasad	Chalk -board
	Application of Schrodinger equation, need for approximate solution, derivation	3L	R. K. Prasad	Chalk -board
	Huckel molecular orbitals	3L	R. K. Prasad	Chalk -board
	Numericals	2L	R. K. Prasad	Chalk -board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

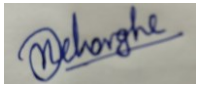
NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: MSc. –I SEMESTER: II MONTH:FEBRUARY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To study structures of solids and phase equillibria
The learners will be able to: draw structures of solids and solve numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – IV SOLID STATE CHEMISTRY AND PHASE EQUILLIBRIA	Solid state chemistry	1L	S. Glasstone	Chalk -board
	Structure, types of defects and its stoichiometry	4L	H. V. keer	Chalk -board
	Phase equillibria	4L	H. V. keer	Chalk -board
	Two component system	3L	H. V. keer	Chalk -board
	Three component system	3L	H. V. keer	Chalk -board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

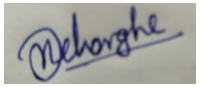
NAME OF THE STAFF: DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: T.Y.BSc. SEMESTER: V MONTH: AUGUST/SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To study properties of solid and liquid
The learners will be able to: Write derivations of colligative properties and solve numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – II CHEMICAL THERMODYNAMICS AND CHEMICAL KINETICS	Colligative properties : vapour pressure, measurement – static and dynamic method	2L	Ira Levine	Chalk -board
	Elevation in boiling point, depression in freezing point, and numericals	5L	Ira Levine	Chalk -board
	Thermodynamic derivation of Van't hoff equation, measurement, reverse osmosis, numericals	3L	Ira Levine	Chalk -board
	Collision theory for unimolecular and bimolecular reactions and numericals	3L	K. Laider	Chalk -board
	Classificaton of reactions , numericals	2L	K. Laider	Chalk -board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

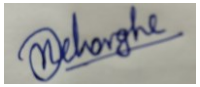
NAME OF THE STAFF : DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: T.Y.BSc. SEMESTER: V MONTH: AUGUST/SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To study nuclear chemistry.
The learners will be able to: Explain principle, construction and working of nuclear reactors and counters, solve numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – III NUCLEAR CHEMISTRY	Basic terms, Radioactive constants, units, numericals	3L	Ira Levine	Chalk -board
	Detection and measurement of radioactivity, counters, behaviour of ion pairs	3L	Ira Levine	Chalk -board
	Applications of use of radioisotopes as tracers, Nuclear reactions, threshold energy, Q- value, Numericals	4L	Ira Levine	Chalk -board
	Fission process, Nuclear reactors, fusion process	3L	Ira Levine	Chalk -board
	Numericals	2L	Ira Levine	Chalk -board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

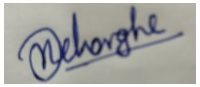
NAME OF THE STAFF: DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: T.Y.BSc. SEMESTER: V I MONTH: DECEMBER/JANUARY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To study electrochemistry.
The learners will be able to : classify chemical cells and derived the expressions for it and solve numericals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – I ELECTRO CHEMISTRY	Introduction, Activity and activity coefficient, Debye-Huckel limiting law, Numericals	4L	S. Glasstone	Chalk -board
	Classification of electrochemical cells, derivation and explanation of each cell, Numericals	4L	S. Glasstone	Chalk -board
	Polarization concept	3L	S. Glasstone	Chalk -board
	Decomposition potential and overvoltage	2L	S. Glasstone	Chalk -board
	Numericals	2L	S. Glasstone	Chalk -board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

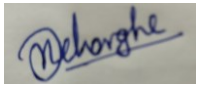
NAME OF THE STAFF: DIPIKA CHORGHE DEPARTMENT: CHEMISTRY

CLASS: T.Y.BSc. SEMESTER: VI MONTH: JANUARY/FEBRUARY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To study quantum chemistry
The learners will be able to: Understand the concept of quantum chemistry and to solve Numericals based on it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- 1 UNIT – III BASICS OF QUANTUM CHEMISTRY	Introduction, basics of quantum chemistry, black body radiation, Compton effect	3L	R.K.Prasad	Chalk -board
	Quantum mechanics, postulates ,Progressive and standing waves, interpretation and properties of wave function	4L	R.K.Prasad	Chalk -board
	State function and significance, operator concept, algebra, eigen value, Numericals	3L	R.K.Prasad	Chalk -board
	Renewable energy sources, solar energy, Silicon solar cell	3L	Ira Levine	Chalk -board
	Hydrogen: fuel of the future, production of hydrogen fuel, advantages.	2L	Ira Levine	Chalk -board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dipti Gharat, DEPARTMENT:Chemistry , CLASS: T. Y. Bsc, SEMESTER: _V_and VI_ MONTH:

ACADEMIC YEAR: _____2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Learning objectives are statements that define the expected goal of a curriculum, course, lesson or activity in terms of demonstrable skills or knowledge that will be acquired by a student as a result of instruction._____

_____

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II SOLID STATE CHEMISTRY	Sem V Structures of Solids 2.2.1 Explanation of terms viz.crystal lattice, lattice point, unit cell and lattice constants. 2.1.2 Closest packing of rigid spheres (hcp,ccp), packing density in simple cubic, bcc and fcc lattices. Relationship between density, radius of unit cell and lattice parameters. 2.1.3 Stoichiometric Point defects in solids (discussion on	11	Solid State Chemistry and its Applications" by A R West Google, Himalaya and sheth publication text book, you tube	Google classroom

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	Frenkel and Schottky defects expected).		video, e-books	
	2.2 Superconductivity. 2.2.1 Discovery of superconductivity. 2.2.2 Explanation of terms like superconductivity, transition temperature, Meissner effect. 2.2.3 Different types of super conductors viz.conventional superconductors, alkali metal fullerides, high temperature super conductors. 2.2.4 Brief application of superconductors.	04	Puri sharma kalia, puri sharma pathania	
	Sem VI			
Paper II Unit III ORGANOMETALLIC CHEMISTRY	3.1 Organometallic Compounds of main group metal 3.1.1General characteristics of various types of organometallic compounds, viz.ionic, □-bonded and electron deficient compounds. 3.1.2 General synthetic methods of organometallic compounds : (i) Oxidative-addition, (ii)Metal-metal exchange(transmetallation), (iii) Carbanion-halide exchange, (iv) Metal-hydrogen exchange(metallation) and (v) Methyleneinsertion reactions. 3.1.3 Some chemical reactions of organometallic compounds:(i) Reactions with oxygen and halogens, (ii) Alkylation and arylation reactions (iii) Reactions with protic reagents, (iv) Redistribution reactions and (v) Complex	06		

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	formation reactions.			
	3.2 Metallocenes Introduction, Ferrocene : Synthesis, properties, structure and bonding on the basis of VBT. 3.3 Catalysis 3.3.1 Comparison between homogeneous and heterogeneous catalysis 3.3.2 Basic steps involved in homogeneous catalysis 3.3.3 Mechanism of Wilkinson's catalyst in hydrogenation of alkenes.	09		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Dipti Gharat _____ DEPARTMENT:Chemistry ____ CLASS: F. Y. Bsc SEMESTER: I and II MONTH:

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Learning objectives are statements that define the expected goal of a curriculum, course, lesson or activity in terms of demonstrable skills or knowledge that will be acquired by a student as a result of instruction._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II Comparative chemistry of Main Group Elements	Sem I			Google classroom
	Metallic and non-metallic nature, oxidation states, electronegativity, anomalous behaviour of second period elements, allotropy, catenation, diagonal relationship.Comparative chemistry of carbides, nitrides, oxides and hydroxides of group I and group II elements. Some important compounds- NaHCO3, Na2CO3, NaCl, NaOH, CaO, CaCO3;	15	Himalaya and sheth publication book, Google, you tube video, e-books	

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	oxides of carbon, oxides and oxyacids of sulphur and nitrogen with respect to environmental aspects.			
Sem II Unit II Chemical Bond and Reactivity	Sem II			Google classroom
	2.1.Types of chemical bond, comparison between ionic and covalent bonds, polarizability (Fajan's Rule), shapes of molecules, Lewis dot structure, Sidgwick Powell Theory, basic VSEPR theory for ABn type molecules with and without lone pair of electrons, isoelectronic principles, applications and limitations of VSEPR theory.	07		
	2.2: Oxidation Reduction Chemistry: a) Reduction potentials b) Redox potentials: half reactions; balancing redox equations.c) Redox stability in wateri) Latimer and Frost Diagramsii) pH dependence of redox potentials.d) Applications of redox chemistry i) Extraction of elements: (example: isolation of copper by auto reduction)ii) Redox reagents in Volumetric analysis: a) I2; b) KMnO4iii) Titration curves:i) single electron systems (example Ce(IV) against Fe(II)); and ii) Multi electron systems as in KMnO4 against Fe(II))	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. SHEETAL R. POWAR** DEPARTMENT: CHEMISTRY CLASS: FYBSc

SEMESTER: I MONTH: July to September ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

i. Understand the basics of Organic Chemistry

ii. Understand and be well versed with the nomenclature of various functional groups

iii. Learn bonding, formation and reactions of organic compounds

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I U-III Basics of Organic Chemistry	Classification and Nomenclature of Organic Compounds: Review of basic rules of IUPAC nomenclature. Nomenclature of mono and bi-functional aliphatic compounds on the basis of priority order of the following classes of compounds: alkanes, alkenes, alkynes, haloalkanes, alcohols, ethers, aldehydes, ketones, carboxylic acids, carboxylic acid derivatives (acid halides, esters, anhydrides, amides), nitro compounds, nitriles and amines; including their cyclic analogues.	(5L)	Morrison and Boyd Organic Chemistry Mc Murry, J.E. Fundamentals of Organic Chemistry	Chalk and Board
	Bonding and Structure of organic compounds: Hybridization: sp3, sp2, sp hybridization of carbon and nitrogen; sp3 and sp2 hybridizations of oxygen in Organic compounds (alcohol, ether, aldehyde, ketone, carboxylic acid, ester, cyanide, amine and amide) Overlap of atomic orbitals: Overlaps of atomic orbitals to form sigma and pi bonds, shapes of organic molecules. Shapes of molecules; Influence of hybridization on bond	(4L)		Chalk and Board

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	properties (as applicable to ethane, ethene, ethyne)			
	Fundamentals of organic reaction mechanism: Electronic Effects: Inductive, electromeric, resonance and mesomeric effects, hyperconjugation and their applications; Dipole moment; Organic acids and bases; their relative strengths. Bond fission: Homolytic and Heterolytic fission with suitable examples. Electrophiles and Nucleophiles; Nucleophilicity and basicity; Types (primary, secondary, tertiary, allyl, benzyl), shape and their relative stability of reactive intermediates: Carbocations, Carbanions and Free radicals. Introduction to types of organic reactions: Addition, Elimination and Substitution reaction.	(6L)		Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. SHEETAL R. POWAR** DEPARTMENT: CHEMISTRY CLASS: FYBSc

SEMESTER: I MONTH: Nov to February ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

i. Understand the basics of Organic Chemistry

ii. Learn the bonding and reactions of aliphatic compounds.

iii. Learn the mechanisms of certain basic reactions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I U-III Chemistry of Aliphatic Hydrocarbons	3.1 Carbon-Carbon sigma bonds: Chemistry of alkanes: Formation of alkanes, Wurtz Reaction, Wurtz-Fittig Reactions, Free radical substitutions: Halogenation - relative reactivity and selectivity.	(3L))	Morrison and Boyd Organic Chemistry Mc Murry, J.E. Fundamentals of Organic Chemistry	Chalk and Board
	3.2 Carbon-Carbon pi bonds: Formation of alkenes and alkynes by elimination reactions: Mechanism of E1, E2, E1cb reactions. Saytzeff and Hofmann eliminations. Reactions of alkenes: Electrophilic additions their mechanisms (Markownikoff/ Anti Markownikoff addition), Mechanism of oxymercuration-demercuration, hydroboration-oxidation, ozonolysis, reduction(catalytic and chemical), syn and	(12L)		Chalk and Board

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	anti-hydroxylation (oxidation). 1, 2-and 1, 4- addition reactions in conjugated dienes and, Diels-Alder reaction; Allylic and benzylic bromination using N-bromosuccinimide and mechanism, e.g. propene, 1-butene, toluene, ethylbenzene. Reactions of alkynes: Acidity, Electrophilic and Nucleophilic additions. Hydration to form carbonyl compounds, Alkylation of terminal alkynes.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. SHEETAL R. POWAR** DEPARTMENT: CHEMISTRY CLASS: TYBSc

SEMESTER: V MONTH: July to September ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

i. Understand the mechanisms of important reactions

ii. Learn the basics of pericyclic reactions

iii. Understand the reactions and mechanisms in photochemical process

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III (Organic Chemistry) Unit I 1.1. Mechanism of organic reactions	1.1.1 The basic terms & concepts: bond fission, reaction intermediates, electrophiles & nucleophiles, ligand, base, electrophilicity vs. acidity & nucleophilicity vs basicity. 1.1.2 Neighbouring group participation in nucleophilic substitution reactions: participation of lone pair of electrons, kinetics and stereochemical outcome.	(10 L)	A guidebook to mechanism in Organic Chemistry, Peter Sykes, Organic Reaction	Chalk and Board

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	1.1.3 Acyl nucleophilic substitution (Tetrahedral mechanism): Acid catalyzed esterification of carboxylic acids (AAC2) and base promoted hydrolysis of esters (BAC2). 1.1.4 Pericyclic reactions, classification and nomenclature : Electro cyclic reactions (ring opening and ring closing), cycloaddition, sigma tropic Rearrangement, group transfer reactions, cheletropic reaction (definition and one example of each type) 1.1.4.2 Pyrolytic elimination: Cope, Chugaev, pyrolysis of acetates		Mechanism, 4th edition, Ahluwalia	
1.2 Photochemistry	1.2.1 Introduction: Difference between thermal and photochemical reactions. Jablonski diagram, singlet and triplet states, allowed and forbidden transitions, fate of excited molecules, photosensitization. 1.2.2 Photochemical reactions of olefins: photoisomerization, photochemical rearrangement of 1,4- dienes (di- π methane) 1.2.3 Photochemistry of carbonyl compounds: Norrish I, Norrish II cleavages. Photo reduction (e.g. benzophenone to benzpinacol)	(5 L)	Organic Chemistry, Morrison and Boyd Organic chemistry, John Mc Murry	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. SHEETAL R. POWAR** DEPARTMENT: CHEMISTRY CLASS: TYBSc

SEMESTER: VI MONTH: Nov to February ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to:

i. Understand the mechanisms of important reactions

ii. Learn the carbohydrate chemistry

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III (Organic Chemistry) Unit II 2.1 Molecular Rearrangements	Mechanism of the following rearrangements with examples and stereochemistry wherever applicable. 2.1.1 Migration to the electron deficient carbon: Pinacol-pinacolone rearrangement. 2.1.2 Migration to the electron deficient nitrogen: Beckmann rearrangement. 2.1.3 Migration involving a carbanion : Favorski rearrangement. 2.1.4 Name reactions: Michael addition, Wittig reaction.	(5 L)	Stereochemistry by Nassipuri.	Chalk and Board
2.2 Carbohydrates	2.2.1 Introduction: classification, reducing and non-reducing sugars, DL notation 2.2.2 Structures of monosaccharides: Fischer projection (4-6 carbon monosaccharides) and Haworth formula (furanose and pyranose forms of pentoses and hexoses) Interconversion: open chain and Haworth forms of monosaccharides with 5 and 6 carbons. Chair conformation with stereochemistry of D-glucose, Stability of chair form of D-glucose 2.2.3 Stereoisomers of D-glucose: enantiomer, diastereomers, anomers, epimers. 2.2.4 Mutarotation in D-glucose with mechanism 2.2.5 Chain lengthening & shortening reactions: Modified Kiliani-Fischer synthesis (D-arabinose to D-glucose and D-mannose), Wohl method (D-glucose to D-arabinose) 2.2.6 Reactions of D-glucose and D-fructose: (a) Osazone formation (b) reduction: Hi/Ni, NaBH4 (c) oxidation: bromine water, HNO3, HIO4 (d) acetylation (e) methylation:(d) and (e) with cyclic pyranose forms 2.2.7 Glycosides: general structure	(10 L)	Organic chemistry Morrision and Boyd. Introduction to Organic chemistry, John McMurry	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: **Dr. SHEETAL R. POWAR** DEPARTMENT: CHEMISTRY CLASS: MSc

SEMESTER: III MONTH: Aug to Oct ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

i. Understand the mechanisms and concepts of new reactions

ii. Learn new methods of synthesis

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper - II Synthetic Organic Chemistry-I Unit 1: Name reactions with mechanism and application	1.1 Mukaiyama esterification, Mitsonobu reaction, Darzen's Glycidic Ester syntheis, Ritter reaction, Yamaguchi esterification, Peterson olefination.	[5L]	Organic Chemistry, Clayden Greeves Warren and Wothers,	Chalk and Board
	1.2 Domino reactions: Characteristics; Nazerov cyclization	[3L]		
	1.3 Multicomponent reactions: Strecker Synthesis, Ugi 4CC, Biginelli synthesis, Hantzsch synthesis, Pictet-Spengler synthesis	[5L]		
	1.4 Click Reactions: Characteristics; Huisgen 1,3-Dipolar Cycloaddition	[2L]		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. SHEETAL R. POWAR** DEPARTMENT: CHEMISTRY CLASS: MSc

SEMESTER: IV MONTH: Jan to March ACADEMIC YEAR: 2018-19

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LEARNING OBJECTIVE/S:
The learners will be able to:

i. Understand the concepts of heterocyclic compounds

ii. Learn synthesis and reactions of heterocyclic compounds

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper - III (Natural products and heterocyclic chemistry) Unit 3 Heterocyclic compounds-I	Introduction, classification, Nomenclature of heterocyclic compounds of monocyclic (3-6 membered) (Common, systematic (Hantzsch-Widman) and replacement nomenclature) Structure, reactivity, synthesis and reactions of pyrazole, imidazole, oxazole, isoxazole, thiazole, isothiazole, pyridazines, pyrimidine, pyrazines and oxazines.	15 L	Heterocyclic chemistry, 3rd edition, Thomas L. Gilchrist, Pearson Education,	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: I MONTH: AUGUST-OCTOBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Aliphatic nucleophilic substitution reactions: S_N1, S_N2, S_N^i reactions, SET mechanism, S_N reactions involving neighboring group participation (NGP), Aromatic nucleophilic substitution: S_NAr, benzyne mechanism, ipso, cine, tele, vicarious substitution, Ester hydrolysis.

2. Aromaticity: Frost-Musulin diagram, Huckel's (4n+2) and 4n rules, aromatic and antiaromatic compounds upto 18 carbon atoms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit II- Nucleophilic substitution reactions and Aromaticity.	Unit 2.1- Nucleophilic substitution reactions	9 L	Advanced Organic Chemistry, F. A. Carey and R. J. Sundberg.	Chalk and board
	Unit 2.2- Aromaticity	6 L	Advanced Organic Chemistry: Reactions and mechanism, L.G. Wade, Jr., Maya Shankar Singh.	Chalk and board

G.V. Gadre

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: II MONTH: January-March ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study Proton magnetic resonance spectroscopy: Principle, chemical shift, spin-spin coupling, coupling constant, Karplus equation.
2. ^{13}C NMR spectroscopy: Theory and comparison with proton NMR, proton coupled and decoupled spectra, off-resonance decoupling.
3. Mass spectrometry: Molecular ion peak, base peak, isotopic abundance, Nitrogen rule, fragmentation pattern in various classes of organic compounds.
4. Structure determination involving individual or combined use of the above spectral techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III, Unit IV- NMR spectroscopy and Mass spectrometry	Unit 4.1- Proton magnetic resonance spectroscopy	8 L	Introduction to Spectroscopy, Donald L. Pavia.	Chalk and board
	Unit 4.2- ^{13}C NMR spectroscopy	3 L	Organic Spectroscopy- Principles and Applications,	Chalk and board

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
			Jagmohan.	
	Unit 4.3- Mass spectrometry	4 L	Spectroscopy of Organic Compounds, P.S. Kalsi.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: III MONTH: AUGUST-NOVEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study Carbohydrates: structure elucidation of Lactose, structural features and applications of various carbohydrates.
2. Natural pigments: structural features and biological importance of various classes of natural pigments like carotenoids, flavones, quinones, porphyrins.
3. Insect pheromones: types of pheromones, synthesis of some pheromones.
4. Alkaloids: occurrence and importance of morphine, atropine, coniine.
5. Synthesis of some natural products.
6. Study of Prostaglandins, Lipids, Insect growth regulators, Plant growth regulators.
7. Drug discovery, design and development: Important topics of medicinal chemistry like Receptor, Therapeutic index, Drug assay. Basic pharmacokinetics as ADME properties.
8. Discovery of Penicillin and Librium without lead, identification of pharmacophore, functional group modification, structure activity relationship (SAR)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III- Unit I-	Unit 1.1- Carbohydrates	5 L	Organic Chemistry	Chalk and board

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Natural Products-I	Unit 1.2- Natural pigments	5 L	Natural Products Volume-II, O. P. Agarwal.	Chalk and board
	Unit 1.3- Insect pheromones	3 L		Chalk and board
	Unit 1.4- Alkaloids	2 L		Chalk and board
Paper III- Unit II- Natural Products-II	Unit 2.1- Multi-step synthesis of natural products	8 L	Natural products chemistry and applications, Sujata V. Bhat, B.A. Nagasampagi.	Chalk and board
	Unit 2.2- Prostaglandins	2 L		Chalk and board
	Unit 2.3- Lipids	2 L		Chalk and board
	Unit 2.4- Insect growth regulators	1 L		Chalk and board
	Unit 2.5- Plant growth regulators	2 L		Chalk and board
Paper IV- Unit I- Drug discovery, design and development	Unit 1.1	7 L	Medicinal chemistry, D.Sriram and P. Yogeeswari Principles of medicinal chemistry (Vol. I and II)- S. S. Kadam, K. R.	Chalk and board

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
			Mahadik.	
	Unit 1.2	8 L	Introduction to Medicinal chemistry by Graham Patrick	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gayatri Gadre DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: IV MONTH: JANUARY-MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Study Steroids: Biological role, important structural and stereochemical features of different class of steroids, synthesis of 16-DPA, synthesis of various male and female hormones from 16 DPA.

2. Heterocyclic compounds: Nomenclature of bicyclic/ tricyclic heterocycles by common, Hantzsch-Widman and replacement nomenclature method, nucleophilic ring opening reactions of some heterocyclic compounds, structure, reactivity, synthesis and reactions of some fused heterocycles.

3. Research methodology: Reporting practical and project work, organizing poster display, giving oral presentation, writing scientific papers.

G.V. Gadre

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
Paper III- Unit I- Natural Products-III	Unit 1.1- Steroids	5 L	Organic Chemistry Natural Products Volume-II, O. P. Agarwal. Natural products chemistry and applications, Sujata V. Bhat, B. A. Nagasampagi.	Chalk and board
	Unit 1.2	2 L		Chalk and board
	Unit 1.3	5 L		Chalk and board
	Unit 1.4	3 L		Chalk and board
Paper III- Unit IV- Heterocyclic compounds- II	Nomenclature of heterocyclic compounds	5 L	Heterocyclic Chemistry, Synthesis, Reactions and Mechanisms, R.K. Bansal. Chemistry of Heterocyclic compounds, Rakesh Kumar Parashar,	Chalk and board
	Nucleophilic ring opening reactions of 3 and 4 membered heterocycles	3 L		Chalk and board
	Structure, reactivity, synthesis and reactions of fused heterocycles	7 L		Chalk and board

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
			Beena Negi.	
Paper IV, Unit III- Methods of scientific research and writing scientific papers.	Methods of scientific research and writing scientific papers.	15 L	Research methodology, C. R. Kothari	Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT**: Chemistry **CLASS**: M.Sc. (I) SEMESTER: I **MONTH**: August

ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: derive the wave function of sp, sp^2, sp^3 hybridization, understand the concept of resonance and resonance energy, Valence Bond Theory and Molecular orbital theory, and weak forces of attraction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, I, **Chemical Bonding**	**1.1** Recapitulation of hybridization. Derivation of wave functions for sp, sp^2, sp^3.	3L	Principles of Inorganic Chemistry.	White Board and marker
	1.2 Discussion of involvement of d orbitals in various types of hybridization, concept of resonance, resonance energy derivation.	3L	Principles of Inorganic Chemistry.	White Board and marker
	1.3 Critical analysis of VBT	2L	Principles of Inorganic Chemistry.	White Board and marker

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	1.4 Molecular Orbital Theory for diatomic species of first transition series	2L	Principles of Inorganic Chemistry.	White Board and Marker
	1.5 Molecular Orbital Theory for SF_6, CO_2, B_2H_6, I^{3-}	3L	Principles of Inorganic Chemistry.	White Board and marker
	1.6 Weak forces of attraction: Hydrogen bonding – concept, types, properties, methods of detection and importance, vander waals forces, ion-dipole, dipole-dipole, London forces	2L	Principles of Inorganic Chemistry.	White Board and Marker

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** M.Sc. (I) **SEMESTER:** II **MONTH:** January

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: understand the reaction mechanism of octahedral and square planar complexes, redox reactions, its mechanism and stereochemistry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, I, **Inorganic Reaction Mechanism**	**1.1** Rate of reactions, factors affecting the rate of reactions, techniques for determination of rate of reaction.	5L	Concise Coordination Chemistry	White Board and marker
	1.2 Ligand Substitution reactions of : a) Octahedral complexes without breaking of metal ligand bond. b) Square planar complexes, trans effect, its theories and aplications.	5L	Principles of Inorganic Chemistry.	White Board and marker
	1.3 Redox reactions: inner and outer sphere mechanism, complimentary and non-complimentary reactions.	3L	Concise Coordination Chemistry	White Board and Marker
	1.4 Stereochemistry of substitution reactions of octahedral complexes.	2L	Principles of Inorganic Chemistry.	White Board and Marker

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** T.Y.B. Sc. **SEMESTER:** V **MONTH:** June

ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: understand the chemistry of non-aqueous solvents, comparative study of group 16 and 17.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, IV, Some Special Topics	**4.1 Chemistry of Non-aqueous Solvents** **4.1.1** Classification of solvents and importance of non-aqueous solvents. **4.1.2** Characteristics and study of liquid ammonia, dinitrogen tetra oxide as non-aqueous solvents with respect to: (i) acid-base reactions and (ii) redox reactions.	5L	J. D. Lee, Concise Inorganic Chemistry	Black Board and Chalk
	4.2 Comparative Chemistry of Group 16 **4.2.1** Electronic configurations, trends in physical properties, allotropy. **4.2.2** Manufacture of sulphuric acid by Contact process.	5L	J. D. Lee, Concise Inorganic Chemistry	Black Board and Chalk
	4.3 Comparative Chemistry of Group 17 **4.3.1** Electronic configuration, General characteristics, anomalous properties of fluorine, comparative study of acidity of oxyacids of chlorine w.r.t acidity, oxidizing properties and structures (on the basis of VSEPR theory).	5L	J. D. Lee, Concise Inorganic Chemistry	Black Board and Chalk

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	4.3.2 Chemistry of interhalogens with reference to preparations, properties and structures (on the basis of VSEPR theory).			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** T.Y.B. Sc. SEMESTER: VI **MONTH:** October

ACADEMIC YEAR: 2018-2019

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LEARNING OBJECTIVE/S:
The learners will be able to: learn various methods to extract metals from their ores, introduction of group 18 elements and bioinorganic chemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, IV, **Some Special Topics**	**4.1 Metallurgy** **4.1.1** Types of metallurgies, **4.1.2** General steps of metallurgy; Concentration of ore, calcinations, roasting, reduction and refining. **4.1.3** Metallurgy of copper: occurrence, physicochemical principles, Extraction of copper from pyrites& refining by electrolysis.	7L	Puri, Sharma Kalia Inorganic chemistry.	Black Board and Chalk
	4.2 Chemistry of Group 18 **4.2.1** Historical perspectives **4.2.2** General characteristics and trends in physical and chemical properties **4.2.3** Isolation of noble gases **4.2.4** Compounds of Xenon (oxides and fluorides) with respect to preparation and structure (VSEPR) **4.2.5** Uses of noble gases	5L	Puri, Sharma Kalia Inorganic chemistry.	Black Board and Chalk
	4.3 Introduction to Bioinorganic Chemistry. **4.3.1**Essential and non-essential elements in biological systems. **4.3.2** Biological importance of metal ions such as Na^{+}, K^{+},Fe^{+2}/Fe^{+3} and Cu^{+2}(Role of Na^{+} and K^{+} w.r.t ion pump)	3L	Puri , Sharma Kalia Inorganic chemistry.	Black Board and Chalk

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** S.Y. B. Sc. **SEMESTER:** III **MONTH:** July

ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: select a method of analysis, decide how to identify a sample and prepare it for analysis, select a procedure for analysis, identify sources of possible errors in the results obtained, know the chemistry of boron compounds, chemistry of silicon and germanium and nitrogen family.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, II, **Selected topics on p block elements**	**2.1 Chemistry of Boron compounds** **2.1.1** Electron deficient compounds – BH_3, BF_3, BCl_3 with respect to Lewis acidity and applications. **2.1.2** Preparation of simple boranes like diborane and tetraborane. **2.1.3** Structure and bonding in diborane and tetraborane (2e-3c bonds) **2.1.4** Synthesis of Borax. **2.2 Chemistry of Silicon and Germanium** **2.2.1** Silicon compounds: Occurrence , Structure and inertness of SiO **2.2.2** Preparation of structure of SiCl **2.2.3** Occurrence and extraction of Germanium **2.2.4** Preparation of extra pure Silicon and Germanium **2.3 Chemistry of Nitrogen family** **2.3.1** Trends in chemical reactivity - Formation of hydrides, halides, oxides with special reference to oxides of nitrogen. **2.3.2** Oxides of nitrogen with respect to preparation and structure of NO, NO,N_2O and N_2O **2.3.3** Synthesis of ammonia by Bosch – Haber process.	5L 5L 5L	Puri, Sharma Kalia Inorganic chemistry. J. D. Lee, 4th Edn., Concise Inorganic Chemistry, E James E. Huheey, Inorganic Chemistry: Principles of Structure and Reactivity	Black Board and Chalk
III, I, **Intorduction to Analytical**	**1.1. Role of Analytical Chemistry** **1.1.1.** Language of analytical chemistry: important terms and their significance in Analytical			

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Chemistry and Statistical Treatment of analytical data-I	Chemistry. **1.1.2.** Purpose of Chemical Analysis; Analysis Based (i) On the nature of information required: (Proximate, Partial, Trace, Complete Analysis) and (ii) On the size of the sample used (Macro, semi-micro and micro analysis) **1.1.3.** Classical and Non-Classical Methods of Analysis; their types and importance. **1.2. Significance of Sampling in Analytical Chemistry** **1.2.1**. Terms involved in Sampling **1.2.2.** Types of Sampling **1.2.3**. Sampling techniques **1.3. Results of Analysis.** **1.3.1.** Errors in Analysis and their types **1.3.2.** Precision and Accuracy in Analysis **1.3.3.** Corrections for Determinate Errors	9L 6L	Instrumental Methods of Chemical Analysis Fundamental of Analytical Chemistry by Douglas A. Skoog, West, F. James Holler. S. R. Crouch	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT II: 15 L

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT I: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Promila Nagpal **DEPARTMENT:** Chemistry **CLASS:** S.Y.B.Sc. **SEMESTER:** IV **MONTH:** October

ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: the importance of separation in sample treatment, various methods of separations, how to select a method of separation of an analyte from the matrix, how a solute gets distributed between two immiscible phases, principle of solvent extraction and various terms involved therein, effect of various parameters on solvent extraction of a solute, classification of Chromatographic methods, Paper and thin layer chromatography and using them in practice, acidity of cations and basicity of anions, uses and environmental chemistry of oxides and oxo-acids

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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II, II, **Ions in aqeous medium**	**2.1. Acidity of Cations and Basicity of Anions** i) Hydration of Cations; Hydrolysis of Cations predicting degree of hydrolysis of cations-effect of Charge and Radious. II) Latimer Equation. Relationship between pKa, acidity and z^2/r ratios of metal ions graphical Presentation iii) Classification of cations on the basis of acidity category – Non acidic,moderately acidic, strongly acidic, very strongly acidic with pKa values range and examples iv) Hydration of Anions; Effect of Charge and Radius; Hydration of anions-concept, diagram classification on the basis of basicity. **2.2. Uses and environmental chemistry of volatile oxides and oxo-acids** i) Physical properties of concentrated oxo-acids like sulfuric, Nitric and Phosphoric acid. ii) Uses and environments aspects of these acids	9L 6L	Puri, Sharma, Kalia Inorganic Chemistry. James E. Huheey, Inorganic Chemistry: Principles of Structure and Reactivity,	Black Board and Chalk
III, I- **Methods of separation**	**1. Separation Techniques in Analytical Chemistry** **1.1.** An Introduction to Analytical Separations and its importance in analysis. **1.2.** Estimation of an analyte without effecting separation. **1.3.** Types of separation methods **1.3.1.** Based on Solubilities (Precipitation, Filtration Crystallisation) **1.3.2.** Based on Gravity- Centrifugation **1.3.3.** Based on volatility-Distillation ; **1.3.4.** Based on Electrical effects-Electrophoresis **1.3.5.** Based on retention capacity of a Stationary Phase - Chromatography;	2L 2L 6L	Modern Analytical Chemistry , David Harvey (page numbers 596 -606) Modern Analytical Chemistry , David Harvey (page numbers 215 -217)	Black Board and Chalk

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	1.3.6. Based on distribution in two immiscible phases-Solvent Extraction; **1.3.7.** Based on capacity to exchange with a resin-Ion Exchange; **1.4. Electrophoresis:** Principles, Basic Instrumentation, Working and Application in Separation of biomolecules like enzymes and DNA. **1.5. Solvent extraction** **1.5.1.** Introduction, Nernst distribution Law, Distribution Ratio, Partition Coefficient. **1.5.2.** Conditions of extraction: Equilibration time, Solvent volumes, temperature, pH. **1.5.3**. Single step and multi-step extraction, Percentage extraction for single step and Multistep extraction. Separation factor. **1.5.4**. Batch and continuous extraction **1.6.** Chromatography : **1.6.1.** Introduction to Chromatography **1.6.2.** Classification of chromatographic methods based on stationary and mobile phase **1.6.3**. Paper Chromatography: Principle, techniques and applications of Paper Chromatography in separation of cations. **1.6.4.** Thin layer Chromatography Principle, technique and Applications in determining the purity of a given solute; Following progress of a given reaction.	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT II: 15 L

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT III: 15 L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Arti Dubey DEPARTMENT: Chemistry CLASS: F.Y.B.Sc. SEMESTER: I MONTH: June-Oct ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to :

- Understand basics of chemical kinetics and predict reaction mechanism.
- Calculate rate constant of zero, first and second order reaction.
- The basics of solutions, Colligative properties, and their applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II (General Chemistry) Unit-I Title-Physical	**1.1 Chemical Kinetics:** Rate of reaction, rate constant, measurement of reaction rates, order and molecularity of reaction, integrated rate equation of first and second order reactions (with equal initial concentration of reactants) (Numericals expected) Determination of order of reaction by (a) Integration method (b)	**(8L)**	Text Book, Reference Book, You tube video	Chalk and talk method

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Chemistry	Graphical method (c)Ostwald's isolation method (d) Half time method (Numericals expected) **1.2 Liquid State:** Surface tension: Introduction, methods of determination of surface tension by drop number method (Numericals expected) Viscosity: Introduction, coefficient of viscosity, relative viscosity, specific viscosity,reduced viscosity, determination of viscosity by Ostwald viscometer (Numericals expected) Refractive index: Introduction, molar refraction and polarizability, determination of refractive index by Abbe's refractometer (Numericals expected) Liquid crystals: Introduction, classification and structure of thermotropic phases (Nematic,smectic and cholesteric phases), applications of liquid crystals	**(7L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15L

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Arti Dubey DEPARTMENT: Chemistry CLASS: T.Y.B.Sc. SEMESTER: V MONTH: June-Oct ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Know about Molecular Symmetry and Chemical Bonding, Understand the Orbital approach, Molecular Orbital Theory .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER -II UNIT-I TITLE- Inorganic chemistry	Molecular Symmetry and Chemical Bonding 1.1Molecular Symmetry 1.1.1 Introduction and Importance of Symmetry in Chemistry. 1.1.2 Symmetry elements and Symmetry operations. 1.1.3 Concept of a Point Group with illustrations using the following point groups :(i)C∞V (ii) D∞h (iii) C2V (iv) C3v (v)C2h and (vi)D3h	(6L)	Text Book, Reference Book, You tube video	Chalk and Talk Method, Power point presentation

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	1.2 Molecular Orbital Theory for heteronuclear diatomic molecules and polyatomic species 1.2.1 Comparision between homonuclear and heteronuclear diatomic molecules. 1.2.2. Heteronuclear diatomic molecules like CO, NO and HCl, appreciation of modified MO diagram for CO. 1.2.3 Molecular orbital theory for H3 and H3+ (correlation diagram expected). 1.2.4. Molecular shape to molecular orbital approach in AB2 molecules. Application of symmetry concepts for linear and angular species consideringσ- bonding only. (Examples like : i) BeH2, ii) H2O).	(9L)		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15 L_____

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NAME OF THE STAFF:Dr.Arti Dubey DEPARTMENT:Chemistry CLASS: M.Sc.(Part-I) SEMESTER: I MONTH:June-Oct ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to :

Study about Molecular Symmetry and Group Theory.

Know about Concepts of Groups, Sub-groups, Classes of Symmetry operations, Group Multiplication Tables and Applications of Group Theory.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-II Title-Inorganic chemistry	**Molecular Symmetry and Group Theory:** 2.1. Symmetry criterion of optical activity, symmetry restrictions on dipole moment. A systematic procedure for symmetry classification of molecules. 2.2. Concepts of Groups, Sub-groups, Classes of Symmetry operations, Group Multiplication Tables. Abelian and non-Abelian point groups. 2.3. Representation of Groups: Matrix representation of symmetry operations, reducible and irreducible representations. The Great Orthogonality Theorem and its application in construction of character tables for point groups C_{2v}, C_{3v} and D_{2h}, structure of	**[15L]**	Text Book, Reference Book, You tube video	Chalk and Talk Method, Power point presentation

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	character tables. 2.4. Applications of Group Theory (a) Symmetry adapted linear combinations (SALC), symmetry aspects of MO theory, sigma bonding in AB_n (Ammonia, CH_4) molecule. (b) Determination of symmetry species for translations and rotations. (c) Mulliken"s notations for irreducible representations. (d) Reduction of reducible representations using reduction formula. (e) Group-subgroup relationships. *(f)* Descent and ascent in symmetry correlation diagrams showing relationship between different groups.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_____

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NAME OF THE STAFF:Dr.Arti Dubey DEPARTMENT:Chemistry CLASS: M.Sc.(Part-I) SEMESTER: I MONTH: June-Oct ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:

The learners will be able to : Study about Electronic structure of solids and Methods of preparation for inorganic solids. Know about Preparative methods and Applications of Nanomaterials.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-III Title-Inorganic chemistry	**Materials Chemistry and Nanomaterials:** **3.1 Solid State Chemistry** 3.1.1. Electronic structure of solids and band theory, Fermi level, K Space and Brillouin Zones. 3.1.2. Structures of Compounds of the type: AB [nickel arsenide (NiAs)], AB_2 [fluorite (CaF_2) and anti-fluorite structures, rutile (TiO_2) structure and layer structure [cadmium chloride and iodide ($CdCl_2$, CdI_2)]. 3.1.3. Methods of preparation for inorganic solids: Ceramic method, precursor method, sol-gel method (applications in Biosensors), microwave synthesis (discussion on principles, examples, merits and	**[15 L]**	Text Book, Reference Book, You tube video	Chalk and Talk Method, Power point presentation

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	demerits are expected) **3.2 Nanomaterials** 3.2.1. Preparative methods: Chemical methods, Solvothermal, Combustion synthesis, Microwave, Co-precipitation, Langmuir Blodgett(L-B) method, Biological methods: Synthesis using microorganisms. 3.2.2. Applications in the field of semiconductors, solar cells			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 L

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NAME OF THE STAFF: Dr.Arti Dubey DEPARTMENT: Chemistry CLASS: F.Y.B.Sc SEMESTER: II MONTH: Nov-April ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:

The learners will be able to : Understand The fundamentals of ionic equilibrium and its applications.Learn about the basics of Molecular Spectroscopy .

- Know about the Solid State Chemistry .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I TITLE-Physical	**1.1 Ionic Equilibria:** Strong, moderate and weak electrolytes, degree of ionization, factors affecting degree of ionization, ionization constant and ionic product of water, ionization of weak acids and bases, pH scale, common ion effect, dissociation constants of mono-, di- and triprotic acid (exact treatment for monoprotic acid)	**(7L)**	Text Book, Reference Book, You tube video	Chalk and talk method

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Chemistry	Buffers: Introduction, types of buffers, derivation of Henderson equation for acidic and basic buffers, buffer action, buffer capacity (Numericals expected) **1.2 Molecular Spectroscopy:** Electromagnetic radiation, electromagnetic spectrum, Planck's equation, interaction of electromagnetic radiation with matter: Absorption, emission, scattering, flourescence, electronic, vibrational and rotational transitions, Beer-Lambert's law (Numericals expected) **1.3 Solid State Chemistry** Types of solids, crystal lattice, lattice points, unit cell, space lattice and lattice plane, laws of crystallography: Law of constancy of interfacial angle, law of symmetry and law of rational indices (Numericals expected)	**(4L)** **(4L)**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15L_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Dr.Arti Dubey DEPARTMENT:Chemistry CLASS: T.Y.B.Sc. SEMESTER: VI MONTH:Nov-April ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S: The learners will be able to :Know about Crystal Field Theory and effect of crystal field on central metal valence orbitals in various geometries.Evidences for Study about the covalence in metal complexes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER -II UNIT-I TITLE- Inorganic chemistry	**1.Theories of the metal-ligand bond (I)** 1.1 Limitations of Valence Bond Theory. 1.2 Crystal Field Theory and effect of crystal field on central metal valence orbitals in various geometries from linear to octahedral(from coordination number 2 to coordination number 6) 1.3 Splitting of *d* orbitals in octahedral, square planar	**(15L)**	Text Book, Reference Book, You tube video	Chalk and Talk Method, Power point presentation

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	and tetrahedralcrystal fields. 1.4 Distortions from the octahedral geometry : (i) effect of ligand field and (ii) Jahn-Teller distortions. 1.5 Crystal field splitting parameters Δ ; its calculation and factors affecting it in octahedral complexes, Spectrochemical series. 1.6 Crystal field stabilization energy(CFSE), calculation of CFSE for octahedral complexes with d_0 to d_{10} metal ion configurations. 1.7 Consequences of crystal field splitting on various properties such as ionic radii, hydration energy and enthalpies of formation of metal complexes of the first transition series. 1.8 Limitations of CFT : Evidences for covalence in metal complexes(i) intensities of d-d transitions, (ii) ESR spectrum of $[IrCl_6]^{2-}$ (iii) Nephelauxetic effect.			

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Dr.Arti Dubey DEPARTMENT:ChemistryCLASS: M.Sc.(Part-I) SEMESTER: IIMONTH: Nov-April ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S: The learners will be able to : Understand Eighteen and sixteen electron rule and electron counting with examples.
Study about Preparation and properties of the Alkyl and aryl derivatives, Carbenes and carbynes, Alkene derivatives, Alkyne derivatives, Allyl derivatives, Sandwich compounds of Fe, Cr and Half Sandwich compounds of Cr, Mo. Learn Structure and bonding in the organometallic compounds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper-II Unit-II Title-Inorganic chemistry	**Organometallic Chemistry of Transition metals:** 2.1. Eighteen and sixteen electron rule and electron counting with examples. 2.2. Preparation and properties of the following compounds (a) Alkyl and aryl derivatives of Pd and Pt complexes (b) Carbenes and carbynes of Cr, Mo and W (c) Alkene derivatives of Pd and Pt (d) Alkyne derivatives of Pd and Pt (e) Allyl derivatives of nickel (f) Sandwich compounds of Fe, Cr and Half Sandwich compounds of Cr, Mo. 2.3 Structure and bonding on the basis of VBT and MOT in the following organometallic compounds: Zeise"s salt, bis(triphenylphosphine)diphenylacetylene platinum(0) $[Pt(PPh_3)_2(HC{\equiv}CPh)_2]$, diallylnickel(II), ferrocene and bis(arene)chromium(0), tricarbonyl (η_2-butadiene) iron(0).	**[15 L]**	Text Book, Reference Book, You tube video	Chalk and Talk Method, Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L

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NAME OF THE STAFF:Dr.Arti Dubey DEPARTMENT:Chemistry CLASS:M.Sc.(Part-I) SEMESTER: II MONTH:Nov-April ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S: The learners will be able to : Study about Electronic structure of solids and Methods of preparation for inorganic solids. Know about Preparative methods and Applications of Nanomaterials.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-III Title-Inorganic chemistry	**Materials Chemistry and Nanomaterials:** **3.1 Solid State Chemistry** 3.1.1. Electronic structure of solids and band theory, Fermi level, K Space and Brillouin Zones. 3.1.2. Structures of Compounds of the type: AB [nickel arsenide (NiAs)], AB_2 [fluorite (CaF_2) and anti-fluorite structures, rutile (TiO_2) structure and layer structure [cadmium chloride and iodide ($CdCl_2$, CdI_2)]. 3.1.3. Methods of preparation for inorganic solids: Ceramic method, precursor method, sol-gel method (applications in Biosensors), microwave synthesis (discussion on principles, examples, merits and demerits are expected) **3.2 Nanomaterials**	**[15 L]**	Text Book, Reference Book, You tube video	Chalk and Talk Method, Power point presentation

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	3.2.1. Preparative methods: Chemical methods, Solvothermal, Combustion synthesis, Microwave, Co-precipitation, Langmuir Blodgett(L-B) method, Biological methods: Synthesis using microorganisms. 3.2.2. Applications in the field of semiconductors, solar cells			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15 L

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

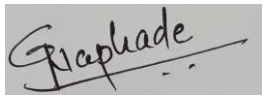
NAME OF THE STAFF: ____Dr. JAYASHRI GOPAL NAPHADE_____ DEPARTMENT: _CHEMISTRY_____ CLASS: __M. Sc.I_____SEMESTER: __I_____

MONTH: ____Aug_____ ACADEMIC YEAR: __2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the Oxidation and reduction reaction. They will also be able to determine the mechanism of deferent Oxidising and reducing reagent.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III UNIT-IV OXIDATION AND REDUCTION	4.1: Oxidation	15L	1.Organic synthesis,Jagdamba Singh ,Yadav,pragati Prakashan 2.Principle of organic synthesis,R.O.C.Norman & coxon,Nelson Thornees	White Board and marker
	4.2: Reduction			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15__

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___Dr.JAYASHRI GOPAL NAPHADE__DEPARTMENT: CHEMISTRY CLASS: __M.Sc.I_____SEMESTER:II_____

MONTH: _____Jan_____ ACADEMIC YEAR: __2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of thermodynamic and kinetic enolate formation .Also understand the alkylation of aldehyde,ketones,ester,amides & nitriles.They understand mechanism of some name reaction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III UNIT-I	1.1: Alkylation of Nuclophilic carbon intermidiate	7L	1.Organic Reaction Mechanism , V.K.Ahluwalia,Alha science 2.Reaction,Rearrangement and Reagent in Organic synthesis ,S.N.Sanyal	White Board and marker
	1.2:Reaction of carbon nuclophiles with carbonyl group	8L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dr.JAYASHRI GOPAL NAPHADE__DEPARTMENT: _CHEMISTREY__CLASS: M.Sc.II (ANALYTICAL CHEMISTRY) SEMESTER: _____III_____ MONTH: ____July_____ ACADEMIC YEAR: _2018-2019_

LEARNING OBJECTIVE/S:
The learners will be able to : Students understand the principle , instrumentation and applications of photoacoustic spectroscopy,atomic emission spectroscopy and Mossbauer's spectroscopy._

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT-II SPECTRAL METHOD-II	2.1:Photoacoustic Spectroscopy	5L	1.Principle of Instrumental Analysis,D.A.Skoog, Holler,5th Edition	White Board and Marker, powerpoint
	2.2:Atomic Emission spectroscopy with plasma and electrical discharge sources	5L		
	2.3: Mossbauer's Spectroscopy	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15___

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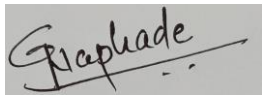
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.JAYASHRI GOPAL NAPHADE__DEPARTMENT: __CHEMISTRY__CLASS: __ M.Sc.II (ANALYTICAL CHEMISTRY) _ SEMESTER: ___IV_____ MONTH: _____Jan_____ ACADEMIC YEAR: _____2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to : understand the principle,instrument and applications of mss and raman spectroscopy.Also know the differnant application used in varios field.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT-II SPECTRAL METHOD-IV	2.1: Mass Spectroscopy	8L	1.Principle of Instrumental Analysis,D.A.Skoogh, Holler,5th Edition	White Board and Marker
	2.2: Raman Spectroscopy	7L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15___

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. JAYASHRI GOPAL NAPHADE, DEPARTMENT: _CHEMISTRY, CLASS: _M.SC II (ORGANIC CHEMISTRY) , SEMESTER: III, MONTH: _____July_____, ACADEMIC YEAR: 2018-2019.

LEARNING OBJECTIVE/S:
The learners will be able to : understand the concept of QSAR factor and how to relatedto drug design.Also understand the synthesis of some drug.they understand the concept of drug._

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV Unit II: Drug Design, Develepment And Synthesis	2.1: QSAR Parameter Steric Factor , Talf Equation	5L	1.Medicinal Chemistry,Sriram &Yogeeswari,2nd edition 2.A Introduction to drug design,Pandeya and Dimmock.	White Board and Markar
	2.2: Mordern method of drug design & synthesis	3L		
	2.3: Concept of prodrug & soft drug	3L		
	2.4: Synthesis and application of the drug	4L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

SIGNATURE OF THE STAFF Naphade

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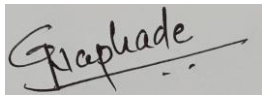
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. JAYASHRI GOPAL NAPHADE, DEPARTMENT: _CHEMISTRY, CLASS: _M.SC II (ORGANIC CHEMISTRY), SEMESTER: III, MONTH: _____July_____, ACADEMIC YEAR: 2018-2019.

LEARNING OBJECTIVE/S:
The learners will be able to : understand the Pericyclic reactions and it's different types.Also understand the Selectivity of cycloaddition reaction and sigmatropic reaction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit II: Pericyclic Reaction	2.1: Cycloaddition Reaction & Other Cycloaddition Reaction	7L	1.Pericyclic Reaction, Ian Fleming 2.Pericyclic Reaction- A mechanistic Approach, S. M. Mukharji.	White Board and Markar
	2.2: Cycloaddition Reaction	3L		
	2.3: Sigmatropic Rearrangement	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

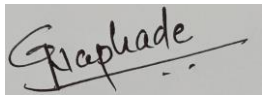
NAME OF THE STAFF: Dr.JAYASHRI GOPAL NAPHADE___DEPARTMENT: __CHEMISTRY_ CLASS: _M.Sc II(ORGANIC CHEMISTRY)

SEMESTER: ___IV_____ MONTH: _____Jan_____ ACADEMIC YEAR: ___2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the how the protection of group is necessary in organic synthesis also understand the concept of Umpolung.they also understand the concept of retrosynthetic an d how to plan the retrosynthetic apporoach.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED		TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT-I Desiging Organic Synthesis-i	1.1:Protectin group in organic Synthesis	3L	1.Protective groups in Organic synthesis,Greene and Wuts 2.Principle of organic synthesis, R.O.C. Norman & Coxon. 3.Organic Synthesis:The Disconnection Approach,Stuart Warren.	White Board & Marker
	1.2: Concept of Umpolung	3L		
	1.3:Introduction to Retrosynthetic analysis & synthetic planning	9L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

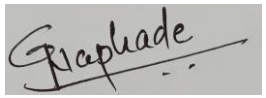
NAME OF THE STAFF: __Dr.JAYASHRI GOPAL NAPHADE ___DEPARTMENT: __CHEMISTRY_CLASS: _M.Sc.II(ORGANIC CHEMISTRY)

SEMESTER: _IV_ MONTH: _____Jan_____ ACADEMIC YEAR: ___2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to: understand the different sources use in research .some information about journals.They understand different resources used during research.like information technology and library.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV UNIT-I RESEARCH METHODOLOGY	1.1: Print: Primary, Secondary,Tertiary sources	5L	Research methodology,C.R.Kothari	Powerpoint
	1.2::Journals	5L		
	1.3:Information Technology & Library Resources	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Kirti Pankaj Mhatre_____DEPARTMENT:____Chemistry_____

CLASS:____TyBsc._____ SEMESTER:__Vth_____ MONTH:___June,July, August_____

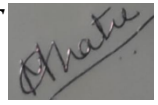
ACADEMIC YEAR:____2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to :_____1.To study quality in analytical chemistrty like Concepts of Quality, Quality Control and Quality Assurance.

2.To study the chemical calculations like inter conversion of various concentration units and Percent composition of elements in chemicalcompounds.

3..To study how to do the sampling of solids and liquid and gases alogwith the Collection, preservation and dissolution of the sample..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICTTOOLS USED
Analytical chemistryPaper IV UNIT I :INTRODUCTION TO QUALITYCONCEPTS,CHEMICAL CALCULATIONS AND SAMPLING	1.1 Quality in Analytical Chemistry 1.1.1 Quality Control and Quality Assurance 1.1.2 Importance of Quality concepts in Industry 1.1.3 Chemical Standards and Certified Concepts of Quality, Reference Materials; Importance in chemical analysis	05L	Saujanya publication,sheth publication,Himalaya publication textbook,	Chalk and Board

SIGNATURE OF THE STAFF  **SIGNATURE OF THE HOD**

	Quality of material: Various grades of laboratory reagents			
	1.2 Chemical Calculations (Numericals and word problems are expected) 1.2.1.Inter conversion of various concentration units. (Conversion of concentration from one unit to another unit with examples) 1.2.2 Percent composition of elements in chemical compounds	04L	Same as above	Chalk and Board
	1.3 Sampling 1.3.1 Purpose, significance and difficulties encountered in sampling 1.3.2 Sampling of solids: Sample size – bulk ratio, size to weight ratio, multistage and sequential sampling, size reduction methods, sampling of compact solids, equipments and methods of sampling	06L	Same as above	Chalk and Board

	of compact solids, sampling of particulate solids, methods and equipments used for sampling of particulate solids. 1.3.3 Sampling of liquids: Homogeneous and heterogeneous, Static and flowing liquids. 1.3.4 Sampling of gases: Ambient and stack sampling: Apparatus and methods for sampling of gases. 1.3.5 Collection, preservation and dissolution of the sample.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_15_L_

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____KIRTI PANKAJ MHATRE_____DEPARTMENT:_____CHEMISTRY_____CLASS: _TYBSC_____ SEMESTER:_____VTH_____ MONTH:__AUG-SEPT_____ ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To study redox titration like Construction of the titration curves and calculation of E_{system} in aqueous medium , Theory of redox indicators, Criteria for selection of an indicator in details.

2.To study complexomatric titrations in details like construction of titration curve, Use of EDTA as titrant and its standardisation, absolute and conditional formation constants of metal EDTA complexes,Selectivity of EDTA as a titrant,Factors enhancing selectivity with examples,Types of

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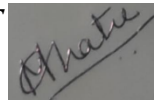
EDTA titrations,Metallochromic indicators, theory, examples and applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV UNIT 2 **CLASSICAL METHODS OF ANALYSIS (TITRIMETRY) (3 & 6 UNITS)**	**2.1 Redox Titrations (Numerical and word Problemsare expected)** 2.1.1 Introduction 2.1.2 Construction of the titration curves and calculation of E_{system} in aqueous medium in case of: (1) One electron system (2) Multielectron system 2.1.3 Theory of redox indicators, Criteria for selectionof an indicator	08L	Saujanya publicationof analytical chemistry,sheth publication,Himalaya publication textbook,	Chalk and Board

SIGNATURE OF THE STAFF 

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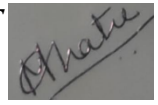
	Use of diphenyl amine and ferroin as redox indicators			

SIGNATURE OF THE STAFF 

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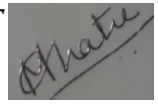
	2.2 Complexometric Titrations *2.2.1 Introduction, construction of titration curve* *2.2.2 Use of EDTA as titrant and its standardisation, absolute and* *conditional formation constants of metal EDTA complexes,* *Selectivity of EDTA as a titrant.* *Factors enhancing selectivity with examples.* *Advantages and limitations of EDTA as a titrant.* *2.2.3 Types of EDTA titrations.* *2.2.4 Metallochromic indicators, theory, examples and applications*	*07L*	*Same as above*	*Same as above*

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15L_____

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____KIRTI PANKAJ MHATRE_____DEPARTMENT:_____CHEMISTRY_____CLASS: _____MSC II_analytical chemistry_____ SEMESTER: _IIIRD_____ MONTH: _JULY-AUG-SEPT_____

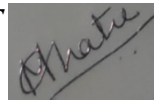
ACADEMIC YEAR: _2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : __1.To study ion exchange chromatography in detail like : Ion exchange equilibria, breakthrough capacity, inorganicion exchangers, synthetic ion exchangers, chelating resins and their applications for separation of inorganic and organic compounds..

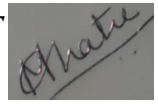
2. To study ion chromatography : Principle, instrumentation with special reference to separation and suppressor columns, applications.

3. To study exclusive chromatography Theory, instrumentation and applications of gel permeation chromatography, retention behavior, inorganic molecular sieves,determination of molecular weight of polymers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF  **SIGNATURE OF THE HOD**

PAPER IV	3.1 Ion exchange chromatography: Ion exchange equilibria, breakthrough capacity, inorganic ion exchangers, synthetic	08L	1.Fundamentals of Analytical	POWER POINT PRESENTATION AND CHALK –BOARD

SIGNATURE OF THE STAFF 

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UNIT 3 Chromatographic Techniques -I	ion exchangers, chelating resins and their applications for separation of inorganic and organic compounds.		Chemistry, D. A. Skoog and D. M. West, Saonders, College publication. 2.Chemical methods of separation, J A Dean, Van Nostrand Reinhold, 1969	
	3.2 Ion chromatography: Principle, instrumentation with special reference to separation and suppressor columns, applications.	02L	SAME AS ABOVE	SAME AS ABOVE
	3.3 Exclusion chromatography : Theory, instrumentationand applications of gel permeation chromatography, retention behavior, inorganic molecular sieves,determination of molecular weight of polymers,	05L	SAME AS ABOVE	SAME AS ABOVE

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15L_

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TEACHING PLAN (UNIT PLAN)

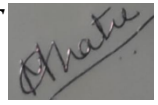
NAME OF THE STAFF:_____KIRTI PANKAJ MHATRE_____DEPARTMENT:____CHEMISTRY_____CLASS:

___MSC -I_____ SEMESTER:__IST_____ MONTH: AUG-SET-OCT_____

ACADEMIC YEAR:__2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : _

.To study volume and mass based concept, stoichiometry, ppm,ppb,mmol,solubility,pH problems,common ion concept,formation constant,and , oxidizing and reducing agents, equivalent weight of oxidizing and reducing agents, stoichiometry of redox titration (Normality of a solution of a oxidizing / reducing agent and its relationship with molarity).

SIGNATURE OF THE STAFF 

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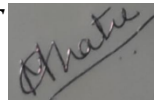
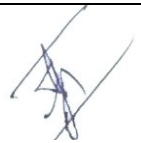
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLSUSED
PAPER IV UNIT II **Calculations based on Chemical Principles**	**The following topics are to be covered in the form of numerical problems only.** a. Concentration of a solution based on volume and mass units. b. Calculations of ppm, ppb and dilution of the solutions, concept of mmol. c. Stoichiometry of chemical reactions, concept of kg mol, limiting reactant, theoretical and practical yield. d. Solubility and solubility equilibria, effect of presence of common ion. e. Calculations of pH of acids, bases, acidic and basic buffers. f. Concept of formation constants, stability and instability constants, stepwise formation constants. g. Oxidation number, rules for assigning oxidation number, redox reaction in term of oxidation number, oxidizing and reducing agents, equivalent weight of oxidizing and reducing agents, stoichiometry of redox titration (Normality of a solution of a oxidizing / reducing agent and its relationship with molarity).	15L	3000 solved problems in chemistry ,schaums solved problem series,David E.Goldberg , Mc Graw Hill international Editions, chapter 11, 15, 16, 21, 22	CHALK AND BOARD

SIGNATURE OF THE STAFF  **SIGNATURE OF THE HOD** 

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15L_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Kirti Pankaj Mhatre_____DEPARTMENT:_____CHEMISTRY_____

CLASS:_____TYBSC_____ SEMESTER:__VITH_____ MONTH:_____NOV-DEC-JAN_____

ACADEMIC YEAR:____2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to : 1.To study the polarography concepts like polarography H shaped polarographic cell, DME (construction,

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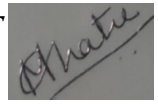
working,advantages and limitations), DC polarogram: Terms involved - Residual current, Diffusion current, Limiting current, Half-Wave Potential

SIGNATURE OF THE STAFF 

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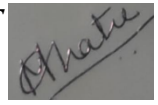
Role and selection of supporting electrolyte, Interference of oxygen, Half wave potential $E_{1/2}$,Factors affecting $E_{1/2}$ Ilkovic equations: variousterms involved in it (No derivation)along with numericals.

2.To study 1Principle, Rotating Platinum Electrode(Construction, advantages and limitations)Titration curves with example, Advantages andlimitations of amperometric titrations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF 

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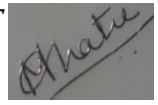
ANALYTICAL CHEMISTRY PAPER IV UNIT-1 **ELECTRO ANALYTICAL TECHNIQUES (3 & 6 UNITS)**	**1.1 Polarography (Numerical and word problemsare expected)** 1.1.1 Difference between potentiometry and voltammetry, Polarizable and non-polarizable electrodes 1.1.2 Basic principle of polarography H shaped polarographic cell, DME (construction, working, advantages and limitations) 1.1.3 DC polarogram: Terms involved - Residual current, Diffusion current, Limiting current, Half-Wave Potential Role and selection of supporting electrolyte, Interferenceof oxygen and its removal, polarographic Maxima and Maxima	11L	SAUJANYA PRAKASHAN TEXTBOOK, SHETH PUBLICATION TEXTBOOK, HIMALAYA PUBLICATION TEXTBOOK	CHALK AND BOARD

SIGNATURE OF THE STAFF 

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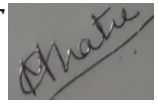
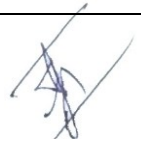
	Suppressors Qualitative aspects of Polarography: Half wave potential$E_{1/2}$, Factors affecting $E_{1/2}$ Quantitative aspects of polarography: Ilkovic equations: various terms involved in it (No derivation) 1.1.4 Quantification 1) Wave height – Concentration plots (working plots/calibration) 2) Internal standard (pilot ion) method 3) Standard addition method 1.1.5 Applications advantages and limitations			
	1.2Amperometric Titrations 1.1.1Principle, Rotating Platinum Electrode(Construction, advantages and limitations)	04L	SAME AS ABOVE	CHALK AND BOARD

SIGNATURE OF THE STAFF  **SIGNATURE OF THE HOD** 

	1.2.2 Titration curves with example 1.2.3 Advantages and limitations			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15L_____

TEACHING PLAN (UNIT PLAN)

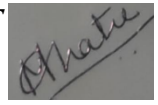
NAME OF THE STAFF:_____KIRTI PANKAJ MHATRE_____DEPARTMENT:__CHEMISTRY_____CLASS: ___FYBSC_____ SEMESTER:__II_____ MONTH:__DEC-JAN-FEB_____

ACADEMIC YEAR: _2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to :

1.To study strereochemistry of cycloalkanes in this Types of cycloalkanes and their relative stability, Baeyer strain theory and conformationalanalysis like, Chair, Boat and Twist boat forms; Relative stability with energy.

.2. To study aromatic hydrocarbons with carbocations /carbanions and heterocyclic compounds with suitable examples and electrophilicaromatic substitution reactions and basic concepts of aromaticity.

SIGNATURE OF THE STAFF 

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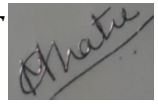
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF 

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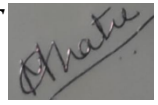
PAPER II UNIT III ***3.1 Stereochemistry -II: Cycloalkanes and Conformational Analysis:*** ***3.2Aromatic Hydrocarbons:***	***3.1 Stereochemistry-II: Cycloalkanes and Conformational Analysis:*** Types of cycloalkanes and their relative stability, Baeyer strain theory, Conformation analysis of cyclohexane: Chair, Boat and Twist boat forms; Relative stability with energy.	05L	HIMALAYA PUBLICATIONS TEXTBOOK , SHETH PUBLICATIONS TEXTBOOK OF FYBSC.	CHALK AND BOARD,STERIOCHEMISTRY MODELS.
	3.2Aromatic Hydrocarbons: Aromaticity: Hückel's ruleanti-aromaticity, aromatic character of arenes, cyclic carbocations/carbanions and heterocyclic compoundswith suitable examples. Electrophilic aromatic substitution: halogenation,nitration, sulphonation and Friedel-Craft	10L	SAME AS ABOVE	SAME AS ABOVE

SIGNATURE OF THE STAFF 

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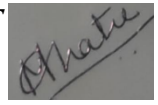
	alkylation/acylation with their mechanism. , Hammond's postulate, Directing effects of the groups.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15L_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Kirti Pankaj Mhatre_____DEPARTMENT:___CHEMISTRY

_____CLASS:_____MSC II_analytical chemistry_____ ACADEMIC YEAR: _2018-19_ SEMESTER:___IVTH_____

SIGNATURE OF THE STAFF 

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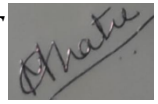
MONTH: _DEC-JAN-FEB_____

SIGNATURE OF THE STAFF 

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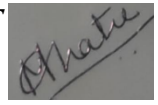
LEARNING OBJECTIVE/S:
The learners will be able to : _1.To study Principle, Instrumentation, and Applications of (ESR).2.To study Principle, Instrumentation, and Applications of Mossbauer's Spectroscopy.

3.To study Principle, Instrumentation, and Applications of Atomic Emission Spectroscopy- based on plasma and electrical discharge sources.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
PAPER IV UNIT II Spectral Methods – II	Principle, Instrumentation, and Applications of 2.1 Electron Spin Resonance Spectroscopy (ESR)	05L	1.Fundamentals of Analytical Chemistry, D .A. Skoog and D. M. West and F. J. Holler Holt- Saunders 6th Edition (1992) 2. Principles of Instrumental Analysis, D. A. Skoog, F. J. Holler and J.A. Niemann,	PPT PRESENTATION, CHALK AND BOARD

SIGNATURE OF THE STAFF 

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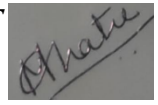
			5th Edition	

SIGNATURE OF THE STAFF 

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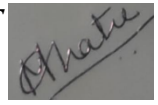
			(1998)	
	Principle, Instrumentation, and Applications of 2.2 Mossbauer's Spectroscopy	05L	SAME AS ABOVE	SAME AS ABOVE
	Principle, Instrumentation, and Applications of 2.3 Atomic Emission Spectroscopy- based on plasma and electrical discharge sources	05L	SAME AS ABOVE	SAME AS ABOVE

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15L_____

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____KIRTI PANKAJ MHATRE_____DEPARTMENT:_____CHEMISTRY_____CLASS:

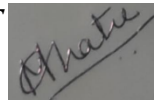
_MSC I_____ SEMESTER:_____II_____ MONTH:__DEC-JAN-FEB_____

ACADEMIC YEAR: _2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to :

To study Ion selective electrodes and their applications (solid state, precipitate, liquid –liquid, enzyme and gas sensing electrodes), ion selective field effect transistors, biocatalytic membrane electrodes and enzyme based biosensors, Ilkovic equation, derivation starting with Cottrell equation, effect ofcomplex formation on the polarographic waves.
2.To study Electrogravimetry: Introduction, principle, instrumentation, factors affecting the nature of the deposit, applications .3.To study Coulometry: Introduction, principle, instrumentation, coulometry at controlled potential and controlled current .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLSUSED

SIGNATURE OF THE STAFF 

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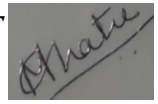
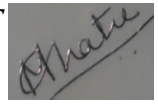
PAPER IV UNIT IV ***Electroanalytical***	***4.1 Ion selective potentiometry and Polarography: [10 L]*** Ion selective electrodes and their applications (solid state, precipitate, liquid –liquid, enzyme and gas sensing electrodes), ion selective field effect transistors, biocatalytic membrane electrodes and enzyme based biosensors. ***Polarography:*** Ilkovic equation, derivation starting with	10L	Principles of Instrumental Analysis – Skoog, Holler, Nieman, 5th	CHALK ABD BOARD

SIGNATURE OF THE STAFF  ***SIGNATURE OF THE HOD***

Methods (Numericals areExpected)	*Cottrell equation, effect of complex formation on the polarographic waves.*		*Edition, Harcourt College Publishers, 1998. Chapters - 23, 24, 25.*	
	***4.2 Electrogravimetry**: Introduction, principle, instrumentation, factors affecting the nature of the deposit,applications.*	*03L*		
	***4.3 Coulometry:** Introduction, principle, instrumentation, coulometry at controlled potential and controlled current .*	*02L*		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15L_

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: June to September ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to : Chemistry of inner transition elements with respect to their properties,uses and separation technique like ion exchange and solvent extraction technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCH 502(paper2) Unit 3	3.1 Introduction:: Position in periodic table and electronic configuration of lanthanides and actinides . 3.2 Chemistry of lanthanides with reference to i) lanthanide contraction ii) Oxidation States iii) ability to form complexes iv) magnetic and spectral properties. 3.3 Occurrence , extraction and separation of lanthanides by i) ion exchange method ii) solvent extraction method , applications of lanthanides	15	Himalaya publication textbook ,Sheth Publication textbook	Chalkboard and duster

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USCHACDD 501 Applied component(Drugs and dyes)) unit 1 and 2	1.1 General Introduction to Drugs 1.1.1 definition of a drug , sources of a drugs 1.1.2 nomenclature of Drugs : generic name,brand name , systematic name. 1.1.3 definition of following terms pharmacon,pharmacology,pharmacophore,half life efficiency,LD50,ED50,GI50,theraputic index. 1.1.4 brief idea of the following terms: receptors,agonists,antagonisyd,drug receptor interaction,drug potency,bioavalibility,drug toxicity,drug addiction,spurious drugs,misbrsnded Drugs,adulterated drugs , pharmacopeia. 1.2 Routes of Drug administration and dosage forms. 1.2.1 Oral and parenteral Routes with advantages and disadvantages 1.2.2Formulations and combination formulation,different dosage forms. 1.3 Pharmacodynamic agents 1.3.1 CNS drugs : Classification based on pharmacological actions :CNS depressant and CNS stimulants,concept of sedation and hypnosis , anaestesia 2.1 Analgesic,antipyretics and Anti -inflammatory drugs. 2.1.1 Analgesics and antipyretics 2.1.2 Anti inflammatory drugs 2.2 Antihistamine drugs. 2.3 Cardiovascular Drugs 2.4 Antidiabetic drugs 2.5 Antiparkinsonism drugs	15 15	Himalaya publication textbook,Sheth Publication textbook	Chalkboard and duster

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SIGNATURE OF THE H.O.D.

	2.6 Drugs for respiratory system			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 each

SIGNATURE OF THE STAFF

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NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry

CLASS: M.Sc. SEMESTER: 1 MONTH: August to December ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to : learn chacterisation of coordination compounds

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCH102 (paper 2) unit 4	4.1 Formation,thermal studies,conductivity measurements,electonic,spectral and magnetic measurements,IR,NMRand ESR spectroscopic methods. 4.2 Spectral calculations using Tanabe Sugano diagram,calculations of electronic parameters such as delta,B,C nephelauxatic ratio	15	D.Banerjea,Coordination chemistry. F.A Cotton ,G,Wilkinson , Advanced Inorganic chemistry,6th edition,Wiley	Whiteboard marker

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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NAME OF THE STAFF: Chetan Bhalchandra Meher DEPARTMENT: Chemistry
CLASS: T.Y.B.Sc. Semester: VI MONTH: Nov To March ACADEMIC YEAR: 2018-2019
The learners will be able to : To learn molecular orbital theory For coordination compounds.p properties of coordination compounds,stability of metal complexes,reactivity of metal complexes and electronic spectra of metal complexes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCH602(PAPER 2) Unit2	2.1 identification of the central metal orbitals and their symmetry suitable for formation of Sigma bonds with ligand orbitals. 2.2construction of LGO. 2.3constrction of Sigma molecular orbitals of ML6 complexes , effect of pi bonding on complexes. 2.4. Electronic spectra. 2.4.1 origin of electronic spectra. 2.4.2types of electronic transition in coordination compounds 2.4.3 selection rules. 2.4.4electronic configuration and electronic micro states. 2.4.5 determination of terms for P2 and d1 configuration	15	Himalaya publication textbook,Sheth publication textbook	Chalkboard and duster

TOTAL NUMBER OF LECTURES ALLOCAT ED TO THE UNIT: 15

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

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DEPARTMENT:

CLASS: T.Y.B.Sc. SEMESTER: VI MONTH: November to March 2019 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to : learn about chemotherapeutic agents,nanoparyicles in medicinal chemistry and also Drugs and environmental aspects

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCHACDD 601(Drugs and dyes) Unit 5 and 6	5.1 Drugs discovery,design and development. 5.1.1Discovery of lead compound 5.1.2medicinal properties of compounds. 5.1.3 Development of Drug. 5.1.4 structure modification to increase potency. 5.1.5computer assisted drug design. 5.2 Drug metabolism. 5.3Chemotherapeutic agents. 5.3.1 antibiotics and antivirals. 5.3.2 Antimalarials. 5.3.3anthelmintics and antifungal agents. 6.1 antiamoebic. Drugs. 6.2 antitubercular and antileprotic Drugs. 6.3anti-neoplastic Drugs 6.4 anti-HIV drugs 6.5Drugs intermediate: synthesis and uses. 6.nano particles in medicinal chemistry.	15 15	Himalaya publication textbook and Sheth Publication textbook	Chalkboard and duster

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Dayanand Patil College of Arts

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DEPARTMENT:

	6.7 drugs and environmental aspects			

T OF LECTURES ALLOCATED TO THE UNIT: 30

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DEPARTMENT:

CLASS: M.Sc. SEMESTER: II MONTH: Jan to April 2019 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to : learn about Organometallic chemistry of transportation metals

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCH202(unit2)	2.1 Eighteen and sixteen electron rule and electron counting with examples. 2.2 preparation and properties of following compounds. A)alkyl and aryl derivatives of Pd and Pt complexes. B) carbenes and carbyenes of Cr,Mo and W. C)alkene derivatives of Pd and Pt. D) alkyne derivatives of Pd and Pt. E)allyl derivatives of Ni. F) sandwich compounds of Fe,Cr and half sandwich compounds of Cr and Mo. 2.3 Structure and bonding on the basis of VBT and MOT of organometallic compounds	15	R.C.Mehrotra and A.singu,Organomettalic chemistry,A unified approach,2nd edition	Chalkboard and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: June 2018 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand UV – Visible spectroscopy, its basic theory and applications.
Study mass spectrometry, determination of molecular formula and its applications.
Learn natural products like terpenoids, alkaloids in detail.
To gain knowledge of hormones like adrenaline.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III, Organic Chemistry	Electromagnetic spectrum, units of wavelength and frequency, UV – Visible spectroscopy: Basic theory, solvents, nature of UV-Visible spectrum, concept of chromophore, auxochrome	02	Introduction to spectroscopy (third edition), Pavia	Black board/ chalk and duster.
UNIT-IV, Spectroscopy-I And Natural Products	Mass spectrometry: Basic theory. Nature of mass spectrum. General rules of fragmentation. Importance of molecular ion peak, isotopic peaks, base peak, nitrogen rule, rule of 13 for determination of empirical formula and molecular formula	03	Spectral identification of organic molecules by Silverstein.	Black board/ chalk and duster.

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	Natural products: terpenoids, their introduction, isoprene rule, special isoprene rule, structural determination of citral,	04	Textbook, Himalaya publication	Black board/ chalk and duster.
	Alkaloids introduction and occurrence, structural determination of nicotine,	04	Textbook, Himalaya publication	Black board/ chalk and duster.
	Hormones: Introduction, structure of adrenaline (epinephrine), physiological action of adrenaline.	02	Organic chemistry by Morrision and Boyd,7th edition	Black board/ chalk and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV *DEPARTMENT: CHEMISTRY*

CLASS: T.Y.B.Sc. *SEMESTER: V* *MONTH: June 2018* *ACADEMIC YEAR: 2018-2019*

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand relation between color and chemical constitution, Armstrong theory, Witt's theory.
Study preparation of the dyes intermediates and its applications.
Get a brief idea of unit processes in dyes and dye intermediates.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF ***SIGNATURE OF THE H.O.D.***

		ALLOTED		
PAPER- Drugs and Dyes, **UNIT-IV,** **Colour and Chemical Constitution of Dyes**	Absorption of visible light, Colour of wavelength absorbed, Complementary colour. Relation between colour and chemical constitution.	02	Textbook, Himalaya publication	Black board/ chalk and duster.
	Armstrong theory (quinonoid theory) and its limitations. Witt's Theory, Valence Bond theory, comparative study and relation of colour,	02	Textbook, Himalaya publications	Black board/ chalk and duster.
	brief idea of Unit Processes, Introduction to primaries and intermediates,	03	Textbook, Seth publication	Black board/ chalk and duster.
	Preparation of the dyes Intermediates; Benzene derivatives.	04	Textbook, Seth publication	Black board/ chalk and duster.
	Preparation of the dyes Intermediates; Naphthalene Derivative, Anthracene Derivative.	04	Textbook, Seth publication	Black board/ chalk and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: III MONTH: June 2018 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

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The learners will be able to:

Study role of radicals in organic synthesis and their applications in detail.
Learn generation, stability, reactivity and structural and stereochemical properties of free radicals,.
Study characteristic reactions and applications of radicals in synthesis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic Organic Chemistry-I UNIT-II, Radicals in organic synthesis	Stability, reactivity and structural and stereochemical properties of free radicals, Persistent and charged radicals, Electrophilic and nucleophilic radicals. Radical Initiators: azobisisobutyronitrile (AIBN) and dibenzoyl peroxide.	04	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J. Sundberg, 5th Edition,	Black board/ chalk and duster.
	Characteristic reactions - free radical substitution, addition to multiple bonds. Radical chain reactions, radical halogenation of hydrocarbons (regioselectivity),radical cyclizations, autoxidations	04	Organic Chemistry, Clayden Greeves Warren and Wothers,	Black board/ chalk and duster.

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	Radicals in synthesis: Inter and intra molecular C-C bond formation via mercuric hydride, tin hydride, thiol donors.	04	Advanced Organic	Black board/ chalk and duster.
	Cleavage of C-X, C-Sn, C-Co, C-S, O-O bonds. Oxidative coupling, C-C bond formation in aromatics: $S_{RN}Ar$ reactions.		Chemistry: Reaction Mechanism, R. Bruckner, Academic Press (2002).	
	Hunsdiecker reaction, Pinacol coupling, McMurry coupling, Sandmeyer reaction, Acyloin condensation.	03	Organic reactions and their mechanisms, 3rd revisededition, P.S. Kalsi, New Age International Publishers	Black board/ chalk and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: III MONTH: June 2018 ACADEMIC YEAR: 2018-2019

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

LEARNING OBJECTIVE/S:
The learners will be able to:

Study enamines, their generation & application in organic synthesis with mechanistic pathways.
Learn phosphorus, sulfur and nitrogen ylides; preparation and their synthetic applications along with their stereochemical aspects.
Study a-C-H functionalization by nitro, sulfoxide, sulfone and phosphonate groups.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic Organic Chemistry-I UNIT-III, Enamines, Ylides and	Enamines: Generation & application in organic synthesis with mechanistic pathways, Stork enamine reaction. Reactivity, comparison between enamines and enolates. Synthetic reactions of enamines including asymmetric reactions of chiral enamines derived from chiral secondary amines.	04	Name Reactions and Reagents in Organic Synthesis, 2nd Edn., Bradford P. Mundy, Michael G. Ellard,	Black board/ chalk and duster.
a-C-H functionalization	Phosphorus, Sulfur and Nitrogen Ylides: Preparation and their synthetic applications along with their stereochemical aspects.	03	Organic Chemistry, Clayden Greeves Warren and Wothers,	Black board/ chalk and duster.

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	Wittig reaction, Horner-Wadsworth-Emmons Reaction, Barton-Kellogg olefination.	*03*	*Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press (2002).*	*Black board/ chalk and duster.*
	a-C-H functionalization: By nitro, sulfoxide, sulfone and phosphonate groups: generation of carbanions by strong bases (LDA/n-butyl lithium) and applications in C-C bond formation.	*03*	*Organic reactions and their mechanisms, 3rd revisededition, P.S. Kalsi, New Age International Publishers*	*Black board/ chalk and duster.*
	Bamford-Stevens reaction, Julia olefination and its modification, Seyferth-Gilbert homologation, Steven's Rearrangement.	*02*	*Advanced Organic Chemistry, Part A and Part B: Reaction and*	

			Synthesis, Francis A.	

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			Carey, Richard J. Sundberg,	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: III MONTH: June 2018 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand concept of primary and secondary metabolites and the building blocks.
Study general pathway of amino acid biosynthesis in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV, Medicinal , Biogenesis	Primary and secondary metabolites and the building blocks, general pathway of amino acid biosynthesis.	03	Natural Products Volume- 2, By	Black board/ chalk and duster.
			O. P. Agarwal.,	

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and green chemistry	*Acetate pathway: Biosynthesis of malonylCoA, saturated fatty acids, prostaglandins from arachidonic acid, aromatic polyketides.*	*04*	*Organic Chemistry, Clayden Greeves Warren and Wothers,*	*Black board/ chalk and duster.*
UNIT-III, ***Biogenesis and biosynthesis of natural products***	*Shikimic Acid pathway: Biosynthesis of shikimic acid, aromatic amino acids, cinnamic acid and its derivatives, lignin and lignans, benzoic acid and its derivatives, flavonoids and isofalvonoids.*	*04*	*Chemistry of natural products, V.K. Ahluwalia, Vishal Publishing Co.*	*Black board/ chalk and duster.*
	Mevalonate pathway: Biosynthesis of mevalonic acid, monoterpenes – geranyl cation and its derivatives,	*02*	*Medicinal Natural Products: A Biosynthetic Approach by Paul M.* *Dewick. 3rd Edition, Wiley.*	*Black board/ chalk and duster.*
	sesquiterpenes - farnesyl cation and its derivatives and diterpenes.	*02*		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV *DEPARTMENT: CHEMISTRY*

CLASS: T.Y.B.Sc. *SEMESTER: VI* *MONTH: November 2018* *ACADEMIC YEAR: 2018-2019*

LEARNING OBJECTIVE/S:
The learners will be able to:

Study polymers, their classification, stereochemistry and applications.
Understand concept of biodegradable polymers
Learn catalysts and reagents with respect to functional group transformations and selectivity.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III, Organic Chemistry UNIT-IV, Polymer, Catalysts and	terms monomer, polymer, homopolymer, copolymer, thermo plastics and thermosets. Addition polymers: polyethylene, polypropylene, teflon, polystyrene, PVC, Uses. Condensation polymers: polyesters, polyamides, polyurethanes, polycarbonates, phenol formaldehyde resins.Uses	03	Textbook, Himalaya publication	Black board/ chalk and duster.
	Stereochemistry of polymers: Tacticity, mechanism of stereochemical control of polymerization using Ziegler	03	Polymer science – a text	Black board/ chalk and duster.

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	Natta catalysts. Natural and synthetic rubbers: Polymerisation of isoprene: 1,2 and 1,4 addition (cis and trans), Styrene butadiene copolymer. Additives to polymers: Plasticisers, stabilizers and fillers.		book by Ahluwalia and Mishra	
	Biodegradable polymers: Classification and uses. polylactic acid structure, properties and use for packaging and medical purposes.,	02	Textbook, Himalaya publication	Black board/ chalk and duster.
Reagents	Catalysts for hydrogenation: a. Raney Nickel b. Pt and PtO_2 (C=C, CN, NO_2, aromatic ring) c. Pd/C : C=C, COCl→CHO (Rosenmund) d. Lindlar catalyst: alkynes,	04	Oranic chemistry by Carey and Sundberg, Part A & B	Black board/ chalk and duster.
	Reagents: a. $LiAlH_4$ (reduction of CO, COOR, CN,NO_2) b. $NaBH_4$ (reduction of CO) c. SeO_2 (Oxidation of CH_2 alpha to CO) d. mCPBA (epoxidation of C=C) e. NBS (allylic and benzylic bromination)	03	Organic chemistry by Morrision and Boyd,7th edition	Black board/ chalk and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF ***SIGNATURE OF THE H.O.D.***

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV *DEPARTMENT: CHEMISTRY*

CLASS: T.Y.B.Sc. *SEMESTER: VI* *MONTH: November 2018* *ACADEMIC YEAR: 2018-2019*

LEARNING OBJECTIVE/S:
The learners will be able to:

Study classification of dyes based on chemical constitution and and synthesis of selected dyes.
Get a brief idea of health and environmental hazards of synthetic dyes and their remediation processes.
Get a brief idea of impact of the textile and leather dye industry on the environment and effluent treatment strategies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Drugs and Dyes,	Classification of Dyes, Nitro Dye: Naphthol Yellow S Nitroso Dye: Gambine Y, Azo dyes,	03	Textbook, Himalaya publication	Black board/ chalk and duster.
UNIT-III, Classification of Dyes based on Chemical Constitution and Synthesis	Diphenylmethane dye: Auramine O*, Triphenylmethane dye: Diamine series: Malachite Green* Triamine series: Acid Magenta	03	Textbook, Himalaya publications	Black board/ chalk and duster.
	Heterocyclic Dyes:Thiazine dyes, Azine dyes, Quinone Dyes: a) Naphthaquinone: Naphthazarin b) Anthraquinone Dyes:	03	Textbook, Seth publication	Black board/ chalk and duster.

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of Selected Dyes.	Indigoid Dyes: Indigo* (from aniline + monochloroacetic acid) Phthalocyanine Dyes: Monastral Fast Blue B	03	Textbook, Seth publication	Black board/ chalk and duster.
Health and Environmental Hazards of Synthetic Dyes	Health and Environmental Hazards of Synthetic Dyes and their Remediation Processes Impact of the textile and leather dye Industry on the environment	03	Textbook, Seth publication	Black board/ chalk and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV *DEPARTMENT: CHEMISTRY*

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY *SEMESTER: IV* *MONTH: November 2018* *ACADEMIC YEAR: 2018-2019*

LEARNING OBJECTIVE/S:
The learners will be able to:

To gain knowledge about principles of molecular associations and organizations in biological macromolecules
Study role of synthetic molecular receptors and their applications.
Learn molecular recognition and catalysis.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, Theoretical organic chemistry-II UNIT-II, Supramolecular chemistry	Principles of molecular associations and organizations as exemplified in biological macromolecules like nucleic acids, proteins and enzymes..	03	Organic reactions & their mechanisms, third revised edition, P.S. Kalsi, New Age International Publishers.	White board/ marker pen and duster.
	Synthetic molecular receptors: receptors with molecular cleft, molecular tweezers, receptors with multiple hydrogen sites.	03	Organic Chemistry, Clayden Greeves Warren and Wothers,	White board/ marker pen and duster.
	Structures and properties of crown ethers, cryptands, cyclophanes, calixarenes, rotaxanes and cyclodextrins.	03	Bioorganic, Bioinorganic and Supramolecular chemistry, P.S. Kalsi and J.P. Kalsi.	White board/ marker pen and duster.

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			New Age International Publishers	
	Synthesis of crown ethers, cryptands and calixarenes.	02	Organic reactions and their mechanisms, 3rd revisededition, P.S. Kalsi, New Age International Publishers	White board/ marker pen and duster.
	Molecular recognition and catalysis, molecular selfassembly. Supramolecular Polymers, Gelsand Fibres.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV *DEPARTMENT: CHEMISTRY*

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY *SEMESTER: IV* *MONTH: November 2018* *ACADEMIC YEAR: 2018-2019*

LEARNING OBJECTIVE/S:

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The learners will be able to:

UNDERSTAND CONCEPTS OF Electro-organic chemistry IN DETAIL.
Study cathodic reduction and anodic oxidation and its application in organic synthesis with mechanistic pathways.
Learn organocatalysts and Pd catalysed cycloaddition reactions
Study applications of selected methods of organic synthesis like crown ethers, cryptands, micelles

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic organic chemistry-II UNIT-III, Electro-organic chemistry and Selected methods of Organic synthesis	Electrode potential, cell parameters, electrolyte, working electrode, choice of solvents, supporting electrolytes.	02	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J. Sundberg,	White board/ marker pen and duster.
	Cathodic reduction: Reduction of alkyl halides, aldehydes, ketones, Nitro compounds, olefins, arenes, electro-dimerization.	02	Organic Chemistry, Clayden Greeves Warren and Wothers,	White board/ marker pen and duster.

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	Anodic oxidation: Oxidation of alkylbezene, Kolbe reaction, Non-Kolbe oxidation, Shono oxidation..	03	Advanced Organic	White board/ marker pen and duster.
			Chemistry: Reaction Mechanism, R. Bruckner, Academic Press (2002).	
	Selected Methods of Organic synthesis, Applications of the following in organic synthesis: Crown ethers, cryptands, micelles, cyclodextrins, catenanes. Organocatalysts: Proline, Imidazolidinone. Pd catalysed cycloaddition reactions: Stille reaction, Saeguse-Ito oxidation to enones, Negishi coupling	05	Organic reactions and their mechanisms, 3rd revisededition, P.S. Kalsi, New Age International Publishers	White board/ marker pen and duster.

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	Use of Sc(OTf), and Yb(OTf) as water tolerant Lewis acid catalyst in aldol condensation, Michael reaction, Diels-Alder reaction, Friedel – Crafts reaction.	*03*	*Chem.Rev. 2002, 102, 2227-2302, Rare Earth Metal Triflates in Organic Synthesis, S.*	*White board/ marker pen and duster.*

			Kobayashi.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHAILESH GURAV DEPARTMENT: CHEMISTRY

CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY SEMESTER: IV MONTH: November 2018 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

To gain knowledge of basic concepts of organometalic chemistry.
Understand importance of palladium in organic synthesis.
Study application of Ce, Sm, Ni, Co, Fe, Rh, and Cr in organic synthesis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic organic chemistry-II	Introduction to basic concepts: 18 electron rule, bonding in transition metal complexes, C-H activation, oxidative addition, reductive elimination, migratory insertion.	03	Moder Organic Synthesis: An Introduction, G.S. Zweifel and M.H. Nantz,	White board/ marker pen and duster.

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UNIT-IV, *Transition and rare earth metals in organic synthesis*			*W.H. Freeman and Company, (2007).*	
	Palladium in organic synthesis: π-bonding of Pd with olefins, applications in C-C bond formation, carbonylation, alkene isomerisation, cross-coupling of organometallics and halides.	*03*	*Organic Chemistry, Clayden Greeves Warren and Wothers,*	*White board/ marker pen and duster.*
	Heck reaction, Suzuki-Miayura coupling, Sonogashira reaction and Wacker oxidation. *Heteroatom coupling for bond formation between aryl/vinyl groups and N, S, or P atoms.* *Olefin metathesis using Grubb's catalyst.*	*03*	*Advanced Organic Chemistry: Reaction Mechanism, R.* *Bruckner, Academic Press*	*White board/ marker pen and duster.*
	Application of Ni, Co, Fe, Rh, and Cr carbonyls in organic synthesis.	*04*	*Advanced Organic Chemistry, Part A and Part B: Reaction and* *Synthesis, Francis A. Carey, Richard*	*White board/ marker pen and duster.*

			J. Sundberg,	
	Application of samarium iodide including reduction of organic halides, aldehydes and ketones, a-functionalised carbonyl and nitro compounds. Application of Ce(IV) in synthesis of heterocyclic quinoxaline derivatives and its role as a de-protecting agent.	02	Modern Methods of Organic Synthesis, 4th Edition, W. Carruthers and Iain Coldham,	White board/ marker pen and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF ***SIGNATURE OF THE H.O.D.***

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____Namrata Amit Kawale_____DEPARTMENT: Chemistry_____

CLASS:_____FYBSc CBZ_____ SEMESTER:_____I_____ MONTH: june to sept_____ ACADEMIC YEAR: ____2018-19

LEARNING OBJECTIVE/S:

The learners will be able to learn basics of Stereochemistry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II,U-3 Stereochemistry	1) Flying –wedge ,fischer projection formula 2) Newman and Sawhorse formula	15		Chalk n duster
	3) Their interconversions 4) Geometrical isomerism in alkene			
	5) E/Z notation with CIP rule 6) optical activity ,specific rotation.			
	7) Meso structure ,Racemic mixture 8) D/L and R/S designations			
	9) conformational analysis of alkane			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D**

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Bhaskar Waman Thakur College of Science
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Namrata Amit Kawale DEPARTMENT: Chemistry

CLASS: FYBSc PCM SEMESTER: I MONTH: june to sept

LEARNING OBJECTIVE/S: ACADEMIC YEAR: 2018-19

The learners will be able to : learn basics of stereochemistry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II,U-3 Stereochemistry	1) Flying –wedge ,fischer projection formula 2) Newman and Sawhorse formula	15		Chalk and duster
	3) Their interconversions 4) Geometrical isomerism in alkene			
	5) E/Z notation with CIP rule 6) optical activity ,specific rotation.			
	7) Meso structure ,Racemic mixture 8) D/L and R/S designations			
	9) conformational analysis of alkane			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D**

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Namrata Amit Kawale_____DEPARTMENT:_____Chemistry_____

CLASS:_____TYBSc_____ SEMESTER:_____V_____ MONTH: june to sept ACADEMIC YEAR: 2018-19_____

LEARNING OBJECTIVE/S:

_____

The learners will be able to : learn chirality optical activity ,agrochemicals and hetrocyclic chemistry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-3,U-2	1)Element of symmetry chirality of compound without stereo genic centrre	05		Chalk and duster
	2)Introduction of agrochemicals, advantages synthesis and application of IAA,Biopesticides	04		
	3)Heterocyclic chemistry-reactivity and their preparation ,reactions	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D**

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Bhaskar Waman Thakur College of Science
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Namrata Amit Kawale_____DEPARTMENT: Chemistry_____

_ CLASS:____MSc_____ SEMESTER:_____I_____ MONTH: june to sept_ACADEMIC YEAR:__ 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to : learn details in stereochemistry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Stereochemistry	3.1 Symmetry operations: Identification of the different axes and planes of symmetry. 3.2 Molecules with tri and tetracoordinate chiral centres:	03		Chalk and duster
	3.3. Molecules with two or more chiral centres:	02		
	3.4 Axial and planar chirality: Principles of axial and planar chirality. Stereochemical features and configurational descriptors (R, S)	05		
	3.5 Prochirality: Homotopic, heterotopic and diastereotopic ligands and faces. Identification using substitution and symmetry criteria.	05		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____Namrata Amit Kawale_____DEPARTMENT: Chemistry_____

CLASS:_____FYBSc CBZ_____ SEMESTER: _____II_____ MONTH: _ ACADEMIC YEAR:_____2018-19_____
_____oct to feb

LEARNING OBJECTIVE/S: The learners will be able to learn aromatic hydrocarbon_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II,U-3 Stereochemistry	cycloalkanes and their relative stability, Baeyer strain theory, Conformation analysis of cyclohexane: Chair, Boat and Twist boat forms; Relative stability with energy.	05		Chalk n duster
	Aromatic Hydrocarbons Aromaticity; Huckels rule ,anti aromaticity	04		
	Cyclic carbocations/carbanions and heterocyclic compounds with suitable examples.	02		
	Electrophilic aromatic substitution: halogenation, nitration, sulphonation and Friedel-Craft alkylation/acylation with their mechanism.	02		
	Hammond's postulate, Directing effects of groups	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D**

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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:___Namrata Amit Kawale_____DEPARTMENT: Chemistry_____

CLASS:_____FYBSc PCM_____ SEMESTER:_____II_____MONTH: oct to feb_ ACADEMIC YEAR:____2018-19_____

LEARNING OBJECTIVE/S: The learners will be able to learn Aromatic hydrocarbons._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II,U-3 Stereochemistry	cycloalkanes and their relative stability, Baeyer strain theory, Conformation analysis of cyclohexane: Chair, Boat and Twist boat forms; Relative stability with energy.	05		Chalk n duster
	Aromatic HydrocarbonsAromaticity; Huckels rule ,anti aromaticity	04		
	Cyclic carbocations/carbanions and heterocyclic compounds with suitable examples.	02		
	Electrophilic aromatic substitution: halogenation, nitration, sulphonation and Friedel-Craft alkylation/acylation with their mechanism.	02		
	Hammond's postulate, Directing effects of groups	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Namrata Amit Kawale_____DEPARTMENT:_____Chemistry_____

CLASS:_____TYBSc_____ SEMESTER:_____VI_____

LEARNING OBJECTIVE/S: MONTH: oct to feb

ACADEMIC YEAR: 2018-19_

The learners will be able to : learn stereochemistry of nucleophilic reactions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-3,U-2 Stereochemistry	Stereoselectivity and stereospecificity: Idea of enantioselectivity (ee) and diastereoselectivity (de) , Topicity : enantiotopic and diasterotopic atoms, group	05		Chalk and duster
	Stereochemistry of – i) Substitution reactions : SNi (reaction of alcohol with thionyl chloride) ii) Elimination reactions: E2–Base induced dehydrohalogenation of 1-bromo-1,2- diphenylpropane	04		
	Addition reactions to olefins: a) bromination (electrophilic anti addition) b) syn hydroxylation with OsO4 and KMnO4 c) epoxidation followed by hydrolysis	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D**

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Namrata Amit Kawale_____DEPARTMENT: Chemistry_____

_ CLASS:___MSc_____ SEMESTER:_____II_ MONTH: oct to febACADEMIC YEAR:____2018-19_____

LEARNING OBJECTIVE/S:

The learners will be able to : learn mechanisms if reactions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-3,U-2 Reactions and Rearrangements:	Mechanisms, stereochemistry (if applicable) and applications of the following: 2.1. Reactions: Baylis-Hilman reaction, McMurry Coupling, Corey-Fuchs reaction, Nef reaction, Passerini reaction.	04		Chalk and duster
	2.2. Concerted rearrangements: Hofmann, Curtius, Lossen, Schmidt, Wolff, Boulton-Katritzky.	03		
	2.3. Cationic rearrangements: Tiffeneau-Demjanov, Pummerer, Dienone-phenol, Rupe,Wagner-Meerwein.	04		
	2.4. Anionic rearrangements: Brook, Neber, Von Richter, Wittig, Gabriel–Colman,Payne.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15_____

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Yashwant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHINGPLAN (UNITPLAN)

NAME OFTHE STAFF:_____PriyaSanjayBarve_____DEPARTMENT:_CHEMISTRY_____
CLASS: _____SY BSc_____ SEMESTER: __III_____MONTH: _____ ACADEMIC YEAR: _2018- 19
_____LEARNING OBJECTIVE/S:
Thelearnerswillbeableto:Thelearnerswillbeableto:CHEMICALTHERMODYNAMICSINWHICHFREEENERGIESANDTHE ELECTROCHEMISTRY WITH THE BASIC CONCEPTS OF ELECTROCHEMISTRYY_____

PAPER,UNIT,TITLE	SUBTOPICS	NO OFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
PAPERI UNIT I PHYSICALCHEMISTRY	1.1 ChemicalThermodynamics-II 1.1.1 Free Energy Functions: Helmholtz Free Energy, Gibb'sFreeEnergy,VariationofGibb'sfreeenergywithPressureand Temperature. 1.1.2 Gibbs-Helmholtzequation,van'tHoffreactionisothermand van't Hoff reaction isochore. (Numericalsexpected). 1.1.3 ThermodynamicsofOpenSystem:PartialMolalProperties, Chemical Potential and its variationwithPressureandTemperature,Gibb'sDuhemequation. 1.1.4 ConceptofFugacityandActivity	(8L)	TEXTBOOKS REFFERENCE BOOKS UTUBEVIDEOS	CLALK AND TALK METHODPOWERPOINTPRESENTATION
	1.2 Electrochemistry: 1.2.1 Conductivity,equivalentandmolarconductivityandtheirvariation with dilution for weak and strong electrolytes.	(7L)	TEXTBOOKS REFFERENCE	CLALKANDTALKMETHOD POWERPOINTPRESENTATION

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	1.2.2 Kohlrauschlawofindependentmigrationofions. *1.2.3 Applications of conductance measurements:determinationofdegreeofionizationandionizationconstantof weak electrolyte, solubility and solubility product ofsparingly soluble salts, ionic product of water. (Numericalsexpected).* *1.2.4 Transference number and its experimentaldeterminationusingMovingboundarymethod.(Numericalsexpected). Factors affecting transference number.*		*BOOKS* *UTUBEVIDEOS*	

TOTALNUMBER OFLECTURESALLOCATEDTOTHEUNIT:_____15_____

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TEACHINGPLAN (UNITPLAN)

NAME OFTHE STAFF:_____PriyaSanjayBarve_____DEPARTMENT:_CHEMISTRY_____
CLASS: _____SY BSc_____ SEMESTER: __IV_____MONTH: _____ ACADEMIC YEAR: _2018- 19
_____LEARNING OBJECTIVE/S:
Thelearnerswillbeableto:LEARNELETROCHEMISTRYIIGIVESTHEMTHEIDEAABOUTTHEREVERSIBLEANDIRRIVERSIBLECELLALSO GIVE THE KNOWLEDGE OF PHASE EQUILIBRIA __

PAPER,UNIT,TITLE	SUBTOPICS	NO OFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
PAPERI UNIT I PHYSICAL	1.1 Electrochemistry-II: 1.1.1 Electrochemicalconventions,Reversibleandirreversiblecells. 1.1.2 Nernst equation and its importance, Types ofelectrodes,Standardelectrodepotential,Electrochemicalseries (Numericals expected).	(8L)	TEXTBOOKS REFFERENCE BOOKS UTUBEVIDEOS	CLALK AND TALK METHODPOWERPOINTPRESENTATION

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CHEMISTRY	1.1.3 Thermodynamics of a reversible cell, calculation ofthermodynamicproperties:ΔG,ΔHandΔSfromEMFdata.(Numericals expected) 1.1.4 CalculationofequilibriumconstantfromEMFdata.(Numericals expected) 1.1.5 Concentrationcellswithtransferenceandwithouttransference. Liquid junction potential and salt bridge. 1.1.6 pHdeterminationusinghydrogenelectrodeandquinhydrone electrode.(Numericals expected)			
	1.2 PhaseEquilibria: 1.2.1 Phases, components and degrees of freedom of asystem,criteriaofphaseequilibrium.GibbsPhaseRuleandits thermodynamic derivation. 1.2.2 DerivationofClausius–Clapeyronequationanditsimportance in phase equilibria. (numericals expected) 1.2.3 Phasediagramsofone-componentsystems(waterandsulphur). 1.2.4 Twocomponentsystemsinvolvingeutectics,congruentand incongruent melting points (lead-silver system).	(7L)	TEXTBOOKS REFFERENCE BOOKS UTUBEVIDEOS	CLALK AND TALK METHODPOWERPOINTPRESENTATION

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:_15_____

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TEACHINGPLAN (UNITPLAN)

NAME OFTHE STAFF:_____PriyaSanjayBarve_____DEPARTMENT:_CHEMISTRY_____
CLASS: _____SY BSc_____ SEMESTER: __II_____MONTH: _____ ACADEMIC YEAR: _2018- 19
_____LEARNING OBJECTIVE/S:
Thelearnerswillbeableto:LEARNABOUTTHECARBONYLCOMPOUNDITSGENERALMECHANISMALSOVARIOUSREACTION

PAPER,UNIT, TITLE	SUBTOPICS	NO OFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
PAPERII UNITIII	UnitIII:OrganicChemistry Carbonyl Compounds: 3.1Nomenclatureofaliphatic,alicyclicandaromaticcarbonyl compounds.Structure,reactivityofaldehydesandketones	3	TEXTBOOKS REFFERENCE	CLALK AND TALK METHODPOWERPOINTPRESENTATION

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ORGANIC CHEMISTRY	and methods of preparation; Oxidation of primary andsecondaryalcoholsusingPCC,hydrationofalkynes,actionofGrignard reagent on esters, Rosenmund reduction,Gattermann–KochformylationandFriedelCraftacylationofarenes		BOOKS UTUBEVIDEOS	
	3.2Generalmechanismofnucleophilicaddition,andacidcatalyzed nucleophilic addition reactions.	2	TEXTBOOKS REFFERENCE BOOKS UTUBEVIDEOS	CLALK AND TALK METHODPOWERPOINTPRESENTATION
	3.3ReactionsofaldehydesandketoneswithNaHSO$_3$,HCN,RMgX, alcohol, amine, phenyl hydrazine, 2,4-Dinitrophenylhydrazine, LiAlH$_4$ and NaBH$_4$.	3	TEXTBOOKS REFFERENCE BOOKS UTUBEVIDEOS	CLALK AND TALK METHODPOWERPOINTPRESENTATION
	3.4 Mechanisms of following reactions: Benzoincondensation, Knoevenagel condensation, Claisen-Schmidtand Cannizzaro reaction.	2	TEXTBOOKS REFFERENCE BOOKS UTUBEVIDEOS	CLALK AND TALK METHODPOWERPOINTPRESENTATION
	3.5Keto-enoltautomerism:Mechanismofacidandbasecatalysedenolization	2	TEXTBOOKS REFFERENCE BOOKS	CLALK AND TALK METHODPOWERPOINTPRESENTATION

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			UTUBEVIDEOS	
	3.6 Active methylene compounds: Acetylacetone, ethylacetoacetatediethylmalonate,stabilisedenols.Reactionsof Acetylacetoneandethylacetoacetate(alkylation,conversionto ketone, mono- and dicarboxylic acid)	3	TEXTBOOKS REFFERENCE BOOKS UTUBEVIDEOS	CLALK AND TALK METHODPOWERPOINTPRESENTATION

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:__15_____

TEACHINGPLAN (UNITPLAN)

NAME OF THE STAFF: _____PriyaSanjay Barve_____DEPARTMENT:_ CHEMISTRY_____

_____CLASS: _____SY BSc_____ SEMESTER: __IV_____MONTH: _____

ACADEMIC YEAR: _2018- 19_____

LEARNINGOBJECTIVE/S:
Thelearnerswillbeableto:LEARNABOUTTHECHEMISTRYOFNITROGENCONTAININGCOMPOUND,ITSNOMENCLATURE,REACTIONS

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PAPER,UNIT,TITLE	*SUBTOPICS*	*NO OFLECTURES ALLOTED*	*REFERENCE/S*	*TEACHINGMETHOD/ICTTOOLSUSED*
PAPERII *UNIT III* *ORGANIC CHEMISTRY*	*UnitIII:OrganicChemistry* *Nitrogen containing compounds and heterocyclic compounds:* *3.1 Amines: Nomenclature, effect of substituent on basicityof aliphatic and aromatic amines;* *3.1.1. Preparation: Reduction ofaromaticnitro compoundsusing catalytic hydrogenation,chemical reduction using Fe-HCl,Sn-HCl,Zn-aceticacid,reductionofnitriles,ammonolysisof halides, reductive amination , Hofmann bromamidereaction.* *3.1.2. Reactions-SaltFormation,N-acylation,N-alkylation,Hofmann's exhaustive methylation (HEM),Hofmann-eliminationreaction,reactionwithnitrousacid,carbylaminereaction, Electrophilic substitution in aromatic amines:bromination, nitration and sulphonation.*	*(7Lectures*	*TEXTBOOKS* *REFFERENCE BOOKS* *UTUBEVIDEOS*	*CLALK AND TALK* *METHODPOWERPOINTPRESENTATION*
	3.2DiazoniumSalts:) *Preparation and their reactions/synthetic application - Sandmeyerreaction,Gattermannreaction,Gombergreaction,Replacement of diazo group by -H,-OH. Azo coupling withphenols, naphthols and aromatic amines, reduction ofdiazonium salt to aryl hydrazine and hydroazobenzene*		*TEXTBOOKS* *REFFERENCE BOOKS* *UTUBEVIDEOS*	*CLALK AND TALK* *METHODPOWERPOINTPRESENTATION*

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	3.3 HeterocyclicCompounds:) *3.3.1. Classification, nomenclature, electronic structure,aromaticityin5-numberedand6-memberedringscontainingone heteroatom;* *3.3.2. Synthesis of Furan, Pyrrole (Paal-Knorr synthesis, Knorrpyrrole synthesis, and Hantzsch synthesis), Thiophene,Pyridine (Hantzsch synthesis),* *3.3.3. Reactivity of furan, pyrrole and thiophene towardselectrophilicsubstitutionreactionsonthebasisofstability ofintermediate and of pyridine on the basis of electrondistribution. Reactivity of pyridine towards nucleophilicsubstitution on the basis of electron distribution.* *3.3.4. Reactionsoffuran,pyrroleandthiophene:halogenation,nitration, sulphonation, Vilsmeier-Haack reaction, Friedel-Crafts reaction. Furan: Diels-Alder reaction, Ring opening.Pyrrole:Acidityandbasicityofpyrrole.Comparisonofbasicityof pyrrole and pyrrolidine.* *3.3.5. Pyridine: Basicity. Comparison of basicity of pyridine,pyrrole and piperidine. Sulphonation of pyridine (with andwithout catalyst), reduction and action of sodamide(Chichibabin reaction).*	*(8Lectures*	*TEXTBOOKS* *REFFERENCE BOOKS* *UTUBEVIDEOS*	*CLALK AND TALK* *METHODPOWERPOINTPRESENTATION*

*TOTALNUMBER OFLECTURESALLOCATEDTOTHEUNIT:15*_____

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NAME OFTHE STAFF:_____PriyaSanjayBarve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____TY BSc_____ SEMESTER: __V_____MONTH: _____ ACADEMIC YEAR: _2018- 19

_____LEARNING OBJECTIVE/S:
Thelearnerswillbeableto:LEARNETHEIUPACNOMENCLATUREOFBICYCLICCOMPOUNDANDSYNTHESISOFCOMPOUND__

PAPER,UNIT,TITLE	SUBTOPICS	NO OFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
PAPERIII UNIT III ORGANIC CHEMISTRY	3.1 IUPAC IUPAC Systematic nomenclature of the following classes of compounds (including compounds upto twosubstituents/functionalgroups): 3.1.1 Bicycliccompounds–spiro,fusedandbridged(upto 11 carbon atoms) – saturated and unsaturatedcompounds. 3.1.2 Biphenyls 3.1.3 Cummuleneswithupto 3double bonds 3.1.4 Quinolinesandisoquinolines	(5L)	TEXTBOOKS REFFERENCE BOOKS UTUBEVIDEOS	CLALK AND TALK METHODPOWERPOINTPRESENTATION
	3.2Synthesisoforganiccompounds	(10L)	TEXTBOOKS	CLALKANDTALKMETHOD

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	3.2.1 Introduction:Linearandconvergentsynthesis,criteria for an ideal synthesis, concept of chemo *selectivityandregioselectivitywithexamples,calculation of yields.* *3.2.2 MulticomponentSynthesis:Mannichreactionand Biginelli reaction. Synthesis with examples* *(nomechanism)* *3.2.3 Greenchemistry andsynthesis:* *Introduction:Twelveprinciplesofgreenchemistry,concept of atom economy and E-factor,* *calculationsandtheirsignificance,numericalexamples.* *i) Greenreagents:dimethylcarbonate.* *ii) Greenstartingmaterials:D-glucose* *iii) Greensolvents:supercriticalCO_2* *iv) Greencatalysts:Biocatalysts.* *3.2.4Planningoforganicsynthesis* *i) synthesisofnitroanilines.(o&p)* *ii) synthesisofhalobenzoicacid.(o&p)* *iii) Alcohols(primary/secondary/tertiary) usingGrignard*		*REFFERENCE BOOKS* *UTUBEVIDEOS*	*POWERPOINTPRESENTATION*

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	reagents. *iv)Alkanes(usingorganolithiumcompounds)*			

*TOTALNUMBER OFLECTURESALLOCATEDTOTHEUNIT:15*_____

TEACHINGPLAN (UNITPLAN)

*NAME OFTHE STAFF:*_____*PriyaSanjayBarve*_____*DEPARTMENT:*_*CHEMISTRY*_____

CLASS: _____*TY BSc*_____ *SEMESTER:* __*VI*____*MONTH:* _*DECEMBERTO MARCH ACADEMIC YEAR:* _*2018- 19*
_____*LEARNING OBJECTIVE/S:*
Thelearnerswillbeableto:STUDYABOUTSPECTROSCOPYUV,IR,AND,NMR

PAPER,UNIT, TITLE	*SUBTOPICS*	*NO OFLECTURES*	*REFERENCE/S*	*TEACHINGMETHOD/ICTTOOLS USED*

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PAPERIII UNIT III ORGANIC CHEMISTRY	3.1 SpectroscopyII) 3.1.1 IRSpectroscopy:Basictheory,natureofIRspectrum, selection rule, fingerprint region. 3.1.2 PMRSpectroscopy:BasictheoryofPMR,natureof PMR spectrum, chemical shift (δunit), standardforPMR,solventsused.Factorsaffecting chemical shift: (1) inductive effect (2) anisotropiceffect (withreferencetoC=C,C≡C,C=Oand benzene ring). Spin- spin coupling and couplingconstant.applicationofdeuteriumexchange technique. application of PMR in structure determination. 3.1.3 Spectral characteristics of following classes of organic compounds, including benzene and monosubstitutedbenzenes,withrespecttoIRandPMR:(1) alkanes (2) alkenes (3) alkynes (4) haloalkanes (5) alcohols (6) carbonylcompounds (7) ethers (8) amines (broad regions characteristicofdifferentgroupsareexpected).	(10L	TEXTBOOKS REFFERENCE BOOKS UTUBEVIDEOS	CLALK AND TALK METHODPOWERPOINTPRESENTATION

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	Problems of structureelucidationof simpleorganic compounds using individual or combined use ofUV-Vis,IR,MassandNMRspectroscopictechniqueare expected. (Index of hydrogen deficiencyshouldbethefirststepinsolvingtheproblems).			
	3.2NucleicAcids Controlledhydrolysis of nucleicacids.sugars andbases in nucleic acids. Structures of nucleosides and nucleotides in DNA and RNA. Structures of nucleic acids (DNA and RNA)including base pairing.	*(5L)*		

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TEACHINGPLAN (UNITPLAN)

NAME OFTHE STAFF:_____PriyaSanjayBarve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____MSc PART II_____SEMESTER: __III_____MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: _2018- 19 _____LEARNING OBJECTIVE/S:

Thelearnerswillbeableto:

PAPER,UNIT,TITLE	SUBTOPICS	NO OFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
PAPERIII UNIT III ORGANIC CHEMISTRY	Advancedspectroscopictechniques-I[15L] 3.1 Proton NMR spectroscopy: Recapitulation, chemical and magnetic equivalenceofprotons,Firstorder,secondorder, Spinsystemnotations (A2,AB,AX,AB2,AX2,AMXandA2B2-A2X2spin systemswithsuitable examples).Longrangecoupling(Allyliccoupling,	[7L]	TEXTBOOKS REFFERENCE BOOKS UTUBEVIDEOS	CLALK AND TALK METHODPOWERPOINTPRESENTATION

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	'W'couplingand *Coupling in aromatic and heteroaromatic systems), Temperature effects,* *Simplification of complex spectra, nuclear magnetic double resonance,* *chemicalshiftreagents.*			
	3.2 13C –NMR spectroscopy: Recapitulation, equivalent and non-equivalent *carbons (examples of aliphatic and aromatic compounds), 13C- chemical* *shifts, calculation of 13C- chemical shifts of aromatic carbons, heteronuclear* *couplingofcarbonto19Fand31P.*	*[4L]*	*TEXTBOOKS* *REFFERENCE BOOKS* *UTUBEVIDEOS*	*CLALK AND TALK* *METHODPOWERPOINTPRESENTAT* *ION*
	3.3 Spectral problems based on UV, IR, 1HNMR and 13CNMR and Massspectroscopy	*4L*	*TEXTBOOKS* *REFFERENCE BOOKS* *UTUBEVIDEOS*	*CLALK AND TALK* *METHODPOWERPOINTPRESENTAT* *ION*

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TEACHINGPLAN (UNITPLAN)

NAME OFTHE STAFF:_____PriyaSanjayBarve_____DEPARTMENT:_CHEMISTRY_____

CLASS: _____MSc PART II____SEMESTER: III_MONTH: AUGUST TO DECEMBER_____ ACADEMIC YEAR: _2018- 19

_____LEARNING OBJECTIVE/S:

Thelearnerswillbeableto:LEARNADVANCEDSPECTROSCOPY

PAPER,UNIT,TITLE	SUBTOPICS	NO OFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
PAPERIII	Advancedspectroscopictechniques-II[15L]	[10L]	TEXTBOOKS	CLALKANDTALKMETHOD

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UNITIV ORGANIC CHEMISTRY	4.1 Advanced NMR techniques: DEPT experiment,determining number of attachedhydrogens(Methyl/methylene/methineand quaternary carbons), two dimensionalspectroscopictechniques, COSYand HETCOR spectra, NOEandNOESYtechniques.		REFFERENCE BOOKS UTUBEVIDEOS	POWERPOINTPRESENTATION
	4.2SpectralproblemsbasedonUV,IR,$_1$HNMR,$_{13}$CNMR (Including 2D technique)andMassspectroscopy	[5L]	TEXTBOOKS REFFERENCE BOOKS UTUBEVIDEOS	CLALK AND TALK METHODPOWERPOINTPRESENTAT ION

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:__15_____

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NAME OFTHE STAFF:_____PriyaSanjayBarve_____DEPARTMENT:_CHEMISTRY_____
CLASS: _____MSc PART II _____ SEMESTER: __IV____MONTH: _JANUARY TO MAY_____ ACADEMICYEAR:2018-19
LEARNING OBJECTIVE/S:
Thelearnerswillbeableto:LEANABOUTTHEDESIGNINGTHEORGANICSYNTHESIS

PAPER,UNIT,TITLE	SUBTOPICS	NO OFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
PAPERII UNIT II ORGANIC CHEMISTRY	Unit2:DesigningOrganicSynthesis-II[15L] 2.1 General strategy: choosing a disconnection-simplification, symmetry, high yieldingsteps,andrecognisablestartingmaterial. [3L]	3L	TEXTBOOKS REFFERENCE BOOKS UTUBEVIDEOS	CLALK AND TALK METHODPOWERPOINTPRESENTATION
	2.2 One group C-C Disconnections: Alcohols (includingstereoslectivity), carbonyls (including regioselectivity), Alkene synthesis, useof acetylenes andaliphaticnitrocompoundsinorganicsynthesis. [6L]	6L	TEXTBOOKS REFFERENCE BOOKS UTUBEVIDEOS	CLALK AND TALK METHODPOWERPOINTPRESENTATION

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	2.3TwogroupC-CDisconnections:1,2-1,3-1,4-1,5-and 1,6- difunctionalized compounds, Diels-Alder reactions, α, β-unsaturated compounds,controlincarbonylcondensations,Michael addition and Robinsonannelation	6L	TEXTBOOKS REFFERENCE BOOKS UTUBEVIDEOS	CLALK AND TALK METHODPOWERPOINTPRESENTATION

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:__15_____

TEACHINGPLAN (UNITPLAN)

NAME OFTHE STAFF:_____PriyaSanjayBarve_____DEPARTMENT:_CHEMISTRY_____
CLASS: _MSc PART II_____ SEMESTER: __IV____MONTH: JANUARYTOMAY_____ ACADEMIC YEAR: _2019- 20
_____LEARNING OBJECTIVE/S:
Thelearnerswillbeableto:LEARNABOUTVARIOUSNATURALPRODUCTSAND
VITAMINS_____

PAPER,UNIT,TITLE	SUBTOPICS	NO OFLECTURES	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED

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PAPERIIIUN IT II ORGANIC CHEMISTRY	Unit2:Naturalproducts-IV[15L] 2.1Vitamins: Classification,sourcesandbiological importance of vitamin B_1, B_2,B_6,folicacid,B_{12},C,D_1,E(α-tocopherol),K_1,K_2,H(β-biotin).Synthesis of the following: VitaminAfrom β-ionone andbromoestermoiety. Vitamin B_1 including synthesis of pyrimidine and thiazole moietiesVitamin $B_2$from 3, 4-dimethylaniline and D(-)ribose Vitamin B_6 from: 1) ethoxyacetylacetone and cyanoacetamide, 2) ethylester of N-formyl-DL-alanine(Harris synthesis) Vitamin E (α-tocopherol) from trimethylquinol and phytyl bromideVitamin $K_1$from 2-methyl-1, 4-naphthaquinone andphytol.	[5L]		
	2.2Antibiotics: Classificationonthebasisofactivity. Structure elucidation, spectral data of penicillin-G, cephalosporin-C and chloramphenicol.penicillin-G and phenoxymethylpenicillinfrom D-penicillamine and t-butyl	6L		

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	phthalimidemalonaldehyde(synthesisofD-penicillamine and t-butylphthalimide malonaldehyde expected).			
	2.3 Naturally occurring insecticides: Sources, structureand biologicalproperties of pyrethrums (pyrethrin I), rotenoids (rotenone). Synthesis of pyrethrinI.	*2L*		
	2.4 3.4 Terpenoids: Occurrence, classification, structure elucidationstereochemistry,spectraldataandsynthesisof zingiberene .	*,2L*		

*TOTALNUMBER OFLECTURESALLOCATEDTOTHEUNIT:15*_____

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TEACHING PLAN (UNITPLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: T.Y.Bsc. SEMESTER : V MONTH :JUNE-JULY

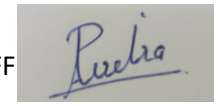
ACADEMICYEAR: 2018-2019

LEARNINGOBJECTIVE/S:
The learners will be able to:

To learn- dipole moment, polarization of a bond, bond moment, derivation for Rotational spectroscopy, Vibrational spectroscopy,
To learn-Rotational-Vibrational spectroscopy, Raman spectroscopy, solve the numerical problems based on this topic.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICT TOOLSUSED
PAPER-I, UNIT-I TITLE: MOLECULAR SPECTROSCOPY	1.Rotational Spectrum	04	1)T.Y.Bsc Physical Chemistry Text book by Sheth Pub. And by Himalaya Pub. 2)Principles of Physical Chemistry B.R. Puri, L.R. Sharma, M.S. Pathania, VISHAL PUB.,2008.	Chalk-board
	2.Vibrational Spectrum	04		
	3.Vibrational Rotational spectrum of diatomic molecule	04		
	4.Raman Spectroscopy	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: T.Y.Bsc.

SEMESTER : V MONTH : AUGUST-SEPTEMBER ACADEMICYEAR:2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to:

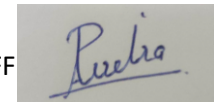
To know-Adsorption and its types, Langmuir and B.E.T adsorption isotherm, Terms like Emulsion, Gel, Sol.

To learn-Origin of charges on colloidal particles, Concept of electrical double layer, zeta potential, Helmholtz and Stern model, Electro-kinetic phenomena.

To know-micelle formation, Classification and applications of surfactants in detergents and food industry.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
PAPER-I, UNIT-IV TITLE: SURFACE CHEMISTRY	1.Adsorption	05	1)T.Y. Bsc Physical Chemistry Text book by Sheth Pub. And by Himalaya Pub. 2) Principles of Physical Chemistry B.R. Puri, L.R. Sharma, M.S. Pathania, VISHAL PUB.,2008.	Chalk-board
	2.Colloidal State	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF  SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: M.Sc-I

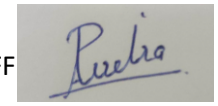
SEMESTER: I MONTH: JULY-AUGUST ACADEMICYEAR: 2018-2019

The learners will be able to:

To learn-State function and exact differentials. Maxwell equations, Maxwell thermodynamic Relations.
To learn-Joule Thomson experiment, Joule Thomson coefficient, inversion temperature, Joule Thomson coefficient in terms of Vander Waals constants.
To know-Third law of Thermodynamics.
To learn-Entropy change for a phase transition, absolute entropies, determination of absolute entropies in terms of heat capacity, standard molar entropies and their dependence on molecular mass and molecular structure, residual entropy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICT TOOLSUSED
PAPER-I, UNIT-I	1.Maxwell equations	05	Atkin's Physical Chemistry, 7th Edn., Oxford University Press, 2002.	Chalk-board
TITLE: Thermodynamic s-I	2.Joule Thomson experiment	04		
	3.Third law of Thermodynamics	02		
	4.Entropy change for a phase transition	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF  SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: M.Sc-I

SEMESTER : I MONTH : SEPTEMBER–OCTOBER ACADEMIC YEAR:2018-2019

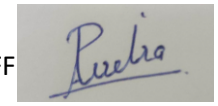
LEARNINGOBJECTIVE/S:

The learners will be able to:

To learn-Rate laws, Differential rate equations, Consecutive reactions, Steady state Approximation, formation and decomposition of phosgene, decomposition of ozone, Reaction between Hydrogen and Bromine, Decomposition of ethane, decomposition of acetaldehyde, Reaction between hydrogen and oxygen, Semenov-Hinshelwood and Thompson mechanism, Explosion limits and factors affecting explosion limits.
To learn-Kinetics of step wise polymerization, Kinetics of free radical chain polymerization.
To know-Unimolecular Reactions : Lindeman-Hinshelwood theory, Rice-Ramsperger-Kasssel(RRK)theory, Rice-Ramsperger-Kassel Marcus (RRKM) theory.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD / ICT TOOLS USED
PAPER-I,	1.Composite Reactions	08	K.J. Laidler and J.H. Meiser, Physical Chemistry, 2nd Ed., CBS Publishers and Distributors, New Delhi, 1999.	Chalk-board
UNIT-III	2.Polymerization reactions	03		
TITLE : Chemical Dynamics-I	3.Reaction in Gas Phase	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF  SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNITPLAN)

NAME OF THE STAFF : PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: T.Y.Bsc.

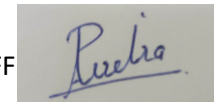
CLASS:T.Y.Bsc. SEMESTER:VI MONTH:NOVEMBER-DECEMBER ACADEMICYEAR:2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

To know-Basic terms like macromolecule, monomer, repeat unit, degree of polymerization, Classification of polymers.
To learn-Number average, Weight average, Viscosity average molar mass, Viscosity method using Ostwald Viscometer for determining molar masses of polymers,
To learn-Characteristics, Method of preparation and applications of Light Emitting Polymers, Antioxidants, Ultraviolet stabilizers, Colourants, Antistatic agents and Curing agents.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICT TOOLSUSED
PAPER-I, UNIT-II TITLE: POLYMERS	1.Basic terms	02	1)T.Y.Bsc Physical Chemistry Text book by Sheth Pub. And by Himalaya Pub. 2)Principles of Physical Chemistry B.R. Puri, L.R. Sharma, M.S. Pathania, VISHAL PUB.,2008.	Chalk-board
	2.Classification of polymers	03		
	3.Method of determining molar masses of polymers	04		
	4.Light Emitting Polymers	03		
	5.Antioxidants and Stabilizers	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

SIGNATURE OF THE STAFF  SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNITPLAN)

NAME OF THE STAFF : PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: T.Y.Bsc.

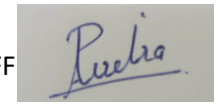
SEMESTER:VI MONTH: March-April-May ACADEMICYEAR:2018-2019

LEARNINGOBJECTIVE/S:
The learners will be able to:

To Learn-Principle of NMR, Nuclear spin, magnetic moment, nuclear 'g' factor, energy levels, Larmor precession, Relaxation processes in NMR i.e. spin-spin relaxation and spin-lattice relaxation, Instrumentation of NMR Spectrometer,
To learn-Principle of ESR, fundamental equation, g-value–dimensionless constant or electron g-factor, hyperfine splitting, Instrumentation of ESR spectrometer, ESR spectrum of hydrogen and deuterium.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICT TOOLSUSED
PAPER-I, UNIT-IV TITLE: NMRandESR	1.NUCLEAR MAGNETIC RESONANCE	07	1) T.Y.Bsc Physical Chemistry Text book by Sheth Pub. by Himalaya Pub. 2) Principles of Physical Chemistry B.R.Puri, L.R. Sharma, M.S. Pathania, VISHAL PUB.,2008.	Chalk-board
	2.ELECTRON SPIN RESONANCE SPECTROSCOPY	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

SIGNATURE OF THE STAFF  SIGNATURE OF THE H.O.D.

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TEACHINGPLAN(UNITPLAN)

NAME OF THE STAFF : PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: M.Sc-I

SEMESTER: II SEMESTER:II MONTH:JANUARY-FEBRUARY ACADEMIC YEAR: 2018-2019

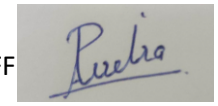
LEARNINGOBJECTIVE/S:

The learners will be able to:

To learn-Fugacity of real gases, Determination of fugacity of real gases using graphical method and from equation of state. Equilibrium constant for real gases in terms of fugacity. Gibb's energy of mixing, entropy and enthalpy of mixing.
To learn-Chemical potential in nonideal solutions excess functions of nonideal solution, Gibbs Duhem Margules equation.
To learn-Laplace equation, Kelvin equation, Gibb's adsorption isotherm, BET isotherm.
To learn-standard free energy change in biochemical reactions, exergonic, endergonic. Hydrolysis of ATP, synthesis of ATP from ADP.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICT TOOLSUSED
PAPER-I, UNIT-I TITLE: Thermodynamics -II	1.Fugacity	05	Peter Atkins and Juliode Paula, Atkin's Physical Chemistry,7th Edn., Oxford University Press,2002	Chalk-board
	2.Real solutions	03		
	3.Thermodynamics of surfaces	04		
	4.Bioenergetics	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

SIGNATURE OF THE STAFF  SIGNATURE OF THE H.O.D.

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TEACHINGPLAN(UNITPLAN)

NAME OF THE STAFF : PRIYANKA MELWIN RODRIGUES. DEPARTMENT: CHEMISTRY CLASS: M.Sc-I.

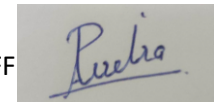
SEMESTER: II MONTH: MARCH-APRIL ACADEMICYEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

To study – Solvent Effects on reaction rates, Reactions between ions -influence of solvent Dielectric constant, influence of ionic strength, Linear free energy relationships Enzyme action
To learn-Michaelis-Menten analysis, Lineweaver-Burk and Eadie Analyses.
To learn-Competitive, Non competitive and Uncompetitive Inhibition. Effect of pH, Enzyme activation by metal ions, Regulatory enzymes.
To study-The parabolic rate law, The first order rate Law, the contracting sphere rate law, Contracting area rate law, some examples of kinetic studies.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
PAPER-I, UNIT-III TITLE: Chemical Kinetics and Molecular Reaction Dynamics	1.Elementary Reactions in Solution	04	Peter Atkins and Juliode Paula, Atkin's Physical Chemistry,7th Edn., Oxford University Press,2002.	Chalk-board
	2.Kinetics of reactions catalysed by enzymes	03		
	3.Inhibition of Enzyme action	04		
	4.Kinetics of reactions in the Solid State	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

SIGNATURE OF THE STAFF  SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: SY BSc (PC-CZ) SEMESTER: III MONTH: July- October ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : Study basics of Instrumental Methods and know the advantages of using instruments to make measurements.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
Paper III, Unit III, Instrumental Methods	**3.1.** Relation between the Analyte, Stimulus and measurement of change in the observable property.	1	Textbook of Himalaya Publication	BLACK BOARD	
	3.2. Block Diagram of an Analytical instrument.	1	Textbook of Himalaya Publication	BLACK BOARD	

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	3.3. Types of Analytical Instrumental methods based on tical interactions (eg. Spectrometry: uv-visible, Polarimetry) ii. Electrochemical interactions (eg. Potentiometry, Conductometry,) iii. Thermal interactions (eg. Thermogravimetry)	1	Textbook of Himalaya Publication	BLACK BOARD	
	3.4.1 . Interaction of electromagnetic radiation with matter: Absorption and Emission spectroscopy	2	Textbook of Himalaya Publication	BLACK BOARD	
	3.4.2. Basic Terms: Radiant Power, Absorbance, Transmittance, Monochromatic light, Polychromatic light, Wavelength of maximum absorbance,Absorptivity and Molar Absorbtivity	1	Textbook of Himalaya Publication	BLACK BOARD	
	3.4.3. Statement of Beer's Law and Lambert's Law, Combined Mathematical Expression of Beer -Lambert's Law, Validity of Beer-Lambert's Law,Deviations from Beer-Lambert's Law ((Real deviations, Instrumental deviations and Chemical deviations)	**1**	Textbook of Himalaya Publication	BLACK BOARD	

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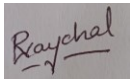
	3.4.4. Instrumentation for absorption spectroscopy: Colorimeters and Spectrophotometers	**1**	Textbook of Himalaya Publication	BLACK BOARD
	3.4.5. Block Diagrams for Single beam and Colorimeter, and Spectrophotometer (Principles, Construction and working-Details of Components expected i.e , source ,Sample holder , Filters/Monochromators, Detectors such as Photomultiplier tube)	**2**	Textbook of Himalaya Publication	BLACK BOARD
	3.4.6. Applications of UV-Visible Spectrophotometry (a) Qualitative analysis such as Identification of functional groups in Organic compounds ,Chromophores and Auxochrome,c*is* and *trans* isomers (b) Quantitative analysis by Calibration curve method and	**2**	Textbook of Himalaya Publication	BLACK BOARD
	3.4.7. Photometric Titrations: Principle ,Instrumentation, Types of Photometric titration Curves with examples.	3	Textbook of Himalaya Publication	BLACK BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF 

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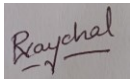
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: FY BSc- CBZ (A) SEMESTER: I MONTH: July- October ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

SIGNATURE OF THE STAFF 

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The learners will be able to : Learn Basics of Organic Chemistry, Classification and Nomenclature of Organic Compounds , Bonding and Structure of organic compounds and Fundamentals of organic reaction mechanism

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit III Organic Chemistry	3.1 Classification and Nomenclature of Organic Compounds	5	Textbook of Himalaya Publication	BLACK BOARD
	3.2 Bonding and Structure of organic compounds	4	Textbook of Himalaya Publication	BLACK BOARD
	3.3 Fundamentals of organic reaction mechanism	6	Textbook of Himalaya Publication	BLACK BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: FY BSc- CBZ (B) SEMESTER: I MONTH: July- October ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : Learn Basics of Organic Chemistry, Classification and Nomenclature of Organic Compounds , Bonding and Structure of organic compounds and Fundamentals of organic reaction mechanism

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit III Organic Chemistry	3.1 Classification and Nomenclature of Organic Compounds	5	Textbook of Himalaya Publication	BLACK BOARD
	3.2 Bonding and Structure of organic compounds	4	Textbook of Himalaya Publication	BLACK BOARD
	3.3 Fundamentals of organic reaction mechanism	6	Textbook of Himalaya Publication	BLACK BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry
CLASS: FY BSc- CBZ (B) SEMESTER: I MONTH: July- October ACADEMIC YEAR: 2018-2019LEARNING OBJECTIVE/S: The learners will be able to : Learn basics of stereochemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit III, Stereochemistry -I	Fischer Projection, Newman and Sawhorse Projection formulae (of erythro, threo isomers of tartaric acid and 2,3 dichlorobutane) and their interconversions	3	Textbook of Himalaya Publication	BLACK BOARD
	Geometrical isomerism in alkene and cycloalkanes: cis–trans and syn-anti isomerism E/Z notations with C.I.P rules.	2	Textbook of Himalaya Publication	BLACK BOARD
	Optical Isomerism: Optical Activity, Specific Rotation, Chirality/Asymmetry, Enantiomers, Molecules with two similar and dissimilar chiral-centres, Distereoisomers, meso structures, racemic mixture and resolution	4	Textbook of Himalaya Publication	BLACK BOARD

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	Relative and absolute configuration: D/L and R/S designations	3	Textbook of Himalaya Publication Textbook of Himalaya Publication	BLACK BOARD
	Conformation analysis of alkanes (ethane, propane and n-butane); Relative stability with energy diagrams.	3	Textbook of Himalaya Publication	BLACK BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

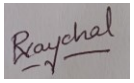
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: SY BSc (PC-CZ) SEMESTER: IV MONTH: Nov -March ACADEMIC YEAR: 2018-2019

Absent because of maternity leave .
LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	

SIGNATURE OF THE STAFF 

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Paper III, Unit III,					

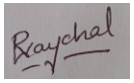
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: FY BSc- CBZ (A) SEMESTER: II MONTH: Nov- March ACADEMIC YEAR: 2018-2019

Absent because of Maternity leave
LEARNING OBJECTIVE/S:

SIGNATURE OF THE STAFF  **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit III Organic Chemistry				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: FY BSc- CBZ (B) SEMESTER: II MONTH: Nov- March ACADEMIC YEAR: 2018-2019

Absent because of Maternity leave
LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit III Organic Chemistry				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

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Vidhya Dayanand Patil College of Arts
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms Rashmita Bharatkumar Vaychal DEPARTMENT: Chemistry

CLASS: FY BSc- CBZ (B) SEMESTER: II MONTH: Nov-March ACADEMIC YEAR: 2018-2019

Absent because of Maternity Leave

LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II, Unit III,				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

SIGNATURE OF THE STAFF Rvaychal **SIGNATURE OF THE H.O.D.**

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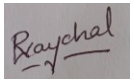
SIGNATURE OF THE STAFF 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Miss Riyan Rocky Gardner_____DEPARTMENT:

____Chemistry ESTER: __First____ MONTH: __August_____ ACADEMIC YEAR: __2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to : ____Study about atomic structure ,hydrogenicatoms, many electron atoms,shell ,seashells and atomic orbitals.learn about radial shape of atomic orbitals ,Aufbau principle .

Study about periodic table and periodicity ,classification of elements ,electronegativity like Pauling, Alfred and Rochow and Mulliken etc._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 unit 2 Atomic structure and Periodic table and periodicity	1. Atomic structure :Historical perspective of the atomic structure,Rutherford's atomic model,Bohrs atomic model ,it's limitations and atomic spectrum of atomic model,and structure of hydrogen atom. 2. Hydrogenic atom : Simple principle of quantum mechanics, atomic orbitals. Hydrogenic energy level ,shell, subshells and atomic orbitals, electron spin,radial shape of atomic orbitals, radial distribution function, angular shape of orbitals.	10	Himalaya publications F.Y.Bsc textbook	Black board ,chalk and duster

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	3. Many electron atom : penetration and shielding ,effective nuclear charge. 4. Aufbau principle.			
	1. Periodic table and periodicity : Long form of periodic table,classification of elements, periodicity in following properties : atomic and ionic size,ionization enthalpy, electron gain enthalpy, effective nuclear charge ,electronegativity : Pauling, mulliken and Alfred and Rochow electronegativity.	05	Himalaya publications F.Y.Bsc textbook	Black board ,chalk and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Miss Riyan Rocky Gardner_____DEPARTMENT: __Chemistry CLASS: _F.Y.Bsc_____ SEMESTER: __Second_____ MONTH: _____January ACADEMIC YEAR: 2018- 2019_____

LEARNING OBJECTIVE/S:
The learners will be able to : Study about concept of qualitative analysis, various types of gases,role of papers impregnated with qualitative analysis,concept of precipitation equllibria, common in effect, uncommon in effect , buffer action on precipitation equllibria..learn about the acid base theories ,application and limitations of acid base theories ,HSAB concept ,Friedel craft acylation and alkylation
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 unit 2	5. Concept of qualitative analysis : testing of gaseous evaluates, role of papers impregnated with reagent in qualitative analysis. 6. Precipitation equllibria, common ion effects,uncommon ion effect,oxidation state,buffer action ,complexing agents precipitation on ionic compounds.	07	Himalaya publications F.Y.Bsc textbook	Blackboard, chalk and duster

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1. concept of qualitative analysis and 2. Acid base theories.	1. Acid Base theory : Arrhenius, Lowery Bronsted ,Lewis, solvent solute concept of acid and bases, HSAB concept and its application. 2. Application of acid base chemistry in : understanding organic reactions like Friedel craft alkylation and acylation. 3. Volumetric analysis to special reference to titration curve involving strong acid and strong base.	08	Himalaya publications F.Y.Bsc textbook	Blackboard, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Miss Riyan Rocky Gardner_____DEPARTMENT: __Chemistry CLASS: _Msc part 2 Analytical_____ SEMESTER: ___Third_____ MONTH: August_____ ACADEMIC YEAR: 2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to : Study about principle ,instrumentation and application of chemilluminescence techniques, chiropractic optical methods ,photoacoustic spectroscopy and spectroelectrochemisty.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 unit 4 Miscellaneous techniques	4. Principle, instrumentation and application of chemiluminescence techniques 2. Priciple ,instrumentation and application of Chirooptical methods.	03 05	Techniques and mechanism of electrochemistry P A chritian and A.Hamnett	White board ,chalk and duster

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	3. Priciple ,instrumentation and application of Photoacoustic spectroscopy 4. Principle, instrumentation and application of spectroelectrochemisty	03 04		
	1. Analytical chemistry in forensic science : general idea	02	Lab manual on blood analysis and medical diagnostic by Dr.Gaytree Prakash and S chand and company Ltd ,New Delhi	White board, chalk and duster
	2. Foreinsic analysis: blood ,DNA profiling, alcohol in body fluid ,systemic drug identification	05		White board, chalk and duster
Paper 4 unit 3	3. Analytical toxicology: isolation, identification and determination of following: Narcotics, hallucinogens, depressants, stimulants,metabolites of drug in blood and urine . Viscera ,stomach wash and vomit and postmortem blood for poisons.	08		White board, chalk and duster

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Forensic science				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Miss Riyan Rocky Gardner_____DEPARTMENT: __Chemistry CLASS: _Msc part 2 Analytical_____ SEMESTER: ___fourth_____ MONTH: January ACADEMIC YEAR: 2018- 2019_____

LEARNING OBJECTIVE/S:
The learners will be able to : Study about classification of plastics and polymers ,metallic impurities in plastic and polymers and their determination .impact of plastic on environment as pollutants ,paints and pigments .learn about the metallurgy,definition of ores and alloys,analysis of ores and alloys, techniques of purification

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 unit 3 Plastic and polymers	2. Classification of plastic, determination of additives, molecular weight distribution, analysis of plastic and polymer . 3. Metallic impurities in plastic and their determination. 4. Impact of plastic on environment as pollutants. 5. Paints and pigments : types of paints, determination of volatile and non volatile pigments in paints ,binders and thinner.	03 05	Skoog reference book Skoog reference book	Lecture cum demonstration White board ,chalk and duster Lecture cum demonstration White board,chalk and duster

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	6. Role of organosilicon in paints and their impact on environment.	03 04	Skoog reference book Skoog reference book	Lecture cum demonstration White board, chalk and duster Lecture cum demonstration White board, chalk and duster
	1. Ores and minerals, dressing of ore ,pollution due to metallurgical process	03	Alloying understanding the basics ,edited by joseph R. Davis ASM international (2001)	White board, chalk and duster
Paper 3 unit 4 Metallurgy	2.Chemical analysis of ores of principle constituents: Galena,Pyrulusite, Bauxite, Hematite ,monozite.	04		White board,chalk and duster
	3. definition and analysis of following alloys : Cupronickel ,steel and stainless steel,bronze and gun metal .	04		White board,chalk and duster
	4. Techniques of purification: zone refining, analysis of high purity materials like silicon, vaccum fusion and extraction techniques.	04	Zone refining and allied techniques ,norman L. Parr, G. newness	White board,chalk and duster

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			technology and engineering 1916	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV *DEPARTMENT: CHEMISTRY* *CLASS: F.Y.B.Sc.* *SEMESTER: I* *MONTH: July 2018* *ACADEMIC YEAR: 2018-2019*

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand concept of state functions, path functions and thermodynamic parameters.
Study first law of thermodynamics in detail.
Calculate of bond energy, bond dissociation energy and resonance energy from thermochemical data.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Chemistry Paper-I	Thermodynamic terms: System, surrounding, boundaries, open, closed and isolated system, intensive and extensive properties, state functions and path functions, zeroth law of thermodynamics	03	Text book Himalaya publication	White board/ marker pen and duster.
UNIT-I Chemical Thermodynamics And Chemical	First law of thermodynamics: concept of heat (q), work (w), internal energy (U), statement of first law, enthalpy, relation between heat capacities, sign conventions, calculations of heat (q), work (w), internal energy (U), and enthalpy (H)	03	Text book Seth publication	White board/ marker pen and duster.

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Calculations	*Thermochemistry: Heats of reactions, standard states, enthalpy of formation of molecules,*	*04*	*Atkins P.W. and Paula J.de,*	*White board/ marker pen and duster.*

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	enthalpy of combustion and its applications, calculation of bond energy, bond dissociation energy and resonance energy from thermochemical data, Kirchhoff's equation		Atkin's Physical Chemistry.	.
	Expressing concentration of solutions: Normality, molality, molarity, formality, mole fractions, weight ratio,	02	Text book Himalaya publication	White board/ marker pen and duster.
	volume ratio, weight to volume ratio, ppm, ppb, millimoles, milliequivalents , Numericals.	03		White board/ marker pen and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV *DEPARTMENT: CHEMISTRY*

CLASS: S.Y.B.Sc. *SEMESTER: III* *MONTH: June 2018* *ACADEMIC YEAR: 2018-2019*

LEARNING OBJECTIVE/S:
The learners will be able to:

To describe the reactions of halogenated and oxygenated organic compounds of aliphatic and aromatic hydrocarbons
To predict the reactivity and stereochemistry of halogenated and oxygenated organic compounds

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Chemistry Paper-I UNIT-III Alkyl And Aryl	Haloalkanes i. Nucleohilic substitution: SN1, SN2 & SNi, Mechanism and Stereochemistry ii. Factors affecting nucleophilic substitution: Substrate, Solvent, Reagent, Leaving group	02	Text book Himalaya publication	Black board/ chalk and duster.
	Haloarenes i. Reactivity of aryl halides towards nucleophilic substitution ii. Mechanism of nucleophilic aromatic substitution: Addition-Elimination (SNAr); Elimination-Addition (Benzyne)	03	Text book Seth publication	Black board/ chalk and duster.

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Halides and Compounds Containing Oxygen - Alcohols, Phenols, Ethers, & Epoxides	Alcohols & phenols i. Physical properties: Hydrogen bonding (types); effect of Hbonding on properties (o- & p-nitrophenol); comparison of acidity of alcohols & phenols; acidity of substituted phenols ii. Preparation & of alcohols: industrial preparation (fermentation); hydration of alkenes; hydrolysis of alkyl halides	03	Morrison, R. T.; Boyd, R. N. (2012). Organic Chemistry. Dorling Kindersley (India) Pvt. Ltd.	Black board/ chalk and duster. . .
	iii. Reactions of alcohols- with sodium, HX (Lucas test), esterification, Oppenaeur oxidation	02	Text book Seth publication	Black board/ chalk and duster.
	iv. Preparation of phenol- cumene hydroperoxide method v. Reactions of phenols: O-alkylation & O-acylation; Schotten-Baumen reaction, Fries rearrangement, Claisen rearrangement			
	Ethers & Epoxides i. Preparation of ethers - Williamson's synthesis ii. Reaction of ethers - cleavage of ethers with HI iii. Preparation of epoxides- peroxyacids (m-CPBA)	02	Text book Himalaya publication	Black board/ chalk and duster.

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	iv. Reactivity & reactions of epoxides- ring opening reactions in *acidic (HX, ROH, HCN), basic & neutral conditions (NH3, RMgX & RO-) with reference to regioselectivity*	*03*		*Black board/ chalk and duster.*

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV *DEPARTMENT: CHEMISTRY* *CLASS: S.Y.B.Sc.* *SEMESTER: III* *MONTH: June 2018* *ACADEMIC YEAR: 2018-2019*

LEARNING OBJECTIVE/S:

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The learners will be able to:

To study different types of complex chemical reactions and their reaction rates.
To learn the role of different phases in solution equilibrium system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Chemistry Paper-II UNIT-I Kinetics and Phase equilibria of solutions	Types of Complex Chemical reactions i. Reversible or opposing reactions ii. Consecutive reactions iii. Parallel reactions (Derivations not expected) iv. Thermal chain reactions: H and Br reaction. (Kinetic expression not expected).	03	Text book Himalaya publication	White board/ marker pen and duster.
	Effect of temperature on the rate of reaction i. Arrhenius equation and its derivation ii. Concept of energy of activation (Ea).	03	Atkins P. W., and Paula J. De, Physical Chemistry, 10th ed., Oxford University, 12	White board/ marker pen and duster.

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	(Numerical expected) *Theories of reaction rates*		*press (2014).*	
	i. Collision theory of unimolecular reaction(Lindemann's approach) and bimolecular reaction *ii. Activated complex theory of bimolecular reactions* *iii. Comparison of the two theories* *(Qualitative treatment only)*			
	Phase rule & terms involved *b) Liquid -liquid mixtures- classification* *i. Completely miscible liquids* *ii. Ideal solutions and Raoult's law* *iii. Deviations from Raoult's law -non-ideal solutions* *iv. Vapour pressure: composition and temperature;* *Composition curves of ideal and non-ideal solutions, Numericals*	*03*	*Text book* *Himalaya publication*	*White board/ marker pen and duster.* *.*

	Partial miscibility of liquids *i. Classification on the basis of Critical solution temperature* *ii. Effect of impurity on partial miscibility of liquids* *iii. Partially Miscible Liquids with Upper Critical Solution*	*03*	*Text book* *Himalaya publication*	*White board/ marker pen and duster.*

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	Temperature (Phenol-Water System) iv. Partially Miscible Liquids with Lower Critical Solution Temperature (Triethylamine-Water System) v. Partially Miscible Liquids with Upper and Lower Critical Solution Temperature (Nicotine-Water System)			
	Immiscibility of liquids: Principle of steam distillation (Numerical expected) e) Nernst distribution law and its applications i. Solvent extraction – method	03	Text book Himalaya publication	White board/ marker pen and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV *DEPARTMENT: CHEMISTRY* *CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY* *SEMESTER: III* *MONTH: June 2018* *ACADEMIC YEAR: 2018-2019*

LEARNING OBJECTIVE/S:
The learners will be able to:

Study principles of photochemistry and modes of dissipation of energy.
Learn photochemistry of carbonyl compounds, enones, a, ß-unsaturated ketones and cyclohexadienones.
Study photochemistry of arenes and singlet oxygen and photo-oxygenation reactions.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, Theoretical organic chemistry-I	Principles of photochemistry: quantum yield, electronic states and transitions, selection rules, modes of dissipation of energy (Jablonski diagram), electronic energy transfer: photosensitization and quenching process.	03	Molecular Photochemistry, J. D.Coyle.	Black board/ chalk and duster.
UNIT-IV, Photochemistry	Photochemistry of carbonyl compounds:$\pi \rightarrow \pi^*$, $n \rightarrow \pi^*$ transitions, Norrish- I and Norrish-II cleavages, Paterno-Buchi reaction. Photoreduction, calculation of quantum yield,	04	Organic Chemistry, Clayden Greeves Warren and Wothers,	Black board/ chalk and duster.
	photochemistry of enones, photochemical rearrangements of a, β-unsaturated ketones and cyclohexadienones. Photo Fries rearrangement, Barton reaction	04	Molecular Photochemistry, N. J. Turro, W. A. Benjamin.	Black board/ chalk and duster.
	Photochemistry of olefins: cis-trans isomerizations, dimerizations, hydrogen abstraction, addition and Di- π-methane rearrangement including aza-di- π -methane. Photochemical Cross-Coupling of Alkenes, Photodimerisation of alkenes.	02	Organic Chemistry, Part A and B, Fifth edition,2007, Francis A.	Black board/ chalk and duster.

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			Richard J. Sundberg	
	Photochemistry of arenes: 1, 2- , 1, 3- and 1, 4- additions. Photocycloadditions of aromatic Rings. Singlet oxygen and photo-oxygenation reactions. Photochemically induced Radical Reactions. Chemiluminescence.	02	Bioorganic, Bioinorganic and Supramolecular chemistry, P.S. Kalsi and J.P. Kalsi.	Black board/ chalk and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV *DEPARTMENT: CHEMISTRY* *CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY* *SEMESTER: III* *MONTH: June 2018* *ACADEMIC YEAR: 2018-2019*

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand importance of organosilicons, organoboron and organotin compounds in organic synthesis.
Study application of mercury, selenium in organic synthesis.
Study application of silyl enol ethers in organic synthesis.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II, Synthetic Organic Chemistry-I UNIT-IV, Metals / Non-metals in organic synthesis	Mercury in organic synthesis: Mechanism and regiochemistry of oxymercuration and demercuration of alkenes, mercuration of aromatics, transformation of aryl mercurials to aryl halides. Organomercurials as carbene transfer reagents.	03	Advanced Organic Chemistry: Reaction Mechanism, R. Bruckner, Academic Press	White board/ marker pen and duster.
	Organoboron compounds: Mechanism and regiochemistry of hydroboration of alkenes and alkynes, asymmetric hydroboration using chiral boron reagents, 9-BBN hydroboration, oxazaborolidine (CBS catalyst) and functional group reduction by diborane.	03	Organic Chemistry, Clayden Greeves Warren and Wothers,	White board/ marker pen and duster.
	Organosilicons: Salient features of silicon governing the reactivity of organosilicons, preparation and important bond-forming reactions of alkyl silanes, alkenyl silanes, aryl silanes and allyl silanes. β-silyl cations as intermediates. Iodotrimethylsilane in organic synthesis.	03	Modern Methods of Organic Synthesis, 4th Edition, W. Carruthers	White board/ marker pen and duster. .

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			and Iain Coldham,.	
	Silyl enol ethers: Application: As nucleophiles (Michael	02	Moder Organic	White board/ marker pen and

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	reaction, Mukaiyama aldol reaction), in ring contraction reactions.		Synthesis: An Introduction, G.S. Zweifel and M.H. Nantz,	duster.
	Organotin compounds: Preparation of alkenyl and allyl tin compounds; application in C-C bond formation, in replacement of halogen by H at the same C atom. Selenium in organic synthesis: Preparation of selenols/selenoxide, selenoxide elimination to create unsaturation, selenoxide and seleno acetals as a-C-H activating groups	04	Advanced Organic Chemistry, Part A and Part B: Reaction and Synthesis, Francis A. Carey, Richard J. Sundberg,	White board/ marker pen and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY CLASS: F.Y.B.Sc. SEMESTER: II MONTH: November 2018 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

Study ideal gas laws, kinetic theory of gases in detail.

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Study reversible and irreversible reactions, law of mass action, dynamic equilibria.
Study spontaneity and physical significance of free energy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Chemistry Paper-I UNIT-I Gaseous State And Chemical Equilibria and Thermodynamic Parameters	Ideal gas laws, kinetic theory of gases, Maxwell-Boltzmann's distribution of velocities (qualitative discussion), ideal gases, real gases, compressibility factor, Boyle's Temperature, Numericals.	04	Text book Himalaya publication	White board/ marker pen and duster.
	Deviation from ideal gas laws, reasons for deviation from ideal gas laws, Van der Waals equation of state, Joule-Thomson effect: qualitative discussion and experimentation, inversion temperature. Numericals.	04	Text book Seth publication	White board/ marker pen and duster.
	Reversible and irreversible reactions, law of mass action, dynamic equilibria, equilibrium constant, (Kc and Kp),	02	Text book Himalaya publication	White board/ marker pen and duster.
	relationship between Kc and Kp, Le Chatelier's principle, factors affecting chemical equilibrium, Numericals.	02	Text book Himalaya publication	White board/ marker pen and duster.

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	Statement of second law of thermodynamics, concepts of entropy and free energy, spontaneity and physical	*03*	*Text book*	*White board/ marker pen and duster.*

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	significance of free energy, thermodynamic derivation of equilibrium constant, Numericals.		Himalaya publication	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV DEPARTMENT: CHEMISTRY

CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: November 2018 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

To study nomenclature, structure and physical properties, acidity of carboxylic acids.
To predict the reactivity, nomenclature, and preparation of aromatic sulphonic acids.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Nomenclature, structure and physical properties, acidity of carboxylic acids, effects of substituents on acid strength of aliphatic and aromatic carboxylic acids. Preparation of carboxylic acids: oxidation of alcohols and alkyl benzene, carbonation of Grignard and hydrolysis of nitriles.	03	Text book Himalaya publication	Black board/ chalk and duster.

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	Reactions: Acidity, salt formation, decarboxylation, Reduction of carboxylic acids with $LiAlH_4$, diborane, Hell-Volhard-Zelinsky reaction,Conversion of carboxylic acid to acid chlorides, esters, amides and acid anhydrides and their relative reactivity.	04	Text book Seth publication	Black board/ chalk and duster.
PAPER **Chemistry Paper-I**	Mechanism of nucleophilic acyl substitution and acid-catalysed nucleophilic acyl substitution. Interconversion of acid derivatives by nucleophilic acyl substitution. Mechanism of Claisen condensation and Dieckmann condensation.	04	Morrison, R. T.; Boyd, R. N. (2012). Organic Chemistry. Dorling Kindersley (India) Pvt. Ltd.	Black board/ chalk and duster.
UNIT-III	Nomenclature, preparation of aromatic sulphonic acids by sulphonation of benzene (with mechanism), toluene and naphthalene, Reactions: Acidity of arene sulfonic acid,	02	Text book Seth publication	Black board/ chalk and duster.
	Comparative acidity of carboxylic acid and sulfonic acids. Salt formation, desulphonation.Reaction with alcohol, phosphorous pentachloride, IPSO substitution.	02	Text book Himalaya publication	Black board/ chalk and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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S.Y.B.Sc. *SEMESTER: IV* *MONTH: November 2018* *ACADEMIC YEAR: 2018-2019*

LEARNING OBJECTIVE/S:
The learners will be able to:

To study different Types of catalysis, catalytic activity, specificity and selectivity.
To learn Recapitulation of laws of crystallography and types of crystals

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Chemistry Paper-II	laws of crystallography and types of crystals Characteristics of simple cubic, face centered cubic and body centered cubic systems, interplanar distance in cubic lattice	03	Text book Himalaya publication	White board/ marker pen and duster.
UNIT-I Solid State And Catalysis	Use of X-rays in the study of crystal structure, Bragg's equation (derivation expected), X-rays diffraction method of studying crystal lattice structure, structure of NaCl and KCl. Determination of Avogadro's number, Numericals.	04	Atkins P. W., and Paula J. De, Physical Chemistry, 10th ed., Oxford University, 12 press (2014).	White board/ marker pen and duster.

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	Types of catalysis, catalytic activity, specificity and selectivity, inhibitors, catalyst poisoning and deactivation	*03*	*Text book* *Himalaya publication*	*White board/ marker pen and duster.* *.*

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	Mechanisms and kinetics of acid-base catalyzed reactions, effect of pH. Mechanisms and kinetics of enzyme catalyzed reactions (Michaelis-Menten equation)	03	Text book Himalaya publication	White board/ marker pen and duster.
	Effect of particle size and efficiency of nanoparticles as catalyst.	02	Text book Himalaya publication	White board/ marker pen and duster.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV *DEPARTMENT: CHEMISTRY* *CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY* *SEMESTER: IV* *MONTH: November 2018* *ACADEMIC YEAR: 2018-2019*

LEARNING OBJECTIVE/S:
The learners will be able to:

Study principles of asymmetric synthesis, methods of asymmetric induction.
Learn asymmetric reactions with mechanism, reduction of prochiral carbonyl compounds and olefins.
Study use of chiral auxiliaries in diastereoselective reductions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF ***SIGNATURE OF THE H.O.D.***

PAPER-I, Theoretical organic chemistry-II **UNIT-IV,** **Asymmetric synthesis**	Principles of asymmetric synthesis: Introduction, the chiral pool in Nature, methods of asymmetric induction – substrate, reagent and catalyst controlled reactions.	03	Stereochemistry of Carbon Compounds: Principles and Applications, D, Nasipuri.	Black board/ chalk and duster.
	Synthesis of L-DOPA [Knowles's Mosanto process]. Asymmetric reactions with mechanism: Aldol and related reactions,	03	Organic Chemistry, Clayden Greeves Warren and Wothers,	Black board/ chalk and duster.
	Cram's rule, Felkin-Anh model, Sharpless enantioselective epoxidation, hydroxylation, aminohydroxylation,	03	Stereochemistry, P. S. Kalsi, 4th edition, New Age International Ltd.	Black board/ chalk and duster.

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	Diels-Alder reaction, reduction of prochiral carbonyl compounds and olefins.	*03*	*Organic Chemistry, Part A and B, Fifth edition,2007, Francis A. Carey and Richard J. Sundberg*	*Black board/ chalk and duster.*

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	Use of chiral auxiliaries in diastereoselective reductions, asymmetric amplification. Use of chiral BINOLs, BINAPs and chiral oxazolines asymmetric transformations.	*03*	*Bioorganic, Bioinorganic and Supramolecular chemistry, P.S. Kalsi and J.P. Kalsi.*	*Black board/ chalk and duster.*

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA JADHAV *DEPARTMENT: CHEMISTRY* *CLASS: M.Sc. PART-II, ORGANIC CHEMISTRY* *SEMESTER: IV* *MONTH: November 2018* *ACADEMIC YEAR: 2018-2019*

LEARNING OBJECTIVE/S:
The learners will be able to:

Learn chemical safety & ethical handling of chemicals.
Learn safe working procedure and protective environment, protective apparel, emergency procedure.
Learn recovery, recycling and reuse of laboratory chemicals and procedure for laboratory disposal of explosives.

PAPER, UNIT, TITLE	***SUBTOPICS***	***NO OF LECTURES ALLOTED***	***REFERENCE/S***	***TEACHING METHOD/ ICT TOOLS USED***

SIGNATURE OF THE STAFF ***SIGNATURE OF THE H.O.D.***

PAPER-IV, **Research Methodology** **UNIT-IV,** **Chemical Safety & Ethical Handling Of** **Chemicals**	*Safe working procedure and protective environment, protective apparel, emergency procedure, first aid, laboratory ventilation,*	*03*	*Chemical Safety matters – IUPAC-IPCS, (1992) Cambridge* *University Press.*	*White board/ marker pen and duster.*
	safe storage and use of hazardous chemicals, procedure for working with substances that pose hazards, flammable or explosive hazards.	*03*	*OSU Safety manual*	*White board/ marker pen and duster.*
	procedures for working with gases at pressures above or below atmospheric pressur, safe storage and disposal of waste chemicals, recovery, recycling and reuse of laboratory chemicals.	*03*	*Harris, D. C. (2007)Quantative Chemical Analysis 6th Ed., Freeman* *Chapters*	*White board/ marker pen and duster.* .
	procedure for laboratory disposal of explosives, identification, *verification and segregation of laboratory waste*	*03*		*White board/ marker pen and duster.*

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	disposal of chemicals in the sanitary sewer system, incineration and transportation of hazardous chemicals.	*03*		*White board/ marker pen and duster.*

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF Gyadhay.

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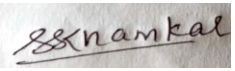
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SHRADDHA S. KHAMKAR DEPARTMENT: CHEMISTRY
CLASS: M.Sc -1 SEMESTER: I MONTH: SEPTEMBER-2018

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the thermodynamic and kinetic requirements of organic reaction. They will also be able to determine the mechanism of organic reactions by using various techniques. They will gain new insights into the concepts of acidity and basicity andbthe factors affecting the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – III Unit – I Title - Physical Organic Chemistry	1.1- Thermodynamic and Kinetic requirements of a reaction 1.2- Determining mechanism of a reaction 1.3- Acids and Bases	4L 3L 8L	1. Physical Organic Chemistry by Neil Issacs 2. Modern Physical Chemistry by Eric V. Anslyn and Dougherty 3. Organic Synthesis by Jagdamba Singh and	Chalk and Board and Powerpoint.

Signature of staff Member : 

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			L.D.s. Yadav	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____15_____

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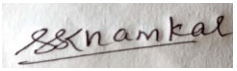
EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:___DR.SHRADDHA S.KHAMKAR_____DEPARTMENT:
_____CHEMISTRY SEMESTER:_____II____ MONTH:_____JAN
_____CLASS:
_____M.Sc -1_____

2019_____ ACADEMIC YEAR:_____2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the molecular orbital theory, form the molecular orbital diagrams for organic compounds. They get introduced to HOMO- LUMO concepts. Studecan gain insights into the concepts of spectroscopy techniques such as IR and UV.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – III				

Signature of staff Member : 

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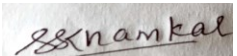
Unit – III Title – Introduction to Molecular orbital theory	3.1.1 Molecular orbitals 3.1.2 Introduction to FMO's 3.1.3 Applications of FMO concepts 3.2 Applications of UV and IR Spectroscopy	2L 3L 2L 4L	1. Molecular Orbital and Organic chemical reactions by Ian	Chalk and Board

Signature of staff Member : 

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for organic Chemistry	3.2.1 Ultraviolet Spectroscopy 3.2.2 Infrared Spectroscopy	4L	Fleming 2. Introduction to Spectroscopy by Donald Pavia and Gary Lampman 3. Organic Spectroscopy – Principles and Applications by Jagmohan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____15_____

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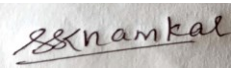
EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:___DR.SHRADDHA S.KHAMKAR_____DEPARTMENT: _____CHEMISTRY _____ SEMESTER:_____III_____

_____CLASS:__M.Sc - II_____ LEARNING OBJECTIVE/S:

ACADEMIC YEAR:_____2018-19_____

Signature of staff Member : 

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MONTH:_____July 2018_____

Signature of staff Member : SSKnamkal

Signature of HOD :

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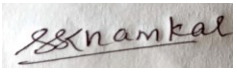
The learners will be able to : Understand the thermodynamic and kinetic requirements of organic reaction. They will also be able to determine the mechanism of organic reactions by using various techniques. They will gain new insights into the concepts of acidity and basicity andbthe factors affecting the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – I Unit – I Title - Organic Reaction Mechanisms				
	1.1 – Organic reactive intermediates, method of generation etc 1.2 Neighbouring group Participation 1.3 Role of FMO'S in Organic reactivity 1.4 Pericyclic Reactions – Classification, Woodward Hoffman's rules	5L 3L 2L 5L	1. Advanced Organic Chemistry by Jerry March 2. Mechanism and theory in Organic Chemistry by T. h. Lowry and Richardson 3. Organic Reaction Mechanism by Ahluwalia and Parashar 4. Organic Chemistry Part A and B by Carry and Sundberg.	Marker -Duster
	3.1 Classification of point groups based on symmetry elements	2L 3L	1. Stereochemistry of carbon compounds by D. Nasipuri	Chalk and duster and Powerpoint

Signature of staff Member : 

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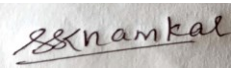
Paper I Unit – 3	3.2 Conformational analysis of medium rings 3.3 Stereochemistry of fused and bridged ring compounds	5L 5L	2. Stereochemistry of organic compounds by Ernest L. Eliel	

Signature of staff Member : 

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Title – Stereochemistry – I	3.4 Anancomeric systems		3. Stereochemistry by P.S. Kalsi 4. Organic Stereochemistry by Robinson	
Paper – 4 Unit – 4 Title – Green Chemistry	4.1 Introduction to basic principles of green chemistry 4.2 Use of green reagents in green chemistry 4.3 Comparison of traditional processes vs green processes 4.4 Green Catalysts	1L 9L 3L 2L	1. Green chemistry by Mike Lancaster 2. New trends in green chemistry by Ahluwalia 3. An introduction to Green Chemistry by V. Kumar 4. Green chemistry by Paul . Anastas and Warner.	Chalk and Duster and Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____15_____

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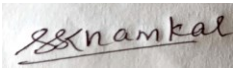
Signature of staff Member : 

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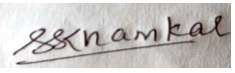
Signature of staff Member : 

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NAME OF THE STAFF:___DR.SHRADDHA S.KHAMKAR_____DEPARTMENT: _____CHEMISTRY SEMESTER:_____IV____ MONTH:_____JAN 2019_____

_____CLASS:__M.Sc - II_____

ACADEMIC YEAR:_____2018-19_____

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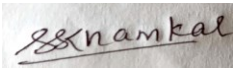
LEARNING OBJECTIVE/S:

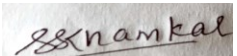
The learners will be able to : Understand the thermodynamic and kinetic requirements of organic reaction. They will also be able to determine the mechanism of organic reactions by using various techniques. They will gain new insights into the concepts of acidity and basicity andbthe factors affecting the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper – 1 Unit – 2 Title – Supramolecular Chemistry				
	2.1. – Principles of Molecular associations and organisations 2.2 – Synthetic molecular receptors 2.3 – Structures and properties of Supramolecules Molecular recognition and catalysis	3L 3L 5L 4L	1. Supramoleculer Chemistry by J.M. Lehn 2. Crown ethers and analogous compounds by M. Hiraoka 3. Large ring compounds by J.A. Semlyen	Chalk -Duster
	3.1 Racemisation and Resolution of racemates		1. Stereochemistry by	Chalk and duster

Signature of staff Member : 

Signature of HOD :

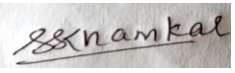
Paper – 1 Unit – 3 Title – Stereochemistry	3.2 Determination of enantiomer and diastereomer composition 3.3 Correlative method for configurational assignment 3.4 Molecular dissymmetry and chiroptical properties	3L 3L 4L 5L	P.S Kalsi 2. Organic Stereochemistry by Robinson 3. Stereochemistry of Carbon Compounds by D. Nasipuri	

Signature of staff Member : 

Signature of HOD :

Paper – IV Unit – II Title – Data Analysis				
	The Investigative Approach – Measurements, SI units and their uses, Scientific methods and designing experiments Analysis and presentation of Data – Descriptive statistics, Chemometrics, Correlation regression, Analysis of variance	15L	Powerpoint and chalk-duster	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____15_____

Signature of staff Member : 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.sc (CBZ-B) SEMESTER: I MONTH: AUGUST TO NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop the knowledge about Atomic structure and Periodic structure.

To develop understanding about Structure of atom and Periodic table.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit II	**2.1 Atomic structure** (Qualitative treatment only; it is expected that the learner knows the mathematical statements and understands their physical significance after completing this topic. No derivations of the mathematical equations required) a)Historical perspectives of the atomic structure; Rutherford's Atomic Model, Bohr's theory, its limitations and atomic spectrum of hydrogen atom. Structure of hydrogen atom. b)Hydrogenic atoms: 1.Simple principles of quantum mechanics; 2.Atomic orbitals i)Hydrogenic energy levels ii)Shells, subshells	10	Himalaya Publication F.Y.B.sc, Inorganic Chemistry textbook	Black board and chalk

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	and orbitals iii)Electron spin iv)Radial shapes of orbitals v)Radial distribution function vi)Angular shapes of orbitals. 3.Many Electron Atoms i)Penetration and shielding ii)Effective nuclear charge 4.Aufbau principle **2.2:Periodic Table and periodicity** Long form of Periodic Table; Classification for elements as main group, transition and inner transition elements; Periodicity in the following properties : Atomic and ionic size; electron gain enthalpy; ionization enthalpy, effective nuclear charge (Slater's rule); electronegativity ; Pauling, Mulliken and Alred Rochow electronegativities (Numerical problems expected, wherever applicable.)	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.sc (CBZ-B) SEMESTER: I MONTH: AUGUST TO NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop the knowledge about chemical kinetics and liquid state.

To develop the understanding about order of reactions and different instruments used to measure different properties of liquids

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I	**1.1 Chemical Kinetics** Rate of reaction, rate constant, measurement of reaction rates, order and molecularity of reaction, integrated rate equation of first and second order reactions (with equal initial concentration of reactants) (Numericals expected) Determination of order of reaction by (a) Integration method (b) Graphical method (c) Ostwald's isolation method (d) Half time method (Numericals expected)	8	Himalaya Publication F.Y.B.sc, Physical chemistry Textbook	Black board and Chalk
	1.2 Liquid State Surface tension: Introduction, methods of determination of surface tension by drop number method (Numericals expected)	7		

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	Viscosity: Introduction, coefficient of viscosity, relative viscosity, specific viscosity, reduced viscosity, determination of viscosity by Ostwald viscometer (Numericals expected) Refractive index: Introduction, molar refraction and polarizability, determination of refractive index by Abbe's refractometer (Numericals expected) Liquid crystals: Introduction, classification and structure of thermotropic phases (Nematic, smectic and cholesteric phases), applications of liquid crystals			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.Sc (CBZ-B) SEMESTER: I MONTH: AUGUST TO NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop knowledge about comparative chemistry of main group elements.

To develop understanding about comparative chemistry of main group elements.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II	**2.0 Comparative chemistry of Main Group Elements** Metallic and non-metallic nature,oxidation states, electronegativity, anomalous behaviour of second period elements, allotropy, catenation, diagonal relationship.Com parative chemistry of carbides,nitrides ,oxides and hydroxides of group I and group II elements. Some important compounds-$NaHCO_3$, Na_2CO_3, NaCl, NaOH, CaO, $CaCO_3$; oxides of carbon, oxides and oxyacids of sulphur and nitrogen with respect to environmental aspects	15	Himalaya Publication F.Y.B.sc, Inorganic chemistry textbook	Black board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.sc (CBZ-B) SEMESTER: II MONTH: JANUARY TO MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop knowledge about concept of qualitative analysis and acid base theories.

To develop understanding about different types of reagents and solutions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit II	**2.1 Concept of Qualitative Analysis** a)Testing of Gaseous Evolutes, Role of Papers impregnated with Reagents in qualitative analysis (with reference to papers impregnated with starch iodide, potassium dichromate, lead acetate, dimethyglyoxime and oxine reagents). b)Precipitation equilibria, effect of common ions, uncommon ions, oxidation states, buffer action, complexing agents on precipitation of ionic compounds. (Balanced chemical equations and numerical problems expected)	7	Himalaya Publication F.Y.B.sc, Inorganic chemistry textbook	Black board and chalk
	2.2 Acid BaseTheories Arrhenius, Lowry-Bronsted, Lewis, Solvent – Solute concept of acids and bases, Hard and Soft acids and bases. Applications of HSAB Applications of acid base chemistry in:i)Understanding organic reactions like Friedel Craft's (acylation/alkylation) reaction	8		

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	ii)Volumetric analysis with special reference to calculation of titration curve involving strong acid and strong base.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.sc (CBZ-B) SEMESTER: II MONTH: JANUARY TO MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

To develop knowledge about Ionic Equilibria, Solid state and Molecular spectroscopy.

To develop understanding about different types of electrolytes and electromagnetic waves.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I	**1.1 Ionic Equilibria** Strong, moderate and weak electrolytes, degree of ionization, factors affecting degree of ionization, ionization constant and ionic product of water, ionization of weak acids and bases, pH scale, common ion effect, dissociation constants of mono di and triprotic acid (exact treatment for monoprotic acid) Buffers: Introduction, types of buffers, derivation of Henderson equation for acidic and basic buffers, buffer action, buffer capacity (Numericals expected)	7	Himalaya Publication F.Y.B.sc, Physical chemistry Textbook	Black board and chalk
	1.2 Molecular Spectroscopy Electromagnetic radiation, electromagnetic spectrum, Planck's equation, interaction of electromagnetic radiation with matter: Absorption,	4		

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	emission, scattering, flourescence, electronic, vibrational and rotational transitions Beer Lambert's law (Numericals expected) **1.3 Solid State Chemistry** Types of solids, crystal lattice, lattice points, unit cell, space lattice and lattice plane, laws of crystallography: Law of constancy of interfacial angle, law of symmetry and law of rational indices (Numericals expected)	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: F.Y.B.sc (CBZ-B) SEMESTER: II MONTH: JANUARY TO MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop the knowledge about chemical bond and oxidation reduction chemistry.

To develop understanding about chemical bond and oxidation reduction chemistry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II	**2.1 :Chemical Bond and Reactivity** Types of chemical bond, comparison between ionic and covalent bonds, polarizability(Fajan's Rule), shapes of molecules, Lewis dot structure, Sidgwick Powell Theory, basic VSEPR theory for AB_n type molecules with and without lone pair of electrons, isoelectronic principles, applications and limitations of VSEPR theory. **2.2 Oxidation Reduction Chemistry** a) Reduction potentials b) Redox potentials: half reactions; balancing redox equations. c) Redox stability in water i)Latimer and Frost Diagrams ii)pH dependence of redox potentials. d)Applications of redox chemistry i)Extraction of elements:	7 8	Himalaya Publication F.Y.B.sc, Inorganic chemistry textbook	Black board and chalk

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	(example: isolation of copper by auto reduction) ii)Redox reagents in Volumetric analysis: a) I2 b) KMnO4 iii)Titration curves:i) single electron systems (example Ce(IV) against Fe(II)); and ii) Multi electron systems as in KMnO4 against Fe(II))			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART I SEMESTER: I MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop the knowledge about thermal methods and automation in chemical analysis.

To develop the understanding about thermal methods and automated techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit IV	**4.1 Thermal Methods** 4.1.1 Introduction, Recapitulation of types of thermal methods, comparison between TGA and DTA. 4.1.24.1.2 Differential Scanning Calorimetry- Principle, comparison of DTA and DSC, Instrumentation, Block diagram, Nature of DSC Curve, Factors affecting curves (sample size, sample shape, pressure). 4.1.3 Applications - Heat of reaction, Specific heat, Safety screening, Polymers, liquid crystals, Percentage cystallinity, oxidative stability, Drug analysis, Magnetic transition. e.g. Analysis of Polyethylene for its crystallinity.	9	Instrumental Analysis, 5 th Edition, Skoog, Holler and Nieman: Chapter 31	Black board and chalk

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	4.2 Automation in chemical analysis Need for automation, Objectives of automation, An overview of automated instruments and instrumentation, process control analysis, flow injection analysis, discrete automated systems, automatic analysis based on multilayered films, gas monitoring equipment s, Automatic titrators.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART I SEMESTER: II MONTH: FEBRUARY TO APRIL ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop knowledge about different spectroscopy instruments and radio analytical methods.

To develop understanding about different spectroscopy instruments and radio analytical methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit II	**2.1 X-ray spectroscopy** principle, instrumentation and applications of X -ray fluorescence, absorption and diffraction spectroscopy. **2.2 Mass spectrometry** recapitulation, instrumentation, ion sources for molecular studies, electron impact, field ionization, field absorption, chemical ionization and fast atom bombardment sources. Mass analyzers: Quadrupole, time of flight and ion trap. Applications. **2.3 Radioanalytical Methods** recapitulation, isotope dilution method, introduction, principle, single dilution method, double dilution method and applications.	4 6 5	*Principles of Instrumental Analysis - Skoog, Holler and Nieman, 5Th Edition, Ch: 12 *Principles of Instrumental Analysis - Skoog, Holler and Nieman, 5th Edition, Ch: 20	Black board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M,sc PART II SEMESTER: III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop the knowledge about cosmetics.

To develop understanding about different elements present in cosmetics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV Unit IV Pharmaceutical and Organic Analysis	**Cosmetic Analysis** **4.1 Cosmetics** Introduction. Evaluation of cosmetic materials, raw materials and additives. Formulation, standards and methods of analysis.	2	Google	Black board and chalk
	4.2 Deodorants and antiperspirant Al, Zn, Boric acid, chlorides, sulphates, hexachlorophene, methanamine, phenolsulphonates and urea.	3		
	4.3 Face powder Fats, fatty acids, boric acid, barium sulphate, Ca, Mg, Ti, Fe, oxides of Ti, Fe and Al.	3		
	4.4 Hair tonic 2,5-diaminotoluene, potassium borates, sodium perborate, pyrogallol, resorcinol, salicylic acid, dithioglycollic acid (inpermanent wavers).	3		

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	4.5 Creams and Lotions Types of emulsions, chloroform soluble materials, glycerol, pH emulsion, ash analysis, nonvolatile matter (IR spectroscopy) . **4.6 Lipsticks** General analysis, determination of -nonvolatile matter, lakes and fillers, trichloroethylene-acetone soluble contents.	2 2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TANVI .A. RAUL DEPARTMENT: CHEMISTRY

CLASS: M.sc PART II SEMESTER: IV MONTH: JANUARY TO APRIL ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Develop knowledge of effluent treatment.

To develop understanding about different steps involved in effluent treatment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper III Unit I	**Effluent Treatment** 1.1 Effluent treatment plant general construction and process flow charts. 1.2Treatment and disposal of Sewage. 1.3. Effluent parameters for metallurgical industry. 1.4 Permissible limits for metal (example Cr, As, Pb, Cd etc) traces in the effluent. 1.5 Recovery of metals from effluent, modern methods – Electrodialysis,Electrodeposition and Ion Exchange etc. 1.6 Recycle and reuse of process and treated (effluent) water.	3 3 2 2 3 2	Water and water pollution (hand book) Ed., Seonard'l Ciacere, Vol I to IV, Marcel Dekker inc. N.Y.(1972)	Black board and chalk

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce

CLASS: F Y B Com Div. A & B SEMESTER: I MONTH: October Academic Year: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to :

Demonstrate knowledge of preparation of financial statement and financial schedule in accordance with GAAP – Generally Accepted Accounting Principles, through analysis and synthesis of information as well. Student will learn relevant financial accounting carrier skills, applying both quantitative & qualitative knowledge to their future carrier in business.

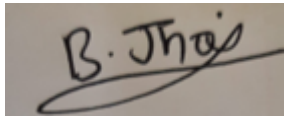
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

Accountancy & Financial Management 1	**Accounting Standards Issued by ICAI and Inventory Valuation • Accounting Standards:** Concepts, Benefits, Procedures for Issue of Accounting Standards Various AS: **AS – 1: Disclosure of Accounting Policies** (a) Purpose (b) Areas of Policies (c) Disclosure of Policies (d)Disclosure of Change in Policies **AS – 2: Valuation of Inventories (Stock)** (a) Meaning, Definition (b) Applicability (c) Measurement of Inventory	03	*Financial Accounting by M. Mukherjee and M. Hanif, Tata McGraw Hill Education Pvt. Ltd., New Delhi* *Financial Accounting by Williams, Tata Mc. Grow Hill and Co. Ltd., Mumbai*	Chalk & talk, Black-Board Method; Group Discussion,

	(d) Disclosure in Final Account(e) Explanation with Illustrations **AS – 9: Revenue Recognition** (a) Meaning and Scope (b) Transactions Excluded (c) Sale of Goods (d) Rendering of Services (e) Effects of Uncertainties (f) Disclosure			
	Final Accounts • Adjustments and Closing Entries • Final Accounts of Manufacturing Concerns (Proprietary Firm)	12		

	Departmental Accounts Meaning Basis of Allocation of Expenses and Incomes / Receipts Inter Departmental Transfer: At Cost Price and Invoice Price Stock Reserve Departmental Trading and Profit and Loss Account and Balance Sheet	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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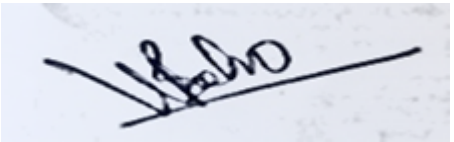

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: SYB.COM – E, L, M, N

SEMESTER: III MONTH: August-November ACADEMIC YEAR: 2022-2023 SUBJECT: ADVERTISING- I

LEARNING OBJECTIVE/S:

1. To highlight the role of advertising for the success of brands and its importance within the marketing function of a company.
2. It aims to orient learners towards the practical aspects and techniques of advertising.
3. It is expected that this course will prepare learners to lay down a foundation for advanced post-graduate courses in advertising

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
MODULE 1 Introduction to Advertising	Integrated Marketing Communications (IMC)- Concept, Features, Elements, Role of advertising in IMC	03	Advertising Principles and Practice, 2012 - Ruchi Gupta – S.Chand Publishing Advertising and Promotion: An Integrated Marketing Communications Perspective George Belch and Michael Belch	1.Lecture and discussion. 2. Flow charts. 3.Online teaching learning tools (google meet, google form Google classroom, PPTs)
	Advertising: Concept, Features, Evolution of Advertising, Active Participants, Benefits of advertising to Business firms and consumers.	03		
	Classification of advertising: Geographic, Media, Target audience and Functions.	06		

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12*4=48

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: SYB.COM – E, L, M, N

SEMESTER: III MONTH: August-November ACADEMIC YEAR: 2022-2023 SUBJECT: ADVERTISING- I

LEARNING OBJECTIVE/S:
1. To highlight the role of advertising for the success of brands and its importance within the marketing function of a company.
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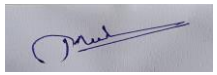
PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
MODULE 2	Ad Agency: Features, Structure and services offered, Types of advertising agencies, Agency selection criteria	03	Advertising Principles and Practice, 2012 - Ruchi Gupta – S.Chand Publishing Advertising and Promotion: An Integrated Marketing	1.Lecture and discussion. 2. Flow charts. 3.Online teaching learning tools (google meet, google form Google classroom, PPTs)
	Agency and Client: Maintaining Agency–Client relationship, Reasons and ways of avoiding Client Turnover, Creative Pitch, Agency compensation	03		



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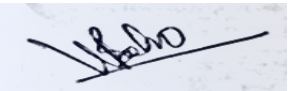

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TEACHING PLAN (UNIT PLAN)

Advertising Agency	Careers in advertising: Skills required for a career in advertising, Various Career Options, Freelancing Career Options - Graphics, Animation, Modelling, Dubbing.	05	Communications Perspective George Belch and Michael Belch	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11*4=44

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: SYB.COM – E, L, M, N

SEMESTER: III MONTH: August-November ACADEMIC YEAR: 2022-2023 SUBJECT: ADVERTISING- I

LEARNING OBJECTIVE/S:

1. To highlight the role of advertising for the success of brands and its importance within the marketing function of a company.
2. It aims to orient learners towards the practical aspects and techniques of advertising.
3. It is expected that this course will prepare learners to lay down a foundation for advanced post-graduate courses in advertising

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
	Economic Aspects: Effect of advertising on consumer demand, monopoly and competition, Price.	03		1.Lecture and discussion. 2. Flow charts.

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MODULE 3 Economic & Social Aspects of Advertising	Social aspects: Ethical and social issues in advertising, positive and negative influence of advertising on Indian values and culture.	03	Advertising Principles and Practice, 2012 - Ruchi Gupta – S.Chand Publishing Advertising and Promotion: An Integrated Marketing Communications Perspective George Belch and Michael Belch	3.Online teaching learning tools (google meet, google form Google classroom, PPTs)
	Pro Bono/Social advertising: Pro Bono Advertising, Social Advertising by Indian Government through Directorate of Advertising and Visual Publicity (DAVP), Self-Regulatory body- Role of ASCI (Advertising Standard Council of India)	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11*4=44

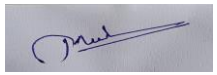
NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: SYB.COM – E, L, M, N

SEMESTER: III MONTH: August-November ACADEMIC YEAR: 2022-2023 SUBJECT: ADVERTISING- I

LEARNING OBJECTIVE/S:

1. To highlight the role of advertising for the success of brands and its importance within the marketing function of a company.
2. It aims to orient learners towards the practical aspects and techniques of advertising.
3. It is expected that this course will prepare learners to lay down a foundation for advanced post-graduate courses in advertising

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED



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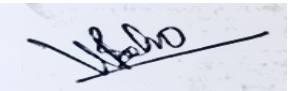

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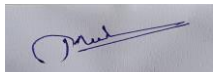
MODULE 4 Brand Building and Special Purpose Advertising	Brand Building: The Communication Process, AIDA Model, Role of advertising in developing Brand Image and Brand Equity, and managing Brand Crises.	03	Advertising Principles and Practice, 2012 - Ruchi Gupta – S.Chand Publishing Advertising and Promotion: An Integrated Marketing Communications Perspective George Belch and Michael Belch	1.Lecture and discussion. 2. Flow charts. 3.Online teaching learning tools (google meet, google form Google classroom, PPTs)
	Special purpose advertising: Rural advertising, Political advertising-, Advocacy advertising, Corporate Image advertising, Green Advertising – Features of all the above special purpose advertising.	03		
	Trends in Advertising: Media, Ad spends, Ad Agencies, Execution of advertisements	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11*4=44



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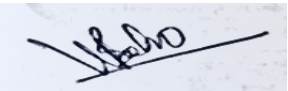

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Patil DEPARTMENT: Commerce CLASS: FYBCOM (H, I) SEMESTER: I (Subject : Commerce I) MONTH: Aug-Nov ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Learner will be able to learn basic concept of business. He will also be able to learn various business objectives and various strategies of business.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE I UNIT I BUSINESS	Introduction: Concept, functions, scope, significance OBJECTIVES OF BUSINESS : Steps, classification, reconciliation of economic & social objectives NEW TRENDS IN BUSINESS : Liberalisation, privatization, globalisation, strategy alternatives, restructuring strategies, turnaround strategies	12	Introduction to commerce, Vikram , Amit,Atlantic pub	Chalk & board
UNIT II BUSINESS ENVIRONM	INTRODUCTION : Concept, importance, inter relationship between business and environment Constituents: Internal and external environment, educational environment and its impact	12	Introduction to commerce, Vikram , Amit,Atlantic pub	Chalk & board

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ENT	International environment: Current trends in world, WTO, trading blocs and their impact			
UNIT IV Entrepreneurship	Entrepreneurship: Types, Competencies, Training & Development Centres, Incentives to Entrepreneurs, Women entrepreneurs: Problems, Promotion	08	Introduction to commerce, Vikram , Amit,Atlantic pub	Chalk & board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashlesha Maurya DEPARTMENT: Commerce CLASS: F.Y.B. Com SEMESTER: I

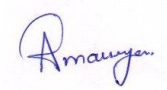
MONTH: July to November ACADEMIC YEAR: 2022-2023 Subject: Environmental Studies

Div. L, M, N, O

LEARNING OBJECTIVES:

The learners will be able to understand need to study this subject. It helps them to understand current environmental problems in the society and theirresponsibility towards the environment.

UNIT 1	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1. Environment: Meaning, definition, scope and its components	5	1.Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method



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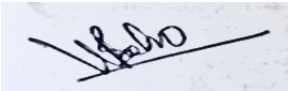

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TEACHING PLAN (UNIT PLAN)

Environment and Ecosystem	2. concept of an ecosystem : definition, Characteristics, components and types, functioning and structure	4	2.Fundamentals of Ecology: Odum E.P.	Teaching aid: Google forms, Power point presentation,chalkboard
	3. Food Chain and Food Web, Ecological Pyramids	2		
	4. Man and environment relationship , Importance and scope of Environmental Studies	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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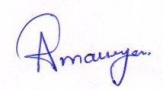
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVES:

The learners will be able to understand about different types resources and problems caused by improper utilization of natural resources. They will alsounderstand the concept of sustainability and its need to handle current environmental problems.

UNIT 2	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Natural Resources and Sustainable Development	1. Meaning, definitions, classification and types of resources	2	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2. discussion method Teaching aid: Google forms, Power point presentation, chalkboard
	2. Factors influencing resource; Resource conservation-meaning and methods	2		
	3.conventional and non-conventional resources	3		
	4. Problems associated with and management of water, forest and energy resources	5		



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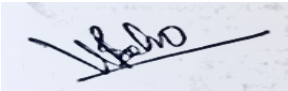

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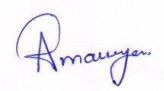
TEACHING PLAN (UNIT PLAN)

	5. resource utilization and sustainable development	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13



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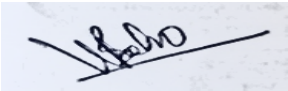

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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVES:
The learners will be able to understand about environmental and social problems caused by increasing population and its control measures. They will able tounderstand concepts of HDI &WHI

UNIT 3	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Populations and Emerging Issues of Development	1. Population explosion in the world and in India and arising concerns, Demographic Transition Theory	3	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google forms, Power point presentation,chalkboard
	2. Pattern of population growth in the world and in India and associated problems	3		
	3. Measures taken to control population growth in India; Human population and environment	3		
	4. Environment and Human Health	1		

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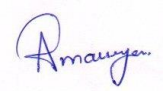
TEACHING PLAN (UNIT PLAN)

	5. Human Development Index, The World Happiness Index	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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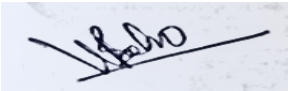

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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVES:
The learners will be able to understand about concepts of urbanization and associated problems. They will learn about smart and sustainable cities.

UNIT 4	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Urbanisation and Environment	1. Concept of Urbanisation	1	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google forms, Power point presentation,chalkboard
	2. Problems of migration and urban environment- changing landuse, crowding and stress on urban resources	5		
	3. Degradation of air and water, loss of soil cover, impact on biodiversity, Urban heat islands	3		
	4. Emerging Smart Cities and safe cities in India - Sustainable Cities	3		

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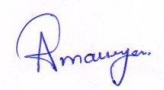
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVES:
The learners will be able to read various types of thematic maps and learn about map fillings which will give them an idea of spatial distribution ofenvironmental problems

UNIT 5	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Reading of Thematic Maps and Map Filling	1. Reading of Thematic Maps Located bars, Circles, Pie charts, Isopleths, Choropleth and Flow map, Pictograms	4	Environmental studies: P.G. Shinde	Teaching Method: 1. Lecture method 2.Discussion method 3.Demonstration method Teaching aid: Chalkboard
	2. Map filling of World (Environmentally significant features) using point, line and polygon segment.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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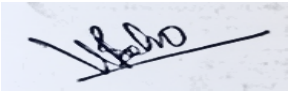

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. VERONIKA B. BARLA** DEPARTMENT: **BUS. ECONOMICS** CLASS: **F.Y.BCOM** SEMESTER: **II** (Subject : **BUS. ECONOMICS-II**)

MONTH: ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVES:

The student must be able to understand **Market Structure: Perfect Competition and Monopoly**

The student must be able to understand **Pricing and Output Decisions under Imperfect Competition**

The student must be able to understand **Pricing practices**

The student must be able to understand **Evaluating capital projects**

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TEACHING PLAN (UNIT PLAN)

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Business Economics - II	**Unit I:** **Perfect competition and Monopoly models** as two extreme cases - profit maximisation and the competitive firm's supply curve - Short run and long run equilibrium of a firm and of industry - Monopoly - Sources of monopoly power – short run and long run equilibrium of a firm under Monopoly	**10 lectures**	*Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases*	Google classroom, Google Forms
	Unit II: Monopolistic competition: Competitive and Monopolistic elements of monopolistic competition- equilibrium of firm under monopolistic competitions, monopolistic verses perfect competition, excess capacity and inefficiency, debate over role of advertising, (topics to be	15 lectures	H. L. AHUJA MORDEN ECONOMICS	

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TEACHING PLAN (UNIT PLAN)

	taught using case studies from real life examples) ***Oligopolistic Market:*** Key attributes of oligopoly- Collusive and non-collusive oligopoly market, Price rigidity, Cartels and price leadership models(with practical examples)			
	Unit III: ***Unit III:*** Cost oriented pricing methods: cost –plus (full cost)/mark-up pricing, marginal cost pricing, Mark up pricing, discriminating pricing, multiple – product pricing - transfer pricing (case studies on how pricing methods are used in business world)	**10 lectures**		

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TEACHING PLAN (UNIT PLAN)

	Unit IV: Evaluating capital projects Meaning and importance of capital budgeting- steps in capital budgeting- Techniques of Investment appraisal: payback period method, net present value method, and internal rate of return method (with numerical examples)	**10 lectures**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Suborna S. Banerjee DEPARTMENT: B. Com. CLASS: FYBCom. SEMESTER: 1 (Subject : Bussiness Communication 1)

MONTH: August - November ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

To help students understand the various aspects of communication. The learners will be able to Preparing resumes to attending interviews, convenig meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

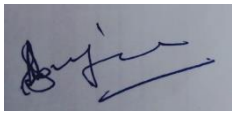
To make students aware of the importance of developing skills.

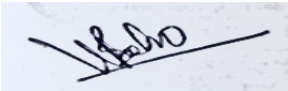
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1) Theory of Communication	1) Concept of Communication- Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World Impact of technological advancements on communication 2) Channels and Objectives of Communication: Channels: Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine Objectives of Communication: Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Moral of Employees 3) Methods and Modes of Communication:	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk – Board PPT

	Methods: Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette Modes: Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing			
2) Obstacles to Communication in Business World	1) Problems in Communication /Barriers to Communication: Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers 2) Listening: Importance of Listening Skills, Cultivating good Listening Skills – 4 3) Introduction to Business Ethics: Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility Teachers can adopt a case study approach and address issues such as the following so as to orient and sensitize the student community to actual business practices: Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk –Talk Method PPT

4) Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities Listening Comprehension Remedial Teaching Speaking Skills: Presenting a News Item, Dialogue and Speeches Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling.	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk- Talk Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: FYB.COM – N & O

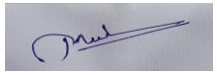
SEMESTER: 1st MONTH: August-November ACADEMIC YEAR: 2022-2023 SUBJECT: COMMERCE I

LEARNING OBJECTIVE/S: The learners will be able to:

1. learn basic concept of business.
2. learn various business objectives and various strategies of businesses.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
MODULE 1 BUSINESS	Introduction: concept, functions, scope, significance	03	Introduction to commerce, Vikram, Amit, Atlantic pub	1.Lecture and discussion. 2. Flow charts. 3.Online teaching learning tools(google meet, google formGoogle classroom, PPTs)
	Objectives of business: steps, classification, reconciliation of economic & social objectives	03		
	New trends in business: liberalisation, privatization, globalisation, strategy alternatives, restructuring strategies, turnaround strategies	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12*2=24



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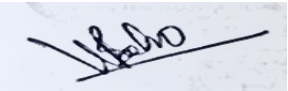

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TEACHING PLAN (UNIT PLAN)

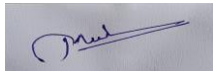
NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: FYB.COM – N & O

SEMESTER: 1st MONTH: August-November ACADEMIC YEAR: 2022-20213 SUBJECT: COMMERCE I

LEARNING OBJECTIVE/S: The learners will be able to:

1. To introduce the learners with Inter-relationship between Business and Environment.
2. To acquaint students with a knowledge of international trading environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 2: BUSINESS ENVIRONMENT	• Introduction: Concept and Importance of business environment, Inter – relationship between Business and Environmental.	3	Business Environment – Cherunilam Essentials of Business Environment – Aswathappa	1.Lecture and discussion. 2. Flow charts. 3.Online teaching learning tools (Google meet, google form Google classroom, PPTs)
	• Constituents of Business Environment: Internal and external Environment, Educational Environment and it's impact. .	4		
	• International Environment – Current Trends in the World, International Trading Environment - WTO and Trading Blocs and their impact on Indian Business	5		



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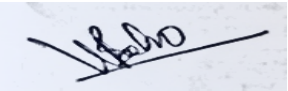

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12*2=24

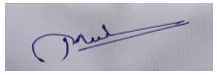
NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: FYB.COM – N & O

SEMESTER: 1st MONTH: August-November ACADEMIC YEAR: 2022-2023 SUBJECT: COMMERCE I

LEARNING OBJECTIVE/S: The learners will be able to:

1. To identify and demonstrate process for Business plan and its statutory requirements.
2. To makes students able to prepare project report, and Feasibility Study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 3: PROJECT PLANNING	• Introduction: Business Planning Process; Concept and Importance of Project Planning; Project Report; Feasibility Study Types and its Importance.	4	Strategic management - Bhutani Business Organization Management - Maheshwari	1. Lecture and discussion. 2. Flow charts. 3. Online teaching learning tools (google meet, google form Google classroom, PPTs)
	• Business Unit Promotion: Concept and Stages of Business Unit Promotion, Location -Factors determining location and Role of Government in Promotion.	4		
	• Statutory Requirements in Promoting Business Unit: Licensing and Registration Procedure, Filling returns			



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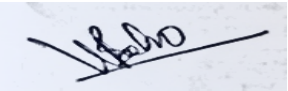

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TEACHING PLAN (UNIT PLAN)

	and other documents, other important legal provision.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12*2=24

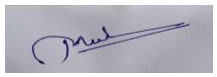
NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: FYB.COM – N & O

SEMESTER: 1st MONTH: August-November ACADEMIC YEAR: 2022-2023 SUBJECT: COMMERCE I

EARNING OBJECTIVE/S: The learners will be able to:

1. Concept of entrepreneurship and the scenario of entrepreneurship in India.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
MODULE- 4 ENTREPRENEUR SHIP	Introduction: Concept, Importance, Factors – Growth of Entrepreneurship, Intrapreneurs	03	Entrepreneurship, Hisrich, Robert D, Mc grow Hill	1.Lecture and discussion. 2. Flow charts. 3.Online teaching learning tools(google meet, google form Google classroom, PPTs)
	Entrepreneurship: Types, Competencies, Training & Development Centres, Incentives to Entrepreneurs	03		



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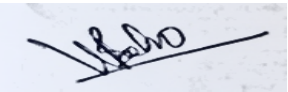

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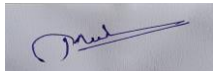
TEACHING PLAN (UNIT PLAN)

	Women entrepreneurs: Problems, Promotion	02		

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT: 08*2=16



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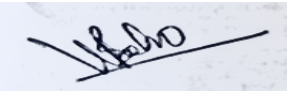

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: FYBCOM (ALL DIVISIONS) SEMESTER: I (Subject : NSS FC I)

MONTH: AUGUST TO OCTOBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Gain knowledge about National Service Scheme, its benefits to the society, scope for the NSS volunteers

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT-1 Introduction to NSS	**UNIT- 1 Emergence of NSS in India (Historical Background) and its development.** Organizational Structure of National Service Scheme from National Level to College Level.Objectives of National Service Scheme (SS) National Service Scheme (NSS) - Symbol and it's meaning **UNIT -Il Symbol of NSS and its meaning** Motto of National Service Scheme (NSS)	10	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi.And 2. University of Mumbai National	Chalk and talk method

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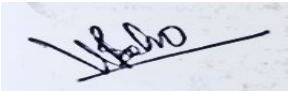

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	Various prayers, inspirational songs to be used in NSS Programme.		Service Scheme Manual,2009.	
UNIT-2 National Service Scheme Regular Activities	**UNIT - I Guidelines of Distribution of working hours or academic year.** Classification of Regular Activities in the Society Rural Urban Campus Need base with association **UNIT - II Associations in NSS Activities** Govt. Organization; NGO; Scope for Innovation (Self-Generated)	10	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi.And 2. University of Mumbai National Service Scheme Manual,2009.	Chalk and talk method
Unit 3 Social Issues in India	Features of Indian Society , communities in India, Family System, Division of Labour, Caste System , Gender Issues, Regional Imbalance.	12	1. Service Scheme Manual (Received) Government of India Ministry of	Chalk and talk method

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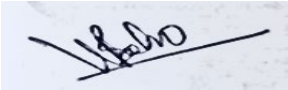

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TEACHING PLAN (UNIT PLAN)

			Youth Affairs and sports, New Delhi.And 2. University of Mumbai National Service Scheme Manual,2009.	
UNIT4 : Indian Constitution and Social Justice.	Preamble , Strucutre, Features, Fundamental Rights and Duties. Social Justice – Concept and Features Contribution of Social Justice – Dr Ambedkar, Mahatma Phule and Shahu Maharaj	13	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi.And 2. University of Mumbai National Service Scheme Manual,2009.	Chalk and talk method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

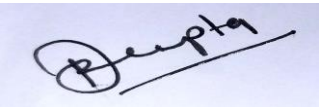
NAME OF THE STAFF: **Dr. DEEPAK GUPTA** DEPARTMENT: COMMERCE CLASS: F.Y.BCom SEMESTER: I Subject: FINANCIAL ACCOUNTING

MONTH: JULY, AUG, SEP, & OCT ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 & 4	**Inventory Valuation**: Part A - FIFO Method, Part B - Weighted Average Method	10	Financial Accounting by SN Maheshwari	Chalk-Board Method, Discussion, Google classroom.
	Capital & Revenue expenditure: Capital Expenditure, Revenue Expenditure, (Explain Basic definition , features, Differences & Practical problem solved)	10	Financial Accounting by SN Maheshwari	Chalk-Board Method, Discussion, Google classroom.
	Hire Purchaser : Calculation of Interest , Journal Entry in the book s of Purchaser company, Journal Entry in the book s of Vendor company, Ledger in the book of Purchaser & Vendor (Practical Problem Solve),	15	Financial Accounting by SN Maheshwari	Chalk-Board Method, Discussion, Google classroom.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35



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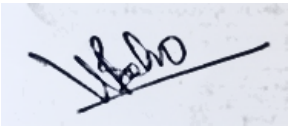

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Snehal S. Jadhav DEPARTMENT: Commerce CLASS: FYBCOM SEMESTER: I (Subject :Environmental Studies)

MONTH: November ACADEMIC YEAR: 2022 - 2023

LEARNING OBJECTIVE/S: The learners will be able to acquire a knowledge about the Environment, its components and Environmental problems. It will help to create awareness about protection of environment and natural Resources.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	Unit 1: Environment and Ecosystem- Definition, scope, its components. Ecosystem-Definition, components and types, functioning and structure, Food chain, Food web, Ecological pyramid; Man, and environment relationship, Importance and scope of environmental studies.	13	Environmental Science by Santra S.C Online resources	Chalk-Board Method
	Unit 2: Natural Resources and Sustainable Development Meaning and Definitions; Classification and types of resources, factors influencing resource utilisation; Resource conservation- meaning and methods- conventional and non-conventional resources, problems associated with and management of water, forest and	13	Essential of Ecology and Environment by S.V.S Rana. Online resources	Chalk-Board Method

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TEACHING PLAN (UNIT PLAN)

	energy resources- resource utilization and sustainable development.			
	Unit 3: Population and Immerging issues of Development: Population explosion in the world and India and arising concerns-Demographic Transition Theory- pattern of population growth and associated problems, Measures, Human population and environment, environment and Health,HDI, WHI.	13	Environmental Science by Santra S.C Online resources	Chalk-Board Method
	Unit 4: Urbanization and Environment: Concept of urbanization- problems of migration and urban environment- changing land use, crowding and stress on urban resources, degradation of air and water, loss of soil cover, impact on biodiversity, Urban Heat Island, Emerging smart cities and safe cities in India, sustainable	13	Environmental management by H V. Jadhav	Chalk-Board Method
	Map filling and Map reading- World Map	04	Map book by Sheth and Vipul Publication	Chalk-Board Method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __SMITA KHAIRE___DEPARTMENT: Commerce (Interdisciplinary) CLASS: F.Y.B.COM SEMESTER: _I_ (Subject : EVS)

MONTH: August-November _____ ACADEMIC YEAR: 2022-23_____

LEARNING OBJECTIVE/S: The learners will be able to acquire a knowledge and understanding about the Environment, its components and Environment problems. It will help to create awareness about protection of the Environment and natural resources.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Environmental Studies Div- I, J, K (U1 to U4 and Map reading and Map filling) Div-L (U1 and U4 and Map filling)	Unit 1: Environment and Ecosystem- Definition, scope, its components. Ecosystem-Definition, components and types, functioning and structure, Food chain, Food web, Ecological pyramid; Man, and environment relationship, Importance and scope of environmental studies.	13/7	Environmental Science by Santra S.C Online resources	Chalk-Board Method
	Unit 2: Natural Resources and Sustainable Development Meaning and Definitions; Classification and types of resources, factors influencing resource utilisation; Resource conservation- meaning and methods- conventional and non-conventional resources, problems associated with and management of water, forest and energy resources- resource utilization and sustainable development.	13	Essential of Ecology and Environment by S.V.S Rana. Online resources	Chalk-Board Method

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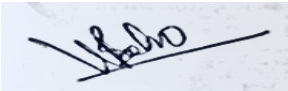

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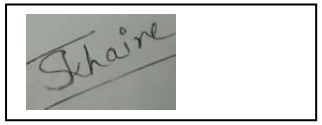
	Unit 3: Population and Immerging issues of Development: Population explosion in the world and India and arising concerns- Demographic Transition Theory- pattern of population growth and associated problems, Measures, Human population and environment, environment and Health, HDI, WHI.	13	Environmental management by H.V. Jadhav	Chalk-Board Method
	Unit 4: Urbanization and Environment: Concept of urbanization- problems of migration and urban environment changing land use, crowding and stress on urban resources, degradation of air and water, loss of soil cover, impact on biodiversity, Urban Heat Island, Emerging smart cities and safe cities in India, sustainable cities	13/7	Environmental Science by Santra S.C Online resources	Chalk-Board Method
	Map filling and Map reading- World Map	4	Map book by Sheth and Vipul Publication	Chalk-Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_ 13___



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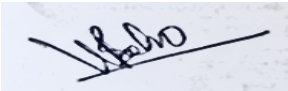

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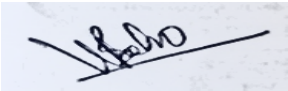

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Tejaswini Naik_____ DEPARTMENT: accountancy CLASS: Fybcom SEMESTER: _1_ (Subject : financial accounting)

MONTH: june-sept ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To give students an overview of how to keep systematic record of financial accounts and facilitate decision making.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED

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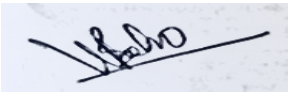

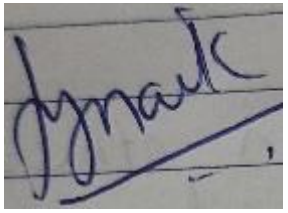

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TEACHING PLAN (UNIT PLAN)

	SUBTOPICS 1.Accounting standard 1 , 2 , and 9- Disclosure of accounting policies, stock valuation and revenue recognition.(theory only) 2. Inventory valuation – PROcess of purchase of inventory, method of valuation of stock- FIFO and weighed average method theory and practical questions. 3. Capital and revenue expenditure- difference, features, revenue income, capital income, theory and practical questions.	5 6 3	Manan publication	Blackboard

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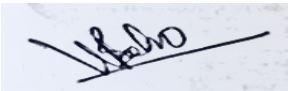

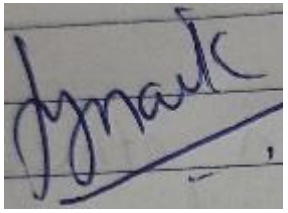

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TEACHING PLAN (UNIT PLAN)

	6. Accounting for Hire Purchase Meaning Calculation of interest Accounting for hire purchase transactions by asset purchase method based on full cash price Journal entries, ledger accounts and disclosure in balance sheet for hirer and vendor (excluding default, repossession and calculation of cash price)	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____21

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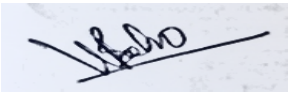

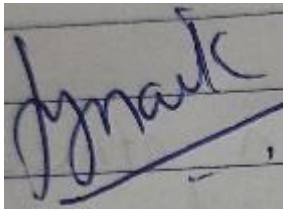

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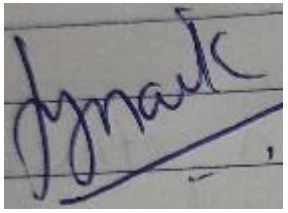

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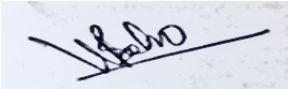

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **ANKITA PANDEY** DEPARTMENT: **FYBCOM** CLASS: **COMMERCE** SEMESTER: **I** (Subject : **BUSINESS ECONOMICS**)

MONTH: **AUGUST TO DECEMBER** ACADEMIC YEAR: **2022 - 2023**

LEARNING OBJECTIVE/S: **To learn a better role of an entrepreneur and skilled manager Build familiarity with the operation of markets and optimization in an economic context.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction	Introduction to Business Economics : Basic tools- opportunity cost Principle _ Incremental and marginal concepts. Basic economic relations _ functional relations : equations - Total, Average and Marginal relations _ use of marginal analysis in decision making. The basic of market demand, markets supply and equilibrium price_ shifts in the demand and supply curves and equilibrium.	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board
UNIT 2 Demand Analysis	Demand Analysis Demand Function : Nature of demand curve under different markets meaning, significance, types and measurement of elasticity of demand. (price, income cross and promotional) -relationship between elasticity of demand and revenue concepts.	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board

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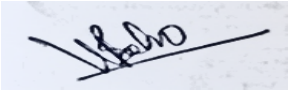

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TEACHING PLAN (UNIT PLAN)

Demand Estimation and forecasting :	Demand Estimation and forecasting : Meaning and significance _ methods of demand estimation : survey and statistical methods (numerical illustrations on trend analysis and simple linear regression)			
UNIT 3 Supply and production decisions	Short run analysis with law of variable proportions _ production function with two variable inputs _ isoquants, ridge lines and least cost combination of inputs_ Long run production function and laws of returns to scale _ expansion path_ economies and diseconomies of scale and economies of scope	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board
UNIT 4 Cost of Production Extension of Cost Analysis :	Cost concepts : Accounting Cost and economic cost, implicit and explicit cost, social and private cost, historical cost and replacement cost, sunk cost and Incremental cost _ fixed and variable cost _ total, average and marginal cost _ Cost Output relationship in the short run and long run Cost reduction through experience -- LAC and Learning Curve _ Break even analysis [with business applications]	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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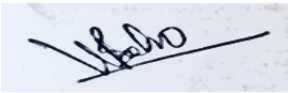

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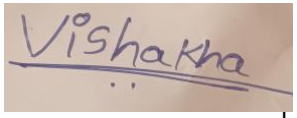
TEACHINGPLAN(UNITPLAN)

NAME OF THE STAFF: **VISHAKHA SANE** DEPARTMENT: **FYBCOM** CLASS: **COMMERCE** SEMESTER: **I** (Subject : **BUSINESS ECONOMICS**)

MONTH: **AUGUST TO DECEMBER** ACADEMIC YEAR: **2022 - 2023**

LEARNING OBJECTIVE/S: **To learn a better role of an entrepreneur and skilled manager Build familiarity with the operation of markets and optimization in an economic context.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction	Introduction to Business Economics : Basic tools- opportunity cost Principle _ Incremental and marginal concepts. Basic economic relations _ functional relations : equations - Total, Average and Marginal relations _ use of marginal analysis in decision making. The basic of market demand, markets supply and equilibrium price_ shifts in the demand and supply curves and equilibrium.	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board
UNIT 2 Demand Analysis	Demand Analysis Demand Function : Nature of demand curve under different markets meaning, significance, types and measurement of elasticity of demand. (price, income cross and promotional) -relationship between elasticity of demand and revenue concepts.	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board



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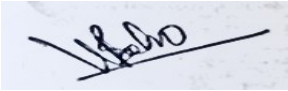

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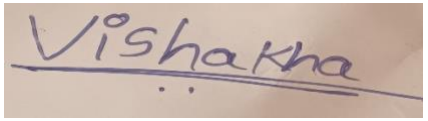
TEACHINGPLAN(UNITPLAN)

Demand Estimation and forecasting :	Demand Estimation and forecasting : Meaning and significance _ methods of demand estimation : survey and statistical methods (numerical illustrations on trend analysis and simple linear regression)			
UNIT 3 Supply and production decisions	Short run analysis with law of variable proportions _ production function with two variable inputs _ isoquants, ridge lines and least cost combination of inputs_ Long run production function and laws of returns to scale _ expansion path_ economies and diseconomies of scale and economies of scope	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board
UNIT 4 Cost of Production Extension of Cost Analysis :	Cost concepts : Accounting Cost and economic cost, implicit and explicit cost, social and private cost, historical cost and replacement cost, sunk cost and Incremental cost _ fixed and variable cost _ total, average and marginal cost _ Cost Output relationship in the short run and long run Cost reduction through experience -- LAC and Learning Curve _ Break even analysis [with business applications]	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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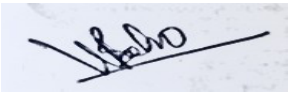

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____REENA BEHERA_____ DEPARTMENT: ____BUSINESS ECONOMICS_____ CLASS: _____FYBCOM__
SEMESTER: __I (Subject : _____Business Economics I_____)

MONTH: _____July to October_____ ACADEMIC YEAR: __2022-23_____

LEARNING OBJECTIVE/S: ___Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the

Various economic indicators in various economy and their
purposes._____

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Module 1,2,3,4	1 Introduction Scope and Importance of Business Economics - basic tools- Opportunity Cost principle- Incremental and Marginal Concepts. Basic economic relations - functional relations: equations- Total, Average and Marginal relations- use of	4 lectures per week	H.K.Ahuja Advanced Economic Theory	Chalk Duster Ppt Presentation Google Classroom Class test Quiz Assignment Google meet

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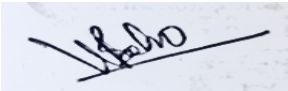

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TEACHING PLAN (UNIT PLAN)

	Marginal analysis in decision making, The basics of market demand, market supply and equilibrium price- shifts in the demand and supply curves and equilibrium 2 Demand Analysis Demand Function - nature of demand curve under different markets Meaning, significance, types and measurement of elasticity of demand (Price, income cross and promotional)- relationship between elasticity of demand and revenue concepts Demand estimation and forecasting: Meaning and significance - methods of			

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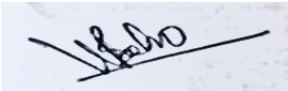

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TEACHING PLAN (UNIT PLAN)

	demand estimation : survey and statistical methods (numerical illustrations on trend analysis and simple linear regression) 3 Supply and Production Decisions Production function: short run analysis with Law of Variable ProportionsProduction function with two variable inputs- isoquants, ridge lines and least cost combination of inputs- Long run production function and Laws of Returns to Scale - expansion path - Economies and diseconomies of Scale and economies of scope 4 Cost of Production Cost concepts: Accounting cost and economic cost, implicit and explicit cost,			

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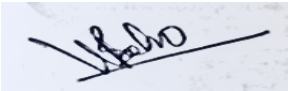

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TEACHING PLAN (UNIT PLAN)

	social and private cost, historical cost and replacement cost, sunk cost and incremental cost -fixed and variable cost - total, average and marginal cost - Cost Output Relationship in the Short Run and Long Run (hypothetical numerical problems to be discussed) Extensions of cost analysis: cost reduction through experience - LAC and Learning curve - Break even analysis (with business applications)			

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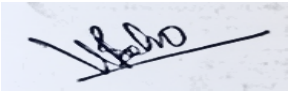

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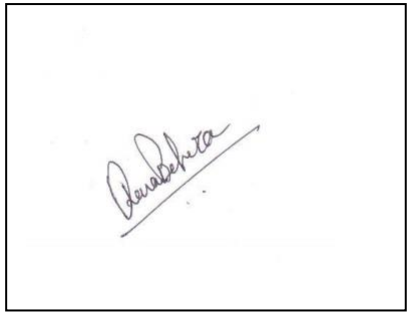
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____45



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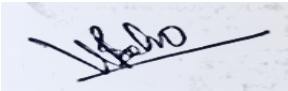

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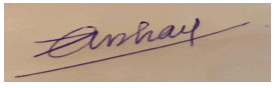
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jinal Chohan_____ DEPARTMENT: __Commerce__ CLASS: __FYBCOM G&H__ SEMESTER: I__ (Subject : Commerce__)

MONTH: November to March _____ ACADEMIC YEAR: __2022-23_____

LEARNING OBJECTIVE/S: _To be able to learn basic concept of business. He will also be able to learn various business objectives and various strategies of businesses

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	EACHING METHOD/ ICT TOOLS USED
UNIT II **BUSINESS ENVIRONMENT**	INTRODUCTION : Concept, importance, inter-relationship between business and environment	11	Introduction to commerce, Vikram , Amit, Atlantic pub Essentials of business environment- Ashwathappa	Chalk and board



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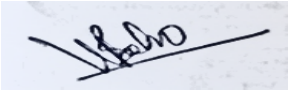

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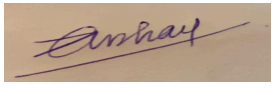
TEACHING PLAN (UNIT PLAN)

	CONSTITUENTS OF BUSINESS ENVIRONMENT: Internal and external environment, educational environment and its impact			
	INTERNATIONAL ENVIRONMENT: Current trends in the world, international trading environment-WTO and trading blocks and their impact on Indian business			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_11___



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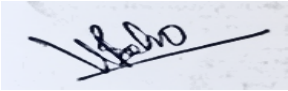

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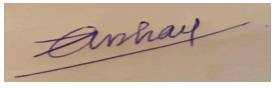
TEACHING PLAN (UNIT PLAN)

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/ S	EACHING METHOD/ ICT TOOLS USED
Unit 3 Project Planning	INTRODUCTION : Business planning process, concept and importance of project planning, project report, feasibility study types and its importance	**11**	Introduction to commerce, Vikram , Amit, Atlantic pub	**Chalk and board**
	BUSINESS UNIT PROMOTION: Concept and stages of business unit promotion, factors affecting location, role of government in promotion		Essentials of business environment- Ashwathappa	
	STATUTORY REQUIREMENTS: Licensing and registration, procedure, filing returns and other documents, other important legal provisions			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_11___



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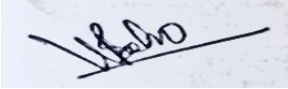

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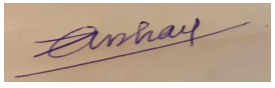
TEACHING PLAN (UNIT PLAN)

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE /S	EACHING METHOD/ ICT TOOLS USED
Unit 4 Women Entrepreneur	INTRODUCTION : Concept, importance, factors – growth of entrepreneurship, intrapreneurs ENTREPRENEURSHIP : Types, competencies, training & development centres, incentives to entrepreneurs WOMEN ENTREPRENEURS : Problems, promotion	11	Introduction to commerce, Vikram , Amit, Atlantic pub	Chalk and Board
			Essentials of business	



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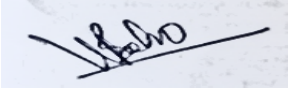

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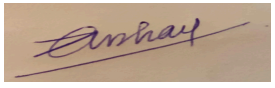
TEACHING PLAN (UNIT PLAN)

			environment-Ashwathappa	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_11___



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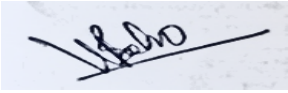

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Karishma Kale DEPARTMENT: Commerce CLASS: FYBCOM-K SEMESTER: I (Subject: Commerce I)

MONTH: August- December ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Know the basic concepts of business and modern business theories to apply in today's dynamic world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Chp 1: Business	Introduction: Concept of Business, Functions, Scope Significance Objectives of Business: Steps, classification, Reconciliation of economic and social objectives New Trends in Business: Liberalisation, privatisation , globalisation, strategy alternatives, restructuring strategies, turnaround strategies	6	Manan Prakashan	Chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6

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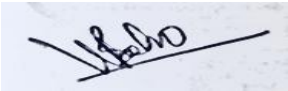

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Komal Sudhir Naik DEPARTMENT: Mathematics CLASS: FYBCOM (I, J, L)

SEMESTER: I SUBJECT : Maths and Stats MONTH: Aug-Sep ACADEMIC YEAR:- 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MATHEMATICAL AND STATISTICAL METHODS UNIT I Shares and Mutual Funds	**Shares:** Concept of share, face value, market value, dividend, equity shares, preferential shares, bonus shares. Simple examples.	08	Securities Laws & Regulation of Financial Market : Intermediate Course Paper 8, Institute of Company Secretaries of India, Chapter 11.	Chalk and board
	Mutual Funds: Simple problems on calculation of Net income after considering entry load, dividend, change in Net Asset Value (N.A.V.) and exit load. Averaging of price under the Systematic Investment Plan (S.I.P.)	07	Indian Mutual Funds Handbook : By Sundar Shankaran, Vision Books, 2006, Sections 1.7,1.8.1, 6.5 & Annexures 1.1to 1.3.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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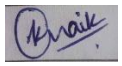
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Komal Sudhir Naik DEPARTMENT: Mathematics CLASS: FYBCOM (I, J, K)

SEMESTER: I SUBJECT : Maths and Stats MONTH: Aug-Sep ACADEMIC YEAR:- 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MATHEMATICAL AND STATISTICAL METHODS UNIT II	**Permutation and Combination**: Factorial Notation, Fundamental principle of counting, Permutation as arrangement, Simple examples, combination as selection, Simple examples, Relation between r n C and r n P Examples on commercial application of permutation and combination	09	Applied Calculus: By Stephen Waner and Steven Constenoble, Brooks/Cole Thomson Learning, second edition, Chapter 1 to 5.	Chalk and board



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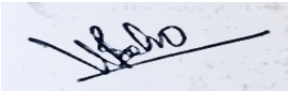

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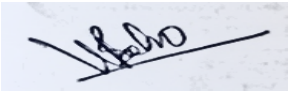
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

Permutation, Combination and Linear Programming Problems	**Linear Programming Problem**: Sketching of graphs of (i) linear equation Ax + By + C = 0 (ii) linear inequalities. Mathematical Formulation of Linear Programming Problems upto 3 variables. Solution of Linear Programming Problems using graphical method up to two variables.	06		Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

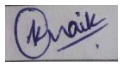
NAME OF THE STAFF: Komal Sudhir Naik DEPARTMENT: Mathematics CLASS: FYBCOM (L ,O)

SEMESTER: SEM I SUBJECT : Maths and Stats MONTH: Aug-Sept ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MATHEMATICAL AND STATISTICAL METHODS UNIT IV ELEMENTARY PROBABILITY THEORY	**Probability Theory**: Concept of random experiment/trial and possible outcomes; Sample Space and Discrete Sample Space; Events their types, Algebra of Events, Mutually Exclusive and Exhaustive Events, Complimentary events. Classical definition of Probability, Addition theorem (without proof), conditional probability. Independence of Events: $P(A \cap B) = P(A)\,P(B)$. Simple examples.	08	Operations Research by Gupta and Kapoor 12.	Chalk and board
	Random Variable: Probability distribution of a discrete random variable; Expectation and Variance of random variable, simple examples on probability distributions.	07	Operations Research by Schaum Series	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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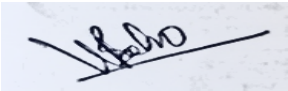

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

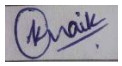
NAME OF THE STAFF: Komal Sudhir Naik DEPARTMENT: Mathematics CLASS: FYBCOM (L)

SEMESTER: SEM I SUBJECT : Maths and Stats MONTH: Aug-Sept ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MATHEMATICAL AND STATISTICAL METHODS UNIT V DECISION THEORY	Decision making situation, Decision maker, Courses of Action, States of Nature, Pay-off and Pay-off matrix; Decision making under uncertainty, Maximin, Maximax, Minimax regret and Laplace criteria; simple examples to find optimum decision. Formulation of Payoff Matrix. Decision making under Risk, Expected Monetary Value (EMV); Decision Tree; Simple Examples based on EMV. Expected Opportunity Loss (EOL), simple examples based on EOL.	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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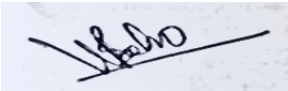

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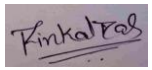
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rinkal Ajoy Das DEPARTMENT: Mathematics CLASS: FYBCOM (I,J,K,L,M)

SEMESTER: SEM I SUBJECT : Maths and Stats MONTH: Aug-Sept ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MATHEMATICAL AND STATISTICAL METHODS	**Measures of Central Tendencies**: Definition of Average, Types of Averages: Arithmetic Mean,Median, and Mode for grouped as well as ungrouped data. Quartiles, Deciles and Percentiles. Using Ogive locate median and Quartiles. Using Histogram locate mode. Combined and Weighted mean.	08	Mathematics for Business Economics: By J. D. Gupta, P. K. Gupta and Man Mohan, Tata Mc- Graw Hill Publishing Co. Ltd., 1987, Chapters 9 to 11 & 16.	Chalk and board



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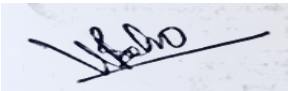

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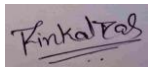
TEACHING PLAN (UNIT PLAN)

UNIT III SUMMARIZATION MEASURES	**Measures of Dispersions**: Concept and idea of dispersion. Various measures Range, Quartile Deviation, Mean Deviation, Standard Deviation, Variance, Combined Variance.	07	STATISTICS by Schaum Series	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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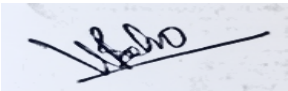

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TEACHING PLAN (UNIT PLAN)

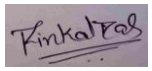
NAME OF THE STAFF: Rinkal Ajoy Das DEPARTMENT: Mathematics CLASS: FYBCOM (I)

SEMESTER: SEM I SUBJECT : Maths and Stats MONTH: Aug-Sept ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MATHEMATICAL AND STATISTICAL METHODS UNIT IV	**Probability Theory**: Concept of random experiment/trial and possible outcomes; Sample Space and Discrete Sample Space; Events their types, Algebra of Events, Mutually Exclusive and Exhaustive Events, Complimentary events. Classical definition of Probability, Addition theorem (without proof), conditional probability. Independence of Events: $P(A \cap B) = P(A)P(B)$. Simple examples.	08	Operations Research by Gupta and Kapoor 12.	Chalk and board
ELEMENTARY PROBABILITY THEORY	**Random Variable**: Probability distribution of a discrete random variable; Expectation and Variance of random variable, simple examples on probability distributions.	07	Operations Research by Schaum Series	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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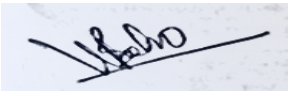

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

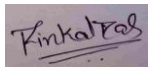
NAME OF THE STAFF: Rinkal Ajoy Das DEPARTMENT: Mathematics CLASS: FYBCOM (I,J,K)

SEMESTER: SEM I SUBJECT : Maths and Stats MONTH: Aug-Sept ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED.
MATHEMATICAL AND STATISTICAL METHODS UNIT V DECISION THEORY	Decision making situation, Decision maker, Courses of Action, States of Nature, Pay-off and Pay-off matrix; Decision making under uncertainty, Maximin, Maximax, Minimax regret and Laplace criteria; simple examples to find optimum decision. Formulation of Payoff Matrix. Decision making under Risk, Expected Monetary Value (EMV); Decision Tree; Simple Examples based on EMV. Expected Opportunity Loss (EOL), simple examples based on EOL.	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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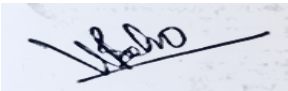

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VIVA COLLEGE, Virar (W)

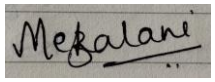
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mezbin Lalani DEPARTMENT: Accountancy CLASS: FYBCOM SEMESTER: I (Subject :Financial accounting)

MONTH: Aug – Nov ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To understand the methods of stock valuation , difference between capital and revenue items and learn the method of hire purchase accounting

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Module 1: Stock Valuation	Introduction to Stock valuation, periodic and perpetual inventory system, FIFO method, it's advantages and disadvantages, weighted average method, it's advantages and disadvantages, practical sums	15	Financial Accounting by SN Maheshwari	Chalk and duster, discussion, Google classroom, PDFs etc
Module 2: Capital and Revenue	Meaning of Capital expenditure and revenue expenditure, it's examples, meaning of Capital receipt and revenue receipts, it's examples, practical illustrations	15	Financial Accounting by SN Maheshwari	Chalk and duster, discussion, Google classroom, PDFs etc
Module 3: Accounting for		15	Financial	Chalk and duster, discussion, Google classroom, PDFs etc



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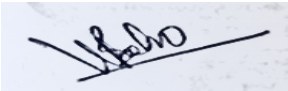

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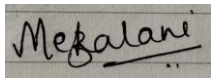
TEACHING PLAN (UNIT PLAN)

Hire Purchase system			Accounting by SN Maheshwari	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____



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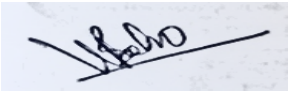

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: CA MONALI SANKHE DEPARTMENT: ACCOUNTANCY

SEMESTER: I MONTH: October Academic Year: 2022-23

CLASS: F Y B Com Div. M AND N

LEARNING OBJECTIVE/S: The learners will be able to :
have knowledge of preparation of financial statements and financial schedules

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy & Financial Management	**1. Accounting Standards Issued by ICAI and Inventory Valuation • Accounting Standards:** **AS – 1: Disclosure of Accounting Policies** **AS – 2: Valuation of Inventories (Stock)** **AS – 9: Revenue Recognition**	03	*Manan Prakashan*	Chalk & talk, Black-Board Method; Group Discussion,
	2. Departmental Accounting	15		
	3. Branch Accounting	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 per Division

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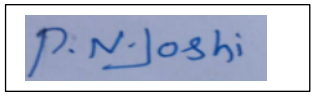
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Padmaja Joshi DEPARTMENT: Commerce CLASS: FYBCOM SEMESTER: I (Subject : Business Communication

MONTH: July-November ACADEMIC YEAR: 2022-23

- LEARNING OBJECTIVE/S: To build up comprehensive understanding of business correspondence and conditions.
- To create influential oral, written and practical skills among students.
- To develop the powerful utilization of communication technologies.
- To equip students with the career skills such as collaborative working at workplace, interviews, etc

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1: Unit I : Theory of Communication	Concept of Communication · Meaning · Definition · Process · Need · Feedback · Emergence of Communication as a key concept in the Corporate and Global world	**05**	Agarwal, Anju D. A Practical Handbook for Consumers. India Book House, 1989. 2. Ashley, A. A Handbook of Commercial	Google classroom, T, blackboard, youtube
Unit 2: Communication at the Workplace	i. Channels of Communication (03) Formal and Informal – Vertical, Horizontal, Diagonal and Grapevine ii. Methods of Communication (05) Semester III: Applied Component: Paper-I Total Credits: 02 Course Title: Business Communication Verbal, Non-Verbal and Visual (including	29		Google classroom, PPT, blackboard, youtube



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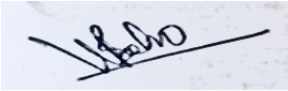

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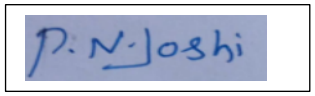
TEACHING PLAN (UNIT PLAN)

	ii. Kinesics, Para-Language, Proxemics, Silence, Sign, Signal and Symbol) iii. Business Etiquette (04) Office Etiquette, Internet Etiquette / Netiquette, Business Card Etiquette, Handshake Etiquette, Mobile Phone Etiquette iv. Barriers to Communication and Ways to Overcome Them (06) Physical or Environmental, Semantic or Language, Psychological and Cross-Cultural Barriers Ways to Overcome these Barriers v. Listening (04) What is Listening? The Listening Process Importance of Good Listening How to Develop Effective Listening Skills Obstacles to Listening vi. Business Ethics (07) What is Ethics? Business Ethics? Importance of Business Ethics at Workplace Digital Ethics Environmental Ethics Ethics in International Business Corporate Social Responsibility		Correspondence. Oxford UP, 1992. Management. MMC School of Management, 1994. 5. Bah, J.C. and Nagamia S.M. Modern Business Correspondence and Minute Writing. N.M. Tripathi Pvt., 1974. 6. Balan, K.R. and Rayudu, C.S. Effective Communication. Beacon Books, 1996. 7. Bangh, L. Sue, Fryar, Maridell and	
Unit 3: New Media in Communication	· Impact of Technology Enabled Communication · Video Conference: Skype, Google Meet, Go-To-Meeting and Jio-Meet · Social Media: WhatsApp, Twitter, Facebook, Instagram, Telegram and Blog	07		Google classroom, PPT, blackboard, youtube



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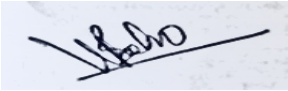

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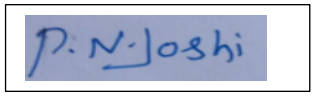
TEACHING PLAN (UNIT PLAN)

Unit 4: Business Correspondenc	i. Theory of Business Letter Writing · Principles of Effective Letter Writing · Parts of a Business Letter · Layout of a Business Letter (Full Block) ii. Personnel Correspondence Job Application Letter and Resume Letter of Recommendation Letter of Appointment Letter of Acceptance of Job Offer Letter of Appreciation Letter of Resignation	14	Thomas David A. How to Write First Class Business Correspondence. N.T.C. Publishing Group USA, 1998. 8. Banerjee, Bani P. Foundation of Ethics in Management. Excel Books, 2005.	Google classroom, PPT, blackboard, youtube

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 55



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(Commerce)

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PALLAVI G NAIK DEPARTMENT: COMMERCE CLASS: FYBCOM SEMESTER: I MONTH: AUG TO NOV

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Understand some of the most significant theories and principle

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUISNESS ECONOMICS I	MODULE I INTRODUCTION SCOPE AND IMPORTANCE OF BUISNESS ECONOMICS. BASIC CONCEPTS OF BUSINESS ECONOMICS ANALYSIS,OPPORTUNITY COST,INCREMENTAL AND MARGINAL CONCEPTS,MARGINAL ANALYSIS,FUNCTIONAL RELATIONS AND TOOLS FOR ECONOMIC ANALYSIS. CH 2 MARKET DEMAND AND SUPPLY DEMAND ,SUPPLY,MARKET EQULIBRIUM,CHANGES IN MARKET EQULIBRIUM MODULE II DEMAND ANALYSIS INTODUCTION,DEMAND,SUPPLY,MARKET EQUILIBRIUM,CHANGES IN MARKET EQUILIBRIUCH 3 DEMAND FUNCTION THE LAW OF DEMAND,DETERMINATS 0F DEMAND,DEMAND FUNCTION,PRICE INCOME AND SUBSTITUTION EFFECT,NATURE OF	8	MANAN PRAKASHAN	BLACKBORD AND CHALK GOOGLE CLASSROOM

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	DEMAND CURVE UNDER DIFFERENT MARKET MODULE II DEMAND ANALYSIS CH 4 ELASTICITY OF DEMAND PRICE ELASTICITY,INCOME ELASTICITY,CROSS ELASTICITY,PROMOTIONAL ELASTICITY OF DEMAND,IMPORTANCE OF ELASTICITY OF DEMAND CH 5 DEMAND ESTIMATION AND FORCASTING SIGNIFICANCE OF DEMAND FORECASTING TYPES, STEPS IN DEMAND FORECASTING METHODS OF DEMAND FORCASTING MODULE III SUPPLY AND PRODUCTION DECISIONS CH 6 THEORY OF PRODUCTION PRODUCTION FUNCTION,ISOQUANTS,RIDGE LINES,LEAST COST COMBINATION OF INPUTS,EXPANSION PATH CH 7 SHORT RUN AND LONG RUN ANALYSIS OF PRODUCTION TYPES OF PRODUCTION FUNCTION,LAW OF VARIABLE PROPORTIONS,LAWS OF RETURNS TO SCALE CH 8 ECONOMIES AND DISECONOMIES OF SCALE INTERNAL AND EXTERNAL DISECONOMIES ECONOMIES OF SCOPE.			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____8____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SACHI ARJUN KADAM DEPARTMENT: Accountancy CLASS: FYBAF SEMESTER: I_ (Subject : Cost Accounting)

MONTH: Oct ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost Accounting – Introduction and Elements of Cost				
Introduction to Cost Accounts	Evolution Objectives and Scope of Cost Accounting Importance and Advantages of Cost Accounting Difference between Cost Accounting and Financial Accounting Limitations of Financial Accounting Definitions: Cost, Costing and Cost Accounting Classification of Cost on Different Bases Cost Allocation and Apportionment Coding System Essentials of Good Costing System 2	10	Cost Accounting Theory and Practice by B.K. Bhar, Tata Mc. Grow Hill and Co. Ltd., Mumbai	Online/ Google Meet / PPT

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TEACHING PLAN (UNIT PLAN)

	Labour Prctical Problem Merrick system, Taylor, halsey, rowan Material FIFO , weighted avg method	5 5		
Overheads	Overheads: The Concept Classification of overheads on different bases Apportionment and Absorption of Overheads	15	Cost Accounting by S.P. Jain and K.L. Narang, Kalyani Publishers, Ludhiana	Online/ Google Meet / PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_35

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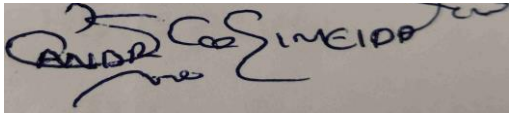
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SANDRA ALMEIDA DEPARTMENT:__Commerce____CLASS:__FYBCOM SEMESTER: I_____(Subject : Commerce__)

MONTH: JUNE ACADEMIC YEAR:_2022-23___

LEARNING OBJECTIVE/S: _To be able to learn basic concept of business. He will also be able to learn various business objectives and various strategies of businesses

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	EACHING METHOD/ ICT TOOLS USED
UNIT 1	OBJECTIVES OF BUSINESS : Steps, classification, reconciliation of economic & social objectives			



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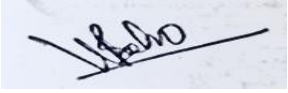

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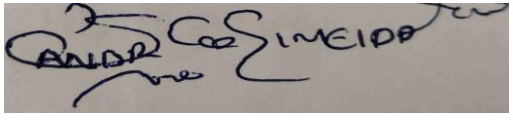
TEACHING PLAN (UNIT PLAN)

UNIT II **BUSINESS ENVIRON MENT**	INTRODUCTION : Concept, importance, inter-relationship between business and environment	11	Introduction to commerce, Vikram , Amit, Atlantic pub Essentials of business environment- Ashwathappa	Chalk and board



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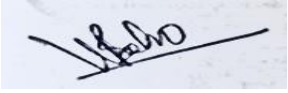

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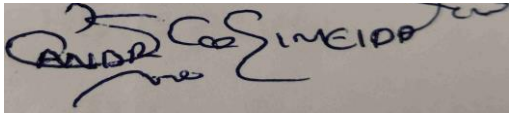
TEACHING PLAN (UNIT PLAN)

	CONSTITUENTS OF BUSINESS ENVIRONMENT: Internal and external environment, educational environment and its impact INTERNATIONAL ENVIRONMENT: Current trends in the world, international trading environment-WTO and trading blocks and their impact on Indian business			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_11____



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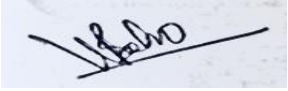

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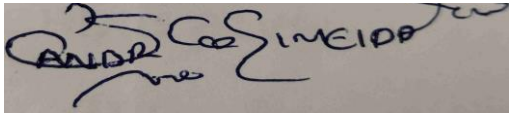
TEACHING PLAN (UNIT PLAN)

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/ S	EACHING METHOD/ ICT TOOLS USED
Unit 3 Project Planning	INTRODUCTION : Business planning process, concept and importance of project planning, project report, feasibility study types and its importance	**11**	Introduction to commerce, Vikram , Amit, Atlantic pub	**Chalk and board**
	BUSINESS UNIT PROMOTION: Concept and stages of business unit promotion, factors affecting location, role of government in promotion		Essentials of business environment- Ashwathappa	
	STATUTORY REQUIREMENTS: Licensing and registration, procedure, filing returns and other documents, other important legal provisions			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_11____



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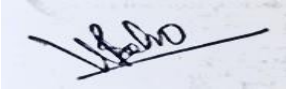

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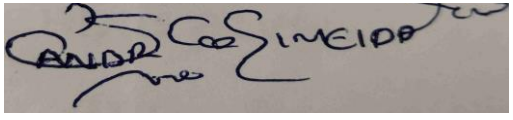
TEACHING PLAN (UNIT PLAN)

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE /S	EACHING METHOD/ ICT TOOLS USED
Unit 4 Women Entrepreneur	INTRODUCTION : Concept, importance, factors – growth of entrepreneurship, intrapreneurs ENTREPRENEURSHIP : Types, competencies, training & development centres, incentives to entrepreneurs WOMEN ENTREPRENEURS : Problems, promotion	11	Introduction to commerce, Vikram , Amit, Atlantic pub	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_11



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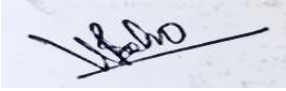

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA VAIBHAV TAMBE DEPARTMENT: COMMERCE CLASS: FYBCOM(A,B,C,D) SEMESTER: II

(Subject: FOUNDATION COURSE - II) MONTH: DEC- MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 1 Globalisation & Indian Society	Concepts of liberalization, privatization and globalization. Growth of information technology and communication and its impact manifested in everyday life. Impact of globalization on industry: changes in employment and increasing migration. Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides.	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
UNIT 2 Human Rights	a]Concept of Human Rights. b] Evolution of Human Rights c] The Universal Declaration of Human Rights	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD

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TEACHING PLAN (UNIT PLAN)

	d] Fundamental Rights in Constitution			• INTERACTIVE METHOD
UNIT 3 Ecology	a] Concept of environment & ecology. b] Importance of environmental studies, Environment as a Natural capital & quality of human life. c] Environmental Degradation, Causes, Impact on human life d] Sustainable Development – Concept, Components e] Poverty & Environment	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
UNIT 4 Understanding Stress & Conflicts	Causes of stress & Conflicts in individual & society. Agents of Socialization & the role played by them in developing the individual. Significance of values, ethics & prejudices in developing the individuals. Stereotypying & prejudice as significant factors in causing conflicts in society. Aggression & Violence as the public expression of conflicts.	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

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TEACHING PLAN (UNIT PLAN)

UNIT 5 Managing stress & conflict in Contemporary Society	Types of conflicts and use of coping mechanisms for managing individual stress. Maslow's theory of self-actualisation. Different methods of responding to conflicts in society, Conflict Resolution, & Efforts towards building peace & harmony in society.	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 50

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: COMMERCE CLASS: FYBCOM (K and L) SEMESTER: II (Subject : COMMERCE II)

MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to:

- Understand the meaning of services.
- Get knowledge of E-commerce and retailing its format.
- Interpret global trend in service sector and the future opportunities

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT I: CONCEPT OF SERVICES	• **Introduction** : Meaning, Characteristic, Scope and Classification of Services – Importance of Service sector in the Indian Context. • **Marketing Mix for Services**: Consumer Expectations, Services Mix, Product, Place, Price, Promotion, process of services delivery, Physical evidence and people. • **Service Strategies**: Market research and services development cycle, Managing demand and Capacity, Opportunities and challenges in service sector.	12	Management Of Service Sector, Bhatia, B S, V P Pub	Chalk-board, discussion, example and test

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TEACHING PLAN (UNIT PLAN)

UNIT – 2 Retailing	• **Introduction**: Concept of organized and unorganized retailing , Trends in retailing, growth of organized retailing in India, Survival strategies for unorganized Retailers • **Retail Format**: Store format, Non – Store format, Store Planning, design and layout • **Retail Scenario**: Retail Scenario in India and Global context – Prospects and Challenges in India.Mall Management – RetailFranchising. FDI in Retailing, Careers in Retailing	12	Learning retailing Management, Levy Michael., Weitz Barton A,Tata Mcgraw Hill	Chalk-board, discussion, example and test
Unit-3 Recent trends in service sector	• **ITES Sector**: Concept and scope of BPO, KPO, LPO and ERP • **Banking and Insurance Sector**: ATM, Debit & Credit Cards, Internet Banking – Opening of Insurance sector for private players, FDI and its impact on Banking and Insurance Sector in India. **Logistics**: Net-working – Importance – Challenges.	12	Management of services sector-Bhatia	Chalk-board, discussion, example and test
Unit -4	• **Introduction**: Meaning, Features, Functions andScope of E-Commerce-Importance andLimitations of E-Commerce	09	introduction To E – Commerce,	Chalk-board, discussion, example and test

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TEACHING PLAN (UNIT PLAN)

E-commerce	• **Types of E-Commerce**: Basic ideas and Major activities of B2C,B2B, C2C. • **Present status of E-Commerce in India**: Transition to E-Commerce in India, E-Transition Challenges for Indian Corporates; on-line Marketing Research.		Dhawan, Nidhi, International Book House	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

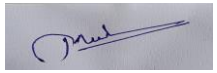
NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: SYB.COM – K, L

SEMESTER: IV MONTH: December-February ACADEMIC YEAR: 2022-2023 SUBJECT: ADVERTISING- II

LEARNING OBJECTIVE/S:

1. To highlight the role of advertising for the success of brands and its importance within the marketing function of a company.
2. It aims to orient learners towards the practical aspects and techniques of advertising.
3. It is expected that this course will prepare learners to lay down a foundation for advanced post-graduate courses in advertising

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
MODULE 1	Traditional Media: Print, Broadcasting, Out-Of-Home advertising and films - advantages and limitations of all the above traditional media	03	Brand Equity & Advertising- Advertising's role in building strong brands, 2013- David A. Aker, Alexander L. Biel, Psychology Press Brand Positioning – Strategies for Competitive Advantage,	1.Lecture and discussion. 2. Flow charts. 3.Online teaching learning tools (google meet, google form Google classroom, PPTs)
	New Age Media: Digital Media / Internet Advertising – Forms, Significance and Limitations	03		



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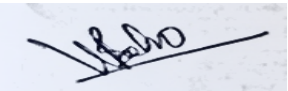

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TEACHING PLAN (UNIT PLAN)

Media in Advertising	Media Research: Concept, Importance, Tool for regulation - ABC and Door darshan Code	05	Subroto Sengupta, 2005, Tata McGraw Hill Publication.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11*2=22

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: SYB.COM – K, L

SEMESTER: IV MONTH: December-February ACADEMIC YEAR: 2022-2023 SUBJECT: ADVERTISING- II

LEARNING OBJECTIVE/S:
1. To highlight the role of advertising for the success of brands and its importance within the marketing function of a company.
2. It aims to orient learners towards the practical aspects and techniques of advertising.
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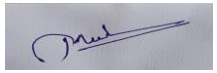
PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
	Advertising Campaign: Concept, Advertising Campaign Planning -Steps Determining advertising objectives - DAGMAR model	03	Brand Equity & Advertising- Advertising's role in building strong brands, 2013- David A.	1.Lecture and discussion. 2. Flow charts. 3.Online teaching learning



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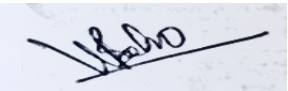

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TEACHING PLAN (UNIT PLAN)

MODULE 2	Advertising Budgets: Factors determining advertising budgets, methods of setting advertising budgets, Media Objectives - Reach, Frequency and GRPs	03	Aker, Alexander L. Biel, Psychology Press Brand Positioning – Strategies for Competitive Advantage, Subroto Sengupta, 2005, Tata McGraw Hill Publication.	tools (google meet, google form Google classroom, PPTs)
Planning Advertising Campaigns	Media Planning: Concept, Process, Factors considered while selecting media, Media Scheduling Strategies	05		

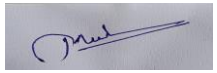
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11*2=22

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: SYB.COM – K, L

SEMESTER: IV MONTH: December-February ACADEMIC YEAR: 2022-2023 SUBJECT: ADVERTISING- II

LEARNING OBJECTIVE/S:

1. To highlight the role of advertising for the success of brands and its importance within the marketing function of a company.
2. It aims to orient learners towards the practical aspects and techniques of advertising.
3. It is expected that this course will prepare learners to lay down a foundation for advanced post-graduate courses in advertising



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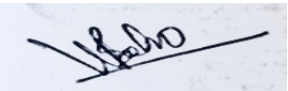

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PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
MODULE 3 Execution and Evaluation of Advertising	Creativity: Concept and Importance, Creative Process, Concept of Creative Brief, Techniques of Visualization	03	Brand Equity & Advertising- Advertising's role in building strong brands, 2013- David A. Aker, Alexander L. Biel, Psychology Press Brand Positioning – Strategies for Competitive Advantage, Subroto Sengupta, 2005, Tata McGraw Hill Publication.	1.Lecture and discussion. 2. Flow charts. 3.Online teaching learning tools (google meet, google form Google classroom, PPTs)
	Creative aspects: Buying Motives - Types, Selling Points- Features, Appeals – Types, Concept of Unique Selling Preposition (USP)	03		
	Creativity through Endorsements: Endorsers – Types, Celebrity Endorsements – Advantages and Limitations, High Involvement and Low Involvement Products	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11*2=22

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: SYB.COM – K, L

SEMESTER: IV MONTH: December-February ACADEMIC YEAR: 2022-2023 SUBJECT: ADVERTISING- II

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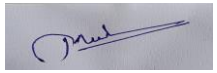
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
1. To highlight the role of advertising for the success of brands and its importance within the marketing function of a company.
2. It aims to orient learners towards the practical aspects and techniques of advertising.
3. It is expected that this course will prepare learners to lay down a foundation for advanced post-graduate courses in advertising

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
MODULE 4 Fundamentals of Creativity in Advertising	Preparing print ads: Essentials of Copywriting, Copy – Elements, Types, Layout- Principles, Illustration - Importance.	03	Brand Equity & Advertising- Advertising's role in building strong brands, 2013- David A. Aker, Alexander L. Biel, Psychology Press Brand Positioning – Strategies for Competitive Advantage, Subroto Sengupta, 2005, Tata McGraw Hill Publication.	1.Lecture and discussion. 2. Flow charts. 3.Online teaching learning tools (google meet, google form Google classroom, PPTs)
	Creating broadcast ads: Execution Styles, Jingles and Music – Importance, Concept of Storyboard	04		
	Evaluation: Advertising copy, Pre-testing and Post-testing of Advertisements – Methods and Objectives	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12*2=24



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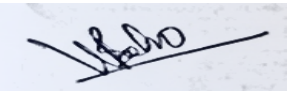

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NAME OF THE STAFF: AMITA RAKESH PATIL DEPARTMENT: ACCOUNTANCY CLASS: FYBCOM SEMESTER: 2 (Subject : Financial Accounting)

MONTH: DECEMBER - MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
UNIT 1 Accounting for Incomplete Records	Introduction, Entries, Format. Opening Statement of Affairs . Practical Problems	15	Financial Ac. counting by R. Narayanaswamy	Disscussion Method and Black Board, Google classroom
UNIT 2 Consignment Accounts	Introduction to consignment , Consignee, Consignor. Format and journal entries for the same. Practical problems	15	Financial Ac. counting by R. Narayanaswamy	Disscussion Method and Black Board, Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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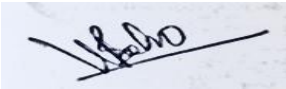

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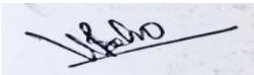
TEACHING PLAN (UNIT PLAN)

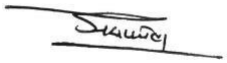
NAME OF THE STAFF: Archana Patil DEPARTMENT: Commerce CLASS: FYBCOM (E, F) SEMESTER: II (Subject : Commerce II)

MONTH: December- March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To introduce learners with different concepts of services.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I: CONCEPT OF SERVICES	Introduction : Meaning, Characteristic, Scope and Classification of Services – Importance of Service sector in the Indian Context Marketing Mix for Services : Consumer Expectations, Services Mix, Product, Place, Price, Promotion, process of services delivery, Physical evidence and people Service Strategies : Market research and services development cycle, Managing demand and Capacity, Opportunities and challenges in service sector.	12	Introduction to commerce, Vikram , Amit,Atlantic pub	Chalk & board





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UNIT II RETAILING	INTRODUCTION : Concept of organised & unorganised retailing, trends in retailing, growth of organised retailing, survival strategies for unorganised retailing Retail scenario : Retail scenario in India, retail scenario in global context, prospects & challenges in India, mall management, retail franchising, FDI Retail format : Store format, non-store format, store planning	11	Introduction to commerce, Vikram , Amit,Atlantic pub	Chalk & board
UNIT III Recent trends in service sector	ITES SECTOR :BPO, KPO, LPO,ERP BANKING & INSURANCE SECTOR : ATM, DEBIT CARD, CREDIT CARD, Internet banking, opening of insurance sector for private players, FDI & its impact on banking & insurance sector in India Logistics: Elements, importance and challenges	12	Introduction to commerce, Vikram , Amit,Atlantic pub	Chalk & board

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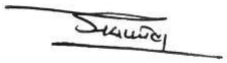
(Accountancy) **(Commerce)**

UNIT IV E-Commerce	Introduction :Meaning, Features, Functions and Scope of E-Commerce – Importance and Limitations of E-commerce Types of E- Commerce :Basic ideas and Major activities of B2C, B2B, B2C Present Status of E- Commerce in India : Transition to E- Commerce in India, E-Transition Challenges for Indian Corporates, On-line Marketing Research	08	Introduction to commerce, Vikram , Amit,Atlantic pub	Chalk & board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 43



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ashlesha Maurya** DEPARTMENT: **Commerce** CLASS: **F.Y.B. Com (Div- N)** SEMESTER: **II**

MONTH: December to March ACADEMIC YEAR: 2022-2023 Subject: Environmental Studies

LEARNING OBJECTIVES:

The learners will be able to understand about solid waste and the problems associated with their improper management. They will learn about proper waste handling and treatment done by MCGM.

UNIT 1	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Solid Waste Management	1. Classification of solid wastes – Types and Sources of Solid Waste	3	1.Environmental studies: P.G. Shinde 2. A Textbook of Environmental	Teaching Method: 1. lecture method 2. discussion method Teaching aid: Google forms, Power point presentation, chalkboard
	2. Effects of Solid Waste Pollution- Health hazards, Environmental Impacts	3		

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TEACHING PLAN (UNIT PLAN)

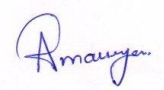
for Sustainable Society	3. Solid Waste Management	3	Chemistry and Pollution Control: S.S.Dara	
	4. solid waste management in Mumbai- Schemes and initiatives run by MCGM – role of citizens in waste management in Mumbai	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

LEARNING OBJECTIVES:

The learners will be able to understand about the different types of environmental problems associated with agriculture and Industries. They will also learn about sustainable agricultural & industrial practices.

UNIT 2	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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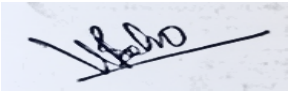

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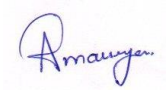
TEACHING PLAN (UNIT PLAN)

		ALLOTED		
Agriculture and Industrial Development	1. Environmental Problems Associated with Agriculture: Loss of Productivity, Land Degradation ,desertification	3	Environmental studies: P.G. Shinde 2. A Textbook of Environmental Chemistry and Pollution Control: S.S.Dara	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google forms, Power point presentation,chalkboard
	2.Uneven Food Production – Hunger, Malnutrition and Food Security – Sustainable Agricultural practices	3		
	3. Environmental Problems Associated with Industries – pollution	3		
	4. Global warming, Ozone Layer Depletion , Acid rain	2		
	5. Sustainable Industrial practices – Green Business and Green Consumerism, Corporate Social Responsibility	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13



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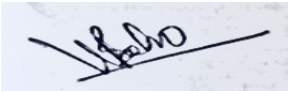

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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVES:

The learners will be able to understand about the various tourism types, tourism potentials in India and challenges before India. They will learn about positive and negative impacts of tourism

UNIT 3	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Tourism and Environment	1. Tourism: Meaning, Nature, Scope and importance	2	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google forms, Power point presentation,chalkboard
	2. Typology of tourism- classification	3		
	3. Tourism potentials in India and challenges before India, New tourism Policy of India	3		
	4. Consequences of tourism : Positive and Negative Impacts on Economy, Culture and environment	3		

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TEACHING PLAN (UNIT PLAN)

	5. Ecotourism	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

LEARNING OBJECTIVES:

The learners will be able to understand about various environmental movements in India. They will learn the concepts of Environmental Management, ISO, EIA. They will also understand Concept and components of Geospatial Technology.

UNIT 4	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1. Environmental movements in India: Save Narmada Movement, Chipko Movement, Appiko Movement, Save Western Ghat and Save Jaitapur	4	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method

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TEACHING PLAN (UNIT PLAN)

Environmental Movements and Management	2. Environmental Management: Concept, need and relevance; Concept of ISO 14000 and 16000; Concept of Carbon Bank and Carbon Credit	3		Teaching aid: Google forms, Power point presentation,chalkboard
	3. .EIA - Environment Protection Acts	2		
	4. Concept and components of Geospatial Technology- Applications of GST in Environmental Management.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

LEARNING OBJECTIVES:

The learners will be able to learn about map fillings which will give them an idea of spatial distribution of environmental problems

UNIT 5	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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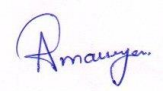
TEACHING PLAN (UNIT PLAN)

Reading of Thematic Maps and Map Filling	1. Map filling of Konkan (Environmentally significant features)using point, line and polygon segment.	4	Environmental studies: P.G. Shinde	Teaching Method: 1. Lecture method 2.Discussion method 3.Demonstration method Teaching aid: Chalkboard
	2. Map filling of Mumbai (Environmentally significant features) using point, line and polygon segment.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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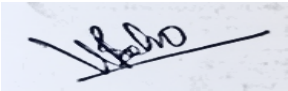

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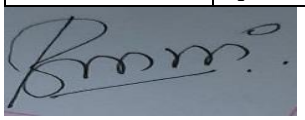
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. BRISTI BISWAS **DEPARTMENT**: Business Economics **CLASS**: FYBCOM **SEMESTER**: II (**Subject**: BUSINESS ECONOMICS)

MONTH: DEC 2022-MARCH 2023 **ACADEMIC YEAR**: 2022-2023

LEARNING OBJECTIVE/S: To learn a better role of an entrepreneur and skilled manager Build familiarity with the operation of markets and optimization in an economic context

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1 Market Structure: Perfect competition and Monopoly	**Perfect Competition:** Features, Equilibrium of firm and industry in the short run and long run.	10	H.L Ahuja Advanced Economic Theory	Chalk and Board Discussion Case studies
	Monopoly: Features, Sources of monopoly, short and long-run equilibrium		H.L Ahuja	Chalk and Board



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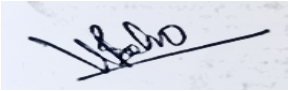

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TEACHING PLAN (UNIT PLAN)

Unit 2: Imperfect Competition			Advanced Economic Theory	Discussion Case studies
Unit 3: Pricing Practices Evaluating capital projects Unit 4:	**Monopolistic Competition:** Features, Short run equilibrium, group equilibrium, effects of selling cost, role of advertisement, perfect competition vs. monopolistic competition **Oligopoly**: Features, Collusive and Non-collusive oligopoly, kinked demand curve, cartel formation, price leadership	10	H.L Ahuja Advanced Economic Theory	Chalk and Board
	Pricing Practices: Price discrimination, marginal cost pricing, mark-up pricing, multiproduct pricing, transfer pricing	10		Chalk and Board
	Capital Budgeting: Meaning, importance, steps, Payback period method, NPV, IRR	10		Chalk and Board Case Studies

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40

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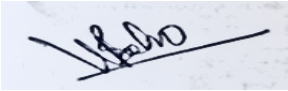

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TEACHING PLAN (UNIT PLAN)

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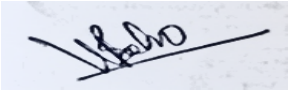

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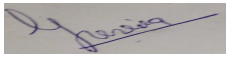
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: Business Economics CLASS: FYBCOM SEMESTER: II (Subject: Business Economics II

MONTH: November – March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Students will be able to understand dynamics of the markets

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Business Economics II	Perfect Competition: Features, Equilibrium of firm and industry in the short run and long run. Monopoly: Features, Sources of monopoly, short and long-run equilibrium	3 lectures per week	Advanced Micro Economic Theory (H.L.	Chalk and Board Google Classroom Classroom Discussions
	Monopolistic Competition: Features, Short run equilibrium, group equilibrium, effects of selling cost, role of advertisement, perfect competition vs. monopolistic competition Oligopoly: Features, Collusive and Non-collusive oligopoly,	3 lectures per week	Advanced Micro Economic Theory (H.L.	Chalk and Board Google Classroom Classroom Discussions



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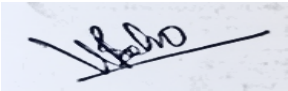

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	Pricing Practices: Price discrimination, marginal cost pricing, Mark-up pricing, Multi-Product pricing, Transfer pricing		Advanced Micro Economic Theory (H.L.	Chalk and Board Google Classroom Classroom Discussions
	Module 4: Capital Budgeting Meaning and Importance of Capital Budgeting, Payback Method, NPV, IRR		Advanced Micro Economic Theory (H.L.	Chalk and Board Google Classroom Classroom Discussions

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___10_

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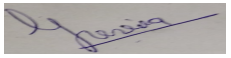

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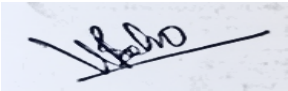

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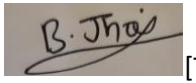
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: _ Accountancy CLASS: F Y B Com (A&B)_ SEMESTER: II (Subject : Accountancy&financial management II)
MONTH: JAN, FEB, MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: _The Lerner will able to understand the Accounting for incomplete records and its importance. They will learn theoretical as well as practical concept about fire insurance claim and its importance. Understand the meaning of Branch along with its types. The learners will able to calculate profit & loss of each branch separately. They are able to ascertain the financial position of each branch separately on a particular date. The learner will able to understand the special features of consignment business, meaning of the term consigner & consignee and difference between two transaction – sales & consignment. Practice the accounting treatments for consignment transactions and events in the books of consigner & consignee.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Accountancy & Financial Management II	Chapter 1: Accounting for Incomplete Records • Introduction, Meaning, Types & Features • Introduction Of Conversion Method • Double Vs. Single Entry System • Bills Receivable & Bills Payable Account • Total Debtors & Total Creditors Account • Cash /Bank and Expenses Account	15	*Advanced Accountancy by R.L Gupta and M. Radha swamy, S. Chand and Company (P) Ltd., New Delhi*	Chalk & talk, Black-Board Method,, MS Office & discussion. Google classroom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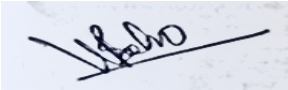

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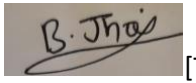
	• Problems on Preparation of Final Account of Proprietary (Conversion Method)		Introduction to Accountancy by T.S. Grewal, S.	
	Chapter 1: Accounting for Incomplete Records • Introduction, Meaning, Types & Features • Introduction Of Conversion Method • Double Vs. Single Entry System • Bills Receivable & Bills Payable Account • Total Debtors & Total Creditors Account • Cash /Bank and Expenses Account • Problems on Preparation of Final Account of Proprietary (C **Consignment Accounts** Accounting for Consignment Transactions Valuation of Stock (at Cost Price & at Invoice Price) Invoicing of Goods at Higher Price			
	Branch Accounts Meaning / Classification of Branches Accounting for Dependent Branch (at Cost Price & at Invoice Price) Debtors Method			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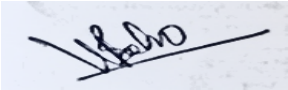

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TEACHING PLAN (UNIT PLAN)

	Stock and Debtors Method			
	Chapter 4: Fire Insurance Claim • Introduction & Meaning • Computing Loss with Stock on Date of Fire, Salvage & Actual Loss • Computing Claim With & Without Average Clause • Memorandum Trading Account • Total Debtors & Total Creditors Account to Ascertain Credit/Cash Sale and Purchase • Problems Solved on the same			
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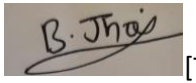
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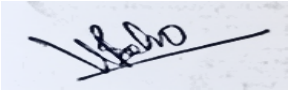

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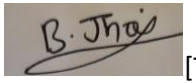
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_60___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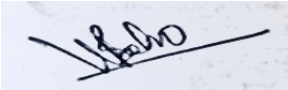

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. VERONIKA B. BARLA** DEPARTMENT: **BUS. ECONOMICS** CLASS: **F.Y.BCOM** SEMESTER: **II** (Subject : **BUS. ECONOMICS-II**)

MONTH: ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVES:

The student must be able to understand **Market Structure: Perfect Competition and Monopoly**

The student must be able to understand **Pricing and Output Decisions under Imperfect Competition**

The student must be able to understand **Pricing practices**

The student must be able to understand **Evaluating capital projects**

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PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Business Economics - II	**Unit I:** **Perfect competition and Monopoly models** as two extreme cases - profit maximisation and the competitive firm's supply curve - Short run and long run equilibrium of a firm and of industry - Monopoly - Sources of monopoly power – short run and long run equilibrium of a firm under Monopoly	**10 lectures**	*Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases*	Google classroom, Google Forms
	Unit II: Monopolistic competition: Competitive and Monopolistic elements of monopolistic competition- equilibrium of firm under monopolistic competitions, monopolistic verses perfect competition, excess capacity and inefficiency, debate over role of advertising, (topics to be	15 lectures	H. L. AHUJA MORDEN ECONOMICS	

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TEACHING PLAN (UNIT PLAN)

	taught using case studies from real life examples) ***Oligopolistic Market:*** Key attributes of oligopoly- Collusive and non-collusive oligopoly market, Price rigidity, Cartels and price leadership models(with practical examples)			
	Unit III: ***Unit III:*** Cost oriented pricing methods: cost –plus (full cost)/mark-up pricing, marginal cost pricing, Mark up pricing, discriminating pricing, multiple – product pricing - transfer pricing (case studies on how pricing methods are used in business world)	**10 lectures**		

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TEACHING PLAN (UNIT PLAN)

	Unit IV: Evaluating capital projects Meaning and importance of capital budgeting- steps in capital budgeting- Techniques of Investment appraisal: payback period method, net present value method, and internal rate of return method (with numerical examples)	**10 lectures**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Suborna S. Banerjee **DEPARTMENT**: Commerce **CLASS**: FYBCOM **SEMESTER:** II

SUBJECT : Bussiness Communication 2 MONTH: Dec to April

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

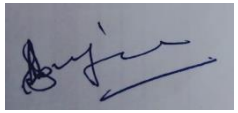
The learners will be able to Preparing resumes to attending interviews, convening meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

To make students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
1) Group Communication	1) Interviews: 2) meetings: 3) Committees & Conferences: 4) Public Relations:	15	Manan Publication, Sheth Publication, Vipul Publication	PPT and Sketches	

2) Business correspondence	1) Trade Letters	15	From Internet	Chalk – Talk Method	
3) Language and writing skills	1) Reports & Business Proposals 2) Summarization	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk – Talk Method	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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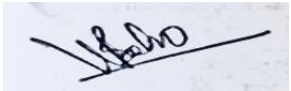

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TEACHING PLAN (UNIT PLAN)

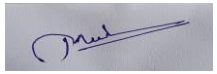
NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: FYB.COM – G,H

SEMESTER: 1st MONTH: December-February ACADEMIC YEAR: 2022-2023 SUBJECT: COMMERCE II

The learners will be able to :

1. To introduce learners with different concepts of services.
2. To make student able to identify elements of marketing mix, Service Strategies and it's implementation in service sector.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1: CONCEPT OF SERVICES	• Introduction : Meaning, Characteristic, Scope and Classification of Services – Importance of Service sector in the Indian Context.	4	Service Marketing – Temani Management of Service sector - Bhatia	1. Lecture and discussion . 2. Flow charts.
	• Marketing Mix for Services : Consumer Expectations, Services Mix, Product, Place, Price, Promotion, process of services delivery, Physical evidence and people.	4		
	• Service Strategies : Market research and			



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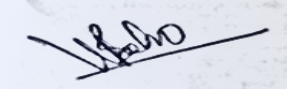

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TEACHING PLAN (UNIT PLAN)

	services development cycle, Managing demand and Capacity, Opportunities and challenges in service sector.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 ×2 div = 24

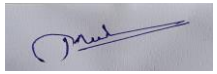
NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: FYB.COM – G,H

SEMESTER: 1st MONTH: December-February ACADEMIC YEAR: 2022-2023 SUBJECT: COMMERCE II

The learners will be able to :

1. To introduce learners with different concepts of organized and un-organized retailing.
2. To make student able to identify essentials of store formates.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Introduction: Concept of organized and unorganized retailing , Trends in retailing, growth of organized retailing in India, Survival strategies for unorganized Retailers	4	Introduction To Retailing,Lusch, RobertF.,Dunne, PatrickM.,Carver ,JamesR.,Cengage eLearning	Lecture and discussion . Flow charts.



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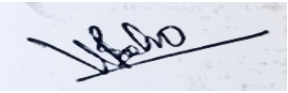

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MODULE 2 RETAILING	Retail Format: Store format, Non – Store format, Store Planning, design and layout	4	Retailing Management, Levy Michael., Weitz Barton A,Tata Mcgraw Hill	
	Retail Scenario: Retail Scenario in India and Global context – Prospects and Challenges in India.Mall Management – RetailFranchising. FDI in Retailing, Careers in Retailing	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 ×2 div = 24

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: FYB.COM – G,H

SEMESTER: 1st MONTH: December-February ACADEMIC YEAR: 2022-2023 SUBJECT: COMMERCE II

The learners will be able to :

1. To introduce learners with different concepts of services outsourcing

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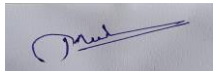
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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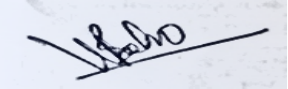

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TEACHING PLAN (UNIT PLAN)

MODULE 3 RECENT TRENDS IN SERVICE SECTOR	ITES Sector: Concept and scope of BPO, KPO, LPO and ERP.	4	Management Of Service Sector, Bhatia, B S, V P Pub	Lecture and discussion . Flow charts.
	Banking and Insurance Sector: ATM, Debit & Credit Cards, Internet Banking – Opening of Insurance sector for private players, FDI and its impact on Banking and Insurance Sector in India	4		
	Logistics: Net working – Importance – Challenges	2		

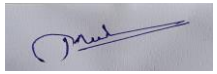
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 ×2 div = 20

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: FYB.COM – G,H

SEMESTER: 1st MONTH: December-February ACADEMIC YEAR: 2022-2023 SUBJECT: COMMERCE II

The learners will be able to :

1. To introduce learners with different concepts and importance of E-commerce.



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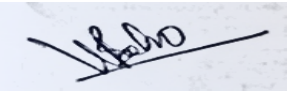

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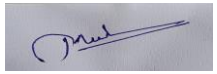
TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 4 E-COMMERCE	Introduction: Meaning, Features, Functions andScope of E-Commerce-Importance andLimitations of E-Commerce	4	Introduction To E – Commerce, Dhawan, Nidhi, International Book House	Lecture and discussion . Flow charts.
	Types of E-Commerce:Basic ideas and Major activities of B2C,B2B, C2C.	4		
	Present status of E-Commerce in India:Transition to E-Commerce in India, E-Transition Challenges for Indian Corporates; on-line Marketing Research.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 ×2 div = 22



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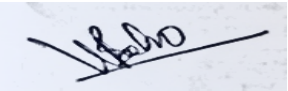

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: FYBCOM (ALL DIVISIONS) SEMESTER: II (Subject : NSS FC II)

MONTH: DECEMBER TO FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Gain knowledge about National Service Scheme, its benefits to the society, scope for the NSS volunteers

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1 **Volunteerism & Communication Skills**	**UNIT -I Concept of Volunteerism Meaning & Features** Need of Training for volunteerism Role Models of Volunteerism in India Leadership - Meaning & Attributes Communication Skills - Meaning. Types & Importance **UNIT - II Strategic Planning** - Meaning, Characteristics, Requirement of Successful implementation of Programmes. Importance of Planning and Limitations of Planning	10	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi.And 2. University of Mumbai National	Chalk and talk method

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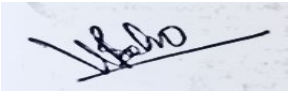

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TEACHING PLAN (UNIT PLAN)

			Service Scheme Manual,2009.	
UNIT-2 **Socio-Economic Survey of Village/Slum adoption**	**UNIT I- Meaning & Needs of Socio-Economic Survey** • Process of Socio-Economic Survey ✓ Design of Questionnaire (Population, Literacy, Family) ✓ Design of Interview, Education, Income Data Analysis (Introduction of Different Tools). **UNIT - Il Introduction of various Government Agencies necessary for Policy making of Development.** ✓ Census ✓ National Sample Survey Organization (NSSO) ✓ National Family Health Survey (NFHS) ✓ Introduction of various schemes introduce by Govt. for the Socio Economic	10	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi.And 2. University of Mumbai National Service Scheme Manual,2009.	Chalk and talk method

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TEACHING PLAN (UNIT PLAN)

	Upliftment of the Farmers and Rural Populations			
Unit 3 Special Camp	**UNIT – I Nature & Objectives of Activities** • Selection of Camp Site • Identification of Specific Theme • Co-ordination with Local Planning Government and other Agencies. • Ice breaking &team building activities. **UNIT - II Feedback / Evaluation** Post Camping activities	12	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi.And 2. University of Mumbai National Service Scheme Manual,2009.	Chalk and talk method
	UNIT - I Structure of Government Organisations and Non – Government Organisations (Co-ordination of National Service Scheme (NSS) with Government Organisations (GO) and Non – Government Organisations (NGO)). Grants for NSS From GO's for Activities	13	1. Service Scheme Manual (Received) Government of India Ministry of	Chalk and talk method

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TEACHING PLAN (UNIT PLAN)

UNIT4 : **Government Organisations / Non – Government Organisations**	• Regular Activities • CampingActivities • Other Programme Development Scheme E.g. HIV-AIDS-MADAC, Blood Donation		Youth Affairs and sports, New Delhi.And 2. University of Mumbai National Service Scheme Manual,2009.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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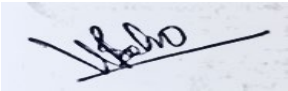

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TEACHING PLAN (UNIT PLAN)

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Delcy Lopes DEPARTMENT: Accountancy CLASS: F.Y.B. Com. SEMESTER: I (Subject : Financial Accounting)

MONTH: DECEMBER - MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit - 1	**Accounting for Incomplete Records-** Introduction, Entries, Format. Opening Statement of Affairs. Practical Problems	15	Financial Accounting by SN Maheshwari	Chalk and duster, discussion, Google classroom, PDFs etc
Unit -2	**Consignment Accounts-** Introduction to consignment, Consignee, Consignor. Format and journal entries for the same. Practical problems	15	Financial Accounting by SN Maheshwari	Chalk and duster, discussion, Google classroom, PDFs etc
Unit -3	**Branch Accounts** Meaning, types, Stock system, Stock – Debtor system Practical problems	15	Financial Accounting by SN Maheshwari	Chalk and duster, discussion, Google classroom, PDFs etc

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TEACHING PLAN (UNIT PLAN)

Unit – 4	**Fire Insurance claims** Meaning, features, formula, format, practical problems	15	Financial Accounting by SN Maheshwari	Chalk and duster, discussion, Google classroom, PDFs etc

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:60

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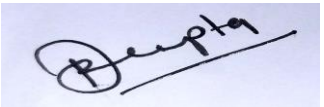
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. DEEPAK GUPTA** DEPARTMENT: COMMERCE CLASS: F.Y.BCom SEMESTER: II Subject: FINANCIAL ACCOUNTING

MONTH: DEC, JAN, FEB & MAR ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1, 2, 3 & 4	**Accounting for Incomplete Records** • Introduction, Meaning, Types & Features • Introduction Of Conversion Method • Double Vs. Single Entry System • Bills Receivable & Bills Payable Account • Total Debtors & Total Creditors Account • Cash /Bank and Expenses Account • Problems on Preparation of Final Account of Proprietary (Conversion Method)	15	Financial Accounting by SN Maheshwari	Chalk-Board Method, Discussion, Google classroom.
	Consignment Accounts Accounting for Consignment Transactions Valuation of Stock (at Cost Price & at Invoice Price) Invoicing of Goods at Higher Price & Practical problem solved	15	Financial Accounting by SN Maheshwari	Chalk-Board Method, Discussion, Google classroom.



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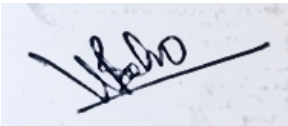

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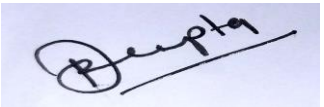
TEACHING PLAN (UNIT PLAN)

	Branch Accounts Meaning / Classification of Branches Accounting for Dependent Branch (at Cost Price & at Invoice Price) Debtors Method Practical Problem Solve Stock and Debtors Method Problems Solved on the same	15	Financial Accounting by SN Maheshwari	Chalk-Board Method, Discussion, Google classroom.
	Fire Insurance Claim • Introduction & Meaning • Computing Loss with Stock on Date of Fire, Salvage & Actual Loss • Computing Claim With & Without Average Clause • Memorandum Trading Account • Total Debtors & Total Creditors Account to Ascertain Credit/Cash Sale and Purchase • Problems Solved on the same	15	Financial Accounting by SN Maheshwari	Chalk-Board Method, Discussion, Google classroom.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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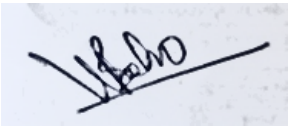

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Snehal S. Jadhav DEPARTMENT: Commerce CLASS: FYBCOM SEMESTER: II (Subject : Environmental Studies)

MONTH: July ACADEMIC YEAR : 2022 - 2023

LEARNING OBJECTIVE/S: The learners will be able to acquire a knowledge about the Environment, its components and Environmental problems. It will help to create awareness about protection of environment and natural Resources.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Environmental Studies - I	Unit I : Solid Waste Management for Sustainable Society : Classification of solid wastes – Types and Sources of Solid Waste ; Effects of Solid Waste Pollution- Health hazards, Environmental Impacts; Solid Waste Management – solid waste management in Mumbai- Schemes and initiatives run by MCGM – role of citizens in waste management in urban and rural areas.	13	Essential of Ecology and Environment by S.V.S Rana. Online resources	Chalk and Board
	Unit–II:AGRICULTURE & INDUSTRIAL DEVELOPMENT. 1)Environmental Problems Associated with Agriculture :Loss of Productivity,Land Degradation,desertification. 2)Uneven Food Production–	13	SantraS.C.,2004,‘ Environmental Science’,New Central Book agencyPvtLtd,	Chalk and Board

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TEACHING PLAN (UNIT PLAN)

	Hunger,Malnutrition and Food Security– Sustainable Agricultural practices. 3)Environmental Problems Associated with Industries–Pollution- Global Warming,Ozone Layer Depletion, Acidrain,- Sustainable Industrial practices.		Kolkata.	
	Unit–III:TOURISM AND ENVIRONMENT 1)Tourism:Meaning,Scope And Importance,Typology Of Tourism classification;Tourism potentials in India and challenges Before India;New Tourism Policy of India 2)Consequences Of Tourism:Positive and Negative Impacts on Economy, Culture and environment. 3)Ecotourism.	13	Saxena M. ,2000, N. 'Environment al Management', Rawat Publication,New Delhi. Environmental Management By N.K.Uberoi	Chalk and Board
	UNIT IV : Solid Waste Management for Sustainable Society : Classification of solid wastes – Types and Sources of Solid Waste ; Effects of Solid Waste Pollution- Health hazards, Environmental	13		Chalk and Board

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TEACHING PLAN (UNIT PLAN)

	Impacts; Solid Waste Management – solid waste management in Mumbai- Schemes and initiatives run by MCGM – role of citizens in waste management in urban and rural areas.			
	MapfillingkonkanMap	02	Sheth Publication & Vipul Prakashan	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SMITA KHAIRE __ DEPARTMENT: Commerce (Interdisciplinary)__CLASS: _F.Y.B.COM__SEMESTER: II__ (Subject : _EVS_____)

MONTH: _December-March_____ ACADEMIC YEAR: _2022-23_____

LEARNING OBJECTIVE/S: _The learners will be able to acquire a knowledge and understanding about the Environment, its components and Environment problems. It will help to create awareness about protection of the Environment.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Environmental studies (K ,L,M)	Unit 1: Solid waste management for sustainable society Classification of solid waste- types and sources of solid waste; effects of solid waste pollution- Health hazards, Environmental impact; Solid Waste Management Solid Waste Management in Mumbai – schemes and initiatives by MCGM role of citizen in waste management in urban and rural areas.	13	Environmental Science by Santra S.C	Lecture method Chalk-Board Method
	Unit 2: Agricultural and Industrial development Environmental problems associated with Agriculture; loss of productivity, Land degradation, Desertification, uneven food production – Hunger, Malnutrition and food security; Sustainable Agricultural Practices. Environmental problems associated with Industries; Pollution, Global warming, Ozone layer depletion, Acid rain, Sustainable Industrial practices- Green business and Green consumption, Corporate social responsibility towards environment.	13	Essential of Ecology and Environment by S.V.S Rana.	Lecture method Chalk-Board Method

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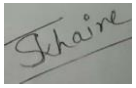
TEACHING PLAN (UNIT PLAN)

	Unit 3: Definition, Meaning, Nature, Scope, importance of Tourism, Typology of Tourism, Tourism Potentials in India, Challenges faced by India, National Tourism Policy, Impact of Tourism on Economy, Culture and Environment, Ecotourism.	13		Lecture method Chalk-Board Method
	Unit 4: Environmental Movements and Management: Environmental movements in India: Save Narmada Movement, Chipko Movement, Appiko Movement, Save Western Ghats Movement; Environmental Management: Concept, need and relevance; Concept of ISO 14000 and 16000; Concept of Carbon Bank and Carbon credits, EIA, Ecological footprint; Environmental protection Acts; Concept and components of Geospatial technology Application of GST in Environmental management.	13	Environmental management by H.V. Jadhav	Lecture method Chalk-Board Method
	Map filling of Konkan and Mumbai	4	Sheth and Vipul Publication	Lecture method Chalk-Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_13___



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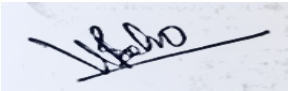

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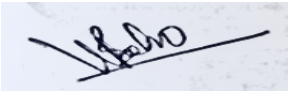

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA VAIBHAV TAMBE DEPARTMENT: COMMERCE CLASS: FYBCOM(A,B,C,D) SEMESTER: II

(Subject: FOUNDATION COURSE - II) MONTH: DEC- MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 1 Globalisation & Indian Society	Concepts of liberalization, privatization and globalization. Growth of information technology and communication and its impact manifested in everyday life. Impact of globalization on industry: changes in employment and increasing migration. Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides.	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
UNIT 2 Human Rights	a]Concept of Human Rights. b] Evolution of Human Rights c] The Universal Declaration of Human Rights	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD

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TEACHING PLAN (UNIT PLAN)

	d] Fundamental Rights in Constitution			• INTERACTIVE METHOD
UNIT 3 Ecology	a] Concept of environment & ecology. b] Importance of environmental studies, Environment as a Natural capital & quality of human life. c] Environmental Degradation, Causes, Impact on human life d] Sustainable Development – Concept, Components e] Poverty & Environment	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
UNIT 4 Understanding Stress & Conflicts	Causes of stress & Conflicts in individual & society. Agents of Socialization & the role played by them in developing the individual. Significance of values, ethics & prejudices in developing the individuals. Stereotypying & prejudice as significant factors in causing conflicts in society. Aggression & Violence as the public expression of conflicts.	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

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TEACHING PLAN (UNIT PLAN)

UNIT 5 Managing stress & conflict in Contemporary Society	Types of conflicts and use of coping mechanisms for managing individual stress. Maslow's theory of self-actualisation. Different methods of responding to conflicts in society, Conflict Resolution, & Efforts towards building peace & harmony in society.	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 50

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

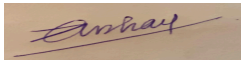
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF- JINAL CHOHAN DEPARTMENT: COMMERCE CLASS: FY BCOM SEMESTER: II (Subject : COMMERCE -II

MONTH: November - March ACADEMIC YEAR: 22-23

LEARNING OBJECTIVE/S: TO GAIN THE KNOWLEDGE OF MANAGEMENT

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 1	.Introduction : Meaning, Characteristic, Scope and Classification of Services – Importance of Service sector in the Indian Context. • Marketing Mix for Services: Consumer Expectations, Services Mix, Product, Place, Price, Promotion, process of services delivery, Physical evidence and people. • Service Strategies:	10	Principles of management by Philip Kotler And Essential of Management by Koontz	CHALK & DUSTER
UNIT 2	Introduction: Concept of organized and unorganized retailing , Trends in retailing, growth of organized retailing in India, Survival strategies for unorganized Retailers • Retail Format: Store format, Non – Store format, Store	10		



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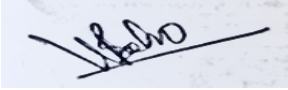

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TEACHING PLAN (UNIT PLAN)

	Planning, design and layout • Retail Scenario: Retail Scenario in India and Global			
UNIT 3	ITES Sector: Concept and scope of BPO, KPO, LPO and ERP • Banking and Insurance Sector: Logistics: Net-working – Importance – Challenges.	10		
	Introduction: Meaning, Features, Functions andScope of E-Commerce-Importance andLimitations of E-Commerce			
UNIT 4	Types of E-Commerce: Basic ideas and Major activities of B2C,B2B, C2C. • Present status of E-Commerce in India: Transition to E-Commerce in India, E-Transition Challenges	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___40_

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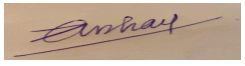

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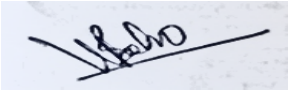

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VIVACOLLEGE,Virar(W)

TEACHING PLAN (UNIT PLAN)

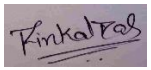
NAME OF THE STAFF: RINKAL A. DAS DEPARTMENT: MATHEMATICS CLASS: FY.BCom (A,B,C,D)

SEMESTER: II MONTH: DECEMBER- APRIL ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to : develop critical and logical thinking and will able to solve various problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and Statistical Techniques-II	**Concept of real functions**: constant function, linear function, xn , ex , ax , log x. Demand, Supply, Total Revenue, Average Revenue, Total cost, Average cost and Profit function. Equilibrium Point, Break-even point.	06	Sheth Publication	Chalk and board



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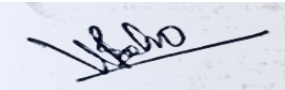

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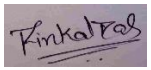
Unit I : Functions, Derivatives and Their Applications	**Derivative of functions**: i. Derivative as rate measure, Derivative of xn , ex , ax , log x. ii. Rules of derivatives: Scalar multiplication, sum, difference, product, quotient (Statements only), Simple problems. Secondorder derivatives. iii. Applications: Marginal Cost, Marginal Revenue, Elasticity of Demand. Maxima and Minima for functions in Economics and Commerce.	09	Sheth Publication	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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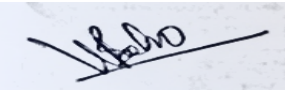

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

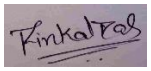
NAME OF THE STAFF: RINKAL A. DAS DEPARTMENT: MATHEMATICS CLASS: FY.BCom

(A,B,C,D) SEMESTER: II MONTH: DECEMBER- APRIL ACADEMIC YEAR2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : develop critical and logical thinking and will able to solve various problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and Statistical Techniques-II	**Interest:** Simple Interest, Compound Interest (Nominal & Effective Rate of Interest),. Calculations involving upto 4 time periods.	06	Sheth Publication	Chalk and board
Unit II : Interest and Annuity:	**Annuity:** Annuity Immediate and its Present value, Future value. Equated Monthly Installments (EMI) using reducing balance method & amortization of loans. Stated Annual Rate & Affective Annual Rate Perpetuity and its present value. Simple problems involving up to 4 time periods	09	Sheth Publication	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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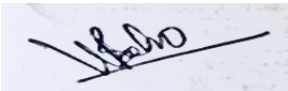

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TEACHING PLAN (UNIT PLAN)

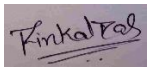
NAME OF THE STAFF: RINKAL A. DAS DEPARTMENT: MATHEMATICS CLASS: FY.BCom

(A,B,C,D) SEMESTER: II MONTH: DECEMBER- APRILACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : develop critical and logical thinking and will able to solve various problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and Statistical Techniques-II	**Correlation Analysis**: Meaning, Types of Correlation, Determination of Correlation: Scatter diagram, Karl Pearson's method of Correlation Coefficient (excluding Bivariate) and Spearman's Rank CorrelationCoefficient.	06	Sheth Publication	Chalk and board
Unit III: Bivariate Linear Correlation and Regression	**Regression Analysis:** Meaning, Concept of Regression equations, Slope of the Regression Line and its interpretation. Regression Coefficients (excluding Bivariate Frequency Distribution Table), Relationship between Coefficient of Correlation and Regression Coefficients , Finding the equations of Regression lines by method of Least Squares.	09	Sheth Publication	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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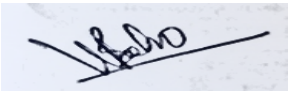

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TEACHING PLAN (UNIT PLAN)

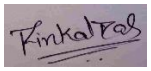
NAME OF THE STAFF: RINKAL A. DAS DEPARTMENT: MATHEMATICS CLASS: FY.BCom

(A,B,C,D) SEMESTER: II MONTH: DECEMBER- APRIL ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to : develop critical and logical thinking and will able to solve various problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and Statistical Techniques-II Unit IV : Time series and Index	**Time series:** Concepts and components of a time series. Representation of trend by Freehand Curve Method, Estimation of Trend using Moving Average Method and Least Squares Method (Linear Trend only). Estimation of Seasonal Component using Simple Arithmetic Mean for Additive Model only (For Trend free data only). Concept of Forecasting using Least Squares Method.	06	Sheth Publication	Chalk and board



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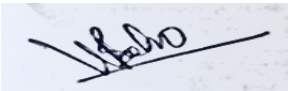

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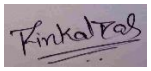
TEACHING PLAN (UNIT PLAN)

Numbers:	**Index Numbers:** Concept and usage of Index numbers, Types of Index numbers, Aggregate and Relative Index Numbers, Lasperye's, Paasche's, Dorbisch-Bowley's, Marshall-Edgeworth and Fisher's ideal index numbers, Test of Consistency: Time Reversal Test and Factor Reversal Test. Chain Base Index Nos. Shifting of Base year. Cost of Living Index Numbers, Concept of Real Income, Concept of Wholesale Price Index Number. (Examples on missing values should not be taken).	09	Sheth Publication	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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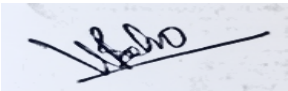

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TEACHING PLAN (UNIT PLAN)

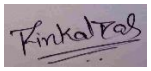
NAME OF THE STAFF: RINKAL A. DAS DEPARTMENT: MATHEMATICS CLASS: FY.BCom

(A,B,C,D) SEMESTER: II MONTH: DECEMBER- APRIL ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : develop critical and logical thinking and will able to solve various problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and Statistical Techniques-II Unit V : Elementary Probability Distributions	**Probability Distributions**: i. Discrete Probability Distribution: Binomial, Poisson (Properties and applications only, no derivations are expected) ii. Continuous Probability distribution: Normal Distribution. (Properties and applications only, no derivations are expected)	15	Sheth Publication	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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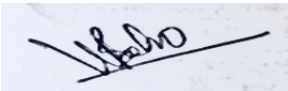

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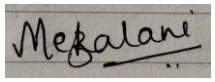
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mezbin Lalani DEPARTMENT: Accountancy CLASS: FYBCOM SEMESTER: II (Subject :Financial accounting)

MONTH: DEC-MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Gain knowledge about the different methods of accounting used.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Module 1: Module 2:	Chapter 1 Introduction to Incomplete Accounting records Meaning, define, scope, advantage and disadvantages, difference between Double entry system and Single entry system, practical problems 1 to 6 Consignment Accounts Meaning, difference between, practical problems	15 15	Financial Accounting by SN Maheshwari	Chalk and duster, discussion, Google classroom, PDFs etc
Module 3: Branch Accounts	Branch Accounts Meaning, types, Stock system, Stock – Debtor system Practical problems	15	Financial Accounting by SN Maheshwari	Chalk and duster, discussion, Google classroom, PDFs etc



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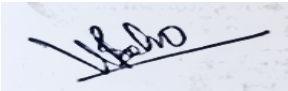

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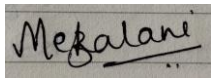
TEACHING PLAN (UNIT PLAN)

Module 4	Chapter 4 Fire Insurance claims Meaning, features, formula, format, practical problems 1 to 6	15	Financial Accounting by SN Maheshwari	Chalk and duster, discussion, Google classroom, PDFs etc

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___60_



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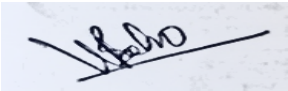

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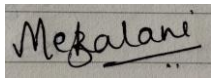
TEACHING PLAN (UNIT PLAN)



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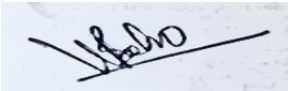

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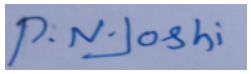
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Padmaja Joshi DEPARTMENT: Commerce CLASS: FYBCOM SEMESTER: II Subject: Business Communication MONTH: Dec-March
ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

- The learners will be able to Preparing resumes to attending interviews, convening meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.
- To make students aware of the importance of developing skills.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1: Group communication	1) Interviews: 2) meetings: 3) Committees & Conferences: 4) Public Relations:	15	Manan Publication, Sheth Publication,	Blackboard, Chalk, Google classroom



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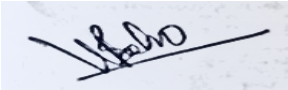

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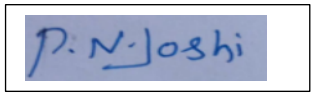
TEACHING PLAN (UNIT PLAN)

Unit 2 Business Correspondence	1) Trade Letters	15	Vipul Publication	Blackboard, Chalk, Google classroom
Unit 3: Languages and writing skills	1.Reports and business prospects 2.Summarisation 3.Tutorial activities	15		Blackboard, Chalk, Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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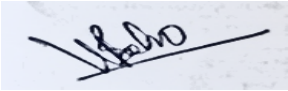

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:

Pallavi G Naik DEPARTMENT: Business Economics CLASS: FYBCOM SEMESTER: II (Subject : BUSINESS ECONOMICS)

MONTH: NOVEMBER TO MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Make students learn micro economics application and it's application to business.

A sound knowledge of business Economics.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Business Economics II	Module I Market structure: perfect competition and Monopoly Ch 1 Market structure extreme cases of perfect competition and Monopoly, types of market structure Ch 2 perfect competition, meaning and features, behaviour of price TR,MR AND AR Ch 3 Equilibrium of firm and industry In perfect competition, Equilibrium of firm,short run and long run equilibrium of firm Ch 4 Monopoly, meaning, features, sources of Monopoly power Ch 5 Monopolistic competition, meaning features, short run and long run equilibrium and production and selling cost	8	Manan prakashan A.L Ahuja.	Google classroom Blackboard and chalk

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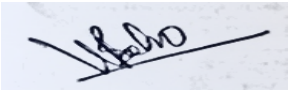

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TEACHING PLAN (UNIT PLAN)

	Ch 6 Oligopoly meaning, features,noncollussive and collusive Oligopoly			
	Ch 7 pricing practice I meaning degrees of price discrimination Dumping,conditions of price discrimination			
	Ch 8 pricing practice II Marginal cost pricing Cost plus pricing Transfer pricing Case studies			
	Ch 9 capital budgeting Importance of capital budgeting Importance of capital budgeting Steps in capital budgeting NPV,IRR, Comparison			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

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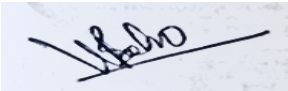

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TEACHING PLAN (UNIT PLAN)

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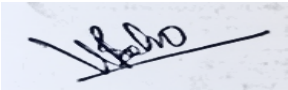

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TEACHING PLAN

NAME OF THE STAFF: Priyanka Bangera DEPARTMENT: Commerce CLASS: FYBcom SEMESTER: II (Subject : EVS)MONTH: Jan - April ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the Rights of Consumers, Information and protection of citizens and the Acts and also understand the different approaches to Ecology and Principles of Environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
Solid Waste Management forSustainable Society	1.Classificationofsolidwastes–TypesandSourcesof Solid Waste. 2.EffectsofSolidWastePollution-Healthhazards, Environmental Impacts 3.SolidWasteManagement. 4.solidwaste managementin Mumbai-Schemes andinitiativesrunby MCGM – roleofcitizensin wastemanagementinMumbai	10	Environmental studies: P.G. Shinde	▪ Chalk – Board method ▪ Discussions

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TEACHING PLAN

UNIT 2 Agricultureand Industrial Development			Environmental studies: P.G. Shinde	
	1.EnvironmentalProblemsAssociatedwithAgriculture: Loss of Productivity, Land Degradation ,desertification 2.UnevenFoodProduction–Hunger,Malnutritionand Food Security – Sustainable Agricultural practices.3.EnvironmentalProblemsAssociatedwithIndustries– pollution. 4.Global warming,OzoneLayer Depletion, Acid rain. 5.SustainableIndustrialpractices – Green BusinessandGreenConsumerism,CorporateSocial Responsibility	13		

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TEACHING PLAN

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
FC Unit III Tourism and Environment	1.Tourism:Meaning,Nature,Scopeandimportance 2.Typologyoftourism-classification 3.TourismpotentialsinIndiaandchallengesbeforeIndia, New tourism Policy of India 4.Consequencesoftourism:PositiveandNegativeImpacts onEconomy, Culture and environment 5.Ecotourism	13		▪ Chalk – Board method ▪ Discussions

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TEACHING PLAN

Unit IV Environmental Movements and Management	1. Environmental movements in India: Save Narmada Movement,ChipkoMovement,AppikoMovement,Save Western Ghat and Save Jaitapur 2. Environmental Management: Concept, need and relevance;ConceptofISO14000and16000;Conceptof Carbon Bank and Carbon Credit 3..EIA- EnvironmentProtection Acts 4.ConceptandcomponentsofGeospatialTechnology-Applications of GST in Environmental Management.	3		

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TEACHING PLAN

Unit V Reading of ThematicMaps and Map Filling	1.MapfillingofKonkan(Environmentallysignificant features)using point, line and polygon segment. 2.MapfillingofMumbai(Environmentallysignificant features) using point, line and polygon segment.	04		

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TEACHING PLAN

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32

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TEACHING PLAN

NAME OF THE STAFF: Priyanka Bangera DEPARTMENT: Commerce CLASS: FYBcom SEMESTER: II (Subject : EVS)MONTH: Jan - April ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the Rights of Consumers, Information and protection of citizens and the Acts and also understand the different approaches to Ecology and Principles of Environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
Solid Waste Management forSustainable Society	1.Classificationofsolidwastes–TypesandSourcesof Solid Waste. 2.EffectsofSolidWastePollution-Healthhazards, Environmental Impacts 3.SolidWasteManagement. 4.solidwaste managementin Mumbai-Schemes andinitiativesrunby MCGM – roleofcitizensin wastemanagementinMumbai	10	Environmental studies: P.G. Shinde	▪ Chalk – Board method ▪ Discussions

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TEACHING PLAN

UNIT 2 Agricultureand Industrial Development			Environmental studies: P.G. Shinde	
	1.EnvironmentalProblemsAssociatedwithAgriculture: Loss of Productivity, Land Degradation ,desertification 2.UnevenFoodProduction–Hunger,Malnutritionand Food Security – Sustainable Agricultural practices.3.EnvironmentalProblemsAssociatedwithIndustries– pollution. 4.Global warming,OzoneLayer Depletion, Acid rain. 5.SustainableIndustrialpractices – Green BusinessandGreenConsumerism,CorporateSocial Responsibility	13		

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TEACHING PLAN

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
FC Unit III Tourism and Environment	1.Tourism:Meaning,Nature,Scopeandimportance 2.Typologyoftourism-classification 3.TourismpotentialsinIndiaandchallengesbeforeIndia, New tourism Policy of India 4.Consequencesoftourism:PositiveandNegativeImpacts onEconomy, Culture and environment 5.Ecotourism	13		▪ Chalk – Board method ▪ Discussions

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TEACHING PLAN

Unit IV Environmental Movements and Management	1. Environmental movements in India: Save Narmada Movement,ChipkoMovement,AppikoMovement,Save Western Ghat and Save Jaitapur 2. Environmental Management: Concept, need and relevance;ConceptofISO14000and16000;Conceptof Carbon Bank and Carbon Credit 3..EIA- EnvironmentProtection Acts 4.ConceptandcomponentsofGeospatialTechnology-Applications of GST in Environmental Management.	3		

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TEACHING PLAN

Unit V Reading of ThematicMaps and Map Filling	1.MapfillingofKonkan(Environmentallysignificant features)using point, line and polygon segment. 2.MapfillingofMumbai(Environmentallysignificant features) using point, line and polygon segment.	04		

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TEACHING PLAN

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Accountancy

CLASS: S Y B Com (Div A) SEMESTER: III MONTH: AUGUST ACADEMIC YEAR: 2022-23

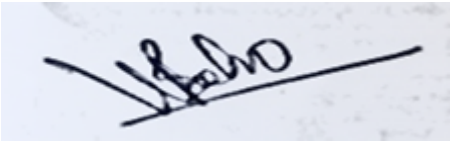
LEARNING OBJECTIVE/S:

The learners will be able to :

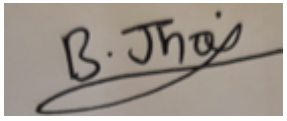
Understand the concepts of amalgamation, preparation of account of accounting for amalgamation of partnership firm and its accounting effect. The learners will be able to understand the need, procedure, accounting effect and treatment for conversion of partnership firm into a limited company.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy and Financial Management III	**Amalgamation of Firms** i) Realization method only ii) Calculation of purchase consideration iii) Journal / ledger accounts of old firms iv) Preparing Balance sheet of new firm v) Adjustment of goodwill in the new firm vi) Realignment of capitals in the new firm by current accounts / cash or a combination thereof Excluding Common transactions between the amalgamating firms	15	Shashi K. Gupta – "Contemporary Issues in Accounting", Kalyani Publishers. Ashok Sehgal – "Fundamentals of Financial Accounting", Taxmann's Publishers	GOOGLE CLASSROOM Group Discussion, Chalk & talk, Black-Board Method; Group Discussion
	Conversion / Sale of a Partnership Firm into a Ltd. Company	15		

	(i) Realisation method only (ii) Calculation of New Purchase consideration, Journal / Ledger Accounts of old firms. Preparing Balance sheet of new company			



TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAKTANA KORE DEPARTMENT: Commerce CLASS: S.Y.B.Com (A) SEMESTER: III

MONTH: June to July ACADEMIC YEAR: 2022-2023 Subject: Advertising

LEARNING OBJECTIVES:
The learners will be able to understand basics of advertising.

UNIT	SUBTOPIC	NO. OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD
UNIT I: INTRODUCTION TO ADVERTISING	• **Integrated Marketing Communication:** Concept and features, elements, role of advertising in IMC	3		Chalk & board method, discussion method
	• **Advertising:** Concept and features, evolution, active participants, benefits to business and consumers	4		

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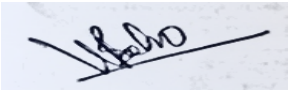

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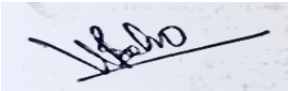
TEACHING PLAN (UNIT PLAN)

	• **Classification of advertising:** Geographic area, media, audience, functions	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Rakhee Oza DEPARTMENT: Commerce CLASS: S.Y.B.Com (E,F) SEMESTER: III

MONTH: June to July ACADEMIC YEAR: 2022-2023 Subject: Advertising

LEARNING OBJECTIVES:
The learners will be able to understand basics of advertising.

UNIT	SUBTOPIC	NO. OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD
UNIT I: INTRODUCTION TO ADVERTISING	**Integrated Marketing Communication:** Concept and features, elements, role of advertising in IMC	3		Chalk & board method, discussion method
	Advertising: Concept and features, evolution, active participants, benefits to business and consumers	4		

SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

	Classification of advertising: Geographic area, media, audience, functions	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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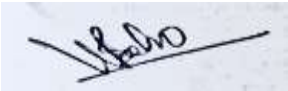

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NAME OF THE STAFF: AMITA RAKESH PATIL DEPARTMENT: ACCOUNTANCY CLASS: SYBCOM SEMESTER: 3 (Subject : Financial Accounting)
MONTH: June - September ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
UNIT 1 Piecemeal Distribution	Introduction,Meaning, surplus Capital Method and Maximum loss method. Format of Excess Capital and Statement of Distribution. Practical problems	15	Financial Ac. counting by R. Narayanaswamy	Disscussion Method and Black Board, Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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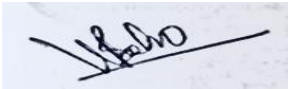

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Patil DEPARTMENT: Commerce CLASS: S.Y.B.Com (Div. J) SEMESTER: III

MONTH: June to Sept. ACADEMIC YEAR: 2022-2023 Subject: Advertising

LEARNING OBJECTIVES:The learners will be able to understand basics of advertising.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	E TEACHING METHOD/ ICT TOOLS USED
UNIT I: INTRODUCTION TO ADVERTISING	Communication: Concept and features, elements, role of advertising in IMC Advertising: Concept and features, evolution, active participants, benefits to business and consumers Classification of advertising: Geographic area, media, audience	14		Chalk & board
UNIT II ADVERTISING	Advertising agency: Features, structure and services, types of Ad agencies, agency selection criteria, agency compensation	13		Chalk & board

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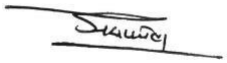
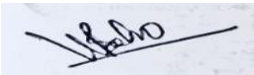
AGENCY	Agency and client: Maintaining agency-client relationship, reasons of client turnover, ways of avoiding client turnover, creative pitch Careers in advertising: Skills for career in advertising, career options in advertising, freelancing as a career option			
UNIT III ECONOMIC AND SOCIAL ASPECTS OF ADVERTISING	Economic aspects: Economic impact of advertising, effect on consumer demand, effect on monopoly and competition, effect on consumer price Social aspects: Ethical issues, social and cultural issues, positive and negative influence on Indian culture PRO BONO/SOCIAL ADVERTISING: Pro bono advertising, social advertising through DAVP, self regulatory laws, role of ASCI	11		Chalk & board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 38





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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHWINI DATTATRAY BHOIR DEPARTMENT: COMMERCE CLASS: SYBCOM H, I, J, K, L SEMESTER: III

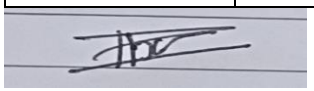
SUBJECT - BUSINESS LAW -I MONTH: JUNE – OCTOBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to know the meaning of the terms Agreement and contract and note the Distinction between the two.

The learners will be able to know the Concepts of sale and agreement to sell, Definitions, Conditions and Warranty, and Rights of an unpaid seller.

The learners will be able to know the History of negotiable instrument and its types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I Indian Contract Act-1872 part -I	Chapter :I-Contract- Definition of Contract and Agreement, Essentials of Valid Contract, Classification of contracts. Chapter :II- Offer and Acceptance - Rules of valid offer and acceptance, Counter offer, standing or open offer, distinguish between offer and invitation to offer.Concept of Communication and Revocation of offer and acceptance.	10	The Indian Contract Act,1872 -Avtar singh Business Law- kapoor N. D.	1) Lecture and Discussion 2) Case Study 3) Black Board, Chalk and Duster



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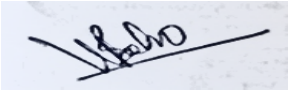

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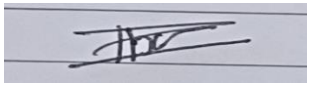
Module No.II Indian Contract Act- 1872 Part II	Chapter : III- Capacity to Contract - Minor, Unsound Mind, Disqualified persons. Chapter :IV- Consideration - Concept and Importance of Consideration, Legal rules of Consideration, Exceptions to the rule, 'No Consideration No Contract' Unlawful Considertion.		Business law- I, Kalaivani Venkataraman, Vipul prakashan	
	Chapter :I- Consent - Agreements in which consent is not free- Coercion, undue Influence, Misrepresentation Fraud, Mistake. Chapter: II - Void Agreements - Concept, Void Agreement under Indian Contract Act. Chapter : III - Contingent Contract, Quasi Contract, Concept of E-Contract & Legal Issues in formation and discharge of E- Contract. Concept of performance of contract. Chapter : IV- Modes of Discharge of Contract, Remedies on breach of Contract.	10		
Module No. III Special Contracts.	Chapter :I- Law of Indemnity & Guarantee - Concept, Essentials elements of Indemnity and Guarantee, Contract of Indemnity vs. Guarantee, modes of Discharged of Surety.			



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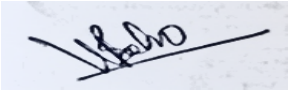

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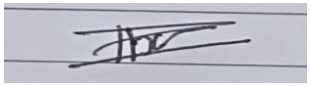
	Chapter : II- Law of Bailment - Concept, Essentials of Bailment, Kinds of Bailment, Rights and Duties of Bailor and Bailee. Chapter - III Law of Pledge - Concept, Essentials of valid Pledge, Lien- Concept, Difference Between Pledge and Lien, Rights of Pawnor and Pawnee Chapeter IV - Law of Agency - Concept, Modes of Creation of Agency, Modes of Termination of Agency, Rights and Duties of Principal and Agent.	10		
Module IV The Sale of Goods Act-1930	Contract of sale- concept, Essentials elements of contract of sale, Distinction between sale and agreement to sell.Distinguish between sale and Hire purchase agreement, types of goods. Effects of destruction of goods Conditions and Warranties- concept, Distinguish between conditions and warranties, Implied Conditions and Warranties, Concept of Doctrine of Caveat emptor - Exceptions. Property - Concept, rules of transfer of property Unpaid seller - Concept, rights of an unpaid Seller, Remedies for breach of contract of sale, Auction Sale - Concept, Legal provisions.	10		



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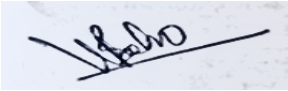

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Module V The Negotiable instruments Act 2015	Negotiable instruments - Concept, Characteristics, Classification of Negotiable instruments Maturity of instruments. Promissory Note and Bill of Exchange Concept, Essentials of promissory Note, Bill of Exchange, Essentials features of promissory note and bill of exchange, kinds promissory note bill of exchange, cheque concept, types & Crossing of cheque, Distinguish between bill of exchange & cheque, Dishonour of cheque - concept & penalties. Miscellaneous provisions - parties to Negotiable instruments Holder, Holder in due course, Rights & Privileges of holder in due course, payment in due course, noting & protest.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 50

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Audrin Anthony Colaco DEPARTMENT: Accountancy CLASS: SYBCOM SEMESTER: III (Subject :Management Account)

MONTH: June 2022 to Nov 2022 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To Understand concept of Working Capital

To evaluate various projects with techniques of capital budgeting

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Working Capital	Working Capital Requirement	15	Manan Publication	Chalkboard, Google Classroom
	Level ofActivity			
	Margin of Safety			
Capital Budgeting	Payback Period, Net Present Value, Profitability Index, Average Rate of Return	15	Manan Publication	Chalkboard, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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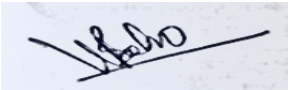

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Pallavi G. Naik DEPARTMENT: B.Economics CLASS: SYBCOM SEMESTER:SEM III (Subject : B.ECONOMICS)

MONTH: JUNE TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Micro Economics and macro economics understanding of business aspects.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module-1 Introduction to macro Economics Module II Basic concepts of Keynesian Economics Module- III Post Keynesian development of macro economics	Circular flow of income, measurement of National income, trade cycle, Say's law of Market		JIngan	Blackboard chalk and duster
	Theory of Effective demand, consumption function, investment function, Theory of Multiplier, Liquidity preference theory of interest		H.L.Ahuja	Google classroom
	IS-LM model, Phillips curve-unemployment- stagflation		Manan prakashan	PPT
	Integration of commodity, Phillips curve		Seth publication	
	Stagflation causes and consequences Money supply demand for money Money and prices Inflation I Inflation II			

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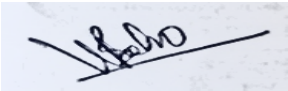

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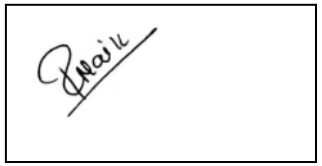
Module IV Money prices and inflation				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8



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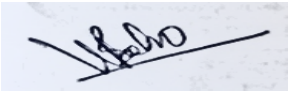

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____REENA BEHERA_____ DEPARTMENT: _____Business Economics____ CLASS: ____SYBCOM___
SEMESTER: III__ (Subject : _____BUSINESS ECONOMICS____III_____)

MONTH: _____JUNE TO OCTOBER_____ ACADEMIC YEAR: ____2022-23_____

LEARNING OBJECTIVE/S: ___The learners will be able to understand the concept of using macroeconomics for the growth of the economy by developing a core understanding regarding income, expenditure, measurement, and trade cycles, demand and supply of money and levels of inflation for the development of the economy._____

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Module 1,2,3,4	INTRODUCTION • Macroeconomics: Meaning, Scope and Importance. • Circular flow of aggregate income and expenditure and its Importanceclosed and open economy models • The Measurement of National Product: Meaning and Importance of National Income Accounting- conventional and Green GNP and NNP concepts -National	4 lectures per week	Ackley.G (1976), Macro Economic Theory and Policy, Macmillan Publishing Co. New York Ahuja. H.L., Modern Economics — S.Chand	Chalk Duster Ppt, Google meet, Google Classroom, Discussion, quiz,Test,assignment

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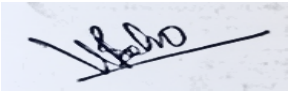

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TEACHING PLAN (UNIT PLAN)

	Income and Economic Welfare. • Trade Cycles: Features and Phases • Classical Macro economics : Say's law of Markets - Features, Implications and Criticism 2 BASIC CONCEPTS OF KEYNESIAN ECONOMICS • The Principle of Effective Demand: Aggregate Demand and Aggregate Supply • Consumption Function: Properties, Assumptions and Implications • Investment function and Marginal Efficiency of capital • Investment Multiplier effect on Income and Output: Assumptions, Working, Leakages, Criticism and Importance - paradox of thrift • Relevance of Keynesian theory tools to the developing countries Liquidity Preference Theory of Interest		Company Ltd. New Delhi. Blanchard Olivier (2000), Macro Economics, Englewood Elitt, Prentice Hall Bouman John, Principles of Macro Economics Dornbush , Rudiger, Fisher Stanley and Startz, Richards Macroeconomics, Nineth edition	

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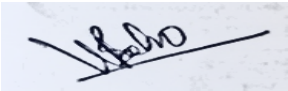

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TEACHING PLAN (UNIT PLAN)

	3 POST KEYNESIAN DEVELOPMENTS IN MACRO ECONOMICS • The IS-LM model of integration of commodity and money markets • Inflation and unemployment : Philips curve • Stagflation : meaning, causes, and consequences • Supply side economics 4 MONEY, PRICES AND INFLATION • Money Supply: Determinants of Money Supply - Factors influencing Velocity of Circulation of Money • Demand for Money : Classical and Keynesian approaches and Keynes' liquidity preference theory of interest - Friedman's restatement of Demand for money		2004 Tata-Mac Graw Hill, New Delhi. Dwivedi, D.N. (2001), Macro Economics: Theory and Policy, Tata-Mac Graw Hill, New Delhi. Friedman Hilton (1953) Essays in Positive Economics, University of Chicago Press, London. Gregory .N. Mankiw,	

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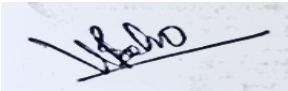

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TEACHING PLAN (UNIT PLAN)

	• Money and prices : Quantity theory of money - Fisher's equation of exchange - Cambridge cash balance approach • Inflation : Demand Pull Inflation and Cost Push Inflation - Effects of InflationNature of inflation in a developing economy - policy measures to curb inflation- monetary policy and inflation targeting		Macroeconomics, Fifth Edition (2002) New York:Worth Publishers Jhingan, M.L., Principles of Economics — Vrinda Publications (P) Ltd. Shapiro, E (1996), Macro-Economic Analysis , Galgotia Publication, New Delhi. Vaish .M.C. (2010) Macro	

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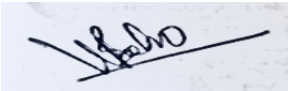

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TEACHING PLAN (UNIT PLAN)

			Economic Theory 14th edition, Vikas Publishing House(P)Ltd	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___45_

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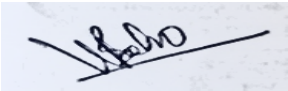

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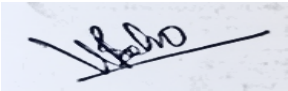

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. VERONIKA B. BARLA** DEPARTMENT: **BUS. ECONOMICS** CLASS: **S.Y.BCOM** SEMESTER: I (Subject : **BUS. ECONOMICS-III**)

MONTH: ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVES:

1. The student must be able to understand **Macroeconomics, Circular flow of aggregate income and expenditure The Measurement of National Product, Trade Cycles, Classical Macro economics, Say's law of Markets.**

2. The student must be able to understand **Basic concepts of Keynesian economics.**

3. The student must be able to understand post keynesian developments in macro economics.

4. The student must be able to understand Money , prices and inflation.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Business Economics - III	**Unit I:Introduction**		*Mehta, P.L.: Managerial Economics*	Google classroom, Google Forms

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TEACHING PLAN (UNIT PLAN)

Money Supply:	**macroeconomics:** Meaning, Scope and Importance. • **Circular flow of aggregate income and expenditure** and its Importance- closed and open economy models • **The Measurement of National Product:** Meaning and Importance of National Income Accounting- conventional and Green GNP and NNP concepts -National Income and Economic Welfare. • **Trade Cycles:** Features and Phases • **Classical Macro economics : Say's law of Markets** - Features, Implications and Criticism	**10 lectures**	– *Analysis, Problem and Cases*	
	Unit -II **The Principle of Effective Demand:** Aggregate Demand and Aggregate Supply • **Consumption Function:** Properties, Assumptions and Implications	15 lectures	H. L. AHUJA MORDEN ECONOMICS	

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TEACHING PLAN (UNIT PLAN)

	• **Investment function and Marginal Efficiency of capital** • **Investment Multiplier effect on Income and Output:** Assumptions, Working, Leakages, Criticism and Importance - paradox of thrift • **Relevance of Keynesian theory tools to the developing countries**			
	Unit -III **The IS -LM model** of integration of commodity and money markets • **Inflation and unemployment** : Philips curve • **Stagflation** : meaning, causes, and consequences • **Supply side economics :** Basic propositions and critical appraisal	**10 lectures**		
	Money Supply:	**10 lectures**		

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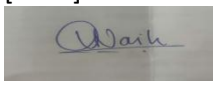

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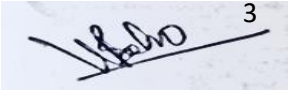

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TEACHING PLAN (UNIT PLAN)

	Determinants of Money Supply - Factors influencing Velocity of Circulation of Money • **Demand for Money :** Classical and Keynesian approaches and Keynes' liquidity preference theory of interest - Friedman's restatement of Demand for money • **Money and prices** : Quantity theory of money - Fisher's equation of exchange - Cambridge cash balance approach • **Inflation :** Demand Pull Inflation and Cost Push Inflation - Effects of Inflation- Nature of inflation in a developing economy - policy measures to curb inflation- monetary policy and inflation targeting			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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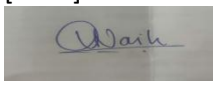

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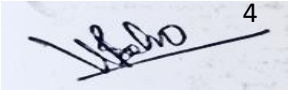

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TEACHING PLAN (UNIT PLAN)

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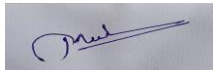
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: COMMERCE CLASS: SYB.COM-I
SEMESTER: III MONTH: June-October ACADEMIC YEAR: 2022-2023 SUBJECT: COMMERCE-III

The learners will be able to:

1. To identify and demonstrate process for making short and long term plans.
2. To recognize the importance of seeking Information before making decisions.
3. To make student able to work in group, problem solving and organizational skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 2: PLANNING & DECISION	▪ Planning- steps, Importance, Components, Coordination- Importance	4	Management - James Stoner Management: Global Prospective – Heinze Weihrich & Harold Koontz	1. Lecture and discussion. 2. Flow charts. 3. Online teaching learning tools (google meet, google form Google classroom, PPTs)
	▪ M.B.O – Process, Advantages, Management By Exception-Advantages; Management Information System – Concept, Components	3		
	▪ Decision Making – Techniques, Essentials of a Sound			



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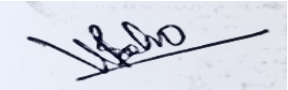

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TEACHING PLAN (UNIT PLAN)

MAKING	Decision Making, Impact of Technology on Decision Making	3	Principles of Management	

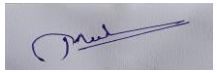
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10×1div = 10

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: SYB.COM – L, M, N
SEMESTER: III MONTH: JUNE-OCTOBER ACADEMIC YEAR: 2022-2023 SUBJECT: COMMERCE-III

LEARNING OBJECTIVE/S:

1. To make the learners aware about conceptual knowledge and evolution of Management.
2. To familiarize the learners with the functions in Management.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
MODULE 1	Management- Concept, Nature, Functions, Managerial Skills & Competencies	03	Management Today Principles& Practice- Gene Burton, ManabThakur, Tata McGrawHill,PublishingCo. Ltd.Management – JamesA.F.Stoner, Prentice Hall, Inc .U.S.A	1.Lecture and discussion. 2. Flow charts. 3.Online teaching learning tools (google meet, google form Google classroom, PPTs)
	Evolution of Management Thoughts Classical Approach: Scientific Management – F.W.Taylor'sContribution Classical Organisation Theory: HenriFayol's Principles Neo Classical:	03		



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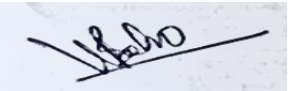

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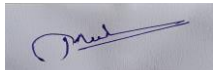
TEACHING PLAN (UNIT PLAN)

Introduction To Management	Human Relations Approach – EltonMayo'sHawthorne experiments			
	Modern Management Approach-PeterDrucker's Dimensions of Management, Indian Management Thoughts: Origin & Significance of Indian Ethos to Management.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11*3=33



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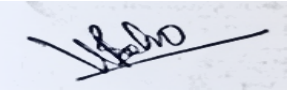

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM (G & H) SEMESTER: III (Subject : COMMERCE III)

MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To gain the knowledge of management, evolution of management, to study different elements of management.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 2- Planning & Decision Making	**Planning** - Steps, Importance, Components, Coordination - Importance **M.B.O** -Process, Advantages, Management By Exception- Advantages; Management Information System-Concept, Components **Decision Making** - Techniques, Essentials of a Sound Decision Making, Impact of Technology on Decision Making.	10	Principles of management by Philip Kotler And Essential of Management by Koontz	Chalk and talk method
UNIT 3 – ORGANISING	**Organising** – steps, organisational structures	12	Principles of management by Philip Kotler And Essential of	Chalk and talk method

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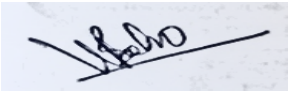

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TEACHING PLAN (UNIT PLAN)

Unit 4 – Directing and Controlling	**Departmentation** – Meaning , base, span of management, factors influencing span of management, Tall / Flat organisation **Delegation of Authority** – Process, barriers, principles, decentralization- factors influencing, Centralisation v/s decentralisation		Management by Koontz	
	Motivation – Concept, Importance , Factors influencing Importance of Communication, Barriers to Effective communication **Leadership** : Concept, Functions, Styles , Qualities of good leader **Controlling** : Concept , steps , Essentials of good control system Techniques of controlling – PERT , CPM , Budgetary control, Management Audit	12	Principles of management by Philip Kotler And Essential of Management by Koontz	Chalk and talk method
	Classical Organisational Theory – Henry Fayol Principles **Neo Classical** : Human Relations Approach – Elton Mayo's Hawthome Experiments	08	Principles of management by Philip Kotler And Essential of	Chalk and talk method

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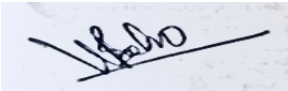

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TEACHING PLAN (UNIT PLAN)

Unit 1 – Introduction of Management	**Modern Management Approach** – Peter Drucker's Dimensions of Management , Indian management Thoughts – Origin and significance of Indian Ethos to Management.		Management by Koontz	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 42

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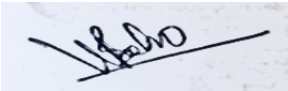

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM (ALL DIVISIONS) SEMESTER: III (Subject : NSS FC III)

MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Gain knowledge about history of NSS, NSS Programme at National & State level, Meaning of NSS symbol, importance of NSS

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 2 – Disaster Preparedness & Disaster Management	**UNIT- I BASICS OF DISASTER PREPAREDNESS** Disaster – Meaning and types Disaster Preparedness its meaning and methods Helpline nos, First Aid Techniques Breathing Techniques, Rescue Methods CPR Various types of knots and stretchers **UNIT -Il DISASTER MANAGEMENT**	12	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi.And 2. University of Mumbai National	Chalk and talk method

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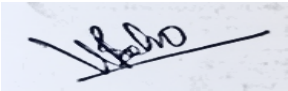

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	Concept, Disaster Cycle, Role of technology in disaster response, Disaster management cell at different levels and its functioning , Sendai Convention .		Service Scheme Manual,2009.	
Unit 3 – Health Hygiene and Diseases	**Meaning of Health and Hygiene :** Indicator (Physical and Mental) Role of Health in development Public Health System in India Maintenance of Hygiene and sanitation **Diseases and Disorders – Preventive Campaigning** Diseases and disorders Communicable and Non -communicable diseases	13	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi.And 2. University of Mumbai National Service Scheme Manual,2009.	Chalk and talk method

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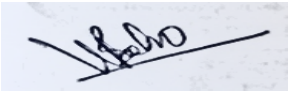

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	Preventive campaign in Malaria, TB, Dengue, Cancer, HIV/AIDS, diabetes, malnutrition			
Unit -4 ENVIRONMENT AND ENERGY CONSERVATION	Unit 1 : Environment and Environment Enrichment Programme Meaning, features, issues, Conservation of natural resources and sustainability in environment with respect to water conservation types. Bandhara, CCT, rain water harvesting Environmental Movements in India Unit 2 : Energy and energy conservation programme Energyv-concept and features Conventional and non conventional energy EnergyvConservation meaning and importance	12	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi.And 2. University of Mumbai National Service Scheme Manual,2009.	Chalk and talk method

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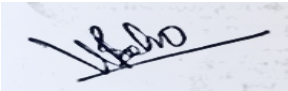

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Unit 1 – Value System and Gender Sentivity	**Value System :** Meaning, types, Human values and social responsibilities, Indian Value system ,eleven vows **Gender Sensitivity and Women Empowerment** Concept of gender, causes behind gender related problems, remedial measures, Women empowerment – meaning , various schemes in India	10	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi.And 2. University of Mumbai National Service Scheme Manual,2009.	Chalk and talk method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 47

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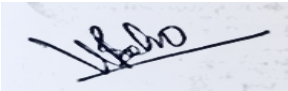

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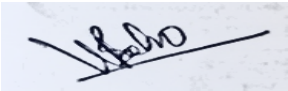

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TEACHING PLAN (UNIT PLAN)

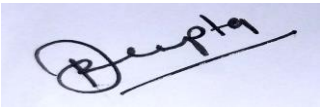
NAME OF THE STAFF: **Dr. DEEPAK GUPTA** DEPARTMENT: COMMERCE CLASS: S.Y.BCom SEMESTER: III Subject: MANAGEMENT ACCOUNTING

MONTH: JUNE, JULY, AUG & SEP ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1, 2 & 3	**Introduction to Management Accounting**	04	ICAI study material	Chalk-Board Method, Discussion, Google classroom.
	Vertical Statement Analysis -Vertical Statement - Trend Analysis - Comparative Statement - Common Size Statement	15	ICAI study material	Chalk-Board Method, Discussion, Google classroom.
	Ratio Analysis • Balance Sheet Ratios • Revenue Statement Ratios • Composite Ratios	11	ICAI study material	Chalk-Board Method, Discussion, Google classroom.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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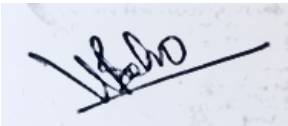

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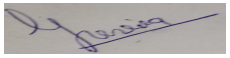
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: Business Economics CLASS: FYBCOM SEMESTER: _III_ (Subject: Business Economics III

MONTH: June-October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Students will be able to understand basic concepts of macroeconomics

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Business Economics III	2 BASIC CONCEPTS OF KEYNESIAN ECONOMICS • The Principle of Effective Demand: Aggregate Demand and Aggregate Supply • Consumption Function: Properties, Assumptions and Implications • Investment function and Marginal Efficiency of capital • Investment Multiplier effect on Income and Output: Assumptions, Working, Leakages, Criticism an Importance - paradox of thrift • Relevance of Keynesian theory tools to the developing countries Liquidity Preference Theory of Interest	2 lectures per week	MACRO ECONOMIC THEORY - M.L.JHINGAN PRINCIPLES OF MACRO ECONOMICS - MANKIW	Chalk and Board Google Classroom Classroom Discussions



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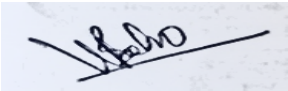

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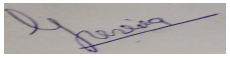
TEACHING PLAN (UNIT PLAN)

	3 POST KEYNESIAN DEVELOPMENTS IN MACRO ECONOMICS • The IS-LM model of integration of commodity and money markets • Inflation and unemployment: Philips curve • Stagflation : meaning, causes, and consequences • Supply side economics	2 lectures per week		
	4 MONEY, PRICES AND INFLATION • Money Supply: Determinants of Money Supply - Factors influencing Velocity of Circulation of Money • Demand for Money : Classical and Keynesian approaches and Keynes' liquidity preference theory of interest - Friedman's restatement of Demand for money			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___10_



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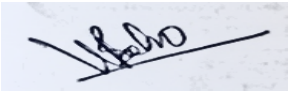

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.Mala Khanchandani DEPARTMENT: : Commerce CLASS: S.Y.B.Com SEMESTER: III

Subject : Foundation Course III

MONTH: June to September ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

The learners will be able to:

- To prevent Human Rights violations and to safeguard the Fundamental rights of every citizen of India.
- To understand the competencies related to communicating with those from other cultures.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
FCIII Unit 1 Human Rights Violations And	D **Children**- Constitutional and legal rights, forms of violations, Redressal mechanism. E **People with disabilities**, Minorities, and the elderly population- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	06	Michael Vaz Aurara vaz: foundation course.	❖ Google Classroom ❖ Chalk and Talk Method ❖ Group Discussion ❖ Explanation with examples

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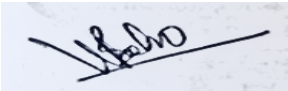

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TEACHING PLAN (UNIT PLAN)

Redressal Unit 2 Dealing with Environmental Concerns			Newspapers	❖ Story telling Offline Projects assigned
	A Concept of Disaster & Effects on Human Life – Physical, Psychological Economic & Social Effects **B Case study of Environmental Disaster** **C Dealing with Disaster**:-Factors to be considered in prevention Mitigation & Disaster Preparedness. **D Human Rights Issues in addressing Disaster**: - Issues related to compensation, equitable and fair distribution of relief & humanitarian approach to resettlement & rehabilitation.	10	Michael Vaz Aurara vaz: foundation course. Newspapers	❖ Google Classroom ❖ Chalk and Talk Method ❖ Group Discussion ❖ Explanation with examples ❖ Story telling Offline Projects assigned
Unit 3Science & Technology-1	**A Science & Technology:-**The Ancient Cultures ,The Classical Era, the middle ages,The Renaissance, the age of reason & enlightenment. B **Nature of Science:-**principal & Characteristics science as Empirical practical ,theoretical, validated knowledge C **Science & Superstition –** Roll of Science in Exploding myth,	08	Michael Vaz Aurara vaz: foundation course. Newspapers	❖ Google Classroom ❖ Chalk and Talk Method ❖ Group Discussion ❖ Explanation with examples ❖ Story telling

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TEACHING PLAN (UNIT PLAN)

	blind belief & prejudice, science & scientific temper, science as fundamental duty of Indian Citizen			Offline Projects assigned
Unit 4 Soft Skills for Effective interpersonal Communication	Part A 1. Effective Listening : Importance of Listening, Features of Listening. 2. Guidelines to develop effective listening skills. 3. Verbal Communication: Oral Communication, Advantages of oral communication,Disadvantages of Oral Communication 4.Written Communication :Advantages & Disadvantages of Written Communication 5. Non Verbal Communication:Body Language, Para language,Silence,Space Surrounding & Time, Advantages & Disadvantages of Non Verbal Communication 6.Public Speaking & Presentation Skills 7. Barriers to Effective Communication 8/ Tips for effective Communication Part B Formal & Informal Communication – Writing Formal	12	Michael Vaz Aurara vaz: foundation course. Newspapers	❖ Google Classroom ❖ Chalk and Talk Method ❖ Group Discussion ❖ Explanation with examples ❖ Story telling Offline Projects assigned

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	applications, preparing group discussions, interviews & presentations Part C Leadership skills & self improvement, Style of leadership & team building			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36

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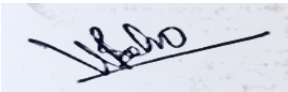

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Tejaswini Naik DEPARTMENT: Accountancy CLASS: Sybcom c and d SEMESTER: 3 (Subject : financial accounting)

MONTH: june-sept ACADEMIC YEAR: _2022-23_____

LEARNING OBJECTIVE/S: learner will understand how to prepare final accounting while admitting partner, how to calculate distribution of cash at the time of dissolution of parnership firm.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Financial accounting				
	1.partnership final account admission and final account. Solved 6 questions 2. Piecemeal distribution of cash- proportionate /excess capital method. Solved 6 questions	15 15	TAXMANN	Blackboard,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___30_

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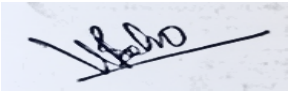

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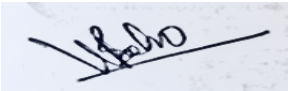

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____REENA BEHERA_____ DEPARTMENT: _____Business Economics____ CLASS: ____SYBCOM___
SEMESTER: III__ (Subject : _____BUSINESS ECONOMICS____III_____)

MONTH: _____JUNE TO OCTOBER_____ ACADEMIC YEAR: ____2022-23_____

LEARNING OBJECTIVE/S: ___The learners will be able to understand the concept of using macroeconomics for the growth of the economy by developing a core understanding regarding income, expenditure, measurement, and trade cycles, demand and supply of money and levels of inflation for the development of the economy._____

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Module 1,2,3,4	INTRODUCTION • Macroeconomics: Meaning, Scope and Importance. • Circular flow of aggregate income and expenditure and its Importanceclosed and open economy models • The Measurement of National Product: Meaning and Importance of National Income Accounting- conventional and Green GNP and NNP concepts -National	4 lectures per week	Ackley.G (1976), Macro Economic Theory and Policy, Macmillan Publishing Co. New York Ahuja. H.L., Modern Economics — S.Chand	Chalk Duster Ppt, Google meet, Google Classroom, Discussion, quiz,Test,assignment

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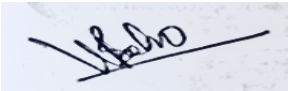

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TEACHING PLAN (UNIT PLAN)

	Income and Economic Welfare. • Trade Cycles: Features and Phases • Classical Macro economics : Say's law of Markets - Features, Implications and Criticism 2 BASIC CONCEPTS OF KEYNESIAN ECONOMICS • The Principle of Effective Demand: Aggregate Demand and Aggregate Supply • Consumption Function: Properties, Assumptions and Implications • Investment function and Marginal Efficiency of capital • Investment Multiplier effect on Income and Output: Assumptions, Working, Leakages, Criticism and Importance - paradox of thrift • Relevance of Keynesian theory tools to the developing countries Liquidity Preference Theory of Interest		Company Ltd. New Delhi. Blanchard Olivier (2000), Macro Economics, Englewood Elitt, Prentice Hall Bouman John, Principles of Macro Economics Dornbush , Rudiger, Fisher Stanley and Startz, Richards Macroeconomics, Nineth edition	

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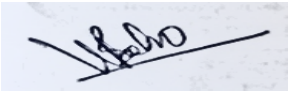

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TEACHING PLAN (UNIT PLAN)

	3 POST KEYNESIAN DEVELOPMENTS IN MACRO ECONOMICS • The IS-LM model of integration of commodity and money markets • Inflation and unemployment : Philips curve • Stagflation : meaning, causes, and consequences • Supply side economics 4 MONEY, PRICES AND INFLATION • Money Supply: Determinants of Money Supply - Factors influencing Velocity of Circulation of Money • Demand for Money : Classical and Keynesian approaches and Keynes' liquidity preference theory of interest - Friedman's restatement of Demand for money		2004 Tata-Mac Graw Hill, New Delhi. Dwivedi, D.N. (2001), Macro Economics: Theory and Policy, Tata-Mac Graw Hill, New Delhi. Friedman Hilton (1953) Essays in Positive Economics, University of Chicago Press, London. Gregory .N. Mankiw,	

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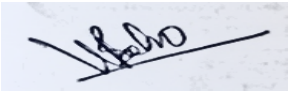

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	• Money and prices : Quantity theory of money - Fisher's equation of exchange - Cambridge cash balance approach • Inflation : Demand Pull Inflation and Cost Push Inflation - Effects of InflationNature of inflation in a developing economy - policy measures to curb inflation- monetary policy and inflation targeting		Macroeconomics, Fifth Edition (2002) New York:Worth Publishers Jhingan, M.L., Principles of Economics — Vrinda Publications (P) Ltd. Shapiro, E (1996), Macro-Economic Analysis , Galgotia Publication, New Delhi. Vaish .M.C. (2010) Macro	

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			Economic Theory 14th edition, Vikas Publishing House(P)Ltd	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___45_

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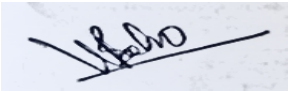

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TEACHING PLAN (UNIT PLAN)

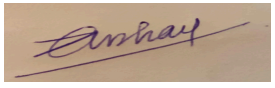
NAME OF THE STAFF: Jinal Chohan_____ DEPARTMENT: __Commerce__ CLASS: __SYBCOM G&H SEMESTER: III_ (Subject : COMMERCE III)

MONTH: June to October ____ ACADEMIC YEAR: __2022-23_____

LEARNING OBJECTIVE/S: _To gain the knowledge of management, evolution of management, to study different elements of management

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
UNIT 1 – Introduction to Mangement	**Classical Organisational Theory** – Henry Fayol Principles **Neo Classical** : Human Relations Approach – Elton Mayo's Hawthome Experiments **Modern Management Approach** – Peter Drucker's Dimensions of Management , Indian management Thoughts – Origin and significance of Indian Ethos to Management.	8	Principles of management by Philip Kotler And Essential of Management by Koontz	Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___8



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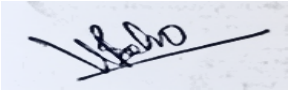

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TEACHING PLAN (UNIT PLAN)

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/ S	EACHING METHOD/ ICT TOOLS USED
Unit 2-Planning & Decision Making	**Planning** - Steps, Importance, Components, Coordination - Importance **M.B.O** -Process, Advantages, Management By Exception- Advantages; Manage[1]ment Information System-Concept, Components **Decision Making** - Techniques, Essentials of a Sound Decision Making, Impact of Technology on Decision Making.	**8**	Principles of management by Philip Kotler	Chalk and board method

Total number of lectures allocated to the unit -8

APER, UNIT, TITLE	SUBTOPIC	LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED

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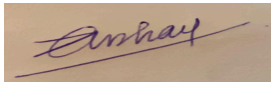

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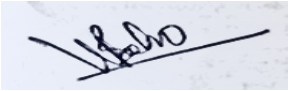

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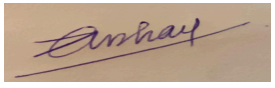
TEACHING PLAN (UNIT PLAN)

UNIT 3 – ORGANISING	**Organising** – steps, organisational strucutures **Departmentation** – Meaning , base, span of management, factors influencing span of management, Tall / Flat organisation **Delegation of Authority** – Process, barriers, principles, decentralization- factors influencing, Centralisation v/s decentralisation	10	Principles of management by Philip Kotler And Essential of Management by Koontz	Chalk and board method

Total number of lectures allocated to the unit -10

APER, UNIT, TITLE	SUBTOPIC	LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
Unit 4- Directing and Controlling	**Motivation –** Concept, Importance , Factors influencing Importance of Communication, Barriers to Effective communication **Leadership** : Concept, Functions, Styles , Qualities of good leader **Controlling** : Concept , steps , Essentials of good control system Techniques of controlling – PERT , CPM , Budgetary control, Management Audit	8	Principles of management by Philip Kotler And Essential of Management by Koontz	Chalk and board method

Total number of lectures allocated to the unit -8



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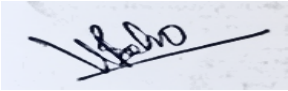

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Karishma Kale DEPARTMENT: Commerce CLASS: SYBCOM- K,L,M,N,O Subject- Advertising

SEMESTER: _III_____ MONTH: July- November_____ ACADEMIC YEAR: ___2022-23_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand advertisement related terminologies, special purpose advertising and the importance of brand.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2: Advertising Agency	Ad Agency: Features, Structure and services offered, Types of advertising agencies, Agency selection citeria 2 Manan Prakashan Online teaching- PPT Agency and Client: Maintaining agency -client relationship, Reasons and ways of avoiding client turnover, Creative Pitch, Agency compensation 3 Manan Prakashan Online teaching- PPT Careers in advertising: Skills required for a career in advertising, Various career options, Freelancing career options	8	Manan Prakashan	Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___8_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Karishma Kale DEPARTMENT: Commerce CLASS: SYBCOM- C, D,J,K,L,M,N,O Subject- Commerce

SEMESTER: _III_____ MONTH: July- November_____ ACADEMIC YEAR: ___2022-23_____

LEARNING OBJECTIVE/S:
The learners will be able to : Know the basic concepts of Management, Planning, Decision making, Organizing and Directing and Controlling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Chp 2: Planning and Decision Making	Planning: Steps, Importance, Components, Co-ordination- Importance	3	Manan Prakashan	Chalk and Duster
	MBO: Process, Advantages, MBE, MIS	3		
	Decision Making: Techniques, Essentials of a sound decision making, Impact of Technology on Decision making	3		

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TEACHING PLAN (UNIT PLAN)

Chp 3: Organising	Organising: Steps, Organisation structure Departmentation: Meaning, Bases, Span of Management, Factors influencing Span of Management, Tall and Flat organisation	3	Manan Prakashan	Chalk and Duster
	Delegation of Authority: Process, Barriers to Delegation, Principles of effective delegation, Decentralisation, Centralisation and Decentralisation	3		
Chp 4: Directing and Controlling	Motivation: Concept, Importance, Influencing Factor, Importance of communication, Barriers to effective communication Leadership: Concept, Functions, Styles, Qualities of good leader Controlling: Concept, Steps, Essentials of good control system, Techniques of controlling- PERT, CPM, Budgetary Control, Management Audit.	9	Manan Prakashan	Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___24_____

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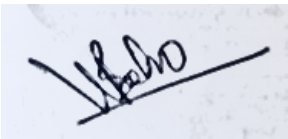

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TEACHING PLAN (UNIT PLAN)

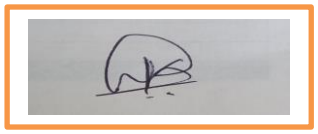
NAME OF THE STAFF: **KAUSHIK SAVE** DEPARTMENT: **ACCOUNTANCY** CLASS: **SYBCOM– I,J,K,L** SEMESTER: **III**
MONTH: **June to October 2022** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: The learners will be able to:

1. Know & understand what is Management accounting, Users of Management Accounting, Importance of Management Accounting
2. Know & understand Analysis tools of management accounting i.e. Vertical Statement, Trend Analysis, Comparative Statement, Common Size Statement
3. Know & understand what is Ratio Analysis and different types of accounting ratios

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Management Accounting Unit 1	Introduction to Management Accounting	4	Manan Prakashan, Self maintained notes,ICAI study material	Black board, Google Classroom
Management Accounting Unit 2	Vertical Statement Analysis -Vertical Statement - Trend Analysis - Comparative Statement - Common Size Statement	15	Manan Prakashan, Self maintained notes,ICAI study material	Black board, Google Classroom
Management Accounting Unit 3	Ratio Analysis • Balance Sheet Ratios • Revenue Statement Ratios • Composite Ratios	11	Manan Prakashan, Self maintained notes,ICAI study material	Black board, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30 per Division



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Kavita Vilas Purandare DEPARTMENT: Commerce CLASS: SYBCOM SEMESTER: III
(Subject : Business Law) MONTH: June to October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To learn Indian Contract Act, Special contract, Sale of goods act and negotiable instrument act.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indian Contract Act 1872 (Part 1 and 2)	• Indian contract Act, 1872 • Definitions, agreement, kinds of agreement, contract, kinds of contract, valid, void, voidable, contingent and Quasi contract • Offer or proposal – definition, essentials of valid proposal or offer, distinguish between offer and invitation to offer. • Capacity to contract, consent and free consent. • Consideration – concept, importance of consideration, legal rules of consideration.	24		Chalk and Board
Special Contracts	• Law of Indemnity and guarantee (ss.124-125, ss-126-129, 132-147 • Law of Bailment and pledge	12		Chalk and Board

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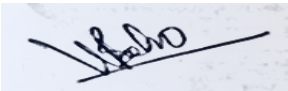

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TEACHING PLAN (UNIT PLAN)

	• Law of Agency			
Sale of goods act - 1930	• Introduction, Definition, Formalities of contract of sale • Distinguished between sale and agreement to sell, sale and hire purchase agreement • Transfer of property as between the seller and the buyer, rights of an unpaid seller. • Property – concept, rule of transfer of property. • Unpaid seller, rights of an unpaid seller, remedies of breach contract.	12		Chalk and Board
Negotiable instruments act – Amended act 2015	• Meaning, definition, characteristics of negotiable instrument, evidence, presumptions, classifications • Promissory note and bill of exchange, • Definition of acceptor, acceptance, drawer, Drawee • Miscellaneous provisions – parties to negotiable instruments holder, rights and privileges of holder in due course.	12		Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR (CA) MABEL LOBO DEPARTMENT: ACCOUNTANCY CLASS:SYBCOM– E,FSEMESTER: III

MONTH: June to October 2022 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to: Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Management Accounting Unit 1	Introduction to Management Accounting	4	Manan Prakashan, Self maintained notes,ICAI study material	Black board, Google Classroom
Management Accounting Unit 2	Vertical Statement Analysis -Vertical Statement - Trend Analysis - Comparative Statement - Common Size Statement	15	Manan Prakashan, Self maintained notes,ICAI study material	Black board, Google Classroom
Management Accounting Unit 3	Ratio Analysis - Balance Sheet Ratios - Revenue Statement Ratios - Composite Ratios	11	Manan Prakashan, Self maintained notes,ICAI study material	Black board, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30 per Division

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TEACHING PLAN (UNIT PLAN)

DEPARTMENT: COMMERCE- ACCOUNTANCY CLASS: TYBCOM SEMESTER: V (Subject: FINANCIAL ACCOUNTING) MONTH: JUNE TO OCT
ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: TO IMPART THE PRACTICAL KNOWLEDGE OF FINANCIAL ACCOUNTING.

THE LEARNERS WILL BE ABLE TO: APPLY THESE FINANCIAL ACCOUNTING RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Internal Reconstruction	Meaning and Need of Internal Reconstruction, Difference between internal reconstruction and external reconstruction, methods and legal procedures. Accounting procedures, journal entries on internal reconstruction. Accounting procedures, journal entries on internal reconstruction. Practical Illustrations	15	.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Chalk & Duster Google classroom, PPT
2. Preparation of Final Accounts of Companies	**Preparation of Final Accounts of Companies** Relevant provisions of Companies Act related to preparation of Final Account (excluding cash flow statement) Preparation of financial statements as per Companies Act. (excluding cash	15	S.N. MAHESHWAR Y, KHAN & JAIN,	Chalk & Duster Google classroom, PPT

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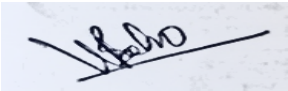

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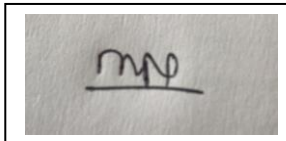
TEACHING PLAN (UNIT PLAN)

	flow statement) AS 1 in relation to final accounts of companies (disclosure of accounting policies) Adjustments.		Timothy R. Mayes	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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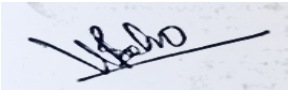

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Accountancy CLASS: S Y B Com [A&B]

SEMESTER: IV MONTH: December ACADEMIC YEAR: 2022-23

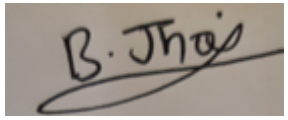
LEARNING OBJECTIVE/S:
The learners will be able to:
Learn about the working format of the company regards to raising of capital funds by way of issuing shares, debentures. Also, the legal procedure to raise these funds. It also helps to give practical knowledge of accounts. Additionally, the learner will be able to understand the method for the redemption of preference share and calculation of settling the proceeds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy and Financial Management IV	UNIT I **Introduction to Company Accounts** Introduction of basic terms: Types of companies, nature and formation of companies, Shares, Debentures, Share Capital, Reserves and surplus, types of assets and liabilities, dividend, format of Balance Sheet (Only theory) Issue of shares: Different modes IPO, Private Placements, Preferential, Rights, ESO, SWEAT and ESCROW account, Issue of shares at par, premium and discount, Under subscription and Over subscription of shares, forfeiture and reissue of forfeited shares, issue of shares for consideration other than cash. (Only theory) Issue of Debentures: types of Debentures, Issue of debentures at par, premium and discount, Issue of Debentures with consideration of Redemption, Issue of debentures for cash receivable in instalments or at a time Issue of debentures for consideration other than cash. (Only theory)	15	Introduction to Accountancy T.S. Grewal S. Chand and Co. (P) Ltd., New Delhi Advanced Accounts Shukla and Grewal S. Chand and Co. (P) Ltd., New Delhi	GOOGLE CLASSROOM Group Discussion, Chalk & talk, Black-Board Method; Group Discussion

	UNIT II **Redemption of Preference Shares** Provision of the Companies Act for redemption of Preference Shares (Sec 55 of the Companies Act, 2013), Companies (Share and Debentures) Rules. Methods of Redemption of fully paid-up Preference Shares as per Companies Act, 2013: The proceed of a fresh issue of shares, the capitalization of undistributed profits and a combination of both, calculation of minimum fresh issue to provide the fund for redemption, (Question on entries and/or Balance Sheet) Note: Companies governed by Section 133 of the Companies Act, 2013 and comply with the accounting standards prescribed for them. Hence, the balance in security premium account not to be utilized for premium payable on redemption of preference shares.	15		
	UNIT III Redemption of Debentures Provisions of companies Act , creation and investment of Debenture redemption reserve. Methods of redemption by payment in lumpsum and payment in instalments, conversion. Practical problems.	15		
	UNIT IV Ascertainment and Treatment of Profit Prior to Incorporation. Introduction Principles of ascertainment	15		

	Preparation of separate combined, columnar profit &loss A/c including different basis of allocation of expenses and Income.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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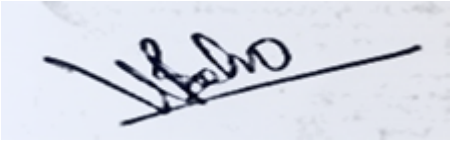

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: COMMERCE CLASS: SYBCOM (M and N) SEMESTER: IV (Subject : ADVERTISING)

MONTH: NOVEMBER TO FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to:

- Understand the concept of advertising in detail.
- Get knowledge of various advertising strategies carried out by the marketers.
- Interpret global trend in advertising and the future opportunities.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1- Media in Advertising	**Traditional Media:** Print, Broadcasting, Out-Of-Home advertising and films - advantages and limitations of all the above traditional media **New Age Media:** Digital Media Forms, Significance and Limitations **Media Research:** Concept, Important, Tool for regulation- ABC and Doordarshan Code.	12	Marketing management by - Phillip Kotler And Marketing management Ramaswamy & Kumari Nama	Chalk-board, discussion, example and test

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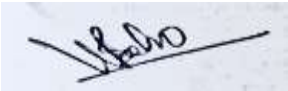

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TEACHING PLAN (UNIT PLAN)

UNIT – 2 Planning Advertising Campaign	**Advertising Campaign** – Concept , Planning , Steps , Objectives , DAGMAR model **Advertising Budget** – Facctors determining advt budget, Methods, Media Objectives **Media Planning** - Concept , Process , Media Scheduling Strategies	12	Marketing management by - Phillip Kotler And Marketing management Ramaswamy & Kumari Nama	Chalk-board, discussion, example and test
Unit-3 Fundamental of creativity in advertising	**Creativity:** Concept and Importance, Creative Process, Concept of Creative Brief, Techniques of Visualization. **Creative aspects:** Buying Motives - Types, Selling Points Features, Appeals Preposition (USP) **Creativity through Endorsements:** Endorsers Types, Celebrity Endorsements - Advantages and Limitations, High Involvement and Low Involvement Products.	12	Marketing management by - Phillip Kotler And Marketing management Ramaswamy & Kumari Nama	Chalk-board, discussion, example and test
Unit -4 Execution and Evaluation of Advertising	**Preparing print ads** - essentials of copywriting, Copy- elements, types, Layout – principles, Illustration- importance. **Creating broadcast ads** : Execution styles, jingles and music importance, Concept of Storyboard	10	Marketing management by - Phillip Kotler And Marketing management	Chalk-board, discussion, example and test

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TEACHING PLAN (UNIT PLAN)

	Evaluation - Advertising copy, Pre- test and Post- test of advertisements , Methods and Objectives. **Creating broadcast ads** : Execution styles, jingles and music importance, Concept of Storyboard **Evaluation** - Advertising copy, Pre- test and Post- test of advertisements , Methods and Objectives.		Ramaswamy & Kumari Nama	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 46

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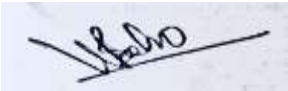

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TEACHING PLAN (UNIT PLAN)

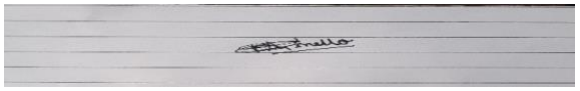
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Abigail D'mello SUBJECT: Foundation Course IV DEPARTMENT: Commerce

CLASS: SYBCom SEMESTER: IV Div:- C,D,E,F,G,H,I MONTH: November December ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I Significant, contemporary rights of citizens	**A Rights of Consumers-** violation of consumer rights and important provisions of the consumer protection act 2016; other important laws to protect consumers; consumer courts and consumer movements	04	Foundation course IV by Michael Vaz and Aurora Vaz	Chalk & Board, Discussion.
	B Right to information- Genesis and relation with transparency and accountability; important provisions of the Right to Information Act 2005; some success stories	04		



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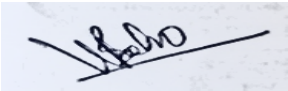

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TEACHING PLAN (UNIT PLAN)

	C Protection of Citizens'/ Public Interest- Public Interest Litigation, need and procedure to file a PIL; some Landmark cases	02		
	D citizens charter, Public Service Guarantee Act	02		

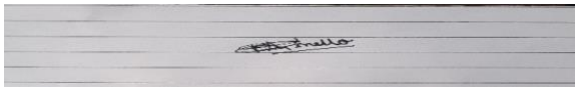
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Abigail D'mello SUBJECT: Foundation Course IV DEPARTMENT: Commerce

CLASS:SYB.Com SEMESTER: IV Div:- C,D,E,F,G,H,I MONTH: January ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.



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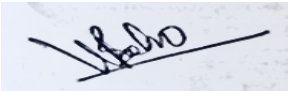

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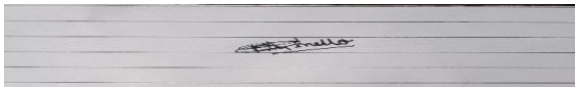
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Approaches to understanding ecology	**A understanding approaches to ecology-** anthropocentrism, biocentrism and ecocentrism, Eco feminism and deep ecology	04	Foundation course IV by Michael Vaz and Aurora Vaz	Chalk & Board, Discussion.
	B environmental principles 1- the sustainability principle, the polluter pays principle, the precautionary principle	04		
	C environmental principles 2- the equity principle, Human Rights principle, the participation principle	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11



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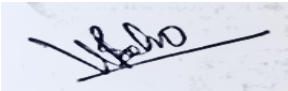

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TEACHING PLAN (UNIT PLAN)

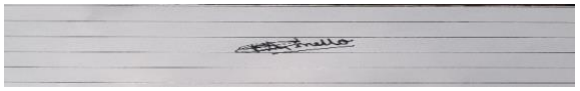
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Abigail D'mello SUBJECT: Foundation Course IV DEPARTMENT: Commerce

CLASS:SYB.Com SEMESTER: IV Div:-C,D,E,F,G,H,I MONTH: February ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III	**Part A- some significant modern technologies, features and applications**		Foundation course IV by	Chalk & Board, Discussion.



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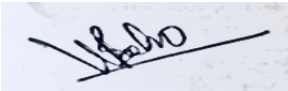

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TEACHING PLAN (UNIT PLAN)

Science and Technology II	1. **Laser technology-** light amplification by stimulated emission of radiation, use of laser in Remote Sensing, GIS or GPS mapping, medical use	02	Michael Vaz and Aurora Vaz	
	2. **Satellite Technology-** various uses in satellite navigation systems, GPS and imprecise climate and weather analysis	02		
	3. **Information and Communication Technology-** convergence of various Technology like satellite, computer and digital in the information revolution of today's society	02		
	4. **Biotechnology and genetic engineering-** applied biology and uses in medicine, Pharmaceuticals and Agriculture, genetically modified plant, animal and human life	02		
	5. **Nanotechnology-** definition, the study, control and application of phenomena and materials at length scales below 100 nm, uses in medicine, military intelligence and consumer products	01		
	Part B- issues of control, access and misuse of Technology	02		

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

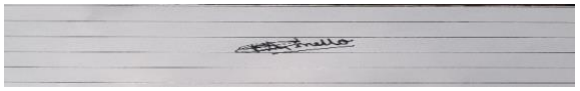
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Abigail D'mello SUBJECT: Foundation Course IV DEPARTMENT: Commerce

CLASS:SYB.Com SEMESTER: IV Div:- C,D,E,F,G,H,I MONTH: March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV	**Part A- Basic information on competitive examinations, the pattern, eligibility criteria and local centres**		Foundation course IV by	Chalk & Board, Discussion.



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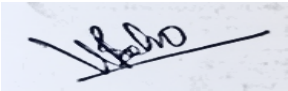

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

Introduction to competitive exams	1. Examinations conducted for entry into professional courses- graduate record examination, graduate management admission test GMAT, common admission test and scholastic aptitude test	01	Michael Vaz and Aurora Vaz	
	2. Examinations conducted for entry into jobs by Union Public Service Commission, Staff Selection Commission, Staff Public Service Commission, Banking and Insurance sectors and the National and State Eligibility Test NET/SET for entry into teaching profession	02		
	Part B- Soft Skills required for Competitive Examinations			
	1. **Information on areas tested-** quantitative ability, data interpretation, verbal ability and logical reasoning, creativity and Lateral thinking	02		
	2. **Motivation-** concept, theories and types of motivation	02		
	3. **Goal setting-** types of goals, SMART goals, Stephen Covey's concept of human endowment	01		

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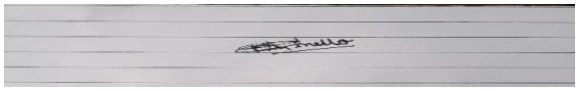
	4. **Time management-** effective strategies for time management	01		
	5. **Writing skills-** paragraph writing, report writing, filing an application under the RTI Act, consumer grievance letter	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11



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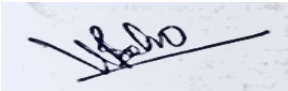

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NAME OF THE STAFF: AMITA RAKESH PATIL DEPARTMENT: ACCOUNTANCY CLASS: SYBCOM SEMESTER: 4 (Subject : Financial Accounting)
MONTH: November-March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit -1 Introduction to Company Accounts	Types of Companies, nature and formation of companies,shares,,debentures,sharecapital,format of balance sheet. Issue of shares Issue of Debentures	15	Financial Accounting by R. Narayanaswamy	Discussion and Blackboard method
Unit -2 Redemption of Preference Shares	Provisions of companies Act for redemption of preference shares. Methods of redemption, proceeds of fresh issue, calculation of minimum issue. Practical problems	15	Financial Accounting by R. Narayanaswamy	Discussion and Blackboard method
Unit – 3 Redemption of Debentures	Provisions of companies Act , creation and investment of Debenture redemption reserve. Methods of redemption by payment in lumpsum and payment in instalments, conversion. Practical problems	15	Financial Accounting by R. Narayanaswamy	Discussion and Blackboard method
Unit- 4	Introduction Principles of ascertainment	15	Financial Accounting by R. Narayanaswamy	Discussion and Blackboard method

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Ascertainment and Treatment of Profit Prior to Incorporation	Preparation of separate combined, columnar profit &loss A/c including different basis of allocation of expenses and Income.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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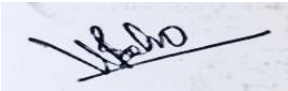

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Ramchandra Patil DEPARTMENT: Commerce CLASS: SYB.COM – K, L SEMESTER: IV MONTH: December-January ACADEMIC YEAR: 2022-2023 SUBJECT: COMMERCE-IV

LEARNING OBJECTIVE/S: To acquaint the learners with the basic concepts of Production Management, Inventory Management

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 PRODUCTION & INVENTORY MANAGEMENT	Production Systems: Concept, Types -Continuous and Intermittent. Productivity: Concept, Factors Influencing Productivity, Measures for improving Productivity. Inventory Management- Objectives, Inventory Control Techniques. Scientific Inventory Control System -Importance Production Management: Objectives, Scope Production Planning &Control :Steps, Importance	12	Essentials of Inventory Management-MaxMuller	Chalk & board
MODULE II QUALITYMANAGEME	Introduction to Quality: Dimensions of Quality, Cost of Quality: Types –Internal Failure Cost, External FailureCost, Appraisal Cost, Prevention Cost, Quality Circle: Features.	10	Production & Operation	Chalk & board

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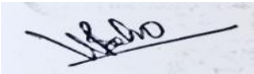
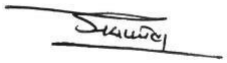
NT	Quality Management Tools: TQM –Importance, Six Sigma – Process, ISO 9000 – Certification Procedure, Kaizen– Process Service Quality Management:Importance, SERVQUALModel,Measures to improve service quality.		Management(Text & Cases)K.Ashwathappa&G.Sudeshana Reddy, Himalaya Publication.	
MODULE III INDIAN FINANCIAL SYSTEM	Indian Financial Market: Structure, Primary Market – IPO Procedure Dematerialisation:Process, Role of Depositories : NSDL and CDSL SEBI: Functions of SEBI, Investors protection measures of SEBI. Stock Exchange – Functions, Speculators. Credit Rating: Advantages, Credit Rating Agencies in India - CRISIL, CARE, and ICRA.	12	Indian Financial System—BharathiPathiak, Pearson publication	Chalk & board
MODULE 4 RECENT TRENDS IN FINANCE	Mutual Funds- Advantages and Limitations, Types, Factors responsible for growth of mutual funds – Systematic Investment Plan. Commodity Market: Categories, Derivatives Market: Types, Participants, Types of Derivative Instruments. Start-up Ventures –Concept, Sources of Funding, Micro Finance – Importance, Role of Self Help Groups.	12	Mutual Funds in India: Emerging Issues-NaliniPravaTripathy, Excel Books New Delhi.	Chalk & board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 46





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TEACHING PLAN (UNIT PLAN)

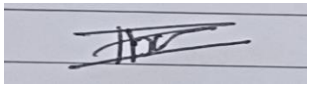
NAME OF THE STAFF: ASHWINI DATTATRAY BHOIR DEPARTMENT: COMMERCE CLASS: SYBCOM DIV - N SEMESTER: IV

SUBJECT : BUSINESS LAW MONTH: NOVEMBER - MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to Know Various kinds of companies and features and procedure for incorporating a company.
The learners will be able to Know Partnership Meaning, Procedure for Registration of Partnership, Types of Partner, Rights and Duties of Partner.

The learners will be able to Know Rights of Consumers, forms of its Violation and Consumer Protection Act.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module. No. 1 Indian companies Act, 2013 Part -1	Chapter I – Company, Features, Role of promoters, Duties and Liabilities of the promoter, effects of pre incorporation contracts, consequences of non- registration, and lifting of corporate veil. Chapter II – Classification of companies, Distinction between Private company and public company, Advantages and disadvantages of Private company and public company, Common Procedure for Incorporation of company.	08	Company Law Avtar singh Indian Partnership Act, 1932- Pollock & Mulla Agrawal V.K. Consumer	1) Lecture and Discussion 2) Case Study 3) Black Board, Chalk and Duster



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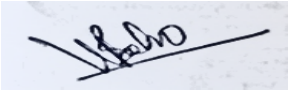

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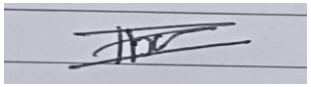
	Chapter III – Memorandum of Association and Article of Association – Concept, Clauses of MOA, AOA – Contents, Doctrine of constructive notice, Doctrine of Ultra Vires, Doctrine of Indoor management. Chapter IV - Prospectus : concept, Kinds, Contents, Private Placement		protection Law and practice Vipul Prakashan	
Module. No. 2 Indian companies Act, 2013 Part – 2	Chapter - I Member of a Company: Concept, Who can become a member, Modes of acquiring membership, Cessation of membership, Right and liabilities of members. Chapter – II Director: Qualification and disqualification, Classification, Director Identification number, Legal position of director.	08		
	Chapter – III Meetings : Types, Legal provisions of statutory meeting, Annual General meeting, Extra-Ordinary meeting.	08		
Module. No. 3				



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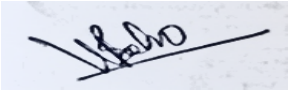

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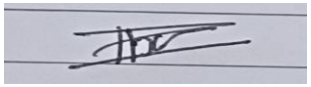
Indian Partnership Act, 1932	Chapter I - Partnership: Concept, Essentials, True test of Partnership, Partnership Deed, Types of Partnership, Rights and duties of Partners, Distinguish between Partnership and Hindu Undivided Family. Chapter II - Dissolution: Concept, Modes of Dissolution, Consequences of Dissolution Chapter III - Limited Liability Partnership 2008: Concept, Characteristics, Advantages and Disadvantages, Procedure for Incorporation. Chapter IV - Extent of L.L.P.: Conversation of LLP, Mutual Rights and Duties of Partners, winding up of LLP, Distinction between LLP and Partnership.	08		
Module No. 4 Consumer Protection Act, 1986 and Competition Act 2002.	Chapter - I Concept, Objects, Reasons for enacting the Consumer Protection Act, Definition of Consumer, Consumer Dispute, Complaint, Defect, Deficiency, Unfair Trade Practices, Goods and Services. Chapter - II - Consumer Protection Councils and Redressal Agencies: District, State and National.			



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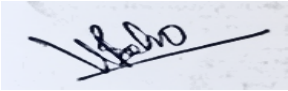

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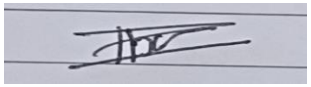
Module No. 5 Intellectual Property Rights	Chapter - III - Competition Act 2002: Concept, Salient Features, Objectives and Advantages. Chapter IV Abuse of Dominant Position, Competition Commission of India, Anti-Competition Agreements.			
	Chapter I – Intellectual Property right: Concept, Nature, Introduction and background of IPR in India. Chapter II – IPR relating to patents, Concepts of Invention and discovery, comparison, Concepts of patents, General principals applicable to working of patented inventions, Terms of patents, Infringement of patent right and remedies. Chapter III - IPR Relating to Copyrights: Concept of Copyright, Ownership of Copy right, Duration or term of copy right, Original work and fairs use, Rights of copyright holder, Infringement of copyrights and Remedies. Chapter IV - IPR Relating to Trademarks: Concept, Functions, Types, trademarks that cannot be registered, Registration of	08		



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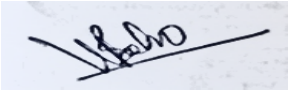

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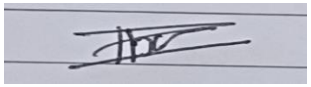
	trademarks and Rights of the Proprietor of Trade Marks. Procedure for registration of Trade Marks., infringement of Trademarks and Remedies.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40



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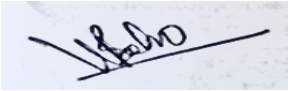

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____Tejaswini Yogesh Naik_____ DEPARTMENT: __Accountancy_____ CLASS: ___SYBCOM____
SEMESTER: IV (Subject : AUDITING)

MONTH: JANUARY TO APRIL ACADEMIC YEAR 2022-23 _____

LEARNING OBJECTIVE/S: Basic of Auditing , difference between auditing and accounting, types of errors and frauds, principles of audit, types of audit , audit planning, audit programme, audit working papers, test check, audit sampling, internal control, internal audit, vouching and verification

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	Intriduction to auditing	10 10	Manan publication	Blackboard

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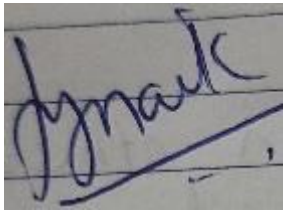

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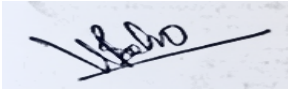

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TEACHING PLAN (UNIT PLAN)

		10 15		
	1. Audit planning procedures and documentation 2. Audit techniques and internal audit introduction Audit techniques: Vouching and verification			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____45

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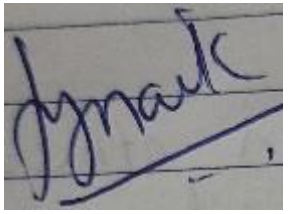

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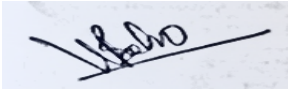

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TEACHING PLAN (UNIT PLAN)

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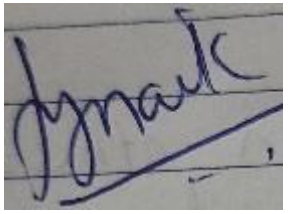

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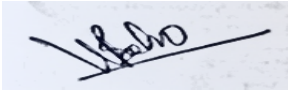

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Audrin Anthony Colaco DEPARTMENT: Accountancy CLASS: SYBCOM SEMESTER: IV (Subject :Auditing)

MONTH: Dec 2022 to April 2023 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To Know the objective, Limitation of audit & Difference between Accounting and Auditing, Investigation and Auditing.

To Understand Errors & Frauds, Types of Error, Types of frauds & Auditors Duties and Responsibilities in case of fraud.

To analyse the Principles of Audit & Types of Audit

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1. Introduction to Auditing	A. Basics Financial Statements, Users of Information, Definition of Auditing,Objectives of Auditing, Inherent limitations of Audit, Difference between Accounting and Auditing, Investigation and Auditing. B. Errors & Frauds - Definitions, Reasons and Circumstances, Types of Error,Types of frauds, Risk of fraud and Error in Audit, Auditors Duties and Responsibilities in case of fraud. C. Principles of Audit, Materiality, True and Fair view D. Types of Audit - Meaning, Advantages,Disadvantages of Balance sheet Audit, Interim Audit, Continuous Audit, Concurrent Audit and	15	1.Principles and Practice of auditing (Sultan chand &son) 2.Auditing Principle & Techniques (S.K.Basu) 3.Auditing (Dr. T.R. sharma)	Lecture Method , Black board, Google Classroom

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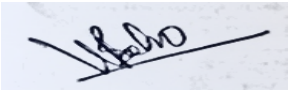

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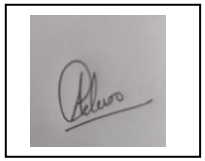
TEACHING PLAN (UNIT PLAN)

	Annual Audit, Statutory Audit			
Vouching and Verification	Vouching and verification of transactions and assets liabilities	15	1.Principles and Practice of auditing (Sultan chand &son) 2.Auditing Principle & Techniques (S.K.Basu) 3.Auditing (Dr. T.R. sharma)	Lecture Method , Black board, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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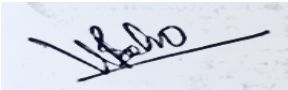

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: Business Economics CLASS: FYBCOM SEMESTER: IV (Subject: Business Economics IV

MONTH: November – March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Students will be able to understand basic concepts of Public Finance

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Business Economics III	Module 1:The role of state in the economy. Meaning and Scope of Public Finance, Major Fiscal Functions Principle of Maximum Social Advantage Market Failure and Role of Government	3 lectures per week	MACRO ECONOMIC THEORY - M.L.JHINGAN Advanced Macro Economics - H.L. AHUJA.	Chalk and Board Google Classroom Classroom Discussions
	Module 2: PUBLIC REVENUE: Sources, Canons, Types, Impact and Incidence of Taxation, Economic Effects, Nature of Taxation	3 lectures per week	Advanced Macro Economics - H.L. AHUJA.	Chalk and Board Google Classroom Classroom Discussions

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TEACHING PLAN (UNIT PLAN)

	Module 3: PUBLIC EXPENDITURE AND PUBLIC DEBTS: Classification, Economic effects, significance, Theories of public expenditure Public debt, Types of Public Debt, Effects of Public Debt, FRBM act		Advanced Macro Economics - H.L. AHUJA.	Chalk and Board Google Classroom Classroom Discussions
	Module 4: FISCAL MANAGEMENT AND FINANCIAL ADMINISTRATION: Fiscal Policy, Contra Cyclical and Fiscal Policy and Discretionary Fiscal Policy- Principle of Sound Finance and Functional Finance, Budget-Meaning, objectives and Types, Intergovernmental Fiscal Relations-Fiscal Federalism and Fiscal Decentralization.			Chalk and Board Google Classroom Classroom Discussions

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___10_

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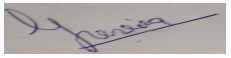
TEACHING PLAN (UNIT PLAN)



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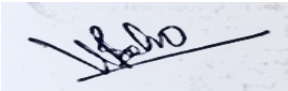

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. BRISTI BISWAS **DEPARTMENT**: Business Economics **CLASS**: SYBCOM **SEMESTER**: IV (**Subject**: BUSINESS ECONOMICS)

MONTH: NOVEMBER-MARCH **ACADEMIC YEAR**: 2022-2023

LEARNING OBJECTIVE/S: To learn a better role of an entrepreneur and skilled manager Build familiarity with the operation of markets and optimization in an economic context

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS IV	Module 1:THE ROLE OF GOVERNMENT IN AN ECONOMY: Meaning and Scope of Public Finance, Major Fiscal Functions, Principle of MSA-Dalton & Musgrave, Principles in Practice and its Limitations	15	Advanced Macro Economics - H.L. AHUJA.	Chalk and Duster
	Module 2: PUBLIC REVENUE: Sources, Canons, Types, Impact and Incidence of Taxation, Economic Effects, Nature of Taxation	15	Macro Economics - H.L.Ahuja	Chalk and Duster
Module I to Module IV	Module 3: PUBLIC EXPENDITURE AND PUBLIC DEBTS: Classification, Economic effects, significance, Contribution, Public debt burden of debt finance.	15	Advanced Economic Theory (M.L. Jhingan)	Chalk and Duster

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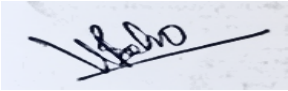

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	Module 4:FISCAL MANAGEMENT AND FINANCIAL ADMINISTRATION: Fiscal Policy, Contra Cyclical and Fiscal Policy and Discretionary Fiscal Policy-Principle of Sound Finance and Functional Finance, Budget-Meaning, objectives and Types, Intergovernmental Fiscal Relations-Fiscal Federalism and Fiscal Decentralization.	15	Advanced Economic Theory (M.L. Jhingan)	Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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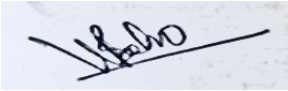

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pallavi Naik DEPARTMENT: B.Economics CLASS: SYBCOM SEMESTER: IV (Subject : B.ECONOMICS)

MONTH: December to march ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The fundamental concepts and issues of public finance

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
MODULE 1: The role of government in an economy	The role of government in an economy – Public finance , Efficiency – Market – Government , The principle of maximum social advantage		Manan prakashan	Chalk duster and blackboard
	Public revenue, Shifting of tax burden , Economic effects of Taxation	15	Seth publication	
Module 2 : Public revenue Module 3: Public expenditure and Public dept	Public expenditure : Canons , Classification and Effects, Growth of Public expenditure, Public expenditure and social welfare , Public Debt.			
	Fiscal policy , Types of fiscal policy , Types of Budget and concepts of Deficit , Intergovernmental Fiscal Relations.	15		
Module 4; Fiscal Management		15		

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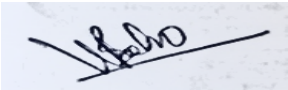

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and financial administration				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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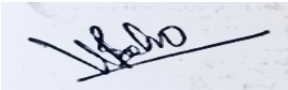

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. VERONIKA B. BARLA** DEPARTMENT: **BUS. ECONOMICS** CLASS: **F.Y.BCOM** SEMESTER: **IV** (Subject : **BUS. ECONOMICS-IV**)

MONTH: ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVES:

The student must be able to understand **THE ROLE OF GOVERNMENT IN AN ECONOMY**

The student must be able to understand **PUBLIC REVENUE**

The student must be able to understand **PUBLIC EXPENDITURE AND PUBLIC DEBT**

The student must be able to understand Fiscal policy and Management

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics - IV	Unit I		*Mehta, P.L.: Managerial Economics*	Google classroom, Google Forms CHALK DUSTER

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TEACHING PLAN (UNIT PLAN)

	Meaning and Scope of Public finance. • Major fiscal functions : allocation function, distribution function & stabilization function • Principle of Maximum Social Advantage: Dalton and Musgrave Views - the Principle in Practice, Limitations. • Relation between Efficiency, Markets and Governments • The concept of Public Goods and the role of Government	**10 lectures**	– *Analysis, Problem and Cases*	METHOD
	Unit-II Sources of Public Revenue : tax and non-tax revenues • Objectives of taxation - Canons of taxation - Types of taxes : direct and	15 lectures	H. L. AHUJA MORDEN ECONOMICS	

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TEACHING PLAN (UNIT PLAN)

	indirect - Tax Base and Rates of taxation : proportional, progressive and regressive taxation • ***Shifting of tax burden:*** Impact and incidence of taxation - Processes- factors influencing incidence of taxation • ***Economic Effects of taxation:*** on Income and Wealth, Consumption, Savings, Investments and Production. • ***Redistributive and Anti – Inflationary nature of taxation*** and their implications			
	Unit III: ***Public Expenditure:*** Canons - classification - economic effects of public spending - on production, consumption, distribution, employment and stabilization - Theories of Public Expenditure: Wagner's Hypothesis	**10 lectures**		

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TEACHING PLAN (UNIT PLAN)

	and Wiseman Peacock Hypothesis - Causes for Public Expenditure Growth - Significance of Public Expenditure: Low Income Support and Social Insurance Programmes. • **Public Debt :** Classification - Burden of Debt Finance : Internal and External- Public Debt and Fiscal Solvency			
	Unit IV: **fiscal Policy:** Meaning, Objectives, constituents and Limitations. • **Contra cyclical Fiscal Policy and Discretionary Fiscal Policy :** Principles of Sound and Functional Finance	**10 lectures**	Sumitra, Managerial Economics cases and concepts	

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	• ***Budget-*** Meaning objectives and types - Structure of Union budget - Deficit concepts • ***Intergovernmental Fiscal Relations :*** fiscal federalism and fiscal decentralization – centralstate financial relations			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani DEPARTMENT: Commerce CLASS: S.Y.B.Com SEMESTER: IV (Subject : Foundation Course IV)

MONTH: November to February ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

The learners will be able to :

_To develop and gain logical reasoning, critical thinking abilities, creating and testing hypotheses and thus opening doors to research.

_To measure verbal reasoning, quantitative reasoning, and analytical writing.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
FC Unit II Approaches to understanding ecology	A Understanding approaches to ecology-Anthropocentrism, B Biocentrism and Ecocentrism, Ecofeminism and Deep ecology.	12	Sheth Publishers Michael Vaz Aurara vaz:foundation course	Lecture method, interative method

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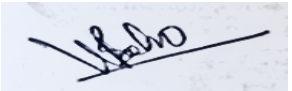

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TEACHING PLAN (UNIT PLAN)

	C Environmental Principles-i) The sustainability principle, ThePolluter Pays Principle , The Precautionary Principle. Environmental Principles-ii) The Equity Principle;		Newspapers	
Unit IV Introduction to competitive exams	Part A: Basic information on competitive examinations- The pattern, eligibility criteria and local centres. i) Examinations conducted for entry into professional courses- GRE, GMAT, CAT,SAT. ii) Examination conducted for entry into jobs by UPSC,SSC, Banking and Insurance sector, NET-SET. Part B: Soft skills for competitive examinations	12	Sheth Publishers Michael Vaz Aurara vaz:foundation course Newspapers	Lecture method, interative method

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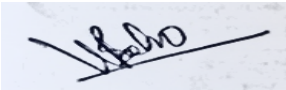

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TEACHING PLAN (UNIT PLAN)

	i) Information on area s tested: Quantitative ability, Data interpretation , Verbal ability and logical reasoning, creativity and lateral thinking. ii) Motivation: Concept, theories and types of motivations. iii) Goal setting: Types of goals, SMART Goals, Stephen Conveys concept of human endowment. iv) Time management: Effective strategies . Writing Skills: Paragraph writing, Report writing, Filing an application under the RTI Act, Grievance letter.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:24

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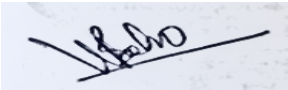

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Praktana Kore DEPARTMENT: _____ CLASS: _SYB.COM –G,H _____ SEMESTER: __IV IV (Subject : _____)

MONTH: _____December-February _____ ACADEMIC YEAR: _____ 2022-2023 _____

LEARNING OBJECTIVE/S: _To acquaint the learners with the basic concepts of Production Management, Inventory Management

_____

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED	
MODULE 1 PRODUCTION & INVENTORY MANAGEMENT	Production Management: Objectives, Scope Production Planning & Control : Steps, Importance	03	Production & Operations Management (Text & Cases)- K.Ashwathappa&G.Sudeshana Reddy, Himalaya Publication Essentials of Inventory Management- MaxMuller	1. Lecture method discussion. 2. Flow charts.	1.Lect 2. Flov
	Production Systems: Concept, Types - Continuous and Intermittent. Productivity: Concept, Factors Influencing Productivity, Measures for improving Productivity.	04			
	Inventory Management- Objectives, Inventory Control- Techniques. Scientific Inventory Control System - Importance	04			

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TEACHING PLAN (UNIT PLAN)

	Introduction to Quality: Dimensions of Quality, Cost of Quality: Types – Internal Failure Cost, External Failure Cost, Appraisal Cost, Prevention Cost, Quality Circle: Features.			
	Quality Management Tools: TQM – Importance, Six Sigma – Process, ISO 9000 – Certification Procedure, Kaizen – Process			
	Service Quality Management: Importance, SERVQUAL Model,Measures to improve service quality.			

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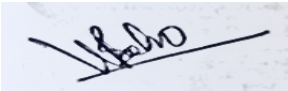

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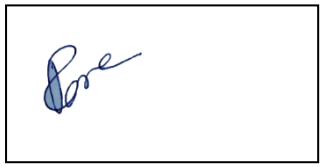
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____



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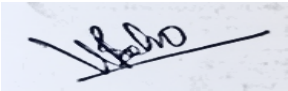

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Rakhee Oza DEPARTMENT: Commerce CLASS: S.Y.B.Com (E,F) SEMESTER: IV

MONTH: June to July ACADEMIC YEAR: 2022-2023 Subject: Commerce

LEARNING OBJECTIVES:
To acquaint the learners with the basic concepts of Production Management, Inventory Management.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED	
MODULE 1 PRODUCTIO N & INVENTORY	Production Management: Objectives, Scope Production Planning &Control : Steps, Importance	03	Production & Operation Management (Text & Cases)- K.Ashwathappa&G.Sudeshana Reddy, Himalaya Publication Essentials of Inventory Management- MaxMuller	1. Lecture and discussion. 2. Flow charts.	1.Lectu 2. Flov
	Production Systems: Concept, Types - Continuous and Intermittent. Productivity: Concept, Factors Influencing Productivity, Measures for improving Productivity.				

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TEACHING PLAN (UNIT PLAN)

MANAGEMENT	Inventory Management- Objectives, Inventory Control- Techniques. Scientific Inventory Control System - Importance	04			
	Introduction to Quality: Dimensions of Quality, Cost of Quality: Types – Internal Failure Cost, External Failure Cost, Appraisal Cost, Prevention Cost, Quality Circle: Features.	04			
	Quality Management Tools: TQM – Importance, Six Sigma – Process, ISO 9000 – Certification Procedure, Kaizen – Process				
	Service Quality Management: Importance, SERVQUAL Model,Measures to improve service quality.				

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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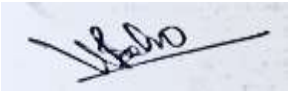

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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

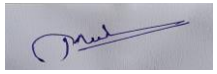
NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: SYB.COM – I, J

SEMESTER: IV MONTH: December-February ACADEMIC YEAR: 2022-2023 SUBJECT: COMMERCE-IV

LEARNING OBJECTIVE/S: To acquaint the learners with the basic concepts of Production Management, Inventory Management

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
MODULE 1 PRODUCTION & INVENTORY MANAGEMENT	Production Management: Objectives, Scope Production Planning &Control : Steps, Importance	03	Production & Operation Management (Text & Cases)- K.Ashwathappa&G.Sudesh ana Reddy, Himalaya Publication Essentials of Inventory Management-MaxMuller	1.Lecture and discussion. 2. Flow charts. 3.Online teaching learning tools (google meet, google form Google classroom, PPTs)
	Production Systems: Concept, Types - Continuous and Intermittent. Productivity: Concept, Factors Influencing Productivity, Measures for improving Productivity.	04		
	Inventory Management- Objectives, Inventory Control- Techniques. Scientific Inventory Control System - Importance	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11*2=22



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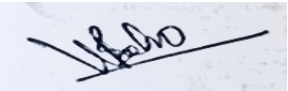

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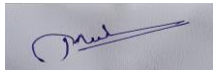
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: SYB.COM – I, J

SEMESTER: IV MONTH: December-February ACADEMIC YEAR: 2022-2023 SUBJECT: COMMERCE-IV

LEARNING OBJECTIVE/S: To acquaint the learners with the basic concepts of Quality Management.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
MODULE 2 QUALITY MANAGEMENT	Introduction to Quality: Dimensions of Quality, Cost of Quality: Types – Internal Failure Cost, External Failure Cost, Appraisal Cost, Prevention Cost, Quality Circle: Features.	04	Production and Operations Management – ProfL.C.Jhamb, Event Publishing House. .Production Planning & Control- ProfL.C.Jhamb, Event Publishing House	1.Lecture and discussion. 2. Flow charts. 3.Online teaching learning tools (google meet, google form Google classroom, PPTs)
	Quality Management Tools: TQM – Importance, Six Sigma – Process, ISO 9000 – Certification Procedure, Kaizen – Process	03		



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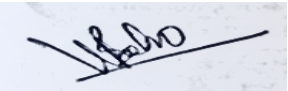

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TEACHING PLAN (UNIT PLAN)

	Service Quality Management: Importance, SERVQUAL Model,Measures to improve service quality.	03	Production & Operation Management (Text & Cases)- K.Ashwathappa&G.Sudesh ana Reddy, Himalaya Publication.	

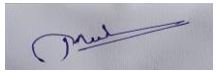
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10*2=20

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: SYB.COM – I, J

SEMESTER: IV MONTH: December-February ACADEMIC YEAR: 2022-2023 SUBJECT: COMMERCE-IV

LEARNING OBJECTIVE/S: To provide basic knowledge about Indian Financial Systems.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED



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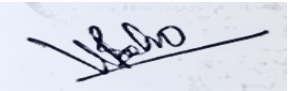

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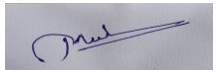
TEACHING PLAN (UNIT PLAN)

MODULE 3 INDIAN FINANCIAL SYSTEM	Indian Financial Market: Structure, Primary Market – IPO Procedure Dematerialisation: Process, Role of Depositories : NSDL and CDSL	04	. Indian Financial System—BharathiPathiak, Pearson Publication Financial Institutions and Markets : StructureGrowth & Innovations – L.M.Bhole , Jitendra Mahakad, The IndianFinancial System and Financial Market Operator-VasantDesai, Himalaya Publishing Indian Financial System – M.Y.Khan, Tata McGraw – Hill	1.Lecture and discussion. 2. Flow charts. 3.Online teaching learning tools (google meet, google form Google classroom, PPTs)
	SEBI: Functions of SEBI, Investors protection measures of SEBI. Stock Exchange – Functions, Speculators.	04		
	Credit Rating: Advantages, Credit Rating Agencies in India - CRISIL, CARE, and ICRA.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12*2=24

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: SYB.COM – I, J



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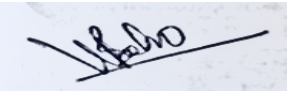

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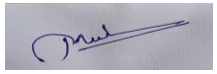
TEACHING PLAN (UNIT PLAN)

SEMESTER: IV MONTH: December-February ACADEMIC YEAR: 2022-2023 SUBJECT: COMMERCE-IV

LEARNING OBJECTIVE/S: To update the learners with the recent trends in Finance.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
MODULE 4 RECENT TRENDS IN FINANCE	Mutual Funds- Advantages and Limitations, Types, Factors responsible for growth of mutual funds – Systematic Investment Plan.	04	Mutual Funds in India: Emerging Issues- NaliniPravaTripathy, Excel Books New Delhi. A Trades Guide to Indian Commodities Market-Vijay L. Bhambwani, Network 18 Publication Ltd.	1.Lecture and discussion. 2. Flow charts. 3.Online teaching learning tools (google meet, google form Google classroom, PPTs)
	Commodity Market: Categories, Derivatives Market: Types, Participants, Types of Derivative Instruments.	04		
	Start-up Ventures –Concept, Sources of Funding, Micro Finance – Importance, Role of Self Help Groups.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12*2=24



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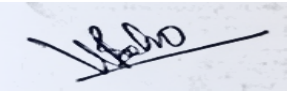

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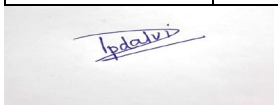
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM (DIV G&H) SEMESTER: III (Subject : Advertising)

MONTH: NOVEMBER TO FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Gain knowledge about advertising, its benefits, scope, function, different media in advertising.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT-1 Media in Advertising	**Traditional Media:** Print, Broadcasting, Out-Of-Home advertising and films - advantages and limitations of all the above traditional media. **New Age Media:** Digital Media Forms, Significance and Limitations **Media Research:** Concept, Important, Tool for regulation- ABC and Doordarshan Code.	11	Marketing Management by Philip Kotler	Chalk and talk method



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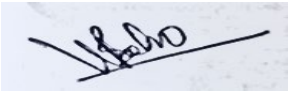

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TEACHING PLAN (UNIT PLAN)

UNIT-2 Planning Advt Campaign				
	Advertising Campaign – Concept , Planning , Steps , Objectives , DAGMAR model **Advertising Budget** – Facctors determining advt budget, Methods, Media Objectives **Media Planning** - Concept , Process , Media Scheduling Strategies	11		Chalk and talk method
UNIT 3 – Fundamentals of Creativity in Advertising	**Creativity:** Concept and Importance, Creative Process, Concept of Creative Brief, Techniques of Visualization. • **Creative aspects:** Buying Motives - Types, Selling Points Features, Appeals Preposi	11		Chalk and talk method

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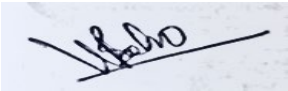

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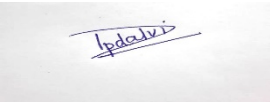
TEACHING PLAN (UNIT PLAN)

UNIT 4 - Execution and Evaluation of Advertising	**Preparing print ads** - essentials of copywriting, Copy- elements, types, Layout – principles, Illustration- importance. **Creating broadcast ads** : Execution styles, jingles and music importance, Concept of Storyboard **Evaluation** - Advertising copy, Pre- test and Post- test of advertisements , Methods and Objectives.	12	Marketing Management by Philip Kotler	Chalk and talk method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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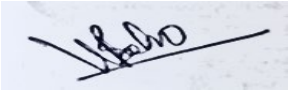

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM (DIV C & D) SEMESTER: III (Subject : Commerce IV)

MONTH: NOVEMBER TO FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To gain the knowledge of production, planning and inventory management .

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1 – Production and Inventory Management	**Production Management** - Objectives , Scope. PPC :steps and importance **Production System** - Concept , Types **Productivity** - Concept , Factors and Measures. **Inventory Management :** Objectives , Inventory Control Techniques. Scientific Inventory Control System- Importance.	11	Production and Operation Management – S N Chary	Chalk and talk method

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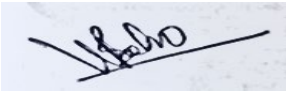

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TEACHING PLAN (UNIT PLAN)

UNIT-2 Quality Management	**Introduction to Quality** – dimensions **Cost of Quality** – Types **Quality Management Tools** – TQM , SIX SIGMA , ISO 9000, KAIZEN PROCESS. Service Quality Management – Importance , SERVQUAL model , Measures to improve service quality	10	Total Quality Management – Stephen George and Arnold Weimerskirch	Chalk and talk method
UNIT 3 – Indian Financial System	**Indian Financial Market – Structure ,** IPO process ,Role of Depositories : NSDL and CDSL **SEBI** : Functions, Measures of SEBI , Stock Exchange – Functions and speculators **Credit Ratings –** Advantages , CRISIL , CARE , ICRA	12	Indian Financial System – Bharati Pathak	Chalk and talk method

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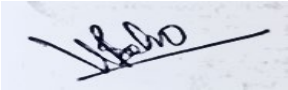

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TEACHING PLAN (UNIT PLAN)

UNIT 4 - Recent Trends in Finance	**Mutual Funds** – Advantages , Limitation, Types , Factors responsible. **Commodity Market -** Types **Derivative Market –** Types , participants , types of derivative instruments. **Start Up Ventures –** Concept , Sources **Micro Finance –** Importance , Role of SHG	12	Indian Financial System – Bharati Pathak. Banking and Micro Finance in India – Minimol M C	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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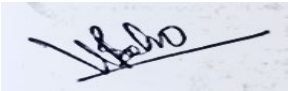

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM (ALL DIVISIONS) SEMESTER: III (Subject : NSS FC IV)

MONTH: NOVEMBER TO FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Gain knowledge about National Service Scheme, its benefits to the society, scope for the NSS volunteers

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT-1 Entrepreneurship Development and Schemes	• Entrepreneurship development – meaning • Attributes of entrepreneur • Women entrepreneurship • Government and self-employment schemes • Skill India, Start up India, Digital India, Make in India, • NITI Aayog	12	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi.And 2. University of Mumbai National	Chalk and talk method

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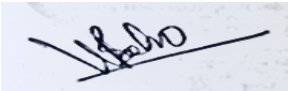

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			Service Scheme Manual,2009.	
UNIT-2 Cottage Industries in India	• Cottage industries – meaning • Pre independence & Post independence scenario • Marketing of Cottage Products and outlets • Government policies to encourage cottage industries • Hurdles in the development of cottage industries	10	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi.And 2. University of Mumbai National Service Scheme Manual,2009.	Chalk and talk method
UNIT 3 - Rural Resource Mobilization	• **Resources Mobilization – Meaning** • Case Study of Eco – Village, Eco – Tourism, Agro – Tourism • **UNIT - II Concept of " Ideal Village "** • Gandhian Concept of " Ideal Village " • Case Studies on Ideal Village – Raleganssiddhi, Hiware Bazar, MendhaLekha		1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs	Chalk and talk method

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and Ideal Village		12	and sports, New Delhi.And 2. University of Mumbai National Service Scheme Manual,2009.	
UNIT 4 - Voluntary Organisations and Non-Govt. Organisations in Maharashtra	• **UNIT - I** • Search • Anandwan • Muktangan • **UNIT – II** • Snehalay • Halo Medical Foundation (HMF) • Bharatiya Agro Industries Foundation (BAIF)	11	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi.And 2. University of Mumbai National Service Scheme Manual,2009.	Chalk and talk method

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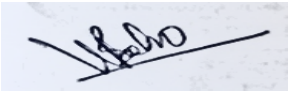

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani DEPARTMENT: Commerce CLASS: S.Y.B.Com SEMESTER: IV (Subject : Foundation Course IV)

MONTH: November to February ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

The learners will be able to :

_To develop and gain logical reasoning, critical thinking abilities, creating and testing hypotheses and thus opening doors to research.

_To measure verbal reasoning, quantitative reasoning, and analytical writing.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
FC Unit II Approaches to understanding ecology	A Understanding approaches to ecology-Anthropocentrism, B Biocentrism and Ecocentrism, Ecofeminism and Deep ecology.	12	Sheth Publishers Michael Vaz Aurara vaz:foundation course	Lecture method, interative method

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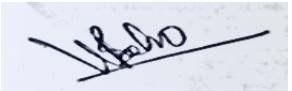

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TEACHING PLAN (UNIT PLAN)

	C Environmental Principles-i) The sustainability principle, ThePolluter Pays Principle , The Precautionary Principle. Environmental Principles-ii) The Equity Principle;		Newspapers	
Unit IV Introduction to competitive exams	Part A: Basic information on competitive examinations- The pattern, eligibility criteria and local centres. i) Examinations conducted for entry into professional courses- GRE, GMAT, CAT,SAT. ii) Examination conducted for entry into jobs by UPSC,SSC, Banking and Insurance sector, NET-SET. Part B: Soft skills for competitive examinations	12	Sheth Publishers Michael Vaz Aurara vaz:foundation course Newspapers	Lecture method, interative method

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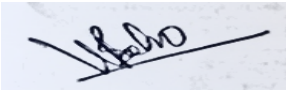

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TEACHING PLAN (UNIT PLAN)

	i) Information on area s tested: Quantitative ability, Data interpretation , Verbal ability and logical reasoning, creativity and lateral thinking. ii) Motivation: Concept, theories and types of motivations. iii) Goal setting: Types of goals, SMART Goals, Stephen Conveys concept of human endowment. iv) Time management: Effective strategies . Writing Skills: Paragraph writing, Report writing, Filing an application under the RTI Act, Grievance letter.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:24

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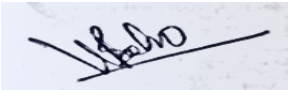

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jinal Chohan_____ DEPARTMENT: __Commerce__ CLASS: __SYBCOM I & J__ SEMESTER: IV__ (Subject : Advertising__)

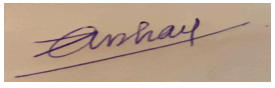
MONTH: November to March _____ ACADEMIC YEAR: __2022-23_____

LEARNING OBJECTIVE/S: _Gain knowledge about advertising, its benefits, scope, function, different media in advertising.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 1 Media in Advertising	Traditional Media: Print, Broadcasting, Out-Of-Home advertising and films - advantages and limitations of all the above traditional media New Age Media: Digital Media Forms, Significance and Limitations Media Research: Concept, Important, Tool for regulation- ABC and Doordarshan Code.	11	Marketing Management by Philip Kotler	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES		EACHING METHOD/ ICT TOOLS USED



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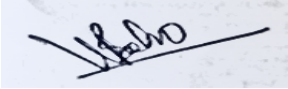

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TEACHING PLAN (UNIT PLAN)

		ALLOTED	REFERENCE/S	
UNIT 2 Planning Advertising Campaign	Advertising Campaign – Concept , Planning , Steps , Objectives , DAGMAR model Advertising Budget – Facctors determining advt budget, Methods, Media Objectives Media Planning - Concept , Process , Media Scheduling Strategies	**11**	Marketing Management by Philip Kotler	**Chalk and board**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____11

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE /S	EACHING METHOD/ ICT TOOLS USED
Unit 3 Fundamentals of Creativity in Advertising	**Creativity:** Concept and Importance, Creative Process, Concept of Creative Brief, Techniques of Visualization. **Creative aspects:** Buying Motives - Types, Selling Points Features, Appeals Preposition (USP)	11	Marketing Management by Philip Kotler	Chalk and Board

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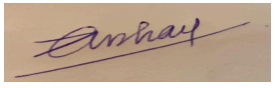
TEACHING PLAN (UNIT PLAN)

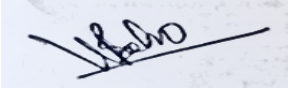
	Creativity through Endorsements: Endorsers Types, Celebrity Endorsements - Advantages and Limitations, High Involvement and Low Involvement Products			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____11

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
Unit 4	Preparing print ads - essentials of copywriting, Copy- elements, types, Layout – principles, Illustration- importance. Creating broadcast ads : Execution styles, jingles and music importance, Concept of Storyboard Evaluation - Advertising copy, Pre- test and Post- test of advertisements , Methods and Objectives.	11	Marketing Management by Philip Kotler	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____11





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TEACHING PLAN (UNIT PLAN)

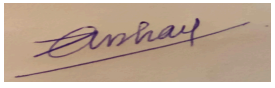
NAME OF THE STAFF: Jinal Chohan_____ DEPARTMENT: __Commerce_IV_ CLASS: __SYBCOM A&B_ SEMESTER: IV__ (Subject : Advertising__)

MONTH: November to March _____ ACADEMIC YEAR: __2022-23_____

LEARNING OBJECTIVE/S: _To update the learners with the recent trends in Finance.

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	EACHING METHOD/ ICT TOOLS USED
MODULE 1 PRODUCTION & INVENTORY MANAGEMENT	Production Management: Objectives, Scope Production Planning &Control : Steps, Importance Production Systems: Concept, Types - Continuous and Intermittent. Productivity: Concept, Factors Influencing Productivity, Measures for improving Productivity. Inventory Management- Objectives, Inventory Control-Techniques. Scientific Inventory Control System - Importance	11	Production & Operation Management (Text & Cases)- K.Ashwathappa &G.Sudeshana	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____



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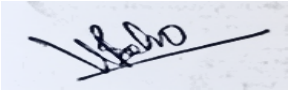

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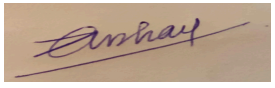
TEACHING PLAN (UNIT PLAN)

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE	EACHING METHOD/ ICT TOOLS USED
Packaging, Product positioning, service Positioning	Introduction to Quality: Dimensions of Quality, Cost of Quality: Types – Internal Failure Cost, External Failure Cost, Appraisal Cost, Prevention Cost, Quality Circle: Features.	**11**	Production & Operation Management (Text & Cases)	**Chalk and Board**
	Quality Management Tools: TQM – Importance, Six Sigma – Process, ISO 9000 – Certification Procedure, Kaizen – Process			
	Service Quality Management: Importance, SERVQUAL Model,Measures to improve service quality.			

Total number of lectures alloted - 11



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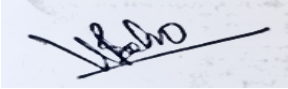

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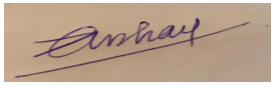
TEACHING PLAN (UNIT PLAN)

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE /S	EACHING METHOD/ ICT TOOLS USED
MODULE 3 INDIAN FINANCIAL SYSTEM	Indian Financial Market: Structure, Primary Market – IPO Procedure Dematerialisation: Process, Role of Depositories : NSDL and CDSL	11	Production & Operation Management (Text & Cases)	Chalk and board
	SEBI: Functions of SEBI, Investors protection measures of SEBI. Stock Exchange – Functions, Speculators.			
	Credit Rating: Advantages, Credit Rating Agencies in India - CRISIL, CARE, and ICRA.			

Total number of lectures alloted -11

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED



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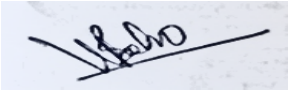

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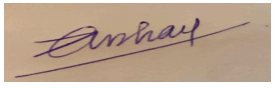
TEACHING PLAN (UNIT PLAN)

		ALLOTED		
MODULE 4 RECENT TRENDS IN FINANCE	Mutual Funds- Advantages and Limitations, Types, Factors responsible for growth of mutual funds – Systematic Investment Plan. Commodity Market: Categories, Derivatives Market: Types, Participants, Types of Derivative Instruments. Start-up Ventures –Concept, Sources of Funding, Micro Finance – Importance, Role of Self Help Groups.	11	Production & Operation Management r	Chalk and board

Total number of lectures alloted - 11



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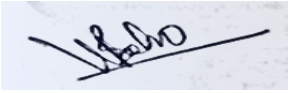

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NAAC accredited "B" Grade, 2.69 CGPA
TEACHING PLAN (UNIT PLAN)

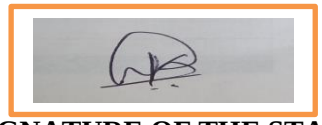
NAME OF THE STAFF: **KAUSHIK SAVE** DEPARTMENT: **ACCOUNTANCY** CLASS: **SYBCOM– I,J,K,L** SEMESTER: **III**
MONTH: **June to October 2022** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: The learners will be able to:

1. What is Auditing, what are the objective, Limitation of audit & Difference between Accounting and Auditing, Investigation and Auditing.
2. What is Errors & Frauds, Types of Error, Types of frauds & Auditors Duties and Responsibilities in case of fraud.
3. What are the Principles of Audit & Types of Audit

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Introduction to Auditing	A. Basics Financial Statements, Users of Information, Definition of Auditing,Objectives of Auditing, Inherent limitations of Audit, Difference between Accounting and Auditing, Investigation and Auditing. B. Errors & Frauds - Definitions, Reasons and Circumstances, Types of Error,Types of frauds, Risk of fraud and Error in Audit, Auditors Duties and Responsibilities in case of fraud. C. Principles of Audit, Materiality, True and Fair view D. Types of Audit - Meaning, Advantages,Disadvantages of Balance sheet Audit, Interim Audit, Continuous Audit, Concurrent Audit and Annual Audit, Statutory Audit	10	1.Principles and Practice of auditing (Sultan chand &son) 2.Auditing Principle & Techniques (S.K.Basu) 3.Auditing (Dr. T.R. sharma)	Lecture Method , Black board, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

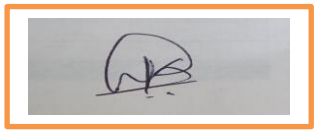
NAME OF THE STAFF: **KAUSHIK SAVE** DEPARTMENT: **ACCOUNTANCY** CLASS: **SYBCOM– I,J,K,L** SEMESTER: **III**
MONTH: **June to October 2022** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: The learners will be able to:

1. What is Audit Planning, Audit Program Audit Working Papers

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	TEACHING METHOD/ ICT TOOLS USED
2.Audit Planning, Procedures and Documentation	A.Audit Planning - Meaning, Objectives, Factors to be considered, Sources of obtaining information, Discussion with Client, Overall Audit Approach B.Audit Program - Meaning, Factors, Advantages and Disadvantages, Overcoming Disadvantages, Methods of Work, Instruction before commencing Work, Overall Audit Approach. C.Audit Working Papers - Meaning, importance, Factors determining Form and Contents, Main Functions / Importance, Features, Contents of Permanent Audit File, Temporary Audit File, Ownership, Custody, Access of Other Parties to Audit Working Papers, Auditors Lien on Working Papers, Auditors Lien on Client's Books.	10	Lecture Method , Black board, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

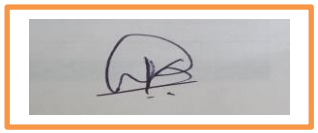
NAME OF THE STAFF: **KAUSHIK SAVE** DEPARTMENT: **ACCOUNTANCY** CLASS: **SYBCOM– I,J,K,L** SEMESTER: **III**
MONTH: **June to October 2022** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: The learners will be able to:

1. What is Test Check, Audit Sampling, Internal Control & Internal Audit

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3.Auditing Techniques and Internal Audit Introduction	A.Test Check- Test Checking Vs Routing Checking, test Check meaning, features, factors to be considered, when Test Checks can be used, advantages, disadvantages, precautions. B.Audit Sampling - Audit Sampling, meaning, purpose, factors in determining sample size - Sampling Risk, Tolerable Error and expected error, methods of selecting Sample Items Evaluation of Sample Results auditors Liability in conducting audit based on Sample C.Internal Control - Meaning and purpose, review of internal control, advantages, auditors duties, review of internal control, InherentLimitations of Internal control, internal control samples for sales and debtors, purchases and creditors, wages and salaries. Internal Checks Vs Internal Control, Internal Checks Vs Test Checks. D.Internal Audit: Meaning, basic principles of establishing Internal audit, objectives, evaluation of internal Audit by statutory auditor, usefulness of Internal Audit, Internal Audit Vs External Audit, Internal Checks Vs InternalAudit	15	1.Principles and Practice of auditing (Sultan chand &son) 2.Auditing Principle & Techniques (S.K.Basu) 3.Auditing (Dr. T.R. sharma)	Lecture Method , Black board, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

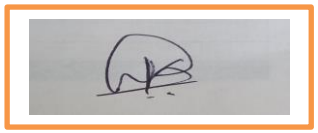
NAME OF THE STAFF: **KAUSHIK SAVE** DEPARTMENT: **ACCOUNTANCY** CLASS: **SYBCOM– G,H,I** SEMESTER: **III**
MONTH: **June to October 2022** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: The learners will be able to:

1. How to Vouch and Verify of Audit of Income, Audit of Expenditure, Audit of Assets & Audit of Liabilities

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
4.Auditing Techniques: Vouching & Verification	A. Audit of Income: Cash Sales, Sales on Approval, Consignment Sales, Sales Returns Recovery of Bad Debts written off, Rental Receipts, Interest and Dividends Received Royalties Received B. Audit of Expenditure Purchases, Purchase Returns, Salaries and Wages, Rent, Insurance Premium, Telephone expense Postage and Courier, Petty Cash Expenses, Travelling Commission Advertisement, Interest Expense C. Audit of Assets Book Debts / Debtors, Stocks - Auditors General Duties; Patterns, Dies and Loose Tools, Spare Parts, Empties and Containers Quoted Investments and Unquoted Investment Trade Marks / Copyrights Pater Know-How Plant and Machinery Land and Buildings Furniture and Fixture D. Audit of Liabilities: Outstanding Expenses, Bills Payable Secured Unsecured Loans, Contingent Liabilities	10	1.Principles and Practice of auditing (Sultan chand &son) 2.Auditing Principle & Techniques (S.K.Basu) 3.Auditing (Dr. T.R. sharma)	Lecture Method , Black board, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Kavita Vilas Purandare DEPARTMENT: Commerce CLASS: SYBCOM SEMESTER: IV
(Subject : Business Law) MONTH: November to March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To learn Indian Companies Act, 2013 Corporate Law and IPR, Indian Partnership Act 1932 and Consumer protection Act, 1986

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indian companies Act, 2013	• Company and its formation, definition, nature of company. • Advantages and disadvantages of company. • Membership of companies. • Types of companies • Memorandum of Association and Articles of Association • prospectus	15		Chalk and Board
Corporate Law and IPR	• Classification of directors, women directors • Meetings, various types of meeting of shareholders and board, convening and conduct of meeting • Intellectual Property Rights – salient features,	15		Chalk and Board
Indian Partnership	• Definition, types of partnership act. • Reconstitution of partnership firm, dissolution of the firm.	15		Chalk and Board

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TEACHING PLAN (UNIT PLAN)

Act, 1932	• Limited liability partnership			
Consumer Protection Act, 1986	• Introduction, definition of consumer, unfair trade practices • Consumer protection redressal agencies – jurisdiction. Penalties for complaints. • Competition Act 2002, objectives of the Act, Sailent features, competition commission of India.	15		Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_Dr. Mabel Lobo DEPARTMENT: Accountancy CLASS: S.Y. B. Com. SEMESTER: IV

SUBJECT: Financial Accounting and Auditing – Auditing MONTH: December 2022 to April 2023 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to: 1] Understand Need for Auditing
2] Acquire Knowledge tools and techniques of Auditing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Auditing	A. Basics – Financial Statements, Users of Information, Definition of Auditing, Objectives of Auditing, Inherent limitations of Audit, Difference between Accounting and Auditing, Investigation and Auditing. B. Errors & Frauds – Definitions, Reasons and Circumstances, Types of Error, Types of frauds, Risk of fraud and Error in Audit, Auditors Duties and Responsibilities in case of fraud. C. Principles of Audit, Materiality, True and Fair view D. Types of Audit – Meaning, Advantages, Disadvantages of Balance sheet Audit, Interim Audit, Continuous Audit, Concurrent Audit and Annual Audit, Statutory Audit	10	Principles of External Auditing Brenda Porter,	Chalk and Board

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TEACHING PLAN (UNIT PLAN)

Audit Planning, Procedures and Documentation	A. Audit Planning – Meaning, Objectives, Factors to be considered, Sources of obtaining information, Discussion with Client, Overall Audit Approach B. Audit Program – Meaning, Factors, Advantages and Disadvantages, Overcoming Disadvantages, Methods of Work, Instruction before commencing Work, Overall Audit Approach. C. Audit Working Papers – Meaning, importance, Factors determining Form and Contents, Main Functions / Importance, Features, Contents of Permanent Audit File, Temporary Audit File, Ownership, Custody, Access of Other Parties to Audit Working Papers, Auditors Lien on Working Papers, Auditors Lien on Client's Books.	10	Auditing Theory Ian Denni	Chalk and Board

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TEACHING PLAN (UNIT PLAN)

Auditing Techniques and Internal Audit Introduction	A. Test Check – Test Checking Vs Routing Checking, test Check meaning, features, factors to be considered, when Test Checks can be used, advantages, disadvantages, precautions. B. Audit Sampling – Audit Sampling, meaning, purpose, factors in determining sample size – Sampling Risk, Tolerable Error and expected error, methods of selecting Sample Items Evaluation of Sample Results auditors Liability in conducting audit based on Sample C. Internal Control – Meaning and purpose, review of internal control, advantages, auditors duties, review of internal control, Inherent Limitations of Internal control, internal control samples for sales and debtors, purchases and creditors, wages and salaries. Internal Checks Vs Internal Control, Internal Checks Vs Test Checks. D. Internal Audit : Meaning, basic principles of establishing Internal audit, objectives, evaluation of internal Audit by statutory auditor, usefulness of Internal Audit, Internal Audit Vs External Audit, Internal Checks Vs Internal Audit	15	Contemporary Auditing Michael C. Knapp	Chalk and Board

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TEACHING PLAN (UNIT PLAN)

Auditing Techniques : Vouching & Verification	A. Audit of Income : Cash Sales, Sales on Approval, Consignment Sales, Sales Returns Recovery of Bad Debts written off, Rental Receipts, Interest and Dividends Received Royalties Received B. Audit of Expenditure : Purchases, Purchase Returns, Salaries and Wages, Rent, Insurance Premium, Telephone expense Postage and Courier, Petty Cash Expenses, Travelling Commission Advertisement, Interest Expense C. Audit of Assets Book Debts / Debtors, Stocks – Auditors General Duties; Patterns, Dies and Loose Tools, Spare Parts, Empties and Containers Quoted Investments and Unquoted Investment Trade Marks / Copyrights Patents Know-How Plant and Machinery Land and Buildings Furniture and Fixtures D. Audit of Liabilities : Outstanding Expenses, Bills Payable Secured loans Unsecured Loans, Contingent Liabilities	10	Contemporary Auditing Michael C. Knapp	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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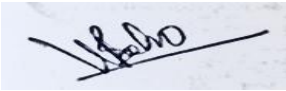
NAME OF THE STAFF: AMITA RAKESH PATIL DEPARTMENT: ACCOUNTANCY CLASS: TYBCOM SEMESTER: 5 (Subject : Financial Accounting)
MONTH: June - September ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
Unit 1 Final Accounts of Companies	Provisions of companies act related to preparation of final accounts , format of balance sheet and general instructions for preparation of balance sheet (Notes to accounts). Format of statement of P&L and general instructions for preparation ofstatement of P&L under guidance of ICAI (Notes to accounts). Adjustment of final accounts and adjustment effect , accounting standard.Practical Sums	18	Financial Ac. counting by R. Narayanaswamy	Disscussion Method and Black Board, Google classroom
Unit 2 Internal Reconstruction	Meaning and need of internal reconstruction , Difference between internal reconstruction and external reconstruction, methods and legal procedures. Accounting procedures, journal entries on internal reconstruction. Practical sums	18	Financial Ac. counting by R. Narayanaswamy	Disscussion Method and Black Board, Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36



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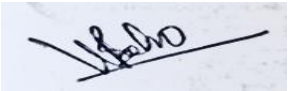

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : TYBCOM (G,H,I) SEM : V SUB: Commerce V MONTH : July-Oct. YEAR : 2022-23

LEARNINGOBJECTIVE/S : The learners will be able to learn various aspects about marketing. Marketing is very essential part of commerce. This subject is helpful to develop marketing skills among learners

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE I : INTRODUCTION TO MARKETING	Marketing Concept, features, importance, functions, evolution, Marketing research, marketing information system, data mining , Consumer behaviour, market segmentation, consumer relationship management, market targeting	10	Marketing Management by Philip Kotler	Chalk & board

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Module II **MARKETING DECISION I**	Marketing mix, product decision areas, Product life cycle, management of PLC, branding, brand equity, packaging, product positioning, service positioning, pricing, pricing strategies	10	Marketing Management by Philip Kotler	Chalk & board
Module III: Marketing decision II	Physical distribution, distribution channel, supply chain management, promotion, integrated marketing communications, sales management, personal selling	10	Marketing Management by Philip Kotler	Chalk & board

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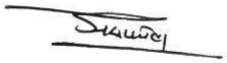
MODULE IV : KEY MARKETING DIMENSIONS Marketing	ethics, unethical practices in marketing, general role of consumer organisations, competitive strategies for market leader, market challenger, market follower, niche marketing, Rural marketing, digital marketing, green marketing, Challenges faced by marketing managers in 21st century, careers in marketing, success & failure of brands in India	12	Marketing Management by Philip Kotler	Chalk & board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 42



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _: Mr. ARJUN VISHWAKARMA DEPARTMENT: Commerce CLASS: _T.Y.Bcom SEMESTER: V (Subject : Computer System And Application)

MONTH: NOVEMBER - MARCH ACADEMIC YEAR: _2022- 2023_

LEARNING OBJECTIVE/S:
Learners will be able to understand the concept of Internet , computer Network , searching methods and cybercrime. Learners will be able to analyze the information using Spread Sheet and MySQL using SQL Language.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –I Data communication, networking and Internet	Data communication and components, data representation, distributed processing	01	Computer System And Application Manan Prakashan	POWER POINT PRESENTATION AND Google Meet , Board , Chalk and Duster
	Network basics and infrastructure - Definition, types (LAN,MAN,WAN) - Network structure - Topologies – Star, Bus Ring	01		

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	- Network media, wired- Twisted Pair , Co-axial, Fiber Optic and wireless radio and infrared. - Network hardware - HUBS, Bridges, Switches, Routers Network Protocols	01		
	Internet – Definition, Types of Connection, Hot-Spot, Services on Net – www, email, blog IP address, domain name, URL, Hyperlink, web browser, searching directories, Search engine, Boolean search (AND OR NOT), Advance search, meta search E-mail, parts of email address , cybercrime, hacking, sniffing, spoofing	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: <u>06</u>

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –II DATABASE AND MYSQL Unit – III DATABASE AND MYSQL	INTRODUCTION TO MYSQL	03	Computer System And Application Manan Prakashan and www.wikipedia.com	POWER POINT PRESENTATION AND DISCUSSION METHOD , Board , Chalk and Duster
	MYSQL BASIC	03		
	MYSQL built-in Functions , Multi table queries	06		
	Transaction	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4- MS-EXCEL	Excel- Calculations using Avg., Sum functions	02	Computer System And Application Manan Prakashan and www.wikipedia.com	POWER POINT PRESENTATION AND DISCUSSION METHOD , Board , Chalk and Duster
	Excel- Calculation of pivot Table.	02		
	Excel- Calculation of Selling Price. Simple interest and Compound Interest Excel- Excel Functions.	04		
	Excel- Calculation of Subtotal.	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

Practicals : - Computer System And Application
Sem - V

Sr. No.	Sub Topics	No. Of Lecture Allotted	TEACHING METHOD/ ICT TOOLS USED
Practical 1	Excel Calculations using SUM, AVG functions.	02	Projector and Computer, Black Board
Practical 2	Excel – Calculations of Subtotal	02	Projector and Computer, Black Board
Practical 3	Excel - Calculations of Pivot Table	02	Projector and Computer, Black Board
Practical 4	Excel – Excel functions	02	Projector and Computer, Black Board
Practical 5	Excel – Calculations selling Price	02	Projector and Computer, Black Board
Practical 6	MYSQL- creation of database and tables	02	Projector and Computer, Black Board
Practical 7	MYSQL- inserting values in tables	02	Projector and Computer, Black Board
Practical 8	MYSQL-alteration of columns	02	Projector and Computer, Black Board
Practical 9	MYSQL-Basic queries (select update, delete, Drop)	02	Projector and Computer, Black Board
Practical 10	MYSQL- Use of group by and Order by statements	02	Projector and Computer, Black Board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Audrin Anthony Colaco DEPARTMENT: Accountancy CLASS: TYBCOM SEMESTER: V (Subject :Direct Taxation)

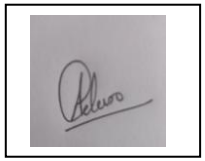
MONTH: June 2022 to Nov 2023 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To Know the heads of Income

To Understand concept of taxation

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Income from HP	Concept, Format, Interest, SOP, LOP, DLOP	10	Taxaman	Lecture Method , Black board, Google Classroom
Income from Other Source	Concept, Exemptions, Practical Problem	10	Taxaman	Lecture Method , Black board, Google Classroom
Total Income	Deductions, Practical Problems	10	Taxaman	Lecture Method , Black board, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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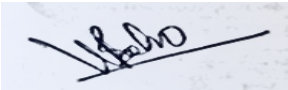

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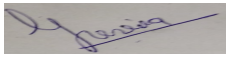
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: Business Economics CLASS: SYBCOM SEMESTER: V (Subject: Business Economics V

MONTH: June -October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The student must be able to understand Macro Economic overview of India

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Business Economics V	Unit I Overview of New Economic Policy-1991, - Role of Social Infrastructure with reference to education, health and family welfare. Sustainable Development Goals and Policy measures: Make in India, Invest in India, and Skill Development and Training Programmes. Foreign Investment Policy Measures in India – Foreign Investment Promotion Board, FDI- MNCs and their role.	3 lectures per week	Mehta P.L : Managerial Economics	Chalk and Board Google Classroom Classroom Discussions
	Unit-II National Agricultural Policy 2000: Objectives, Features and Implications, Agricultural pricing and agricultural finance Agricultural Marketing Development-Agricultural Market infrastructure - Market information- Marketing training- Enabling Environments-Recent Developments	3 lectures per week	Advanced Micro Economic Theory (H.L.	Chalk and Board Google Classroom Classroom Discussions



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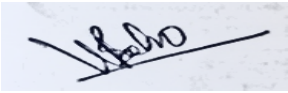

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TEACHING PLAN (UNIT PLAN)

	Pricing Practices: Price discrimination, marginal cost pricing, Mark-up pricing, multi-product pricing, Transfer pricing		Advanced Micro Economic Theory (H.L.	Chalk and Board Google Classroom Classroom Discussions
	Module 3: Competition Act of 2002 Industrial Sector in India Service Sector		Advanced Micro Economic Theory (H.L.	Chalk and Board Google Classroom Classroom Discussions
	Module 4: Banking Sector- Recent trends, issues and challenges in Banking and Insurance Industry Money Market – Structure, Limitations and Reforms.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___10_

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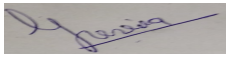

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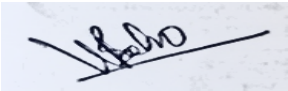

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: ACCOUNTANCY

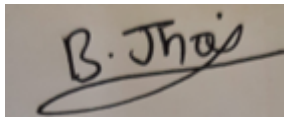
CLASS: Tybcom [O&N DIV] MONTH: AUGUST ACADEMIC YEAR: 2022-23

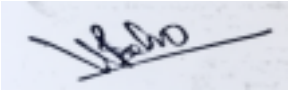
SEMESTER: V
SUBJECT:FINANCIAL ACCOUNTING)

LEARNING OBJECTIVE/S: TO IMPART THE PRACTICAL KNOWLEDGE OF FINANCIAL ACCOUNTING.
THE LEARNERS WILL BE ABLE TO: APPLY THESE FINANCIAL ACCOUNTING RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Preparation of Final Accounts of Companies	**Preparation of Final Accounts of Companies** Relevant provisions of Companies Act related to preparation of Final Account (excluding cash flow statement) Preparation of financial statements as per Companies Act. (excluding cash flow statement) AS 1 in relation to final accounts of companies (disclosure of accounting policies) Adjustments.	15	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Chalk & Duster Google classroom, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





SIGNATURE OF THE STAFF

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BABLI JHA DEPARTMENT: Accountancy CLASS: TYBCOM[M&L DIV] SEMESTER: V (Subject :Direct Taxation)

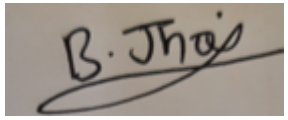
MONTH: JULY 2022 to Nov 2023 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To Know the heads of Income

To Understand concept of taxation

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Income from HP	Concept, Format, Interest, SOP, LOP, DLOP	10	Taxaman	Lecture Method , Black board, Google Classroom
Income from Salary	Salary Income: Section 15 – 17 Including Section 10 relating to House Rent Allowance, Travel Concession, Special Allowance, Gratuity, Pension ,Commutation, Leave Encashment, Compensation, Voluntary Retirement, Payment from Provident Fund Concept, Exemptions, Practical Problem	10	Taxaman	Lecture Method , Black board, Google Classroom
Total Income	Deductions, Practical Problems	10	Taxaman	Lecture Method , Black board, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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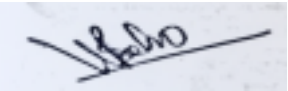

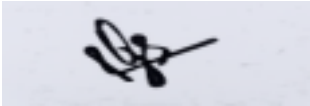

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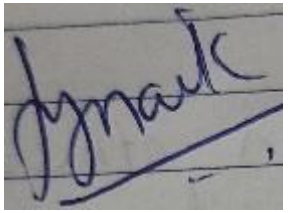
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____Tejaswini Yogesh Naik_____ DEPARTMENT: __Accountancy_____ CLASS: ___SYBCOM____
SEMESTER: IV (Subject : Direct tax

MONTH: JANUARY TO APRIL ACADEMIC YEAR 2022-23 _____

LEARNING OBJECTIVE/S: Difference in direct and indirect tax, meaning of income from salary, difference in allowance and perquisites, allowance, perquisites, gratuity,leave encashment, pension, retrenchment compensation, different types of house property, deduction u/s 24, gross annual value, net annual value, preconstruction interest, arrears and unrealised rent, income from business and profession, expenses which are allowed as deduction, expenses not allowed as deduction, section 32-37. Deduction under chapter VI A 80A,,80U,80D,80DD,80TTA,80E,80C,80CCC,80CCE

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	1. Intriduction 2. Definitions	2 2	Manan publication	Black board, ppt presentation



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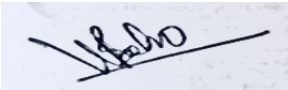

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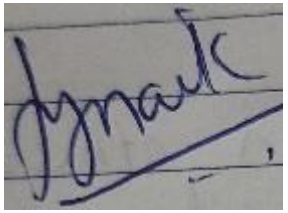
TEACHING PLAN (UNIT PLAN)

	3. Income from salary 4. Income from houseproperty 5. Income from capital gains 6. 6. Income from business and profession 7. Income from other sources 8. Deductions 9. Total income	5 4 5 5 5 4 4 3		



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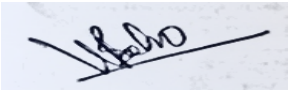

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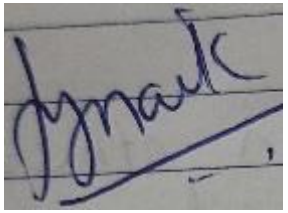
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____35



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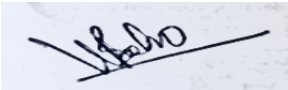

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TEACHING PLAN (UNIT PLAN)

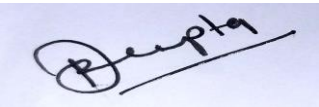
NAME OF THE STAFF: **Dr. DEEPAK GUPTA** DEPARTMENT: COMMERCE CLASS: T.Y.BCom SEMESTER: V Subject: COST ACCOUNTING

MONTH: JUNE, JULY, AUG & SEP ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1, 2 & 3	**Introduction To Cost Accounting** Objectives & scope of cost accounts, cost centre & cost units, cost Classification for stock valuation, coding system, elements of cost , cost Behaviour pattern	04	Arora M.N. Vikas Publication	Chalk-Board Method, Discussion, Google classroom.
	Classification Of Cost & Cost Sheet Classification of cost , cost of sales , cost unit, cost centres, cost sheet , Total cost & cost unit different cost for different purpose, simple Practical problems on preparation of cost sheet	15	Arora M.N. Vikas Publication	Chalk-Board Method, Discussion, Google classroom.
	Material Cost Procurement procedures Inventory control -techniques Inventory accounting Practical problems based on calculation of EOQ, material turnover ratio, Valuation of inventory based on FIFO method & weighted average method	11	Arora M.N. Vikas Publication	Chalk-Board Method, Discussion, Google classroom.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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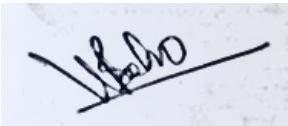

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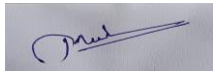
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: TYB.COM – O

SEMESTER: V MONTH: August-November ACADEMIC YEAR: 2022-2023 SUBJECT: EXPORT MARKETING

LEARNING OBJECTIVE/S:
1. To provide basic conceptual and applicative knowledge about exports and imports
2. To develop the student's employability and interpersonal skills

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
MODULE 3 India's Foreign Trade Policy	Foreign Trade Policy (FTP) 2015-20 - Highlights and Implications, Export Trade facilitations and ease of doing business as per the new FTP	03	• Export Policy Procedures& Documentation– M. I. Mahajan, Snow White Publications Pvt. Ltd, 26th Edition, • International Business, K. Aswathappa, McGraw-Hill Education (India) Pvt. Ltd.,6th Edition	1.Lecture and discussion. 2. Flow charts. 3.Online teaching learning tools (google meet, google form Google classroom, PPTs)
	Role of Directorate General of Foreign Trade (DGFT), Negative list of Exports, Deemed Exports	03		
	Benefits to Status Holders & Towns of Excellence; Common benefits for EHTP, BTP and STP; Benefits enjoyed by (IIAs) Integrated Industrial Areas (SEZ), EOU,AEZ	05		



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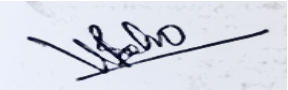

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TEACHING PLAN (UNIT PLAN)

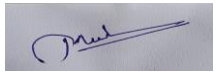
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: TYB.COM – O

SEMESTER: V MONTH: August-November ACADEMIC YEAR: 2022-2023 SUBJECT: EXPORT MARKETING

LEARNING OBJECTIVE/S:1. To provide basic conceptual and applicative knowledge about exports and imports
2. To develop the student's employability and interpersonal skills

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
	Financial Incentives available to Indian Exporters - Marketing Development Assistance (MDA), Market Access Initiative (MAI), Assistance to States for Infrastructure Development for Exports (ASIDE), Industrial Raw Material Assistance Centre(IRMAC),	04	• Export Policy Procedures& Documentation– M. I. Mahajan, Snow White	1.Lecture and discussion. 2. Flow charts. 3.Online teaching learning tools (google meet, google



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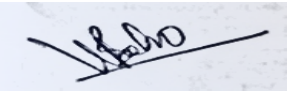

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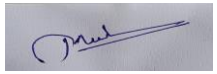
TEACHING PLAN (UNIT PLAN)

MODULE 4 Export Incentives and Assistance	Institutional Assistance to Indian Exporters - Federation of Indian Export Organisations (FIEO), India Trade Promotion Organisation (ITPO), The Federation of Indian Chambers of Commerce and Industry (FICCI), Export Promotion Councils (EPCs) & Commodity Boards (CBs), Indian Institute of Foreign Trade (IIFT), Indian Institute of Packaging (IIP)	04	Publications Pvt. Ltd, 26th Edition, • International Business, K. Aswathappa, McGraw-Hill Education (India) Pvt. Ltd.,6th Edition	form Google classroom, PPTs)
	Schemes - Export Promotion Capital Goods (EPCG) Scheme, Duty Exemption and Remission Schemes, Export Advance Authorisation Scheme; Duty Drawback (DBK); IGST Refund for Exporters	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11



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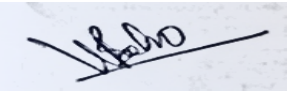

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Tejaswini Naik_____ DEPARTMENT: accountancy CLASS: Fybcom SEMESTER: _1_ (Subject : financial accounting)

MONTH: june-sept ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To give students an overview of how to keep systematic record of financial accounts and facilitate decision making.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED

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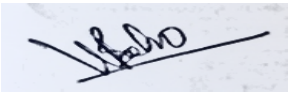

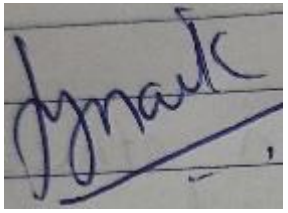

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TEACHING PLAN (UNIT PLAN)

	SUBTOPICS 1.Accounting standard 1 , 2 , and 9- Disclosure of accounting policies, stock valuation and revenue recognition.(theory only) 2. Inventory valuation – PROcess of purchase of inventory, method of valuation of stock- FIFO and weighed average method theory and practical questions. 3. Capital and revenue expenditure- difference, features, revenue income, capital income, theory and practical questions.	5 6 3	Manan publication	Blackboard

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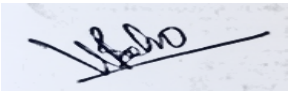

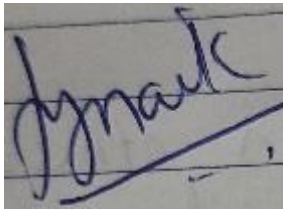

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TEACHING PLAN (UNIT PLAN)

	6. Accounting for Hire Purchase Meaning Calculation of interest Accounting for hire purchase transactions by asset purchase method based on full cash price Journal entries, ledger accounts and disclosure in balance sheet for hirer and vendor (excluding default, repossession and calculation of cash price)	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____21

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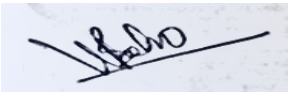

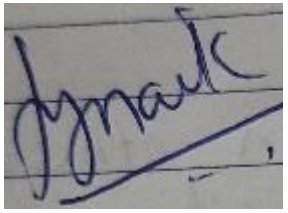

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TEACHING PLAN (UNIT PLAN)

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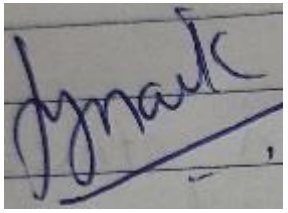

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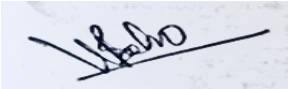

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TEACHING PLAN (UNIT PLAN)

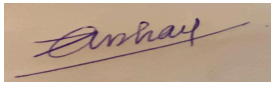
NAME OF THE STAFF: __Jinal Chohan_ DEPARTMENT: ___Commerce__ CLASS: TYBCOM O SEMESTER: _5_ (Subject :Export marketing_)

MONTH: __June-Dec_____ ACADEMIC YEAR: 2022-23_____

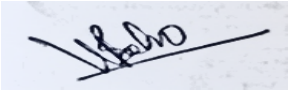
LEARNING OBJECTIVE/S: The learners will be able to learn various aspects about Export marketing. The students will have insight in the field of exports

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
MODULE I : INTRODUCTION TO EXPORT MARKETING	●Importanceof Exports Distinction between Domestic Marketing and Export Marketing ●Factors Influencing Export Marketing Major merchandise /commodities Export of India	10	Export Marketing Management by Philip Kotler	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__10__



SIGNATURE OF THE STAFF



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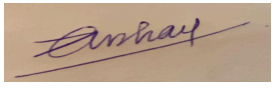
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
MODULE II - India's Foreign Trade Policy	1. Foreign Trade Policy 2015-20 2. Role of Directorate General of Foreign Trade(DGFT) 3. Benefits to Status Holders and Towns of Excellence	**10**	Export Marketing Management by Philip Kotler	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__10__



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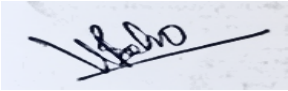

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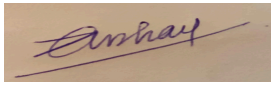
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jinal Chohan_____ DEPARTMENT: __Commerce__ CLASS: __TYBCOM __ SEMESTER: V__ (Subject : MHRM__)

MONTH: November to March _____ ACADEMIC YEAR: __2022-23_____

LEARNING OBJECTIVE/S: 1.To understands the concepts of marketing management 2.To learn about marketing process for different types of products and services 3. To understand the tools used by marketing managers in decision situations 4. To understand the marketing environment

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
Unit 1 INTRODUCTION TO MARKETING	Marketing, Concept, Features, Importance, Functions, Evolution, Strategic v/s Traditional Marketing	12	Phillip Kotler. (2005) Marketing	Chalk and Board
	Marketing Research- Concept, Features, Process Marketing Information System- Concept, Components Data Mining- Concept, importance			
	Consumer Behaviour- concept, Factors Influencing Consumer Behaviour Market Segmentation- Concept, Benefits, Bases of Market Segmentation			



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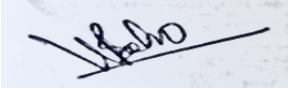

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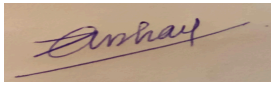
TEACHING PLAN (UNIT PLAN)

	CRM- Concept Techniques Market Targeting- Concept, Five Patterns of Target Market Selection			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__12__

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
Unit 2 MARKETING DECISION-I	**MARKETING MIX, Product Decision Areas, PLC, Branding, Brand Equity** **Packaging, Product positioning, service Positioning** **Pricing**	**12**	Phillip Kotler. (2005) Marketing Management,	**Chalk and Board**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__12__



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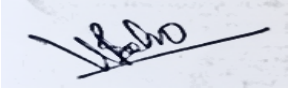

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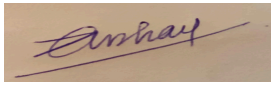
TEACHING PLAN (UNIT PLAN)

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE /S	EACHING METHOD/ ICT TOOLS USED
Unit 3 MARKETING DECISION -II	**Physical Distribution, supply Chain Management**	12	Phillip Kotler. (2005) Marketing	Chalk and Board
	Promotion , Integrated Marketing Communication			
	Sales Management, Personal Selling			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__12__



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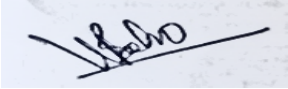

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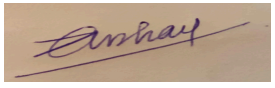
TEACHING PLAN (UNIT PLAN)

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
Unit 4 KEY MARKETING DIMENTIONS	Marketing Ethics, Competitive Strategies Rural Marketing, Digital Marketing , Green Marketing Challenges Faced by Marketing Managers, Careers in Marketing, Factors contributing to Success of Brands in India, Reasons for Failure of Brands in India	12	Phillip Kotler. (2005) Marketing Management,	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__12__



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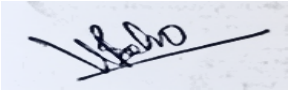

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

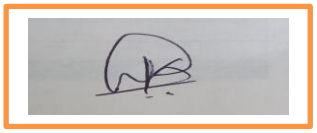
NAME OF THE STAFF: **KAUSHIK SAVE** DEPARTMENT: **ACCOUNTANCY** CLASS: **TYBCOM– N,O** SEMESTER: **V**
MONTH: **June to October 2022** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are the Provision regarding Income from House Property under Income Tax Act, 1961.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME	**Income From House Property:** Section 22 to 27, Including Section 2 - Annual Value	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Black board, Google Classroom.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

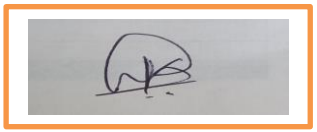
NAME OF THE STAFF: **KAUSHIK SAVE** DEPARTMENT: **ACCOUNTANCY** CLASS: **TYBCOM– N,O** SEMESTER: **V**
MONTH: **June to October 2022** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are the Provision regarding Income from Business and Profession under Income Tax Act, 1961.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME	**Profits & Gains From Business & Profession, Vocation** Section 28 to 32, 36, 37, 40, 40A, 43B, 44AD, 44ADA & 44AE Including.: Section 2 – Business	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Black board, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

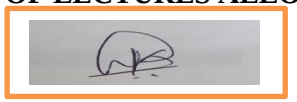
NAME OF THE STAFF: **KAUSHIK SAVE** DEPARTMENT: **ACCOUNTANCY** CLASS: **TYBCOM– N,O** SEMESTER: **V**
MONTH: **June to October 2022** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are provision of Income from Capital Gain under Income Tax Act, 1961
2. What are provision of Deductions under Chapter VI - A under Income Tax Act, 1961

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME	**Salary Income: Section 15 – 17** Including Section 10 relating to House Rent Allowance, Travel Concession, Special Allowance, Gratuity, Pension ,Commutation, Leave Encashment, Compensation, Voluntary Retirement, Payment from Provident Fund	15	1.Direct Taxes Law & Practice by V.K Singhania- TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Black board, Google Classroom
Deductions under Chapter VI – A	**80 A**-Restriction on claim in Chapter VI- A deductions **80 C**- Payment of LIC/PF and other eligible investments **80CCC** - Contribution to certain Pension Fund **80D** - Medical Insurance Premium **80 DD**- Maintenance and medical treatment of handicapped dependent **80E** - Interest on Educational Loan **80 TTA**-Interest on Saving Bank account **80D** - Deduction in the case of totally blind or physically handicapped or mentally retarded resident person			Black board, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

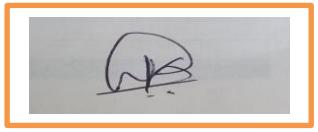
NAME OF THE STAFF: **KAUSHIK SAVE** DEPARTMENT: **ACCOUNTANCY** CLASS: **TYBCOM– N,O** SEMESTER: **V**
MONTH: **June to October 2022** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. How to Compute Taxable income of Individual and HUF.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMPUTATION OF TOTAL INCOME	Computation of Total Income of Individual and HUF with respect to above heads and deductions	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Black board, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR (CA) MABEL LOBO DEPARTMENT: ACCOUNTANCY CLASS: T.Y.B. Com. (Division A B C D I J) SEMESTER: V

MONTH: July to October ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & Remember- the meaning of income from House Property and calculation of income from House Property.
2) Understand & Remember- the meaning of Income from Business / Profession and calculation of Income from Business / Profession.
3) Understand & Remember- the meaning of Capital Assets and Calculation of Income thereon

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Heads of Income	Income from House Property	3	Book by Manan publications/Internet	Board and chalk
	Income from Business/ Profession	4	Book by Manan publications/Internet	Board and chalk
	Income from Capital Gain	3	Book by Manan publications/Internet	Board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO ALL DIVISIONS: 50

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR (CA) MABEL LOBO DEPARTMENT: ACCOUNTANCY CLASS: T.Y.B. Com. (Division A B C D I J)

SEMESTER: V MONTH: July to October ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & Remember- the meaning of Other sources and calculation of Income thereon.
2) Calculation of Total Income considering all heads of income
3) Understand & Remember- the meaning of Capital Assets and Calculation of Income thereon

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Heads of Income	Income from Other Sources	2	Book by Manan publications/Internet	Board and chalk
	Calculation of Total Income	4	Book by Manan publications/Internet	Board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE DIVISON : 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _: Mrs. Manjushri Oak ___ DEPARTMENT: __Commerce__ CLASS: _T.Y.Bcom SEMESTER: V (Subject : Computer System And Application)

MONTH: NOVEMBER - MARCH ACADEMIC YEAR: _2022- 2023_

LEARNING OBJECTIVE/S:
Learners will be able to understand the concept of Internet , computer Network , searching methods and cybercrime. Learners will be able to analyze the information using Spread Sheet and MySQL using SQL Language.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –I Data communication, networking and Internet	Data communication and components, data representation, distributed processing	01	Computer System And Application Manan Prakashan	POWER POINT PRESENTATION AND DISCUSSION METHOD , Board , Chalk and Duster
	Network basics and infrastructure - Definition, types (LAN,MAN,WAN) - Network structure - Topologies – Star, Bus Ring	01		

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	- Network media, wired- Twisted Pair , Co-axial, Fiber Optic and wireless radio and infrared. - Network hardware - HUBS, Bridges, Switches, Routers Network Protocols	01		
	Internet – Definition, Types of Connection, Hot-Spot, Services on Net – www, email, blog IP address, domain name, URL, Hyperlink, web browser, searching directories, Search engine, Boolean search (AND OR NOT), Advance search, meta search E-mail, parts of email address , cybercrime, hacking, sniffing, spoofing	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –II DATABASE AND MYSQL Unit – III DATABASE AND MYSQL	INTRODUCTION TO MYSQL	03	Computer System And Application Manan Prakashan and www.wikipedia.com	POWER POINT PRESENTATION AND DISCUSSION METHOD , Board , Chalk and Duster
	MYSQL BASIC	03		
	MYSQL built-in Functions , Multi table queries	06		
	Transaction	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4- MS-EXCEL	Excel- Calculations using Avg., Sum functions	02	Computer System And Application Manan Prakashan and www.wikipedia.com	POWER POINT PRESENTATION AND DISCUSSION METHOD , Board , Chalk and Duster
	Excel- Calculation of pivot Table.	02		
	Excel- Calculation of Selling Price. Simple interest and Compound Interest Excel- Excel Functions.	04		
	Excel- Calculation of Subtotal.	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

Practicals : - Computer System And Application
Sem - V

Sr. No.	Sub Topics	No. Of Lecture Allotted	TEACHING METHOD/ ICT TOOLS USED
Practical 1	Excel Calculations using SUM, AVG functions.	02	Projector and Computer, Black Board
Practical 2	Excel – Calculations of Subtotal	02	Projector and Computer, Black Board
Practical 3	Excel - Calculations of Pivot Table	02	Projector and Computer, Black Board
Practical 4	Excel – Excel functions	02	Projector and Computer, Black Board
Practical 5	Excel – Calculations selling Price	02	Projector and Computer, Black Board
Practical 6	MYSQL- creation of database and tables	02	Projector and Computer, Black Board
Practical 7	MYSQL- inserting values in tables	02	Projector and Computer, Black Board
Practical 8	MYSQL-alteration of columns	02	Projector and Computer, Black Board
Practical 9	MYSQL-Basic queries (select update, delete, Drop)	02	Projector and Computer, Black Board
Practical 10	MYSQL- Use of group by and Order by statements	02	Projector and Computer, Black Board

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TEACHING PLAN (UNIT PLAN)

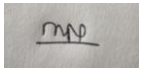
DEPARTMENT: COMMERCE- ACCOUNTANCY CLASS: TYBCOM SEMESTER: V (SUBJECT: COST ACCOUNTING MONTH: JUNE TO OCT ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO: APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. INTRODUCTION TO COST ACCOUNTING	OBJECTIVES & SCOPE OF COST ACCOUNTS, COST CENTRE & COST UNITS, COST CLASSIFICATION FOR STOCK VALUATION, CODING SYSTEM, ELEMENTS OF COST , COST BEHAVIOUR PATTERN	10	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	Chalk & Duster Google classroom, PPT
2. CLASSIFICATION OF COST & COST SHEET	CLASSIFICATION OF COST , COST OF SALES , COST UNIT, COST CENTRES, COST SHEET , TOTAL COST & COST UNIT DIFFERENT COST FOR DIFFERENT PURPOSE, SIMPLE PRATICAL PROBLEMS ON PREPARATION OF COST SHEET	10	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	Chalk & Duster Google classroom, PPT
3 MATERIAL COST	PROCUREMENT PROCEDURES INVENTORY CONTROL -TECHNIQUES INVENTORY ACCOUNTING PRATICAL PROBLEMS BASED ON CALCULATION OF EOQ, MATERIAL TURNOVER RATIO, VALUATION OF INVENTORY BASED ON FIFO METHOD & WEIGHTED AVERAGE METHOD	10	PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	Chalk & Duster Google classroom, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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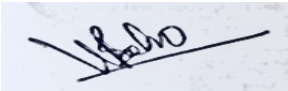

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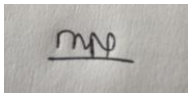
TEACHING PLAN (UNIT PLAN)

DEPARTMENT: COMMERCE- ACCOUNTANCY CLASS: TYBCOM SEMESTER: V (Subject: FINANCIAL ACCOUNTING) MONTH: JUNE TO OCT ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S: TO IMPART THE PRACTICAL KNOWLEDGE OF FINANCIAL ACCOUNTING.
THE LEARNERS WILL BE ABLE TO: APPLY THESE FINANCIAL ACCOUNTING RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Internal Reconstruction	Meaning and Need of Internal Reconstruction, Difference between internal reconstruction and external reconstruction, methods and legal procedures. Accounting procedures, journal entries on internal reconstruction. Accounting procedures, journal entries on internal reconstruction. Practical Illustrations	15	.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Chalk & Duster Google classroom, PPT
2. Preparation of Final Accounts of Companies	**Preparation of Final Accounts of Companies** Relevant provisions of Companies Act related to preparation of Final Account (excluding cash flow statement) Preparation of financial statements as per Companies Act. (excluding cash flow statement) AS 1 in relation to final accounts of companies (disclosure of accounting policies) Adjustments.	15	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Chalk & Duster Google classroom, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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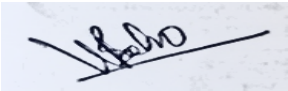

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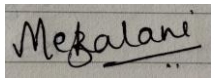
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mezbin Lalani DEPARTMENT: Accountancy CLASS: TYBCOM SEMESTER: V (Subject :Financial accounting)

MONTH: JUNE-OCT ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To enable students to understand various aspects of Financial Accounting.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1: Investment Accounting	Meaning of Investments, AS 13, types of investments, accounting for investment accounting as per As 13, Ex and cum interest prices, weighted average method, format of investment accounts, practical illustrations.	15	Khan & Jain	Chalk and duster, discussion, Google classroom, PDFs etc
Unit -2 Buy back of shares	Legal provisions related to buy back, restrictions, power, transfer to CRR, Compliances, journal entries, practical illustrations.	15	Khan & Jain	Chalk and duster, discussion, Google classroom, PDFs etc
Unit 3: Ethical behaviour and implication for Accountants	Meaning of ethical behaviour, corporate governance, corporate social responsibility, Rule based and principal based approach, IFAC code of ethics	15	Khan & Jain	Chalk and duster, discussion, Google classroom, PDFs etc



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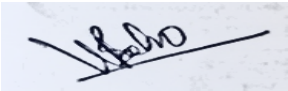

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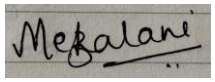
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___45



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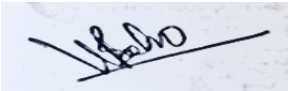

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: CA Monali Sankhe DEPARTMENT: ACCOUNTANCY CLASS: T.Y.B.COM div M,N SEMESTER: V MONTH: JUNE TO OCT ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To enable students to understand various aspects of Financial Accounting.
THE LEARNERS WILL BE ABLE TO: To apply the financial accounting techniques in day to day life practically.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Investment accounting 2. Buy back of shares 3. Ethical behaviour and Implication for accountants.	Meaning of Investments, AS 13, types of investments, accounting for investment accounting as per As 13, Ex and cum interest prices, weighted average method, format of investment accounts, practical illustrations.	15	Manan Prakashan, ICAI material	Chalk & Duster, Google classroom, PPT
	Legal provisions related to buy back, restrictions, power, transfer to CRR, Compliances, journal entries, practical illustrations.	15	Manan Prakashan, ICAI material	Chalk & Duster , Google classroom, PPT
	Meaning of ethical behaviour, corporate governance, corporate social responsibility, Rule based and principal based approach, IFAC code of ethics	15	Manan Prakashan, ICAI material	Chalk & Duster , Google classroom, PPT

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 per Division

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NAME OF THE STAFF: NEELAM.R. RATHORE DEPARTMENT: Commerce CLASS: T.Y.B.COM SEMESTER: V **(**Subject: Computer Systems and Application)

MONTH: JUNE – OCT. ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to understand the concept of Data Communication, Various communication media, and Various types of networks.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit-I Data Communication, Networking and Internet	Data Communication: Definition, Components, Data Representation, Data Transmission, Types Of Network(LAN, MAN, WAN), Network topology(STAR, BUS, RING, MESH), Network Media, Network Hardware, OSI(Open System Interconnection) Internet (Types of connections, Definitions), Services on the net, IP addresses, Domain Names, URLs, Hyperlinks, Web Browsers, Email, Cyber Crime, Hacking, Spoofing, Sniffing.	18	Computer System And Application Manan Prakashan	Black Board And Discussion Method

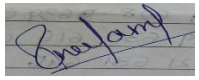
Unit-II Databases and MYSQL	SQL Basics: Primary, foreign and candidate key, Tables, data, information, Naming rules and conventions, database architecture, Database Queries: Datatypes, Create table, insert into table, deletion, updating, altering of data, Function- Text Function, Date and time function, Mathematical function,	09	Computer System And Application Manan Prakashan MYSQL The Complete Reference – By James.R. Groff	Black Board And Discussion Method
Unit-III Databases and MYSQL	MYSQL Simple Queries, select statements, filtering data using conditions, simple and complex conditions using logical, arithmetic, relational operators, Aggregate functions, Multitable queries (inner join), Nested Queries.	09	Computer System And Application Manan Prakashan MYSQL The Complete Reference – By James.R. Groff	Black Board And Discussion Method
Unit-IV Spreadsheet	Creating and Navigating worksheets and adding information to worksheets, working with Multiple Spreadsheets, Functions in Excel(Financial, Mathematical, statistical) , Data Analysis- Sorting, Subtotal, Pivot tables,	09	Computer System And Application Manan Prakashan Excel 2013 Formulas-John Walkenbach	Black Board And Discussion Method

Practicals : - Computer System And Application

Sem - V

Sr. No.	**Sub Topics**	**No. Of Lecture Allotted**	**TEACHING METHOD/ ICT TOOLS USED**
Practical 1	Excel Calculations using SUM, AVG functions.	02	Projector and Computer, Black Board
Practical 2	Excel – Calculations of Subtotal	02	Projector and Computer, Black Board
Practical 3	Excel - Calculations of Pivot Table	02	Projector and Computer, Black Board
Practical 4	Excel – Excel functions	02	Projector and Computer, Black Board
Practical 5	Excel – Calculations selling Price	02	Projector and Computer, Black Board
Practical 6	MYSQL- creation of database and tables	02	Projector and Computer, Black Board
Practical 7	MYSQL- inserting values in tables	02	Projector and Computer, Black Board
Practical 8	MYSQL-alteration of columns	02	Projector and Computer, Black Board
Practical 9	MYSQL-Basic queries (select update, delete, Drop)	02	Projector and Computer, Black Board
Practical 10	MYSQL- Use of group by and Order by statements	02	Projector and Computer, Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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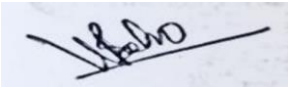

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TEACHING PLAN (UNIT PLAN)

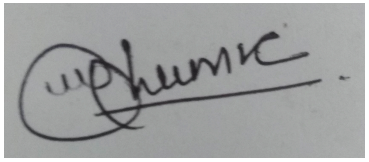
NAME OF THE STAFF: PROF.NILESHWARI VINAY GHUMRE

_ DEPARTMENT: COMMERCE. _ CLASS: SYBCOM SEMESTER: SEM IV_ MONTH: JAN TO MARCH ACADEMIC YEAR: 2022-23 SUB: COMMERCE IV

LEARNING OBJECTIVE/S:
The learners will be able to : Understand Quality Management, Quality Management Techniques, Service Quality Management .

Recent trends in finance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	***Introduction to Quality:** Dimensions of Quality, Cost of Quality, Types of Quality.			

[Type h  ere]

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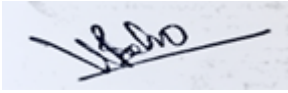

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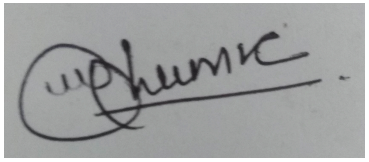
MODULE 2. QUALITY MANAGEMENT **MODULE 3. INDIAN FINANCE SYSTEM** .	***Quality Management Tools:** TQM : Importance , Six Sigma: Process . ISO:9000- Certification Process. Kaizen -Process. ***Service Quality Management:** Importance, SERVQUAL MODEL, Measures to improve service Quality. Indian financial system structure, primary Market IPO ,NSDL ,CDSL,SEBI stock market Credit Rating CRISIL CARE ICRA ***Derivative Market:** Types, Participants, Types of Derivative instrument	**10** **12**	**1.Production & operation management: L.C. Jhamb.** **2.Indian financial system: M.Y Khan. Tata McGraw.**	**Google Meet** **goggle form**

[Type h  ere]

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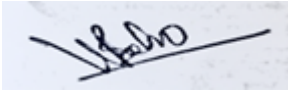

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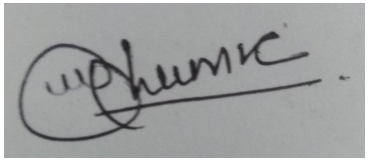
[Type h  ere]

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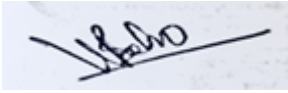

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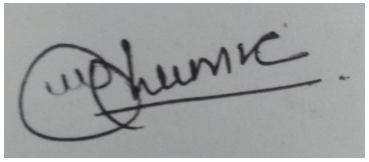
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

[Type h  ere]

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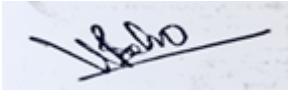

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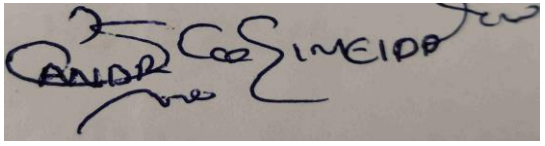
TEACHING PLAN (UNIT PLAN)

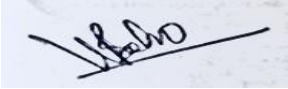
NAME OF THE STAFF: SANDRA ALMEDA DEPARTMENT: _Commerce___ CLASS: _TYBCOM K L M N O SEMESTER: V

(Subject : MHRM_____) MONTH: JUNE ADEMIC YEAR: _2022-23_____

LEARNING OBJECTIVE/S: 1.To understands the concepts of marketing management 2.To learn about marketing process for different types of products and services 3. To understand the tools used by marketing managers in decision situations 4. To understand the marketing environment

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
Unit 1 INTRODUCTION TO MARKETING	Marketing, Concept, Features, Importance, Functions, Evolution, Strategic v/s Traditional Marketing Marketing Research- Concept, Features, Process Marketing Information System- Concept, Components Data Mining- Concept, importance	12	Phillip Kotler. (2005) Marketing	Chalk and Board





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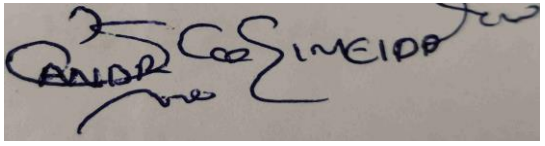
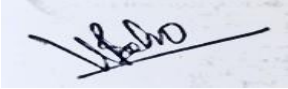
TEACHING PLAN (UNIT PLAN)

	Consumer Behaviour- concept, Factors Influencing Consumer Behaviour Market Segmentation- Concept, Benefits, Bases of Market Segmentation			





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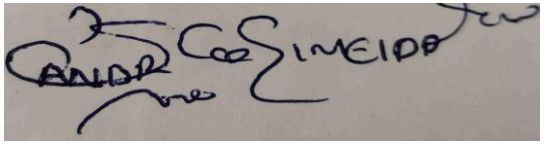
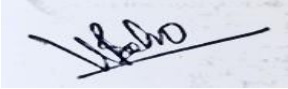
TEACHING PLAN (UNIT PLAN)

	CRM- Concept Techniques Market Targeting- Concept, Five Patterns of Target Market Selection			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__12___

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED





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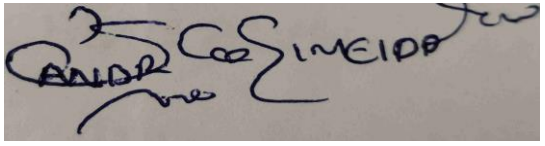
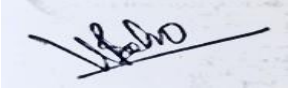
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

Unit 2 MARKETING DECISION-I	**MARKETING MIX, Product Decision Areas, PLC, Branding, Brand Equity** **Packaging, Product positioning, service Positioning** **Pricing**	**12**	Phillip Kotler. (2005) Marketing Management,	**Chalk and Board**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__12___





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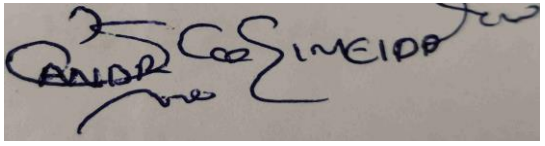
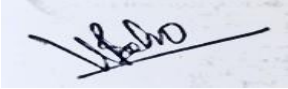
TEACHING PLAN (UNIT PLAN)

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE /S	EACHING METHOD/ ICT TOOLS USED
Unit 3 MARKETING DECISION -II	Physical Distribution, supply Chain Management	12	Phillip Kotler. (2005) Marketing	Chalk and Board
	Promotion , Integrated Marketing Communication			
	Sales Management, Personal Selling			





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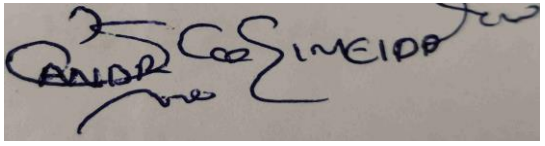
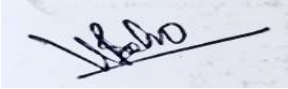
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__12___





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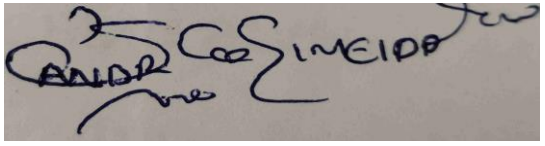
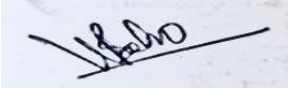
TEACHING PLAN (UNIT PLAN)

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
Unit 4 KEY MARKETING DIMENTIONS	Marketing Ethics, Competitive Strategies Rural Marketing, Digital Marketing , Green Marketing Challenges Faced by Marketing Managers, Careers in Marketing, Factors contributing to Success of Brands in India, Reasons for Failure of Brands in India	12	Phillip Kotler. (2005) Marketing Management,	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__12___





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. SONAL RAUT** DEPARTMENT: COMMERCE CLASS: T.Y.BCom SEMESTER: V Subject: FINANCIAL ACCOUNTING

MONTH: JUNE, JULY, AUG & SEP ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2, 3 & 5	**Internal Reconstruction** • Introduction, Meaning, Need for Reconstruction • Distinction Between Internal & External Reconstruction • Methods of Reconstruction & Accounting Treatment for same • Practical problems	15	Financial Accounting by SN Maheshwari	Chalk-Board Method, Discussion, Google classroom.
	Buyback of Shares • Introduction, Company Law & Legal Provisions • Capital Redemption Account, Compliance of Conditions • Maximum Limit, Debt-Equity Ratio & Cancellation of Shares • Practical problems	15	Financial Accounting by SN Maheshwari	Chalk-Board Method, Discussion, Google classroom.

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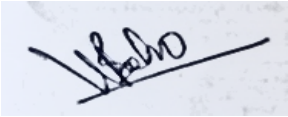

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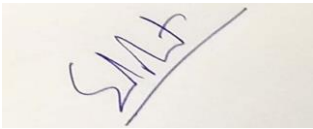
TEACHING PLAN (UNIT PLAN)

	Ethical Behaviour and Implications for Accountants • Meaning & Features of Ethics • Personal Ethics: Factors, Standards • Professional Ethics: Factors, IFAC Code of Conduct • Business Ethics: Factors • Workplace Ethics: Difficulties • Corporate Ethics: Levels, CSR, Whistle Blower • Ethical Education: Purpose, Goal/Stages	10	Financial Accounting by SN Maheshwari	Chalk-Board Method, Discussion, Google classroom.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40



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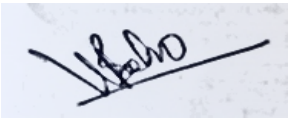

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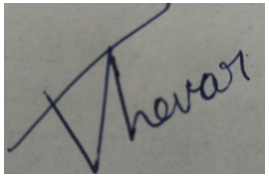
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Ms VALARMATHI TEVAR DEPARTMENT: COMMERCE

CLASS: TYBCOM Div: O SEMESTER: III MONTH: AUGUST ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :1. To understand Fundamental economic ideas and the operation of the economy on a national scale. 2. Basic Understanding of production, distribution and consumption of goods and services, the exchange process, the role of government, the national income and its distribution, GDP, consumption function, savings function, investment spending and the multiplier principle 3. Acquire basic knowledge of the influence of government spending on income and output. 4. Develop ability to analyze monetary policy, including the banking system and the Federal Reserve System.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS Module II : Agriculture During Post Reform Period	National Agricultural Policy 2000 : Objectives, Features and Implications ♦ Agricultural Pricing and Agricultural Finance ♦ Agricultural Marketing Development : Agricultural Market Infrastructure – Market Information – Marketing Training – Enabling Environments – Recent Developments	12	MANANPRAKSHAN Dr. P A Johnson – A. D. Mascarenhas – Sonali Chatterjee 5th Revised Edition – June 2022	CHALK AND DUSTER



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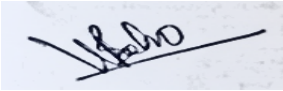

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

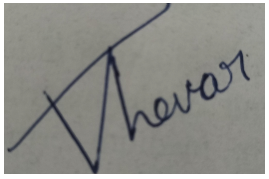
NAME OF THE STAFF:Ms VALARMATHI TEVAR DEPARTMENT: COMMERCE

CLASS: TYBCOM Div: O SEMESTER: III MONTH: SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To understand Fundamental economic ideas and the operation of the economy on a national scale. 2. Basic Understanding of production, distribution and consumption of goods and services, the exchange process, the role of government, the national income and its distribution, GDP, consumption function, savings function, investment spending and the multiplier principle 3. Acquire basic knowledge of the influence of government spending on income and output. 4. Develop ability to analyze monetary policy, including the banking system and the Federal Reserve System.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS Module III : The Industry and Service Sector During Post-Reform Period.	Policy Measures, Competition Act, 2002 : Disinvestment Policy, Micro, Small and Medium Enterprises [MSME Sector] Since 2007 ♦ Industrial Pollution in India : Meaning, Types, Effects and Control ♦ Service Sector : Recent Trends, Role and Growth in Healthcare and Tourism Industry	12	MANANPRAKSHAN Dr. P A Johnson – A. D. Mascarenhas – Sonali Chatterjee	Chalk and duster



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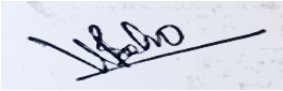

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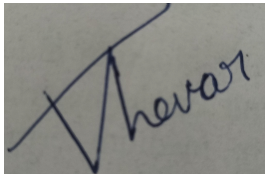
			5th Revised Edition – June 2022	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12



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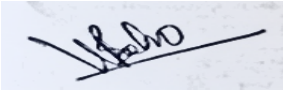

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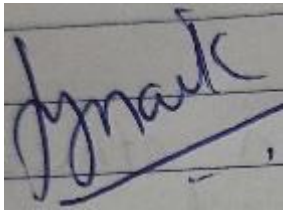
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Tejaswini Naik DEPARTMENT: Accountancy CLASS: Tybcom SEMESTER: VI (Subject : Indirect tax)

MONTH: December- march ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: WHAT IS INDIRECT TAX
The learners will be able to : Difference in direct and indirect tax, how to calculate gst , registration process

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDIRECT TAX	1.Definition s: goods, business, consideration, e-commerce, India, person,principal supply,services, supplier, taxable supply, taxable person,n on taxable supply	5 lectures 15 lectures 15 lectures	Anaspure, manan publication	Black board



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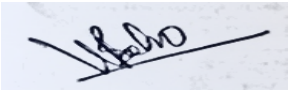

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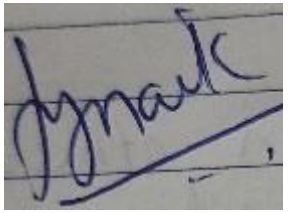
TEACHING PLAN (UNIT PLAN)

	2.Levy and collection of tax: scope of supply, non taxable supplies, composite and mixed supply, composition levy, exemption from tax, levy and collection of tax 3. Time, place and value of supply: time of supply, value of supply, place of supply.			
	4. Input tax credit			
	5.Registration under GST	5		



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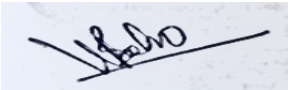

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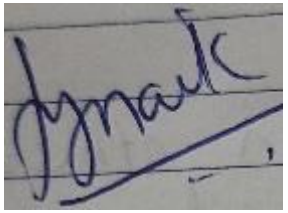
TEACHING PLAN (UNIT PLAN)

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	6 payment of tax 7.computation of liability and tax	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____45



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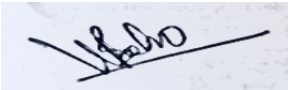

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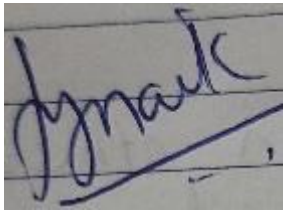
TEACHING PLAN (UNIT PLAN)



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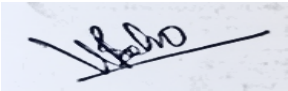

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NAME OF THE STAFF: AMITA RAKESH PATIL DEPARTMENT: ACCOUNTANCY CLASS: TYBCOM SEMESTER: 6 (Subject : Financial Accounting)

MONTH: November-March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit – 1 Amalgamation , Absorption and External Reconstruction	Meaning and Types of amalgamation, Accounting procedure of Vendor Company and Purchasing Company, Calculation of Purchase Consideration. Practical Problems	**15**	Financial Ac. counting by R. Narayanaswamy	Chalk and Board Method
Unit- 2 Accounting of transactions of Foreign Currency	Meaning and accounting effects of changes in foreign exchange rates, translation of transcations in foreign currency, transactions of balances at year end, accounting for exchange difference. Practical Problems	**15**	Financial Ac. counting by R. Narayanaswamy	Chalk and Board Method
Unit- 3 for Accounting Limited Liability partnership	Meaning of limited liability and its statutory provisions. Conversion of partnership into LLP , format of Balance sheet. Practical problems on final accounts	10	Financial Ac. counting by R. Narayanaswamy	Chalk and Board Method

Unit-4 Underwriting of_shares_and Debentures	Meaning of underwriting and underwriting commission , payment of commission to underwriters , sub- underwriters , brokers etc. Types of underwriting, explaination about marked, unmarked and firm underwriting and liability of underwriters. Practical problems	10	Financial Ac. counting by R. Narayanaswamy	Chalk and Board Method
Unit- 5 Liquidation of Companies	Meaning of liquidation and winding up,preferential payments, overriding preferential payments. Format of statement of affairs, deficit and surplus and format of liquidators statement of account. Practical problems	10	Financial Ac. counting by R. Narayanaswamy	Chalk and Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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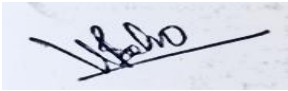

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : TYBCOM (I,J) SEM : VI SUB: Commerce VI MONTH : DEC-March YEAR : 2022-23

LEARNING OBJECTIVE/S : The learners will be able to learn importance of human resource management.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I: Human Resource Management	Human Resource Management, human resource planning, job analysis, job design, recruitment, selection, E-selection	12	Human ResourceManagement by John Storey	Chalk & board
UNIT II Human Resource Development	Human resource development, training, performance appraisal, potential appraisal, career planning, succession planning, mentoring, counselling	12	HumanResource Management by John Storey	Chalk & board

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UNIT III Human Relations	Human relations, leadership, motivation, employee morale, EQ & SQ, employee grievance, employee welfare measures and health and safety measures	12	Human Resource Management by John Storey	Chalk & board
UNIT IV Trends in human resource management	HR in changing environment, competencies, learning organisation, innovation culture, trends in HRM, employee engagement, HRIS, changing pattern of employment, challenges of HRM, employee empowerment, workforce diversity, attrition, downsizing, employee absenteeism, work life balance, sexual harassment at workplace, HR practices, Millennial competency mapping	12	Human Resource Management by John Storey	Chalk & board

TOTAL NUMBE OF LECTURES ALLOCATED TO THE UNIT: 48

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _: Mr. ARJUN VISHWAKARMA_ DEPARTMENT: _Commerce_____ CLASS: _T.Y.Bcom SEMESTER: VI (Subject : Computer System And Application) MONTH: NOVEMBER- MARCH ACADEMIC YEAR: _2022- 2023_

LEARNING OBJECTIVE/S: Learner will able to understand benefits of e-commerce, payment system, business modules etc..
Learner will able to learn fundamentals of designing , implementing and distributing a visual basic application.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
E- Commerce	Definition of e-commerce, features of e-commerce, types of e-commerce, B2C,B2B,C2C,P2P.	01	Computer System And Application Manan Prakashan and www.wikipedia.com	Power Point Presentation And Googlee Meet Board , Chalk and Duster
	Business Modules- Advertising, subscription, transaction fee, Sales revenue, Affiliate Revenue.	02		
	Major B2c Models. E-commerce security Encryption- digital signature, SSL. Payment system	01		
	Online credit card Transaction working, SET protocol. Limitations of e-commerce. M-commerce – Definition and features.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Visual Basic	Introduction to VB GUI and programming language, Visual Basic Environment,	01	Computer System And Application Manan Prakashan and www.wikipedia.com	Power Point Presentation And Discussion Method Board ,Chalk and Duster
	Introduction to VB control, designing the user interface, coding of controls, and role of properties.	01		
	Use of variables and controls, data types, naming rules/convention, declaring variables, val function and operation, formatting data,	07		
	Project related to decision and condition, use of statement, function with option button and check boxes	02		
	Input validation, Sub-procedure and Sub-function,	03		

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Advanced Spreadsheet.	Creating and using Templates, Using Predefined templates, Adding protection option. Creating and Linking Multiple Spreadsheet.	02	Computer System And Application Manan Prakashan and www.wikipedia.com	Power Point Presentation And Discussion Method Board ,Chalk and Duster
	Using Formulas and logical operators with different examples.	02		
	Creating and using named ranges. Creating Formulas that use reference to cells in different worksheets with examples.	02		
	Database functions LOOKUP,VLOOKUP,HLOOKUP Conditional Logic Functions IF,COUNTIF,SUMIF,AVERAGEIF WITH EXAMPLES String Functions	03		
	Date Functions, Statistical Functions, Data Analysis using Filter with customized condition and Graphical representation of data using different charts. ,Using Scenarios ,Creating and managing Scenarios, Goal Seek. , Solver Understanding Macros, Creating, Recording and running Simple macros.	09		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32

Practicals : - Computer System And Application

Sem - VI

Sr. No.	Sub Topics	No. Of Lecture Allotted	TEACHING METHOD/ ICT TOOLS USED
Practical 1	Excel Calculations of Taxable Income (If Statement)	01	Computer, Ms-Excel
Practical 2	Excel – Date and Time Function	01	Computer, Ms-Excel
Practical 3	Excel - Text Functions	01	Computer, Ms-Excel
Practical 4	Excel – Use of V lookup function	01	Computer, Ms-Excel
Practical 5	Excel – Maths Function	01	Computer, Ms-Excel
Practical 6	Excel- Advance filter use of charts (Pie, Bar etc.)	01	Computer, Ms-Excel
Practical 7	Visual Basic - Project on welcome message	01	Computer, Visual Studio 6.0
Practical 8	Visual Basic - Calculations of simple and compound interest	01	Computer, Visual Studio 6.0
Practical 9	Visual Basic - Project on text specification(change of font and colour)	01	Computer, Visual Studio 6.0
Practical 10	Visual Basic - Calculating factorial of numbers (Loops)	01	Computer, Visual Studio 6.0

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Audrin Anthony Colaco DEPARTMENT: Accountancy CLASS: TYBCOM SEMESTER: VI (Subject :Direct Taxation)

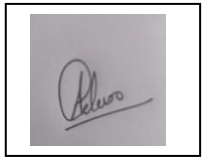
MONTH: Dec 2022 to April 2023 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To Know the process under GST

To Understand concept of GST

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Registration	Rules for Registration, Practical Problems	10	Manan Prakashan,	Lecture Method , Black board, Google Classroom
Input Tax Credit	Rules of ITC , Practical Problems	10	Manan Prakashan,	Lecture Method , Black board, Google Classroom
Collection and Levy	Exempted list, Negative List, Computation of GST	10	Manan Prakashan,	Lecture Method , Black board, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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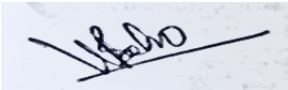

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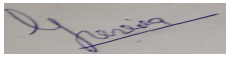
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: Business Economics CLASS: TYBCOM SEMESTER: VI (Subject: Business Economics VI

MONTH: November - March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The student must be able to understand basic concept and theories of international economics

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Business Economics VI	Unit I Theories of International Trade - Ricardo's Theory of Comparative Costs and the Heckscher- Ohlin Theory. Terms of Trade - Types and Limitations.	3 lectures per week	International Economics : Domnic Salvator International Economics : M.L. Jhingan	Chalk and Board Google Classroom Classroom Discussions



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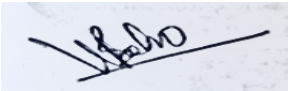

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	Unit-II Commercial Trade Policy –Free Trade and Protection – Pros and Cons. Tariff And Non Tariff Barriers: Meaning, Types and Effects International Economic Integration – Types and Objectives:-EU and Brexit, ASAEN	3 lectures per week	International Economics : Domnic Salvator International Economics : M.L. Jhingan	Chalk and Board Google Classroom Classroom Discussions
	Unit III: Balance of Payment: Meaning, Structure, Types of Disequilibrium. Causes and measures to correct the disequilibrium in Balance of Payments WTO-		International Economics : Domnic Salvator International Economics : M.L. Jhingan .	Chalk and Board Google Classroom Classroom Discussions
	Unit IV: Foreign Exchange Market: Meaning, Functions, Determination of Equilibrium Rate of Exchange. Purchasing Power Parity Theory, Spot and Forward Exchange Rates, Arbitrage. Role of Central Bank in foreign exchange rate management, Managed flexible exchange rate system of India.		International Economics : Domnic Salvator	Chalk and Board Google Classroom Classroom Discussions

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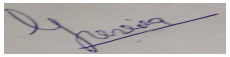
			International Economics : M.L. Jhingan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___10_



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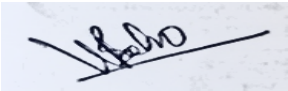

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Rakhee Oza DEPARTMENT: Commerce CLASS: T.Y.B.Com (E,F) SEMESTER: VI

MONTH: June to Oct ACADEMIC YEAR: 2022-2023 Subject: Commerce

LEARNING OBJECTIVES:
To acquaint the learners with the basic concepts of Production Management, Inventory Management.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT I:	Human Resource Management, human resource planning, job analysis, job design, recruitment, selection, E-selection	10	Human ResourceManagement by John Storey	Chalk & board
UNIT II	Human resource development, training, performance appraisal, potential appraisal, career planning, succession planning, mentoring, counselling	10		

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UNIT III	Human relations, leadership, motivation, employee morale, EQ & SQ, employee grievance, employee welfare measures and health and safety measures	10		
UNIT IV	HR in changing environment, competencies, learning organisation, innovation culture, trends in HRM, employee engagement, HRIS, changing pattern of employment, challenges of HRM, employee empowerment, workforce diversity, attrition, downsizing, employee absenteeism, work life balance, sexual harassment at workplace, HR practices, Millennial competency mapping	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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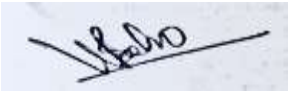

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: TYBCOM (DIV M) SEMESTER: VI(Subject : HRM – COMMERCE VI)

MONTH: NOVEMBER TO FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To gain the knowledge of Human Resource Management .

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1 HRM	Human resource management- concept functions importance traditional versus strategic hrm Human resource planning- concept steps in human resource planning Job analysis concept components, job design concept technique Recruitment sources of recruitment Selection concept process techniques of E- SelectionHuman resource development – concept and functions	10	Human Resource Management – Gary Dessler , Biju Varkkey	Chalk and talk method

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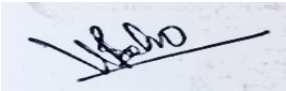

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Unit 2 HRD	Human resource development – concept and functions Training methods of training evaluating training effectiveness Performance appraisal concept and importance, benefits and limitations methods			
Unit 3 Human relations	Human relations concept and significance Leadership concept transactional transformational leadership Motivation concept theories of motivation Maslow need hierarchy theory, vrooms expectancy theory, macgregors theory X theory y, pinks theory of motivation Employees morale emotional quotient and spiritual quotient Employee grievance causes procedure of redressal Employee welfare majors and health and safety measures	12	Human Resource Management – Gary Dessler , Biju Varkkey	Chalk and talk method

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Unit 4 : Recent Trends in HRM	HR in changing environment Competencies concept classification Learning organization, innovation culture Trends in human resource management Employee engagement concept and types Human resource information system	12	Human Resource Management – Gary Dessler , Biju Varkkey	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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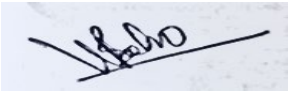

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Delcy Lopes DEPARTMENT: Accountancy CLASS: T.Y.B. Com. SEMESTER: VI (Subject : Financial Accounting)

MONTH: November - MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit - 1	**Amalgamation ,Absorption and External Reconstruction-** Meaning and Types of amalgamation, Accounting procedure of Vendor Company and Purchasing Company, Calculation of Purchase Consideration. Practical Problems	15	Financial Ac. counting by R. Narayanaswamy	Chalk and duster, discussion, Google classroom, PDFs etc
Unit -2	**Accounting of transactions of Foreign Currency-** Meaning and accounting effects of changes in foreign exchange rates, translation of transactions in foreign currency, transactions of balances at year end, accounting for exchange difference. Practical Problems	15	Financial Ac. counting by R. Narayanaswamy	Chalk and duster, discussion, Google classroom, PDFs etc
Unit -3	**Accounting for Limited Liability Partnership-** Meaning of limited liability and its statutory provisions. Conversion of partnership into LLP ,	10	Financial Ac. counting by R. Narayanaswamy	Chalk and duster, discussion, Google classroom, PDFs etc

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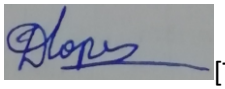
	format of Balance sheet. Practical problems on final accounts			
Unit – 4	**Underwriting of shares and Debentures-** Meaning, features, formula, format, practical problems	10	Financial Ac. counting by R. Narayanaswamy	Chalk and duster, discussion, Google classroom, PDFs etc
Unit - 5	**Liquidation of Companies-** Meaning of liquidation and winding up, preferential payments, overriding preferential payments. Format of statement of affairs, deficit and surplus and format of liquidators statement of account. Practical problems	10	Financial Ac. counting by R. Narayanaswamy	Chalk and duster, discussion, Google classroom, PDFs etc

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:60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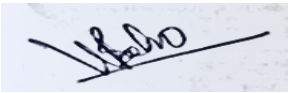

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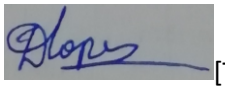
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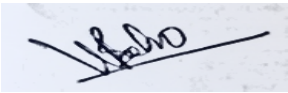

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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

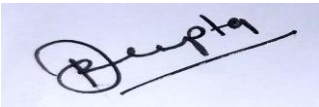
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. DEEPAK GUPTA** DEPARTMENT: COMMERCE CLASS: S.Y.BCom SEMESTER: III Subject: MANAGEMENT ACCOUNTING

MONTH: JUNE, JULY, AUG & SEP ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To understand what is GST and how it is reflected in our practical life. The learners will be able to understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1, 2, 3, 4 & 5	**Introduction to GST** ● What is GST ● Need for GST ● Dual GST Mode	05	ICAI study material	Chalk-Board Method, Discussion, Google classroom.
	Value of Supply ● Transaction Value as Value of Supply ● CGST Rules-2017 Determination of Value of supply (Rule 27 to 35)	10	ICAI study material	Chalk-Board Method, Discussion, Google classroom.
	Input Tax Credit Stamp Payment of Tax ● Eligibility for taking Input Tax Credit ● Input Tax Credit in Special Circumstances ● Computation of Tax Liability ● Payment of Tax (Section 49 and Section 50 of CGST Act)	15	ICAI study material	Chalk-Board Method, Discussion, Google classroom.



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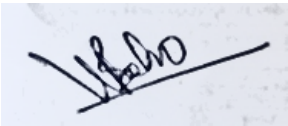

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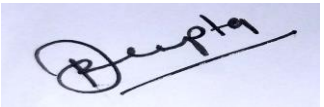
TEACHING PLAN (UNIT PLAN)

	Registration under GST Law ● Persons liable for Registration ● Persons not liable for Registration ● Compulsory Registration ● Persons not liable for Registration ● Procedure for Registration ● Amendment of Registration ● Cancellation of Registration ● Revocation of cancellation of Registration ● Practical Problems ● Exemption from GST ● Time of Supply ● Place of Supply ● Computation of GST	20	ICAI study material	Chalk-Board Method, Discussion, Google classroom.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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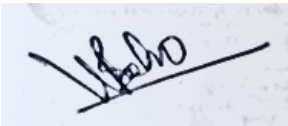

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Jagruti Naukudkar DEPARTMENT: Commerce CLASS: T.Y.B.COM DIV: M,N

SEMESTER: VI MONTH: December - March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S :

1) Knowledge based & Conceptual learning to get acquainted with objective type test.

2) Solve practical questions using concepts.

3) Financial Goal Setting & decision making.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Cost Accounting	Unit 1 Contract Costing Progress Payment, Retention Money, Contract A/C, Accounting of Mat, Treatment of profit on incomplete contract, Format of Contract A/c, Practical Problems.	12	Manan Prakashan, Inernet	Discussion, Notes, Videos, BlackBoard Method

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TEACHING PLAN (UNIT PLAN)

	Unit 2 Process Costing Process Loss, Abnormal Gain & Losses, Joint & by products, Practical Problems.	12	Manan Prakashan, Inernet	Discussion, Notes, Videos, BlackBoard Method
	Unit 3 Marginal costing Meaning, Cost volume profit, PV Ratio, Break Even Point, Margin of Safety, theory and Practical Problems.	8	Manan Prakashan, Inernet	Discussion, Notes, Videos, BlackBoard Method
	Unit 4 Standard costing Imp of standard costing , Variances, Reasons of variances, labour variances and material variances, theory and Practical Problems.	8	Manan Prakashan, Inernet	Discussion, Notes, Videos, BlackBoard Method
	Unit 5 Control Account Difference in Integrated and Non Integrated Accounting, Cost Control Account, Stock Control Account, Finished Goods Control Account, WIP Control Account.	12	Manan Prakashan, Inernet	Discussion, Notes, Videos, BlackBoard Method
	Unit 6 Some Emerging Concept of Cost A/C	8	Manan Prakashan,	Discussion, Notes, Videos, BlackBoard Method

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	Target Costing, Life Cycle Costing, Benchmarking, ABC Costing		Inernet	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

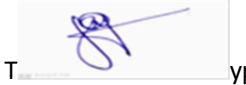
NAME OF THE STAFF: **Mrs. Jagruti Naukudkar** DEPARTMENT**: COMMERCE** CLASS: **T.Y.B.COM** DIV: **G, K, L**

SEMESTER: **VI** MONTH: **December - March** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:

1) Knowledge based & Conceptual learning to get acquainted with objective type test.
2) Solve practical questions using concepts.
3) Financial Goal Setting & decision making.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit – 1 Amalgamation , Absorption and External Reconstruction	Meaning and Types of amalgamation. Accounting procedure of Vendor Company and Purchasing Company. Calculation of Purchase Consideration. Practical Problems.	15	Manan Prakashan, Financial Ac. counting by R. Narayanaswamy	Discussion, Notes, Videos, BlackBoard Method
Unit- 2 Accounting of transactions of	Meaning and accounting effects of changes in foreign exchange rates, translation of transactions in foreign currency, transactions of balances at year end, accounting for exchange difference.	10	Manan Prakashan, Financial Ac. counting by R.	Discussion, Notes, Videos, BlackBoard

T  ype here]
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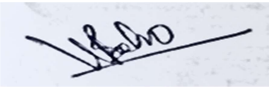

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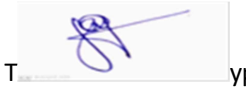
TEACHING PLAN (UNIT PLAN)

Foreign Currency	Practical Problems.		Narayanaswamy	Method
Unit- 3 Liquidation of Companies	Meaning of liquidation and winding up,preferential payments, overriding preferential payments. Format of statement of affairs, deficit and surplus and format of liquidator's statement of account. Practical problems.	15	Manan Prakashan, Financial Ac. counting by R. Narayanaswamy	Discussion, Notes, Videos, BlackBoard Method
Unit- 4 Underwriting of shares and Debentures	Meaning of underwriting and underwriting commission, payment of commission to underwriters, sub- underwriters, brokers etc. Types of underwriting, explanation about marked, unmarked and firm underwriting and liability of underwriters. Practical problems.	10	Manan Prakashan, Financial Ac. counting by R. Narayanaswamy	Discussion, Notes, Videos, BlackBoard Method
Unit- 5 Accounting for Limited Liability partnership	Meaning of limited liability and its statutory provisions. Conversion of partnership into LLP, format of Balance sheet. Practical problems.	10	Manan Prakashan, Financial Ac. counting by R. Narayanaswamy	Discussion, Notes, Videos, BlackBoard Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

T  ype here]
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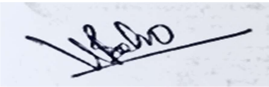

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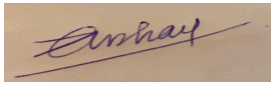
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jinal Chohan_____ DEPARTMENT: __Commerce VI__ CLASS: __TYBCOM__ SEMESTER: VI__ (Subject : HRM__)

MONTH: November to March _____ ACADEMIC YEAR: __2022-23_____

LEARNING OBJECTIVE/S: _Gain knowledge about advertising, its benefits, scope, function, different media in advertising.

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	EACHING METHOD/ ICT TOOLS USED
Unit 1 Human Resource Management	Human Resource Management – Concept, Functions, Importance, Traditional v/s Strategic Human Resource Management Human Resource Planning- Concept Steps in Human Resource Planning Job Analysis-Concept, Components, Job design-Concept, Techniques Recruitment- Concept, Sources of Recruitment Selection - Concept , process , Techniques of E, selection,	11	Human Resource Development" by Jon M Werner and Randy L DeSimone	Chalk and Board



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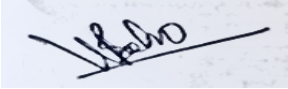

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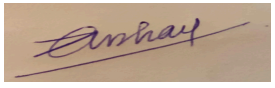
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___11_

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/ S	EACHING METHOD/ ICT TOOLS USED
Unit 2 Human Resource Development	Human Resource Development- Concept, functions Training-Concept, Process of identifying training and development needs, Methods of Training & Development	**11**	Human Resource Development" by Jon M	**Chalk and Board**



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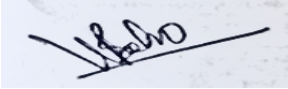

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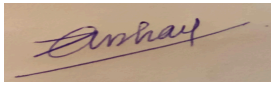
TEACHING PLAN (UNIT PLAN)

			Werner and Randy L DeSimone	
	Performance Appraisal- Concept, Benefits, Limitations, Methods Potential Appraisal-Concept, Importance			
	Career Planning- Concept, Importance Succession Planning- Concept, Need Mentoring- Concept, Importance Counselling- Concept, Techniques.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___11_

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE /S	EACHING METHOD/ ICT TOOLS USED



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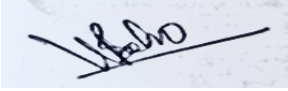

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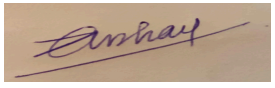
TEACHING PLAN (UNIT PLAN)

Unit 3 Human Relations	Human Relations- Concept, Significance Leadership –Concept, Transactional & Transformational Leadership Motivation- Concept, Theories of Motivation,(Maslow's Need Hierarchy Theory, Vroom's Expectancy Theory, McGregor's Theory X and Theory Y, Pink's Theory of Motivation)			
	Employees Morale- Concept, Factors affecting Morale, Measurement of Employees Morale Emotional Quotient and Spiritual Quotient- Concept, Factors affecting EQ & SQ	11	**Human Resource Development" by Jon M Werner and Randy L DeSimone**	Chalk and Board
	Employee Grievance- Causes, Procedure for Grievance redressal Employee welfare measures and Health & Safety Measures.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___11_



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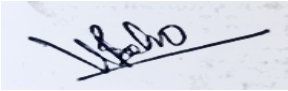

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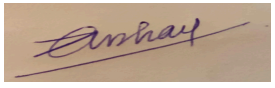
TEACHING PLAN (UNIT PLAN)

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
Unit 4 Trends in human resources	HR in changing environment: Competencies- concept, classification Learning organizations- Concept, Creating an innovative organization, Innovation culture- Concept, Need, Managerial role.	11	Human Resource Developmen t" by Jon M Werner and Randy L DeSimone	Chalk and Board



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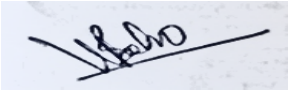

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TEACHING PLAN (UNIT PLAN)

	Trends in Human Resource Management,: Employee Engagement-Concept, Types Human resource Information System (HRIS) – Concept, Importance, Changing patterns of employment.			
	Challenges in Human Resource Management: Employee Empowerment, Workforce Diversity. Attrition, Downsizing, Employee Absenteeism, Work life Balance, Sexual Harassment at work place, Domestic and International HR Practices, Millennial (Gen Y)Competency Mapping			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___11_

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NAAC accredited "B" Grade, 2.69 CGPA
TEACHING PLAN (UNIT PLAN)

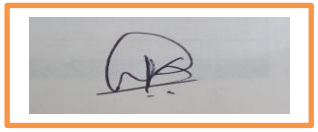
NAME OF THE STAFF: **KAUSHIK SAVE** DEPARTMENT: **ACCOUNTANCY** CLASS: **TYBCOM– G,H,I** SEMESTER: **VI**
MONTH: **December2022 to April 2023** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:

1. To understand what is GST and how it is reflected in our practical life.
2. The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Introduction to GST	Introduction to GST • What is GST • Need for GST • Dual GST Mode	1	Manan Prakashan, Self-maintained notes, ICAI study material	Google meet, PPTs

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 1 per Division



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TEACHING PLAN (UNIT PLAN)

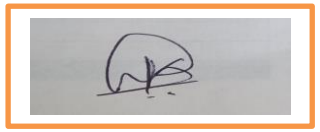
NAME OF THE STAFF: **KAUSHIK SAVE** DEPARTMENT: **ACCOUNTANCY** CLASS: **TYBCOM– G,H,I** SEMESTER: **VI**
MONTH: **December2022 to April 2023** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:

1. To understand what is GST and how it is reflected in our practical life.
2. The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Unit 3 Value of Supply	• Transaction Value as Value of Supply • CGST RULES – 2017 Determination of Value of supply (Rule 27 to 35)	4	Manan Prakashan, Self-maintained notes, ICAI study material	PPTs, Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 per Division



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TEACHING PLAN (UNIT PLAN)

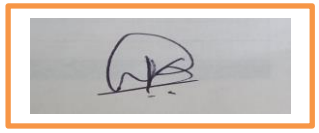
NAME OF THE STAFF: **KAUSHIK SAVE** DEPARTMENT: **ACCOUNTANCY** CLASS: **TYBCOM– G,H,I** SEMESTER: **VI**
MONTH: **December2022 to April 2023** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:

1. To understand what is GST and how it is reflected in our practical life.
2. The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Unit 4 Input Tax Credit & Payment of Tax	Input Tax Credit & Payment of Tax • Eligibility for taking Input Tax Credit • Input Tax Credit in Special Circumstances • Computation of Tax Liability • Payment of Tax (Section 49 and Section 50 of CGST Act)	4	Manan Prakashan, Self-maintained notes, ICAI study material	PPTs, Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 per Division



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TEACHING PLAN (UNIT PLAN)

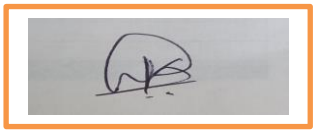
NAME OF THE STAFF: **KAUSHIK SAVE** DEPARTMENT: **ACCOUNTANCY** CLASS: **TYBCOM– G,H,I** SEMESTER: **VI**
MONTH: **December2022 to April 2023** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:

1. To understand what is GST and how it is reflected in our practical life.
2. The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Unit 5 Registration under GST Law	Registration under GST Law • Persons liable for Registration • Persons not liable for Registration • Compulsory Registration • Persons not liable for Registration • Procedure for Registration • Amendment of Registration • Cancellation of Registration • Revocation of cancellation of Registration • Practical Problems	4	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 per Division



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TEACHING PLAN (UNIT PLAN)

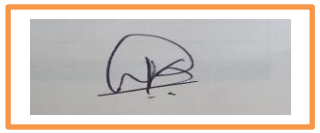
NAME OF THE STAFF: **KAUSHIK SAVE** DEPARTMENT: **ACCOUNTANCY** CLASS: **TYBCOM– G,H,I** SEMESTER: **VI**
MONTH: **December2022 to April 2023** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:

1. To understand what is GST and how it is reflected in our practical life.
2. The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Unit 5 Registration under GST Law	• Exemption from GST • Time of Supply • Place of Supply • Computation of GST	6	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6 per Division



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof DR (CA) MABEL LOBO DEPARTMENT: ACCOUNTANCY CLASS:TYBCOM (DIV A,B,C,)

SEMESTER: VI MONTH: December2022 to April 2023 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To let students understand what is GST and how it is reflected in our practical life.
The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Introduction to GST	Introduction to GST ● What is GST ● Need for GST ● Dual GST Mode	1	Manan Prakashan, Self-maintained notes, ICAI study material	Google meet, PPTs

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 1 per Division

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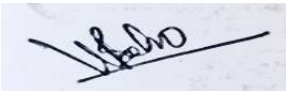

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _: Mrs. Manjushri Oak _ DEPARTMENT: _Commerce__ CLASS: _T.Y.Bcom SEMESTER: VI (Subject : Computer System And Application) MONTH: NOVEMBER- MARCH ACADEMIC YEAR: _2022- 2023_

LEARNING OBJECTIVE/S: Learner will able to understand benefits of e-commerce, payment system, business modules etc..
Learner will able to learn fundamentals of designing , implementing and distributing a visual basic application.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
E- Commerce	Definition of e-commerce, features of e-commerce, types of e-commerce, B2C,B2B,C2C,P2P.	01	Computer System And Application Manan Prakashan and www.wikipedia.com	Power Point Presentation And Discussion Method Board , Chalk and Duster
	Business Modules- Advertising, subscription, transaction fee, Sales revenue, Affiliate Revenue.	02		
	Major B2c Models. E-commerce security Encryption- digital signature, SSL. Payment system	01		
	Online credit card Transaction working, SET protocol. Limitations of e-commerce. M-commerce – Definition and features.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Visual Basic	Introduction to VB GUI and programming language, Visual Basic Environment,	01	Computer System And Application Manan Prakashan and www.wikipedia.com	Power Point Presentation And Discussion Method Board ,Chalk and Duster
	Introduction to VB control, designing the user interface, coding of controls, and role of properties.	01		
	Use of variables and controls, data types, naming rules/convention, declaring variables, val function and operation, formatting data,	07		
	Project related to decision and condition, use of statement, function with option button and check boxes	02		
	Input validation, Sub-procedure and Sub-function,	03		

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Advanced Spreadsheet.	Creating and using Templates, Using Predefined templates, Adding protection option. Creating and Linking Multiple Spreadsheet.	02	Computer System And Application Manan Prakashan and www.wikipedia.com	Power Point Presentation And Discussion Method Board ,Chalk and Duster
	Using Formulas and logical operators with different examples.	02		
	Creating and using named ranges. Creating Formulas that use reference to cells in different worksheets with examples.	02		
	Database functions LOOKUP,VLOOKUP,HLOOKUP Conditional Logic Functions IF,COUNTIF,SUMIF,AVERAGEIF WITH EXAMPLES String Functions	03		
	Date Functions, Statistical Functions, Data Analysis using Filter with customized condition and Graphical representation of data using different charts. ,Using Scenarios ,Creating and managing Scenarios, Goal Seek. , Solver Understanding Macros, Creating, Recording and running Simple macros.	09		

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32

Practicals : - Computer System And Application

Sem - VI

Sr. No.	Sub Topics	No. Of Lecture Allotted	TEACHING METHOD/ ICT TOOLS USED
Practical 1	Excel Calculations of Taxable Income (If Statement)	01	Computer, Ms-Excel
Practical 2	Excel – Date and Time Function	01	Computer, Ms-Excel
Practical 3	Excel - Text Functions	01	Computer, Ms-Excel
Practical 4	Excel – Use of V lookup function	01	Computer, Ms-Excel
Practical 5	Excel – Maths Function	01	Computer, Ms-Excel
Practical 6	Excel- Advance filter use of charts (Pie, Bar etc.)	01	Computer, Ms-Excel
Practical 7	Visual Basic - Project on welcome message	01	Computer, Visual Studio 6.0
Practical 8	Visual Basic - Calculations of simple and compound interest	01	Computer, Visual Studio 6.0
Practical 9	Visual Basic - Project on text specification(change of font and colour)	01	Computer, Visual Studio 6.0
Practical 10	Visual Basic - Calculating factorial of numbers (Loops)	01	Computer, Visual Studio 6.0

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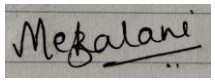
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mezbin Lalani DEPARTMENT: Accountancy CLASS: TYBCOM SEMESTER: VI (Subject : Cost Accounting)

MONTH: Dec- March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To enable students to understand various techniques of Cost Accounting.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1: Cost Control Accounts.	Meaning, advantages, Cost control accounts, principal and subsidiary accounts, preparation of cost control accounts.	12	M.L.Gupta & Agrawal	Chalk and duster, discussion, Google classroom, PDFs etc
Unit -2 Contract Costing	Meaning, Contractor & contractee, retention money, WIP, work certified and uncertified, Contract profits, treatments, practical illustrations	12	M.L.Gupta & Agrawal	Chalk and duster, discussion, Google classroom, PDFs etc
Unit 3: Process Costing	Meaning of process industries, process account, normal loss, abnormal loss, abnormal gains, inter process profits, format of process account, practical illustrations	12	M.L.Gupta & Agrawal	Chalk and duster, discussion, Google classroom, PDFs etc



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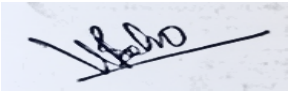

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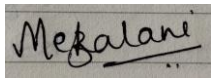
TEACHING PLAN (UNIT PLAN)

Unit 4: Standard Costing & Marginal Costing	Standard Costing methods & Marginal Costing Methods	16	M.L.Gupta & Agrawal	Chalk and duster, discussion, Google classroom, PDFs etc
Unit 5: Emerging Concepts in Cost Accounting	Target costing, life cycle costing, Benchmarking, ABC costing.	08	M.L.Gupta & Agrawal	Chalk and duster, discussion, Google classroom, PDFs etc

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__60



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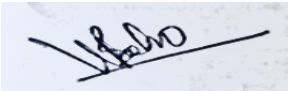

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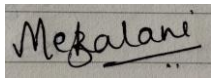
TEACHING PLAN (UNIT PLAN)



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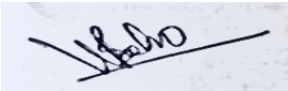

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: CA Monali Sankhe DEPARTMENT: ACCOUNTANCY CLASS: T.Y.B.COM div F,G,H SEMESTER: V**I** MONTH: Nov March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To enable students to understand various aspects of Cost Accounting.
THE LEARNERS WILL BE ABLE TO: To apply the Cost accounting techniques to practical life cases

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost control accounts	Meaning, advantages, Cost control accounts, principal and subsidiary accounts, preparation of cost control accounts.	12	Manan Prakashan	Chalk & Duster,Google classroom, PPT
Contract Costing	Meaning, Contractor & contractee, retention money, WIP, work certified and uncertified, Contract profits, treatments, practical illustrations.	12	Manan Prakashan	Chalk & Duster,Google classroom, PPT
Process costing	Meaning of process industries, process account, normal loss, abnormal loss, abnormal gains, inter process profits, format of process account, practical illustrations	12	Manan Prakashan	Chalk & Duster,Google classroom, PPT

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Standard costing	Types of standards, setting of standards, material variances , labour variances, practical illustrations.	8	Manan Prakashan	Chalk & Duster,Google classroom, PPT

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TEACHING PLAN (UNIT PLAN)

Emerging Concepts in Cost accounting.	Target costing, life cycle costing, Benchmarking, ABC costing. .	8	Manan Prakashan	Chalk & Duster,Google classroom, PPT
Marginal Costing	Meaning of marginal cost, contribution, break even analysis, margin of safety, PV ratio, practical illustrations.	8	Manan Prakashan	Chalk & Duster,Google classroom, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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NAME OF THE STAFF: NEELAM.R. RATHORE DEPARTMENT: Commerce CLASS: T.Y.B.COM SEMESTER: VI **(**Subject: Computer Systems and Application)

MONTH: NOV – OCT. ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to understand the concept of Data Communication, Various communication media, and Various types of networks.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit-I E-Commerce	Definition , Features, Types of E-Commerce, Business Models, Major B2C models, E-Commerce Security, Encryption, Payments ,Encryption , Payment Systems, Online Credit Card Transaction ,Limitation of E-Commerce, M-Commerce.	18	Computer System And Application Manan Prakashan	Black Board And Discussion Method
Unit-II Advanced Spreadsheet	Multiple Spreadsheets, Formulas and logical Operators, functions, VLOOKUP, HLOOKUP, Conditional logic, String Functions	09	Computer System And Application Manan Prakashan Excel 2013 Formulas-John Walkenbach	Black Board And Discussion Method

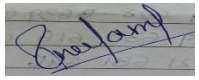
Unit-III Advanced Spreadsheet	Date and statistical functions, Data Analysis filter , Graphical representation of data, Scenarios, Goal Seek, Solver , macros	09	Computer System And Application Manan Prakashan Excel 2013 Formulas-John Walkenbach	Black Board And Discussion Method
Unit-IV Visual Basic	Introduction, VB controls, Variables, Constants, and calculations. Data types, Decisions and Conditions, Sub-Procedures and Sub-Functions	09	Computer System And Application Manan Prakashan	Black Board And Discussion Method

Practicals : - Computer System And Application

Sem - VI

Sr. No.	**Sub Topics**	**No. Of Lecture Allotted**	**TEACHING METHOD/ ICT TOOLS USED**
Practical 1	Excel Calculations using IF conditions	02	Projector and Computer, Black Board
Practical 2	Excel – Date and Time functions	02	Projector and Computer, Black Board
Practical 3	Excel - Maths Functions	02	Projector and Computer, Black Board
Practical 4	Excel – Vlookup function	02	Projector and Computer, Black Board
Practical 5	Excel – Calculations using Filter	02	Projector and Computer, Black Board
Practical 6	Excel-Graphical Representation of Data	02	Projector and Computer, Black Board
Practical 7	Visual Basic-Change of label and command buttons	02	Projector and Computer, Black Board
Practical 8	Visual Basic-Designing of Form and change of fonts and colors	02	Projector and Computer, Black Board
Practical 9	Visual Basic-Calculate Simple and Compound Interest	02	Projector and Computer, Black Board
Practical 10	Visual Basic- To calculate Factorial	02	Projector and Computer, Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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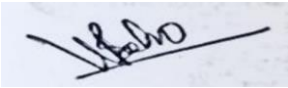

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TEACHING PLAN (UNIT PLAN)

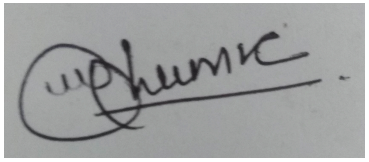
NAME OF THE STAFF: PROF.NILESHWARI VINAY GHUMRE

_ DEPARTMENT: COMMERCE. _ CLASS: SYBCOM SEMESTER: SEM IV_ MONTH: JAN TO MARCH ACADEMIC YEAR: 2022-23 SUB: COMMERCE IV

LEARNING OBJECTIVE/S:
The learners will be able to : Understand Quality Management, Quality Management Techniques, Service Quality Management .

Recent trends in finance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	***Introduction to Quality:** Dimensions of Quality, Cost of Quality, Types of Quality.			

[Type h  ere]

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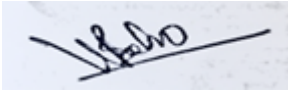

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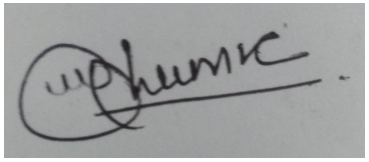
MODULE 2. QUALITY MANAGEMENT **MODULE 3. INDIAN FINANCE SYSTEM** .	***Quality Management Tools:** TQM : Importance , Six Sigma: Process . ISO:9000- Certification Process. Kaizen -Process. ***Service Quality Management:** Importance, SERVQUAL MODEL, Measures to improve service Quality. Indian financial system structure, primary Market IPO ,NSDL ,CDSL,SEBI stock market Credit Rating CRISIL CARE ICRA ***Derivative Market:** Types, Participants, Types of Derivative instrument	**10** **12**	**1.Production & operation management: L.C. Jhamb.** **2.Indian financial system: M.Y Khan. Tata McGraw.**	**Google Meet** **goggle form**

[Type h  ere]

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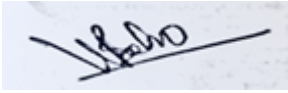

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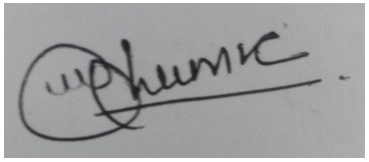
[Type h  ere]

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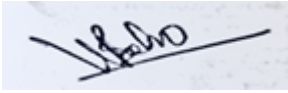

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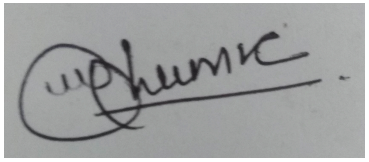
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

[Type h  ere]

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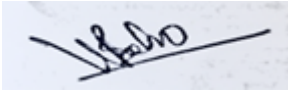

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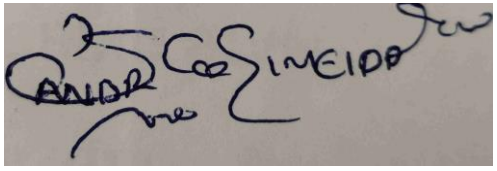
TEACHING PLAN (UNIT PLAN)

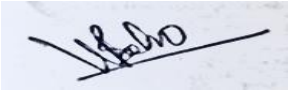
NAME OF THE STAFF: SANDRA ALMEDA CLASS:__TYBCOM__K L M N O SEMESTER: VI
DEPARTMENT:__Commerce VI_____ _____(Subject : HRM_____)

MONTH: November _____ ACADEMIC YEAR:__2022-23_____

LEARNING OBJECTIVE/S: _Gain knowledge about advertising, its benefits, scope, function, different media in advertising.

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	EACHING METHOD/ ICT TOOLS USED
Unit 1 Human Resource Management	Human Resource Management – Concept, Functions, Importance, Traditional v/s Strategic Human Resource Management Human Resource Planning- Concept Steps in Human Resource Planning Job Analysis-Concept, Components, Job design-Concept, Techniques	11	Human Resource Development" by Jon M Werner and Randy L	Chalk and Board





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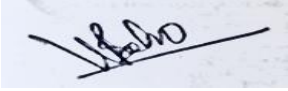
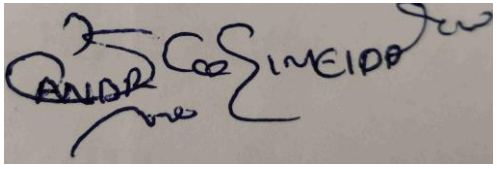
	Recruitment- Concept, Sources of Recruitment Selection - Concept , process , Techniques of E, selection,		DeSimone	





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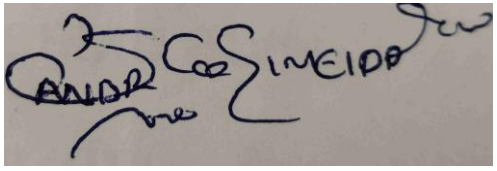
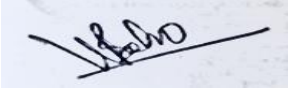
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___11_

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/ S	EACHING METHOD/ ICT TOOLS USED





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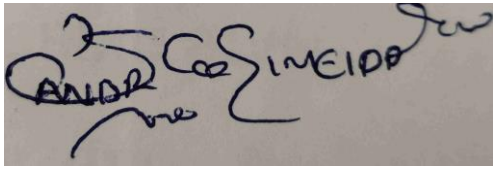
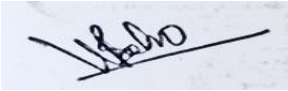
TEACHING PLAN (UNIT PLAN)

Unit 2 Human Resource Development	Human Resource Development- Concept, functions Training-Concept, Process of identifying training and development needs, Methods of Training & Development	**11**	**Human Resource Development" by Jon M**	**Chalk and Board**





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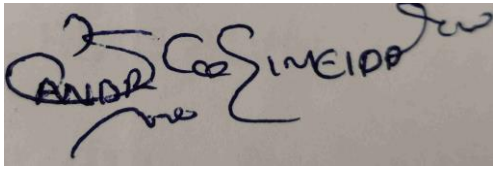
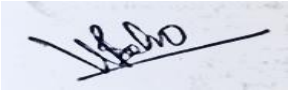
TEACHING PLAN (UNIT PLAN)

			Werner and Randy L DeSimone	
	Performance Appraisal- Concept, Benefits, Limitations, Methods Potential Appraisal-Concept, Importance			
	Career Planning- Concept, Importance Succession Planning- Concept, Need Mentoring- Concept, Importance Counselling- Concept, Techniques.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___11_





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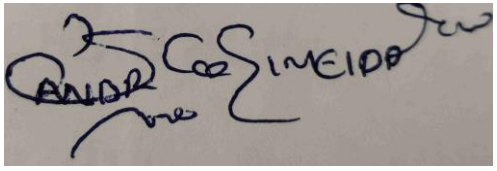
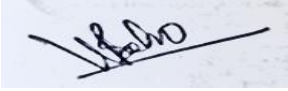
TEACHING PLAN (UNIT PLAN)

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE /S	EACHING METHOD/ ICT TOOLS USED





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TEACHING PLAN (UNIT PLAN)

Unit 3 Human Relations	Human Relations- Concept, Significance Leadership –Concept, Transactional & Transformational Leadership Motivation- Concept, Theories of Motivation,(Maslow's Need Hierarchy Theory, Vroom's Expectancy Theory, McGregor's Theory X and Theory Y, Pink's Theory of Motivation)			
	Employees Morale- Concept, Factors affecting Morale, Measurement of Employees Morale Emotional Quotient and Spiritual Quotient- Concept, Factors affecting EQ & SQ	11	**Human Resource Development" by Jon M Werner and Randy L DeSimone**	Chalk and Board
	Employee Grievance- Causes, Procedure for Grievance redressal Employee welfare measures and Health & Safety Measures.			

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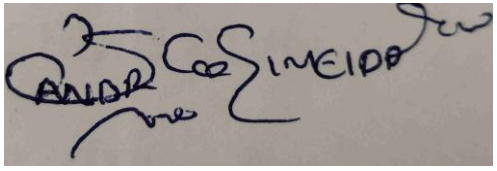
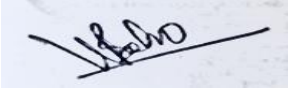
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___11_





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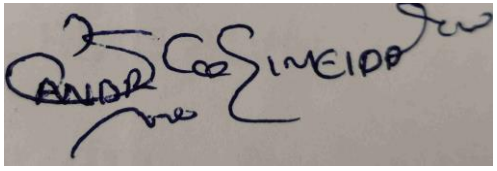
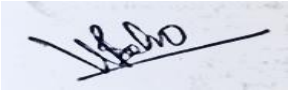
TEACHING PLAN (UNIT PLAN)

APER, UNIT, TITLE	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
Unit 4 Trends in human resources	HR in changing environment: Competencies- concept, classification Learning organizations- Concept, Creating an innovative organization, Innovation culture- Concept, Need, Managerial role.	11	**Human Resource Developmen t" by Jon M Werner and Randy L DeSimone**	Chalk and Board





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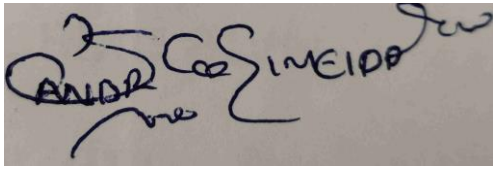
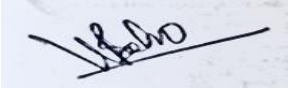
TEACHING PLAN (UNIT PLAN)

	Trends in Human Resource Management,: Employee Engagement-Concept, Types Human resource Information System (HRIS) – Concept, Importance, Changing patterns of employment.			
	Challenges in Human Resource Management: Employee Empowerment, Workforce Diversity. Attrition, Downsizing, Employee Absenteeism, Work life Balance, Sexual Harassment at work place, Domestic and International HR Practices, Millennial (Gen Y)Competency Mapping			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___11_





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms. SONAL RAUT** DEPARTMENT: COMMERCE CLASS: T.Y.BCom SEMESTER: VI Subject: FINANCIAL ACCOUNTING

MONTH: DEC, JAN, FEB & MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1, 2, 3, 4 & 5	**AS – 14 - Amalgamation, Absorption & External Reconstruction:** In the nature of merger and purchase with corresponding accounting treatments of pooling of interests and Purchase method respectively. Meaning and Computation of Purchase consideration. Problems based on purchase method only.	15	Financial Accounting by SN Maheshwari	Chalk-Board Method, Discussion, Google classroom.
	Accounting of Transactions of Foreign Currency In relation to purchase and sale of goods, services and assets and Loan and credit transactions. Computation and treatment of exchange rate differences	15	Financial Accounting by SN Maheshwari	Chalk-Board Method, Discussion, Google classroom.
	Liquidation of Companies Meaning of liquidation or winding up, Preferential payments, Overriding preferential payments, Preparation of statement of affairs, deficit / surplus account, Liquidator's final statement of account	10	Financial Accounting by SN Maheshwari	Chalk-Board Method, Discussion, Google classroom.

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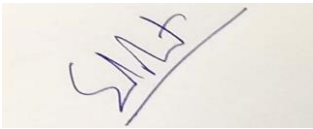
TEACHING PLAN (UNIT PLAN)

	Underwriting of Shares and Debentures Introduction, Underwriting, Underwriting Commission, Provision of Companies Act with respect to Payment of underwriting commission, Underwriters, Sub-Underwriters, Brokers and, Manager to issues, Types of underwriting, Abatement Clause, Marked, Unmarked and Firm-underwriting applications, Liability of the underwriters in respect of underwriting contract Practical problems	10	Financial Accounting by SN Maheshwari	Chalk-Board Method, Discussion, Google classroom.
	Accounting for Limited Liability Partnership Statutory Provisions, Conversion of partnership firm into LLP, Final Accounts	10	Financial Accounting by SN Maheshwari	Chalk-Board Method, Discussion, Google classroom.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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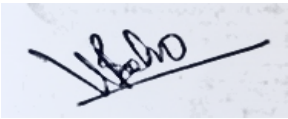

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sunitha Nair DEPARTMENT: _Commerce_ CLASS: T.Y.B.Com (E & F) SEMESTER: VI (Subject : Business Economics)

MONTH: December - April ACADEMIC YEAR: __2022-23

LEARNING OBJECTIVE/S: The Learners will be able to understand the old school and contemprorary method and theories utilized to understand the terms of trade and exchange along with the legalities of trading relations under the policy brackets to cater the smooth international trade between nations.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED

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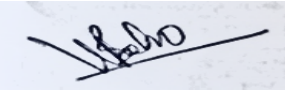

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TEACHING PLAN (UNIT PLAN)

I & II, III & IV	Unit I: Introduction to International Trade Theories of International Trade: Ricado and Heckscher - Ohlin; Terms of Trade: Types and Limitations; Gains from International Trade: Offer curves and Reciprocal Demand.	03 lectures per week	M.L. Jhingan: International Economics Dominick Salvatore: International Economics Trade and Finance	Chalk and Board, PPT, Google form test

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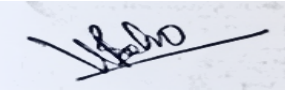

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TEACHING PLAN (UNIT PLAN)

	Unit II: Commercial Policy Commercial Trade Policy: Free Trade & Protection , Pros & Cons; Tariff and Non-Tariff Barriers: Meaning, Types and Effects; International Economic Integration: Types and Objectives, EU & BREXIT, ASEAN	03 lectures per week	Paul Krugman: International Economics Theory and Policy. Desai and Bhalerao:	Chalk and Board, PPT, Google form test

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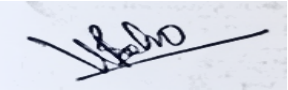

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

			International Economics	
	Unit III - BALANCE OF PAYMENT AND WTO : Concept and Structure of Balance of Payments, Causes and Disequilibrium and Measures to Correct Disequilibrium in BOP, India's Balance of Payment since 1991 and World Trade Organisation.	03 lectures per week	M.L. Jhingan: International Economics Dominick Salvatore: International	Chalk and Board, PPT, Google form test

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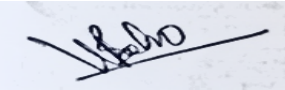

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TEACHING PLAN (UNIT PLAN)

			Economics Trade and Finance	
	Unit IV- FOREIGN EXCHANGE MARKET: Foreign Exchange Market, Determination of Equilibrium Rate of Exchange, Purchasing Power Parity Theory, Rate of Central Bank in Foreign Exchange Rate Management	03 lectures per week	M.L. Jhingan: International Economics	Chalk and Board, PPT, Google form test

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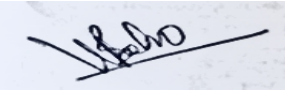

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_54___

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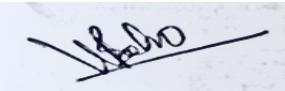

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TEACHING PLAN (UNIT PLAN)

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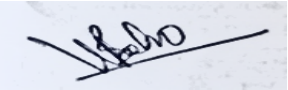

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TEACHING PLAN (UNIT PLAN)

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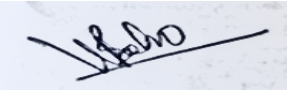

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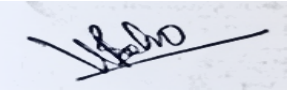

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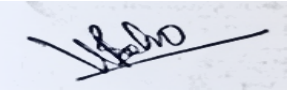

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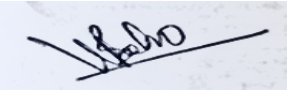

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. VEENA SIHANA** DEPARTMENT: **BUSSINESS ECONOMICS** CLASS: **T.Y.BCOM** SEMESTER: **VI**

SUBJECT : **BUS. ECONOMICS-VI** MONTH: Noveber to March 2023 ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVES: The student must be able to understand Introduction to International Trade, Commercial Policy, BOP & Foreign Exchange market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	E -REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics - VI	**Unit I** Theories of International Trade - Ricardo's Theory of Comparative Costs and the Heckscher- Ohlin Theory. Terms of Trade - Types and Limitations. Gains from International trade - Offer Curves and Reciprocal Demand	**10 Lectures**	*Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases* *Dominick Salvatore – International Economics*	Google classroom, Google Forms CHALK DUSTER METHOD
	Unit-II Commercial Trade Policy –Free Trade and Protection – Pros and Cons. Tariff And Non Tariff Barriers: Meaning, Types and Effects International	**15 Letures**	H. L. AHUJA MORDEN ECONOMICS *M.L. Jhingan – International Economics*	

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	Economic Integration – Types and Objectives:-EU and Brexit, ASAEN			
	Unit III: Balance of Payment: Meaning, Structure, Types of Disequilibrium. Causes and measures to correct the disequilibrium in Balance of Payments WTORecent Developments in TRIPS, TRIMS and GATS.	**10 Lectures**	*MANANPRAKSHAN Dr. P A Johnson – A. D. Mascarenhas – Sonali Chatterjee*	
	Unit IV: Foreign Exchange Market: Meaning, Functions, Determination of Equilibrium Rate of Exchange. Purchasing Power Parity Theory, Spot and Forward Exchange Rates, Arbitrage. Role of Central Bank in foreign exchange rate management, Managed flexible exchange rate system of India.	**10 Lectures**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___45_

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(Accountancy) **(Commerce)**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. VERONIKA B. BARLA** DEPARTMENT: **BUS. ECONOMICS** CLASS: **T.Y.BCOM** SEMESTER: **VI** (Subject : **BUS. ECONOMICS-VI**)

MONTH: ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVES:

The student must be able to understand **Introduction to International Trade**

The student must be able to understand **Commercial Policy**

The student must be able to understand B**alance of payments and International Economic Organization**

The student must be able to understand **Foreign Exchange market**

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics - VI	**Unit I** Theories of International Trade - Ricardo's Theory of Comparative Costs and the Heckscher- Ohlin Theory. Terms of Trade - Types and Limitations. Gains from International trade - Offer Curves and Reciprocal Demand	**10 lectures**	*Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases* *Dominick Salvatore – International Economics*	Google classroom, Google Forms CHALK DUSTER METHOD
	Unit-II Commercial Trade Policy –Free Trade and Protection – Pros and Cons. Tariff And Non Tariff Barriers: Meaning, Types and Effects International Economic Integration – Types and Objectives:-EU and Brexit, ASAEN	15 lectures	H. L. AHUJA MORDEN ECONOMICS *M.L. Jhingan – International Economics*	

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TEACHING PLAN (UNIT PLAN)

	Unit III: Balance of Payment: Meaning, Structure, Types of Disequilibrium. Causes and measures to correct the disequilibrium in Balance of Payments WTO-Recent Developments in TRIPS, TRIMS and GATS.	**10 lectures**		
	Unit IV: Foreign Exchange Market: Meaning, Functions, Determination of Equilibrium Rate of Exchange. Purchasing Power Parity Theory, Spot and Forward Exchange Rates, Arbitrage. Role of Central Bank in foreign exchange rate management, Managed flexible exchange rate system of India.	**10 lectures**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

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TEACHING PLAN (UNIT PLAN)

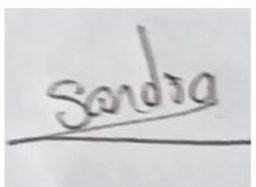
NAME OF THE STAFF: **Mrs. Sandra Shamir Almeida** DEPARTMENT: **Commerce**

CLASS: **FYBCOM** (M,N,O,P) SEMESTER: **Sem I** MONTH: **Sept to Dec** ACADEMIC YEAR : **2021-22**

LEARNING OBJECTIVE/S:

1) The learners will be able to know the various concepts about Accounting Standard 1, 2 & 9, especially about Inventory Valuation, Capital and Revenue: Receipts and Expenditure and about Accounting for Hire Purchase.
2) He will also be able to practically apply this knowledge in business & entrepreneurship in India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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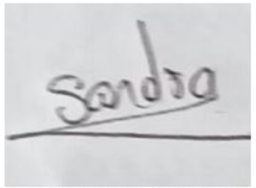
ACCOUNTANCY AND FINANCIAL MANAGEMENT-I	**Module I : ACCOUNTING STANARDS ISSUED BY ICAI AND INVENTORY VALUATION** • **Inventory Valuation** • Meaning of Inventories • Cost of Inventory Valuation • Inventory Systems: Periodic Inventory System and Perpetual Inventory System • Valuation : Meaning & Importance • Methods of Stock Valuation as per AS-2 : FIFO AND Weighted Average Method • Computation of Valuation of Inventory as on balance sheet date: If inventory is taken on a date after the balance sheet or before the balance sheet.	12	**Financial Accounting: A Managerial Perspective by Narayanswamy**	Google Meet, Google Class room, Power Point Presentations, Word & Table Top Method of teaching, Google forms for evaluation & Group discussion.



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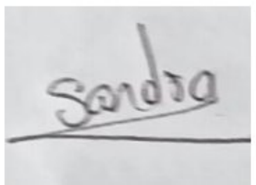
	Module II : FINAL ACCOUNTS ➢ **Capital and Revenue : Expenditure and Receipts** • Expenditure : Capital and Revenue • Receipts: Capital, Revenue • Adjustments and Closing Entries	08	**Financial Accounting for Management by N Ramachandran**	Google Meet, Google Class room, Power Point Presentations, Word, Excel & Table Top Method of teaching, Google forms for evaluation & Group discussion.



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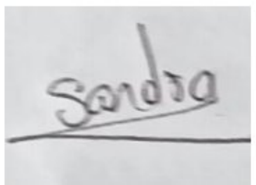
	Module IV : ACCOUNTING FOR HIRE PURCHASE • Meaning • Calculation of Interest • Accounting for Hire Purchase transactions by asset purchase method based on full cash price • Journal entries, ledger accounts and disclosure in balance sheet for hirer and vendor (excluding default, repossession and calculation of cash price)	15	**Financial Accounting for Management by Ambrish Gupta**	Google Meet, Google Class Room, Power Point Presentations, Word & Table Top Method of teaching, Google forms for evaluation & Group discussion.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ARUN RAUT DEPARTMENT: COMMERCE

8CLASS: FYBCOM (A B C) SEMESTER: I MONTH: JUL-NOV ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of Accounting Standards, Preparation and working of Manufacturing A/C and Departmental A/C.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	ACCOUNTING STANDARD **AS – 1: Disclosure of Accounting Policies** **AS – 2: Valuation of Inventories (Stock)** **AS – 9: Revenue Recognition**	4	Manan Prakashan, Internet	MS Office, Google docs, sheet, slides, Google Meet

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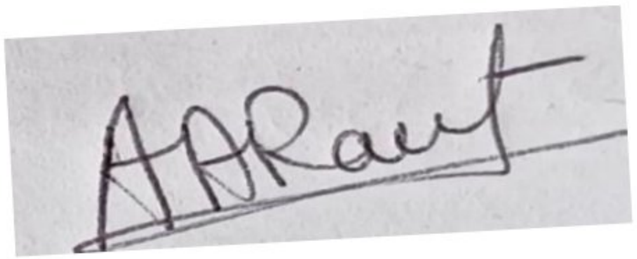

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2	**Final Accounts** **Adjustments and Closing Entries** **Final Accounts of Manufacturing Concerns (Proprietary Firm)** Format of Manufacturing Trading and P&L A/C, Balance Sheet, Questions based on Manufacturing A/C.	6	Manan Prakashan, Internet	MS Office, Google docs, sheet, slides, Google Meet
3	Departmental A/C Format of Departmental Trading and P&L A/C, Questions based on Manufacturing A/C.	5	Manan Prakashan, Internet	MS Office, Google docs, sheet, slides, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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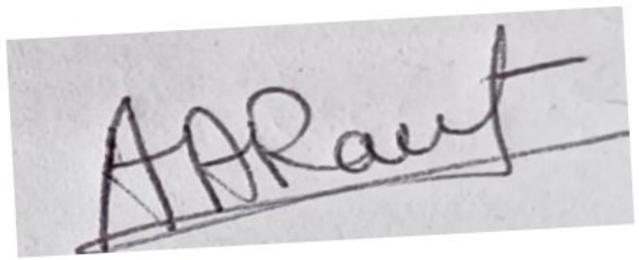

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce

CLASS: F Y B Com (M, N, O, P) MONTH: DECEMBER ACADEMIC YEAR: 2021-22

SEMESTER: I

LEARNING OBJECTIVE/S:

The learners will be able to:

Demonstrate knowledge of preparation of financial statement and financial schedule in accordance with GAAP – Generally Accepted Accounting Principles, through analysis and synthesis of information as well. Student will learn relevant financial accounting carrier skills, applying both quantitative & qualitative knowledge to their future carrier in business.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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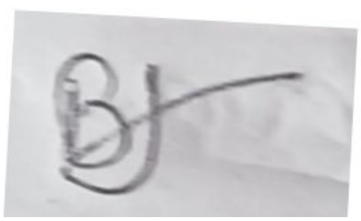

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Accountancy & Financial Management 1	**Accounting Standards Issued by ICAI and Inventory Valuation** **• Accounting Standards:** Concepts, Benefits, Procedures for Issue of Accounting Standards Various AS: **AS – 1: Disclosure of Accounting Policies** (a) Purpose (b) Areas of Policies (c) Disclosure of Policies (d)Disclosure of Change in Policies **AS – 2: Valuation of Inventories (Stock)** (a) Meaning, Definition (b) Applicability (c) Measurement of Inventory	03	*Financial Accounting by M. Mukherjee and M. Hanif, Tata McGraw Hill Education Pvt. Ltd., New Delhi* *Financial Accounting by Williams, Tata Mc. Grow Hill and Co. Ltd., Mumbai*	GOOGLE MEET FOR ONLINE TEACHING, GOOGLE CLASSROOM DESKTOP AND LAPTOP, , Group Discussion,
	(d) Disclosure in Final Account(e) Explanation with Illustrations **AS – 9: Revenue Recognition** (a) Meaning and Scope (b) Transactions Excluded (c) Sale of Goods (d) Rendering of Services (e) Effects of Uncertainties (f) Disclosure			
	Final Accounts • Adjustments and Closing Entries • Final Accounts of Manufacturing Concerns (Proprietary Firm)	10		

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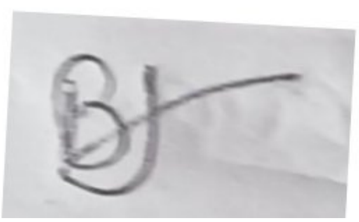

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	Departmental Accounts Meaning Basis of Allocation of Expenses and Incomes / Receipts Inter Departmental Transfer: At Cost Price and Invoice Price Stock Reserve Departmental Trading and Profit and Loss Account and Balance Shee	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 23

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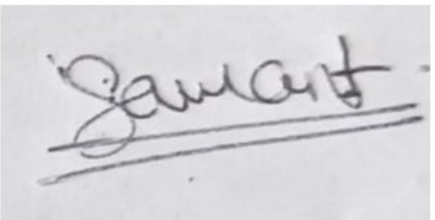
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **VISHAL SAWANT** DEPARTMENT: **COMMERCE** CLASS: FYBCOM (A,B,C,D) SEMESTER: I

SUBJECT: FINANCIAL ACCOUNTING MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: prepare department trading and profit & loss account, calculation of stock by FIFO and weighted average method and calculation of hire purchase price and cash price.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Capital revenue income and expenditure	Characteristics of Capital expenditure and income, Characteristics of Revenue expenditure and income. Questions on capital expenditure and income with reasons.	8	Manan prakashan	Google meet, PPT, EXCEL.ONE NOTE
Inventory valuation	Concept of inventory valuation, format of FIFO and Weighted average method of inventory valuation. Q1 to Q6 on inventory valuation with both methods.	10	Manan prakashan	Google meet, PPT, EXCEL.ONE NOTE



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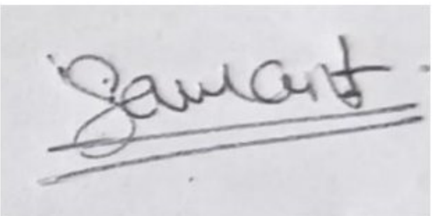
Hire purchase system	Meaning of hire purchase, journal entry in the books of hire vendor and hire purchaser. Calculation of interest. Calculation of depreciation. Q1 to Q6 on hire purchase system in the books of both vendor and purchaser.	12	Manan Prakashan	Google meet, PPT, EXCEL.ONE NOTE

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____30_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ARUN RAUT DEPARTMENT: COMMERCE

8CLASS: FYBCOM (A B C) SEMESTER: I MONTH: JUL-NOV ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of Accounting Standards, Preparation and working of Manufacturing A/C and Departmental A/C.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	ACCOUNTING STANDARD **AS – 1: Disclosure of Accounting Policies** **AS – 2: Valuation of Inventories (Stock)** **AS – 9: Revenue Recognition**	4	Manan Prakashan, Internet	MS Office, Google docs, sheet, slides, Google Meet
2	**Final Accounts**	6	Manan Prakashan, Internet	MS Office, Google docs, sheet, slides, Google Meet

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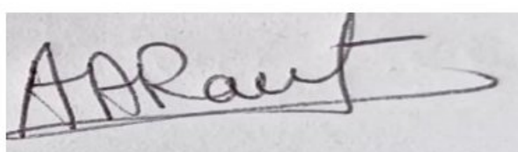

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	Adjustments and Closing Entries **Final Accounts of Manufacturing Concerns (Proprietary Firm)** Format of Manufacturing Trading and P&L A/C, Balance Sheet, Questions based on Manufacturing A/C.			
3	Departmental A/C Format of Departmental Trading and P&L A/C, Questions based on Manufacturing A/C.	5	Manan Prakashan, Internet	MS Office, Google docs, sheet, slides, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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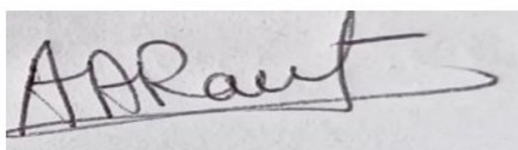

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHWINI DATTATRAY BHOIR DEPARTMENT: COMMERCE CLASS: FYBCOM I,J,K,L. SEMESTER: I MONTH: - OCTOBER - JANUARY ACADEMIC YEAR: 2021 -2022 SUBJECT - FOUNDATION COURCE - I

LEARNING OBJECTIVE/S:
The learners will be able to know importance of Constitution and importance of fundamental Rights and Duties.

The learners will be able to know Indian Multi-Cultural.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Overview of Indian Society	Understand the Multi-Cultural diversity of Indian Society through its demographic composition: Population distribution according to religion, caste and gender; Appreciate the concept of linguistic diversity in relation of the indian situation;	5	Indian Society and Culture, Vinita Padey, Rawat pub2016	1) Lecture and Discussion 2) Online teaching learning tools (Google meet, Google form, PPTs) 3) Black Board, chalk and Duster
Unit -4 The Indian Constitution	Philosophy of the Constitution as set out in the preamble; The structure of the Constitution - the preamble, main body and	7	Introduction to the Constitution	

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	schedules; Fundamental Duties of the Indian Citizen ; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; basic features of the Constitution.		of India - Durga Das Basu	
Unit 5- Significant Aspects of Political processes.	The party system in Indian politics; Local self-government in urban and rural areas; The 73rd and 74th Amendments and their implications inclusive politics; Role and significance of women in politics.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Hemangi Mehta DEPARTMENT: Commerce CLASS: FYBCOM:-K SEMESTER: I MONTH: October to January 2021-22

ACADEMIC YEAR:2021-22

LEARNING OBJECTIVES:
The learners will be able to:

To make the students socially aware of the societal problems and their personality.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 & UNIT 3	Module II : Concept of Disparity 1 : Social Stratification and inequality, Gender Disparities, Disparities and Disability, Status of women in India, their problems, solutions, Handicapped Persons and services available to them.	06	Foundation Course By Michael Vaz	PPT, GOOGLE MEET

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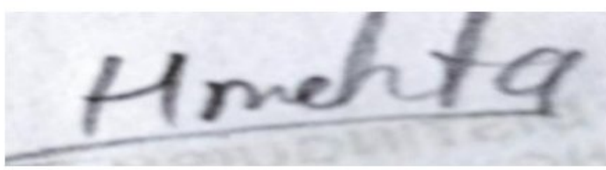

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	Module III : Concept of Disparity 2 : Inequalities and the Caste System, Inter-group Conflicts- Caste conflicts, Understand inter group conflicts arising out of communalism, Communalism and conflicts, Regionalism and conflicts, Linguistic conflicts.	04		PPT, GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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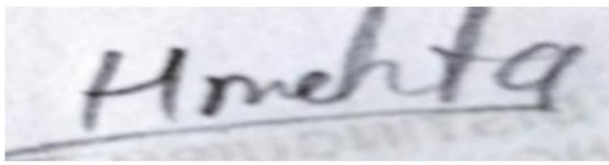

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Seema Sihana DEPARTMENT: Commerce CLASS: FYBCOM:-A,B,C,D SEMESTER: I MONTH: October to January 2021-22

ACADEMIC YEAR:2021-22

LEARNING OBJECTIVES:
The learners will be able to: Familiarize the commerce students about social awareness in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE I	Module II : Concept of Disparity 1 : Social Stratification and inequality, Gender Disparities, Disparities and Disability, Status of women in India, their problems, solutions, Handicapped Persons and services available to them.	04	Flavia Agnes Law and Gender Inequalities Jaya Sagade Women human rights in India	PPT, GOOGLE MEET Word Documents
	Module III : Concept of Disparity 2 :	04		PPT, GOOGLE MEET Word Documents

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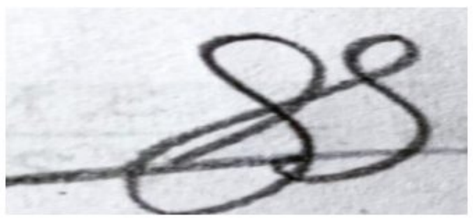

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	Inequalities and the Caste System, Inter-group Conflicts- Caste conflicts, Communalism and conflicts, Regionalism and conflicts, Linguistic conflicts.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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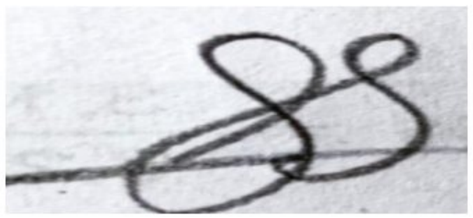

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA VAIBHAV TAMBE DEPARTMENT: Commerce CLASS: F.Y.Bcom E, F,G,H,I
SUBJECT: FOUNDATION COURSE I SEMESTER: I MONTH: October-December ACADEMIC YEAR: 2021-2022

A teaching plan is a document that outlines the structure and details of a single session. A good teaching plan is a comprehensive write-up of the step-by-step teaching methods, the estimated duration of each segment of teaching, and the materials and resources needed for the session.

LEARNING OBJECTIVE/S:

By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

(For a detailed description of each component see Appendix A).

APPENDIX {A}

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	a] Concept of disparity as arising out of stratification and inequalities.	03	Book by Manan publications/Internet	Online

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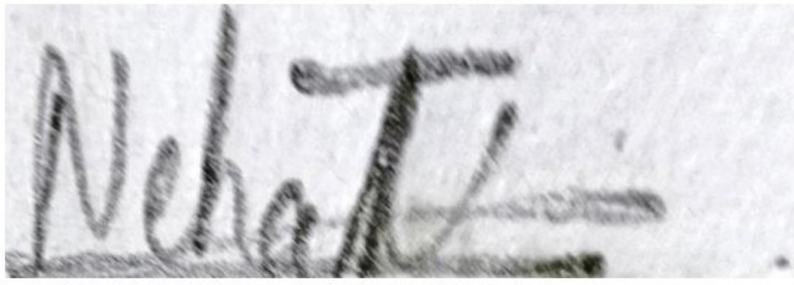
UNIT1 Concept of Disparity 1	b]gender disparities with special references to violence against women.	02	Book by Manan publications/Internet	Online
	c] Female Foeticide & Declining gender ratio	02	Book by Manan publications/Internet	Online
	d] inequalities faced by people with disabilities.	02	Book by Manan publications/Internet	Online
	e] Understand the issues of people with physical & mental disabilities. Special provisions and facilities for disabled personalities.	01	Book by Manan publications/Internet	Online

Total no of lecture 10

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Concept of Disparity 2	a] Inequalities manifested due to caste system	01	Book by Manan publications/Internet	Online
	b]different types of conflicts arising out of caste system, inter- group conflict, cultural differences, lingual differences.	01	Book by Manan publications/Internet	Online



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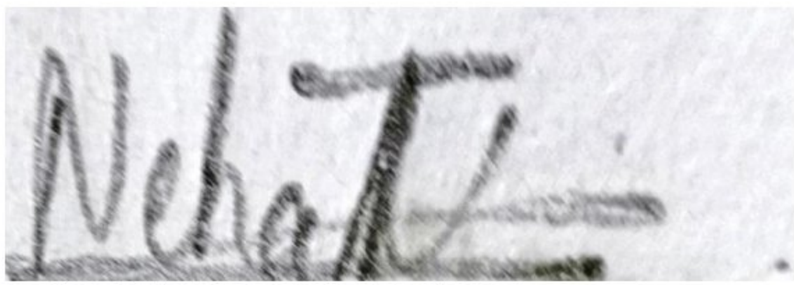
	c] Inter-group conflict arising out of communalism and its effects on society.	01	Book by Manan publications/Internet	Online
	d] Causes and Effects of conflicts arising out of regionalism.	01	Book by Vipul publication/internet	Online
	e] Causes and Effects of conflicts arising out of linguistic differences.	01	Book by Vipul, Manan publication/ internet	Online

Total no of lecture 05



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA D'CUNHA DEPARTMENT: COMMERCE CLASS: FYBCOM SEMESTER: I MONTH: OCTOBER

ACADEMIC YEAR: 2021

LEARNING OBJECTIVE/S:
The learners will be able to know about Indian society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FONDATION COURSE UNIT 1 OVERVIEW OF INDIAN SIOCIETY	Understand regional variations according to rural, urban and tribal characteristics, Understanding the concept of diversity as Difference	05	Text Book	PPT

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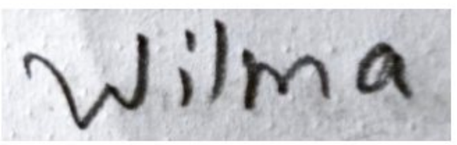

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: FYBCOM SEMESTER: 1 MONTH: NOVEMBER

ACADEMIC YEAR: 2021

LEARNING OBJECTIVE/S:
The learners will be able to get knowledge about Indian Constitution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 The Indian constitution	Philosophy of the constitution as set out in the preamble, The structure of the constitution- the preamble, Main body and schedules, Fundamental duties of the Indian citizen, Tolerance, Peace and Communal harmony as crucial values in strengthening the social fabric of Indian society, Basic features of the constitution.	10	Text Book	PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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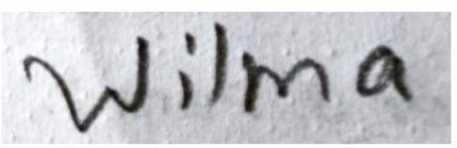

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: FYBCOM SEMESTER: I MONTH: DECEMBER

ACADEMIC YEAR: 2021

LEARNING OBJECTIVE/S:
The learners will be able to understand the political system in India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 Significance aspect of Political Processes	The party system in Indian politics, Local self-government in Urban and Rural areas, 73rd and 74th Amendments and their implications for inclusive politics, Role and Significance of Women in Politics.	10	Text Book	PPT, CHALK AND BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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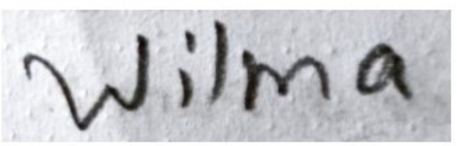

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ABHISHEK MADAYE

DEPARTMENT: ____COMMERCE_____ CLASS: ____FYBCOM (E,F,G,H) ____ SEMESTER: __I_____ MONTH: __JUL-NOV_____ ACADEMIC YEAR: _____2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of Accounting Standards, Preparation and working of Manufacturing A/C and Departmental A/C.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	ACCOUNTING STANDARD **AS – 1: Disclosure of Accounting Policies** **AS – 2: Valuation of Inventories (Stock)** **AS – 9: Revenue Recognition**	4	Manan Prakashan, Internet	Excel,Google docs, sheet, Google Meet
2	**Final Accounts** **Adjustments and Closing Entries** **Final Accounts of Manufacturing Concerns (Proprietary Firm)** Format of Manufacturing Trading and P&L A/C, Balance Sheet, Questions based on Manufacturing A/C.	6	Manan Prakashan, Internet	Excel,Google docs, sheet, Google Meet
3	Departmental A/C Format of Departmental Trading and P&L A/C, Questions based on Manufacturing A/C.	5	Manan Prakashan, Internet	Excel,Google docs, sheet, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Smita Sushant Khaire_____

DEPARTMENT: Commerce CLASS: FYBCOM SEMESTER: __I___MONTH: OCT-JAN

ACADEMIC YEAR: _2021-2022

LEARNING OBJECTIVE/S: The learners will be able to understand and acquire knowledge about Environment.
It will be helps to develop an attitude of concern towards Environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environmental studies Div- A to H (Unit 1 and Unit 2) Div- I to L (Unit 1 and Unit 3)	Unit1: Environment and Ecosystem- Definition, scope, its components, Ecosystem-Definition, components, and types, functioning and structure, Food chain, Food web, Ecological pyramid; Man, and environment relationship, Importance, and scope of environmental studies	7	Environmental science by Santra S.C	PowerPoint presentation
	Unit 2: Natural Resources and Sustainable Development Meaning and Definitions; Classification and types of resources, factors influencing resource utilisation; Resource conservation-meaning and methods- conventional and non-conventional resources, problems associated with and management of water, forest and energy resources- resource utilization and sustainable development	7	Essential of Ecology and Environment by Odum. E.P.	PowerPoint presentation
	Unit 3: Population and Immerging issues of Development: Population explosion in the world and India and arising concerns- Demographic Transition Theory- pattern of population growth and associated problems, Measures, Human population and environment, environment, and Health, HDI, WHI	7		PowerPoint presentation

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	Map Filling (World Map)	1	Map book of Sheth Publication	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___7_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti Pramod Patil DEPARTMENT: Commerce CLASS: F.Y.B.Com (Div. :A,B,C,D,E,F,G,H,M,N,O,P)

SEMESTER: I MONTH: October to January ACADEMIC YEAR: 2021-2022 Subject: Environmental Studies

LEARNING OBJECTIVES:
The learners will be able to understand need to study this subject. It helps them to understand current environmental problems in the society and their responsibility towards the environment.

UNIT 1	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environment and Ecosystem	1. Environment: Meaning, definition, scope and its components	3	1.Environmental studies: P.G. Shinde 2.Fundamentals of Ecology: Odum E.P.	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. concept of an ecosystem : definition, Characteristics, components and types, functioning and structure	3		
	3. Food Chain and Food Web, Ecological Pyramids	1		
	4. Man and environment relationship , Importance and scope of Environmental Studies	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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LEARNING OBJECTIVES:
The learners will be able to understand about environmental and social problems caused by increasing population and its control measures. They will able to understand concepts of HDI &WHI

UNIT 3	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Populations and Emerging Issues of Development	1. Population explosion in the world and in India and arising concerns, Demographic Transition Theory	2	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Pattern of population growth in the world and in India and associated problems	1		
	3. Measures taken to control population growth in India; Human population and environment	2		
	4. Environment and Human Health	1		
	5. Human Development Index, The World Happiness Index	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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LEARNING OBJECTIVES:
The learners will be able to understand about concepts of urbanization and associated problems. They will learn about smart and sustainable cities.

UNIT 4	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Urbanisation and Environment	1. Concept of Urbanisation	1	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Problems of migration and urban environment- changing landuse, crowding and stress on urban resources	2		
	3. Degradation of air and water, loss of soil cover, impact on biodiversity, Urban heat islands	2		
	4. Emerging Smart Cities and safe cities in India - Sustainable Cities	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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LEARNING OBJECTIVES:

The learners will be able to read various types of thematic maps and learn about map fillings which will give them an idea of spatial distribution of environmental problems

UNIT 5	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Reading of Thematic Maps and Map Filling	1. Reading of Thematic Maps Located bars, Circles, Pie charts, Isopleths, Choropleth and Flow map, Pictograms	04	Environmental studies: P.G. Shinde	Teaching Method: 1. Lecture method 2.Discussion method 3.Demonstration method Teaching aid: chalkboard, maps, Google meet, Google forms, Paint
	2. Map filling of World (Environmentally significant features) using point, line and polygon segment.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Nilambari Yogesh Shidhaye Department: - Commerce
Class: - F.Y.B.COM (I, J, K, L) SEM: - I MONTH-: Sept-Dec YEAR: -2021/22

LEARNINIG OBJECTIVES: The learner will be able to learn through online teaching, as well as offline teaching as well. The concept of business environment, Internal and external environment, educational environment and its impact, functions of WTO and major trading blocs. The students will also receive the knowledge relate to the project planning and process, statutory requirements in promoting the business unit.

PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	METHODS
COMMERCE - II	MODULE-II **Business Environment:** INTRODUCTION: - Concept of Business Environment, Importance of Analysing business Environment, Interrelationship among the same. Constituents of Business Environment Part II- Internal and External Environment, Educational Environment and its impact. International Trading environment Part III: - Current trends, WTO, Functions of WTO, Major Trading Blocs, Impact of Trading Blocs.	11 Lectures	Michael Vaz Aurora Vaz Kale and Ahmed	Presenting the PPT according to Topic wise with the help of google meet. Online and Offline lecture both.
	MODULE: - III PROJECT PLANNING Introduction: - Business planning process, Concept and Importance of Project planning, Project Report, Feasibility study and types of the same. Business Unit Promotion – Part II	12 Lectures	Michael Vaz Aurora Vaz Kale and Ahmed	Presenting the PPT according to Topic wise with the help of google meet. Online and Offline lecture both.

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	Stages of Business Unit Promotion, Factors Determining Location, Role of Government in Promotion of Business Unit. <u>Statutory Requirements in Promoting Business Unit – Part III.</u> Licensing and Registration, Filing Returns and Documents, Important Legal Provisions.			

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBCOM (A,B,C,D,E,F) SEM : I MONTH : Oct-Dec YEAR : 2021-22

LEARNING OBJECTIVE/S : be able to learn basic concept of business. He will also be able to learn various business objectives and various strategies of businesses.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE I UNIT I BUSINESS	INTRODUCTION : Concept, functions, scope, significance	03	Introduction to commerce, Vikram , Amit, Atlantic pub	Google Meet, PPT, chalk & board
	OBJECTIVES OF BUSINESS : Steps, classification, reconciliation of economic & social objectives	03	Introduction to commerce, Vikram , Amit, Atlantic pub	Google Meet, PPT, chalk & board
	NEW TRENDS IN BUSINESS : Liberalisation, privatization, globalisation, strategy alternatives, restructuring strategies, turnaround strategies	06	Introduction to commerce, Vikram , Amit, Atlantic pub	Google Meet, PPT, chalk & board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBCOM (A,B,C,D,E,F) SEM : I MONTH : Dec-Jan YEAR : 2021-22

LEARNING OBJECTIVE/S : Learner will be able to learn concept of entrepreneurship and the scenario of entrepreneurship in India.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE I UNIT IV ENTREPRENEURSHIP	INTRODUCTION : Concept, importance, factors – growth of entrepreneurship, intrapreneurs	03	Entrepreneurship, Hisrich, Robert D, Mc grow Hill	Google Meet, PPT, chalk & board
	ENTREPRENEURSHIP : Types, competencies, training & development centres, incentives to entrepreneurs	03	Entrepreneurship, Hisrich, Robert D, Mc grow Hill	Google Meet, PT, chalk & board
	WOMEN ENTREPRENEURS : Problems, promotion	02	Entrepreneurship, Hisrich, Robert D, Mc grow Hill	Google Meet, PPT, chalk & board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : MS. SEEMA SIHANA SEMESTER: I

DEPARTMENT: Commerce

CLASS: FYB.COM – E, F, G, H

MONTH: October- January 2021-22 ACADEMIC YEAR: 2021-2022

SUBJECT: COMMERCE I

LEARNING OBJECTIVE/S:
The learners will be able to:

1. To introduce the learners with Inter-relationship between Business and Environment.
2. To acquaint students with a knowledge of international trading environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 2: BUSINESS ENVIRONMENT	• Introduction : Concept and Importance of business environment, Inter – relationship between Business and Environmental.	4	Business Environment – Cherunilam Essentials of Business Environment – Aswathappa	1. Lecture and discussion. 2. Flow charts. 3. Online teaching learning tools (google meet, google form Google classroom, PPTs)
	• Constituents of Business Environment : Internal and external Environment, Educational Environment and it's impact. .			
	• International Environment – Current Trends in the			

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	World, International Trading Environment - WTO and Trading Blocs and their impact on Indian Business			

MODULE 3: PROJECT PLANNING	• Introduction : Business Planning Process; Concept and Importance of Project Planning; Project Report; Feasibility Study Types and it's Importance.	4	Strategic management - Bhutani Business Organisation Management - Maheshwari	4. Lecture and discussion. 5. Flow charts. 6. Online teaching learning tools (google meet, google form Google classroom, PPTs)
	• Business Unit Promotion: Concept and Stages of Business Unit Promotion, Location -Factors determining location and Role of Government in Promotion.			
	• Statutory Requirements in Promoting Business Unit : Licensing and Registration Procedure, Filling returns and other documents, other important legal provision.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE Div: M,N,O,P SUBJECT: COMMERCE I

CLASS: FYBCOM SEMESTER: I MONTH: October-December ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to : Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 2: Business Environment	1. Introduction: concept and importance of business environment, interrelationship between Business and Environment.	2	Commerce I-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method
	2. Constituents of business environment internal and external environment, educational environment and its impact.	3	Commerce I-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method
	3. International environment: current trends in the world, International trading environment- WTO & Trading Blocks & their impact on Indian business.	6	Commerce I-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Module - 3: Project Planning	1.Introduction : Business Planning Process; Concept and Importance of Project Planning; Project Report; Feasibility Study Types and its Importance.	4	Commerce I-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method
	2 Business Unit Promotion : Concept and Stages of Business Unit Promotion, Location – Factors determining location and Role of Government in Promotion.	4	Commerce I-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method
	4. Statutory Requirements in Promoting Business Unit : Licensing and Registration Procedure, Filling returns and other documents, Other important legal provisions.	4	Commerce I-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sarita Panigrahy DEPARTMENT: Mathematics CLAS: FYBCom SEMESTER: I MONTH: OCTOBER- DECEMBER

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Skills and Value, Learning objectives Curriculum Communicate

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II Permutation, Combination	**Permutation, Combination :** Factorial Notation, Fundamental principle of counting, Permutation as arrangement, Simple examples, combination as selection, Simple examples, Relation between r n C and r n P Examples on commercial application ofpermutation and combination.	9	By Manan Prakashan and Vipul Publication	ICT and Table-top method
Unit IV: Elementary Probability Theory:	**Probability Theory**: Concept of random experiment/trial and possible outcomes; SampleSpace and Discrete Sample Space; Events their types, Algebra of Events, MutuallyExclusive and Exhaustive Events, Complimentary events.Classical definition of Probability, Addition theorem (without proof), conditional probability.Independence of Events: $P(A \cap B) = P(A)\,P(B)$. Simple examples.	10	By Manan Prakashan and Vipul Publication	ICT and Table-top method,Blackbord duster
	Random Variable: Probability distribution of a discrete random variable; Expectation and Variance of random variable, simple examples on probability distributions.	5	S.L.Agarwal	ICT and Table-top method, Blackbord duster

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: Khan Parveen Saba N. DEPARTMENT: COMMERCE CLASS: FY B.COM (I,J,K,L,M,N,O,P)

SEMESTER: I MONTH: OCTOBER & NOVEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define different measures of central tendency like, mean, median, mode etc.
- Find median, quartiles and mode graphically using ogives and histogram.
- Find mean, combined and weighted mean, median, mode, quartiles, deciles, percentiles using required formula.
- Define different measures of dispersion like range, quartile deviation, variance etc.
- Find range, quartile deviation, mean deviation, variance, standard deviation and combined standard deviation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and Statistical Techniques-I Measures of central tendency and measures of dispersion (Unit 3)	➢ Definition of averages, its types, merits, demerits ➢ Finding mean, median, mode, quartiles, deciles, percentiles using numerical formula ➢ Finding mode, median, quartiles, graphically ➢ Measures of dispersion: types, merits. Demerits ➢ Finding range, quartile deviation, mean deviation, variance, standard deviation	1 3 1 1 3	Basic Statistics (S.L Agarwal)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Powerpoint presentation, blackboard, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9

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TEACHING PLAN (UNIT 5 PLAN)

NAME OF THE STAFF: Khan Parveen Saba N. DEPARTMENT: COMMERCE CLASS: FY B.COM (I,J,K,L,M,N,O,P)

SEMESTER: I MONTH: DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define courses of action, states of nature, pay off matrix, regret table.
- Draw decision tree and find the optimum decision.
- Find the best decision under uncertainity and under risk using various criteria.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and Statistical Techniques-I Decision theory (Unit 5)	➢ Course of action, states of nature, pay off matrix, regret table. ➢ Best decision under uncertainty ➢ Best decision under risk (EMV & EOL) ➢ Decision tree and finding the optimum decision ➢ Drawing the pay off matrix	1 1 1 1 1	Basic Statistics (S.L Agarwal)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Powerpoint presentation, blackboard, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Manish Pithadia DEPARTMENT: Commerce

CLASS: F.Y.B.Com SEMESTER: Ist MONTH: Nov/Dec ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: To developed skill of calculating financial and management mathematics and some basic statistical techniques.
The learners will be able to : Financial mathematics in which Share and Mutual Fund basic concept , basic example related to purchased and sell. Also learn management mathematics by Linear programming problem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	Share: Concept of share, face value, market value, dividend, equity share, preferential share, bonus share, simple example.	8	Financial mathematics by V.K.Kapoor	ICT
	Mutual Fund: Basic concept of mutual fund, simple example on net income with entry load , dividend, exit load, change un N.A.V. Average cost price under the SIP.	7	Financial mathematics by V.K.Kapoor	ICT
Unit II	Linear Programing problem: Introduction, basic terms of L.P.P. formulation of L.P.P. Solution of L.P.P with graphical method	5	Financial mathematics by V.K.Kapoor	ICT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr.Praful Ghag_____ DEPARTMENT: _____Commerce_____

CLASS: __F.Y.B.Com_____ SEMESTER: ____Ist_____ MONTH: ___Nov/Dec____ ACADEMIC YEAR:__2021-2022_____

LEARNING OBJECTIVE/S: To developed skill of calculating financial and management mathematics and some basic statistical techniques.
The learners will be able to : Financial mathematics in which Share and Mutual Fund basic concept , basic example related to purchased and sell. Also learn management mathematics by permutation and combination for arrangements and selection.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II	Permutation and Combination: Factorial Notation, Fundamental principle of counting,Permutation as arrangement, Simple examples, combination as selection, Simple examples, Relation between r n C and r n P Examples on commercial application of permutation and combination.	8	Financial mathematics by V.K.Kapoor	ICT
Unit IV	Probability Theory: Concept of random experiment/trial and possible outcomes; Sample Space and Discrete Sample Space; Events their types, Algebra of Events, Mutually Exclusive and Exhaustive Events, Complimentary events. Classical definition of Probability, Addition theorem (without proof), conditional probability. Independence of Events: $P(A \cap B) = P(A) P(B)$. Simple examples.	10	S.L.Agarwal on basic statistics	ICT
	Random Variable: Probability distribution of a discrete random variable; Expectation and Variance of random variable, simple	5	S.L.Agarwal on basic statistics	ICT

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	examples on probability distributions.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____20_____

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TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: COMMERCE

CLASS: FY B.COM (E,F,G,H) SEMESTER: I MONTH: OCTOBER & NOVEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define different measures of central tendency like, mean, median, mode etc.
- Find median, quartiles and mode graphically using ogives and histogram.
- Find mean, combined and weighted mean, median, mode, quartiles, deciles, percentiles using required formula.
- Define different measures of dispersion like range, quartile deviation, variance etc.
- Find range, quartile deviation, mean deviation, variance, standard deviation and combined standard deviation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and Statistical Techniques-I Measures of central tendency and measures of dispersion (Unit 3)	➢ Definition of averages, its types, merits, demerits ➢ Finding mean, median, mode, quartiles, deciles, percentiles using numerical formula ➢ Finding mode, median, quartiles, graphically ➢ Measures of dispersion: types, merits. Demerits ➢ Finding range, quartile deviation, mean deviation, variance, standard deviation	1 3 1 1 3	Basic Statistics (S.L Agarwal)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Powerpoint presentation, pen tablet (writing device), blackboard, chalk and duster

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9

TEACHING PLAN (UNIT 5 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: COMMERCE

CLASS: FY B.COM (E,F,G,H) SEMESTER: I MONTH: DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define courses of action, states of nature, pay off matrix, regret table.
- Draw decision tree and find the optimum decision.
- Find the best decision under uncertainity and under risk using various criteria.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and Statistical Techniques-I Decision theory (Unit 5)	➢ Course of action, states of nature, pay off matrix, regret table. ➢ Best decision under uncertainty ➢ Best decision under risk (EMV & EOL) ➢ Decision tree and finding the optimum decision ➢ Drawing the pay off matrix	1 1 1 1 1	Basic Statistics (S.L Agarwal)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Powerpoint presentation, pen tablet (writing device), blackboard, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAF F: **MR. LEJESH KELOTH** DEPARTMENT**: COMMERCE**

CLASS: **F.Y.BCOM (I ,J, K, L)** SEMESTER: **I** MONTH**: AUGUST TO DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S : To understand the working of business unit in the economy.

The learners will be able to : will be able to understand the basic principles of market economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics – Paper -I	**Module 3 : Supply and Production Decision** a) Theory of production b) Short run and long run analysis of production. C) Economics and diseconomies of scale.	10	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication, Himalaya Publication.	Black Board Method
Business Economics – Paper -I	**Module 4: cost of production** a) Cost concept. b) Cost output relationship. c) Break even analysis. **(I & J DIVISION)**	10	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication,	Black Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **ASST. PROF. SUBORNA S BANERJEE** DEPARTMENT: **F.Y.B.COM** CLASS: **A to H**

SEMESTER: **ONE** MONTH: **OCTOBER 2021** TO **JANUARY 2022** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:

The learners will be able to : To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to
Preparing resumes to attending interviews, convening meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.
To make students aware of the importance of developing skills

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 chapter 3	BUSINESS ETHICS	10	JOURNALS	PPT
Unit 2 chapter 1	BUSINESS CORRESPONDENCE	15	REFERENCE BOOK	PPT
Unit 2 chapter 2	PERSONAL CORRESPONDENCE	15	REFERENCE BOOK	PPT

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. SIVAPRIYA ACHARI **DEPARTMENT**: Commerce **CLASS:** FYFMG……**SEMESTER:** I

MONTH: October - 2021 January - 2022 **ACADEMIC YEAR**: 2021-2022

LEARNING OBJECTIVE/S:

1. To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

2. The learners will be able to preparing resumes to attending interviews, convening meetings, planning strategies, making presentations, drafting reports etc., all call for honing our writing and speaking skills.

3. To make students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
1) Theory of Communication	4)BUSINESS ETHICS. Ethics at workplace,Importance of business ethics. Personal Integrity at the workplace. Business Ethics and Media Computer Ethics Corporate Social Responsibility.	15	Manan Publication, Sheth Publication, Vipul Publication	Google Meet, Google classroom, PPT	

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Unit..2 Business Correspondence	**5)Problems in Communication/Barriers to Communication.** **Physical/Semantic/Language/Social cultural/Psychological Barriers,ways to overcome these barriers.** **6)Listening** **Importance of listening skills,Obstacles to listening,Cultivating good listening skills.** **Unit...2. Business Correspondence** **1)Theory of Business Letter writing** **Parts,structure,layouts...Full block,Principle of Effective Letter writing,Principles of Effective E.mail writing.** **2)Personnel Correspondence** **SOP,Letter of Recommendation,Job Application letter and Résumé,Letter of**				

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	Appointment,Letter of Acceptance of Job offer,Letter of Appreciation,Letter of Resignation.				
		15	Manan Publication, Sheth Publication, Vipul Publication	Google Meet, Google classroom, PPT	

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE **CLASS:** FY.B. Com (M & N Div.)

SUBJECT – BUSSINESS COMMUNICATION **SEMESTER:** I **MONTH:** OCTOBER TO JANUARY **ACADEMIC YEAR:**2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Theory of Communication	**1) Concept of Communication**- Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World Impact of technological advancements on communication **2) Channels and Objectives of Communication:**	15	Manan Publication, Sheth Publication, Vipul Publication	Online Lectures on Google Meet

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	Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine **Objectives of Communication:** Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Moral of Employees **3) Methods and Modes of Communication:** **Methods:** Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette **Modes:** Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4) Language and Writing Skills	Commercial Terms used in Business Communication **Paragraph Writing**: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities - Listening Comprehension, Remedial Teaching, Speaking Skills: Presenting a News Item, Dialogue and Speeches Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. Reading Comprehension: Analysis of texts from the fields of Commerce and Management	15	Manan Publication, Sheth Publication, Vipul Publication	Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **BRISTI BISWAS** DEPARTMENT: COMMERCE CLASS: **FYBCOM (DIV: A, B, C, D, I, J, K, L)**

SEMESTER: I MONTH: **AUGUST- JANUARY** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: : To understand the application of microeconomics at corporate level.
The learners will be able to: observe micro economics in the real world and to understand and make business decisions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I **Introduction to business economics**	Introduction : Business Economics ,basic concepts for business economic analysis ,functional relations and tool for economic analysis. Introduction to market demand and supply, demand supply, market equilibrium, changes in market equilibrium.		H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication, Himalaya Publication.	ONLINE (G-MEET/POWER POINT) OFFLINE (CHALK- DUSTER)

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Module II **Demand Analysis** **Module III** **Supply and production decisions and cost of production** (DIVISION: A,B,C,D I,J,K,L)	Meaning of demand,law of demand,determinants of demand, demand function, price, income and substitution effects, nature of demand curve under different markets. Meaning of elasticity, price elasticity of demand , income elasticity of demand , cross elasticity of demand,promotional elasticity of demand, importance of elasticity of demand , relationship between price elasticity of demand and revenue concept. Significance of demand forecasting ,types of demand forecasting, steps in demand forecasting ,methods of demand forecasting.		H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication, Himalaya Publication.	ONLINE (G-MEET/POWER POINT) OFFLINE (CHALK- DUSTER)
	Concept of break even point ,variables influencing the break even point ,business application of break even analysis ,limitations of break even analysis.		H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication, Himalaya Publication.	ONLINE (G-MEET/POWER POINT) OFFLINE (CHALK- DUSTER)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT**: COMMERCE** CLASS: **F.Y.BCOM (M, N, O, P)** SEMESTER: **I** MONTH**: AUGUST TO DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S : To understand the working of business unit in the economy.

The learners will be able to : will be able to understand the basic principles of market economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics – Paper -I	**Module 3 : Supply and Production Decision** a) Theory of production b) Short run and long run analysis of production. C) Economics and diseconomies of scale.	10	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication, Himalaya Publication.	Power Point Presentation, Digital Board, chalk and talk, quiz
Business Economics – Paper -I	**Module 4: cost of production** a) Cost concept. b) Cost output relationship. c) Break even analysis.	10	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication,	Power Point Presentation, Digital Board, chalk and talk, quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **VISHAKHA SANE** DEPARTMENT: COMMERCE CLASS: **FYBCOM (DIV: M,N,O,P)**

SEMESTER: I MONTH: **AUGUST- JANUARY** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: : To understand the application of microeconomics at corporate level.
The learners will be able to: observe micro economics in the real world and to understand and make business decisions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I **Introduction to business economics**	Introduction : Business Economics ,basic concepts for business economic analysis ,functional relations and tool for economic analysis. Introduction to market demand and supply, demand supply, market equilibrium, changes in market equilibrium.		H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication, Himalaya Publication.	ONLINE (G-MEET/POWER POINT) OFFLINE (CHALK- DUSTER)

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Module II **Demand Analysis**	Meaning of demand,law of demand,determinants of demand, demand function, price, income and substitution effects, nature of demand curve under different markets. Meaning of elasticity, price elasticity of demand , income elasticity of demand , cross elasticity of demand,promotional elasticity of demand, importance of elasticity of demand , relationship between price elasticity of demand and revenue concept. Significance of demand forecasting ,types of demand forecasting, steps in demand forecasting ,methods of demand forecasting.		H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication, Himalaya Publication.	ONLINE (G-MEET/POWER POINT) OFFLINE (CHALK- DUSTER)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. ARCHANA D. JOSHI DEPARTMENT: COMMERCE CLASS: FY.B.COM – E,F,G,H

SEMESTER: II MONTH: JANUARY TO MAY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

To help students understand the various aspects of Group Communication

The learners will be able to : It introduces students to the process of making effective presentations and moves on to the various group Communications, where individual and team work is equally important.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	1) Interviews: Group Discussion Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit 2) Meetings: Need and Importance of Meetings, Conduct of Meeting and Group Dynamics Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions 3) Conference: Meaning and Importance of Conference Organizing a Conference Modern Methods: Video and Tele – Conferencing 4) Public Relations: Meaning, Functions of PR Department, External and Internal Measures of PR	15	Manan Publication Sheth Publication Vipul Publication	Chalk and board

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4) Language and Writing Skills	Reports: Parts, Types, Feasibility Reports, Investigative Reports Summarisation: Identification of main and supporting/sub points Presenting these in a cohesive manner	15	Manan Publication Sheth Publication Vipul Publication	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Zeba DEPARTMENT: Commerce CLASS: FYBCOM SEMESTER: II MONTH: Dec to April ACADEMIC YEAR: 2021-22 DIV: A,B,C,D

LEARNING OBJECTIVE/S:

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to

Preparing resumes to attending interviews, convening meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

To make students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
1) Group Communication	1) Interviews: 2) meetings: 3) Committees & Conferences: 4) Public Relations:	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk and board	

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2) Business correspondence	1) Trade Letters (ref.	15	From Internet	Chalk and board	
3) Language and writing skills	1) Reports & Business Proposals 2) Summarization	8	Manan Publication, Sheth Publication, Vipul Publication	Chalk and board	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 38

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Avinash Pawar DEPARTMENT: COMMERCE CLASS: FY.B.COM – M,N,O,P

SEMESTER: II SUB: BUSINESS COMMUNICATION MONTH: JANUARY TO MAY

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

To help students understand the various aspects of Group Communication

The learners will be able to : It introduces students to the process of making effective presentations and moves on to the various group Communications, where individual and team work is equally important.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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1)Group Communication	1) Interviews: Group Discussion Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit 2) Meetings: Need and Importance of Meetings, Conduct of Meeting and Group Dynamics Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions 3) Conference: Meaning and Importance of Conference Organizing a Conference Modern Methods: Video and Tele – Conferencing 4) Public Relations: Meaning, Functions of PR Department, External and Internal Measures of PR	15	Manan Publication Sheth Publication Vipul Publication	Chalk and board
2)Business Correspondence	Trade letters: letters of inquiry,letters of complaints,claims,Adjustments,sales letters ,Promotional leaflets and Fliers,Consumer grievance redressed letters,letters under right to information (RTI) Act.	15	Manan Publication Sheth Publication Vipul Publication	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Murial Rumao **DEPARTMENT: COMMERCE** **CLASS: FY B.COM (Div – I,J,K,L)**

SEMESTER: II **MONTH: JANUARY TO MARCH** **ACADEMIC YEAR: 2021-22**

LEARNING OBJECTIVE/S:
To improve students presentation skill and make enable them to write appropriately for organization / industry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS COMMUNICATION-II UNIT- 1	Group Communication: iii. Committees & Conferences iv. Public relations	08	Mansn Prakashan	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS COMMUNICATION-II UNIT- 3	Language and writing skills i. Reports: Parts, Types & Business Proposals ii. Summarisation iii. Tutorial Activities	15	Manan Prakashan	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:PADMAJA NILESH JOSHI DEPARTMENT: COMMERCE CLASS: FY.B.COM – I, J, K, L

SEMESTER: II MONTH: JANUARY TO MAY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

To help students understand the various aspects of Group Communication

The learners will be able to : It introduces students to the process of making effective presentations and moves on to the various group Communications, where individual and team work is equally important.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1)Group Communication	1) Interviews: Group Discussion Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit 2) Meetings: Need and Importance of Meetings, Conduct of Meeting and Group Dynamics Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions 3) Conference: Meaning and Importance of Conference Organizing a Conference Modern Methods: Video and Tele – Conferencing 4) Public Relations: Meaning, Functions of PR Department, External and Internal Measures of PR	15	Manan Publication Sheth Publication Vipul Publication	Chalk and board

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2)Business Correspondence	Trade letters: letters of inquiry,letters of complaints,claims,Adjustments,sales letters ,Promotional leaflets and Fliers,Consumer grievance redressed letters,letters under right to information (RTI) Act.	15	Manan Publication Sheth Publication Vipul Publication	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SIVAPRIYA ACHARI DEPARTMENT: COMMERCE CLASS: FY.B.COM – M, N, O, P

SEMESTER: II MONTH: JANUARY TO MAY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

To help students understand the various aspects of Group Communication

The learners will be able to : It introduces students to the process of making effective presentations and moves on to the various group Communications, where individual and team work is equally important.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1)Group Communication	1) Interviews: Group Discussion Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit 2) Meetings: Need and Importance of Meetings, Conduct of Meeting and Group Dynamics Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions 3) Conference: Meaning and Importance of Conference Organizing a Conference Modern Methods: Video and Tele – Conferencing 4) Public Relations: Meaning, Functions of PR Department, External and Internal Measures of PR	15	Manan Publication Sheth Publication Vipul Publication	Chalk and board

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2)Business Correspondence	Trade letters: letters of inquiry,letters of complaints,claims,Adjustments,sales letters ,Promotional leaflets and Fliers,Consumer grievance redressed letters,letters under right to information (RTI) Act.	15	Manan Publication Sheth Publication Vipul Publication	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Nilambari Yogesh Shidhaye Department: - Commerce
Class: - F.Y.B.COM (I, J, K, L) SEM: - II MONTH-: JAN/MARCH YEAR: -2021-22

LEARNINIG OBJECTIVES: The learner will be able to learn through online teaching, Concept of services, Importance and limitations, features of E-Commerce.

PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED
COMMERCE - II	MODULE-I Concept of Services: - Meaning, Features, Scope and classification of services, Importance of service sector in the Indian context., Marketing mix for services, Service Strategies: - marketing research and service development cycle, Manging demand and capacity, Opportunities and challenges in service sector.	12 Lectures		Online Teaching with the help of PPT
	MODULE: - IV E-Commerce: - Meaning, features, functions and scope of E-commerce, Importance and limitations of E-commerce, Types of E-commerce, Present status of E-commerce in India, E-transitions, Challenges and opportunities for Indian corporates, On-line marketing research,	12 Lectures		Online Teaching with the help of PPT

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: FYB.COM - A,B,C,D SEMESTER:-2nd MONTH: November -February ACADEMIC YEAR: 2021-22 SUBJECT : COMMERCE II

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To introduce learners with different concepts of services.
2. To make students able to identify elements of marketing mix, Service Strategies and its implementation in the service sector.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1: CONCEPT OF SERVICES	• Introduction : Meaning, Characteristic, Scope and Classification of Services – Importance of Service sector in the Indian Context.	4	Service Marketing – Temani Management of Service sector - Bhatia	1. Lecture and discussion . 2. Flow charts. 3. google meet 4. ppts
	• Marketing Mix for Services : Consumer Expectations, Services Mix, Product, Place, Price, Promotion, process of services delivery, Physical evidence and people.	4		
	• Service Strategies : Market research and services development cycle, Managing demand and Capacity, Opportunities and challenges in the service sector.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 ×4 div = 48

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE _ DEPARTMENT: B.COM CLASS: FYB.COM - A,B,C,D

SEMESTER:-2nd MONTH: November – Februar ACADEMIC YEAR: 2021-22SUBJECT : COMMERCE II

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To introduce learners about scope and Importance of E- Commerce.
2. To acquaint students with the knowledge of challenges and opportunities of E- Commerce in India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 4 :	• Introduction :Meaning, Features, Functions and Scope of E- Commerce – Importance and Limitations of E-Commerce.	4	Introduction to E- Commerce – Dhawn	1.Lecture and discussion . 2. Flow charts. 3. google meet 4. ppts
	• Types of E- Commerce :Basic ideas and Major activities of B2C, B2B, C2C.	3		

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E-COMMERCE	• Present Status of E- Commerce in India : Transition to E-Commerce in India, E-Transition Challenges for Indian Corporates, On-line Marketing Research.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 ×4 div = 44

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -Praktana Manoj Kore Department: - Commerce
Class: - F.Y.B.COMM,N,O,P) SEM: - II MONTH-: JAN/MARCH YEAR: -2021-22

LEARNING OBJECTIVES: The learner will be able to learn through online teaching, Concept of services, Importance and limitations, features of E-Commerce.

PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED
COMMERCE - II	MODULE-I Concept of Services: - Meaning, Features, Scope and classification of services, Importance of service sector in the Indian context., Marketing mix for services, Service Strategies: - marketing research and service development cycle, Managing demand and capacity, Opportunities and challenges in service sector.	12 Lectures		Online Teaching with the help of PPT
	MODULE: - IV E-Commerce: - Meaning, features, functions and scope of E-commerce, Importance and limitations of E-commerce, Types of E-commerce, Present status of E-commerce in India, E-transitions, Challenges and opportunities for Indian corporates, On-line marketing research,	12 Lectures		Online Teaching with the help of PPT

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Seema Sihana Department: - Commerce
Class: - F.Y.B.COM (I, J, K, L) SEM: - II MONTH-: JAN/MARCH YEAR: -2021-22

LEARNINIG OBJECTIVES: The learner will be able to learn through online teaching, Concept of services, Importance and limitations, features of E-Commerce.

PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED
COMMERCE - II	MODULE-I Concept of Services: - Meaning, Features, Scope and classification of services, Importance of service sector in the Indian context., Marketing mix for services, Service Strategies: - marketing research and service development cycle, Manging demand and capacity, Opportunities and challenges in service sector.	12 Lectures		Online Teaching with the help of PPT
	MODULE: - IV E-Commerce: - Meaning, features, functions and scope of E-commerce, Importance and limitations of E-commerce, Types of E-commerce, Present status of E-commerce in India, E-transitions, Challenges and opportunities for Indian corporates, On-line marketing research,	12 Lectures		Online Teaching with the help of PPT

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE SUBJECT: COMMERCE II

CLASS: FYBCOM (Div M,N,O,P) SEMESTER: II MONTH: Jan-march ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to : Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2: Retailing	1.Introduction: Concept of organized and unorganized retailing, Trends in retailing, growth of organized retailing in India, Survival strategies for unorganized Retailers	4	Commerce II-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet
	2. Retail Format: Store format, Non – Store format, Store Planning, design and layout	4	Commerce II-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet
	3. Retail Scenario: Retail Scenario in India and Global context – Prospects and Challenges in India. Mall Management – Retail Franchising. FDI in Retailing, Careers in Retailing	4	Commerce II-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet
Unit 3: Recent Trends in Service Sector	1. ITES Sector: Concept and scope of BPO, KPO, LPO and ERP.	4	Commerce II-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet
	2. Banking and Insurance Sector: ATM, Debit & Credit Cards, Internet Banking – Opening of Insurance sector for private players, FDI and its impact on Banking and Insurance Sector in India	4	Commerce II-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet
	3. Logistics: Networking – Importance – Challenges	2	Commerce II-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. FIROZKHAN KHURSHIT KHAN** DEPARTMENT**: COMMERCE**

CLASS: **S.Y.B.COM** DIV: **A, B, C & D** SEMESTER: **III** MONTH: **NOVEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To impart the practical knowledge of Accountancy & Financial Management.

The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Amalgamation of Firms	**UNIT-3: Amalgamation of Firms** Realisation method only, Calculation of purchase consideration, Journal/ledger accounts of old firms, Preparing Balance sheet of New firm, Adjustment of goodwill in the new firm, Realignment of capitals in the new firm by current accounts / cash or a combination thereof Excluding Common transactions between the amalgamating firms.	15	S.N. MAHESHWARY , KHAN & JAIN, Timothy R. Mayes	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet
Conversion / Sale of a Partnership Firm into a Ltd. Company	**UNIT-4: Conversion / Sale of a Partnership Firm into a Ltd. Company** Realisation method only. Calculation of New Purchase consideration, Journal / Ledger Accounts of old firms. Preparing Balance Sheet of new company.	15	S.N. MAHESHWARY , KHAN & JAIN, Timothy R. Mayes	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHWINI DATTATRAY BHOIR DEPARTMENT: COMMERCE CLASS: SYBCOM F,G,H,I SEMESTER: III MONTH: JULY - OCTOBER ACADEMIC YEAR: 2021 - 2022 SUBJECT - BUSINESS LAW - I

LEARNING OBJECTIVE/S:
The learners will be able to know the meaning of the terms Agreement and contract and note the Distinction between the two.

The learners will be able to know the Concept of Indemnity & Guarantee, Difference between contract of indemnity and contract of Guarantee.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I Indian Contract Act-1872 part -I	Chapter :I-Contract- Definition of Contract and Agreement, Essentials of Valid Contract, Classification of contracts. Chapter :II- Offer and Acceptance - Rules of valid offer and acceptance, Counter offer, standing or open offer, distinguish between offer and invitation to offer.Concept of Communication and Revocation of offer and acceptance. Chapter : III- Capacity to Contract - Minor, Unsound Mind, Disqualified persons.	2 3 2 2	The Indian Contract Act,1872 -Avtar singh Business Law- kapoor N. D. Business Law -I Kalaivani venkataraman, Vipul prakasha	1) Lecture and Discussion 2) Online teaching learning tools (Google meet, Google form, PPTs,)

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Module No.II	Chapter :IV- Consideration - Concept and Importance of Consideration, Legal rules of Consideration, Exceptions to the rule, 'No Consideration No Contract' Unlawful Considertion.			
Indian Contract Act- 1872 Part II	Chapter :I- Consent - Agreements in which consent is not free-Coercion, undue Influence, Misrepresentation Fraud, Mistake.	3		
	Chapter: II - Void Agreements - Concept, Void Agreement under Indian Contract Act.	2		
	Chapter : III - Contingent Contract, Quasi Contract, Concept of E- Contract & Legal Issues in formation and discharge of E-Contract. Concept of performance of contract.	3		
Module No. III Special Contracts.	Chapter : IV- Modes of Discharge of Contract, Remedies on breach of Contract.	2		
	Chapter :I- Law of Indemnity & Guarantee - Concept, Essentials elements of Indemnity and Guarantee, Contract of Indemnity vs. Guarantee, modes of Discharged of Surety.	3		
	Chapter : II- Law of Bailment - Concept, Essentials of Bailment, Kinds of Bailment, Rights and Duties of Bailor and Bailee.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Ashwini Gurav DEPARTMENT: Commerce CLASS: SYBCOM (K, L, M, N) SEMESTER: III

MONTH: July to October ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand & Remember concept & Impact of Disasters.
- Understand & Remember role of science; Follow fundamental duties of Indian citizen
- Understand & Remember importance of technology
- Understand about Self: importance of body language
- Write formal application & resume
- Build Effective leadership skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Dealing with Environmental Concerns	A. Concept of Disasters: Characteristics & Impact B. Locally relevant case studies of environmental disasters	03	Michael Vaz Aurara Vaz FC textbook, Internet	❖ Google Meet, PPT, YouTube ❖ Online Projects assigned and assessment
Unit 3Science & Technology-1	C. Science & Superstition: role of science in exploding myth, blind beliefs and prejudices, science & scientific temper as fundamental duty of Indian citizen	03	Michael Vaz Aurara Vaz FC textbook, Internet	❖ Google Meet, PPT, YouTube ❖ Online Projects assigned and assessment

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Unit 4 Soft Skills for Effective interpersonal Communication	D. Science in Everyday Life: role of technology in development, science v/s technology			
	A. Importance of Self Awareness & Body Language B. Formal & Informal Communication, Writing Formal Application, Resume C. Leadership Skills & Self-Improvement, Styles of Leadership & Team-Building	03	Michael Vaz Aurara Vaz FC textbook, Internet	❖ Google Meet, PPT, YouTube ❖ Online Projects assigned and assessment

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce
CLASS: S Y B Com SEMESTER: III MONTH: AUGUST ACADEMIC YEAR: 2021-22
DIV: F, G, H, I

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the concepts of amalgamation, preparation of account of accounting for amalgamation of partnership firm and its accounting effect. The learners will able to understand the need, procedure, accounting effect and treatment for conversion of partnership firm into a limited company.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy and Financial Management III	**Amalgamation of Firms** i) Realization method only ii) Calculation of purchase consideration iii) Journal / ledger accounts of old firms iv) Preparing Balance sheet of new firm v) Adjustment of goodwill in the new firm vi) Realignement of capitals in the new firm by current accounts / cash or a combination thereof Excluding Common transactions between the amalgamating firms	14	Shashi K. Gupta – "Contemporary Issues in Accounting", Kalyani Publishers. Ashok Sehgal – "Fundamentals of Financial Accounting", Taxmann's Publishers	GOOGLE MEET FOR ONLINE TEACHING, GOOGLE CLASSROOM DESKTOP AND LAPTOP, , Group Discussion, EXCEL AND PPT

	Conversion / Sale of a Partnership Firm into a Ltd. Company	12		
	(i) Realisation method only (ii) Calculation of New Purchase consideration, Journal / Ledger Accounts of old firms. Preparing Balance sheet of new company			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 26

Babli Jha

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:CHETAN VARMA DEPARTMENT: **Commerce**
CLASS: **FYBCOM** SEMESTER**: III** MONTH: Aug **to NOV** ACADEMIC YEAR: **2021 - 22**
LEARNING OBJECTIVE/S:
To create evolved youth, who will be equipped to contribute in the development of the nation.
To inculcate spirit of adventure, undertake adventure activities, to hone leadership qualities and risk taking abilities.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course in NCC	The students will overcome fear & inculcate within them the sense of adventure , sportsmanship , espirit-d-corp and develop confidence , courage , determination, diligence and quest for excellence. i. Any Two such as – Obstacle course, Slithering, Trekking, Cycling, Rock Climbing, Para Sailing, Sailing, Scuba Diving etc.	05		Online platform – Google Meet PPT, Videos
	1.			
	Objective: To make student aware of the protection and conservation of the environment.	05		Online platform – Google Meet PPT, Videos

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	Desired outcome: The student will be made aware of the modern techniques of waste management and pollution control. i. Waste management ii. Pollution control, water, Air, Noise and Soil			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____10_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____CHETAN PRAKASH VARMA _____ DEPARTMENT: ___COMMERCE ___ CLASS: SYBCOM -J,K,L,M,N

SEMESTER: ___III___ MONTH: _____JULY TO NOVEMBER _____ ACADEMIC YEAR: ____2021-22_____

LEARNING OBJECTIVE/S:
The learners will be able to : ___To make student understand the All Macro Economics Perspective, National Income, Theory of J.M Keynes and its applicability in business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS-III	BASIC CONCEPTS OF KEYNESIAN ECONOMICS The Principle of Effective Demand: Aggregate Demand and Aggregate Supply Consumption Function: Properties, Assumptions and Implications Investment function and Marginal Efficiency of capital	03	Ackley.G (1976), Macro Economic Theory and Policy, Macmillan Publishing Co. New York	Google meet, kahoot, quizzes, YouTube Channel Links
	Investment Multiplier effect on Income and Output: Assumptions, Working, Leakages, Criticism and Importance - paradox of thrift Relevance of Keynesian theory tools to the developing countries	03	Ahuja. H.L., Modern Economics — S.Chand Company Ltd. New Delhi.	

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	MONEY, PRICES AND INFLATION Money Supply: Determinants of Money Supply - Factors influencing Velocity of Circulation of Money Demand for Money : Classical and Keynesian approaches and Keynes' liquidity preference theory of interest - Friedman's restatement of Demand for money	04	Principles of Macro Economics Dornbush , Rudiger, Fisher Stanley and Startz, Richards	
	Money and prices : Quantity theory of money - Fisher's equation of exchange - Cambridge cash balance approach Inflation : Demand Pull Inflation and Cost Push Inflation - Effects of Inflation-	03	Jhingan, M.L., Principles of Economics — Vrinda Publications (P) Ltd.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____13___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA R. BHOSALE DEPARTMENT: B. COM CLASS: SYB.COM – F, G, H, I, J SEMESTER: 3rd
MONTH: August – October ACADEMIC YEAR: 2021-2022 SUBJECT: COMMERCE III

LEARNING OBJECTIVE/S:

The learners will be able to:

1.To identify and demonstrate processes for making short and long term plans.

2. To recognize the importance of seeking Information before making decisions.

3. To make students able to work in groups, problem solving and organizational skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 2: PLANNING & DECISION MAKING	▪ Planning- steps, Importance, Components, Coordination-Importance	4	Management - James Stoner Management: Global Prospective – Heinze Weihrich & Harold Koontz Principles of Management	1. Lecture and discussion. 2. Flow charts. 3. Online teaching learning tools (google meet, google form Google classroom, PPTs)
	▪ M.B.O – Process, Advantages, Management By Exception-Advantages; Management Information System – Concept, Components	3		
	▪ Decision Making – Techniques, Essentials of a Sound Decision Making, Impact of Technology on Decision Making	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10×5 div = 50

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA R. BHOSALE DEPARTMENT: B. COM CLASS: SYB.COM – F, G, H, I, J SEMESTER: 3rd
MONTH: August – October ACADEMIC YEAR: 2021-2022 SUBJECT: COMMERCE III

LEARNING OBJECTIVE/S:

The learners will be able to:

1.To make student able to work in different types of organization

2.To recognize the importance of span of management and Delegation of Authority

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 3. ORGANISING	• Organising – Steps, Organisation Structures- Features of Line & Staffordshire Organisation, Matrix Organisation, Virtual Organisation, Formal v/S Informal Organisation	4	Management – James Stoner. Management Global Prospective - H.W.& Koontz. Principles of Management.	1. Lecture and discussion. 2. Flow charts. 3. Online teaching learning tools (google meet, google form Google classroom, PPTs)
	• Departmentation – Meaning- Bases, Span of Management – Factors Influencing Span of Management, Tall and Flat Organisation	4		
	• Delegation of Authority – Process, Barriers to Delegation, Principles of Effective Delegation. Decentralisation : Factors Influencing Decentralisation, Centralization v/S Decentralisation	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _12 × 5 div = 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DILIP MAHENDRA JAIN DEPARTMENT: COMMERCE

CLASS: SYBCOM DIVISION : K, L, M AND N SEMESTER: III MONTH: JULY TO NOVEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The Learner Will Understand the Conceptual part of Management, Planning Decision making and how it is applied in organization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE III	MODULE 2 Planning and Decision Making a. Planning: Importance, Components & Steps b. M.B.O: Process, Advantages, MBE & MIS c. Decision Making: Techniques, Essentials of Sound Decision Making, Impact of Technology on Decision Making	11	MANAN PRAKASHAN SETH PUBLICATION	ONLINE LECTURES
	MODULE 3 Organizing a. Organising: Steps, Organisation Structures b. Departmentation: Bases of Segmentation, Factors Influencing Span of Management c. Delegation of Authority: Process, Barriers, Decentralization, Centralization v/s Decentralization	12	MANAN PRAKASHAN SETH PUBLICATION	ONLINE LECTURES POWER POINT PRESENTATIONS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 23

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Deepakkumar Gupta** DEPARTMENT: **Commerce**
CLASS: **FYBCOM** SEMESTER: **III** MONTH: Aug **to Dec** ACADEMIC YEAR: **2021 - 22**
LEARNING OBJECTIVE/S:
To create evolved youth, who will be equipped to contribute in the development of the nation.
To train students so as to achieve their physical and mental endurance to acquire body language

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course in NCC	Unit 1 : Introduction to NCC, National Integration and Awareness	10		Online platform – Google Meet PPT, Videos
	1. Genesis, Aims, Objectives of NCC and NCC song 2. Organization and training 3. Incentives & benefits 4. Religions, Culture, Traditions and Customs of India 5. National Integration : importance and necessity.			
	Unit 2: Drill: Foot Drill	06		Online platform – Google Meet PPT, Videos
	1.Side pace, pace forward and to the rear 2. Turning on the march and whiling 3.Saluting on the march			

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	4.Marking time, forward march and halt in quick time 5.Changing step 6. Formation of squad and squad drill			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____16_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof DEEPAKKUMAR GUPTA DEPARTMENT: COMMERCE CLASS: SYBCOM Div : E,F,G,H,I,J

SEMESTER: III MONTH: June- September ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit-2 Piecemeal Distribution	Introduction , excess capital method, asset taken over by partner,	3	Financial Ac. counting by R. Narayanaswamy,	Chalk & talk Method and Discussion method
	Treatment of past profit or past losses in the balance sheet, contingent liabilities, realisation expenses	3	Financial Ac. counting by R. Narayanaswamy	Chalk & talk Method and Discussion method
	Treatment of secured liabilities , preferential liabilities, excluding insolvency of partner and maximum loss method	3	Financial Ac. counting by R. Narayanaswamy	Chalk & talk Method and Discussion method
	Practical problems	6	Financial Ac. counting by R. Narayanaswamy, S.N. MAHESHWARY	Chalk & talk Method and Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof DEEPAKKUMAR GUPTA DEPARTMENT: Commerce CLASS: SYBCOM Div : E,F,G,H,I,J

SEMESTER: III MONTH: June- September ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit-1 Partnership final accounts based on adjustment of Admission or Retirement or Death of partner during the year	Introduction to final accounts ,adjustments relating to admission, retirement and death of partner	3	Financial Ac. counting by R. Narayanaswamy,	Chalk & talk Method and Discussion method
	Allocation of gross profit prior to and after admission, retirement and death when stock on date of admission or retirement is not given.	3	Financial Ac. counting by R. Narayanaswamy,	Chalk & talk Method and Discussion method
	Allocation of gross profit prior to and after admission, retirement and death when stock on date of admission or retirement is given and to be divided on basis of time, sales or other basis	3	Financial Ac. counting by R. Narayanaswamy, S.N. MAHESHWARY	Chalk & talk Method and Discussion method

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	Practical problems	6	Financial Ac. counting by R. Narayanaswamy	Chalk & talk Method and Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. AKRUTI BOSE DEPARTMENT: COMMERCE

CLASS: SYBCOM A,B,C,D SEMESTER: III MONTH:JULY/OCTOBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: ONLINE
The learners will be able to : Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS III Module III and Module IV	POST KEYNESIAN DEVELOPMENTS IN MACROECONOMICS: Liquidity Preference theory of Interest, The		Macro Economics by H.L. AHUJA.	Online .
	IS-LM model, Inflation and Unemployment, Stagflation and Supply Side Economics.			
	MONEY, PRICES AND INFLATION: Money Supply, Demand for Money-Classical and Keynesian Approaches, Money and			
	Prices-Quantity Theory of Money, Fisher's equation of exchange, Inflation: Demand Pull and Cost Push Inflation, Nature Policy to			
	Curb inflation and Monetary policy, Inflation targeting.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08 Lectures.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: S.Y.B.COM Divisions: A,B,C,D,E. SEMESTER: 3

MONTH: JULY TO OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

- To Understand the Constitution rights towards Scheduled Castes Tribes Women and Children people with disabilities elderly and more.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FCIII Unit 1 Human Rights Violations And Redressal Unit 2 Dealing with Environmental Concerns	**D)** Children - Constitutional and legal rights, forms of violations, Redressal mechanism. **E)** People with disabilities - Minorities, and the elderly population- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	03	Foundation Course by Michael Vaz	• Google Meet • PPT • SlideShare • Kiwi Browser • Google form
	C) Dealing with Disaster - Factors to be considered in prevention Mitigation & Disaster Preparedness. **D)** Human Rights Issues in addressing Disaster - Issues related to compensation, equitable and fair distribution of relief & humanitarian approach to resettlement & rehabilitation.	03	Foundation Course by Michael Vaz	• Google Meet • PPT • SlideShare • Kiwi Browser • Google form

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Unit 3 Science & Technology-1	**A)** Science & Technology **-** The Ancient Cultures ,The Classical Era, the middle ages,The Renaissance, the age of reason & enlightenment. B) Nature of Science **-** principal & Characteristics science as Empirical practical ,theoretical, validated knowledge	03	Foundation Course by Michael Vaz	• Google Meet • PPT • SlideShare • Kiwi Browser • Google form
Unit 4 Soft Skills for Effective Interpersonal Communication	**Part A** **1.** Effective Listening : Importance of Listening, Features of Listening. **2.** Guidelines to develop effective listening skills. **3.** Verbal Communication: Oral Communication, Advantages of oral communication,Disadvantages of Oral Communication **4.** Written Communication :Advantages & Disadvantages of Written Communication **5.** Non Verbal Communication:Body Language, Para language,Silence,Space Surrounding & Time, Advantages & Disadvantages of Non Verbal Communication **6.** Public Speaking & Presentation Skills **7.** Barriers to Effective Communication **8.** Tips for effective Communication	04	Foundation Course by Michael Vaz	• Google Meet • PPT • SlideShare • Kiwi Browser • Google form

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:GAURI YADAV. DEPARTMENT: COMMERCE CLASS:. SYBCOM SEMESTER: III.

MONTH: AUG - DEC ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : learn and understand Management accounting. It's importañce in planning activities and decision making. Various anlaysis to manage and ratios to compare the sales.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Introduction to Management Accounting, Analysis and Interpretation of account	Meaning - Nature - Scope and Functions of Management Accounting - Role of Management Accounting in Decision Making - Management Accounting and Financial Accounting Vertical Forms of Balance Sheet and Profit and Loss Account suitable for analysis, Trend analysis, Comparative Statement, Common Size Statement. Question Problems based on the above.	15	Manan prakashan	PPT, Google Meet, Excel to solve sums
2.Ratio Analysis and Interpretation based on vertical Financial statement				
	Balance Sheet Ratios: i. Current Ratio ii. Liquid Ratio iii. Stock Working Capital Ratio iv. Proprietary Ratio v. Debt Equity Ratio vi. Capital Gearing Ratio. b. Revenue Statement Ratios: i. Gross Profit Ratio ii. Expenses Ratio iii. Operating Ratio iv. Net Profit Ratio v. Net Operating Profit	15	Manan prakashan	PPT, Google Meet, Word, Excel to solve sums

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	Ratio vi. Stock Turnover Ratio c. Combined Ratio i. Return on Capital employed (Including Long Term Borrowings) ii. Return on proprietor's Fund (Shareholders Fund and Preference Capital) iii. Return on Equity Capital iv. Dividend Payout Ratio v. Debt Service Ratio vi. Debtors Turnover vii. Creditors Turnover			
	Sums solved on all three ratios.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: COM MERCE

CLASS S.Y.B.COM Div : F, G,H,,I SEMESTER: III MONTH: JUNE -SEPTEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: To inculcate the interest in macroeconomics
The learners will be able to : understand how an economy works

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I & II..	**Module 1 - Intoduction**	10		
	1.Meaning , scope and importance of Macro economics 2.Circular flow of aggregate income and expenditure 3.The measurement of National product 4. Trade cycles – Features and Phases 5. Classical Macroeconomics – Say's law of Markets		**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Google Meet, PPT 2 Quiz method
	Module 2- Basic concepts of Keynesian Economics	10		
	1.The Principles of Effective Demand 2. Consumption Function 3.Investment Function and Marginal Efficiency of Capital		**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1. Google Meet , PPT 2 Quiz method
	4.Investment Multiplier effect on Income and Output 5.Relevance of Keynesian theory tools to developing countries.			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____20__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI VIJAY MEHTA DEPARTMENT: COMMERCE CLASS: SY.B.COM

SEMESTER: III DIV:- M,N MONTH: JULY-OCT 2021 SUB: F.C ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

The objective of this subject is to make students aware on the issue relating to Human rights and environmental concerns and also on human rights violation as well as issues relating to environmental degradation and also about the technological developments and their relevance in their day to day life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Scheduled Castes, Scheduled Tribes, Women Constitutional and legal rights, Forms of Violations, Redressal Mechanisms.	3	Foundation Course by Michael Vaz	Online Lecture and PPT
UNIT 2	Dealing with Disasters- Factors, Mitigation, Disaster Preparedness, Human Rights issues in addressing disasters, Issues to Compensation, Humanitarian approach	3	Foundation Course by Michael Vaz	Online Lecture and PPT
UNIT 3	Development of Science- Ancient Culture, the Classical Era, Middle ages, The Renaissance, The age of Reason and Enlightment Nature of Science	3	Foundation Course by Michael Vaz	Online Lecture and PPT
UNIT 4	Effective listening – Importance, Features, Guidelines to develop effective listening skills, Verbal communication, Oral Communication, Written Communication, Non verbal Communication, Public speaking, Barriers to effective Communication, Tips for effective communication.	3	Foundation Course by Michael Vaz	Online Lecture and PPT

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: **Commerce**

CLASS: **SYBCOM Div K L M N** SEMESTER**: III** MONTH: July to Nov ACADEMIC YEAR: **2021 - 22**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) Revise the concepts of Partnership Final Accounts
3) Solve practical questions using concepts
4) Revise the Concepts of Piecemeal distribution of Cash
5) Solve practical questions using concepts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting – III	Unit 1 : Partnership Final Accounts	16		Online platform – Google Meet PPT, Videos, Spreadsheets, Quiz Flip Book, Google Classroom, Group discussion.
	1) Concepts - Admission, Retirement & Death 2) Treatment of Goodwill 3) Practical problems			
	Unit 2 : Piecemeal Distribution of Cash	16		Online platform – Google Meet

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				PPT, Videos, Spreadsheets, Quiz Flip Book, Google Classroom, Group discussion.
	1) Introduction & Meaning of Piecemeal Distribution of Cash 2) Methods of Piecemeal Distribution of Cash 3) Explanation of Excess Capital Method 4) Practical problems			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____32_____

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NAME OF THE STAFF: JINAL CHOHAN DEPARTMENT: COMMERCE

SUBJECT: Foundation Course III CLASS: SYBCOM (A-E)

SEMESTER: III MONTH: July-September ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to: Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Human Rights Violations and Redressal	1.Scheduled Castes- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2	FC III-Manan Prakashan	Presentation method with chat, Google Meet
	2.Scheduled tribes- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2	FC III-Manan Prakashan	Presentation method with chat, Google Meet
	3.Women- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2	FC III-Manan Prakashan	Presentation method with chat, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2: Dealing With Environmental Concerns	A. Concept of Disaster and general effects of Disasters on human life- physical, psychological, economic and social effects.	3	FC III-Manan Prakashan	Presentation method with chat, Google Meet
	B. Some locally relevant case studies of environmental disasters.	2	FC III-Manan Prakashan	Presentation method with chat, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3: Science and Technology I	C. Science and Superstition-role of science in exploding myths, blind beliefs and prejudices, Science and scientific temper.	3	FC III-Manan Prakashan	Presentation method with chat, Google Meet
	D. Science in everyday life- technology, its meaning and role in development, interrelation and distinction between science and technology.	2	FC III-Manan Prakashan	Presentation method with chat, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4: Soft Skills for Effective Interpersonal Communication	**Part A)** Importance of self-Awareness, Importance of Body language **Part B** I) Informal Communication - Purpose and Types. II) Writing Formal Applications, Statement of Purpose (SOP) and Resume. III) Preparing for Group Discussions, Interviews and Presentations.	5	FC III-Manan Prakashan	Presentation method with chat, Google Meet
	Part C I) Leadership Skills and Self-Improvement - Characteristics of Effective Leadership. II) Styles of Leadership and Team-Building.	3	FC III-Manan Prakashan	Presentation method with chat, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE CLASS: SYBCOM

SEMESTER: **III** MONTH: July,2021 to Oct,2021 ACADEMIC YEAR :2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to Learn what is working capital, its types and how to estimate working capital requirement, Meaning and calculation of various capital budgeting techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Management Accounting	1] **Working capital Management**-Concept, Nature,Meaning ,Typesof working capital,Planning, Estimation of working capital requirement in case of Trading & Manufacturing concern., Operating cycle	10	Management Accounting- M.Y. Khan	Google meet, Google slide, Microsoft word, Spreadsheet
	2] **Capital Budgeting**-Introduction, Classification of capital budgeting projects, process. Capitalbudgeting techniques – Payback period,accounting Rate of Return, Net present value, Profitability index & Discounted payback. Practical problems.	15		Google meet, Google slide, Microsoft word, Spreadsheet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: COMMERCE
CLASS: SYBCOM SEMESTER: III MONTH: AUGUST-OCTOBER SUB: ADVERTISING ACADEMIC YEAR:2021-22

LEARNING OBJECTIVE/S: Understand what advertising is and its role in advertising and brand promotion and the economic effects of advertising. Understand the structure of the advertising industry. Be able to identify, analyse, and understand the advertising environment. Understand the importance of placing the message in conventional and "new" media. Covers the basics of planning, creating, using, and placing advertising in the business world.Reviews entire field of advertising as basis for students. Discuss the role of the advertising agency and its client relationships. Identify advertising's place in the communications mix. Identify and discuss a range of creative strategies in advertising.

PAPER, UNIT , TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTRODUCTION TO ADVERTISING	Integrated Marketing Communication- Features, Elements, Role of advertising in IMC	4	Advertising and Promotion : An Integrated Marketing Communications Perspective George Belch and Michael Belch, 2015, 10th Edition, McGraw Hill Education, 5. Advertising: Planning and Implementation, 2006 – Raghuvir Singh, Sangeeta Sharma –Prentice Hall	GMEET, PPT, MICROSOFT WORD WITH PEN TOOL,PDF FILES, GOOGLE FORM, GOOGLE CLASSROOM
	Advertising-concept, Features, Evolution of advertising, Active participants, Benefits of advertising to business firms and consumers	4		
	Classification of Advertising: Geographic, Media, Target audience and Functions	4		
ECONOMIC & SOCIAL ASPECTS OF ADVERTISING	**Economic Aspects: Effect of advertising on consumer demand, monopoly and competition, Price**	4		
	Social Aspects: Ethical and social issues in advertising, positive and negative influence of advertising on indian values and culture	4		
	Pro Bono/Social advertising	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: THEORY-23

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DIVISION-A- E –UNIT I & III – NO LECTURES- 23

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: SYBCOM SEMESTER: III

MONTH: July- November ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : understand that the records need to be maintained and planning need to be done for future

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Management Accounting **Unit- 1** Working Capital	Meaning of working capital, nature and concept of working capital,estimation of working capital. Operating cycle, format of working capital. Practical problems	12	Management Accounting , by Patankar	Online lecture taken on Google Meet
Unit-2 Capital budgeting	Introduction , capital budgeting process, projects. Capital budgeting techniques- payback period, ARR, net present value, profitability index, discounted payback period. Practical problems	12	Management Accounting , by Patankar	Online lecture taken on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Madhura Surve. DEPARTMENT: COMMERCE. CLASS: S.Y. B.COM (J,K,L,M,N) SEMESTER: III

MONTH: July- October ACADEMIC YEAR: 2021-22. LEARNING OBJECTIVE/S:

The learners will be able to : Carrier Opportunities and scope of Advertising

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I Introduction to Advertising	IMC, Meaning, Definition, features of Advertising, Active Participants, Evolution, growth of Advertising benefits and classification of Advertising	10	Advertising : Principles and practices	Online lectures through Google Meet
Unit III Economics and social effect of Advertising	Economic and Social effect of advertising, impact of advertising on Price, Production and distribution, Positive and Negative effects of Advertising, effect of advertising on monopoly and competition, Ethical issues, Untruthful ads, importance of Truth in Advertising Pro-bono Advertising , self regulation laws, ASCI.	15	Advertising, sales, Promotion Management	Online lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.Mala Khanchandani DEPARTMENT: Commerce CLASS: S.Y.B.Com Divisions: E,F,G,H,I,J,K,L SEMESTER: III

MONTH: July to October ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

- To prevent Human Rights violations and to safeguard the Fundamental rights of every citizen of India.
- To understand the competencies related to communicating with those from other cultures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FCIII Unit 1 Human Rights Violations And Redressal	D **Children**- Constitutional and legal rights, forms of violations, Redressal mechanism. E **People with disabilities**, Minorities, and the elderly population- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	03	Michael Vaz Aurara vaz: foundation course. Newspapers	❖ Online lectures(Google Meet) ❖ Google Slides ❖ Discussion ❖ Explanation with examples ❖ Online Projects assigned
Unit 2 Dealing with Environmental Concerns	**C Dealing with Disaster**:-Factors to be considered in prevention Mitigation & Disaster Preparedness. **D Human Rights Issues in addressing Disaster**: - Issues related to compensation, equitable and fair distribution of relief & humanitarian approach to resettlement & rehabilitation.	03	Michael Vaz Aurara vaz: foundation course. Newspapers	❖ Online lectures(Google Meet) ❖ Google Slides ❖ Discussion ❖ Explanation with examples ❖ Online Projects assigned and assessment.

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Unit 3Science & Technology-1	**A Science & Technology:-**The Ancient Cultures ,The Classical Era, the middle ages,The Renaissance, the age of reason & enlightenment. B **Nature of Science:-**principal & Characteristics science as Empirical practical ,theoretical, validated knowledge	03	Michael Vaz Aurara vaz: foundation course. Newspapers	❖ Online lectures(Google Meet) ❖ Google Slides ❖ Discussion ❖ Explanation with examples ❖ Online Projrcts assigned and assessment.
Unit 4 Soft Skills for Effective interpersonal Communication	Part A 1. Effective Listening : Importance of Listening, Features of Listening. 2. Guidelines to develop effective listening skills. 3. Verbal Communication: Oral Communication, Advantages of oral communication,Disadvantages of Oral Communication 4.Written Communication :Advantages & Disadvantages of Written Communication 5. Non Verbal Communication:Body Language, Para language,Silence,Space Surrounding & Time, Advantages & Disadvantages of Non Verbal Communication 6.Public Speaking & Presentation Skills 7. Barriers to Effective Communication 8/ Tips for effective Communication	04	Michael Vaz Aurara vaz: foundation course. Newspapers	❖ Online lectures(Google Meet) ❖ Google Slides ❖ Discussion ❖ Explanation with examples ❖ Online Projrcts assigned and assessment.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NIKITA SUNIL JOGLE DEPARTMENT: COMMERCE SUBJECT: ADVERTISING I

CLASS: SYBCOM (A, B, C, D, E) SEMESTER: III MONTH: JULY - OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: learn about advertising agencies – its functioning, structure, various types, career opportunities in advertising etc. And, brand building process, advertising for different purposes & new trends in advertising sector

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2 – Advertising Agency	• Ad Agency – Features, structure & services offered, types of advertising agencies, agency selection criteria. • Agency & Client – Maintaining agency – client relationship, reasons & ways of avoiding client turnover, creative pitch, agency compensation. • Careers in Advertising – Skills required for a career in advertising, various career options, freelancing career options – graphics, animation, modelling, dubbing.	8	Textbook Wikipedia YouTube	Google Meet, Power Point Presentation, Word Documents, Quizziz Website, YouTube Videos
4 – Brand Building & Special Purpose Advertising	• Brand Building – The communication process, AIDA model, role of advertising in developing brand image & brand equity & managing brand crisis.	9	Textbook Wikipedia YouTube	Google Meet, Power Point Presentation, Word Documents, Quizziz Website, YouTube Videos

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	• Special Purpose Advertising – Rural advertising, political advertising, advocacy advertising, corporate image advertising, green advertising – features of all the above special purpose advertising. • Trends in Advertising – Media, ad spends, ad agencies, execution of advertisements.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NIKITA SUNIL JOGLE DEPARTMENT: COMMERCE SUBJECT: INTRODUCTION TO MANAGEMENT ACCOUNTING

CLASS: SYBCOM (E div) SEMESTER: III MONTH: AUGUST TO OCTOBER ACADEMIC YEAR: 2021 - 2022

LEARNING OBJECTIVE/S:
The learners will be able to : get accustomed to the scope & workings of management accounting, analysis of financial statements & ratio analysis

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Introduction to Management Accounting	A. Introduction to Management Accounting: Meaning, nature, scope, functions, decision making process, financial accounting v/s management accounting B. Analysis & Interpretation of Financial Statements: i. Study of balance sheet & income statement/revenue statement in vertical form suitable for analysis ii. Relationship between items in balance sheet & revenue statements iii. Tools of analysis of financial statements (i) Trend analysis (ii) Comparative statement (iii) Common sized statements	13	Textbook	Google Meet, PowerPoint Presentation, MS-Excel
2. Ratio Analysis & Interpretation	A. Balance Sheet Ratios:	15	Textbook	Google Meet, PowerPoint Presentation, MS-Excel

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	Current ratio, Liquid ratio, Stock working capital ratio, Proprietory ratio, Debt equity ratio, Capital gearing ratio B. Revenue Statement Ratios: Gross profit ratio, Expenses ratio, Operating ratio, Net profit ratio, Net operating profit ratio, Stock turnover ratio C. Combined Ratio: Return on capital employed, Return on proprietor's fund, Return on equity capital, Dividend pay-out ratio, Debt service ratio, Debtors turnover, Creditors turnover			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28 LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: INTRO. TO MANAGEMENT ACCOUNTING DEPARTMENT: COMMERCE

CLASS: SYBCOM (DIV :F,G,H,I) SEMESTER: III MONTH: JULY- AUGUST ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 INTRODUCTION TO MANAGEMENT ACCOUNTING	**Introduction to Management Accounting**		COST AND MANAGEMENT ACCOUNTING BY SAXENA & VASHIST	• Google Meet • Excel • PowerPoint
	Introduction, Meaning, Nature, Scope, Function	1		
	Decision making process, Strategic, Tactical and Operational Information, Financial Accounting vs Management Accounting	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 02

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: INTRO. TO MANAGEMENT ACCOUNTING DEPARTMENT: COMMERCE

CLASS: SYBCOM (DIV F,G,H,I) SEMESTER: III MONTH: AUGUST - SEPTEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 WORKING CAPITAL MANAGEMENT	Introduction, Meaning, Types of Working Capital	1	COST AND MANAGEMENT ACCOUNTING BY SAXENA & VASHIST	• Google Meet • Excel • PowerPoint
	Factors, Advantages, Limitation, Estimation of Working Capital Operating Cycle, Provision for Contingencies / Margin of Safety, Format	1		
	Practical Illustrations	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 3: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: INTRO. TO MANAGEMENT ACCOUNTING DEPARTMENT: COMMERCE

CLASS: SYBCOM (DIV:F,G,H,I) SEMESTER: III MONTH: SEPTEMBER - OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 CAPITAL BUDGETING	Meaning, Features, Process of Capital Budgeting	1	COST AND MANAGEMENT ACCOUNTING BY SAXENA & VASHIST	• Google Meet • Excel • PowerPoint
	Cash flow and Capital Investment Decision	1		
	Techniques of Evolution	1		
	Practical Illustrations	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 4: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE Div: F,G,H,I,J SUBJECT: Foundation Course III

CLASS: SYBCOM SEMESTER: III MONTH: July-September ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to: Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Human Rights Violations and Redressal	1.Scheduled Castes- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2	FC III-Manan Prakashan	Presentation method with chat, Google Meet
	2.Scheduled tribes- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2	FC III-Manan Prakashan	Presentation method with chat, Google Meet
	3.Women- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2	FC III-Manan Prakashan	Presentation method with chat, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2: Dealing With	A. Concept of Disaster and general effects of Disasters on human life- physical, psychological, economic and social effects.	3	FC III-Manan Prakashan	Presentation method with chat, Google Meet

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Environmental Concerns	B. Some locally relevant case studies of environmental disasters.	2	FC III-Manan Prakashan	Presentation method with chat, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3: Science and Technology I	C. Science and Superstition-role of science in exploding myths, blind beliefs and prejudices, Science and scientific temper.	3	FC III-Manan Prakashan	Presentation method with chat, Google Meet
	D. Science in everyday life- technology, its meaning and role in development, interrelation and distinction between science and technology.	2	FC III-Manan Prakashan	Presentation method with chat, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4: Soft Skills for Effective Interpersonal Communication	**Part A)** Importance of self-Awareness, Importance of Body language **Part B** I) Informal Communication - Purpose and Types. II) Writing Formal Applications, Statement of Purpose (SOP) and Resume. III) Preparing for Group Discussions, Interviews and Presentations.	5	FC III-Manan Prakashan	Presentation method with chat, Google Meet

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	Part C I) Leadership Skills and Self-Improvement - Characteristics of Effective Leadership. II) Styles of Leadership and Team-Building.	3	FC III-Manan Prakashan	Presentation method with chat, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Adv. Shweta Bharat Chaudhari DEPARTMENT: Commerce CLASS: SYBCOM (A, B, C, D, J, K, L, M, N) SEMESTER: III

MONTH: July to Oct. ACADEMIC YEAR: 2021 - 2022 LEARNING OBJECTIVE/S: Business Law

The learners will be able to : Introduction, Understand Meaning, Rules and regulations, section, important act details with related case study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I Indian Contract Act, 1872 Part 1	Chapter I Definitions, Kinds of agreements, Kinds of contracts, distinction between agreement and contract Chapter II Proposal, kinds of proposal -specific, offer to a class of persons, general offer, counter offer, invitation to offer, standing offer, express proposal, implied offer, requirements of a valid offer section 3 & 5 Acceptance, requirements of a valid acceptance, Rules of communication of proposal, acceptance and revocation of proposal/acceptance Chapter III Capacity to contract, minor, unsound mind, Disqualified person. Section 10-12	03 04 03	Indian contract act 1872 Avtar singh Pollak and mulla D.D basu	GOOGLE MEET PPT presentation (ONLINE)

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Module II Indian Contract Act, 1872 Part II	Chapter IV Consideration, agreements without consideration, unlawful consideration, inadequacy of consideration Agreements expressly declared to be void section 2- 25			
	Chapter I consent and free consent, coercion, undue influence, fraud, misrepresentationMistake Chapter II Void agreement section 24 to 30 Chapter III section 31 and 68 -72 Contingent contract, quasi-contracts, e-contract, Privity of contracts with exceptions	02		
Module III Special Contrac	Chapter IV Section 73 - 75 Discharge of contracts, Remedies available on breach of contracts	03		
	Chapter I Law of Indemnity and guarantee related essential, discharge of surety, distriction between, section 124 - 125, 126 - 129, 132 - 147	02		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 × 9 = 135

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNITHA CHANDRASHEKHAR NAIR DEPARTMENT: COM MERCE

CLASS S.Y.B.COM (Div- A, B, C, D) SEMESTER: III MONTH: JUNE -SEPTEMBER ACADEMIC YEAR: 2021 -2022

LEARNING OBJECTIVE/S: To inculcate the interest in macroeconomics
The learners will be able to : understand how an economy works

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics III Unit I & II..	**Module 1 - Intoduction**			
	1.Meaning , scope and importance of Macro economics 2.Circular flow of aggregate income and expenditure 3.The measurement of National product 4. Trade cycles – Features and Phases 5. Classical Macro economics – Say's law of Markets	10	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Chalk and Black Board Method 2 Quiz method 3.Discussion method
	Module 2- Basic concepts of Keynesian Economics			
	1.The Principals of Effective Demand 2. Consumption Function 3.Investmment Function and Marginal Efficiency of Capital	10	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Chalk and Black Board Method 2 Quiz method 3.Discussion method
	4.Investment Multiplie effect on Income and Output 5.Relevance of Keynesian theory tools to the developing countries.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMBARI PATWARDHAN DEPARTMENT: COMMERCE CLASS: SYBCOM (A, B, C, D, E, F, G, M,N)

SEMESTER: III MONTH: JULY - OCTOBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: Business Law
The learners will be able to: The Pupils Will be able to understand the concept of goods, it's types, contract of sale, and other related provisions, As well as they will be able to understand the concept of negotiable instrument ,it's types, and other related provisions and specific contracts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
The Sale of Goods Act, 1930	Chapter I Introduction, definitions, formalities of contract of sale, Distinguish between sale and agreement to sell Hire Purchase agreement.	02	Principles of law Of sale of goods Dr Avatar Sing	Google Meet & PPT
	Chapter II Conditions and Warranties, Doctrine of Caveat Emptor	01		Google Meet & PPT
	Chapter III Transfer of property in goods-meaning and rules governing The same, transfer of risk	02		Google Meet & PPT
	Chapter IV Meaning of the term unpaid seller and rights of an unpaid seller, auction sale	01		Google Meet & PPT

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The Negotiable Instruments Act,1881	Chapter I Meaning and characteristics of Negotiable Instruments, Classification of Negotiable Instruments	01		Google Meet & PPT
	Chapter II Promissory Note and Bill of Exchange, essential elements, Distinguish between Promissory note and bill of exchange, Acceptance and acceptor, absolute and Qualified acceptance, Drawer, drawee in case of need, payee, dishonor	03		Google Meet & PPT
	Chapter III Cheques, crossing of cheques, distinguish between Bill of Exchange and cheque, penalties in case of dishonour of cheques	02		Google Meet & PPT
	Chapter IV Miscellaneous provisions(sections8-10,22,99-102,118-122,134-137)Holder and Holder in due course, Rights and Privileges of a holder in due course ,Payment in Due course ,maturity of an instrument ,Bill in sets	02		Google Meet & PPT
Specific contract Act	Chapter II -Law of bailment and pledge Chapter III -Law of Agency	02	Contract Act: Dr. Avtar Singh	Google Meet & PPT

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: SYBCOM

DIVISIONS: A,B,C,D,E

SUBJECT: FOUNDATION COURSE SEMESTER: 4 MONTH:DECEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Introduction to Competitive Exams	Part A: Basic information on competitive examinations- The pattern, eligibility criteria and local centres. i.Examinations conducted for entry into professional courses- GRE, GMAT, CAT,SAT. ii.Examination conducted for entry into jobs by UPSC,SSC, Banking and Insurance sector, NET-SET. Part B: Soft skills for competitive examinations i.Information on area s tested: Quantitative ability, Data interpretation , Verbal ability and logical reasoning, creativity and lateral thinking. ii.Motivation: Concept, theories and types of motivations. iii.Goal setting: Types of goals, SMART Goals, Stephen Conveys concept of human endowment. iv.Time management: Effective strategies .	17	Advertising by Michael Vaz	Chalk Board, Flow Chart, Diagrams Google Meet, PPT, Kiwi Browser, Google Form.

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	v. Writing Skills: Paragraph writing, Report writing, Filing an application under the RTI Act, Grievance Letter.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHWINI DATTATRAY BHOIR DEPARTMENT: COMMERCE CLASS: SYBCOM F,G,H,I SEMESTER: IV

MONTH: NOVEMBER - MARCH ACADEMIC YEAR: 2021 - 2022 SUBJECT - BUSINESS LAW -II

LEARNING OBJECTIVE/S:
The learners will be able to Know Partnership Meaning , Procedure for Registration of Partnership, Types of Partner, Rights and Duties of Partner.

The learners will be able to Know Rights of Consumers, forms of its Violation and Consumer Protection Act.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module. No. 3 Indian Partnership Act, 1932 Module No. 4	Chapter I - Partnership: Concept, Essentials, True test of Partnership, Partnership Deed, Types of Partnership, Rights and duties of Partners, Distinguish between Partnership and Hindu Undivided Family. Chapter II - Dissolution: Concept, Modes of Dissolution, Consequences of Dissolution Chapter III - Limited Liability Partnership 2008: Concept, Characteristics, Advantages and Disadvantages, Procedure for Incorporation . Chapter IV - Extent of L.L.P.: Converstion of LLP, Mutual Rights and Duties of Partners, winding up of LLP, Distinction between LLP and Partnership.	3 2 2 3 2	Indian Partnership Act, 1932- Pollock & Mulla Agrawal V.K. Consumer protection Law and practice, 5th Ed., New Delhi: B.L.H. publishers Distributors Pvt. Ltd. 2009	1) Lecture and Discussion 2) Online teaching learning tools (Google meet, Google form, PPTs) 3) Case Study, 4) Black Board, Chalk and Duster

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Consumer Protection Act, 1986 and Competition Act 2002. Module No. 5	Chapter - I Concept, Objects, Reasons for enacting the Consumer Protection Act, Definition of Consumer, Consumer Dispute, Complaint, Defect, Deficiency, Unfair Trade Practices, Goods and Services. Chapter - II - Consumer Protection Councils and Redressal Agencies: District, State and National. Chapter - III - Competition Act 2002 : Concept, Salient Features, Objectives and Advantages. Chapter IV Abuse of Dominant Position , Competition Commission of India, Anti-Competition Agreements.	3 2 3		
Intellectual Property Rights	Chapter III - IPR Relating to Copyrights: Concept of Copyright, Ownership of Copy right, Duration or term of copy right , Original work and fairs use, Rights of copyright holder, Infringement of copyrights and Remedies. Chapter IV - IPR Relating to Trademarks : Concept, Functions, Types, trademarks that cannot be registered, Registration of trade marks and Rights of the Proprietor of Trade Marks. Procedure for registration of Trade Marks., infringement of Trademarks and Remedies.	3 2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. FIROZKHAN KHURSHIT KHAN** DEPARTMENT**: COMMERCE**

CLASS: **S.Y.B.COM** DIV: **A, B, C & D** SEMESTER: **IV** MONTH: **MARCH** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To impart the practical knowledge of Accountancy & Financial Management.

The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Redemption of Debentures	**Unit: 3 - Redemption of Debentures** Provisions of Section 71 (1) and (4) of the Companies Act, 2013, Creation and investment of DRR including The Companies (Share Capital and Debentures) Rules, 2014, the methods of writing-off discount/loss on issue of debentures; Terms of issue of debentures, Methods of redemption of debentures: By payment in lumpsum and by payment in instalments (excluding from by purchase in open market), Conversion. (Question on entries. ledgers and/or Balance Sheet and /or redemption of preference shares)	15	S.N. MAHESHWARY , KHAN & JAIN, Timothy R. Mayes	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet
Ascertainment and Treatment of Profit Prior to Incorporation	**Unit: 4 - Ascertainment and Treatment of Profit Prior to Incorporation** Principles for ascertainment, Preparation of separate combined, columnar Profit and Loss A/c including different basis of allocation of expenses and income	15	S.N. MAHESHWARY , KHAN & JAIN, Timothy R. Mayes	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. AKRUTI BOSE DEPARTMENT: COMMERCE

CLASS: SYBOM A,B,C,D,E SEMESTER: IV MONTH: DECEMBER/MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: ONLINE / OFFLINE
The learners will be able to : Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS IV Module I and Module IV	THE ROLE OF GOVERNMENT IN AN ECONOMY: Meaning and Scope of Public Finance, Major Fiscal Functions, Principle of		Macro Economics by H.L. AHUJA.	Online Lectures through Laptop, Mobile, PPT slide, Google Meet.
	Maximum Social Advantage-Dalton and Musgrave, the principle in Practice and its Limitations.			Offline Lecture through Chalk Board method.
	FISCAL MANAGEMENT AND FINANCIAL ADMINISTRATION: Fiscal Policy, Contra Cyclical and Fiscal Policy and Discretionary Fiscal Policy-Principle of Sound Finance and Functional Finance, Budget-Meaning, objectives and			
	Types, Intergovernmental Fiscal Relations-Fiscal Federalism and Fiscal Decentralization.			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08 Lectures.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: SYBCOM SEMESTER: IV

MONTH: December- March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : understand the auditing subject thorough and it will behelpful for them in future

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing Unit – 2 Audit planning, procedures and Documentation	Audit planning , meaning, objectives, sources, discussion with client. Audit program , meaning, factors , advantages, disadvantages, overcoming disadvantages. Audit evidence about internal controls, transactions during year , year end balances, differences, audit procedures. Audit working papers, meaning, fators, contents of permanent audit file, current audit file, ownership, custody and access, audit notebook	10		Online Lecture taken on Google Meet

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Unit – 1 Introduction to Auditing	Definition of auditing, objectives, its limitations, difference between accounting and auditing and investigation and auditing. Meaning of errors and frauds, Types of errors and frauds, Risk of error and error inaudit, duties and responsibilities of auditor during fraud. Principles of audit, materiality, True and fair view. Types of audit, Advantages and disadvantages of Balance sheet audit, Interim audit, continous audit, concurrent audit, annual audit and statutory audit	12		Online Lecture taken on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: Commerce CLASS: S.Y.BCOM (Division K L M N) SEMESTER: IV

MONTH: December, January, February, March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & remember the Rights of Citizens and would be able apply it their daily life.
2) Understand & remember the concept of Laser Technology, Satellite Technology, GPS, Information and Communication Technology, Biotechnology and Genetic engineering, Nanotechnology and identify the uses of these technologies.
3) Understand and identify Issues of Control, Access and Misuse of Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1- Significant, Contemporary Rights of Citizens	A. Rights of consumers B. Right to Information C. Protection of Citizens'/Public Interest D. Citizens' Charters, Public Service Guarantee Acts	**08**	Book by Manan publications/Internet	Google Meet, PPT, Chalkboard
Unit 3- Science and Technology –II	Information and Communication Technology- convergence of various technologies like satellite, computer and digital in the information revolution of today's society.	02	Book by Manan publications/Internet	Google Meet, PPT, Chalkboard

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	Biotechnology and Genetic engineering- applied biology and uses in medicine, pharmaceuticals and agriculture; genetically modified plant, animal and human life.	02	Book by Manan publications/Internet	Google Meet, PPT, Chalkboard
	Biotechnology and Genetic engineering- applied biology and uses in medicine, pharmaceuticals and agriculture; genetically modified plant, animal and human life.	02	Book by Manan publications/Internet	Google Meet, PPT, Chalkboard
	Nanotechnology- definition: the study, control and application of phenomena and materials at length scales below 100 nm; uses in medicine, military intelligence and consumer products.	02	Book by Manan publications/Internet	Google Meet, PPT, Chalkboard
	Issues of Control, Access and Misuse of Technology	02	Book by Manan publications/Internet	Google Meet, PPT, Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce CLASS: S Y B Com (F, G, H, I) SEMESTER: IV

MONTH: December ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:
Learn about the working format of the company regards to raising of capital funds by way of issuing shares, debentures. Also, the legal procedure to raise these funds. It also helps to give practical knowledge of accounts. Additionally, the learner will be able to understand the method for the redemption of preference share and calculation of settling the proceeds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy and Financial Management IV	**Introduction to Company Accounts** Introduction of basic terms: Types of companies, nature and formation of companies, Shares, Debentures, Share Capital, Reserves and surplus, types of assets and liabilities, dividend, format of Balance Sheet (Only theory) Issue of shares: Different modes IPO, Private Placements, Preferential, Rights, ESO, SWEAT and ESCROW account, Issue of shares at par, premium and discount, Under subscription and Over subscription of shares, forfeiture and reissue of forfeited shares, issue of shares for consideration other than cash. (Only theory) Issue of Debentures: types of Debentures, Issue of debentures at par, premium and discount, Issue of Debentures with consideration of Redemption, Issue of debentures for cash receivable in instalments or at a time Issue of debentures for consideration other than cash. (Only theory)	12	Introduction to Accountancy T.S. Grewal S. Chand and Co. (P) Ltd., New Delhi Advanced Accounts Shukla and Grewal S. Chand and Co. (P) Ltd., New Delhi	Google Meet for online teaching, Excel, PowerPoint Presentation, MS word

	Redemption of Preference Shares Provision of the Companies Act for redemption of Preference Shares (Sec 55 of the Companies Act, 2013), Companies (Share and Debentures) Rules. Methods of Redemption of fully paid-up Preference Shares as per Companies Act, 2013: The proceed of a fresh issue of shares, the capitalization of undistributed profits and a combination of both, calculation of minimum fresh issue to provide the fund for redemption, (Question on entries and/or Balance Sheet) Note: Companies governed by Section 133 of the Companies Act, 2013 and comply with the accounting standards prescribed for them. Hence, the balance in security premium account not to be utilized for premium payable on redemption of preference shares.	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

Babli Jha

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: SYB.COM -F,G,H,I,J
SEMESTER:4th MONTH: November – February ACADEMIC YEAR: 2021-2022 SUBJECT : COMMERCE IV
LEARNING OBJECTIVE/S:
The learners will be able to:

1.To acquaint the learner with the basic concepts of Production management.

2.To provide basic knowledge about inventory management and it's techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODUL1: PRODUCTION AND INVENTORY MANAGEMENT	• Production Management: Objectives, Scope Production Planning & Control :Steps, Importance	3	Production & Operation Management . Essential of Inventory Management	1.Lecture methods . 2.Flow charts and diagrams. 3. PPT 4. Google Meet 5. PDF
	• Production Systems :Concept, Type – Continuous and Intermittent. Productivity : Concept, Factors Influencing Productivity, Measures for improving productivity	4		
	• Inventory Management -Objectives, Inventory Control -Techniques. Scientific Inventory Control System -Importance	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 × 5 div = 44

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE _DEPARTMENT: B.COM CLASS: SYB.COM -F,G,H,I,J
SEMESTER: 4th MONTH: November – February ACADEMIC YEAR: 2019-2020 SUBJECT : COMMERCE IV
LEARNING OBJECTIVE/S:
The learners will be able to :

1. To provide basic knowledge about Indian Financial Systems.
2. To acquire knowledge about SEBI , Stock Exchange and Credit Rating Agencies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 3: INDIAN FINANCIAL SYSTEM	• Indian Financial Market : Structure, Primary MARKET- IPO Procedure Dematerialisation: Process, Role of Depositories: NSDL and CDSL	4	Indian Financial System - M.Y.Khan Financial Institutions & Markets- L.M.Bhole	1. Lecture and discussion. 2. Flow charts and Institutional Structures. 3. PPT 4. Google Meet 5. PDF
	• SEBI: Function of SEBI, Investors protection measures of SEBI. Stock Exchange – Function ,Speculators.	4		
	• Credit Rating : Advantages, Credit Rating Agencies in India- CRISIL, CARE, and ICRA.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 × 5 div =60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT:COMMERCE CLASS: SYBCOM (F G H I)

SUBJECT: ADVERTISING SEMESTER: IV MONTH: November to February ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

Gain knowledge about advertising, its benefits, scope, function, different media in advertising.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1 Media in Advertising	• **Traditional Media:** Print, Broadcasting, Out-Of-Home advertising and films - advantages and limitations of all the above traditional media • **New Age Media:** Digital Media Forms, Significance and Limitations • **Media Research:** Concept, Important, Tool for regulation- ABC and Doordarshan Code	11	Marketing Management by Philip Kotler.	Online lectures through Google meet / Power point presentation & Offline lectures through chalk & duster method.
UNIT-3 Fundamental of creativity in advertising.	• **Creativity:** Concept and Importance, Creative Process, Concept of Creative Brief, Techniques of Visualization. • **Creative aspects:** Buying Motives - Types, Selling Points Features, Appeals Preposition (USP) • **Creativity through Endorsements:** Endorsers Types, Celebrity Endorsements - Advantages and Limitations, High Involvement and Low Involvement Products.	11	Marketing Management by Philip Kotler	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____22_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM (A,B,C,D,E)

SUBJECT: COMMERCE IV SEMESTER: IV MONTH: November to February . ACADEMIC YEAR: 2021-22.

LEARNING OBJECTIVE/S:
The learners will be able to : To gain the knowledge of management, evolution of management, to study different elements of management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1- Production & Inventory management	• Production Management: Objective, scope • PPC – steps and importance, • Production system: concept, types – continuous and intermittent • Productivity • Inventory management, inventory control techniques • Scientific inventory control system	11	Principles of management by Philip Kotler And Essential of Management by Koontz	Online lectures through Google meet / Power point presentation & Offline lectures through chalk & duster method.
UNIT 4- Recent Trends in Finance.	• Mutual Funds- Advantages and Limitations. Types. Factors responsible for growth of mutual funds - Systematic Investment Plan, • Commodity Market: Categories, Derivatives Market: Types, Participants, Types of Derivative Instruments. • Start-up Ventures Concept. Sources of Funding, Micro Finance - Importance, Role of Self Help Groups.	12	Principles of management by Philip Kotler And Essential of Management by Koontz	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 23

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM (ALL DIVISIONS)

SUBJECT: FOUNDATION COURSE IN NSS SEMESTER: IV MONTH: November to February ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Gain knowledge about National Service Scheme, its benefits to the society, scope for the NSS volunteers

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1 Entrepreneurship Development and Schemes	• Entrepreneurship development – meaning • Attributes of entrepreneur • Women entrepreneurship • Government and self-employment schemes • Skill India, Start up India, Digital India, Make in India, • NITI Aayog	12	NSS MANUAL – UNIVERSITY OF MUMBAI	Online lectures through Google meet / Power point presentation & Offline lectures through chalk & duster method.
UNIT-2 Cottage Industries in India	• Cottage industries – meaning • Pre independence & Post independence scenario • Marketing of Cottage Products and outlets • Government policies to encourage cottage industries • Hurdles in the development of cottage industries	10	NSS MANUAL – UNIVERSITY OF MUMBAI	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DEEPAKKUMAR GUPTA** DEPARTMENT**: COMMERCE** CLASS: **S.Y.B.COM** SEMESTER: **IV**
MONTH: Nov to April ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To impart the practical knowledge of Accountancy & Financial Management.
The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Redemption of Debentures	**Unit: 3 - Redemption of Debentures** Provisions of Section 71 (1) and (4) of the Companies Act, 2013, Creation and investment of DRR including The Companies (Share Capital and Debentures) Rules, 2014, the methods of writing-off discount/loss on issue of debentures; Terms of issue of debentures, Methods of redemption of debentures: By payment in lumpsum and by payment in instalments (excluding from by purchase in open market), Conversion. (Question on entries. ledgers and/or Balance Sheet and /or redemption of preference shares)	15	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Chalk and Board Ms. Power point Ms Word
Ascertainment and Treatment of Profit Prior to Incorporation	**Unit: 4 - Ascertainment and Treatment of Profit Prior to Incorporation** Principles for ascertainment, Preparation of separate combined, columnar Profit and Loss A/c including different basis of allocation of expenses and income	15	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Chalk and Board Ms. Power point Ms Word

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NILESHWARI GHUMRE DEPARTMENT: COMMERCE CLASS: SYBCOM

SUBJECT: COMMERCE IV SEMESTER: IV MONTH: November to February. ACADEMIC YEAR: 2021-22.

LEARNING OBJECTIVE/S:
The learners will be able To: To gain the knowledge of management, evolution of management, to study different elements of management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1- Production & Inventory management	• Production Management: Objective, scope • PPC – steps and importance, • Production system: concept, types – continuous and intermittent • Productivity • Inventory management, inventory control techniques • Scientific inventory control system	12	Principles of management by Philip Kotler And Essential of Management by Koontz	Online lectures through Google meet / Power point presentation & Offline lectures through chalk & duster method.
UNIT 4- Recent Trends in Finance.	• Mutual Funds- Advantages and Limitations. Types. Factors responsible for growth of mutual funds - Systematic Investment Plan, • Commodity Market: Categories, Derivatives Market: Types, Participants, Types of Derivative Instruments. • Start-up Ventures Concept. Sources of Funding, Micro Finance - Importance, Role of Self Help Groups.	12	Principles of management by Philip Kotler And Essential of Management by Koontz	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___24__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Adv. Shweta Bharat Chaudhari DEPARTMENT: Commerce CLASS: SYBCOM SEMESTER: IV

MONTH: December to April ACADEMIC YEAR: 2021- 2022 LEARNING OBJECTIVE/S: Busines Law

The learners will be able to : Introduction, Understand Meaning, Rules and regulations, section, important act details with related case study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 Indian Campanies Act, 2013 Part 1	Chapter I Company and its formation, definition and nature of company, advantages and disadvantages of a company, lifting of corporate veil with cases, promoters, pre-incorporation and preliminary contracts	03	1. Company Law : Avtar Singh. 2. Indian Company Law. Authors, Dr. N. S. Kothari, Ramesh Chand Agarwal.	Online, Google meet, PPT Offline , Black Board, Chalk and Duster
	Chapter II Types of companies (meaning and concept only) statutory companies, one person company, Company, limited by shares/guarantee	04		
	Private company, public company, Producer Company, formation of companies with charitable	03		
MODULE 2 Indian Campanies	Objects, holding and subsidiary company, Government, foreign company, small company	02		

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Act, 2013 Part 2	Procedure for registration of a company, documents to be submitted for registration, Effect of incorporation. Chapter III Memorandum of Association & Articles of Association: meaning, concept, clauses, effect ofRegistration of Memorandum and Articles of Association, Doctrine of Constructive NoticeDoctrine of Ultra Vires, Doctrine of Indoor Management Chapter IV Prospectus- meaning, when to be issued, when not required, kinds of prospectus, contents of prospectus, private placement			
	Membership of a company Who can become a member? Modes of acquiring membership, cessation of membership, rights, liabilities and duties of members Chapter II Classification of Directors, woman director, independent director, small shareholders' director Disqualification of director, Director Identification Number, powers and duties, position of director	03 04		

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MODULE 5 Intellectual property right	as key managerial personnel, Manager, Managing Director.	03		
	Chapter III Meetings, types of meetings of members and Board of directors, convening and conduct of meetings, Postal ballot, meetings through video conferencing, e-voting.	02		
	Chapter I IPR concept, Nature , Scope, Introduction & Background of IPR in India.	02		
	Chapter II IPR related Patents concept, general Principal, Rights and Remedies, Term etc.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28 *2 = 56

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani DEPARTMENT: Commerce

CLASS: S.Y.B.Com Divisions: F,G,H,I,J,K,L SEMESTER: IV MONTH: November to March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- To develop and gain logical reasoning, critical thinking abilities, creating and testing hypotheses and thus opening doors to research.
- To measure verbal reasoning, quantitative reasoning, and analytical writing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FC Unit IV	Module II: Approaches to Understanding Ecology Anthropocentrism, Biocentrism and Eco ecentrism, Ecofeminism and Deep Ecology, The Sustainability principle, PPP, TPP The Equity principle, Human Rights Principle, The Participation Principle.	6	Sheth Publishers Michael Vaz Aurara vaz:foundation course Newspapers	❖ Online lectures(Google Meet) ❖ Google Slides ❖ Discussion ❖ Explanation with examples ❖ Online Projects assigned and assessment.

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Unit IV Introduction to competitive exams				
	Part A: Basic information on competitive examinations- The pattern, eligibility criteria and local centres. i) Examinations conducted for entry into professional courses- GRE, GMAT, CAT,SAT. ii) Examination conducted for entry into jobs by UPSC,SSC, Banking and Insurance sector, NET-SET. Part B: Soft skills for competitive examinations i) Information on area s tested: Quantitative ability, Data interpretation , Verbal ability and logical reasoning, creativity and lateral thinking. ii) Motivation: Concept, theories and types of motivations. iii) Goal setting: Types of goals, SMART Goals, Stephen Conveys concept of human endowment. iv) Time management: Effective strategies . v) Writing Skills: Paragraph writing, Report writing, Filing an application under the RTI Act, Grievance letter.	08	Sheth Publishers Michael Vaz Aurara vaz : foundation course Newspapers	❖ Online lectures(Google Meet) ❖ Google Slides ❖ Discussion ❖ Explanation with examples ❖ Online Projects assigned and assessment.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: SYBCOM

DIVISONS : A,B,C,D,E

SEMESTER: 4 MONTH: JANUARY-FEBRUARY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: FOUNDATION COURSE
The learners will be able to: Understand the deep ecology environmental principles like human rights and more.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Approaches to Understanding Ecology	Understanding approaches to ecology – Anthropocentrism, Biocentrism and Eco centrism, Ecofeminism and Deep Ecology.	3	Foundation Course by Michael Vaz	PPT, Google Meet, Kiwi Browser, Google Form, Chalk Board, Diagrams, Flow Chart. .
	Environmental Principles – 1: The Sustainability Principle; The Polluter Pays Principle; The Precautionary Principle.	4		
	Environmental Principles – 2: The Equity Principle; Human Rights Principles; The Participation Principle.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI YADAV DEPARTMENT: COMMERCE CLASS: SYBCOM SEMESTER: IV

MONTH: DEC-MAR ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : How to internal control for sales, creditors and to internal audit its objectivies . internal check & internal audit. Techniques of auditing vouching & verifications of books of accounts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3. Auditing Techniques and Internal Audit Introduction	A. Internal Control – Meaning and purpose, review of internal control, advantages, auditors duties, review of internal control, Inherent Limitations of Internal control, internal control samples for sales and debtors, purchases and creditors, wages and salaries. Internal Checks Vs Internal Control, Internal Checks Vs Test Checks B. Internal Audit : Meaning, basic principles of establishing Internal audit, objectives, evaluation of internal Audit by statutory auditor, usefulness of Internal Audit, Internal Audit Vs External Audit, Internal Checks Vs Internal Audit	8	Manan Prakashan	PPT , Explanation, Discussion and Examples.

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4. Auditing Techniques : Vouching & Verification	A. Audit of Income : Cash Sales, Sales on Approval, Consignment Sales, Sales Returns Recovery of Bad Debts written off, Rental Receipts, Interest and Dividends Received Royalties Received B. Audit of Expenditure : Purchases, Purchase Returns, Salaries and Wages, Rent, Insurance Premium, Telephone expense Postage and Courier, Petty Cash Expenses, Travelling Commission Advertisement, Interest Expense C. Audit of Assets Book Debts / Debtors, Stocks – Auditors General Duties; Patterns, Dies and Loose Tools, Spare Parts, Empties and Containers Quoted Investments and Unquoted Investment Trade Marks / Copyrights Patents Know-How Plant and Machinery Land and Buildings Furniture and Fixtures D. Audit of Liabilities : Outstanding Expenses, Bills Payable Secured loans Unsecured Loans, Contingent Liabilities	10	Manan Prakashan	PPT , Explanation, Discussion and Examples.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: COM MERCE

CLASS S.Y.B.COM SEMESTER: IV MONTH: NOVEMBER - MARCH ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S To inculcate the interest in Public Finance and policy :
The learners will be able to : Understanding the essential of government finance as it forms the grounding of analyzing public policies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –IV Unit I & IV	**Module II : Introduction to Public Finance**			
	1.Public Finance. 2.Principle of maximum social advantage. 3. Efficiency-Government - Market	10	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Power point presentation 2 Quiz method 3.Discussion method
	Module IV : Public Expenditure and Public Debt.			
	Fiscal Policy Budget Intergovernmental fiscal relations Fiscal responsibility and budget management	10	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Power Point Presentation 2 Quiz method 3.Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI VIJAY MEHTA DEPARTMENT: COMMERCE

CLASS: SYBCOM SEMESTER:IV MONTH:NOV 2021- FEB 2022 ACADEMIC YEAR:2021-2022 (FC)

LEARNING OBJECTIVE/S:
The learners will be able to: To make students understand the concept relating to human right, Ecology and Environmental principles .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II & UNIT IV,	Module II: Approaches to Understanding Ecology Anthropocentrism, Biocentrism and Eco ecentrism, Ecofeminism and Deep Ecology, The Sustainability principle, PPP, TPP The Equity principle, Human Rights Principle, The Participation Principle.	5	Foundation Course by Michael Vaz	Google Meet, PPT, Chalk Board, Diagrams
	Module IV : Introduction to Competitive Exams Examinations conducted for entry into professional courses- GRE, GMAT, CAT, SAT, Union Public Service Commissions, SSC, NET, SET Quantitative Ability, Data Interpretation, Verbal Ability and logical reasoning, Creativity and Lateral thinking Motivation- Concept, Theories and types Goal Setting- Types, SMART Goals, Stephen Coveys Concept of human endowment Time Management- Effective Strategies for Time Management	5	Foundation Course by Michael Vaz	Google Meet, PPT, Chalk Board, Diagrams

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	Writing Skills- Paragraph Writing, Report writing, Consumer Grievance Letter, Filing an application under the RTI Act.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: **Commerce**

CLASS: **SYBCOM K, L,M & N** SEMESTER: **IV** MONTH: **Dec to March** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) Understand the concepts of Company Accounts & Company's Act, 2013
3) Understand concepts of Profit Prior to Incorporation
4) Solve practical questions based on the concepts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting 4	Unit 1 : Preparation of Final Accounts of Companies	16		
	1) Relevant provisions of Companies Act related to preparation of Final Account 2) Preparation of financial statements as per Companies Act. 3) AS 1 in relation to final accounts of companies (disclosure of accounting policies)			Offline Lectures - Chalk Board Online platform – Google Meet PPT, Videos, Spreadsheets, Quiz Flip Book, Google Classroom, Group discussion.
	Unit 4 : Ascertainment and Treatment of Profit Prior to Incorporation	16		

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	1) Principles for ascertainment Preparation of separate, combined and columnar Profit and Loss Account including different basis of allocation of expenses Incomes			Offline Lectures - Chalk Board Online platform – Google Meet PPT, Videos, Spreadsheets, Quiz Flip Book, Google Classroom, Group discussion.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _32_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE CLASS: SYBCOM

SEMESTER: **IV** MONTH: Nov,2021 to March,2022 ACADEMIC YEAR :2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to learn various audit techniques such as vouching, verification, internal control, Internal check ,Internal audit etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AUDITING	1] **Audit Technique- Vouching** –Meaning , Points to be consider while doing vouching . Audit of Income- cash sales, Credit sales , Consignment sales , Rent receipt, Interest & dividend receipt , Royalties receipt Audit of Expenses –Purchase, Purchase Return , Salaries & wages, Rent, Insurance premium, Telephone Expenses, Advetisement Expenses, Travelling expenses etc.	10	Auditing- Kamal Gupta	Chalk & Duster,Google meet ,MS word
	2] **Audit Technique – Verification** – Meaning , Points to be consider while doing verification. Vouching v/s Verification. Audit of Assets – Book Debts, Stock, Patterns , Loose tools, Investments, patents, Plant & Machinery, Building , Furniture. Audit of Liabilities – Outstanding Expenses, Bills payable, Creditors, Secured loan , Unsecured loan & Contingent Liabilities.	10		Chalk & Duster, Google meet ,MS Word

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	3]**Audit Techniques- Internal control-** Meaning, Purpose , review of internal control, Limitations. Internal control for – Sales, Debtors , purchase, creditors. Internal check v/s Internal control. Internal Audit- Meaning, Objectives, Evaluation, Usefulness of internal Audit .Internal Audit v/s External Audit. Internal check v/s Internal Audit.	05		Chalk & Duster ,Google meet , Wikipedia

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: COMMERCE
CLASS: SYBCOM SEMESTER: IV MONTH: NOV-MARCH SUB: ADVERTISING ACADEMIC YEAR:2021-22

LEARNING OBJECTIVE/S: Understand and analyze the relevant research in advertising and marketing communication. Design effective visual communication for various advertising approaches that combine the use of print, online/digital, and other multimedia communication. Develop advertising media buying and planning strategies. Create and defend the strategy and execution of an ad campaign for a client(s).

PAPER, UNIT , TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PLANNING ADVERTISING CAMPAIGN	Concept ,steps in advertising planning, determining Ad objective	3	Advertising and Promotion : An Integrated Marketing Communications Perspective George Belch and Michael Belch, 2015, 10th Edition, McGraw Hill Education, 5. Advertising: Planning and Implementation, 2006 – Raghuvir Singh, Sangeeta Sharma –Prentice Hall	GMEET, PPT, MICROSOFT WORD WITH PEN TOOL,PDF FILES, GOOGLE FORM, GOOGLE CLASSROOM
	Factors determining Ad Budget and Methods of setting Ad Budget	4		
	Media objectives, media planning, Factors determining media selection, media scheduling strategies	4		
EXECUTION AND EVALUATION OF ADVERTISING	Preparing print ad	5		
	Creating broadcast ads	4		
	Evaluation	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: THEORY-23

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DIVISION-A- E –UNIT I & IV – NO LECTURES- 23

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAVITA VILAS PURANDARE DEPARTMENT: COMMERCE CLASS: SYBCOM (J, L, M, N) SEMESTER: IV

SUBJECT: ADVERTISING MONTH: Nov to March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
Understand and analyze the relevant research in advertising and marketing communication. Design effective visual communication for various advertising approaches that combine the use of print, online/digital, and other multimedia communication..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 - PLANNING ADVERTISING CAMPAIGN	• Concept ,steps in advertising planning, determining Ad objective • Factors determining Ad Budget and Methods of setting Ad Budget • Media objectives, media planning, Factors determining media selection, media scheduling strategies	12	Marketing Management Advertisement by Ajgavkar	GMEET, PPT, MICROSOFT WORD WITH PEN TOOL,PDF FILES, GOOGLE FORM, GOOGLE CLASSROOM
UNIT 4 – EXECUTION AND EVALUATION OF ADVERTISING	• Preparing print ad • Creating broadcast ads • Evaluation	12	Marketing Management Advertisement by Ajgavkar	GMEET, PPT, MICROSOFT WORD WITH PEN TOOL,PDF FILES, GOOGLE FORM, GOOGLE CLASSROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACH.ING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF. MADHURA ARVIND SURVE DEPARTMENT: COMMERCE CLASS: S.Y.B.COM (JKLMN) SEMESTER: IV

MONTH: NOVEMBER - MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: TO MAKE STUDENTS LEARN ABOUT ADVERTISING AND ITS IMPORTANCE IN GROWTH OF BUSINESS

The learners will be able to: UNDERSTAND HOW HE CAN USE HIS CREATIVITY IN ATTRAACTING CUSTOMERS IN TODAYS COMPETITION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ADVERTISING UNIT I & III	**UNIT I : MEDIA IN ADVERTISING**	11	ADVERTISING (MANAN PRAKSHAN & VIPUL PRAKASHN)	1. CHALK & BLACK BOARD METHOD 2. INTERACTIVE METHOD
	1) TRADITIONAL MEDIA 2) NEW AGE MEDIA 3)MEDIA RESEARCH			
	UNIT III : FUNDAMENTAL OF CREATIVITY IN ADVERTISING	11	ADVERTISING (MANAN PRAKSHAN & VIPUL PRAKASHN)	1. CHALK & BLACK BOARD METHOD 2. INTERACTIVE METHOD
	1)CREATIVITY 2) CREATIVE ASPECT 3) CREATIVITY THROUGH ENDORSMENT			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NILESHWARI GHUMRE DEPARTMENT: COMMERCE CLASS: SYBCOM

SUBJECT: COMMERCE IV SEMESTER: IV MONTH: November to February. ACADEMIC YEAR: 2021-22.

LEARNING OBJECTIVE/S:
The learners will be able To: To gain the knowledge of management, evolution of management, to study different elements of management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1- Production & Inventory management	• Production Management: Objective, scope • PPC – steps and importance, • Production system: concept, types – continuous and intermittent • Productivity • Inventory management, inventory control techniques • Scientific inventory control system	12	Principles of management by Philip Kotler And Essential of Management by Koontz	Online lectures through Google meet / Power point presentation & Offline lectures through chalk & duster method.
UNIT 4- Recent Trends in Finance.	• Mutual Funds- Advantages and Limitations. Types. Factors responsible for growth of mutual funds - Systematic Investment Plan, • Commodity Market: Categories, Derivatives Market: Types, Participants, Types of Derivative Instruments. • Start-up Ventures Concept. Sources of Funding, Micro Finance - Importance, Role of Self Help Groups.	12	Principles of management by Philip Kotler And Essential of Management by Koontz	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___24__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: CHETAN PRAKASH VARMA DEPARTMENT: COMMERCE CLASS: SYBCOM

SEMESTER: IV MONTH: NOV- MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : To make student understand the All Macro Economics Perspective, National Income, Theory of J.M Keynes and its applicability in business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS-IV	• Meaning and Scope of Public finance. • Major fiscal functions : allocation function, distribution function & stabilization function • Principle of Maximum Social Advantage: Dalton and Musgrave Views - the Principle in Practice, Limitations.	06	Ackley.G (1976), Macro Economic Theory and Policy, Macmillan Publishing Co. New York	CHALK AND TALK / EXPLORITATIVE/TWO WAY COMMUNICATION Story-telling method Textbook method Lecture Method
	• Relation between Efficiency, Markets and Governments • The concept of Public Goods and the role of Government	02	Jha, R (1998) : Modern Public Economics, Route Ledge, London	Demonstration Method Tutorial Method Questions-Answer method Discussion method Heuristic method

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				Discovery method
	• 1Public Expenditure –Canons , Classification and Effects • 2.Growth of public Expenditure	03	Musgrave, R.A and P.B. Musgrave (1976) : Public Finance in Theory and Practice, Tata McGraw Hill, Kogakusha, Tokyo	
	• 3.Public Expenditure and Social Welfare • 4.Public Debt	02	Mithani, D.M (1998) : Modern Public Finance, Himalaya Publishing House, Mumbai	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____13___

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE Div: F,G,H,I,J SUBJECT: Foundation Course

CLASS: SYBCOM SEMESTER: IV MONTH: November-March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The learners will be able to: To impart knowledge or information regarding the unit taught within the time frame with examples which students will be able to understand, thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Significant, contemporary Rights of Citizens	1. Rights of Consumers-Violations of consumer rights and important provisions of the Consumer Protection Act, 2016; Other important laws to protect consumers; Consumer courts and consumer movements.	3	FC IV-Manan Prakashan,	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method
	2. Right to Information- Genesis and relation with transparency and accountability; important provisions of the Right to Information Act, 2005; some success stories.	3	FC IV-Manan Prakashan,	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method
	3. Protection of Citizens'/Public Interest-Public Interest Litigation, need and procedure to file a PIL; some landmark cases.	3	FC IV-Manan Prakashan,	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method
	4. Citizens' Charters, Public Service Guarantee Acts.	3	FC IV-Manan Prakashan,	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method

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Unit 3: Science and Technology II	Part A: Some Significant Modern Technologies, Features and Applications: i. Laser Technology- Light Amplification by Stimulated Emission of Radiation; use of laser in remote sensing, GIS/GPS mapping, medical use. ii. ii. Satellite Technology- various uses in satellite navigation systems, GPS, and imprecise climate and weather analyses. iii. iii. Information and Communication Technology- convergence of various technologies like satellite, computer and digital in the information revolution of today's society. iv. iv. Biotechnology and Genetic engineering- applied biology and uses in medicine, pharmaceuticals and agriculture; genetically modified plant, animal and human life. v. v. Nanotechnology- definition: the study, control and application of phenomena and materials at length scales below 100 nm; uses in medicine, military intelligence and consumer products.	7	FC IV-Manan Prakashan,	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method
	Part B: Issues of Control, Access and Misuse of Technology.	4	FC IV-Manan Prakashan,	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1 & 3: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNITHA CHANDRASHEKHAR NAIR DEPARTMENT: COM MERCE

CLASS S.Y.B.COM SEMESTER: IV MONTH: NOVEMBER - MARCH ACADEMIC YEAR: **2021 -22**

LEARNING OBJECTIVE/S To inculcate the interest in Public Finance and policy :
The learners will be able to : Understanding the essential of government finance as it forms the grounding of analyzing public policies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –IV Unit II & III	**Module II : Public Revenue**			
	1.Public Revenue. 2.Shifting of Tax burden 3. Economic effects of taxation.	10	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Power point presentation 2 Quiz method 3.Discussion method
	Module III : Public Expenditure and Public Debt.			
	1Public Expenditure –Canons , Classification and Effects 2.Growth of public Expenditure	10	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Power Point Presentation 2 Quiz method 3.Discussion method
	3.Public Expenditure and Social Welfare 4.Public Debt			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: AUDITING DEPARTMENT: COMMERCE

CLASS: SYBCOM SEMESTER: IV MONTH: NOV, DEC, JAN ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 INTRODUCTION TO AUDITING	A. Basics – Financial Statements, Users of Information, Definition of Auditing, Objectives of Auditing, Inherent limitations of Audit, Difference between Accounting and Auditing, Investigation and Auditing	2		• Google Meet • PowerPoint • Excel
	B. Errors & Frauds – Definitions, Reasons and Circumstances, Types of Error, Types of Frauds, Risk of Fraud and Error in Audit, Auditors Duties and Responsibilities in case of Fraud	2		
	C. Principles of Audit, Materiality, True and Fair View	1		
	D. Types of Audit – Meaning, Advantages, Disadvantages of Balance Sheet Audit, Interim Audit, Continuous Audit, Concurrent Audit and Annual Audit, Statutory Audit	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: AUDITING DEPARTMENT: COMMERCE

CLASS: SYBCOM SEMESTER: IV MONTH: JANUARY, FEBRUARY, ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 AUDIT PLANNING PROCEDURE AND DOCUMENTATION	A. Audit Planning – Meaning, Objectives, Factors to be considered, Sources of obtaining information, Discussion with Client, Overall Audit Approach	2		• Google Meet • PowerPoint • Excel
	B. Audit Program – Meaning, Factors, Advantages and Disadvantages, Overcoming Disadvantages, Methods of Work, Instruction before commencing Work, Overall Audit Approach	2		
	C. Audit Working Papers – Meaning, importance, Factors determining Form and Contents, Main Functions / Importance, Features, Contents of Permanent Audit File, Temporary Audit File, Ownership, Custody, Access of Other Parties to Audit Working Papers, Auditors Lien on Working Papers, Auditors Lien on Client's Books	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: AUDITING DEPARTMENT: COMMERCE

CLASS: SYBCOM SEMESTER: IV MONTH: MARCH, ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 AUDITING TECHNIQUES	A. Test Check – Test Checking Vs Routing Checking, Test Check Meaning, Features, Factors to be considered, when Test Checks can be used, Advantages, Disadvantages, Precautions	1		• Google Meet • PowerPoint • Excel
	B. Audit Sampling – Audit Sampling, Meaning, Purpose, Factors in determining sample size – Sampling Risk, Tolerable Error and Expected Error, Methods of selecting Sample Items, Evaluation of Sample Results, Auditors Liability in conducting audit based on Sample	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 3: 2

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. VEENA SIHANA

DEPARTMENT: COMMERCE

CLASS S.Y.B.COM F, G, H, I SEMESTER: IV MONTH: NOVEMBER - MARCH 2021-22 ACADEMIC YEAR: **2021 -22**

LEARNING OBJECTIVE/S To inculcate the interest in Public Finance and policy :
The learners will be able to : Understanding the essential of government finance as it forms the grounding of analyzing public policies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –IV Unit II & III	**Module II : Public Revenue**			
	1.Public Revenue. 2.Shifting of Tax burden 3. Economic effects of taxation.	4	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Power point presentation 2 Quiz method 3.Discussion method
	Module III : Public Expenditure and Public Debt.			
	1Public Expenditure –Canons , Classification and Effects 2.Growth of public Expenditure	4	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Power Point Presentation 2 Quiz method 3.Discussion method
	3.Public Expenditure and Social Welfare 4.Public Debt			

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VidhyaDayanandPatil College of Arts
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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____08_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANOJ SHARMA DEPARTMENT: COMMERCE CLASS: SYBCOM (H, I, J, K & L)

SEMESTER: III MONTH: JULY - OCTOBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: Business Law

The learners will be able to: The Pupils Will be able to understand the concept of goods, it's types, contract of sale, and other related provisions, As well as they will be able to understand the concept of negotiable instrument ,it's types, and other related provisions and specific contracts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
The Sale of Goods Act, 1930	Chapter I Introduction, definitions, formalities of contract of sale, Distinguish between sale and agreement to sell Hire Purchase agreement.	02	Principles of law Of sale of goods Dr Avatar Sing & Vipul Prakashan	Google Meet & PPT
	Chapter II Conditions and Warranties, Doctrine of Caveat Emptor	01		Google Meet & PPT
	Chapter III Transfer of property in goods-meaning and rules governing The same, transfer of risk	02		Google Meet & PPT
	Chapter IV Meaning of the term unpaid seller and rights of an unpaid seller, auction sale	01		Google Meet & PPT

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The Negotiable Instruments Act,1881	Chapter I Meaning and characteristics of Negotiable Instruments, Classification of Negotiable Instruments	01		Google Meet & PPT
	Chapter II Promissory Note and Bill of Exchange, essential elements, Distinguish between Promissory note and bill of exchange, Acceptance and acceptor, absolute and Qualified acceptance, Drawer, drawee in case of need, payee, dishonor	03		Google Meet & PPT
	Chapter III Cheques, crossing of cheques, distinguish between Bill of Exchange and cheque, penalties in case of dishonour of cheques	02		Google Meet & PPT
	Chapter IV Miscellaneous provisions(sections8-10,22,99-102,118-122,134-137)Holder and Holder in due course, Rights and Privileges of a holder in due course ,Payment in Due course ,maturity of an instrument ,Bill in sets	02		Google Meet & PPT
Specific contract Act	Chapter II -Law of bailment and pledge Chapter III	02	Contract Act: Dr. Avtar Singh	Google Meet & PPT

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	-Law of Agency			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM (ALL DIVISIONS)

SUBJECT: FOUNDATION COURSE IN NSS SEMESTER: III MONTH: JULY TO OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

Gain knowledge about National Service Scheme, its benefits to the society, scope for the NSS volunteers

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-2 Disaster Management & Preparedness	• **Basics of Disaster Preparedness :** • Meaning , types and methods • Help line nos, first aid techniques • Breathing techniques, rescue methods, CPR • Various types of knots and stretchers • **Disaster Management :** • Concept, disaster cycle, role of technology • Role of volunteer in first responder , Disaster management cell	12	NSS MANUAL – UNIVERSITY OF MUMBAI	Online lectures through Google meet / Power point presentation
UNIT-4 Environment & Energy Conservation	• Environment – meaning, features, issues, conservation of natural resources, Sustainability in environment with respect to water conservation types. • Environment Movements in India • Energy – concept, features • Conventional and non-conventional energy • Energy conservation – the meaning and importance	10	NSS MANUAL – UNIVERSITY OF MUMBAI	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF.NILESHWARI GHUMRE. DEPARTMENT: COMMERCE III CLASS: SYBCOM.

SEMESTER:III MONTH:AUG- DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: SUBJECT:COMMERCE III
The learners will be able to : Understand meaning of Management, Evolution of Management, Modern Management Approach,, Indian Ethos.

Function of Management: Directing and Controlling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 INTRODUCTION TO MANAGEMENT	*Management: Meaning, Nature, functions, Mgmt Skills & competencies *Evolution of Management Thoughts: Classica approach. Classical organisation theory, Neo Classical approach:Human relation approach, Modern Management approach. *Indian Management Thoughts: Origin and significance of Indian Ethos to management. *Motivation: Meaning, Importance, influencing factors. *Communication: importance and barriers of effective communication.	11	Management principles and practice: Mc Graw Hill Publication	Online lectures on Google Meet.
MODULE 4 DIRECTING AND CONTROLLING	*Leadership: Meaning, functions , Styles of leadership and Qualities of good leader. *Controlling: steps , essentials , techniques of controlling , PERT, CPM, Budgetary Control, Management Audit	12		Online Lectures on Google Meet.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF.NILESHWARI GHUMRE. DEPARTMENT: COMMERCE III CLASS: SYBCOM.

SEMESTER:III MONTH:AUG- DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: SUBJECT:COMMERCE III
The learners will be able to : Understand meaning of Management, Evolution of Management, Modern Management Approach,, Indian Ethos.

Function of Management: Directing and Controlling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 INTRODUCTION TO MANAGEMENT	*Management: Meaning, Nature, functions, Mgmt Skills & competencies *Evolution of Management Thoughts: Classica approach. Classical organisation theory, Neo Classical approach:Human relation approach, Modern Management approach. *Indian Management Thoughts: Origin and significance of Indian Ethos to management. *Motivation: Meaning, Importance, influencing factors. *Communication: importance and barriers of effective communication.	11	Management principles and practice: Mc Graw Hill Publication	Online lectures on Google Meet.
MODULE 4 DIRECTING AND CONTROLLING	*Leadership: Meaning, functions , Styles of leadership and Qualities of good leader. *Controlling: steps , essentials , techniques of controlling , PERT, CPM, Budgetary Control, Management Audit	12		Online Lectures on Google Meet.

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Prof. Abhishek V. Madaye DEPARTMENT:Commerce
CLASS: S.Y.B.com DIV:A,B,C,D SUBJECT:Accountancy and financial management-III
SEMESTER: III MONTH: July to October ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concepts of partnership final Accounts and piecemeal distribution of cash.

Module /Unit	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I	**Partnership final Accounts based on adjustment of admission or retirement/death of a partner during the year:** **1) Simple question based on admission,retirement ,and death of the partner** **2) Theory regarding the same**	15	Text Books and Reference material from Internet	PPT, Excel

Module II	**Piecemeal distribution of cash:** **1) Excess capital method** **2) Assets taken over by partner** **3) Treatment of past profits or past losses in the balance sheet.** **4) Treatment on secured liabilities** **5) Contingent liabilities, realization expenses etc.**	10	Text Books and Reference material	Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Prof. Abhishek V. Madaye DEPARTMENT:Commerce
CLASS: S.Y.B.com DIV:E SUBJECT:Accountancy and financial management-III
SEMESTER: III MONTH: July to October ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concepts of Amalgamation of Firms and Conversion / Sale of a Partnership Firm into a Ltd. Company.

Module /Unit	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module III Amalgamation of Firms	Realization method only ii) Calculation of purchase consideration iii) Journal / ledger accounts of old firms iv) Preparing Balance sheet of new firm v) Adjustment of goodwill in the new firm vi) Realignement of capitals in the new firm by current accounts / cash or a combination thereof Excluding Common transactions between the amalgamating firms	15	Text Books and Reference material from Internet	PPT, Excel

Module IV Conversion / Sale of a Partnership Firm into a Ltd. Company	(i) Realisation method only (ii) Calculation of New Purchase consideration, Journal / Ledger Accounts of old firms. Preparing Balance sheet of new company	10	Text Books and Reference material	Word, Pdf, Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Prof. Abhishek V. Madaye DEPARTMENT:Commerce
CLASS: S.Y.B.com DIV:F,G,H,I SUBJECT:**Introduction to Management A/C** SEMESTER:III MONTH: July to October ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S:
The learners will be able to: Understand the basic concepts and introduction of Management A/C, preparation of vertical income and financial statement, and use of ration for analysis.

Module /Unit	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I Introduction to Management Accounting	A. Introduction to Management Accounting – Meaning, Nature, Scope, Functions, Decision Making Process, Financial Accounting V/s Management Accounting B. Analaysis and Interpretation of Financial Statements i) Study of Balance sheet and Income statement / Revenue statements in vertical	10	Text Books and Reference material from Internet	Word,PPT,Pdf, Excel

	form suitable for analysis ii) Relationship between items in Balance Sheet and Revenue statement iii) Tools of analysis of Financial Statements (i) Trend analysis (ii) Comparative Statement (iii) Common Size Statement			
Module II Ratio Analysis and Interpretation	(Based on Vertical Form of Financial statements) – Meaning, classification, Du Point Chart, advantages and Limitations) A. Balance Sheet Ratios : i) Current Ratio ii) Liquid Ratio iii) Stock Working Capital Ratio iv) Proprietary Ratio v) Debt Equity Ratio vi) Capital Gearing Ratio B. Revenue Statement Ratio: i) Gross Profit Ratio ii) Expenses Ratio iii) Operating Ratio iv) Net Profit Ratio v) Net Operating Profit Ratio vi) Stock Turnover Ratio A. Combined Ratio : i) Return on capital employed (Including Long Term Borrowings) ii) Return on proprietor's Fund (Shareholders Fund and Preference Capital) iii) Return on Equity Capital iv) Dividend Payout Ratio v) Debt Service Ratio vi) Debtors Turnover vii) Creditors Turnover (Practical Question on Ratio Analysis)	15	Text Books and Reference material	Word, Pdf, Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Karishma Vijay Kale DEPARTMENT: Commerce CLASS: SYBCOM- F,G,H,I,K

SEMESTER: III MONTH: July- September ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Understand advertisement related terminologies, special purpose advertising and the importance of brand.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2: Advertising Agency	Ad Agency: Features, Structure and services offered, Types of advertising agencies, Agency selection criteria	2	Manan Prakashan	Online teaching- PPT, Use of advertisements
	Agency and Client: Maintaining agency -client relationship, Reasons and ways of avoiding client turnover, Creative Pitch, Agency compensation	3	Manan Prakashan	Online teaching- PPT ,Use of advertisements
	Careers in advertising: Skills required for a career in advertising, Various career options, Freelancing career options	2	Manan Prakashan	Online teaching- PPT Use of advertisements
Unit 4: Brand building & Special purpose advertising	Brand Building: Communication process, AIDA Model, Role of advertising in developing Brand Image and brand Equity, and managing Brand crisis.	3	Manan Prakashan	Online teaching- PPT Use of advertisements
	Special purpose advertising: Rural advertising, Political advertising, Advocacy advertising, Corporate Image	3	Manan Prakashan	Online teaching- PPT Use of advertisements

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	advertising, Green advertising- Features of all above special purpose advertising			
	Trends in advertising: Media, Ad spends, Ad agencies, Execution of Advertisements	2	Manan Prakashan	Online teaching- PPT Use of advertisements

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __.__15____

Karishma Kale

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM. (A,B,C,D,E)

SUBJECT: COMMERCE III SEMESTER: III MONTH: JULY TO OCTOBER ACADEMIC YEAR: 2021-22.

LEARNING OBJECTIVE/S:
The learners will be able to : To gain the knowledge of management, evolution of management, to study different elements of management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2-Planning & Decision Making	**Planning** - Steps, Importance, Components, Coordination - Importance **M.B.O** -Process, Advantages, Management By Exception-Advantages; Management Information System-Concept, Components **Decision Making** - Techniques, Essentials of a Sound Decision Making, Impact of Technology on Decision Making.	**10**	Principles of management by Philip Kotler And Essential of Management by Koontz	Online lectures through Google meet / Power point presentation
Unit -3 Organising	**Organising** Steps, Organisation Structures - Features of Line & Staff Organisation, Matrix Organisation, Virtual Organisation, Formal Vs Informal Organisation. **Departmentation** Meaning Bases, Span of Management Factors Influencing Span of Management, Tall and Flat Organisation .**Delegation of Authority**-Process, Barriers to Delegation, Principles of Effective Delegation. Decentralisation Factors Influencing Decentralisation, Centralization vs Decentralisation Directing And Controlling	10	Principles of management by Philip Kotler And Essential of Management by Koontz	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Veena Sihana DEPARTMENT: Commerce CLASS: SYBCOM F,G,H,I DIV SEMESTER: III MONTH: July to October 2021

ACADEMIC YEAR:2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: Familiarize the commerce students with basic concepts of macroeconomics and with certain common features of economic occurrence in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics - III	Module II – Basic Concepts of Keynesian Economics Liquidity Preference Theory of Interest	1	Jhingan, M.L., Principles of Economics — Vrinda Publications (P) Ltd Ahuja. H.L., Modern Economics — S.Chand Company Ltd. New Delhi.	Google meet, PPT, Word Documents
	Module III – Post Keynesian Development in Macro Economics IS LM Model, Philips Curve, Supply Side Economics, Stagflation	3		Google meet, PPT, Word Documents
	Module IV – Money, Prices & Inflation Money Supply, Demand for Money, Money & Prices, Inflation – Causes, Effects & Measures	4		Google meet, PPT, Word Documents

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. VISHAL SAWANT** DEPARTMENT**: COMMERCE**

CLASS: **S.Y.B.COM** DIV: **JKLMN** SEMESTER: **III** MONTH: **June to Sept** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To impart the practical knowledge of Accountancy & Financial Management.

The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Amalgamation of Firms	**UNIT-3: Amalgamation of Firms** Realisation method only, Calculation of purchase consideration, Journal/ledger accounts of old firms, Preparing Balance sheet of New firm, Adjustment of goodwill in the new firm, Realignment of capitals in the new firm by current accounts / cash or a combination thereof Excluding Common transactions between the amalgamating firms.	15	S.N. MAHESHWARY , KHAN & JAIN, Timothy R. Mayes	Online Lecture Conducted on Google Meet, one note, excel with pen & tablet
Conversion / Sale of a Partnership Firm into a Ltd. Company	**UNIT-4: Conversion / Sale of a Partnership Firm into a Ltd. Company** Realisation method only. Calculation of New Purchase consideration, Journal / Ledger Accounts of old firms. Preparing Balance Sheet of new company.	15	S.N. MAHESHWARY , KHAN & JAIN, Timothy R. Mayes	Online Lecture Conducted on Google Meet, one note, excel with pen & tablet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: SYBCOM

DIVISIONS: A,B,C,D,E

SUBJECT: FOUNDATION COURSE SEMESTER: 4 MONTH:DECEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Introduction to Competitive Exams	Part A: Basic information on competitive examinations- The pattern, eligibility criteria and local centres. i.Examinations conducted for entry into professional courses- GRE, GMAT, CAT,SAT. ii.Examination conducted for entry into jobs by UPSC,SSC, Banking and Insurance sector, NET-SET. Part B: Soft skills for competitive examinations i.Information on area s tested: Quantitative ability, Data interpretation , Verbal ability and logical reasoning, creativity and lateral thinking. ii.Motivation: Concept, theories and types of motivations. iii.Goal setting: Types of goals, SMART Goals, Stephen Conveys concept of human endowment. iv.Time management: Effective strategies .	17	Advertising by Michael Vaz	Chalk Board, Flow Chart, Diagrams Google Meet, PPT, Kiwi Browser, Google Form.

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	v. Writing Skills: Paragraph writing, Report writing, Filing an application under the RTI Act, Grievance Letter.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHWINI DATTATRAY BHOIR DEPARTMENT: COMMERCE CLASS: SYBCOM F,G,H,I SEMESTER: IV

MONTH: NOVEMBER - MARCH ACADEMIC YEAR: 2021 - 2022 SUBJECT - BUSINESS LAW -II

LEARNING OBJECTIVE/S:
The learners will be able to Know Partnership Meaning , Procedure for Registration of Partnership, Types of Partner, Rights and Duties of Partner.

The learners will be able to Know Rights of Consumers, forms of its Violation and Consumer Protection Act.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module. No. 3 Indian Partnership Act, 1932 Module No. 4	Chapter I - Partnership: Concept, Essentials, True test of Partnership, Partnership Deed, Types of Partnership, Rights and duties of Partners, Distinguish between Partnership and Hindu Undivided Family. Chapter II - Dissolution: Concept, Modes of Dissolution, Consequences of Dissolution Chapter III - Limited Liability Partnership 2008: Concept, Characteristics, Advantages and Disadvantages, Procedure for Incorporation . Chapter IV - Extent of L.L.P.: Converstion of LLP, Mutual Rights and Duties of Partners, winding up of LLP, Distinction between LLP and Partnership.	3 2 2 3 2	Indian Partnership Act, 1932- Pollock & Mulla Agrawal V.K. Consumer protection Law and practice, 5th Ed., New Delhi: B.L.H. publishers Distributors Pvt. Ltd. 2009	1) Lecture and Discussion 2) Online teaching learning tools (Google meet, Google form, PPTs) 3) Case Study, 4) Black Board, Chalk and Duster

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Consumer Protection Act, 1986 and Competition Act 2002. Module No. 5	Chapter - I Concept, Objects, Reasons for enacting the Consumer Protection Act, Definition of Consumer, Consumer Dispute, Complaint, Defect, Deficiency, Unfair Trade Practices, Goods and Services. Chapter - II - Consumer Protection Councils and Redressal Agencies: District, State and National. Chapter - III - Competition Act 2002 : Concept, Salient Features, Objectives and Advantages. Chapter IV Abuse of Dominant Position , Competition Commission of India, Anti-Competition Agreements.	3 2 3		
Intellectual Property Rights	Chapter III - IPR Relating to Copyrights: Concept of Copyright, Ownership of Copy right, Duration or term of copy right , Original work and fairs use, Rights of copyright holder, Infringement of copyrights and Remedies. Chapter IV - IPR Relating to Trademarks : Concept, Functions, Types, trademarks that cannot be registered, Registration of trade marks and Rights of the Proprietor of Trade Marks. Procedure for registration of Trade Marks., infringement of Trademarks and Remedies.	3 2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DR. FIROZKHAN KHURSHIT KHAN** DEPARTMENT**: COMMERCE**

CLASS: **S.Y.B.COM** DIV: **A, B, C & D** SEMESTER: **IV** MONTH: **MARCH** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To impart the practical knowledge of Accountancy & Financial Management.

The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Redemption of Debentures	**Unit: 3 - Redemption of Debentures** Provisions of Section 71 (1) and (4) of the Companies Act, 2013, Creation and investment of DRR including The Companies (Share Capital and Debentures) Rules, 2014, the methods of writing-off discount/loss on issue of debentures; Terms of issue of debentures, Methods of redemption of debentures: By payment in lumpsum and by payment in instalments (excluding from by purchase in open market), Conversion. (Question on entries. ledgers and/or Balance Sheet and /or redemption of preference shares)	15	S.N. MAHESHWARY , KHAN & JAIN, Timothy R. Mayes	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet
Ascertainment and Treatment of Profit Prior to Incorporation	**Unit: 4 - Ascertainment and Treatment of Profit Prior to Incorporation** Principles for ascertainment, Preparation of separate combined, columnar Profit and Loss A/c including different basis of allocation of expenses and income	15	S.N. MAHESHWARY , KHAN & JAIN, Timothy R. Mayes	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. AKRUTI BOSE DEPARTMENT: COMMERCE

CLASS: SYBOM A,B,C,D,E SEMESTER: IV MONTH: DECEMBER/MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: ONLINE / OFFLINE
The learners will be able to : Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS IV Module I and Module IV	THE ROLE OF GOVERNMENT IN AN ECONOMY: Meaning and Scope of Public Finance, Major Fiscal Functions, Principle of		Macro Economics by H.L. AHUJA.	Online Lectures through Laptop, Mobile, PPT slide, Google Meet.
	Maximum Social Advantage-Dalton and Musgrave, the principle in Practice and its Limitations.			Offline Lecture through Chalk Board method.
	FISCAL MANAGEMENT AND FINANCIAL ADMINISTRATION: Fiscal Policy, Contra Cyclical and Fiscal Policy and Discretionary Fiscal Policy-Principle of Sound Finance and Functional Finance, Budget-Meaning, objectives and			
	Types, Intergovernmental Fiscal Relations-Fiscal Federalism and Fiscal Decentralization.			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08 Lectures.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: SYBCOM SEMESTER: IV

MONTH: December- March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : understand the auditing subject thorough and it will behelpful for them in future

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing Unit – 2 Audit planning, procedures and Documentation	Audit planning , meaning, objectives, sources, discussion with client. Audit program , meaning, factors , advantages, disadvantages, overcoming disadvantages. Audit evidence about internal controls, transactions during year , year end balances, differences, audit procedures. Audit working papers, meaning, fators, contents of permanent audit file, current audit file, ownership, custody and access, audit notebook	10		Online Lecture taken on Google Meet

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Unit – 1 Introduction to Auditing	Definition of auditing, objectives, its limitations, difference between accounting and auditing and investigation and auditing. Meaning of errors and frauds, Types of errors and frauds, Risk of error and error inaudit, duties and responsibilities of auditor during fraud. Principles of audit, materiality, True and fair view. Types of audit, Advantages and disadvantages of Balance sheet audit, Interim audit, continous audit, concurrent audit, annual audit and statutory audit	12		Online Lecture taken on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: Commerce CLASS: S.Y.BCOM (Division K L M N) SEMESTER: IV

MONTH: December, January, February, March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & remember the Rights of Citizens and would be able apply it their daily life.
2) Understand & remember the concept of Laser Technology, Satellite Technology, GPS, Information and Communication Technology, Biotechnology and Genetic engineering, Nanotechnology and identify the uses of these technologies.
3) Understand and identify Issues of Control, Access and Misuse of Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1- Significant, Contemporary Rights of Citizens	A. Rights of consumers B. Right to Information C. Protection of Citizens'/Public Interest D. Citizens' Charters, Public Service Guarantee Acts	**08**	Book by Manan publications/Internet	Google Meet, PPT, Chalkboard
Unit 3- Science and Technology –II	Information and Communication Technology- convergence of various technologies like satellite, computer and digital in the information revolution of today's society.	02	Book by Manan publications/Internet	Google Meet, PPT, Chalkboard

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	Biotechnology and Genetic engineering- applied biology and uses in medicine, pharmaceuticals and agriculture; genetically modified plant, animal and human life.	02	Book by Manan publications/Internet	Google Meet, PPT, Chalkboard
	Biotechnology and Genetic engineering- applied biology and uses in medicine, pharmaceuticals and agriculture; genetically modified plant, animal and human life.	02	Book by Manan publications/Internet	Google Meet, PPT, Chalkboard
	Nanotechnology- definition: the study, control and application of phenomena and materials at length scales below 100 nm; uses in medicine, military intelligence and consumer products.	02	Book by Manan publications/Internet	Google Meet, PPT, Chalkboard
	Issues of Control, Access and Misuse of Technology	02	Book by Manan publications/Internet	Google Meet, PPT, Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce CLASS: S Y B Com (F, G, H, I) SEMESTER: IV

MONTH: December ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:
Learn about the working format of the company regards to raising of capital funds by way of issuing shares, debentures. Also, the legal procedure to raise these funds. It also helps to give practical knowledge of accounts. Additionally, the learner will be able to understand the method for the redemption of preference share and calculation of settling the proceeds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy and Financial Management IV	**Introduction to Company Accounts** Introduction of basic terms: Types of companies, nature and formation of companies, Shares, Debentures, Share Capital, Reserves and surplus, types of assets and liabilities, dividend, format of Balance Sheet (Only theory) Issue of shares: Different modes IPO, Private Placements, Preferential, Rights, ESO, SWEAT and ESCROW account, Issue of shares at par, premium and discount, Under subscription and Over subscription of shares, forfeiture and reissue of forfeited shares, issue of shares for consideration other than cash. (Only theory) Issue of Debentures: types of Debentures, Issue of debentures at par, premium and discount, Issue of Debentures with consideration of Redemption, Issue of debentures for cash receivable in instalments or at a time Issue of debentures for consideration other than cash. (Only theory)	12	Introduction to Accountancy T.S. Grewal S. Chand and Co. (P) Ltd., New Delhi Advanced Accounts Shukla and Grewal S. Chand and Co. (P) Ltd., New Delhi	Google Meet for online teaching, Excel, PowerPoint Presentation, MS word

	Redemption of Preference Shares Provision of the Companies Act for redemption of Preference Shares (Sec 55 of the Companies Act, 2013), Companies (Share and Debentures) Rules. Methods of Redemption of fully paid-up Preference Shares as per Companies Act, 2013: The proceed of a fresh issue of shares, the capitalization of undistributed profits and a combination of both, calculation of minimum fresh issue to provide the fund for redemption, (Question on entries and/or Balance Sheet) Note: Companies governed by Section 133 of the Companies Act, 2013 and comply with the accounting standards prescribed for them. Hence, the balance in security premium account not to be utilized for premium payable on redemption of preference shares.	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

Babli Jha

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: SYB.COM -F,G,H,I,J
SEMESTER:4th MONTH: November – February ACADEMIC YEAR: 2021-2022 SUBJECT : COMMERCE IV
LEARNING OBJECTIVE/S:
The learners will be able to:

1.To acquaint the learner with the basic concepts of Production management.

2.To provide basic knowledge about inventory management and it's techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODUL1: PRODUCTION AND INVENTORY MANAGEMENT	• Production Management: Objectives, Scope Production Planning & Control :Steps, Importance	3	Production & Operation Management . Essential of Inventory Management	1.Lecture methods . 2.Flow charts and diagrams. 3. PPT 4. Google Meet 5. PDF
	• Production Systems :Concept, Type – Continuous and Intermittent. Productivity : Concept, Factors Influencing Productivity, Measures for improving productivity	4		
	• Inventory Management -Objectives, Inventory Control -Techniques. Scientific Inventory Control System -Importance	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 × 5 div = 44

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE _DEPARTMENT: B.COM CLASS: SYB.COM -F,G,H,I,J
SEMESTER: 4th MONTH: November – February ACADEMIC YEAR: 2019-2020 SUBJECT : COMMERCE IV
LEARNING OBJECTIVE/S:
The learners will be able to :

1. To provide basic knowledge about Indian Financial Systems.
2. To acquire knowledge about SEBI , Stock Exchange and Credit Rating Agencies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 3: INDIAN FINANCIAL SYSTEM	• Indian Financial Market : Structure, Primary MARKET- IPO Procedure Dematerialisation: Process, Role of Depositories: NSDL and CDSL	4	Indian Financial System - M.Y.Khan Financial Institutions & Markets- L.M.Bhole	1. Lecture and discussion. 2. Flow charts and Institutional Structures. 3. PPT 4. Google Meet 5. PDF
	• SEBI: Function of SEBI, Investors protection measures of SEBI. Stock Exchange – Function ,Speculators.	4		
	• Credit Rating : Advantages, Credit Rating Agencies in India- CRISIL, CARE, and ICRA.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 × 5 div =60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT:COMMERCE CLASS: SYBCOM (F G H I)

SUBJECT: ADVERTISING SEMESTER: IV MONTH: November to February ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

Gain knowledge about advertising, its benefits, scope, function, different media in advertising.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1 Media in Advertising	• **Traditional Media:** Print, Broadcasting, Out-Of-Home advertising and films - advantages and limitations of all the above traditional media • **New Age Media:** Digital Media Forms, Significance and Limitations • **Media Research:** Concept, Important, Tool for regulation- ABC and Doordarshan Code	11	Marketing Management by Philip Kotler.	Online lectures through Google meet / Power point presentation & Offline lectures through chalk & duster method.
UNIT-3 Fundamental of creativity in advertising.	• **Creativity:** Concept and Importance, Creative Process, Concept of Creative Brief, Techniques of Visualization. • **Creative aspects:** Buying Motives - Types, Selling Points Features, Appeals Preposition (USP) • **Creativity through Endorsements:** Endorsers Types, Celebrity Endorsements - Advantages and Limitations, High Involvement and Low Involvement Products.	11	Marketing Management by Philip Kotler	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____22_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM (A,B,C,D,E)

SUBJECT: COMMERCE IV SEMESTER: IV MONTH: November to February . ACADEMIC YEAR: 2021-22.

LEARNING OBJECTIVE/S:
The learners will be able to : To gain the knowledge of management, evolution of management, to study different elements of management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1- Production & Inventory management	• Production Management: Objective, scope • PPC – steps and importance, • Production system: concept, types – continuous and intermittent • Productivity • Inventory management, inventory control techniques • Scientific inventory control system	11	Principles of management by Philip Kotler And Essential of Management by Koontz	Online lectures through Google meet / Power point presentation & Offline lectures through chalk & duster method.
UNIT 4- Recent Trends in Finance.	• Mutual Funds- Advantages and Limitations. Types. Factors responsible for growth of mutual funds - Systematic Investment Plan, • Commodity Market: Categories, Derivatives Market: Types, Participants, Types of Derivative Instruments. • Start-up Ventures Concept. Sources of Funding, Micro Finance - Importance, Role of Self Help Groups.	12	Principles of management by Philip Kotler And Essential of Management by Koontz	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 23

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM (ALL DIVISIONS)

SUBJECT: FOUNDATION COURSE IN NSS SEMESTER: IV MONTH: November to February ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Gain knowledge about National Service Scheme, its benefits to the society, scope for the NSS volunteers

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1 Entrepreneurship Development and Schemes	• Entrepreneurship development – meaning • Attributes of entrepreneur • Women entrepreneurship • Government and self-employment schemes • Skill India, Start up India, Digital India, Make in India, • NITI Aayog	12	NSS MANUAL – UNIVERSITY OF MUMBAI	Online lectures through Google meet / Power point presentation & Offline lectures through chalk & duster method.
UNIT-2 Cottage Industries in India	• Cottage industries – meaning • Pre independence & Post independence scenario • Marketing of Cottage Products and outlets • Government policies to encourage cottage industries • Hurdles in the development of cottage industries	10	NSS MANUAL – UNIVERSITY OF MUMBAI	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DEEPAKKUMAR GUPTA** DEPARTMENT**: COMMERCE** CLASS: **S.Y.B.COM** SEMESTER: **IV**
MONTH: Nov to April ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To impart the practical knowledge of Accountancy & Financial Management.
The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Redemption of Debentures	**Unit: 3 - Redemption of Debentures** Provisions of Section 71 (1) and (4) of the Companies Act, 2013, Creation and investment of DRR including The Companies (Share Capital and Debentures) Rules, 2014, the methods of writing-off discount/loss on issue of debentures; Terms of issue of debentures, Methods of redemption of debentures: By payment in lumpsum and by payment in instalments (excluding from by purchase in open market), Conversion. (Question on entries. ledgers and/or Balance Sheet and /or redemption of preference shares)	15	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Chalk and Board Ms. Power point Ms Word
Ascertainment and Treatment of Profit Prior to Incorporation	**Unit: 4 - Ascertainment and Treatment of Profit Prior to Incorporation** Principles for ascertainment, Preparation of separate combined, columnar Profit and Loss A/c including different basis of allocation of expenses and income	15	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Chalk and Board Ms. Power point Ms Word

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NILESHWARI GHUMRE DEPARTMENT: COMMERCE CLASS: SYBCOM

SUBJECT: COMMERCE IV SEMESTER: IV MONTH: November to February. ACADEMIC YEAR: 2021-22.

LEARNING OBJECTIVE/S:
The learners will be able To: To gain the knowledge of management, evolution of management, to study different elements of management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1- Production & Inventory management	• Production Management: Objective, scope • PPC – steps and importance, • Production system: concept, types – continuous and intermittent • Productivity • Inventory management, inventory control techniques • Scientific inventory control system	12	Principles of management by Philip Kotler And Essential of Management by Koontz	Online lectures through Google meet / Power point presentation & Offline lectures through chalk & duster method.
UNIT 4- Recent Trends in Finance.	• Mutual Funds- Advantages and Limitations. Types. Factors responsible for growth of mutual funds - Systematic Investment Plan, • Commodity Market: Categories, Derivatives Market: Types, Participants, Types of Derivative Instruments. • Start-up Ventures Concept. Sources of Funding, Micro Finance - Importance, Role of Self Help Groups.	12	Principles of management by Philip Kotler And Essential of Management by Koontz	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___24__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Adv. Shweta Bharat Chaudhari DEPARTMENT: Commerce CLASS: SYBCOM SEMESTER: IV

MONTH: December to April ACADEMIC YEAR: 2021- 2022 LEARNING OBJECTIVE/S: Busines Law

The learners will be able to : Introduction, Understand Meaning, Rules and regulations, section, important act details with related case study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 Indian Campanies Act, 2013 Part 1	Chapter I Company and its formation, definition and nature of company, advantages and disadvantages of a company, lifting of corporate veil with cases, promoters, pre-incorporation and preliminary contracts	03	1. Company Law : Avtar Singh. 2. Indian Company Law. Authors, Dr. N. S. Kothari, Ramesh Chand Agarwal.	Online, Google meet, PPT Offline , Black Board, Chalk and Duster
	Chapter II Types of companies (meaning and concept only) statutory companies, one person company, Company, limited by shares/guarantee	04		
	Private company, public company, Producer Company, formation of companies with charitable	03		
MODULE 2 Indian Campanies	Objects, holding and subsidiary company, Government, foreign company, small company	02		

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Act, 2013 Part 2	Procedure for registration of a company, documents to be submitted for registration, Effect of incorporation. Chapter III Memorandum of Association & Articles of Association: meaning, concept, clauses, effect ofRegistration of Memorandum and Articles of Association, Doctrine of Constructive NoticeDoctrine of Ultra Vires, Doctrine of Indoor Management Chapter IV Prospectus- meaning, when to be issued, when not required, kinds of prospectus, contents of prospectus, private placement			
	Membership of a company Who can become a member? Modes of acquiring membership, cessation of membership, rights, liabilities and duties of members Chapter II Classification of Directors, woman director, independent director, small shareholders' director Disqualification of director, Director Identification Number, powers and duties, position of director	03 04		

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MODULE 5 Intellectual property right	as key managerial personnel, Manager, Managing Director.	03		
	Chapter III Meetings, types of meetings of members and Board of directors, convening and conduct of meetings, Postal ballot, meetings through video conferencing, e-voting.	02		
	Chapter I IPR concept, Nature , Scope, Introduction & Background of IPR in India.	02		
	Chapter II IPR related Patents concept, general Principal, Rights and Remedies, Term etc.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28 *2 = 56

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani DEPARTMENT: Commerce

CLASS: S.Y.B.Com Divisions: F,G,H,I,J,K,L SEMESTER: IV MONTH: November to March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- To develop and gain logical reasoning, critical thinking abilities, creating and testing hypotheses and thus opening doors to research.
- To measure verbal reasoning, quantitative reasoning, and analytical writing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FC Unit IV	Module II: Approaches to Understanding Ecology Anthropocentrism, Biocentrism and Eco ecentrism, Ecofeminism and Deep Ecology, The Sustainability principle, PPP, TPP The Equity principle, Human Rights Principle, The Participation Principle.	6	Sheth Publishers Michael Vaz Aurara vaz:foundation course Newspapers	❖ Online lectures(Google Meet) ❖ Google Slides ❖ Discussion ❖ Explanation with examples ❖ Online Projects assigned and assessment.

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Unit IV Introduction to competitive exams				
	Part A: Basic information on competitive examinations- The pattern, eligibility criteria and local centres. i) Examinations conducted for entry into professional courses- GRE, GMAT, CAT,SAT. ii) Examination conducted for entry into jobs by UPSC,SSC, Banking and Insurance sector, NET-SET. Part B: Soft skills for competitive examinations i) Information on area s tested: Quantitative ability, Data interpretation , Verbal ability and logical reasoning, creativity and lateral thinking. ii) Motivation: Concept, theories and types of motivations. iii) Goal setting: Types of goals, SMART Goals, Stephen Conveys concept of human endowment. iv) Time management: Effective strategies . v) Writing Skills: Paragraph writing, Report writing, Filing an application under the RTI Act, Grievance letter.	08	Sheth Publishers Michael Vaz Aurara vaz : foundation course Newspapers	❖ Online lectures(Google Meet) ❖ Google Slides ❖ Discussion ❖ Explanation with examples ❖ Online Projects assigned and assessment.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: SYBCOM

DIVISONS : A,B,C,D,E

SEMESTER: 4 MONTH: JANUARY-FEBRUARY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: FOUNDATION COURSE
The learners will be able to: Understand the deep ecology environmental principles like human rights and more.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Approaches to Understanding Ecology	Understanding approaches to ecology – Anthropocentrism, Biocentrism and Eco centrism, Ecofeminism and Deep Ecology.	3	Foundation Course by Michael Vaz	PPT, Google Meet, Kiwi Browser, Google Form, Chalk Board, Diagrams, Flow Chart. .
	Environmental Principles – 1: The Sustainability Principle; The Polluter Pays Principle; The Precautionary Principle.	4		
	Environmental Principles – 2: The Equity Principle; Human Rights Principles; The Participation Principle.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI YADAV DEPARTMENT: COMMERCE CLASS: SYBCOM SEMESTER: IV

MONTH: DEC-MAR ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : How to internal control for sales, creditors and to internal audit its objectivies . internal check & internal audit. Techniques of auditing vouching & verifications of books of accounts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3. Auditing Techniques and Internal Audit Introduction	A. Internal Control – Meaning and purpose, review of internal control, advantages, auditors duties, review of internal control, Inherent Limitations of Internal control, internal control samples for sales and debtors, purchases and creditors, wages and salaries. Internal Checks Vs Internal Control, Internal Checks Vs Test Checks B. Internal Audit : Meaning, basic principles of establishing Internal audit, objectives, evaluation of internal Audit by statutory auditor, usefulness of Internal Audit, Internal Audit Vs External Audit, Internal Checks Vs Internal Audit	8	Manan Prakashan	PPT , Explanation, Discussion and Examples.

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4. Auditing Techniques : Vouching & Verification	A. Audit of Income : Cash Sales, Sales on Approval, Consignment Sales, Sales Returns Recovery of Bad Debts written off, Rental Receipts, Interest and Dividends Received Royalties Received B. Audit of Expenditure : Purchases, Purchase Returns, Salaries and Wages, Rent, Insurance Premium, Telephone expense Postage and Courier, Petty Cash Expenses, Travelling Commission Advertisement, Interest Expense C. Audit of Assets Book Debts / Debtors, Stocks – Auditors General Duties; Patterns, Dies and Loose Tools, Spare Parts, Empties and Containers Quoted Investments and Unquoted Investment Trade Marks / Copyrights Patents Know-How Plant and Machinery Land and Buildings Furniture and Fixtures D. Audit of Liabilities : Outstanding Expenses, Bills Payable Secured loans Unsecured Loans, Contingent Liabilities	10	Manan Prakashan	PPT , Explanation, Discussion and Examples.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: COM MERCE

CLASS S.Y.B.COM SEMESTER: IV MONTH: NOVEMBER - MARCH ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S To inculcate the interest in Public Finance and policy :
The learners will be able to : Understanding the essential of government finance as it forms the grounding of analyzing public policies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –IV Unit I & IV	**Module II : Introduction to Public Finance**			
	1.Public Finance. 2.Principle of maximum social advantage. 3. Efficiency-Government - Market	10	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Power point presentation 2 Quiz method 3.Discussion method
	Module IV : Public Expenditure and Public Debt.			
	Fiscal Policy Budget Intergovernmental fiscal relations Fiscal responsibility and budget management	10	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Power Point Presentation 2 Quiz method 3.Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI VIJAY MEHTA DEPARTMENT: COMMERCE

CLASS: SYBCOM SEMESTER:IV MONTH:NOV 2021- FEB 2022 ACADEMIC YEAR:2021-2022 (FC)

LEARNING OBJECTIVE/S:
The learners will be able to: To make students understand the concept relating to human right, Ecology and Environmental principles .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II & UNIT IV,	Module II: Approaches to Understanding Ecology Anthropocentrism, Biocentrism and Eco ecentrism, Ecofeminism and Deep Ecology, The Sustainability principle, PPP, TPP The Equity principle, Human Rights Principle, The Participation Principle.	5	Foundation Course by Michael Vaz	Google Meet, PPT, Chalk Board, Diagrams
	Module IV : Introduction to Competitive Exams Examinations conducted for entry into professional courses- GRE, GMAT, CAT, SAT, Union Public Service Commissions, SSC, NET, SET Quantitative Ability, Data Interpretation, Verbal Ability and logical reasoning, Creativity and Lateral thinking Motivation- Concept, Theories and types Goal Setting- Types, SMART Goals, Stephen Coveys Concept of human endowment Time Management- Effective Strategies for Time Management	5	Foundation Course by Michael Vaz	Google Meet, PPT, Chalk Board, Diagrams

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	Writing Skills- Paragraph Writing, Report writing, Consumer Grievance Letter, Filing an application under the RTI Act.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: **Commerce**

CLASS: **SYBCOM K, L,M & N** SEMESTER: **IV** MONTH: **Dec to March** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) Understand the concepts of Company Accounts & Company's Act, 2013
3) Understand concepts of Profit Prior to Incorporation
4) Solve practical questions based on the concepts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting 4	Unit 1 : Preparation of Final Accounts of Companies	16		
	1) Relevant provisions of Companies Act related to preparation of Final Account 2) Preparation of financial statements as per Companies Act. 3) AS 1 in relation to final accounts of companies (disclosure of accounting policies)			Offline Lectures - Chalk Board Online platform – Google Meet PPT, Videos, Spreadsheets, Quiz Flip Book, Google Classroom, Group discussion.
	Unit 4 : Ascertainment and Treatment of Profit Prior to Incorporation	16		

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	1) Principles for ascertainment Preparation of separate, combined and columnar Profit and Loss Account including different basis of allocation of expenses Incomes			Offline Lectures - Chalk Board Online platform – Google Meet PPT, Videos, Spreadsheets, Quiz Flip Book, Google Classroom, Group discussion.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _32_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE CLASS: SYBCOM

SEMESTER: **IV** MONTH: Nov,2021 to March,2022 ACADEMIC YEAR :2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to learn various audit techniques such as vouching, verification, internal control, Internal check ,Internal audit etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AUDITING	1] **Audit Technique- Vouching** –Meaning , Points to be consider while doing vouching . Audit of Income- cash sales, Credit sales , Consignment sales , Rent receipt, Interest & dividend receipt , Royalties receipt Audit of Expenses –Purchase, Purchase Return , Salaries & wages, Rent, Insurance premium, Telephone Expenses, Advetisement Expenses, Travelling expenses etc.	10	Auditing- Kamal Gupta	Chalk & Duster,Google meet ,MS word
	2] **Audit Technique – Verification** – Meaning , Points to be consider while doing verification. Vouching v/s Verification. Audit of Assets – Book Debts, Stock, Patterns , Loose tools, Investments, patents, Plant & Machinery, Building , Furniture. Audit of Liabilities – Outstanding Expenses, Bills payable, Creditors, Secured loan , Unsecured loan & Contingent Liabilities.	10		Chalk & Duster, Google meet ,MS Word

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	3]**Audit Techniques- Internal control-** Meaning, Purpose , review of internal control, Limitations. Internal control for – Sales, Debtors , purchase, creditors. Internal check v/s Internal control. Internal Audit- Meaning, Objectives, Evaluation, Usefulness of internal Audit .Internal Audit v/s External Audit. Internal check v/s Internal Audit.	05		Chalk & Duster ,Google meet , Wikipedia

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: COMMERCE
CLASS: SYBCOM SEMESTER: IV MONTH: NOV-MARCH SUB: ADVERTISING ACADEMIC YEAR:2021-22

LEARNING OBJECTIVE/S: Understand and analyze the relevant research in advertising and marketing communication. Design effective visual communication for various advertising approaches that combine the use of print, online/digital, and other multimedia communication. Develop advertising media buying and planning strategies. Create and defend the strategy and execution of an ad campaign for a client(s).

PAPER, UNIT , TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PLANNING ADVERTISING CAMPAIGN	Concept ,steps in advertising planning, determining Ad objective	3	Advertising and Promotion : An Integrated Marketing Communications Perspective George Belch and Michael Belch, 2015, 10th Edition, McGraw Hill Education, 5. Advertising: Planning and Implementation, 2006 – Raghuvir Singh, Sangeeta Sharma –Prentice Hall	GMEET, PPT, MICROSOFT WORD WITH PEN TOOL,PDF FILES, GOOGLE FORM, GOOGLE CLASSROOM
	Factors determining Ad Budget and Methods of setting Ad Budget	4		
	Media objectives, media planning, Factors determining media selection, media scheduling strategies	4		
EXECUTION AND EVALUATION OF ADVERTISING	Preparing print ad	5		
	Creating broadcast ads	4		
	Evaluation	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: THEORY-23

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DIVISION-A- E –UNIT I & IV – NO LECTURES- 23

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAVITA VILAS PURANDARE DEPARTMENT: COMMERCE CLASS: SYBCOM (J, L, M, N) SEMESTER: IV

SUBJECT: ADVERTISING MONTH: Nov to March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
Understand and analyze the relevant research in advertising and marketing communication. Design effective visual communication for various advertising approaches that combine the use of print, online/digital, and other multimedia communication..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 - PLANNING ADVERTISING CAMPAIGN	• Concept ,steps in advertising planning, determining Ad objective • Factors determining Ad Budget and Methods of setting Ad Budget • Media objectives, media planning, Factors determining media selection, media scheduling strategies	12	Marketing Management Advertisement by Ajgavkar	GMEET, PPT, MICROSOFT WORD WITH PEN TOOL,PDF FILES, GOOGLE FORM, GOOGLE CLASSROOM
UNIT 4 – EXECUTION AND EVALUATION OF ADVERTISING	• Preparing print ad • Creating broadcast ads • Evaluation	12	Marketing Management Advertisement by Ajgavkar	GMEET, PPT, MICROSOFT WORD WITH PEN TOOL,PDF FILES, GOOGLE FORM, GOOGLE CLASSROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACH.ING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF. MADHURA ARVIND SURVE DEPARTMENT: COMMERCE CLASS: S.Y.B.COM (JKLMN) SEMESTER: IV

MONTH: NOVEMBER - MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: TO MAKE STUDENTS LEARN ABOUT ADVERTISING AND ITS IMPORTANCE IN GROWTH OF BUSINESS

The learners will be able to: UNDERSTAND HOW HE CAN USE HIS CREATIVITY IN ATTRAACTING CUSTOMERS IN TODAYS COMPETITION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ADVERTISING UNIT I & III	**UNIT I : MEDIA IN ADVERTISING**	11	ADVERTISING (MANAN PRAKSHAN & VIPUL PRAKASHN)	1. CHALK & BLACK BOARD METHOD 2. INTERACTIVE METHOD
	1) TRADITIONAL MEDIA 2) NEW AGE MEDIA 3)MEDIA RESEARCH			
	UNIT III : FUNDAMENTAL OF CREATIVITY IN ADVERTISING	11	ADVERTISING (MANAN PRAKSHAN & VIPUL PRAKASHN)	1. CHALK & BLACK BOARD METHOD 2. INTERACTIVE METHOD
	1)CREATIVITY 2) CREATIVE ASPECT 3) CREATIVITY THROUGH ENDORSMENT			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NILESHWARI GHUMRE DEPARTMENT: COMMERCE CLASS: SYBCOM

SUBJECT: COMMERCE IV SEMESTER: IV MONTH: November to February. ACADEMIC YEAR: 2021-22.

LEARNING OBJECTIVE/S:
The learners will be able To: To gain the knowledge of management, evolution of management, to study different elements of management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1- Production & Inventory management	• Production Management: Objective, scope • PPC – steps and importance, • Production system: concept, types – continuous and intermittent • Productivity • Inventory management, inventory control techniques • Scientific inventory control system	12	Principles of management by Philip Kotler And Essential of Management by Koontz	Online lectures through Google meet / Power point presentation & Offline lectures through chalk & duster method.
UNIT 4- Recent Trends in Finance.	• Mutual Funds- Advantages and Limitations. Types. Factors responsible for growth of mutual funds - Systematic Investment Plan, • Commodity Market: Categories, Derivatives Market: Types, Participants, Types of Derivative Instruments. • Start-up Ventures Concept. Sources of Funding, Micro Finance - Importance, Role of Self Help Groups.	12	Principles of management by Philip Kotler And Essential of Management by Koontz	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___24__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: CHETAN PRAKASH VARMA DEPARTMENT: COMMERCE CLASS: SYBCOM

SEMESTER: IV MONTH: NOV- MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : To make student understand the All Macro Economics Perspective, National Income, Theory of J.M Keynes and its applicability in business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS-IV	• Meaning and Scope of Public finance. • Major fiscal functions : allocation function, distribution function & stabilization function • Principle of Maximum Social Advantage: Dalton and Musgrave Views - the Principle in Practice, Limitations.	06	Ackley.G (1976), Macro Economic Theory and Policy, Macmillan Publishing Co. New York	CHALK AND TALK / EXPLORITATIVE/TWO WAY COMMUNICATION Story-telling method Textbook method Lecture Method
	• Relation between Efficiency, Markets and Governments • The concept of Public Goods and the role of Government	02	Jha, R (1998) : Modern Public Economics, Route Ledge, London	Demonstration Method Tutorial Method Questions-Answer method Discussion method Heuristic method

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				Discovery method
	• 1Public Expenditure –Canons , Classification and Effects • 2.Growth of public Expenditure	03	Musgrave, R.A and P.B. Musgrave (1976) : Public Finance in Theory and Practice, Tata McGraw Hill, Kogakusha, Tokyo	
	• 3.Public Expenditure and Social Welfare • 4.Public Debt	02	Mithani, D.M (1998) : Modern Public Finance, Himalaya Publishing House, Mumbai	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____13___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE Div: F,G,H,I,J SUBJECT: Foundation Course

CLASS: SYBCOM SEMESTER: IV MONTH: November-March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The learners will be able to: To impart knowledge or information regarding the unit taught within the time frame with examples which students will be able to understand, thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Significant, contemporary Rights of Citizens	1. Rights of Consumers-Violations of consumer rights and important provisions of the Consumer Protection Act, 2016; Other important laws to protect consumers; Consumer courts and consumer movements.	3	FC IV-Manan Prakashan,	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method
	2. Right to Information- Genesis and relation with transparency and accountability; important provisions of the Right to Information Act, 2005; some success stories.	3	FC IV-Manan Prakashan,	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method
	3. Protection of Citizens'/Public Interest-Public Interest Litigation, need and procedure to file a PIL; some landmark cases.	3	FC IV-Manan Prakashan,	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method
	4. Citizens' Charters, Public Service Guarantee Acts.	3	FC IV-Manan Prakashan,	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method

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Unit 3: Science and Technology II	Part A: Some Significant Modern Technologies, Features and Applications: i. Laser Technology- Light Amplification by Stimulated Emission of Radiation; use of laser in remote sensing, GIS/GPS mapping, medical use. ii. ii. Satellite Technology- various uses in satellite navigation systems, GPS, and imprecise climate and weather analyses. iii. iii. Information and Communication Technology- convergence of various technologies like satellite, computer and digital in the information revolution of today's society. iv. iv. Biotechnology and Genetic engineering- applied biology and uses in medicine, pharmaceuticals and agriculture; genetically modified plant, animal and human life. v. v. Nanotechnology- definition: the study, control and application of phenomena and materials at length scales below 100 nm; uses in medicine, military intelligence and consumer products.	7	FC IV-Manan Prakashan,	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method
	Part B: Issues of Control, Access and Misuse of Technology.	4	FC IV-Manan Prakashan,	Presentation method with chat, Google Meet, Lecture method, Discussion method, participation method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1 & 3: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNITHA CHANDRASHEKHAR NAIR DEPARTMENT: COM MERCE

CLASS S.Y.B.COM SEMESTER: IV MONTH: NOVEMBER - MARCH ACADEMIC YEAR: **2021 -22**

LEARNING OBJECTIVE/S To inculcate the interest in Public Finance and policy :
The learners will be able to : Understanding the essential of government finance as it forms the grounding of analyzing public policies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –IV Unit II & III	**Module II : Public Revenue**			
	1.Public Revenue. 2.Shifting of Tax burden 3. Economic effects of taxation.	10	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Power point presentation 2 Quiz method 3.Discussion method
	Module III : Public Expenditure and Public Debt.			
	1Public Expenditure –Canons , Classification and Effects 2.Growth of public Expenditure	10	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Power Point Presentation 2 Quiz method 3.Discussion method
	3.Public Expenditure and Social Welfare 4.Public Debt			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: AUDITING DEPARTMENT: COMMERCE

CLASS: SYBCOM SEMESTER: IV MONTH: NOV, DEC, JAN ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 INTRODUCTION TO AUDITING	A. Basics – Financial Statements, Users of Information, Definition of Auditing, Objectives of Auditing, Inherent limitations of Audit, Difference between Accounting and Auditing, Investigation and Auditing	2		• Google Meet • PowerPoint • Excel
	B. Errors & Frauds – Definitions, Reasons and Circumstances, Types of Error, Types of Frauds, Risk of Fraud and Error in Audit, Auditors Duties and Responsibilities in case of Fraud	2		
	C. Principles of Audit, Materiality, True and Fair View	1		
	D. Types of Audit – Meaning, Advantages, Disadvantages of Balance Sheet Audit, Interim Audit, Continuous Audit, Concurrent Audit and Annual Audit, Statutory Audit	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: AUDITING DEPARTMENT: COMMERCE

CLASS: SYBCOM SEMESTER: IV MONTH: JANUARY, FEBRUARY, ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 AUDIT PLANNING PROCEDURE AND DOCUMENTATION	A. Audit Planning – Meaning, Objectives, Factors to be considered, Sources of obtaining information, Discussion with Client, Overall Audit Approach	2		• Google Meet • PowerPoint • Excel
	B. Audit Program – Meaning, Factors, Advantages and Disadvantages, Overcoming Disadvantages, Methods of Work, Instruction before commencing Work, Overall Audit Approach	2		
	C. Audit Working Papers – Meaning, importance, Factors determining Form and Contents, Main Functions / Importance, Features, Contents of Permanent Audit File, Temporary Audit File, Ownership, Custody, Access of Other Parties to Audit Working Papers, Auditors Lien on Working Papers, Auditors Lien on Client's Books	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: AUDITING DEPARTMENT: COMMERCE

CLASS: SYBCOM SEMESTER: IV MONTH: MARCH, ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 AUDITING TECHNIQUES	A. Test Check – Test Checking Vs Routing Checking, Test Check Meaning, Features, Factors to be considered, when Test Checks can be used, Advantages, Disadvantages, Precautions	1		• Google Meet • PowerPoint • Excel
	B. Audit Sampling – Audit Sampling, Meaning, Purpose, Factors in determining sample size – Sampling Risk, Tolerable Error and Expected Error, Methods of selecting Sample Items, Evaluation of Sample Results, Auditors Liability in conducting audit based on Sample	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 3: 2

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. VEENA SIHANA

DEPARTMENT: COMMERCE

CLASS S.Y.B.COM F, G, H, I SEMESTER: IV MONTH: NOVEMBER - MARCH 2021-22 ACADEMIC YEAR: **2021 -22**

LEARNING OBJECTIVE/S To inculcate the interest in Public Finance and policy :
The learners will be able to : Understanding the essential of government finance as it forms the grounding of analyzing public policies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –IV Unit II & III	**Module II : Public Revenue**			
	1.Public Revenue. 2.Shifting of Tax burden 3. Economic effects of taxation.	4	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Power point presentation 2 Quiz method 3.Discussion method
	Module III : Public Expenditure and Public Debt.			
	1Public Expenditure –Canons , Classification and Effects 2.Growth of public Expenditure	4	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Power Point Presentation 2 Quiz method 3.Discussion method
	3.Public Expenditure and Social Welfare 4.Public Debt			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____08_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR(CA) MABEL LOBO DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER:VI MONTH: NOV- MARCH

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: WHAT IS INDIRECT TAX
The learners will be able to : Difference in direct and indirect tax, how to calculate gst , registration process

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDIRECT TAX	Introduction of GST - History of gst , tax structure , features of gst , advantages of gst. 2. Registration under gst law – s. 22 . Who has to get registered , Exemption from gst registration , compulsory registration (s. 24) , process of registration , cancellation of registration , deemed registration	5 lectures 15 lectures 15 lectures	Anaspure, manan publication	Power point presentayion
	3. Input tax credit.- eligibility for itc , computation of tax liability and payment of tax. Itc in special circumstances			
	4. Value of tax			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: COMMERCE CLASS:TYBCOM – DIV I AND J . SEMESTER: VI

SUBJECT : DIRECT TAX MONTH: DECEMBER 2021 – APRIL 2022. ACADEMIC YEAR:2021 -22

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the basic principles underlying the Indirect Tax

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1. Introduction to Indirect Taxation and GST Basics for Taxation - Direct Taxes and Indirect Taxes – Features of Indirect taxes, Difference, Advantages and Disadvantages, Sources and Authority of Taxes in India	6	MANAN PRAKASHAN, ICAI STUDY MATEIAL	GOOGLE MEET, PPT, EXCEL, WHITE BOARD.
	2. Definations: Audit, business, consideration,goods, non taxable supply, person , service, taxable person, taxable supply, reverse charge, recipient etc	3		
	3. Scope of supply, Levy and collection of Tax, Exemptions from Tax	9		
	4. Time of supply , Nature and scope of supply	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 23 PER DIVISION

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TEJASWINI YOGESH NAIK DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER:VI MONTH: NOV-MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: WHAT IS INDIRECT TAX
The learners will be able to : Difference in direct and indirect tax, how to calculate gst , registration process

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDIRECT TAX	Introduction of GST - History of gst , tax structure , features of gst , advantages of gst. 2. Registration under gst law – s. 22 . Who has to get registered , Exemption from gst registration , compulsory registration (s. 24) , process of registration , cancellation of registration , deemed registration	5 lectures 15 lectures 15 lectures	Anaspure, manan publication	Power point presentayion
	3. Input tax credit.- eligibility for itc , computation of tax liability and payment of tax. Itc in special circumstances			
	4. Value of tax			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF.NEELAM RATHORE DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER: VI

MONTH:-NOV-MARCH ACADEMIC YEAR: 2021-2022 SUBJECT:-COMPUTER SYSTEMS AND APPLICATIONS

LEARNING OBJECTIVE/S:

The learners will be able to Analyze, Design, Implement and evaluate a computer based system, process components or program to meet the different context of life in this competitive world

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –IV VISUAL BASIC	Introduction to Visual Basic, GUI and programming Language Visual Basic Environment.	2	The complete Reference to Visual Basic 6.0 By-Noel Jerke	GOOGLE MEET,PPT,WORD DOCUMENTS
	Introduction to VB Controls, Designing the user Interface, Coding of controls and use of properties.	2		
	Use of variables and constants Data types Naming rules and conventions, Declaring and Variables, Val functions & Operations, Formatting Data.	2		
	Projects related to Decisions and conditions , use of statements, Functions with option Button & Check Boxes, Message Box.	2		
	Input Validation, Sub-Procedures and Sub-functions. Loops(for Next statement, Do while Statement)	1		.

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Unit 3,4 MS-EXCEL	Excel-Creation and of Templates, linking Multiple Spreadsheets, Using formulas and logical operators.	2	DIFFERENT EXCEL BOOKS – BY Lokesh Lalwani	Google meet and Microsoft excel
	Creating and using named Ranges, Creating Formulas that use reference to cells in different worksheets	2		
	Date functions and Statistical functions	2		
	Data Analysis with the help of filtering the worksheets with customized conditions, Graphical representation of data.	3		
	Using Scenario, Goal Seek Solver Macros with the help of examples	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Priyanka Devnath_Rajput DEPARTMENT: Commerce CLASS: TYBCOM (A TO E)

SEMESTER: VI MONTH: DECEMBER - APRIL ACADEMIC YEAR: 2021- 2022 SUBJECT: Computer Systems & Applications

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of E-Commerce, Security related to Cryptography and Payment System, MS-Excel Software in deep.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I E-Commerce	A)Definition of E-commerce B) Features of E-commerce C) Types of E-commerce (B2C, B2B, C2C, P2P) D) Business Models in E-commerce (Advertising, Subscription, Transaction Fee, Sales Revenue, Affiliate Revenue) E) Major B2C models (Portal, Etailer, Content Provider, Transaction Broker, Market Creator, Service Provider, Community Provider).	05	Computer System And Application Manan Prakashan and www.wikipedia.com	Google Meet, Google Attendance, MS-Word & PDF Files, Notepad
	F) E-Commerce Security: Integrity, Non repudiation, Authenticity, Confidentiality, Privacy Availability. G) Encryption: Definition, Digital Signatures, SSL	03		

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			Computer System And Application Manan Prakashan and www.wikipedia.com	Google Meet, Google Attendance, MS-Word & PDF Files, Notepad
	H) Payment Systems: Digital Cash, Online stored value, Digital accumulating balance payment, Digital credit accounts, digital checking. I) How an Online credit card transaction works. SET protocol.	04		
	J) Limitation of E-commerce.	04		
	K) M-commerce (Definition and Features).	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manjushri Shripad Oak DEPARTMENT: Commerce

CLASS: T.Y.B.COM SEMESTER: VI MONTH: January ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : : Learner will able to understand benefits of e-commerce, payment system, business modules etc..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –I E- Commerce (DIV – F,G,H,I,J,K)	Definition of e-commerce, features of e-commerce, types of e-commerce, B2C,B2B,C2C,P2P.	01	Computer System And Application Manan Prakashan	Power Point Presentation And Discussion Method
	Business Modules- Advertising, subscription, transaction fee, Sales revenue, Affiliate Revenue.	02	Computer System And Application Manan Prakashan	Power Point Presentation And Discussion Method
	Major B2c Models. E-commerce security Encryption- digital signature, SSL. Payment system	01	Computer System And Application Manan Prakashan	Power Point Presentation And Discussion Method
	Online credit card Transaction working, SET protocol. Limitations of e-commerce. M-commerce – Definition and features.	02	Computer System And Application Manan Prakashan	Power Point Presentation And Discussion Method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manjushri Shripad Oak DEPARTMENT: Commerce

CLASS: T.Y.B.COM SEMESTER: VI MONTH: January ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Learner will able to learn fundamentals of designing , implementing and distributing a visual basic application.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –IV Visual Basic (DIV – F,G,H,I,J,K)	Introduction to VB GUI and programming language, Visual Basic Environment,	01	The complete reference to Visual Basic 6.0 By Noel jerke	Google meet , Visual Studio 6.0 software, Paint brush And Discussion Method
	Introduction to VB control, designing the user interface, coding of controls, and role of properties.	01	The complete reference to Visual Basic 6.0 By Noel jerke	Google meet , Visual Studio 6.0 software, Paint brush And Discussion Method

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	Use of variables and controls, data types, naming rules/convention, declaring variables, val function and operation, formatting data,	01	The complete reference to Visual Basic 6.0 By Noel jerke	Google meet , Visual Studio 6.0 software, Paint brush And Discussion Method
	Project related to decision and condition, use of statement, function with option button and check boxes	02	The complete reference to Visual Basic 6.0 By Noel jerke	Google meet , Visual Studio 6.0 software, Paint brush And Discussion Method
	Input validation, Sub-procedure and Sub-function,	01	The complete reference to Visual Basic 6.0 By Noel jerke	Google meet , Visual Studio 6.0 software, Paint brush And Discussion Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit - 2 and Unit – 3. Advanced Spreadsheet. (DIV - K)	Creating and using Templates, Using Predefined templates, Adding protection option. Creating and Linking Multiple Spreadsheet.	02	Computer System And Application Manan Prakashan	GOOGLE MEET, Note Pad Microsoft Excel
	Using Formulas and logical operators with different examples.	02	Computer System And Application Manan Prakashan	GOOGLE MEET, Note Pad Microsoft Excel
	Creating and using named ranges. Creating Formulas that use reference to cells in different worksheets with examples.	02	Computer System And Application Manan Prakashan	GOOGLE MEET, Note Pad Microsoft Excel
	Database functions LOOKUP,VLOOKUP,HLOOKUP Conditional Logic Functions IF,COUNTIF,SUMIF,AVERAGEIF WITH EXAMPLES String Functions	03	Computer System And Application Manan Prakashan	GOOGLE MEET, Note Pad Microsoft Excel
	Date Functions, Statistical Functions, Data Analysis using Filter with customized condition and Graphical representation of data using different charts. ,Using Scenarios ,Creating and managing Scenarios, Goal Seek. , Solver Understanding Macros, Creating, Recording and running Simple macros.	09	Computer System And Application Manan Prakashan	GOOGLE MEET, Note Pad Microsoft Excel

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

Practicals : - Computer System And Application

Sem - VI

Sr. No.	**Sub Topics**	**No. Of Lecture Allotted**	**TEACHING METHOD/ ICT TOOLS USED**
Practical 1	Excel Calculations of Taxable Income (If Statement)	01	Computer, Ms-Excel
Practical 2	Excel – Date and Time Function	01	Computer, Ms-Excel
Practical 3	Excel - Text Functions	01	Computer, Ms-Excel
Practical 4	Excel – Use of V lookup function	01	Computer, Ms-Excel
Practical 5	Excel – Maths Function	01	Computer, Ms-Excel
Practical 6	Excel- Advance filter use of charts (Pie, Bar etc.)	01	Computer, Ms-Excel
Practical 7	Visual Basic - Project on welcome message	01	Computer, Visual Studio 6.0
Practical 8	Visual Basic - Calculations of simple and compound interest	01	Computer, Visual Studio 6.0

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Practical 9	Visual Basic - Project on text specification(change of font and colour)	01	Computer, Visual Studio 6.0
Practical 10	Visual Basic - Calculating factorial of numbers (Loops)	01	Computer, Visual Studio 6.0

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Arjun Vishwakarma DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: VI MONTH: DECEMBER

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : The learner will be able to use basic computer software and some financial software

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1,4	▶ **Module - I : E-Commerce (18 Lectures)** **(a) Definition of E-commerce** **(b) Features of E-commerce** **(c) Types of E-commerce (B2C, B2B, C2C, P2P)** **(d) Business Models in E-commerce (Advertising, Subscription, Transaction Fee, Sales Revenue, Affiliate Revenue)** **(e) Major B2C models (Portal, Etailer, Content Provider, Transaction Broker, Market Creator, Service Provider, Community Provider).** **(f) E-Commerce Security : Integrity, Non repudiation, Authenticity, Confidentiality, Privacy Availability.** **(g) Encryption : Definition, Digital ignatures, SSL.** **(h) Payment Systems : Digital Cash, Online stored value, digital accumulating balance payment, Digital credit accounts, digital checking.** **(i) How an Online credit card transaction works. SET protocol.**	4	Computer Skills-2 and Wikipedia	PowerPoint Presentation, Laptop

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	(j) Limitations of E-commerce. **(k) M-commerce (Definition and Features)**			
	▶ **Module - IV : Visual Basic** **(a) Introduction to Visual Basic, Introduction Graphical User Interface (GUI) Programming Language (Procedural, Object Oriented, Event Driven), Writing VB Projects. The Visual Basic Environment** **(b) Introduction to VB Controls Text boxes, Frames, Check boxes, Option button, Designing the User Interface, Default & Cancel property, tab order, Coding for controls using Text, Caption, Value property and Set Focus method** **(c) Variables, Constants, and Calculations Variable and Constant, Data Type (String, Integer, Currency, Single, Double, Date), Naming rules/conventions, Constants (Named & Intrinsic), Declaring variables, Val Function, Arithmetic Operations, Formatting Data.** **(d) Decision and Condition Condition, Comparing numeric variables and constants, Comparing Strings, Comparing Text Property of text box, Compound Conditions (And, Or, Not). If Statement, if then-else Statement, LCase and Ucase function, Using If statements with Option Buttons & Check Boxes. Msgbox (Message box) statement Input Validation : Is Numeric function.** **(e) Sub-procedures and Sub-functions, Using common dialog box, Creating a new sub-procedure, Writing a Function procedure. Simple loops using For Next**	9	Computer Skills-2	PowerPoint Presentation, Laptop

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	statements and Do while statement and display output using MsgBox Statement.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4,9

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: COMMERCE

CLASS: TYBCOM SEMESTER: VI MONTH: NOV-MARCH SUB: COMMERCE-VI(HRM) ACADEMIC YEAR:2021-22

LEARNING OBJECTIVE/S: 1.To enable the students to understand the HR Management and system at various levels in general and in certain specific industries or organizations. 2. To help the students focus on and analyses the issues and strategies required to select and develop manpower resources 3. To develop relevant skills necessary for application in HR related issues 4. To enable the students to integrate the understanding of various HR concepts along with the domain concept in order to take correct business decisions

PAPER, UNIT , TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Human Resource Management	Human Resource Management – Concept, Functions, Importance, Traditional v/s Strategic Human Resource Management	4	Human Resource Development" by Jon M Werner and Randy L DeSimone	GMEET, PPT, MICROSOFT WORD WITH PEN TOOL,PDF FILES, GOOGLE FORM, GOOGLE CLASSROOM
	Human Resource Planning- Concept Steps in Human Resource Planning Job Analysis-Concept, Components, Job design- Concept, Techniques	4	Same as above	
	Recruitment- Concept, Sources of Recruitment Selection - Concept , process , Techniques of E, selection,	4	Same as above	
Human Resource Development	Human Resource Development- Concept, functions Training- Concept, Process of identifying training and development needs, Methods of Training & Development	4		GMEET, PPT, MICROSOFT WORD WITH PEN TOOL,PDF FILES, GOOGLE FORM, GOOGLE CLASSROOM MYSQL SOFTWARE, NOTEPAD

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	Performance Appraisal- Concept, Benefits, Limitations, Methods Potential Appraisal-Concept, Importance	4		
	Career Planning- Concept, Importance Succession Planning- Concept, Need Mentoring- Concept, Importance Counselling- Concept, Techniques.	3		
Human Relations	Human Relations- Concept, Significance Leadership –Concept, Transactional & Transformational Leadership Motivation- Concept, Theories of Motivation,(Maslow's Need Hierarchy Theory, Vroom's Expectancy Theory, McGregor's Theory X and Theory Y, Pink's Theory of Motivation)	4		
	Employees Morale- Concept, Factors affecting Morale, Measurement of Employees Morale Emotional Quotient and Spiritual Quotient- Concept, Factors affecting EQ & SQ	4		
	Employee Grievance- Causes, Procedure for Grievance redressal Employee welfare measures and Health & Safety Measures.	3		
Trends In Human Resource Management	HR in changing environment: Competencies- concept, classification Learning organizations- Concept, Creating an innovative organization, Innovation culture- Concept, Need, Managerial role.	4		
	Trends in Human Resource Management,: Employee Engagement- Concept, Types Human resource Information System (HRIS) – Concept, Importance, Changing patterns of employment.	4		
	Challenges in Human Resource Management: Employee Empowerment, Workforce Diversity. Attrition, Downsizing, Employee Absenteeism, Work life Balance, Sexual Harassment at work place, Domestic and International HR Practices, Millennial (Gen Y)Competency Mapping	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: THEORY-45

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DIVISION-D & E –UNIT II & III – NO LECTURES- 23

DIVISION- I & J – UNIT I,II,III & IV- NO LECTURES-45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Commerce VI (HRM) DEPARTMENT: Commerce

CLASS:TYBCOM SEMESTER:VI MONTH:Dec-Jan ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I HRM	HRM – Concept , functions, importance, traditional and Strategic HRM	3	Marketing Management By Philip ,Kotlar	Chalk Board ,Discussion
	HRP - Concept, steps in HRP	2		
	Job Analysis – Concept Component, job design –concept , techniques	2		
	Recruitment- Concept , Sources	2		
	Selection –Concept , Process, techniques of e-selections	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Commerce VI (HRM) DEPARTMENT: Commerce

CLASS:TYBCOM SEMESTER:VI MONTH:Feb- March ACADEMIC YEAR: 2021-22

The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit IV Trends in HRM	HR in Changing Environment – Competencies ,Classification	3	Marketing Management By Philip ,Kotlar	Chalk Board ,Discussion
	Learning Organization , Innovative Organization & Culture	3		
	Trends in HRM – Employee Engagement and types	3		
	HRIS- Concept, importance, Change in pattern of employment	3		
	Challenges in HRM ,Domestic and international HR practice	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: varada katle _ DEPARTMENT: comeerce CLASS: TY BCOM SEMESTER: __V **I** MONTH: DECEMBER 2020

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE SUBJECT :MHRM (COMMERCE VI)
The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE VI Human Resource Management ,Human Relation	Human Resouece Devlopment , Training, Performance appraisal,	5	Manan prakashan	Online mobile and lab top
	Carrer planning , succession planning,mentoring , counselling	5		
	Human relation ,leadership, motivation ,employee moral	5		
	Emotional quotient and spiritual quotient	5		
	Employee grievance , employee welfre measure			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: COMMERCE

CLASS: TYBCOM (A, B, C, D, and E) SEMESTER: VI MONTH: DECEMBER TO MARCH ACADEMIC YEAR:2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand Human resource management and its various aspects including selection, recruitment, E-selection etc.
- Get insight on how human resource planning, job analysis and job design are done in big MNC's.
- Perceive meaning and methods of training and development. This unit will also help the understand the meaning of performance and potential appraisal which in turn will help Improve their performance in the actual job.
- Interpret changing environment of human resources field and understand the challenges faced in HRM.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-1 Human Resource Management	HUMAN RESOURCE MANAGEMENT – Concept, Functions, Importance, Traditional v/s Strategic Human Resource Management HUMAN RESOURCE PLANNING- Concept Steps in Human Resource Planning JOB ANALYSIS-Concept, Components JOB DESIGN- Concept, Techniques RECRUITMENT- Concept, Sources of Recruitment SELECTION - Concept , process , Techniques of E,selection,	10	Human resource management by Gary Dessler	Google meet, Google forms, Testmoz, Inkcredible, Jamboard, Power Point Presentation

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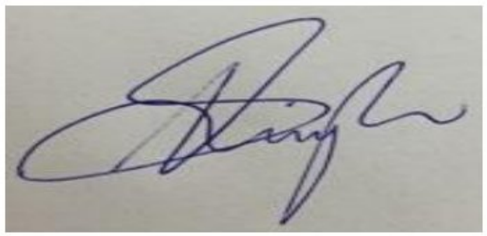
Unit-4 Trends in human resources management	●HR IN CHANGING ENVIRONMENT: competencies, classification, learning organisation, innovation culture ●TRENDS IN HRM: employee engagement, Human Resource Information System, changing patterns of employment ●CHALLENGES IN HRM: Employee empowerment, workforce diversity, attrition, downsizing, employee absenteeism, work life balance, sexual harassment at work place, domestic & international HR practices, Millennial competency mapping.	10	Human Resource Management by John Storey	Google meet, Google forms, Testmoz, Inkcredible, Jamboard, Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : TYBCOM (F,G,H) SEM : VI MONTH : Dec -Jan YEAR : 2021-22

LEARNINGOBJECTIVE/S : Human resource is an important asset of the organisation. Here, learner will be able to learn various things about HR.

PAPER/ UNIT/ TITLE	SUBTITLE	NO. OF LECURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE VI **MODULE I** **HUMAN RESOURCE MANAGEMENT**	●Human resource management- concepts, functions, importance	04	Human Resource Management by John Storey	Google meet, PPT, chalk & board
	●Human resource planning- concept, steps, job analysis, job design	03	Human Resource Management by John Storey	Google meet, PPT, chalk & board
	●Recruitment- concept, sources of recruitment, selection, E-selection	03	Human Resource Management by John Storey	Google meet, PPT, chalk & board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : TYBCOM (F,G,H) SEM : VI MONTH : Jan-March YEAR : 2021-22

LEARNINGOBJECTIVE/S : Human resource is an important asset of the organisation. Here, learner will be able to learn various things about HR.

PAPER/ UNIT/ TITLE	SUBTITLES	NO. OF LECURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE VI MODULE IV TRENDS IN HUMAN RESOURCE MANAGEMENT	●HR in changing environment : competencies, classification, learning organisation, innovation culture	05	Human Resource Management by John Storey	Google meet, PPT, chalk & board
	●Trends in HRM : employee engagement, Human Resource Information System, changing patterns of employment	05	Human Resource Management by John Storey	Google meet, PPT, chalk & board
	●Challenges in HRM : Employee empowerment, workforce diversity, attrition, downsizing, employee absenteeism, work life balance, sexual harassment at work place, domestic & international HR practices, Millennial competency mapping	05	Human Resource Management by John Storey	Google meet, PPT, chalk & board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: Commerce CLASS: TYBCom SEMESTER: VI MONTH: DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : accounting treatment for contract costing and preparation of contract account. Computation of cost of each process, abnormal gains and losses during process.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, Contract costing	Progress payments, retention money, contract accounts, accounting for material	1	Manan Prakashan	Google Meet, Google Sheets & Google Slides
	accounting for tax deducted at source by the contractee, accounting for plant used in a contract	1		
	Treatment of profit on incomplete contracts, contract profit and balance sheet entries.	2		
	Practical problems	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

MONTH: Feb - Mar

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, process costing	Process loss, abnormal loss and gains, joint products and by products, process account formats	2	Manan Prakashan	Google Meet, Google Sheets & Google Slides
	Practical problems	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

MONTH: Mar- Apr

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, Some emerging concepts of cost accounting	Introduction, Need for new techniques, Target Costing	2	Manan Prakashan	Google Meet, Google Sheets & Google Slides
	Life Cycle Costing	2		
	Benchmarking	2		
	Activity Based Costing (ABC costing)	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KALPANA JAIN** DEPARTMENT**: COMMERCE** CLASS: **T.Y.B.COM** DIV: **F, G, H, I ,J,K ,L and M** SEMESTER: **VI** MONTH: **NOVEMBER-FEBRUARY** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S : To explain the concepts of accounts an impart the practical knowledge of Financial Accounting. The learners will be able to understand the accounting concepts in simple way which will help them to tackle the accounting problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AS – 14 - Amalgamation, Absorption & External Reconstruction	**Unit: 1- AS-14** *Types of Amalgamation *In the nature of merger and purchase * Corresponding accounting treatments of pooling of interests and purchase method respectively. * Meaning and Computation of purchase consideration. *.Journal entries in the books of Purchase Company and in the books of vendor company. * Problems based on purchase method only.	15	Financial accountancy by R Narayanswamy	Chalk and Board
Accounting of transactions of Foreign Currency	**Unit: 2 –** ***Meaning, Definition and Objectives.** ***Different exchange rates prevailing.** ***Monetary items and Non Monetary items.** ***Accounting for exchange difference with Import (Purchases) and Export(Sales)** *Foreign exchange fluctuations ledger account *Journal entries for export as well as import	10	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: Commerce CLASS: TYBCom SEMESTER: VI MONTH: DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : accounting treatment for contract costing and preparation of contract account. Computation of cost of each process, abnormal gains and losses during process.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, Contract costing	Progress payments, retention money, contract accounts, accounting for material	1	Manan Prakashan	Google Meet, Google Sheets & Google Slides
	accounting for tax deducted at source by the contractee, accounting for plant used in a contract	1		
	Treatment of profit on incomplete contracts, contract profit and balance sheet entries.	2		
	Practical problems	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

MONTH: Feb - Mar

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, process costing	Process loss, abnormal loss and gains, joint products and by products, process account formats	2	Manan Prakashan	Google Meet, Google Sheets & Google Slides
	Practical problems	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

MONTH: Mar- Apr

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, Some emerging concepts of cost accounting	Introduction, Need for new techniques, Target Costing	2	Manan Prakashan	Google Meet, Google Sheets & Google Slides
	Life Cycle Costing	2		
	Benchmarking	2		
	Activity Based Costing (ABC costing)	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL SUBJECT: FINANCIAL ACCOUNTING DEPARTMENT: COMMERCE

CLASS: TYBCOM SEMESTER: VI MONTH: NOVEMBER ACADEMIC YEAR: 2021- 22

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - 3 Liquidation of companies	Meaning of Liquidation, Modes of Winding up, Preferential Creditors (Section 327), Over riding preferential payments (Section 326)	2	Financial Accounting By R. Narayanaswamy	Google meet, Microsoft Power point, Excel
	Format of Statement of Affairs, Deficit / Surplus Account, Format of Liquidators Final Statement of Accounts	2		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FINANCIAL ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____TYBCOM ____ SEMESTER: VI_ MONTH: __DECEMBER - JANUARY_ ACADEMIC YEAR: _____2021- 22 ___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - 4 Underwriting of shares and Debentures	Introduction of Underwriting and Underwriting commission, Provision of companies Act with respect of payment of underwriting commission, underwriters, sub-underwriters, Brokers & managers to issue.	2	Financial Accounting By R. Narayanaswamy	Google meet, Microsoft Power point
	Types of Underwriting, Abatement clause, Format of liability of underwriters, Accounting treatment relating to underwriting.	2		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FINANCIAL ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____TYBCOM ____ SEMESTER: VI_ MONTH: __FEBRUARY - MARCH_ ACADEMIC YEAR: ____2021- 22___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 5 Accounting for LLP	Meaning, Advantages and Disadvantages of LLP, Statutory Provisions	1	Financial Accounting By R. Narayanaswamy	Google meet, Microsoft Power point
	Conversion of Partnership firm inti LLP, Format of statements of Assets & Liabilities, Format of Income & Expenditure, Adjustment in Final A/c.	3		
	Practical Question Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10__

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TEACHING PLAN

NAME OF THE STAFF: **Mrs Amita Rakesh Patil** DEPARTMENT**: COMMERCE** CLASS: **T.Y.B.COM** DIV: **F, G, H, I ,J**

SEMESTER: **VI** MONTH: **December - March** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S : To impart the practical knowledge of Financial Accounting.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- 4 Underwriting of shares and Debentures	Meaning of underwriting and underwriting commission , payment of commission to underwriters , sub- underwriters , brokers etc. Types of underwriting, explaination about marked, unmarked and firm underwriting and liability of underwriters. Practical problems	10	Financial Ac. counting by R. Narayanaswamy	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet
Unit- 5 Accounting for Limited Liability partnership	Meaning of limited liability and its statutory provisions. Conversion of partnership into LLP , format of Balance sheet. Practical problems on final accounts	10	Financial Ac. counting by R. Narayanaswamy	Online Lecture Conducted on Google Meet,

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				equipment used- Pen-tablet
Unit- 3 Liquidation of Companies	Meaning of liquidation and winding up,preferential payments, overriding preferential payments. Format of statement of affairs, deficit and surplus and format of liquidators statement of account. Practical problems	10	Financial Ac. counting by R. Narayanaswamy	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SONAL RAUT DEPARTMENT: COMMERCE

CLASS: TYBCOM (A,B,C,D,E) SEMESTER: VI MONTH: DEC, JAN, FEB & MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

Comprehension based Learning to Esemplastic into Objective or Subjective type Exams. To Understand the Concept of Amalgamation, Absorption & External Reconstruction and to Learn Theoretical & Practical working of the Limited Liability Partnership.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & V	UNIT I: Amalgamation, Absorption & External Reconstruction ➢ Introduction, Meaning, AS 14, ➢ Distinction Between Amalgamation, Absorption & External Reconstruction ➢ Ledger Accounts & Journal Entries on Purchasing &Vendor Company ➢ Questions solved on the same	16	S.N & S.K. MAHESHWARI	Google Meet, Google Slides, Microsoft Excel

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	UNIT V: Accounting For Limited Liability Partnership ➢ Introduction, Advantage & Disadvantages ➢ Public & Private Companies Vs. LLP ➢ Partnership Firm Vs. LLP ➢ LLP Agreement & Format ➢ Ledger Accounts & Journal Entries of Old Firm & LLP ➢ Questions Solved on the same	16	S.N & S.K. MAHESHWARI	Google Meet, Google Slides, Microsoft Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___32_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: COMMERCE CLASS: T.Y.B.COM

SEMESTER: VI MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVES:

The Learner/Students will be able to under the concept of Indian economy in terms of classification of various sector such as primary, secondary and tertiary sector and their contribution towards the development of Indian Economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECONOMICS SEM VI	**Module - I : Introduction to International Trade (10 Lec.)** **Theories of International Trade -** Ricardo's Theory of Comparative Costs and the Heckscher-Ohlin Theory **Terms of Trade -** Types and Limitations **Gains From International Trade -** Offer Curves and Reciprocal Demand		M.L Jhingan: International Economics Dominic Salvatore: International Economics	PPT Lecture, Jam Board Session, Quiz, Discussion, Google Meet, Google Slide.
ECONOMICS SEM VI	**Module - II: Commercial Policy (10 Lec.)** **Commercial Trade Policy –** Free Trade and Protection - Pros and Cons. **Tariff and Non-Tariff Barriers –** Meaning, Types and Effects **International Economic Integration –**		M.L Jhingan: International Economics Dominic Salvatore:	PPT Lecture, Jam Board Session, Quiz, Discussion, Google Meet, Google Slide.

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	Types and Objectives: EU and Brexit, ASEAN		International Economics	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira

DEPARTMENT: COMMERCE

CLASS: T.Y.B.Com.

SEMESTER: VI MONTH: December - April ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVES: The Learners will be able to understand the old school and contemprorary method and theories utilized to understand the terms of trade and exchange along with the legalities of trading relations under the policy brackets to cater the smooth international trade between nations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I & II	Unit I: Introduction to International Trade Theories of International Trade: Ricado and Heckscher - Ohlin; Terms of Trade: Types and Limitations; Gains from International Trade: Offer curves and Reciprocal Demand.	(02 Lectures) Per (DIV: K, L, M) Per week	M.L. Jhingan: International Economics Dominick Salvatore: International Economics Trade and Finance	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST
	Unit II: Commercial Policy Commercial Trade Policy: Free Trade & Protection , Pros & Cons;	(02 Lectures) Per (DIV: K, L, M) Per week	Paul Krugman: International Economics Theory	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST

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	Tariff and Non-Tariff Barriers: Meaning, Types and Effects; International Economic Integration: Types and Objectives, EU & BREXIT, ASEAN		and Policy. Desai and Bhalerao: International Economics	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: <u>08 Lectures per Week</u>

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. VEENA SIHANA_____ DEPARTMENT: COMMERCE

CLASS: TYBCOM A, B, C, D, E_____SEMESTER: VI_____ MONTH: NOVEMBER-MARCH_____ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: Online/Offline.
The learners will be able to: Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS VI Module III and IV	BALANCE OF PAYMENT AND WTO : Concept and Structure of Balance of Payments, Causes and Disequilibrium and	2	International Economics by H.L. AHUJA.	Online Lectures through mobile, Laptop, PPT.
	Measures to Correct Disequilibrium in BOP, India's Balance of Payment since 1991 and World Trade Organisation.	2		Offline lecture through Chalkboard method.
	FOREIGN EXCHANGE MARKET: Foreign Exchange Market, Determination of Equilibrium Rate of	2		
	Exchange, Purchasing Power Parity Theory, Rate of Central Bank in Foreign Exchange Rate Management	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08 Lectures.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Veronika B Barla **DEPARTMENT**: Commerce

CLASS: T.Y.Bcom **SEMESTER**: VI

MONTH: _____ **SUBJECT**: Business Economics **ACADEMIC YEAR**: 2020-21

LEARNING OBJECTIVE/S: 1 Introduction to international trade.
2. understand the commercial policy

The learners will be able to: 1. Theories of international trade, terms of trade, types and limitation, gain from international trade, offer curve, reciprocal demand.
2. commercial trade policy, free trade and protective trade –pros and cons. Tariff and non tariff barriers, types and effect, international economic integration.

Paper, Unit, Title	Subtopics	Number of lectures allotted	References	Teaching Method /ICT tools used
Business Economics Module I Introduction to international trade	Theories of international trade: Ricardian theory of cost analysis	2	Indian economy Mishra and Puri	GOOGLE MEET, PPT, JAM BOARD,ETC
	Heckscher ohlin theory,	2	"	"
	Terms of trade: types and limitation	3	"	"
	Gain from international trade , offer curve and reciprocal demand	3	"	"
Unit II	Commercial policy , free trade, and protection,- pros and cons	3	"	"
	Tariff and non-Tariff barrier, types and effect	3	"	"

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Commercial policy	International economic integration, types and objective, EU, Brexit, ASEAN	4	"	"

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT I AND II: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.AKRUTI BOSE DEPARTMENT: COMMERCE

CLASS: TYBCOM K,L,M. SEMESTER: VI MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: Online/Offline.
The learners will be able to: Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS VI Module III and IV	BALANCE OF PAYMENT AND WTO : Concept and Structure of Balance of Payments, Causes and Disequilibrium and		International Economics by H.L. AHUJA.	Online Lectures through mobile, Laptop, PPT.
	Measures to Correct Disequilibrium in BOP, India's Balance of Payment since 1991 and World Trade Organisation.			Offline lecture through Chalkboard method.
	FOREIGN EXCHANGE MARKET: Foreign Exchange Market, Determination of Equilibrium Rate of			
	Exchange, Purchasing Power Parity Theory, Rate of Central Bank in Foreign Exchange Rate Management			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 Lectures.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE CLASS: TYBCOM

SEMESTER: **VI** MONTH: Dec,2021to March,2022 ACADEMIC YEAR :2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to understand preparation of contract Account, Process accounts , Abnormal Gain/ loss accounts, Meaning of Target costing , ABC costing, Benchmarking etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST ACCOUNTING	**1] Contract costing**-Meaning of contract, Retention money,Contract ledger, accounting for material, plant & machinery. Treatment of profit on incomplete contract, Contract profit , contractee account , Practical problems on contract accounting.	10	S.N. Maheshwari B.K.Bhar	Chalk & Duster,Google meet, MS Excel
	2] Process costing- Meaning of process account , process loss,Abnormal Gain/ Loss, Joint product & By product, Process stock account. Practical problems.	10		Chalk & Duster,Google meet, MS Excel
	3]Some Emerging concept of Cost Accounting- Target costing, Life cycle costing,Benchmarking , ABC costing	10		Chalk & Duster,Google meet, Wikipedia

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ARUN RAUT DEPARTMENT: COMMERCE

CLASS: TYBCOM (F to J) SEMESTER: VI MONTH: Nov-Apl ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Learn the Cocept of Costing, how to prepare Contract A/C and Process A/C.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2. Contract Costing	Contract Costing Progress Payment, Retention Money, Contract A/C, Accounting of Mat, Treatment of profit on incomplete contract, Format of Contract A/c, Practical Problems.	8	Manan Prakashan, Inernet	Google meet, PPT, Microsoft word, Spreadsheet
3. Process Costing	Process Costing Process Loss, Abnormal Gain & Losses, Joint & by products, Practical Problems.	8	Manan Prakashan, Inernet	Google meet, PPT, Microsoft word, Spreadsheet
6. some Emmg Con of Cost A/C	Some Emerging Concept of Cost A/C Target Costing, Life Cycle Costing, Benchmarking, ABC Costing	4	Manan Prakashan, Inernet	Google meet, PPT, Microsoft word, Spreadsheet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM (DIV E TO L) SEMESTER: VI MONTH: DEC TO MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) INTRODUCTION TO MARGINAL COSTING	MARGINAL COSTING MEANING, APPLICATION, ADVANTAGES, LIMITATIONS CONTRIBUTION, BREAKEVEN ANALYSIS, MARGIN OF SAFETYAND PROFIT VOLUME GRAPH SIMPLE PRATICAL PROBLEMS BASED ON MARGINAL COSTING EXCLUDING DECISION MAKING	10	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	GOOGLE MEET, PPT, EXCEL
2) COST CONTROL ACCOUNTS	ADVANTAGES & DISADVANTAGES COST CONTROL ACCOUNTS, PRINCIPAL ACCOUNTS, SUBSIDIARY ACCOUNTS TO BE MAINTAINED SIMPLE PRACTICAL PROBLEMS ON PREPARATION OF COST CONTROL ACCOUNTS.	10	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	GOOGLE MEET, PPT, EXCEL
3) STANDARD COSTING	NEED TO LEARN STANDARD COSTING , VARIANCES, REASONS OF VARIANCES, LABOUR VARIANCES AND MATERIAL VARIANCES. THEORY AND PRACTICAL QUESTIONS	10	PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	GOOGLE MEET, PPT, EXCEL

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Tejaswini Yogesh Naik DEPARTMENT: commerce CLASS:TY BCOM SEMESTER: VI MONTH: October to March
ACADEMIC YEAR:2020- 21 learners will be able to : uderstand how to manage and control cost.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting	1. Marginal costing : meaning, cost volume profit, pv ratio, break even point, margin of safety, theory and practical	10 lectures for	Maheshwari	Black board
	On each sub topic. 2.Standard costing: Need to learn standard costing , variances,	Each topic .		
	Reasons of variances, labour variances and material variances. Theory and practical questions.			
	3. control account: difference in integrated and non integrated accounting, cost control account, stock control			
	Account, finished goods control account,wip control account.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NIKITA SUNIL JOGLE DEPARTMENT: ACCOUNTANCY CLASS: TYBCOM (H & I) SEMESTER: **VI**

MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2022 - 2023

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 – COST CONTROL ACCOUNTS	Advantages & disadvantages, cost control accounts, principal accounts, subsidiary accounts to be maintained	7	Text book	Chalk & Board
MODULE 2 – CONTRACT COSTING	Progress payments, retention money, contract accounts, accounting for material, accounting for tax deducted at source by the contractee, accounting for plant used in contract, treatment of profit on incomplete contracts, contract profit & balance sheet entries	8	Text book	Chalk & Board
MODULE 3 – PROCESS COSTING	Process loss, abnormal gains & losses, joint products & by products, excluding equivalent units, inter-process profit	7	Text book	Chalk & Board
MODULE 4 – INTRODUCTION	Meaning, appliactions, advantages, limitations, contribution, breakeven analysis, margin of safety & profit volume graph	8	Text book	Chalk & Board

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TO MARGINAL COSTING				
MODULE 5 – INTRODUCTION TO STANDARD COSTING	Various types of standards, setting of standards, basic concepts of material & labour variances analysis	7	Text book	Chalk & Board
MODULE 6 – SOME EMERGING CONCEPTS OF COST ACCOUNTING	Target costing, life cycle costing, benchmarking, ABC costing	2	Text book	Chalk & Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 39 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SACHIN ARJUN KADAM DEPARTMENT: commerce CLASS:TY BCOM SEMESTER: VI MONTH: October to March
ACADEMIC YEAR:2020- 21 learners will be able to : uderstand how to manage and control cost.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting	1.Marginal costing : meaning, cost volume profit, pv ratio, break even point, margin of safety, theory and practical On each sub topic.	10 lectures for Each topic .	Maheshwari	Black board
	2.Standard costing: Need to learn standard costing , variances, Reasons of variances, labour variances and material variances. Theory and practical questions.	10 lectures for Each topic .	Annapure	Black board
	3. control account: difference in integrated and non integrated accounting, cost control account, stock control, Account, finished goods control account,wip control account.	10 lectures for Each topic .	Annapure	Black board
	4. Contract account : theory and practical problems	10 lectures for Each topic .	Annapure	Black board
	5. Process Account: theory and practical problems	10 lectures for Each topic .	Annapure	Black board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **VISHAL SAWANT** DEPARTMENT: **COMMERCE** CLASS: FYBCOM (A,B,C,D) SEMESTER: I

SUBJECT: FINANCIAL ACCOUNTING MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: prepare department trading and profit & loss account, calculation of stock by FIFO and weighted average method and calculation of hire purchase price and cash price.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Capital revenue income and expenditure	Characteristics of Capital expenditure and income, Characteristics of Revenue expenditure and income. Questions on capital expenditure and income with reasons.	8	Manan prakashan	Google meet, PPT, EXCEL.ONE NOTE
Inventory valuation	Concept of inventory valuation, format of FIFO and Weighted average method	10	Manan prakashan	Google meet, PPT, EXCEL.ONE NOTE

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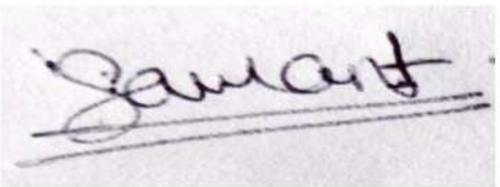

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	of inventory valuation. Q1 to Q6 on inventory valuation with both methods.			
Hire purchase system	Meaning of hire purchase, journal entry in the books of hire vendor and hire purchaser. Calculation of interest. Calculation of depreciation. Q1 to Q6 on hire purchase system in the books of both vendor and purchaser.	12	Manan Prakashan	Google meet, PPT, EXCEL.ONE NOTE

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____30_____

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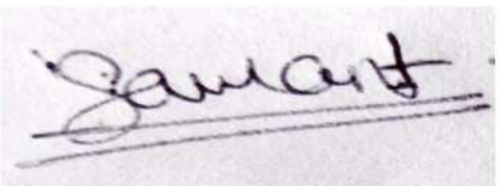

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SONAL RAUT DEPARTMENT: COMMERCE

CLASS: FYBCOM (I,J,K,L) SEMESTER: I MONTH: OCT, NOV & DEC ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Comprehension based Learning to Esemplastic into Objective type Exams. To Understand Accounting Standard and it's Importance. To Learn Theoretical as well as Practical Concept about Manufacturing Concern and Departmental Accounts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE -I, II & III	Chapter 1: AS-1 Disclosure of Accounting Policies ➢ Introduction, Meaning & Definition	03		

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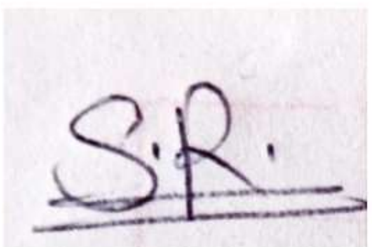

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	➢ 32 Accounting Standards ➢ Accounting policies ➢ Accounting Assumptions		S.K & S.N MAHESHWARI	Google Meet, Google Slides, Microsoft Excel
	Chapter 2: AS-2 Valuation of Inventories ➢ Introduction & Meaning ➢ Determination of Value ➢ Ascertainment of Cost ➢ Measurement ➢ Cost Formulas	03	S.K & S.N MAHESHWARI	Google Meet, Google Slides, Microsoft Excel
	Chapter 3: AS-9 Revenue Recognition ➢ Introduction & Meaning ➢ Revenue From Sale of Goods ➢ Revenue From Rendering Services ➢ Revenue From Other Income (Interest, Dividend, Royalty)	03	S.K & S.N MAHESHWARI	Google Meet, Google Slides, Microsoft Excel
	Chapter 6: Final Account of Manufacturing Concern ➢ Introduction, Meaning & Items in Manufacturing Account	12		

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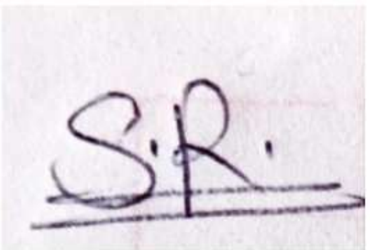

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	➢ Journal Entries, Format of Manufacturing Account ➢ Questions solved on the same		S.K & S.N MAHESHWARI	Google Meet, Google Slides, Microsoft Excel
	Chapter 7: Departmental Accounting ➢ Meaning, Objectives & Basis of Allocation of Expenses ➢ Format of Departmental Trading & P&L, General P&L A/c ➢ Questions solved on the same	12	S.K & S.N MAHESHWARI	Google Meet, Google Slides, Microsoft Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 33

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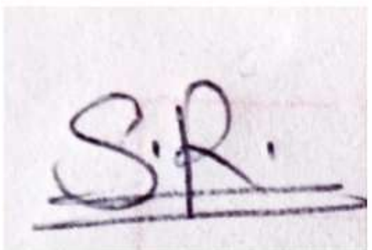

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce

CLASS: F Y B Com (E, F G & H) SEMESTER: I MONTH: DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to:

Demonstrate knowledge of preparation of financial statement and financial schedule in accordance with GAAP – Generally Accepted Accounting Principles, through analysis and synthesis of information as well. Student will learn relevant financial accounting carrier skills, applying both quantitative & qualitative knowledge to their future carrier in business.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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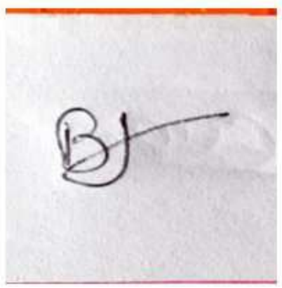

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Accountancy & Financial Management 1	**Accounting Standards Issued by ICAI and Inventory Valuation** **• Accounting Standards:** Concepts, Benefits, Procedures for Issue of Accounting Standards Various AS: **AS – 1: Disclosure of Accounting Policies** (a) Purpose (b) Areas of Policies (c) Disclosure of Policies (d)Disclosure of Change in Policies **AS – 2: Valuation of Inventories (Stock)** (a) Meaning, Definition (b) Applicability (c) Measurement of Inventory	03	*Financial Accounting by M. Mukherjee and M. Hanif, Tata McGraw Hill Education Pvt. Ltd., New Delhi* *Financial Accounting by Williams, Tata Mc. Grow Hill and Co. Ltd., Mumbai*	GOOGLE MEET FOR ONLINE TEACHING, GOOGLE CLASSROOM DESKTOP AND LAPTOP, , Group Discussion,

	(d) Disclosure in Final Account(e) Explanation with Illustrations **AS – 9: Revenue Recognition** (a) Meaning and Scope (b) Transactions Excluded (c) Sale of Goods (d) Rendering of Services (e) Effects of Uncertainties (f) Disclosure			

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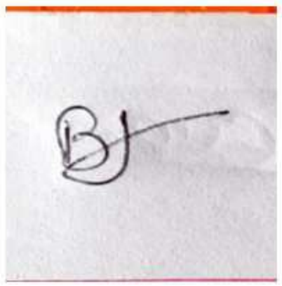

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	Final Accounts • Adjustments and Closing Entries • Final Accounts of Manufacturing Concerns (Proprietary Firm)	10		
	Departmental Accounts Meaning Basis of Allocation of Expenses and Incomes / Receipts Inter Departmental Transfer: At Cost Price and Invoice Price Stock Reserve Departmental Trading and Profit and Loss Account and Balance Sheet	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 23

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ARUN RAUT DEPARTMENT: COMMERCE

8CLASS: FYBCOM (A B C) SEMESTER: I MONTH: JUL-NOV ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to : Calculate inventory, will able to bifurcate capital and revenue income and expenditure. And will able to pass journal entries as well as prepare ledgers for hire purchase in both the books.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	ACCOUNTING STANDARD **AS – 1: Disclosure of Accounting Policies** **AS – 2: Valuation of Inventories (Stock)**	4	Manan Prakashan	MS Office, Google docs, sheet, slides, Google Meet

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	AS – 9: Revenue Recognition			
2	Final Accounts Adjustments and Closing Entries Final Accounts of Manufacturing Concerns (Proprietary Firm) Practical questions	12	Manan Prakashan	MS Office, Google docs, sheet, slides, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____16___

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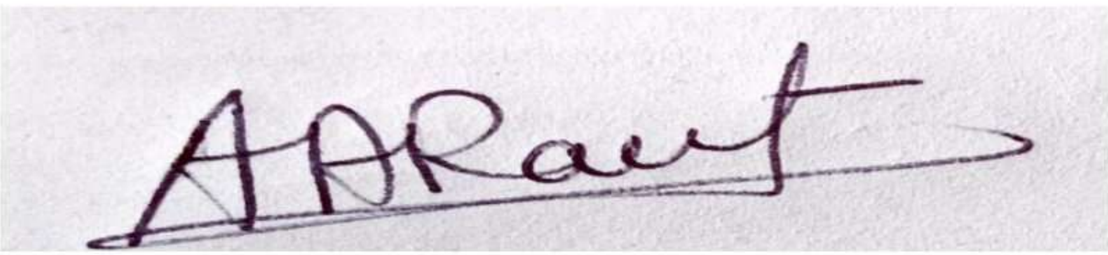

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Sandra Shamir Almeida DEPARTMENT : Commerce

CLASS : FYBCOM (M,N,O,P) SEM : I MONTH : Oct-Dec YEAR : 2020-21

LEARNING OBJECTIVE/S:

- The learners will be able to know the various concepts about Accounting Standard 1, 2 & 9, especially about Inventory Valuation, Capital and Revenue : Receipts and Expenditure and about Accounting for Hire Purchase.
- He will also be able to practically apply this knowledge in business & entrepreneurship in India.

PAPER/ UNIT/ TITLE	SUB TOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING M ICT TOOLS U
ACCOUNTANCY AND FINANCIAL MANAGEMENT-I	**Module I : ACCOUNTING STANARDS ISSUED BY ICAI AND INVENTORY VALUATION** ➢ **Inventory Valuation** • Meaning of Inventories • Cost of Inventory Valuation • Inventory Systems: Periodic Inventory System and Perpetual Inventory System • Valuation : Meaning & Importance • Methods of Stock Valuation as per AS-2 : FIFO AND Weighted Average Method • Computation of Valuation of Inventory as on	12	**Financial Accounting : A Managerial Perspective by Narayanswamy**	Google Meet, Google Class Power Point Presentations, Excel & Table Method of tea

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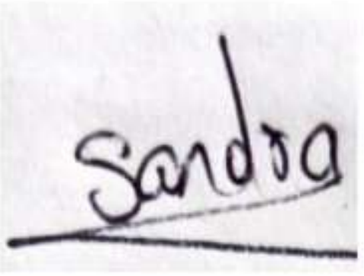

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	balance sheet date: If inventory is taken on a date after the balance sheet or before the balance sheet.			
	Module II : FINAL ACCOUNTS ➢ Capital and Revenue : Expenditure and Receipts • Expenditure : Capital and Revenue • Receipts: Capital, Revenue • Adjustments and Closing Entries	08	**Financial Accounting for Management by N Ramachandran**	Google Meet, Google Class Power Point Presentations, Excel & Table Method of teac
	Module IV : ACCOUNTING FOR HIRE PURCHASE • Meaning • Calculation of Interest • Accounting for Hire Purchase transactions by asset purchase method based on full cash price • Journal entries, ledger accounts and disclosure in balance sheet for	**15**	**Financial Accounting for Management by Ambrish Gupta**	Google Meet, Google Class Power Point Presentations, Excel & Table Method of teac

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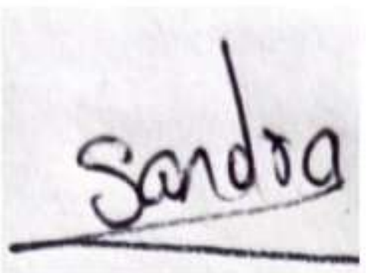

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	hirer and vendor (excluding default, repossession and calculation of cash price)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35

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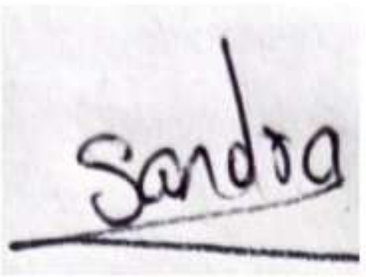

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHAKTI VILAS PURANDARE DEPARTMENT: COMMERCE CLASS: FYBCOM(I J K L)

SEMESTER: I SUBJECT: FINANCIAL ACCOUNTING MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to: prepare department trading and profit & loss account, calculation of stock by FIFO and weighted average method and calculation of hire purchase price and cash price.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
Capital revenue income and	Characteristics of Capital expenditure and income, Characteristics of Revenue expenditure and income. Questions on capital expenditure and income with reasons.	15	Manan prakashan	Google meet

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expenditure				
Inventory valuation	Concept of inventory valuation, format of FIFO and Weighted average method of inventory valuation. Q1 to Q6 on inventory valuation with both methods.	15	Manan prakashan	Google meet
Hire purchase system	Meaning of hire purchase, journal entry in the books of hire vendor and hire purchaser. Calculation of interest. Calculation of depreciation. Q1 to Q6 on hire purchase system in the books of both vendor and purchaser.	15	Manan Prakashan	Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHWANATH V. PAWAR DEPARTMENT: COMMERCE

CLASS: FYBCOM (M,N,O,P) SEMESTER: I MONTH: OCT - DEC ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: **TO ENHANCE THE ABILITIES OF LEARNER TO DEVELOP THE CONCEPT OF FINANCIAL MANAGEMENT AND ITS SIGNIFICANCE IN THE BUSINESS.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE -I (Accounting Standard Issued by ICAI	Chapter 1: AS-1 Disclosure of Accounting Policies A. Introduction, Meaning & Definition. B. Accounting policies C. Accounting Assumptions	03	Manan prakashan	Google Meet.
	Chapter 2: AS-2 Valuation of Inventories A. Introduction & Meaning. B. Determination of Value. C. Ascertainment of Cost. D. Measurement Cost Formulas.	02	Manan prakashan	Google Meet.

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& Inventory Valuation)	E. Main Features or Requirement.			
	Chapter 3: AS-9 Revenue Recognition A. Introduction & Meaning B. Revenue From Sale of Goods C. Revenue From Rendering Services D. Main Features or Requirement of AS-9	04	Manan prakashan	Google Meet.
MODULE -II (Final Accounts)	Chapter 6: Final Account of Manufacturing Concern A. Introduction, Meaning , Items & Adjustment in Manufacturing Account B. Journal Entries, Format of Manufacturing Account C. Questions solved on the same	11	Manan prakashan	Google Meet.
MODULE-III (Departmental Account)	Chapter 7: Departmental Accounting A. Meaning, Objectives & Basis of Allocation of Expenses B. Format of Departmental Trading & P&L, General P&L A/c, C. Inter-Departmental Transfers, At Cost, At Selling Price. D. Questions solved on the same	10	Manan prakashan	Google Meet.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Deepakkumar Gupta** DEPARTMENT: **Commerce**

CLASS: **FYBCOM Div E,F,G,H** SEMESTER: **I** MONTH: Aug **to Dec** ACADEMIC YEAR: **2020 - 21**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) To learn Concepts of stock valuation
3) Solve practical questions using concepts
4) To learn Concepts of hire purchase
5) Solve practical questions using concepts
6) To learn Concepts of Capital and Revenue Expenditure and Receipts
7) Solve practical questions using concepts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy and Financial	Unit 1 : Inventory valuation	10		Online platform – Google Meet PPT, Videos

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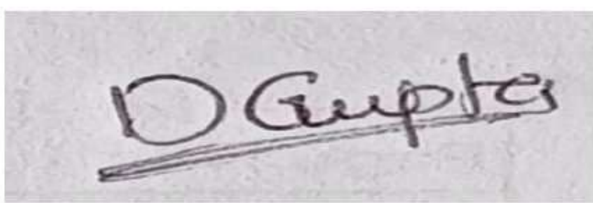

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management– I	1) Introduction and meaning of Inventory valuation 2) Concept of periodic and perpetual system of inventory 3) Concepts of First In First Out and weighted average method 4) Treatment of shortage, damaged , loss of goods 5) Practical problems			
	Unit 2 : Capital and Revenue : Expenditure and Receipts	06		Online platform – Google Meet PPT, Videos
	1) Introduction & Meaning of Capital and Revenue 2) Features of Capital Expenditure and Revenue : Expenditure 3) Features of Capital receipts and Revenue Receipts 4) Practical problems			
	Unit 3 : Accounting for Hire Purchase	16		Online platform – Google Meet PPT, Videos
	1) Introduction & Meaning of hire purchase 2) Calculation of interest 3) Calculation of instalment 4) Accounting for hire purchase transactions by assets method 5) Journal entries in the books of both parties 6) Preparation of Ledger accounts 7) Practical problems on hire purchase			

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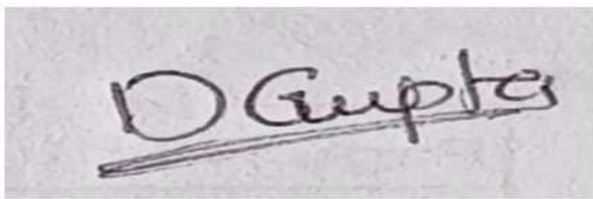

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32

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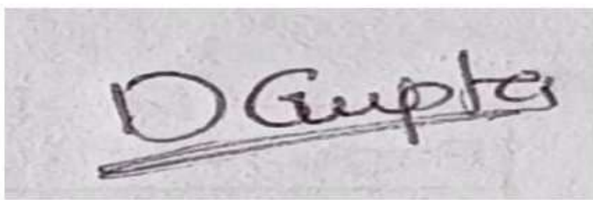

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TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: COMMERCE

CLASS: FY B.COM (E,F,G,H) SEMESTER: I MONTH: OCTOBER & NOVEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define different measures of central tendency like, mean, median, mode etc.
- Find median, quartiles and mode graphically using ogives and histogram.
- Find mean, combined and weighted mean, median, mode, quartiles, deciles, percentiles using required formula.
- Define different measures of dispersion like range, quartile deviation, variance etc.
- Find range, quartile deviation, mean deviation, variance, standard deviation and combined standard deviation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and Statistical Techniques-I Measures of central tendency and	➢ Definition of averages, its types, merits, demerits ➢ Finding mean, median, mode, quartiles, deciles, percentiles using numerical formula ➢ Finding mode, median, quartiles, graphically ➢ Measures of dispersion: types, merits. Demerits	1 3 1 1 3	Basic Statistics (S.L Agarwal)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD

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measures of dispersion (Unit 3)	➢ Finding range, quartile deviation, mean deviation, variance, standard deviation			TEACHING AIDS : Powerpoint presentation, pen tablet (writing device)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9

TEACHING PLAN (UNIT 5 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: COMMERCE

CLASS: FY B.COM (E,F,G,H) SEMESTER: I MONTH: DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define courses of action, states of nature, pay off matrix, regret table.
- Draw decision tree and find the optimum decision.
- Find the best decision under uncertainity and under risk using various criteria.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and Statistical Techniques-I	➢ Course of action, states of nature, pay off matrix, regret table. ➢ Best decision under uncertainty	1 1 1	Basic Statistics (S.L Agarwal)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD

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Decision theory (Unit 5)	➢ Best decision under risk (EMV & EOL) ➢ Decision tree and finding the optimum decision ➢ Drawing the pay off matrix	1 1		TEACHING AIDS : Powerpoint presentation, pen tablet (writing device) s

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE
CLASS: FYBCom(A,B,C,D) SEMESTER: I MONTH: OCTOBER-NOVEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:
The learners will be able to:

- Learn the concept of face value, market value, dividend, equity shares, bonus shares, preference shares.
- Solve the questions based on buying and selling of shares with and without brokerage.
- Define net asset value of mutual funds, entry/exit load and understand the concept of SIP.
- Solve simple problems on calculation of net income after considering entry load and exit load change in net asset value and SIP.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MATHEMATICAL & STATISTICAL TECHNIQUES	Shares and Mutual Funds	Unit1	▪ Concept of Shares, Face value, market value, dividend. Explanation of types of Shares. ▪ Sums based on Shares ▪ Concept of Mutual Funds and its types	2 2	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

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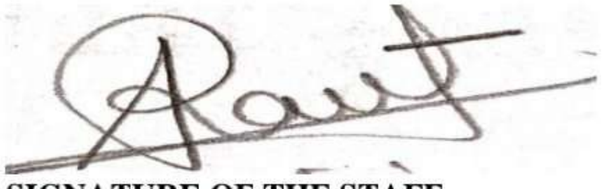

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			▪ Calculation of net income after considering entry load and exit load ▪ Change in net asset value and problems based on it. ▪ Concept of SIP and sums based on it and focus and how to apply this knowledge in day to day life.	2 2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

TEACHING PLAN (UNIT 4 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

CLASS: FYBCom(A,B,C,D) SEMESTER: I MONTH: OCTOBER-NOVEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:

The learners will be able to:

- Learn and understand terms like random experiment, sample space, different types of events, probability, conditional probability.
- Find the probability of the event under the given conditions.
- Understand the concept of random variable, its expectation and variance.

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PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MATHEMATICAL & STATISTICAL TECHNIQUES	Random Variable	Unit4	▪ Introduction to Random variable ▪ Probability distribution of a discrete random variable ▪ Calculation of expectation and variance of a random variable	1 1	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Manish pithadia DEPARTMENT: Commerce

CLASS: F.Y.B.COM SEMESTER: I St MONTH: October to December ACADEMIC YEAR: 2020-21

Division : E, F, G, H, I, J, K, L, M, N, O, P
LEARNING OBJECTIVE/S:
The learners will be able to : Application of mathematics and statistical tools in business and commercial application. Develops the student power of decision making with statistical tools. For future research activity basic concept and practical knowledge with mathematical and statistical tools. Some future realistic calculations with mathematics which is useful for their jobs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Manish pithadia DEPARTMENT: Commerce

CLASS: F.Y.B.COM SEMESTER: I St MONTH: October to December ACADEMIC YEAR: 2020-21

Division : E, F, G, H, I, J, K, L, M, N, O, P
LEARNING OBJECTIVE/S:
The learners will be able to : Application of mathematics and statistical tools in business and commercial application. Develops the student power of decision making with statistical tools. For future research activity basic concept and practical knowledge with mathematical and statistical tools. Some future realistic calculations with mathematics which is useful for their jobs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Mathematical and Statistical Techniques	Unit I: Share and Mutual fund :Introduction, types of shares, basic concept, dividend, bonus share, mutual fund basic concept, dividend, basic example on each, SIP scheme of mutual fund with example.	15	Business mathematics by V.K. Kpoor	Balck board
	Unit IV: probability distribution of discrete random variable and its expectation and variance.	5	Basic Statistics by B.L. Agarwal	Balck board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Praful Ghag DEPARTMENT: Commerce CLASS: F.Y.B.COM SEMESTER: I St

MONTH: October ACADEMIC YEAR: 2020-21

Division: E, F, G, H, I, J, K, L, M ,N, O, P
LEARNING OBJECTIVE/S:
The learners will be able to : Application of mathematics and statistical tools in business and commercial application. Develops the student power of decision making with statistical tools. For future research activity basic concept and practical knowledge with mathematical and statistical tools. Some future realistic calculations with mathematics which is useful for their jobs.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Unit II : Permutation and Combination, Linear programming problems: Factorial notation, fundamental principle of counting , Permutation and Combination with simple example with commercial application. Sketching of graphs of linear equation, formulation of L.P.P upto 3 variables. Solving L.P.P. graphically upto 2 variables.	15	Business mathematics by V.K. Kpoor	Balck board
	Unit IV: Elementary probability: Basic concept of probability, types of events, classical definition of probability, Addition theorem of probability, conditional probability, independent events, multiplication theorem of probability,	10	Basic Statistics by B.L. Agarwal	Balck board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Madhu sharma_ DEPARTMENT: Commerce CLASS: F.Y.B.Com (A,B,C,D) SEMESTER: I MONTH: October to December. ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to :

_understand the real life application of mathematics and statistics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit -2 : **Permutation, Combination and Linear**	• **Permutation and Combination:** Factorial Notation, Fundamental principle of counting, • Permutation as arrangement, Simple examples, combination as selection, Simple examples, Relation	15 lectures		Table top problem solving method & PPT, with Microsoft Word live solving method,

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Programming Problems:	between r n C and r n P Examples on commercial application of permutation and combination. • **Linear Programming Problem**: Sketching of graphs of (i) linear equation Ax + By + C = 0 (ii) linear inequalities. Mathematical Formulation of Linear Programming Problems upto 2 variables. Solution of Linear Programming Problems using graphical method up to two variables.		V.K.Kapoor Businesses mathematics	Strategic thanking using assignments, extra lectures

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: Khan Parveen Saba N. DEPARTMENT: COMMERCE

CLASS: FY B.COM(A, B, C, D, I, J, K, L, M, N, O, P) SEMESTER: I MONTH: OCTOBER & DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define different measures of central tendency like, mean, median, mode etc.
- Find median, quartiles and mode graphically using ogives and histogram.
- Find mean, combined and weighted mean, median, mode, quartiles, deciles, percentiles using required formula.
- Define different measures of dispersion like range, quartile deviation, variance etc.
- Find range, quartile deviation, mean deviation, variance, standard deviation and combined standard deviation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Mathematical and Statistical Techniques-I Measures of central tendency and measures of dispersion (Unit 3)	➢ Definition of averages, its types, merits, demerits ➢ Finding mean, median, mode, quartiles, deciles, percentiles using numerical formula ➢ Finding mode, median, quartiles, graphically ➢ Measures of dispersion: types, merits. Demerits ➢ Finding range, quartile deviation, mean deviation, variance, standard deviation	1 3 1 1 3	Basic Statistics (S.L Agarwal)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : PowerPoint presentations, table-top

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9

TEACHING PLAN (UNIT 5 PLAN)

NAME OF THE STAFF: Khan Parveen Saba N. DEPARTMENT: COMMERCE

CLASS: FY B.COM(A, B, C, D, I, J, K, L, M, N, O, P) SEMESTER: I MONTH: DECEMBER

ACADEMIC YEAR: 2020-21

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LEARNING OBJECTIVE/S:
The learners will be able to :

- Define courses of action, states of nature, pay off matrix, regret table.
- Draw decision tree and find the optimum decision.
- Find the best decision under uncertainity and under risk using various criteria.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and Statistical Techniques-I Decision theory (Unit 5)	➢ Course of action, states of nature, pay off matrix, regret table. ➢ Best decision under uncertainty ➢ Best decision under risk (EMV & EOL) ➢ Decision tree and finding the optimum decision ➢ Drawing the pay off matrix	1 1 1 1 1	Basic Statistics (S.L Agarwal)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : PowerPoint presentations, table-top

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Smita Sushant Khaire_____

DEPARTMENT: Commerce CLASS: FYBCOM Div- A to L SEMESTER: __I___MONTH: OCT-DEC

ACADEMIC YEAR: _2020-2021

LEARNING OBJECTIVE/S: The learners will be able to understand and acquire knowledge about Environment.
It will be helps to develop an attitude of concern towards Environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environmental studies	Unit1: Environment and Ecosystem- Definition, scope, its components Ecosystem-Definition, components, and types, functioning and structure, Food chain, Food web, Ecological pyramid; Man, and environment relationship, Importance, and scope of environmental studies	7	Environmental science by Santra S.C	PowerPoint presentation
	Unit 3: Population and Immerging issues of Development: Population explosion in the world and India and arising concerns- Demographic Transition Theory- pattern of population growth and associated problems, Measures, Human population and environment, environment, and Health, HDI, WHI	7	Essential of Ecology and Environment by Odum. E.P.	PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___7_____

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TEACHING PLAN (UNITPLAN)

NAMEOFTHESTAFF: SNEHAL S. JADHAVDEPARTMENT: COMMERCE CLASS:F.Y.B.COM (Div I to P div)

SEMESTER:1st

MONTH:JULY OCTOBER

ACADEMICYEAR:2020 - 2021.

LEARNINGOBJECTIVE/S:

The learners will be able to create an environmental awareness. To create an insight into various environmental issues at various levels and environmental movements towards making Environmental Sustainable.

PAPER, UNIT, TITLE	SUBTOPICS	NOOF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLSUSED
Paper1 Environmental Studies	UNITIINATURAL RESOURCESAND SUSTAINABLE DEVELOPMENT. 1)Meaning&Definition,Classificationandtypes ofResources.2)Factors	07	1)Singh,Savindra,2011:EnvironmentalGeography,PrayagPustakBhavan,Allahabad,India. 2)OdumE.P.(1971):FundamentalsofEcology,W.B.Saunders, Philadelphia. 3)BharuchaE.,ATextBookofEnvironmentalStudies,Universities	Power Point Presentation

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	Influencing resource utilisation,3)Resource conservation Meaning&Methods Conventional&Non Conventionalenergyresourc es.4)Problems		Press,Hyderabad.	

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	associated with managementofwater,forestandenegyresources. 5) Resourcesutilisationandsustainabledevelopment.			

	UNITIV 1)Conceptifurbanisation problemsofmigrationandurbanenvironment changinglanduse,crowdingandstress,onurban resources,degradationofair,water,lossofsoilcoverimpactonbiodiversity,urbanheatisland,Emergingsmartcitiesandsafecitiesin India sustainablecities.	07	1)GautamAlka,2009:EnvironmentalGeography,ShardaPustakBhavan,Allahabad,India. 2)DetwylerT.R.,1971:Man'sImpactonEnvironment,McGraw-Hill,NewYork	Power Point Presentation

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TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:__14___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti Pramod Patil DEPARTMENT: Commerce CLASS: F.Y.B.Com (Div.:A,B,C,D,E,F,G,H,M,N,O,P)

SEMESTER: I MONTH: October to December ACADEMIC YEAR: 2020-2021 Subject: Environmental Studies

LEARNING OBJECTIVES:
The learners will be able to understand need to study this subject. It helps them to understand current environmental problems in the society and their responsibility towards the environment.

UNIT 1	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environment and Ecosystem	1. Environment: Meaning, definition, scope and its components	3	1.Environmental studies: P.G. Shinde 2.Fundamentals of Ecology: Odum E.P.	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Powerpoint presentation
	2. concept of an ecosystem : definition, Characteristics, components and types, functioning and structure	3		
	3. Food Chain and Food Web, Ecological Pyramids	1		
	4. Man and environment relationship , Importance and scope of Environmental Studies	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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LEARNING OBJECTIVES:

The learners will be able to understand about different types resources and problems caused by improper utilization of natural resources. They will also understand the concept of sustainability and its need to handle current environmental problems.

UNIT 2	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Natural Resources and Sustainable Development	1. Meaning, definitions, classification and types of resources	1	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Factors influencing resource; Resource conservation-meaning and methods	2		
	3.conventional and non-conventional resources	2		
	4. Problems associated with and management of water, forest and energy resources	2		
	5. resource utilization and sustainable development	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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LEARNING OBJECTIVES:
The learners will be able to understand about environmental and social problems caused by increasing population and its control measures. They will able to understand concepts of HDI &WHI

UNIT 3	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Populations and Emerging Issues of Development	1. Population explosion in the world and in India and arising concerns, Demographic Transition Theory	2	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Pattern of population growth in the world and in India and associated problems	1		
	3. Measures taken to control population growth in India; Human population and environment	2		
	4. Environment and Human Health	1		
	5. Human Development Index, The World Happiness Index	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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LEARNING OBJECTIVES:
The learners will be able to understand about concepts of urbanization and associated problems. They will learn about smart and sustainable cities.

UNIT 4	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Urbanisation and Environment	1. Concept of Urbanisation	1	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Problems of migration and urban environment- changing landuse, crowding and stress on urban resources	2		
	3. Degradation of air and water, loss of soil cover, impact on biodiversity, Urban heat islands	2		
	4. Emerging Smart Cities and safe cities in India - Sustainable Cities	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Padmaja Nilesh Joshi DEPARTMENT: Commerce CLASS: FYBCOM (Div. I to P)SEMESTER: I MONTH:October to Dec.

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to

Preparing resumes to attending interviews, convening meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

To make students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
1) Theory of Communication	1) Concept of Communication- Models of Communication -Meaning, Definition, Process Need, Feedback Emergence of communication as a key concept in the Corporate and Global World Impact of technological Enabled communication Types: Internet, Blogs, E- mail, Moodle, Social media (Facebook, Twitter and WhatsApp advantages and disadvantages) Communication at Workplace-	15	Manan Publication, Sheth Publication, Vipul Publication	Google meet. PPT	

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	2) Channels and Objectives of Communication: Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine 3) Methods and Modes of Communication: Methods: Verbal and Nonverbal (including Visual), Business Etiquette Introduction to Business Ethics: Ethics at workplace, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility 1) Problems in Communication /Barriers to Communication: Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers 2) Listening: Importance of Listening Skills, obstacles to listening, Cultivating good Listening Skills				

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3) Business Correspondence	1)Theory of Business Letter Writing: Parts, Structure, Layouts—Full Block, Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, letter of recommendation, Job Application Letter and Resume, Letter of Appointment (to be discussed in class) Letter of Resignation, Letter of acceptance of job offer, letter of Appreciation.	15	Manan Publication, Sheth Publication, Vipul Publication	Google meet PPT	
4) Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities □ Listening Comprehension □ Remedial Teaching □ Speaking Skills: Presenting a News Item, Dialogue and Speeches □ Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. □ Reading Comprehension: Analysis of texts from the fields of Commerce and Management	15	Manan Publication, Sheth Publication, Vipul Publication	PPT	

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Archana Devendra Joshi DEPARTMENT: Commerce CLASS: FYBCOM SEMESTER: I **MONTH**: AUG TO DEC

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to

Preparing resumes to attending interviews, convenig meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

Tomake students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
1) Theory of Communication	1) Concept of Communication- Meaning, Definition, Process, Need, Feedback. Emergence of communication as akey concept in the Corporate and Global World Impact of technological advancements on communication 2) Channels and Objectives of Communication: Channels: Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine Objectives of Communication: Information, Advice, Order and Instruction, Persuasion,	15	Manan Publication, Sheth Publication, Vipul Publication	GOOGLE MEET, PPT AND MANAN PUBLICATION ONLINE SHARED	

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	Motivation, Education, Warning, and Boosting the Moral of Employees 3) Methods and Modes of Communication: Methods: Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette Modes: Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing				
3) Business Correspondence	1)Theory of Business Letter Writing: Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation [Letter of Appointment, Promotion and Termination, Letter of Recommendation (to be taught but not to be tested in the examination)]	15	Manan Publication, Sheth Publication, Vipul Publication	PPT, GOOGLE MEET	
4) Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities □ Listening Comprehension □ Remedial Teaching □ Speaking Skills: Presenting a News Item, Dialogue and Speeches □ Paragraph	15	Manan Publication, Sheth Publication, Vipul Publication	PPT, GOOGLE MEET	

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	Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. □ Reading Comprehension: Analysis of texts from the fields of Commerce and Management				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 38

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Suborna S. Banerjee DEPARTMENT: Commerce CLASS: FYBCOM (Div. F to J) SEMESTER: I MONTH: AUGUST TO DECEMBER 2022 . ACADEMIC YEAR: 2022

LEARNING OBJECTIVE/S:

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to

Preparing resumes to attending interviews, convenig meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

Tomake students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
1) Theory of Communication	1) Concept of Communication- Models of Communication - Linear/ Interactive/ Transactional / Shanon and Weavor (to be only discussed in class) Meaning, Definition, Process Need, Feedback Emergence of communication as a key concept in the Corporate and Global World Impact of technological Enabled communication Types: Internet, Blogs, E- mail, Moodle, Social	15	Manan Publication, Sheth Publication, Vipul Publication	PPT and Sketches	

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	media (Facebook, Twitter and WhatsApp advantages and disadvantages) Communication at Workplace- 2) Channels and Objectives of Communication: Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine 3) Methods and Modes of Communication: Methods: Verbal and Nonverbal (including Visual), Business Etiquette Introduction to Business Ethics: Ethics at workplace, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility 1) Problems in Communication /Barriers to Communication: Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers 2) Listening: Importance of Listening Skills, obstacles to listening, Cultivating good Listening Skills				

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3) Business Correspondence	1)Theory of Business Letter Writing: Parts, Structure, Layouts—Full Block, Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, letter of recommendation, Job Application Letter and Resume, Letter of Appointment (to be discussed in class) Letter of Resignation, Letter of acceptance of job offer, letter of Appreciation.	15	Manan Publication, Sheth Publication, Vipul Publication	PPT and Sketches drawn	
4) Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities □ Listening Comprehension □ Remedial Teaching □ Speaking Skills: Presenting a News Item, Dialogue and Speeches □ Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. □ Reading Comprehension: Analysis of texts from the fields of Commerce and Management	15	Manan Publication, Sheth Publication, Vipul Publication	PPT and Sketches drawn	

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH PAWAR **DEPARTMENT: COMMERCE** **CLASS: FYBCOM (Div – A,B,C,D.) ENGLISH**

SEMESTER: I **MONTH: OCTOBER** **ACADEMIC YEAR:2020-2021**

LEARNING OBJECTIVE/S:

The learners will be able to :

1) To introduce key concepts of communication
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS COMMUNICATION-I	Problems in Communication / Barriers to Communication: Physical/Semantic or Language/Socio-Cultural/Psychological Barriers. Ways to overcome these barriers.	08	PPT	Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH PAWAR **DEPARTMENT: COMMERCE** **CLASS: FYBCOM (Div – A,B,C,D.) ENGLISH**

SEMESTER: I **MONTH: NOVEMBER** **ACADEMIC YEAR: 2020-2021**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS COMMUNICATION-I	Listening: Importance of Listening Skills Cultivating Good Listening Skills	3	PPT	Online Lectures on Google Meet
	Introduction to Business Ethics : Concept and interpretation, Importance of Business Ethics, Personal Integrity, Business Ethics & Media, Computer Ethics, Corporate Social Responsibility.	4	PPT	Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH PAWAR **DEPARTMENT: COMMERCE** **CLASS: FYBCOM (Div – A,B,C,D.) ENGLISH**

SEMESTER:I **MONTH: DECEMBER** **CADEMIC YEAR: 2020-2021**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS COMMUNICATION-I	Language and writing skills: Using appropriate devices , cohesion and coherence , self-editing, interpretation of technical data , report. Activities: i. Listening comprehension ii. Remedial Teaching iii. Speaking skills iv. Paragraph writing Reading comprehension	15	PPT	Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof.Sivapriya Achari. DEPARTMENT: Commerce CLASS: FYBCOM (Div. I to P SEMESTER: I MONTH: July to Dec.

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to

Preparing resumes to attending interviews, convenig meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

Tomake students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
1) Theory of Communication	1) Concept of Communication- Models of Communication -Meaning, Definition, Process Need, Feedback Emergence of communication as a key concept in the Corporate and Global World Impact of technological Enabled communication Types: Internet, Blogs, E- mail, Moodle, Social media (Facebook, Twitter and WhatsApp advantages and disadvantages) Communication at Workplace-	15	Manan Publication, Sheth Publication, Vipul Publication	Online ppt	

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	2) Channels and Objectives of Communication: Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine 3) Methods and Modes of Communication: Methods: Verbal and Nonverbal (including Visual), Business Etiquette Introduction to Business Ethics: Ethics at workplace, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility 1) Problems in Communication /Barriers to Communication: Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers 2) Listening: Importance of Listening Skills, obstacles to listening, Cultivating good Listening Skills				

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3) Business Correspondence	1)Theory of Business Letter Writing: Parts, Structure, Layouts—Full Block, Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, letter of recommendation, Job Application Letter and Resume, Letter of Appointment (to be discussed in class) Letter of Resignation, Letter of acceptance of job offer, letter of Appreciation.	15	Manan Publication, Sheth Publication, Vipul Publication	Online ppt	
4) Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities □ Listening Comprehension □ Remedial Teaching □ Speaking Skills: Presenting a News Item, Dialogue and Speeches □ Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. □ Reading Comprehension: Analysis of texts from the fields of Commerce and Management	15	Manan Publication, Sheth Publication, Vipul Publication	Online	

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNITHA CHANDRASHEKHAR NAIR DEPARTMENT: COM MERCE

CLASS F.Y.B.COM - (div- E,F,G,H) SEMESTER: I MONTH: August - December ACADEMIC YEAR: 2020 - 2021

LEARNING OBJECTIVE/S: To make the students learn micro-economics and its application to business .
The learners will be able to :to understand the decision making process of business .

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –I Unit III & IV.	**Module III – Supply and Production Decision**	10		
	1.Theory of Production. 2. Short-run and Long-run analysis of Production 3. Economies and Diseconomies of scale.		**Advanced Economic Theory Of Micro economics (H. L. Ahuja)**	1. Power Point Presentation 2 Quiz method 3.Discussion method
	Module IV- Cost of production	10		
	1 . Cost Concepts 2. Cost- Output Relationship 3. Break-even Analysis.		**Advanced Economic Theory Of Micro economics (H. L. Ahuja)**	1.Power Point Presentati 2 Quiz method 3.Discussion method
	.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. LEJESH KELOTH** DEPARTMENT**: COMMERCE**

CLASS: **F.Y.BCOM (I,J,K,L)** SEMESTER: **I** MONTH: **AUG TO DECEMBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S : To understand the working of a business unit in the economy.

The learners will be able to : will be able to understand the basic principles of market economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics – Paper -I	**Module 3 : Supply and Production Decision** a) Theory of production b) Short run and long run analysis of production. C) Economics and diseconomies of scale.	10	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication, Himalaya Publication.	Black Board Method
Business Economics – Paper -I	**Module 4: cost of production** a) Cost concept. b) Cost output relationship. c) Break even analysis.	10	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication,	Black Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: CHETAN PRAKASH VARMA DEPARTMENT: COMMERCE CLASS: FYBCOM

SEMESTER: I (E,F,G,H) MONTH: SEPT- DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

To make student understand the concepts of business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics -I	**Introduction** **Scope and Importance of Business Economics** - basic tools- Opportunity Cost principle- Incremental and Marginal Concepts. Basic economic relations - functional relations: equations- Total, Average and Marginal relations- use of Marginal analysis in decision making.	5	*Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases (S. Chand & Sons, N. Delhi, 2000)* • *Salvatore, D.: Managerial Economics in a global economy (Thomson South Western Singapore, 2001)*	Online Mode, PPT Slide Method, Youtube Links, Kahoot. Lecture Method

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	The basics of market demand, market supply and equilibrium price- shifts in the demand and supply curves and equilibrium	3	• *Frank Robert.H ,Bernanke. Ben S., Principles of Economics (Tata McGraw Hill (ed.3)*	Demonstration Method Questions-Answer method Discussion method
	Demand Analysis Demand Function - nature of demand curve under different markets Meaning, significance, types and measurement of elasticity of demand (Price, income cross and promotional)- relationship between elasticity of demand and revenue concepts	6	• *Gregory Mankiw., Principles of Economics, Thomson South western (2002 reprint)*	
	Demand estimation and forecasting: Meaning and significance - methods of demand estimation : survey and statistical methods (numerical illustrations on trend analysis and simple linear regression)	4	• *Samuelson &Nordhas.: Economics (Tata McGraw Hills, New Delhi, 2002*	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLORITA PEREIRA DEPARTMENT: COM MERCE

CLASS F.Y.B.COM DIV : M, N, O ,P SEMESTER: I MONTH: August - December ACADEMIC YEAR: 2020 - 2021

LEARNING OBJECTIVE/S: To make the students learn micro-economics and its application to business .
The learners will be able to :to understand the decision making process of business .

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –I Unit III & IV.	**Module III – Supply and Production Decision**	10		
	1.Theory of Production. 2. Short-run and Long-run analysis of Production 3. Economies and Diseconomies of scale.		**Advanced Economic Theory Of Micro economics (H. L. Ahuja)**	1. Power Point Presentation 2 Quiz method 3.Discussion method
	Module IV- Cost of production	10		
	1 . Cost Concepts 2. Cost- Output Relationship 3. Break-even Analysis.		**Advanced Economic Theory Of Micro economics (H. L. Ahuja)**	1.Power Point Presentati 2 Quiz method 3.Discussion method
	.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHAKHA SANE. DEPARTMENT: COMMERCE

CLASS: FYBCOM SEMESTER: I (M,N,O,P) MONTH: SEPT-DECEMBE ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

To make student understand the concepts of business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics -I	**Introduction** **Scope and Importance of Business Economics** - basic tools- Opportunity Cost principle- Incremental and Marginal Concepts. Basic economic relations - functional relations: equations- Total, Average and Marginal relations- use of Marginal analysis in decision making.	5	*Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases (S. Chand & Sons, N. Delhi, 2000)* • *Salvatore, D.: Managerial Economics in a global economy (Thomson South Western Singapore, 2001)*	Online Mode, PPT Slide Method,

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	The basics of market demand, market supply and equilibrium price- shifts in the demand and supply curves and equilibrium	3	• *Frank Robert.H ,Bernanke. Ben S., Principles of Economics (Tata McGraw Hill (ed.3)*	Demonstration Method Questions-Answer method
	Demand Analysis Demand Function - nature of demand curve under different markets Meaning, significance, types and measurement of elasticity of demand (Price, income cross and promotional)- relationship between elasticity of demand and revenue concepts	6		
	Demand estimation and forecasting: Meaning and significance - methods of demand estimation : survey and statistical methods (numerical illustrations on trend analysis and simple linear regression)	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___18_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Veronika B Barla **DEPARTMENT**: Commerce

CLASS: FY.Bcom **Division A, B, C, and D SEMESTER**: I

MONTH: _____ **SUBJECT**: Business Economics **ACADEMIC YEAR**: 2020-21

LEARNING OBJECTIVE/S: 1. Help to understand business economics.
2. Helps to understand supply and production decisions

The learners will be able to: 1. Introduction to business economics, market demand, and supply

2. Theory of production, short and long-run production function, economies and diseconomies of scale, break-even analysis,

Paper, Unit, Title	Subtopics	Number of lectures allotted	References	Teaching Method /ICT tools used
Business Economics Module I Introduction to business economics	Scope and Importance of business economics	1	Indian economy Mishra and Puri, Morden economics , H. L. Ahuja	Online method
	Basic tools of decision making, opportunity cost, incremental and marginal cost	3	"	"
	Basic economic relation – functional relation, equations, average and marginal relation,	2	"	"
	Use of marginalism in decision making	1	"	"

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	Market equilibrium, market demand, market supply.	2	"	"
	Shifts in demand and supply curve and effect on equilibrium	2	"	"
Unit III Supply and production decisions	Production function, meaning types	1	"	"
	Short-run production function and law of variable proportion	2	"	"
	Long-run production function and law of returns to scale	2	"	"
	Isoquant: meaning, types	2	"	"
	Rigid lines and least-cost combination of inputs, expansion of the path	2	"	"
	Economies and diseconomies of scale	2	"	"
Unit IV Cost of production	Break-even analysis	3	"	"

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT I and III: 24Hrs

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Bristi Gourgopal Biswas DEPARTMENT: Commerce CLASS: F.Y.BOM (Division:A,B,C,D,I,J,K,L) SEMESTER: I (Subject : Business Economics I)

MONTH: AUGUST-DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To understand the application of microeconomics at corporate level .

The learners will be able to : observe microeconomics in the real world and to understand and make business decisions.

Module I **Demand Analysis**	INTRODUCTION: **Scope and Importance of Business Economics** - basic tools- Opportunity Cost principle- Incremental and Marginal Concepts. Basic economic relations - functional relations: equations- Total, Average and Marginal relations- use of Marginal analysis in decision making	10		Online Mode, PPT Slide Method,

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MODULE II	**Demand Analysis Demand Function:** Meaning of demand,law of demand,determinants of demand, demand function, price, income and substitution effects, nature of demand curve under different markets. Meaning of elasticity, price elasticity of demand , income elasticity of demand , cross elasticity of demand,promotional elasticity of demand, importance of elasticity of demand , relationship between price elasticity of demand and revenue concept. **Demand estimation and forecasting:** Significance of demand forecasting ,types of demand forecasting, steps in demand forecasting ,methods of demand forecasting.	10		Online Mode, PPT Slide Method,
Module IV **BREAK EVEN POINT**	**BREAK EVEN POINT** Concept of break even point ,variables influencing the break even point ,business application of break even analysis ,limitations of break even analysis.	10		Online Mode, PPT Slide Method,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE

DEPA

RTMENT: B.COM

CLAS

S: FYB.COM – A, B, C, D MONTH: October- December ACADEMIC

YEAR: 2020-2021 SEMESTER: 1st SUBJECT: COMMERCE I

LEARNING OBJECTIVE/S:
The learners will be able to:

1. To introduce the learners to the Inter-relationship between Business and Environment.
2. To acquaint students with a knowledge of the international trading environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 2: BUSINESS ENVIRONMENT	• Introduction : Concept and Importance of business environment, Inter – relationship between Business and Environmental.	3	Business Environment – Cherunilam Essentials of Business Environment – Aswathappa	1. Lecture and discussion. 2. Flow charts. 3. Online teaching learning tools (google meet, google form Google classroom, PPTs)
	• Constituents of Business Environment : Internal and external Environment, Educational Environment and it's impact. .	4		
	• International Environment – Current Trends in the			

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	World, International Trading Environment - WTO and Trading Blocs and their impact on Indian Business	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 × 4 div =14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: FYB.COM – A, B, C, D SEMESTER:

1st MONTH: October-December ACADEMIC YEAR: 2020-2021 SUBJECT: COMMERCE I

LEARNING OBJECTIVE/S:
The learners will be able to:

1. To identify and demonstrate the process for the Business plan and it's statutory requirements.
2. To make students able to prepare project reports, and Feasibility Study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	• Introduction : Business Planning Process; Concept and Importance of Project Planning; Project Report; Feasibility Study Types and it's Importance.	4	Strategic management - Bhutani	

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MODULE 3: PROJECT PLANNING	• Business Unit Promotion: Concept and Stages of Business Unit Promotion, Location -Factors determining location and Role of Government in Promotion.	4	Business Organisation Management - Maheshwari	4. Lecture and discussion. 5. Flow charts. 6. Online teaching learning tools (google meet, google form Google classroom, PPTs)
	• Statutory Requirements in Promoting Business Unit : Licensing and Registration Procedure, Filling returns and other documents, other important legal provision.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 × 4 div = 48

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Nilambari Yogesh Shidhaye Department: - Commerce
Class: - F.Y.B.COM (I, J, K, L) SEM: - I MONTH-: NOVE-JAN YEAR: -2020/21

LEARNINIG OBJECTIVES: The learner will be able to learn through online teaching, concept of business, impact of LPG on economic growth of the nation, and new trends in the business as well as Entrepreneurship concept, their types, institutions or training centre in India. Women entrepreneur their problems and promotions.

PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED
COMMERCE - II	MODULE-I **Business: -** INTRODUCTION: - Concept, Functions, Scope and significance of business, Traditional and modern concept of business. Objectives of Business: - Steps in setting business objectives, classification of business objectives, New Trends in Business: - Impact of Liberalization, Privatization, and globalization, strategy alternatives in the changing scenario, Restructuring and turnaround strategies. MODULE: - IV Entrepreneurship Introduction: - Concept and importance of entrepreneurship, growth of entrepreneurship. The Entrepreneurs: - Types, competencies, training and development centers in India, Incentives to entrepreneurs in India. Women Entrepreneurs: -	12 Lectures 12 Lectures		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBCOM (A,B,C,D,E,F) SEM : I MONTH : Nov-Dec YEAR : 2020-21

LEARNING OBJECTIVE/S : be able to learn basic concept of business. He will also be able to learn various business objectives and various strategies of businesses.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE I	INTRODUCTION : Concept, functions, scope, significance	03	Introduction to commerce, Vikram , Amit, Atlantic pub	Google Meet
UNIT I BUSINESS	OBJECTIVES OF BUSINESS : Steps, classification, reconciliation of economic & social objectives	03	Introduction to commerce, Vikram , Amit, Atlantic pub	Google Meet
	NEW TRENDS IN BUSINESS : Liberalisation, privatization, globalisation, strategy alternatives, restructuring strategies, turnaround strategies	06	Introduction to commerce, Vikram , Amit, Atlantic pub	Google Meet

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBCOM (A,B,C,D) SEM : I MONTH : December YEAR : 2020-21

LEARNING OBJECTIVE/S : Learner will be able to learn concept of entrepreneurship and the scenario of entrepreneurship in India.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE I **UNIT IV**	INTRODUCTION : Concept, importance, factors – growth of entrepreneurship, intrapreneurs	03	Entrepreneurship, Hisrich, Robert D, Mc grow Hill	Google Meet
ENTREPRENEURSHIP	ENTREPRENEURSHIP : Types, competencies, training & development centres, incentives to entrepreneurs	03	Entrepreneurship, Hisrich, Robert D, Mc grow Hill	Google Meet
	WOMEN ENTREPRENEURS : Problems, promotion	02	Entrepreneurship, Hisrich, Robert D, Mc grow Hill	Google Meet

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBCOM (A,B,C,D,E,F) SEM : I MONTH : Nov-Dec YEAR : 2020-21

LEARNING OBJECTIVE/S : be able to learn basic concept of business. He will also be able to learn various business objectives and various strategies of businesses.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE I UNIT I BUSINESS	INTRODUCTION : Concept, functions, scope, significance	03	Introduction to commerce, Vikram , Amit, Atlantic pub	Google Meet
	OBJECTIVES OF BUSINESS : Steps, classification, reconciliation of economic & social objectives	03	Introduction to commerce, Vikram , Amit, Atlantic pub	Google Meet
	NEW TRENDS IN BUSINESS : Liberalisation, privatization, globalisation, strategy alternatives, restructuring strategies, turnaround strategies	06	Introduction to commerce, Vikram , Amit, Atlantic pub	Google Meet

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBCOM (A,B,C,D) SEM : I MONTH : December YEAR : 2020-21

LEARNING OBJECTIVE/S : Learner will be able to learn concept of entrepreneurship and the scenario of entrepreneurship in India.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE I UNIT IV	INTRODUCTION : Concept, importance, factors – growth of entrepreneurship, intrapreneurs	03	Entrepreneurship, Hisrich, Robert D, Mc grow Hill	Google Meet
ENTREPRENEURSHIP	ENTREPRENEURSHIP : Types, competencies, training & development centres, incentives to entrepreneurs	03	Entrepreneurship, Hisrich, Robert D, Mc grow Hill	Google Meet
	WOMEN ENTREPRENEURS : Problems, promotion	02	Entrepreneurship, Hisrich, Robert D, Mc grow Hill	Google Meet

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 08

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBCOM (A,B,C,D,E,F) SEM : I MONTH : Nov-Dec YEAR : 2020-21

LEARNING OBJECTIVE/S : be able to learn basic concept of business. He will also be able to learn various business objectives and various strategies of businesses.

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PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE I	INTRODUCTION : Concept, functions, scope, significance	03	Introduction to commerce, Vikram , Amit, Atlantic pub	Google Meet
UNIT I	OBJECTIVES OF BUSINESS : Steps, classification, reconciliation of economic & social objectives	03	Introduction to commerce, Vikram , Amit, Atlantic pub	Google Meet
BUSINESS	NEW TRENDS IN BUSINESS : Liberalisation, privatization, globalisation, strategy alternatives, restructuring strategies, turnaround strategies	06	Introduction to commerce, Vikram , Amit, Atlantic pub	Google Meet

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBCOM (A,B,C,D) SEM : I MONTH : December YEAR : 2020-21

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LEARNING OBJECTIVE/S : Learner will be able to learn concept of entrepreneurship and the scenario of entrepreneurship in India.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE I **UNIT IV** **ENTREPRENEURSHIP**	INTRODUCTION : Concept, importance, factors – growth of entrepreneurship, intrapreneurs	03	Entrepreneurship, Hisrich, Robert D, Mc grow Hill	Google Meet
	ENTREPRENEURSHIP : Types, competencies, training & development centres, incentives to entrepreneurs	03	Entrepreneurship, Hisrich, Robert D, Mc grow Hill	Google Meet
	WOMEN ENTREPRENEURS : Problems, promotion	02	Entrepreneurship, Hisrich, Robert D, Mc grow Hill	Google Meet

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAVITA VILAS PURANDARE DEPARTMENT: COMMERCE CLASS: FYBCOM (G H I J K L)

SEMESTER: I SUBJECT: COMMERCE I MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Students will understand the basic concepts of business, to develop the knowledge and understanding of business. To make students aware of current trends in service sector.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 – Business environment	• Introduction: concept and importance of business environment. • Interrelationship between business and environment. • Constitutions of business environment.	12		Google meet
UNIT 3 – Project planning	• Introduction: business planning process, concepts and importance of project planning, project report. • Business unit promotion: concept, stages. • Statutory requirements in promoting business unit: licensing and registration procedure, filling returns and other documents and important legal provisions.	12		Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Seema Sihana DEPARTMENT: Commerce CLASS: FYBCOM E,F,G,H SEMESTER: I MONTH: November to January 2021

ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Familiarize the commerce students with basic concepts of business and develop knowledge and understanding of business in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE PAPER I	Module I : Business : Introduction, Objectives, New Trends	12	Peter Drucker – Newyork Harper Business. Rashmi Bansal	Google meet, PPT, EXCEL SHEETS, WORD DOCUMENTS
	Module IV – Entrepreneurship: Introduction, Entrepreneurs, Women Entrepreneurs.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____CHETAN PRAKASH VARMA_____ DEPARTMENT: ___COMMERCE_____CLASS: ____FYBCOM_____

SEMESTER: _____I_____ MONTH: __October- DECEMBER_____ ACADEMIC YEAR: ____2020-21_____

LEARNING OBJECTIVE/S: Desired outcome: The students will overcome fear & inculcate within them the sense of adventure , sportsmanship , espirit-d-corp and develop confidence , courage , determination, diligence and quest for excellence.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Adventure Training • Any Two such as – Obstacle course, Slithering, Trekking, Cycling, Rock Climbing, Para Sailing, Sailing, Scuba Diving etc	3	NCC HAND BOOK	ONLINE MODE GOOGLE MEET
	Environment Awareness and Conservation Desired outcome: The student will be aware of the conservation of natural resources and protection of environment.	4		YOUTUBE LINK
	• Natural Resources – Conservation and Management • Water Conservation and Rainwater Harvesting	3		DEFENCE WEBSITES

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Seema Sihana DEPARTMENT: Commerce CLASS: FYBCOM A,B,C,D SEMESTER: I MONTH: November to January 2021

ACADEMIC YEAR:2020-21

LEARNING OBJECTIVES:
The learners will be able to: Familiarize the commerce students about social awareness in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE I	Module II & III : Concept of Disparity 1 & 2 : Social Stratification, Gender Disparities, Disparities and Disability, Status of women in India, their problems, solutions, Handicapped Persons and services available to them, Inequalities and Caste System, Intergroup conflicts.	20	Social Problems in India Ram Ahuja Jaya Sagade Women human rights in India	Google meet, PPT, EXCEL SHEETS, WORD DOCUMENTS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. RASHMI SAWANT

DEPARTMENT: COMMERCE

CLASS: FYBCOM

SUBJECT: NSS FOUNDATION COURSE SEMESTER: I

MONTH: AUGUST TO DECEMBER

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to :

1. Gain knowledge about social issues in India. They will understand different features of India as a society.
2. learn about Indian Constitution, concept of social justice and great social reformers.
3. his

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit - 3	**UNIT - I** • **Concept of Society, Community (Steps involved in evaluation of society)** • **Features of Indian Society** • **Communities in India** **UNIT - II** • **Basic Social Issues in India**	10	1. https://books.google.com/books/about/Theories_Methods_in_Rural_Community_Stud.	Online lectures through Google Meet / PPT and youtube videos used

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Social Issues in India	• **Family System, Division of labour, Cast System in India, Gender Issues, Regional Imbalance**		html?id=5PogBQAAQBAJ 2. http://www.thebetterindia.com/140/national-service-service-scheme-nss/ 3. https://books.google.com/books/about/The_Constitution_of_India.html?id=Y4pADwAAQBAJ	
Unit - 4 **Indian Constitution and Social Justice**	**UNIT - I** • **Indian Constitution** • **Preamble** • **Structure** • **Features** • **Fundamental Rights & Duties** **UNIT - II** • **Social Justice – the Concept and its features** • **Contribution for Social Justice – Mahatma Jyotiba Phule, Dr. Babasaheb Ambedkar, LShahu Maharaj.**	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA VAIBHAV TAMBE DEPARTMENT: Commerce CLASS: F.Y.Bcom E, F,G,H
SUBJECT: FOUNDATION COURSE I SEMESTER: I MONTH: October-December ACADEMIC YEAR: 2020-2021

A teaching plan is a document that outlines the structure and details of a single session. A good teaching plan is a comprehensive write-up of the step-by-step teaching methods, the estimated duration of each segment of teaching, and the materials and resources needed for the session.

LEARNING OBJECTIVE/S:

By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

(For a detailed description of each component see Appendix A).

APPENDIX {A}

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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UNIT1 Concept of Disparity 1	a] Concept of disparity as arising out of stratification and inequalities.	03	Book by Manan publications/Internet	Online
	b]gender disparities with special references to violence against women.	02	Book by Manan publications/Internet	Online
	c] Female Foeticide & Declining gender ratio	02	Book by Manan publications/Internet	Online
	d] inequalities faced by people with disabilities.	02	Book by Manan publications/Internet	Online
	e] Understand the issues of people with physical & mental disabilities. Special provisions and facilities for disabled personalities.	01	Book by Manan publications/Internet	Online

Total no of lecture 10

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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UNIT 2 Concept of Disparity 2	a] Inequalities manifested due to caste system	01	Book by Manan publications/Internet	Online
	b]different types of conflicts arising out of caste system, inter- group conflict, cultural differences, lingual differences.	01	Book by Manan publications/Internet	Online
	c] Inter-group conflict arising out of communalism and its effects on society.	01	Book by Manan publications/Internet	Online
	d] Causes and Effects of conflicts arising out of regionalism.	01	Book by Vipul publication/internet	Online
	e] Causes and Effects of conflicts arising out of linguistic differences.	01	Book by Vipul, Manan publication/ internet	Online

Total no of lecture 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHWINI DATTATRAY BHOIR DEPARTMENT: COMMERCE CLASS: FYBCOM I,J,L. SEMESTER: I MONTH: OCTOBER - DECEMBER ACADEMIC YEAR: 2020 - 2021 SUBJECT - FOUNDATION COURCE - I

LEARNING OBJECTIVE/S:
The learners will be able to know importance of Constitution and importance of fundamental Rights and Duties.

The learners will be able to know about the Indian society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Overview of Indian Society	Understand the Multi-Cultural diversity of Indian Society through its demographic composition: Population distribution according to religion, caste and gender; Appreciate the concept of linguistic diversity in relation of the indian situation; Understand regional variations according to rural, urban and tribal characteristics; Understanding the concept of diversity as difference.	5	Indian Society and Culture, Vinita Padey, Rawat pub2016	1) Lecture and Discussion 2) Online teaching learning tools (Google meet, Google form, PPTs)
Unit -4 The Indian Constitution	Philosophy of the Constitution as set out in the preamble; The structure of the Constitution - the preamble, main body and schedules; Fundamental Duties of the Indian Citizen ; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; basic features of the Constitution.		Introduction to the Constitution of India - Durga Das Basu	

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Unit 5- Significant Aspects of Political processes.	The party system in Indian politics; Local self-government in urban and rural areas; The 73rd and 74th Amendments and their implications inclusive politics; Role and significance of women in politics.	4	Michael Vaz, Foundation Course - I Manan Prakashan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: FYBCOM

SUBJECT: NSS FOUNDATION COURSE SEMESTER: I MONTH: October to December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to : Gain knowledge about history of NSS, NSS Programme at National & State level, Meaning of NSS symbol, importance of NSS .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit -1 Introduction to National Service Scheme (NSS)	**UNIT- 1 Emergence of NSS in India (Historical Background) and its development.** Organizational Structure of National Service Scheme from National Level to College Level. Objectives of National Service Scheme (SS) National Service Scheme (NSS) - Symbol and it's meaning **UNIT -Il Symbol of NSS and its meaning** Motto of National Service Scheme (NSS) Various prayers, inspirational songs to be used in NSS Programme.	10	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi.And 2. University of Mumbai National Service Scheme Manual,2009.	Online lectures through Google Meet / PPT used

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Unit -2 National Service Scheme (NSS) Regular Activities	**UNIT - I Guidelines of Distribution of working hours or academic year.** Classification of Regular Activities in the Society Rural Urban Campus Need base with association **UNIT - II Associations in NSS Activities** Govt. Organization; NGO; Scope for Innovation (Self-Generated)	10	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi. 2. University of Mumbai National Service Scheme Manual,2009.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Deepakkumar Gupta** DEPARTMENT: **Commerce**

CLASS: **FYBCOM** SEMESTER: **I** MONTH: Aug **to Dec** ACADEMIC YEAR: **2020 - 21**

LEARNING OBJECTIVE/S: Desired outcome: The students will overcome fear & inculcate within them the sense of adventure , sportsmanship , espirit-d-corp and develop confidence , courage , determination, diligence and quest for excellence.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course in NCC	Unit 1 : Introduction to NCC, National Integration and Awareness	10		Online platform – Google Meet PPT, Videos
	1) Genesis, Aims, Objectives of NCC and NCC song 2) Organization and training 3) Incentives & benefits 4) Religions, Culture, Traditions and Customs of India 5) National Integration : importance and necessity.			
	Unit 5 : Specialised subject : Army	06		Online platform – Google Meet PPT, Videos
	1) Armed force - Basic organisation of Armed forces - Organisation of Army - Badges and Rank 2) Introduction to Infantry and Weapon Training			

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	- Characteristics of 7.62 mm Rifle , ammunation,fire power			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____16_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT: COMMERCE CLASS: FYBCOM SEMESTER: 1

MONTH: AUG-DEC DIV:K ACADEMIC YEAR: 2020-2021 SUBJECT: F.C

LEARNING OBJECTIVES:

The learners will be able to :Make aware of the societal problems and their personality and also gain knowledge regarding Indian Constitution, Political processes and Social problems in India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Overview of Indian society	Understand the multi cultural diversity of Indian society through its demographic composition: Population distribution according to religion, caste and gender, linguistic diversity, Understand regional variations according to rural, urban and tribal characteristics, concept of diversity as difference.		Michael Vaz	PPT Online lectures (Google Meet)
UNIT 4 The Indian Constitution	Philosophy of the Constitution as set out in the Preamble The structure of the Constitution- the Preamble, Schedules, Fundamental duties of the Indian Citizen, tolerance, peace and communal harmony as crucial values., Basic features of the constitution.	15		
UNIT 5 Significant Aspects of Political Processes	The party system in Indian politics Local self-governance in urban and rural areas The 73rd & 74th Amendments and their implications for inclusive politics			

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	Role and significance of women in politics.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA D'CUNHA **DEPARTMENT**: COMMERCE **CLASS:** FYBCOM (A, B, C, D, M, N, O, P) **SEMESTER:** I

MONTH: SEPTEMBER-OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to know about the Indian society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE UNIT 1 Overview of Indian Society	Understand the multi-cultural diversity of Indian society through its Demographic composition: Population distribution according to religion, caste and gender, appreciate the concept of Linguistic Diversity in relation to the Indian situation Understanding regional variations according to rural, urban and tribal characteristics, Understanding the concept of diversity as difference.	10	Textbook- FOUNDATION COURSE-II Michael Vaz Meeta Set	PPT AND VIDEOS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA D'CUNHA DEPARTMENT: COMMERCE CLASS: FYBCOM (A, B, C, D, M, N, O, P)

SEMESTER: I MONTH: OCTOBER-NOVEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to get knowledge about Indian Constitution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 The Indian constitution	Philosophy of the constitution as set out in the preamble, The structure of the constitution- the preamble, Main body and schedules, Fundamental duties of the Indian citizen, Tolerance, Peace and Communal harmony as crucial values in strengthening the social fabric of Indian society, Basic features of the constitution.	10	Textbook- FOUNDATION COURSE-II Michael Vaz Meeta Set	PPT AND VIDEOS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: FYBCOM (A, B, C, D, M, N, O, P) SEMESTER: I

MONTH: NOVEMBER-DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to understand the political system in India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 Significance aspect of Political Processes	The party system in Indian politics, Local self-government in Urban and Rural areas, 73rd and 74th Amendments and their implications for inclusive politics, Role and Significance of Women in Politics.	10	Textbook- FOUNDATION COURSE-II Michael Vaz Meeta Set	PPT AND VIDEOS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti Pramod Patil DEPARTMENT: Commerce CLASS: F.Y.B.Com (Div. A,B,C,D,E,F,G,H)

SEMESTER: II MONTH: January to March ACADEMIC YEAR: 2020-2021 Subject: Environmental Studies

LEARNING OBJECTIVES:
The learners will be able to understand about solid waste and the problems associated with their improper management. They will learn about proper waste handling and treatment done by MCGM.

UNIT 1	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Solid Waste Management for Sustainable Society	1. Classification of solid wastes – Types and Sources of Solid Waste	1	1.Environmental studies: P.G. Shinde 2. A Textbook of Environmental Chemistry and Pollution Control: S.S.Dara	Teaching Method: 1. Lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Effects of Solid Waste Pollution- Health hazards, Environmental Impacts	1		
	3. Solid Waste Management	2		
	4. solid waste management in Mumbai- Schemes and initiatives run by MCGM – role of citizens in waste management in Mumbai	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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LEARNING OBJECTIVES:

The learners will be able to understand about the different types of environmental problems associated with agriculture and Industries. They will also learn about sustainable agricultural & industrial practices.

UNIT 2	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Agriculture and Industrial Development	1. Environmental Problems Associated with Agriculture: Loss of Productivity, Land Degradation ,desertification	2	Environmental studies: P.G. Shinde 2. A Textbook of Environmental Chemistry and Pollution Control: S.S.Dara	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2.Uneven Food Production – Hunger, Malnutrition and Food Security – Sustainable Agricultural practices	2		
	3. Environmental Problems Associated with Industries – pollution	2		
	4. Global warming, Ozone Layer Depletion , Acid rain	2		
	5. Sustainable Industrial practices – Green Business and Green Consumerism, Corporate Social Responsibility	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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LEARNING OBJECTIVES:
The learners will be able to understand about the various tourism types, tourism potentials in India and challenges before India. They will learn about positive and negative impacts of tourism

UNIT 3	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Tourism and Environment	1. Tourism: Meaning, Nature, Scope and importance	2	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Typology of tourism- classification			
	3. Tourism potentials in India and challenges before India, New tourism Policy of India	2		
	4. Consequences of tourism : Positive and Negative Impacts on Economy, Culture and environment	2		
	5. Ecotourism	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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LEARNING OBJECTIVES:
The learners will be able to understand about various environmental movements in India. They will learn the concepts of Environmental Management, ISO, EIA. They will also understand Concept and components of Geospatial Technology.

UNIT 4	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environmental Movements and Management	1. Environmental movements in India: Save Narmada Movement, Chipko Movement, Appiko Movement, Save Western Ghat and Save Jaitapur	2	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Environmental Management: Concept, need and relevance; Concept of ISO 14000 and 16000; Concept of Carbon Bank and Carbon Credit	2		
	3. .EIA - Environment Protection Acts	2		
	4. Concept and components of Geospatial Technology- Applications of GST in Environmental Management.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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LEARNING OBJECTIVES:

The learners will be able to learn about map fillings which will give them an idea of spatial distribution of environmental problems

UNIT 5	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Reading of Thematic Maps and Map Filling	1. Map filling of Konkan (Environmentally significant features)using point, line and polygon segment.	1	Environmental studies: P.G. Shinde	Teaching Method: 1. Lecture method 2.Discussion method 3.Demonstration method Teaching aid: Google meet, Google forms, Power point presentation, Paint
	2. Map filling of Mumbai (Environmentally significant features) using point, line and polygon segment.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Snehal S. Jadhav_____ DEPARTMENT: _____Commerce_____ CLASS: _____FYBCOM_Div (I DIV TO P DIV) _____ SEMESTER: _____II_____ MONTH: _____January - March _____ ACADEMIC YEAR: _2020- 2021 _____

LEARNING OBJECTIVE/S:
The learners will be able to :

Thelearnerswillbeabletocreateanenvironmentalawareness.Tocreateaninsightintovariousenvironmentalissuesatvariouslevelsandenvironmentalmovement stowardsmakingenvironmentalSustainable.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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ENVIRONMENTAL STUDIES	Unit–II:AGRICULTURE & INDUSTRIAL DEVELOPMENT. 1)EnvironmentalProblemsAssociatedwithAgriculture :Lo ssofProductivity,LandDegradation,desertification. 2)UnevenFoodProduction–Hunger,MalnutritionandFoodSecurity–SustainableAgriculturalpractices.3)EnvironmentalProble ms AssociatedwithIndustries–Pollution-Global Warming,OzoneLayerDepletion,Acidrain,-SustainableIndustrial practices.	07	SantraS.C.,2004,'E nvironmental Science',New Central Book agencyPvtLtd, Kolkata.	Powerpoint presentation(ppt)

	Unit–III:TOURISM AND ENVIRONMENT 1)Tourism:Meaning,Scope And Importance,Typology Of Tourism classification;Tourismpotentialsin Indiaandchalleng es beforeIndia;NewTourismPolicyofIndia 2)Consequences Of Tourism:PositiveandNegativeImpactsonEconomy, Cul tureandenvironment.3)Ecotourism.	07	Saxena M.,2000,'Environm ental Management',Ra wat Publication,New Delhi. Environmental Management By N.K.Uberoi	Powerpoint presentation(ppt)
	MapfillingkonkanMap	02	ShethPublication &V ipulPrakashan	Powerpoint presentation(ppt)

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __16_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _SMITA KHAIRE (JADHAV)_____DEPARTMENT: Commerce_____CLASS: F.Y.B.COM

SEMESTER: ___II____Div- A to F _and I to L_____ MONTH: _Jan-Apr ACADEMIC YEAR: __2020-2021_____

LEARNING OBJECTIVE/S:
The learners will be able to: The learners will be able to acquire a basic understanding and knowledge about the environment and its problems. It will help to create awareness about protection of the Environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environmental studies	Unit 1: Solid waste management for sustainable society Classification of solid waste- types and sources of solid waste; effects of solid waste pollution- Health hazards, Environmental impact; Solid Waste Management- Solid Waste Management in Mumbai – schemes and initiatives by MCGM- role of citizen in waste management in urban and rural areas.	7	Environmental Science by Santra S.C Essential of Ecology and Environment by S.V.S Rana.	PowerPoint Presentation
	Unit 4: Environmental Movements and Management: Environmental movements in India: Save Narmada Movement, Chipko Movement, Appiko Movement, Save Western Ghats Movement; Environmental Management: Concept, need and relevance; Concept of ISO 14000 and 16000; Concept of Carbon Bank and Carbon credits, EIA, Ecological footprint; Environmental protection Acts; Concept and components of Geospatial technology- Application of GST in Environmental management.	7	Environmental management by H.V. Jadhav	PowerPoint Presentation
	Map filling of Mumbai - Environment significant features	2	Map book by Sheth and Vipul Publication	PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _7_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: COMMERCE CLASS: FYBCOM (M,N,O&P) SEMESTER: II
MONTH: JANUARY TO APRIL SUBJECT: ENVIRONMENTAL STUDIES ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the meaning of solid waste management and ways to manage waste.
- Get knowledge of steps taken by the government to manage the waste generated in Mumbai.
- Interpret carbon credit and carbon bank ISO for environmental management.
- Know in detail about GST in environmental application.
- Apply the knowledge gained in practical life and help save the environment from being affected.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit1- Solid waste management for sustainable society	**Solid waste management for sustainable society** Classification of solid waste Types and sources of solid waste; effects of solid waste Pollution- Health hazards, Environmental impact; Solid Waste Management Solid Waste Management in Mumbai – schemes and initiatives by MCGM- Role of citizen in waste management in urban and rural areas.	7	Environmental Studies: P.G. Shinde	Google meet, Google forms, PPT, Inkcredible, Testmoz, Youtube

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UNIT – 4 Environmental Movements and Management	**Unit 4: Environmental Movements and Management** Environmental movements in India: Save Narmada Movement, Chipko Movement, Appiko Movement, Save Western Ghats Movement Environmental Management: Concept, need and relevance; **Concept of ISO** : ISO 14000 and ISO 16000 Concept of **Carbon Bank and Carbon credits** **EIA** (ENVIRONMENTAL IMPACT ASSESSMENT) **Ecological footprint** **Environmental protection Acts** Concept and components of **Geospatial technology** Application of **GST** in Environmental management.	7	Environmental management by H.V.	Google meet, Google forms, PPT, Inkcredible, Testmoz, Youtube
MAPS	**MAP FILLING:** MUMBAI MAP (ENVIRONMENT SIGNIFICANTFEATURES)	2	Sheth and Manan Prakashan	Google meet, PPT, Inkcredible, Testmoz, Youtube

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: FYBCOM DIV – G , H

SEMESTER: 2 MONTH: DECEMBER- MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: Environmental Studies
The learners will be able to:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Agriculture and Industrial Development	Environmental Problems Associated with Agriculture: Loss of Productivity, Land Degradation, Desertification- Uneven Food Production- Hunger, Malnutrition and	06	Environmental Studies By Sheth Publication	Google Meet, PPT, SlideShare and Kiwi Browser, Google form and Google Classroom .
	Food Security- Sustainable Agriculture Practices			
	Environmental Problems Associated with industries- pollution-Global warming,			
	Ozone Layer Depletion Acid rain- Sustainable Industrial practices-			
	Green Business and Green Consumerism, Corporate Social Responsibility towards environment.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBCOM (A,B,C,D) SEM : II MONTH : Jan-Feb YEAR : 2020-21

LEARNING OBJECTIVE/S : Learner will be able to learn retailing scenario, types of retailing in India.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE II UNIT II RETAILING	INTRODUCTION : Concept of organised & unorganised retailing, trends in retailing, growth of organised retailing, survival strategies for unorganised retailing	03	Retailing management, Levy Michael., Weitz Barton A, Tata Mcgraw Hill	Google Meet
	Retail format : Store format, non-store format, store planning	03	Retailing management, Levy Michael., Weitz Barton A, Tata Mcgraw Hill	Google Meet
	Retail scenario : Retail scenario in India, retail scenario in global context, prospects & challenges in India, mall management, retail franchising, FDI in retailing, careers in retailing	05	Retailing management, Levy Michael., Weitz Barton A, Tata Mcgraw Hill	Google Meet

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBCOM (A,B,C,D) SEM : II MONTH : Feb-March YEAR : 2020-21

LEARNING OBJECTIVE/S : Learner will be able to learn ITES sector, various developments in banking & insurance sector in India and logistics system in India.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE II	ITES SECTOR :BPO, KPO, LPO,ERP	03	Seth publication	Google Meet
UNIT III **RECENT TRENDS IN SERVICE SECTOR**	BANKING & INSURANCE SECTOR : ATM, DEBIT CARD, CREDIT CARD, Internet banking, opening of insurance sector for private players, FDI & its impact on banking & insurance sector in India	05	Seth publication	Google Meet
	LOGISTIS : Logistics networking, importance, challenges	02	Seth publication	Google Meet

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Nilambari Yogesh Shidhaye Department: - Commerce
Class: - F.Y.B.COM (I, J, K, L) SEM: - II MONTH-: JAN/MARCH YEAR: -2020/21

LEARNINIG OBJECTIVES: The learner will be able to learn through online teaching, Concept of services, Importance and limitations, features of E-Commerce.

PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED
COMMERCE - II	MODULE-I Concept of Services: - Meaning, Features, Scope and classification of services, Importance of service sector in the Indian context., Marketing mix for services, Service Strategies: - marketing research and service development cycle, Manging demand and capacity, Opportunities and challenges in service sector.	12 Lectures		Online Teaching with the help of PPT
	MODULE: - IV E-Commerce: - Meaning, features, functions and scope of E-commerce, Importance and limitations of E-commerce, Types of E-commerce, Present status of E-commerce in India, E-transitions, Challenges and opportunities for Indian corporates, On-line marketing research,	12 Lectures		Online Teaching with the help of PPT

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAVITA VILAS PURANDARE DEPARTMENT: COMMERCE CLASS: FYBCOM (I J K L) SEMESTER: II

SUBJECT: COMMERCE II MONTH: JANUARY TO MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Students will understand the concepts of services, retailing, recent trends in service sector and E-commerce.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module – II Retailing	• Introduction – concept of retailing, trends and growth. • Retail format – store format, non store format, store planning, design and layout. • Retail scenario – Global context and mall management.	12		Google meet
Module – IV E-Commerce	• Introduction – Meaning, Features, Functions, Scope, Importance and Limitations of E-commerce. • Types of E-commerce – basic ideas and major activities of B2C, B2B, C2C. • Present status of E-commerce in India.	12		Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: FYB.COM - A,B,C,D SEMESTER:-2nd MONTH: November -February ACADEMIC YEAR: 2019 -2020 SUBJECT : COMMERCE II

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To introduce learners with different concepts of services.
2. To make students able to identify elements of marketing mix, Service Strategies and its implementation in the service sector.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1: CONCEPT OF SERVICES	• Introduction : Meaning, Characteristic, Scope and Classification of Services – Importance of Service sector in the Indian Context.	4	Service Marketing – Temani Management of Service sector - Bhatia	1. Lecture and discussion . 2. Flow charts. 3. google meet 4. ppts
	• Marketing Mix for Services : Consumer Expectations, Services Mix, Product, Place, Price, Promotion, process of services delivery, Physical evidence and people.	4		
	• Service Strategies : Market research and services development cycle, Managing demand and Capacity, Opportunities and challenges in the service sector.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 ×4 div = 48

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE _ DEPARTMENT: B.COM CLASS: FYB.COM - A,B,C,D

SEMESTER:-2nd MONTH: November – Februar ACADEMIC YEAR: 2019 -2020 SUBJECT : COMMERCE II

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To introduce learners about scope and Importance of E- Commerce.
2. To acquaint students with the knowledge of challenges and opportunities of E- Commerce in India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 4 :	• Introduction :Meaning, Features, Functions and Scope of E- Commerce – Importance and Limitations of E-Commerce.	4	Introduction to E- Commerce – Dhawn	1.Lecture and discussion . 2. Flow charts. 3. google meet 4. ppts
	• Types of E- Commerce :Basic ideas and Major activities of B2C, B2B, C2C.	3		

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E-COMMERCE	• Present Status of E- Commerce in India : Transition to E-Commerce in India, E-Transition Challenges for Indian Corporates, On-line Marketing Research.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 ×4 div = 44

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE SUBJECT: COMMERCE II

CLASS: FYBCOM (Div M,N,O,P) SEMESTER: II MONTH: Jan-march ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: The learners will be able to : Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2: Retailing	1.Introduction: Concept of organized and unorganized retailing, Trends in retailing, growth of organized retailing in India, Survival strategies for unorganized Retailers	4	Commerce II-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet
	2. Retail Format: Store format, Non – Store format, Store Planning, design and layout	4	Commerce II-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet
	3. Retail Scenario: Retail Scenario in India and Global context – Prospects and Challenges in India. Mall Management – Retail Franchising. FDI in Retailing, Careers in Retailing	4	Commerce II-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet
Unit 3: Recent Trends in Service Sector	1. ITES Sector: Concept and scope of BPO, KPO, LPO and ERP.	4	Commerce II-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet
	2. Banking and Insurance Sector: ATM, Debit & Credit Cards, Internet Banking – Opening of Insurance sector for private players, FDI and its impact on Banking and Insurance Sector in India	4	Commerce II-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet
	3. Logistics: Networking – Importance – Challenges	2	Commerce II-Manan Prakashan, Seth Publication	Presentation method with chat, Google Meet

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -Praktana Manoj Kore Department: - Commerce
Class: - F.Y.B.COMM,N,O,P) SEM: - II MONTH-: JAN/MARCH YEAR: -2020/21

LEARNING OBJECTIVES: The learner will be able to learn through online teaching, Concept of services, Importance and limitations, features of E-Commerce.

PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED
COMMERCE - II	MODULE-I Concept of Services: - Meaning, Features, Scope and classification of services, Importance of service sector in the Indian context., Marketing mix for services, Service Strategies: - marketing research and service development cycle, Managing demand and capacity, Opportunities and challenges in service sector.	12 Lectures		Online Teaching with the help of PPT
	MODULE: - IV E-Commerce: - Meaning, features, functions and scope of E-commerce, Importance and limitations of E-commerce, Types of E-commerce, Present status of E-commerce in India, E-transitions, Challenges and opportunities for Indian corporates, On-line marketing research,	12 Lectures		Online Teaching with the help of PPT

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNITHA CHANDRASHEKHAR NAIR DEPARTMENT: COM MERCE

CLASS F.Y.B.COM Div- E,F,G,H SEMESTER: II MONTH: January - April ACADEMIC YEAR: 2020 -2021

LEARNING OBJECTIVE/S: To make the students learn micro-economics and its application to business .
The learners will be able to :to understand the decision making process of business .

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –II Unit II & III.	**Module II – Pricing and Output Decisions under imperfect competition**	10		
	1.Monopolistic Competition . 2. Oligopoly Market		**Advanced Economic Theory Of Micro economics (H. L. Ahuja)**	1.Power Point Presentation 2 Quiz method 3.Discussion method
	Module III- Pricing Practices	10		
	1 . Pricing practices -I . Degrees of Price Discrimination,Conditions for Price Discriminations Conditions of Profitable Price Discriminations & Equilibruim of Price Discriminating Monopolist .		**Advanced Economic Theory Of Micro economics (H. L. Ahuja)**	1. Power Point Presentation 2 Quiz method 3.Discussion method
	2 . Pricing practices -II Full-cost pricing, Marginal cost pricing, Multiple –product pricing & Transfer pricing .			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Veronika B Barla **DEPARTMENT**: Commerce

CLASS: FY.Bcom **Division A, B, C, and D SEMESTER**: II

MONTH: _____ **SUBJECT**: Business Economics **ACADEMIC YEAR**: 2020-21

LEARNING OBJECTIVE/S: 1. Help to understand the pricing decision under Under perfect competition and monopoly
2. Helps to understand capital budgeting.

The learners will be able to: 1. Introduction to types of market, extreme cases perfect competition, and monopoly. Features of perfect competition, profit maximization, short-run and long-run market equilibrium of firm and industry. Monopoly and its features, sources of monopoly, short-run and long-run equilibrium under monopoly.

2.

Paper, Unit, Title	Subtopics	Number of lectures allotted	References	Teaching Method /ICT tools used
Business Economics Module I Introduction to business economics	Meaning of market: types of market, perfect competition, and monopoly in extreme cases	2	Indian Economy Mishra and Puri, Modern economics , H. L. Ahuja	ONLINE MODE
	Profit maximization and competitive firms supply curve	3	"	"
	Short-run and long-run equilibrium under perfect competition firm and industry.	6	"	"
	Monopoly: features, sources	3	"	"

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	Short-run and long-run equilibrium under monopoly	4	"	"
Unit III Capital budgeting	Meaning and importance of capital budgeting	2	"	"
	Steps involved in capital budgeting	2	"	"
	Method of capital budgeting Payback period	2	"	"
	Net present value	2	"	"
	Internal Rate of Return	2	"	"

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT I and III: 28Hrs

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. LEJESH KELOTH** DEPARTMENT**: COMMERCE**

CLASS: **F.Y.BCOM(I,J,K,L)** SEMESTER: **II** MONTH**: JANUARY TO MARCH** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S : To understand the working of a business unit in the economy

The learners will be able to : Able to understand basic principles of market economy, application through case studies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics – Paper -II	**MODULE – 1:** **Market Structure: Perfect Competition and Monopoly:** Perfect Competition and Monopoly models as two extreme cases – profit maximisation and the competitive firm's supply curve – Short Run and Long Run equilibrium of a firm and of industry – monopoly – Sources of monopoly power - Short Run and Long Run equilibrium of a firm.	10	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication, Himalaya Publication.	PPT, SLIDES, WHITEBOARD, QUIZE,
Business Economics – Paper -II	**MODULE – 4:** **Evaluating Capital Projects** Meaning and importance of capital budgeting- steps in capital budgeting- techniques of investment appraisal: Payback period method, Net Present Value Method and Internal Rate of Return Method with numerical examples.	10	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication,	PPT, SLIDES, WHITEBOARD, QUIZE

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____CHETAN PRAKASH VARMA_____ DEPARTMENT: ___COMMERCE_____CLASS: ____FYBCOM_____

SEMESTER: _____II___(E,F,G,H)___ MONTH: ___JANUARY-MARCH _____ ACADEMIC YEAR: ____2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to :

To make student understand the concepts of business economics which will make them to analyse the market factors working, its reward, decision making, production analysis, cost concept, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics -I	Market structure: Perfect competition and Monopoly Perfect competition and Monopoly models as two extreme cases - profit maximisation and the competitive firm's supply curve - Short run and long run equilibrium of a firm and of industry	5	*Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases (S. Chand & Sons, N. Delhi, 2000)* • *Salvatore, D.: Managerial Economics in a global economy (Thomson South Western Singapore, 2001)*	Online Mode Of communication PPT Slide Method. Lecture Method
	monopoly - Sources of monopoly power – short run and long- run equilibrium of a firm under Monopoly	3	• *Frank Robert.H ,Bernanke. Ben S., Principles of*	Demonstration Method

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			Economics (Tata McGraw Hill (ed.3)	Tutorial Method Questions-Answer method Discussion method
	Monopolistic competition: competitive and monopolistic elements of monopolistic competition - equilibrium of a firm under monopolistic competition, monopolistic competition verses perfect competition- excess capacity and inefficiency - debate over role of advertising (topics to be taught using case studies from real life examples)	4	• *Gregory Mankiw., Principles of Economics, Thomson South western (2002 reprint)*	
	Oligopolistic markets: key attributes of oligopoly - Collusive and non collusive oligopoly market - Price rigidity - Cartels and price leadership models (with practical examples)	5	• *Samuelson &Nordhas.: Economics (Tata McGraw Hills, New Delhi, 2002*	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHAKHA SANE DEPARTMENT: COMMERCE CLASS: FYBCOM (M,N,O,P) SEMESTER: **II** MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : students are able to understand the basic concepts about the market structure and to know the different market.As well as they also able to understand the concept of capital budgeting in business cycle.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 and 4	**Introduction** 1.Market Structure: Perfect Competition and Monopoly Perfect competition and Monopoly models as two extreme cases-profit maximisation and the competitive firm's supply curve-Short run and long run equilibrium of a firm and of industry-monopoly- Sources of monopoly power- short run and long run equilibrium of a firm under Monopoly.	10	*Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases (S. Chand & Sons, N. Delhi, 2000)* • *Salvatore, D.: Managerial Economics in a global economy (Thomson South Western Singapore, 2001)*	1.Power Point Presentation 2 Quiz method 3.Discussion method

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	4- Evaluating Capital projects Meaning and importance of capital budgeting- steps in capital budgeting-Techniques of investment appraisal: Payback period methods, Net present value and Internal Rate of Return Method. (With Numerical example).	10	Micro economics- H.L Ahuja	1.Power Point Presentation 2 Quiz method 3.Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Bristi Gourgopal Biswas DEPARTMENT: Commerce CLASS: F.Y.BCOM(A,B,C,D,I,J,K,L) SEMESTER: II (Subject : Business Economics II)

MONTH: JAN-MAY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To understand the application of microeconomics at corporate level .

The learners will be able to : observe microeconomics in the real world and to understand and make business decisions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE II	Features of monopolistic competition, short run equilibrium of the firm, long run equilibrium of the firm ,selling cost and its effects, role of advertisement. Meaning of oligopoly ,characteristics of oligopoly ,collusive and non collusive oligopoly ,price rigidity ,collusive oligopoly, price leadership. I	10		ONLINE CLASS GOOGLE MEET(PPT)

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MODULE III	Meaning of pricing practices, degrees of price discrimination, conditions for price discrimination, conditions for profitable price discrimination, equilibrium of price discriminating monopolist ,dumping. Introduction to pricing practices part II, marginal cost pricing ,cost plus pricing ,multi product pricing Transfer pricing.	10		ONLINE CLASS GOOGLE MEET(PPT)
MODULE IV	Evaluating Capital projects Meaning and importance of capital budgeting- steps in capital budgeting- Techniques of investment appraisal: Payback period methods, Net present value and Internal Rate of Return Method. (With Numerical example).	10		ONLINE CLASS GOOGLE MEET(PPT)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GLORITA PEREIRA DEPARTMENT: COM MERCE

CLASS F.Y.B.COM DIV : M ,N, O,P SEMESTER: II MONTH: January - April ACADEMIC YEAR: 2020 - 2021

LEARNING OBJECTIVE/S: To make the students learn micro-economics and its application to business .
The learners will be able to :to understand the decision making process of business .

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –II Unit II & III.	**Module II – Pricing and Output Decisions under imperfect competition**	10		
	1.Monopolistic Competition . 2. Oligopoly Market		**Advanced Economic Theory Of Micro economics (H. L. Ahuja)**	1.Power Point Presentation 2 Quiz method 3.Discussion method
	Module III- Pricing Practices	10		
	1 . Pricing practices -I . Degrees of Price Discrimination,Conditions for Price Discriminations Conditions of Profitable Price Discriminations & Equilibruim of Price Discriminating Monopolist .		**Advanced Economic Theory Of Micro economics (H. L. Ahuja)**	1. Power Point Presentation 2 Quiz method 3.Discussion method
	2 . Pricing practices -II Full-cost pricing, Marginal cost pricing, Multiple –product pricing & Transfer pricing .			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **VISHAL SAWANT** DEPARTMENT: COMMERCE CLASS: FYBCOM (A,B,C,D) SEMESTER: II

SUBJECT: FINANCIAL ACCOUNTING MONTH: JANUARY TO MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Fire Insurance Policy, Average Claim and make accounting from incomplete records.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accounting from incomplete records	• Steps for preparing final accounts from incomplete records. • Difference between single entry system and double entry system. • Format of various accounts to prepare for working notes. • Q1 to Q7 on incomplete records.	15	Manan Prakashan	Google meet, PPT, EXCEL.ONE NOTE
Fire insurance claim	• Methods of calculation of stock destroy by fire. • Steps for calculating claim with GPR. • Q1 to Q8 on fire insurance claim.	15	Manan Prakashan	Google meet, PPT, EXCEL.ONE NOTE

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____30_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHAKTI VILAS PURANDARE DEPARTMENT: COMMERCE CLASS: FYBCOM (I J K L) SEMESTER: II

SUBJECT: FINANCIAL ACCOUNTING MONTH: JANUARY TO MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Fire insurance Policy and make accounting from incomplete records.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accounting from incomplete records	• Steps for preparing final accounts from incomplete records. • Difference between single entry system and double entry system. • Format of various accounts to prepare for working notes. • Q1 to Q7 on incomplete records.	15	Manan Prakashan	Google meet,
Fire insurance claim	• Methods of calculation of stock destroy by fire. • Steps for calculating claim with GPR. • Q1 to Q8 on fire insurance claim.	15	Manan Prakashan	Google meet,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. DEEPAKKUMAR GUPTA DEPARTMENT: COMMERCE

CLASS: FYBCOM (E,F,G,H) SEMESTER: II MONTH: JAN, FEB & MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Comprehension based Learning to Esemplastic into Objective or Subjective type Exams. To Understand the Accounting for Incomplete Records and it's Importance. To Learn Theoretical as well as Practical Concept about Fire Insurance Claim & Incomplete Records.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE I & IV	Chapter 1: Accounting for Incomplete Records ➢ Introduction, Meaning, Types & Features ➢ Introduction Of Conversion Method ➢ Double Vs. Single Entry System ➢ Bills Receivable & Bills Payable Account ➢ Total Debtors & Total Creditors Account ➢ Cash /Bank And Expenses Account ➢ Problems on Preparation of Final Account of Proprietary (Conversion Method)	15	S.K & S.N MAHESHWARI	Google Meet, Google Slides, Microsoft Excel

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	Chapter 4: Fire Insurance Claim ➢ Introduction & Meaning ➢ Computing Loss with Stock on Date of Fire, Salvage & Actual Loss ➢ Computing Claim With & Without Average Clause ➢ Memorandum Trading Account ➢ Total Debtors & Total Creditors Account to Ascertain Credit/Cash Sale and Purchase ➢ Problems Solved on the same	15	S.K & S.N MAHESHWARI	Google Meet, Google Slides, Microsoft Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce

CLASS: F Y B Com (E, F, G & H) SEMESTER: II MONTH: March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the meaning of Branch along with its types. The learners will able to calculate profit & loss of each branch separately. They are able to ascertain the financial position of each branch separately on a particular date. The learner will able to understand the special features of consignment business, meaning of the term consigner & consignee and difference between two transaction – sales & consignment. Practice the accounting treatments for consignment transactions and events in the books of consigner & consignee.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy & Financial Management II	**Consignment Accounts** Accounting for Consignment Transactions Valuation of Stock (at Cost Price & at Invoice Price) Invoicing of Goods at Higher Price	15	*Advanced Accountancy by R.L Gupta and M. Radhaswamy, S. Chand and Company (P) Ltd., New Delhi* Introduction to Accountancy by T.S. Grewal, S. Chand and Company (P) Ltd., New Delhi	Lecture through Google Meet, MS Office & discussion
	Branch Accounts Meaning / Classification of Branches Accounting for Dependent Branch (at Cost Price & at Invoice Price) Debtors Method Stock and Debtors Method	15		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

Babli Jha

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Sandra Shamir Almeida DEPARTMENT : Commerce

CLASS : FYBCOM (M,N,O,P) SEM : II MONTH : January - April YEAR : 2020-21

LEARNING OBJECTIVE/S:

- The learners will be able to know the various concepts about Consignment Accounts and Branch Accounts.
- He will also be able to practically apply this knowledge in Opening Branch account and sale on Consignment in India.

PAPER/ UNIT/ TITLE	SUB TOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING M ICT TOOLS U
ACCOUNTANCY AND FINANCIAL MANAGEMENT-I	**Module II : Consignment Accounts** • Accounting for consignment Transactions • Valuation of Stock • Invoicing of goods at higher price • (Excluding over riding commission, normal/abnormal losses)	15	**Financial Accounting : A Managerial Perspective by Narayanswamy**	Google meet, PowerPoint Presentation, Forms & Word Documents.
	Module III : Branch ACCOUNTS • Meaning / Classification of Branch • Accounting for dependent Branch not maintaining full books by (a) Debtors method (b) Stock and Debtors methods	15	**Financial Accounting for Management by N Ramachandran**	Google meet, PowerPoint Presentation, Forms & Word Documents.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ARUN RAUT DEPARTMENT: COMMERCE

CLASS: FYBCOM (A B C D) SEMESTER: II MONTH: DEC-MAR ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Prepare consignment account in the books of consigner and consignee, will able to prepare branch account by both the methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	CONSIGNMENT ACCOUNTING: Introduction, Valuation of stock, Calculation of commission and Dell Creder Commision, Journal entries, ledgers, and Practical questions based on consignment.	15	Manan Prakashan	MS office, Google docs, sheet & slides, Google Meet
2	BRANCH ACCOUNT: Meaning, Classification of branches, Dependent Branch, Independent Branch, Methods of branch accounting (Debtors method and stock and debtors methods)Journal entries, Ledgers and Practical questions based on consignment.	15	Manan Prakashan	MS office, Google docs, sheet & slides, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: Commerce CLASS: F.Y.BCOM (Division I J K L) SEMESTER: II

MONTH: January, February ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand and remember the concept of Consignment Accounts; calculation of Consignment Accounts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Consignment Accounts	Introduction to Consignment Accounts	02	Book by Manan publications/Internet	Google Meet, MS Excel, MS word
	Format, Adjustments and Entries	02	Book by Manan publications/Internet	Google Meet, MS Excel, MS word
	Consignment Accounts (sums)	06	Book by Manan publications/Internet	Google Meet, MS Excel, MS word

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SONAL RAUT DEPARTMENT: COMMERCE

CLASS: FYBCOM (M,N,O,P) SEMESTER: II MONTH: JAN, FEB & MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Comprehension based Learning to Esemplastic into Objective or Subjective type Exams. To Understand the Accounting for Incomplete Records and it's Importance. To Learn Theoretical as well as Practical Concept about Fire Insurance Claim & Incomplete Records.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE I & IV	Chapter 1: Accounting for Incomplete Records ➢ Introduction, Meaning, Types & Features ➢ Introduction Of Conversion Method ➢ Double Vs. Single Entry System ➢ Bills Receivable & Bills Payable Account ➢ Total Debtors & Total Creditors Account ➢ Cash /Bank And Expenses Account ➢ Problems on Preparation of Final Account of Proprietary (Conversion Method)	15	S.K & S.N MAHESHWARI	Google Meet, Google Slides, Microsoft Excel

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	Chapter 4: Fire Insurance Claim ➢ Introduction & Meaning ➢ Computing Loss with Stock on Date of Fire, Salvage & Actual Loss ➢ Computing Claim With & Without Average Clause ➢ Memorandum Trading Account ➢ Total Debtors & Total Creditors Account to Ascertain Credit/Cash Sale and Purchase ➢ Problems Solved on the same	15	S.K & S.N MAHESHWARI	Google Meet, Google Slides, Microsoft Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. LEJESH KELOTH** DEPARTMENT**: COMMERCE**

CLASS: **F.Y. BCOM** (I,J,K,L) SEMESTER: **II** MONTH: **JANUARY TO MARCH** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S : To acquaint students about surrounding issues, relating to globalisation, Human rights.

The learners will be able to : To understand human behaviours.and contemporary nature.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course- II	**MODULE – 1: Globalisation and Indian Society:** Concepts of Liberalisation, Privatization and Globalization, growth of information technology and communication and its impact manifested in everyday life; impact of Globalization on industry: changes in employment and increasing migration; changes in agrarian sector due to Globalization; rise in corporate farming and increase in farmers' Suicides.	10	Manan Prakashan Vipul Prakashan Psychology studies	PPT, SLIDES , AND IMAGES ,
Foundation Course- II	**MODULE –2: HUMAN RIGHTS Meaning , definition, characteristic ,Evolution of human rights ,UDHR .ARTICLE 1 TO 20, Fundamental rights of constution, significance and characteristics, Right to Equality , Right to FREEDOM, Right to education, Right against EXPLOITATION, Right to Freedom of religion(article (25 to 29), Cultural and educational Rights (29 30)Right to Property , Right to CONSTUTIONAL REMEDIES**	15	Manan Prakashan Vipul Prakashan Psychology studies	PPT , SLIDES AND IMAGES

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. RASHMI SAWANT

DEPARTMENT: COMMERCE

CLASS: FYBCOM

SUBJECT: NSS FOUNDATION COURSE SEMESTER: II

MONTH: JANUARY TO MARCH ACADEMIC YEAR: 2020-21 .

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Gain knowledge about special Camping Activities. Objective and nature of those activities.
2. To understand the procedure of taking feedback and evaluating post camping activities.
3. To gain knowledge about contribution of government and non government organisations and their activities that can be incorporated in NSS camps

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3 **Special Camping Activity**	**UNIT – I Nature & Objectives of Activities** • **Selection of Camp Site** • **Identification of Specific Theme** • **Co-ordination with Local Planning Government and other Agencies.** • **Ice breaking and team building activities.** **UNIT - II Feedback / Evaluation** **Post Camping activities**	10	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi.	Online lectures through Google meet and Google classroom, youtube videos. PPTs
		10		

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Unit 4 **Government Organisations / Non – Government Organisations**	**UNIT - I Structure of Government Organisations and Non – Government Organisations** • **(Co-ordination of National Service Scheme (NSS) with Government Organisations (GO) and Non – Government Organisations (NGO)).** • **Grants for NSS From GO's for Activities** • **Regular Activities** • **CampingActivities** • **Other Programme Development Scheme E.g. HIV-AIDS-MADAC, Blood Donation**		2. University of Mumbai National Service Scheme Manual,2009.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____20____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA D'CUNHA DEPARTMENT: COMMERCE CLASS: FYBCOM(A,B,C,D,M,N,O,P) SEMESTER: II

MONTH: JANUARY-FEBRUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to get knowledge about Human Rights.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 HUMAN RIGHTS	Concept of human rights, Origin and evolution of the concept, The universal declaration of Human Rights. Human Rights constituents' with special reference to Fundamental Rights stated in the Constitution.	10	Textbook- FOUNDATION COURSE-II Michael Vaz Meeta Seta	PPT AND VIDEOS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA D'CUNHA DEPARTMENT: COMMERCE CLASS: FYBCOM (A,B,C,D,M,N,O,P) SEMESTER: II

MONTH: MARCH-APRIL ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to know the importance of Ecology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 ECOLOGY	Importance of environmental studies in the current developmental context, Understanding concept of environment, ecology, and their interconnectedness Environment as a natural capital and connection to quality of human life, Environmental Degradation- causes and the impact on human life, Sustainable development- Concept and Components, poverty and environment	10	Textbook- FOUNDATION COURSE-II Michael Vaz Meeta Seta	PPT AND VIDEOS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA VAIBHAV TAMBE **DEPARTMENT: Commerce** **CLASS: F.Y.Bcom – C,D,E,F,G,H**
SUBJECT: FOUNDATION COURSE II **SEMESTER: II** **MONTH: Janaury- March** **ACADEMIC YEAR: 2020-2021**

A teaching plan is a document that outlines the structure and details of a single session. A good teaching plan is a comprehensive write-up of the step-by-step teaching methods, the estimated duration of each segment of teaching, and the materials and resources needed for the session.

LEARNING OBJECTIVE/S:

By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

(For a detailed description of each component see Appendix A).

APPENDIX {A}

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Globalisation & Indian Society	**Concepts of liberalization, privatization and globalization**	2	Book by Manan publications/Internet	Online
	Growth of information technology and communication and its impact manifested in everyday life	1	Book by Manan publications/Internet	Online
	Impact of globalization on industry: changes in employment and increasing migration	1	Book by Manan publications/Internet	Online
	Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides.	1	Book by Manan publications/Internet	Online

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Total no of lecture 05

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 Understanding Stress & Conflicts	**Causes of stress & Conflicts in individual & society,**	1	Book by Manan publications/Internet	Online
	Agents of Socialization & the role played by them in developing the individual.	1	Book by Manan publications/Internet	Online
	Significance of values, ethics & prejudices in developing the individuals.	1	Book by Manan publications/Internet	Online
	Stereotypying & prejudice as significant factors in causing conflicts in society.	1	Book by Manan publication/internet	Online
	Aggression & Violence as the public expression of conflicts.	1	Book by Manan publication/internet	Online

Total no of lecture 05

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UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 Managing stress & conflict in Contemporary Society	**Types of conflicts and use of coping mechanisms for managing individual stress**	1	Book by Manan publications/Internet	Online
	Maslow's theory of self-actualisation,	1	Book by Manan publications/Internet	Online
	Different methods of responding to conflicts in society, Conflict Resolution, & Efforts towards building peace & harmony in society.	1	Book by Manan publications/Internet	Online

Total no of lecture 03

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Seema Sihana DEPARTMENT: Commerce CLASS: FYBCOM A, B SEMESTER: II MONTH: January to March 2021

ACADEMIC YEAR:2020-21

LEARNING OBJECTIVES:
The learners will be able to: Familiarize the commerce students about social awareness in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE II	.Module I : Globalisation and Indian Society:Concept and Impact of LPG, Migration, Corporate Farming,Growth and Impact of IT and Communication.	07	Social Problems in India Ram Ahuja Environment and Ecology Access Publishers Majid Husain	GOOGLE MEET, PPT, EXCEL SHEETS, WORD DOCUMENTS
	Module IV : Understanding Stress and Conflict:Meaning, causes, significance of values, ethics ,prejudices, aggression and violence.	10		
	Module V : Managing stress and conflict in contemporary society: Types, Maslows theory, strategies.	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Karishma Vijay Kale

DEPARTMENT:Commerce CLASS:FyBCom - E, F, G, H

SEMESTER: IV MONTH:March ACADEMIC YEAR:2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Know about Human rights and ecoogy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Chapter 2 Human Rights	Concept of Human rights, origin and evolution of concept	2	Manan	Online Teaching- PPT
	Universal Declaration of Human Rights	2	Manan	Online Teaching- PPT
	Human Rights constituents with special reference to Fundamental Rights stated in the Constitution	2	Manan	Online Teaching- PPT
Chapter 3 Ecology	Importance of Environment studies in the current development context Understanding concepts of environment, ecology and their interconnectedness Environment as natural capital and connection to quality of human life Environmental Degradation- Causes and impact on human life Sustainable Development- Concept and components, poverty and environment	6	Manan	Online Teaching- PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _12_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT:COMMERCE CLASS: FYBCOM

SUBJECT: NSS FOUNDATION COURSE SEMESTER: II MONTH: January to March ACADEMIC YEAR: 2020-21 .

LEARNING OBJECTIVE/S:
The learners will be able to : Gain knowledge about history of NSS, NSS Programme at National & State level, Meaning of NSS symbol, importance of NSS .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Volunteerism & Communication Skills	**UNIT -I Concept of Volunteerism Meaning & Features** Need of Training for volunteerism Role Models of Volunteerism in India Leadership - Meaning & Attributes Communication Skills - Meaning. Types & Importance **UNIT - II Strategic Planning** - Meaning, Characteristics, Requirement of Successful implementation of Programmes. Importance of Planning and Limitations of Planning	10	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi. 2. University of Mumbai National Service Scheme Manual,2009.	Online lectures through Google Meet / PPT
Unit 2	**UNIT I- Meaning & Needs of Socio-Economic Survey** • Process of Socio-Economic Survey	10	1. Service Scheme Manual (Received)	

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Socio-Economic Survey of Village/Slum adoption	✓ Design of Questionnaire (Population, Literacy, Family) ✓ Design of Interview, Education, Income ✓ Data Analysis (Introduction of Different Tools). ✓ Report Writing **UNIT - Il Introduction of various Government Agencies necessary for Policy making of Development.** ✓ Census ✓ National Sample Survey Organization (NSSO) ✓ National Family Health Survey (NFHS) ✓ Introduction of various schemes introduce by Govt. for the Socio Economic Upliftment of the Farmers and Rural Populations		Government of India Ministry of Youth Affairs and sports, New Delhi. 2. University of Mumbai National Service Scheme Manual,2009.	Online lectures through Google Meet and PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____20____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Deepakkumar Gupta** DEPARTMENT: **Commerce**

CLASS: FYBCOM SEMESTER: __II_____ MONTH: Aug to Dec ACADEMIC YEAR: 2020 - 21

LEARNING OBJECTIVE/S:

To create evolved youth, who will be equipped to contribute in the development of the nation.
To train students so as to achieve their physical and mental endurance to acquire body language

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course in NCC	Unit 9: Drill with Arms	10		Online platform – Google Meet PPT, Videos
	1 Getting on Parade with Rifle and Dressing at the Order .2. Dismissing and Falling Out 3. General Salute, Salami Shastra 4. Squad Drill 5. Short/Long tail from the order and vice-versa 6. Examine Arms			
	Unit 10: Weapon Training 1.The lying position, Holding and	06		Online platform – Google Meet PPT, Videos

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	Aiming-I 2.Trigger control and firing a shot 3.Range procedure and safety precautions 4. Theory of Group and Snap Shooting 5. Short range firing, Aiming-II-Alteration of sight			
	Unit 11: Specialized subject (ARMY) A. Map reading i. Setting a Map, finding North and own position ii. Map to ground, Ground to Map iii. Point to Point March B. Field Craft and Battle Craft i. Observation, Camouflage and Concealment ii. Field Signals iii. Types of Knots and Lashing			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____16_____

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TEACHING PLAN (UNIT 4 PLAN)

NAME OF THE STAFF: Khan Parveen Saba N. DEPARTMENT: COMMERCE

CLASS: FY B.COM (A, B, I, J, K, L, M, N, O, P) SEMESTER: II MONTH: JANUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Describe the components of time series.
- Estimate the trend using moving average method and least square method.
- Estimate the seasonal component of time series using simple average method.
- Understand the concept and usage of index numbers.
- Find index numbers using different methods.
- Understand the concept of real income and cost of living index numbers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematoical and Statistical techniques-II Time series (Unit 4)	➢ Time series: definition and components ➢ Trend values using moving average and least square method ➢ Seasonal component using simple average method	1 2 1	Basic Statistics (S.L Agarwal)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : PowerPoint presentations, tabletop

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4

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TEACHING PLAN (UNIT 5 PLAN)

NAME OF THE STAFF: Khan Parveen Saba N. DEPARTMENT: COMMERCE

CLASS: FY B.COM(A, B, I, J, K, L, M, N, O, P) SEMESTER: II MONTH: FEBRUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define and state the properties of binomial, Poisson and normal distribution.
- Solve the questions of probability based on binomial, Poisson and normal distribution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematoical and Statistical techniques-II Elementary Probability Distribution (Unit5)	➢ Binomial distribution : definition, properties, examples ➢ Poisson distribution : definition, properties, examples ➢ Normal distribution : definition, properties, examples	2 2 2	Basic Statistics (S.L Agarwal)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS :PowerPoint presentations, tabletop

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6

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TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: Khan Parveen Saba N. DEPARTMENT: COMMERCE

CLASS: FY B.COM (M, N, O, P) SEMESTER: II MONTH: MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of simple interest, compound interest, annuity and EMI.
- Solve the questions related to simple interest, compound interest, annuity and EMI.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematoical and Statistical techniques-II Interest (Unit 2)	➢ Simple interest with examples ➢ Compound interest with examples	2 2	Business Mathematics (V.K Kapoor)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS :PowerPoint presentations, tabletop

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4

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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: Khan Parveen Saba N. DEPARTMENT: COMMERCE

CLASS: FY B.COM (A, B, I, J, K, L) SEMESTER: II MONTH: MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define different types of functions.
- Find break even point and equilibrium price.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematoical and Statistical techniques-II Functions , (Unit 1)	➢ Functions and its types ➢ Demand, supply, revenue, profit, Average cost/ revenue, equilibrium point, break even point	1 3	Business Mathematics (V.K Kapoor)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS :PowerPoint presentations, tabletop

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Manish pithadia DEPARTMENT: Commerce

CLASS: F.Y.B.COM SEMESTER: II nd MONTH: November ACADEMIC YEAR: 2020-2021

Division : E, F ,G, H, I, J, K, L, M, N, O, P
LEARNING OBJECTIVE/S:
The learners will be able to : Application of mathematics and statistical tools in business and commercial application. Develops the student power of decision making with statistical tools. For future research activity basic concept and practical knowledge with mathematical and statistical tools. Some future realistic calculations with mathematics which is useful for their jobs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and Statistical Techniques	Unit I: Derivatives and application: Basic concept of function, types of function, Equilibrium point, break even point. Basic concept of derivatives, Rules of derivatives, and simple problem , second order derivatives, Marginal derivative, Elasticity of demand, Maxima and Minima for functions in economics and commerce.	10	Business mathematics by V.K. Kpoor	Balck board
	Unit II : Interest and Annuity: Simple interest, Compound interest with nominal and effective rate of interest, Annuity and types of annuity, for immediate annuity future value, present value and EMI using reducing balance method and amortization table.	15	Business mathematics by V.K. Kpoor	Balck board
	Unit III: Bivariate linear Correlation and Regression: Basic concept of correlation and types of correlation, Determine correlation using scatter diagram, Karl Pearson's method, Spearman's rank correlation coefficient. Basic concept of	15	Basic Statistics by B.L. Agarwal	Balck board

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	regression equations, regression coefficient, relation between regression coefficient and correlation coefficient, finding regression equation by method of least squares.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Praful Ghag DEPARTMENT: Mathematics

CLASS: F.Y.B.COM SEMESTER: II nd MONTH: November ACADEMIC YEAR: 2020-2021

Division: E,F,G,H, M, N,O,P
LEARNING OBJECTIVE/S:
The learners will be able to : Application of mathematics and statistical tools in business and commercial application. Develops the student power of decision making with statistical tools. For future research activity basic concept and practical knowledge with mathematical and statistical tools. Some future realistic calculations with mathematics which is useful for their jobs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and Statistical Techniques	Unit I:Function, Derivatives and application: Basic concept of function, types of function, Equilibrium point, break even point. Basic concept of derivatives, Rules of derivatives, and simple problem , second order derivatives, Marginal derivative, Elasticity of demand, Maxima and Minima for functions in economics and commerce.	15	Business mathematics by V.K. Kpoor	Balck board
	Unit IV: Concept and uses of index numbers, types of index numbers, Construction of index numbers, using Aggregate and relative index numbers, Laspery's, Paasche's, Dorbisch-bowley's , Marshall-Edgewoth and Fisher's idea index number, test of consistency, chain base index numbers, shift base index numbers, cost of living index, concept of real income.	8	Basic Statistics by B.L. Agarwal	Balck board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS SEMESTER: II DEPARTMENT: COMMERCE
CLASS: FYBCom (A,B,C,D,I,J,K,L) MONTH: JANUARY-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:
The learners will be able to:

- Define Simple and Compound interest and its formula.
- Understand the concept of this topic and learn how to use in day to day life.
- Learn meaning of EMI, annuity and its types, also calculation of present and future value.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MATHEMATICAL & STATISTICAL TECHNIQUES-II	Interest and Annuity	Unit2	▪ Introduction to the formula of Simple interest and sums based on it. Introduction to the formula of Compound interest and sums based on it monthly, quarterly, .half yearly and yearly. ▪ Introduction and sums based on EMI, reducing balance and flat rate of interest. ▪ Introduction to annuity and its types, calculation of present	1 1 1	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

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			value and future value by using its formula. ▪ Concept on Stated annual rate and effective annual rate and solving sums based on it.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

TEACHING PLAN (UNIT 4 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS SEMESTER: II DEPARTMENT: COMMERCE
CLASS: FYBCom (A,B,C,D,I,J,K,L) MONTH: JANUARY-MARCH ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVES:

The learners will be able to:

- Learn the concept and usage of Index numbers.
- Find how far the cost of living has gone up in the last ten years.
- Learn its application that it is the only tool with which the movements of all prices can be measured.
- Focus and how to apply this knowledge in day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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MATHEMATICAL & STATISTICAL TECHNIQUES-II	Index Numbers	Unit4	▪ Introduction to index number and its uses ▪ Exercise on Simple average and weighted average of relative method. ▪ Sums based on Laspeyre's ,Paasche's and Fishers formula and comparison between them. ▪ Test of Consistency: Time reversal, factor reversal and Circular test. Quantity and Value Index numbers	1 1 1 2	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Madhu sharma DEPARTMENT: Commerce CLASS: F.Y.B.Com (A, B, C, D) SEMESTER: II MONTH: January to march ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to :

understand the real life application of mathematics and statistics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit -1 : derivative & it's applications	• Single order derivative, double order derivative, Marginal cost average cost , marginal revenue & marginal profit, minima & maxima methods	15 lectures	V.K.Kapoor Businesses mathematics	Table top problem solving method & PPT, Strategic thanking using assignments, extra lectures
Unit-3 Bivariate linear	• Correlation Analysis : Meaning, Types of Correlation, Determination of Correlation: Scatter Diagram, Karl Pearson's Method of			

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correlation and regression	Correlation Coefficient and Spearman's Rank Correlation Coefficient. • Regression Analysis : Meaning, Concept of Regression Equations, Slope of the Regression Line and its Interpretation. Regression Coefficients ,Relationship between Coefficient of Correlation and Regression Coefficients, Finding the equations of Regression lines by method of Least Squares	15 lectures	V.K.Kapoor fundamental of applied statistics	Table top problem solving method & PPT, Strategic thanking using assignments, extra lectures

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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Madhu sharma

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TEACHING PLAN (UNIT 4 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: COMMERCE

CLASS: FY B.COM (C,D,E,F,G,H) SEMESTER: II MONTH: JANUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Describe the components of time series.
- Estimate the trend using moving average method and least square method.
- Estimate the seasonal component of time series using simple average method.
- Understand the concept and usage of index numbers.
- Find index numbers using different methods.
- Understand the concept of real income and cost of living index numbers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematoical and Statistical techniques-II Time series (Unit 4)	➢ Time series: definition and components ➢ Trend values using moving average and least square method ➢ Seasonal component using simple average method	1 2 1	Basic Statistics (S.L Agarwal)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Powerpoint presentation, pen tablet (writing device)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4

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TEACHING PLAN (UNIT 5 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: COMMERCE

CLASS: FY B.COM (C,D,E,F,G,H) SEMESTER: II MONTH: FEBRUARY S ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define and state the properties of binomial, Poisson and normal distribution.
- Solve the questions of probability based on binomial, Poisson and normal distribution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematoical and Statistical techniques-II Elementary Probability Distribution (Unit5)	➢ Binomial distribution : definition, properties, examples ➢ Poisson distribution : definition, properties, examples ➢ Normal distribution : definition, properties, examples	2 2 2	Basic Statistics (S.L Agarwal)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Powerpoint presentation, pen tablet (writing device)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6

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TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: COMMERCE

CLASS: FY B.COM (E,F,G,H) SEMESTER: II MONTH: MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of simple interest, compound interest, annuity and EMI.
- Solve the questions related to simple interest, compound interest, annuity and EMI.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematoical and Statistical techniques-II Interest (Unit 2)	➢ Simple interest with examples ➢ Compound interest with examples	2 2	Business Mathematics (V.K Kapoor)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Powerpoint presentation, pen tablet (writing device)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4

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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: COMMERCE

CLASS: FY B.COM (C,D) SEMESTER: II MONTH: MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define different types of functions.
- Find break even point and equilibrium price.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematoical and Statistical techniques-II Functions , (Unit 1)	➢ Functions and its types ➢ Demand, supply, revenue, profit, Average cost/ revenue, equilibrium point, break even point	1 3	Business Mathematics (V.K Kapoor)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Powerpoint presentation, pen tablet (writing device)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Suborna S. Banerjee DEPARTMENT: Commerce CLASS: FYBCOM (Div. A to H) SEMESTER: II MONTH: Dec to April

ACADEMIC YEAR: 2020-21 DIV: A To H

LEARNING OBJECTIVE/S:

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to

Preparing resumes to attending interviews, convening meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

To make students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
1) Group Communication	1) Interviews: 2) meetings: 3) Committees & Conferences: 4) Public Relations:	15	Manan Publication, Sheth Publication, Vipul Publication	PPT and Sketches	

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2) Business correspondence	1) Trade Letters (ref.	15	From Internet	PPT and Sketches	
3) Language and writing skills	1) Reports & Business Proposals 2) Summarization	8	Manan Publication, Sheth Publication, Vipul Publication	PPT and Sketches	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 38

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT: COMMERCE** **CLASS: FY B.COM (Div – A,B,C,D.)**

SEMESTER: II **MONTH: JANUARY TO MARCH** **ACADEMIC YEAR: 2020-2021**

LEARNING OBJECTIVE/S:
To improve students presentation skill and make enable them to write appropriately for organization / industry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS COMMUNICATION-II UNIT- 1	Group Communication: iii. Committees & Conferences iv. Public relations	08	PPTs	Online lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS COMMUNICATION-II UNIT- 3	Language and writing skills i. Reports: Parts, Types & Business Proposals ii. Summarisation iii. Tutorial Activities	15	PPTs	Online lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SIVAPRIYA ACHARI DEPARTMENT: COMMERCE CLASS: FY.B.COM – I, J, K, L, M, N, O, P

SEMESTER: II MONTH: JANUARY TO MAY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

To help students understand the various aspects of Group Communication

The learners will be able to : It introduces students to the process of making effective presentations and moves on to the various group Communications, where individual and team work is equally important.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1)Group Communication	1) Interviews: Group Discussion Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit 2) Meetings: Need and Importance of Meetings, Conduct of Meeting and Group Dynamics Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions 3) Conference: Meaning and Importance of Conference Organizing a Conference Modern Methods: Video and Tele – Conferencing 4) Public Relations: Meaning, Functions of PR Department, External and Internal Measures of PR	15	Manan Publication Sheth Publication Vipul Publication	Google meet, ppt

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2)Business Correspondence	Trade letters: letters of inquiry,letters of complaints,claims,Adjustments,sales letters ,Promotional leaflets and Fliers,Consumer grievance redressed letters,letters under right to information (RTI) Act.	15	Manan Publication Sheth Publication Vipul Publication	Google meet, ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:PADMAJA NILESH JOSHI DEPARTMENT: COMMERCE CLASS: FY.B.COM – I, J, K, L, M, N, O, P

SEMESTER: II MONTH: JANUARY TO MAY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

To help students understand the various aspects of Group Communication

The learners will be able to : It introduces students to the process of making effective presentations and moves on to the various group Communications, where individual and team work is equally important.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1)Group Communication	1) Interviews: Group Discussion Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit 2) Meetings: Need and Importance of Meetings, Conduct of Meeting and Group Dynamics Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions 3) Conference: Meaning and Importance of Conference Organizing a Conference Modern Methods: Video and Tele – Conferencing 4) Public Relations: Meaning, Functions of PR Department, External and Internal Measures of PR	15	Manan Publication Sheth Publication Vipul Publication	Google meet, ppt

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2)Business Correspondence	Trade letters: letters of inquiry,letters of complaints,claims,Adjustments,sales letters ,Promotional leaflets and Fliers,Consumer grievance redressed letters,letters under right to information (RTI) Act.	15	Manan Publication Sheth Publication Vipul Publication	Google meet, ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. ARCHANA D. JOSHI DEPARTMENT: COMMERCE CLASS: FY.B.COM – E,F,G,H

SEMESTER: II MONTH: JANUARY TO MAY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

To help students understand the various aspects of Group Communication

The learners will be able to : It introduces students to the process of making effective presentations and moves on to the various group Communications, where individual and team work is equally important.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	1) Interviews: Group Discussion Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit 2) Meetings: Need and Importance of Meetings, Conduct of Meeting and Group Dynamics Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions 3) Conference: Meaning and Importance of Conference Organizing a Conference Modern Methods: Video and Tele – Conferencing 4) Public Relations: Meaning, Functions of PR Department, External and Internal Measures of PR	15	Manan Publication Sheth Publication Vipul Publication	Google meet, ppt

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4) Language and Writing Skills	Reports: Parts, Types, Feasibility Reports, Investigative Reports Summarisation: Identification of main and supporting/sub points Presenting these in a cohesive manner	15	Manan Publication Sheth Publication Vipul Publication	Google meet, ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Deepakkumar Gupta** DEPARTMENT: **Commerce**

CLASS: **SYBCOM Div E,F,G,H** SEMESTER: **III** MONTH: Aug **to Dec** ACADEMIC YEAR: **2020 - 21**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) Revise the concepts of Partnership Final Accounts
3) Solve practical questions using concepts
4) Revise the Concepts of Piecemeal distribution of Cash
5) Solve practical questions using concepts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy and Financial management–III	Unit 1 : Partnership Final Accounts	16		Online platform – Google Meet PPT, Videos, Ms word , exel
	1) Introduction and meaning of Partnership 2) Concept of fixed And fluctuating capital method 3) Concepts - Admission, Retirement & Death 4) Treatment of Goodwill 5) Practical problems		Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya	

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			Financial Accounting by M.Mukherjee &M. Hanif	
	Unit 2 : Piecemeal Distribution of Cash	16		Online platform – Google Meet PPT, Videos, Ms word , exel
	1) Introduction & Meaning of Piecemeal Distribution of Cash 2) Concept of internal and external creditors 3) Order of payment of cash 4) Methods of Piecemeal Distribution of Cash 5) Explanation of Excess Capital Method 6) Practical problems		Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____32_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Prof. Abhishek V. Madaye DEPARTMENT:Commerce
CLASS: S.Y.B.com Div: A,B,C,D SUBJECT:Accountancy and financial management-III
SEMESTER: III MONTH: August to December ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concepts of partnership final Accounts and piecemeal distribution of cash.

Module /Unit	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I	**Partnership final Accounts based on adjustment of admission or retirement/death of a partner during the year:** **1) Simple question based on admission,retirement ,and death of the partner** **2) Theory regarding the same**	15	Text Books and Reference material from Internet	PPT, Excel
Module II	**Piecemeal distribution of cash:** **1) Excess capital method** **2) Assets taken over by partner** **3) Treatment of past profits or past losses in the balance sheet.** **4) Treatment on secured liabilities** **5) Contingent liabilities, realization expenses etc.**	10	Text Books and Reference material	Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. FIROZKHAN KHURSHIT KHAN** DEPARTMENT**: COMMERCE**

CLASS: **S.Y.B.COM** DIV: **A, B, C & D** SEMESTER: **III** MONTH: **NOVEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To impart the practical knowledge of Accountancy & Financial Management.

The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Amalgamation of Firms	**UNIT-3: Amalgamation of Firms** Realisation method only, Calculation of purchase consideration, Journal/ledger accounts of old firms, Preparing Balance sheet of New firm, Adjustment of goodwill in the new firm, Realignment of capitals in the new firm by current accounts / cash or a combination thereof Excluding Common transactions between the amalgamating firms.	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet
Conversion / Sale of a Partnership Firm into a Ltd. Company	**UNIT-4: Conversion / Sale of a Partnership Firm into a Ltd. Company** Realisation method only. Calculation of New Purchase consideration, Journal / Ledger Accounts of old firms. Preparing Balance Sheet of new company.	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce
CLASS: S Y B Com SEMESTER: III MONTH: DECEMBER ACADEMIC YEAR: 2020-21
LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the concepts of amalgamation, preparation of account of accounting for amalgamation of partnership firm and its accounting effect. The learners will able to understand the need, procedure, accounting effect and treatment for conversion of partnership firm into a limited company.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy and Financial Management III	**Amalgamation of Firms** i) Realization method only ii) Calculation of purchase consideration iii) Journal / ledger accounts of old firms iv) Preparing Balance sheet of new firm v) Adjustment of goodwill in the new firm vi) Realignement of capitals in the new firm by current accounts / cash or a combination thereof Excluding Common transactions between the amalgamating firms	15	Shashi K. Gupta – "Contemporary Issues in Accounting", Kalyani Publishers. Ashok Sehgal – "Fundamentals of Financial Accounting", Taxmann's Publishers	Lecture through Google Meet, MS office & Discussion
	Conversion / Sale of a Partnership Firm into a Ltd. Company	15		

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	(i) Realisation method only (ii) Calculation of New Purchase consideration, Journal / Ledger Acco Preparing Balance sheet of new company	unts of old firms.		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: **Commerce**

CLASS: **SYBCOM Div I J K L M** SEMESTER: **III** MONTH: Aug **to Dec** ACADEMIC YEAR: **2020 - 21**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) Revise the concepts of Partnership Final Accounts
3) Solve practical questions using concepts
4) Revise the Concepts of Piecemeal distribution of Cash
5) Solve practical questions using concepts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting – III	Unit 1 : Partnership Final Accounts	16		Online platform – Google Meet PPT, Videos
	1) Concepts - Admission, Retirement & Death 2) Treatment of Goodwill 3) Practical problems			
	Unit 2 : Piecemeal Distribution of Cash	16		Online platform – Google Meet PPT, Videos
	1) Introduction & Meaning of Piecemeal Distribution of Cash 2) Methods of Piecemeal Distribution of Cash			

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	3) Explanation of Excess Capital Method 4) Practical problems			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. VISHAL SAWANT** DEPARTMENT**: COMMERCE** CLASS: **S.Y.B.COM** DIV: **IJKLM** SEMESTER: **III** MONTH: **NOVEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To impart the practical knowledge of Accountancy & Financial Management.

The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Amalgamation of Firms	**UNIT-3: Amalgamation of Firms** Realisation method only, Calculation of purchase consideration, Journal/ledger accounts of old firms, Preparing Balance sheet of New firm, Adjustment of goodwill in the new firm, Realignment of capitals in the new firm by current accounts / cash or a combination thereof Excluding Common transactions between the amalgamating firms.	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet
Conversion / Sale of a Partnership Firm into a Ltd. Company	**UNIT-4: Conversion / Sale of a Partnership Firm into a Ltd. Company** Realisation method only. Calculation of New Purchase consideration, Journal / Ledger Accounts of old firms. Preparing Balance Sheet of new company.	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PALLAVI GANGADHAR NAI K DEPARTMENT: COMMERCE CLASS: SYBCOM SEMESTER: III MONTH: JUNE TO NOVEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : UNDERSTAND SOME OF THE MOST SIGNIFICANT MACROECONOMICS THEORIES AND PRINCIPLE..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS II	MODULE 1 INTRODUCTION TO MACROECONOMICS, SCOPE AND IMPORTANCE, CIRCULAR FLOW OF INCOME,CLOSE AND OPEN ECONOMY MODELS, MEASUREMENT OF NATIONAL INCOME, CONVENTIONAL AND GREEN GNP AND NNP CONCEPTS, TARDE CYCLES, FEATURES AND PHASES, SAY'S LAW OF MARKETS, FEATURES, IMPLICATIONS AND CRITICISM	6	MANAN PRAKASHAN SETH PUBLICATION	BLACKBOARD AND CHALK
	MODULE 4 MONEY, PRICES AND INFLATION MONEY SUPPLY DETERMINANTS, FACTORS INFLUENCING VELOCITY OF CIRCULATION OF MONEY, DEMAND FOR MONEY, CLASSICAL AND KEYNESIAN APPROACHES, LIQUIDITY PREFERENCE THEORY OF INTEREST,INFLATION, DEMAND PULL AND COST PUSH INFLATION, EFFECTS AND CAUSES OF INFLATION,	6		
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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNITHA CHANDRASHEKHAR NAIR DEPARTMENT: COM MERCE

CLASS S.Y.B.COM SEMESTER: III MONTH: August -December ACADEMIC YEAR: 2020 -2021

LEARNING OBJECTIVE/S: To inculcate the interest in macroeconomics
The learners will be able to : understand how an economy works

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics III Unit I & II..	**Module 1 - Intoduction**			
	1.Meaning , scope and importance of Macro economics 2.Circular flow of aggregate income and expenditure 3.The measurement of National product 4. Trade cycles – Features and Phases 5. Classical Macro economics – Say's law of Markets	10	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1Power Point Presentation 2 Quiz method 3.Discussion method
	Module 2- Basic concepts of Keynesian Economics			
	1.The Principals of Effective Demand 2. Consumption Function 3.Investmment Function and Marginal Efficiency of Capital	10	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Power Point Presentation 2 Quiz method 3.Discussion method
	4.Investment Multiplier effect on Income and Output 5.Relevance of Keynesian theory tools to the developing countries.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AKRUTI BOSE DEPARTMENT: COMMERCE

CLASS: SYBCOM A,B,C,D SEMESTER: III MONTH:JUNE/OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: ONLINE
The learners will be able to : Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS III Module III and Module IV	POST KEYNESIAN DEVELOPMENTS IN MACRO ECONOMICS: Liquidity Preference theory of Interest, The		Macro Economics by H.L. AHUJA.	Online .
	IS-LM model, Inflation and Unemployment, Stagflation and Supply Side Economics.			
	MONEY, PRICES AND INFLATION: Money Supply, Demand for Money-Classical and Keynesian Approaches, Money and			
	Prices-Quantity Theory of Money, Fisher's equation of exchange, Inflation: Demand Pull and Cost Push Inflation, Nature Policy to			
	Curb inflation and Monetary policy, Inflation targeting.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08 Lectures.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: Commerce

CLASS: SYBcom SEMESTER: III MONTH: Aug-Dec ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Familiarize with basic concepts of macroeconomics and with certain common features of economic occurrence in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –III Unit 1 Introduction Unit 2 Basic concepts of Keynesian economics	Macroeconomics Circular flow of income and expenditure Measurement of national product Trade cycles Classical macroeconomics	10	Ahuja. H.L., Modern Economics — S.Chand Company Ltd. New Delhi	Google Meet, PPT , Quiz
	The principle of effective demand Consumption function Investment function Theory of multiplier	10	Gregory .N. Mankiw, Macroeconomics, Fifth Edition (2002) New York:Worth Publishers	Google meet, PPT, Quiz

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Veena Sihana DEPARTMENT: Commerce CLASS: SYBCOM SEMESTER: III MONTH: June to October 2020

ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Familiarize the commerce students with basic concepts of macroeconomics and with certain common features of economic occurrence in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics - III	Module II – Basic Concepts of Keynesian Economics Liquidity Preference Theory of Interest	2	Jhingan, M.L., Principles of Economics — Vrinda Publications (P) Ltd Ahuja. H.L., Modern Economics — S.Chand Company Ltd. New Delh.	PPT, EXCEL SHEETS, WORD DOCUMENTS
	Module III – Post Keynesian Development in Macro Economics IS LM Model, Philips Curve, Supply Side Economics, Stagflation	10		PPT, EXCEL SHEETS, WORD DOCUMENTS
	Module IV – Money, Prices & Inflation Money Supply, Demand for Money, Money & Prices, Inflation – Causes, Effects & Measures	15		PPT, EXCEL SHEETS, WORD DOCUMENTS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: CHETAN PRAKASH VARMA DEPARTMENT: COMMERCE CLASS: SYBCOM

SEMESTER: III MONTH: SEPT- DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : To make student understand the All Macro Economics Perspective, National Income, Theory of J.M Keynes and its applicability in business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS-III	BASIC CONCEPTS OF KEYNESIAN ECONOMICS The Principle of Effective Demand: Aggregate Demand and Aggregate Supply Consumption Function: Properties, Assumptions and Implications Investment function and Marginal Efficiency of capital	04	Ackley.G (1976), Macro Economic Theory and Policy, Macmillan Publishing Co. New York	Google meet Communication, YouTube Links, Kahoot. Story-telling method Textbook method Lecture Method Demonstration Method Tutorial Method Questions-Answer method Discussion method
	Investment Multiplier effect on Income and Output: Assumptions, Working, Leakages, Criticism and Importance - paradox of thrift	03	Ahuja. H.L., Modern Economics — S.Chand Company Ltd. New Delhi.	

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	Relevance of Keynesian theory tools to the developing countries			
	MONEY, PRICES AND INFLATION Money Supply: Determinants of Money Supply - Factors influencing Velocity of Circulation of Money Demand for Money : Classical and Keynesian approaches and Keynes' liquidity preference theory of interest - Friedman's restatement of Demand for money	04	Principles of Macro Economics Dornbush , Rudiger, Fisher Stanley and Startz, Richards	
	Money and prices : Quantity theory of money - Fisher's equation of exchange - Cambridge cash balance approach Inflation : Demand Pull Inflation and Cost Push Inflation - Effects of Inflation-	04	Jhingan, M.L., Principles of Economics — Vrinda Publications (P) Ltd.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: Commerce CLASS: S.Y.BCOM (Division I J K L M) SEMESTER: III

MONTH: September to December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & Remember- Concept of Organising,organization structure.
2) Understand & Remember- Concept of Departmentation,Decentralisation & centralization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3- Organising	Organising - Steps, Organisation Structures - Features of Line & Staff Organisation, Matrix Organisation, Virtual Organisation, Formal v/s Informal Organisation	02	Book by Manan publications/Internet	Google Meet, PPT,
	Departmentation - Meaning - Bases, Span of Management - Factors Influencing Span of Management, Tall and Flat Organisation	02	Book by Manan publications/Internet	Google Meet, PPT,
	Delegation of Authority - Process, Barriers to Delegation, Principles of Effective Delegation. Decentralisation : Factors Influencing Decentralisation, Centralization v/s Decentralisation	02	Book by Manan publications/Internet	Google Meet, PPT,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: Commerce CLASS: S.Y.BCOM (Division I J K L M) SEMESTER: III

MONTH: September to December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & Remember- Concept of Planning, MBO, MBE.
2) Understand & Remember- Concept of Decision Making.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Planning & Decision Making	Planning - Steps, Importance, Components, Coordination – Importance	02	Book by Manan publications/Internet	Google Meet, PPT,
	M.B.O - Process, Advantages, Management By Exception- Advantages; Management Information System - Concept, Components	04	Book by Manan publications/Internet	Google Meet, PPT,
	Decision Making - Techniques, Essentials of a Sound Decision Making, Impact of Technology on Decision Making	04	Book by Manan publications/Internet	Google Meet, PPT,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF.NAZIA SAJID SHAIKH_ DEPARTMENT: COMMERCE III CLASS: SYBCOM.

SEMESTER:III MONTH:AUG-DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: SUBJECT:COMMERCE III
The learners will be able to : Understand meaning of Management, Evolution of Management, Modern Management Approach,, Indian Ethos.

Function of Management: Directing and Controlling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 INTRODUCTION TO MANAGEMENT	*Management: Meaning, Nature, functions, Mgmt Skills & competencies *Evolution of Management Thoughts: Classica approach. Classical organisation theory, Neo Classical approach:Human relation approach, Modern Management approach. *Indian Management Thoughts: Origin and significance of Indian Ethos to management. *Motivation: Meaning, Importance, influencing factors.	11	Management principles and practice: Mc Graw Hill Publication	Online lectures on Google Meet.
MODULE 4 DIRECTING AND CONTROLLING	*Communication: importance and barriers of effective communication. *Leadership: Meaning, functions , Styles of leadership and Qualities of good leader. *Controlling: steps , essentials , techniques of controlling , PERT, CPM, Budgetary Control, Management Audit	12		Online Lectures on Google Meet.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: COMMERCE CLASS: SYB.COM -E, F, G, H
SEMESTER: 3rd MONTH: August-October ACADEMIC YEAR: 2020-2021 SUBJECT: COMMERCE III
LEARNING OBJECTIVE/S:
The learners will be able to:

1. To identify and demonstrate processes for making short and long term plans.
2. To recognize the importance of seeking Information before making decisions.
3. To make students able to work in group, problem solving and organizational skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 2: PLANNING & DECISION MAKING	▪ Planning- steps, Importance, Components, Coordination-Importance	4	Management - James Stoner Management: Global Prospective – Heinze Weihrich & Harold Koontz	1. Lecture and discussion. 2. Flow charts. 3. Online teaching learning tools (google meet, google form Google classroom, PPTs)
	▪ M.B.O – Process, Advantages, Management By Exception-Advantages; Management Information System – Concept, Components	3		
	▪ Decision Making – Techniques, Essentials of a Sound Decision Making, Impact of Technology on Decision			

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	Making	3	Principles of Management	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10×4 div = 40

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA R. BHOSALE DEPARTMENT: B. COM CLASS: SYB.COM – E, F, G, H SEMESTER: 3rd
MONTH: August – October ACADEMIC YEAR: 2020-2021 SUBJECT: COMMERCE

III LEARNING OBJECTIVE/S:

The learners will be able to:

1. To make student able to work in different types of organization
2. To recognize the importance of span of management and Delegation of Authority

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 3.	• Organising – Steps, Organisation Structures- Features of Line & Staffordshire Organisation, Matrix Organisation, Virtual Organisation, Formal v/S Informal Organisation	4	Management – James Stoner. Management Global Prospective - H.W.& Koontz.	1. Lecture and discussion. 2. Flow charts. 3. Online teaching learning tools (google meet, google form Google classroom, PPTs)
	• Departmentation – Meaning- Bases, Span of Management – Factors Influencing Span of Management, Tall and Flat Organisation	4		

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ORGANISING	• Delegation of Authority – Process, Barriers to Delegation, Principles of Effective Delegation. Decentralisation : Factors Influencing Decentralisation, Centralization v/S Decentralisation	4	Principles of Management.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _12 × 4 div = 48

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM. (A,B,C,D)

SUBJECT: COMMERCE III SEMESTER: III MONTH: August to December ACADEMIC YEAR: 2020-21 .

LEARNING OBJECTIVE/S:
The learners will be able to : To gain the knowledge of management, evolution of management, to study different elements of management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2-Planning & Decision Making	**Planning** - Steps, Importance, Components, Coordination - Importance **M.B.O** -Process, Advantages, Management By Exception-Advantages; Management Information System-Concept, Components **Decision Making** - Techniques, Essentials of a Sound Decision Making, Impact of Technology on Decision Making.	**10**	Principles of management by Philip Kotler And Essential of Management by Koontz	Online lectures through Google meet / Power point presentation
Unit -4 Organising	**Organising** Steps, Organisation Structures - Features of Line & Staff Organisation, Matrix Organisation, Virtual Organisation, Formal Vs Informal Organisation. **Departmentation** Meaning Bases, Span of Management Factors Influencing Span of Management, Tall and Flat Organisation .**Delegation of Authority**-Process, Barriers to Delegation, Principles of Effective Delegation. Decentralisation Factors Influencing Decentralisation, Centralization vs Decentralisation Directing And Controlling	10	Principles of management by Philip Kotler And Essential of Management by Koontz	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF.NILESHWARI VINAY GHUMRE

DEPARTMENT: COMMERCE III CLASS: SYBCOM.

SEMESTER:III MONTH:AUG-DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: SUBJECT:COMMERCE III
The learners will be able to : Understand meaning of Management, Evolution of Management, Modern Management Approach,, Indian Ethos.

Function of Management: Directing and Controlling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 INTRODUCTION TO MANAGEMENT				
	*Management: Meaning, Nature, functions, Mgmt Skills & competencies *Evolution of Management Thoughts: Classica approach. Classical organisation theory, Neo Classical approach:Human relation approach, Modern Management approach. *Indian Management Thoughts: Origin and significance of Indian Ethos to management. *Motivation: Meaning, Importance, influencing factors.	11	Management principles and practice: Mc Graw Hill Publication	Online lectures on Google Meet.
MODULE 3- ORGANISING	*Communication: importance and barriers of effective communication.	12		Online Lectures on Google Meet.

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	Organising - Steps, Organisation Structures - Features of Line & Staff Organisation, Matrix Organisation, Virtual Organisation, Formal v/s Informal Organisation			
	Departmentation - Meaning - Bases, Span of Management - Factors Influencing Span of Management, Tall and Flat Organisation			
	Delegation of Authority - Process, Barriers to Delegation, Principles of Effective Delegation. Decentralisation : Factors Influencing Decentralisation, Centralization v/s Decentralisation			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Madhura Surve. DEPARTMENT: COMMERCE. CLASS: S.Y. B.COM SEMESTER: III MONTH: September – December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Carrier Opportunities and scope of Advertising

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I Introduction to Advertising	IMC, Meaning, Definition, features of Advertising, Active Participants, Evolution, growth of Advertising benefits and classification of Advertising	10	Advertising : Principles and practices	Online lectures through Google Meet
Unit III Economics and social effect of Advertising	Economic and Social effect of advertising, impact of advertising on Price, Production and distribution, Positive and Negative effects of Advertising, effect of advertising on monopoly and competition, Ethical issues, Untruthful ads, importance of Truth in Advertising Pro-bono Advertising , self regulation laws, ASCI.	15	Advertising, sales, Promotion Management	Online lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NIKITA SUNIL JOGLE DEPARTMENT: COMMERCE

CLASS: SYBCOM (A, B, C, D) SEMESTER: III MONTH: AUGUST - DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: learn about advertising agencies – its functioning, structure, various types, career opportunities in advertising etc. And also, about the brand building process, advertising for different purposes & new trends in advertising sector

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2 – Advertising Agency	• Ad Agency – Features, structure & services offered, types of advertising agencies, agency selection criteria. • Agency & Client – Maintaining agency – client relationship, reasons & ways of avoiding client turnover, creative pitch, agency compensation. • Careers in Advertising – Skills required for a career in advertising, various career options, freelancing career options – graphics, animation, modelling, dubbing.	8	Text book Wikipedia YouTube	Google Meet, Power Point Presentation, Word Documents, Quizziz Website, YouTube videos
4 – Brand Building & Special Purpose Advertising	• Brand Building – The communication process, AIDA model, role of advertising in developing brand image & brand equity & managing brand crisis. • Special Purpose Advertising – Rural advertising, political advertising, advocacy advertising, corporate image advertising, green advertising – features of all the above special purpose advertising.	9	Text book Wikipedia YouTube	Google Meet, Power Point Presentation, Word Documents, Quizziz Website, YouTube videos

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	• Trends in Advertising – Media, ad spends, ad agencies, execution of advertisements.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17 Lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM (E,F,G,H)

SUBJECT: ADVERTISING SEMESTER: III MONTH: August to December ACADEMIC YEAR: 2020-21.

LEARNING OBJECTIVE/S:
The learners will be able to : Gain knowledge about advertising, its benefits, scope, function, different media in advertising.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1:- Introduction to Advertising.	• **Integrated Marketing Communications (IMC)-** Concept Features, Elements, Role of advertising in IMC • **Advertising:** Concept, Features, Evolution of Advertising Active Participants, Benefits of advertising to Business and consumers • **Classification of Advertising:** Geographic, Media, Target audience and Functions	12	Marketing Management by Philip Kotler.	Online lectures through Google Meet / Power Point Presentation
UNIT 3:- Economic & Social Aspects of Advertising	• **Economic Aspects:** Effect of advertising on consumer demand, monopoly and competition, Price • **Social Aspects:** Ethical and social issues in advertising positive and negative influence of advertising on Indian values and culture • **Pro Bono/Social advertising:** Pro Bono Advertising, Social Advertising by Indian Government through Directorate of Advertising and Visual Publicity (DAVP). Self-Regulatory body - Role of ASCI (Advertising Standard Council of India)	11	Marketing Management by Philip Kotler.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____23_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Karishma Vijay Kale

DEPARTMENT:Commerce CLASS:SyBCom - E, F, G, H

SEMESTER: IV MONTH:October ACADEMIC YEAR:2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Know the concepts of advertising and able to advertise the product.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Chapter 2 Advertising Agency	Ad Agency: Features, Structure and services offered, Types of advertising, Agency selection criteria	2	Manan	Online Teaching- PPT and advertisements
	Agency and Client: Maintaining Agency- Client relationship, Reasons and ways of avoiding Client Turnover, Creative Pitch, Agency Compensation	3	Manan	Online Teaching- PPT and advertisements
	Careers in Advertising: Skills reuired for career in advertising, Various career options, Freelancing Careers Option- Graphics, Animation, Modeling, Dubbing	3	Manan	Online Teaching- PPT and advertisements
Chapter 4 Brand Building and Special Purpose Advertising	Brand Building: The Communication Process, AIDA Model, Role of advertising in developing Brand Image and Brand Equity, and managing Brand Crises	2	Manan	Online Teaching- PPT and advertisements

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	Special Purpose Advertising: Rural advertising, Political advertising, Advocacy advertising,, Corporate Image advertising, Green advertising- Features of all the above special purpose advertising	3		
	Trends in Advertising: Media, Ad spends, Ad agencies, Execution of Advertisement	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAVITA VILAS PURANDARE DEPARTMENT: COMMERCE CLASS: SYBCOM (I J K L M)

SUBJECT: ADVERTISING SEMESTER: III MONTH: August to December ACADEMIC YEAR: 2020-21.

LEARNING OBJECTIVE/S:
The learners will be able to : Gain knowledge about advertising, its benefits, scope, function, different media in advertising.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1:- Introduction to Advertising.	• **Integrated Marketing Communications (IMC)-** Concept Features, Elements, Role of advertising in IMC • **Advertising:** Concept, Features, Evolution of Advertising Active Participants, Benefits of advertising to Business and consumers • **Classification of Advertising:** Geographic, Media, Target audience and Functions	12	Marketing Management by Philip Kotler.	GOOGLE MEET
UNIT 3:- Economic & Social Aspects of Advertising	• **Economic Aspects:** Effect of advertising on consumer demand, monopoly and competition, Price • **Social Aspects:** Ethical and social issues in advertising positive and negative influence of advertising on Indian values and culture • **Pro Bono/Social advertising:** Pro Bono Advertising, Social Advertising by Indian Government through Directorate of Advertising and Visual Publicity (DAVP). Self-Regulatory body - Role of ASCI (Advertising Standard Council of India)	12	Marketing Management by Philip Kotler.	GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: CHETAN PRAKASH VARMA DEPARTMENT: COMMERCE CLASS: SYBCOM

SEMESTER: III MONTH: SEPT- DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to : Desired outcome: The students will overcome fear & inculcate within them the sense of adventure , sportsmanship , espirit-d-corp and develop confidence , courage , determination, diligence and quest for excellence. To make student aware of the protection and conservation of the environment. Desired outcome: The student will be made aware of the modern techniques of waste management and pollution control.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Unit 3A: Adventure Training 4 Objective: To inculcate spirit of adventure, undertake adventure activities, to hone leadership qualities and risk taking abilities. i. Any Two such as – Obstacle course, Slithering, Trekking, Cycling, Rock Climbing, Para Sailing, Sailing, Scuba Diving etc.	3	NCC HAND BOOK	ONLINE MODE GOOGLE MEET
	Unit 3B: Environment Awareness and Conservation 2 Objective: i. Waste management ii. Pollution control, water, Air, Noise and Soil	4		YOUTUBE LINK
	smartness, turnout, develop the quality of immediate and implicit obedience of orders, with good reflexes. i. Side pace, pace forward and to the rear ii. Turning on the march and whiling iii. Saluting on the march iv. Marking time, forward march and halt in quick time v. Changing step vi.	3		DEFENCE WEBSITES

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	Formation of squad and squad drill			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM (ALL DIVISIONS)

SUBJECT: FOUNDATION COURSE IN NSS SEMESTER: III MONTH: August to December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Gain knowledge about National Service Scheme, its benefits to the society, scope for the NSS volunteers

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-2 Disaster Management & Preparedness	• **Basics of Disaster Preparedness :** • Meaning , types and methods • Help line nos, first aid techniques • Breathing techniques, rescue methods, CPR • Various types of knots and stretchers • **Disaster Management :** • Concept, disaster cycle, role of technology • Role of volunteer in first responder , Disaster management cell	12	NSS MANUAL – UNIVERSITY OF MUMBAI	Online lectures through Google meet / Power point presentation
UNIT-4 Environment & Energy Conservation	• Environment – meaning, features, issues, conservation of natural resources, Sustainability in environment with respect to water conservation types. • Environment Movements in India • Energy – concept, features • Conventional and non-conventional energy • Energy conservation – the meaning and importance	10	NSS MANUAL – UNIVERSITY OF MUMBAI	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____22_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. RASHMI SAWANT DEPARTMENT:COMMERCE

CLASS: SYBCOM (ALL DIVISIONS)

SUBJECT: FOUNDATION COURSE IN NSS SEMESTER: III

MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to understand the meaning and types of values, their connection with responsibility. They will be able to think, feel and act sensitively towards women and all other genders. They will be able understand the importance of health and hygiene. They will understand different types of diseases, their remedies and preventive measures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1 Value System & Gender Sensitivity	UNIT - I Value System • Meaning of Values, Types of Values • Human Values & Social Responsibilities • Indian Value System – the Concepts and its Features • Eleven Vows UNIT - II Gender Sensitivity and Women Empowerment • Concept of Gender • Causes behind Gender related problems and remedial measures. • Meaning of Woman Empowerment • Various Schemes for Woman Empowerment in India	12	NSS MANUAL – UNIVERSITY OF MUMBAI	Online lectures through Google meet / Power point presentation
	UNIT – I Meaning of Health and Hygiene • Indicators (Physical & Mental),			

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UNIT-3 Environment & Energy Conservation Health, Hygiene & Diseases	• Role of Health in Development • Public Health System in India (include different schemes NHM, JSSY, Aayush, • Health insurance) • Maintenance of Hygiene • Sanitation UNIT – II Diseases and Disorders – Preventive Campaigning • Diseases and Disorders • Communicable and Non-Communicable Diseases • Preventive Campaigning in Malaria, Tuberculosis, Dengue, Cancer, HIV/AIDS, • Diabetes, Malnutrition	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____22_____

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TEACHINGPLAN(UNITPLAN)

NAMEOFTHESTAFF: Ambari S Patwardhan DEPARTMENT: Self Finance CLASS: SYBCOM (A,B,C,D)

SEMESTER:II MONTH: Augest to December ACADEMIC YEAR: 2020-21

LEARNINGOBJECTIVE/S:Business Law
Thelearnerswillbeableto:The Pupils will be able to understand the concept and types of Negotiable Instruments,their usages,Rules Regarding them.Similarly they will be able to understand the concept of goods ,contract of sale and rules governing such contract,as well as

PAPER,UNIT, TITLE	SUBTOPICS	NOOF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLS USED
Sale of Goods Act1930	a)formation of contractofsale b)Goods and their classifications c)Price, Conditions And Warranties d)Transfer of property in goods e)Performance of contract of sales f)Unpaid seller &his rights g)sale by Auction h)Hire Purchase Agreement	07	Saleofgoods Act:Mulla Principles of law of sale of goods And Hire Purchase :Avatar Singh	Google meet
Negotiable Instrument Act1881	a)Defination of Negotiable Instrument b)Features of Negotiable Instrument c)Promissory Note	07	Negotiable Instruments Act :Mulla	Google meet

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	d)Bill of Exchange and Cheque e)Holder and Holderin due course f)Crossing of Cheque g)Types of Crossing h)Dishonour & Discharge of Negotiable Instruments		Introductionto Negotiable Instruments:Dr AvatarSingh	

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT: Commerce CLASS: SYBCOM (A, B,C, D) SEMESTER: III

MONTH: June to Nov. ACADEMIC YEAR: 2020 - 2021 LEARNING OBJECTIVE/S: Business Law

The learners will be able to : Introduction, Understand Meaning, Rules and regulations, section, important act details with related case study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I: Indian Contract Act, 1872 Part 1	Chapter I Definitions, Kinds of agreements, Kinds of contracts, distinction between agreement and contract Chapter II Proposal, kinds of proposal -specific, offer to a class of persons, general offer, counter offer, invitation to offer, standing offer, express proposal, implied offer, requirements of a valid offer section 3 & 5 Acceptance, requirements of a valid acceptance, Rules of communication of proposal, acceptance and revocation of proposal/acceptance Chapter III Capacity to contract, minor, unsound mind, Disqualified person. Section 10-12	03 04 02 03	Indian contract act 1872 Avtar singh Pollak and mulla D.D basu	GOOGLE MEET PPT presentation (ONLINE)

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Module II Indian Contract Act, 1872 Part II	Chapter IV Consideration, agreements without consideration, unlawful consideration, inadequacy of consideration Agreements expressly declared to be void section 2- 25			
Module III Special Contract	Chapter I consent and free consent, coercion, undue influence, fraud, misrepresentationMistake Chapter II Void agreement section 24 to 30 Chapter III section 31 and 68 -72 Contingent contract, quasi-contracts, e-contract, Privity of contracts with exceptions Chapter IV Section 73 - 75 Discharge of contracts, Remedies available on breach of contracts Chapter I Law of Indemnity and guarantee related essential, discharge of surety, distriction between, section 124 - 125, 126 - 129, 132 - 147	04 02 03 03 03		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27 × 4 = 216

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: SYBCOM SEMESTER: III

MONTH: August- November ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand that the records need to be maintained and planning need to be done for future

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Management Accounting **Unit- 1** Working Capital	Meaning of working capital, nature and concept of working capital,estimation of working capital. Operating cycle, format of working capital. Practical problems	12	Management Accounting , by Patankar	Online lecture taken on Google Meet
Unit-2 Capital budgeting	Introduction , capital budgeting process, projects. Capital budgeting techniques- payback period, ARR, net present value, profitability index, discounted payback period. Practical problems	12	Management Accounting , by Patankar	Online lecture taken on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:GAURI YADAV. DEPARTMENT: COMMERCE CLASS:. SYBCOM SEMESTER: III.

MONTH: AUG - DEC ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : learn and understand Management accounting. It's importañce in planning activities and decision making. Various anlaysis to manage and ratios to compare the sales.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Introduction to Management Accounting, Analysis and Interpretation of account	Meaning - Nature - Scope and Functions of Management Accounting - Role of Management Accounting in Decision Making - Management Accounting and Financial Accounting Vertical Forms of Balance Sheet and Profit and Loss Account suitable for analysis, Trend analysis, Comparative Statement, Common Size Statement. Question Problems based on the above.	15	Manan prakashan	PPT, Google Meet, Excel to solve sums
2.Ratio Analysis and Interpretation based on vertical Financial statement				
	Balance Sheet Ratios: i. Current Ratio ii. Liquid Ratio iii. Stock Working Capital Ratio iv. Proprietary Ratio v. Debt Equity Ratio vi. Capital Gearing Ratio. b. Revenue Statement Ratios: i. Gross Profit Ratio ii. Expenses Ratio iii. Operating Ratio iv. Net Profit Ratio v. Net Operating Profit Ratio vi. Stock Turnover Ratio	15	Manan prakashan	PPT, Google Meet, Word, Excel to solve sums

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	c. Combined Ratio i. Return on Capital employed (Including Long Term Borrowings) ii. Return on proprietor's Fund (Shareholders Fund and Preference Capital) iii. Return on Equity Capital iv. Dividend Payout Ratio v. Debt Service Ratio vi. Debtors Turnover vii. Creditors Turnover			
	Sums solved on all three ratios.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ambari S Patwardhan DEPARTMENT: COMMERCE CLASS: SYBCOM A, B, C, D SEMESTER: IV MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2020 -2021 SUBJECT - BUSINESS LAW

LEARNING OBJECTIVE/S:
The pupils will be able to Know Partnership Meaning , Procedure for Registration of Partnership, Types of Partner, Rights and Duties of Partner.

The learners will be able to Know Rights of Consumers, forms of its Violation and Consumer Protection Act.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indian Partnership Act, 1932	Chapter I - Partnership: Concept, Essentials, True test of Partnership, Partnership Deed, Types of Partnership, Rights and duties of Partners, Distinguish between Partnership and Hindu Undivided Family.	03	Indian Partnership Act, 1932- Pollock & Mulla	Google Meet
	Chapter II - Dissolution: Concept, Modes of Dissolution, Consequences of Dissolution	01		
	Chapter III - Limited Liability Partnership 2008: Concept, Characteristics, Advantages and Disadvantages, Procedure for Incorporation .	02		
	Chapter IV - Extent of L.L.P.: Converstion of LLP, Mutual Rights and Duties of Partners, winding up of LLP, Distinction between LLP and Partnership.	02		
	Chapter - I Concept, Objects, Reasons for enacting the Consumer Protection Act, Definition of Consumer, Consumer Dispute,	02		

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Consumer Protection Act, 1986 and Competition Act 2002.	Complaint, Defect, Deficiency, Unfair Trade Practices, Goods and Services. Chapter - II - Consumer Protection Councils and Redressal Agencies: District, State and National. Chapter - III - Competition Act 2002 : Concept, Salient Features, Objectives and Advantages. Chapter IV Abuse of Dominant Position , Competition Commission of India, Anti-Competition Agreements.	02 01 02		
Intellectual Property Rights	Chapter III - IPR Relating to Copyrights: Concept of Copyright, Ownership of Copy right, Duration or term of copy right , Original work and fairs use, Rights of copyright holder, Infringement of copyrights and Remedies. Chapter IV - IPR Relating to Trademarks : Concept, Functions, Types, trademarks that cannot be registered, Registration of trade marks and Rights of the Proprietor of Trade Marks. Procedure for registration of Trade Marks., infringement of Trademarks and Remedies.	02 02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT: Commerce CLASS: SYBCOM SEMESTER: IV

MONTH: December to April ACADEMIC YEAR: 2020 - 2021 Division : A/ B/ C/ D, LEARNING OBJECTIVE/S: Busines Law

The learners will be able to : Introduction, Understand Meaning, Rules and regulations, section, important act details with related case study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 Indian Campanies Act, 2013 Part 1	Chapter I Company and its formation, definition and nature of company, advantages and disadvantages of a company, lifting of corporate veil with cases, promoters, pre-incorporation and preliminary contracts Chapter II Types of companies (meaning and concept only) statutory companies, one person company, Company, limited by shares/guarantee Private company, public company, Producer Company, formation of companies with charitable Objects, holding and subsidiary company, Government, foreign company, small company	03 04 03	1. Company Law : Avtar Singh. 2. Indian Company Law. Authors, Dr. N. S. Kothari, Ramesh Chand Agarwal.	Online google meet PPT presentation
MODULE 2 Indian Campanies Act, 2013 Part 2	Procedure for registration of a company, documents to be submitted for registration, Effect of incorporation. Chapter III Memorandum of Association & Articles of Association: meaning, concept, clauses, effect ofRegistration of	02		

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	Memorandum and Articles of Association, Doctrine of Constructive NoticeDoctrine of Ultra Vires, Doctrine of Indoor Management Chapter IV Prospectus- meaning, when to be issued, when not required, kinds of prospectus, contents of prospectus, private placement			
Intellectual property right	Membership of a company Who can become a member? Modes of acquiring membership, cessation of membership, rights, liabilities and duties of members Chapter II Classification of Directors, woman director, independent director, small shareholders' director Disqualification of director, Director Identification Number, powers and duties, position of director as key managerial personnel, Manager, Managing Director. Chapter III Meetings, types of meetings of members and Board of directors, convening and conduct of meetings,	03 04 03 02		

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	Postal ballot, meetings through video conferencing, e-voting.			
	IPR realted introduction, definition, Patent Act related to patents all details clear	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 33

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM (ALL DIVISIONS)

SUBJECT: FOUNDATION COURSE IN NSS SEMESTER: IV MONTH: January to March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Gain knowledge about National Service Scheme, its benefits to the society, scope for the NSS volunteers

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1 Entrepreneurship Development and Schemes	• Entrepreneurship development – meaning • Attributes of entrepreneur • Women entrepreneurship • Government and self-employment schemes • Skill India, Start up India, Digital India, Make in India, • NITI Aayog	12	NSS MANUAL – UNIVERSITY OF MUMBAI	Online lectures through Google meet / Power point presentation
UNIT-2 Cottage Industries in India	• Cottage industries – meaning • Pre independence & post independence scenario • Marketing of Cottage Products and outlets • Government policies to encourage cottage industries • Hurdles in the development of cottage industries	10	NSS MANUAL – UNIVERSITY OF MUMBAI	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____22_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani DEPARTMENT: Commerce

CLASS: S.Y.B.Com Divisions: A,B,C,D SEMESTER: IV MONTH: January to March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- To developand gain logical reasoning, critical thinking abilities, creating and testing hypotheses and thus opening doors to research.
- To measure verbal reasoning, quantitative reasoning, and analytical writing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FC Unit III Science and technology	Part A: Some significant modern technologies, features and applications. i) Laser Technology- Light amplification by stimulated emission of radiation, uses of laser in remote sensing, GPS mapping, medical use. ii) Satellite technology- Various uses in Satellite navigation system, GPS and imprecise climate and weather analysis. iii) Information and communication technology- Convergence of various technologies like satellites, computer and digital in the information revolution of today's society.	7	Sheth Publishers Michael Vaz Aurara vaz:foundation course Newspapers	❖ Online lectures(Google Meet) ❖ Google Slides ❖ Discussion ❖ Explanation with examples ❖ Online Projects assigned and assessment.

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	iv) Biotechnology and genetic engineering- applied biology and uses in medicines, pharmaceuticals and agriculture, genetically modified plant, animal and human life. v) Nanotechnology- Definition: The study, control and application of phenomena and material at length scales below 100 nm; uses in medicines, military intelligence and consumer product. Part B: Issues of control, access and misuse of technology.	2		
Unit IV Introduction to competitive exams	Part A: Basic information on competitive examinations- The pattern, eligibility criteria and local centres. i) Examinations conducted for entry into professional courses- GRE, GMAT, CAT,SAT. ii) Examination conducted for entry into jobs by UPSC,SSC, Banking and Insurance sector, NET-SET. Part B: Soft skills for competitive examinations i) Information on area s tested: Quantitative ability, Data interpretation , Verbal ability and logical reasoning, creativity and lateral thinking. ii) Motivation: Concept, theories and types of motivations. iii) Goal setting: Types of goals, SMART Goals, Stephen Conveys concept of human endowment. iv) Time management: Effective strategies .	12	Sheth Publishers Michael Vaz Aurara vaz : foundation course Newspapers	❖ Online lectures(Google Meet) ❖ Google Slides ❖ Discussion ❖ Explanation with examples ❖ Online Projects assigned and assessment.

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	v) Writing Skills: Paragraph writing, Report writing, Filing an application under the RTI Act, Grievance letter.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 21

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. FIROZKHAN KHURSHIT KHAN** DEPARTMENT**: COMMERCE**

CLASS: **S.Y.B.COM** DIV: **A, B, C & D** SEMESTER: **IV** MONTH: **MARCH** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To impart the practical knowledge of Accountancy & Financial Management.

The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Redemption of Debentures	**Unit: 3 - Redemption of Debentures** Provisions of Section 71 (1) and (4) of the Companies Act, 2013, Creation and investment of DRR including The Companies (Share Capital and Debentures) Rules, 2014, the methods of writing-off discount/loss on issue of debentures; Terms of issue of debentures, Methods of redemption of debentures: By payment in lumpsum and by payment in instalments (excluding from by purchase in open market), Conversion. (Question on entries. ledgers and/or Balance Sheet and /or redemption of preference shares)	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet
Ascertainment and Treatment of Profit Prior to Incorporation	**Unit: 4 - Ascertainment and Treatment of Profit Prior to Incorporation** Principles for ascertainment, Preparation of separate combined, columnar Profit and Loss A/c including different basis of allocation of expenses and income	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce

CLASS: S Y B Com SEMESTER: IV MONTH: March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Learn about the working format of the company regards to raising of capital funds by way of issuing shares, debentures. Also the legal procedure to raise these funds. It also helps to give practical knowledge of accounts. Additionally the learner will be able to understand the method for the redemption of preference share and calculation of settling the proceeds. sss

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy and Financial Management IV	**Introduction to Company Accounts** Introduction of basic terms: Types of companies, nature and formation of companies, Shares, Debentures, Share Capital, Reserves and surplus, types of assets and liabilities, dividend, format of Balance Sheet (Only theory) Issue of shares: Different modes IPO, Private Placements, Preferential, Rights, ESO, SWEAT and ESCROW account, Issue of shares at par, premium and discount, Under subscription and Over subscription of shares, forfeiture and reissue of forfeited shares, issue of shares for consideration other than cash. (Only theory) Issue of Debentures: types of Debentures, Issue of debentures at par, premium and discount, Issue of Debentures with consideration of Redemption ,Issue of debentures for cash receivable in instalments or at a time Issue of debentures for consideration other than cash. (Only theory)	14	Introduction to Accountancy T.S. Grewal S. Chand and Co. (P) Ltd., New Delhi Advanced Accounts Shukla and Grewal S. Chand and Co. (P) Ltd., New Delhi	Lecture through Google Meet, MS Office & discussion

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	Redemption of Preference Shares Provision of the Companies Act for redemption of Preference Shares (Sec 55 of the Companies Act, 2013), Companies (Share and Debentures) Rules. Methods of Redemption of fully paid up Preference Shares as per Companies Act, 2013: The proceed of a fresh issue of shares, the capitalisation of undistributed profits and a combination of both, calculation of minimum fresh issue to provide the fund for redemption, (Question on entries and/or Balance Sheet) Note: Companies governed by Section 133 of the Companies Act, 2013 and comply with the accounting standards prescribed for them. Hence, the balance in security premium account not to be utilised for premium payable on redemption of preference shares.	14		Lecture through Google Meet, MS Office & discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28

Babli Jha

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNITHA CHANDRASHEKHAR NAIR DEPARTMENT: COM MERCE

CLASS S.Y.B.COM SEMESTER: IV MONTH: JANUARY - MARCH ACADEMIC YEAR: **2020 -21**

LEARNING OBJECTIVE/S To inculcate the interest in Public Finance and policy :
The learners will be able to : Understanding the essential of government finance as it forms the grounding of analyzing public policies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –IV Unit II & III	**Module II : Public Revenue**			
	1.Public Revenue. 2.Shifting of Tax burden 3. Economic effects of taxation.	10	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Power point presentation 2 Quiz method 3.Discussion method
	Module III : Public Expenditure and Public Debt.			
	1Public Expenditure –Canons , Classification and Effects 2.Growth of public Expenditure	10	**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Power Point Presentation 2 Quiz method 3.Discussion method
	3.Public Expenditure and Social Welfare 4.Public Debt			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AKRUTI BOSE DEPARTMENT: COMMERCE

CLASS: SYBOM A,B,C,D SEMESTER: IV MONTH: DECEMBER/MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: ONLINE
The learners will be able to : Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS IV Module I and Module IV	THE ROLE OF GOVERNMENT IN AN ECONOMY: Meaning and Scope of Public Finance, Major Fiscal Functions, Principle of		Macro Economics by H.L. AHUJA.	Online Lectures through Laptop, Mobile, PPT slide, Google Meet.
	Maximum Social Advantage-Dalton and Musgrave, the principle in Practice and its Limitations.			
	FISCAL MANAGEMENT AND FINANCIAL ADMINISTRATION: Fiscal Policy, Contra Cyclical and Fiscal Policy and Discretionary Fiscal Policy-Principle of Sound Finance and Functional Finance, Budget-Meaning, objectives and			
	Types, Intergovernmental Fiscal Relations-Fiscal Federalism and Fiscal Decentralization.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08 Lectures.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF.NILESHWARI VINAY GHUMRE

_ DEPARTMENT: COMMERCE. _ CLASS: SYBCOM SEMESTER: SEM IV_ MONTH: JAN TO MARCH ACADEMIC YEAR: 2020-21

SUB: COMMERCE IV

LEARNING OBJECTIVE/S:
The learners will be able to : Understand Quality Management, Quality Management Techniques, Service Quality Management .

Recent trends in finance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	
MODULE 2. QUALITY MANAGEMENT	***Introduction to Quality:** Dimensions of Quality, Cost of Quality, Types of Quality. ***Quality Management Tools:** TQM : Importance , Six Sigma: Process . ISO:9000- Certification Process. Kaizen -Process. ***Service Quality Management:** Importance, SERVQUAL MODEL, Measures to improve service Quality.	**10**	**1.Production & operation management: L.C. Jhamb.**	**TEACHING METHOD/ ICT TOOLS USED**
MODULE 3. INDIAN FINANCE SYSTEM	Indian financial system structure, primary Market IPO ,NSDL ,CDSL,SEBI stock market Credit Rating CRISIL CARE ICRA ***Derivative Market:** Types, Participants, Types of Derivative instrument	**12**	**2.Indian financial system: M.Y Khan. Tata McGraw.**	**Online Lectures on Google Meet**

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM (A,B,C,D)

SUBJECT: COMMERCE IV SEMESTER: IV MONTH: January to March . ACADEMIC YEAR: 2020-21.

LEARNING OBJECTIVE/S:
The learners will be able to : To gain the knowledge of management, evolution of management, to study different elements of management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1- Production & Inventory management	• Production Management : Objective, scope • PPC – steps and importance, • Production system : concept,types – continuous and intermittent • Productivity • Inventory management , inventory control techniques • Scientific inventory control system	11	Principles of management by Philip Kotler And Essential of Management by Koontz	Online lectures through Google meet / Power point presentation
UNIT 4- Recent Trends in Finance.	• Mutual Funds- Advantages and Limitations. Types. Factors responsible for growth of mutual funds - Systematic Investment Plan, • Commodity Market: Categories, Derivatives Market: Types, Participants, Types of Derivative Instruments. • Start-up Ventures Concept. Sources of Funding, Micro Finance - Importance, Role of Self Help Groups.	12	Principles of management by Philip Kotler And Essential of Management by Koontz	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___23__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI YADAV DEPARTMENT: COMMERCE CLASS: SYBCOM SEMESTER: IV

MONTH: NOV-MAR ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : How to internal control for sales, creditors and to internal audit its objectivies . internal check & internal audit. Techniques of auditing vouching & verifications of books of accounts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3. Auditing Techniques and Internal Audit Introduction	A. Internal Control – Meaning and purpose, review of internal control, advantages, auditors duties, review of internal control, Inherent Limitations of Internal control, internal control samples for sales and debtors, purchases and creditors, wages and salaries. Internal Checks Vs Internal Control, Internal Checks Vs Test Checks B. Internal Audit : Meaning, basic principles of establishing Internal audit, objectives, evaluation of internal Audit by statutory auditor, usefulness of Internal Audit, Internal Audit Vs External Audit, Internal Checks Vs Internal Audit	8	Manan Prakashan	PPT , Explanation, Discussion and Examples.

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4. Auditing Techniques : Vouching & Verification	A. Audit of Income : Cash Sales, Sales on Approval, Consignment Sales, Sales Returns Recovery of Bad Debts written off, Rental Receipts, Interest and Dividends Received Royalties Received B. Audit of Expenditure : Purchases, Purchase Returns, Salaries and Wages, Rent, Insurance Premium, Telephone expense Postage and Courier, Petty Cash Expenses, Travelling Commission Advertisement, Interest Expense C. Audit of Assets Book Debts / Debtors, Stocks – Auditors General Duties; Patterns, Dies and Loose Tools, Spare Parts, Empties and Containers Quoted Investments and Unquoted Investment Trade Marks / Copyrights Patents Know-How Plant and Machinery Land and Buildings Furniture and Fixtures D. Audit of Liabilities : Outstanding Expenses, Bills Payable Secured loans Unsecured Loans, Contingent Liabilities	10	Manan Prakashan	PPT , Explanation, Discussion and Examples.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: SYBCOM SEMESTER: IV

MONTH: January- March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand the auditing subject thorough and it will behelpful for them in future

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing Unit – 2 Audit planning, procedures and Documentation	Audit planning , meaning, objectives, sources, discussion with client. Audit program , meaning, factors , advantages, disadvantages, overcoming disadvantages. Audit evidence about internal controls, transactions during year , year end balances, differences, audit procedures. Audit working papers, meaning, fators, contents of permanent audit file, current audit file, ownership, custody and access, audit notebook	10		Online Lecture taken on Google Meet

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				Online Lecture taken on Google Meet
Unit – 1 Introduction to Auditing	Definition of auditing, objectives, its limitations, difference between accounting and auditing and investigation and auditing. Meaning of errors and frauds, Types of errors and frauds, Risk of error and error inaudit, duties and responsibilities of auditor during fraud. Principles of audit, materiality, True and fair view. Types of audit, Advantages and disadvantages of Balance sheet audit, Interim audit, continous audit, concurrent audit, annual audit and statutory audit	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NIKITA SUNIL JOGLE DEPARTMENT: COMMERCE

CLASS: SYBCOM (A, B, C, D) SEMESTER: IV MONTH: JANUARY TO MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Learn about the different types of medias available in advertising sector & the importance of creativity in advertising

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1 – Media in Advertising	• Traditional Media – Print, Broadcasting, Out-of-Home advertising & films – advantages & limitations of all the above traditional media • New Age Media – Digital Media/Internet Advertising – Forms, Significance & Limitations • Media Research – Concept, Importance, Tool for regulation – ABC & Doordarshan Code	8	Text book Wikipedia YouTube	Google Meet, Power Point Presentation, Word Documents, Quizziz Website, YouTube videos
3 – Fundamentals of Creativity in Advertising	• Creativity – Concept & importance, creative process, concept of creative brief, techniques of visualisation. • Creative Aspects – Buying motives – types, selling points – features, appeals – types,	5	Text book Wikipedia YouTube	Google Meet, Power Point Presentation, Word Documents, Quizziz Website, YouTube videos

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	concept of unique selling proposition (USP). Creativity through Endorsements – Endorsers – types, celebrity endorsements – advantages & limitations, high involvement & low involvement products.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA VAIBHAV TAMBE DEPARTMENT: Commerce CLASS: S.Y.Bcom A,B,C,D
SUBJECT: Advertising II SEMESTER: IV MONTH: January-March ACADEMIC YEAR: 2020-2021

A teaching plan is a document that outlines the structure and details of a single session. A good teaching plan is a comprehensive write-up of the step-by-step teaching methods, the estimated duration of each segment of teaching, and the materials and resources needed for the session.

LEARNING OBJECTIVE/S:

By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

(For a detailed description of each component see Appendix A).

APPENDIX {A}

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Planning advertising concepts	a] Advertising campaigns: Concept, Advertising campaigns planning, steps in determining advertising campaign objectives, DAGMAR model	03	Book by Manan publications/Internet	Online
	b] Advertising budgets: factors determining advertising budget, methods of setting advertising budget, media objective- reach, frequency, GRP's	02	Book by Manan publications/Internet	Online
	c] Media planning: concept, process, factors considered while selecting media, media scheduling strategies	02	Book by Manan publications/Internet	Online

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UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Execution and evaluation of advertising	a] Preparing print ads: Essential of copywriting, copy-elements, types, layout- principles, illustration- importance	02	Book by Manan publications/Internet	Online
	b] Creating broadcast ads: execution style, jingles and music- importance, concept of storyboard	02	Book by Manan publications/Internet	Online
	c] Evaluation: Advertising copy, pre-testing and post-testing of advertisement, methods and objectives of pre-test & post-test.	02	Book by Manan publications/Internet	Online

Total no of lecture 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM (DIV E TO L) SEMESTER: V MONTH: AUGUST TO DEC ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. MATERIAL COST	PROCUREMENT PROCEDURES INVENTORY CONTROL -TECHNIQUES INVENTORY ACCOUNTING PRATICAL PROBLEMS BASED ON CALCULATION OF EOQ, MATERIAL TURNOVER RATIO, VALUATION OF INVENTORY BASED ON FIFO METHOD & WEIGHTED AVERAGE METHOD	10	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	Google meet, PPT, Microsoft word, Spreadsheet
2. LABOUR COST	ATTENDANCE AND PAYROLL PROCEDURES, OVERVIEW OF STATUTORIES REQUIRMENTS, IDLE TIME, OVERTIME AND INCENTIVES LABOUR TURNOVER , EFFICIENCY RATING SYSTEM , REMUNERATION SYSTEMS AND INCENTIVE SCHEMES. REMUNERATION AND INCENTIVE SYSTEMS BASED ON PIECE WORK PLAN, HALSEY PREMIUM PLAN, ROWAN SYSTEM, GANTT'S TASK. PRACTICAL PROBLEMS BASED ON – PREPARATION OF LABOUR COST STATEMENT	10	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	Google meet, PPT, Microsoft word, Spreadsheet
3. OVERHEADS	FUNCTIONAL ANALYSIS-FACTORY, ADMINISTRATIVE & SELLING & DISTRIBUTION. BEHAVIOURAL ANALYSIS-FIXED, VARIABLE & SEMI VARIABLE.PRACTICAL PROBLEMS ON DEPARTMENTALISATION & APPORTIONMENT OF PRIMARY OVERRHEADS. COMPUTATION OF MACHINE	10	PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	Google meet, PPT, Microsoft word, Spreadsheet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL | DEPARTMENT: COMMERCE | CLASS: TYBCOM

SEMESTER: **V** | MONTH :Aug,2020 to Dec,2020 | ACADEMIC YEAR :2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to understand Objectives ,scope of cost accounting ,classification of cost, material procurement procedure, Technique of inventory control,Stock valuation, Primary distribution of overheads, Calculation of Machine hour Rate.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST ACCOUNTING	**1] Introduction to Cost accounting**-Objectives & scope of cost accounting, cost centre &cost unit,Cost classification for stock valuation, Decision making & control, coding system, elements of cost, cost behaviour pattern.	10	S.N. Maheshwari B.K.Bhar	Google meet, Google slide, Microsoft word, Spreadsheet
	2]Material cost- Procurement of material procedure & documentation in respect of receipt & issue of stock.Inventory control- Technique for fixing of minimum,maximum& reorder level,Economic Order Quantity, ABC classification . Inventory accounting , Practical problems of calculation of EOQ,Raw material Turnover ratio, Preparation of stock ledger & valuation of stock based on FIFO & weighted Average cost.	10		Google meet, Google slide, Microsoft word, Spreadsheet
	3]Overheads- Functional Analysis-Factory, Administrative & selling & distribution. Behavioural Analysis-Fixed, Variable & semi variable.Practical problems on Departmentalisation & Apportionment of primary overrheads. Computation of Machine	10		Google meet, Google slide, Microsoft word, Spreadsheet

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	overhead rate. Basic concept of treatment of over & under absortioption of overheads.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____NILESHWARI VINAY GHUMRE_____ DEPARTMENT: _____COMMERCE____ CLASS: ____TYBCOM_ SEMESTER: V_

MONTH: _____AUG TO DEC___ ACADEMIC YEAR: _____2020-21__

LEARNING OBJECTIVE/S:
The learners will be able to : _____STUDENTS WILL HAVE INDEBTH KNOWLEDGE AND PRACTICAL EXPERIENCE OF EXPORT MARKETING_

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 AND 4	Export marketing, Trade barriers, major economic groupings, overseas market research	12	R.L.KRAMER	Google meet, ppt , online lectures
	Export incentives and assistance	12	Michael vaz	Google meet, ppt, online lectures

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___24_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. DR (CA)MABEL LOBO DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: V

MONTH: August to December 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit I Introduction and Basic Terms	Introduction to Income Tax : Introduction of Tax i.e. Direct and Indirect, Basic information about what is Direct Tax	1	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel
	BASIC TERMS : 1.Assessee 2.Assessment 3.Assessment Year 4.Capital Assets 5.Income 8.Person 6.Previous Year 7.Transfer Practical questions	5	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. DR (CA)MABEL LOBO DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: V

MONTH: August to December 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit II Scope of Total Income	Residential Status Basic Conditions, Exceptions, Additional Conditions R & OR, R but NOR, NRI Practical problems	5	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel
	Scope of Total Income Related to R & OR, R but NOR, NRI	3	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. DR (CA)MABEL LOBO DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: V

MONTH: August to December 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit III Heads of Income	Capital Gains Concept of Capital Asset, Transfer, Types of Capital Gains, Exempt Transfers, Exemptions, Practical Problems	5	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel
	Income from Other Sources Income taxable and deductions deductible under this head Exempt Incomes, Practical Problems	5	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. DR (CA)MABEL LOBO DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: V

MONTH: August to December 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit V Computation of Total Income for Individual	Computation of total income by combining two or more heads of incomes – practical problems	3	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____Tejaswini Yogesh Naik_____ DEPARTMENT: __Commerce____ CLASS: __TYBCOM SEMESTER: V _____

MONTH: __August- December___ ACADEMIC YEAR: _2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : ____Difference in direct and indirect tax, meaning of income from salary, difference in allowance and perquisites, allowance, perquisites, gratuity,leave encashment, pension, retrenchment compensation, different types of house property, deduction u/s 24, gross annual value, net annual value, preconstruction interest, arrears and unrealised rent, income from business and profession, expenses which are allowed as deduction, expenses not allowed as deduction, section 32-37. Deduction under chapter VI A 80A,,80U,80D,80DD,80TTA,80E,80C,80CCC,80CCE

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct tax	1. Income from house property 2. Income from salary 3. Income from Business and profession 4. Deductions	5 5 6 4	Manan publication	Power point presentation, pen and paper

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __20_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM** SEMESTER: **5th** MONTH: **AUG-SEPT.**

ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are the Provision regarding Income from House Property under Income Tax Act, 1961.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME	**Income From House Property:** Section 22 to 27, Including Section 2 - Annual Value MCQ Question	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **5th** MONTH: **SEPT.**

ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are the Provision regarding Income from Business and Profession under Income Tax Act, 1961.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME	**Profits & Gains From Business & Profession, Vocation** Section 28 to 32, 36, 37, 40, 40A, 43B, 44AD, 44ADA & 44AE Including.: Section 2 – Business MCQ Question	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **5th** MONTH: **OCTOBER**

ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are provision of Income from Capital Gain under Income Tax Act, 1961
2. What are provision of Deductions under Chapter VI - A under Income Tax Act, 1961

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME	**Salary Income: Section 15 – 17** Including Section 10 relating to House Rent Allowance, Travel Concession, Special Allowance, Gratuity, Pension ,Commutation, Leave Encashment, Compensation, Voluntary Retirement, Payment from Provident Fund	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM
Deductions under Chapter VI – A	**80 A**-Restriction on claim in Chapter VI- A deductions **80 C**- Payment of LIC/PF and other eligible investments **80CCC** - Contribution to certain Pension Fund **80D** - Medical Insurance Premium **80 DD**- Maintenance and medical treatment of handicapped dependent **80E** - Interest on Educational Loan **80 TTA**-Interest on Saving Bank account **80D** - Deduction in the case of totally blind or physically handicapped or mentally retarded resident person			ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **5th** MONTH: **NOV-DEC.**

ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. How to Compute Taxable income of Individual and HUF.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMPUTATION OF TOTAL INCOME	Computation of Total Income of Individual and HUF with respect to above heads and deductions (MCQ Questions)	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Audrin Anthony Colaco DEPARTMENT: Self Finance CLASS: T.Y.B. Com. (Division A B C D) SEMESTER: V

MONTH: September to December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & Remember- the meaning of salary; section 10, sections 15-17; calculation of income from salary; various allowances (taxable, partly taxable, non-taxable); perquisities; rules and calculation of Gratuity, Pension, Leave encashment.
2) Understand & Remember- the meaning of income from House Property and calculation of income from House Property.
3) Understand & Remember- the meaning of Income from N=Business / Profession and calculation of Income from Business / Profession.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Heads of Income	Income from Salary	10	Book by Manan publications/Internet	Google Meet, Google Classroom, PPT, Excel
	Income from House Property	10	Book by Manan publications/Internet	Google Meet, Google Classroom, PPT, Excel
	Income from Business/ Profession	10	Book by Manan publications/Internet	Google Meet, Google Classroom, PPT, Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: V

MONTH: August to December 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit I Introduction and Basic Terms	Introduction to Income Tax : Introduction of Tax i.e. Direct and Indirect, Basic information about what is Direct Tax	1	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel
	BASIC TERMS : 1.Assessee 2.Assessment 3.Assessment Year 4.Capital Assets 5.Income 8.Person 6.Previous Year 7.Transfer Practical questions	5	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: V

MONTH: August to December 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit II Scope of Total Income	Residential Status Basic Conditions, Exceptions, Additional Conditions R & OR, R but NOR, NRI Practical problems	5	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel
	Scope of Total Income Related to R & OR, R but NOR, NRI	3	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: V

MONTH: August to December 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit III Heads of Income	Capital Gains Concept of Capital Asset, Transfer, Types of Capital Gains, Exempt Transfers, Exemptions, Practical Problems	5	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel
	Income from Other Sources Income taxable and deductions deductible under this head Exempt Incomes, Practical Problems	5	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: V

MONTH: August to December 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit V Computation of Total Income for Individual	Computation of total income by combining two or more heads of incomes – practical problems	3	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF.NEELAM RATHORE DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER: V

MONTH:-AUG-DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to Analyze, Design, Implement and evaluate a computer based system, process components or program to meet the different context of life in this competitive world

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit - 2 and Unit – 3. Database and MYSQL.	Introduction to Database and MYSQL as Non-Procedural language.	3	MYSQL – The Complete Reference, By – Vikram Vaswani.	GOOGLE MEET,PPT,WORD DOCUMENTS
	MYSQL Basics, Datatypes, Creation, Insertion, Updation and Deleting of Data; Built-in-Functions.	3		
	After of Data for Charge of Columns, Rename, Show, Describe and Drop statement, Primary key, Foreign key and Constraints.	3		
	MYSQL simple Queries (Select Statement) filtering of Data by using conditions use of operators, Aggregate functions.	3		
	Multi-Table Queries – use of Joins (INNERJOIN) Nested Queries using Sub-Quires and Joins, use of HAVING Clause Simple transactions (Start, Commit and Rollback)	6	Database Management Systems, By – Raghu Ramakrishnan	.

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Unit 4- MS-EXCEL	Excel- Calculations using Avg., Sum functions.	2	DIFFERENT EXCEL BOOKS – BY Lokesh Lalwani	Google meet and Microsoft excel
	Excel- Calculation of pivot Table.	2		
	Excel- Calculation of Selling Price. Simple interest and Compound Interest	2		
	Excel- Excel Functions.	2		
	Excel- Calculation of Subtotal.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: COMMERCE

CLASS: TYBCOM SEMESTER: V MONTH: AUGUST-DECEMBER ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Students will come to know how online data communicated over the network and different components, types and structures of networks. Students will come to know technical aspect of Internet which they regularly used in their day to day life e.g. Websites, protocols email services

PAPER, UNIT , TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
THEORY DATA COMMUNICATION NETWORKING AND INTERNET	Data Communication Component, Data representation, Distributed processing. Definition, Types (LAN, MAN, WAN) Advantages. Network Structures – Server Based, Client server, Peer to Peer.	2	Data Communication and Networking - Behrouz A Forouzan Introduction to Computers – Peter Norton, Tata McGraw Hill	GMEET, PPT, MICROSOFT WORD WITH PEN TOOL,PDF FILES, GOOGLE FORM, GOOGLE CLASSROOM
	Topologies – Star, Bus, Ring. Network Media, Wired and Wireless. Network Hardware: Hubs, Bridges, Switches, Routers. Network Protocols – TCP/IP, OSI Model.	3	Same as above	
	Definition, Types of connections, sharing internet connection. Services on net- WWW, Email-Blogs. IP addresses, Domain names, URLs.	3	Same as above	
	Searching Directories, Search engines, Boolean search (AND, OR, NOT), Advanced search, Meta Search Engines Email – POP/SMTP accounts in Email, Different parts of an Email address. Receiving and sending emails with attachments by scanning	3	Same as above	

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	attachments for viruses			
MYSQL UNIT II AND III	**MYSQL-HOW TO CREATE ,USE, RENAME DELETE DATABASES**	2		GMEET, PPT, MICROSOFT WORD WITH PEN TOOL,PDF FILES, GOOGLE FORM, GOOGLE CLASSROOM MYSQL SOFTWARE, NOTEPAD
	MYSQL-TABLE CREATION	2		
	MYSQL-INSERTION OF RECORDS	2		
	ALTERATION AND UPDATION OF RECORDS **TRANSACTION**	2		
	SIMPLE QUERIES, JOINS, SUBQURIES	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: THEORY-18

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Arjun Vishwakarma DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: V MONTH: October

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : The learner will be able to use basic computer software and some financial software

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1,2,3	**MODULE - I : Data Communication, Networking and Internet** a. Data Communications and Internet b. Network Basics and Infrastructure c. Internet	4	Computer Skills-2 and Wikipedia	PowerPoint Presentation, Laptop
	MODULE - II : Database and MySQ a. Introduction to MYSQL b. MySQL Basics	4	Computer Skills-2	PowerPoint Presentation, Laptop
	MODULE - III : Database and MySQL a. MySQL Simple queries b. Multi-Table Queries c. Nested Queries (Only upto two levels)	4	Computer Skills-2	PowerPoint Presentation, Laptop

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manjushri Shripad Oak DEPARTMENT: Commerce

CLASS: T.Y.B.COM SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Learners will be able to understand the concept of Internet , computer Network , searching methods and cybercrime .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –I Data communication, networking and Internet	Data communication and components, data representation, distributed processing	01	Computer System And Application Manan Prakashan	POWER POINT PRESENTATION AND DISCUSSION METHOD
	Network basics and infrastructure - Definition, types (LAN,MAN,WAN) - Network structure - Topologies – Star, Bus Ring	01	Computer System And Application Manan Prakashan	POWER POINT PRESENTATION AND DISCUSSION METHOD
	- Network media, wired- Twisted Pair , Co-axial, Fiber Optic and wireless radio and infrared. - Network hardware - HUBS, Bridges, Switches, Routers Network Protocols	01	Computer System And Application Manan Prakashan	POWER POINT PRESENTATION AND DISCUSSION METHOD
	Internet – Definition, Types of Connection, Hot-Spot, Services on Net – www, email, blog	01	Computer System And Application Manan Prakashan	POWER POINT PRESENTATION AND DISCUSSION METHOD

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	IP address, domain name, URL, Hyperlink, web browser, searching directories, Search engine, Boolean search (AND OR NOT), Advance search, meta search	01	Computer System And Application Manan Prakashan	POWER POINT PRESENTATION AND DISCUSSION METHOD
	E-mail, parts of email address , cybercrime, hacking, sniffing, spoofing	01	Computer System And Application Manan Prakashan	POWER POINT PRESENTATION AND DISCUSSION METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manjushri Shripad Oak DEPARTMENT: Commerce

CLASS: T.Y.B.COM SEMESTER: V MONTH: AUGUST ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Learners will be able to analyze the information using Spread Sheet.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –II DATABASE AND MYSQL	INTRODUCTION TO MYSQL	03	Computer System And Application Manan Prakashan	MYSQL,NOTE PAD AND DISCUSSION METHOD
	MYSQL BASIC	03	Computer System And Application Manan Prakashan	MYSQL,NOTE PAD AND DISCUSSION METHOD
	MYSQL built-in Functions	03	Computer System And Application Manan Prakashan	MYSQL,NOTE PAD AND DISCUSSION METHOD
Unit – III DATABASE AND MYSQL	Multi table queries	03	Computer System And Application Manan Prakashan	MYSQL,NOTE PAD AND DISCUSSION METHOD
	Transaction	02	Computer System And Application Manan Prakashan	MYSQL,NOTE PAD AND DISCUSSION METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SONAL RAUT DEPARTMENT: COMMERCE

CLASS: TYBCOM (A,B,C,D) SEMESTER: V MONTH: AUG, SEP, OCT, NOV & DEC ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Comprehension based Learning to Esemplastic into Objective type Exams. To Understand the Concept of Internal Reconstruction and Buy Back Of Shares, and to Learn Theoretical & Practical working of the both Concepts. To Enhance the Ethical Knowledge of Business as well as Society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2,3&5	UNIT 2: Internal Reconstruction ➢ Introduction, Meaning, Need for Reconstruction ➢ Distinction Between Internal & External Reconstruction ➢ Methods of Reconstruction & Accounting Treatment for same ➢ Questions solved on the same	15	S.N & S.K. MAHESHWARI	Google Meet, Google Slides, Microsoft Excel

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	UNIT 3: Buy Back of Shares ➢ Introduction, Company Law & Legal Provisions ➢ Capital Redemption Account, Compliance of Conditions ➢ Maximum Limit, Debt-Equity Ratio & Cancellation of Shares ➢ Questions Solved on the same	12	S.N & S.K. MAHESHWARI	Google Meet, Google Slides, Microsoft Excel
	UNIT 5: Ethical Behaviour and Implications for Accountants ➢ Meaning & Features of Ethics ➢ Personal Ethics: Factors, Standards ➢ Professional Ethics: Factors, IFAC Code of Conduct ➢ Business Ethics: Factors ➢ Work Place Ethics: Difficulties ➢ Corporate Ethics: Levels, CSR, Whistle Blower ➢ Ethical Education: Purpose, Goal/Stages	05	S.N & S.K. MAHESHWARI	Google Meet, Google Slides, Microsoft Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KALPANA JAIN** DEPARTMENT**: COMMERCE** CLASS: **T.Y.B.COM** DIV: **F,G,H,I,J,K,Land M** SEMESTER: **V** MONTH:June-September ACADEMIC YEAR: **2021-202**

LEARNING OBJECTIVE/S : To explain the concepts of Accounts and impart practical knowledge of Financial Accounting.

The learners will be able to :understand the accounting concepts in simple way which will help them to tackle the accounting problems..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Buyback of Shares	***Introduction, Company law, legal Provisions** ***Capital Redemption Account, Compliance of Conditions** ***Maximum limit, Debt-Equity Ratio and Cancellation of Shares** ***Journal entries and BalanceSheet**	12	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Chalk-Board Method
Investment Accounting (w.r.t. Accounting Standard- 13)	*For shares (variable income bearing securities) * For debentures/Preference. shares (fixed income bearing securities) *Accounting for transactions of purchase and sale of investments with ex and cum interest prices * Finding cost of investment sold and carrying cost as per weighted average method (Excl. brokerage). *Calculation of Dividend, Bonus Shares, Right Shares. *Columnar format for investment account.	15	Financial Accounting by R. Narayan	Chalk-Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

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NAME OF THE STAFF: **Mrs Amita Rakesh Patil** DEPARTMENT**: COMMERCE** CLASS: **T.Y.B.COM** DIV: **E, F, G, H**

SEMESTER: **V** MONTH: **August-November** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S : To impart the practical knowledge of Financial Accounting.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- 1 Preparation of Final Accounts of Companies	Relevant provisions of Companies Act related to preparation of Final Account (excluding cash flow statement) Preparation of financial statements as per Companies Act. (excluding cash flow statement) AS 1 in relation to final accounts of companies (disclosure of accounting policies) Adjustments.	12	Financial Ac. counting by R. Narayanaswamy	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet
Unit- 2 Internal Reconstruction	Meaning and need of internal reconstruction , Difference between internal reconstruction and external reconstruction, methods and legal procedures, Accounting procedures, journal entries on internal reconstruction, Format of capital reduction account ,format of Balance sheet after reconstruction. Practical sums	12	Financial Ac. counting by R. Narayanaswamy	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet

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Unit - 5 Ethical behaviour and Implications for accountant	Introduction and meaning of ethical behaviour, link between law, corporate governance, corporate social responsibility and ethics. Principal based approach and ethics, accounting standard setting process and ethics. IFAC code of ethics for professional accountants, ethics in accounting work environment. Company code of ethics, role of whistle blowing, importance for learning ethics	10	Financial Ac. counting by R. Narayanaswamy	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 34

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF :Praktana M. Kore DEPARTMENT : Commerce

CLASS : TYBCOM (KL) SEM : V MONTH : AUG- DEC YEAR : 2020-21

LEARNINGOBJECTIVE/S : The learners will be able to learn various aspects about Export marketing. The students will have insight in the field of exports

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Export Marketing	**MODULE I : INTRODUCTION TO EXPORT MARKETING** ●Importanceof Exports Distinction between Domestic Marketing and Export Marketing ●Factors Influencing Export Marketing Major merchandise /commodities Export of India	10	Export Marketing Management by Philip Kotler	Google meet Google forms, PPT
	MODULE II - India's Foreign Trade Policy 1. Foreign Trade Policy 2015-20 2. Role of Directorate General of Foreign Trade(DGFT) 3. Benefits to Status Holders and Towns of Excellence	10	Export Marketing Management by Philip Kotler	Google meet Google forms, PPT

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Nilima Bhagwat

DEPARTMENT: COM MERCE

CLASS T.Y.B.COM SEMESTER: V MONTH: AUG -DEC ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To inculcate the interest in macroeconomics
The learners will be able to : understand how an economy works

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I & IV	**Module 1 – Macroeconomic Overview of India**	15		
	1.New Economic Policy 1991 2. Social infrastructure : Education, Health and Family Welfare 3. Sustainable development goals and policy measures 4. Foreign Investment in India		**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1Google meet, PowerPoint presentation .2 Quiz method
	Module 4 – Banking and Financial Market	10		
	1. Banking sector 2. Insurance 3. Money market 4. Capital Market		**Advanced Economic Theory Of Macro economics (H. L. Ahuja)**	1.Google meet and ppt Method 2 Quiz method
	.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:25 _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AKRUTI BOSE DEPARTMENT: COMMERCE

CLASS: TYBCOM ABCD SEMESTER: V MONTH:JUNE/OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES:
The learners will be able to : Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS V Module II and Module III	AGRICULTURE DURING POST REFORM PERIOD : National Agricultural Policy 2000, Agricultural Pricing and Agricultural Finance,	(02 Lectures)	Micro Economics by H.L. AHUJA.	Online on Mobile with Apps like Google meet and PPT, slide share, Word document, Excel sheets .
	Agricultural Marketing Development.	In Each Div		
	THE INDUSTRY AND SERVICE SECTOR DURING POST-REFORM PERIOD: Policy Measures, Competition Act, 2002, Industrial Pollution	ABCD		
	In India, the Service Sector.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8 Lectures.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Veena Sihana DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: V MONTH: June to October 2020

ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Familiarize the commerce students with basic concepts of macroeconomics and with certain common features of economic occurrence in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics - V	Module III – The Industry And Service Sector During Post Reform Period I - Policy Measures- Competition Act 2003, Disinvestment Policy, II - Industrial Pollution in India: Meaning, Types, Effects and Control. III - Service Sector: Recent trends, role and growth in Healthcare and Tourism Industry	14	Jhingan, M.L., Principles of Economics — Vrinda Publications (P) Ltd Ahuja. H.L., Modern Economics — S.Chand Company Ltd. New Delh.	PPT, EXCEL SHEETS, WORD DOCUMENTS
	Module IV – Banking and Financial Market I - Banking Sector- Recent trends, issues and challenges in Banking and Insurance Industry. II -Money Market – Structure, Limitations and Reforms. III-Capital Market – Structure, Growth and Reforms.	14		PPT, EXCEL SHEETS, WORD DOCUMENTS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: COMMERCE CLASS: T.Y.B.Com.

SEMESTER: V MONTH: JUNE - OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES: The Learners will be able to understand the aspects of Indian economy in terms of economic policies, development measures, agriculture industry in the pre and post reform period and their core role in the growth and development of the country.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I & II	Unit I: Overview of New Economic Policy: Role of Education health and family welfare; Sustainable Development Goals: Make and invest in India, skill development programme; Foreign Investment Policy Measures in India: FDI & MNC's and their role, Foreign Investment Promotion Board.	(01 Lectures) Per (DIV: A,B,C,D,E) Per week	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	GOOGLE MEET Lecture, group discussion, test, presentation of important topics, usage of PPT
	Unit IV: Banking and insurance sector- structure, Trends, problem, challenges, Division, problem and challenges of insurance sector; Money Market- Meaning, reform, structure, instruments, limitations. Capital Market- Meaning, structure, growth, reform, policy.	(01 Lectures) Per (DIV: A,B,C,D,E) Per week	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy	GOOGLE MEET Lecture, group discussion, test, presentation of important topics, usage of PPT

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			Uma Kapila: Indian Economy	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: <u>05 Lectures per Week</u>

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PALLAVI G NAIK. DEPARTMENT:COMMERCE

CLASS: __TYBCOM SEMESTER: V MONTH:_AUG- DECE

ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : ____about Economy and it's phenomenal strategies_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics	Module 2 Agriculture during post reform period Ch 5 National Agriculture Policy 2000 Objectives, main features, implications Ch 6 Agricultural pricing Features, objectives, implementation, evaluation Ch 7 Agricultural Finance Need and classification Sources, NABARD, Limitations, suggestions Ch. 8 Agricultural Marketing Problems, marketing forms, infrastructure, information, training, environment, Recent developments	4	Manan prakashan, seth publication	ONLINE LECTURES

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	Module 3 THE INDUSTRY ANS SERVICE SECTOR DURING POST REFORM PERIOD			Google meet
	Ch. 9 overview of industrial sector competition Act 2002,measurement of industrial production, composition, Industrial growth, industrial growth since 1991,competition Act 2002 Ch 10 Disinvestment Policy Objectives of disinvestment, achievements, evaluation Ch 11 MSME Sector, classification, role of MSME SECTOR, Government measures and policies Ch 12 industrial pollution Meaning, types, causes, effects, measures Ch 13 SERVICE SECTOR:TRENDS IN HEALTHCARE AND TOURISM INDUSTRIES Nature of services sector in India, role of services sector in India Health industry, tourism industry	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NILESHWARI VINAY GHUMRE DEPARTMENT: COMMERCE

CLASS: TYBCOM (E,F,G,H) SEMESTER: V MONTH: June to December ACADEMIC YEAR: 2020-21

SUBJECT: Commerce V

LEARNING OBJECTIVES:
The learners will be able to understand the concept of marketing in detail and will be acquaint with various marketing strategies carried out by the marketers. The learner will also get an insight on digital marketing, Artificial intelligence which is the need o the hour. Along with the above mentioned points students will also get to know about Consumer behavior, Market segmentation, CRM and different forms of targeting the market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Marketing Decisions I	Marketing Mix- Concept, Product- Product Decision Areas Product Life Cycle- Concept, Managing stages of PLC Branding- Concept , Components Brand Equity- Concept , Factors influencing Brand Equity · Packaging- Concept , Essentials of a good package Product Positioning- Concept, Strategies of Product Positioning Service Positioning- Importance & Challenges · Pricing- Concept, Objectives, Factors influencing Pricing, Pricing Strategies	08	Marketing management by - Phillip Kotler And Marketing management Ramaswamy & Kumari Nama	Google meet, Google forms, Testmoz, Inkcredible, Jamboard, Power Point Presentation
Unit 3- Marketing Decisions II	Physical Distribution- Concept, Factors influencing Physical Distribution, Marketing Channels (Traditional & Contemporary Channels) Supply Chain Management-Concept, Components of SCM · Promotion- Concept, Importance, Elements of Promotion mix Integrated Marketing Communication (IMC)- Concept, Scope ,Importance · Sales Management- Concept,	09	Marketing management by - Phillip Kotler And Marketing management	Google meet, Google forms, Testmoz, Inkcredible, Jamboard, Power Point Presentation

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	Components, Emerging trends in selling Personal Selling-Concept , Process of personal selling, Skill Sets required for Effective Selling		Ramaswamy & Kumari Nama	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Aaradhna Singh DEPARTMENT: COMMERCE

CLASS: TYBCOM (A,B,C,D)

SEMESTER: V MONTH: June to December ACADEMIC YEAR: 2020-21

SUBJECT: Commerce V

LEARNING OBJECTIVES:
The learners will be able to understand the concept of marketing in detail and will be acquaint with various marketing strategies carried out by the marketers. The learner will also get an insight on digital marketing, Artificial intelligence which is the need o the hour. Along with the above mentioned points students will also get to know about Consumer behavior, Market segmentation, CRM and different forms of targeting the market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Marketing Decisions I	Marketing Mix- Concept, Product- Product Decision Areas Product Life Cycle- Concept, Managing stages of PLC Branding- Concept , Components Brand Equity- Concept , Factors influencing Brand Equity · Packaging- Concept , Essentials of a good package Product Positioning- Concept, Strategies of Product Positioning Service Positioning- Importance & Challenges · Pricing- Concept, Objectives, Factors influencing Pricing, Pricing Strategies	08	Marketing management by - Phillip Kotler And Marketing management Ramaswamy & Kumari Nama	Google meet, Google forms, Testmoz, Inkcredible, Jamboard, Power Point Presentation
Unit 3- Marketing Decisions II	Physical Distribution- Concept, Factors influencing Physical Distribution, Marketing Channels (Traditional & Contemporary Channels) Supply Chain Management-Concept, Components of SCM · Promotion- Concept, Importance, Elements of Promotion mix Integrated Marketing Communication (IMC)-	09	Marketing management by - Phillip Kotler And	Google meet, Google forms, Testmoz, Inkcredible, Jamboard, Power Point Presentation

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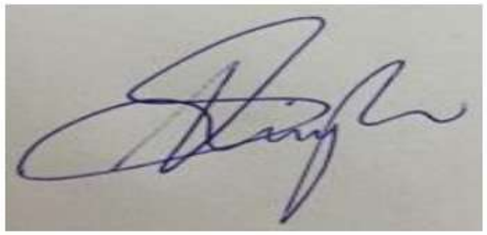
	Concept, Scope ,Importance · Sales Management- Concept, Components, Emerging trends in selling Personal Selling- Concept , Process of personal selling, Skill Sets required for Effective Selling		Marketing management Ramaswamy & Kumari Nama	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Rashmi Gurunani DEPARTMENT : Commerce

CLASS : TYBCOM (IJKL) SEM : V MONTH : AUG- DEC YEAR : 2020-21

LEARNINGOBJECTIVE/S : The learners will be able to learn various aspects about marketing. Marketing is very essential part of commerce. This subject is helpful to develop marketing skills among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE V	**MODULE I : INTRODUCTION TO MARKETING** ●Marketing Concept, features, importance, functions, evolution ●Marketing research, marketing information system, data mining ●Consumer behaviour, market segmentation, consumer relationship management, market targeting	10	Marketing Management by Philip Kotler	Google meet Google forms, PPT
	MODULE II - Marketing decision - 1 Marketing Mix- Concept, Product- Product Decision Areas Product Life Cycle- Concept, Managing stages of PLC Branding- Concept , Components Brand Equity- Concept , Factors influencing Brand Equity Packaging- Concept , Essentials of a good package Product Positioning- Concept, Strategies of Product Positioning Service Positioning- Importance & Challenges Pricing- Concept, Objectives, Factors influencing Pricing, Pricing Strategies.	10	Marketing Management by Philip Kotler	Google meet Google forms, PPT

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Praktana Manoj Kore DEPARTMENT : Commerce

CLASS : TYBCOM (A,B,C,D) SEM : V MONTH : August- November YEAR : 2020-21

LEARNINGOBJECTIVE/S : The learners will be able to learn various aspects about marketing. Marketing is very essential part of commerce. This subject is helpful to develop marketing skills among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE V	**MODULE I : INTRODUCTION TO MARKETING** ●Marketing Concept, features, importance, functions, evolution ●Marketing research, marketing information system, data mining ●Consumer behaviour, market segmentation, consumer relationship management, market targeting	10	Marketing Management by Philip Kotler	Google meet
	MODULE IV : KEY MARKETING DIMENSIONS ●Marketing ethics, unethical practices in marketing, general role of consumer organisations, competitive strategies for market leader, market challenger, market follower, niche marketing ●Rural marketing, digital marketing, green marketing ●Challenges faced by marketing managers in 21st century, careers in marketing, success & failure of brands in India	10	Marketing Management by Philip Kotler	Google meet

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : TYBCOM (E,F,G,H) SEM : V MONTH : August- November YEAR : 2020-21

LEARNINGOBJECTIVE/S : The learners will be able to learn various aspects about marketing. Marketing is very essential part of commerce. This subject is helpful to develop marketing skills among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE V	**MODULE I : INTRODUCTION TO MARKETING** ●Marketing Concept, features, importance, functions, evolution ●Marketing research, marketing information system, data mining ●Consumer behaviour, market segmentation, consumer relationship management, market targeting	10	Marketing Management by Philip Kotler	Google meet
	MODULE IV : KEY MARKETING DIMENSIONS ●Marketing ethics, unethical practices in marketing, general role of consumer organisations, competitive strategies for market leader, market challenger, market follower, niche marketing ●Rural marketing, digital marketing, green marketing ●Challenges faced by marketing managers in 21st century, careers in marketing, success & failure of brands in India	10	Marketing Management by Philip Kotler	Google meet

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Rakhee Oza DEPARTMENT : Commerce

CLASS : TYBCOM (IJKL) SEM : V MONTH : AUG- DEC YEAR : 2020-21

LEARNINGOBJECTIVE/S : The learners will be able to learn various aspects about marketing. Marketing is very essential part of commerce. This subject is helpful to develop marketing skills among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Commerce V	hysical Distribution- Concept, Factors influencing Physical Distribution, Marketing Channels (Traditional & Contemporary Channels) Supply Chain Management-Concept, Components of SCM · Promotion- Concept, Importance, Elements of Promotion mix Integrated Marketing Communication (IMC)- Concept, Scope ,Importance · Sales Management- Concept, Components, Emerging trends in selling Personal Selling- Concept , Process of personal selling, Skill Sets required for Effective Selling	10	Marketing Management by Philip Kotler	Google meet Google forms, PPT
	MODULE IV : KEY MARKETING DIMENSIONS ●Marketing ethics, unethical practices in marketing, general role of consumer organisations, competitive strategies for market leader, market challenger, market follower, niche marketing ●Rural marketing, digital marketing, green marketing ●Challenges faced by marketing managers in 21st century, careers in marketing, success & failure of brands in India	10	Marketing Management by Philip Kotler	Google meet Google forms, PPT

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: Self Finance CLASS: TyBcom SEMESTER: V MONTH: August ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Understand Cost Accounting Practical use. Classification of Costs and Cost Sheet in Details & How to Reconcile Cost Accounts and Financial Accounts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, Introduction to Cost Accounting	Objectives and scope of cost accounting, cost centers and cost units	1	Manan Prakashan-Ainapure	Online Lecture, PPT, Excel
	Cost classification for stock valuation, Decision Making and control			
	Coding systems	1		
	Elements of cost			
	Cost Behaviour Pattern, Separating Components of semi-variable Costs	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 03

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MONTH: September- October

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, Classification of Costs and Cost Sheet	Classification of Costs, Cost of sales, Cost Centre, Cost Unit, Profit center and Investment center	1	Manan Prakashan-Ainapure	Online Lecture, PPT, Excel
	Cost sheet Formats, Total costs and Units costs, Different costs for Different purposes	2		
	Practical Problems on preparation of Cost sheet	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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MONTH: Nov-Dec

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, Reconciliation of Cost and Financial Accounts	Meaning and Introduction of Reconciliation	1	Manan Prakashan-Ainapure	Online Lecture, PPT, Excel
	Reasons for Differences Between Cost and Financial A/cs	1		
	Practical Problems	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. SACHIN ARJUN KADAM DEPARTMENT: COMMERCE CLASS: T.Y.B.Com.

SEMESTER: V MONTH: JUNE - OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES: The Learners will be able to understand the aspects of Indian economy in terms of economic policies, development measures, agriculture industry in the pre and post reform period and their core role in the growth and development of the country.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I	Unit I: 1. Introduction to Cost Accounting (a) Objectives and scope of Cost Accounting (b) Cost centres and Cost units (c) Cost classification for stock valuation, Profit measurement, Decision making and control (d) Coding systems (e) Elements of Cost (f) Cost behaviour pattern, Separating the components of semi-variable costs	(02 Lectures) Per (DIV: E,F,G & H) Per week	Advanced Cost Accounting Tybcom Text Book – Manan prakashan	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST ,YOU Tube, Google classroom, canvas ppt
II	Unit II: 2. Classification of Costs and Cost sheet Classification of costs, Cost of Sales, Cost Centre, Cost Unit, Profit Centre and Investment Centre Cost Sheet, Total Costs and Unit Costs, Different Costs for different purpose Note- Simple practical problems on preparation of cost sheet	(02 Lectures) Per (DIV: E,F,G & H) Per week	Advanced Cost Accounting Tybcom Text Book – Manan prakashan	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST, YOU Tube, Google classroom, canvas ppt

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III	Unit III 3. Reconciliation of Costs and Financial costs Practical problems based on Reconciliation of cost and Financial accounts.	(02 Lectures) Per (DIV: E,F,G & H) Per week	Advanced Cost Accounting Tybcom Text Book – Manan prakashan	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST, YOU Tube, Google classroom, canvas ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: <u>08 Lectures per Week</u>

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof DR (CA) MABEL LOBO DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: VI

MONTH: December2020 to April 2021 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is GST and how it is reflected in our practical life.
The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Introduction to GST	Introduction to GST • What is GST • Need for GST • Dual GST Mode	1	Manan Prakashan, Self-maintained notes, ICAI study material	Google meet, PPTs

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 1 per Division

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: Prof DR (CA) MABEL LOBO DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: VI

MONTH: December 2020 to April 2021 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is GST and how it is reflected in our practical life.
The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Unit 3 Value of Supply	• Transaction Value as Value of Supply • CGST RULES – 2017 Determination of Value of supply (Rule 27 to 35)_	4	Manan Prakashan, Self-maintained notes, ICAI study material	PPTs, Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof DR (CA) MABEL LOBO DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: VI

MONTH: December 2020 to April 2021 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is GST and how it is reflected in our practical life.
The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Unit 4 Input Tax Credit & Payment of Tax	Input Tax Credit & Payment of Tax • Eligibility for taking Input Tax Credit • Input Tax Credit in Special Circumstances • Computation of Tax Liability • Payment of Tax (Section 49 and Section 50 of CGST Act)	4	Manan Prakashan, Self-maintained notes, ICAI study material	PPTs, Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof DR (CA) MABEL LOBO DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: VI

MONTH: December 2020 to April 2021 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is GST and how it is reflected in our practical life.
The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Unit 5 Registration under GST Law	Registration under GST Law • Persons liable for Registration • Persons not liable for Registration • Compulsory Registration • Persons not liable for Registration • Procedure for Registration • Amendment of Registration • Cancellation of Registration • Revocation of cancellation of Registration • Practical Problems	4	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Audrin Anthony Colaco DEPARTMENT: Self Finance CLASS: T.Y.B. Com. (Division A B C D) SEMESTER: VI

MONTH: January 2021 to April 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & Remember- the concept of GST.
2) Acquire knowledge about various definitions under GST.
3) Understand the Scope of Supply
4) Know the exemption from GST
5) Analise the Time of Supply.
6) Determine Nature and Place of Supply

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Heads of Income	Introduction to GST	02	Book by Manan publications/Internet	Google Meet, Google Classroom, PPT, Excel
	Definitions under GST	04	Book by Manan publications/Internet	Google Meet, Google Classroom, PPT, Excel
	Scope of Supply	06	Book by Manan publications/Internet	Google Meet, Google Classroom, PPT, Excel
	Exemptions from Tax	06	Book by Manan publications/Internet	Google Meet, Google Classroom, PPT, Excel
	Time of Supply	06	Book by Manan publications/Internet	Google Meet, Google Classroom, PPT, Excel

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	Nature and Place of Supply	06	Book by Manan publications/Internet	Google Meet, Google Classroom, PPT, Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: VI

MONTH: December2020 to April 2021 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is GST and how it is reflected in our practical life.
The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Introduction to GST	Introduction to GST • What is GST • Need for GST • Dual GST Mode	1	Manan Prakashan, Self-maintained notes, ICAI study material	Google meet, PPTs

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 1 per Division

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: VI

MONTH: December 2020 to April 2021 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is GST and how it is reflected in our practical life.
The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Unit 3 Value of Supply	• Transaction Value as Value of Supply • CGST RULES – 2017 Determination of Value of supply (Rule 27 to 35)_	4	Manan Prakashan, Self-maintained notes, ICAI study material	PPTs, Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: VI

MONTH: December 2020 to April 2021 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is GST and how it is reflected in our practical life.
The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Unit 4 Input Tax Credit & Payment of Tax	Input Tax Credit & Payment of Tax • Eligibility for taking Input Tax Credit • Input Tax Credit in Special Circumstances • Computation of Tax Liability • Payment of Tax (Section 49 and Section 50 of CGST Act)	4	Manan Prakashan, Self-maintained notes, ICAI study material	PPTs, Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: VI

MONTH: December 2020 to April 2021 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is GST and how it is reflected in our practical life.
The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Unit 5 Registration under GST Law	Registration under GST Law • Persons liable for Registration • Persons not liable for Registration • Compulsory Registration • Persons not liable for Registration • Procedure for Registration • Amendment of Registration • Cancellation of Registration • Revocation of cancellation of Registration • Practical Problems	4	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TEJASWINI YOGESH NAIK DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER:VI MONTH: NOV-MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: WHAT IS INDIRECT TAX
The learners will be able to : Difference in direct and indirect tax, how to calculate gst , registration process

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDIRECT TAX	1.Definition s: goods, business, consideration, e-commerce, India, person,principal supply,services, supplier, taxable supply, taxable person,n on taxable supply 2.Levy and collection of tax: scope of supply, non taxable supplies, composite and mixed supply, composition levy, exemption from tax, levy and collection of tax 3. Time, place and value of supply: time of supply, value of supply, place of supply.	5 lectures 15 lectures 15 lectures	Anaspure, manan publication	Black board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.(Div.I,J,K,L)** SEMESTER: **6th** MONTH: **JANUARY** ACADEMIC YEAR: **2020-21**
LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is GST and What are the Need for GST
2. What are dual GST Model (CGST,SGST,UTGST,IGST)
3. What are the basic term use in GST Law (Definitions) and what is GSTIN

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTRODUCTION TO GST	**1. What is GST** **2.Need for GST** **3.Dual GST Model** **4. Definitions** Section 2(17) Business Section 2(13) Consideration Section 2(45) Electronic Commerce Operator Section 2(52) Goods Section 2(56) India Section2 (78) Non- taxable Supply Section 2(84) Person Section 2(90) Principal Supply Section 2193) Recipient Section 2(98) Reverse charge Section 2(102) Services Section 2(105) Supplier Section 2(107) Taxable Person Section 2(108) Taxable Supply **5. Goods & Services Tax Network (GSTN)**	09	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.(Div.I,J,K,L)** SEMESTER: **6th**
MONTH:**FEBRUARY** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is taxable event under GST and which supply is not taxable in GST(non-taxable supply)
2. What is Composite and Mixed Supplies and its taxability?

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
LEVY AND COLLECTION OF TAX (Continue….)	**1. Scope of Supply** **2. Non- taxable Supplies** **3.Composite and Mixed Supplies**	04	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.(Div.I,J,K,L)** SEMESTER: **6th** MONTH:**MARCH**

ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Composition Levy
2. How the create levy of GST and how the GST collect from Consumer
3. What are Exemption under GST?

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
LEVY AND COLLECTION OF TAX	1. Composition Levy 2.Levy and Collection of tax 3.Exemption from tax	05	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.(Div.I,J,K,L)** SEMESTER: **6th** MONTH: **MARCH-APRIL.** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Time of Supply and its Provision as per CGST Act, 2017?

2. What is Place of Supply its Provision as per CGST Act, 2017?

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
TIME, PLACE AND VALUE OF SUPPLY	• Time of Supply • Place of Supply	09	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manjushri Shripad Oak DEPARTMENT: Commerce

CLASS: T.Y.B.COM SEMESTER: VI MONTH: January ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : : Learner will able to understand benefits of e-commerce, payment system, business modules etc..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –I E- Commerce	Definition of e-commerce, features of e-commerce, types of e-commerce, B2C,B2B,C2C,P2P.	01	Computer System And Application Manan Prakashan	Power Point Presentation And Discussion Method
	Business Modules- Advertising, subscription, transaction fee, Sales revenue, Affiliate Revenue.	02	Computer System And Application Manan Prakashan	Power Point Presentation And Discussion Method
	Major B2c Models. E-commerce security Encryption- digital signature, SSL. Payment system	01	Computer System And Application Manan Prakashan	Power Point Presentation And Discussion Method
	Online credit card Transaction working, SET protocol. Limitations of e-commerce. M-commerce – Definition and features.	02	Computer System And Application Manan Prakashan	Power Point Presentation And Discussion Method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manjushri Shripad Oak DEPARTMENT: Commerce

CLASS: T.Y.B.COM SEMESTER: VI MONTH: January ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Learner will able to learn fundamentals of designing , implementing and distributing a visual basic application.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –IV Visual Basic	Introduction to VB GUI and programming language, Visual Basic Environment,	01	The complete reference to Visual Basic 6.0 By Noel jerke	Google meet , Visual Studio 6.0 software, Paint brush And Discussion Method

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	Introduction to VB control, designing the user interface, coding of controls, and role of properties.	01	The complete reference to Visual Basic 6.0 By Noel jerke	Google meet , Visual Studio 6.0 software, Paint brush And Discussion Method
	Use of variables and controls, data types, naming rules/convention, declaring variables, val function and operation, formatting data,	01	The complete reference to Visual Basic 6.0 By Noel jerke	Google meet , Visual Studio 6.0 software, Paint brush And Discussion Method
	Project related to decision and condition, use of statement, function with option button and check boxes	02	The complete reference to Visual Basic 6.0 By Noel jerke	Google meet , Visual Studio 6.0 software, Paint brush And Discussion Method
	Input validation, Sub-procedure and Sub-function,	01	The complete reference to Visual Basic 6.0 By Noel jerke	Google meet , Visual Studio 6.0 software, Paint brush And Discussion Method
Unit - 2 and Unit – 3. Advanced Spreadsheet.	Creating and using Templates, Using Predefined templates, Adding protection option. Creating and Linking Multiple Spreadsheet.	02	Computer System And Application	GOOGLE MEET, Note Pad Microsoft Excel

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			Manan Prakashan	
	Using Formulas and logical operators with different examples.	02	Computer System And Application Manan Prakashan	GOOGLE MEET, Note Pad Microsoft Excel
	Creating and using named ranges. Creating Formulas that use reference to cells in different worksheets with examples.	02	Computer System And Application Manan Prakashan	GOOGLE MEET, Note Pad Microsoft Excel
	Database functions LOOKUP,VLOOKUP,HLOOKUP Conditional Logic Functions IF,COUNTIF,SUMIF,AVERAGEIF WITH EXAMPLES String Functions	03	Computer System And Application Manan Prakashan	GOOGLE MEET, Note Pad Microsoft Excel
	Date Functions, Statistical Functions, Data Analysis using Filter with customized condition and Graphical representation of data using different charts. ,Using Scenarios ,Creating and managing Scenarios, Goal Seek. , Solver Understanding Macros, Creating, Recording and running Simple macros.	09	Computer System And Application Manan Prakashan	GOOGLE MEET, Note Pad Microsoft Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

Practicals : - Computer System And Application

Sem - VI

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Sr. No.	Sub Topics	No. Of Lecture Allotted	TEACHING METHOD/ ICT TOOLS USED
Practical 1	Excel Calculations of Taxable Income (If Statement)	01	Computer, Ms-Excel
Practical 2	Excel – Date and Time Function	01	Computer, Ms-Excel
Practical 3	Excel - Text Functions	01	Computer, Ms-Excel
Practical 4	Excel – Use of V lookup function	01	Computer, Ms-Excel
Practical 5	Excel – Maths Function	01	Computer, Ms-Excel
Practical 6	Excel- Advance filter use of charts (Pie, Bar etc.)	01	Computer, Ms-Excel
Practical 7	Visual Basic - Project on welcome message	01	Computer, Visual Studio 6.0
Practical 8	Visual Basic - Calculations of simple and compound interest	01	Computer, Visual Studio 6.0
Practical 9	Visual Basic - Project on text specification(change of font and colour)	01	Computer, Visual Studio 6.0
Practical 10	Visual Basic - Calculating factorial of numbers (Loops)	01	Computer, Visual Studio 6.0

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Arjun Vishwakarma DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: VI MONTH: DECEMBER

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : The learner will be able to use basic computer software and some financial software

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1,4	▶ **Module - I : E-Commerce (18 Lectures)** **(a) Definition of E-commerce** **(b) Features of E-commerce** **(c) Types of E-commerce (B2C, B2B, C2C, P2P)** **(d) Business Models in E-commerce (Advertising, Subscription, Transaction Fee, Sales Revenue, Affiliate Revenue)** **(e) Major B2C models (Portal, Etailer, Content Provider, Transaction Broker, Market Creator, Service Provider, Community Provider).** **(f) E-Commerce Security : Integrity, Non repudiation, Authenticity, Confidentiality, Privacy Availability.** **(g) Encryption : Definition, Digital ignatures, SSL.** **(h) Payment Systems : Digital Cash, Online stored value, digital accumulating balance payment, Digital credit accounts, digital checking.** **(i) How an Online credit card transaction works. SET protocol.**	4	Computer Skills-2 and Wikipedia	PowerPoint Presentation, Laptop

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	(j) Limitations of E-commerce. **(k) M-commerce (Definition and Features)**			
	▶ **Module - IV : Visual Basic** **(a) Introduction to Visual Basic, Introduction Graphical User Interface (GUI)** **Programming Language (Procedural, Object Oriented, Event Driven), Writing VB Projects. The Visual Basic Environment** **(b) Introduction to VB Controls** **Text boxes, Frames, Check boxes, Option button, Designing the User Interface, Default & Cancel property, tab order, Coding for controls using Text, Caption, Value property and Set Focus method** **(c) Variables, Constants, and Calculations** **Variable and Constant, Data Type (String, Integer, Currency, Single, Double, Date), Naming rules/conventions, Constants (Named & Intrinsic), Declaring variables, Val Function, Arithmetic Operations, Formatting Data.** **(d) Decision and Condition** **Condition, Comparing numeric variables and constants, Comparing Strings, Comparing Text Property of text box, Compound Conditions (And, Or, Not). If Statement, if then-else Statement, LCase and Ucase function, Using If statements with Option Buttons & Check Boxes. Msgbox (Message box) statement Input Validation : Is Numeric function.** **(e) Sub-procedures and Sub-functions, Using common dialog box, Creating a new sub-procedure, Writing a Function procedure. Simple loops using For Next**	9	Computer Skills-2	PowerPoint Presentation, Laptop

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	statements and Do while statement and display output using MsgBox Statement.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4,9

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF.NEELAM RATHORE DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER: VI

MONTH:-JAN-APRIL ACADEMIC YEAR: 2020-2021 SUBJECT:-COMPUTER SYSTEMS AND APPLICATIONS

LEARNING OBJECTIVE/S:
The learners will be able to Analyze, Design, Implement and evaluate a computer based system, process components or program to meet the different context of life in this competitive world

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit - 2 and Unit – 3. Advanced Spreadsheet.	Creating and using Templates, Using Predefined templates, Adding protection option. Creating and Linking Multiple Spreadsheet.	2	DIFFERENT EXCEL BOOKS – BY Lokesh Lalwani	GOOGLE MEET,PPT,WORD DOCUMENTS, Microsoft Excel
	Using Formulas and logical operators with different examples.	2		
	Creating and using named ranges. Creating Formulas that use reference to cells in different worksheets with examples.	2		
	Database functions LOOKUP,VLOOKUP,HLOOKUP Conditional Logic Functions IF,COUNTIF,SUMIF,AVERAGEIF WITH EXAMPLES String Functions	3		
	1.Date Functions, Statistical Functions 2. Data Analysis using Filter with customized condition and Graphical representation of data using different charts. 3.Using Scenarios ,Creating and managing Scenarios 4.Using Goal Seek 5.Using Solver 6. Understanding Macros, Creating, Recording and running Simple macros.	9		.

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Unit 4- Visual Basic	Projects related to Decisions and conditions, use of statements, functions with option Button & Check Bones Mgs Box.	2	The Complete Reference to Visual Basic 6.0, By:- Noel Jerke	Google meet and Microsoft excel, Visual Basic 6.0 Software
	Input Validation, Sub-Procedures and Sub-functions. Loops (for Next statement, Do while statement).	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: COMMERCE

CLASS: TYBCOM SUBJECT: COMPUTER PRACTICAL SEMESTER: VI MONTH: JAN-APRIL ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Students will come to know about MS-Excel and Visual Basic 6.0

PAPER, UNIT , TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EXCEL	IF FUNCTION	1		GMEET, PPT, MICROSOFT WORD WITH PEN TOOL,PDF FILES, GOOGLE FORM, GOOGLE CLASSROOM MS-EXCEL
	CHARTS	1		
	VLOOKUP	1		
	DATE AND TIME FUNCTION, TEXT FUNCTION	1		
	MATHS FUNCTION	1		
	FILTER			
VISUAL BASIC 6.0	**SIMPLE VB PROJECT (LABEL AND ITS PROPERTIES SETTING)**	1		GMEET, PPT, MICROSOFT WORD WITH PEN TOOL,PDF FILES, GOOGLE FORM, GOOGLE CLASSROOM VB 6.0 SOFTWARE, NOTEPAD

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	LOOPS	1		
	SIMPLE INTEREST COMPOUND INTEREST	1		
	OPTION BUTTONS AND CHECK BOXES	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: PRACTICALS-10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Priyanka Devnath_Rajput DEPARTMENT: Commerce CLASS: TYBCOM

SEMESTER: VI MONTH: JANUARY-APRIL ACADEMIC YEAR: 2020- 2021 SUBJECT: Computer Systems & Applications

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of E-Commerce, Security related to Cryptography and Payment System, MS-Excel Software in deep.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I E-Commerce	A) E-Commerce Security: Integrity, Non repudiation, Authenticity, Confidentiality, Privacy Availability.	01	Computer System And Application Manan Prakashan and www.wikipedia.com	Google Meet, Google Attendance, MS-Word & PDF Files, Notepad
	B) Encryption: Definition, Digital Signatures, SSL	02		
	C) Payment Systems: Digital Cash, Online stored value, Digital accumulating balance payment, Digital credit accounts, digital checking.	02		
	D) How an Online credit card transaction works. SET protocol.	02		
	E) Limitation of E-commerce.	01		
	F) M-commerce (Definition and Features).	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – II And UNIT - III Advanced Spreadsheet	A) Multiple Spread sheets: Creating and using templates, using predefined templates, Adding protection option. Creating and Linking Multiple Spreadsheets. Using formulas and logical operators. Creating and using named ranges. Creating Formulas that use reference to cells in different worksheets.	06	Computer System And Application Manan Prakashan and www.wikipedia.com	Google Meet, Google Meet Attendance, MS-EXCEL & PDF Files, Notepad
	B) Functions • Database Functions: LOOKUP, VLOOKUP, HLOOKUP • Conditional Logic functions: IF, Nested IF, COUNTIF, SUMIF, AVERAGEIF • String functions: LEFT, RIGHT, MID, LEN, UPPER, LOWER, PROPER, TRIM, FIXED • Date functions: TODAY, NOW, DATE, TIME, DAY, MONTH, YEAR, WEEKDAY, DAYS360 • Statistical Functions: COUNTA, COUNTBLANK, CORREL, LARGE, SMALL	05		
	C) Data Analysis: Filter with customized condition. The Graphical representation of data Column, Line, Pie and Bar charts. Using Scenarios, creating and managing a scenario. Using Goal Seek Using Solver. Understanding Macros, Creating, Recording and Running Simple Macros. Editing a Macro(concept only)	07		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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Practical: - Computer Systems And Application

Sem – VI 2020-21

Sr. No.	Sub Topics	No. Of Lecture Allotted	TEACHING METHOD/ ICT TOOLS USED
Practical 1	Excel Calculations of Taxable Income (If Statement)	01	Computer, Notepad, Google Meet, Google Meet Attendance MS-Excel
Practical 2	Excel – Date and Time Function	01	Computer, Notepad, Google Meet, Google Meet Attendance MS-Excel
Practical 3	Excel - Text Functions	01	Computer, Notepad, Google Meet, Google Meet Attendance MS-Excel
Practical 4	Excel – Use of V lookup function	01	Computer, Notepad, Google Meet, Google Meet Attendance MS-Excel
Practical 5	Excel – Math Function	01	Computer, Notepad, Google Meet, Google Meet Attendance MS-Excel
Practical 6	Excel- Advance filter use of charts (Pie, Bar etc.)	01	Computer, Notepad, Google Meet, Google Meet Attendance MS-Excel
Practical 7	Visual Basic - Project on welcome message	01	Computer, Notepad, Google Meet, Google Meet Attendance, Visual Studio 6.0
Practical 8	Visual Basic - Calculations of simple and compound interest	01	Computer, Notepad, Google Meet, Google Meet Attendance, Visual Studio 6.0
Practical 9	Visual Basic - Project on text specification(change of font and color)	01	Computer, Notepad, Google Meet, Google Meet Attendance, Visual Studio 6.0
Practical 10	Visual Basic - Calculating factorial of numbers (Loops)	01	Computer, Notepad, Google Meet, Google Meet Attendance, Visual Studio 6.0

TOTAL NUMBER OF LECTURES ALLOCATED TO THE PRACTICAL: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SONAL RAUT DEPARTMENT: COMMERCE

CLASS: TYBCOM (A,B,C,D) SEMESTER: VI MONTH: JAN, FEB, MAR & APRIL ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Comprehension based Learning to Esemplastic into Objective or Subjective type Exams. To Understand the Concept of Amalgamation, Absorption & External Reconstruction and to Learn Theoretical & Practical working of the Limited Liability Partnership.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & V	UNIT I: Amalgamation, Absorption & External Reconstruction ➢ Introduction, Meaning, AS 14, ➢ Distinction Between Amalgamation, Absorption & External Reconstruction ➢ Ledger Accounts & Journal Entries on Purchasing &Vendor Company ➢ Questions solved on the same	16	S.N & S.K. MAHESHWARI	Google Meet, Google Slides, Microsoft Excel

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	UNIT V: Accounting For Limited Liability Partnership ➢ Introduction, Advantage & Disadvantages ➢ Public & Private Companies Vs. LLP ➢ Partnership Firm Vs. LLP ➢ LLP Agreement & Format ➢ Ledger Accounts & Journal Entries of Old Firm & LLP ➢ Questions Solved on the same	16	S.N & S.K. MAHESHWARI	Google Meet, Google Slides, Microsoft Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___32_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. FIROZKHAN KHURSHIT KHAN** DEPARTMENT**: COMMERCE**

CLASS: **T.Y.B.COM** DIV: **A, B, C & D** SEMESTER: **VI** MONTH: **MARCH** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S : To impart the practical knowledge of Financial Accounting.

The learners will be able to : Develop unique Skills to solve practical problems of Finance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accounting of Transactions of Foreign Currency	**Unit: 1 - Accounting of Transactions of Foreign Currency** In relation to purchase and sale of goods, services and assets and loan and credit transactions. Computation and treatment of exchange rate differences	15	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet
Liquidation of Companies	**Unit: 3 - Liquidation of Companies** Meaning of liquidation or winding up, Preferential payments, Overriding preferential payments, Preparation of statement of affairs, deficit / surplus account, Liquidator's final statement of account	10	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet
Underwriting of Shares and Debentures	**Unit: 4 - Underwriting of Shares and Debentures** Introduction, Underwriting, Underwriting Commission, Provision of Companies Act with respect to Payment of underwriting commission, Underwriters, Sub-Underwriters, Brokers and, Manager to issues, Types of underwriting, Abatement Clause, Marked, Unmarked and Firm-underwriting applications, Liability of the underwriters in respect of underwriting contract Practical problems	10	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NILESHWARI VINAY GHUMRE DEPARTMENT: EXPORT MARKETING

CLASS: TYBCOM (K,L) SEMESTER: VI MONTH: JAN TO MARCH 2021 ACADEMIC YEAR: 2020-21

SUBJECT: Commerce VI

LEARNING OBJECTIVES:
The learners will be able to understand the concept of Export marketing in detail and will be acquaint with various export marketing strategies carried out by the marketers. The learner will also get an insight on digital marketing, Artificial intelligence which is the need o the hour. Along with the above mentioned points students will also get to know about Consumer behavior, Market segmentation, CRM and different forms of targeting the market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1- PRODUCT PLANNING AND PRICING DECISIONS FOR EXPORT MARKETING	Planning for export marketing with regards to product, brand, package Labelling in export, Export price International commercial terms	08	Marketing management by - Phillip Kotler And Marketing management Ramaswamy & Kumari Nama	Google meet, Google forms, Testmoz, Inkcredible, Jamboard, Power Point Presentation
	Methods of payment in export marketing, procedures, types , benifits Pre-shipment and post-shipment procedure Role of commercial banks, EXIM BANK ,SIDBI AND ECGC	09	Marketing management by - Phillip Kotler And Marketing management	Google meet, Google forms, Testmoz, Inkcredible, Jamboard, Power Point Presentation

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Unit 3- EXPORT FINANCE			Ramaswamy & Kumari Nama	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAKTANA M. KORE DEPARTMENT: EXPORT MARKETING CLASS: TYBCOM (K,L) SEMESTER: VI MONTH: JAN TO MARCH 2021

ACADEMIC YEAR: 2020-21

SUBJECT: Export Marketing

LEARNING OBJECTIVES:

The learners will be able to understand the concept of Export marketing in detail and will be acquaint with various export marketing strategies carried out by the marketers. The learner will also get an insight on digital marketing, Artificial intelligence which is the need o the hour.

Along with the above mentioned points students will also get to know about Consumer behavior, Market segmentation, CRM and different forms of targeting the market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II- Export Distribution and Promotion	a) Factors Influencing Distribution Channels. b) Components of Logistics In Export Marketing c) Sales Promotion Techniques used in Export Marketing	08	Marketing management by - Phillip Kotler And Marketing management Ramaswamy & Kumari Nama	Google meet, Google forms, Power Point Presentation
Unit IV Export Procedure and Documentation	a)Registration with Different Authorities b)Features of Pre -Shipment and Post - Shipment /finance c)Importance of different documents	09	Marketing management by - Phillip Kotler And Marketing management	Google meet, Google forms, Power Point Presentation

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			Ramaswamy & Kumari Nama	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AKRUTI BOSE DEPARTMENT: COMMERCE

CLASS: TYBCOM I,J. SEMESTER: VI MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: Online.
The learners will be able to: Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS VI Module I, II, III and IV	BALANCE OF PAYMENT AND WTO : Concept and Structure of Balance of Payments, Causes and Disequilibrium and		International Economics by H.L. AHUJA.	Online Lectures through mobile, Laptop, PPT.
	Measures to Correct Disequilibrium in BOP, India's Balance of Payment since 1991 and World Trade Organisation.			
	FOREIGN EXCHANGE MARKET: Foreign Exchange Market, Determination of Equilibrium Rate of			
	Exchange, Purchasing Power Parity Theory, Rate of Central Bank in Foreign Exchange Rate Management			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 Lectures.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AKRUTI BOSE DEPARTMENT: COMMERCE

CLASS: TYBCOM K, L. SEMESTER: VI MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: Online
The learners will be able to : Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS VI Module III and Module IV	I - INTRODUCTION TO INTERNATIONAL TRADE		International Economics by H.L. AHUJA.	Online Lectures through mobile, Laptop, PPT.
	II - COMMERCIAL POLICY			
	III- BALANCE OF PAYMENT AND INTERNATIONAL ECONOMIC ORGANISATION			
	IV – FOREIGN EXCHANGE MARKET			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 Lectures.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: COMMERCE CLASS: T.Y.B.Com.

SEMESTER: VI MONTH: NOVEMBER - MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES: The Learners will be able to understand the old school and contemprorary method and theories utilized to understand the terms of trade and exchange along with the legalities of trading relations under the policy brackets to cater the smooth international trade between nations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I & II	Unit I: Introduction to International Trade Theories of International Trade: Ricado and Heckscher - Ohlin; Terms of Trade: Types and Limitations; Gains from International Trade: Offer curves and Reciprocal Demand.	(02 Lectures) Per (DIV: A,B,C,D) Per week	M.L. Jhingan: International Economics Dominick Salvatore: International Economics Trade and Finance	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST
	Unit II: Commercial Policy Commercial Trade Policy: Free Trade & Protection , Pros & Cons; Tariff and Non-Tariff Barriers: Meaning, Types and Effects; International Economic Integration: Types and Objectives, EU & BREXIT, ASEAN	(02 Lectures) Per (DIV: A,B,C,D) Per week	Paul Krugman: International Economics Theory and Policy. Desai and Bhalerao:	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST

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			International Economics	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: <u>08 Lectures per Week</u>

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____ DEPARTMENT: _____

CLASS: _____ SEMESTER: _____ MONTH: _____ ACADEMIC YEAR: _____

LEARNING OBJECTIVE/S:
The learners will be able to :

_____

_____

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Veena Sihana DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: VI MONTH: Nov to Mar 2021

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Familiarize the commerce students with basic concepts of macroeconomics and with certain common features of economic occurrence in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics - VI	Module III – Balance of Payments & International Economic Organisation Balance of Payments – Structure – Causes of Disequilibrium & Measures to correct it in BOP – World Trade Organisation	14	Singh.S.K. (2014): Public finance in Theory and Practice, S.Chand &co Pvt Ltd, New Delhi Ahuja. H.L., Modern Economics — S.Chand Company Ltd. New Delhi.	PPT, EXCEL SHEETS, WORD DOCUMENTS
	Module IV – Foreign Exchange Market Foreign Exchange Market – Determination of Equilibrium Rate of Exchange – Purchasing Power Parity Theory – Role of Central Bank in Foreign Exchange Rate Management.	14		PPT, EXCEL SHEETS, WORD DOCUMENTS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NILESHWARI VINAY GHUMRE DEPARTMENT: COMMERCE

CLASS: TY BCOM (E,F,G,H) SEMESTER: __VI MONTH: JAN TO MARCH 2021

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE SUBJECT :MHRM (COMMERCE VI)
The learners will be able to : UNDERSTAND THE TOPIC

Human resource is an important asset of the organisation. Here, learner will be able to learn various things about HR.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE VI Module 2 Human Resource development Module 3 Human Relation	Human Resouece Devlopment , Training, Performance appraisal,	5	Manan prakashan	Online mobile and lab top
	Carrer planning , succession planning,mentoring , counselling	5	Human Resource Management by John Storey	Google meet , Google forms ,ppt
	Human relation ,leadership, motivation ,employee moral	5	Human Resource Management by John Storey	Google meet , Google forms ,ppt
	Emotional quotient and spiritual quotient	5		
	Employee grievance , employee welfre measure			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: COMMERCE

CLASS: TYBCOM(ABCD) SEMESTER: VI MONTH: DECEMBER TO MARCH ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand Human resource management and its various aspects including selection, recruitment, E-selection etc
- Get insight on how human resource planning, job analysis and job design is done in big MNC's.
- Perceive meaning and methods of training and development. This unit will also help the understand meaning of performance and potential appraisal which in turn will help Improve their performance in the actual job.
- Interpret carrier planning, succession planning, mentoring and counseling

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-1 Human Resource Management	HUMAN RESOURCE MANAGEMENT – Concept, Functions, Importance, Traditional v/s Strategic Human Resource Management HUMAN RESOURCE PLANNING- Concept Steps in Human Resource Planning JOB ANALYSIS-Concept, Components JOB DESIGN- Concept, Techniques RECRUITMENT- Concept, Sources of Recruitment SELECTION - Concept , process , Techniques of E,selection,	10	Human resource management by Gary Dessler	Google meet, Google forms, Inkcredible, Jamboard, testmoz, Power Point Presentation, YouTube.

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Unit-4- Trends in Human resource management	HR in changing environment COMPETENCIES- Concept, classification LEARNING ORGANISATION- Concept & procress INNOVATIVE ORGANIZATION- Concept & creating an Innovative organization INNOVATION CULTURE- Concept, Need and managerial role TRENDS IN HUMAN RESOURCE MANAGEMENT EMPLOYEE ENGAGEMENT- Concept & types HUMAN RESOURCE INFORMATION SYSTEM- Concept and importance CHANGING PATTERN OF EMPLOYMENT CHALLENGES IN HUMAN RESOURCE MANAGEMENT: Employee empowerment, workforce diversity, Attrition, Downsizing, Employee absenteeism, Work life balance, Sexual harassment at work place, Domestic and international HR practices, Millennial gen Y, Competency mapping.	10	Human resource management by Gary Dessler	Google meet, Google forms, Inkcredible, Jamboard, testmoz, Power Point Presentation, YouTube

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFf - Archana Patil DEPARTMENT : Commerce

CLASS : TYBCOM (EvF G H) SEM : VI MONTH : Jan - March YEAR : 2020-21

LEARNINGOBJECTIVE/S : Human resource is an important asset of the organisation. Here, learner will be able to learn various things about HR.

PAPER/ UNIT/ TITLE	SUBTITLES	NO. OF LECURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE VI	**MODULE I :HUMAN RESOURCE MANAGEMENT** ●Human resource management- concepts, functions, importance ●Human resource planning- concept, steps, job analysis, job design ●Recruitment- concept, sources of recruitment, selection, E-selection	10	Human Resource Management by John Storey	Google meet , Google forms ,ppt
	MODULE IV :TRENDS IN HUMAN RESOURCE MANAGEMENT ●HR in changing environment : competencies, classification, learning organisation, innovation culture ●Trends in HRM : employee engagement, Human Resource Information System, changing patterns of employment ●Challenges in HRM : Employee empowerment, workforce diversity, attrition, downsizing, employee absenteeism, work life balance, sexual harassment at work place, domestic & international HR practices, Millennial competency mapping	10	Human Resource Management by John Storey	Google meet , Google forms , PPT

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFf - RASHMI GURUNANI DEPARTMENT : Commerce

CLASS : TYBCOM (I J K L) SEM : VI MONTH : Jan - March YEAR : 2020-21

LEARNINGOBJECTIVE/S : Human resource is an important asset of the organisation. Here, learner will be able to learn various things about HR.

PAPER/ UNIT/ TITLE	SUBTITLES	NO. OF LECURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE VI	**MODULE I :HUMAN RESOURCE MANAGEMENT** ●Human resource management- concepts, functions, importance ●Human resource planning- concept, steps, job analysis, job design ●Recruitment- concept, sources of recruitment, selection, E-selection	10	Human Resource Management by John Storey	Google meet , Google forms ,ppt
	MODULE IV :TRENDS IN HUMAN RESOURCE MANAGEMENT ●HR in changing environment : competencies, classification, learning organisation, innovation culture ●Trends in HRM : employee engagement, Human Resource Information System, changing patterns of employment ●Challenges in HRM : Employee empowerment, workforce diversity, attrition, downsizing, employee absenteeism, work life balance, sexual harassment at work place, domestic & international HR practices, Millennial competency mapping	10	Human Resource Management by John Storey	Google meet , Google forms , PPT

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr Rakhee Oza _ DEPARTMENT: Commerce CLASS: TY BCOM SEMESTER: __V **I** MONTH: DECEMBER 2020-APRIL 2021

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE SUBJECT :MHRM (COMMERCE VI)
The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE VI Human Resource Management ,Human Relation	Human Resouece Devlopment , Training, Performance appraisal,	5	Manan prakashan	Online mobile and lap top, PPT
	Carrer planning , succession planning,mentoring , counselling	5		
	Human relation ,leadership, motivation ,employee moral	5		
	Emotional quotient and spiritual quotient	5		
	Employee grievance , employee welfre measure			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NILESHWARI VINAY GHUMRE DEPARTMENT: COMMERCE

CLASS: TY BCOM (E,F,G,H) SEMESTER: __VI MONTH: JAN TO MARCH 2021

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE SUBJECT :MHRM (COMMERCE VI)
The learners will be able to : UNDERSTAND THE TOPIC

Human resource is an important asset of the organisation. Here, learner will be able to learn various things about HR.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE VI Module 2 Human Resource development Module 3 Human Relation	Human Resouece Devlopment , Training, Performance appraisal,	5	Manan prakashan	Online mobile and lab top
	Carrer planning , succession planning,mentoring , counselling	5	Human Resource Management by John Storey	Google meet , Google forms ,ppt
	Human relation ,leadership, motivation ,employee moral	5	Human Resource Management by John Storey	Google meet , Google forms ,ppt
	Emotional quotient and spiritual quotient	5		
	Employee grievance , employee welfre measure			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: Self Finance CLASS: TYBCom SEMESTER: VI MONTH: January ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : accounting treatment for contract costing and preparation of contract account. Computation of cost of each process, abnormal gains and losses during process.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, Contract costing	Progress payments, retention money, contract accounts, accounting for material	1	Manan Prakashan	Google Meet, Google Sheets & Google Slides
	accounting for tax deducted at source by the contractee, accounting for plant used in a contract	1		
	Treatment of profit on incomplete contracts, contract profit and balance sheet entries.	2		
	Practical problems	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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MONTH: Feb - Mar

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, process costing	Process loss, abnormal loss and gains, joint products and by products, process account formats	2	Manan Prakashan	Google Meet, Google Sheets & Google Slides
	Practical problems	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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MONTH: Mar- Apr

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, process costing	Introduction, Need for new techniques, Target Costing	2	Manan Prakashan	Google Meet, Google Sheets & Google Slides
	Life Cycle Costing	2		
	Benchmarking	2		
	Activity Based Costing (ABC costing)	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE CLASS: TYBCOM

SEMESTER: **VI** MONTH: Jan,2021 to March,2021 ACADEMIC YEAR :2020-21

LEARNING OBJECTIVE/S:
The learners will be able to understand preparation of contract Account, Process accounts , Abnormal Gain/ loss accounts, Meaning of Target costing , ABC costing, Benchmarking etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST ACCOUNTING	**1] Contract costing**-Meaning of contract, Retention money,Contract ledger, accounting for material, plant & machinery. Treatment of profit on incomplete contract, Contract profit , contractee account , Practical problems on contract accounting.	10	S.N. Maheshwari B.K.Bhar	Google meet, microsoft excel , microsoft word
	2] Process costing- Meaning of process account , process loss,Abnormal Gain/ Loss, Joint product & By product, Process stock account. Practical problems.	10		Google meet, microsoft excel , microsoft word
	3]Some Emerging concept of Cost Accounting- Target costing, Life cycle costing,Benchmarking , ABC costing	10		Google meet, microsoft excel , microsoft word

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM (DIV E TO L) SEMESTER: VI MONTH: JAN TO APRIL ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

THE LEARNERS WILL BE ABLE TO : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) INTRODUCTION TO MARGINAL COSTING	MARGINAL COSTING MEANING, APPLICATION, ADVANTAGES, LIMITATIONS CONTRIBUTION, BREAKEVEN ANALYSIS, MARGIN OF SAFETYAND PROFIT VOLUME GRAPH SIMPLE PRATICAL PROBLEMS BASED ON MARGINAL COSTING EXCLUDING DECISION MAKING	10	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	GOOGLE MEET, PPT, EXCEL
2) COST CONTROL ACCOUNTS	ADVANTAGES & DISADVANTAGES COST CONTROL ACCOUNTS, PRINCIPAL ACCOUNTS, SUBSIDIARY ACCOUNTS TO BE MAINTAINED SIMPLE PRACTICAL PROBLEMS ON PREPARATION OF COST CONTROL ACCOUNTS.	10	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	GOOGLE MEET, PPT, EXCEL
3) STANDARD COSTING	NEED TO LEARN STANDARD COSTING , VARIANCES, REASONS OF VARIANCES, LABOUR VARIANCES AND MATERIAL VARIANCES. THEORY AND PRACTICAL QUESTIONS	10	PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	GOOGLE MEET, PPT, EXCEL

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. SACHIN ARJUN KADAM DEPARTMENT: COMMERCE CLASS: T.Y.B.Com.

SEMESTER: VI MONTH: JAN - MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES: The Learners will be able to understand the aspects of Indian economy in terms of economic policies, development measures, agriculture industry in the pre and post reform period and their core role in the growth and development of the country.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II	Unit II: 2. Contract Costing Progress payments, Retention money, Contract accounts, Accounting for material, Accounting for Tax deducted at source by the contractee, Accounting for plant used in a contract, treatment of profit on incomplete contracts, Contract profit and Balance sheet entries. Excluding Escalation clause Note- Simple practical problems	(01 Lectures) Per (DIV: I,J,K &L)) Per week	Advanced Cost Accounting Tybcom Text Book – Manan prakashan	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST ,YOU Tube, Google classroom, canvas ppt
III	Unit III: 3. Process Costing Process loss, Abnormal Gains and Losses, Joint products and by-products. Excluding Equivalent units, Inter-process profit Note- Simple Practical problems Process Costing and joint and by-products	(01 Lectures) Per (DIV: I,J,K &L)) Per week	Advanced Cost Accounting Tybcom Text Book – Manan prakashan	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST, YOU Tube, Google classroom, canvas ppt
	Unit VI 6. Some Emerging concepts of Cost accounting	(02 Lectures) Per (DIV: E,F,G & H)	Advanced Cost Accounting	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST, YOU Tube, Google classroom, canvas ppt

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VI	Target Costing Life cycle Costing Benchmarking ABC Costing Note- No practical problems	Per week	Tybcom Text Book – Manan prakashan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: <u>04 Lectures per Week</u>

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Tejaswini Yogesh Naik DEPARTMENT: commerce CLASS:TY BCOM SEMESTER: VI MONTH: October to March
ACADEMIC YEAR:2020 -21
The learners will be able to : uderstand how to manage and control cost.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting	1. Marginal costing : meaning, cost volume profit, pv ratio, break even point, margin of safety, theory and practical	10 lectures for	Maheshwari	Black board
	On each sub topic. 2.Standard costing: Need to learn standard costing , variances,	Each topic .		
	Reasons of variances, labour variances and material variances. Theory and practical questions.			
	3. control account: difference in integrated and non integrated accounting, cost control account, stock control			
	Account, finished goods control account,wip control account.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Archana D Joshi DEPARTMENT: Commerce CLASS: FYBCOM SEMESTER: I MONTH: July 2019 ACADEMIC YEAR: 2019 -20

LEARNING OBJECTIVE/S:

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to

Preparing resumes to attending interviews, convenig meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

Tomake students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
1) Theory of Communication	1) Concept of Communication- Models of Communication - Linear/ Interactive/ Transactional / Shanon and Weavor (to be only discussed in class) Meaning, Definition, Process Need, Feedback Emergence of communication as a key concept in the Corporate and Global World Impact of technological Enabled communication Types: Internet, Blogs, E- mail, Moodle, Social media (Facebook, Twitter and WhatsApp	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	

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	advantages and disadvantages) Communication at Workplace- 2) Channels and Objectives of Communication: Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine 3) Methods and Modes of Communication: Methods: Verbal and Nonverbal (including Visual), Business Etiquette Introduction to Business Ethics: Ethics at workplace, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility 1) Problems in Communication /Barriers to Communication: Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers 2) Listening: Importance of Listening Skills, obstacles to listening, Cultivating good Listening Skills				

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3) Business Correspondence	1)Theory of Business Letter Writing: Parts, Structure, Layouts—Full Block, Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, letter of recommendation, Job Application Letter and Resume, Letter of Appointment (to be discussed in class) Letter of Resignation, Letter of acceptance of job offer, letter of Appreciation.	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	
4) Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities Listening Comprehension Remedial Teaching Speaking Skills: Presenting a News Item, Dialogue and Speeches Paragraph Writing: Preparation of the first draft, Revision	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk	

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	and Self – Editing, Rules of spelling. □ Reading Comprehension: Analysis of texts from the fields of Commerce and Management				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____CHETAN PRAKASH VARMA_____ DEPARTMENT: ___COMMERCE_____CLASS: ____FYBCOM_____

SEMESTER: _____I_____ MONTH: ___SEPT- DECEMBER_____ ACADEMIC YEAR: ____2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to :

To make student understand the concepts of business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics-I	**Introduction** **Scope and Importance of Business Economics** - basic tools- Opportunity Cost principle- Incremental and Marginal Concepts. Basic economic relations - functional relations: equations- Total, Average and Marginal relations- use of Marginal analysis in decision making.	5	*Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases (S. Chand & Sons, N. Delhi, 2000)* • *Salvatore, D.: Managerial Economics in a global economy (Thomson South Western Singapore, 2001)*	CHALK AND TALK /TWO WAY COMMUNICATION Story-telling method Textbook method Lecture Method

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	The basics of market demand, market supply and equilibrium price- shifts in the demand and supply curves and equilibrium	3	• *Frank Robert.H ,Bernanke. Ben S., Principles of Economics (Tata McGraw Hill (ed.3)*	Demonstration Method Tutorial Method Questions-Answer method Discussion method Heuristic method Discovery method
	Demand Analysis Demand Function - nature of demand curve under different markets Meaning, significance, types and measurement of elasticity of demand (Price, income cross and promotional)- relationship between elasticity of demand and revenue concepts	6	• *Gregory Mankiw., Principles of Economics, Thomson South western (2002 reprint)*	
	Demand estimation and forecasting: Meaning and significance - methods of demand estimation : survey and statistical methods (numerical illustrations on trend analysis and simple linear regression)	4	• *Samuelson &Nordhas.: Economics (Tata McGraw Hills, New Delhi, 2002*	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____18_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Bristi Gourgopal Biswas DEPARTMENT: Commerce CLASS: F.Y.BCOM (Division: A,B,C,D,I,J,K,L) SEMESTER: I (Subject : Business Economics I)

MONTH: July-September ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To understand the application of microeconomics at corporate level .

The learners will be able to : observe microeconomics in the real world and to understand and make business decisions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I **Introduction to business economics**	Introduction ,Business Economics ,basic concepts for business economic analysis ,functional relations and tool for economic analysis. Introduction to market demand and supply, demand supply ,market equilibrium, changes in market equilibrium.	10		Chalk and board

Module II **Demand Analysis**	Meaning of demand,law of demand,determinants of demand, demand function, price, income and substitution effects, nature of demand curve under different markets. Meaning of elasticity, price elasticity of demand , income elasticity of demand , cross elasticity of demand,promotional elasticity of demand, importance of elasticity of demand , relationship between price elasticity of demand and revenue concept. Significance of demand forecasting ,types of demand forecasting, steps in demand forecasting ,methods of demand forecasting.	10		Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: Commerce

CLASS: FYB.com SEMESTER: I MONTH: June-Oct ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

Build a familiarity with the basic tools of consumer and producer theory in an economic context

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –I Unit 3 Supply and production decisions Unit 4 Cost of production	Production Function	10	Salvatore, D.:Managerial Economics in a global economy	Chalk and Talk Discussions Case studies
	Cost concepts	5	Mehta, P.L.: ManagerialEconomics – Analysis,Problem and Cases	Chalk and talk
	Extension of cost analysis	5		Chalk and talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHAKHA SANE DEPARTMENT: COMMERCE CLASS: FYBCOM SEMESTER: **1** MONTH: JUNE-AUG

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
Unit1 and 2	**Introduction** **Scope and Importance of Business Economics** - basic tools- Opportunity Cost principle- Incremental and Marginal Concepts. Basic economic relations - functional relations: equations- Total, Average and Marginal relations- use of Marginal analysis in decision making.	2	ADVANCE ECONOMIC THEORY H L AHUJA	
	Demand analysis: Nature of demand curve under different market meaning significant types and measurements of elasticity of demand- Relationship between elasticity of demand and revenue concept.	2	Manan prakash	CHALK AND DUSTER

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	demand estimation and forecasting: meaning significant- methods of demand estimation survey and statistical method.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Muriel Rumao_____ DEPARTMENT: _____Commerce_____ CLASS: FYBCOM A,B, C, D

SEMESTER: ____I_____MONTH: August- November ACADEMIC YEAR:___2019-20____

LEARNING OBJECTIVE/S:
The learners will be able to : understand the basic concept of communication.

understand the different types of business communication and its applicability.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1	Concept of communication	4	Seth	Blackboard and discussion
	Mode of communication	3	Seth	Blackboard and discussion
	Channels of communication	3	Seth	Blackboard and discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____10____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Kavita Vilas Purandare DEPARTMENT : Commerce

CLASS : FYBCOM SEM : I MONTH : July - Oct YEAR : 2019-20

LEARNINGOBJECTIVE/S

The learners will be able to know the various concepts about business, entrepreneurship. He will also be able to study the situation of business & entrepreneurship in India.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD / ICT TOOLS USED
COMMERCE I	**MODULE I : BUSINESS** 1.INTRODUCTION : Concept, functions, scope, significance 2.OBJECTIVES OF BUSINESS : Steps, classification, reconciliation of economic & social objectives 3.NEW TRENDS IN BUSINESS : Liberalisation, privatization, globalisation, strategy alternatives, restructuring strategies, turnaround strategies	15		Chalk & board
	MODULE IV : ENTREPRENEURSHIP 1.INTRODUCTION : Concept, importance, factors – growth of entrepreneurship, intrapreneurs 2.ENTREPRENEURSHIP : Types, competencies, training & development centres, incentives to entrepreneurs 3.WOMEN ENTREPRENEURS : Problems, promotion	08		Chalk & board

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EACHING PLAN (UNIT PLAN)

SEMESTER: 1st

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE

DEPA

RTMENT: B.COM

CLAS

S: FYB.COM – A, B, C, D MONTH: October- December ACADEMIC

YEAR: 2019-2020 SUBJECT: COMMERCE I

LEARNING OBJECTIVE/S:
The learners will be able to:

1. To introduce the learners with Inter-relationship between Business and Environment.
2. To acquaint students with a knowledge of international trading environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	• Introduction : Concept and Importance of business environment, Inter – relationship between Business and Environmental.	3	Business Environment – Cherunilam	1. Lecture and discussion. 2. Flow charts. 3. Online teaching learning tools (google meet, google form Google classroom, PPTs)

MODULE 2: BUSINESS ENVIRONMENT	• Constituents of Business Environment : Internal and external Environment, Educational Environment and it's impact. .	4	Essentials of Business Environment – Aswathappa	
	• International Environment – Current Trends in the World, International Trading Environment - WTO and Trading Blocs and their impact on Indian Business	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 × 4 div =14

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: FYB.COM – A, B, C, D SEMESTER: 1st MONTH: October-December ACADEMIC YEAR: 2019-2020 SUBJECT: COMMERCE I

LEARNING OBJECTIVE/S:
The learners will be able to:

1. To identify and demonstrate process for Business plan and it's statutory requirements.
2. To makes students able to prepare project report, and Feasibility Study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

MODULE 3: PROJECT PLANNING	• Introduction : Business Planning Process; Concept and Importance of Project Planning; Project Report; Feasibility Study Types and it's Importance.	4	Strategic management - Bhutani Business Organisation Management - Maheshwari	4. Lecture and discussion. 5. Flow charts. 6. Online teaching learning tools (google meet, google form Google classroom, PPTs)
	• Business Unit Promotion: Concept and Stages of Business Unit Promotion, Location -Factors determining location and Role of Government in Promotion.	4		
	• Statutory Requirements in Promoting Business Unit : Licensing and Registration Procedure, Filling returns and other documents, other important legal provision.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 × 4 div = 48

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBCOM (A,B,C,D) SEM : I MONTH : YEAR : 2019-20

LEARNING OBJECTIVE/S : be able to learn basic concept of business. He will also be able to learn various business objectives and various strategies of businesses.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE I	INTRODUCTION : Concept, functions, scope, significance	03	Introduction to commerce, Vikram , Amit, Atlantic pub	Chalk and board
UNIT I	OBJECTIVES OF BUSINESS : Steps, classification, reconciliation of economic & social objectives	03	Introduction to commerce, Vikram , Amit, Atlantic pub	Chalk and board
BUSINESS	NEW TRENDS IN BUSINESS : Liberalisation, privatization, globalisation, strategy alternatives, restructuring strategies, turnaround strategies	06	Introduction to commerce, Vikram , Amit, Atlantic pub	Chalk and board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBCOM (A,B,C,D) SEM : I MONTH : YEAR : 2019-20

LEARNING OBJECTIVE/S : Learner will be able to learn concept of entrepreneurship and the scenario of entrepreneurship in India.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE I **UNIT IV** **ENTREPRENEURSHIP**	INTRODUCTION : Concept, importance, factors – growth of entrepreneurship, intrapreneurs	03	Entrepreneurship, Hisrich, Robert D, Mc grow Hill	Chalk and board
	ENTREPRENEURSHIP : Types, competencies, training & development centres, incentives to entrepreneurs	03	Entrepreneurship, Hisrich, Robert D, Mc grow Hill	Chalk and board
	WOMEN ENTREPRENEURS : Problems, promotion	02	Entrepreneurship, Hisrich, Robert D, Mc grow Hill	Chalk and board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _SAYLI VAIBHAV PATIL_ DEPARTMENT: COMMERCE SUBJECT: COMMERCE I

CLASS: FYBCOM SEMESTER: I MONTH: JULY- SEPT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: The learners will be able to : Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 1: Business	1. Introduction: concept, functions, scope and significance of business, traditional and modern concept of business.	4	Commerce I-Manan Prakashan, Seth Publication	Lecture method, Discussion method, participation method
	2. Objectives of business: Steps in setting business objectives, classification of business objectives, reconciliation of economic and social objectives	3	Commerce I-Manan Prakashan, Seth Publication	Lecture method, Discussion method
	3. New trends in business: impact of liberalization, privatization and globalisation, strategy alternative in the changing scenario, restructuring and turnaround strategies	5	Commerce I-Manan Prakashan, Seth Publication	Lecture method, Discussion method
Module 2: Business Environment	1. Introduction: concept and importance of business environment, interrelationship between Business and Environment.	2	Commerce I-Manan Prakashan, Seth Publication	Lecture method, Discussion method
	2. Constituents of business environment internal and external environment, educational environment and its impact.	3	Commerce I-Manan Prakashan, Seth Publication	Lecture method, Discussion method
	3. International environment: current trends in the world, International trading environment- WTO & Trading Blocks & their impact on Indian	6	Commerce I-Manan Prakashan, Seth	Lecture method, Discussion method

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	business.		Publication	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 23

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Seema Sihana DEPARTMENT: Commerce CLASS: FYBCOM SEMESTER: I MONTH: June to October 2019

ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Familiarize the commerce students with basic concepts of business and develop knowledge and understanding of business in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE PAPER I	Module I : Business : Introduction, Objectives, New Trends	12	Peter Drucker – Newyork Harper Business. Rashmi Bansal	Chalk & Duster
	Module IV – Entrepreneurship: Introduction, Entrepreneurs, Women Entrepreneurs.	10		Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti Pramod Patil DEPARTMENT: Commerce CLASS: F.Y.B.Com SEMESTER: I

MONTH: July to October ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:
The learners will be able to understand need to study this subject. It helps them to understand current environmental problems in the society and their responsibility towards the environment.

UNIT 1	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environment and Ecosystem	1. Environment: Meaning, definition, scope and its components	5	1.Environmental studies: P.G. Shinde 2.Fundamentals of Ecology: Odum E.P.	Teaching Method: 1. lecture method 2.discussion method Teaching aid: chalkboard
	2. concept of an ecosystem : definition, Characteristics, components and types, functioning and structure	4		
	3. Food Chain and Food Web, Ecological Pyramids	2		
	4. Man and environment relationship , Importance and scope of Environmental Studies	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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LEARNING OBJECTIVES:

The learners will be able to understand about different types resources and problems caused by improper utilization of natural resources. They will also understand the concept of sustainability and its need to handle current environmental problems.

UNIT 2	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Natural Resources and Sustainable Development	1. Meaning, definitions, classification and types of resources	2	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method Teaching aid: chalkboard
	2. Factors influencing resource; Resource conservation-meaning and methods	2		
	3.conventional and non-conventional resources	3		
	4. Problems associated with and management of water, forest and energy resources	5		
	5. resource utilization and sustainable development	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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LEARNING OBJECTIVES:
The learners will be able to understand about environmental and social problems caused by increasing population and its control measures. They will able to understand concepts of HDI &WHI

UNIT 3	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Populations and Emerging Issues of Development	1. Population explosion in the world and in India and arising concerns, Demographic Transition Theory	3	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method Teaching aid: chalkboard
	2. Pattern of population growth in the world and in India and associated problems	3		
	3. Measures taken to control population growth in India; Human population and environment	3		
	4. Environment and Human Health	1		
	5. Human Development Index, The World Happiness Index	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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LEARNING OBJECTIVES:
The learners will be able to understand about concepts of urbanization and associated problems. They will learn about smart and sustainable cities.

UNIT 4	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Urbanisation and Environment	1. Concept of Urbanisation	1	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method Teaching aid: chalkboard
	2. Problems of migration and urban environment- changing landuse, crowding and stress on urban resources	5		
	3. Degradation of air and water, loss of soil cover, impact on biodiversity, Urban heat islands	3		
	4. Emerging Smart Cities and safe cities in India - Sustainable Cities	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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LEARNING OBJECTIVES:
The learners will be able to read various types of thematic maps and map fillings which will give them an idea of spatial distribution of environmental problems

UNIT 5	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Reading of Thematic Maps and Map Filling	1. Reading of Thematic Maps Located bars, Circles, Pie charts, Isopleths, Choropleth and Flow map, Pictograms	4	Environmental studies: P.G. Shinde	Teaching Method: 1. Lecture method 2.Discussion method 3.Demonstration method Teaching aid: chalkboard, maps
	2. Map filling of World (Environmentally significant features) using point, line and polygon segment.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __SMITA KHAIRE (JADHAV)_____ _ DEPARTMENT: Commerce_____

_ CLASS: ____F.Y.B.COM_____ SEMESTER: __I_____ MONTH: July to october_ ACADEMIC YEAR: _2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to acquire a basic understanding and knowledge about the environment and it's interrelationships. It will help them to aware about protection of environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER: Environmental studies	Unit-1: Environment and Ecosystem:- Environment : meaning,definition,scope and it's component Concepts of an Ecosystem: definition, characteristics, components and types, functioning and structure; food chain, food web and ecological pyramid, Man and environment relationship ; Importance and scope of Environmental studies.	13	Environmental Science by Santra S.C Fundamentals of Ecology by Odum E.P	Black board method

	Unit 3- Population and Emerging issues of development: Population explosion in the world and in India and arising concern, Demographic Transition Theory , pattern of population growth in the world and in India and associated problems ; Measures taken to control population growth in India; Human population and environment – Environment and Human health; Human Development Index , The world Happiness Index.	13	Environmental management by H.V.Jadhav	Black board method
	Reading of Thematic maps: Located bar, located circle, pie charts, Isopleth, Choropleth, Flow map and pictograms- only reading and interpretation.	4	Mapbook by Sheth and Vipul publication	Black board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____30_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHAL S. JADHAV DEPARTMENT: COMMERCE CLASS: F.Y.B.COM SEMESTER: 1st MONTH: JULY - OCTOBER

ACADEMIC YEAR: 2019- 2020.

LEARNING OBJECTIVE/S:
The learners will be able to create an environmental awareness.To create an insight into various environmental issues at various levels and environmental movements towards making environmental Sustainable.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Environmental Studies	UNIT II NATURAL RESOURCES AND SUSTAINABLE DEVELOPMENT. 1) Meaning & Definition, Classification and types of Resources.2) Factors influencing resource utilisation, 3)Resource conservation - Meaning & Methods - Conventional & Non- Conventional energy resources. 4)Problems	13	1)Singh,Savindra,2011: Environmental Geography, Prayag Pustak Bhavan, Allahabad,India. 2)Odum E.P.(1971):Fundamentals of Ecology, W.B. Saunders, Philadelphia. 3)Bharucha E.,A Text Book of Environmental Studies, Universities Press, Hyderabad.	Black Board Method

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	associated with management of water,forest and enegy resources. 5)Resources utilisation and sustainable development.			
	UNIT IV 1) Concept if urbanisation-problems of migration and urban environment - changing land use, crowding and stress,on urban resources, degradation of air,water,loss of soil cover impact on biodiversity,urban heat island, Emerging smart cities and safe citiesin India-sustainable cities.	13	1)Gautam Alka,2009: Environmental Geography,Sharda Pustak Bhavan, Allahabad, India. 2)DetwylerT.R.,1971:Man'sImpactonEnvironment,McGraw-Hill,NewYork	Black Board Method

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	MAP: WORLD MAP 1) Map Filling.	04	Sheth Publication & Vipul Prakashan.	Black Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __30____

SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Sandra Shamir Almeida DEPARTMENT : Commerce

CLASS : FYBCOM (M,N,O,P) SEM : I MONTH : AUG-Dec YEAR : 2019-20

LEARNING OBJECTIVE/S:

- The learners will be able to know the various concepts about Accounting Standard 1, 2 & 9, especially about Inventory Valuation, Capital and Revenue: Receipts and Expenditure and about Accounting for Hire Purchase.
- He will also be able to practically apply this knowledge in business & entrepreneurship in India.

PAPER/ UNIT/ TITLE	SUB TOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING ME ICT TOOLS US
ACCOUNTANCY AND FINANCIAL MANAGEMENT-I	**Module I : ACCOUNTING STANARDS ISSUED BY ICAI AND INVENTORY VALUATION** ➢ **Inventory Valuation** • Meaning of Inventories • Cost of Inventory Valuation • Inventory Systems: Periodic Inventory System and Perpetual Inventory System • Valuation : Meaning & Importance • Methods of Stock Valuation as per AS-2 : FIFO AND Weighted Average Method • Computation of Valuation of Inventory as on balance sheet date: If inventory is taken on a date after the balance sheet or before the balance sheet.	12	**Financial Accounting : A Managerial Perspective by Narayanswamy**	CHALK AND DU

	Module II : FINAL ACCOUNTS ➢ Capital and Revenue : Expenditure and Receipts • Expenditure : Capital and Revenue • Receipts: Capital, Revenue • Adjustments and Closing Entries	08	**Financial Accounting for Management by N Ramachandran**	CHALK AND DU
	Module IV : ACCOUNTING FOR HIRE PURCHASE • Meaning • Calculation of Interest • Accounting for Hire Purchase transactions by asset purchase method based on full cash price • Journal entries, ledger accounts and disclosure in balance sheet for hirer and vendor (excluding default, repossession and calculation of cash price)	**15**	**Financial Accounting for Management by Ambrish Gupta**	CHALK AND DU

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____ANKITA ARUN RAUT_____ DEPARTMENT: ____COMMERCE_____

8CLASS: ____FYBCOM_____ SEMESTER: __I_____ MONTH: __JUL-NOV_____ ACADEMIC YEAR: _____2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : Calculate inventory, will able to bifurcate capital and revenue income and expenditure. And will able to pass journal entries as well as prepare ledgers for hire purchase in both the books.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	ACCOUNTING STANDARD & INVENTORY VALUATION: INVENTORY VALUATION: Meaning, Periodic Inventory System, Perpetual Inventory System, Methods of Stock Valuation, FIFO and Weighted Average Method, Practical Problems based on inventory	15	Manan Prakashan	Chalk & Duster
2	FINAL ACCOUNT: Capital and Revenue Income and Expenditure- Meaning, Characteristics, Distinguish, Problems, Based on Capital and Revenue,	10	Manan Prakashan	Chalk & Duster
3	ACCOUNTING FOR HIRE PURCHASE: Meaning, Calculation of Interest, Journal Entries, Ledger Accounts, And Disclosure of Balance Sheet in the books of vendor and purchaser. Practical Questions on hire purchase	15	Manan Prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce

CLASS: F Y B Com SEMESTER: I MONTH: July ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :
Demonstrate knowledge of preparation of financial statement and financial schedule in accordance with GAAP – Generally Accepted Accounting Principles, through analysis and synthesis of information as well. Student will learn relevant financial accounting carrier skills, applying both quantitative & qualitative knowledge to their future carrier in business.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy & Financial Management 1	**Accounting Standards Issued by ICAI and Inventory Valuation** **• Accounting Standards:** Concepts, Benefits, Procedures for Issue of Accounting Standards Various AS: **AS – 1: Disclosure of Accounting Policies** (a) Purpose (b) Areas of Policies (c) Disclosure of Policies (d)Disclosure of Change in Policies **AS – 2: Valuation of Inventories (Stock)** (a) Meaning, Definition (b) Applicability (c) Measurement of Inventory	03	*Financial Accounting by M. Mukherjee and M. Hanif, Tata McGraw Hill Education Pvt. Ltd., New Delhi* *Financial Accounting by Williams, Tata Mc. Grow Hill and Co. Ltd., Mumbai*	Chalk & talk, Black-Board Method; Group Discussion,

	(d) Disclosure in Final Account(e) Explanation with Illustrations **AS – 9: Revenue Recognition** (a) Meaning and Scope (b) Transactions Excluded (c) Sale of Goods (d) Rendering of Services (e) Effects of Uncertainties (f) Disclosure			
	Final Accounts • Adjustments and Closing Entries • Final Accounts of Manufacturing Concerns (Proprietary Firm)	12		
	Departmental Accounts Meaning Basis of Allocation of Expenses and Incomes / Receipts Inter Departmental Transfer: At Cost Price and Invoice Price Stock Reserve Departmental Trading and Profit and Loss Account and Balance Sheet	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

Babli Jha

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAKKUMAR GUPTA DEPARTMENT: COMMERCE

CLASS: FYBCOM (E,F,G,H) SEMESTER: I MONTH: AUG, SEP, OCT & NOV ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

Comprehension based Learning to Esemplastic into Objective type Exams. To Understand Accounting Standard and it's Importance. To Learn Theoretical as well as Practical Concept about Manufacturing Concern and Departmental Accounts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE -I, II & III	Chapter 1: AS-1 Disclosure of Accounting Policies ➢ Introduction, Meaning & Definition ➢ 32 Accounting Standards ➢ Accounting policies ➢ Accounting Assumptions	03	S.K & S.N MAHESHWARI	CHALK & BLACKBOARD
	Chapter 2: AS-2 Valuation of Inventories ➢ Introduction & Meaning ➢ Determination of Value ➢ Ascertainment of Cost ➢ Measurement ➢ Cost Formulas	03	S.K & S.N MAHESHWARI	CHALK & BLACKBOARD

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	Chapter 3: AS-9 Revenue Recognition ➢ Introduction & Meaning ➢ Revenue From Sale of Goods ➢ Revenue From Rendering Services ➢ Revenue From Other Income (Interest, Dividend, Royalty)	03	S.K & S.N MAHESHWARI	CHALK & BLACKBOARD
	Chapter 4: Capital and Revenue : Expenditure and Receipts ❑ Capital and Revenue : Expenditure and Receipts ❑ Expenditure : Capital and Revenue ❑ Receipts: Capital, Revenue ❑ Adjustments and Closing Entries	12	S.K & S.N MAHESHWARI	CHALK & BLACKBOARD
	Chapter 8: ACCOUNTING FOR HIRE PURCHASE ➢ Meaning ➢ Calculation of Interest ➢ Accounting for Hire Purchase transactions by asset purchase method based on full cash price ➢ Journal entries, ledger accounts and disclosure in balance sheet for hirer and vendor (excluding default, repossession and calculation of cash price)	12	S.K & S.N MAHESHWARI	CHALK & BLACKBOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___33_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SONAL RAUT DEPARTMENT: COMMERCE

CLASS: FYBCOM (A,B,C,D) SEMESTER: I MONTH: AUG, SEP, OCT & NOV ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

Comprehension based Learning to Esemplastic into Objective type Exams. To Understand Accounting Standard and it's Importance. To Learn Theoretical as well as Practical Concept about Manufacturing Concern and Departmental Accounts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE -I, II & III	Chapter 1: AS-1 Disclosure of Accounting Policies ➢ Introduction, Meaning & Definition ➢ 32 Accounting Standards ➢ Accounting policies ➢ Accounting Assumptions	03	S.K & S.N MAHESHWARI	CHALK & BLACKBOARD
	Chapter 2: AS-2 Valuation of Inventories ➢ Introduction & Meaning ➢ Determination of Value ➢ Ascertainment of Cost ➢ Measurement ➢ Cost Formulas	03	S.K & S.N MAHESHWARI	CHALK & BLACKBOARD

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	Chapter 3: AS-9 Revenue Recognition ➢ Introduction & Meaning ➢ Revenue From Sale of Goods ➢ Revenue From Rendering Services ➢ Revenue From Other Income (Interest, Dividend, Royalty)	03	S.K & S.N MAHESHWARI	CHALK & BLACKBOARD
	Chapter 6: Final Account of Manufacturing Concern ➢ Introduction, Meaning & Items in Manufacturing Account ➢ Journal Entries, Format of Manufacturing Account ➢ Questions solved on the same	12	S.K & S.N MAHESHWARI	CHALK & BLACKBOARD
	Chapter 7: Departmental Accounting ➢ Meaning, Objectives & Basis of Allocation of Expenses ➢ Format of Departmental Trading & P&L, General P&L A/c ➢ Questions solved on the same	12	S.K & S.N MAHESHWARI	CHALK & BLACKBOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___33_____

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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: Commerce CLASS: F.Y.BCOM (Division I J K L) SEMESTER: I

MONTH: September ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand and remember the concept of Accounting Standards issued by ICAI; accounting principles and policies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1- Accounting Standards Issued by ICAI	AS – 1: Disclosure of Accounting Policies	01	Book by Manan publications/Internet	Chalkboard
	AS – 2: Valuation of Inventories (Stock)	01	Book by Manan publications/Internet	Chalkboard
	AS – 9: Revenue Recognition	01	Book by Manan publications/Internet	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 03

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Bhakti Vilas Purandare_ DEPARTMENT: COMMERCE____
CLASS: ____FYBCOM SEMESTER: __I_____ _MONTH: __JULNOV__
ACADEMIC YEAR:_____2019-20_____
LEARNING OBJECTIVE/S:
The learners will be able to : Student will learn relevant financial accounting carrier skills, applying both quantitative & qualitative knowledge to their future carrier in business..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	ACCOUNTING STANDARD & INVENTORY VALUATION: INVENTORY VALUATION: Meaning, Periodic Inventory System, Perpetual Inventory System, Methods of Stock Valuation, FIFO and Weighted Average Method, Practical Problems based on inventory	15	Manan Prakashan	Chalk & Duster
2	FINAL ACCOUNT: Capital and Revenue Income and Expenditure-Meaning, Characteristics, Distinguish, Problems, Based on Capital and Revenue,	10	Manan Prakashan	Chalk & Duster
3	ACCOUNTING FOR HIRE PURCHASE: Meaning, Calculation of Interest, Journal Entries, Ledger Accounts, And Disclosure of Balance Sheet in the books of vendor and purchaser. Practical Questions on hire purchase	15	Manan Prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __40_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE C LASS: FYBCOM SEMESTER: I MONTH: JULY

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to know about the Indian society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FONDATION COURSE UNIT 1 OVERVIEW OF INDIAN SIOCIETY	Understand regional variations according to rural, urban and tribal characteristics, Understanding the concept of diversity as Difference	05	Text Book	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: FYBCOM SEMESTER: 1 MONTH: AUGUST

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to get knowledge about Indian Constitution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 The Indian constitution	Philosophy of the constitution as set out in the preamble, The structure of the constitution- the preamble, Main body and schedules, Fundamental duties of the Indian citizen, Tolerance, Peace and Communal harmony as crucial values in strengthening the social fabric of Indian society, Basic features of the constitution.	10	Text Book	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: FYBCOM SEMESTER: I MONTH: SEPTEMBER

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to understand the political system in India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 Significance aspect of Political Processes	The party system in Indian politics, Local self-government in Urban and Rural areas, 73rd and 74th Amendments and their implications for inclusive politics, Role and Significance of Women in Politics.	10	Text Book	Chalk And board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: FYBCOM

SUBJECT: NSS FOUNDATION COURSE SEMESTER: I MONTH: June to October ACADEMIC YEAR: 2019-20 .

LEARNING OBJECTIVE/S:

The learners will be able to : Gain knowledge about history of NSS, NSS Programme at National & State level, Meaning of NSS symbol, importance of NSS .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING MET TOOLS US
Unit -1 Introduction to National Service Scheme (NSS)	**UNIT- 1 Emergence of NSS in India (Historical Background) and its development.** Organizational Structure of National Service Scheme from National Level to College Level. Objectives of National Service Scheme (NSS) National Service Scheme (NSS) - Symbol and it's meaning **UNIT -Il Symbol of NSS and its meaning** Motto of National Service Scheme (NSS) Various prayers, inspirational songs to be used in NSS	10	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi.And 2. University of Mumbai National	Chalk And Duster.

	Programme.		Service Scheme Manual,2009.	
Unit -2 National Service Scheme (NSS) Regular Activities	**UNIT - I Guidelines of Distribution of working hours or academic year.** Classification of Regular Activities in the Society Rural Urban Campus Need base with association **UNIT - II Associations in NSS Activities** Govt. Organization; NGO; Scope for Innovation (Self-Generated)	10	1. Service Scheme Manual (Received) Government of India Ministry of Youth Affairs and sports, New Delhi. 2. University of Mumbai National Service Scheme Manual,2009.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___20__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA VAIBHAV TAMBE **DEPARTMENT: Commerce** **CLASS: F.Y.Bcom A & B**
SUBJECT: FOUNDATION COURSE I **SEMESTER: I** **MONTH: August, September** **ACADEMIC YEAR: 2019-2020**

A teaching plan is a document that outlines the structure and details of a single session. A good teaching plan is a comprehensive write-up of the step-by-step teaching methods, the estimated duration of each segment of teaching, and the materials and resources needed for the session.

LEARNING OBJECTIVE/S:

By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

(For a detailed description of each component see Appendix A).

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Overview of Indian Society	a] Multicultural diversity in Indian society	02	Book by Manan publications/Internet	Chalkboard
	b] Population distribution according to religion caste and gender, caste system, composition of caste system.	03	Book by Manan publications/Internet	Chalkboard

Total no of lecture 05

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VIVA COLLEGE, Virar (W)
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APPENDIX {A}

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT1 Concept of Disparity 1	a] Concept of disparity as arising out of stratification and inequalities.	02	Book by Manan publications/Internet	Chalkboard
	b]gender disparities with special references to violence against women.	02	Book by Manan publications/Internet	Chalkboard
	c] Female Foeticide & Declining gender ratio	02	Book by Manan publications/Internet	Chalkboard
	d] inequalities faced by people with disabilities.	02	Book by Manan publications/Internet	Chalkboard
	e] Understand the issues of people with physical & mental disabilities. Special provisions and facilities for disabled personalities.	02	Book by Manan publications/Internet	Chalkboard

Total no of lecture 10

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UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Concept of Disparity 2	a] Inequalities manifested due to caste system	01	Book by Manan publications/Internet	Chalkboard
	b]different types of conflicts arising out of caste system, inter- group conflict, cultural differences, lingual differences.	03	Book by Manan publications/Internet	Chalkboard
	c] Inter-group conflict arising out of communalism and its effects on society.	02	Book by Manan publications/Internet	Chalkboard
	d] Causes and Effects of conflicts arising out of regionalism.	02	Book by Vipul publication/internet	Chalkboard
	e] Causes and Effects of conflicts arising out of linguistic differences.	02	Book by Vipul, Manan publication/ internet	Chalkboard

Total no of lecture 10

SIG1NATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHWINI DATTATRAY BHOIR DEPARTMENT: COMMERCE CLASS: FYBCOM I,J,K,L. SEMESTER: I MONTH: JUN - OCTOBER ACADEMIC YEAR: 2019 -2020 SUBJECT - FOUNDATION COURCE

LEARNING OBJECTIVE/S:
The learners will be able to know importance of Constitution and importance of fundamental Rights and Duties.

The learners will be able to know Indian Multi-Cultural.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Overview of Indian Society	Understand the Multi-Cultural diversity of Indian Society through its demographic composition: Population distribution according to religion, caste and gender; Appreciate the concept of linguistic diversity in relation of the indian situation;	5	Indian Society and Culture, Vinita Padey, Rawat pub2016	1) Lecture Method 2) Black Board, chalk and Duster
Unit -4 The Indian Constitution	Philosophy of the Constitution as set out in the preamble; The structure of the Constitution - the preamble, main body and schedules; Fundamental Duties of the Indian Citizen ; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; basic features of the Constitution.	7	Introduction to the Constitution of India - Durga Das Basu	

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Unit 5- Significant Aspects of Political processes.	The party system in Indian politics; Local self-government in urban and rural areas; The 73rd and 74th Amendments and their implications inclusive politics; Role and significance of women in politics.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Suborna S. Banerjee **DEPARTMENT:** Commerce **CLASS**: FYBCOM **SEMESTER:** II

MONTH: Dec to April **ACADEMIC YEAR**: 2018-19 **Div** : A to H

LEARNING OBJECTIVE/S:

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to

Preparing resumes to attending interviews, convening meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

To make students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
1) Group Communication	1) Interviews: 2) meetings: 3) Committees & Conferences: 4) Public Relations:	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk – Board	

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2) Business correspondence	1) Trade Letters (ref.	15	From Internet	Chalk - Board	
3) Language and writing skills	1) Reports & Business Proposals 2) Summarization	8	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 38

SIGNATURE OF SUBORNA BANARJEE **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Suborna S. Banerjee DEPARTMENT: Commerce CLASS: FYBCOM (Div A to H) SEMESTER: I MONTH: July to Dec.

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to

Preparing resumes to attending interviews, convenig meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

Tomake students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
1) Theory of Communication	1) Concept of Communication- Models of Communication - Linear/ Interactive/ Transactional / Shanon and Weavor (to be only discussed in class) Meaning, Definition, Process Need, Feedback Emergence of communication as a key concept in the Corporate and Global World Impact of technological Enabled communication Types: Internet, Blogs, E- mail, Moodle, Social	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	

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	media (Facebook, Twitter and WhatsApp advantages and disadvantages) Communication at Workplace- 2) Channels and Objectives of Communication: Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine 3) Methods and Modes of Communication: Methods: Verbal and Nonverbal (including Visual), Business Etiquette Introduction to Business Ethics: Ethics at workplace, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility 1) Problems in Communication /Barriers to Communication: Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers 2) Listening: Importance of Listening Skills, obstacles to listening, Cultivating good Listening Skills				

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3) Business Correspondence	1)Theory of Business Letter Writing: Parts, Structure, Layouts—Full Block, Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, letter of recommendation, Job Application Letter and Resume, Letter of Appointment (to be discussed in class) Letter of Resignation, Letter of acceptance of job offer, letter of Appreciation.	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	
4) Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities Listening Comprehension Remedial Teaching Speaking Skills: Presenting a News Item, Dialogue and Speeches Paragraph Writing: Preparation of the first draft,	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk	

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	Revision and Self – Editing, Rules of spelling. Reading Comprehension: Analysis of texts from the fields of Commerce and Management				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Bristi Gourgopal Biswas DEPARTMENT: Commerce CLASS: F.Y.BCOM (Division:A,B,C,D,I,J,K,L) SEMESTER: II (Subject : Business Economics II)

MONTH: November-February ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To understand the application of microeconomics at corporate level .

The learners will be able to : observe microeconomics in the real world and to understand and take business decisions under different type of competitive market.

Module II **Pricing and output decisions under imperfect competition**	Features of monopolistic competition, short run equilibrium of the firm, long run equilibrium of the firm ,selling cost and its effects, role of advertisement. Meaning of oligopoly ,characteristics of oligopoly ,collusive and non collusive oligopoly ,price rigidity ,collusive oligopoly, price leadership.	15		Chalk and board
Module III **Pricing practices**	Meaning of pricing practices, degrees of price discrimination, conditions for price discrimination, conditions for profitable price discrimination, equilibrium of price discriminating monopolist ,dumping.			

	Introduction to pricing practices part II, marginal cost pricing ,cost plus pricing ,multi product pricing Transfer pricing.	10		Chalk and board
Module IV **Evaluating capital project**	Introduction to capital budgeting ,meaning of capital budgeting ,importance of capital budgeting, steps in capital budgeting ,techniques of investment appraisal, comparison of net present value and internal rate of return methods.	10		Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____CHETAN PRAKASH VARMA_____ DEPARTMENT: ___COMMERCE_____CLASS: ____FYBCOM_____

SEMESTER: _____II_____ MONTH: ___DECEMBER-MARCH _____ ACADEMIC YEAR: ____2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to :

To make student understand the concepts of business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics-I	Market structure: Perfect competition and Monopoly Perfect competition and Monopoly models as two extreme cases - profit maximisation and the competitive firm's supply curve - Short run and long run equilibrium of a firm and of industry	5	*Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases (S. Chand & Sons, N. Delhi, 2000)* • *Salvatore, D.: Managerial Economics in a global economy (Thomson South Western Singapore, 2001)*	CHALK AND TALK / EXPLORITATIVE/TWO WAY COMMUNICATION Story-telling method Textbook method Lecture Method

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	monopoly - Sources of monopoly power – short run and long- run equilibrium of a firm under Monopoly	3	• *Frank Robert.H ,Bernanke. Ben S., Principles of Economics (Tata McGraw Hill (ed.3)*	Demonstration Method Tutorial Method Questions-Answer method Discussion method Heuristic method Discovery method
	Monopolistic competition: competitive and monopolistic elements of monopolistic competition - equilibrium of a firm under monopolistic competition, monopolistic competition verses perfect competition- excess capacity and inefficiency - debate over role of advertising (topics to be taught using case studies from real life examples)	4	• *Gregory Mankiw., Principles of Economics, Thomson South western (2002 reprint)*	
	Oligopolistic markets: key attributes of oligopoly - Collusive and non collusive oligopoly market - Price rigidity - Cartels and price leadership models (with practical examples)	5	• *Samuelson &Nordhas.: Economics (Tata McGraw Hills, New Delhi, 2002*	

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____17_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Bhakti Vilas Purandare_ DEPARTMENT: _COMMERCE_____
CLASS:___FYBCOM___SEMESTER: _II__MONTH:__DEC, to MARCH___
ACADEMIC YEAR:___2019-20___
LEARNING OBJECTIVE/S:
The learners will be able to:
Comprehension based Learning to Esemplastic into Objective or Subjective type Exams. To Understand the Accounting for Incomplete Records and it's Importance. To Learn Theoretical as well as Practical Concept about Fire Insurance Claim & Incomplete Records.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE I& IV	Chapter 1: Accounting for Incomplete Records • Introduction, Meaning, Types& Features • Introduction Of Conversion Method • Double Vs. Single Entry System • Bills Receivable & Bills Payable Account • Total Debtors & Total Creditors Account • Cash /Bank And Expenses Account	15	MANAN PRAKASHAN	CHALK & BLACKBOARD
	Chapter 4: Fire Insurance Claim • Introduction & Meaning • Computing Loss with Stock on Date of Fire,	15	MANAN PRAKASHAN	CHALK & BLACKBOARD

	Salvage & Actual Loss • Computing Claim With & Without Average Clause • Memorandum Trading Account • Total Debtors & Total Creditors Account to Ascertain Credit/Cash Sale and Purchase • Problems Solved on the same			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___30_____

Late Shri. Vishnu Waman Thakur Charitable Trust
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YashvantKeshavPatil College of Commerce
VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Claretta Elias Lopes_____DEPARTMENT: __COM MERCE_____

CLASS __F.Y.BBI SEMESTER: II_____MONTH: _JUNE -SEPTEMBER ACADEMIC YEAR: __2019 -2020_____

LEARNING OBJECTIVE/S: To make the students socially aware of the societal problem and their personality.
The learners will be able to: to understand the overall stratification of the society.

PAPER, UNIT, TITLE	SUB TOPICS			NO. OF LECTURES ALLOTED	

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Foundation Course–II Unit I, IV, and V	Unit 1: Globalisation and Indian Society Understanding the concepts of liberalization, privatization and globalization Growth of information technology and communication and its impact manifested in everyday life: Impact of globalization on industry: changes in employment and increasing Changes in agrarian sector due to globalization; rise in corporate farming migration; and increase in farmers' suicides.			6	**Text book**
	Unit 4: Understanding Stress and Conflict			**6**	**Text book**

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	Causes of stress and conflict in individuals and society: Agents of socialization and the role played by them in developing the individual Significance of values, ethics and prejudices in developing the individual Stereotyping and prejudice as significant factors in causing conflicts in society Aggression and violence as the public expression of conflict.				
	<u>Unit 5: Managing Stress and Conflict in Contemporary Societ</u> Types of conflicts and use of coping mechanisms for managing individua stress; Maslow's theory of self-actualisation, Different methods of responding to conflicts in society: Contlict-resolution and efforts towards building peace and harmony in society			5	**Text book**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Kavita Vilas Purandare DEPARTMENT : Commerce

CLASS : FYBCOM SEM : II MONTH : Nov - March YEAR : 2018-19

LEARNINGOBJECTIVE/S : learner will be able to learn scenario of service sector in India as growth of service sector is important for the development of our country.

PAPER/ UNIT/ TITLE	SUBTITLES	NO. OF LECURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE II	**MODULE II : RETAILING** 1.INTRODUCTION : Concept of organised & unorganised retailing, trends in retailing, growth of organised retailing, survival strategies for unorganised retailing 2.Retail format : Store format, non-store format, store planning 3.Retail scenario : Retail scenario in India, retail scenario in global context, prospects & challenges in India, mall management, retail franchising, FDI	10		Chalk & board
	MODULE III : RECENT TRENDS IN SERVICE SECTOR 1.ITES SECTOR :BPO, KPO, LPO,ERP 2.BANKING & INSURANCE SECTOR : ATM, DEBIT CARD, CREDIT CARD, Internet banking, opening of insurance sector for private players, FDI & its impact on banking & insurance sector in India 3.LOGISTIS :	10		Chalk & board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE _ DEPARTMENT: B.COM CLASS: FYB.COM - A,B,C,D SEMESTER: _2nd _ MONTH: November -February ACADEMIC YEAR: 2019 -2020 SUBJECT : COMMERCE II

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To introduce learners with different concepts of services.
2. To make student able to identify elements of marketing mix, Service Strategies and it's implementation in service sector.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1: CONCEPT OF SERVICES	• Introduction : Meaning, Characteristic, Scope and Classification of Services – Importance of Service sector in the Indian Context.	4	Service Marketing – Temani Management of Service sector - Bhatia	1. Lecture and discussion . 2. Flow charts.
	• Marketing Mix for Services : Consumer Expectations, Services Mix, Product, Place, Price, Promotion, process of services delivery, Physical evidence and people.	4		
	• Service Strategies : Market research and services development cycle, Managing demand and Capacity, Opportunities and challenges in service sector.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 ×4 div = 48

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE _ DEPARTMENT: B.COM CLASS: FYB.COM - A,B,C,D SEMESTER: _2nd MONTH: November – February ACADEMIC YEAR: 2019 -2020 SUBJECT : COMMERCE II

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To introduce learners about scope and Importance of E- Commerce.
2. To acquaint students with the knowledge of challenges and opportunities of E- Commerce in India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 4 : E-COMMERCE	• Introduction :Meaning, Features, Functions and Scope of E- Commerce – Importance and Limitations of E-Commerce.	4	Introduction to E- Commerce – Dhawn	1. Lecture and discussion . 2. Flow charts.
	• Types of E- Commerce :Basic ideas and Major activities of B2C, B2B, C2C.	3		
	• Present Status of E- Commerce in India : Transition to E-Commerce in India, E-Transition Challenges for Indian Corporates, On-line Marketing Research.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 ×4 div = 44

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAKKUMAR GUPTA DEPARTMENT: COMMERCE

CLASS: FYBCOM (E,F,G,H) SEMESTER: II MONTH: DEC, JAN, FEB & MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

Comprehension based Learning to Esemplastic into Objective or Subjective type Exams. To Understand the Accounting for Incomplete Records and it's Importance. To Learn Theoretical as well as Practical Concept about Fire Insurance Claim & Incomplete Records.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE I & IV	Chapter 1: Accounting for Incomplete Records ➢ Introduction, Meaning, Types & Features ➢ Introduction Of Conversion Method ➢ Double Vs. Single Entry System ➢ Bills Receivable & Bills Payable Account ➢ Total Debtors & Total Creditors Account ➢ Cash /Bank And Expenses Account ➢ Problems on Preparation of Final Account of Proprietary (Conversion Method)	15	S.K & S.N MAHESHWARI	CHALK & BLACKBOARD

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	Chapter 4: Fire Insurance Claim ➢ Introduction & Meaning ➢ Computing Loss with Stock on Date of Fire, Salvage & Actual Loss ➢ Computing Claim With & Without Average Clause ➢ Memorandum Trading Account ➢ Total Debtors & Total Creditors Account to Ascertain Credit/Cash Sale and Purchase ➢ Problems Solved on the same	15	S.K & S.N MAHESHWARI	CHALK & BLACKBOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___30_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPASHREE PARAG VARTAK DEPARTMENT: MATHEMATICS CLASS: FYBCOM SEMESTER: II MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

- The learners will be able to : Draw different types of scatter diagrams to study the correlation between two variables.Find the regression equations using least square method.Analyze the relationship between regression coefficients and correlation coefficient.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MATHEMATICAL AND STATISTICAL TECHNIQUES II UNIT III BIVARIATE LINEAR CORRELATION AND REGRESSION	Correlation, Meaning types, properties, scatter diagram	2	BASIC STATISTICS BY AGRAWAL	BLACKBOARD CHALK AND DUSTER
	Karl Pearson correlation coefficient, Spearman Rank correlation coefficient	3		Explanation, Discussion, Problem solving assignments
	Meaning, Concept of Regression equations, Slope of the Regression Line and its interpretation.	3		
	Finding the equations of Regression lines by method of Least Squares.	4		
	Relation between regression coefficient and correlation coefficient	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Archana D Joshi DEPARTMENT: COMMERCE CLASS: FY.B.COM – (E, F, G, H) SEMESTER: II

MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

To help students understand the various aspects of Group Communication

The learners will be able to: It introduces students to the process of making effective presentations and moves on to the various group Communications, where individual and team work is equally important.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	1) Interviews: Group Discussion Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit 2) Meetings: Need and Importance of Meetings, Conduct of Meeting and Group Dynamics Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions	10	Manan Publication Sheth Publication Vipul Publication	Chalk - Board

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TRADE LETTERS	Letters of Inquiry,Letters of complaints,claims Adjustments sales letters,Promotional Leaflets and Fliers Consumer Grievance Letters Letters under Right to Information Act .	10	Manan Publication Sheth Publication Vipul Publication	Chalk - Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHAL S. JADHAV DEPARTMENT: COMMERCE CLASS: F.Y.B.COM SEMESTER: 2nd MONTH: NOVEMBER - MARCH

ACADEMIC YEAR: 2019 - 2020.

LEARNING OBJECTIVE/S:
The learners will be able to create an environmental awareness.Make aware students about various environmental factors and its relation to the field of Commerce.. To highlight functional and spatial linksbetween environment, economy and society.To create an insight into various environmental issues at various levels andenvironmental movements towards makin environmental sustainable.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL STUDIES	UNIT – III: TOURISM AND ENVIRONMENT 1)Tourism: Meaning, Scope and importance, Typologyof tourism- classification; Tourism potentials in India and challenges before India; New Tourism Policy of India 2)Consequences of tourism : Positive and Negative Impacts on Economy, Culture and environment. 3) Ecotourism.	13	Saxena H M., 2000, 'Environmental Management',Rawat Publication, New Delhi. Environmental Management by N.K. Uberoi	Black Board Method

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	UNIT IV ENVIRONMENTAL MOVEMENTS AND MANAGEMENT 1) Environmental Movements in India - Save Narmada Movement, Chipko Movement,Appiko Movement,Save Western Ghat Movement. 2) Environmental Management: Concept,need & relevance. 3) Concept of ISO 14000 & ISO 16000. 4) Concept of Carbon Bank & Carbon Credits. 5)EIA. 6) Ecological footprint. 7) Environmental Protection Acts. 8)Concept and Components of Geospatial Technology-Application of GST in Environmental Management. 13	13	Asolekar S, Gopichandran R. 2005.'Preventive Environmental management- an Indian perspective'CEE, Ahmedabad, Foundation Books Pvt Ltd,Daryaganj. Santra S. C., 2004, 'Environmental Science', New Central Book agency Pvt Ltd, Kolkata.	Black Board Method
	Map filling konkan Map	04	Sheth Publication & Vipul Prakashan.	BLACK Board Method.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____30_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce

CLASS: F Y B Com SEMESTER: II MONTH: November ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :
Understand the meaning of Branch along with its types. The learners will able to calculate profit & loss of each branch separately. They are able to ascertain the financial position of each branch separately on a particular date. The learner will able to understand the special features of consignment business, meaning of the term consigner & consignee and difference between two transaction – sales & consignment. Practice the accounting treatments for consignment transactions and events in the books of consigner & consignee.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy & Financial Management II	**Consignment Accounts** Accounting for Consignment Transactions Valuation of Stock (at Cost Price & at Invoice Price) Invoicing of Goods at Higher Price	15	*Advanced Accountancy by R.L Gupta and M. Radhaswamy, S. Chand and Company (P) Ltd., New Delhi* Introduction to Accountancy by T.S. Grewal, S. Chand and Company (P) Ltd., New Delhi	Chalk & talk, Black-Board Method, Group Discussion,
	Branch Accounts Meaning / Classification of Branches Accounting for Dependent Branch (at Cost Price & at Invoice Price) Debtors Method Stock and Debtors Method	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

Babli Jha

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Sandra Shamir Almeida DEPARTMENT : Commerce

CLASS : FYBCOM (M,N,O,P) SEM : II MONTH : Aug - Oct YEAR : 2019-20

LEARNING OBJECTIVE/S:

- The learners will be able to know the various concepts about Consignment Accounts and Branch Accounts.
- He will also be able to practically apply this knowledge in Opening Branch account and sale on Consignment in India.

PAPER/ UNIT/ TITLE	SUB TOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING ME ICT TOOLS US
ACCOUNTANCY AND FINANCIAL MANAGEMENT-I	**Module II : Consignment Accounts** • Accounting for consignment Transactions • Valuation of Stock • Invoicing of goods at higher price • (Excluding over riding commission, normal/abnormal losses)	15	**Financial Accounting : A Managerial Perspective by Narayanswamy**	Duster and Cha
	Module III : Branch ACCOUNTS • Meaning / Classification of Branch • Accounting for dependent Branch not maintaining full books by (a) Debtors method (b) Stock and Debtors methods	15	**Financial Accounting for Management by N Ramachandran**	Duster and Cha

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____ANKITA ARUN RAUT_____ DEPARTMENT: ____COMMERCE_____

CLASS: ____FYBCOM_____ SEMESTER: __II_____ MONTH: __DEC-MAR_____ ACADEMIC YEAR: _____2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : Prepare consignment account in the books of consigner and consignee, will able to prepare branch account by both the methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	CONSIGNMENT ACCOUNTING: Introduction, Valuation of stock, Calculation of commission and Dell Creder Commision, Journal entries, ledgers, and Practical questions based on consignment.	15	Manan Prakashan	Chalk & Duster
2	BRANCH ACCOUNT: Meaning, Classification of branches, Dependent Branch, Independent Branch, Methods of branch accounting (Debtors method and stock and debtors methods) Practical questions based on consignment.	15	Manan Prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. VISHAL SAWANT DEPARTMENT: COMMERCE

CLASS: FYBCOM) SEMESTER: II MONTH: DEC, JAN, FEB & MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

Comprehension based Learning to Esemplastic into Objective or Subjective type Exams. To Understand the Accounting for Incomplete Records and it's Importance. To Learn Theoretical as well as Practical Concept about Fire Insurance Claim & Incomplete Records.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE I& IV	Chapter 1: Accounting for Incomplete Records ➢ Introduction, Meaning, Types& Features ➢ Introduction Of Conversion Method ➢ Double Vs. Single Entry System ➢ Bills Receivable & Bills Payable Account ➢ Total Debtors & Total Creditors Account ➢ Cash /Bank And Expenses Account ➢ Problems on Preparation of Final Account of Proprietary (Conversion Method)	15	MANAN PRAKASHAN	CHALK & BLACKBOARD

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	Chapter 4: Fire Insurance Claim ➢ Introduction & Meaning ➢ Computing Loss with Stock on Date of Fire, Salvage & Actual Loss ➢ Computing Claim With & Without Average Clause ➢ Memorandum Trading Account ➢ Total Debtors & Total Creditors Account to Ascertain Credit/Cash Sale and Purchase ➢ Problems Solved on the same	15	MANAN PRAKASHAN	CHALK & BLACKBOARD
			S.K & S.N MAHESHWARI	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___30_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE CLASS: FYBCOM

SEMESTER: **II** MONTH: Dec,2019 to Feb,2020 ACADEMIC YEAR :2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to understand causes of stress & conflicts, values of ethics, types of conflicts, Maslow's theory of self Actualization, causes of environmental degradation & its impact on human life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course	1]**Understanding Stress and Conflict**: Causes of stress and conflict in individuals and society; Agents of socialization and the role played by them in developing the individual; Significance of values, ethics and prejudices in developing the individual; Stereotyping and prejudice as significant factors in causing conflicts in society. Aggression and violence as the public expression of conflict;	10	----	Chalk & Duster
	2]Managing Stress and Conflict in Contemporary Society: Types of conflicts and use of coping mechanisms for managing individual stress; Maslow's theory of self-actualisation; Different methods of responding to conflicts in society; Conflict-resolution and efforts towards building peace and harmony in society.	10	---	Chalk & Duster
	3]Ecology-Environmental Degradation- causes and impact on human life; Sustainable development- concept and components; poverty and environment	05	-----	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **COMMERCE**

CLASS: **F.Y.B.COM.** SEMESTER: **II**

MONTH: **NOVEMBER - FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to understand the nature and objectives of camping activities. The learner will be able to know the importance and procedures to evaluate the feedback post camp.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE I (NSS) **UNIT 3** **SPECIAL CAMPING ACTIVITY**	**NATURE AND OBJECTIVES OF ACTIVITIES.** - selection of camp site - identification of specific theme - Coordination with local planning governments and other agencies. - ice breaking and team building activities	07	Vaz, Michel, Foundation Course II MANAN PRAKASHAN	Black Board-chalk Field work during 7 days residential camp

	FEEDBACK AND EVALUATION - post camping activities	04	Vaz, Michel, Foundation Course II MANAN PRAKASHAN	Black Board-chalk Field work during 7 days residential camp

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PROF. MRS. RASHMI SACHIN SAWANT**

DEPARTMENT: **COMMERCE**

CLASS: **F.Y.B.COM.** SEMESTER: **II**

MONTH: **NOVEMBER - FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: The learner will be able to understand the nature of involvement of government organizations and non government organizations with NSS. The learner will be able to understand the funding from both the agencies and its utilization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE I (NSS) **UNIT 4** **GOVERNMENT ORGANIZATIONS / NON GOVERNMENT ORGANIZATIONS**	**INDIAN CONSTITUTION STRUCTURE OF GOVERNMENT AND NON GOVERNMENT ORGANIZATIONS** - coordination of NSS with government organizations - coordination of NSS with nongovernmental organizations	05	Vaz, Michel, Foundation Course II MANAN PRAKASHAN	Black Board-chalk Field work during 7 days residential camp
	SOCIAL JUSTICE - concepts and features - contribution for social justice by great leaders	06	Vaz, Michel, Foundation Course II MANAN PRAKASHAN	Black Board-chalk Field work during 7 days residential camp

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: Self Finance CLASS: FYBCOM SEMESTER: IV MONTH: January ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : ecology and its significance. loan about privatisation, liberalisation and globalisation and changes in Indian society. Concept and origin of human rights and fundamental rights.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation course, globalisation and Indian society	Understanding the concepts of liberalization privatization and globalisation	2	Manan Prakashan	Lecture method
	growth of information technology and communication and its impact on everyday life	2		
	Impact of globalisation on industry, changes in employment and increasing migration	3		
	Changes in agrarian sector due to globalisation, rise in corporate farming and increasing farmer's suicide	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

MONTH: February

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation course, ecology	Importance of Environment Studies in the current developmental context; Understanding concepts of Environment, Ecology and their interconnectedness;	3	Manan Prakashan	Lecture method
	Environment as natural capital and connection to quality of human life;	2		
	Environmental Degradation- causes and impact on human life;	2		
	Sustainable development- concept and components; poverty and environment	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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MONTH: March

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation course, human rights	Concept of Human Rights; origin and evolution of the concept;	3	Manan Prakashan	Lecture method
	The Universal Declaration of Human Rights;	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita Almeida DEPARTMENT: Commerce CLASS:F.Y.BCOM (G & H) SEMESTER:II MONTH:January-April

ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand and remember the concept of Human rights.
2) Understand and remember Human Rights constituents with special reference to Fundamental Rights stated in the Constitution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Human Rights.	Concept of Human Rights; origin and evolution of the concept	02	Book byManan publications	Chalkboard
	The Universal Declaration of Human Rights	02	Book by Manan publications	Chalkboard
	Human Rights constituents with special reference to Fundamental Rights stated in the Constitution	03	Book byManan publications	Chalkboard
	Importance of Environmental Studies in the current development context			
Unit3- Ecology	Understanding the concept of Environment,Ecology and their interconnectedness.	02	Book byManan publications	Chalkboard
	Environment as natural capital and connection to quality of human life.	01	Book byManan publications	Chalkboard

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	Environmental Degradation-Causes And impact on human life.	01	Book byManan publications	Chalkboard
	Sustaninabledevelopment-concept and components, poverty and environment.	02	Book byManan publications	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBCOM (A,B,C,D) SEM : II MONTH : YEAR : 2019-20

LEARNING OBJECTIVE/S : Learner will be able to learn retailing scenario, types of retailing in India.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE II **UNIT II** **RETAILING**	INTRODUCTION : Concept of organised & unorganised retailing, trends in retailing, growth of organised retailing, survival strategies for unorganised retailing	03	Retailing management, Levy Michael., Weitz Barton A, Tata Mcgraw Hill	Chalk and board
	Retail format : Store format, non-store format, store planning	03	Retailing management, Levy Michael., Weitz Barton A, Tata Mcgraw Hill	Chalk and board
	Retail scenario : Retail scenario in India, retail scenario in global context, prospects & challenges in India, mall management, retail franchising, FDI in retailing, careers in retailing	05	Retailing management, Levy Michael., Weitz Barton A, Tata Mcgraw Hill	Chalk and board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 11

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBCOM (A,B,C,D) SEM : II MONTH : YEAR : 2019-20

LEARNING OBJECTIVE/S : Learner will be able to learn ITES sector, various developments in banking & insurance sector in India and logistics system in India.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE II	ITES SECTOR :BPO, KPO, LPO,ERP	03	Seth publication	Chalk and board
UNIT III **RECENT TRENDS IN SERVICE SECTOR**	BANKING & INSURANCE SECTOR : ATM, DEBIT CARD, CREDIT CARD, Internet banking, opening of insurance sector for private players, FDI & its impact on banking & insurance sector in India	05	Seth publication	Chalk and board
	LOGISTIS : Logistics networking, importance, challenges	02	Seth publication	Chalk and board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 10

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBCOM (A,B,C,D) SEM : II MONTH : YEAR : 2019-20

LEARNING OBJECTIVE/S : Learner will be able to learn the concept of e-commerce.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE II **UNIT IV** **E-COMMERCE**	INTRODUCTION : Features, functions, scope, advantages, limitations of e -commerce	04	Introduction to e-commerce, Dhawan, Nidhi, International Book House	Chalk and board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 04

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHAKHA SANE DEPARTMENT: COMMERCE CLASS: FYBCOM SEMESTER: **II** MONTH: NOV-MARCH

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to : Observe microeconomics in the real world and to understand and take business decisions under different type of competitive market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
Unit1 and 4	**Unit 1: Introduction** Market structure:Perfect competition and Monopoly- perfect competition and monopoly model's as two extreme cases- profit maximisation and competitive firm's supply curve- short-run and long-run equilibrium of a firm and of industry- monopoly- sources of a monopoly power- short-run and long-run equilibrium of a firm under Monopoly	2	ADVANCE ECONOMIC THEORY H L AHUJA	CHALK AND DUSTER
	Unit 4 Evaluating a capital project:		Manan prakash	CALK AND DUSTER

SIGNATURE OF THE STAFF **vishakha sane** **SIGNATURE OF THE H.O.D.**

	Meaning and importance of the capital budgeting- stets in capital budgeting- techniques of investment appraisal: payback period method, Net present value method and internal rate of return method(with a numerical examples)	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

SIGNATURE OF THE STAFF **vishakha sane** **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: Commerce

CLASS: FYB.com SEMESTER: II MONTH: Nov-March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

Build a familiarity with the operation of markets and optimization in an economic context.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –II Unit 1 Market Structure: Perfect competition and Monopoly Unit 4 Evaluating capital projects	Perfect Competition	5	Salvatore, D.:Managerial Economics in a global economy	Chalk and Talk Discussion Case studies
	Monopoly	5	Mehta, P.L.: ManagerialEconomics – Analysis,Problem and Cases	Chalk and talk Discussion Case studies
	Evaluating Capital projects	10		Chalk and talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT I PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYB com SEMESTER: II

MONTH: December ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) understand the concept of real function

(2) learn about function and its type

(3) learn the concept of Derivative

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and statistical technique II Function, Derivatives and their application Unit I	(1) function and its type	02	Business mathematics and statistics(S.L Agarwal, Ane book pvt limited) Business statistics by SG Gupta	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) demand, supply, total revenue, average revenue, total cost ,average cost, and profit function ,equilibrium point ,break even point.	04	Business mathematics by VK Kapoor	

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	(3) derivative as a rate measure, Rules of Derivative	03		
	(4) marginal cost ,marginal revenue , & elasticity of demand	03		
	(5) maxima and minima for function in economics and Commerce	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lecture

TEACHING PLAN (UNIT II PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYB com SEMESTER: II
MONTH: january ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) understand the concept of interest

(2) learn the basic concept of Annuity and EMI

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Interest and Annuity Unit 2	(1) simple interest with example	04	Business mathematics and statistics(S.L Agarwal, Ane book pvt limited)	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,

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			Business statistics by SG Gupta	
	(2) compound interest with example future and present value also	04		
	(3) Annuity immediate and its Present value and future value	05		
	(4) EMI equated monthly installment	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

TEACHING PLAN (UNIT III PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYB com SEMESTER: II

MONTH: February ACADEMIC YEAR: 2019-20

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LEARNING OBJECTIVE/S:
The learners will be able to :

(1) understand the different different concept of correlation analysis

(2) learn about regression analysis

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Bivariate linear correlation and regression Unit 3	(1) meaning and type of correlation	02	Business mathematics and statistics(S.L Agarwal, Ane book pvt limited) Business statistics by SG Gupta	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) determination of correlation: scatter diagram ,Karl Pearson and spearman's rank correlation coefficient	04		
	(3) meaning and concept of regression	02		
	(4) slope of regression line ,regression coefficient	04		
	(5) regression line by method of least square	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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TEACHING PLAN (UNIT IV PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYB com SEMESTER: II

MONTH: february-march ACADEMIC YEAR: 2019-20

OBJECTIVE/S:
The learners will be able to :

(1) learn the concept of time series

(2) understand the different components of time series

(3) to understand the index number

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Time series and index number Unit 4	(1) definition and component of time series	02	Business mathematics and statistics(S.L Agarwal, Ane book pvt limited) Business statistics by SG Gupta	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) trend value using moving average & least square method seasonal component using arithmetic mean	04		
	(3) concept and uses of index number, type of index number	03		

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	(4) standard weighted index number and Factor reverse time reverse	03		
	(5) cost of living and real income	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

TEACHING PLAN (UNIT V PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYB com SEMESTER: II

MONTH: March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : (1) concept of discrete probability distribution : binomial and Poisson

(2) understand what is continuous probability distribution normal distribution

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Binomial poison normal distribution unit 5	(1) definition of discrete probability distribution	03	Business mathematics and statistics(S.L Agarwal, Ane book pvt limited) Business statistics by SG Gupta	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) Binomial Distribution with example	03		
	(3) poisson distribution with example	03		
	(4) definition of normal distribution and its property	02		
	(5) some based on normal distribution	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Madhu Sharma_ DEPARTMENT: Commerce CLASS: F.Y.B.Com SEMESTER: II MONTH: January to march ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to :

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit -1 : functions & derivative	• Demand and supply function, break even point, equilibrium price, Total cost ,average cost, revenue function & profit functions • Single order derivative, double order derivative, Marginal cost average cost , marginal revenue & marginal profit, minima & maxima methods • Simple interest	15 lectures	V.K.Kapoor Businesses mathematics	Black board problem solving method, Strategic thanking using assignments, remedial lectures

Unit -2 : Simple & compound interest , **Annuity and EMI**	• Compound interest based on yearly , half yearly , quarterly & monthly • Annuity : annuity due, certain annuity , present and future value of Annuity • EMI: 1) EMI on Flat interest rate 2) EMI on reducing balance method	15 lectures	V.K.Kapoor Businesses mathematic	Black board problem solving method, Strategic thanking using assignments, remedial lectures
Unit – 4 : Time series & Index numbers	• Simple Aggregative price index number • Simple average of relative index numbers • Weighted price index number • Weighted average of relative index number • Some Standard weighted index numbers • Cost of living index numbers: family budget method & expenditure method • Real income	15 lectures	S.L.Agarwal on basic statistics	Black board problem solving method, Strategic thanking using assignments, remedial lecture

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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Madhu sharma

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF.NAZIA SAJID SHAIKH_ DEPARTMENT: COMMERCE III CLASS: SYBCOM.

SEMESTER:III MONTH:JUNE-OCT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: SUBJECT:COMMERCE III
The learners will be able to : Understand meaning of Management, Evolution of Management, Modern Management Approach,, Indian Ethos.

Function of Management: Directing and Controlling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 INTRODUCTION TO MANAGEMENT	*Management: Meaning, Nature, functions, Mgmt Skills & competencies *Evolution of Management Thoughts: Classica approach. Classical organisation theory, Neo Classical approach:Human relation approach, Modern Management approach. *Indian Management Thoughts: Origin and significance of Indian Ethos to management. *Motivation: Meaning, Importance, influencing factors. *Communication: importance and barriers of effective communication.	11	Management principles and practice: Mc Graw Hill Publication	Chalk and Duster
MODULE 4 DIRECTING AND CONTROLLING	*Leadership: Meaning, functions , Styles of leadership and Qualities of good leader. *Controlling: steps , essentials , techniques of controlling , PERT, CPM, Budgetary Control, Management Audit	12		Chalk and Duster

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF.NAZIA SAJID SHAIKH_ DEPARTMENT: COMMERCE III CLASS: SYBCOM.

SEMESTER:III MONTH:JUNE-OCT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: SUBJECT:COMMERCE III
The learners will be able to : Understand meaning of Management, Evolution of Management, Modern Management Approach,, Indian Ethos.

Function of Management: Directing and Controlling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 INTRODUCTION TO MANAGEMENT	*Management: Meaning, Nature, functions, Mgmt Skills & competencies *Evolution of Management Thoughts: Classica approach. Classical organisation theory, Neo Classical approach:Human relation approach, Modern Management approach. *Indian Management Thoughts: Origin and significance of Indian Ethos to management. *Motivation: Meaning, Importance, influencing factors. *Communication: importance and barriers of effective communication.	11	Management principles and practice: Mc Graw Hill Publication	Chalk and Duster
MODULE 4 DIRECTING AND CONTROLLING	*Leadership: Meaning, functions , Styles of leadership and Qualities of good leader. *Controlling: steps , essentials , techniques of controlling , PERT, CPM, Budgetary Control, Management Audit	12		Chalk and Duster

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM

SUBJECT: ADVERTISING SEMESTER: III MONTH: June to October ACADEMIC YEAR: 2019-20 .

LEARNING OBJECTIVE/S:
The learners will be able to : Gain knowledge about advertising, its benefits, scope, function, different media in advertising.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHO TOOLS USED
UNIT 1:- Introduction to Advertising.	• **Integrated Marketing Communications (IMC)-** Concept Features, Elements, Role of advertising in IMC • **Advertising:** Concept, Features, Evolution of Advertising Active Participants, Benefits of advertising to Business and consumers • **Classification of Advertising:** Geographic, Media, Target audience and Functions	12	Marketing Management by Philip Kotler.	Chalk And Duster
UNIT 3:- Economic & Social Aspects of Advertising	• **Economic Aspects:** Effect of advertising on consumer demand, monopoly and competition, Price • **Social Aspects:** Ethical and social issues in advertising positive and negative influence of advertising on Indian values and culture • **Pro Bono/Social advertising:** Pro Bono Advertising, Social Advertising by Indian Government through Directorate of Advertising and Visual Publicity (DAVP). Self-Regulatory body - Role of ASCI (Advertising Standard Council of India)	11	Marketing Management by Philip Kotler.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____23____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Kavita Vilas Purandare DEPARTMENT: COMMERCE
CLASS: SYBCOM_ SEMESTER: III MONTH: JUNE TO OCT. ACADEMIC YEAR: 2020-21 SUB: ADVERTISING.
LEARNING OBJECTIVE/S:
The learners will be able to : Advertising Agency, Agency and Client relationship, Career in advertising, Role of advertising in Brand Building &Brand Equity, Special Purpose Advertising, Trends in advertising.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 2. ADVERTISING AGENCY.	***Advertising Agency:** features, Structure & Services offered, Types of Ad Agency, Agency Selection Criteria . ***Agency and Client:** Maintaining Agency -Client relationship , Reasons & ways of avoiding Client turnover, Creative Pitch, Agency compensation. ***Careers in advertising:** Skills required for a career in advertising, various Career options, freelancing Career options-Graphics , Animation, Modelling Dubbing.	**11**	**Advertising: Frank William J.**	**Chalk and Dusters, Advertisement in Newspaper, Magazines.**
MODULE 4. BRAND BUILDING AND SPECIAL PURPOSE ADVERTISING.	***Brand Building:** Communication Process, **AIDA Model,** Role of Advertising in developing Brand image& Brand Equity & Brand Crisis. ***Special Purpose Advertising:** Rural advertising, Political advertising, Advocacy advertising, Corporate image advertising, Green advertising-featured of all above Special Purpose Advertising. ***Trends in advertising:** Media ,Media spend, Execution of Advertising.	**11**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Madhura Surve. DEPARTMENT: COMMERCE. CLASS: S.Y. B.COM SEMESTER: III MONTH: September – December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Carrier Opportunities and scope of Advertising

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I Introduction to Advertising	IMC, Meaning, Definition, features of Advertising, Active Participants, Evolution, growth of Advertising benefits and classification of Advertising	10	Advertising : Principles and practices	Online lectures through Google Meet
Unit III Economics and social effect of Advertising	Economic and Social effect of advertising, impact of advertising on Price, Production and distribution, Positive and Negative effects of Advertising, effect of advertising on monopoly and competition, Ethical issues, Untruthful ads, importance of Truth in Advertising Pro-bono Advertising , self regulation laws, ASCI.	15	Advertising, sales, Promotion Management	Online lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: SYBCOM SEMESTER: III

MONTH: June-October ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : understand that the records need to be maintained and planning need to be done for future

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Management Accounting Unit- 1 Working Capital	Meaning of working capital, nature and concept of working capital,estimation of working capital	3	Management accounting , by patankar	Disscussion method and Blackboard
	Operating cycle, format of working capital	2		
	Practical problems	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: SYBCOM SEMESTER: III

MONTH: June-October ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : understand that the records need to be maintained and planning need to be done for future

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Management Accounting Unit-2 Capital budgeting	Introduction , capital budgeting process, projects	2	Management accounting , by patankar	Disscussion method and Blackboard
	Capital budgeting techniques- payback period, ARR, net present value, profitability index, discounted payback period	3		
	Practical problems	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____CHETAN PRAKASH VARMA _____ DEPARTMENT: ___COMMERCE ___ CLASS: __SYBCOM ___

SEMESTER: ___III___ MONTH: _____SEPT- DECEMBER _____ ACADEMIC YEAR: ____2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : ___To make student understand the All Macro Economics Perspective, National Income, Theory of J.M Keynes and its applicability in business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS-III	BASIC CONCEPTS OF KEYNESIAN ECONOMICS The Principle of Effective Demand: Aggregate Demand and Aggregate Supply Consumption Function: Properties, Assumptions and Implications Investment function and Marginal Efficiency of capital	06	Ackley.G (1976), Macro Economic Theory and Policy, Macmillan Publishing Co. New York	CHALK AND TALK / EXPLOITATIVE/TWO WAY COMMUNICATION Story-telling method Textbook method Lecture Method Demonstration Method Tutorial Method Questions-Answer method Discussion method Heuristic method Discovery method

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	Investment Multiplier effect on Income and Output: Assumptions, Working, Leakages, Criticism and Importance - paradox of thrift Relevance of Keynesian theory tools to the developing countries	05	Ahuja. H.L., Modern Economics — S.Chand Company Ltd. New Delhi.	
	MONEY, PRICES AND INFLATION Money Supply: Determinants of Money Supply - Factors influencing Velocity of Circulation of Money Demand for Money : Classical and Keynesian approaches and Keynes' liquidity preference theory of interest - Friedman's restatement of Demand for money	06	Principles of Macro Economics Dornbush , Rudiger, Fisher Stanley and Startz, Richards	
	Money and prices : Quantity theory of money - Fisher's equation of exchange - Cambridge cash balance approach Inflation : Demand Pull Inflation and Cost Push Inflation - Effects of Inflation-	04	Jhingan, M.L., Principles of Economics — Vrinda Publications (P) Ltd.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____21___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Bhakti Vilas Purandare DEPARTMENT: COMMERCE
CLASS: SYBCOM SEMESTER: III MONTH: June- September
ACADEMIC YEAR: 2019-20
LEARNING OBJECTIVE/S:
The learners will be able to : Understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit-2 Piecemeal Distribution	Introduction , excess capital method, asset taken over by partner,	3	Financial Ac. counting by R. Narayanaswamy,	Chalk & talk Method and Discussion method
	Treatment of past profit or past losses in the balance sheet, contingent liabilities, realisation expenses	3	Financial Ac. counting by R. Narayanaswamy	Chalk & talk Method and Discussion method
	Practical problems	6	Financial Ac. counting by R. Narayanaswamy, S.N. MAHESHWARY	Chalk & talk Method and Discussion method

Financial Accounting Unit-1 Partnership final accounts based on adjustment of Admission or Retirement or Death of partner during the year	Introduction to final accounts ,adjustments relating to admission, retirement and death of partner	3	Financial Ac. counting by R. Narayanaswamy,	Chalk & talk Method and Discussion method
	Allocation of gross profit prior to and after admission, retirement and death when stock on date of admission or retirement is not given.	3	Financial Ac. counting by R. Narayanaswamy,	Chalk & talk Method and Discussion method
	Allocation of gross profit prior to and after admission, retirement and death when stock on date of admission or retirement is given and to be	3	Financial Ac. counting by R. Narayanaswamy, S.N. MAHESHWARY	Chalk & talk Method and Discussion method

	divided on basis of time, sales or other basis			
	Practical problems	6	Financial Ac. counting by R. Narayanaswamy	Chalk & talk Method and Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHWINI DATTATRAY BHOIR DEPARTMENT: COMMERCE CLASS: SYBCOM E,F,G,H SEMESTER: III MONTH: JUN - OCTOMBER ACADEMIC YEAR: 2019 -2020 SUBJECT - BUSINESS LAW

LEARNING OBJECTIVE/S:
The learners will be able to know the meaning of the terms Agreement and contract and note the Distinction between the two.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I Indian Contract Act-1872 part - I Module No.II	Chapter :I-Contract- Definition of Contract and Agreement, Essentials of Valid Contract, Classification of contracts. Chapter :II- Offer and Acceptance - Rules of valid offer and acceptance, Counter offer, standing or open offer, distinguish between offer and invitation to offer.Concept of Communication and Revocation of offer and acceptance. Chapter : III- Capacity to Contract - Minor, Unsound Mind, Disqualified persons. Chapter :IV- Consideration - Concept and Importance of Consideration, Legal rules of Consideration, Exceptions to the rule, 'No Consideration No Contract' Unlawful Considertion.	2 3 2 2	The Indian Contract Act,1872 -Avtar singh Business Law-kapoor N. D.	Lecture Method, Case Study, Black Board, Chalk and Duster
	Chapter :I- Consent - Agreements in which consent is not free-Coercion, undue Influence, Misrepresentation Fraud, Mistake.	3		

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Indian Contract Act- 1872 Part II	Chapter: II - Void Agreements - Concept, Void Agreement under Indian Contract Act. Chapter : III - Contingent Contract, Quasi Contract, Concept of E- Contract & Legal Issues in formation and discharge of E-Contract. Concept of performance of contract. Chapter : IV- Modes of Discharge of Contract, Remedies on breach of Contract.	2 3 2		
Module No. III Special Contracts.	Chapter :I- Law of Indemnity & Guarantee - Concept, Essentials elements of Indemnity and Guarantee, Contract of Indemnity vs. Guarantee, modes of Discharged of Surety. Chapter : II- Law of Bailment - Concept, Essentials of Bailment, Kinds of Bailment, Rights and Duties of Bailor and Bailee.	3 2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT: Commerce

CLASS: SYBCOM (A,B,C, D) SEMESTER:III MONTH: June to Oct.

ACADEMICYEAR: 2018 -2019 LEARNING OBJECTIVE/S: Business Law

The learners will be able to : Introduction, Understand Meaning, Rules and Regulations, Section, Important Act Details with Related Case Study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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ModuleI:IndianContractAct,1872 Part 1	Chapter I Definitions, Kinds of agreements, Kinds of contracts, distinction between agreement and contract Chapter II Proposal, kinds of proposal -specific, offer to a class of persons, general offer, counter offer, invitation to offer, standing offer, express proposal, implied offer, requirements of a valid offer section 3 & 5 Acceptance, requirements of a valid acceptance, Rules of communication of proposal, acceptance and revocation of proposal/acceptance Chapter III Capacity to contract, minor, unsound mind, Disqualified person. Section 10-12 Chapter IV Consideration, agreements without consideration,	03 04 02 03	Indian contract act 1872 Avtar singh Pollak and mulla D.D basu	Chalk And Duster
Module II Indian Contract Act, 1872 Part II	unlawful consideration, inadequacy of consideration Agreements expressly declared to be void section 2- 25			

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Module III Special Contract	Chapter I consentandfreeconsent,coercion,undueinfluence,fraud, misrepresentationMistake Chapter II Void agreement section 24 to 30 Chapter III section 31 and 68 -72 Contingent contract, quasi-contracts, e-contract, Privity of contracts with exceptions Chapter IV Section 73 - 75 Discharge of contracts, Remedies available on breach of contracts Chapter I Law of Indemnity and guarantee related essential, discharge of surety, distriction between, section 124 - 125, 126 - 129, 132 - 147	04 02 03 03 03		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27 × 4 = 216

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: COMMERCE CLASS: SYB.COM -E, F, G, H
SEMESTER: 3rd MONTH: August-October
ACADEMIC YEAR: 2019-2020 LEARNING OBJECTIVE/S: SUBJECT: COMMERCE III
The learners will be able to:

1. To identify and demonstrate process for making short and long term plans.
2. To recognize the importance of seeking Information before making decisions.
3. To make student able to work in group, problem solving and organizational skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 2: PLANNING & DECISION MAKING	▪ Planning- steps, Importance, Components, Coordination-Importance	4	Management - James Stoner Management: Global Prospective – Heinze Weihrich & Harold Koontz Principles of Management	1. Lecture and discussion. 2. Flow charts. 3. Online teaching learning tools (google meet, google form Google classroom, PPTs)
	▪ M.B.O – Process, Advantages, Management By Exception-Advantages; Management Information System – Concept, Components	3		
	▪ Decision Making – Techniques, Essentials of a Sound Decision Making, Impact of Technology on Decision Making	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10×4 div = 40

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA R. BHOSALE DEPARTMENT: B. COM CLASS: SYB.COM – E, F, G, H SEMESTER: 3rd
MONTH: August – October ACADEMIC YEAR: 2019-2020 SUBJECT: COMMERCE

III LEARNING OBJECTIVE/S:

The learners will be able to:

1.To make student able to work in different types of organization

2.To recognize the importance of span of management and Delegation of Authority

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 3. ORGANISING	• Organising – Steps, Organisation Structures- Features of Line & Staffordshire Organisation, Matrix Organisation, Virtual Organisation, Formal v/S Informal Organisation	4	Management – James Stoner. Management Global Prospective - H.W.& Koontz. Principles of Management.	1. Lecture and discussion. 2. Flow charts. 3. Online teaching learning tools (google meet, google form Google classroom, PPTs)
	• Departmentation – Meaning- Bases, Span of Management – Factors Influencing Span of Management, Tall and Flat Organisation	4		
	• Delegation of Authority – Process, Barriers to Delegation, Principles of Effective Delegation. Decentralisation : Factors Influencing Decentralisation, Centralization v/S Decentralisation	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _12 × 4 div = 48

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM. SUBJECT: COMMERCE III SEMESTER: III MONTH: June to October ACADEMIC YEAR: 2019-20 .

LEARNING OBJECTIVE/S:
The learners will be able to : To gain the knowledge of management, evolution of management, to study different elements of management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING MET TOOLS US
Unit 2-Planning & Decision Making	**Planning** - Steps, Importance, Components, Coordination - Importance **M.B.O** -Process, Advantages, Management By Exception-Advantages; Management Information System-Concept, Components **Decision Making** - Techniques, Essentials of a Sound Decision Making, Impact of Technology on Decision Making.	**10**	Principles of management by Philip Kotler And Essential of Management by Koontz	Chalk And Duster
Unit -4 Organising	**Organising** Steps, Organisation Structures - Features of Line & Staff Organisation, Matrix Organisation, Virtual Organisation, Formal Vs Informal Organisation. **Departmentation** Meaning Bases, Span of Management Factors Influencing Span of Management, Tall and Flat Organisation .**Delegation of Authority**-Process, Barriers to Delegation, Principles of Effective Delegation. Decentralisation Factors Influencing Decentralisation, Centralization vs Decentralisation Directing And Controlling	10	Principles of management by Philip Kotler And Essential of Management by	

			Koontz	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___20__ ____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof DEEPAKKUMAR GUPTA DEPARTMENT: COMMERCE CLASS: SYBCOM

SEMESTER: III MONTH: June- September ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit-2 Piecemeal Distribution	Introduction , excess capital method, asset taken over by partner,	3	Financial Ac. counting by R. Narayanaswamy,	Chalk & talk Method and Discussion method
	Treatment of past profit or past losses in the balance sheet, contingent liabilities, realisation expenses	3	Financial Ac. counting by R. Narayanaswamy	Chalk & talk Method and Discussion method
	Treatment of secured liabilities , preferential liabilities, excluding insolvency of partner and maximum loss method	3	Financial Ac. counting by R. Narayanaswamy	Chalk & talk Method and Discussion method
	Practical problems	6	Financial Ac. counting by R. Narayanaswamy, S.N. MAHESHWARY	Chalk & talk Method and Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof DEEPAKKUMAR GUPTA DEPARTMENT: Commerce CLASS: SYBCOM

SEMESTER: III MONTH: June- September ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit-1 Partnership final accounts based on adjustment of Admission or Retirement or Death of partner during the year	Introduction to final accounts ,adjustments relating to admission, retirement and death of partner	3	Financial Ac. counting by R. Narayanaswamy,	Chalk & talk Method and Discussion method
	Allocation of gross profit prior to and after admission, retirement and death when stock on date of admission or retirement is not given.	3	Financial Ac. counting by R. Narayanaswamy,	Chalk & talk Method and Discussion method
	Allocation of gross profit prior to and after admission, retirement and death when stock on date of admission or retirement is given and to be divided on basis of time, sales or other basis	3	Financial Ac. counting by R. Narayanaswamy, S.N. MAHESHWARY	Chalk & talk Method and Discussion method
	Practical problems	6	Financial Ac. counting by R. Narayanaswamy	Chalk & talk Method and Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PALLAVI GANGADHAR NAI K DEPARTMENT: COMMERCE CLASS: SYBCOM SEMESTER: III MONTH: JUNE TO MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : UNDERSTAND SOME OF THE MOST SIGNIFICANT MACROECONOMICS THEORIES AND PRINCIPLE..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS II	MODULE 1 INTRODUCTION TO MACROECONOMICS, SCOPE AND IMPORTANCE, CIRCULAR FLOW OF INCOME,CLOSE AND OPEN ECONOMY MODELS, MEASUREMENT OF NATIONAL INCOME, CONVENTIONAL AND GREEN GNP AND NNP CONCEPTS, TARDE CYCLES, FEATURES AND PHASES, SAY'S LAW OF MARKETS, FEATURES, IMPLICATIONS AND CRITICISM	6	MANAN PRAKASHAN SETH PUBLICATION	BLACKBOARD AND CHALK
	MODULE 4 MONEY, PRICES AND INFLATION MONEY SUPPLY DETERMINANTS, FACTORS INFLUENCING VELOCITY OF CIRCULATION OF MONEY, DEMAND FOR MONEY, CLASSICAL AND KEYNESIAN APPROACHES, LIQUIDITY PREFERENCE THEORY OF INTEREST,INFLATION, DEMAND PULL AND COST PUSH INFLATION, EFFECTS AND CAUSES OF INFLATION,	6		
		2		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce

CLASS: S Y B Com SEMESTER: III MONTH: July ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :
Understand the concepts of amalgamation, preparation of account of accounting for amalgamation of partnership firm and its accounting effect. The learners will able to understand the need, procedure, accounting effect and treatment for conversion of partnership firm into a limited company.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy and Financial Management III	**Amalgamation of Firms** i) Realization method only ii) Calculation of purchase consideration iii) Journal / ledger accounts of old firms iv) Preparing Balance sheet of new firm v) Adjustment of goodwill in the new firm vi) Realignement of capitals in the new firm by current accounts / cash or a combination thereof Excluding Common transactions between the amalgamating firms	15	Shashi K. Gupta – "Contemporary Issues in Accounting", Kalyani Publishers. Ashok Sehgal – "Fundamentals of Financial Accounting", Taxmann's Publishers	Chalk & talk, Black-Board Method, Group Discussion,
	Conversion / Sale of a Partnership Firm into a Ltd. Company	15		

	(i) Realisation method only (ii) Calculation of New Purchase consideration, Journal / Ledger Accounts of old firms. Preparing Balance sheet of new company			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

Babli Jha

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: **Commerce**

CLASS: **SYBCOM I & J** SEMESTER**: III** MONTH: **June to Sep** ACADEMIC YEAR: **2019 -20**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Solve practical problems using realization method
2) Write journal entries for old firm
3) Calculate Purchase consideration
4) Prepare balance sheet of old company

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting III	Unit 3 : - Amalgamation of Firms	8		Chalk Board
	1) Realization method only 2) Calculation of purchase consideration 3) Journal / ledger accounts of old firms 4) Preparing Balance sheet of new firm 5) Adjustment of goodwill in the new firm 6) Realignement of capitals in the new firm by current accounts / cash or a combination thereof Excluding Common transactions between the amalgamating firms			
	Unit 4 : Conversion / Sale of a Partnership Firm into a Ltd. Company	8		Chalk Board

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	1) Realisation method only 2) Calculation of New Purchase consideration, Journal /Ledger Accounts of old firms. Preparing Balance sheet of new company			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __16_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: SYBCOM

SEMESTER: 3 MONTH: JUNE-JULY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: FOUNDATION COURSE
The learners will be able to: Understand the constitution rights towerds scheduled cast tribes women and children people with disabilities, elderly and more

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Human Rights Violations and Redressal	Scheduled Castes – Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2	Foundation Course by Michael Vaz	Chalk Board, Flow Chart, Diagrams .
	Scheduled tribes – Constitutional and legal rights, forms of violations, redressal mechanisms.	2		
	Women – Constitutional and legal rights, forms of violations, redressal mechanisms.	2		
	Children – Constitutional and legal rights, forms of violations, redressal mechanisms	2		
	People with Disabilities, Minorities, and the Elderly population- Constitutional and legal rights, forms of violations, redressal mechanisms.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms.Mala Khanchandani DEPARTMENT: Commerce

CLASS: S.Y.B.Com SEMESTER: III MONTH: June to Octobe ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : _

_To provide opportunities for the students to become engage in real world issues and acquire the skills to be creative problem solvers.

To enable students to develop inquiring minds and curiosity about science and nature.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FC Unit 2 Dealing with environmental concerns.	A. Concept of disaster and general effects of disaster on human life- Physical, Psychological, economic and social effects. B. Some locally relevant case studies of environmental disasters. C. Dealing with disaster- Factors to be considered in prevention, Mitigation and disaster preparedness . D. Human Rights issues in addressing disasters- Issues related to compensation, equitable and fair distribution of relief and humanitarian approach to resettlement and rehabilitation.	`12	Michael Vaz Aurara vazL foundation course. Newspapers	Chalk and talk Discussion Explanation with examples

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FC Unit III Science and Technology				
	A. Development of Science – The Ancient Cultures, The Classical Era, The Middle Ages, The Renaissance, The Age of Reason and Enlightenment. B. Nature Of Science- Its Principles and Characteristics; Science as Empirical, Practical, Theoretical, Validated knowledge. C. Science and Superstition- The Role of Science in Exploding Myth, Blind belief and prejudices; Science and scientific temper- Scientific temper as a fundamental duty of Indian citizens. D. Science in everyday life- Technology, Its meaning and role in development; Inter relation and distinctions between science and technology.	12	Michael Vaz Aurara vaz:foundation course. Newspapers	Chalk and talk Discussion Explanation with examples

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____12_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN) FC 19-20

NAME OF THE STAFF: **RASHMI SAWANT** SUBJECT: **FOUNDATION COURSE-III** DEPARTMENT: **COMMERCE** CLASS: **SYBCOM**

SEMESTER: **III** MONTH: **JUNE-JULY**

ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the importance of Human right violation as well as issues relating to environmental degradation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1. Human Rights Violation and Redressal	Scheduled Castes – Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2	Vaz, Michel, Foundation Course I MANAN PRAKASHAN	Discussion Method And Chalk Board
	Scheduled tribes – Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2		
	Women - – Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2		
	Children - – Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2		

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	People with Disabilities, Minorities, and the Elderly population - – Constitutional and legal rights, Forms of violations, Redressal mechanisms.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **RASHMI SAWANT** SUBJECT: **FOUNDATION COURSE-III** DEPARTMENT: **COMMERCE** CLASS: **SYBCOM**

SEMESTER: **III** MONTH: **AUGUST-SEPTEMBER**

ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the importance of technology development in their day to day life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3. Science and Technology - I	Development of Science – the ancient cultures, the Classical era, the Middle Ages, the Renaissance, the Age of Reason and Enlightenment.	3	Vaz, Michel, Foundation Course I	Discussion Method And Chalk Board

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	Nature of Science – its principles and characteristics; Science as empirical, practical, theoretical, validated knowledge.	2	MANAN PRAKASH AN	
	Science and Superstition – the role of science in exploding myths, blind beliefs and prejudices; Science and scientific temper – scientific temper as a fundamental duty of the Indian citizen.	3		
	Science in everyday life – technology, its meaning and role in development; Interrelation and distinction between science and technology.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FOUNDATION COURSE-III DEPARTMENT: ____COMMERCE___

CLASS: ____SYBCOM____ SEMESTER: _____III_____ MONTH: __JUNE-JULY_ ACADEMIC YEAR: ____2019-2020___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the importance of Human right violation as well as issues relating to environmental degradation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1. Human Rights Violation and Redressal	Scheduled Castes – Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2		Discussion Method And Chalk Board
	Scheduled tribes – Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2		
	Women - – Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2		
	Children - – Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2		
	People with Disabilities, Minorities, and the Elderly population - – Constitutional and legal rights, Forms of violations, Redressal mechanisms.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___12_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FOUNDATION COURSE-III DEPARTMENT: ____COMMERCE___
CLASS: ____SYBCOM____ SEMESTER: _____III_____ MONTH: __AUGUST- SEPTEMBER_ ACADEMIC YEAR: ____2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the importance of technology development in their day to day life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3. Science and Technology - I	Development of Science – the ancient cultures, the Classical era, the Middle Ages, the Renaissance, the Age of Reason and Enlightenment.	3		Discussion Method And Chalk Board
	Nature of Science – its principles and characteristics; Science as empirical, practical, theoretical, validated knowledge.	2		
	Science and Superstition – the role of science in exploding myths, blind beliefs and prejudices; Science and scientific temper – scientific temper as a fundamental duty of the Indian citizen.	3		
	Science in everyday life – technology, its meaning and role in development; Interrelation and distinction between science and technology.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __11_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. FIROZKHAN KHURSHIT KHAN** DEPARTMENT**: COMMERCE**

CLASS: **S.Y.B.COM** DIV: **A, B, C & D** SEMESTER: **III** MONTH: **NOVEMBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: To impart the practical knowledge of Accountancy & Financial Management.

The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Amalgamation of Firms	**UNIT-3: Amalgamation of Firms** Realisation method only, Calculation of purchase consideration, Journal/ledger accounts of old firms, Preparing Balance sheet of New firm, Adjustment of goodwill in the new firm, Realignment of capitals in the new firm by current accounts / cash or a combination thereof Excluding Common transactions between the amalgamating firms.	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Chalk-Board Method
Conversion / Sale of a Partnership Firm into a Ltd. Company	**UNIT-4: Conversion / Sale of a Partnership Firm into a Ltd. Company** Realisation method only. Calculation of New Purchase consideration, Journal / Ledger Accounts of old firms. Preparing Balance Sheet of new company.	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Chalk-Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: Commerce

CLASS: SYBcom SEMESTER: III MONTH: June-Oct ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

Familiarize with basic concepts of macroeconomics and with certain common features of economic occurrence in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –III Unit 1 Introduction Unit 2 Basic concepts of Keynesian economics	Macroeconomics Circular flow of income and expenditure Measurement of national product Trade cycles Classical macroeconomics	10	Ahuja. H.L., Modern Economics — S.Chand Company Ltd. New Delhi	Chalk and Talk Discussion
	The principle of effective demand Consumption function Investment function Theory of multiplier	10	Gregory .N. Mankiw, Macroeconomics, Fifth Edition (2002) New York:Worth Publishers	Chalk and talk Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE CLASS: SYBCOM

SEMESTER: **III** MONTH: June,2019 to Sept,2019 ACADEMIC YEAR :2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to Learn what is working capital, its types and how to estimate working capital requirement, Meaning and calculation of various capital budgeting techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Management Accounting	1**] Working capital Management**-Concept, Nature,Meaning ,Typesof working capital,Planning, Estimation of working capital requirement in case of Trading & Manufacturing concern., Operating cycle	10	Management Accounting- M.Y. Khan	Chalk & duster
	2**] Capital Budgeting**-Introduction, Classification of capital budgeting projects, process. Capitalbudgeting techniques – Payback period,accounting Rate of Return, Net present value, Profitability index & Discounted payback. Practical problems.	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____SYBCOM____ SEMESTER: _____III_____ MONTH: __JUNE-JULY_ ACADEMIC YEAR: ____2019-2020___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Management Accounting	A) Introduction to Management Accounting – Meaning, Nature, scope, functions Decision Making process, Financial Accounting v/s Management Accounting	2	Management Accounting By I.M Pandey	Chalk Board And Discussion Method
	B) Analysis and Interpretation of Financial Statements Study of Balance sheet and Income Statement in vertical form suitable for analysis	2		
	Trend Analysis - Practical Illustrations	2		
	Comparative Statement – Practical Illustrations	2		
	Common size Statement – Practical Illustrations	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___10_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____SYBCOM____ SEMESTER: _____III_____ MONTH: __AUGUST- SEPTEMBER__ ACADEMIC YEAR: ____2019-2020___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Ratio Analysis and Interpretation	Introduction and Meaning of Financial statement analysis, Steps, objectives , Types of Analysis, simple sums on financial statement	2	Management Accounting By I.M Pandey	Chalk Board And Discussion Method
	Ratio Analysis- Meaning, Classification , DU Pont chart, Advantages and limitations.	3		
	Balance sheet ratio, Revenue statement Ratio and Combined Ratio (Applications of formulas)	3		
	Practical Illustrations	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NIKITA SUNIL JOGLE DEPARTMENT: COMMERCE CLASS: SYBCOM (A,B,C,D) SEMESTER: III

MONTH: JUNE - SEPTEMBER ACADEMIC YEAR: 2019 - 2020

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2 – Advertising Agency	• Ad Agency – Features, structure & services offered, types of advertising agencies, agency selection criteria. • Agency & Client – Maintaining agency – client relationship, reasons & ways of avoiding client turnover, creative pitch, agency compensation. • Careers in Advertising – Skills required for a career in advertising, various career options, freelancing career options – graphics, animation, modelling, dubbing.	10	Text book	Chalk & Board Samples of actual advertisings
3 – Brand Building & Special Purpose Advertising	• Brand Building – The communication process, AIDA model, role of advertising in developing brand image & brand equity & managing brand crisis. • Special Purpose Advertising – Rural advertising, political advertising, advocacy advertising, corporate	8	Text book	Chalk & Board Samples of actual advertisings

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	image advertising, green advertising – features of all the above special purpose advertising. Trends in Advertising – Media, ad spends, ad agencies, execution of advertisements.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA SINGH DEPARTMENT: CCOMMERC CLASS: SYBCOM SEMESTER: 3 MONTH: JUNE TO OCTOBER ACADEMIC YEAR: 2018-19 LEARNING OBJECTIVE/S: ADVERTISING

The learners will be able to : Basic Of Advertising, Meaning, Scope, Benefits, And Classification Of Advertising

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 1: Introduction to Advertising	Integrated Marketing Communication (IMC) : Concept, Features, Elements, Role Of Advertising In IMC.	12 Lec.	Marketing Management by Philip Kotler	Chalk and Duster
	Advertising: Concept, Features, Evolution Of Advertising,Etc.			
	Classification Of Advertising : Geographic, Media, Target Audience And Functions			
Module 3: Economic & Social Aspects of Advertising	Economic Aspects: Effect Of Advertising On Consumer Demand, Monopoly, Etc.,	11 Lec.	Marketing Management by Philip Kotler	
	Social Aspects: Ethical And Social Issues In Advertising, Positive And Negative Influence On Indian Values & Culture			
	Pro Bono/Social Advertising: Pro Bono Advertising, Social Advertising			

	By Indian Government Through DAVP, Etc.,			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: **<u>23 Lectures</u>**

Signature of HOD

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA SINGH DEPARTMENT: COMMERCE CLASS: SYBCOM
SUBJECT: COMMERCE IV SEMESTER: IV MONTH: November to February. ACADEMIC YEAR: 2019-20 .
LEARNING OBJECTIVE/S:
The learners will be able to : To gain the knowledge of management, evolution of management, to study different elements of management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-2- Quality Management	• Introduction to Quality: Dimensions of Quality. Cost of Quality: Types - Internal Failure Cost, External Failure Cost, Appraisal Cost, Prevention Cost, Quality Circle: Features. • Quality Management Tools: TOM - Importance, Six Sigma - Process, ISO 9000 Certification Procedure, Kaizen Process • Service Quality Management: Importance, SERVQUAL Model Measures to improve service quality.	**10**	Principles of management by Philip Kotler And Essential of Management by Koontz	Chalk And Duster
UNIT 4- Recent Trends in Finance.	• Mutual Funds- Advantages and Limitations. Types. Factors responsible for growth of mutual funds - Systematic Investment Plan, • Commodity Market: Categories,	12	Principles of management by Philip Kotler And Essential of Management by Koontz	

	Derivatives Market: Types, Participants, Types of Derivative Instruments. • Start-up Ventures Concept. Sources of Funding, Micro Finance - Importance, Role of Self Help Groups.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___22__ ____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF NAZIA SAJID SHAIKH. DEPARTMENT: _COMMERCE CLASS:SYBCOM (Div:K) SEMESTER: SEM III

MONTH:JUNE TO OCT. ACADEMIC YEAR: 2019-2020. SUB: COMMERCE III

LEARNING OBJECTIVE/S:
The learners will be able: Understand Introduction to Management, Functions of Management: Planning and Decision Making, Organising , Directing and Controlling.

PAPER, UNIT, TITLES	SUB TOPIC	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 INTRODUCTION TO MANAGEMENT	***Management**: meaning, functions of Management , Management skills and competencies. ***Evolution of Management thoughts:** Classical approach, Classical Organisation theory, Neo Classical:. Human relation approach. ***Modern management approach:** Peter drucker dimensions of Management., Indian Management thoughts: origin and significance of Indian Ethos to management.	**11**	**MANAGEMENT TODAYS PRINCIPLES AND PRACTICES:TATA MCGRAW**	Chalk and Duster
MODULE 2. PLANNING AND DECISION MAKING	***Planning:** Steps , Importance and components of palnning. ***Coordination:** Importance. **.MBE:** Advantages,**MIS:** Components. ***MBO:** Process , Advantages, ***Decision Making:** Techniques, Essential of Sound decision, Impact of technology on Decision Making.	**10**		
MODULE 3. ORGANISING.	***Organising:**. Steps,. ***Organisation structure:** Line and Staff Organisation, Matrix Organisation, Virtual Organisation, Formal v/s	**11**		

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***MODULE 4. DIRECTING AND CONTROLLING**	informal organisation ***Departmentation:** Meaning, Bases of Departmentation, ***Span of Management:** factors influencing span of Management. ***Tall and flat organisation.** ***Motivation:** Meaning, Importance, influencing factors. ***Communication:** Importance, Barriers to effective communication. ***Leadership:** Meaning, functions, Styles of leadership, Qualities of good leader.***Controlling:** Steps, Essential, Techniques Of Controlling, PERT, CPM, Budgetary Control, Management Audit.	**12**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM

SUBJECT: ADVERTISING SEMESTER: IV MONTH: ACADEMIC YEAR: 2019-20 .

LEARNING OBJECTIVE/S:
The learners will be able to :

Gain knowledge about advertising, its benefits, scope, function, different media in advertising.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1 Media in Advertising	• **Traditional Media:** Print, Broadcasting, Out-Of-Home advertising and films - advantages and limitations of all the above traditional media • **New Age Media:** Digital Media Forms, Significance and Limitations • **Media Research:** Concept, Important, Tool for regulation- ABC and Doordarshan Code	11	Marketing Management by Philip Kotler.	Chalk And Duster
UNIT-3 Fundamental of creativity in advertising.	• **Creativity:** Concept and Importance, Creative Process, Concept of Creative Brief, Techniques of Visualization. • **Creative aspects:** Buying Motives - Types, Selling Points Features, Appeals Preposition (USP) • **Creativity through Endorsements:** Endorsers Types, Celebrity Endorsements - Advantages and Limitations, High Involvement and Low Involvement Products.	11	Marketing Management by Philip kotler	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: SYBCOM SEMESTER: IV

MONTH: December- March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : understand the auditing subject thororugh and it will be helpful for them in future

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing Unit – 1 Introduction to Auditing	Definition of auditing, objectives, its limitations, difference between accounting and auditing and investigation and auditing	2		Disscussion method and Blackboard
	Meaning of errors and frauds, Types of errors and frauds, Risk of error and error inaudit, duties and responsibilities of auditor during fraud	3		
	Principles of audit, materiality, True and fair view	2		
	Types of audit, Advantages and disadvantages of Balance sheet audit, Interim audit, continous audit, concurrent audit, annual audit and statutory audit	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: SYBCOM SEMESTER: IV

MONTH: December- March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : understand the auditing subject thororugh and it will behelpful for them in future

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing Unit – 2 Audit planning, procedures and Documentation	Audit planning , meaning, objectives, sources, discussion with client	2		Disscussion method and Blackboard
	Audit program , meaning, factors , advantages, disadvantages, overcoming disadvantages	3		
	Audit evidence about internal controls, transactions during year , year end balances, differences, audit procedures	2		
	Audit working papers, meaning, fators, contents of permanent audit file, current audit file, ownership, custody and access, audit notebook	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE CLASS: SYBCOM

SEMESTER: **IV** MONTH: Nov,2019 to Feb,2020 ACADEMIC YEAR :2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to learn various audit techniques such as vouching, verification, internal control, Internal check ,Internal audit etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AUDITING	1] **Audit Technique- Vouching** –Meaning , Points to be consider while doing vouching . Audit of Income- cash sales, Credit sales , Consignment sales , Rent receipt, Interest & dividend receipt , Royalties receipt Audit of Expenses –Purchase, Purchase Return , Salaries & wages, Rent, Insurance premium, Telephone Expenses, Advetisement Expenses, Travelling expenses etc.	10	Auditing- Kamal Gupta	Chalk & Duster
	2] **Audit Technique – Verification** – Meaning , Points to be consider while doing verification. Vouching v/s Verification. Audit of Assets – Book Debts, Stock, Patterns , Loose tools, Investments, patents, Plant & Machinery, Building , Furniture. Audit of Liabilities – Outstanding Expenses, Bills payable, Creditors, Secured loan , Unsecured loan & Contingent Liabilities.	10		Chalk & Duster
	3]**Audit Techniques- Internal control**- Meaning, Purpose , review of internal control, Limitations. Internal control for – Sales, Debtors , purchase, creditors. Internal check v/s Internal	05		Chalk & Duster

	control. Internal Audit- Meaning, Objectives, Evaluation, Usefulness of internal Audit .Internal Audit v/s External Audit. Internal check v/s Internal Audit.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI YADAV DEPARTMENT: COMMERCE CLASS: SYBCOM SEMESTER: IV

MONTH: NOV-MAR ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : How to internal control for sales, creditors and to internal audit its objectivies . internal check & internal audit. Techniques of auditing vouching & verifications of books of accounts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3. Auditing Techniques and Internal Audit Introduction	A. Internal Control – Meaning and purpose, review of internal control, advantages, auditors duties, review of internal control, Inherent Limitations of Internal control, internal control samples for sales and debtors, purchases and creditors, wages and salaries. Internal Checks Vs Internal Control, Internal Checks Vs Test Checks B. Internal Audit : Meaning, basic principles of establishing Internal audit, objectives, evaluation of internal Audit by statutory auditor, usefulness of Internal Audit, Internal Audit Vs External Audit, Internal Checks Vs Internal Audit	8	Manan Prakashan	Chalk & Duster

4. Auditing Techniques : Vouching & Verification	A. Audit of Income : Cash Sales, Sales on Approval, Consignment Sales, Sales Returns Recovery of Bad Debts written off, Rental Receipts, Interest and Dividends Received Royalties Received B. Audit of Expenditure : Purchases, Purchase Returns, Salaries and Wages, Rent, Insurance Premium, Telephone expense Postage and Courier, Petty Cash Expenses, Travelling Commission Advertisement, Interest Expense C. Audit of Assets Book Debts / Debtors, Stocks – Auditors General Duties; Patterns, Dies and Loose Tools, Spare Parts, Empties and Containers Quoted Investments and Unquoted Investment Trade Marks / Copyrights Patents Know-How Plant and Machinery Land and Buildings Furniture and Fixtures D. Audit of Liabilities : Outstanding Expenses, Bills Payable Secured loans Unsecured Loans, Contingent Liabilities	10	Manan Prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____CHETAN PRAKASH VARMA _____ DEPARTMENT: ___COMMERCE ___ CLASS: __SYBCOM ___

SEMESTER: ___IV___ MONTH: _____NOV- MARCH _____ ACADEMIC YEAR: ____2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : ___To make student understand the All Macro Economics Perspective, National Income, Theory of J.M Keynes and its applicability in business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS-IV	• Meaning and Scope of Public finance. • Major fiscal functions : allocation function, distribution function & stabilization function • Principle of Maximum Social Advantage: Dalton and Musgrave Views - the Principle in Practice, Limitations.	06	Ackley.G (1976), Macro Economic Theory and Policy, Macmillan Publishing Co. New York	CHALK AND TALK / EXPLORITATIVE/TWO WAY COMMUNICATION Story-telling method Textbook method Lecture Method
	• Relation between Efficiency, Markets and Governments • The concept of Public Goods and the role of Government	03	Jha, R (1998) : Modern Public Economics, Route Ledge, London	Demonstration Method Tutorial Method Questions-Answer method Discussion method Heuristic method Discovery method

	• Fiscal Policy: Meaning, Objectives, constituents and Limitations. • Contra cyclical Fiscal Policy and Discretionary Fiscal Policy :Principles of Sound and Functional Finance • Budget- Meaning objectives and types - Structure of Union budget - Deficit concepts-Fiscal Responsibility and Budget Management Act.	04	Musgrave, R.A and P.B. Musgrave (1976) : Public Finance in Theory and Practice, Tata McGraw Hill, Kogakusha, Tokyo	
	• Intergovernmental Fiscal Relations: fiscal federalism and fiscal decentralization - central-state financial relations - 14th Finance Commission recommendations	03	Mithani, D.M (1998) : Modern Public Finance, Himalaya Publishing House, Mumbai	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____16___

Signature of HOD

Late Shri. Vishnu Waman Thakur Charitable Trust
BhaskarWaman Thakur College of Science
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VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT: Commerce CLASS: SYBCOM (A, B, C, D) SEMESTER: IV

MONTH: December to April ACADEMIC YEAR: 2019 - 2020 LEARNING OBJECTIVE/S: Business Law

The learners will be able to : Introduction, Understand Meaning, Rules and regulations, section, important act details with related case study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 Indian Campanies Act, 2013 Part 1	Chapter I Company and its formation, definition and nature of company, advantages and disadvantages of a company, lifting of corporate veil with cases, promoters, pre-incorporation and preliminary contracts	03	1. Company Law : Avtar Singh. 2. Indian Company Law. Authors, Dr. N. S. Kothari, Ramesh Chand Agarwal.	Chalk And Duster
	Chapter II Types of companies (meaning and concept only) statutory companies, one person company, Company, limited by shares/guarantee	04		
	Private company, public company, Producer Company, formation of companies with charitable Objects, holding and subsidiary company, Government, foreign company, small company	03		
	Procedure for registration of a company, documents to be submitted for registration,Effect of incorporation	03		

MODULE 2 IndianCampaniesAct,2013Part 2 MODULE IntellectualPropertyRights	Chapter III Memorandum of Association & Articles of Association: meaning, concept, clauses, effect of Registration of Memorandum and Articles of Association, Doctrine of Constructive Notice Doctrine of Ultra Vires, Doctrine of Indoor Management Chapter IV Prospectus- meaning, when to be issued, when not required, kinds of prospectus, contents of prospectus, private placement			
	Membership of a company Chapter I Who can become a member? Modes of acquiring membership, cessation of membership, rights, liabilities and duties of members Chapter II Classification of Directors, woman director, independent director, small shareholders' director Disqualification of director, Director Identification Number, powers and duties, position of director as key managerial personnel, Manager, Managing Director. Chapter III Meetings, types of meetings of members and Board	03 04 03		

	of directors, convening and conduct of meetings, Postal ballot, meetings through video conferencing, e-voting.			
	Chapter II Intellectual Property Rights (a) IPR introduction and types (b) Patents Meaning, salient features conditions for an invention to be patented, what is patentable What is not, duration of a patent	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 26 x 4 = 104

Signature of HOD

Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHWINI DATTATRAY BHOIR DEPARTMENT: COMMERCE CLASS: SYBCOM E,F,G,H,I,J,K SEMESTER: IV

MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2019 -2020 SUBJECT - BUSINESS LAW

LEARNING OBJECTIVE/S:
The learners will be able to Know Partnership Meaning , Procedure for Registration of Partnership, Types of Partner, Rights and Duties of Partner.

The learners will be able to Know Rights of Consumers, forms of its Violation and Consumer Protection Act.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module. No. 3 Indian Partnership Act, 1932	Chapter I - Partnership: Concept, Essentials, True test of Partnership, Partnership Deed, Types of Partnership, Rights and duties of Partners, Distinguish between Partnership and Hindu Undivided Family.	3	Indian Partnership Act, 1932- Pollock & Mulla	Lecture Method, Case Law,
	Chapter II - Dissolution: Concept, Modes of Dissolution, Consequences of Dissolution	2	Agrawal V.K. Consumer protection Law and practice, 5th Ed., New Delhi: B.L.H. publishers Distributors Pvt. Ltd. 2009	Chalk, Duster, Black Board
	Chapter III - Limited Liability Partnership 2008: Concept, Characteristics, Advantages and Disadvantages, Procedure for Incorporation .	2		
	Chapter IV - Extent of L.L.P.: Converstion of LLP, Mutual Rights and Duties of Partners, winding up of LLP, Distinction between LLP and Partnership.	3		
Module No. 4	Chapter - I Concept, Objects, Reasons for enacting the Consumer Protection Act, Definition of Consumer, Consumer Dispute, Complaint, Defect, Deficiency, Unfair Trade Practices, Goods	2		

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Consumer Protection Act, 1986 and Competition Act 2002.	and Services. Chapter - II - Consumer Protection Councils and Redressal Agencies: District, State and National. Chapter - III - Competition Act 2002 : Concept, Salient Features, Objectives and Advantages. Chapter IV Abuse of Dominant Position , Competition Commission of India, Anti-Competition Agreements.	3 2 3		
Module No. 5 Intellectual Property Rights	Chapter III - IPR Relating to Copyrights: Concept of Copyright, Ownership of Copy right, Duration or term of copy right , Original work and fairs use, Rights of copyright holder, Infringement of copyrights and Remedies. Chapter IV - IPR Relating to Trademarks : Concept, Functions, Types, trademarks that cannot be registered, Registration of trade marks and Rights of the Proprietor of Trade Marks. Procedure for registration of Trade Marks., infringement of Trademarks and Remedies.	3 2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE _ DEPARTMENT: _B.COM CLASS: SYB.COM -E,F,G,H___

SEMESTER:_4th MONTH: November – February ACADEMIC YEAR: 2019-2020 SUBJECT : COMMERCE IV

LEARNING OBJECTIVE/S:
The learners will be able to :

1.To acquaint the learner with the basic concepts of Production management.

2.To provide basic knowledge about inventory management and it's techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODUL1: PRODUCTION AND INVENTORY MANAGEMENT	• Production Management: Objectives, Scope Production Planning & Control :Steps, Importance	3	Production & Operation Management . Essential of Inventory Management	1.Lecture methods . 2.Flow chats and diagrams.
	• Production Systems :Concept, Type – Continuous and Intermittent. Productivity : Concept, Factors Influencing Productivity, Measures for improving productivity	4		
	• Inventory Management -Objectives, Inventory Control -Techniques. Scientific Inventory Control System -Importance	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 × 4 div = 44

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE _DEPARTMENT: B.COM CLASS: SYB.COM -E,F,G,H

SEMESTER: 4th MONTH: November – February ACADEMIC YEAR: 2019-2020 SUBJECT : COMMERCE IV

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To provide basic knowledge about Indian Financial Systems.
2. To acquire knowledge about SEBI , Stock Exchange and Credit Rating Agencies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 3: INDIAN FINANCIAL SYSTEM	• Indian Financial Market : Structure, Primary MARKET- IPO Procedure Dematerialisation: Process, Role of Depositories: NSDL and CDSL	4	Indian Financial System - M.Y.Khan Financial Institutions & Markets- L.M.Bhole	1. Lecture and discussion. 2. Flow charts and Institutional Structures.
	• SEBI: Function of SEBI, Investors protection measures of SEBI. Stock Exchange – Function ,Speculators.	4		
	• Credit Rating : Advantages, Credit Rating Agencies in India- CRISIL, CARE, and ICRA.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 × 4 div = 48

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM

SUBJECT: COMMERCE IV SEMESTER: IV MONTH: November to February. ACADEMIC YEAR: 2019-20 .

LEARNING OBJECTIVE/S:
The learners will be able to : To gain the knowledge of management, evolution of management, to study different elements of management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-2- Quality Management	• Introduction to Quality: Dimensions of Quality. Cost of Quality: Types - Internal Failure Cost, External Failure Cost, Appraisal Cost, Prevention Cost, Quality Circle: Features. • Quality Management Tools: TOM - Importance, Six Sigma - Process, ISO 9000 Certification Procedure, Kaizen Process • Service Quality Management: Importance, SERVQUAL Model Measures to improve service quality.	**10**	Principles of management by Philip Kotler And Essential of Management by Koontz	Chalk And Duster
UNIT 4- Recent Trends in Finance.	• Mutual Funds- Advantages and Limitations. Types. Factors responsible for growth of mutual funds - Systematic Investment Plan, • Commodity Market: Categories, Derivatives Market: Types, Participants, Types of Derivative Instruments. • Start-up Ventures Concept. Sources of Funding, Micro Finance - Importance, Role of Self Help Groups.	12	Principles of management by Philip Kotler And Essential of Management by Koontz	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DEEPAKKUMAR GUPTA** DEPARTMENT**: COMMERCE** CLASS: **S.Y.B.COM**

SEMESTER: I**V** MONTH: **MARCH** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: To impart the practical knowledge of Accountancy & Financial Management.

The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Redemption of Debentures	**Unit: 3 - Redemption of Debentures** Provisions of Section 71 (1) and (4) of the Companies Act, 2013, Creation and investment of DRR including The Companies (Share Capital and Debentures) Rules, 2014, the methods of writing-off discount/loss on issue of debentures; Terms of issue of debentures, Methods of redemption of debentures: By payment in lumpsum and by payment in instalments (excluding from by purchase in open market), Conversion. (Question on entries. ledgers and/or Balance Sheet and /or redemption of preference shares)	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Chalk and Board
Ascertainment and Treatment of Profit Prior to Incorporation	**Unit: 4 - Ascertainment and Treatment of Profit Prior to Incorporation** Principles for ascertainment, Preparation of separate combined, columnar Profit and Loss A/c including different basis of allocation of expenses and income	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PALLAVI GANGADHAR NAIK DEPARTMENT: COMMERCE_ CLASS: SYBCOM SEMESTER: _IV MONTH: NOVEMBER TO MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : UNDERSTAND THE FUNDAMENTAL CONCEPTS AND ISSUES OF PUBLIC REVENUE, EXPENDITURE, DEBT

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS II	MOODULE 2 PUBLIC REVENUE,SOURCES OF PUBLIC REVENUES, TAX AND NON-TAX REVENUES, CANONS AND TYPES OF DIRECT AND INDIRECT TAX, SHIFTING OF TAX BURDEN, IMPACT AND INCIDENCE OF TAXATION, ECONOMIC EFFECTS OF TAXATION, REDISTRIBUTIVE AND ANTI INFLATIONARY NATURE OF TAXATION	6	MANAN PRAKASHAN SETH PUBLICATION	CHALK AND BLACKBOARD
	MODULE 3 PUBLIC EXPENDITURE, CANONS, CLASSIFICATION, ECONOMIC EFFECTS OF PUBLIC SPENDING, THEORIES OF PUBLIC EXPENDITURE, WAGNER'S AND WISEMAN PEACOCK HYPOTHESIS, CAUSES FOR PUBLIC EXPENDITURE GROWTH SIGNIFICANCE OF PUBLIC EXPENDITURE, SOCIAL SECURITY CONTRIBUTIONS, PUBLIC DEBT, BURDEN OF DEBT FINANCE,	6		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce

CLASS: S Y B Com SEMESTER: IV MONTH: November ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

Learn about the working format of the company regards to raising of capital funds by way of issuing shares, debentures. Also the legal procedure to raise these funds. It also helps to give practical knowledge of accounts. Additionally the learner will be able to understand the method for the redemption of preference share and calculation of settling the proceeds. sss

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy and Financial Management IV	**Introduction to Company Accounts** Introduction of basic terms: Types of companies, nature and formation of companies, Shares, Debentures, Share Capital, Reserves and surplus, types of assets and liabilities, dividend, format of Balance Sheet (Only theory) Issue of shares: Different modes IPO, Private Placements, Preferential, Rights, ESO, SWEAT and ESCROW account, Issue of shares at par, premium and discount, Under subscription and Over subscription of shares, forfeiture and reissue of forfeited shares, issue of shares for consideration other than cash. (Only theory) Issue of Debentures: types of Debentures, Issue of debentures at par, premium and discount, Issue of Debentures with consideration of Redemption ,Issue of debentures for cash receivable in instalments or at a time Issue of debentures for consideration other than cash. (Only theory)	15	Introduction to Accountancy T.S. Grewal S. Chand and Co. (P) Ltd., New Delhi Advanced Accounts Shukla and Grewal S. Chand and Co. (P) Ltd., New Delhi	Chalk & talk, Black-Board Method, Group Discussion,

	Redemption of Preference Shares Provision of the Companies Act for redemption of Preference Shares (Sec 55 of the Companies Act, 2013), Companies (Share and Debentures) Rules. Methods of Redemption of fully paid up Preference Shares as per Companies Act, 2013: The proceed of a fresh issue of shares, the capitalisation of undistributed profits and a combination of both, calculation of minimum fresh issue to provide the fund for redemption, (Question on entries and/or Balance Sheet) Note: Companies governed by Section 133 of the Companies Act, 2013 and comply with the accounting standards prescribed for them. Hence, the balance in security premium account not to be utilised for premium payable on redemption of preference shares.	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

Babli Jha

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: **Commerce**

CLASS: **SYBCom I, J & K** SEMESTER: **IV** MONTH: **Dec to March** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Introduction and provisions of Companies Act for preparation of Final A/C.
2) Disclosure of accounting policies.
3) Ascertainment and Treatment of Profit Prior to Incorporation

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting 4	Unit 1 : Preparation of Final Accounts of Companies	8		Chalk Board
	1) Relevant provisions of Companies Act related to preparation of Final Account 2) Preparation of financial statements as per Companies Act. 3) AS 1 in relation to final accounts of companies (disclosure of accounting policies)			
	Unit 4 : Ascertainment and Treatment of Profit Prior to Incorporation	8		Chalk Board
	1) Principles for ascertainment Preparation of separate, combined and columnar Profit and Loss Account including different basis of allocation of expenses			

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Incomes			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _16_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. VISHAL SAWANT** DEPARTMENT**: COMMERCE**

CLASS: **S.Y.B.COM** SEMESTER: **IV** MONTH: **MARCH** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: To impart the practical knowledgeof Accountancy & Financial Management.

The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Redemption of Preference Shares	**Unit: 2 – Redemption of Preference Shares** Provision of the companies Act for redemption of Preference Share (Sec55 of Companies Act, 2013), Rules. Method of Redemption of fully paid up preference shares as per companies Act. 2013: Proceed of Fresh Issue of shares, Capitalisation of Reserve and combination of minimum fresh issue to provide the fund for redemption.	15	S.N. MAHESHWAR Y, MANAN PRAKASHAN & PRAGATI PRKASHAN	Chalk and Board
Redemption of Debentures	**Unit: 3 - Redemption of Debentures** Provisions of Section 71 (1) and (4) of the Companies Act, 2013, Creation and investment of DRR including The Companies (Share Capital and Debentures) Rules, 2014, the methods of writing-off discount/loss on issue of debentures; Terms of issue of debentures, Methods of redemption of debentures: By payment in lumpsum and by payment in instalments (excluding from by purchase in open market), Conversion.(Question on entries. ledgers and/or Balance Sheet and /or redemption of preference shares)	15	MANAN PRAKASHAN & PRAGATI PRAKASHAN	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: SYBCOM

SEMESTER: 4 MONTH: NOVEMBER-DECEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: FOUNDATION COURSE
The learners will be able to: Understand the given rights of consumers, RTI, PIL, and many more.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Significant, Contemporary Rights of Citizens	Rights of Consumers- Violations of consumer rights and important provisions of the Consumer Protection Act, 2016; Other important laws to protect consumers; Consumer courts and consumer movements	3	Foundation Course by Michael Vaz	Chalk Board, Flow Chart, Diagrams .
	Right to Information- Genesis and relation with transparency and accountability; important provisions of the Right to Information Act, 2005; some success stories.	3		
	Protection of Citizens/ Public Interest – Public Interest Litigation, need and procedure to file a PIL; some landmark cases.	3		
	Citizens' Charters, Public Service Guarantee Acts.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchanda ni DEPARTMENT: Commerce

CLASS: S.Y.B.Com SEMESTER: IV MONTH: November to February ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

_To developand gain logical reasoning, critical thinking abilities, creating and testing hypotheses and thus opening doors to research.

_To measure verbal reasoning, quantitative reasoning, and analytical writing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FC Unit III Science and technology	Part A: Some significant modern technologies, features and applications. i) Laser Technology- Light amplification by stimulated emission of radiation, uses of laser in remote sensing, GPS mapping, medical use. ii) Satellite technology- Various uses in Satellite navigation system, GPS and imprecise climate and weather analysis. iii) Information and communication technology- Convergence of various technologies like satellites, computer and digital in the information revolution of today's society. iv) Biotechnology and genetic engineering- applied biology and uses in medicines, pharmaceuticals and agriculture, genetically modified plant, animal and human life.	9	Sheth Publishers Michael Vaz Aurara vaz:foundation course Newspapers	Lecture method, interative method

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	v) Nanotechnology- Definition: The study, control and application of phenomena and material at length scales below 100 nm; uses in medicines, military intelligence and consumer product. Part B: Issues of control, access and misuse of technology.	3		
Unit IV Introduction to competitive exams	Part A: Basic information on competitive examinations- The pattern, eligibility criteria and local centres. i) Examinations conducted for entry into professional courses- GRE, GMAT, CAT,SAT. ii) Examination conducted for entry into jobs by UPSC,SSC, Banking and Insurance sector, NET-SET. Part B: Soft skills for competitive examinations i) Information on area s tested: Quantitative ability, Data interpretation , Verbal ability and logical reasoning, creativity and lateral thinking. ii) Motivation: Concept, theories and types of motivations. iii) Goal setting: Types of goals, SMART Goals, Stephen Conveys concept of human endowment. iv) Time management: Effective strategies . v) Writing Skills: Paragraph writing, Report writing, Filing an application under the RTI Act, Grievance letter.	12	Sheth Publishers Michael Vaz Aurara vaz : foundation course Newspapers	Lecture method, interative method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____12_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Vidhya Dayanand Patil College of Arts
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. FIROZKHAN KHURSHIT KHAN** DEPARTMENT**: COMMERCE**

CLASS: **S.Y.B.COM** DIV: **A, B, C & D** SEMESTER: **IV** MONTH: **MARCH** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: To impart the practical knowledge of Accountancy & Financial Management.

The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Redemption of Debentures	**Unit: 3 - Redemption of Debentures** Provisions of Section 71 (1) and (4) of the Companies Act, 2013, Creation and investment of DRR including The Companies (Share Capital and Debentures) Rules, 2014, the methods of writing-off discount/loss on issue of debentures; Terms of issue of debentures, Methods of redemption of debentures: By payment in lumpsum and by payment in instalments (excluding from by purchase in open market), Conversion. (Question on entries. ledgers and/or Balance Sheet and /or redemption of preference shares)	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Chalk and Board
Ascertainment and Treatment of Profit Prior to Incorporation	**Unit: 4 - Ascertainment and Treatment of Profit Prior to Incorporation** Principles for ascertainment, Preparation of separate combined, columnar Profit and Loss A/c including different basis of allocation of expenses and income	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: Commerce

CLASS: S.Y.B.com SEMESTER: IV MONTH: Nov-March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the underlying concepts and practical tradeoffs entailed in Public finance policy alternatives.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –IV Unit 1 Role of government in an economy	Meaning and scope of public finance Major fiscal functions Principle of maximum social advantage Relationship between efficiency markets and governments Concept of public goods and role of government	10	Ahuja H.L. : Modern Economics, 19th edition, 2015, S.Chand &co Pvt Ltd, New Delhi	Chalk and Talk Discussion
Unit 4 Fiscal policy and Management	Fiscal policy Contra-cyclical fiscal policy Budget Inter-governmental fiscal relations	15	Bhatia H.L.: Public Finance. Vikas Publishing House Pvt. Ltd.	Chalk and talk Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN) (SUB: Financial A/c)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: S.Y.B.COM.**SEMESTER: **4th** MONTH: **NOVEMBER**
ACADEMIC YEAR: **2019-20**
LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Company and Types of company
2. What are the Requirement and Procedures Accounting for Companies,
3. What is Shares, Debentures, Share Capital, Reserves and surplus, types of assets and liabilities, Dividend

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTRODUCTION TO COMPANY ACCOUNTS (Continue…..)	**Introduction of Basic Terms** : 1. Types of companies ,nature and formation of companies, 2. Shares, Debentures, Share Capital, Reserves and surplus, types of assets and liabilities, dividend 3. Format of Balance Sheet (Only theory)	05	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: S.Y.B.COM.** SEMESTER: **2th** MONTH: **DEC. - JANUARY**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Issue of Shares
2. What is Issue of Debentures

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTRODUCTION TO COMPANY ACCOUNTS	**Issue of Shares**: **1.** Different modes IPO, Private Placements, Preferential, Rights, ESO, SWEAT and ESCROW account, **2.** Issue of shares at par, premium and discount, Under subscription and Over subscription of shares, forfeiture and reissue of forfeited shares, issue of shares for consideration other than cash. (Only theory) **Issue of Debentures** : **1.** Types of Debentures, **2.** Issue of debentures at par, premium and discount, Issue of Debentures with consideration of Redemption **3.** Issue of debentures for cash receivable in instalments or at a time Issue of debentures for consideration other than cash. (Only theory)	10	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	Lecture Method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: S.Y.B.COM.** SEMESTER: **4th** MONTH: **FEBRUARY**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Redemption of Preference Shares
2. What are the legal Provision of Redemption of Preference Shares?
3. What are divisible profits and non-divisible Profits. And what is CRR?

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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REDEMPTION OF PREFERENCE SHARES **(Continue….)**	**1.** Company Law / Legal Provisions for redemption of preference shares in Companies Act. **2.** Sources of redemption including divisible profits and proceeds of fresh issue of shares Premium on redemption from security premium and profits of company **3.** Capital Redemption Reserve Account - creation and use	07	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: S.Y.B.COM.** SEMESTER: **4th** MONTH: **FEBRUARY - MARCH**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are Journal Entries regarding redemption of preference shares
2. How to Prepare Balance sheet of Company as per Sch-3 of Company Act 2013.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

REDEMPTION OF PREFERENCE SHARES	**1.** Procedure of redemption of preference shares(Journal Entries and Balance sheet of company) **2.** Practical Question based on redemption of preference shares	08	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Kavita Vilas Purandare DEPARTMENT: Commerce
CLASS: SYBCOM SEMESTER: IV MONTH: December to April
ACADEMIC YEAR: 2019 - 2020 LEARNING OBJECTIVE/S: Business Law
The learners will be able to : Introduction, Understand Meaning, Rules and regulations, section, important act details with related case study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 Indian Companies Act, 2013 Part 1	Chapter I Company and its formation, definition and nature of company, advantages and disadvantages of a company, lifting of corporate veil with cases, promoters, pre-incorporation and preliminary contracts Chapter II Types of companies (meaning and concept only) statutory companies, one person company, Company, limited by shares/guarantee Private company, public company, Producer Company, formation of companies with charitable Objects, holding and subsidiary company, Government, foreign company, small company Procedure for registration of a company, documents to be submitted for registration, Effect of incorporation Chapter III Memorandum of Association & Articles of Association: meaning, concept, clauses, effect of Registration of Memorandum and Articles of Association, Doctrine of	03 04 03 03	1. Company Law : Avtar Singh. 2. Indian Company Law. Authors, Dr. N. S. Kothari, Ramesh Chand Agarwal.	Chalk and duster
MODULE 2 Indian Companies Act, 2013Part 2				

MODULE IPR	Constructive Notice Doctrine of Ultra Vires, Doctrine of Indoor Management Chapter IV Prospectus- meaning, when to be issued, when not required, kinds of prospectus, contents of prospectus, private placement			
	Membership of a company Chapter I Who can become a member? Modes of acquiring membership, cessation of membership, rights, liabilities and duties of members Chapter II Classification of Directors, woman director, independent director, small shareholders' director Disqualification of director, Director Identification Number, powers and duties, position of director as key managerial personnel, Manager, Managing Director. Chapter III meetings, types of meetings of members and Board of directors, convening and conduct of meetings, Postal ballot, meetings through video conferencing, e-voting.	03 04 03		
	Chapter II Intellectual Property Rights (a) IPR introduction and types (b) Patents Meaning, salient features conditions for	03		

	an invention to be patented, what is patentable What is not, duration of a patent			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ----------

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Neha Tambe DEPARTMENT: commerce CLASS: S.Y.Bcom (Divisions A B C D) SEMESTER: IV

MONTH: December to February ACADEMIC YEAR: 2019-20 Sub- Advertising-II

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand the concept of Advertising; traditional and modern media.

2) Understand the concept of Media research.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1- Media in Advertising	Traditional Media: Print, Broadcasting, Out-Of-Home advertising and films - advantages and limitations of all the above traditional media	3	Book by Manan Publications/ internet	chalkboard
	New Age Media: Digital Media / Internet Advertising – Forms, Significance and Limitations	4	Book by Manan Publications/ internet	Chalkboard
	Media Research: Concept, Importance, Tool for regulation - ABC and Doordarshan Code.	4	Book by Manan Publications/ internet	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Planning Advertising Campaigns	Advertising Campaign: Concept, Advertising Campaign Planning -Steps Determining advertising objectives - DAGMAR model	3	Book by Manan Publications/ internet	chalkboard
	Advertising Budgets: Factors determining advertising budgets, methods of setting advertising budgets, Media Objectives - Reach, Frequency and GRPs	4	Book by Manan Publications/ internet	Chalkboard
	Media Planning: Concept, Process, Factors considered while selecting media, Media Scheduling Strategies.	4	Book by Manan Publications/ internet	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NIKITA SUNIL JOGLE DEPARTMENT: COMMERCE CLASS: SYBCOM (A,B,C,D) SEMESTER: IV

MONTH: DECEMBER - MARCH ACADEMIC YEAR: 2019 - 2020

LEARNING OBJECTIVE/S:
The learners will be able to : understand the importance of creativity in advertising & how to execute different types of ads.

SUBJECT – ADVERTISING II

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3 – Fundamentals of Creativity in Advertising	• Creativity – Concept & importance, creative process, concept of creative brief, techniques of visualisation. • Creative Aspects – Buying motives – types, selling points – features, appeals – types, concept of unique selling proposition (USP). • Creativity through Endorsements – Endorsers – types, celebrity endorsements – advantages & limitations, high involvement & low involvement products.	12	Text book	Chalk & Board Samples of actual advertisings
4 – Execution & Evaluation of Advertising	• Preparing print ads – Essentials of copywriting, copy – elements, types, layout – principles, illustration – importance. • Creating broadcast ads – Execution styles, jingles & music – importance, concept of storyboard.	09	Text book	Chalk & Board Samples of actual advertisings

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	• Evaluation – Advertising copy, pre – testing & post – testing of advertisements – methods & objectives			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 21

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sachin A.Kadam DEPARTMENT: COMMERCE

CLASS: TYBCOM SEMESTER: V MONTH: OCT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Unit 5 Unit 6	Chapter 1 Introduction to Cost Accounting Meaning, define, scope, advantage and disadvantages, difference between Cost Accounting and Financial accounting, Elements, Components	4 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	Chalk, Duster and printed notes
	Chapter 5 Classification of costs and cost sheet Meaning, classification, format, practical problems, Small calculations	4 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	Chalk, Duster and printed notes
	Chapter 6 Reconciliation of Cost and Financial Accounts Brief, Introduction, Format, small calculations	4 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	Chalk, Duster and printed notes

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TOTAL NUMBER OF LECTURES TO THE UNIT: _12_____

Signature of HOD

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PALLAVI NAIK DEPARTMENT:COMMERCE CLASS: TYBCOM SEMESTER: V MONTH: JUNE TO NOVEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :Learning basic concepts of micro economics_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECONOMICS	AGRICULTURE DURING POST REFORM PERIOD : National Agricultural Policy 2000, Agricultural Pricing and Agricultural Finance, Agricultural Marketing Development.	6	MANAN PRAKASHAN	BLACKBOARD AND CHALK
	In India, Service Sector.			
			SETH PUBLICATION	
		6		

	THE INDUSTY AND SERVICE SECTOR DURING POST-REFORM PEROD: Policy Measures, Competition Act, 2002, Industrial Pollution			
	In India, Service Sector.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____ 2019-20

SIGNATURE OF HOD

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Aaradhana R Singh DEPARTMENT: Commerce

CLASS: TYBCOM (A,B,C & D) SEMESTER: V MONTH: June to December ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES:
The learners will be able to understand the concept of marketing in detail and will be acquainted with various marketing strategies carried out by the marketers. The learner will also get an insight on digital marketing, Artificial intelligence which is the need of the hour. Along with the above mentioned points students will also get to know about Consumer behavior, Market segmentation, CRM and different forms of targeting the market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1- INTRODUCTION TO MARKETING	MARKETING CONCEPT- Features, Importance, Functions, Evolution, Strategic v/s Traditional Marketing MARKETING RESEARCH - Concept, Features, Process MARKETING INFORMATION SYSTEM-Concept & Components DATA MINING- Concept, Importance CONSUMER BEHAVIOUR- Concept, Factors influencing Consumer Behaviour MARKET SEGMENTATION- Concept, Benefits, Bases of market segmentation	12	Marketing management by - Phillip Kotler And Marketing management Ramaswamy & Kumari Nama	Chalk, Board and duster

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Unit 4- Key Marketing Dimensions	CUSTOMER RELATIONSHIP MANAGEMENT- Concept and Techniques MARKET TARGETING- Concept, Five patterns of Target market Selection			
	MARKETING ETHICS: Concept, Unethical practices in marketing, General role of consumer organizations COMPETITIVE STRATEGIES FOR MARKET LEADER- Market Challenger, Market Follower and Market Nicher RURAL MARKETING- Concept, Features of Indian Rural Market, Strategies for Effective Rural Marketing DIGITAL MARKETING-Concept, trends in Digital Marketing GREEN MARKETING- concept and importance CHALLENGES FACED BY MARKETING MANAGERS IN 21ST CENTURY CAREERS IN MARKETING – Skill sets required for effective marketing FACTORS CONTRIBUTING TO SUCCESS OF BRANDS IN INDIA(with suitable examples) REASONS FOR FAILURE OF BRANDS IN INDIA (with suitable examples)	12		Chalk Board and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Arjun Vishwakarma DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: V MONTH: OCTOBER

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : The learner will be able to use basic computer software and some financial software

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1,2,3	**MODULE - I : Data Communication, Networking and Internet** a. Data Communications and Internet b. Network Basics and Infrastructure c. Internet	4	Computer Skills-2 and Wikipedia	PowerPoint Presentation, Laptop
	MODULE - II : Database and MySQ a. Introduction to MYSQL b. MySQL Basics	4	Computer Skills-2	PowerPoint Presentation, Laptop
	MODULE - III : Database and MySQL a. MySQL Simple queries b. Multi-Table Queries c. Nested Queries (Only upto two levels)	4	Computer Skills-2	PowerPoint Presentation, Laptop

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF. VISHWANATH V. PAWAR DEPARTMENT: COMMERCE

CLASS: TYBCOM SEMESTER: V MONTH: June,2019 to Sept,2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Unit 5 Unit 6	Chapter 1 Introduction to Cost Accounting Meaning, define, scope, advantage and disadvantages, difference between Cost Accounting and Financial accounting, Elements, Components	3	Manan prakashan, Google, Dr. Saxena (Advance accounting)	Chalk, Duster and printed notes
	Chapter 5 Classification of costs and cost sheet Meaning, classification, format, practical problems, Small calculations	5	Manan prakashan, Google, Dr. Saxena(Advance accounting)	Chalk, Duster and printed notes
	Chapter 6 Reconciliation of Cost and Financial Accounts Brief, Introduction, Format, small calculations	5	Manan prakashan, Google, Dr. Saxena(Advance accounting)	Chalk, Duster and printed notes

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _13_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM SEMESTER: V MONTH: JUNE 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTRODUCTION TO COST ACCOUNTING	A) OBJECTIVES & SCOPE OF COST ACCOUNT,	02	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	CHALK - BOARD METHOD
	B) COST CENTRE & COST UNITS	02	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	
	C) CODING SYSTEM	01		
	D) ELEMENTS OF COST , COST BEHAVIOUR PATTERN	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM SEMESTER: V MONTH: JULY 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MATERIAL COST	A) PROCUREMENT PROCEDURES	01	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	
	B) INVENTORY CONTROL -TECHNIQUES C) INVENTORY ACCOUNTING	02	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	CHALK - BOARD METHOD
	PRATICAL PROBLEMS BASED ON CALCULATION OF EOQ, MATERIAL TURNOVER RATIO, VALUATION OF INVENTORY BASED ON FIFO METHOD & WEIGHTED AVERAGE METHOD	06	PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM SEMESTER: V MONTH: AUGUST 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CLASSIFICATION OF COST & COST SHEET	A) CLASSIFICATION OF COST , COST OF SALES , COST UNIT, COST CENTRES, COST SHEET , TOTAL COST & COST UNIT DIFFERENT COST FOR DIFFERENT PURPOSE	03	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	
	B) SIMPLE PRATICAL PROBLEMS ON PREPARATION OF COST SHEET	06	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	CHALK - BOARD METHOD
			PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM SEMESTER: V MONTH: SEPTEMBER 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RECONCILIATION OF COST & FINANCIAL ACCOUNTS	PRACTICAL PROBLEMS BASED ON RECONCILIATION OF COST & FINANCIAL ACCOUNTS.	07	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	
			ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	CHALK - BOARD METHOD
			PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Bhaskar Waman Thakur College of Science
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: Self Finance CLASS: TyBcom SEMESTER: V MONTH: July ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : techniques to calculate the value of material and its treatment. calculate the value of overheads attributed to the product or process

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, material cost	Procurement procedure- stored procedures and documentation in respect of receipt and issue of stock, stock verification	2	Manan Prakashan	Lecture method
	Inventory control- techniques of fixing of minimum, maximum and reorder levels, economic order quantity, ABC classification, stocktaking and perpetual inventory	4		
	Inventory accounting, practical problems based on calculation of economic order quantity, raw material turnover ratio	4		
	Preparation of stock ledger and valuation of inventories based on FIFO AND Weighted average cost	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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MONTH: August

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, overheads	Functional analysis- factory, administration, selling and distribution	1	Manan Prakashan-Ainapure	Lecture method
	Behaviour analysis- fixed, variable, semi variable cost	1		
	Practical problems	4		
	Departmentalization and apportionment of primary overheads, computation of overhead rates including machine overhead rates, practical problems	3		
	Basic concepts of treatment of over / under absorption of overheads- direct labour method and prime cost method	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE CLASS: TYBCOM

SEMESTER: **V** MONTH: June,2019 to Sept,2019 ACADEMIC YEAR :2019-2020

EARNING OBJECTIVE/S:

The learners will be able to understand Objectives ,scope of cost accounting ,classification of cost, material procurement procedure, Technique of inventory control,Stock valuation, Primary distribution of overheads, Calculation of Machine hour Rate.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST ACCOUNTING	**1] Introduction to Cost accounting**-Objectives & scope of cost accounting, cost centre &cost unit,Cost classification for stock valuation, Decision making & control, coding system, elements of cost, cost behaviour pattern.	10	S.N. Maheshwari B.K.Bhar	Chalk & Duster
	2]Material cost- Procurement of material procedure & documentation in respect of receipt & issue of stock.Inventory control- Technique for fixing of minimum,maximum & reorder level,Economic Order Quantity, ABC classification . Inventory accounting , Practical problems of calculation of EOQ,Raw material Turnover ratio, Preparation of stock ledger & valuation of stock based on FIFO & weighted Average cost.	10		Chalk & Duster
	3]Overheads- Functional Analysis-Factory, Administrative & selling & distribution. Behavioural Analysis-Fixed, Variable & semi variable.Practical problems on Departmentalisation & Apportionment of primary overrheads. Computation of Machine	10		Chalk & Duster

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	overhead rate. Basic concept of treatment of over & under absortioption of overheads.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Tejaswini Yogesh Naik DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: V ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: Learner will be able to understand how to manage and control the cost.
The learners will be able to : Identify differences among various types of cost such as direct cost ,indirect cost, administration cost, selling and distribution cost, variable cost, fixed cost, etc.; Learner will understand how to find total cost , percentage of profit, selling price and so on. Learner will come to know why there are differences in financial profit and costing profit.

PAPER, UNIT, TITLE Cost accounting	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1. Cost sheet : Format, meaning and applicability , cost per unit, items excluded from cost sheet, different cost sheet. And practical questions on it. 2.Reconciliation of cost and financial accounts : Need for Reconciliation statement, reasons of differences in financial and costing profits, items appearing only in cost accounts and items appears only in financial accounts , and practical questions on it.	14 lectures for each topic	Maheshwari	Black board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM** SEMESTER: **5th** MONTH: **JUNE**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Know the details about Income Tax Act 1961 and its coverage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DIRECT TAX, CHAPTER 1	**Definitions u/s 2 & 3 of IT Act 1961** Section 2-Assessee, Assessment Year, Assessment, Annual value, Business, Capital asset, Income, Person, Previous Year, Transfer **Section 3** Previous Year	6	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **5th** MONTH: **JULY**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are the Provision regarding residential status of individual under Income Tax Act, 1961.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESIDENTIAL STATUS & SCOPE OF TOTAL INCOME	**Basis of Charge :Section 4 to 9** Residential Status, Scope Of Total Income, Deemed Income	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **5th** MONTH: **AUGUST**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are provision of salary income under Income Tax Act, 1961

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME	**Salary Income: Section 15 – 17** Including Section 10 relating to House Rent Allowance, Travel Concession, Special Allowance, Gratuity, Pension ,Commutation, Leave Encashment, Compensation, Voluntary Retirement, Payment from Provident Fund	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**:MABEL R LOBO** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **5th** MONTH: **SEPTEMBER**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. How to Compute Taxable income of Individual and HUF.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMPUTATION OF TOTAL INCOME	Computation of Total Income of Individual and HUF with respect to above heads and deductions (Practical Questions)	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEELAM RATHORE DEPARTMENT: COMMERCE ,

CLASS: TY. BCOM. SEMESTER: 5th MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2019-2020,

LEARNING OBJECTIVE/S:
The learners will be able to: The learners will be able to Analyze, Design, Implement and evaluate a computer based system, process components or program to meet the different context of life in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit - 2 and Unit – 3. Database and MYSQL.	Introduction to Database and MYSQL as Non-Proudural language.	3	MYSQL – The Complete Reference, By – Vikram Vaswani. Database Management Systems, By – Raghu Ramakrishnan	
	MYSQL Basics, Datatypes, Creation, Insertion, Updation and Deleting of Data; Built-in-Functions.	3		
	After of Data for Charge of Columns, Rename, Show, Describe and Drop statement, Primary key, Foreign key and Constraints.	3		
	MYSQL simple Queries (Select Statement) filtering of Data by using conditions use of operators, Aggregate functions.	3		
	Multi-Table Queries – use of Joins (INNERJOIN)	3		
	Nested Queries using Sub-Quires and Joins, use of HAVING Clause Simple transactions (Start, Commit and Rollback)	3		
Pratical-1	Excel- Calculations using Avg., Sum functions.	2		
Pratical-2	Excel- Calculation of Subtotal.	2		
Pratical-3	Excel- Calculation of pivot Table.	2		
Pratical-4	Excel- Excel Functions.	2		
Pratical-5	Excel- Calculation of Selling Price.	2		
Pratical-6	MYSQL- Creation of Database and Table.	2		

Pratical-7	MYSQL- Insertion of Values in Table.	2		
Pratical-8	MYSQL- Insertion of Columns.	2		
Pratical-9	MYSQL- Basic Queries (Select, Update, Delete, Drop).	2		
Pratical-10	MYSQL_ Use of Group by Order by Statements.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM** SEMESTER: **5th** MONTH: **JUNE**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are the Provisions regarding Income from House Property under Income Tax Act, 1961.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME	**Income From House Property:** Section 22 to 27, Including Section 2 - Annual Value Practical Question	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **5th** MONTH: **JULY**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are the Provisions regarding Income from Business and Profession under Income Tax Act, 1961.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME	**Profits & Gains From Business & Profession, Vocation** Section 28 to 32, 36, 37, 40, 40A, 43B, 44AD, 44ADA & 44AE Including.: Section 2 – Business Practical Question	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **5th** MONTH: **AUGUST**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are provision of Income from Capital Gain under Income Tax Act, 1961
2. What are provision of Deductions under Chapter VI - A under Income Tax Act, 1961

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME	**Income from Capital Gains :** Section 45, 48, 49, 50, 54 and 55	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method
Deductions under Chapter VI – A	**80 A**-Restriction on claim in Chapter VI- A deductions **80 C**- Payment of LIC/PF and other eligible investments **80CCC** - Contribution to certain Pension Fund **80D** - Medical Insurance Premium **80 DD**- Maintenance and medical treatment of handicapped dependent **80E** - Interest on Educational Loan **80 TTA**-Interest on Saving Bank account **80D** - Deduction in the case of totally blind or physically handicapped or mentally retarded resident person			Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **5th** MONTH: **SEPTEMBER**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. How to Compute Taxable income of Individual and HUF.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMPUTATION OF TOTAL INCOME	Computation of Total Income of Individual and HUF with respect to above heads and deductions (Practical Questions)	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manjushri Shripad Oak DEPARTMENT: Commerce

CLASS: T.Y.B.COM SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Learners will be able to understand the concept of Internet , computer Network , searching methods and cybercrime .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –I Data communication, networking and Internet	Data communication and components, data representation, distributed processing	03	Computer System And Application Manan Prakashan	Black Board And Discussion Method
	Network basics and infrastructure - Definition, types (LAN,MAN,WAN) - Network structure - Topologies – Star, Bus Ring	03	Computer System And Application Manan Prakashan	Black Board And Discussion Method
	- Network media, wired- Twisted Pair , Co-axial, Fiber Optic and wireless radio and infrared. - Network hardware - HUBS, Bridges, Switches, Routers Network Protocols	03	Computer System And Application Manan Prakashan	Black Board And Discussion Method
	Internet – Definition, Types of Connection, Hot-Spot, Services on Net – www, email, blog	03	Computer System And Application Manan Prakashan	Black Board And Discussion Method

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	IP address, domain name, URL, Hyperlink, web browser, searching directories, Search engine, Boolean search (AND OR NOT), Advance search, meta search	03	Computer System And Application Manan Prakashan	Black Board And Discussion Method
	E-mail, parts of email address , cybercrime, hacking, sniffing, spoofing	03	Computer System And Application Manan Prakashan	Black Board And Discussion Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manjushri Shripad Oak DEPARTMENT: Commerce

CLASS: T.Y.B.COM SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Learners will be able to analyze the information using Spread Sheet.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –IV Spread sheet	Spreadsheet-Creating and navigating worksheet and adding information in work sheet. - Entering different types of data	02	Computer System And Application Manan Prakashan	Black Board And Discussion Method

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	- Auto complete, auto correct, auto fill, auto fit, undo, redo - Moving data- cur copy paste, inserting rows and columns. - Find and replace value, spell check. Formatting Cell.			
	Multiple spread sheet Adding, removing, hiding worksheet. Header/footer, page break. Formulas, cell references.	02	Computer System And Application Manan Prakashan	Black Board And Discussion Method
	Function- - Financial function- FV,PV,PMT,PPMT,IPMT,NPER,RATE. - Mathematical and statistical functions- - Round, Round down, Round up, Ceiling, Floor, Int, Max, Min, Mod, SQRT, ABS, Sum, Count, Average.	02	Computer System And Application Manan Prakashan	Black Board And Discussion Method
	Data Analysis- - Sorting, Subtotal, Pivot Table.	03	Computer System And Application Manan Prakashan	Black Board And Discussion Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9

Practicals : - Computer System And Application

Sem - V

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Sr. No.	Sub Topics	No. Of Lecture Allotted	TEACHING METHOD/ ICT TOOLS USED
Practical 1	Excel Calculations using SUM, AVG functions.	02	Projector and Computer, Black Board
Practical 2	Excel – Calculations of Subtotal	02	Projector and Computer, Black Board
Practical 3	Excel - Calculations of Pivot Table	02	Projector and Computer, Black Board
Practical 4	Excel – Excel functions	02	Projector and Computer, Black Board
Practical 5	Excel – Calculations selling Price	02	Projector and Computer, Black Board
Practical 6	MYSQL- creation of database and tables	02	Projector and Computer, Black Board
Practical 7	MYSQL- inserting values in tables	02	Projector and Computer, Black Board
Practical 8	MYSQL-alteration of columns	02	Projector and Computer, Black Board
Practical 9	MYSQL-Basic queries (select update, delete, Drop)	02	Projector and Computer, Black Board
Practical 10	MYSQL- Use of group by and Order by statements	02	Projector and Computer, Black Board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: V

MONTH: June to October 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit I Introduction and Basic Terms	Introduction to Income Tax : Introduction of Tax i.e. Direct and Indirect, Basic information about what is Direct Tax	1	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk
	BASIC TERMS : 1.Assessee 2.Assessment 3.Assessment Year 4.Capital Assets 5.Income 8.Person 6.Previous Year 7.Transfer Practical questions	5	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6 per Division

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: V

MONTH: June to October 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit II Scope of Total Income	Residential Status Basic Conditions, Exceptions, Additional Conditions R & OR, R but NOR, NRI Practical problems	5	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk
	Scope of Total Income Related to R & OR, R but NOR, NRI	3	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8 per Division

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Yashvant Keshav Patil College of Commerce
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: V

MONTH: June to October 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit III Heads of Income	Capital Gains Concept of Capital Asset, Transfer, Types of Capital Gains, Exempt Transfers, Exemptions, Practical Problems	5	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk
	Income from Other Sources Income taxable and deductions deductible under this head Exempt Incomes, Practical Problems	5	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 per Division

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: V

MONTH: June to October 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit V Computation of Total Income for Individual	Computation of total income by combining two or more heads of incomes – practical problems	3	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3 per Division

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____NILESHWARI VINAY GHUMRE_____ DEPARTMENT: _____COMMERCE____ CLASS: ____TYBCOM_ SEMESTER: V_

MONTH: _____AUG TO DEC___ ACADEMIC YEAR: _____2020-21__

LEARNING OBJECTIVE/S:
The learners will be able to : _____STUDENTS WILL HAVE INDEBTH KNOWLEDGE AND PRACTICAL EXPERIENCE OF EXPORT MARKETING_

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 AND 4	Export marketing, Trade barriers, major economic groupings, overseas market research	12	R.L.KRAMER	Google meet, ppt , online lectures
	Export incentives and assistance	12	Michael vaz	Google meet, ppt, online lectures

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___24_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : PRAKTANA KORE DEPARTMENT : Commerce

CLASS : TYBCOM (A,B,C,D) SEM : V MONTH : June - Sept YEAR : 2019-20

LEARNINGOBJECTIVE/S : Marketing is very essential part of commerce. This subject is helpful to develop marketing skills among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE V	**MODULE II: MARKETING DECISIONS - I** MARKETING MIX - Concept PRODUCT- Product Decision Areas, PLC- Concept,Managing Stages of PLC BRANDING-Concept , Components BRAND EQUITY- Concept, Factors Influencing Brand Equity PACKAGING- Concept ,Essentials of Good Package Product Positioning- concept,Strategies of Product Positioning Service Positioning - Importance and Challenges PRICING- Concept,Objectives,Factors Influencing Pricing,Pricing Stategies	11	Marketing management by - Phillip Kotler And	Chalk & board

	MODULE III: **MARKETING DECISIONS- II** PHYSICAL DISTRIBUTION-Concept,Factors Influencing Physical Distribution,Marketing Channels SCM- Concept,Components PROMOTION-Concept,Importance.Elements of Promotion Mix IMC-Concept ,scope,importance SALES MANAGEMENT-Concept, Components,Emerging Trends PERSONAL SELLINGS - Concept ,Process Skill sets required	10		Chalk & board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: COMMERCE CLASS: T.Y.B.COM

SEMESTER: V MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES:

The Learner/Students will be able to under the concept of Indian economy in terms of classification of various sector such as primary, secondary and tertiary sector and their contribution towards the development of Indian Economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECONOMICS SEM V	**Module I: Macro Economic Overview of India** **Overview of New Economic Policy 1991:** Role of Social Infrastructure with reference to Education, Health and Family Welfare. **Sustainable Development Goals and Policy Measures:** Make in India, Invest in India, and Skill Development and Training Programmes. **Foreign Investment Policy Measures in India:** Foreign Investment Promotion Board, FDI-MNCs and their Role.	15	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	Lecture, group discussion, test, oral presentation of important topics.
ECONOMICS SEM V	**Module IV: Banking and Financial Market (10 Lec.)** **Banking Sector :** Recent Trends, Issues and Challenges in Banking and Insurance Industry	10	V.K. Puri S.K. Misra: Indian Ecomomy	Lecture, group discussion, test, oral presentation of important topics.

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	Money Market: Structure, Limitations and Reforms **Capital Market:** Structure, Growth and Reforms		Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AKRUTI BOSE DEPARTMENT: COMMERCE

CLASS: TYBOM I,J,K SEMESTER: V MONTH:JUNE/SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: Board and Chalk
The learners will be able to : Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS V Module II and Module III	AGRICULTURE DURING POST REFORM PERIOD : National Agricultural Policy 2000, Agricultural Pricing and Agricultural Finance,		Micro Economics by H.L. AHUJA.	Board, Chalk and duster.
	Agricultural Marketing Development.			
	THE INDUSTY AND SERVICE SECTOR DURING POST-REFORM PEROD: Policy Measures, Competition Act, 2002, Industrial Pollution			
	In India, Service Sector.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6 Lectures.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TEJASWINI YOGESH NAIK DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER: V MONTH:JUNe – sept

Year: 2019-20

LEARNING OBJECTIVE/S: HOW TO CALCULATE VARIOUS TYPES OF DIRECT INCOME
The learners will be able to : HOW TO CALCULATE INCOME FROM HOUSE PROPERTY, CAPITAL GAINS, BUSINESS AND PROFESSION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct tax	1.Income from house property: gross annual value, building, appurtenant land municipal tax, standard deduction, pre construction interest,types of house property. 2.Income from capital gain: capital, transfer, short term and long term capital gain, types of capital assets, cost inflation index. 3. Income from business and professional: meaning , deductions u/s 37, 38, 39. 4. Deductions: 80 A, 80 C, 80CC, 80 E, 80D, 80U 5.Total income	5 lectures for each topic	Anaspure, manan publication	Black board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____25_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Veena Sihana DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: V MONTH: June to October 2019

ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Familiarize the commerce students with basic concepts of macroeconomics and with certain common features of economic occurrence in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics - V	Module III – The Industry And Service Sector During Post Reform Period I - Policy Measures- Competition Act 2003, Disinvestment Policy, II - Industrial Pollution in India: Meaning, Types, Effects and Control. III - Service Sector: Recent trends, role and growth in Healthcare and Tourism Industry	14	Jhingan, M.L., Principles of Economics — Vrinda Publications (P) Ltd Ahuja. H.L., Modern Economics — S.Chand Company Ltd. New Delhi.	Chalk & Duster
	Module IV – Banking and Financial Market I - Banking Sector- Recent trends, issues and challenges in Banking and Insurance Industry. II -Money Market – Structure, Limitations and Reforms. III-Capital Market – Structure, Growth and Reforms.	14		Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Priyanka Devnath_Rajput DEPARTMENT: Commerce CLASS: T.Y.BCom (Div- A,B,C,D,E & F)

SEMESTER: V MONTH: June - October ACADEMIC YEAR: 2019- 2020 SUBJECT: Computer Systems and Applications

LEARNING OBJECTIVE/S:-
The learners will be able to: - To gain the knowledge of MS- Excel & MY- SQL Practical's.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES/PRACTICAL ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Computer Systems and Applications Practical's	1) MS-Excel: - Calculations using Average & sum Functions.	02	Computer Systems and Applications By Dr.Faiyaz Gadiwalla & Mukesh.N.Tekwani and www.w3School.com	Computer, MS-Excel Software, My-SQL Software
	2) MS-Excel: - Calculation of Sub- Total.	02		
	3) MS-Excel: - Calculation of Pivot Table.	02		
	4) MS-Excel: - Excel Functions.	02		
	5) MS-Excel: - Calculation of Selling Price.	02		
	6) My- SQL:- Creation of Database and Table	02		
	7) My- SQL: - Insertion of values in Table.	02		
	8) My- SQL:- Alternation of Columns in Table	02		
	9) My- SQL:- Basic Queries (Select, Update, Delete, Drop)	02		
	10) My- SQL: - Use of Group-By and Order- By Statements.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : TYBCOM (E,F,G,H) SEM : V MONTH : YEAR : 2019-20

LEARNING OBJECTIVE/S : Learner will be able to lean concept of marketing, various aspects of marketing and consumer relationship management.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE V **UNIT I** **INTRODUCTION TO MARKETING**	Marketing Concept, features, importance, functions, evolution	03	Ramaswamy & Kumari Nama. Marketing management	Chalk and board
	Marketing research, marketing information system, data mining	03	Ramaswamy & Kumari Nama. Marketing management	Chalk and board
	Consumer behaviour, market segmentation, consumer relationship management, market targeting	04	Ramaswamy & Kumari Nama. Marketing management	Chalk and board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 10

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : TYBCOM (E,F,G,H) SEM : V MONTH : YEAR : 2019-20

LEARNING OBJECTIVE/S : Learner will be able to learn marketing ethics, various marketing strategies & types of marketing. It also focuses on challenges faced by marketers in India.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE V **UNIT IV** **KEY MARKETING DIMENSIONS**	Marketing ethics, unethical practices in marketing, general role of consumer organisations, competitive strategies for market leader, market challenger, market follower, niche marketing	05	Ramaswamy & Kumari Nama. Marketing management	Chalk and board
	Rural marketing, digital marketing, green marketing	03	Ramaswamy & Kumari Nama. Marketing management	Chalk and board
	Challenges faced by marketing managers in 21st century, careers in marketing, success & failure of brands in India	04	Ramaswamy & Kumari Nama. Marketing management	Chalk and board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 12

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VIVA COLLEGE, Virar (W)

Name of the Department: Commerce

Sr. No	Name of the Staff	Subject Taught/ Unit Taught	Remarks (if any)
1	Veronika B. Barla	Business economics	

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Veronika B Barla **DEPARTMENT**: Commerce

CLASS: T.Y.Bcom Division: E, F, G and H **SEMESTER**: V

MONTH: _____ **SUBJECT**: Business Economics-V **ACADEMIC YEAR**: 2019-20

LEARNING OBJECTIVE/S:
1. Help to understand the Macroeconomic overview of India
2. To understand the banking and financial market

The learners will be able to: 1. Role of social infrastructure in education health and family welfare, Various recent macroeconomic policy like make in India, Skill India etc. SDG and measures.

2. recent issues in and challenges in banking and insurance, structure of money and capital market, growth and reform.

aper, Unit, Title	Subtopics	Number of lectures allotted	References	Teaching Method /ICT tools used
Business Economics Module I Macroeconomic an overview of India	Overview of new economic policy 1991	2	Indian economy Mishra and Puri	Lecture method
	Role of social infrastructure with reference to education , health and family welfare	2	"	"
	Sustainable development goal and policy measures	4	"	"
	Make in India	1	"	"
	Invest India	1	"	"
	Skill development and training program	2	"	"
	Foreign investment policy measure in India	3		

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Module: IV Banking and Financial Market	Banking sector: Recent trend, issue and challenges	4	‘	“
	Money Market: Structure, limitation and reform	4	“	“
	Capital Market: Structure, growth and reform	4	“	“

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT I and IV : 27Hrs

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sachin A.Kadam DEPARTMENT: COMMERCE

CLASS: TYBCOM SEMESTER: VI MONTH: April ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2	Chapter 2 Contract Costing Progress payments, Retention money, Contract Accounts, Accounting for Material, Accounting for Tax Deducted at source by the Contractee , Accounting for plant used in a contract, treatment of profit on incomplete contracts, a contract profit and balance sheet entries.	7 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	Chalk, Printed notes and Duster
Unit 3	Chapter 3 Process Costing Process Loss, Abnormal Gains and losses , Joint and by Products. Excluding Equivalent units, Inter-process profit Note- Simple practical problems costing and joint and by products.	7 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	Chalk, Printed notes and Duster
Unit 6	Chapter 6 Some Emerging concepts of Cost Accounting Meaning , Brief Target Costing, Life cycle costing, Bench Marking, ABC Costing	7 lec	Manan prakashan, Google, Dr. Saxena(Advance	Chalk, Printed notes and Duster

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

			accounting)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _21_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PALLAVI. NAIK DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: VI MONTH: Nov to Mar 2020

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Familiarize the commerce students with basic concepts of macroeconomics and with certain common features of economic occurrence in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics - VI	Module III – Balance of Payments & International Economic Organisation Balance of Payments – Structure – Causes of Disequilibrium & Measures to correct it in BOP – World Trade Organisation	14	MANAN PRAKASHAN SETH PUBLICATION	Blackboard Chalk & Duster
	Module IV – Foreign Exchange Market Foreign Exchange Market – Determination of Equilibrium Rate of Exchange – Purchasing Power Parity Theory – Role of Central Bank in Foreign Exchange Rate Management.	14		Blackboard Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: COMMERCE

CLASS: TYBCOM (A,B,C & D) SEMESTER: VI MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES:
The learners will be able to:

- Understand Human resource management, human relations, leadership and its styles.
- Get insight on meaning and different theories of motivation. And also ways to improve morale and Emotional & spiritual quotient.
- Get knowledge of various welfare and safety measures to be taken care of by the firm.
- Perceive the changing patterns of employment and the trends in HRM. The student shall also be able to understand the changing environment of human resource.
- Interpret various challenges in HRM.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-3 Human Relations	HUMAN RELATIONS- Concept, Significance LEADERSHIP –Concept, Transactional & Transformational Leadership MOTIVATION- Concept, Theories of Motivation,(Maslow's Need Hierarchy Theory, Vroom's Expectancy Theory, McGregor's Theory X and Theory Y, Pink's Theory of Motivation) EMPLOYEES MORALE- Concept, Factors affecting Morale, Measurement of Employees Morale	14	Human resource management by Gary Dessler	Chalk, Board and Duster

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Unit-4 Trends In Human Resource Management	EMOTIONAL QUOTIENT AND SPIRITUAL QUOTIENT- Concept, Factors affecting EQ & SQ EMPLOYEE GRIEVANCE- Causes, Procedure for Grievance redressal EMPLOYEE WELFARE MEASURES AND HEALTHY & SAFETY MEASURES.			
	HR IN CHANGING ENVIRONMENT COMPETENCIES- concept, classification LEARNING ORGANIZATIONS- Concept, Creating an innovative organization INNOVATION CULTURE- Concept, Need, Managerial role. TRENDS IN HUMAN RESOURCE MANAGEMENT EMPLOYEE ENGAGEMENT- Concept, Types HUMAN RESOURCE INFORMATION SYSTEM (HRIS) – Concept, Importance CHANGING PATTERNS OF EMPLOYMENT. CHALLENGES IN HUMAN RESOURCE MANAGEMENT: employee empowerment, workforce diversity. attrition, downsizing, employee absenteeism, work life balance, sexual harassment at work place, domestic and international hr practices, millennial (gen y)competency mapping	14		Chalk, Board and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: VI

MONTH: November- February ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit- 1 Underwriting of shares and Debentures	Meaning of underwriting and underwriting commission , payment of commission to underwriters , sub-underwriters , brokers etc	2	Financial Ac. counting by R. Narayanaswamy	Disscussion Method and Black Board
	Types of underwriting, explaination about marked, unmarked and firm underwriting and liability of underwriters	3		
	Practical problems	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: VI

MONTH: November- February ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit – 2 Accounting for Limited Liability partnership	Meaning of limited liability and its statutory provisions	2	Financial Ac. counting by R. Narayanaswamy	Disscussion Method and Black Board
	Conversion of partnership into LLP , format of Balance sheet	3		
	Practical problems on final accounts	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: VI

MONTH: November- February ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit-3 Liquidation of companies	Meaning of liquidation and winding up,preferential payments, overriding preferential payments	2	Financial Ac. counting by R. Narayanaswamy	Disscussion Method and Black Board
	Format of statement of affairs, deficit and surplus and format of liquidators statement of account	3		
	Practical problems	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Arjun Vishwakarma DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: VI MONTH: DECEMBER

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : The learner will be able to use basic computer software and some financial software

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1,4	▶ **Module - I : E-Commerce (18 Lectures)** **(a) Definition of E-commerce** **(b) Features of E-commerce** **(c) Types of E-commerce (B2C, B2B, C2C, P2P)** **(d) Business Models in E-commerce (Advertising, Subscription, Transaction Fee, Sales Revenue, Affiliate Revenue)** **(e) Major B2C models (Portal, Etailer, Content Provider, Transaction Broker, Market Creator, Service Provider, Community Provider).** **(f) E-Commerce Security : Integrity, Non repudiation, Authenticity, Confidentiality, Privacy Availability.** **(g) Encryption : Definition, Digital ignatures, SSL.** **(h) Payment Systems : Digital Cash, Online stored value, digital accumulating balance payment, Digital credit accounts, digital checking.** **(i) How an Online credit card transaction works. SET protocol.**	4	Computer Skills-2 and Wikipedia	PowerPoint Presentation, Laptop

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	(j) Limitations of E-commerce. **(k) M-commerce (Definition and Features)**			
	▶ **Module - IV : Visual Basic** **(a) Introduction to Visual Basic, Introduction Graphical User Interface (GUI)** **Programming Language (Procedural, Object Oriented, Event Driven), Writing VB Projects. The Visual Basic Environment** **(b) Introduction to VB Controls** **Text boxes, Frames, Check boxes, Option button, Designing the User Interface, Default & Cancel property, tab order, Coding for controls using Text, Caption, Value property and Set Focus method** **(c) Variables, Constants, and Calculations** **Variable and Constant, Data Type (String, Integer, Currency, Single, Double, Date), Naming rules/conventions, Constants (Named & Intrinsic), Declaring variables, Val Function, Arithmetic Operations, Formatting Data.** **(d) Decision and Condition** **Condition, Comparing numeric variables and constants, Comparing Strings, Comparing Text Property of text box, Compound Conditions (And, Or, Not). If Statement, if then-else Statement, LCase and Ucase function, Using If statements with Option Buttons & Check Boxes. Msgbox (Message box) statement Input Validation : Is Numeric function.** **(e) Sub-procedures and Sub-functions, Using common dialog box, Creating a new sub-procedure, Writing a Function procedure. Simple loops using For Next**	9	Computer Skills-2	PowerPoint Presentation, Laptop

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	statements and Do while statement and display output using MsgBox Statement.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4,9

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM SEMESTER: V MONTH: DEC 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
A) INTRODUCTION TO MARGINAL COSTING B) INTRODUCTION TO STANDARD COSTING	MARGINAL COSTING MEANING, APPLICATION, ADVANTAGES, LIMITATIONS CONTRIBUTION, BREAKEVEN ANALYSIS, MARGIN OF SAFETYAND PROFIT VOLUME GRAPH	02	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	
	SIMPLE PRATICAL PROBLEMS BASED ON MARGINAL COSTING EXCLUDING DECISION MAKING VARIOUS TYPES OF STANDARDS,SETTING OF STANDARDS, BASIC CONCEPTS OF MATERIAL AND LABOUR ANALYSIS	06 02	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	CHALK - BOARD METHOD
	SIMPLE PRATICAL PROBLEMS BASED ON MATERIAL AND LABOUR VARIANCES EXCLUDING SUB-VARIANCES.	06	PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM SEMESTER: V MONTH: JAN 2020 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
A) PROCESS COSTING B) CONTRACT COSTING	A) 1) PROCESS LOSS, ABNORMAL GAINS & LOSSES, JOINT PRODUCTS AND BY-PRODUCTS.	02	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	
	2) SIMPLE PRACTICAL PROBLEMS PROCESS COSTING AND JOINT AND BY-PRODUCT	06	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	CHALK - BOARD METHOD
	B) 1)CONTRACT ACCOUNTS, 2) RETENTION MONEY, ACCOUTING FOR MATERIAL, ACCOUNTING FOR TAX DEDUCTED AT SOURCE BY THE CONTRACTEE, 3) ACCOUNTING FOR PLANT USED IN CONTRACT,4) TREATMENT OF PROFIT ON INCOMPLETE CONTRACT,5) CONTRACT PROFIT AND BALANCE SHEET ENTRIES	03 06	PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08+03

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM SEMESTER: V MONTH: FEB 2020 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
A) CONTRACT COSTING B) COST CONTROL ACCOUNTS	A) SIMPLE PRATICAL PROBLEMS ON CONTRACT ACCOUNT	06	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	
	B) 1) COST CONTROL ACCOUNTS, PRINCIPAL ACCOUNTS, SUBSIDIARY ACCOUNTS TO BE MAINTAINED 2) ADVANTAGES & DISADVANTAGES	04	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	CHALK - BOARD METHOD
	3)SIMPLE PRACTICAL PROBLEMS ON PREPARATION OF COST CONTROL ACCOUNTS.	01	PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06+ 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM SEMESTER: V MONTH: MARCH 2020 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
A) COST CONTROL ACCOUNTS B) SOME EMERGING CONCEPTS OF COST ACCOUNTING	A) SIMPLE PRACTICAL PROBLEMS ON PREPARATION OF COST CONTROL ACCOUNTS.	06	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	
	B) 1)TARGET COSTING , 2) LIFE CYCLE COSTING, 3) BENCH-MARKING, 4) ABC COSTING (NO PRACTICAL PROBLEMS)	06	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	CHALK - BOARD METHOD
			PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06+06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: CLASS: TYBCom SEMESTER: VI MONTH: January ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : accounting treatment for contract costing and preparation of contract account. Computation of cost of each process, abnormal gains and losses during process.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, contract costing	Progress payments, retention money, contract accounts, accounting for material	1	Manan Prakashan	Lecture method
	accounting for tax deducted at source by the contractee, accounting for plant used in a contract	1		
	Treatment of profit on incomplete contracts, contract profit and balance sheet entries.	2		
	Practical problems	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

MONTH: February

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, process costing	Process loss, abnormal loss and gains, joint products and by products, process account formats	2	Manan Prakashan	Lecture method
	Practical problems	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE CLASS: TYBCOM

SEMESTER: **VI** MONTH: Nov,2019 to Feb,2020 ACADEMIC YEAR :2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to understand preparation of contract Account, Process accounts , Abnormal Gain/ loss accounts, Meaning of Target costing , ABC costing, Benchmarking etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST ACCOUNTING	**1] Contract costing**-Meaning of contract, Retention money,Contract ledger, accounting for material, plant & machinery. Treatment of profit on incomplete contract, Contract profit , contractee account , Practical problems on contract accounting.	10	S.N. Maheshwari B.K.Bhar	Chalk & Duster
	2] Process costing- Meaning of process account , process loss,Abnormal Gain/ Loss, Joint product & By product, Process stock account. Practical problems.	10		Chalk & Duster
	3]Some Emerging concept of Cost Accounting- Target costing, Life cycle costing,Benchmarking , ABC costing	10		Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Tejaswini Yogesh Naik DEPARTMENT: commerce CLASS:TY BCOM SEMESTER: VI MONTH: October to March
ACADEMIC YEAR:2019 -20
The learners will be able to : uderstand how to manage and control cost.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting	1. Marginal costing : meaning, cost volume profit, pv ratio, break even point, margin of safety, theory and practical	10 lectures for	Maheshwari	Black board
	On each sub topic. 2.Standard costing: Need to learn standard costing , variances,	Each topic .		
	Reasons of variances, labour variances and material variances. Theory and practical questions.			
	3. control account: difference in integrated and non integrated accounting, cost control account, stock control			
	Account, finished goods control account,wip control account.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KALPANA JAIN** DEPARTMENT**: COMMERCE** CLASS: **T.Y.B.COM** DIV: **E, F, G, H, I & J** SEMESTER: **VI** MONTH: **NOVEMBER-FEBRUARY** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S : To explain the concepts of accounts an impart the practical knowledge of Financial Accounting.

The learners will be able to : understand the accounting concepts in simple way which will help them to tackle the accounting problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AS – 14 - Amalgamation, Absorption & External Reconstruction	**Unit: 1- AS-14** *Types of Amalgamation *In the nature of merger and purchase * Corresponding accounting treatments of pooling of interests and purchase method respectively. * Meaning and Computation of purchase consideration. *.Journal entries in the books of Purchase Company and in the books of vendor company. * Problems based on purchase method only.	15	Financial accountancy by R Narayanswamy	Chalk and Board
Accounting of transactions of Foreign Currency	**Unit: 2 –** ***Meaning, Definition and Objectives.** ***Different exchange rates prevailing.** ***Monetary items and Non Monetary items.** ***Accounting for exchange difference with Import (Purchases) and Export(Sales)** *Foreign exchange fluctuations ledger account *Journal entries for export as well as import	10	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

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SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FINANCIAL ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____TYBCOM____ SEMESTER: VI_ MONTH: __DECEMBER-JANUARY__ ACADEMIC YEAR: ____2019-2020___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - 3 Liquidation of companies	Meaning of Liquidation, Modes of Winding up, Preferential Creditors (Section 327), Over riding preferential payments (Section 326)	2	Financial Accounting By R. Narayanaswamy	Chalk Board and Discussion methods
	Format of Statement of Affairs, Deficit / Surplus Account, Format of Liquidators Final Statement of Accounts	2		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10__

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FINANCIAL ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____TYBCOM____ SEMESTER: VI_ MONTH: __JANUARY- FEBRUARY_ ACADEMIC YEAR: ____2019-2020___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - 4 Underwriting of shares and Debentures	Introduction of Underwriting and Underwriting commission, Provision of companies Act with respect of payment of underwriting commission, underwriters, sub-underwriters, Brokers & managers to issue.	2	Financial Accounting By R. Narayanaswamy	Chalk Board and Discussion methods
	Types of Underwriting, Abatement clause, Format of liability of underwriters, Accounting treatment relating to underwriting.	2		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10__

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FINANCIAL ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____TYBCOM____ SEMESTER: VI_ MONTH: __FEBRUARY__ ACADEMIC YEAR: ____2019-2020___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 5 Accounting for LLP	Meaning, Advantages and Disadvantages of LLP, Statutory Provisions	1	Financial Accounting By R. Narayanaswamy	Chalk Board and Discussion methods
	Conversion of Partnership firm inti LLP, Format of statements of Assets & Liabilities, Format of Income & Expenditure, Adjustment in Final A/c.	3		
	Practical Question Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10__

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. FIROZKHAN KHURSHIT KHAN** DEPARTMENT**: COMMERCE**

CLASS: **T.Y.B.COM** DIV: **A, B, C & D** SEMESTER: **VI** MONTH: **MARCH** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S : To impart the practical knowledge of Financial Accounting.

The learners will be able to : Develop unique Skills to solve practical problems of Finance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AS – 14 - Amalgamation, Absorption & External Reconstruction	**Unit: 1- AS – 14 - Amalgamation, Absorption & External Reconstruction** In the nature of merger and purchase with corresponding accounting treatments of pooling of interests and purchase method respectively. Meaning and Computation of purchase consideration. Problems based on purchase method only.	15	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Chalk and Board
Liquidation of Companies	**Unit: 3 - Liquidation of Companies** Meaning of liquidation or winding up, Preferential payments, Overriding preferential payments, Preparation of statement of affairs, deficit / surplus account, Liquidator's final statement of account	10	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **6th** MONTH: **NOVEMBER**
ACADEMIC YEAR: **2019-20**
LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is GST and what is the procedure for registration under GST

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
REGISTRATION UNDER GST	**Persons not liable for registration** **Compulsory registration** **Procedure for registration** **Deemed registration** **Cancellation of registration**	15	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **6th** MONTH: **DECEMBER**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Procedure regarding payment of GST

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAYMENT OF GST	**Procedure and provisions regarding payment of tax under GST**	04	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **6th** MONTH: **JANUARY**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Input Tax Credit and the conditions applicable for availment of ITC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INPUT TAX CREDIT	**Eligibility for taking ITC** **Input tax credit in special circumstances**	15	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **6th** MONTH: **FEBRUARY -MARCH**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INPUT TAX CREDIT(Contd)	Computation of tax and payment of Tax	09	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEELAM RATHORE DEPARTMENT: COMMERCE ,

CLASS: TY. BCOM. SEMESTER: 6th MONTH: NOVEMBER TO MARCH ACADEMIC YEAR: 2019-2020,

LEARNING OBJECTIVE/S:
The learners will be able to: The learners will be able to Analyze, Design, Implement and evaluate a computer based system, process components or program to meet the different context of life in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit – IV Visual Basic	Introduction to Visual Basic, GVI and Programming language Visual Basic Environment.	2	The Complete Reference to Visual Basic 6.0, By:- Noel Jerke.	Black Board and Discussion Method.
	Introduction to VB Controls, designing the user Interface, Coding of controls and use of properties.	2		
	Use of variables and Conatants, Data types, Naming rules/ conventions, Declaring Variables, Val Functions & Operations, Formatting Data.	2		
	Projects related to Decisions and conditions, use of statements, functions with option Button & Check Bones Mgs Box.	2		
	Input Validation, Sub-Procedures and Sub-functions. Loops (for Next statement, Do while statement).	1		
Pratical-1	Excel- Calculation of Taxable Income (Statements).	2		
Pratical-2	Excel- Date and Time functions.	2		
Pratical-3	Excel- Text functions.	2		
Pratical-4	Excel- Use of VLOOKUP function.	2		
Pratical-5	Excel- Maths functions.	2		
Pratical-6	Excel- Advanced filter, use of Charts (Pie,Barek).	2		
Pratical-7	Visual Basic- Project on Welcome msg.	2		
Pratical-8	Visual Basic- Calculation of Simple and Compound Interest.	2		

Pratical-9	Visual Basic- Project on Text Specification (Change of font and colour)	2		
Pratical-10	Visual Basic- Calculating factorial of a Number.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____20_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER: VI

MONTH:DECEMBER ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the meaning of ecommerce and its types. Advantages and disadvantages of ecommerce .Business models in ecommerce. Different payments modes in ecommerce. Security issues in ecommerce. security steps in ecommerce.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
THEORY Ecommerce	Definition of E-commerce, Features of E-commerce	2	E- Commerce - Kenneth Laudon, Carol Traver , Pearson Education	CHALK AND BOARD, INTERNET, MOBILE PHONE, ECOMMERCE WEBSITES, APPLICATIONS
	Types of E-commerce, Business Models in E-commerce (Advertising, Subscription, Transaction Fee, Sales Revenue, Affiliate Revenue)	2	E- Commerce - Rajaraman	SAME AS ABOVE
	Major B2C models (Portal, Etailer, Content Provider, Transaction Broker, Market Creator, Service Provider, Community Provider).	2	Same as above	SAME AS ABOVE
	E-Commerce Security: Integrity, Non repudiation, Authenticity, Confidentiality, Privacy Availability.	2	Same as above	SAME AS ABOVE
	Encryption: Definition, Digital Signatures, SSL.	3	Same as above	SAME AS ABOVE
PRACTICAL 1	EXCEL-NESTED IF(CALCULATION OF INCOME TAX)	2		PROJECTOR, MICROSOFT EXCEL 2010
PRACTICAL 2	EXCEL-FILTER AND SORTING	2		SAME AS ABOVE

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PRACTICAL 3	EXCEL-VLOOKUP	2		SAME AS ABOVE
PRACTICAL 4	EXCEL FUNCTIONS(DATE, TIME AND STRING)	2		SAME AS ABOVE

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: THEORY-12 PRACTICAL-8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER: VI MONTH:DEC-JAN

ACADEMIC YEAR:19-20

LEARNING OBJECTIVE/S: The learners will be able to : Understand the meaning of ecommerce and its types. Advantages and disadvantages of ecommerce .Business models in ecommerce. Different payments modes in ecommerce. Security issues in ecommerce. security steps in ecommerce.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Payment Systems: Digital Cash, Online stored value, Digital accumulating balance payment, Digital credit accounts, digital checking.	2	E- Commerce - Kenneth Laudon, Carol Traver , Pearson Education	CHALK AND BOARD, INTERNET, MOBILE PHONE, ECOMMERCE WEBSITES, APPLICATIONS
	How an Online credit card transaction works. SET protocol.	3	E- Commerce - Rajaraman	SAME AS ABOVE
	Limitation of E-commerce. M-commerce (Definition and Features).	2	Same as above	SAME AS ABOVE
UNIT III **Spreadsheet**	**Multiple Spreadsheets**	1		PROJECTOR, MICROSOFT EXCEL 2010
PRACTICAL 5	EXCEL FUNCTIONS(MATHS FUNCTIONS)	2		SAME AS ABOVE
PRACTICAL 6	**EXCEL-GRAPHS**	2		SAME AS ABOVE
PRACTICAL 7	**VB-SIMPLE VB PROJECT USING LABEL AND COMMAND BUTTONS**	2		PROJECTOR, MICROSOFT VISUAL BASIC 6.0
PRACTICAL 8	**VB-SIMPLE AND COMPOUND INTEREST**	2		PROJECTOR, MICROSOFT VISUAL BASIC 6.0

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: THEORY 8 PRACTICAL 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER: VI MONTH: JAN-FEB

ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : The learners will be able to :use different databases functions,string,date,time and conditional functions in excel .how to perform normal, advanced and custom filter in excel. How to design different chats in excel.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
THEORY UNIT III **Spreadsheet**	Database Functions LOOKUP, VLOOKUP, HLOOKUP	2		PROJECTOR, MICROSOFT EXCEL 2010
	Conditional Logic functions IF, COUNTIF, SUMIF	2		PROJECTOR, MICROSOFT EXCEL 2010
	String functions LEFT, RIGHT, MID, LEN, UPPER, LOWER, PROPER, TRIM. Date functions TODAY, NOW, DATE, TIME, DAY, MONTH, YEAR, WEEKDAY, DAYS360	1		PROJECTOR, MICROSOFT EXCEL 2010
	Filter with customized condition.	2		PROJECTOR, MICROSOFT EXCEL 2010
	The Graphical representation of data.	2		PROJECTOR, MICROSOFT EXCEL 2010
PRACTICAL 9	**VB-FACTORIAL (LOOPS)**	2		PROJECTOR, MICROSOFT VISUAL BASIC 6.0
PRACTICAL 10	VB-OPTION AND CHECK BOXES	2		PROJECTOR, MICROSOFT VISUAL BASIC 6.0

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: THEORY 9 PRACTICAL6

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **6th** MONTH: **NOVEMBER**
ACADEMIC YEAR: **2019-20**
LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is GST and What are the Need for GST
2. What are dual GST Model (CGST,SGST,UTGST,IGST)
3. What are the basic term use in GST Law (Definitions) and what is GSTIN

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTRODUCTION TO GST	**1. What is GST** **2.Need for GST** **3.Dual GST Model** **4. Definitions** Section 2(17) Business Section 2(13) Consideration Section 2(45) Electronic Commerce Operator Section 2(52) Goods Section 2(56) India Section 2 (78) Non- taxable Supply Section 2(84) Person Section 2(90) Principal Supply Section 2193) Recipient Section 2(98) Reverse charge Section 2(102) Services Section 2(105) Supplier Section 2(107) Taxable Person Section 2(108) Taxable Supply **5. Goods & Services Tax Network (GSTN)**	09	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **6th** MONTH: **DEC. - JANUARY**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is taxable event under GST and which supply is not taxable in GST(non-taxable supply)
2. What is Composite and Mixed Supplies and its taxability?

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
LEVY AND COLLECTION OF TAX (Continue….)	**1. Scope of Supply** **2. Non- taxable Supplies** **3.Composite and Mixed Supplies**	04	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **6th** MONTH: **JANUARY**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Composition Levy
2. How the create levy of GST and how the GST collect from Consumer
3. What are Exemption under GST?

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
LEVY AND COLLECTION OF TAX	1. Composition Levy 2.Levy and Collection of tax 3.Exemption from tax	05	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **6th** MONTH: **FEBRUARY - MARCH**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Time of Supply and its Provision as per CGST Act, 2017
2. What is Place of Supply its Provision as per CGST Act, 2017.
3. What is Value of Supply its Provision as per CGST Act, 2017.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
TIME, PLACE AND VALUE OF SUPPLY	• Time of Supply • Place of Supply • Value of Supply	09	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manjushri Shripad Oak DEPARTMENT: Commerce

CLASS: T.Y.B.COM SEMESTER: VI MONTH: December ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Learner will able to learn fundamentals of designing , implementing and distributing a visual basic application.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –IV Visual Basic	Introduction to VB GUI and programming language, Visual Basic Environment,	02	The complete reference to Visual Basic 6.0 By Noel jerke	Black Board And Discussion Method
	Introduction to VB control, designing the user interface, coding of controls, and role of properties.	01	The complete reference to Visual Basic 6.0 By Noel jerke	Black Board And Discussion Method

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	Use of variables and controls, data types, naming rules/convention, declaring variables, val function and operation, formatting data,	02	The complete reference to Visual Basic 6.0 By Noel jerke	Black Board And Discussion Method
	Project related to decision and condition, use of statement, function with option button and check boxes message box.	02	The complete reference to Visual Basic 6.0 By Noel jerke	Black Board And Discussion Method
	Input validation, Sub-procedure and Sub-function, loops (for next statement / do while statement).	02	The complete reference to Visual Basic 6.0 By Noel jerke	Black Board And Discussion Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

Practicals : - Computer System And Application

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Sem - VI

Sr. No.	**Sub Topics**	**No. Of Lecture Allotted**	**TEACHING METHOD/ ICT TOOLS USED**
Practical 1	Excel Calculations of Taxable Income (If Statement)	02	Projector and Computer, Black Board
Practical 2	Excel – Date and Time Function	02	Projector and Computer, Black Board
Practical 3	Excel - Text Functions	02	Projector and Computer, Black Board
Practical 4	Excel – Use of V lookup function	02	Projector and Computer, Black Board
Practical 5	Excel – Maths Function	02	Projector and Computer, Black Board
Practical 6	Excel- Advance filter use of charts (Pie, Bar etc.)	02	Projector and Computer, Black Board
Practical 7	Visual Basic - Project on welcome message	02	Projector and Computer, Black Board
Practical 8	Visual Basic - Calculations of simple and compound interest	02	Projector and Computer, Black Board
Practical 9	Visual Basic - Project on text specification(change of font and colour)	02	Projector and Computer, Black Board
Practical 10	Visual Basic - Calculating factorial of numbers (Loops)	02	Projector and Computer, Black Board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: VI

MONTH: November to March 2020 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To let students understand what is GST and how it is reflected in our practical life.
The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Introduction to GST	Introduction to GST • What is GST • Need for GST • Dual GST Mode	1	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 1 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: VI

MONTH: November to March 2020 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To let students understand what is GST and how it is reflected in our practical life.
The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Unit 4 Input Tax Credit & Payment of Tax	Input Tax Credit & Payment of Tax • Eligibility for taking Input Tax Credit • Input Tax Credit in Special Circumstances • Computation of Tax Liability • Payment of Tax (Section 49 and Section 50 of CGST Act)	10	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: VI

MONTH: November to March 2020 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To let students understand what is GST and how it is reflected in our practical life.
The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Unit 5 Registration under GST Law	Registration under GST Law • Persons liable for Registration • Persons not liable for Registration • Compulsory Registration • Persons not liable for Registration • Procedure for Registration • Amendment of Registration • Cancellation of Registration • Revocation of cancellation of Registration • Practical Problems	9	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAF: NILESHWARI GHUMRE DEPARTMENT: COMMERCE CLASS: TYBCOM(E F G H) SEMESTER: VI MONTH: DECEMBER TO MARCH ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:1)Understand Human resource management and its various aspects including selection, recruitment, E-selection etc

2)Get insight on how human resource planning, job analysis and job design is done in big MNC's.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-2-Human Resource Development UNIT 3-HUMAN RELATION	HUMAN RELATIONS LEADERSHIP MOTIVATION EMPLOYEE MORAL EMPLOYEE GRIEVANCE			
	HUMAN RESOURCE DEVELOPMENT- Concept, functions TRAINING- Concept, Process of identifying training and development needs, Methods of Training & Development (Apprenticeship, understudy, job rotation, vestibule training, case study, role playing, sensitivity training, In, basket, management games) EVALUATING TRAINING EFFECTIVENESS- Concept, Methods PERFORMANCE APPRAISAL- Concept, Benefits,	12		Chalk, Board and Duster

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	Limitations, Methods POTENTIAL APPRAISAL-Concept, Importance CAREER PLANNING- Concept, Importance SUCCESSION PLANNING- Concept, Need MENTORING- Concept, Importance COUNSELLING- Concept, Techniques.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Praktana Kore DEPARTMENT : Commerce

CLASS : TYBCOM (A,B,C,D) SEM : VI MONTH : YEAR : 2019-20

LEARNING OBJECTIVE/S : Learner will be able to learn various aspects about Human Resource Development.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
COMMERCE VI **UNIT I** **HUMAN RESOURCE MANAGEMENT**	Human resource management- concepts, functions, importance	03	Human resource management by Gary Dessler	Chalk and board
	Human resource planning- concept, steps, job analysis, job design	04	Human resource management by Gary Dessler	Chalk and board
	Recruitment- concept, sources of recruitment, selection, E-selection	03	Human resource management by Gary Dessler	Chalk and board
COMMERCE VI **UNIT IV** **TRENDS IN HUMAN RESOURCE MANAGEMENT**	HR in changing environment : competencies, classification, learning organisation, innovation culture	04	Human resource management by Gary Dessler	Chalk and board
	Trends in HRM : employee engagement, Human Resource Information System, changing patterns of employment	04	Human resource management by Gary Dessler	Chalk and board

	Challenges in HRM : Employee empowerment, workforce diversity, attrition, downsizing, employee absenteeism, work life balance, sexual harassment at work place, domestic & international HR practices, Millennial competency mapping	05	Human resource management by Gary Dessler	Chalk and board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 10

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : PRAKTANA KORE DEPARTMENT : Commerce

CLASS : TYBCOM SEM : V MONTH : June - Sept YEAR : 2019-20

LEARNINGOBJECTIVE/S : Export Marketing Procedure will be understood learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EXPORT MARKETING	**MODULE I: Product Planning and Pricing Decisions for Export MARKETING** - Planning for Export Need for Labelling International Commercial Terms	11		Chalk & board
	MODULE III: **EXPORT FINANCED** Methods of Payment Features of Pre-shipment and Post shipment Role of Commercial Banks	10		Chalk & board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: COMMERCE CLASS: T.Y.B.COM

SEMESTER: VI MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES:

The Learner/Students will be able to under the concept of Indian economy in terms of classification of various sector such as primary, secondary and tertiary sector and their contribution towards the development of Indian Economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECONOMICS SEM VI	**Module - I : Introduction to International Trade (10 Lec.)** **Theories of International Trade -** Ricardo's Theory of Comparative Costs and the Heckscher-Ohlin Theory **Terms of Trade -** Types and Limitations **Gains From International Trade -** Offer Curves and Reciprocal Demand		M.L Jhingan: International Economics Dominic Salvatore: International Economics	Lecture, group discussion, test, oral presentation of important topics.
ECONOMICS SEM VI	**Module - II: Commercial Policy (10 Lec.)** **Commercial Trade Policy –** Free Trade and Protection - Pros and Cons. **Tariff and Non-Tariff Barriers –** Meaning, Types and Effects		M.L Jhingan: International Economics Dominic Salvatore:	Lecture, group discussion, test, oral presentation of important topics.

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	International Economic Integration – Types and Objectives: EU and Brexit, ASEAN		International Economics	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SONAL RAUT DEPARTMENT: COMMERCE

CLASS: TYBCOM (A,B,C,D) SEMESTER: VI MONTH: NOV, DEC, JAN & FEB ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

Comprehension based Learning to Esemplastic into Objective or Subjective type Exams. To Understand the Concept of Accounting of Foreign Currency & Underwriting of Shares & Debentures and to Learn Theoretical & Practical working of the Limited Liability Partnership.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II, IV & V	UNIT II: Accounting of Transaction of Foreign Currency ➢ Meaning, Definitions & Objectives ➢ Spot Rate, Monetary & Non-Monetary Items. ➢ Accounting For Exchange Difference with Import/ Purchases & Export/ Sales. ➢ Ledger Accounts & Journal Entries of Import & Export ➢ Questions solved on the same	15	S.N & S.K. MAHESHWARI	CHALK & BLACKBOARD

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	UNIT IV: Underwriting of Shares & Debentures ➢ Meaning, SEBI Rules & Regulation for Underwriting ➢ Underwriting Commission, Sub-Underwriters, Brokers ➢ Types of Underwriting & it's Journal entries ➢ Liability of the Underwriters ➢ Questions solved on the same	10	S.N & S.K. MAHESHWARI	CHALK & BLACKBOARD
	UNIT V: Accounting For Limited Liability Partnership ➢ Introduction, Advantage & Disadvantages ➢ Public & Private Companies Vs. LLP ➢ Partnership Firm Vs. LLP ➢ LLP Agreement & Format ➢ Ledger Accounts & Journal Entries of Old Firm & LLP ➢ Questions Solved on the same	15	S.N & S.K. MAHESHWARI	CHALK & BLACKBOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___40_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AKRUTI BOSE DEPARTMENT: COMMERCE

CLASS: TYBOM I,J,K. SEMESTER: VI MONTH:DECEMBER/FEBRUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: Board and Chalk

The learners will be able to : Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS VI Module I and Module II	INTERNATIONAL TRADE: Comparative Cost Theory, Heckscher Ohlin Theory, Terms of Trade, Gains from Trade.		International Economics by H.L. AHUJA.	Board, Chalk and duster.
	BALANCE OF PAYMENT AND WTO : Concept and Structure of Balance of Payments, Causes and Disequilibrium and			
	Measures to Correct Disequilibrium in BOP, India's Balance of Payment since 1991 and World Trade Organisation.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6 Lectures.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TEJASWINI YOGESH NAIK DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER:VI MONTH: NOV-MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: WHAT IS INDIRECT TAX
The learners will be able to : Difference in direct and indirect tax, how to calculate gst , registration process

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDIRECT TAX	1.Definition s: goods, business, consideration, e-commerce, India, person,principal supply,services, supplier, taxable supply, taxable person,n on taxable supply 2.Levy and collection of tax: scope of supply, non taxable supplies, composite and mixed supply, composition levy, exemption from tax, levy and collection of tax 3. Time, place and value of supply: time of supply, value of supply, place of supply.	5 lectures 15 lectures 15 lectures	Anaspure, manan publication	Black board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: COMMERCE

CLASS: FYBCOM (M & N) SEMESTER: I MONTH: JUNE TO DECEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand various renewable and non-renewable resources and the wise usage of it so that it can be saved for the next generation.
- Get insight on the problems associated with the over uses of non renewable resources and management of the resources.
- Know the about migration and its effects on the resources as well as the area of migration
- Interpret the meaning of Smart cities and sustainable cities and how the government is taking efforts to create such cities.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-2 Natural Resources and sustainable development Unit-4 Urbanisation and Enironment	RESOURCES: Meaning and definitions: Classifications and types of resources factors influencing resource utilisation resource conservation meaning and methods CONVENTIONAL AND NON CONVENTIONAL RESOURCES, problems associated with and management of water, forest, soil and energy resources- resource utilisation and sustainable development.	13		Chalk, Board and Duster
	CONCEPT OF URBANISATION PROBLEMS OF MIGRATION and urban environment-changing land use, crowding and stress on urban resources, degradation of air and water, loss of soil cover impact on biodiversity	13		Chalk, Board and Duster

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	URBAN HEAT ISLAND EMERGING SMART CITIES AND SAFE CITIES IN INDIA, SUSTAINABLE CITIES.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 26

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Archana D Joshi **DEPARTMENT**: Commerce **CLASS:** FYBCOM (E, F, G H) **SEMESTER:** I

MONTHS: July to Nov. 2019 **ACADEMIC YEAR**: 2018- 19

LEARNING OBJECTIVE/S:

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to Preparing resumes to attending interviews, convenig meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

Tomake students aware of the importance of developing skills.

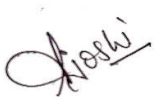
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
1) Theory of Communication	1) Concept of Communication- Models of Communication - Linear/ Interactive/ Transactional / Shanon and Weavor (to be only discussed in class) Meaning, Definition, Process Need, Feedback Emergence of communication as a key concept in the Corporate and Global World Impact of technological Enabled communication Types: Internet, Blogs, E- mail, Moodle, Social media (Facebook, Twitter and WhatsApp advantages and disadvantages)	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	

	Communication at Workplace- 2) Channels and Objectives of Communication: Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine 3) Methods and Modes of Communication: Methods: Verbal and Nonverbal (including Visual), Business Etiquette Introduction to Business Ethics: Ethics at workplace, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility 1) Problems in Communication /Barriers to Communication: Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers 2) Listening: Importance of Listening Skills, obstacles to listening, Cultivating good Listening Skills				

3) Business Correspondence	1)Theory of Business Letter Writing: Parts, Structure, Layouts—Full Block, Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, letter of recommendation, Job Application Letter and Resume, Letter of Appointment (to be discussed in class) Letter of Resignation, Letter of acceptance of job offer, letter of Appreciation.	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	
4) Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities Listening Comprehension Remedial Teaching Speaking Skills: Presenting a News Item, Dialogue and Speeches Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. Reading Comprehension: Analysis of texts from the fields	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk	

	of Commerce and Management				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Bristi Gourgopal Biswas DEPARTMENT: Commerce CLASS: F.Y.BCOM SEMESTER: I (Subject : Business Economics I)

MONTH: July-October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To understand the application of microeconomics at corporate level .

The learners will be able to : observe microeconomics in the real world and to understand and make business decisions.

Module I/II **Introduction to Business Economics** **Demand Analysis**	Introduction ,Business Economics ,basic concepts for business economic analysis ,functional relations and tool for economic analysis. Introduction to market demand and supply, demand supply ,market equilibrium, changes in market equilibrium. Meaning of demand,law of demand,determinants of demand, demand function, price, income and substitution effects, nature of demand curve under different markets. Meaning of elasticity, price elasticity of demand , income elasticity of demand , cross elasticity of demand,promotional elasticity of demand, importance of	10 15		Chalk and board

	elasticity of demand , relationship between price elasticity of demand and revenue concept. Significance of demand forecasting ,types of demand forecasting, steps in demand forecasting ,methods of demand forecasting.			
Module III/IV **Supply and production decisions and cost of production** **Break even analysis**	Concept of production, production function, isoquants ,ridge lines least cost combination of inputs ,expansion path. Types of production function ,law of variable proportions, laws of returns to scale. Meaning of economies and diseconomies of scale, Internal economies and diseconomies of scale, external economies and diseconomies of scale. Cost concepts: money cost, accounting cost and economic cost, fixed , variable and total cost , total , average and marginal cost. Cost function, short run cost output ,relationship between AC, AFC ,AVC and MC, relationship between AC and MC ,short run average cost and output, long run cost output, long run average cost curve ,long run marginal cost curve ,learning curve, long run AC and output. Concept of break even point ,variables influencing the break even point ,business application of break even analysis ,limitations of break even analysis.	15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____CHETAN PRAKASH VARMA_____ DEPARTMENT: ___COMMERCE_____CLASS: ____FYBCOM_____

SEMESTER: _____I_____ MONTH: ___SEPT- DECEMBER_____ ACADEMIC YEAR: ____2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to :

To make student understand the concepts of business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics-I	**Introduction** **Scope and Importance of Business Economics** - basic tools- Opportunity Cost principle- Incremental and Marginal Concepts. Basic economic relations - functional relations: equations- Total, Average and Marginal relations- use of Marginal analysis in decision making.	04	*Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases (S. Chand & Sons, N. Delhi, 2000)* • *Salvatore, D.: Managerial Economics in a global economy (Thomson South Western Singapore, 2001)*	CHALK AND TALK //TWO WAY COMMUNICATION Story-telling method Textbook method Lecture Method

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	The basics of market demand, market supply and equilibrium price- shifts in the demand and supply curves and equilibrium	04	• *Frank Robert.H ,Bernanke. Ben S., Principles of Economics (Tata McGraw Hill (ed.3)*	Demonstration Method Tutorial Method Questions-Answer method Discussion method Heuristic method Discovery method
	Demand Analysis Demand Function - nature of demand curve under different markets Meaning, significance, types and measurement of elasticity of demand (Price, income cross and promotional)- relationship between elasticity of demand and revenue concepts	3	• *Gregory Mankiw., Principles of Economics, Thomson South western (2002 reprint)*	
	Demand estimation and forecasting: Meaning and significance - methods of demand estimation : survey and statistical methods (numerical illustrations on trend analysis and simple linear regression)	4	• *Samuelson &Nordhas.: Economics (Tata McGraw Hills, New Delhi, 2002*	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs.PadmajJoshi. DEPARTMENT: Commerce CLASS: FYBCOM SEMESTER: II MONTH: Nov2019 ACADEMIC YEAR: 2019 -20

LEARNING OBJECTIVE/S:

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to

Preparing resumes to attending interviews, convenig meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

Tomake students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
1) Theory of Communication	1) Concept of Communication- Meaning, Definition, Process, Need, Feedback. Emergence of communication as akey concept in the Corporate and Global World Impact of technological advancements on communication 2) Channels and Objectives of Communication: Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine Objectives of Communication: Information, Advice, Order and Instruction, Persuasion,	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	

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	Motivation, Education, Warning, and Boosting the Moral of Employees 3) Methods and Modes of Communication: Methods: Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette Modes: Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing				
2) Obstacles to Communication in Business World	1) Problems in Communication /Barriers to Communication: Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers 2) Listening: Importance of Listening Skills, Cultivating good Listening Skills – 4	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	

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	3) Introduction to Business Ethics: Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility Teachers can adopt a case study approach and address issues such as the following so as to orient and sensitize the student community to actual business practices: Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour				
3) Business Correspondence	1)Theory of Business Letter Writing: Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation [Letter of Appointment, Promotion and Termination, Letter of Recommendation (to be taught but not to be tested in the examination)]	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	
4) Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a	15	Manan Publication, Sheth	Chalk	

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	given situation, a short informal report etc.] Activities Listening Comprehension Remedial Teaching Speaking Skills: Presenting a News Item, Dialogue and Speeches Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. Reading Comprehension: Analysis of texts from the fields of Commerce and Management		Publication, Vipul Publication		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Suborna S. Banerjee **DEPARTMENT:** Commerce **CLASS**: FYBCOM **SEMESTER:** II

MONTH: Dec to April **ACADEMIC YEAR**: 2018-19 **Div** : A to H

LEARNING OBJECTIVE/S:

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to

Preparing resumes to attending interviews, convening meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

To make students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
1) Group Communication	1) Interviews: 2) meetings: 3) Committees & Conferences: 4) Public Relations:	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk – Board	

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2) Business correspondence	1) Trade Letters (ref.	15	From Internet	Chalk - Board	
3) Language and writing skills	1) Reports & Business Proposals 2) Summarization	8	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 38

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Bhakti Vilas Purandare_ DEPARTMENT: COMMERCE____
CLASS: ____FYBCOM SEMESTER: __I_____ _MONTH: __JULNOV__
ACADEMIC YEAR:_____2018-19_____
LEARNING OBJECTIVE/S:
The learners will be able to : Student will learn relevant financial accounting carrier skills, applying both quantitative & qualitative knowledge to their future carrier in business..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	ACCOUNTING STANDARD & INVENTORY VALUATION: INVENTORY VALUATION: Meaning, Periodic Inventory System, Perpetual Inventory System, Methods of Stock Valuation, FIFO and Weighted Average Method, Practical Problems based on inventory	15	Manan Prakashan	Chalk & Duster
2	FINAL ACCOUNT: Capital and Revenue Income and Expenditure-Meaning, Characteristics, Distinguish, Problems, Based on Capital and Revenue,	10	Manan Prakashan	Chalk & Duster
3	ACCOUNTING FOR HIRE PURCHASE: Meaning, Calculation of Interest, Journal Entries, Ledger Accounts, And Disclosure of Balance Sheet in the books of vendor and purchaser. Practical Questions on hire purchase	15	Manan Prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __40_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBCOM (E,F,G,H) SEM : I MONTH : July - Oct YEAR : 2018-19

LEARNINGOBJECTIVE/S

The learners will be able to know the various concepts about business, entrepreneurship. He will also be able to study the situation of business & entrepreneurship in India.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE I	**MODULE I : BUSINESS** 1.INTRODUCTION : Concept, functions, scope, significance 2.OBJECTIVES OF BUSINESS : Steps, classification, reconciliation of economic & social objectives 3.NEW TRENDS IN BUSINESS : Liberalisation, privatization, globalisation, strategy alternatives, restructuring strategies, turnaround strategies	15		Chalk & board
	MODULE IV : ENTREPRENEURSHIP 1.INTRODUCTION : Concept, importance, factors – growth of entrepreneurship, intrapreneurs 2.ENTREPRENEURSHIP : Types, competencies, training & development centres, incentives to entrepreneurs 3.WOMEN ENTREPRENEURS : Problems, promotion	08		Chalk & board

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EACHING PLAN (UNIT PLAN)

SEMESTER: 1st

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE

DEPA

RTMENT: B.COM

CLAS

S: FYB.COM – A, B, C, D MONTH: October- December ACADEMIC

YEAR: 2018-2019 SUBJECT: COMMERCE I

LEARNING OBJECTIVE/S:
The learners will be able to:

1. To introduce the learners with Inter-relationship between Business and Environment.
2. To acquaint students with a knowledge of international trading environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	• Introduction : Concept and Importance of business environment, Inter – relationship between Business and Environmental.	3	Business Environment – Cherunilam	1. Lecture and discussion. 2. Flow charts. 3. Online teaching learning tools (google meet, google form Google classroom, PPTs)

MODULE 2: BUSINESS ENVIRONMENT	• Constituents of Business Environment : Internal and external Environment, Educational Environment and it's impact. .	4	Essentials of Business Environment – Aswathappa	
	• International Environment – Current Trends in the World, International Trading Environment - WTO and Trading Blocs and their impact on Indian Business	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 × 4 div =14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM CLASS: FYB.COM – A, B, C, D SEMESTER: 1st MONTH: October-December ACADEMIC YEAR: 2018-2019 SUBJECT: COMMERCE I

LEARNING OBJECTIVE/S:
The learners will be able to:

1. To identify and demonstrate process for Business plan and it's statutory requirements.
2. To makes students able to prepare project report, and Feasibility Study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

MODULE 3: PROJECT PLANNING	• Introduction : Business Planning Process; Concept and Importance of Project Planning; Project Report; Feasibility Study Types and it's Importance.	4	Strategic management - Bhutani Business Organisation Management - Maheshwari	4. Lecture and discussion. 5. Flow charts. 6. Online teaching learning tools (google meet, google form Google classroom, PPTs)
	• Business Unit Promotion: Concept and Stages of Business Unit Promotion, Location -Factors determining location and Role of Government in Promotion.	4		
	• Statutory Requirements in Promoting Business Unit : Licensing and Registration Procedure, Filling returns and other documents, other important legal provision.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 × 4 div = 48

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Kavita Vilas Purandare DEPARTMENT : Commerce

CLASS : FYBCOM SEM : I MONTH : July - Oct YEAR : 2018-19

LEARNINGOBJECTIVE/S

The learners will be able to know the various concepts about business, entrepreneurship. He will also be able to study the situation of business & entrepreneurship in India.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD / ICT TOOLS USED
COMMERCE I	**MODULE I : BUSINESS** 1.INTRODUCTION : Concept, functions, scope, significance 2.OBJECTIVES OF BUSINESS : Steps, classification, reconciliation of economic & social objectives 3.NEW TRENDS IN BUSINESS : Liberalisation, privatization, globalisation, strategy alternatives, restructuring strategies, turnaround strategies	15		Chalk & board
	MODULE IV : ENTREPRENEURSHIP 1.INTRODUCTION : Concept, importance, factors – growth of entrepreneurship, intrapreneurs 2.ENTREPRENEURSHIP : Types, competencies, training & development centres, incentives to entrepreneurs 3.WOMEN ENTREPRENEURS : Problems, promotion	08		Chalk & board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Sachin A. Kadam** DEPARTMENT: **COMMERCE** CLASS: **FYBCOM**

SEMESTER: I MONTH: **Oct** ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I	**UNIT I: Environment and Ecosystem** Environment- Definition, Nature, Scope, Components, Typology, Ecology; Definition and Types; Importance of Environment studies and Emerging issues of Development with Special Reference to India.	12 lec	Manan prakashan and Sheth Publication	Chalk, Duster, Printed notes
UNIT II	**UNIT II : Renewable and Non-Renewable Resources** Natural Resources, Definition, Importance, Classification, Distribution Patterns, Conservation of water, Forest, Energy Crisis and its Impact: Management and Mitigation (Case study on Energy Crisis) Map Filling World Map (Practicals)	12 lec	Manan prakashan and Sheth Publication	Chalk, Duster, Printed notes

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _24_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti Pramod Patil DEPARTMENT: Commerce CLASS: F.Y.B.Com SEMESTER: I

MONTH: July to October ACADEMIC YEAR: 2018-2019 Subject: Environmental Studies

LEARNING OBJECTIVES:
The learners will be able to understand need to study this subject. It helps them to understand current environmental problems in the society and their responsibility towards the environment.

UNIT 1	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environment and Ecosystem	1. Environment: Meaning, definition, scope and its components	5	1.Environmental studies: P.G. Shinde 2.Fundamentals of Ecology: Odum E.P.	Teaching Method: 1. lecture method 2.discussion method Teaching aid: chalkboard
	2. concept of an ecosystem : definition, Characteristics, components and types, functioning and structure	4		
	3. Food Chain and Food Web, Ecological Pyramids	2		
	4. Man and environment relationship , Importance and scope of Environmental Studies	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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LEARNING OBJECTIVES:

The learners will be able to understand about different types resources and problems caused by improper utilization of natural resources. They will also understand the concept of sustainability and its need to handle current environmental problems.

UNIT 2	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Natural Resources and Sustainable Development	1. Meaning, definitions, classification and types of resources	2	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method Teaching aid: chalkboard
	2. Factors influencing resource; Resource conservation-meaning and methods	2		
	3.conventional and non-conventional resources	3		
	4. Problems associated with and management of water, forest and energy resources	5		
	5. resource utilization and sustainable development	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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LEARNING OBJECTIVES:
The learners will be able to understand about environmental and social problems caused by increasing population and its control measures. They will able to understand concepts of HDI &WHI

UNIT 3	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Populations and Emerging Issues of Development	1. Population explosion in the world and in India and arising concerns, Demographic Transition Theory	3	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method Teaching aid: chalkboard
	2. Pattern of population growth in the world and in India and associated problems	3		
	3. Measures taken to control population growth in India; Human population and environment	3		
	4. Environment and Human Health	1		
	5. Human Development Index, The World Happiness Index	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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LEARNING OBJECTIVES:
The learners will be able to understand about concepts of urbanization and associated problems. They will learn about smart and sustainable cities.

UNIT 4	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Urbanisation and Environment	1. Concept of Urbanisation	1	Environmental studies: P.G. Shinde	Teaching Method: 1. lecture method 2.discussion method Teaching aid: chalkboard
	2. Problems of migration and urban environment- changing landuse, crowding and stress on urban resources	5		
	3. Degradation of air and water, loss of soil cover, impact on biodiversity, Urban heat islands	3		
	4. Emerging Smart Cities and safe cities in India - Sustainable Cities	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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LEARNING OBJECTIVES:
The learners will be able to read various types of thematic maps and learn about map fillings which will give them an idea of spatial distribution of environmental problems

UNIT 5	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Reading of Thematic Maps and Map Filling	1. Reading of Thematic Maps Located bars, Circles, Pie charts, Isopleths, Choropleth and Flow map, Pictograms	4	Environmental studies: P.G. Shinde	Teaching Method: 1. Lecture method 2.Discussion method 3.Demonstration method Teaching aid: chalkboard, maps
	2. Map filling of World (Environmentally significant features) using point, line and polygon segment.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHAL S. JADHAV DEPARTMENT: COMMERCE CLASS: F.Y.B.COM SEMESTER: 1st MONTH: JULY - OCTOBER

ACADEMIC YEAR: 2018- 2019.

LEARNING OBJECTIVE/S:
The learners will be able to create an environmental awareness.To create an insight into various environmental issues at various levels and environmental movements towards making environmental Sustainable.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Environmental Studies	UNIT II NATURAL RESOURCES AND SUSTAINABLE DEVELOPMENT. 1) Meaning & Definition, Classification and types of Resources.2) Factors influencing resource utilisation, 3)Resource conservation - Meaning & Methods - Conventional & Non-Conventional energy resources. 4)Problems associated with management of water,forest and enegy resources.	13	1)Singh,Savindra,2011: Environmental Geography, Prayag Pustak Bhavan, Allahabad,India. 2)Odum E.P.(1971):Fundamentals of Ecology, W.B. Saunders, Philadelphia. 3)Bharucha E.,A Text Book of Environmental Studies, Universities Press, Hyderabad.	Black Board Method

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	5)Resources utilisation and sustainable development.			
	UNIT III POPULATION AND EMERGING ISSUES OF DEVELOPMENT 1) Population Explosion in World and India an arising concern. 2) Density Zones. 3) Demographic Transition Theory. 4)Pattern of Population growth in the World and in India and it's associated problems. 5)Measures taken to control population growth in India. 6)Human Population and Environment- Environment and Human Health. 7)Human Development Index 8)The World Happiness Index.	13	1)Gautam Alka,2009: Environmental Geography,Sharda Pustak Bhavan, Allahabad, India. 2)DetwylerT.R.,1971:Man'sImpactonEnvironment,McGraw-Hill,NewYork	Black Board Method

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

	MAP: WORLD MAP 1) Reading of Thematic Map - Located bars,Circle,Pie charts,Isopleth,Chloropleth,Flow & Pictogram. 2) Map Filling.	04	Sheth Publication & Vipul Prakashan.	Black Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __30_____

SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____VISHAL SAWANT_____DEPARTMENT: ____COMMERCE_____CLASS: ____FYBCOM

SEMESTER: __I_____MONTH: __JUL-NOV_____ ACADEMIC YEAR:_____2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : Student will learn relevant financial accounting carrier skills, applying both quantitative & qualitative knowledge to their future carrier in business..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	ACCOUNTING STANDARD & INVENTORY VALUATION: INVENTORY VALUATION: Meaning, Periodic InventorySystem, Perpetual Inventory System, Methods of Stock Valuation, FIFO and Weighted Average Method, Practical Problems based on inventory	15	Manan Prakashan	Chalk & Duster
2	FINAL ACCOUNT: Capital and Revenue Income and Expenditure- Meaning, Characteristics, Distinguish, Problems, Based on Capital and Revenue,	10	Manan Prakashan	Chalk & Duster
3	ACCOUNTING FOR HIRE PURCHASE: Meaning, Calculation of Interest, Journal Entries, Ledger Accounts, And Disclosure of Balance Sheet in the books of vendor and purchaser. Practical Questions on hire purchase	15	Manan Prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __40_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____VISHWANATH V. PAWAR_____ DEPARTMENT: ____COMMERCE_____

8CLASS: ____FYBCOM_____ SEMESTER: __I_____ MONTH: __JUL-NOV_____ ACADEMIC YEAR: _____2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : Student will learn relevant financial accounting carrier skills, applying both quantitative & qualitative knowledge to their future carrier in business..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	ACCOUNTING STANDARD & INVENTORY VALUATION: INVENTORY VALUATION: Meaning, Periodic Inventory System, Perpetual Inventory System, Methods of Stock Valuation, FIFO and Weighted Average Method, Practical Problems based on inventory	15	Manan Prakashan	Chalk & Duster
2	FINAL ACCOUNT: Capital and Revenue Income and Expenditure-Meaning, Characteristics, Distinguish, Problems, Based on Capital and Revenue,	10	Manan Prakashan	Chalk & Duster
3	ACCOUNTING FOR HIRE PURCHASE: Meaning, Calculation of Interest, Journal Entries, Ledger Accounts, And Disclosure of Balance Sheet in the books of vendor and purchaser. Practical Questions on hire purchase	15	Manan Prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce

CLASS: F Y B Com SEMESTER: I MONTH: July ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:
Demonstrate knowledge of preparation of financial statement and financial schedule in accordance with GAAP – Generally Accepted Accounting Principles, through analysis and synthesis of information as well. Student will learn relevant financial accounting carrier skills, applying both quantitative & qualitative knowledge to their future carrier in business.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy & Financial Management 1	**Accounting Standards Issued by ICAI and Inventory Valuation** **• Accounting Standards:** Concepts, Benefits, Procedures for Issue of Accounting Standards Various AS: **AS – 1: Disclosure of Accounting Policies** (a) Purpose (b) Areas of Policies (c) Disclosure of Policies (d)Disclosure of Change in Policies **AS – 2: Valuation of Inventories (Stock)** (a) Meaning, Definition (b) Applicability (c) Measurement of Inventory	03	*Financial Accounting by M. Mukherjee and M. Hanif, Tata McGraw Hill Education Pvt. Ltd., New Delhi* *Financial Accounting by Williams, Tata Mc. Grow Hill and Co. Ltd., Mumbai*	Chalk & talk, Black-Board Method, Group Discussion,

	(d) Disclosure in Final Account(e) Explanation with Illustrations **AS – 9: Revenue Recognition** (a) Meaning and Scope (b) Transactions Excluded (c) Sale of Goods (d) Rendering of Services (e) Effects of Uncertainties (f) Disclosure			
	Final Accounts • Adjustments and Closing Entries • Final Accounts of Manufacturing Concerns (Proprietary Firm)	12		
	Departmental Accounts Meaning Basis of Allocation of Expenses and Incomes / Receipts Inter Departmental Transfer: At Cost Price and Invoice Price Stock Reserve Departmental Trading and Profit and Loss Account and Balance Sheet	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

Babli Jha

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT: COMMERCE CLASS: FY.B.COM SEMESTER: 1

MONTH: JULY-AUG ACADEMIC YEAR: 2018-2019 SUBJECT: FOUNDATION COURSE

LEARNING OBJECTIVES:

The learners will be able to : Socially aware of the societal problems and their personality.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 CONCEPT OF DISPARITY-1	Understand the concept of disparity as arising out of stratification And inequality. Explore the disparities arising out of gender with special reference to violence against Women, Foeticide and portrayal of women in media. Appreciate the inequalities faced by people with disabilities and understand the issues of people with physical and mental disabilities.	10	Foundation Course by Michael Vaz	Chalk Board Flow Chart

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Sandra Shamir Almeida DEPARTMENT : Commerce

CLASS : FYBCOM (M,N,O,P) SEM : I MONTH : AUG-Dec YEAR : 2018-19

LEARNING OBJECTIVE/S:

- The learners will be able to know the various concepts about Accounting Standard 1, 2 & 9, especially about Inventory Valuation, Capital and Revenue: Receipts and Expenditure and about Accounting for Hire Purchase.
- He will also be able to practically apply this knowledge in business & entrepreneurship in India.

PAPER/ UNIT/ TITLE	SUB TOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING ME ICT TOOLS US
ACCOUNTANCY AND FINANCIAL MANAGEMENT-I	**Module I : ACCOUNTING STANARDS ISSUED BY ICAI AND INVENTORY VALUATION** ➢ **Inventory Valuation** • Meaning of Inventories • Cost of Inventory Valuation • Inventory Systems: Periodic Inventory System and Perpetual Inventory System • Valuation : Meaning & Importance • Methods of Stock Valuation as per AS-2 : FIFO AND Weighted Average Method • Computation of Valuation of Inventory as on balance sheet date: If inventory is taken on a date after the balance sheet or before the balance sheet.	12	**Financial Accounting : A Managerial Perspective by Narayanswamy**	CHALK AND DU

	Module II : FINAL ACCOUNTS ➢ Capital and Revenue : Expenditure and Receipts • Expenditure : Capital and Revenue • Receipts: Capital, Revenue • Adjustments and Closing Entries	08	**Financial Accounting for Management by N Ramachandran**	CHALK AND DU
	Module IV : ACCOUNTING FOR HIRE PURCHASE • Meaning • Calculation of Interest • Accounting for Hire Purchase transactions by asset purchase method based on full cash price • Journal entries, ledger accounts and disclosure in balance sheet for hirer and vendor (excluding default, repossession and calculation of cash price)	**15**	**Financial Accounting for Management by Ambrish Gupta**	CHALK AND DU

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____ANKITA ARUN RAUT_____ DEPARTMENT: ____COMMERCE_____

8CLASS: ____FYBCOM_____ SEMESTER: __I_____ MONTH: __JUL-NOV_____ ACADEMIC YEAR: _____2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : Calculate inventory, will able to bifurcate capital and revenue income and expenditure. And will able to pass journal entries as well as prepare ledgers for hire purchase in both the books.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	ACCOUNTING STANDARD & INVENTORY VALUATION: INVENTORY VALUATION: Meaning, Periodic Inventory System, Perpetual Inventory System, Methods of Stock Valuation, FIFO and Weighted Average Method, Practical Problems based on inventory	15	Manan Prakashan	Chalk & Duster
2	FINAL ACCOUNT: Capital and Revenue Income and Expenditure- Meaning, Characteristics, Distinguish, Problems, Based on Capital and Revenue,	10	Manan Prakashan	Chalk & Duster
3	ACCOUNTING FOR HIRE PURCHASE: Meaning, Calculation of Interest, Journal Entries, Ledger Accounts, And Disclosure of Balance Sheet in the books of vendor and purchaser. Practical Questions on hire purchase	15	Manan Prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA **DEPARTMENT**: COMMERCE **CLASS:** FYBCOM **SEMESTER:** I **MONTH:** JULY

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to know about the Indian society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE UNIT 1 Overview of Indian Society	Understand the multi-cultural diversity of Indian society trough its Demographic composition: Population distribution according to religion, caste and gender, appreciate the concept of Linguistic Diversity in relation to the Indian situation	05	Text book	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: FYBCOM SEMESTER: I MONTH: AUGUST, SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to get knowledge about Indian Constitution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 The Indian constitution	Philosophy of the constitution as set out in the preamble, The structure of the constitution- the preamble, Main body and schedules, Fundamental duties of the Indian citizen, Tolerance, Peace and Communal harmony as crucial values in strengthening the social fabric of Indian society, Basic features of the constitution.	10	Text book	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: FYBCOM SEMESTER: I MONTH: OCTOBER

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to understand the political system in India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 Significance aspect of Political Processes	The party system in Indian politics, Local self-government in Urban and Rural areas, 73rd and 74th Amendments and their implications for inclusive politics, Role and Significance of Women in Politics.	10	Text Book	Chalk And board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: RASHMI SAWANT DEPARTMENT: COMMERCE

CLASS: FY.B.COM. SEMESTER: I

MONTH: JULY-AUG ACADEMIC YEAR: 2018-2019

SUBJECT: FOUNDATION COURSE - I

LEARNING OBJECTIVES:

The learners will be able to : Socially aware of the societal problems and their personality.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 CONCEPT OF DISPARITY-1	Understand the concept of disparity as arising out of stratification And inequality. Explore the disparities arising out of gender with special reference to violence against Women, Foeticide and portrayal of women in media. Appreciate the inequalities faced by people with disabilities and understand the issues of people with physical and mental disabilities.	10	Foundation Course by Michael Vaz	Chalk Board Flow Chart

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: RASHMI SAWANT DEPARTMENT: COMMERCE

CLASS: FY.B.COM SEMESTER: I

MONTH: SEPT- OCT ACADEMIC YEAR: 2018-2019

SUBJECT: FOUNDATION COURSE - I

LEARNING OBJECTIVES:

The learners will be able to : Socially aware of the societal problems and their personality.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 CONCEPT OF DISPARITY-2	Examine inequalities manifested due to the caste system and inter-group conflicts arising thereof. Understand inter-group conflicts arising out of communalism . Examine the causes and effects of conflicts arising out of regionalism and linguistic differences.	10	Foundation Course by Michael Vaz	Chalk Board Flow Chart

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHRUTI BASARE DEPARTMENT: COMMERCE CLASS: FY.B.COM SEMESTER: 1

MONTH: SEPT- OCT ACADEMIC YEAR: 2018-2019 SUBJECT: FOUNDATION COURSE

LEARNING OBJECTIVES:

The learners will be able to : Socially aware of the societal problems and their personality.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 CONCEPT OF DISPARITY-2	Examine inequalities manifested due to the caste system and inter-group conflicts arising thereof. Understand inter-group conflicts arising out of communalism . Examine the causes and effects of conflicts arising out of regionalism and linguistic differences.	10	Foundation Course by Michael Vaz	Chalk Board Flow Chart

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: Commerce

CLASS: FYB.com SEMESTER: I MONTH: June-Oct ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

Build a familiarity with the basic tools of consumer and producer theory in an economic context

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –I Unit 3 Supply and production decisions Unit 4 Cost of production	Production Function	10	Salvatore, D.:Managerial Economics in a global economy	Chalk and Talk
	Cost concepts	5	Mehta, P.L.: ManagerialEconomics – Analysis,Problem and Cases	Chalk and talk
	Extension of cost analysis	5		Chalk and talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
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TEACHING PLAN (UNIT I PLAN)

NAME OF THE STAFF: Khan Parveen saba DEPARTMENT: commerce CLASS: f y BCom SEMESTER: 1

MONTH: JULY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : (1) understand the concept of shares ,face value, market value ,dividend, equity shares

(2) learn the different type of shares

(3) learn what is Mutual Fund with the basis of Net Asset ValueValu

(4) understand how to use systematic investment plan

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematics and statistical technique-1 1)Shares 2) mutual fund Unit I	(1) concept of shares, face value ,market value ,dividend, equity shares	03	S.L agarwal for basic statistics V.k. kapoor for business mathematics	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) Preference shares, bonus shares with simple example	03		
	(3) mutual fund simple problem on calculation of Net income after considering entry load	03		
	(4) dividend change in net asset value and exit load	03		
	(5) systematic investment plan	03		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15 lectures

TEACHING PLAN (UNIT II PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYB com SEMESTER: I

MONTH: August ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: (1) understand permutation and combination

(2) concept of linear programming problem

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and statistical technique 1 1) permutation and combination 2)LPP Unit II	(1) factorial notation, fundamental principle of Counting permutation as arrangement with examples	03	S.L agarwal for basic statistics V.k. kapoor for business mathematics	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) combination with example	03		
	(3) linear programming problem Basic concept with examples	03		
	(4) formulation method with multiple sums	03		
	(5) graphically method with multiple of sums	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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TEACHING PLAN (UNIT III PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYB com SEMESTER: I

MONTH: August- September ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) concept of measure of Central tendency with examples

(2) understand the concept of measure of dispersion and why we use

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and statistical technique 1 1)Measure of Central tendency 2) measure of dispersion Unit III	(1) definition of average and type of averages	01	S.L agarwal for basic statistics V.k. kapoor for business mathematics	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) mean median mode with sums	05		
	(3)Quartiles, Percentile, Deciles, histogram, ogive, andcombined mean	03		
	(4) concept of measure of dispersion and various measures	03		

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	(5) Quartile deviation,Mean deviation, Standard deviation, Variance and Combined variance	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

TEACHING PLAN (UNIT IV PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYB com SEMESTER: I

MONTH: September- October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : (1) learn the concept of random experiment

(2) understand the possibilities of all outcomes

(3) concept of mutually exclusive and exhaustive

(4) learn what is the probability distribution of discrete random variable

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Mathematical and statistical technique 1 1) Probability theorytheor 2) Random variable Unit IV	(1) definition of probability ,sample space, trials ,discrete sample space ,algebra of events	03	S.L agarwal for basic statistics V.k. kapoor for business mathematics	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) mutually exclusive and exhaustive which sums	02		
	(3) additional theorem and multiplication Independence events	04		
	(4) probability distribution of a discrete random variable	02		
	(5) expectation and variance of random variable simple example on probability distribution	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

TEACHING PLAN (UNIT V PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYB com SEMESTER: I

MONTH: October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

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The learners will be able to : (1) learn decision making with different criteria

(2) the concept of expected monetary value and expected opportunity loss

(3) learn how to make decision tree with the basis of data

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mathematical and statistical technique 1 Decision theory Unit V	(1) definition of decision theory	02	S.L agarwal for basic statistics V.k. kapoor for business mathematics	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) to find mixiMax, Maximin, Laplace, regret	04		
	(3) expected monetary value and expected opportunity loss	03		
	(4) decision tree	03		
	(5) payoff table with sums	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15 lectures

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Madhu Sharma_ DEPARTMENT: Commerce CLASS: F.Y.B.Com SEMESTER: I MONTH: July - November ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to :

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit -1 : shares & mutual fund	• No. of shares purchased & sale. • Amount invest & received. • Dividend received • Bonus shares, gain or loss	15 lectures	V.K.Kapoor Businesses mathematics	Black board problem solving method, Strategic thanking using assignments, remedial lectures
	• No. of units purchased & sake. • Amount invest & received • Gain or loss, stocks, SIP			

Unit -2 : linear programming problems & Permutation & Combination	• Sketching of graphs of (i) linear equation Ax + By + C = 0 (ii) linear inequalities. Mathematical Formulation of Linear Programming Problems upto 3 variables. Solution of Linear Programming Problems using graphical method up to two variables. • Permutation and Combination: Factorial Notation, Fundamental principle of counting, • Permutation as arrangement, Simple examples, combination as selection, Simple examples, Relation between r n C and r n P Examples on commercial application of permutation and combination.	15 lectures	V.K.Kapoor Businesses mathematics	,,
Unit -3 : measure of central tendency & dispersion	• Measures of Central Tendencies: Definition of Average, Types of Averages: Arithmetic Mean, Median, and Mode for grouped as well as ungrouped data. Quartiles, Deciles and Percentiles. Using Ogive locate median and Quartiles. Using Histogram locate mode. Combined and Weighted mean. • Measures of Dispersions: Concept and idea of dispersion. Various measures Range, Quartile Deviation, Mean Deviation, Standard Deviation, Variance, Combined Variance.	15 lectures	S.L.Agarwal on basic statistics	,,
Unit -4 : Elementary Probability Theory	• Probability Theory: Concept of random experiment/trial and possible outcomes; Sample Space and Discrete Sample Space; Events their types, Algebra of Events, Mutually Exclusive and Exhaustive Events, Complimentary events. Classical definition of Probability, Addition theorem (without proof), conditional probability. Independence of Events: $P(A \cap B) = P(A) P(B)$. Simple examples.	15 lectures	S.L.Agarwal on basic statistics	,,

Unit – 5 : Decision Theory	b. Random Variable: Probability distribution of a discrete random variable; Expectation and Variance of random variable, simple examples on probability distributions.			
	• Decision making situation, Decision maker, Courses of Action, States of Nature, Pay-off and Pay-off matrix • Decision making under uncertainty, Maximin, Maximax, Minimax regret and Laplace criteria; simple examples to find optimum decision. • Formulation of Payoff Matrix. • Decision making under Risk, Expected Monetary Value (EMV); Decision Tree; • Simple Examples based on EMV. Expected Opportunity Loss (EOL), simple examples based on EOL.	15 lectures	S.L.Agarwal on basic statistics	,,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Sachin A. Kadam** DEPARTMENT: **COMMERCE** CLASS: **FYBCOM**

SEMESTER: II MONTH: **March** ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I	**UNIT I: Solid Waste Management for sustainable Society** Classification of solid wastes- Types and sources of solid waste Effects of solid Waste Pollution – Health Hazards, Environmental impacts; Solid waste Mangement- Solid waste management in Mumbai – Schemes and Initatives run by MCGM – Role of citizens in waste management in Urban and Rural areas.	13 lec	Manan prakashan and Sheth Publication	Chalk, Duster, Printed notes
UNIT II	**UNIT II : Agriculture and Industrial Development** Environmental problems Associated with Agriculture : Loss of Production , Land Degradation , Desertification – Uneven Food Production – Hunger, Malnutrition and Food security- Sustainable Agriculture practices. Environmental Problems Associated with Industries –Pollution – Global warming, Ozone Layer Depletion , Acid rain –	13 lec	Manan prakashan and Sheth Publication	Chalk, Duster, Printed notes

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Sustainable Industril – Green Business and Green Consumerism,Corporate social Responsibility towards Environment. Map filing - Konkan			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _26_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Sachin A. Kadam** DEPARTMENT: **COMMERCE** CLASS: **FYBCOM**

SEMESTER: II MONTH: **March** ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I	**UNIT I: Solid Waste Management for sustainable Society** Classification of solid wastes- Types and sources of solid waste Effects of solid Waste Pollution – Health Hazards, Environmental impacts; Solid waste Mangement- Solid waste management in Mumbai – Schemes and Initatives run by MCGM – Role of citizens in waste management in Urban and Rural areas.	13 lec	Manan prakashan and Sheth Publication	Chalk, Duster, Printed notes
UNIT II	**UNIT II : Agriculture and Industrial Development** Environmental problems Associated with Agriculture : Loss of Production , Land Degradation , Desertification – Uneven Food Production – Hunger, Malnutrition and Food security- Sustainable Agriculture practices. Environmental Problems Associated with Industries –Pollution – Global warming, Ozone Layer Depletion , Acid rain –	13 lec	Manan prakashan and Sheth Publication	Chalk, Duster, Printed notes

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Sustainable Industril – Green Business and Green Consumerism,Corporate social Responsibility towards Environment. Map filing - Konkan			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _26_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Sachin A. Kadam** DEPARTMENT: **COMMERCE** CLASS: **FYBCOM**

SEMESTER: II MONTH: **March** ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I	**UNIT I: Solid Waste Management for sustainable Society** Classification of solid wastes- Types and sources of solid waste Effects of solid Waste Pollution – Health Hazards, Environmental impacts; Solid waste Mangement- Solid waste management in Mumbai – Schemes and Initatives run by MCGM – Role of citizens in waste management in Urban and Rural areas.	13 lec	Manan prakashan and Sheth Publication	Chalk, Duster, Printed notes
UNIT II	**UNIT II : Agriculture and Industrial Development** Environmental problems Associated with Agriculture : Loss of Production , Land Degradation , Desertification – Uneven Food Production – Hunger, Malnutrition and Food security- Sustainable Agriculture practices. Environmental Problems Associated with Industries –Pollution – Global warming, Ozone Layer Depletion , Acid rain –	13 lec	Manan prakashan and Sheth Publication	Chalk, Duster, Printed notes

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Sustainable Industril – Green Business and Green Consumerism,Corporate social Responsibility towards Environment. Map filing - Konkan			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _26_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Sachin A. Kadam** DEPARTMENT: **COMMERCE** CLASS: **FYBCOM**

SEMESTER: II MONTH: **March** ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I	**UNIT I: Solid Waste Management for sustainable Society** Classification of solid wastes- Types and sources of solid waste Effects of solid Waste Pollution – Health Hazards, Environmental impacts; Solid waste Mangement- Solid waste management in Mumbai – Schemes and Initatives run by MCGM – Role of citizens in waste management in Urban and Rural areas.	13 lec	Manan prakashan and Sheth Publication	Chalk, Duster, Printed notes
UNIT II	**UNIT II : Agriculture and Industrial Development** Environmental problems Associated with Agriculture : Loss of Production , Land Degradation , Desertification – Uneven Food Production – Hunger, Malnutrition and Food security- Sustainable Agriculture practices. Environmental Problems Associated with Industries –Pollution – Global warming, Ozone Layer Depletion , Acid rain –	13 lec	Manan prakashan and Sheth Publication	Chalk, Duster, Printed notes

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Sustainable Industril – Green Business and Green Consumerism,Corporate social Responsibility towards Environment. Map filing - Konkan			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _26_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Suborna S. Banerjee **DEPARTMENT:** Commerce **CLASS**: FYBCOM **SEMESTER:** II

MONTH: Dec to April **ACADEMIC YEAR**: 2018-19 **Div** : A to H

LEARNING OBJECTIVE/S:

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to

Preparing resumes to attending interviews, convening meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

To make students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
1) Group Communication	1) Interviews: 2) meetings: 3) Committees & Conferences: 4) Public Relations:	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk – Board	

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2) Business correspondence	1) Trade Letters (ref.	15	From Internet	Chalk - Board	
3) Language and writing skills	1) Reports & Business Proposals 2) Summarization	8	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 38

SIGNATURE OF SUBORNA BANARJEE **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Suborna S. Banerjee DEPARTMENT: Commerce CLASS: FYBCOM (Div A to H) SEMESTER: I MONTH: July to Dec.

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to

Preparing resumes to attending interviews, convenig meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

Tomake students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
1) Theory of Communication	1) Concept of Communication- Models of Communication - Linear/ Interactive/ Transactional / Shanon and Weavor (to be only discussed in class) Meaning, Definition, Process Need, Feedback Emergence of communication as a key concept in the Corporate and Global World Impact of technological Enabled communication Types: Internet, Blogs, E- mail, Moodle, Social	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	

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	media (Facebook, Twitter and WhatsApp advantages and disadvantages) Communication at Workplace- 2) Channels and Objectives of Communication: Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine 3) Methods and Modes of Communication: Methods: Verbal and Nonverbal (including Visual), Business Etiquette Introduction to Business Ethics: Ethics at workplace, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility 1) Problems in Communication /Barriers to Communication: Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers 2) Listening: Importance of Listening Skills, obstacles to listening, Cultivating good Listening Skills				

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3) Business Correspondence	1)Theory of Business Letter Writing: Parts, Structure, Layouts—Full Block, Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, letter of recommendation, Job Application Letter and Resume, Letter of Appointment (to be discussed in class) Letter of Resignation, Letter of acceptance of job offer, letter of Appreciation.	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	
4) Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities Listening Comprehension Remedial Teaching Speaking Skills: Presenting a News Item, Dialogue and Speeches Paragraph Writing: Preparation of the first draft,	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk	

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	Revision and Self – Editing, Rules of spelling. Reading Comprehension: Analysis of texts from the fields of Commerce and Management				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Bristi Gourgopal Biswas DEPARTMENT: Commerce CLASS: F.Y.BCOM SEMESTER: II (Subject : Business Economics II)

MONTH: November-February ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To understand the application of microeconomics at corporate level .

The learners will be able to : observe microeconomics in the real world and to understand and take business decisions under different type of competitive market.

Module II **Pricing and output decisions under imperfect competition**	Features of monopolistic competition, short run equilibrium of the firm, long run equilibrium of the firm ,selling cost and its effects, role of advertisement. Meaning of oligopoly ,characteristics of oligopoly ,collusive and non collusive oligopoly ,price rigidity ,collusive oligopoly, price leadership.	15		Chalk and board
Module III **Pricing practices**	Meaning of pricing practices, degrees of price discrimination, conditions for price discrimination, conditions for profitable price discrimination, equilibrium of price discriminating monopolist ,dumping.			

	Introduction to pricing practices part II, marginal cost pricing ,cost plus pricing ,multi product pricing Transfer pricing.	10		Chalk and board
Module IV **Evaluating capital project**	Introduction to capital budgeting ,meaning of capital budgeting ,importance of capital budgeting, steps in capital budgeting ,techniques of investment appraisal, comparison of net present value and internal rate of return methods.	10		Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____CHETAN PRAKASH VARMA_____ DEPARTMENT: ___COMMERCE_____CLASS: ____FYBCOM_____

SEMESTER: _____II_____ MONTH: ___DEC-MARCH _____ ACADEMIC YEAR: ____2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to :

To make student understand the concepts of business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics-II	Market structure: Perfect competition and Monopoly Perfect competition and Monopoly models as two extreme cases - profit maximisation and the competitive firm's supply curve - Short run and long run equilibrium of a firm and of industry	5	*Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases (S. Chand & Sons, N. Delhi, 2000)* • *Salvatore, D.: Managerial Economics in a global economy (Thomson South Western Singapore, 2001)*	CHALK AND TALK / EXPLOITATIVE/TWO WAY COMMUNICATION Story-telling method Textbook method Lecture Method

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	monopoly - Sources of monopoly power – short run and long- run equilibrium of a firm under Monopoly	3	• *Frank Robert.H ,Bernanke. Ben S., Principles of Economics (Tata McGraw Hill (ed.3)*	Demonstration Method Tutorial Method Questions-Answer method Discussion method Heuristic method Discovery method
	Monopolistic competition: competitive and monopolistic elements of monopolistic competition - equilibrium of a firm under monopolistic competition, monopolistic competition verses perfect competition- excess capacity and inefficiency - debate over role of advertising (topics to be taught using case studies from real life examples)	4	• *Gregory Mankiw., Principles of Economics, Thomson South western (2002 reprint)*	
	Oligopolistic markets: key attributes of oligopoly - Collusive and non collusive oligopoly market - Price rigidity - Cartels and price leadership models (with practical examples)	5	• *Samuelson &Nordhas.: Economics (Tata McGraw Hills, New Delhi, 2002*	

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____17_____

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. AVINASH PAWAR DEPARTMENT: COMMERCE CLASS: FY.B.COM – (A,B,C,D) Div. SEMESTER: II

MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

To help students understand the various aspects of Group Communication

The learners will be able to: It introduces students to the process of making effective presentations and moves on to the various group Communications, where individual and team work is equally important.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	1) Interviews: Group Discussion Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit 2) Meetings: Need and Importance of Meetings, Conduct of Meeting and Group Dynamics Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions 3) Conference: Meaning and Importance of Conference Organizing a Conference Modern Methods: Video and Tele – Conferencing 4) Public Relations: Meaning, Functions of PR Department, External and Internal Measures of PR	15	Manan Publication Sheth Publication Vipul Publication	Chalk - Board

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4) Language and Writing Skills	Reports: Parts, Types, Feasibility Reports, Investigative Reports Summarization: Identification of main and supporting/sub points Presenting these in a cohesive manner	15	Manan Publication Sheth Publication Vipul Publication	Chalk - Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Bhakti Vilas Purandare_ DEPARTMENT: _COMMERCE_____
CLASS:___FYBCOM___SEMESTER: _II__MONTH:__DEC, to MARCH___
ACADEMIC YEAR:___2018-19
LEARNING OBJECTIVE/S:
The learners will be able to:
Comprehension based Learning to Esemplastic into Objective or Subjective type Exams. To Understand the Accounting for Incomplete Records and it's Importance. To Learn Theoretical as well as Practical Concept about Fire Insurance Claim & Incomplete Records.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE I& IV	Chapter 1: Accounting for Incomplete Records • Introduction, Meaning, Types& Features • Introduction Of Conversion Method • Double Vs. Single Entry System • Bills Receivable & Bills Payable Account • Total Debtors & Total Creditors Account • Cash /Bank And Expenses Account	15	MANAN PRAKASHAN	CHALK & BLACKBOARD
	Chapter 4: Fire Insurance Claim • Introduction & Meaning • Computing Loss with Stock on Date of Fire,	15	MANAN PRAKASHAN	CHALK & BLACKBOARD

	Salvage & Actual Loss • Computing Claim With & Without Average Clause • Memorandum Trading Account • Total Debtors & Total Creditors Account to Ascertain Credit/Cash Sale and Purchase • Problems Solved on the same			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___30_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Kavita Vilas Purandare DEPARTMENT : Commerce

CLASS : FYBCOM SEM : II MONTH : Nov - March YEAR : 2018-19

LEARNINGOBJECTIVE/S : learner will be able to learn scenario of service sector in India as growth of service sector is important for the development of our country.

PAPER/ UNIT/ TITLE	SUBTITLES	NO. OF LECURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE II	**MODULE II : RETAILING** 1.INTRODUCTION : Concept of organised & unorganised retailing, trends in retailing, growth of organised retailing, survival strategies for unorganised retailing 2.Retail format : Store format, non-store format, store planning 3.Retail scenario : Retail scenario in India, retail scenario in global context, prospects & challenges in India, mall management, retail franchising, FDI	10		Chalk & board
	MODULE III : RECENT TRENDS IN SERVICE SECTOR 1.ITES SECTOR :BPO, KPO, LPO,ERP 2.BANKING & INSURANCE SECTOR : ATM, DEBIT CARD, CREDIT CARD, Internet banking, opening of insurance sector for private players, FDI & its	10		Chalk & board

	impact on banking & insurance sector in India 3.LOGISTIS :			

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE _ DEPARTMENT: B.COM CLASS: FYB.COM - A,B,C,D SEMESTER: _2nd _ MONTH: November -February ACADEMIC YEAR: 2018 -2019 SUBJECT : COMMERCE II

LEARNING OBJECTIVE/S:

The learners will be able to :

1. To introduce learners with different concepts of services.
2. To make student able to identify elements of marketing mix, Service Strategies and it's implementation in service sector.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1: CONCEPT OF SERVICES	• Introduction : Meaning, Characteristic, Scope and Classification of Services – Importance of Service sector in the Indian Context.	4	Service Marketing – Temani Management of Service sector - Bhatia	1.Lecture and discussion . 2. Flow charts.
	• Marketing Mix for Services : Consumer Expectations, Services Mix, Product, Place, Price, Promotion, process of services delivery, Physical evidence and people.	4		
	• Service Strategies : Market research and services development cycle, Managing demand and Capacity, Opportunities and challenges in service sector.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 ×4 div = 48

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE _ DEPARTMENT: B.COM CLASS: FYB.COM - A,B,C,D SEMESTER: _2nd MONTH: November – February ACADEMIC YEAR: 2018 -2019 SUBJECT : COMMERCE II

LEARNING OBJECTIVE/S:

The learners will be able to :

1. To introduce learners about scope and Importance of E- Commerce.
2. To acquaint students with the knowledge of challenges and opportunities of E- Commerce in India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 4 : E-COMMERCE	• Introduction :Meaning, Features, Functions and Scope of E- Commerce – Importance and Limitations of E-Commerce.	4	Introduction to E- Commerce – Dhawn	1.Lecture and discussion . 2. Flow charts.
	• Types of E- Commerce :Basic ideas and Major activities of B2C, B2B, C2C.	3		
	• Present Status of E- Commerce in India : Transition to E-Commerce in India, E-Transition Challenges for Indian Corporates, On-line Marketing Research.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 ×4 div = 44

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Archana D Joshi DEPARTMENT: COMMERCE CLASS: FY.B.COM – (E, F, G, H) Div. SEMESTER: II

MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

To help students understand the various aspects of Group Communication

The learners will be able to: It introduces students to the process of making effective presentations and moves on to the various group Communications, where individual and team work is equally important.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	1) Interviews: Group Discussion Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit 2) Meetings: Need and Importance of Meetings, Conduct of Meeting and Group Dynamics Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions	10	Manan Publication Sheth Publication Vipul Publication	Chalk - Board

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TRADE LETTERS	Letters of Inquiry,Letters of complaints,claims Adjustments sales letters,Promotional Leaflets and Fliers Consumer Grievance Letters Letters under Right to Information Act .	10	Manan Publication Sheth Publication Vipul Publication	Chalk - Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHAL S. JADHAV DEPARTMENT: COMMERCE CLASS: F.Y.B.COM SEMESTER: 2nd MONTH: NOVEMBER - MARCH

ACADEMIC YEAR: 2018 - 2019.

LEARNING OBJECTIVE/S:
The learners will be able to create an environmental awareness.Make aware students about various environmental factors and its relation to the field of Commerce.. To highlight functional and spatial linksbetween environment, economy and society.To create an insight into various environmental issues at various levels andenvironmental movements towards makin environmental sustainable.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENVIRONMENTAL STUDIES	Unit – II: AGRICULTURE & INDUSTRIAL DEVELOPMENT. 1) Environmental Problems Associated with Agriculture: Loss of Productivity, Land Degradation, desertification. 2) Uneven Food Production – Hunger, Malnutrition and Food Security – Sustainable Agricultural practices. 3) Environmental Problems Associated with Industries – Pollution -Global warming, Ozone Layer Depletion , Acid rain, - Sustainable Industrial practices.	13	Santra S. C., 2004, 'Environmental Science', New Central Book agency Pvt Ltd, Kolkata.	Black Board Method

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	4) Green Business and Green Consumerism, Corporate Social Responsibility.			
	Unit – III: TOURISM AND ENVIRONMENT 1)Tourism: Meaning, Scope and importance, Typology of tourism- classification; Tourism potentials in India and challenges before India; New Tourism Policy of India 2)Consequences of tourism : Positive and Negative Impacts on Economy, Culture and environment. 3) Ecotourism.	13	Saxena H M., 2000, 'Environmental Management',Rawat Publication, New Delhi. Environmental Management by N.K. Uberoi	Black Board Method
	Map filling konkan Map	04	Sheth Publication & Vipul Prakashan.	BLACK Board Method.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____VISHWANATH V. PAWAR_____DEPARTMENT: ____COMMERCE_____

CLASS: ____FYBCOM_____ SEMESTER: __II_____ MONTH: __DEC-MAR_____ ACADEMIC YEAR: _____2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	CONSIGNMENT ACCOUNTING: Introduction, Valuation of stock, Calculation of commission and Dell Creder Commision, Journal entries, ledgers, and Practical questions based on consignment.	15	Manan Prakashan	Chalk & Duster
2	BRANCH ACCOUNT: Meaning, Classification of branches, Dependent Branch, Independent Branch, Methods of branch accounting (Debtors method and stock and debtors methods) Practical questions based on consignment.	15	Manan Prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce

CLASS: F Y B Com SEMESTER: II MONTH: November ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the meaning of Branch along with its types. The learners will able to calculate profit & loss of each branch separately. They are able to ascertain the financial position of each branch separately on a particular date. The learner will able to understand the special features of consignment business, meaning of the term consigner & consignee and difference between two transaction – sales & consignment. Practice the accounting treatments for consignment transactions and events in the books of consigner & consignee.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy & Financial Management II	**Consignment Accounts** Accounting for Consignment Transactions Valuation of Stock (at Cost Price & at Invoice Price) Invoicing of Goods at Higher Price	15	*Advanced Accountancy by R.L Gupta and M. Radhaswamy, S. Chand and Company (P) Ltd., New Delhi* Introduction to Accountancy by T.S. Grewal, S. Chand and Company (P) Ltd., New Delhi	Chalk & talk, Black-Board Method, Group Discussion,
	Branch Accounts Meaning / Classification of Branches Accounting for Dependent Branch (at Cost Price & at Invoice Price) Debtors Method Stock and Debtors Method	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

Babli Jha

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT: COMMERCE CLASS: FY.B.COM SEMESTER: 2

MONTH: FEB-MARCH ACADEMIC YEAR: 2018-2019 SUBJECT: FOUNDATION COURSE

LEARNING OBJECTIVES:

The learners will be able to : Socially aware of the societal problems and their personality.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 MANAGING STRESS AND CONFLICTS IN CONTEMPORARY SOCIETY	Types of conflicts and use of coping mechanisms for managing individual stress Maslow's theory of self-actualisation. Different methods of responding to conflicts in society. Conflict resolution and efforts towards building peace and harmony in society.	08	Foundation Course by Michael Vaz Foundation course by Rashmi Karanath	Chalk board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT: COMMERCE CLASS: FY.B.COM SEMESTER: 2

MONTH: DEC-JAN ACADEMIC YEAR: 2018-2019 SUBJECT: FOUNDATION COURSE

LEARNING OBJECTIVES:

The learners will be able to : Socially aware of the societal problems and their personality.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 UNDERSTANDING STRESS AND CONFLICTS	Causes of stress and conflicts in individuals and society. Agents of Socialization and the role played by them in developing the individual. Significance of values, ethics and prejudices. Stereotyping and prejudice as significant factors in causing conflicts in society. Aggression and violence as the public expression of conflict. .	10	Foundation Course by Michael Vaz Foundation course by Rashmi Karanath	Chalk board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Sandra Shamir Almeida DEPARTMENT : Commerce

CLASS : FYBCOM (M,N,O,P) SEM : II MONTH : Aug - Oct YEAR : 2018-19

LEARNING OBJECTIVE/S:

- The learners will be able to know the various concepts about Consignment Accounts and Branch Accounts.
- He will also be able to practically apply this knowledge in Opening Branch account and sale on Consignment in India.

PAPER/ UNIT/ TITLE	SUB TOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING ME ICT TOOLS US
ACCOUNTANCY AND FINANCIAL MANAGEMENT-I	**Module II : Consignment Accounts** • Accounting for consignment Transactions • Valuation of Stock • Invoicing of goods at higher price • (Excluding over riding commission, normal/abnormal losses)	15	**Financial Accounting : A Managerial Perspective by Narayanswamy**	Duster and Cha
	Module III : Branch ACCOUNTS • Meaning / Classification of Branch • Accounting for dependent Branch not maintaining full books by (a) Debtors method (b) Stock and Debtors methods	15	**Financial Accounting for Management by N Ramachandran**	Duster and Cha

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ARUN RAUT DEPARTMENT: COMMERCE

CLASS: FYBCOM SEMESTER: II MONTH: DEC-MAR ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Prepare consignment account in the books of consigner and consignee, will able to prepare branch account by both the methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	CONSIGNMENT ACCOUNTING: Introduction, Valuation of stock, Calculation of commission and Dell Creder Commision, Journal entries, ledgers, and Practical questions based on consignment.	15	Manan Prakashan	Chalk & Duster
2	BRANCH ACCOUNT: Meaning, Classification of branches, Dependent Branch, Independent Branch, Methods of branch accounting (Debtors method and stock and debtors methods) Practical questions based on consignment.	15	Manan Prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____MR. VISHAL SAWANT_____DEPARTMENT: _____COMMERCE_____

CLASS:___FYBCOM)_____SEMESTER: _II_____MONTH:__DEC, JAN, FEB & MARCH___ ACADEMIC YEAR:___2018-19___

LEARNING OBJECTIVE/S:
The learners will be able to:

Comprehension based Learning to Esemplastic into Objective or Subjective type Exams. To Understand the Accounting for Incomplete Records and it's Importance. To Learn Theoretical as well as Practical Concept about Fire Insurance Claim & Incomplete Records.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE I& IV	Chapter 1: Accounting for Incomplete Records ➢ Introduction, Meaning, Types& Features ➢ Introduction Of Conversion Method ➢ Double Vs. Single Entry System ➢ Bills Receivable & Bills Payable Account ➢ Total Debtors & Total Creditors Account ➢ Cash /Bank And Expenses Account ➢ Problems on Preparation of Final Account of Proprietary (Conversion Method)	15	MANAN PRAKASHAN	CHALK & BLACKBOARD

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	Chapter 4: Fire Insurance Claim ➢ Introduction & Meaning ➢ Computing Loss with Stock on Date of Fire, Salvage & Actual Loss ➢ Computing Claim With & Without Average Clause ➢ Memorandum Trading Account ➢ Total Debtors & Total Creditors Account to Ascertain Credit/Cash Sale and Purchase ➢ Problems Solved on the same	15	MANAN PRAKASHAN	CHALK & BLACKBOARD
			S.K & S.N MAHESHWARI	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___30_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: FYBCOM SEMESTER: II MONTH: DECEMBER

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The learners will be able to know the importance of Ecology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE UNIT 3 Ecology	Environment as a natural capital and connection to quality of human life, Environmental Degradation- causes and the impact on human life, Sustainable development- Concept and Components, poverty and environment	10	Text book	Chalk And Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: FYBCOM SEMESTER: II MONTH: JANUARY

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to understand different types of stress and conflict in individual life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 Understanding stress and conflict	Causes of stress and conflict in individuals and society, Agents of socialisation and the role played by them in developing the individual, Significance of values, ethics and prejudices in developing the individual, Stereotyping and prejudice as significant factors in causing conflicts in society, Aggression and violence as the public expression of conflict	10	Text Book	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: FYBCOM SEMESTER: II MONTH: FEBRUARY

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to know how to deal with stress and conflict in this contemporary society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 Managing stress and conflict in contemporary society	Types of conflicts and use of coping mechanisms for managing individual stress, Maslow's theory of self-actualisation, Different methods of responding to conflicts in society, conflict-resolution and efforts towards building peace and harmony in society	08	Text Book	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Madhura Surve.** DEPARTMENT: COMMERCE CLASS: FYBCOM (FC-II) SEMESTER: I MONTH: NOVEMBER - MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand basic concepts related to society

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course - II	Unit 1: Globalisation and Indian Society Understanding the concepts of liberalization, privatization and globalization, Growth of information technology and communication and its impact manifested in everyday life: Impact of globalization on industry: changes in employment and increasing migration: Changes in agrarian sector due to globalization, rise in corporate farming and increase in farmers' suicides. Unit 4 : Understanding Stress and Conflict Causes of stress and conflict in individuals and society: Agents of socialization and the role played by them in developing the individual: Significance of values, ethics and prejudices in developing the individual, Stereotyping and prejudice as significant factors in causing conflicts in society. Aggression and violence as the public expression of conflict.	07 10	Foundation Course by Michael Vaz	Chalk and Duster, Group Discussions, Presentation.

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	Unit 5: Managing Stress and Conflict in Contemporary Society Types of conflicts and use of coping mechanisms for managing individual stress, Maslow's theory of self-actualization: Different methods of responding to conflicts in society: Conflict-resolution and efforts towards building peace and harmony in society.	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Princy Tinish DEPARTMENT: Commerce CLASS:F.Y.BCOM(I, J, K, L) SEMESTER:II MONTH:- Feb to March

ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand and remember the concept of Human rights.
2) Understand and remember Human Rights constituents with special reference to Fundamental Rights stated in the Constitution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Human Rights.	Concept of Human Rights; origin and evolution of the concept	02	Book byManan publications	Chalkboard
	The Universal Declaration of Human Rights	02	Book by Manan publications	Chalkboard
	Human Rights constituents with special reference to Fundamental Rights stated in the Constitution	03	Book byManan publications	Chalkboard
Unit3- Ecology	Importance of Environmental Studies in the current development context			
	Understanding the concept of Environment,Ecology and their interconnectedness.	02	Book byManan publications	Chalkboard
	Environment as natural capital and connection to quality of human life.	01	Book byManan publications	Chalkboard

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	Environmental Degradation-Causes And impact on human life. Sustaninable development-concept and components, poverty and environment.	01 02	Book byManan publications Book byManan publications	Chalkboard Chalkboard
Unit 1-Globalisation and Indian Society	Concepts of liberalization, privatization and globalization Growth of information technology and communication and its impact manifested in everyday life Impact of globalization on industry: changes in employment and increasing migration Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides.	07	Book by Manan publications/Internet	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBCOM (E,F,G,H) SEM : II MONTH : Nov - March YEAR : 2018-19

LEARNINGOBJECTIVE/S : learner will be able to learn scenario of service sector in India as growth of service sector is important for the development of our country.

PAPER/ UNIT/ TITLE	SUBTITLES	NO. OF LECURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE II	**MODULE II : RETAILING** 1.INTRODUCTION : Concept of organised & unorganised retailing, trends in retailing, growth of organised retailing, survival strategies for unorganised retailing 2.Retail format : Store format, non-store format, store planning 3.Retail scenario : Retail scenario in India, retail scenario in global context, prospects & challenges in India, mall management, retail franchising, FDI in retailing, careers in retailing	10		Chalk & board
	MODULE III : RECENT TRENDS IN SERVICE SECTOR 1.ITES SECTOR :BPO, KPO, LPO,ERP 2.BANKING & INSURANCE SECTOR : ATM, DEBIT CARD, CREDIT CARD, Internet banking, opening of insurance sector for private players, FDI & its impact on banking & insurance sector in India 3.LOGISTIS : Logistics networking, importance, challenges	10		Chalk & board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: Commerce

CLASS: M.A.Economics SEMESTER: III MONTH: June-Oct ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

Get theoretical knowledge of bases effects and restriction on free flow of international trade with empirical evidence

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
International trade Unit 2 Neoclassical theory of trade Unit 4 Trade Policy	The heckscher-ohlin model Factor price equalization theory Leontief paradox Rybzyancski theorem Trade and growth	11	Salvatore, D.:International economics	Chalk and Talk Discussions
	Instruments of trade policy Tariff and welfare Optimum tariff The stopler samuelson theorem Metzeler's paradox Theory of customs union Quotas and export subsidies	11	Feenstra R.c. Advanced international trade-theory and evidence	Chalk and talk Discussions

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

Glorita Pereira

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA SINGH DEPARTMENT: CCOMMERC CLASS: SYBCOM SEMESTER: 3 MONTH: JUNE TO OCTOBER ACADEMIC YEAR: 2018-19 LEARNING OBJECTIVE/S: ADVERTISING

The learners will be able to : Basic Of Advertising, Meaning, Scope, Benefits, And Classification Of Advertising

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 1: Introduction to Advertising	Integrated Marketing Communication (IMC) : Concept, Features, Elements, Role Of Advertising In IMC.	12 Lec.	Marketing Management by Philip Kotler	Chalk and Duster
	Advertising: Concept, Features, Evolution Of Advertising,Etc.			
	Classification Of Advertising : Geographic, Media, Target Audience And Functions			
Module 3: Economic & Social Aspects of Advertising	Economic Aspects: Effect Of Advertising On Consumer Demand, Monopoly, Etc.,	11 Lec.	Marketing Management by Philip Kotler	
	Social Aspects: Ethical And Social Issues In Advertising, Positive And Negative Influence On Indian Values & Culture			
	Pro Bono/Social Advertising: Pro Bono Advertising, Social Advertising			

	By Indian Government Through DAVP, Etc.,			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 23 Lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM SEMESTER: 3

MONTH: JUNE TO OCTOBER ACADEMIC YEAR: 2018-19 LEARNING OBJECTIVE/S: ADVERTISING

The learners will be able to : Basic Of Advertising, Meaning, Scope, Benefits, And Classification Of Advertising

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 1: Introduction to Advertising	Integrated Marketing Communication (IMC) : Concept, Features, Elements, Role Of Advertising In IMC.	12 Lec.	Marketing Management by Philip Kotler	Chalk and Duster
	Advertising: Concept, Features, Evolution Of Advertising,Etc.			
	Classification Of Advertising : Geographic, Media, Target Audience And Functions			
Module 3: Economic & Social Aspects of Advertising	Economic Aspects: Effect Of Advertising On Consumer Demand, Monopoly, Etc.,	11 Lec.	Marketing Management by Philip Kotler	
	Social Aspects: Ethical And Social Issues In Advertising, Positive And Negative Influence On Indian Values & Culture			
	Pro Bono/Social Advertising: Pro Bono Advertising, Social Advertising By Indian Government Through DAVP, Etc.,			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 23 Lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: SYBCOM

SUBJECT: ADVERTISING SEMESTER: 3 MONTH: AUGUST-SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Demonstrate an understanding of the overall role advertising plays in the business world. Demonstrate an understanding of advertising strategies and budgets. Identify and understand the various advertising media. Demonstrate and understanding of how an advertising agency operates.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3 Economics & Social Aspects of Advertising	Economic Aspects: Effect of advertising on consumer demand, monopoly and competition, Price.	3	Advertising by Michael Vaz	Chalk Board, Flow Chart, Diagrams
	Social Aspects: Ethical and social issues in advertising, positive and negative influence of advertising on Indian values and culture.	3		
	Pro Bono/ Social advertising: Pro Bono Advertising by Indian Government through Directorate of Advertising and Visual Publicity (DAVP), Self-Regulatory body- Role of ASCI (Advertising Standard Council of India).	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: SYBCOM SEMESTER: III

MONTH: June- September ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit-1 Piecemeal Distribution	Introduction , excess capital method, asset taken over by partner,	3	Financial Ac. counting by R. Narayanaswamy	Disscussion method and Blackboard
	Treatment of past profit or past losses in the balance sheet, contingent liabilities, realisation expenses	3		
	Treatment of secured liabilities , preferential liabilities, excluding insolvency of partner and maximum loss method	3		
	Practical problems	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: SYBCOM SEMESTER: III

MONTH: June- September ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit-2 Partnership final accounts based on adjustment of Admission or Retirement or Death of partner during the year	Introduction to final accounts ,adjustments relating to admission, retirement and death of partner	3	Financial Ac. counting by R. Narayanaswamy	Disscussion method and Blackboard
	Allocation of gross profit prior to and after admission, retirement and death when stock on date of admission or retirement is not given.	3		
	Allocation of gross profit prior to and after admission, retirement and death when stock on date of admission or retirement is given and to be divided on basis of time, sales or other basis	3		
	Practical problems	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____CHETAN PRAKASH VARMA _____ DEPARTMENT: ___COMMERCE ___ CLASS: __SYBCOM ___

SEMESTER: ___III___ MONTH: _____SEPT- DECEMBER _____ ACADEMIC YEAR: ____2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : ___To make student understand the All Macro Economics Perspective, National Income, Theory of J.M Keynes and its applicability in business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS-III	BASIC CONCEPTS OF KEYNESIAN ECONOMICS The Principle of Effective Demand: Aggregate Demand and Aggregate Supply Consumption Function: Properties, Assumptions and Implications Investment function and Marginal Efficiency of capital	07	Ackley.G (1976), Macro Economic Theory and Policy, Macmillan Publishing Co. New York	CHALK AND TALK / EXPLOITATIVE/TWO WAY COMMUNICATION Story-telling method Textbook method Lecture Method
	Investment Multiplier effect on Income and Output: Assumptions, Working, Leakages, Criticism and Importance - paradox of thrift Relevance of Keynesian theory tools to the developing countries	05	Ahuja. H.L., Modern Economics — S.Chand Company Ltd. New Delhi.	Demonstration Method Tutorial Method Questions-Answer method Discussion method

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				Heuristic method Discovery method
	MONEY, PRICES AND INFLATION Money Supply: Determinants of Money Supply - Factors influencing Velocity of Circulation of Money Demand for Money : Classical and Keynesian approaches and Keynes' liquidity preference theory of interest - Friedman's restatement of Demand for money	06	Principles of Macro Economics Dornbush , Rudiger, Fisher Stanley and Startz, Richards	
	Money and prices : Quantity theory of money - Fisher's equation of exchange - Cambridge cash balance approach Inflation : Demand Pull Inflation and Cost Push Inflation - Effects of Inflation-	03	Jhingan, M.L., Principles of Economics — Vrinda Publications (P) Ltd.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____21___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT: Commerce

CLASS: SYBCOM (A,B,C, D) SEMESTER:III MONTH: June to Oct.

ACADEMICYEAR: 2018 -2019 LEARNING OBJECTIVE/S: Business Law

The learners will be able to : Introduction, Understand Meaning, Rules and Regulations, Section, Important Act Details with Related Case Study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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ModuleI:IndianContractAct,1872 Part 1	Chapter I Definitions, Kinds of agreements, Kinds of contracts, distinction between agreement and contract Chapter II Proposal, kinds of proposal -specific, offer to a class of persons, general offer, counter offer, invitation to offer, standing offer, express proposal, implied offer, requirements of a valid offer section 3 & 5 Acceptance, requirements of a valid acceptance, Rules of communication of proposal, acceptance and revocation of proposal/acceptance Chapter III Capacity to contract, minor, unsound mind, Disqualified person. Section 10-12 Chapter IV Consideration, agreements without consideration,	03 04 02 03	Indian contract act 1872 Avtar singh Pollak and mulla D.D basu	Chalk And Duster
Module II Indian Contract Act, 1872 Part II	unlawful consideration, inadequacy of consideration Agreements expressly declared to be void section 2- 25			

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Module III Special Contract	Chapter I consentandfreeconsent,coercion,undueinfluence,fraud, misrepresentationMistake Chapter II Void agreement section 24 to 30 Chapter III section 31 and 68 -72 Contingent contract, quasi-contracts, e-contract, Privity of contracts with exceptions Chapter IV Section 73 - 75 Discharge of contracts, Remedies available on breach of contracts Chapter I Law of Indemnity and guarantee related essential, discharge of surety, distriction between, section 124 - 125, 126 - 129, 132 - 147	04 02 03 03 03		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27 × 4 = 216

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: COMMERCE CLASS: SYB.COM -E, F, G, H
SEMESTER: 3rd MONTH: August-October
ACADEMIC YEAR:2018-2019

SUBJECT: COMMERCE III

LEARNING OBJECTIVE/S:
The learners will be able to:

1. To identify and demonstrate process for making short and long term plans.
2. To recognize the importance of seeking Information before making decisions.
3. To make student able to work in group, problem solving and organizational skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 2: PLANNING & DECISION MAKING	▪ Planning- steps, Importance, Components, Coordination-Importance	4	Management - James Stoner Management: Global Prospective – Heinze Weihrich & Harold Koontz	1. Lecture and discussion. 2. Flow charts. 3. Online teaching learning tools (google meet, google form Google classroom, PPTs)
	▪ M.B.O – Process, Advantages, Management By Exception-Advantages; Management Information System – Concept, Components	3		
	▪ Decision Making – Techniques, Essentials of a Sound Decision Making, Impact of Technology on Decision			

	Making	3	Principles of Management	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10×4 div = 40

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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA R. BHOSALE DEPARTMENT: B. COM CLASS: SYB.COM – E, F, G, H SEMESTER: 3rd
MONTH: August – October ACADEMIC YEAR: 2018-2019 SUBJECT: COMMERCE

III LEARNING OBJECTIVE/S:

The learners will be able to:

1. To make student able to work in different types of organization
2. To recognize the importance of span of management and Delegation of Authority

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 3.	• Organising – Steps, Organisation Structures- Features of Line & Staffordshire Organisation, Matrix Organisation, Virtual Organisation, Formal v/S Informal Organisation	4	Management – James Stoner. Management Global Prospective - H.W.& Koontz.	1. Lecture and discussion. 2. Flow charts. 3. Online teaching learning tools (google meet, google form Google classroom, PPTs)
	• Departmentation – Meaning- Bases, Span of Management – Factors Influencing Span of Management, Tall and Flat Organisation	4		

ORGANISING	• Delegation of Authority – Process, Barriers to Delegation, Principles of Effective Delegation. Decentralisation : Factors Influencing Decentralisation, Centralization v/S Decentralisation	4	Principles of Management.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _12 × 4 div = 48

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM SEMESTER: 3

MONTH: JUNE TO OCTOBER ACADEMIC YEAR: 2018-19 LEARNING OBJECTIVE/S: COMMERCE

The learners will be able to : To Gain The Knowledge Of Management, Evolution Of Management, To Study Different Elements Of Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 2 : Planning And Decision Making	Planning: Steps, Importance, Components and Coordination- Importance.	10 Lec.	Principles of Management by Philip Kotler, Essentials of Management by Koontz	Chalk and Duster
	M.B.O.: Process, Advantage, Management By Exception- Advantages; Management Information System- Concept.			
	Decision Making: Techniques, Essentials Of A Sound Decision Making, Impact Of Technology On Decision Making			
Module 3: Organising	Organising: Steps, Organisation Structures- Features Of Line & Staff Organisation, Matrix Organisation, Etc.,	10 Lec.	Principles of Management by Philip Kotler, Essentials of Management by Koontz	
	Departmentation: Meaning Bases, Span Of Management- Factors Influencing Span Of Management, etc.,			
	Delegation Of Authority: Process, Barriers To Delegation, Principles Of Effective Delegation, Decentralisation, etc.,			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20 Lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof DEEPAKKUMAR GUPTA DEPARTMENT: COMMERCE CLASS: SYBCOM

SEMESTER: III MONTH: June- September ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit-2 Piecemeal Distribution	Introduction , excess capital method, asset taken over by partner,	3	Financial Ac. counting by R. Narayanaswamy,	Chalk & talk Method and Discussion method
	Treatment of past profit or past losses in the balance sheet, contingent liabilities, realisation expenses	3	Financial Ac. counting by R. Narayanaswamy	Chalk & talk Method and Discussion method
	Treatment of secured liabilities , preferential liabilities, excluding insolvency of partner and maximum loss method	3	Financial Ac. counting by R. Narayanaswamy	Chalk & talk Method and Discussion method
	Practical problems	6	Financial Ac. counting by R. Narayanaswamy, S.N. MAHESHWARY	Chalk & talk Method and Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof DEEPAKKUMAR GUPTA DEPARTMENT: Commerce CLASS: SYBCOM

SEMESTER: III MONTH: June- September ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit-1 Partnership final accounts based on adjustment of Admission or Retirement or Death of partner during the year	Introduction to final accounts ,adjustments relating to admission, retirement and death of partner	3	Financial Ac. counting by R. Narayanaswamy,	Chalk & talk Method and Discussion method
	Allocation of gross profit prior to and after admission, retirement and death when stock on date of admission or retirement is not given.	3	Financial Ac. counting by R. Narayanaswamy,	Chalk & talk Method and Discussion method
	Allocation of gross profit prior to and after admission, retirement and death when stock on date of admission or retirement is given and to be divided on basis of time, sales or other basis	3	Financial Ac. counting by R. Narayanaswamy, S.N. MAHESHWARY	Chalk & talk Method and Discussion method
	Practical problems	6	Financial Ac. counting by R. Narayanaswamy	Chalk & talk Method and Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PALLAVI GANGADHAR NAIK DEPARTMENT: COMMERCE_ CLASS: SYBCOM SEMESTER: _III MONTH: JUNE TO NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : UNDERSTAND THE HOW AN ECONOMY AS A WHOLE WORKS. AND HOW TO ANALYSE ECONOMIC PHENOMENA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS II	MODULE 1 INTRODUCTION TO MACROECONOMICS,CIRCULAR FLOW OF INCOME, MEASUREMENT OF NATIONAL INCOME, TRADE CYCLES, SAY'S LAW OF MARKET	6	MANAN PRAKASHAN SETH PUBLICATION	CHALK AND BLACKBOARD
	MODULE 3 POST KEYNESIAN DEVELOPMENTS IN MACRO ECONOMICS, Istam MODEL, PHILLIPS CURVE-UNEMPLOYMENT-STAGATION	4		
	MODULE 4:INFLATION II MONETARY POLICY AND INFLATION TARGETING	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce

CLASS: S Y B Com SEMESTER: III MONTH: July ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the concepts of amalgamation, preparation of account of accounting for amalgamation of partnership firm and its accounting effect. The learners will able to understand the need, procedure, accounting effect and treatment for conversion of partnership firm into a limited company.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy and Financial Management III	**Amalgamation of Firms** i) Realization method only ii) Calculation of purchase consideration iii) Journal / ledger accounts of old firms iv) Preparing Balance sheet of new firm v) Adjustment of goodwill in the new firm vi) Realignement of capitals in the new firm by current accounts / cash or a combination thereof Excluding Common transactions between the amalgamating firms	15	Shashi K. Gupta – "Contemporary Issues in Accounting", Kalyani Publishers. Ashok Sehgal – "Fundamentals of Financial Accounting", Taxmann's Publishers	Chalk & talk, Black-Board Method, Group Discussion,
	Conversion / Sale of a Partnership Firm into a Ltd. Company	15		

	(i) Realisation method only (ii) Calculation of New Purchase consideration, Journal / Ledger Accounts of old firms. Preparing Balance sheet of new company			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

Babli Jha

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT: COMMERCE CLASS: SY.B.COM SEMESTER: 3

MONTH: JULY-AUGUST ACADEMIC YEAR: 2018-2019 SUBJECT: FOUNDATION COURSE

LEARNING OBJECTIVES:

The learners will be able to : Socially aware of the societal problems and their personality.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 SCIENCE AND TECHNOLOGY-1	Development of Science: The ancient cultures, the Classical Era, the Middle Ages, the Renaissance, the Age of Reason and Enlightenment	3	Foundation Course by Michael Vaz	Chalk Board
	Nature of Science: Principles and Characteristics, Science as empirical, practical, theoretical, validated knowledge.	2		
	Science and Superstition: The role of science in exploding myths, blind beliefs and prejudices, Science and scientific temper- science temper as a fundamental duty of te Indian citizen.	3		
	Science in everyday life: Technology, menaing and role in development, Interrelation and distinction between science and technology.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHWINI DATTATRAY BHOIR DEPARTMENT: COMMERCE CLASS: SYBCOM E,F,G,H,I,J,K,L SEMESTER: III

MONTH: JUN - OCT ACADEMIC YEAR: 2018-2019 SUBJECT - FOUNDATION COURSE -I

LEARNING OBJECTIVE/S:
The learners will be able to know the importance of the Human Rights Act 1998 and Understand the historical growth of the idea of human rights.

The Learner will understand the basics of good Communication Skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I Human Rights Violations and Redressal	Scheduled Castes - Constitutional and Legal Rights, Forms of violations, Redressal mechanisms. Scheduled tribes- Constitutional and legal rights, Forms of violations, Redressal mechanisms. Women- Constitutional and legal rights, Forms of violations, Redressal mechanisms. Children - Constitutional and legal rights, Forms of violations, Redressal mechanisms. People with Disabilities, Minorities, and the Elderly population-Constitutional and legal rights, Forms of violations, Redressal mechanisms.	3 2 2 2 3	Kaushal, Rachana, Women and Human Rights in India, Kaveri Books, New Delhi,2000	Lecture Method, Black Board, Chalk, Duster
Unit IV Soft	Part A - i) Effective Listening - Importance and Features.		Bhatnagar Mamta and	

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Skills for Effective Interpersonal Communication	ii) Verbal and Non-Verbal Communication; Public -Speaking and Presentation Skills iii) Barriers to Effective Communication; Importance of Self Awareness and Body Language. Part B - i) Formal and Informal Communication - Purpose and Types. ii) Writing Formal Application, Statement of Purpose and Resume. iii) Preparing for Group Discussion, Interviews and Presentations. Part C- i) Leadership Skills and Self-Improvement - Characteristics of Effective Leadership. ii) Styles of Leadership and Team-Building.	4 4 3	Bhatnagar Nitin Effective communication and Soft Skills, Pearson India, New Delhi, 2011	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 23

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. VISHAL SAWANT** DEPARTMENT**: COMMERCE** CLASS: **S.Y.B.COM**

SEMESTER: **III** MONTH: **JUNE -DECEMBER** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: To impart the practical knowledgeof Accountancy & Financial Management.

The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Amalgamation of Firms	**UNIT-3: Amalgamation of Firms** Realisation method only, Calculation of purchase consideration, Journal/ledger accounts of old firms, Preparing Balance sheet of New firm, Adjustment of goodwill in the new firm, Realignment of capitals in the new firm by current accounts / cash or a combination thereof Excluding Common transactions between the amalgamating firms.	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Chalk-Board Method
Conversion / Sale of a Partnership Firm into a Ltd. Company	**UNIT-4: Conversion / Sale of a Partnership Firm into a Ltd. Company** Realisation method only. Calculation of New Purchase consideration, Journal / Ledger Accounts of old firms. Preparing Balance Sheet of new company.	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Chalk-Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF_ Ms .Mala Khanchandani __DEPARTMENT:_Commerce CLASS:_S.Y.B.Com_SEMESTER: III

MONTH:_June to October ACADEMIC YEAR_2018-19_

LEARNING OBJECTIVE/S:
The learners will be able to:

To prevent Human Rights violations and to safeguard the Fundamental rights of every citizen of India._

To understand the competencies related to communicating with those from other cultures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FC Unit 1 Human Rights Violations And Redressal	A. Scheduled castes—Constitutional and legal rights, Forms of violations, Redressal mechanism. B. Scheduled tribes—Constitutional and legal rights, forms of violations, Redressal mechanism. C. Women- Constitutional and legal rights, forms of violations, Redressal mechanism. D. Children- Constitutional and legal rights, forms of violations, Redressal mechanism. E. People with disabilities, Minorities,and the elderly population- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	12	Michael Vaz Aurara vaz: foundation course. Newspapers.	Chalk and talk Discussion Explanation with examples.

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FC Unit 4 Soft Skills For Effective Interpersonal Communication	Part A i) Effective listening- importance and features. ii) Verbal and nonverbal communication, public speaking and presentation skills. iii) Barriers to effective communication,,importance of self awareness and body language.	4	Michael Vaz Aurara vaz: foundation course. Newspapers	Chalk and talk Discussion Explanation with examples
	Part B i) Formal and informal communication- purpose and types. ii) Writing formal applications, statement of purpose and resume. iii) Preparing for group discussions, interviews and presentations.	5		
	Part C i) Leadership skills and self improvement- Characteristics of effective leadership. ii) Styles of leadership and team-building.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___12_____

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TEACHING PLAN (UNIT PLAN) FC 18 - 19

NAME OF THE STAFF: **RASHMI SAWANT** SUBJECT: **FOUNDATION COURSE-III** DEPARTMENT: **COMMERCE** CLASS: **SYBCOM**

SEMESTER: **III** MONTH: **JUNE-JULY**

ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the importance of Human right violation as well as issues relating to environmental degradation.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
UNIT 1. Human Rights Violation and Redressal	Scheduled Castes – Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2	Vaz, Michel, Foundation Course I MANAN PRAKASHAN	Discussion Method And Chalk Board
	Scheduled tribes – Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2		
	Women - – Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2		
	Children - – Constitutional and legal rights, Forms of violations, Redressal mechanisms.	2		
	People with Disabilities, Minorities, and the Elderly population - – Constitutional and legal rights, Forms of violations, Redressal mechanisms.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **RASHMI SAWANT** SUBJECT: **FOUNDATION COURSE-III** DEPARTMENT: **COMMERCE** CLASS: **SYBCOM**

SEMESTER: **III** MONTH: **AUGUST-SEPTEMBER**

ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the importance of technology development in their day to day life.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
UNIT 3. Science and Technology - I	Development of Science – the ancient cultures, the Classical era, the Middle Ages, the Renaissance, the Age of Reason and Enlightenment.	3	Vaz, Michel, Foundation Course I MANAN PRAKASHAN	Discussion Method And Chalk Board
	Nature of Science – its principles and characteristics; Science as empirical, practical, theoretical, validated knowledge.	2		
	Science and Superstition – the role of science in exploding myths, blind beliefs and prejudices; Science and scientific temper – scientific temper as a fundamental duty of the Indian citizen.	3		
	Science in everyday life – technology, its meaning and role in development; Interrelation and distinction between science and technology.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. FIROZKHAN KHURSHIT KHAN** DEPARTMENT**: COMMERCE**

CLASS: **S.Y.B.COM** DIV: **A, B, C & D** SEMESTER: **III** MONTH: **NOVEMBER** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: To impart the practical knowledge of Accountancy & Financial Management.

The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Amalgamation of Firms	**UNIT-3: Amalgamation of Firms** Realisation method only, Calculation of purchase consideration, Journal/ledger accounts of old firms, Preparing Balance sheet of New firm, Adjustment of goodwill in the new firm, Realignment of capitals in the new firm by current accounts / cash or a combination thereof Excluding Common transactions between the amalgamating firms.	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Chalk-Board Method
Conversion / Sale of a Partnership Firm into a Ltd. Company	**UNIT-4: Conversion / Sale of a Partnership Firm into a Ltd. Company** Realisation method only. Calculation of New Purchase consideration, Journal / Ledger Accounts of old firms. Preparing Balance Sheet of new company.	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Chalk-Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: Commerce

CLASS: M.A.Economics SEMESTER: III MONTH: June-Oct ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

Get theoretical knowledge of bases effects and restriction on free flow of international trade with empirical evidence

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
International trade Unit 2 Neoclassical theory of trade Unit 4 Trade Policy	The heckscher-ohlin model Factor price equalization theory Leontief paradox Rybzyancski theorem Trade and growth	11	Salvatore, D.:International economics	Chalk and Talk Discussions
	Instruments of trade policy Tariff and welfare Optimum tariff The stopler samuelson theorem Metzeler's paradox Theory of customs union Quotas and export subsidies	11	Feenstra R.c. Advanced international trade-theory and evidence	Chalk and talk Discussions

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

Glorita Pereira

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE CLASS: SYBCOM

SEMESTER: **III** MONTH: June,2018 to Sept,2018 ACADEMIC YEAR :2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to Learn what is working capital, its types and how to estimate working capital requirement, Meaning and calculation of capital budgeting techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Management Accounting	1**] Working capital Management**-Concept, Nature,Meaning ,Typesof working capital,Planning, Estimation of working capital requirement in case of Trading & Manufacturing concern., Operating cycle	10	Management Accounting- M.Y. Khan	Chalk & duster
	2**] Capital Budgeting**-Introduction, Classification of capital budgeting projects, process. Capitalbudgeting techniques – Payback period,accounting Rate of Return, Net present value, Profitability index & Discounted payback. Practical problems.	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: Self Finance CLASS: SYBCOM SEMESTER: III MONTH: July ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand how to analyse and interpret financial statements and present them in vertical format. Do ratio analysis and interpret the financial position of the company.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to management accounting, Analysis and interpretation of financial statements	Introduction, study of balance sheet and income statement / revenue statements in vertical formats suitable for analysis	1	Ainapure-Manan Prakashan	Lecture method, blackboard and chalk
	Relationship between items in balance sheet and revenue statement	1		
	Tools of analysis of financial statements- trend analysis, practical problems	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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MONTH: August

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to management accounting, analysis and interpretation of financial statements	Tools of analysis of financial statements- comparative statement, practical problems	4	Ainapure-Manan Prakashan	
	Common sized statements, practical problems	4		

MONTH: August

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to management accounting, ratio analysis and interpretation	Based on vertical form of financial statements: explain balance sheet ratios- current ratio, liquid ratio, stock working capital ratio, proprietary ratio, debt equity ratio, capital gearing ratio	2	Ainapure-Manan Prakashan	
	Practical problems	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

MONTH: September

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to management accounting, ratio analysis and interpretation	Revenue statement ratios: gross profit ratio, expense ratio, operating ratio, net profit ratio, net operating profit ratio, stock turnover ratio.	1	Ainapure-Manan Prakashan	Lecture method, blackboard and chalk
	Practical problems on the basis of revenue statement ratios	4		
	Combined ratios: return on capital employed, return on proprietors fund, return on equity capital	1		
	Dividend payout ratio, debt service ratio, debtors turnover, creditors turnover	1		
	Practical problems on the basis of combined ratio	5		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Madhura Surve. DEPARTMENT: COMMERCE. CLASS: S.Y. B.COM SEMESTER: III MONTH: September – December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Carrier Opportunities and scope of Advertising

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I Introduction to Advertising	IMC, Meaning, Definition, features of Advertising, Active Participants, Evolution, growth of Advertising benefits and classification of Advertising	10	Advertising : Principles and practices	Online lectures through Google Meet
Unit III Economics and social effect of Advertising	Economic and Social effect of advertising, impact of advertising on Price, Production and distribution, Positive and Negative effects of Advertising, effect of advertising on monopoly and competition, Ethical issues, Untruthful ads, importance of Truth in Advertising Pro-bono Advertising , self regulation laws, ASCI.	15	Advertising, sales, Promotion Management	Online lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF. MEZBIN LALANI DEPARTMENT: COMMERCE CLASS: S.Y.BCOM SEMESTER: III

MONTH: JUNE-SEPTEMBER 2018. **(Management Accounting)** ACADEMIC YEAR:2018-2019.

LEARNING OBJECTIVE/S: To make students learn about the techniques of management accounting.
The learners will be able to : calculate working capital needs and various important ratios for the company..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Working capital . Ratios				
	Meaning, types , importance and practical sums based on estimation of working capital.	15	Mangement Accounting (Khan & Jain)	Chalk/duster method,
			and	
	Meaning,, Classification of ratios, limitations of ratios, practical sums based on computing various ratios.	15	Management Accounting (Ainapure & Ainapure)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: **Commerce**

CLASS: **SYBCOM I, J & K** SEMESTER**: III** MONTH: **June to Sep** ACADEMIC YEAR: **2018 -19**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Solve Practical problems on Working capital
2) Solve practical problems on Capital Budgeting

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Management Accounting	Unit 3 : Working Capital Management	8		Chalk Board
	1) Concept, Nature of Working Capital , Planning of Working Capital 2) Estimation / Projection of Working Capital Requirement in case of Trading and Manufacturing Organization 3) Operating Cycle			
	Unit 4 : Capital Budgeting	8		Chalk Board
	1) Classification of capital budgeting projects 2) Capital budgeting process 3) Capital budgeting techniques - Payback Period, Accounting Rate of Return, Net Present Value, The Profitability Index, Discounted Payback. (Excluding calculation of cash flow)			

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __16_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NIKITA SUNIL JOGLE DEPARTMENT: COMMERCE CLASS: SYBCOM (E,F,G,H) SEMESTER: III

MONTH: JUNE - OCTOBER ACADEMIC YEAR: 2018 - 2019

LEARNING OBJECTIVE/S:
The learners will be able to: understand the working of an advertising agency in detail & to how to develop a brand & various special purpose advertising.

SUBJECT – ADVERTISING I

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2 -Advertising Agency	• Ad Agency – Features, structure & services offered, types of advertising agencies, agency selection criteria. • Agency & Client – Maintaining agency – client relationship, reasons & ways of avoiding client turnover, creative pitch, agency compensation. • Careers in Advertising – Skills required for a career in advertising, various career options, freelancing career options – graphics, animation, modelling, dubbing.	11	Text book	Chalk & Board Samples of actual advertisings
4 – Brand Building & Special Purpose Advertising	• Brand Building – The communication process, AIDA model, role of advertising in developing brand image & brand equity & managing brand crisis. • Special Purpose Advertising – Rural advertising, political advertising, advocacy advertising, corporate image advertising, green advertising – features of all the above special purpose advertising. • Trends in Advertising – Media, ad spends, ad agencies, execution of advertisements.	09	Text book	Chalk & Board Samples of actual advertisings

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Sachin A. Kadam** DEPARTMENT: **COMMERCE** CLASS: **SYBCOM**

SEMESTER: IV MONTH: **April** ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III	**UNIT III:** **A. Technology and Development- The Interconnectedness between growth of technology and Development of Societies.** **B. B. Some Significance modern technologies , their basic features and applications.** Laser Technology: Light Amplication by stimulated emission of Radiation , use laser in Remote sensing, GIS /GPS mapping , medical use Satellite Technology: Various uses in satellite navigation systems ,GPS ,and in precise climate and weather analyse. Information and Communication Technology - electronic systems such as telecommunication , radio, television , video and internet aided by computer – based information systems , convergence of various technology like satellite , computer and digital in the information revolution of todays society Biotechnology and Genetic Engineering- applied biology and uses in medicine , pharmaceuticals and agriculture ; genetically	10 lec	Manan prakashan and Sheth Publication	Chalk, Duster, Printed notes

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	modified plant, animal and human life Nanotechnology- Definition ;the study , control and application of phenomena and materials at length scales below 100 nm, uses in medicine , military intelligence and consumer products.			
UNIT IV	**UNIT IV :Introduction to Competition to Exams** : Basic information on competition exams – the pattern , eligibility criteria and local centres: Exams conducted for entry professional courses- Graduates record Examination (GRE), Graduate management admission test (GMAT), Common admission test (CAT) an Scholstic Aptitude (SAT) Exam conducted foe entry into UPSC, SSC, SPSC, NET/SET for entry into teaching profession.	9 lec	Manan prakashan and Sheth Publication	Chalk, Duster, Printed notes

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _19_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PALLAVI NAIK DEPARTMENT: COMMERCE CLASS: SYBCOM SEMESTER: IV MONTH:NOVEMBER TO MARCH ACADEMIC YEAR: 2018-19 SUB : ECONOMICS

LEARNING OBJECTIVE/S:
The learners will be able to : basic concepts of macroeconomics and with certain common features of economic occurrence in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECONOMICS	MANAGEMENT AND FINANCIAL ADMINISTRATION: Fiscal Policy, Contra Cyclical and Fiscal Policy and Discretionary Fiscal Policy-PrinFISCAL ciple of Sound Finance and Functional Finance, Budget-Meaning, objectives and Types, Intergovernmental Fiscal Relations-Fiscal Federalism and Fiscal Decentralization. Module II – Public revenue Sources of Public Revenue, Shifting of tax burden, Economic Effects of taxation, Redistributive and Anti – Inflationary nature of taxation	10	MANAN PRAKASHAN	BLACKBORD AND CHAK

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF NAZIA SAJID SHAIKH. DEPARTMENT: _COMMERCE CLASS:SYBCOM SEMESTER: SEM **IV**

MONTH:NOV TO FEB ACADEMIC YEAR: 2018-19 SUB: COMMERCE IV

LEARNING OBJECTIVE/S:
The learners will be able: Understand Introduction to Management, Functions of Management: Planning and Decision Making, Organising , Directing and Controlling.

PAPER, UNIT, TITLES	SUB TOPIC	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 3. ORGANISING.	***Organising:.** Steps,. ***Organisation structure:** Line and Staff Organisation, Matrix Organisation, Virtual Organisation, Formal v/s informal organisation ***Departmentation:** Meaning, Bases of Departmentation, ***Span of Management:** factors influencing span of Management. ***Tall and flat organisation.**	**11**	**MANAGEMENT TODAYS PRINCIPLES AND PRACTICES:TATA MCGRAW**	Chalk and Duster
***MODULE 4. DIRECTING AND CONTROLLING**	***Motivation:** Meaning, Importance, influencing factors. ***Communication:** Importance, Barriers to effective communication. ***Leadership:** Meaning, functions, Styles of leadership, Qualities of good leader.***Controlling:** Steps, Essential, Techniques Of Controlling, PERT, CPM, Budgetary Control, Management Audit.	**12**		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM SEMESTER: 4

MONTH: NOVEMBER TO FEBRUARY ACADEMIC YEAR: 2018-19 LEARNING OBJECTIVE/S: ADVERTISING

The learners will be able to : Basic Of Advertising, Meaning, Scope, Benefits, And Classification Of Advertising

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 1: Media in Advertising	Traditional Media: Print, Broadcasting, Out-Of-Home Advertising And Filims, Advantages And Disadvantages.	11 Lec.	Marketing Management by Philip Kotler	Chalk and Duster
	New Age Media: Digital Media/ Internet Advertising- Forms, Signature And Limitations.			
	Media Research: Concept, Importance, Tool For Regulation- ABC And Doordarshan Code			
Module 3: Fundamentals of Creativity in Advertising	Creativity: Concept And Importance, Creative Process, Concept Of Creative Brief, Techniques Of Visualization.	11 Lec.	Marketing Management by Philip Kotler	
	Creative Aspects: Buying Motives- Types, Selling Points- Features, Appeals- Types, Concept Of USP.			
	Creativity Through Endorsement: Endorsers- Types, Celebrity Endorsements- Advantages And Limitations, etc.,			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22 Lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: SYBCOM

SUBJECT: ADVERTISING SEMESTER: 4 MONTH: NOVEMBER-DECEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Demonstrate an understanding of the overall role advertising plays in the business world. Demonstrate an understanding of advertising strategies and budgets. Identify and understand the various advertising media. Demonstrate and understanding of how an advertising agency operates.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Media in Advertising	Traditional Media : Print, Broadcasting, Out-Of-Home advertising and films – advantages and limitations of all the above traditional media.	4	Advertising by Michael Vaz	Chalk Board, Flow Chart, Diagrams .
	New Age Media: Digital Media/ Internet Advertising – Forms, Significance and Limitations.	3		
	Media Research: Concept, Importance, Tool for regulation- ABC and Doordarshan Code.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: **Commerce**

CLASS: **SYBCOM I, J & K** SEMESTER: **IV** MONTH: **Dec to March** ACADEMIC YEAR: **2018 -19**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Acquire basic knowledge of auditing, specific terms used in auditing
2) Understand the planning, procedure and documentation needed for auditing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing	Unit 1 : Introduction to Auditing	8		Chalk Board
	1) Basics – Financial Statements, Users of Information, Definition of Auditing, Objectives of Auditing, Inherent limitations of Audit, Difference between Accounting and Auditing, Investigation and Auditing. 2) Errors & Frauds – Definitions, Reasons and Circumstances, Types of Error, Types of frauds, Risk of fraud and Error in Audit, Auditors Duties and Responsibilities in case of fraud. 3) Principles of Audit, Materiality, True and Fair view 4) Types of Audit – Meaning, Advantages, Disadvantages of Balance sheet Audit, Interim Audit, Continuous Audit, Concurrent Audit and Annual Audit, Statutory Audit			
	Unit 2 : Audit Planning, Procedures and Documentation	8		Chalk Board

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	1) Audit Planning – Meaning, Objectives, Factors to be considered, Sources of obtaining information, Discussion with Client, Overall Audit Approach 2) Audit Program – Meaning, Factors, Advantages and Disadvantages, Overcoming Disadvantages, Methods of Work, Instruction before commencing Work, Overall Audit Approach. 3) Audit Working Papers – Meaning, importance, Factors determining Form and Contents, Main Functions / Importance, Features, Contents of Permanent Audit File, Temporary Audit File, Ownership, Custody, Access of Other Parties to Audit Working Papers, Auditors Lien on Working Papers, Auditors Lien on Client's Books.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____16_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: Self Finance CLASS: SYBCOM SEMESTER: IV MONTH: January ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : vouch income and expenditure and verify assets and liabilities of the company. About functioning of internal control and what steps are needed to be taken to assess internal control. About how internal auditors done and evaluated.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing, auditing techniques: vouching and verification	Introduction and meaning of vouching and verification, vouching: audit of income- cash sales, sales on approval	1	Ainapure-Manan Prakashan	Lecture method
	Consignment sales, sales returns, recovery of bad debts written off, rental receipts	2		
	interest and dividend received, royalties received	2		
	Audit of expenditure: purchases, purchase returns, salaries and wages	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

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MONTH: February

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing, auditing techniques: vouching and verification	Rent, insurance premium, telephone expenses, postage and courier	1	Ainapure- Manan Prakashan	Lecture method
	Petty cash expenses, travelling commission, advertisement, interest expense	2		
	Audit of assets: debtors, stock, patterns, dyes and loose stools, spare parts, empties and containers, quoted and unquoted investments	2		
	Trademarks, copyrights, patents, know how plant and machinery, land and building, furniture and fixtures	2		

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MONTH: February

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing, auditing techniques: vouching and verification	Audit of liabilities: outstanding expenses, bills payable	2	Ainapure- Manan Prakashan	Lecture method
	Secured loans, unsecured loans, contingent liabilities	1		

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MONTH: March

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing, auditing techniques and internal audit introduction	Internal control: meaning and purpose review of internal control, advantages, auditors duties, review of internal control	2	Ainapure- Manan Prakashan	Lecture method
	Inherent limitations of internal control internal control samples for sales and debtors, purchases and creditors, salaries and wages.	3		
	Internal audit: meaning, basic principles of establishing internal audit, objectives, evaluation of internal audit by statutory auditor, usefulness of internal audit	3		
	internal audit vs external audit, internal checks vs internal audit.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____CHETAN PRAKASH VARMA _____ DEPARTMENT: ___COMMERCE ___ CLASS: __SYBCOM ___

SEMESTER: ___IV___ MONTH: _____NOV- MARCH _____ ACADEMIC YEAR: ____2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : ___To make student understand the All Macro Economics Perspective, National Income, Theory of J.M Keynes and its applicability in business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS-IV	• Meaning and Scope of Public finance. • Major fiscal functions : allocation function, distribution function & stabilization function • Principle of Maximum Social Advantage: Dalton and Musgrave Views - the Principle in Practice, Limitations.	06	Ackley.G (1976), Macro Economic Theory and Policy, Macmillan Publishing Co. New York	CHALK AND TALK //TWO WAY COMMUNICATION Story-telling method Textbook method Lecture Method
	• Relation between Efficiency, Markets and Governments • The concept of Public Goods and the role of Government	03	Jha, R (1998) : Modern Public Economics, Route Ledge, London	Demonstration Method Tutorial Method Questions-Answer method Discussion method Heuristic method Discovery method

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	• Fiscal Policy: Meaning, Objectives, constituents and Limitations. • Contra cyclical Fiscal Policy and Discretionary Fiscal Policy :Principles of Sound and Functional Finance • Budget- Meaning objectives and types - Structure of Union budget - Deficit concepts-Fiscal Responsibility and Budget Management Act.	04	Musgrave, R.A and P.B. Musgrave (1976) : Public Finance in Theory and Practice, Tata McGraw Hill, Kogakusha, Tokyo	
	• Intergovernmental Fiscal Relations: fiscal federalism and fiscal decentralization - central-state financial relations - 14th Finance Commission recommendations	03	Mithani, D.M (1998) : Modern Public Finance, Himalaya Publishing House, Mumbai	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____16___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT: Commerce CLASS: SYBCOM (A, B, C, D) SEMESTER: IV

MONTH: December to April ACADEMIC YEAR: 2018 - 2019 LEARNING OBJECTIVE/S: Business Law

The learners will be able to: Introduction, Understand Meaning, Rules and regulations, section, important act details with related case study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 Indian Campanies Act, 2013 Part 1	Chapter I Company and its formation, definition and nature of company, advantages and disadvantages of a company, lifting of corporate veil with cases, promoters, pre-incorporation and preliminary contracts Chapter II Types of companies (meaning and concept only) statutory companies, one person company, Company, limited by shares/guarantee Private company, public company, Producer Company, formation of companies with charitable Objects, holding and subsidiary company, Government, foreign company, small company Procedure for registration of a company,	03 04 03 03	1. Company Law : Avtar Singh. 2. Indian Company Law. Authors, Dr. N. S. Kothari,	Chalk And Duster

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MODULE 2 IndianCampaniesAct,2013Part 2 MODULE IntellectualPropertyRights	documents to be submitted for registration,Effect of incorporation Chapter III Memorandum of Association & Articles of Association: meaning, concept, clauses, effect of Registration of Memorandum and Articles of Association, Doctrine of Constructive Notice Doctrine of Ultra Vires, Doctrine of Indoor Management Chapter IV Prospectus- meaning, when to be issued, when not required, kinds of prospectus, contents of prospectus, private placement			
	Membership of a company Chapter I Who can become a member? Modes of acquiring membership, cessation of membership, rights, liabilities and duties of members Chapter II Classification of Directors, woman director, independent director, small shareholders' director Disqualification of director, Director Identification Number, powers and duties, position of	03 04 03		

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	director as key managerial personnel, Manager, Managing Director. Chapter III Meetings, types of meetings of members and Board of directors, convening and conduct of meetings, Postal ballot, meetings through video conferencing, e-voting.			
	Chapter II Intellectual Property Rights (a) IPR introduction and types (b) Patents Meaning, salient features conditions for an invention to be patented, what is patentable What is not, duration of a patent	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 26 x 4 = 104

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE _ DEPARTMENT: _B.COM CLASS: SYB.COM -E,F,G,H__
SEMESTER:_4th MONTH: November – February ACADEMIC YEAR: 2018-2019 SUBJECT : COMMERCE IV
LEARNING OBJECTIVE/S:
The learners will be able to :

1.To acquaint the learner with the basic concepts of Production management.

2.To provide basic knowledge about inventory management and it's techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODUL1: PRODUCTION AND INVENTORY MANAGEMENT	• Production Management: Objectives, Scope Production Planning & Control :Steps, Importance	3	Production & Operation Management . Essential of Inventory Management	1.Lecture methods . 2.Flow chats and diagrams.
	• Production Systems :Concept, Type – Continuous and Intermittent. Productivity : Concept, Factors Influencing Productivity, Measures for improving productivity	4		
	• Inventory Management -Objectives, Inventory Control -Techniques. Scientific Inventory Control System -Importance	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 × 4 div = 44

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE _DEPARTMENT: B.COM CLASS: SYB.COM -E,F,G,H
SEMESTER: 4th MONTH: November – February ACADEMIC YEAR: 2018-2019 SUBJECT : COMMERCE IV
LEARNING OBJECTIVE/S:
The learners will be able to :

1. To provide basic knowledge about Indian Financial Systems.
2. To acquire knowledge about SEBI , Stock Exchange and Credit Rating Agencies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 3: INDIAN FINANCIAL SYSTEM	• Indian Financial Market : Structure, Primary MARKET- IPO Procedure Dematerialisation: Process, Role of Depositories: NSDL and CDSL	4	Indian Financial System - M.Y.Khan Financial Institutions & Markets- L.M.Bhole	1. Lecture and discussion. 2. Flow charts and Institutional Structures.
	• SEBI: Function of SEBI, Investors protection measures of SEBI. Stock Exchange – Function ,Speculators.	4		
	• Credit Rating : Advantages, Credit Rating Agencies in India- CRISIL, CARE, and ICRA.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 × 4 div = 48

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYBCOM SEMESTER: 4

MONTH: NOVEMBER TO FEBRUARY ACADEMIC YEAR: 2018-19 LEARNING OBJECTIVE/S: COMMERCE

The learners will be able to : To Gain The Knowledge Of Management, Evolution Of Management, To Study Different Elements Of Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 2 : Quality Management	Introduction To Quality: Dimensions Of Quality, Cost Of Quality: Types – Internal & External Failure Cost, Appraisal Cost, Etc.,	10 Lec.	Principles of Management by Philip Kotler, Essentials of Management by Koontz	Chalk and Duster
	Quality Management Tools: TOM- Importance, Six Sigma-Process, ISO 9000-Certification Procedure, Kaizen Process			
	Service Quality Management: Importance, SERVQUAL Model, Measures To Improve Service Quality.			
Module 4: Recent Trends In Finance	Mutual Funds: Advantages & Limitations, Types, Factors Responsible For Growth Of Mutual Funds.	12 Lec.	Principles of Management by Philip Kotler, Essentials of Management by Koontz	
	Commodity Market: Categories, Derivatives Market: Types, Participants Types Of Derivative Instruments.			
	Start-Up Ventures: Concept, Sources Of Funding, Micro-Finance- Importance, Role Of Self Help Groups.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22 Lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce

CLASS: S Y B Com SEMESTER: IV MONTH: November ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :
Learn about the working format of the company regards to raising of capital funds by way of issuing shares, debentures. Also the legal procedure to raise these funds. It also helps to give practical knowledge of accounts. Further the learner will understand the accounting procedures and accounting treatments to arrive the profit before & after its incorporatin.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy and Financial Management IV	**Introduction to Company Accounts** Introduction of basic terms: Types of companies, nature and formation of companies, Shares, Debentures, Share Capital, Reserves and surplus, types of assets and liabilities, dividend, format of Balance Sheet (Only theory) Issue of shares: Different modes IPO, Private Placements, Preferential, Rights, ESO, SWEAT and ESCROW account, Issue of shares at par, premium and discount, Under subscription and Over subscription of shares, forfeiture and reissue of forfeited shares, issue of shares for consideration other than cash. (Only theory) Issue of Debentures: types of Debentures, Issue of debentures at par, premium and discount, Issue of Debentures with consideration of Redemption ,Issue of debentures for cash receivable in instalments or at a time Issue of debentures for consideration other than cash. (Only theory)	15	Introduction to Accountancy T.S. Grewal S. Chand and Co. (P) Ltd., New Delhi Advanced Accounts Shukla and Grewal S. Chand and Co. (P) Ltd., New Delhi	Chalk & talk, Black-Board Method, Group Discussion,

	Ascertainment and Treatment of Profit Prior to Incorporation (i) Principles for ascertainment Preparation of separate combined, columnar Profit and Loss A/c including different basis of allocation of expenses and income	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASHWINI DATTATRAY BHOIR DEPARTMENT: COMMERCE CLASS: SYBCOM E,F,G,H,I,J SEMESTER: IV MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2018-2019 SUBJECT - FOUNDATION COURSE -IV

LEARNING OBJECTIVE/S:
The learners will be able to Know Rights of Consumers, forms of its Violation and Consumer Protection act. The learner will be able to know Consumer Protection Movements and Courts.

The learner will be able to know the nature of environmental influences on individual Organisms, Their Populations, and communities, on Ecoscapes and ultimately at the level of the biosphere.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I Significant, Contemporary Rights of Citizen	A. Rights of Consumers - Violations of Consumer Rights and important Provisions of the Consumer Protection Act 2016, Other important Laws to protect Consumers; Consumer Courts and Consumer Movements. B. Right to Information - Genesis and Relation with transparency and accountability; Important Provisions of the Right to Information Act 2005; some success stories. C. Protection of Citizens / public Interest - Public Interest Litigation, need and procedure to file a PIL; Some landmark cases. D. Citizens, Charters, Public Service Guarantee Acts.	4 3 3 2	Agrawal V.K. Consumer protection Law and practice, 5th Ed., New Delhi: B.L.H. publishers Distributors Pvt. Ltd. 2009	Lecture Method, Black Board, Chalk, Duster

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Model II Approaches to Understanding Ecology	A. Understanding Approaches to Ecology - Anthropocentrism, Biocentrism and Eco centrism, Ecofeminism and Deep Ecology. B. Enviromental Principles - 1 : The Sustainability Principle; The Popular Pays Principle; The Precautionary Principle. C. Enviromental Principles - 2 : The Equity Principle; Human Rights Principles; The Participation Principle.	3 3 3	Mohapatra,Gaur Krishna Das, Environmental Ecology, Vikas, Noida 2008.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 21

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DEEPAKKUMAR GUPTA** DEPARTMENT**: COMMERCE**

CLASS: **S.Y.B.COM** SEMESTER: I**V** MONTH: **MARCH** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: To impart the practical knowledge of Accountancy & Financial Management.

The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT:1 Introduction to Company Accounts	-Introduction of basic terms: Types of companies, nature and formation of companies. -Issue of shares: Different modes IPO, Private Placements, Preferential, Rights, ESO, SWEAT and ESCROW account, Issue of shares at par, premium and discount, Under subscription and Over subscription of shares, forfeiture and reissue of forfeited shares,	15	S.N. MAHESHWAR Y	Chalk and Board
UNIT:2 Redemption of Preference Shares	Provision of the companies Act for redemption of Preference Share (Sec55 of Companies Act, 2013), Rules. Method of Redemption of fully paid up preference shares as per companies Act. 2013: Proceed of Fresh Issue of shares, Capitalisation of Reserve and combination of minimum fresh issue to provide the fund for redemption	15	S.N. MAHESHWAR Y	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NIKITA SUNIL JOGLE DEPARTMENT: COMMERCE CLASS: SYBCOM (A,B,C,D) SEMESTER: IV

MONTH: DECEMBER - MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: understand the provisions & adjustments to be made in the various accounts & balance sheet during & after redemption of shares & debentures.

SUBJECT – ACCOUNTANCY & FINANCIAL MANAGEMENT IV

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2 – Redemption of Preference Shares	Provision of the Companies Act for redemption of Preference Shares (Sec. 55 of the Companies Act, 2013), Companies (Shares & Debentures) Rules. Methods of Redemption of fully paid up Preference Shares as per Companies Act, 2013: The proceed of a fresh issue of shares, the capitalisation of undistributed profits & a combination of both, calculation of minimum fresh issue to provide the fund for redemption	16	Text book	Chalk & Board
3 – Redemption of Debentures	Introduction: Provision of Sec 71 (1) & (4) of the Companies Act, 2013, creation & investment of DRR including the Companies (Share Capital & Debentures) Rules, 2014, the methods of writing-off discount/loss on issue of debentures, terms of issue of debentures. Methods of redemption of debenture: By payment in lumpsum & by payment in instalments, conversion.	12	Text book	Chalk & Board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. VISHAL SAWANT** DEPARTMENT**: COMMERCE**

CLASS: **S.Y.B.COM** SEMESTER: **IV** MONTH: **MARCH** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: To impart the practical knowledgeof Accountancy & Financial Management.

The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Redemption of Preference Shares	**Unit: 2 – Redemption of Preference Shares** Provision of the companies Act for redemption of Preference Share (Sec55 of Companies Act, 2013), Rules. Method of Redemption of fully paid up preference shares as per companies Act. 2013: Proceed of Fresh Issue of shares, Capitalisation of Reserve and combination of minimum fresh issue to provide the fund for redemption.	15	S.N. MAHESHWAR Y, MANAN PRAKASHAN & PRAGATI PRKASHAN	Chalk and Board
Redemption of Debentures	**Unit: 3 - Redemption of Debentures** Provisions of Section 71 (1) and (4) of the Companies Act, 2013, Creation and investment of DRR including The Companies (Share Capital and Debentures) Rules, 2014, the methods of writing-off discount/loss on issue of debentures; Terms of issue of debentures, Methods of redemption of debentures: By payment in lumpsum and by payment in instalments (excluding from by purchase in open market), Conversion.(Question on entries. ledgers and/or Balance Sheet and /or redemption of preference shares)	15	MANAN PRAKASHAN & PRAGATI PRAKASHAN	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mala Khanchandani_DEPARTMENT:_Commerce CLASS: S.Y.B.Com__SEMESTER: IV

MONTH: November to February ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : __

To work towards the sovereignty and self determination of entities with historical, cultural and ecological identity._

To understand the nature of environment influences on biosphere.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FC Unit 1 Significant, contemporary rights of citizens.	A. Rights of consumers- violations of consumer rights and important provisions of the consumer protection act 2016; Other important laws to protect consumers; Consumer court and consumer movement. B. Right to information- Genesis and relation with transparency and accountability; Important provisions of the right to information act 2005; Some success stories. C. Protection of citizens- Public interest:- Public interest litigation, need and procedure to file a PIL; Some landmark cases. D. Citizens'Charters,Public ServiveGuarantee act.	12	Michael Vaz Aurara vaz: foundation course Newspapers	Chalk and talk Discussion Explanation with examples
Unit 2 Approaches to understanding ecology	A. Understanding approaches to ecology- Anthropocentrism, Biocentrism and Ecocentrism, Ecofeminism and Deep ecology. B. Environmental Principles-i) The sustainability	7	Michael Vaz Aurara vaz: foundation course.	Chalk and talk Discussion Explanation with examples

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	principle, The Polluter Pays Principle, The Precautionary Principle. C. Environmental Principles-ii) The Equity Principle; Human Rights Principles; The Participation Principle	5	Newspapers	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____12____

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TEACHING PLAN (UNIT PLAN) FC 2018-19

NAME OF THE STAFF: **RASHMI SAWANT** DEPARTMENT: **COMMERCE**

CLASS: **SYBCOM** SEMESTER: **IV**

MONTH: **DECEMBER-JANUARY** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to : know the technology available and used highly in today's era.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III	**A. Technology and Development- The Interconnectedness between growth of technology and Development of Societies.** **B. Some Significance of modern technologies , their basic features and applications.**	10 lec	Manan prakashan and Sheth Publication	Chalk, Blackboard
	Laser Technology: Light Amplification by stimulated emission of Radiation , use laser in Remote sensing, GIS /GPS mapping , medical use Satellite Technology: Various uses in satellite navigation systems ,GPS ,and in precise climate and weather analyses. Information and Communication Technology - electronic systems such as telecommunication , radio, television , video and internet aided by computer – based information systems , convergence of various technology like satellite , computer and digital in the information revolution of today's society Biotechnology and Genetic Engineering- applied biology and uses in medicine , pharmaceuticals and agriculture ; genetically modified plant, animal and human life Nanotechnology-Definition ;the study , control and application of phenomena and materials at length scales below 100 nm,			

	uses in medicine , military intelligence and consumer products.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN) FC 2018-19

NAME OF THE STAFF: **RASHMI SAWANT** DEPARTMENT: **COMMERCE**

CLASS: **SYBCOM** SEMESTER: **IV**

MONTH: **FEBRUARY-MARCH** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to : know the competitive examinations available for students and the soft skills required to pass those examinations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV	**Introduction to Competition to Exams** : Basic information on competition exams – the pattern , eligibility criteria and local centres: Exams conducted for entry professional courses- Graduates record Examination (GRE), Graduate management admission test (GMAT), Common admission test (CAT) an Scholastic Aptitude (SAT) Exam conducted for entry into UPSC, SSC, SPSC, NET/SET for entry into teaching profession.	9 lec	Manan prakashan and Sheth Publication	Chalk, Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. FIROZKHAN KHURSHIT KHAN** DEPARTMENT**: COMMERCE**

CLASS: **S.Y.B.COM** DIV: **A, B, C & D** SEMESTER: I**V** MONTH: **MARCH** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: To impart the practical knowledge of Accountancy & Financial Management.

The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Redemption of Debentures	**Unit: 3 - Redemption of Debentures** Provisions of Section 71 (1) and (4) of the Companies Act, 2013, Creation and investment of DRR including The Companies (Share Capital and Debentures) Rules, 2014, the methods of writing-off discount/loss on issue of debentures; Terms of issue of debentures, Methods of redemption of debentures: By payment in lumpsum and by payment in instalments (excluding from by purchase in open market), Conversion. (Question on entries. ledgers and/or Balance Sheet and /or redemption of preference shares)	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Chalk and Board
Ascertainment and Treatment of Profit Prior to Incorporation	**Unit: 4 - Ascertainment and Treatment of Profit Prior to Incorporation** Principles for ascertainment, Preparation of separate combined, columnar Profit and Loss A/c including different basis of allocation of expenses and income	15	S.N. MAHESHWAR Y, KHAN & JAIN, Timothy R. Mayes	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: Commerce

CLASS: S.Y.B.com SEMESTER: IV MONTH: Nov-March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

understand the underlying concepts and practical tradeoffs entailed in Public finance policy alternatives.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –IV Unit 1 Role of government in an economy Unit 3 Public Expenditure and public debt	Meaning and scope of public finance Major fiscal functions Principle of maximum social advantage Relationship between efficiency markets and governments Concept of public goods and role of government	10	Salvatore, D.:Managerial Economics in a global economy	Chalk and Talk
	Public expenditure Public debt	10	Bhatia H.L.: Public Finance. Vikas Publishing House Pvt. Ltd.	Chalk and talk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MADHURA SURVE** DEPARTMENT: COMMERCE Advertising
CLASS- SYBCOM SEMESTER: IV MONTH: NOVEMBER TO FEBRUARY ACADEMIC YEAR: 2018-19 LEARNING OBJECTIVE/S:
The learners will be able to : Basic Of Advertising, Meaning, Scope, Benefits, And Classification Of Advertising

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 1: Media in Advertising	Traditional Media: Print, Broadcasting, Out-Of-Home Advertising And Filims, Advantages And Disadvantages.	10	Marketing Management by Philip Kotler	Chalk and Duster
	New Age Media: Digital Media/ Internet Advertising- Forms, Signature And Limitations.			
	Media Research: Concept, Importance, Tool For Regulation- ABC And Doordarshan Code			
Module 3: Fundamentals of Creativity in Advertising	Creativity: Concept And Importance, Creative Process, Concept Of Creative Brief, Techniques Of Visualization.	10	Marketing Management by Philip Kotler	
	Creative Aspects: Buying Motives- Types, Selling Points-Features, Appeals- Types, Concept Of USP.			
	Creativity Through Endorsement: Endorsers-Types, Celebrity Endorsements- Advantages And Limitations, etc.,			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20 Lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NIKITA SUNIL JOGLE DEPARTMENT: COMMERCE CLASS: SYBCOM (E,F,G,H) SEMESTER: IV

MONTH: JANUARY - MARCH ACADEMIC YEAR: 2018 - 2019

LEARNING OBJECTIVE/S:
The learners will be able to: understand the importance of creativity in advertising & how to execute different types of ads.

SUBJECT – ADVERTISING II

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3 – Fundamentals of Creativity in Advertising	• Creativity – Concept & importance, creative process, concept of creative brief, techniques of visualisation. • Creative Aspects – Buying motives – types, selling points – features, appeals – types, concept of unique selling proposition (USP). • Creativity through Endorsements – Endorsers – types, celebrity endorsements – advantages & limitations, high involvement & low involvement products.	10	Text book	Chalk & Board Samples of actual advertisings
4 – Execution & Evaluation of Advertising	• Preparing print ads – Essentials of copywriting, copy – elements, types, layout – principles, illustration – importance. • Creating broadcast ads – Execution styles, jingles & music – importance, concept of storyboard. • Evaluation – Advertising copy, pre – testing & post – testing of advertisements – methods & objectives	8	Text book	Chalk & Board Samples of actual advertisings

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF NILESHWARI GHUMRE DEPARTMENT: _COMMERCE CLASS:SYBCOM SEMESTER: SEM **IV**

MONTH:NOV TO FEB ACADEMIC YEAR: 2018-19 SUB: COMMERCE IV

LEARNING OBJECTIVE/S:
The learners will be able: Understand Introduction to Management, Functions of Management: Planning and Decision Making, Organising , Directing and Controlling.

PAPER, UNIT, TITLES	SUB TOPIC	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 3. ORGANISING.	***Organising:.** Steps,. ***Organisation structure:** Line and Staff Organisation, Matrix Organisation, Virtual Organisation, Formal v/s informal organisation ***Departmentation:** Meaning, Bases of Departmentation, ***Span of Management:** factors influencing span of Management. ***Tall and flat organisation.**	**11**	**MANAGEMENT TODAYS PRINCIPLES AND PRACTICES:TATA MCGRAW**	Chalk and Duster
***MODULE 4. DIRECTING AND CONTROLLING**	***Motivation:** Meaning, Importance, influencing factors. ***Communication:** Importance, Barriers to effective communication. ***Leadership:** Meaning, functions, Styles of leadership, Qualities of good leader.***Controlling:** Steps, Essential, Techniques Of Controlling, PERT, CPM, Budgetary Control, Management Audit.	**12**		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA SINGH DEPARTMENT: COMMERCE CLASS: SYBCOM SEMESTER: 4 MONTH: NOVEMBER TO FEBRUARY ACADEMIC YEAR: 2018-19 LEARNING OBJECTIVE/S: ADVERTISING

The learners will be able to : Basic Of Advertising, Meaning, Scope, Benefits, And Classification Of Advertising

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 2: PLANNING ADVERTISING CAMPAIGNS	Advertising campaigns, steps DAGMAR Model ,Advertising Budget, GRPs , Reach frequency, Media planning , Media scheduling,	11 Lec.	Marketing Management by Philip Kotler	Chalk and Duster
Module 4: EXECUTION AND EVALUATION OF ADVERTISING	Essentials of Copywriting, copywriter , Layout Principle, Illustration. Execution, jingles, music , Advertising Copy , pre testing post testing	11 Lec.	Marketing Management by Philip Kotler	
	,			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22 Lectures

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AKRUTI BOSE DEPARTMENT: COMMERCE

CLASS: SYBOM A,B,C,D SEMESTER: IV MONTH: DECEMBER/FEBRUARY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: Board and Chalk

The learners will be able to : Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS IV Module I and Module IV	THE ROLE OF GOVERNMENT IN AN ECONOMY: Meaning and Scope of Public Finance, Major Fiscal Functions, Principle of		Macro Economics by H.L. AHUJA.	Board, Chalk and duster
	Maximum Social Advantage-Dalton and Musgrave, the principle in Practice and its Limitations.			
	MANAGEMENT AND FINANCIAL ADMINISTRATION: Fiscal Policy, Contra Cyclical and Fiscal Policy and Discretionary Fiscal Policy-PrinFISCAL ciple of Sound Finance and Functional Finance, Budget-Meaning, objectives and			
	Types, Intergovernmental Fiscal Relations-Fiscal Federalism and Fiscal Decentralization.			

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PALLAVI G NAIK. DEPARTMENT:COMMERCE

CLASS: __TYBCOM SEMESTER: V MONTH:_AUG- DECE

ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : ____about Economy and it's phenomenal strategies_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics	Module 2 Agriculture during post reform period Ch 5 National Agriculture Policy 2000 Objectives, main features, implications Ch 6 Agricultural pricing Features, objectives, implementation, evaluation Ch 7 Agricultural Finance Need and classification Sources, NABARD, Limitations, suggestions Ch. 8 Agricultural Marketing Problems, marketing forms, infrastructure, information, training, environment, Recent developments	4	Manan prakashan, seth publication	ONLINE LECTURES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Module 3 THE INDUSTRY ANS SERVICE SECTOR DURING POST REFORM PERIOD			Google meet
	Ch. 9 overview of industrial sector competition Act 2002,measurement of industrial production, composition, Industrial growth, industrial growth since 1991,competition Act 2002 Ch 10 Disinvestment Policy Objectives of disinvestment, achievements, evaluation Ch 11 MSME Sector, classification, role of MSME SECTOR, Government measures and policies Ch 12 industrial pollution Meaning, types, causes, effects, measures Ch 13 SERVICE SECTOR:TRENDS IN HEALTHCARE AND TOURISM INDUSTRIES Nature of services sector in India, role of services sector in India Health industry, tourism industry	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: COMMERCE

CLASS: TYBCOM (ABCD) SEMESTER: V MONTH: JUNE TO DECEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:
The learners will be able to understand the concept of marketing in detail and will be acquainted with various marketing strategies carried out by the marketers. The learner will also get an insight on digital marketing, Artificial intelligence which is the need of the hour. Along with the above mentioned points students will also get to know about Consumer behavior, Market segmentation, CRM and different forms of targeting the market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1- INTRODUCTION TO MARKETING	MARKETING CONCEPT- Features, Importance, Functions, Evolution, Strategic v/s Traditional Marketing MARKETING RESEARCH - Concept, Features, Process MARKETING INFORMATION SYSTEM-Concept & Components DATA MINING- Concept, Importance CONSUMER BEHAVIOUR- Concept, Factors influencing Consumer Behaviour MARKET SEGMENTATION- Concept, Benefits, Bases of market segmentation	12	Marketing management by - Phillip Kotler And Marketing management Ramaswamy & Kumari Nama	Chalk, Board and duster

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Unit 4- Key Marketing Dimensions	CUSTOMER RELATIONSHIP MANAGEMENT- Concept and Techniques MARKET TARGETING- Concept, Five patterns of Target market Selection			
	MARKETING ETHICS: Concept, Unethical practices in marketing, General role of consumer organizations COMPETITIVE STRATEGIES FOR MARKET LEADER- Market Challenger, Market Follower and Market Nicher RURAL MARKETING- Concept, Features of Indian Rural Market, Strategies for Effective Rural Marketing DIGITAL MARKETING-Concept, trends in Digital Marketing GREEN MARKETING- concept and importance CHALLENGES FACED BY MARKETING MANAGERS IN 21ST CENTURY CAREERS IN MARKETING – Skill sets required for effective marketing FACTORS CONTRIBUTING TO SUCCESS OF BRANDS IN INDIA(with suitable examples) REASONS FOR FAILURE OF BRANDS IN INDIA (with suitable examples)	12		Chalk Board and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: V

MONTH: JUNE-SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit 1 Final Accounts of the companies	Provisions of companies act related to preparation of final accounts , format of balance sheet and general instructions for preparation of balance sheet (Notes to accounts)	3	Financial Ac. counting by R. Narayanaswamy	Disscussion Method and Black Board
	Format of statement of P&L and general instructions for preparation ofstatement of P&L under guidance of ICAI (Notes to accounts)	3		
	Adjustment of final accounts and adjustment effect , accounting standard.	3		
	Practical questions	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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YashvantKeshavPatil College of Commerce
VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: V

MONTH: JUNE-SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit – 2 Internal Reconstruction	Meaning and need of internal reconstruction , Difference between internal reconstruction and external reconstruction, methods and legal procedures	3	Financial Ac. counting by R. Narayanaswamy	Disscussion Method and Black Board
	Accounting procedures, journal entries on internal reconstruction	3		
	Format of capital reduction account ,format of Balance sheet after reconstruction	3		
	Practical sums	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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YashvantKeshavPatil College of Commerce
VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: V

MONTH: JUNE-SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit – 3 Ethical behaviour and Implications for accountants	Introduction and meaning of ethical behaviour, link between law, corporate governance, corporate social responsibility and ethics	2	Financial Ac. counting by R. Narayanaswamy	Discussion methods
	Principal based approach and ethics, accounting standard setting process and ethics	2		
	IFAC code of ethics for professional accountants, ethics in accounting work environment	2		
	Company code of ethics, role of whistle blowing, importance for learning ethics	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

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Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Arjun Vishwakarma DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: V MONTH: October

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : The learner will be able to use basic computer software and some financial software

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1,2,3	**MODULE - I : Data Communication, Networking and Internet** a. Data Communications and Internet b. Network Basics and Infrastructure c. Internet	4	Computer Skills-2 and Wikipedia	PowerPoint Presentation, Laptop
	MODULE - II : Database and MySQ a. Introduction to MYSQL b. MySQL Basics	4	Computer Skills-2	PowerPoint Presentation, Laptop
	MODULE - III : Database and MySQL a. MySQL Simple queries b. Multi-Table Queries c. Nested Queries (Only upto two levels)	4	Computer Skills-2	PowerPoint Presentation, Laptop

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: Self Finance CLASS: TyBcom SEMESTER: V MONTH: July ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : calculate the value of overheads attributed to the product or process

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, overheads	Functional analysis- factory, administration, selling and distribution	1	Manan Prakashan-Ainapure	Lecture method
	Behaviour analysis- fixed, variable, semi variable cost	1		
	Practical problems	4		
	Departmentalization and apportionment of primary overheads, computation of overhead rates including machine overhead rates, practical problems	3		
	Basic concepts of treatment of over / under absorption of overheads- direct labour method and prime cost method	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM SEMESTER: V MONTH: JUNE 2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTRODUCTION TO COST ACCOUNTING	A) OBJECTIVES & SCOPE OF COST ACCOUNT,	02	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	CHALK - BOARD METHOD
	B) COST CENTRE & COST UNITS	02	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	
	C) COST CLASSIFICATION FOR STOCK VALUATION	02	PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	
	D) CODING SYSTEM	01		
	E) ELEMENTS OF COST , COST BEHAVIOUR PATTERN	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM SEMESTER: V MONTH: JULY 2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MATERIAL COST	A) PROCUREMENT PROCEDURES	01	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	
	B) INVENTORY CONTROL -TECHNIQUES	01	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	CHALK - BOARD METHOD
	C) INVERRNTORY ACCOUNTING	01	PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	
	PRATICAL PROBLEMS BASED ON CALCULATION OF EOQ, MATERIAL TURNOVER RATIO, VALUATION OF INVENTORY BASED ON FIFO METHOD & WEIGHTED AVERAGE METHOD	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM SEMESTER: V MONTH: AUGUST 2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CLASSIFICATION OF COST & COST SHEET	A) CLASSIFICATION OF COST , COST OF SALES , COST UNIT, COST CENTRES, COST SHEET , TOTAL COST & COST UNIT DIFFERENT COST FOR DIFFERENT PURPOSE	03	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	
	B) SIMPLE PRATICAL PROBLEMS ON PREPARATION OF COST SHEET	06	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	CHALK - BOARD METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM SEMESTER: V MONTH: SEPTEMBER 2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RECONCILIATION OF COST & FINANCIAL ACCOUNTS	A) PRACTICAL PROBLEMS BASED ON RECONCILIATION OF COST & FINANCIAL ACCOUNTS.	07	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	
			ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	CHALK - BOARD METHOD
			PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE CLASS: TYBCOM

SEMESTER: **V** MONTH: June,2018 to Sept,2018 ACADEMIC YEAR :2018-2019

EARNING OBJECTIVE/S:

The learners will be able to understand Objectives ,scope of cost accounting ,classification of cost, material procurement procedure, Technique of inventory control,Stock valuation, Primary distribution of overheads, Calculation of Machine hour Rate.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST ACCOUNTING	**1] Introduction to Cost accounting**-Objectives & scope of cost accounting, cost centre &cost unit,Cost classification for stock valuation, Decision making & control, coding system, elements of cost, cost behaviour pattern.	10	S.N. Maheshwari B.K.Bhar	Chalk & Duster
	2]Material cost- Procurement of material procedure & documentation in respect of receipt & issue of stock.Inventory control- Technique for fixing of minimum,maximum & reorder level,Economic Order Quantity, ABC classification . Inventory accounting , Practical problems of calculation of EOQ,Raw material Turnover ratio, Preparation of stock ledger & valuation of stock based on FIFO & weighted Average cost.	10		Chalk & Duster
	3]Overheads- Functional Analysis-Factory, Administrative & selling & distribution. Behavioural Analysis-Fixed, Variable & semi variable.Practical problems on Departmentalisation & Apportionment of primary overheads. Computation of Machine overhead rate. Basic concept of treatment of over & under	10		Chalk & Duster

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	absortioption of overheads.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Tejaswini Yogesh Naik DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: V YEAR: 2018-19

LEARNING OBJECTIVE/S: Learner will be able to understand how to manage and control the cost.
The learners will be able to : Identify differences among various types of cost such as direct cost ,indirect cost, administration cost, selling and distribution cost, variable cost, fixed cost, etc.; Learner will understand how to find total cost , percentage of profit, selling price and so on. Learner will come to know why there are differences in financial profit and costing profit.

PAPER, UNIT, TITLE Cost accounting	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1. Cost sheet : Format, meaning and applicability , cost per unit, items excluded from cost sheet, different cost sheet. And practical questions on it. 2.Reconciliation of cost and financial accounts : Need for Reconciliation statement, reasons of differences in financial and costing profits, items appearing only in cost accounts and items appears only in financial accounts , and practical questions on it.	14 lectures for each topic	Maheshwari	Black board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAKKUMAR GUPTA DEPARTMENT: COMMERCE

CLASS: TYBCOM (E,F,G.H) SEMESTER: V MONTH: JUNE, JULY, AUG & SEP ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Comprehension based Learning to Esemplastic into Objective type Exams. To Understand the Concept of Internal Reconstruction and Buy Back Of Shares, and to Learn Theoretical & Practical working of the both Concepts. To Enhance the Ethical Knowledge of Business as well as Society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2,3&5	UNIT 2: Internal Reconstruction ➢ Introduction, Meaning, Need for Reconstruction ➢ Distinction Between Internal & External Reconstruction ➢ Methods of Reconstruction & Accounting Treatment for same ➢ Questions solved on the same	15	S.N & S.K. MAHESHWARI	CHALK & BLACKBOARD

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	UNIT 3: Buy Back of Shares ➢ Introduction, Company Law & Legal Provisions ➢ Capital Redemption Account, Compliance of Conditions ➢ Maximum Limit, Debt-Equity Ratio & Cancellation of Shares ➢ Questions Solved on the same	12	S.N & S.K. MAHESHWARI	CHALK & BLACKBOARD
	UNIT 5: Ethical Behaviour and Implications for Accountants ➢ Meaning & Features of Ethics ➢ Personal Ethics: Factors, Standards ➢ Professional Ethics: Factors, IFAC Code of Conduct ➢ Business Ethics: Factors ➢ Work Place Ethics: Difficulties ➢ Corporate Ethics: Levels, CSR, Whistle Blower ➢ Ethical Education: Purpose, Goal/Stages	05	S.N & S.K. MAHESHWARI	CHALK & BLACKBOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___32_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KALPANA JAIN** DEPARTMENT**: COMMERCE** CLASS: **T.Y.B.COM** DIV: **E,F,G,H,I,&J** SEMESTER: **V** MONTH:June-September ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S : To explain the concepts of Accounts and impart practical knowledge of Financial Accounting.

The learners will be able to :understand the accounting concepts in simple way which will help them to tackle the accounting problems..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Buyback of Shares	***Introduction, Company law, legal Provisions** ***Capital Redemption Account, Compliance of Conditions** ***Maximum limit, Debt-Equity Ratio and Cancellation of Shares** ***Journal entries and BalanceSheet**	12	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Chalk-Board Method
Investment Accounting (w.r.t. Accounting Standard- 13)	*For shares (variable income bearing securities) * For debentures/Preference. shares (fixed income bearing securities) *Accounting for transactions of purchase and sale of investments with ex and cum interest prices * Finding cost of investment sold and carrying cost as per weighted average method (Excl. brokerage). *Calculation of Dividend, Bonus Shares, Right Shares. *Columnar format for investment account.	15	Financial Accounting by R. Narayan	Chalk-Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FINANCIAL ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____TYBCOM____ SEMESTER: V_ MONTH: __JUNE-JULY__ ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Preparation of Final Accounts of the companies	Provisions of companies act related to preparation of final accounts, format of balance sheet and general instructions for preparation of balance sheet (Notes to accounts)	3	Financial Accounting By R.Narayanaswamy	Discussion Method and Chalk Board
	Format of statement of P&L and general instructions for preparation of statement of P&L under guidance of ICAI (Notes to accounts)	3		
	Adjustment of final accounts and adjustment effect , accounting standard.	3		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FINANCIAL ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____TYBCOM____ SEMESTER: V_ MONTH: __AUGUST- SEPTEMBER__ ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 2 Internal Reconstruction	Meaning and Need of Internal Reconstruction , Difference between internal reconstruction and external reconstruction, methods and legal procedures	3	Financial Accounting By R. Narayanaswamy	Discussion Method and Black Board
	Accounting procedures, journal entries on internal reconstruction	3		
	Format of capital reduction Account, Format of Balance sheet after Reconstruction	3		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FINANCIAL ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____TYBCOM____ SEMESTER: V_ MONTH: __SEPTEMBER_ ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the importance Accounting Ethics in Business World

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 3 Ethical behaviour and Implications for accountants	Introduction and meaning of ethical behaviour, link between law, corporate governance, corporate social responsibility and ethics	2	Financial Accounting By R. Narayanaswamy	Discussion methods
	Principal based approach and ethics, accounting standard setting process and ethics	2		
	IFAC code of ethics for professional accountants, ethics in accounting work environment	2		
	Company code of ethics, role of whistle blowing, importance for learning ethics	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __8__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEELAM RATHORE DEPARTMENT: COMMERCE ,

CLASS: TY. BCOM. SEMESTER: 5th MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2018-2019,

LEARNING OBJECTIVE/S:
The learners will be able to: The learners will be able to Analyze, Design, Implement and evaluate a computer based system, process components or program to meet the different context of life in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit - 2 and Unit – 3. Database and MYSQL.	Introduction to Database and MYSQL as Non-Proudural largnage.	3	MYSQL – The Complete Reference, By – Vikram Vaswani. Database Management Systems, By – Raghu Ramakrishnan	
	MYSQL Basics, Datatypes, Creation, Insertion, Updation and Deleting of Data; Built-in-Functions.	3		
	After of Data for Charge of Columns, Rename, Show, Describe and Drop statement, Primary key, Foreign key and Constraints.	3		
	MYSQL simple Queries (Select Statement) filtering of Data by using conditions use of operators, Aggregate functions.	3		
	Multi-Table Queries – use of Joins (INNERJOIN)	3		
	Nested Queries using Sub-Quires and Joins, use of HAVING Clause Simple transactions (Start, Commit and Rollback)	3		
Pratical-1	Excel- Calculations using Avg., Sum functions.	2		
Pratical-2	Excel- Calculation of Subtotal.	2		
Pratical-3	Excel- Calculation of pivot Table.	2		
Pratical-4	Excel- Excel Functions.	2		
Pratical-5	Excel- Calculation of Selling Price.	2		
Pratical-6	MYSQL- Creation of Database and Table.	2		

Pratical-7	MYSQL- Insertion of Values in Table.	2		
Pratical-8	MYSQL- Insertion of Columns.	2		
Pratical-9	MYSQL- Basic Queries (Select, Update, Delete, Drop).	2		
Pratical-10	MYSQL_ Use of Group by Order by Statements.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____20_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER: V MONTH: JUNE-JULY ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S: Students will come to know how online data communicated over the network and different components, types and structures of networks.
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
THEORY DATA COMMUNICATION NETWORKING AND INTERNET	Data Communication Component, Data representation, Distributed processing	2	Data Communication and Networking - Behrouz A Forouzan Introduction to Computers – Peter Norton, Tata McGraw Hill	Chalk and board
	Definition, Types (LAN, MAN, WAN) Advantages. Network Structures – Server Based, Client server, Peer to Peer.	3	Same as above	
	Topologies – Star, Bus, Ring. Network Media, Wired and Wireless.	3	Same as above	
	Network Hardware: Hubs, Bridges, Switches, Routers. Network Protocols – TCP/IP, OSI Model.	3	Same as above	
	Definition, Types of connections, sharing internet connection.	1	Same as above	
PRACTICAL 1	CALCULATIONS USING AVERAGE, SUM FUNCTIONS	2		Projector, Microsoft excel 2010 software

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PRACTICAL 2	SUBTOTAL	2		Projector, Microsoft excel 2010 software
PRACTICAL 3	PIVOT TABLE	2		Projector, Microsoft excel 2010 software
PRACTICAL 4	EXCEL FUNCTIONS	2		Projector, Microsoft excel 2010 software

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: THEORY-12 PRACTICAL-8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER: V MONTH: JULY-AUGUST ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : students will come to know technical aspect of Internet which they regularly used in their day to day life e.g. websites ,protocols email services

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
THEORY UNIT I DATA COMMUNICATION NETWORKING AND INTERNET	Services on net- WWW, Email-Blogs. IP addresses, Domain names, URLs.	2	Data Communication and Networking - Behrouz A Forouzan Introduction to Computers – Peter Norton, Tata McGraw Hill	Chalk and board
	Searching Directories, Search engines, Boolean search (AND, OR, NOT), Advanced search, Meta Search Engines	1	Same as above	Same as above
	Email – POP/SMTP accounts in Email, Different parts of an Email address. Receiving and sending emails with attachments by scanning attachments for viruses	2	Same as above	Same as above
UNIT III **Spreadsheet**	**Creating and Navigating worksheets and adding information to worksheets**	1		Projector, Microsoft excel 2010 software

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PRACTICAL 5	**MYSQL-HOW TO CREATE ,USE, RENAME DELETE DATABASES**	2		Projector, MySql software
PRACTICAL 6	**MYSQL-TABLE CREATION**	2		Projector, MySql software
PRACTICAL 7	**MYSQL-INSERTION OF RECORDS**	2		Projector, MySql software
PRACTICAL 8	**ALTERATION AND UPDATION OF RECORDS**	2		Projector, MySql software

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: THEORY-6 PRACTICAL-8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER: V MONTH: AUGUST-SEPTEMBER ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Perform various types of calculations by using excel functions. Report generations, sorting and filtration of data.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
THEORY UNIT III **Spreadsheet**	**Multiple Spreadsheets**	1		Projector, Microsoft excel 2010 software
	Financial functions: FV, PV, PMT, PPMT, IPMT, NPER, RATE, NPV, IRR	1		Projector, Microsoft excel 2010 software
	Mathematical and statistical functions. ROUND, ROUNDDOWN, ROUNDUP, CEILING, FLOOR, INT, MAX, MIN, MOD, SQRT, ABS, AVERAGE	1		Projector, Microsoft excel 2010 software
	Sorting, Subtotal.	2		Projector, Microsoft excel 2010 software
	Pivot Tables- Building Pivot Tables, Pivot Table regions, Rearranging Pivot Table.	2		Projector, Microsoft excel 2010 software
PRACTICAL 9	MYSQL- FUNCTIONS	2		Projector, MySql software
PRACTICAL 10	MYSQL-JOINS	2		Projector, MySql software

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: THEORY- 7 PRACTICAL 4

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAAC accredited "B" Grade, 2.69 CGPA

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.**SEMESTER: **5th** MONTH: **JUNE**

ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Income Tax and its basic term(Definitions)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEFINITIONS	**Definitions U/S 2:** Section 2-Assessee, Assessment Year, Assessment, Annual value, Business, Capital asset, Income, Person, Previous Year, Transfer **Section 3** Previous Year	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM** SEMESTER: **5th** MONTH: **JULY**

ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Residential status and which income is taxable and nontaxable in India (Scope of Total Income)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESIDENTIAL STATUS AND SCOPE OF TOTAL INCOME	**Basis of Charge :Section 4 to 9** Residential Status, Scope Of Total Income, Deemed Income	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM** SEMESTER: **5th** MONTH: **AUGUST**

ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are the Provision regarding Income from Salary under Income Tax Act, 1961.
2. What are provision of Income from Other Sources under Income Tax Act, 1961

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME	**Salary Income: Section 15 – 17** Including Section 10 relating to House Rent Allowance, Travel Concession, Special Allowance, Gratuity, Pension ,Commutation, Leave Encashment, Compensation, Voluntary Retirement, Payment from Provident Fund	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method
	Income from Other Sources: Section 56 to 59			
	Exemption U/s 10 Related to income from other sources			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **5th** MONTH: **SEPTEMBER**

ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. How to Compute Taxable income of Individual and HUF.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMPUTATION OF TOTAL INCOME	Computation of Total Income of Individual and HUF with respect to above heads and deductions (Practical Questions)	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manjushri Shripad Oak DEPARTMENT: Commerce

CLASS: T.Y.B.COM SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Learners will be able to understand the concept of Internet , computer Network , searching methods and cybercrime .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –I Internet	Internet – Definition, Types of Connection, Hot-Spot, Services on Net – www, email, blog	03	Computer System And Application Manan Prakashan	Black Board And Discussion Method
	IP address, domain name, URL, Hyperlink, web browser, searching directories, Search engine, Boolean search (AND OR NOT), Advance search, meta search	03	Computer System And Application Manan Prakashan	Black Board And Discussion Method
	E-mail, parts of email address , cybercrime, hacking, sniffing, spoofing	03	Computer System And Application Manan Prakashan	Black Board And Discussion Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manjushri Shripad Oak DEPARTMENT: Commerce

CLASS: T.Y.B.COM SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Learners will be able to analyze the information using Spread Sheet.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –IV Spread sheet	Spreadsheet-Creating and navigating worksheet and adding information in work sheet. - Entering different types of data - Auto complete, auto correct, auto fill, auto fit, undo, redo - Moving data- cur copy paste, inserting rows and columns. - Find and replace value, spell check. Formatting Cell.	02	Computer System And Application Manan Prakashan	Black Board And Discussion Method
	Multiple spread sheet Adding, removing, hiding worksheet. Header/footer, page break. Formulas, cell references.	02	Computer System And Application Manan Prakashan	Black Board And Discussion Method
	Function- - Financial function- FV,PV,PMT,PPMT,IPMT,NPER,RATE.	02	Computer System And Application Manan Prakashan	Black Board And Discussion Method

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	- Mathematical and statistical functions- - Round, Round down, Round up, Ceiling, Floor, Int, Max, Min, Mod, SQRT, ABS, Sum, Count, Average.			
	Data Analysis- - Sorting, Subtotal, Pivot Table.	03	Computer System And Application Manan Prakashan	Black Board And Discussion Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9

Practicals : - Computer System And Application

Sem - V

Sr. No.	**Sub Topics**	**No. Of Lecture Allotted**	**TEACHING METHOD/ ICT TOOLS USED**
Practical 1	Excel Calculations using SUM, AVG functions.	02	Projector and Computer, Black Board
Practical 2	Excel – Calculations of Subtotal	02	Projector and Computer, Black Board
Practical 3	Excel - Calculations of Pivot Table	02	Projector and Computer, Black Board
Practical 4	Excel – Excel functions	02	Projector and Computer, Black Board
Practical 5	Excel – Calculations selling Price	02	Projector and Computer, Black Board
Practical 6	MYSQL- creation of database and tables	02	Projector and Computer, Black Board
Practical 7	MYSQL- inserting values in tables	02	Projector and Computer, Black Board
Practical 8	MYSQL-alteration of columns	02	Projector and Computer, Black Board
Practical 9	MYSQL-Basic queries (select update, delete, Drop)	02	Projector and Computer, Black Board
Practical 10	MYSQL- Use of group by and Order by statements	02	Projector and Computer, Black Board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: V

MONTH: June to October 2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit I Introduction and Basic Terms	Introduction to Income Tax : Introduction of Tax i.e. Direct and Indirect, Basic information about what is Direct Tax	1	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk
	BASIC TERMS : 1.Assessee 2.Assessment 3.Assessment Year 4.Capital Assets 5.Income 8.Person 6.Previous Year 7.Transfer Practical questions	5	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6 per Division

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: V

MONTH: June to October 2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.

The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit II Scope of Total Income	Residential Status Basic Conditions, Exceptions, Additional Conditions R & OR, R but NOR, NRI Practical problems	5	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk
	Scope of Total Income Related to R & OR, R but NOR, NRI	3	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: V

MONTH: June to October 2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.

The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit III Heads of Income	Income From Salary Concept of Salary, Perquisites, Allowances, Exemptions Practical Questions	5	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk
	Income from Other Sources Income taxable and deductions deductible under this head Exempt Incomes, Practical Problems	5	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 per Division

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30 per Division

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:SYBIM SEMESTER: IV

MONTH: June to October 2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit IV Deductions U/C VI/A	Deductions u/s 80C, 80CCC, 80CCD, 80D, 80DD, 80E, 80TTA, 80U	3	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3 per Division

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: V

MONTH: June to October 2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit V Computation of Total Income for Individual	Computation of total income by combining two or more heads of incomes – practical problems	3	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3 per Division

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____NILESHWARI VINAY GHUMRE_____ DEPARTMENT: _____COMMERCE____ CLASS: ____TYBCOM_ SEMESTER: V_

MONTH: _____AUG TO DEC___ ACADEMIC YEAR: _____2020-21__

LEARNING OBJECTIVE/S:
The learners will be able to : _____STUDENTS WILL HAVE INDEBTH KNOWLEDGE AND PRACTICAL EXPERIENCE OF EXPORT MARKETING_

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 AND 4	Export marketing, Trade barriers, major economic groupings, overseas market research	12	R.L.KRAMER	Google meet, ppt , online lectures
	Export incentives and assistance	12	Michael vaz	Google meet, ppt, online lectures

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___24_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : PRAKTANA KORE DEPARTMENT : Commerce

CLASS : TYBCOM (A,B,C,D) SEM : V MONTH : June - Sept YEAR : 2018-19

LEARNINGOBJECTIVE/S : Marketing is very essential part of commerce. This subject is helpful to develop marketing skills among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE V	**MODULE II: MARKETING DECISIONS - I** MARKETING MIX - Concept PRODUCT- Product Decision Areas, PLC- Concept,Managing Stages of PLC BRANDING-Concept , Components BRAND EQUITY- Concept, Factors Influencing Brand Equity PACKAGING- Concept ,Essentials of Good Package Product Positioning- concept,Strategies of Product Positioning Service Positioning - Importance and Challenges PRICING- Concept,Objectives,Factors Influencing Pricing,Pricing Stategies	11	Marketing management by - Phillip Kotler And	Chalk & board

	MODULE III: **MARKETING DECISIONS- II** PHYSICAL DISTRIBUTION-Concept,Factors Influencing Physical Distribution,Marketing Channels SCM- Concept,Components PROMOTION-Concept,Importance.Elements of Promotion Mix IMC-Concept ,scope,importance SALES MANAGEMENT-Concept, Components,Emerging Trends PERSONAL SELLINGS - Concept ,Process Skill sets required	10		Chalk & board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: COMMERCE CLASS: T.Y.B.COM

SEMESTER: V MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:

The Learner/Students will be able to under the concept of Indian economy in terms of classification of various sector such as primary, secondary and tertiary sector and their contribution towards the development of Indian Economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECONOMICS SEM V	**Module I: Macro Economic Overview of India** **Overview of New Economic Policy 1991:** Role of Social Infrastructure with reference to Education, Health and Family Welfare. **Sustainable Development Goals and Policy Measures:** Make in India, Invest in India, and Skill Development and Training Programmes. **Foreign Investment Policy Measures in India:** Foreign Investment Promotion Board, FDI-MNCs and their Role.	15	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	Lecture, group discussion, test, oral presentation of important topics.
ECONOMICS SEM V	**Module IV: Banking and Financial Market (10 Lec.)** **Banking Sector :** Recent Trends, Issues and Challenges in Banking and Insurance Industry	10	V.K. Puri S.K. Misra: Indian Ecomomy	Lecture, group discussion, test, oral presentation of important topics.

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	Money Market: Structure, Limitations and Reforms **Capital Market:** Structure, Growth and Reforms		Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM** SEMESTER: **5th** MONTH: **JUNE**

ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Know the details about Income Tax Act 1961 and its coverage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DIRECT TAX, CHAPTER 1	**Definitions u/s 2 & 3 of IT Act 1961** Section 2-Assessee, Assessment Year, Assessment, Annual value, Business, Capital asset, Income, Person, Previous Year, Transfer **Section 3** Previous Year	6	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **5th** MONTH: **JULY**

ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are the Provision regarding residential status of individual under Income Tax Act, 1961.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESIDENTIAL STATUS AND SCOPE OF TOTAL INCOME	**Basis of Charge :Section 4 to 9** Residential Status, Scope Of Total Income, Deemed Income	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **5th** MONTH: **AUGUST**

ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are provision of income from house property and business & profession under Income Tax Act, 1961

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME	**Income From House Property:** Section 22 to 27, Including Section 2 - Annual Value Practical Question **Profits & Gains From Business & Profession, Vocation** Section 28 to 32, 36, 37, 40, 40A, 43B, 44AD, 44ADA & 44AE Including.: Section 2 – Business Practical Question	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:**MABEL R LOBO** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **5th** MONTH: **SEPTEMBER**

ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Provisions relating to calculations of income from capital gain
2. How to Compute Taxable income of Individual and HUF.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME	**Income from Capital Gains :** Section 45, 48, 49, 50, 54 and 55			
COMPUTATION OF TOTAL INCOME	**Computation of Total Income of Individual and HUF with respect to above heads and deductions (Practical Questions)**	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SONAL RAUT DEPARTMENT: COMMERCE

CLASS: TYBCOM (A,B,C,D) SEMESTER: V MONTH: JUNE, JULY, AUG & SEP ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Comprehension based Learning to Esemplastic into Objective type Exams. To Understand the Concept of Internal Reconstruction and Buy Back Of Shares, and to Learn Theoretical & Practical working of the both Concepts. To Enhance the Ethical Knowledge of Business as well as Society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2,3&5	UNIT 2: Internal Reconstruction ➢ Introduction, Meaning, Need for Reconstruction ➢ Distinction Between Internal & External Reconstruction ➢ Methods of Reconstruction & Accounting Treatment for same ➢ Questions solved on the same	15	S.N & S.K. MAHESHWARI	CHALK & BLACKBOARD

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	UNIT 3: Buy Back of Shares ➢ Introduction, Company Law & Legal Provisions ➢ Capital Redemption Account, Compliance of Conditions ➢ Maximum Limit, Debt-Equity Ratio & Cancellation of Shares ➢ Questions Solved on the same	12	S.N & S.K. MAHESHWARI	CHALK & BLACKBOARD
	UNIT 5: Ethical Behaviour and Implications for Accountants ➢ Meaning & Features of Ethics ➢ Personal Ethics: Factors, Standards ➢ Professional Ethics: Factors, IFAC Code of Conduct ➢ Business Ethics: Factors ➢ Work Place Ethics: Difficulties ➢ Corporate Ethics: Levels, CSR, Whistle Blower ➢ Ethical Education: Purpose, Goal/Stages	05	S.N & S.K. MAHESHWARI	CHALK & BLACKBOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___32_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AKRUTI BOSE DEPARTMENT: COMMERCE

CLASS: TYBOM A,B,C,D SEMESTER: V MONTH:JUNE/SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: Board and Chalk
The learners will be able to : Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS V Module II and Module III	AGRICULTURE DURING POST REFORM PERIOD : National Agricultural Policy 2000, Agricultural Pricing and Agricultural Finance,		Micro Economics by H.L. AHUJA.	Board, Chalk and duster
	Agricultural Marketing Development.			
	THE INDUSTY AND SERVICE SECTOR DURING POST-REFORM PEROD: Policy Measures, Competition Act, 2002, Industrial Pollution			
	In India, Service Sector.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 Lectures.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TEJASWINI YOGESH NAIK DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER: V MONTH:JUNE-SEPT. ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: HOW TO CALCULATE VARIOUS TYPES OF DIRECT INCOME
The learners will be able to : HOW TO CALCULATE INCOME FROM HOUSE PROPERTY, CAPITAL GAINS, BUSINESS AND PROFESSION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct tax	1.Income from house property: gross annual value, building, appurtenant land municipal tax, standard deduction, pre construction interest,types of house property. 2.Income from capital gain: capital, transfer, short term and long term capital gain, types of capital assets, cost inflation index. 3. Income from business and professional: meaning , deductions u/s 37, 38, 39. 4. Deductions: 80 A, 80 C, 80CCC, 80 E, 80D, 80U,80DD, 80TTA 5.Total income	5 lectures for each topic	Anaspure, manan publication	Black board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Veena Sihana DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: V MONTH: June to October 2018

ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Familiarize the commerce students with basic concepts of macroeconomics and with certain common features of economic occurrence in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics - V	Module III – The Industry And Service Sector During Post Reform Period I - Policy Measures- Competition Act 2003, Disinvestment Policy, II - Industrial Pollution in India: Meaning, Types, Effects and Control. III - Service Sector: Recent trends, role and growth in Healthcare and Tourism Industry	14	Jhingan, M.L., Principles of Economics — Vrinda Publications (P) Ltd Ahuja. H.L., Modern Economics — S.Chand Company Ltd. New Delhi.	Chalk & Duster
	Module IV – Banking and Financial Market I - Banking Sector- Recent trends, issues and challenges in Banking and Insurance Industry. II -Money Market – Structure, Limitations and Reforms. III-Capital Market – Structure, Growth and Reforms.	14		Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : TYBCOM (E,F,G,H) SEM : V MONTH : June - Sept YEAR : 2018-19

LEARNINGOBJECTIVE/S : The learners will be able to learn various aspects about marketing. Marketing is very essential part of commerce. This subject is helpful to develop marketing skills among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE V	**MODULE I : INTRODUCTION TO MARKETING** ●Marketing Concept, features, importance, functions, evolution ●Marketing research, marketing information system, data mining ●Consumer behaviour, market segmentation, consumer relationship management, market targeting	10		Chalk & board
	MODULE IV : KEY MARKETING DIMENSIONS ●Marketing ethics, unethical practices in marketing, general role of consumer organisations, competitive strategies for market leader, market challenger, market follower, niche marketing ●Rural marketing, digital marketing, green marketing ●Challenges faced by marketing managers in 21st century, careers in marketing, success & failure of brands in India	10		Chalk & board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PALLAVI NAIK DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: VI MONTH: Nov to Mar 2019

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Familiarize the commerce students with basic concepts of macroeconomics and with certain common features of economic occurrence in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics - VI	Module III – Balance of Payments & International Economic Organisation Balance of Payments – Structure – Causes of Disequilibrium & Measures to correct it in BOP – World Trade Organisation	14	Manan Prakashan Seth publication.	Blackboard Chalk & Duster
	Module IV – Foreign Exchange Market Foreign Exchange Market – Determination of Equilibrium Rate of Exchange – Purchasing Power Parity Theory – Role of Central Bank in Foreign Exchange Rate Management.	14		Blackboard Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: COMMERCE

CLASS: TYBCOM(ABCD) SEMESTER: VI MONTH: DECEMBER TO MARCH ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand Human resource management and its various aspects including selection, recruitment, E-selection etc
- Get insight on how human resource planning, job analysis and job design is done in big MNC's.
- Perceive meaning and methods of training and development. This unit will also help the understand the meaning of performance and potential appraisal which in turn will help Improve their performance in the actual job.
- Interpret career planning, succession planning, mentoring and counseling

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-1 Human Resource Management	HUMAN RESOURCE MANAGEMENT – Concept, Functions, Importance, Traditional v/s Strategic Human Resource Management HUMAN RESOURCE PLANNING- Concept Steps in Human Resource Planning JOB ANALYSIS-Concept, Components JOB DESIGN- Concept, Techniques RECRUITMENT- Concept, Sources of Recruitment SELECTION - Concept , process , Techniques of E,selection,	12	Human resource management by Gary Dessler	Chalk, Board and Duster

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Unit-2-Human Resource Development	HUMAN RESOURCE DEVELOPMENT- Concept, functions TRAINING- Concept, Process of identifying training and development needs, Methods of Training & Development (Apprenticeship, understudy, job rotation, vestibule training, case study, role playing, sensitivity training, In, basket, management games) EVALUATING TRAINING EFFECTIVENESS- Concept, Methods PERFORMANCE APPRAISAL- Concept, Benefits, Limitations, Methods POTENTIAL APPRAISAL-Concept, Importance CAREER PLANNING- Concept, Importance SUCCESSION PLANNING- Concept, Need MENTORING- Concept, Importance COUNSELLING- Concept, Techniques.	12		Chalk, Board and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: VI

MONTH: November- March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit- 1 Underwriting of shares and Debentures	Meaning of underwriting and underwriting commission , payment of commission to underwriters , sub-underwriters , brokers etc	2	Financial Ac. counting by R. Narayanaswamy	Disscussion Method and Black Board
	Types of underwriting, explaination about marked, unmarked and firm underwriting and liability of underwriters	3		
	Practical problems	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: VI

MONTH: November- March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit – 2 Accounting for Limited Liability partnership	Meaning of limited liability and its statutory provisions	2	Financial Ac. counting by R. Narayanaswamy	Disscussion Method and Black Board
	Conversion of partnership into LLP , format of Balance sheet	3		
	Practical problems on final accounts	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: VI

MONTH: November- March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit-3 Liquidation of companies	Meaning of liquidation and winding up,preferential payments, overriding preferential payments	2	Financial Ac. counting by R. Narayanaswamy	Disscussion Method and Black Board
	Format of statement of affairs, deficit and surplus and format of liquidators statement of account	3		
	Practical problems	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Arjun Vishwakarma DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: VI MONTH: DECEMBER

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : The learner will be able to use basic computer software and some financial software

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1,4	▶ **Module - I : E-Commerce (18 Lectures)** **(a) Definition of E-commerce** **(b) Features of E-commerce** **(c) Types of E-commerce (B2C, B2B, C2C, P2P)** **(d) Business Models in E-commerce (Advertising, Subscription, Transaction Fee, Sales Revenue, Affiliate Revenue)** **(e) Major B2C models (Portal, Etailer, Content Provider, Transaction Broker, Market Creator, Service Provider, Community Provider).** **(f) E-Commerce Security : Integrity, Non repudiation, Authenticity, Confidentiality, Privacy Availability.** **(g) Encryption : Definition, Digital ignatures, SSL.** **(h) Payment Systems : Digital Cash, Online stored value, digital accumulating balance payment, Digital credit accounts, digital checking.** **(i) How an Online credit card transaction works. SET protocol.**	4	Computer Skills-2 and Wikipedia	PowerPoint Presentation, Laptop

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	(j) Limitations of E-commerce. **(k) M-commerce (Definition and Features)**			
	▶ **Module - IV : Visual Basic** **(a) Introduction to Visual Basic, Introduction Graphical User Interface (GUI)** **Programming Language (Procedural, Object Oriented, Event Driven), Writing VB Projects. The Visual Basic Environment** **(b) Introduction to VB Controls** **Text boxes, Frames, Check boxes, Option button, Designing the User Interface, Default & Cancel property, tab order, Coding for controls using Text, Caption, Value property and Set Focus method** **(c) Variables, Constants, and Calculations** **Variable and Constant, Data Type (String, Integer, Currency, Single, Double, Date), Naming rules/conventions, Constants (Named & Intrinsic), Declaring variables, Val Function, Arithmetic Operations, Formatting Data.** **(d) Decision and Condition** **Condition, Comparing numeric variables and constants, Comparing Strings, Comparing Text Property of text box, Compound Conditions (And, Or, Not). If Statement, if then-else Statement, LCase and Ucase function, Using If statements with Option Buttons & Check Boxes. Msgbox (Message box) statement Input Validation : Is Numeric function.** **(e) Sub-procedures and Sub-functions, Using common dialog box, Creating a new sub-procedure, Writing a Function procedure. Simple loops using For Next**	9	Computer Skills-2	PowerPoint Presentation, Laptop

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	statements and Do while statement and display output using MsgBox Statement.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4,9

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM SEMESTER: V MONTH: DEC 2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTRODUCTION TO MARGINAL COSTING	MARGINAL COSTING MEANING, APPLICATION, ADVANTAGES, LIMITATIONS	02	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	
	CONTRIBUTION, BREAKEVEN ANALYSIS, MARGIN OF SAFETYAND PROFIT VOLUME GRAPH SIMPLE PRATICAL PROBLEMS BASED ON MARGINAL COSTING EXCLUDING DECISION MAKING	06	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	CHALK - BOARD METHOD
			PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM SEMESTER: V MONTH: JAN 2019 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PROCESS COSTING	PROCESS LOSS, ABNORMAL GAINS & LOSSES, JOINT PRODUCTS AND BY-PRODUCTS.	03	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	
	SIMPLE PRACTICAL PROBLEMS PROCESS COSTING AND JOINT AND BY-PRODUCT	06	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	CHALK - BOARD METHOD
			PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM SEMESTER: V MONTH: FEB 2019 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST CONTROL ACCOUNTS	ADVANTAGES & DISADVANTAGES	01	COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	
	COST CONTROL ACCOUNTS, PRINCIPAL ACCOUNTS, SUBSIDIARY ACCOUNTS TO BE MAINTAINED	03	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	CHALK - BOARD METHOD
	SIMPLE PRACTICAL PROBLEMS ON PREPARATION OF COST CONTROL ACCOUNTS.	01	PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM SEMESTER: V MONTH: MARCH 2019 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to : APPLY THESE COST RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST CONTROL ACCOUNTS			COST ACCOUNTING BY ARORA M.N. VIKAS PUBLICATION	
	SIMPLE PRACTICAL PROBLEMS ON PREPARATION OF COST CONTROL ACCOUNTS.	06	ADVANCED PROBLEMS AND SOLUTIONS IN COST ACCOUUNTING - S.N.MAHESHWARI	CHALK - BOARD METHOD
			PRINCIPLE & PRACTICES OF COST ACCOUNTING - N.K.PRASAD	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: Self Finance CLASS: TYBCom (EFGH) SEMESTER: VI MONTH: January

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : accounting treatment for contract costing and preparation of contract account. Computation of cost of each process, abnormal gains and losses during process.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, contract costing	Progress payments, retention money, contract accounts, accounting for material	1	Manan Prakashan	Lecture method
	accounting for tax deducted at source by the contractee, accounting for plant used in a contract	1		
	Treatment of profit on incomplete contracts, contract profit and balance sheet entries.	2		
	Practical problems	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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MONTH: February

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting, process costing	Process loss, abnormal loss and gains, joint products and by products, process account formats	2	Manan Prakashan	Lecture method
	Practical problems	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE CLASS: TYBCOM

SEMESTER: **VI** MONTH: Nov,2018 to Feb,2019 ACADEMIC YEAR :2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to understand preparation of contract Account, Process accounts , Abnormal Gain/ loss accounts, Meaning of Target costing , ABC costing, Benchmarking etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST ACCOUNTING	**1] Contract costing**-Meaning of contract, Retention money,Contract ledger, accounting for material, plant & machinery. Treatment of profit on incomplete contract, Contract profit , contractee account , Practical problems on contract accounting.	10	S.N. Maheshwari B.K.Bhar	Chalk & Duster
	2] Process costing- Meaning of process account , process loss,Abnormal Gain/ Loss, Joint product & By product, Process stock account. Practical problems.	10		Chalk & Duster
	3]Some Emerging concept of Cost Accounting- Target costing, Life cycle costing,Benchmarking , ABC costing	10		Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Tejaswini Yogesh Naik DEPARTMENT: commerce CLASS:TY BCOM SEMESTER: VI MONTH: October to March
ACADEMIC YEAR:2018- 19 learners will be able to : uderstand how to manage and control cost.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting	1. Marginal costing : meaning, cost volume profit, pv ratio, break even point, margin of safety, theory and practical	10 lectures for	Maheshwari	Black board
	On each sub topic. 2.Standard costing: Need to learn standard costing , variances,	Each topic .		
	Reasons of variances, labour variances and material variances. Theory and practical questions.			
	3. control account: difference in integrated and non integrated accounting, cost control account, stock control			
	Account, finished goods control account,wip control account.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KALPANA JAIN** DEPARTMENT**: COMMERCE** CLASS: **T.Y.B.COM** DIV: **E, F, G, H, I & J** SEMESTER: **VI** MONTH: **NOVEMBER-FEBRUARY** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S : To explain the concepts of accounts an impart the practical knowledge of Financial Accounting.

The learners will be able to : understand the accounting concepts in simple way which will help them to tackle the accounting problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AS – 14 - Amalgamation, Absorption & External Reconstruction	**Unit: 1- AS-14** *Types of Amalgamation *In the nature of merger and purchase * Corresponding accounting treatments of pooling of interests and purchase method respectively. * Meaning and Computation of purchase consideration. *.Journal entries in the books of Purchase Company and in the books of vendor company. * Problems based on purchase method only.	15	Financial accountancy by R Narayanswamy	Chalk and Board
Accounting of transactions of Foreign Currency	**Unit: 2 –** ***Meaning, Definition and Objectives.** ***Different exchange rates prevailing.** ***Monetary items and Non Monetary items.** ***Accounting for exchange difference with Import (Purchases) and Export(Sales)** *Foreign exchange fluctuations ledger account *Journal entries for export as well as import	10	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

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SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FINANCIAL ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____TYBCOM____ SEMESTER: VI_ MONTH: __DECEMBER__ ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - 1 Amalgamation, Absorption and External reconstruction	Meaning and Types of Amalgamation, Difference between Amalgamation, Absorption and External reconstruction , Journal entries in the books of Vendor Company	3	Financial Accounting By R. Narayanaswamy	Chalk Board and Discussion methods
	Journal entries in the books of purchasing companies and additional entries by purchasing company, Difference between Purchase Method and Merge Method	3		
	Format of Balance sheet of purchasing company (Schedule III according to companies Act, 2013), Methods of purchase consideration	3		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15__

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FINANCIAL ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____TYBCOM____ SEMESTER: VI_ MONTH: __JANUARY __ ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - 3 Liquidation of companies	Meaning of Liquidation, Modes of Winding up, Preferential Creditors (Section 327), Over riding preferential payments (Section 326)	2	Financial Accounting By R. Narayanaswamy	Chalk Board and Discussion methods
	Format of Statement of Affairs, Deficit / Surplus Account, Format of Liquidators Final Statement of Accounts	2		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10__

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FINANCIAL ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____TYBCOM____ SEMESTER: VI_ MONTH: __FEBRUARY__ ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - 4 Underwriting of shares and Debentures	Introduction of Underwriting and Underwriting commission, Provision of companies Act with respect of payment of underwriting commission, underwriters, sub-underwriters, Brokers & managers to issue.	2	Financial Accounting By R. Narayanaswamy	Chalk Board and Discussion methods
	Types of Underwriting, Abatement clause, Format of liability of underwriters, Accounting treatment relating to underwriting.	2		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FINANCIAL ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____TYBCOM____ SEMESTER: VI_ MONTH: __MARCH__ ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 5 Accounting for LLP	Meaning, Advantages and Disadvantages of LLP, Statutory Provisions	1	Financial Accounting By R. Narayanaswamy	Chalk Board and Discussion methods
	Conversion of Partnership firm inti LLP, Format of statements of Assets & Liabilities, Format of Income & Expenditure, Adjustment in Final A/c.	3		
	Practical Question Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10__

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. FIROZKHAN KHURSHIT KHAN** DEPARTMENT**: COMMERCE**

CLASS: **T.Y.B.COM** DIV: **A, B, C & D** SEMESTER: **VI** MONTH: **MARCH** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S : To impart the practical knowledge of Financial Accounting.

The learners will be able to : Develop unique Skills to solve practical problems of Finance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AS – 14 - Amalgamation, Absorption & External Reconstruction	**Unit: 1- AS – 14 - Amalgamation, Absorption & External Reconstruction** In the nature of merger and purchase with corresponding accounting treatments of pooling of interests and purchase method respectively. Meaning and Computation of purchase consideration. Problems based on purchase method only.	15	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Chalk and Board
Liquidation of Companies	**Unit: 3 - Liquidation of Companies** Meaning of liquidation or winding up, Preferential payments, Overriding preferential payments, Preparation of statement of affairs, deficit / surplus account, Liquidator's final statement of account	10	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **6th** MONTH: **NOVEMBER**
ACADEMIC YEAR: **2018-19**
LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is GST and What are the Need for GST
2. What are dual GST Model (CGST,SGST,UTGST,IGST)
3. What are the basic term use in GST Law (Definitions) and what is GSTIN

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTRODUCTION TO GST	**1. What is GST** **2.Need for GST** **3.Dual GST Model** **4. Definitions** Section 2(17) Business Section 2(13) Consideration Section 2(45) Electronic Commerce Operator Section 2(52) Goods Section 2(56) India Section2 (78) Non- taxable Supply Section 2(84) Person Section 2(90) Principal Supply Section 2193) Recipient Section 2(98) Reverse charge Section 2(102) Services Section 2(105) Supplier Section 2(107) Taxable Person Section 2(108) Taxable Supply **5. Goods & Services Tax Network (GSTN)**	09	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **6th** MONTH: **DECEMBER**
ACADEMIC YEAR: **2018-19**
LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is taxable event under GST and which supply is not taxable in GST(non-taxable supply)
2. What is Composite and Mixed Supplies and its taxability.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
LEVY AND COLLECTION OF TAX (Continue….)	**1. Scope of Supply** **2. Non- taxable Supplies** **3.Composite and Mixed Supplies**	04	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **6th** MONTH: **JANUARY**

ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Composition Levy
2. How the create levy of GST and how the GST collect from Consumer
3. What are Exemption under GST.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
LEVY AND COLLECTION OF TAX	1. Composition Levy 2.Levy and Collection of tax 3.Exemption from tax	05	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **6th** MONTH: **FEBRUARY & MARCH**

ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Time of Supply and its Provision as per CGST Act, 2017
2. What is Place of Supply its Provision as per CGST Act, 2017.
3. What is Value of Supply its Provision as per CGST Act, 2017.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
TIME, PLACE AND VALUE OF SUPPLY	• Time of Supply • Place of Supply • Value of Supply	15	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEELAM RATHORE DEPARTMENT: COMMERCE ,

CLASS: TY. BCOM. SEMESTER: 6th MONTH: NOVEMBER TO MARCH ACADEMIC YEAR: 2018-2019,

LEARNING OBJECTIVE/S:
The learners will be able to: The learners will be able to Analyze, Design, and Implement and evaluate a computer based system, process components or program to meet the different context of life in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit – IV Visual Basic	Introduction to Visual Basic, GVI and Programming language Visual Basic Environment.	2	The Complete Reference to Visual Basic 6.0, By:- Noel Jerke.	Black Board and Discussion Method.
	Introduction to VB Controls, designing the user Interface, Coding of controls and use of properties.	2		
	Use of variables and Conatants, Data types, Naming rules/ conventions, Declaring Variables, Val Functions & Operations, Formatting Data.	2		
	Projects related to Decisions and conditions, use of statements, functions with option Button & Check Bones Mgs Box.	2		
	Input Validation, Sub-Procedures and Sub-functions. Loops (for Next statement, Do while statement).	1		
Pratical-1	Excel- Calculation of Taxable Income (Statements).	2		
Pratical-2	Excel- Date and Time functions.	2		
Pratical-3	Excel- Text functions.	2		
Pratical-4	Excel- Use of VLOOKUP function.	2		
Pratical-5	Excel- Maths functions.	2		
Pratical-6	Excel- Advanced filter, use of Charts (Pie,Barek).	2		

Pratical-7	Visual Basic- Project on Welcome msg.	2		
Pratical-8	Visual Basic- Calculation of Simple and Compound Interest.	2		
Pratical-9	Visual Basic- Project on Text Specification (Change of font and colour)	2		
Pratical-10	Visual Basic- Calculating factorial of a Number.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER: VI MONTH: Nov-Dec

ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the meaning of ecommerce and its types. Advantages and disadvantages of ecommerce .Business models in ecommerce. Different payments modes in ecommerce. Security issues in ecommerce. security steps in ecommerce.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
THEORY Ecommerce	Definition of E-commerce, Features of E-commerce	2	E- Commerce - Kenneth Laudon, Carol Traver , Pearson Education	CHALK AND BOARD, INTERNET, MOBILE PHONE, ECOMMERCE WEBSITES, APPLICATIONS
	Types of E-commerce, Business Models in E-commerce (Advertising, Subscription, Transaction Fee, Sales Revenue, Affiliate Revenue)	2	E- Commerce - Rajaraman	SAME AS ABOVE
	Major B2C models (Portal, Etailer, Content Provider, Transaction Broker, Market Creator, Service Provider, Community Provider).	2	Same as above	SAME AS ABOVE
	E-Commerce Security: Integrity, Non repudiation, Authenticity, Confidentiality, Privacy Availability.	2	Same as above	SAME AS ABOVE
	Encryption: Definition, Digital Signatures, SSL.	3	Same as above	SAME AS ABOVE
PRACTICAL 1	EXCEL-NESTED IF(CALCULATION OF INCOME TAX)	2		PROJECTOR, MICROSOFT EXCEL 2010
PRACTICAL 2	EXCEL-FILTER AND SORTING	2		SAME AS ABOVE

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PRACTICAL 3	EXCEL-VLOOKUP	2		SAME AS ABOVE
PRACTICAL 4	EXCEL FUNCTIONS(DATE, TIME AND STRING)	2		SAME AS ABOVE

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: THEORY 11 PRACTICAL 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER: V MONTH: DEC-JAN

ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S: The learners will be able to : : Understand the meaning of ecommerce and its types. Advantages and disadvantages of ecommerce .Business models in ecommerce. Different payments modes in ecommerce. Security issues in ecommerce. security steps in ecommerce.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Payment Systems: Digital Cash, Online stored value, Digital accumulating balance payment, Digital credit accounts, digital checking.	2	E- Commerce - Kenneth Laudon, Carol Traver , Pearson Education	CHALK AND BOARD, INTERNET, MOBILE PHONE, ECOMMERCE WEBSITES, APPLICATIONS
	How an Online credit card transaction works. SET protocol.	3	E- Commerce - Rajaraman	SAME AS ABOVE
	Limitation of E-commerce. M-commerce (Definition and Features).	2	Same as above	SAME AS ABOVE
UNIT III **Spreadsheet**	**Multiple Spreadsheets**	1		PROJECTOR, MICROSOFT EXCEL 2010
PRACTICAL 5	**EXCEL FUNCTIONS(MATHS FUNCTIONS)**	2		PROJECTOR, MICROSOFT EXCEL 2010
PRACTICAL 6	**EXCEL-GRAPHS**	2		PROJECTOR, MICROSOFT EXCEL 2010
PRACTICAL 7	**VB-SIMPLE VB PROJECT USING LABEL AND COMMAND BUTTONS**	2		PROJECTOR, MICROSOFT VISUAL BASIC 6.0
PRACTICAL 8	**VB-SIMPLE AND COMPOUND INTEREST**	2		PROJECTOR, MICROSOFT VISUAL BASIC 6.0

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: THEORY 8 PRACTICAL8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER: VI MONTH:JAN-FEB

ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :use different databases functions,string,date,time and conditional functions in excel .how to perform normal, advanced and custom filter in excel. How to design different chats in excel.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
THEORY UNIT III **Spreadsheet**	Database Functions LOOKUP, VLOOKUP, HLOOKUP	2		PROJECTOR, MICROSOFT EXCEL 2010
	Conditional Logic functions IF, COUNTIF, SUMIF	2		SAME AS ABOVE
	String functions LEFT, RIGHT, MID, LEN, UPPER, LOWER, PROPER, TRIM. Date functions TODAY, NOW, DATE, TIME, DAY, MONTH, YEAR, WEEKDAY, DAYS360	1		SAME AS ABOVE
	Filter with customized condition.	2		SAME AS ABOVE
	The Graphical representation of data.	2		SAME AS ABOVE
PRACTICAL 9	VB-OPTION AND CHECK BOXES	2		PROJECTOR, MICROSOFT VISUAL BASIC 6.0
PRACTICAL 10	VB-FACTORIAL (LOOP)	2		PROJECTOR, MICROSOFT VISUAL BASIC 6.0

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: THEORY 9 PRACTICAL 4

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **6th** MONTH: **NOVEMBER**
ACADEMIC YEAR: **2018-19**
LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are eligibility and what are the conditions for taking the ITC.
2. Which are Special cases for taking ITC.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INPUT TAX CREDIT & PAYMENT OF TAX **(Continue….)**	**1.** Eligibility for taking Input Tax Credit **2.** Condition for taking Input Tax Credit **3.** Input Tax Credit in Special Circumstances	04	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **6th** MONTH: **DEC. - JANUARY**

ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. How to calculate GST liability
2. How to Pay GST Liability through various Ledgers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INPUT TAX CREDIT & PAYMENT OF TAX	1. **Computation of Tax Liability** 2. **Payment of tax** 3. **Practical Questions**	05	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.COM.** SEMESTER: **6th** MONTH: **FEBRUARY**

ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. Who is liable for registration under GST(section 22)
2. Who is not liable for Registration under GST(section23)
3. Who is compulsory liable for Registration under GST(section 24)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
REGISTRATION UNDER GST LAW (Continue….)	**1.** Persons liable for registration **2.** Persons not liable registration **3.** Compulsory registration **4.** Practical Questions	05	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: S.Y.F.M.G**. SEMESTER: **4th** MONTH: **FEBRUARY -MARCH**

ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are the Procedure for registration
2. What is Deemed registration
3. What is Cancellation of registration

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
REGISTRATION UNDER GST LAW	4. Procedure for registration 5. Deemed registration 6. Cancellation of registration	04	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manjushri Shripad Oak DEPARTMENT: Commerce

CLASS: T.Y.B.COM SEMESTER: VI MONTH: December ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : : Learner will able to understand benefits of e-commerce, payment system, business modules etc..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –I E- Commerce	Definition of e-commercem, features of e-commerce, types of e-commerce, B2C,B2B,C2C,P2P.	04	Computer System And Application Manan Prakashan	Black Board And Discussion Method
	Busines Modules- Advertising, subscription, transaction fee, Sales revenue, Affiliate Revenue.	04	Computer System And Application Manan Prakashan	Black Board And Discussion Method
	Major B2c Models. E-commerce security Encryption- digital signature, SSL. Payment system	04	Computer System And Application Manan Prakashan	Black Board And Discussion Method
	Online credit card Transaction working, SET protocol. Limitations of e-commerce.	06	Computer System And Application	Black Board And Discussion Method

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	M-commerce – Definition and features.		Manan Prakashan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manjushri Shripad Oak DEPARTMENT: Commerce

CLASS: T.Y.B.COM SEMESTER: VI MONTH: December ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : : Learner will able to learn fundamentals of designing , implementing and distributing a visual basic application.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit –IV Visual Basic	Introduction to VB GUI and programming language, Visual Basic Environment,	02	The complete reference to Visual Basic 6.0 By Noel jerke	Black Board And Discussion Method

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Introduction to VB control, designing the user interface, coding of controls, and role of properties.	02	The complete reference to Visual Basic 6.0 By Noel jerke	Black Board And Discussion Method
	Use of variables and controls, data types, naming rules/convention, declaring variables, val function and operation, formatting data,	02	The complete reference to Visual Basic 6.0 By Noel jerke	Black Board And Discussion Method
	Project related to decision and condition, use of statement, function with option button and check boxes message box.	02	The complete reference to Visual Basic 6.0 By Noel jerke	Black Board And Discussion Method
	Input validation, Sub-procedure and Sub-function, loops (for next statement / do while statement).	01	The complete reference to Visual Basic 6.0 By Noel jerke	Black Board And Discussion Method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9

Practicals : - Computer System And Application

Sem - VI

Sr. No.	**Sub Topics**	**No. Of Lecture Allotted**	**TEACHING METHOD/ ICT TOOLS USED**
Practical 1	Excel Calculations of Taxable Income (If Statement)	02	Projector and Computer, Black Board
Practical 2	Excel – Date and Time Function	02	Projector and Computer, Black Board
Practical 3	Excel - Text Functions	02	Projector and Computer, Black Board
Practical 4	Excel – Use of V lookup function	02	Projector and Computer, Black Board
Practical 5	Excel – Maths Function	02	Projector and Computer, Black Board
Practical 6	Excel- Advance filter use of charts (Pie, Bar etc.)	02	Projector and Computer, Black Board
Practical 7	Visual Basic - Project on welcome message	02	Projector and Computer, Black Board
Practical 8	Visual Basic - Calculations of simple and compound interest	02	Projector and Computer, Black Board

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Practical 9	Visual Basic - Project on text specification(change of font and colour)	02	Projector and Computer, Black Board
Practical 10	Visual Basic - Calculating factorial of numbers (Loops)	02	Projector and Computer, Black Board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: VI

MONTH: November to March 2019 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To let students understand what is GST and how it is reflected in our practical life.
The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Unit I Introduction to GST	1Introduction • What is GST • Need for GST • Dual GST Model • Definitions Section 2(17) Business Section 2(13) Consideration Section 2(45) Electronic Commerce Operator Section 2(52) Goods Section 2(56) India Section2(78) Non taxable Supply Section 2(84)Person Section 2(90) Principal Supply Section 2(93) Recipient Section 2(98) Reverse charge Section 2(102) Services Section 2(105) Supplier Section 2(107) Taxable Person Section 2(108) Taxable Supply • Goods & Services Tax Network (GSTN)	5	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5 per Division

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: VI

MONTH: November to March 2019 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To let students understand what is GST and how it is reflected in our practical life.
The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Unit 2 Levy and Collection of Tax	Levy and Collection of Tax • Scope of Supply • Non taxable Supplies • Composite and Mixed Supplies • Composition Levy • Levy and Collection of tax • Exemption from tax	4	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 per Division

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: VI

MONTH: November to March 2019 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To let students understand what is GST and how it is reflected in our practical life.
The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Unit 3 Time, Place and Value of Supply	Time, Place and Value of Supply • Time of Supply E-WAY BILL TO BE INCLUDED • Place of Supply • Value of Supply	9	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: VI

MONTH: November to March 2019 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To let students understand what is GST and how it is reflected in our practical life.
The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Unit 4 Input Tax Credit & Payment of Tax	Input Tax Credit & Payment of Tax • Eligibility for taking Input Tax Credit • Input Tax Credit in Special Circumstances • Computation of Tax Liability • Payment of Tax (Section 49 and Section 50 of CGST Act)	10	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYBCOM SEMESTER: VI

MONTH: November to March 2019 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To let students understand what is GST and how it is reflected in our practical life.
The learners will be able to : Understand the concept of GST and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Unit 5 Registration under GST Law	Registration under GST Law • Persons liable for Registration • Persons not liable for Registration • Compulsory Registration • Persons not liable for Registration • Procedure for Registration • Amendment of Registration • Cancellation of Registration • Revocation of cancellation of Registration • Practical Problems	9	Manan Prakashan, Self-maintained notes, ICAI study material	Black Board, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9 per Division

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAF: NILESHWARI GHUMRE DEPARTMENT: COMMERCE CLASS: TYBCOM(E F G H) SEMESTER: VI MONTH: DECEMBER TO MARCH ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:1)Understand Human resource management and its various aspects including selection, recruitment, E-selection etc

2)Get insight on how human resource planning, job analysis and job design is done in big MNC's.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-2-Human Resource Development UNIT 3- HUMAN RELATION	HUMAN RELATIONS LEADERSHIP MOTIVATION EMPLOYEE MORAL EMPLOYEE GRIEVANCE			
	HUMAN RESOURCE DEVELOPMENT- Concept, functions TRAINING- Concept, Process of identifying training and development needs, Methods of Training & Development (Apprenticeship, understudy, job rotation, vestibule training, case study, role playing, sensitivity training, In, basket, management games) EVALUATING TRAINING EFFECTIVENESS- Concept, Methods PERFORMANCE APPRAISAL- Concept, Benefits,	12		Chalk, Board and Duster

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	Limitations, Methods POTENTIAL APPRAISAL-Concept, Importance CAREER PLANNING- Concept, Importance SUCCESSION PLANNING- Concept, Need MENTORING- Concept, Importance COUNSELLING- Concept, Techniques.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAF: PRAKTANA KORE DEPARTMENT: COMMERCE CLASS: TYBCOM(A B C D)

SEMESTER: VI MONTH: DECEMBER TO MARCH ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:

The learners will be able to:1)Understand Human resource management and its various aspects including selection, recruitment, E-selection etc

2)Get insight on how human resource planning, job analysis and job design is done in big MNC's.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3-	HUMAN RELATIONS Human Relations - Concept,Significance Leadership - concept,Transactional Transformational Leadership Employees morale - Concept, Factors Affecting Morale,Measurement of Employee Morale Emotional Quotient and Spiritual Quotient - Concept , FactorsAffecting EQ and SQ Employee Grievance - Causes,Procedure for Grievance Redressal Employee Welfare Measures and Healthy and Safety Measures	11		Chalk, Board and Duster
UNIT 4	TRENDS IN HUMAN RESOURCE MANAGEMENT HR in Changing Environment : Competencies Learning Organisation Innovation Culture Trends in Human Resource Management: Employee Engagement Human Resource Information System Changing Pattern of Employment Challenges in Human Resource Management	11		Chalk, Board and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: COMMERCE CLASS: T.Y.B.COM

SEMESTER: VI MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:

The Learner/Students will be able to under the concept of Indian economy in terms of classification of various sector such as primary, secondary and tertiary sector and their contribution towards the development of Indian Economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ECONOMICS SEM VI	**Module - I : Introduction to International Trade (10 Lec.)** **Theories of International Trade -** Ricardo's Theory of Comparative Costs and the Heckscher-Ohlin Theory **Terms of Trade -** Types and Limitations **Gains From International Trade -** Offer Curves and Reciprocal Demand		M.L Jhingan: International Economics Dominic Salvatore: International Economics	Lecture, group discussion, test, oral presentation of important topics.
ECONOMICS SEM VI	**Module - II: Commercial Policy (10 Lec.)** **Commercial Trade Policy –** Free Trade and Protection - Pros and Cons. **Tariff and Non-Tariff Barriers –** Meaning, Types and Effects		M.L Jhingan: International Economics Dominic Salvatore:	Lecture, group discussion, test, oral presentation of important topics.

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	International Economic Integration – Types and Objectives: EU and Brexit, ASEAN		International Economics	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SONAL RAUT DEPARTMENT: COMMERCE

CLASS: TYBCOM (A,B,C,D) SEMESTER: VI MONTH: NOV, DEC, JAN & FEB ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Comprehension based Learning to Esemplastic into Objective or Subjective type Exams. To Understand the Concept of Accounting of Foreign Currency & Underwriting of Shares & Debentures and to Learn Theoretical & Practical working of the Amalgamation, Absorption & External Reconstruction.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	UNIT I: Amalgamation, Absorption & External Reconstruction ➢ Introduction, Meaning, AS 14, ➢ Distinction Between Amalgamation, Absorption & External Reconstruction ➢ Ledger Accounts & Journal Entries on Purchasing &Vendor Company ➢ Questions solved on the same	15	S.N & S.K. MAHESHWARI	CHALK & BLACKBOARD

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UNIT I, II & IV	UNIT II: Accounting of Transaction of Foreign Currency ➢ Meaning, Definitions & Objectives ➢ Spot Rate, Monetary & Non-Monetary Items. ➢ Accounting For Exchange Difference with Import/ Purchases & Export/ Sales. ➢ Ledger Accounts & Journal Entries of Import & Export ➢ Questions solved on the same	15	S.N & S.K. MAHESHWARI	CHALK & BLACKBOARD
	UNIT IV: Underwriting of Shares & Debentures ➢ Meaning, SEBI Rules & Regulation for Underwriting ➢ Underwriting Commission, Sub-Underwriters, Brokers ➢ Types of Underwriting & it's Journal entries ➢ Liability of the Underwriters ➢ Questions solved on the same	10	S.N & S.K. MAHESHWARI	CHALK & BLACKBOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___40_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AKRUTI BOSE DEPARTMENT: COMMERCE

CLASS: TYBOM A,B,C,D SEMESTER: VI MONTH:DECEMBER/FEBRUARY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: Board and Chalk
The learners will be able to : Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS VI Module I and Module II	INTERNATIONAL TRADE: Comparative Cost Theory, Heckscher Ohlin Theory, Terms of Trade, Gains from Trade.		International Economics by H.L. AHUJA.	Board, Chalk and duster.
	BALANCE OF PAYMENT AND WTO : Concept and Structure of Balance of Payments, Causes and Disequilibrium and			
	Measures to Correct Disequilibrium in BOP, India's Balance of Payment since 1991 and World Trade Organisation.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 Lectures.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TEJASWINI YOGESH NAIK DEPARTMENT: COMMERCE CLASS: TYBCOM SEMESTER:VI MONTH: NOV-MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: WHAT IS INDIRECT TAX
The learners will be able to : Difference in direct and indirect tax, how to calculate gst , registration process

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INDIRECT TAX	1.Definition s: goods, business, consideration, e-commerce, India, person,principal supply,services, supplier, taxable supply, taxable person,n on taxable supply 2.Levy and collection of tax: scope of supply, non taxable supplies, composite and mixed supply, composition levy, exemption from tax, levy and collection of tax 3. Time, place and value of supply: time of supply, value of supply, place of supply.	5 lectures 15 lectures 15 lectures	Anaspure, manan publication	Black board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Veena Sihana DEPARTMENT: Commerce CLASS: TYBCOM SEMESTER: VI MONTH: Nov to Mar 2019

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Familiarize the commerce students with basic concepts of macroeconomics and with certain common features of economic occurrence in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics - VI	Module III – Balance of Payments & International Economic Organisation Balance of Payments – Structure – Causes of Disequilibrium & Measures to correct it in BOP – World Trade Organisation	14	Singh.S.K. (2014): Public finance in Theory and Practice, S.Chand &co Pvt Ltd, New Delhi Ahuja. H.L., Modern Economics — S.Chand Company Ltd. New Delhi.	Chalk & Duster
	Module IV – Foreign Exchange Market Foreign Exchange Market – Determination of Equilibrium Rate of Exchange – Purchasing Power Parity Theory – Role of Central Bank in Foreign Exchange Rate Management.	14		Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : TYBCOM (E,F,G,H) SEM : VI MONTH : Nov - March YEAR : 2018-19

LEARNINGOBJECTIVE/S : Human resource is an important asset of the organisation. Here, learner will be able to learn various things about HR.

PAPER/ UNIT/ TITLE	SUBTITLES	NO. OF LECURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMERCE VI	**MODULE I :HUMAN RESOURCE MANAGEMENT** ●Human resource management- concepts, functions, importance ●Human resource planning- concept, steps, job analysis, job design ●Recruitment- concept, sources of recruitment, selection, E-selection	10		Chalk & board
	MODULE IV :TRENDS IN HUMAN RESOURCE MANAGEMENT ●HR in changing environment : competencies, classification, learning organisation, innovation culture ●Trends in HRM : employee engagement, Human Resource Information System, changing patterns of employment ●Challenges in HRM : Employee empowerment, workforce diversity, attrition, downsizing, employee absenteeism, work life balance, sexual harassment at work place, domestic & international HR practices, Millennial competency mapping	10		Chalk & board

DEPARTMENT OF FILM, TELEVISION AND NEW MEDIA PRODUCTION
5.3. TEACHING PLAN (UNIT PLAN) 2022-23

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **EFFECTIVE COMMUNICATION SKILLS**

LEARNING OBJECTIVE/S: To prepare students in the production aspects of Film Television & New Media, as required by the present media environment all across globe. To empower the students in the production and managerial aspects of the media business with due emphasis on latest production techniques, along with marketing and branding management of various media products and associated services. To develop creative temperament and mindset needed in the content production segment of media industry. To provide an active industry interface by way of co-learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Fundamentals of Communication: Developing reading & writing skills (Marathi, Hindi and English), Editing & Summarizing (Marathi, Hindi and English), Oral Communication (Marathi, Hindi and English)	3	Textbooks: 1. Crucial Conversations: Tools for Talking When Stakes are High , by Kerry Patterson. 2. Presenting to Win: The Art of Telling Your Story, by Jerry Weissman. Reference Books: 1. Verbal Judo: The Gentle Art of Persuasion, by George J. Thompson. 2. Write to the Top: Writing for Corporate Success,	Theory, project and assignments PPT etc
Unit- II	Enhanced Communication Skills Development: Enhancing communication skills – verbal, Enhancing communication skills - non-verbal, Body type- posture- body language reading, Analysing body language signals and meanings	3		Theory, project and assignments PPT etc
Unit- III	Psychology of communication:	3		Theory, project and

	Gestures- expressions - facial language, eye contact, shake hands, sitting posture, Maintaining comfort distance from people, mirroring, Dressing sense, corporate dressing, formal, semi formal, casual, dressing for various occasions & events, Understanding personalities - auditory / visuals / kinesthetic, eye movement, facial expressions, emotions, smile		by Deborah Dumaine.	assignments PPT etc
Unit- IV	Personality Development: Verbal communication, voice training, speech, clarity, grammar speed, volume, enunciation, pronunciation, ends of sentences, humour, pauses, Stress management, breathing pattern, mind psyching, right attitude, understanding your limitations and strengths, Table manners & etiquettes correct use of spoon knife, etc, Choosing the right accessories i.e shoes, handbags, jewellery, etc.	3		Theory, project and assignments PPT etc

NAME OF THE STAFF: **GAURI PATIL**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **INTRODUCTION TO HISTORY OF ART/ STORYTELLING THROUGH OTHER FORMS OF ART**

LEARNING OBJECTIVE/S: To understand the basics and genres of Music, dance and theatre.
To learn the basics of various acting schools and the art of drama.
To learn the evolution of visual techniques from painting to cinema.
To learn the basic relationship between music and dance in relation to Film making.
Students should be exposed to the canonical text of Natya shastra from where all the traditional performing arts have emerged.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Music : Genres of Music, Introduction to Contemporary Music (Hindi, Regional & POP), Music Directors & Composers, Use of Folk music in Indian Cinema	3	Textbooks: 1) Natya Shastra by Bharata Muni. 2) Melodrama and Popular Culture: Ira Bhaskar. 3) History of Art – Bernard.S. Myers, Trawin Copplestone. 4) Framing Film- Cinema and the Visual Arts, EDITED BY STEVEN ALLEN AND LAURA HUBNER. Reference Books: 1. Dancing: The Pleasure, Power, and Art of Movement; by Gerald Jonas. Harry N. Abrams in association with	Theory, project and assignments PPT etc
Unit- II	Genres of Dance – Understanding storytelling through Folk Dance & Contemporary Dance, Role of Dance in Hindi Cinema	3		Theory, project and assignments PPT etc
Unit- III	The development of theatre, Acting Schools, Make-up, Managing Play, Study of one English and one Hindi or regional play. Influence of theatre on cinema.	3		Theory, project and assignments PPT etc
Unit- IV	1. European Paintings and Painters- A brief overview starting from the renaissance to modern painters. Idea of Perspective coming into painting and changing	3		Theory, project and assignments PPT etc

	the way we perceive the world 2. Indian Paintings & Painters- A look at the rich historical tradition of Indian PaintingsMiniature Paintings to Modern Painters. Difference between the formal aspects of Painting & Cinema. Exploring the idea of time and space in painting in relation to cinema 3. Important Movements- Analysing the important movements that have taken place in postcolonial India in painting to the contemporary scenario.		Thirteen/WNET 1992. 2. History of Dance: An Interactive Arts Approach; by Gayle Kassing.	

NAME OF THE STAFF: **SAMEER RANE**

DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **INITIATION TO LITERATURE & CREATIVE WRITING**

LEARNING OBJECTIVE/S: To introduce basic tenets of Indian literature including regional literature
To introduce and appreciate various forms of literature (Novel, Poetry, Drama, Essay)
To help build skills for creative writing
To help understand the structure of Story, poetry and drama
To introduce writing for internet

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Introduction to Indian Writers – Hindi/Marathi/Urdu & other regional languages: History of Indian literature, prominent writes, important works, cultural significance.	3	Textbooks: 1.) A Concise History of Indian Literature in English by Arvind Mehrotra. 2) The Creative Writing Course book: Forty Authors Share Advice and Exercises for Fiction and Poetry. 3) Creative Writing By Adele Ramet. 4) Creative Writing for People Who Can't Not Write By Kathryn Lindskoog. Reference Books: 1. Creative Writing: A Workbook with Readings By Linda Anderson. 2. Teaching Creative Writing By Graeme Harper. 3. The Everything Creative Writing	Theory, project and assignments PPT etc
Unit- II	A Brief Introduction to Creative Writing: What is creative writing, various forms of writing, various form of writing styles, how to build creative writing skills.	3		Theory, project and assignments PPT etc
Unit- III	Formal structure of the short story: Various forms of writing styles, Genres of story, how to develop an engaging idea, Prominent writers, Pick your style.	3		Theory, project and assignments PPT etc
Unit- IV	Formal aspects of Poetry: Elements of poetry, types of Poetry, Difference between various styles, Famous poets and their works, Study of the Epic Ballad - Mahabharata.	3		Theory, project and assignments PPT etc

			Book By Wendy Burt-Thomas. 4. The Soul of Creative Writing By Richard Goodman, Goodman, Chong.	
Unit- V	Formal aspects of Drama: Structure of drama, one act-two act-three act play, Characterization, Freytag's triangle, Subject specific drama	3		Theory, project and assignments PPT etc
Unit- VI	Writing for the internet: How internet writing is different from conventional writing, Blogging, Reputation management, Development of Blogs, writing for social media, writing for SEO & SMO	3		Theory, project and assignments PPT etc

NAME OF THE STAFF: **K. SUDHESH**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **BASICS OF PHOTOGRAPHY**

LEARNING OBJECTIVE/S: To learn the basics of art of Photography.
To understand the basic intricacies involved in taking a photograph.
To understand what makes a good picture.
To develop basic photographic sense and knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Development of Photography over the years: Brief History of Photography, early photography methods, switch from film to digital, difference between film and digital photography, formats of images in digital.	3	Textbooks: 1. The Art of Photography; by Bruce Barnbaum. 2. Creative Nature & Outdoor Photography; Brenda Tharp. 3. Chasing the Light by Ibarionex Perello. Reference Books: 1. The Camera by Larry Hills. 2. The Creative Black Book. 3. The Print by Ansel Adams, Robert Baker. 4. 500 poses for Photographing Women by Michelle Perkins. 5. Creative Landscapes: Digital Photography Tips & Techniques by Author: Davis, Harold.	Theory, Practical project and assignments PPT etc
Unit- II	Cameras & Techniques: Types of camera, film cameras V/S digital cameras, lenses and their importance, Story Design and Development, Laws of Composition, Gestalt Law and Visual Perception, Semiotic photography.	3		Theory, Practical project and assignments PPT etc
Unit- III	Lighting - Theory & practice: Sources of Lighting, 2 point lighting, 3 point lighting, creating contrast, outdoor natural lighting, related accessories for lighting.	3		Theory, Practical project and assignments PPT etc
Unit- IV	Post production of Photos, Digital Image Editing – Photoshop: Processing of Raw images, Introduction to	3		Theory, Practical project and

	Adobe Photoshop and image ready software, how to enhance the photo digitally.			assignments PPT etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **FILM APPRECIATION – GENRES**

LEARNING OBJECTIVE/S: What is cinema, Film theory – form and function, Film analysis, Auteur Theory,
effect of auteur, Contributions of D W, Griffith, Alfred Hitchcock, Jean Du Godard, Digital Aesthetics, Music and choreography, film genre.
Cinema and society, History of Cinema, Hollywood cinema, early cinema and film form
the studio system, rise and decline of the studio system.
Indian Cinema
History of Indian cinema, history of regional cinema, legends of Indian cinema, Hindi film industry, the Hindi film industry, music and choreography in Indian cinema, contemporary cinema

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	What is cinema, Film theory – form and function, Film analysis, Auteur Theory, effect of auteur, Contributions of D W, Griffith, Alfred Hitchcock, Jean Du Godard	3	Textbooks : 1) The Oxford History of World Cinema. 2) The Cinematic ImagiNation : Indian Popular Films as Social History by Jyotika Virdi. 3) History of Indian Cinema by Renu Saran.	Theory, project and assignments PPT etc
Unit- II	Music and choreography, film genre. Cinema and society, History of Cinema, Hollywood cinema, early cinema and film form the studio system, rise and decline of the studio system.	3		Theory, project and assignments PPT etc
Unit- III	History of Indian cinema, history of regional cinema,	3		Theory, project and assignments

	legends of Indian cinema, Hindi film industry, the Hindi film industry			PPT etc
Unit- IV	music and choreography in Indian cinema, contemporary cinema	3		Theory, project and assignments PPT etc

NAME OF THE STAFF: **JENNIFER BARLA**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **GRAPHIC DESIGNING (PHOTOSHOP, ILLUSTRATOR, ETC.)**

LEARNING OBJECTIVE/S: The learners are exposed to the industry of graphic design. The domain of skills and tools is largely devoted to learning graphic reproduction methods using both modern, that is electronic,
as well as old school techniques. These inputs enable learners to solve simple problems of visual communication related to corporate identity or social communication. Learners use software like Adobe Photoshop and Adobe Illustrator.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	COLOUR THEORY : Colour psychology, Colour schemes, Colour wheel, Colour combination, Hue.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- II	PERSPECTIVE STUDY : 1-point perspective, 2-point perspective, 3-point perspective, Mixed perspective.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- III	STILL LIFE : Sketching & rendering, Light study, Photography.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- IV	TEXTURE STUDY : Texture creation, mixed media, Water/Pastel painting.	1		Theory, Software (Adobe illustration, photoshop) project and assignments

				PPT etc
Unit- V	PORTRAIT PAINTING : Portrait Caricature, Cartoon.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit-VI	PHOTOSHOP : Basic tools in Photoshop, Photo editing, Colour correction.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- VII	ILLUSTRATOR : Basic tools in Illustrator, Vector graphics, Graphics design.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- VIII	COMIC BOOKS : Understanding storyboards, Styles of contemporary comics, Colour tones.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- IX	COMPOSITION : Basic composition skills, Rule of thirds, Understanding of subject and its relation to light and depth of field, Application in comic books.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- X	TYPOGRAPHY : Understanding of typos & fonts, Application of	1		Theory, Software (Adobe illustration, photoshop)

	appropriate typos on art works.			project and assignments PPT etc

NAME OF THE STAFF: **SALONI AKIWATE, JAVED SAYYED**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **BASICS OF POST PRODUCTION**

LEARNING OBJECTIVE/S: An editor's job is to decide, 24/25/30 times a second, where the audience needs to be. Do we
stay in a shot or transition to another, and if so, what shot and how do we get there? Working side-by-side with the director to craft the movie that ultimately hits the screen – or your phone – editing is really about manipulating the audience, in the best possible way, all in the service of storytelling.
In this class, we will study terminology and concepts, learning both the rules and how to break them, as we look at the aesthetics choices and the technological workflow for both picture and sound editing. We will examine the historical role of editing, from the earliest silent film through the digital revolution that has transformed moviemaking today.
INTRO TO EDITING THEORY
Introduction to the history of film editing. Lumiere Brothers, Thomas Edison, Edwin Porter, DW Griffith); the manipulation of editing; Lev Kuleshov's experiment; the language of cinema;
introduction to the editor as storyteller and understanding the narrative structure.
INTRO TO PREMIERE PRO
Screening of Examples. The Premiere Pro interface features and functions, how to import and organize footage, basic editing techniques
EDITING EXERCISE
Watch the work of a Master Editor, Basic Production techniques, Practicing/Reviewing skills
PROJECT: Interview and Film a classmate telling a story for 10 minutes or talking about something they're excited about. Edit together a two minute version of this.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Effective Editing Bird's-eye view of the modern process of editing, Setting Up for Editing Efficient editing habits to work faster, Thinking creatively. Efficient workflow, Configure factory-standard systems, Optimal media management from ingest through to	4	Grammar of the Edit Roy Thompson, Christopher J. Bowen SUGGESTED TEXTS: Film Art: An Introduction, David Bordwell and Kristin Thompson The Invisible Cut: How Editors Make Movie Magic, Bobbie O'Steen	Theory, Software (Adobe Premiere pro) project and assignments PPT etc

	final output. Non Linear Editing Concepts Interface of NLE system, The Three-Point Edit, Additional Edits		Cut By Cut: Editing Your Film or Video, Gael Chandler In the Blink of an Eye: A Perspective on Film Editing, Walter Murch The History of Film Editing, Karel Reisz, Gavin Miller On Film Editing, Edward Dmytrk Film Editing: Great Cuts Every Filmmaker Should Know, Gael Chandler First Cut: Conversations with Film Editors, Gabriella Oldham	
Unit- II	Working in the Timeline, Transitions, Keyframing, Filters, Ingesting	4		Theory, Software (Adobe Premiere pro) project and assignments PPT etc
Unit- III	Compositing, Color Correction, Audio, Titling, Review and Look Forward	4		Theory, Software (Adobe Premiere pro) project and assignments PPT etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **HISTORY OF NON- FICTION FILM**

LEARNING OBJECTIVE/S: This course explores the history and theory of non-fiction film and video, with an emphasis on
work that falls under the rubric of "documentary."
Documentary is a unique form of non-fiction moving image media that claims a special relationship to reality and truth. Through screenings, readings and class discussion, we will explore such questions as:
• How does documentary relate to narrative fiction filmmaking? To other non-fiction forms of television like reality TV or news reports?
• How "real" are documentary representations, and how much does it matter?
• What are some different formal approaches documentary, and how does each mediate the representation of real life it offers?
• How has documentary image-making changed over time? What can we learn from this history that is relevant to media-making today?
• What are the particular ethics of representing others in a medium like video or film?
• What responsibility do documentarians have to their subjects, to the form, and to society at large?
• How do people watch documentaries, and what is the impact of these films on the world they aim to represent?
Be familiar with efforts to create more democratic systems of media production and distribution.
Learn how to watch earlier films both as an audience THEN (with understanding of the film's social, cultural, historical context), and NOW (with understanding of your own future goals and
with critical, analytical eyes to study history).
Be able to think – and write — critically about non-fiction media.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Screen and analyze a wide range of documentaries, exploring the genre as narrative, journalism, propaganda, rhetoric, activism, diary, art, archive, and entertainment. Course Objectives	4	The texts for this class Documentary: A History of the Non-Fiction Film (2nd Edition) by Erik Barnouw (available at Shakespeare and Co) and Crafting Truth: Documentary Form and	Theory, project and assignments, Screenings (T.V.) PPT etc

	By the end of the semester, you should: Be familiar with key periods in the history of non-fiction film and video from 1895 to the present. Be able to recognize and write about various forms and conventions of documentary storytelling, including the basic grammar of documentary moving images.		Meaning, by Louise Spence and Vinicius Navarro (available at Shakespeare and Co.). Additional readings will be available through e-res. As some readings will be accessed electronically, please bring either a printed version of the article (preferred) OR a digital version of the article to class.	
	Explore central questions surrounding the representation of reality and truth, including voice, authority, evidence and point of view. Explore key issues in the ethics of documentary representation, including maker-subject relationships, informed consent, fairness, and evidence.	4		Theory, project and assignments, Screenings (T.V.) PPT etc
2	Be familiar with efforts to create more democratic systems of media production and distribution. Learn how to watch earlier films both as an audience THEN	4		Theory, project and assignments, Screenings (T.V.) PPT etc

	(with understanding of the film's social, cultural, historical context), and NOW (with understanding of your own future goals and with critical, analytical eyes to study history).			
3	Be able to think – and write — critically about non-fiction media.			Theory, project and assignments, Screenings (T.V.) PPT etc

NAME OF THE STAFF: **JENNIFER BARLA**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **WRITING FOR VISUAL MEDIA**

LEARNING OBJECTIVE/S: To understand the basic structure of screenplay
To introduce to the basic skills for screen writing
To understand the intricacies of screen writing
To learn the build characters and write meaning full dialogues

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Preparing to Think Visually: Diving In to the Screenwriter's Mind, Approaching Screenwriting as a Craft, Breaking Down the Elements of a Story, Unpacking Your Idea	3	Textbooks: 1. How not to write a screenplay: 101 common mistakes most screenwriters make by Denny Martin Flinn 2. Screen Adaptation: A Scriptwriting Handbook by Kenneth Portnoy 3. Screenplay: The Foundations Of Screenwriting By Syd Field Reference Books: 1. The Screenwriter's Bible By David Trottier 2. The Bare Bones Book of Screenwriting: The Definitive Beginner's Guide to ... By J. T. Clark 3. Screenwriting for a Global Market: Selling Your Scripts from Hollywood to ... By Andrew Horton	Theory, project and assignments, PPT etc
Unit- II	Structure of Story & Screenplay: Plot Part I: Beginnings, Plot Part II: Middles, Plot Part III: Endings	3		Theory, project and assignments, PPT etc
Unit- III	Dynamics of Characterization: Character Building, Constructing Dynamic Dialogues, Non – traditional Film	3		Theory, project and assignments, PPT etc
Unit- IV	Finalizing the Script: Maintaining an Audience's Trust, Turning Your Story into a Script, Take Two: Rewriting Your Script, Adaptation and Collaboration: Two	3		Theory, project and assignments, PPT etc

	Alternate Ways to Work		4. Screenwriting For Dummies By Laura Schellhardt 5. Screenwriting: The Sequence Approach By Paul Joseph Gulino 6. The Tools of Screenwriting By David Howard, Edward Mabley 7. The Art of Screenwriting: An A to Z Guide to Writing a Successful Screenplay By William Packard 8. Writing the Character-Centered Screenplay By Andrew Horton	

NAME OF THE STAFF: **MAYUR PATEL**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **IMPORTANCE OF SOUND AND SOUND SFX**

LEARNING OBJECTIVE/S: To learn about the basic of sound |To understand the nature of sound and recording devices |
To learn the basics of sync sound, mixing console, analog v/s digital workflow | To understand the need for sound and importance of sound in film | To learn to record a song

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Basics of Sound: Nature of acoustical waves; concepts of amplitude and frequency -wavelength and harmonics. Psycho-acoustics: Nature of hearing and perception of sound, including concepts of pitch, loudness, and timbre; the precedence effect; localization in rooms; equal loudness contours; and other mysteries of hearing. Principles of Stereophony	2	Textbooks: 1. Pro Tools 9: Music Production, Recording, Editing and Mixing By Mike Collins 2. Pro Tools All-in-One Desk Reference For Dummies By Jeff Strong 3. Sound for Film and Television By Tomlinson Holman Reference Books: 1. Sound For Digital Video By Tomlinson Holman 2. Producing for TV And Video: A Real-world Approach By Cathrine Kellison 3. Sound for picture: an inside look at audio production for film and television By Jeff Forlenza, Terri Stone 4. Audio in Media By Stanley R. Alten 5. Master Handbook of	Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- II	Sound for Film and Video: The sound track – its importance in an AV medium, Different elements of a sound track, Explanation of how sound is put to the film	2		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc

Unit- III	Sync Sound: The size of the role sound should play in your film will vary depending on your professor's requests, but when it comes to the technical side of things, you are at least required to know how to achieve synchronized sound and picture with film. Interconnectivity of Analog & Digital Equipment: Basic analog connectors, cabling, patch – bay, interconnectivity between various recording studio equipment. Various Digital interconnects and their sockets on the digital equipment. Microphones Types: Dynamic, Condenser, Ribbon, Polar Pattern, Sensitivity. Microphone designs for special applications Acoustics I (Fundamentals): The behavior of sound in outdoors and in closed spaces; Absorption, reflection, diffraction, refraction, reverberation.	2	AcousticsByF.Alton Everest 6. Modern Recording Techniques By David Miles Huber 7. Mastering Audio By Bob Katz 8. Mixing Audio By Roey Izhaki 9. Practical Recording Techniques By Jenny Bartlett 10. Critical Listening Skills for Audio Professionals By F.Alton Everest 11. The Audible Past By Jonathan Sterne	Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc

Unit- IV	The signal flow and various auxiliary systems. Digital Audio: Analog to Digital to Analog conversion. Sampling Frequency, Bit Rates. Problems in digital audio. Different digital media, Standard digital recording & mastering formats. Audio file formats, storage mediums – optical, magnetic, Jitter etc. Computers in Audio: Different platforms – different operating systems, Configuration of a PC for sound recording. Mother Boards, Processor, Sound Card, Graphic card, Monitors Recorders: Analog, Digital, Tape Based & Tapeless. Digital Audio Workstations (DAW's)	3		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- V	– Film Showcase: Case studies of famous Indian as well as foreign films	2		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- VI	Microphone Techniques: Placement, Applications, Proximity effects	2		Theory, project and assignments, Screenings (T.V.) PPT, Protool and

	etc. microphones and placement techniques for stereo recording. Monitoring Systems: Active & Passive types, Domestic and professional listening environment, Stereo and surround monitoring.			Audacity software etc
Unit- VII	The Production Process of a Song: Music Basics. – Types of Music, Concepts of Melody, Harmony, Rhythm & counter melody etc. Format of a song. Preproduction, Tracking, Overdubbing, Editing, Mixing and Mastering. Processors: Theory of Tonal, Dynamic & Spatial processors. Equalizers – types and their application, Compressors & Limiters - theory and application, Effects processors - Reverberation and Delay devices and their plug in counterparts.	3		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- VIII	Location sound , Radio mics - uses and potential	3		Theory, project and assignments, Screenings

	difficulties. Boom operation for sync sound, Hands-on training in location sound recording for video. Nuendo Basic: Basic principles, understanding the process from initial set up to completion of a project. To set up for a vocal/instruments dub. Hands-on training - You will share a Nuendo workstation during the class. Principles of Mixing: The basic techniques of mixing and the fundamental approach. The Building Blocks of Mixing Setting the sound stage, and the sonic implications of panning and of placing instruments at varying distances from the listener; Consideration of different approaches to getting desired results from EQ; A comprehensive review of the uses of dynamic processor; on Individual channels and Mix master. Finishing a mix with automation.			(T.V.) PPT, Protool and Audacity software etc

	"Mixing in the box." And “Mixing through the board.” Production of the Sound Track for the student project film: Discussing sound design strategy with the director of the film at pre production stage. Attending film sync shoots. Video File formats, Acquiring picture for post production from edit suite. Dubbing the dialogues wherever necessary, Selecting SFX and BG music from the library, recording Foley and music as per the demand of the script. Mixing the final track. Export it to the editor, supervise the final assembly of the film.			

NAME OF THE STAFF: **VIRAJ SHINDE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **BASICS OF CINEMATOGRAPHY-1**

LEARNING OBJECTIVE/S: To understand the importance of cinematography in film making | To enhance the basic knowledge about lighting and its use | To understand various equipment's required for various form of lighting | To understand the basics of various camera, lenses and digital cinematography

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Power of a Picture: Power of a still picture | Shooting a good Still picture | Composition-Framing | Understanding & Use of color | Capturing the Drama | Black and white Photography;	4	Textbooks: 1. Camera Terms and Concepts by David Elkins 2. The Camera Assistant by Doug Hart 3. Motion Picture Camera and Lighting Equipment by David Samuelson Reference Books: 1. Motion Picture Camera Techniques by David Samuelson 2. The 16mm Camera Book by Douglas Underdahl 3. The Hands On Manual for Cinematographers by David Samuelson 4. The Professional Lighting Handbook by Verne Carlson 5. The Filmmakers Pocket Reference by Blain Brown	Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- II	Light: Role of light | Lighting techniques | Concept of lighting various planes | Understanding Various types: Tungsten lamps, Cool Lights, HMI, Cyclorama/background lights, Soft Box lights. | Use of cutter stand, black cloth and Camera filters | barn doors | use of reflectors | Three point lighting | Ratio lighting: 1:2, 1:3, 1:4 | Creating various Background patterns and types | Lighting – Situations | Studio lighting for three cameras set up: Talk Show, Game Show	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

	| Available day light situations | Shooting for Documentary style | Face lighting. Key, fill, back light | Depth of field Exercise | High key lighting | Low key lighting;		6. American Cinematographer ASC Manual 47. The Zone System for Photographers by Carson Graves 8. Cinematography: Screen craft by Peter Ettedgui 9. Contemporary Cinematographers-On Their Art by Pauline Rodgers 10. Operating Cinematography for Film and Video by William Hines 11. Cinematography-A Guide for Filmmakers and Film Teachers by Kris Mankiewicz 12. Film Lighting: Talks with Hollywood's Cinematographers and Gaffers by Kris Malkiewicz 13. The Five C's of Cinematography: Motion Picture Filming Techniques by Joseph V. Mascali 14. The Art of the Cinematographer: A Survey and Interviews with Five Masters by Leonard Maltin 15. Anton Wilson's Cinema Workshop by Anton Wilson 16. Image Control-Motion Picture and Video Camera Filters and Lab	
Unit- III	–Lenses: Type of Lenses | Power of Lenses | Understanding the shot requirement and usage of a lens | Idea of perspective: Depth Of Field, Depth of focus, Critical understanding of Fixed Lens Vs. Zoom Lens | Focus pulling | 18% grey card | Metering | Color temperature meter;	3		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- IV	Movements: Basic grammar of shots | Primary Camera Movement: Pan, Tilt, Zoom, Character Movement | Usage and need of Track and trolly, Crane, jimy gip, Poll Cam | Managing Movements | Single camera Setup | Multi camera setup | Continuity Exercise | Do’s and don’ts of camera movements | Aesthetics and Psychological Impact of Moving Images | Various parts of Motion picture cameras | Moving Image-Motion Picture | Impact of collective moving	3		Theory, project and assignments, Screenings (T.V.) PPT, etc

	Images | Motion Picture Dynamics;		Techniques by Gerald Hirschfeld 17. Lighting for Film and Electronic Cinematography by John David Viera and Dave Viera 18. Painting with Light by John Alton 19. Picture Composition for Film and Television by Peter Ward 20. Matters of Light and Depth-Creating Memorable Images for Video, Film and Stills Through Lighting by Ross Lowell 21. Lighting Technology by Fitt and Thornley Set Lighting Technician's Handbook by Harry C. Box 22. Digital Cinematography by Ben De Leeuw 23. If It's Purple, Someone's Gonna Die: The Power Of Color In Visual Storytelling By Patti Bellantoni 24. High Definition Cinematography By Paul Wheeler	
Unit- V	Understanding digital video recording Principle of video recording | Digital Recording Formats | Editing and compression | Digital			Theory, project and assignments, Screenings (T.V.) PPT, etc

	sampling and storage | Technical formats of video- PAL, NTSC | “Time Code” in Video Recording | Film Stock and Processing			

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2022- 2023**
SUBJECT**: PRACTICAL FILM MAKING 1 (ONLY NON-FICTION FILM)**

LEARNING OBJECTIVE/S: To understand the film making process for multiple locations in non-fiction films
To understand the entire workflow
To gain exposure on various cameras and software used for production
The students will undergo the process of making a non-fiction film.
The students will be exposed to Semi-professional camera cameras & software. The students will also undergo same basic exercises such as 3 shot and 6 shot to give them a basic sense of framing, composition, movement and editing. The final project will be a non-fiction film with the duration of 5-10 minutes.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2022- 2023**
SUBJECT**: INTRODUCTION TO DIRECTION FOR TELEVISION**

LEARNING OBJECTIVE/S: 1. Understanding of the process of Direction for Television
2. Theoretical framework and practical approach to Direction
3. Creating Ads for various categories

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Understanding Television Culture & Semiotics. Understanding Space & Time, Ideology, Aesthetics, Stylistics & Setting. Construction: mise-en-scene & technical codes -1 Writing For Television: Research, Ideation and Conceptualization, Understanding The IV Act Structure for TV, Elements of a TV Program Constructing a plot w.r.t a family tree for serials. Constructing Character biography Writing for Humour Popular Indian TV Discourse- eg.: Aahat (Horror), Daily Soap (any) & Tarak Mehta (comedy) Syntagmatic & Paradigmatic analysis Polysemy Popular TV Discourse- Friends	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

	Principles of Affinity & Contrast Director's Role in Television Inter-textuality & Role and Impression of Women Exploring Non-fiction Reality TV Exploring Non-fiction AD Filmmaking -1 Linear Motif in TV Creating content for TV- Directing for a Webisode			
Unit- II	The course aims to develop the sensibilities and sensitivities of the taught to comprehend the process of direction for television that entails understanding and analysis of different genres of television.	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- III	The learning includes understanding the television medium vis-à-vis the film, ideating, plotting and writing for different genres followed by inspecting the Director's role. Analysing the present day scenario. Experimenting by devising for short versions.	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- IV	The sessions could be designed to give a thorough understanding of both – theory as well as practical's. All lectures will be in the form of interactive sessions and it is expected that the	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

	student reads/watches television as directed before attending lectures.			

NAME OF THE STAFF: **ANURAG TAKKE, JAIVEER ARORA, PALAK SHAH**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2022- 2023**
SUBJECT**: BASICS OF CINEMATOGRAPHY-2**

LEARNING OBJECTIVE/S: To understand the basic structure of film and digital camera | To enhance the basic knowledge about lighting and its use | To understand various equipment's required for various form of mood lighting | To understand basics of various digital cameras, lenses and digital cinematography | To learn the basics of special effects cinematography |To understand the needs of co-creators

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	– Structure of Film and Digital Camera: Understanding the internal structure of camera | perforation loop | pressure plate | Pull down claw | Magazine: Types of magazine | Threading of film | Intermittent Movement | Analysis of Claw motion | Registration pin | Sprocket wheel | Frames per sec | Camera Motors | Slow motion and Fast motion | Reverse Movement | Lens Mount Flange Depth | Magazine Cover/rain cover | Digital Process of Image capturing | Latitude of film Camera format | Latitude of digital	4	Textbooks: 1. Camera Terms and Concepts by David Elkins 2. The Camera Assistant by Doug Hart 3. Motion Picture Camera and Lighting Equipment by David Samuelson Reference Books: 1. Motion Picture Camera Techniques by David Samuelson 2. The 16mm Camera Book by Douglas Underdahl 3. The Hands On Manual for Cinematographers by David Samuelson 4. The Professional Lighting Handbook by Verne Carlson 5. The Filmmakers Pocket Reference by Blain Brown 6. American Cinematographer ASC Manual	Theory, project and assignments, Screenings (T.V.) PPT, etc

	format | Shooting Format-16-mm/35-mm/70-mm/super.16/I-max/3-D | Convenience of Digital format | The Future of Film Formats		7. The Zone System for Photographers by Carson Graves 8. Cinematography: Screen craft by Peter Ettedgui 9. Contemporary Cinematographers-On Their Art by Pauline Rodgers 10. Operating Cinematography for Film and Video by William Hines 11. Cinematography-A Guide for Filmmakers and Film Teachers by Kris Mankiewicz 12. Film Lighting: Talks with Hollywood's Cinematographers and Gaffers by Kris Malkiewicz 13. The Five C's of Cinematography: Motion Picture Filming Techniques by Joseph V. Mascali 14. The Art of the Cinematographer: A Survey and Interviews with Five Masters by Leonard Maltin 15. Anton Wilson's Cinema Workshop by Anton Wilson 16. Image Control-Motion Picture and Video Camera Filters and Lab Techniques by Gerald Hirschfeld 17. Lighting for Film and Electronic Cinematography by	
Unit- II	– Special Effects and Cinematography: Chrome key Concept | Preparation for chrome key | Compositing a digital Picture | Digital matte painting;	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- III	Mood Lighting & Colour Lighting Theory & Practice: Red, Blue, Green , Purple & Orange lights and Treatments for Various Scenes | Colour and Cultural;	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- IV	Image formation (Understanding requirements of a director): Understanding a Screenplay writing | Writing for visuals-STORY BOARDING | Capturing the drama on the camera | How to create packets of emotional experience-Scene | Creation of Drama-Ingredients of a Drama;	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

			John David Viera and Dave Viera 18. Painting with Light by John Alton 19. Picture Composition for Film and Television by Peter Ward 20. Matters of Light and Depth-Creating Memorable Images for Video, Film and Stills Through Lighting by Ross Lowell 21. Lighting Technology by Fitt and Thornley Set Lighting Technician's Handbook by Harry C. Box 22. Digital Cinematography by Ben De Leeuw 23. If It's Purple, Someone's Gonna Die: The Power Of Color In Visual Storytelling By Patti Bellantoni 24. High Definition Cinematography By Paul Wheeler	
Unit- V	– Understanding the needs of Co-creators (Director, Editor, Sound Recordist...) Working in team | Team Building | Conflict formation | Conflict Resolution	1		Theory, project and assignments, Screenings (T.V.) PPT, etc

NAME OF THE STAFF: **JENNIFER BARLA**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **UNDERSTANDING TV FORMATS & GENRES**

LEARNING OBJECTIVE/S: To understand how television programming works | To learn about TRPs and drama creation | To study the impact of niche programming | To learn about various genres of television programming

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Nature of drama in television: Various shows, formats and genres, telecast patterns, audience viewership performance	4	Textbooks: 1. Fundamentals of Film Directing By David K. Irving 2. Writing, Directing, and Producing Documentary Films and Videos By Alan Rosenthal 3. Breaking into Film by Kenna McHugh 4. Before You Shoot : A Guide to Low Budget Film and Video Production by Helen Garvey Reference Books: 1. Film Directing Cinematic Motion: A Workshop for Staging Scenes By Steven Douglas Katz 2. Film Directing Fundamentals: See Your Film Before Shooting By Nicholas T. Proferes 3. Problems Of Film Direction By Sergei Eisenstein	Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- II	– Creating Drama for TRPs: Building the story, herd culture existing in current times, breaking the barriers	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- III	Creating niche television programming: Importance of niche content, niche content channels, producing niche content in wake of DTH connections	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- IV	Differentiation of infotainment, edutainment, entertainment, lifestyle genres: Differentiation of genres, Specialty of different genres,	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

	popularity of genres, content on demand, Study of BBC & Discovery, Study of GECs			

NAME OF THE STAFF: **JENNIFER BARLA**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **CONCEPTS OF STORY BOARDING**

LEARNING OBJECTIVE/S: To understand the need for storyboarding | To learn the fundamentals of shoot taking and division | To understand various storyboarding techniques | To understand the importance of perspective and lighting while storyboarding

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	– Intro to Storyboarding/Visual Story telling & Storyboards: Origins of Story boards and aspect ratio	2	Text Books: 1. Exploring Storyboarding By Wendy Tumminello 2. The Art of the Storyboard: Storyboarding for Film, Tv, and Animation By John Hart 3. Directing the Story By Francis Glebes Reference Books: 1. Beginning Illustration And Storyboarding For Games By Les Pardew 2. Storyboards: Motion In Art By Mark Simon 3. From Word to Image: Storyboarding and the Filmmaking Process By Marcie Beg Leiter 4. Prepare to board! By Nancy Beiman 5. Storyboarding 101: A Crash	Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- II	Fundamentals of Shots: Terminology of Shoots, Camera Framing, Camera Angles and Movements	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- III	Storyboarding Techniques: · Concept- what the story is about, Drawing the components of the storyboard · Indicating motion in the storyboard, Increased reality- perspective and lighting	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- IV	Composition, Perspective & Lighting: Compositional	4		Theory, project and assignments, Drawing sheets, Adobe

	Elements, line-shape-contrast, creating meaning within image, Creation of depth through lens choice and linear, atmospheric and size perspective, High- Key Lighting, Low key Lighting, 3 point Lighting, Tonal quality of lighting.		Course in Professional Storyboarding By James O. Fraioli 6. Writing with pictures: how to write and illustrate children's books By Uri Shulevitz	illustration, Coral draw software, PPT, etc
Unit- V	Continuity: Basic Rules of continuity, 180 – Degree rule, screen direction, Cutaways & Cut-ins	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- VI	– Story Boards for Animations & Special Effects Films: Structure of animation films, Special effects breakdown, creating the environment	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- VII	Story Boarding for Commercials and New Media: Structure of commercials, elements of brand building to be implemented, special colour scheme for brands and products	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc

NAME OF THE STAFF: **BISWARANJAN SWAIN**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2022- 2023**
SUBJECT**: GRAPHICS AND POST PRODUCTION (FLASH, EDITING SOFTWARE, AFTER EFFECTS)**

LEARNING OBJECTIVE/S: Basics of 2D animation, Vector and Raster Graphics, Basic Animation in Flash, Advanced editing
using Flash Elements in the film, Using After Effects, The interface of After Effects, Importing graphics and film, Keyframes, After effects and timeline, Animating using after effects, Compositing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Basics of 2D animation	4	-	Theory, project and assignments, After effects, Flash software PPT, etc
Unit- II	After Effects	4		Theory, project and assignments, After effects, Flash software PPT, etc
Unit- III	Basic Animation in Flash	4		Theory, project and assignments, After effects, Flash software PPT, etc
Unit- IV	Advanced editing	4		Theory, project and assignments, After effects, Flash software PPT, etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **TV PRODUCTION / AD FILM MAKING**

LEARNING OBJECTIVE/S: To introduce the process of 25 mins Television series making To understand the production pipeline of 25 mins Television series making process | To understand the entire workflow 25 mins Television series making process To gain exposure on various cameras and software used for production of 25 mins Television series making The students will undergo the process of 25 mins Television series. The students will be exposed to professional HD cameras & software and will work on projects ranging from 5Mins-25mins. The students will be exposed to the entire process of film making and the production workflow in television Series. The students can also work on an Ad film for about 60 seconds depending on the kind of TV series they are making.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **INTRODUCTION TO DIRECTION FOR FILM**

LEARNING OBJECTIVE/S: To understand the need for direction in films | To understand the role played by a director | To understand the Qualities required to be a director | To learn how to manage creativity and creative team | To learn about drama and continuity for films | To learn the details involve in the production of a feature films

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	ARTISTIC IDENTITY AND DRAMA: The World of the Film Director, Identifying Your Themes	2	Textbooks: 1. Film Directing Cinematic Motion: A Workshop for Staging Scenes By Steven Douglas Katz 2. Film Directing Fundamentals: See Your Film Before Shooting By Nicholas T. Proferes 3. Problems Of Film Direction By Sergei Eisenstein Reference Books: 1. Directing: Film Techniques and Aesthetics By Michael Rabiger 2. On directing film By David Mamet 3. Directing Actors: Creating Memorable Performances for Film and Television By Judith Weston	Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	SCREENCRAFT: A Director's Screen Grammar, Seeing with a Moviemaker's Eye, Shooting Projects	2		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	THE STORY AND ITS DEVELOPMENT: Recognizing the Superior Screenplay – How to create drama, Analysing a Screenplay, Director's Development Strategies, Alternative Story Sources, Setting Creative Limitations	2		Theory, project and assignments, Screening (TV) PPT, etc
Unit- IV	AESTHETICS AND AUTHORSHIP: Point of View, Subtext, Genre, and Archetypes, Time, Structure, and Plot, Space,	2		Theory, project and assignments, Screening (TV) PPT, etc

	Stylized Environments, and Performances, Form and Style		4. Art Direction for Film and Video By Robert L. Olson 5. The film director's team By Alain Silver, Elizabeth Ward 6. Notes of a film director By Sergei Eisenstein 7. Producing and Directing the Short Film and Video By Peter W. Rea, David K. Irving 8. Fundamentals of Film Directing By David K. Irving 9. Writing, Directing, and Producing Documentary Films and Videos By Alan Rosenthal 10. Breaking into Film by Kenna McHugh 11. Before You Shoot : A Guide to Low Budget Film and Video Production by Helen Garvey	
Unit- V	PRODUCTION: Developing a Crew, Mise-en-Scene, Producing a Shooting Script, Before the Camera Rolls, Roll Camera, Location Sound, Continuity, Directing the Actors, Directing the Crew, Monitoring Progress	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- VI	ORGANIZING ACTION IN AN ACTION SCENE: Staging and Camera for Over Easy Action Scene, Development of Screenplay, Director’s Preparation for Directing an Action Scene, Over Easy Action Scene/Staging and Camera Angles for - Storyboard Artist	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- VII	– ORGANIZING ACTION IN A NARRATIVE SCENE: Staging and Camera for Narrative Scene, Choosing a Location, Staging, Camera Style	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- VIII	Styles And Dramatic Structures: Style, Narrative, Dramatic, and Poetic Visual Styles, The Variety of Dramatic Structures,	2		Theory, project and assignments, Screening (TV) PPT, etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **BASICS OF VISUAL COMMUNICATION**

LEARNING OBJECTIVE/S: Aesthetics, Perception, Representation, Visual Rhetoric, Cognition, Semiotics, Reception
Theory, Narrative, Media Aesthetics, Ethics, Visual Literacy, Cultural Studies.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Aesthetics, Perception, Representation	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	Visual Rhetoric, Cognition, Semiotics, Reception	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	Theory, Narrative, Media Aesthetics	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit-IV	Ethics, Visual Literacy, Cultural Studies	4		Theory, project and assignments, Screening (TV) PPT, etc

NAME OF THE STAFF: **SAMPADA DESHMUKH**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **CONVERGENCE AND BASICS OF WEB DESIGNING**

LEARNING OBJECTIVE/S: Convergence and Basics of Web Designing
Concept of Convergence, Internet Key Terms, New Media. Web Designing, HTML programming,
Basic Java Script, Designing your own website, uploading the website, links and navigation

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Convergence and Basics of Web Designing	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	Concept of Convergence, Internet Key Terms, New Media.	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	HTML programming,	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- IV	Basic Java Script, Designing your own website, uploading the website, links and navigation	4		Theory, project and assignments, Screening (TV) PPT, etc

NAME OF THE STAFF: **BISWARANJAN SWAIN**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **CONCEPTS OF POST PRODUCTION & COMPUTER GRAPHICS (INCLUDING VFX)**

LEARNING OBJECTIVE/S: To understand the basics of visual effects | To understand the basic process of visual effects |
To learn about GUI
and CG | To understand the basics of 3D and creating real world in the digital world | To learn about compositing and camera tracking | To understand the process of vfx and final rendering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Introduction to pre-production, production and post-production: Visual effects' a relatively new term describes what used to be more appropriately called 'special photographic effects'. What makes an effect 'special'? The decision as to which medium and format VFX elements are going to be shot with is directly dependent on how they shall be employed and what the specifications are for their final resting place. Methods of creating visual effects, Implementation	4		Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- II	Introduction to the User Interface (GUI): Introduction to 3D Space and the GUI, Introduction to Modeling, Introduction to Polygonal Box Modeling,			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc

	Introduction to Shell Modeling			
Unit- III	CG Basics: Animation Basics, Animation Hierarchies and Deformation, Joints Hierarchies and Constraints, Cameras, Rendering and Path Animation | Understanding Pipeline and integration: Digital image manipulation, 2D digital image manipulation, Compositing software, New life into old methods, Perfecting the illusion, 3D computer-generated imaging (CGI), Digitizing (getting information into the computer)			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- IV	Introduction to Lighting and Rendering: Light Properties, Defining Shadows, Defining Highlights and Specular, Diffuse Inter-reflection and Global Illumination, Render Layers, Rendering Engines and methods			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- V	Introduction to Compositing: Camera Staging and Composition, Renderers and Algorithms Benefits/Disadvantages, Rendering Passes, Introduction to Specific Compositing Software, Compositing 3D			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- VI	Study of VFX and Camera Tracking: Overview of			Theory, project and assignments,

	Production Pipelines, Rendering Utility Nodes, Camera Tracking Foundation 2D and 3D			Screening (TV) PPT, Software and Computer etc
Unit- VII	Introduction to FX (Effects): Overview of Dynamics, Rigid Body and Fluids, Introduction to Particles, Expressions, Introduction to Fields, Project Work			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- VII	Compositing and Rendering: The Interface, Keying, Rotoscoping, Color Correction, Keying, Multi-Pass Compositing			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc

NAME OF THE STAFF: **JENNIFER BARLA**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **DRAMA PRODUCTION**

LEARNING OBJECTIVE/S: The module is intended to provide an introduction to the process of digital short film
production for the purpose of making works of drama and fiction. The focus will therefore be on enabling the development of the practical and theoretical skills in pitching, planning, writing,
shooting and editing necessary to produce a coherent and competent fictional moving image project.

The module will seek to introduce the student to a range of creative and scheduling skills which will assist them in the production of their projects. It will foreground the inherently collaborative and collective aspects of the production process by aiding the student to refine a range of communication and inter-personal skills to accomplish a broad range of tasks, including identification and planning of a suitable production idea; Allocation of roles for the pre-production, shooting and editing phases, as well as encouraging collective responsibility and accountability which is absolutely essential to the completion of any professional or team production. The module will also build upon the more technical grounding offered in Techniques 2 in order to develop the practical vocabulary and skills required to produce moving
image projects. Students will be encouraged to investigate and undertake a role throughout their productions. In crews, they will produce two shorts for inclusion in their personal practice portfolio.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Introduction to the process of digital short film	4	Textbook Rabinger, M (2007) Directing: Film Techniques and Aesthetics, 4th Edition, Hoboken, Taylor and Francis Jones, C. and Jollige, G. (2000), The Guerilla Film Makers Handbook: London: Continuum Reference Books Catliff, S & Granville J. (2013) The Casting	Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	Making works of drama and fiction	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	Enabling the development of the practical and theoretical skills in pitching, planning, writing,	4		Theory, project and assignments, Screening (TV) PPT, etc

Unit- IV	Shooting and editing necessary to produce a coherent and competent fictional moving image project.	4	Handbook: For Film and Theatre Makers, UK, Routledge Cartwright, S. (2012) Pre-Production planning for Video, Film and Multimedia, Hoboken, Taylor and Francis Field, S. (2005) Screenplay: The foundations of Screenwriting, New York, Delta Landry. P (2012) Scheduling and Budgeting your Film, Focal Press La Motte, R (2010) Costume Design 101: 2nd Edition: The Business and Art of Creating Costumes for Film and Television, Michael Wiese Productions Murch, W (2001) In the Blink of an Eye: A Perspective on Film Editing, Silman James Press Potter, C. (2001) Screen Language from Film Writing to Film Making: London Methuen	Theory, project and assignments, Screening (TV) PPT, etc

NAME OF THE STAFF: **JENNIFER BARLA**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **INTERMEDIATE PRACTICAL FILM MAKING (AD AND SHORT FICTION FILM)**

LEARNING OBJECTIVE/S: To understand the production pipeline of film making process in advertisement film making | To introduce the process of Advertisement Film (product as well as PSU) Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film making | To understand the entire workflow in Advertisement Film (product as well as PSU) Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film | To gain exposure on various cameras and software used for production of Advertisement Film (product as well as PSU) Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film The students will undergo the process of Advertisement Film (product as well as PSU), Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film. The students will be exposed to professional HD cameras & software and will work on projects ranging from 30Seconds-15mins. The students will be exposed to the entire process of film making and the production workflow in Advertisement and Multiple Character multiple location Short Film production.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

NAME OF THE STAFF: **AMBARI PATWARDHAN**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **LAWS RELATED TO FILMS, TV AND INTERNET**

LEARNING OBJECTIVE/S: To understand the various laws pertaining to media | To understand the need and importance of Copyright |To learn about intellectual property rights | To understand about media business ethics and issues pertaining to it

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	– Indian Contract Act, 1872: Essentials of valid contract discharge of contract, remedies for breach of contract. Contracts of Indemnity, Guarantee, Bailment, Pledge and Agency.	3	Text Books: 1. Maheshwari, S.N. and S.K. Maheshwari; A Manual of Business Law, 2nd Edition, Himalaya Publishing House, 2004. 2. Kushal M.C.,"Modern Indian Company Law",2004,Shree Mahavir Book Depot. 3. Kushal, M. C.; Business Law, Vikas Publishing House, New Delhi, 2004. Reference Books: 1. Kapoor, N. D.; Elements of Mercantile Law, Sultan Chand & Sons, NewDelhi,2003 2. Memoria & Memoria - Business Policy 3. David J. Fritzsche - Business Ethics: A Global & Management Perspective - Tata McGraw-Hill 4. Ramaswamy Namakumari - Strategic Planning - Corporate Strategy - MacMillan India Ltd 5. Velasquez - Business Ethics - Prentice - Hall of India	Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	The Negotiable Instruments Act 1881: Essentials of a Negotiable instruments, Kinds of Negotiable Instrument Holder and Holder in Due Course, Negotiation by endorsements, crossing of a cheque and Dishonour of a cheque.	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	Media Law, Copyright and	3		Theory, project and

	Intellectual Property: IPR & copyright laws, Copyright Agreements : Short-Term vs. Long-Term Agreements, Media Law and Infringements : Case Studies, Menace of piracy and remedies to counter piracy, Statutory and non-statutory bodies formed to fight piracy		6. Dr.S. Shankaran - Business Ethics & values 7. Gulshan S.S. and Kapoor G.K., "Business Law including CompanyLaw",2003,New Age International Private Limited Publishers. 8. Aggarwal S.K., "Business Law ,2003",Galgotia publishing Company. 9. Bargiel, Ashok; Company Law, Vikas Publishing House, 2004.4. Kapoor, N. D.; 10. Elements of Company Law, Sultan Chand & Sons, New Delhi, 2003.5. Dr. Singh, Avtar; 11. Company Law, Eastern Book Co. Lucknow, Bharat LawHouse, Delhi, 2004 12. Peter Madsen & Jay M. Shafritz - Essential of Business Ethics 13. Ken Smith and Phil Johnson - Business Ethics and Business Behavior 14. Pratley - Essence of Business Ethics - Prentice - Hall of India	assignments, Screening (TV) PPT, etc
Unit- IV	– Role and importance of Business Ethics and Values in Business - Definition of Business, Ethics Impact on Business Policy and Business Strategy - Role of CEO - Impact on the Business Culture.	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- V	Types of Ethical issues - Bribes - Coercion - Deception - Theft - Unfair Discrimination.	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- VI	Vendors, Government, & Social Audit. | CSR- Definition and Importance, examples of various	3		Theory, project and assignments, Screening (TV) PPT, etc

	initiatives taken by various business groups like TATAs, Infosys, Birla and others | Difference between Cause Related Marketing (CRM) and CSR Case Studies: Reliance WLL license, 2G Scam, Satyam Scam and PWC's role in the scam!!! | Role of bodies like Competition Commission of India, SEC, SEBI, TRAI, etc in curbing unethical practices			

NAME OF THE STAFF: **SAMPADA DESHMUKH**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2022- 2023**
SUBJECT**: NEW MEDIA THEORY AND PRACTICE (WITH ADVANCED WEB DESIGN AND APP MAKING)**

LEARNING OBJECTIVE/S: Web Designing – Adobe Dreamweaver, Designing a web page without the graphic user
interface (HTML using notepad), Frames, Layers, Search Engine Optimization, HTML and DHTML, Using JavaScript, Embedding Java Applets, Using Activex Controls, Embedding Video and Audio into web pages, Streaming media, Using YouTube, Creating Forms, Learning basic PHP and MYSQL, Creating Database and using it in the web design, Creating a website for Mobile phones, Creating a news site, creating a brochure site, designing a portal interface, using vernacular language in web sites, dynamic fonts, creating a vernacular medium website, New media and popular culture, social networking, emerging identities, games as advanced new media, mobile journalism, new media as a pedagogical tool.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Web Designing	4		Theory, project and assignments, Screening (TV) PPT Computer, etc
Unit- II	Adobe Dreamweaver	4		Theory, project and assignments, Screening (TV) PPT Computer, etc
Unit- III	HTML and DHTML, Using JavaScript, Embedding Java Applets	4		Theory, project and assignments, Screening (TV) PPT Computer, etc
Unit- IV	Basic PHP and MYSQL, Creating Database and using it in the web design, Creating a website	4		Theory, project and assignments, Screening (TV) PPT Computer, etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **UNDERSTANDING INDIAN CONTEMPORARY CINEMA**

LEARNING OBJECTIVE/S: Exploring the changing trends in Hindi Popular cinema in terms of storytelling, performances
technological and production aspects. Emergence of Film Festivals as a mode of exhibition and the kind of films selected for such prestigious film festivals. Focus on the changing aesthetic trends of regional films, popular films and festival films. Looking at the emergence of digital media and internet being a source of exhibition for films.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Exploring the changing trends in Hindi Popular cinema in terms of storytelling, performances	4		Theory, project and assignments, Screening (TV) PPT etc
Unit- II	Technological and production aspects	4		Theory, project and assignments, Screening (TV) PPT etc
Unit- III	Emergence of Film Festivals as a mode of exhibition and the kind of films selected for such prestigious film festivals.	4		Theory, project and assignments, Screening (TV) PPT etc
Unit- IV	Focus on the changing aesthetic trends of regional films, popular films and festival films. Looking at the emergence of digital media and internet being a source of exhibition for films.	4		Theory, project and assignments, Screening (TV) PPT etc

NAME OF THE STAFF: **JENNIFER BARLA**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2022- 2023**
SUBJECT**: INTRODUCTION TO MEDIA PROJECT MANAGEMENT**

LEARNING OBJECTIVE/S: To educate about the basics involved in a media project management | To educate about the basic project production workflow and management | To educate about the role of a project manager | To help understand the details involving a new business project or proposal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Production Management: The production Manager's job, The process of Production Management, The Business of Film-Pre production, production & post production, Preparing for production, Special Low Budget Indie productions, Locations & unions Management, Cast & Crew – Selection, contracts, agreements, work permits, etc., Budget preparation and budget forms, Insurance & competition bonds	3	Textbooks: 1. Film Production Management 101 Management and Coordination by Deborah S Patz 2. Surviving Production: The Art of Production Management for Film and Television by Deborah S Patz 3. Film Production Management by Bastian Cleve Reference Books: 1. Character Animation & Film Production By Chris Neuhahn, Josh Book 2. Producing and Directing the Short Film and Video By Peter W. Rea, David K. Irving 3. Film Production Theory By Jean Pierre Gegens 4. Production Management for Film and Video By Richard Gates	Theory, project and assignments, PPT etc
Unit- II	Business Creation: Business Plans and Ideation: Entrepreneurship Routes, Case Studies (Relevant and time specific), Introduction to	3		Theory, project and assignments, PPT etc

	Company Creation, Processes of Registration and Incorporation, Company Law, Introduction to Company Law, Registration Procedures and Exceptions, Company Procedure and Ethics		5. The Independent Film Producer's Survival Guide: A Business and Legal Sourcebook By Gunnar Erickson, Harris Tulchin, Mark Halloran 6. The Complete Film Production Handbook by Eve Light Honthaner 7. Independent feature film production By Gregory Goodell 8. Film Production By Steven Bernstein 9. Film production: the complete uncensored guide to independent filmmaking By Greg Merritt	
Unit- III	Contracts and Negotiations: Revenue sharing model, Minimum guarantee model, Share in profits model	3		Theory, project and assignments, PPT etc
Unit- IV	Conflict Resolutions: Negotiations and Bargaining : Role Play Exercise, Research Methodology for Business Planning	3		Theory, project and assignments, PPT etc
Unit- V	Scouting for business opportunities: Investor Pitch Exercises, Business Plan Formulation and Redesign, Financial Projections for Businesses	3		Theory, project and assignments, PPT etc

NAME OF THE STAFF: **K. SUDHESH**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2022- 2023**
SUBJECT: **BASICS OF MARKETING AND PUBLICITY**

LEARNING OBJECTIVE/S: To introduce the basics of marketing and publicity design | To educate about the importance of marketing in today's world | To help understand the various tools needed for marketing and publicity design | To learn about the marketing plan and market research | To help get insight into consumer consumption behaviour

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Introduction to Marketing: 1. Importance of marketing, definition of marketing, scope of marketing, functions of marketing, marketing and its relation to other business functions, difference between sales and marketing. 2. Key marketing terms and concepts- need, want, demand, exchange, marketing myopia and marketing orientations, distinction between selling and marketing.3. Marketing Mix, 4Ps, 7Ps, 4Cs.	2	Reference books: 1. Competing For The Future By C.K. Prahalad & Gary Hamel. 2. Kotler on Marketing: How to Create, Win, and Dominate Markets By Philip Kotler. 3. How to Win Friends and Influence People By Dale Carnigie. 4. Market Research: A Guide to Planning, Methodology and Evaluation By Paul Hague. 5. Art of War By Sun Tzu. 6. Strategic Management By Gregory Dess, Lumpkin & Taylor. 7. How Winners Sell: 21 Proven Strategies to Outsell Your Competition and Win the Big Sale ByDave Stein. 8. Beyond Bullet Points: Using	Theory, project and assignments, PPT etc
Unit- II	Marketing Research: Definition, Marketing Research	2		Theory, project and assignments, PPT etc

	Process, Types of Research: Primary, Secondary, Qualitative, Quantitative		Microsoft® Office PowerPoint® 2007 to Create Presentations That Inform, Motivate, and Inspire By Cliff Atkinson. 9. Selling the Invisible: A Field Guide to Modern Marketing By Harry Beckwith. 10. Marketing Services: Competing Through Quality By Parasuraman & Leonard L. Berry. 11. Marketing Management (12th Edition) (Marketing Management) By Philip Kotler. 12. Consumer Behavior: Building Marketing Strategy, 9/e, (with DDB Needham Data Disk) By Hawkins, Best, & Coney. 13. Crossing the Chasm: Marketing and Selling High-Tech Products to Mainstream Customers By Geoffrey A. Moore. 14. Mind and Heart of the Negotiator, The (3rd Edition) By Leigh Thompson. 15. Radically Transparent By Andy Beal & Judy Strauss.	
Unit- III	Consumer Behavior: 1. Introduction and importance, model of consumer behaviour, characteristics affecting consumer behaviour.	2		Theory, project and assignments, PPT etc
Unit- IV	Segmentation, Targeting & Positioning: 1. Segmentation - Bases and process of segmentation, requirements for effective segmentation, niche marketing, segmenting consumer markets, segmenting business markets.2. Targeting- Evaluating market segments, selecting target market segments.3. Positioning- Positioning maps, differentiation and positioning strategy, communicating and delivering the chosen position	3		Theory, project and assignments, PPT etc
Unit- V	Introduction to the concept of IMC: Introduction & Familiarization, Definition of	3		Theory, project and assignments, PPT etc

	Promotion & Promotion Mix, Tools of Promotion Mix, IMC Planning Process, Creative Strategy, Media Strategy			
Unit- VI	Packaging for film & television: The art of Promo, Advertisement & In serial promotions, Art of Writing Copy, designing for various mediums, Public Relations, Planning, organizing and managing events. Managing the internet and social Media. Vendor selection and management, Media Planning & Buying	3		Theory, project and assignments, PPT etc

NAME OF THE STAFF: **SAMEER RANE, JENNIFER BARLA**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2022- 2023**
SUBJECT**: ADVANCED PRACTICAL FILM MAKING - MUSIC VIDEOS**

LEARNING OBJECTIVE/S: To introduce the process of Music Video
To understand the production pipeline of Music Video
To understand the entire workflow in Music Video making process
To gain exposure on various cameras and software used for production of Music Video
The students will undergo the process of Music Video. The students will be exposed to professional HD cameras & software and will work on projects ranging from 5Mins-8mins. The students will be exposed to the production workflow in music Video.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **VI**
ACADEMIC YEAR: **2022- 2023**
SUBJECT**: FINAL PROJECT- SHORT FILM (30 MINUTES)**

LEARNING OBJECTIVE/S: Comprehensive, which will include writing an original story to production and distribution of film in the national and international circuit. It will also involve creating a blog, FB page, website for the film. Write a report on the roles performed by each student. The students will have to make a 30 minute short fiction project.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

DEPARTMENT OF FILM, TELEVISION AND NEW MEDIA PRODUCTION
5.3. TEACHING PLAN (UNIT PLAN) 2021-22

NAME OF THE STAFF: **ZEBA SIDDIQUI**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **EFFECTIVE COMMUNICATION SKILLS**

LEARNING OBJECTIVE/S: To prepare students in the production aspects of Film Television & New Media, as required by the present media environment all across globe. To empower the students in the production and managerial aspects of the media business with due emphasis on latest production techniques, along with marketing and branding management of various media products and associated services. To develop creative temperament and mindset needed in the content production segment of media industry. To provide an active industry interface by way of co-learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Fundamentals of Communication: Developing reading & writing skills (Marathi, Hindi and English), Editing & Summarizing (Marathi, Hindi and English), Oral Communication (Marathi, Hindi and English)	3	Textbooks: 1. Crucial Conversations: Tools for Talking When Stakes are High , by Kerry Patterson. 2. Presenting to Win: The Art of Telling Your Story, by Jerry Weissman. Reference Books: 1. Verbal Judo: The Gentle Art of Persuasion, by George J. Thompson. 2. Write to the Top: Writing for Corporate Success,	Theory, project and assignments PPT etc
Unit- II	Enhanced Communication Skills Development: Enhancing communication skills – verbal, Enhancing communication skills - non-verbal, Body type- posture- body language reading, Analysing body language signals and meanings	3		Theory, project and assignments PPT etc
Unit- III	Psychology of communication:	3		Theory, project and

	Gestures- expressions - facial language, eye contact, shake hands, sitting posture, Maintaining comfort distance from people, mirroring, Dressing sense, corporate dressing, formal, semi formal, casual, dressing for various occasions & events, Understanding personalities - auditory / visuals / kinesthetic, eye movement, facial expressions, emotions, smile		by Deborah Dumaine.	assignments PPT etc
Unit- IV	Personality Development: Verbal communication, voice training, speech, clarity, grammar speed, volume, enunciation, pronunciation, ends of sentences, humour, pauses, Stress management, breathing pattern, mind psyching, right attitude, understanding your limitations and strengths, Table manners & etiquettes correct use of spoon knife, etc, Choosing the right accessories i.e shoes, handbags, jewellery, etc.	3		Theory, project and assignments PPT etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **INTRODUCTION TO HISTORY OF ART/ STORYTELLING THROUGH OTHER FORMS OF ART**

LEARNING OBJECTIVE/S: To understand the basics and genres of Music, dance and theatre.
To learn the basics of various acting schools and the art of drama.
To learn the evolution of visual techniques from painting to cinema.
To learn the basic relationship between music and dance in relation to Film making.
Students should be exposed to the canonical text of Natya shastra from where all the traditional performing arts have emerged.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Music : Genres of Music, Introduction to Contemporary Music (Hindi, Regional & POP), Music Directors & Composers, Use of Folk music in Indian Cinema	3	Textbooks: 1) Natya Shastra by Bharata Muni. 2) Melodrama and Popular Culture: Ira Bhaskar. 3) History of Art – Bernard.S. Myers, Trawin Copplestone. 4) Framing Film- Cinema and the Visual Arts, EDITED BY STEVEN ALLEN AND LAURA HUBNER. Reference Books: 1. Dancing: The Pleasure, Power, and Art of Movement; by Gerald Jonas. Harry N. Abrams in association with	Theory, project and assignments PPT etc
Unit- II	Genres of Dance – Understanding storytelling through Folk Dance & Contemporary Dance, Role of Dance in Hindi Cinema	3		Theory, project and assignments PPT etc
Unit- III	The development of theatre, Acting Schools, Make-up, Managing Play, Study of one English and one Hindi or regional play. Influence of theatre on cinema.	3		Theory, project and assignments PPT etc
Unit- IV	1. European Paintings and Painters- A brief overview starting from the renaissance to modern painters. Idea of Perspective coming into painting and changing	3		Theory, project and assignments PPT etc

	the way we perceive the world 2. Indian Paintings & Painters- A look at the rich historical tradition of Indian PaintingsMiniature Paintings to Modern Painters. Difference between the formal aspects of Painting & Cinema. Exploring the idea of time and space in painting in relation to cinema 3. Important Movements- Analysing the important movements that have taken place in postcolonial India in painting to the contemporary scenario.		Thirteen/WNET 1992. 2. History of Dance: An Interactive Arts Approach; by Gayle Kassing.	

NAME OF THE STAFF: **SAMEER RANE**

DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **INITIATION TO LITERATURE & CREATIVE WRITING**

LEARNING OBJECTIVE/S: To introduce basic tenets of Indian literature including regional literature
To introduce and appreciate various forms of literature (Novel, Poetry, Drama, Essay)
To help build skills for creative writing
To help understand the structure of Story, poetry and drama
To introduce writing for internet

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Introduction to Indian Writers – Hindi/Marathi/Urdu & other regional languages: History of Indian literature, prominent writes, important works, cultural significance.	3	Textbooks: 1.) A Concise History of Indian Literature in English by Arvind Mehrotra. 2) The Creative Writing Course book: Forty Authors Share Advice and Exercises for Fiction and Poetry. 3) Creative Writing By Adele Ramet. 4) Creative Writing for People Who Can't Not Write By Kathryn Lindskoog. Reference Books: 1. Creative Writing: A Workbook with Readings By Linda Anderson. 2. Teaching Creative Writing By Graeme Harper. 3. The Everything Creative Writing	Theory, project and assignments PPT etc
Unit- II	A Brief Introduction to Creative Writing: What is creative writing, various forms of writing, various form of writing styles, how to build creative writing skills.	3		Theory, project and assignments PPT etc
Unit- III	Formal structure of the short story: Various forms of writing styles, Genres of story, how to develop an engaging idea, Prominent writers, Pick your style.	3		Theory, project and assignments PPT etc
Unit- IV	Formal aspects of Poetry: Elements of poetry, types of Poetry, Difference between various styles, Famous poets and their works, Study of the Epic Ballad - Mahabharata.	3		Theory, project and assignments PPT etc

			Book By Wendy Burt-Thomas. 4. The Soul of Creative Writing By Richard Goodman, Goodman, Chong.	
Unit- V	Formal aspects of Drama: Structure of drama, one act-two act-three act play, Characterization, Freytag's triangle, Subject specific drama	3		Theory, project and assignments PPT etc
Unit- VI	Writing for the internet: How internet writing is different from conventional writing, Blogging, Reputation management, Development of Blogs, writing for social media, writing for SEO & SMO	3		Theory, project and assignments PPT etc

NAME OF THE STAFF: **K. SUDHESH**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **BASICS OF PHOTOGRAPHY**

LEARNING OBJECTIVE/S: To learn the basics of art of Photography.
To understand the basic intricacies involved in taking a photograph.
To understand what makes a good picture.
To develop basic photographic sense and knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Development of Photography over the years: Brief History of Photography, early photography methods, switch from film to digital, difference between film and digital photography, formats of images in digital.	3	Textbooks: 1. The Art of Photography; by Bruce Barnbaum. 2. Creative Nature & Outdoor Photography; Brenda Tharp. 3. Chasing the Light by Ibarionex Perello. Reference Books: 1. The Camera by Larry Hills. 2. The Creative Black Book. 3. The Print by Ansel Adams, Robert Baker. 4. 500 poses for Photographing Women by Michelle Perkins. 5. Creative Landscapes: Digital Photography Tips & Techniques by Author: Davis, Harold.	Theory, Practical project and assignments PPT etc
Unit- II	Cameras & Techniques: Types of camera, film cameras V/S digital cameras, lenses and their importance, Story Design and Development, Laws of Composition, Gestalt Law and Visual Perception, Semiotic photography.	3		Theory, Practical project and assignments PPT etc
Unit- III	Lighting - Theory & practice: Sources of Lighting, 2 point lighting, 3 point lighting, creating contrast, outdoor natural lighting, related accessories for lighting.	3		Theory, Practical project and assignments PPT etc
Unit- IV	Post production of Photos, Digital Image Editing – Photoshop: Processing of Raw images, Introduction to	3		Theory, Practical project and

	Adobe Photoshop and image ready software, how to enhance the photo digitally.			assignments PPT etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **FILM APPRECIATION – GENRES**

LEARNING OBJECTIVE/S: What is cinema, Film theory – form and function, Film analysis, Auteur Theory,
effect of auteur, Contributions of D W, Griffith, Alfred Hitchcock, Jean Du Godard, Digital Aesthetics, Music and choreography, film genre.
Cinema and society, History of Cinema, Hollywood cinema, early cinema and film form
the studio system, rise and decline of the studio system.
Indian Cinema
History of Indian cinema, history of regional cinema, legends of Indian cinema, Hindi film industry, the Hindi film industry, music and choreography in Indian cinema, contemporary cinema

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	What is cinema, Film theory – form and function, Film analysis, Auteur Theory, effect of auteur, Contributions of D W, Griffith, Alfred Hitchcock, Jean Du Godard	3	Textbooks : 1) The Oxford History of World Cinema. 2) The Cinematic ImagiNation : Indian Popular Films as Social History by Jyotika Virdi. 3) History of Indian Cinema by Renu Saran.	Theory, project and assignments PPT etc
Unit- II	Music and choreography, film genre. Cinema and society, History of Cinema, Hollywood cinema, early cinema and film form the studio system, rise and decline of the studio system.	3		Theory, project and assignments PPT etc
Unit- III	History of Indian cinema, history of regional cinema,	3		Theory, project and assignments

	legends of Indian cinema, Hindi film industry, the Hindi film industry			PPT etc
Unit- IV	music and choreography in Indian cinema, contemporary cinema	3		Theory, project and assignments PPT etc

NAME OF THE STAFF: **BISWARANJAN SWAIN**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **GRAPHIC DESIGNING (PHOTOSHOP, ILLUSTRATOR, ETC.)**

LEARNING OBJECTIVE/S: The learners are exposed to the industry of graphic design. The domain of skills and tools is largely devoted to learning graphic reproduction methods using both modern, that is electronic,
as well as old school techniques. These inputs enable learners to solve simple problems of visual communication related to corporate identity or social communication. Learners use software like Adobe Photoshop and Adobe Illustrator.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	COLOUR THEORY : Colour psychology, Colour schemes, Colour wheel, Colour combination, Hue.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- II	PERSPECTIVE STUDY : 1-point perspective, 2-point perspective, 3-point perspective, Mixed perspective.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- III	STILL LIFE : Sketching & rendering, Light study, Photography.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- IV	TEXTURE STUDY : Texture creation, mixed media, Water/Pastel painting.	1		Theory, Software (Adobe illustration, photoshop) project and assignments

				PPT etc
Unit- V	PORTRAIT PAINTING : Portrait Caricature, Cartoon.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit-VI	PHOTOSHOP : Basic tools in Photoshop, Photo editing, Colour correction.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- VII	ILLUSTRATOR : Basic tools in Illustrator, Vector graphics, Graphics design.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- VIII	COMIC BOOKS : Understanding storyboards, Styles of contemporary comics, Colour tones.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- IX	COMPOSITION : Basic composition skills, Rule of thirds, Understanding of subject and its relation to light and depth of field, Application in comic books.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- X	TYPOGRAPHY : Understanding of typos & fonts, Application of	1		Theory, Software (Adobe illustration, photoshop)

	appropriate typos on art works.			project and assignments PPT etc

NAME OF THE STAFF: **BISWARANJAN SWAIN**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **BASICS OF POST PRODUCTION**

LEARNING OBJECTIVE/S: An editor's job is to decide, 24/25/30 times a second, where the audience needs to be. Do we
stay in a shot or transition to another, and if so, what shot and how do we get there? Working side-by-side with the director to craft the movie that ultimately hits the screen – or your phone – editing is really about manipulating the audience, in the best possible way, all in the service of storytelling.
In this class, we will study terminology and concepts, learning both the rules and how to break them, as we look at the aesthetics choices and the technological workflow for both picture and sound editing. We will examine the historical role of editing, from the earliest silent film through the digital revolution that has transformed moviemaking today.
INTRO TO EDITING THEORY
Introduction to the history of film editing. Lumiere Brothers, Thomas Edison, Edwin Porter, DW Griffith); the manipulation of editing; Lev Kuleshov's experiment; the language of cinema;
introduction to the editor as storyteller and understanding the narrative structure.
INTRO TO PREMIERE PRO
Screening of Examples. The Premiere Pro interface features and functions, how to import and organize footage, basic editing techniques
EDITING EXERCISE
Watch the work of a Master Editor, Basic Production techniques, Practicing/Reviewing skills
PROJECT: Interview and Film a classmate telling a story for 10 minutes or talking about something they're excited about. Edit together a two minute version of this.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Effective Editing Bird's-eye view of the modern process of editing, Setting Up for Editing Efficient editing habits to work faster, Thinking creatively. Efficient workflow, Configure factory-standard systems, Optimal media management from ingest through to	4	Grammar of the Edit Roy Thompson, Christopher J. Bowen SUGGESTED TEXTS: Film Art: An Introduction, David Bordwell and Kristin Thompson The Invisible Cut: How Editors Make Movie Magic, Bobbie O'Steen	Theory, Software (Adobe Premiere pro) project and assignments PPT etc

	final output. Non Linear Editing Concepts Interface of NLE system, The Three-Point Edit, Additional Edits		Cut By Cut: Editing Your Film or Video, Gael Chandler In the Blink of an Eye: A Perspective on Film Editing, Walter Murch The History of Film Editing, Karel Reisz, Gavin Miller On Film Editing, Edward Dmytrk Film Editing: Great Cuts Every Filmmaker Should Know, Gael Chandler First Cut: Conversations with Film Editors, Gabriella Oldham	
Unit- II	Working in the Timeline, Transitions, Keyframing, Filters, Ingesting	4		Theory, Software (Adobe Premiere pro) project and assignments PPT etc
Unit- III	Compositing, Color Correction, Audio, Titling, Review and Look Forward	4		Theory, Software (Adobe Premiere pro) project and assignments PPT etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **HISTORY OF NON- FICTION FILM**

LEARNING OBJECTIVE/S: This course explores the history and theory of non-fiction film and video, with an emphasis on
work that falls under the rubric of "documentary."
Documentary is a unique form of non-fiction moving image media that claims a special relationship to reality and truth. Through screenings, readings and class discussion, we will explore such questions as:
• How does documentary relate to narrative fiction filmmaking? To other non-fiction forms of television like reality TV or news reports?
• How "real" are documentary representations, and how much does it matter?
• What are some different formal approaches documentary, and how does each mediate the representation of real life it offers?
• How has documentary image-making changed over time? What can we learn from this history that is relevant to media-making today?
• What are the particular ethics of representing others in a medium like video or film?
• What responsibility do documentarians have to their subjects, to the form, and to society at large?
• How do people watch documentaries, and what is the impact of these films on the world they aim to represent?
Be familiar with efforts to create more democratic systems of media production and distribution.
Learn how to watch earlier films both as an audience THEN (with understanding of the film's social, cultural, historical context), and NOW (with understanding of your own future goals and
with critical, analytical eyes to study history).
Be able to think – and write — critically about non-fiction media.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Screen and analyze a wide range of documentaries, exploring the genre as narrative, journalism, propaganda, rhetoric, activism, diary, art, archive, and entertainment. Course Objectives	4	The texts for this class Documentary: A History of the Non-Fiction Film (2nd Edition) by Erik Barnouw (available at Shakespeare and Co) and Crafting Truth: Documentary Form and	Theory, project and assignments, Screenings (T.V.) PPT etc

	By the end of the semester, you should: Be familiar with key periods in the history of non-fiction film and video from 1895 to the present. Be able to recognize and write about various forms and conventions of documentary storytelling, including the basic grammar of documentary moving images.		Meaning, by Louise Spence and Vinicius Navarro (available at Shakespeare and Co.). Additional readings will be available through e-res. As some readings will be accessed electronically, please bring either a printed version of the article (preferred) OR a digital version of the article to class.	
	Explore central questions surrounding the representation of reality and truth, including voice, authority, evidence and point of view. Explore key issues in the ethics of documentary representation, including maker-subject relationships, informed consent, fairness, and evidence.	4		Theory, project and assignments, Screenings (T.V.) PPT etc
2	Be familiar with efforts to create more democratic systems of media production and distribution. Learn how to watch earlier films both as an audience THEN	4		Theory, project and assignments, Screenings (T.V.) PPT etc

	(with understanding of the film's social, cultural, historical context), and NOW (with understanding of your own future goals and with critical, analytical eyes to study history).			
3	Be able to think – and write — critically about non-fiction media.			Theory, project and assignments, Screenings (T.V.) PPT etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **WRITING FOR VISUAL MEDIA**

LEARNING OBJECTIVE/S: To understand the basic structure of screenplay
To introduce to the basic skills for screen writing
To understand the intricacies of screen writing
To learn the build characters and write meaning full dialogues

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Preparing to Think Visually: Diving In to the Screenwriter's Mind, Approaching Screenwriting as a Craft, Breaking Down the Elements of a Story, Unpacking Your Idea	3	Textbooks: 1. How not to write a screenplay: 101 common mistakes most screenwriters make by Denny Martin Flinn 2. Screen Adaptation: A Scriptwriting Handbook by Kenneth Portnoy 3. Screenplay: The Foundations Of Screenwriting By Syd Field Reference Books: 1. The Screenwriter's Bible By David Trottier 2. The Bare Bones Book of Screenwriting: The Definitive Beginner's Guide to ... By J. T. Clark 3. Screenwriting for a Global Market: Selling Your Scripts from Hollywood to ... By Andrew Horton	Theory, project and assignments, PPT etc
Unit- II	Structure of Story & Screenplay: Plot Part I: Beginnings, Plot Part II: Middles, Plot Part III: Endings	3		Theory, project and assignments, PPT etc
Unit- III	Dynamics of Characterization: Character Building, Constructing Dynamic Dialogues, Non – traditional Film	3		Theory, project and assignments, PPT etc
Unit- IV	Finalizing the Script: Maintaining an Audience's Trust, Turning Your Story into a Script, Take Two: Rewriting Your Script, Adaptation and Collaboration: Two	3		Theory, project and assignments, PPT etc

	Alternate Ways to Work		4. Screenwriting For Dummies By Laura Schellhardt 5. Screenwriting: The Sequence Approach By Paul Joseph Gulino 6. The Tools of Screenwriting By David Howard, Edward Mabley 7. The Art of Screenwriting: An A to Z Guide to Writing a Successful Screenplay By William Packard 8. Writing the Character-Centered Screenplay By Andrew Horton	

NAME OF THE STAFF: **ABHIJEET DEO**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **IMPORTANCE OF SOUND AND SOUND SFX**

LEARNING OBJECTIVE/S: To learn about the basic of sound |To understand the nature of sound and recording devices |
To learn the basics of sync sound, mixing console, analog v/s digital workflow | To understand the need for sound and importance of sound in film | To learn to record a song

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Basics of Sound: Nature of acoustical waves; concepts of amplitude and frequency -wavelength and harmonics. Psycho-acoustics: Nature of hearing and perception of sound, including concepts of pitch, loudness, and timbre; the precedence effect; localization in rooms; equal loudness contours; and other mysteries of hearing. Principles of Stereophony	2	Textbooks: 1. Pro Tools 9: Music Production, Recording, Editing and Mixing By Mike Collins 2. Pro Tools All-in-One Desk Reference For Dummies By Jeff Strong 3. Sound for Film and Television By Tomlinson Holman Reference Books: 1. Sound For Digital Video By Tomlinson Holman 2. Producing for TV And Video: A Real-world Approach By Cathrine Kellison 3. Sound for picture: an inside look at audio production for film and television By Jeff Forlenza, Terri Stone 4. Audio in Media By Stanley R. Alten 5. Master Handbook of	Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- II	Sound for Film and Video: The sound track – its importance in an AV medium, Different elements of a sound track, Explanation of how sound is put to the film	2		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc

Unit- III	Sync Sound: The size of the role sound should play in your film will vary depending on your professor's requests, but when it comes to the technical side of things, you are at least required to know how to achieve synchronized sound and picture with film. Interconnectivity of Analog & Digital Equipment: Basic analog connectors, cabling, patch – bay, interconnectivity between various recording studio equipment. Various Digital interconnects and their sockets on the digital equipment. Microphones Types: Dynamic, Condenser, Ribbon, Polar Pattern, Sensitivity. Microphone designs for special applications Acoustics I (Fundamentals): The behavior of sound in outdoors and in closed spaces; Absorption, reflection, diffraction, refraction, reverberation.	2	AcousticsByF.Alton Everest 6. Modern Recording Techniques By David Miles Huber 7. Mastering Audio By Bob Katz 8. Mixing Audio By Roey Izhaki 9. Practical Recording Techniques By Jenny Bartlett 10. Critical Listening Skills for Audio Professionals By F.Alton Everest 11. The Audible Past By Jonathan Sterne	Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc

Unit- IV	The signal flow and various auxiliary systems. Digital Audio: Analog to Digital to Analog conversion. Sampling Frequency, Bit Rates. Problems in digital audio. Different digital media, Standard digital recording & mastering formats. Audio file formats, storage mediums – optical, magnetic, Jitter etc. Computers in Audio: Different platforms – different operating systems, Configuration of a PC for sound recording. Mother Boards, Processor, Sound Card, Graphic card, Monitors Recorders: Analog, Digital, Tape Based & Tapeless. Digital Audio Workstations (DAW's)	3		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- V	– Film Showcase: Case studies of famous Indian as well as foreign films	2		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- VI	Microphone Techniques: Placement, Applications, Proximity effects	2		Theory, project and assignments, Screenings (T.V.) PPT, Protool and

	etc. microphones and placement techniques for stereo recording. Monitoring Systems: Active & Passive types, Domestic and professional listening environment, Stereo and surround monitoring.			Audacity software etc
Unit- VII	The Production Process of a Song: Music Basics. – Types of Music, Concepts of Melody, Harmony, Rhythm & counter melody etc. Format of a song. Preproduction, Tracking, Overdubbing, Editing, Mixing and Mastering. Processors: Theory of Tonal, Dynamic & Spatial processors. Equalizers – types and their application, Compressors & Limiters - theory and application, Effects processors - Reverberation and Delay devices and their plug in counterparts.	3		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- VIII	Location sound , Radio mics - uses and potential	3		Theory, project and assignments, Screenings

	difficulties. Boom operation for sync sound, Hands-on training in location sound recording for video. Nuendo Basic: Basic principles, understanding the process from initial set up to completion of a project. To set up for a vocal/instruments dub. Hands-on training - You will share a Nuendo workstation during the class. Principles of Mixing: The basic techniques of mixing and the fundamental approach. The Building Blocks of Mixing Setting the sound stage, and the sonic implications of panning and of placing instruments at varying distances from the listener; Consideration of different approaches to getting desired results from EQ; A comprehensive review of the uses of dynamic processor; on Individual channels and Mix master. Finishing a mix with automation.			(T.V.) PPT, Protool and Audacity software etc

	"Mixing in the box." And “Mixing through the board.” Production of the Sound Track for the student project film: Discussing sound design strategy with the director of the film at pre production stage. Attending film sync shoots. Video File formats, Acquiring picture for post production from edit suite. Dubbing the dialogues wherever necessary, Selecting SFX and BG music from the library, recording Foley and music as per the demand of the script. Mixing the final track. Export it to the editor, supervise the final assembly of the film.			

NAME OF THE STAFF: **SANJANA SAWANT**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **BASICS OF CINEMATOGRAPHY-1**

LEARNING OBJECTIVE/S: To understand the importance of cinematography in film making | To enhance the basic knowledge about lighting and its use | To understand various equipment's required for various form of lighting | To understand the basics of various camera, lenses and digital cinematography

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Power of a Picture: Power of a still picture | Shooting a good Still picture | Composition-Framing | Understanding & Use of color | Capturing the Drama | Black and white Photography;	4	Textbooks: 1. Camera Terms and Concepts by David Elkins 2. The Camera Assistant by Doug Hart 3. Motion Picture Camera and Lighting Equipment by David Samuelson Reference Books: 1. Motion Picture Camera Techniques by David Samuelson 2. The 16mm Camera Book by Douglas Underdahl 3. The Hands On Manual for Cinematographers by David Samuelson 4. The Professional Lighting Handbook by Verne Carlson 5. The Filmmakers Pocket Reference by Blain Brown	Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- II	Light: Role of light | Lighting techniques | Concept of lighting various planes | Understanding Various types: Tungsten lamps, Cool Lights, HMI, Cyclorama/background lights, Soft Box lights. | Use of cutter stand, black cloth and Camera filters | barn doors | use of reflectors | Three point lighting | Ratio lighting: 1:2, 1:3, 1:4 | Creating various Background patterns and types | Lighting – Situations | Studio lighting for three cameras set up: Talk Show, Game Show	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

	| Available day light situations | Shooting for Documentary style | Face lighting. Key, fill, back light | Depth of field Exercise | High key lighting | Low key lighting;		6. American Cinematographer ASC Manual 47. The Zone System for Photographers by Carson Graves 8. Cinematography: Screen craft by Peter Ettedgui 9. Contemporary Cinematographers-On Their Art by Pauline Rodgers 10. Operating Cinematography for Film and Video by William Hines 11. Cinematography-A Guide for Filmmakers and Film Teachers by Kris Mankiewicz 12. Film Lighting: Talks with Hollywood's Cinematographers and Gaffers by Kris Malkiewicz 13. The Five C's of Cinematography: Motion Picture Filming Techniques by Joseph V. Mascali 14. The Art of the Cinematographer: A Survey and Interviews with Five Masters by Leonard Maltin 15. Anton Wilson's Cinema Workshop by Anton Wilson 16. Image Control-Motion Picture and Video Camera Filters and Lab	
Unit- III	–Lenses: Type of Lenses | Power of Lenses | Understanding the shot requirement and usage of a lens | Idea of perspective: Depth Of Field, Depth of focus, Critical understanding of Fixed Lens Vs. Zoom Lens | Focus pulling | 18% grey card | Metering | Color temperature meter;	3		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- IV	Movements: Basic grammar of shots | Primary Camera Movement: Pan, Tilt, Zoom, Character Movement | Usage and need of Track and trolly, Crane, jimy gip, Poll Cam | Managing Movements | Single camera Setup | Multi camera setup | Continuity Exercise | Do’s and don’ts of camera movements | Aesthetics and Psychological Impact of Moving Images | Various parts of Motion picture cameras | Moving Image-Motion Picture | Impact of collective moving	3		Theory, project and assignments, Screenings (T.V.) PPT, etc

	Images | Motion Picture Dynamics;		Techniques by Gerald Hirschfeld 17. Lighting for Film and Electronic Cinematography by John David Viera and Dave Viera 18. Painting with Light by John Alton 19. Picture Composition for Film and Television by Peter Ward 20. Matters of Light and Depth-Creating Memorable Images for Video, Film and Stills Through Lighting by Ross Lowell 21. Lighting Technology by Fitt and Thornley Set Lighting Technician's Handbook by Harry C. Box 22. Digital Cinematography by Ben De Leeuw 23. If It's Purple, Someone's Gonna Die: The Power Of Color In Visual Storytelling By Patti Bellantoni 24. High Definition Cinematography By Paul Wheeler	
Unit- V	Understanding digital video recording Principle of video recording | Digital Recording Formats | Editing and compression | Digital			Theory, project and assignments, Screenings (T.V.) PPT, etc

	sampling and storage | Technical formats of video- PAL, NTSC | “Time Code” in Video Recording | Film Stock and Processing			

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2021-2022**
SUBJECT**: PRACTICAL FILM MAKING 1 (ONLY NON-FICTION FILM)**

LEARNING OBJECTIVE/S: To understand the film making process for multiple locations in non-fiction films
To understand the entire workflow
To gain exposure on various cameras and software used for production
The students will undergo the process of making a non-fiction film.
The students will be exposed to Semi-professional camera cameras & software. The students will also undergo same basic exercises such as 3 shot and 6 shot to give them a basic sense of framing, composition, movement and editing. The final project will be a non-fiction film with the duration of 5-10 minutes.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2021-2022**
SUBJECT**: INTRODUCTION TO DIRECTION FOR TELEVISION**

LEARNING OBJECTIVE/S: 1. Understanding of the process of Direction for Television
2. Theoretical framework and practical approach to Direction
3. Creating Ads for various categories

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Understanding Television Culture & Semiotics. Understanding Space & Time, Ideology, Aesthetics, Stylistics & Setting. Construction: mise-en-scene & technical codes -1 Writing For Television: Research, Ideation and Conceptualization, Understanding The IV Act Structure for TV, Elements of a TV Program Constructing a plot w.r.t a family tree for serials. Constructing Character biography Writing for Humour Popular Indian TV Discourse- eg.: Aahat (Horror), Daily Soap (any) & Tarak Mehta (comedy) Syntagmatic & Paradigmatic analysis Polysemy Popular TV Discourse- Friends	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

	Principles of Affinity & Contrast Director's Role in Television Inter-textuality & Role and Impression of Women Exploring Non-fiction Reality TV Exploring Non-fiction AD Filmmaking -1 Linear Motif in TV Creating content for TV- Directing for a Webisode			
Unit- II	The course aims to develop the sensibilities and sensitivities of the taught to comprehend the process of direction for television that entails understanding and analysis of different genres of television.	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- III	The learning includes understanding the television medium vis-à-vis the film, ideating, plotting and writing for different genres followed by inspecting the Director's role. Analysing the present day scenario. Experimenting by devising for short versions.	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- IV	The sessions could be designed to give a thorough understanding of both – theory as well as practical's. All lectures will be in the form of interactive sessions and it is expected that the	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

	student reads/watches television as directed before attending lectures.			

NAME OF THE STAFF: **SANJANA SAWANT**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2021-2022**
SUBJECT**: BASICS OF CINEMATOGRAPHY-2**

LEARNING OBJECTIVE/S: To understand the basic structure of film and digital camera | To enhance the basic knowledge about lighting and its use | To understand various equipment's required for various form of mood lighting | To understand basics of various digital cameras, lenses and digital cinematography | To learn the basics of special effects cinematography |To understand the needs of co-creators

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	– Structure of Film and Digital Camera: Understanding the internal structure of camera | perforation loop | pressure plate | Pull down claw | Magazine: Types of magazine | Threading of film | Intermittent Movement | Analysis of Claw motion | Registration pin | Sprocket wheel | Frames per sec | Camera Motors | Slow motion and Fast motion | Reverse Movement | Lens Mount Flange Depth | Magazine Cover/rain cover | Digital Process of Image capturing | Latitude of film Camera format | Latitude of digital	4	Textbooks: 1. Camera Terms and Concepts by David Elkins 2. The Camera Assistant by Doug Hart 3. Motion Picture Camera and Lighting Equipment by David Samuelson Reference Books: 1. Motion Picture Camera Techniques by David Samuelson 2. The 16mm Camera Book by Douglas Underdahl 3. The Hands On Manual for Cinematographers by David Samuelson 4. The Professional Lighting Handbook by Verne Carlson 5. The Filmmakers Pocket Reference by Blain Brown 6. American Cinematographer ASC Manual	Theory, project and assignments, Screenings (T.V.) PPT, etc

	format | Shooting Format-16-mm/35-mm/70-mm/super.16/I-max/3-D | Convenience of Digital format | The Future of Film Formats		7. The Zone System for Photographers by Carson Graves 8. Cinematography: Screen craft by Peter Ettedgui 9. Contemporary Cinematographers-On Their Art by Pauline Rodgers 10. Operating Cinematography for Film and Video by William Hines 11. Cinematography-A Guide for Filmmakers and Film Teachers by Kris Mankiewicz 12. Film Lighting: Talks with Hollywood's Cinematographers and Gaffers by Kris Malkiewicz 13. The Five C's of Cinematography: Motion Picture Filming Techniques by Joseph V. Mascali 14. The Art of the Cinematographer: A Survey and Interviews with Five Masters by Leonard Maltin 15. Anton Wilson's Cinema Workshop by Anton Wilson 16. Image Control-Motion Picture and Video Camera Filters and Lab Techniques by Gerald Hirschfeld 17. Lighting for Film and Electronic Cinematography by	
Unit- II	– Special Effects and Cinematography: Chrome key Concept | Preparation for chrome key | Compositing a digital Picture | Digital matte painting;	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- III	Mood Lighting & Colour Lighting Theory & Practice: Red, Blue, Green , Purple & Orange lights and Treatments for Various Scenes | Colour and Cultural;	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- IV	Image formation (Understanding requirements of a director): Understanding a Screenplay writing | Writing for visuals-STORY BOARDING | Capturing the drama on the camera | How to create packets of emotional experience-Scene | Creation of Drama-Ingredients of a Drama;	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

			John David Viera and Dave Viera 18. Painting with Light by John Alton 19. Picture Composition for Film and Television by Peter Ward 20. Matters of Light and Depth-Creating Memorable Images for Video, Film and Stills Through Lighting by Ross Lowell 21. Lighting Technology by Fitt and Thornley Set Lighting Technician's Handbook by Harry C. Box 22. Digital Cinematography by Ben De Leeuw 23. If It's Purple, Someone's Gonna Die: The Power Of Color In Visual Storytelling By Patti Bellantoni 24. High Definition Cinematography By Paul Wheeler	
Unit- V	– Understanding the needs of Co-creators (Director, Editor, Sound Recordist...) Working in team | Team Building | Conflict formation | Conflict Resolution	1		Theory, project and assignments, Screenings (T.V.) PPT, etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **UNDERSTANDING TV FORMATS & GENRES**

LEARNING OBJECTIVE/S: To understand how television programming works | To learn about TRPs and drama creation | To study the impact of niche programming | To learn about various genres of television programming

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Nature of drama in television: Various shows, formats and genres, telecast patterns, audience viewership performance	4	Textbooks: 1. Fundamentals of Film Directing By David K. Irving 2. Writing, Directing, and Producing Documentary Films and Videos By Alan Rosenthal 3. Breaking into Film by Kenna McHugh 4. Before You Shoot : A Guide to Low Budget Film and Video Production by Helen Garvey Reference Books: 1. Film Directing Cinematic Motion: A Workshop for Staging Scenes By Steven Douglas Katz 2. Film Directing Fundamentals: See Your Film Before Shooting By Nicholas T. Proferes 3. Problems Of Film Direction By Sergei Eisenstein	Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- II	– Creating Drama for TRPs: Building the story, herd culture existing in current times, breaking the barriers	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- III	Creating niche television programming: Importance of niche content, niche content channels, producing niche content in wake of DTH connections	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- IV	Differentiation of infotainment, edutainment, entertainment, lifestyle genres: Differentiation of genres, Specialty of different genres,	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

	popularity of genres, content on demand, Study of BBC & Discovery, Study of GECs			

NAME OF THE STAFF: **SANJANA SAWANT**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **CONCEPTS OF STORY BOARDING**

LEARNING OBJECTIVE/S: To understand the need for storyboarding | To learn the fundamentals of shoot taking and division | To understand various storyboarding techniques | To understand the importance of perspective and lighting while storyboarding

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	– Intro to Storyboarding/Visual Story telling & Storyboards: Origins of Story boards and aspect ratio	2	Text Books: 1. Exploring Storyboarding By Wendy Tumminello 2. The Art of the Storyboard: Storyboarding for Film, Tv, and Animation By John Hart 3. Directing the Story By Francis Glebes Reference Books: 1. Beginning Illustration And Storyboarding For Games By Les Pardew 2. Storyboards: Motion In Art By Mark Simon 3. From Word to Image: Storyboarding and the Filmmaking Process By Marcie Beg Leiter 4. Prepare to board! By Nancy Beiman 5. Storyboarding 101: A Crash	Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- II	Fundamentals of Shots: Terminology of Shoots, Camera Framing, Camera Angles and Movements	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- III	Storyboarding Techniques: · Concept- what the story is about, Drawing the components of the storyboard · Indicating motion in the storyboard, Increased reality- perspective and lighting	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- IV	Composition, Perspective & Lighting: Compositional	4		Theory, project and assignments, Drawing sheets, Adobe

	Elements, line-shape-contrast, creating meaning within image, Creation of depth through lens choice and linear, atmospheric and size perspective, High- Key Lighting, Low key Lighting, 3 point Lighting, Tonal quality of lighting.		Course in Professional Storyboarding By James O. Fraioli 6. Writing with pictures: how to write and illustrate children's books By Uri Shulevitz	illustration, Coral draw software, PPT, etc
Unit- V	Continuity: Basic Rules of continuity, 180 – Degree rule, screen direction, Cutaways & Cut-ins	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- VI	– Story Boards for Animations & Special Effects Films: Structure of animation films, Special effects breakdown, creating the environment	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- VII	Story Boarding for Commercials and New Media: Structure of commercials, elements of brand building to be implemented, special colour scheme for brands and products	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc

NAME OF THE STAFF: **BISWARANJAN SWAIN**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2021-2022**
SUBJECT**: GRAPHICS AND POST PRODUCTION (FLASH, EDITING SOFTWARE, AFTER EFFECTS)**

LEARNING OBJECTIVE/S: Basics of 2D animation, Vector and Raster Graphics, Basic Animation in Flash, Advanced editing
using Flash Elements in the film, Using After Effects, The interface of After Effects, Importing graphics and film, Keyframes, After effects and timeline, Animating using after effects, Compositing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Basics of 2D animation	4	-	Theory, project and assignments, After effects, Flash software PPT, etc
Unit- II	After Effects	4		Theory, project and assignments, After effects, Flash software PPT, etc
Unit- III	Basic Animation in Flash	4		Theory, project and assignments, After effects, Flash software PPT, etc
Unit- IV	Advanced editing	4		Theory, project and assignments, After effects, Flash software PPT, etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **TV PRODUCTION / AD FILM MAKING**

LEARNING OBJECTIVE/S: To introduce the process of 25 mins Television series making To understand the production pipeline of 25 mins Television series making process | To understand the entire workflow 25 mins Television series making process To gain exposure on various cameras and software used for production of 25 mins Television series making The students will undergo the process of 25 mins Television series. The students will be exposed to professional HD cameras & software and will work on projects ranging from 5Mins-25mins. The students will be exposed to the entire process of film making and the production workflow in television Series. The students can also work on an Ad film for about 60 seconds depending on the kind of TV series they are making.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **INTRODUCTION TO DIRECTION FOR FILM**

LEARNING OBJECTIVE/S: To understand the need for direction in films | To understand the role played by a director | To understand the Qualities required to be a director | To learn how to manage creativity and creative team | To learn about drama and continuity for films | To learn the details involve in the production of a feature films

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	ARTISTIC IDENTITY AND DRAMA: The World of the Film Director, Identifying Your Themes	2	Textbooks: 1. Film Directing Cinematic Motion: A Workshop for Staging Scenes By Steven Douglas Katz 2. Film Directing Fundamentals: See Your Film Before Shooting By Nicholas T. Proferes 3. Problems Of Film Direction By Sergei Eisenstein Reference Books: 1. Directing: Film Techniques and Aesthetics By Michael Rabiger 2. On directing film By David Mamet 3. Directing Actors: Creating Memorable Performances for Film and Television By Judith Weston	Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	SCREENCRAFT: A Director's Screen Grammar, Seeing with a Moviemaker's Eye, Shooting Projects	2		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	THE STORY AND ITS DEVELOPMENT: Recognizing the Superior Screenplay – How to create drama, Analysing a Screenplay, Director's Development Strategies, Alternative Story Sources, Setting Creative Limitations	2		Theory, project and assignments, Screening (TV) PPT, etc
Unit- IV	AESTHETICS AND AUTHORSHIP: Point of View, Subtext, Genre, and Archetypes, Time, Structure, and Plot, Space,	2		Theory, project and assignments, Screening (TV) PPT, etc

	Stylized Environments, and Performances, Form and Style		4. Art Direction for Film and Video By Robert L. Olson 5. The film director's team By Alain Silver, Elizabeth Ward 6. Notes of a film director By Sergei Eisenstein 7. Producing and Directing the Short Film and Video By Peter W. Rea, David K. Irving 8. Fundamentals of Film Directing By David K. Irving 9. Writing, Directing, and Producing Documentary Films and Videos By Alan Rosenthal 10. Breaking into Film by Kenna McHugh 11. Before You Shoot : A Guide to Low Budget Film and Video Production by Helen Garvey	
Unit- V	PRODUCTION: Developing a Crew, Mise-en-Scene, Producing a Shooting Script, Before the Camera Rolls, Roll Camera, Location Sound, Continuity, Directing the Actors, Directing the Crew, Monitoring Progress	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- VI	ORGANIZING ACTION IN AN ACTION SCENE: Staging and Camera for Over Easy Action Scene, Development of Screenplay, Director’s Preparation for Directing an Action Scene, Over Easy Action Scene/Staging and Camera Angles for - Storyboard Artist	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- VII	– ORGANIZING ACTION IN A NARRATIVE SCENE: Staging and Camera for Narrative Scene, Choosing a Location, Staging, Camera Style	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- VIII	Styles And Dramatic Structures: Style, Narrative, Dramatic, and Poetic Visual Styles, The Variety of Dramatic Structures,	2		Theory, project and assignments, Screening (TV) PPT, etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **BASICS OF VISUAL COMMUNICATION**

LEARNING OBJECTIVE/S: Aesthetics, Perception, Representation, Visual Rhetoric, Cognition, Semiotics, Reception
Theory, Narrative, Media Aesthetics, Ethics, Visual Literacy, Cultural Studies.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Aesthetics, Perception, Representation	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	Visual Rhetoric, Cognition, Semiotics, Reception	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	Theory, Narrative, Media Aesthetics	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit-IV	Ethics, Visual Literacy, Cultural Studies	4		Theory, project and assignments, Screening (TV) PPT, etc

NAME OF THE STAFF: **NIKITA GOYAL**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **CONVERGENCE AND BASICS OF WEB DESIGNING**

LEARNING OBJECTIVE/S: Convergence and Basics of Web Designing
Concept of Convergence, Internet Key Terms, New Media. Web Designing, HTML programming,
Basic Java Script, Designing your own website, uploading the website, links and navigation

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Convergence and Basics of Web Designing	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	Concept of Convergence, Internet Key Terms, New Media.	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	HTML programming,	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- IV	Basic Java Script, Designing your own website, uploading the website, links and navigation	4		Theory, project and assignments, Screening (TV) PPT, etc

NAME OF THE STAFF: **BISWARANJAN SWAIN**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **CONCEPTS OF POST PRODUCTION & COMPUTER GRAPHICS (INCLUDING VFX)**

LEARNING OBJECTIVE/S: To understand the basics of visual effects | To understand the basic process of visual effects |
To learn about GUI
and CG | To understand the basics of 3D and creating real world in the digital world | To learn about compositing and camera tracking | To understand the process of vfx and final rendering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Introduction to pre-production, production and post-production: Visual effects' a relatively new term describes what used to be more appropriately called 'special photographic effects'. What makes an effect 'special'? The decision as to which medium and format VFX elements are going to be shot with is directly dependent on how they shall be employed and what the specifications are for their final resting place. Methods of creating visual effects, Implementation	4		Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- II	Introduction to the User Interface (GUI): Introduction to 3D Space and the GUI, Introduction to Modeling, Introduction to Polygonal Box Modeling,			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc

	Introduction to Shell Modeling			
Unit- III	CG Basics: Animation Basics, Animation Hierarchies and Deformation, Joints Hierarchies and Constraints, Cameras, Rendering and Path Animation | Understanding Pipeline and integration: Digital image manipulation, 2D digital image manipulation, Compositing software, New life into old methods, Perfecting the illusion, 3D computer-generated imaging (CGI), Digitizing (getting information into the computer)			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- IV	Introduction to Lighting and Rendering: Light Properties, Defining Shadows, Defining Highlights and Specular, Diffuse Inter-reflection and Global Illumination, Render Layers, Rendering Engines and methods			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- V	Introduction to Compositing: Camera Staging and Composition, Renderers and Algorithms Benefits/Disadvantages, Rendering Passes, Introduction to Specific Compositing Software, Compositing 3D			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- VI	Study of VFX and Camera Tracking: Overview of			Theory, project and assignments,

	Production Pipelines, Rendering Utility Nodes, Camera Tracking Foundation 2D and 3D			Screening (TV) PPT, Software and Computer etc
Unit- VII	Introduction to FX (Effects): Overview of Dynamics, Rigid Body and Fluids, Introduction to Particles, Expressions, Introduction to Fields, Project Work			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- VII	Compositing and Rendering: The Interface, Keying, Rotoscoping, Color Correction, Keying, Multi-Pass Compositing			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **DRAMA PRODUCTION**

LEARNING OBJECTIVE/S: The module is intended to provide an introduction to the process of digital short film
production for the purpose of making works of drama and fiction. The focus will therefore be on enabling the development of the practical and theoretical skills in pitching, planning, writing,
shooting and editing necessary to produce a coherent and competent fictional moving image project.

The module will seek to introduce the student to a range of creative and scheduling skills which will assist them in the production of their projects. It will foreground the inherently collaborative and collective aspects of the production process by aiding the student to refine a range of communication and inter-personal skills to accomplish a broad range of tasks, including identification and planning of a suitable production idea; Allocation of roles for the pre-production, shooting and editing phases, as well as encouraging collective responsibility and accountability which is absolutely essential to the completion of any professional or team production. The module will also build upon the more technical grounding offered in Techniques 2 in order to develop the practical vocabulary and skills required to produce moving
image projects. Students will be encouraged to investigate and undertake a role throughout their productions. In crews, they will produce two shorts for inclusion in their personal practice portfolio.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Introduction to the process of digital short film	4	Textbook Rabinger, M (2007) Directing: Film Techniques and Aesthetics, 4th Edition, Hoboken, Taylor and Francis Jones, C. and Jollige, G. (2000), The Guerilla Film Makers Handbook: London: Continuum Reference Books Catliff, S & Granville J. (2013) The Casting	Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	Making works of drama and fiction	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	Enabling the development of the practical and theoretical skills in pitching, planning, writing,	4		Theory, project and assignments, Screening (TV) PPT, etc

Unit- IV	Shooting and editing necessary to produce a coherent and competent fictional moving image project.	4	Handbook: For Film and Theatre Makers, UK, Routledge Cartwright, S. (2012) Pre-Production planning for Video, Film and Multimedia, Hoboken, Taylor and Francis Field, S. (2005) Screenplay: The foundations of Screenwriting, New York, Delta Landry. P (2012) Scheduling and Budgeting your Film, Focal Press La Motte, R (2010) Costume Design 101: 2nd Edition: The Business and Art of Creating Costumes for Film and Television, Michael Wiese Productions Murch, W (2001) In the Blink of an Eye: A Perspective on Film Editing, Silman James Press Potter, C. (2001) Screen Language from Film Writing to Film Making: London Methuen	Theory, project and assignments, Screening (TV) PPT, etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **INTERMEDIATE PRACTICAL FILM MAKING (AD AND SHORT FICTION FILM)**

LEARNING OBJECTIVE/S: To understand the production pipeline of film making process in advertisement film making | To introduce the process of Advertisement Film (product as well as PSU) Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film making | To understand the entire workflow in Advertisement Film (product as well as PSU) Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film | To gain exposure on various cameras and software used for production of Advertisement Film (product as well as PSU) Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film The students will undergo the process of Advertisement Film (product as well as PSU), Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film. The students will be exposed to professional HD cameras & software and will work on projects ranging from 30Seconds-15mins. The students will be exposed to the entire process of film making and the production workflow in Advertisement and Multiple Character multiple location Short Film production.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

NAME OF THE STAFF: **SALOME DIAS**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **LAWS RELATED TO FILMS, TV AND INTERNET**

LEARNING OBJECTIVE/S: To understand the various laws pertaining to media | To understand the need and importance of Copyright |To learn about intellectual property rights | To understand about media business ethics and issues pertaining to it

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	– Indian Contract Act, 1872: Essentials of valid contract discharge of contract, remedies for breach of contract. Contracts of Indemnity, Guarantee, Bailment, Pledge and Agency.	3	Text Books: 1. Maheshwari, S.N. and S.K. Maheshwari; A Manual of Business Law, 2nd Edition, Himalaya Publishing House, 2004. 2. Kushal M.C.,"Modern Indian Company Law",2004,Shree Mahavir Book Depot. 3. Kushal, M. C.; Business Law, Vikas Publishing House, New Delhi, 2004. Reference Books: 1. Kapoor, N. D.; Elements of Mercantile Law, Sultan Chand & Sons, NewDelhi,2003 2. Memoria & Memoria - Business Policy 3. David J. Fritzsche - Business Ethics: A Global & Management Perspective - Tata McGraw-Hill 4. Ramaswamy Namakumari - Strategic Planning - Corporate Strategy - MacMillan India Ltd 5. Velasquez - Business Ethics - Prentice - Hall of India	Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	The Negotiable Instruments Act 1881: Essentials of a Negotiable instruments, Kinds of Negotiable Instrument Holder and Holder in Due Course, Negotiation by endorsements, crossing of a cheque and Dishonour of a cheque.	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	Media Law, Copyright and	3		Theory, project and

	Intellectual Property: IPR & copyright laws, Copyright Agreements : Short-Term vs. Long-Term Agreements, Media Law and Infringements : Case Studies, Menace of piracy and remedies to counter piracy, Statutory and non-statutory bodies formed to fight piracy		6. Dr.S. Shankaran - Business Ethics & values 7. Gulshan S.S. and Kapoor G.K., "Business Law including CompanyLaw",2003,New Age International Private Limited Publishers. 8. Aggarwal S.K., "Business Law ,2003",Galgotia publishing Company. 9. Bargiel, Ashok; Company Law, Vikas Publishing House, 2004.4. Kapoor, N. D.; 10. Elements of Company Law, Sultan Chand & Sons, New Delhi, 2003.5. Dr. Singh, Avtar; 11. Company Law, Eastern Book Co. Lucknow, Bharat LawHouse, Delhi, 2004 12. Peter Madsen & Jay M. Shafritz - Essential of Business Ethics 13. Ken Smith and Phil Johnson - Business Ethics and Business Behavior 14. Pratley - Essence of Business Ethics - Prentice - Hall of India	assignments, Screening (TV) PPT, etc
Unit- IV	– Role and importance of Business Ethics and Values in Business - Definition of Business, Ethics Impact on Business Policy and Business Strategy - Role of CEO - Impact on the Business Culture.	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- V	Types of Ethical issues - Bribes - Coercion - Deception - Theft - Unfair Discrimination.	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- VI	Vendors, Government, & Social Audit. | CSR- Definition and Importance, examples of various	3		Theory, project and assignments, Screening (TV) PPT, etc

	initiatives taken by various business groups like TATAs, Infosys, Birla and others | Difference between Cause Related Marketing (CRM) and CSR Case Studies: Reliance WLL license, 2G Scam, Satyam Scam and PWC's role in the scam!!! | Role of bodies like Competition Commission of India, SEC, SEBI, TRAI, etc in curbing unethical practices			

NAME OF THE STAFF: **NIKITA GOYAL**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2021-2022**
SUBJECT**: NEW MEDIA THEORY AND PRACTICE (WITH ADVANCED WEB DESIGN AND APP MAKING)**

LEARNING OBJECTIVE/S: Web Designing – Adobe Dreamweaver, Designing a web page without the graphic user
interface (HTML using notepad), Frames, Layers, Search Engine Optimization, HTML and DHTML, Using JavaScript, Embedding Java Applets, Using Activex Controls, Embedding Video and Audio into web pages, Streaming media, Using YouTube, Creating Forms, Learning basic PHP and MYSQL, Creating Database and using it in the web design, Creating a website for Mobile phones, Creating a news site, creating a brochure site, designing a portal interface, using vernacular language in web sites, dynamic fonts, creating a vernacular medium website, New media and popular culture, social networking, emerging identities, games as advanced new media, mobile journalism, new media as a pedagogical tool.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Web Designing	4		Theory, project and assignments, Screening (TV) PPT Computer, etc
Unit- II	Adobe Dreamweaver	4		Theory, project and assignments, Screening (TV) PPT Computer, etc
Unit- III	HTML and DHTML, Using JavaScript, Embedding Java Applets	4		Theory, project and assignments, Screening (TV) PPT Computer, etc
Unit- IV	Basic PHP and MYSQL, Creating Database and using it in the web design, Creating a website	4		Theory, project and assignments, Screening (TV) PPT Computer, etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **UNDERSTANDING INDIAN CONTEMPORARY CINEMA**

LEARNING OBJECTIVE/S: Exploring the changing trends in Hindi Popular cinema in terms of storytelling, performances
technological and production aspects. Emergence of Film Festivals as a mode of exhibition and the kind of films selected for such prestigious film festivals. Focus on the changing aesthetic trends of regional films, popular films and festival films. Looking at the emergence of digital media and internet being a source of exhibition for films.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Exploring the changing trends in Hindi Popular cinema in terms of storytelling, performances	4		Theory, project and assignments, Screening (TV) PPT etc
Unit- II	Technological and production aspects	4		Theory, project and assignments, Screening (TV) PPT etc
Unit- III	Emergence of Film Festivals as a mode of exhibition and the kind of films selected for such prestigious film festivals.	4		Theory, project and assignments, Screening (TV) PPT etc
Unit- IV	Focus on the changing aesthetic trends of regional films, popular films and festival films. Looking at the emergence of digital media and internet being a source of exhibition for films.	4		Theory, project and assignments, Screening (TV) PPT etc

NAME OF THE STAFF: **SACHIN YADAV**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2021-2022**
SUBJECT**: INTRODUCTION TO MEDIA PROJECT MANAGEMENT**

LEARNING OBJECTIVE/S: To educate about the basics involved in a media project management | To educate about the basic project production workflow and management | To educate about the role of a project manager | To help understand the details involving a new business project or proposal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Production Management: The production Manager's job, The process of Production Management, The Business of Film-Pre production, production & post production, Preparing for production, Special Low Budget Indie productions, Locations & unions Management, Cast & Crew – Selection, contracts, agreements, work permits, etc., Budget preparation and budget forms, Insurance & competition bonds	3	Textbooks: 1. Film Production Management 101 Management and Coordination by Deborah S Patz 2. Surviving Production: The Art of Production Management for Film and Television by Deborah S Patz 3. Film Production Management by Bastian Cleve Reference Books: 1. Character Animation & Film Production By Chris Neuhahn, Josh Book 2. Producing and Directing the Short Film and Video By Peter W. Rea, David K. Irving 3. Film Production Theory By Jean Pierre Gegens 4. Production Management for Film and Video By Richard Gates	Theory, project and assignments, PPT etc
Unit- II	Business Creation: Business Plans and Ideation: Entrepreneurship Routes, Case Studies (Relevant and time specific), Introduction to	3		Theory, project and assignments, PPT etc

	Company Creation, Processes of Registration and Incorporation, Company Law, Introduction to Company Law, Registration Procedures and Exceptions, Company Procedure and Ethics		5. The Independent Film Producer's Survival Guide: A Business and Legal Sourcebook By Gunnar Erickson, Harris Tulchin, Mark Halloran 6. The Complete Film Production Handbook by Eve Light Honthaner 7. Independent feature film production By Gregory Goodell 8. Film Production By Steven Bernstein 9. Film production: the complete uncensored guide to independent filmmaking By Greg Merritt	
Unit- III	Contracts and Negotiations: Revenue sharing model, Minimum guarantee model, Share in profits model	3		Theory, project and assignments, PPT etc
Unit- IV	Conflict Resolutions: Negotiations and Bargaining : Role Play Exercise, Research Methodology for Business Planning	3		Theory, project and assignments, PPT etc
Unit- V	Scouting for business opportunities: Investor Pitch Exercises, Business Plan Formulation and Redesign, Financial Projections for Businesses	3		Theory, project and assignments, PPT etc

NAME OF THE STAFF: **K. SUDHESH**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2021-2022**
SUBJECT: **BASICS OF MARKETING AND PUBLICITY**

LEARNING OBJECTIVE/S: To introduce the basics of marketing and publicity design | To educate about the importance of marketing in today's world | To help understand the various tools needed for marketing and publicity design | To learn about the marketing plan and market research | To help get insight into consumer consumption behaviour

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Introduction to Marketing: 1. Importance of marketing, definition of marketing, scope of marketing, functions of marketing, marketing and its relation to other business functions, difference between sales and marketing. 2. Key marketing terms and concepts- need, want, demand, exchange, marketing myopia and marketing orientations, distinction between selling and marketing.3. Marketing Mix, 4Ps, 7Ps, 4Cs.	2	Reference books: 1. Competing For The Future By C.K. Prahalad & Gary Hamel. 2. Kotler on Marketing: How to Create, Win, and Dominate Markets By Philip Kotler. 3. How to Win Friends and Influence People By Dale Carnigie. 4. Market Research: A Guide to Planning, Methodology and Evaluation By Paul Hague. 5. Art of War By Sun Tzu. 6. Strategic Management By Gregory Dess, Lumpkin & Taylor. 7. How Winners Sell: 21 Proven Strategies to Outsell Your Competition and Win the Big Sale ByDave Stein. 8. Beyond Bullet Points: Using	Theory, project and assignments, PPT etc
Unit- II	Marketing Research: Definition, Marketing Research	2		Theory, project and assignments, PPT etc

	Process, Types of Research: Primary, Secondary, Qualitative, Quantitative		Microsoft® Office PowerPoint® 2007 to Create Presentations That Inform, Motivate, and Inspire By Cliff Atkinson. 9. Selling the Invisible: A Field Guide to Modern Marketing By Harry Beckwith. 10. Marketing Services: Competing Through Quality By Parasuraman & Leonard L. Berry. 11. Marketing Management (12th Edition) (Marketing Management) By Philip Kotler. 12. Consumer Behavior: Building Marketing Strategy, 9/e, (with DDB Needham Data Disk) By Hawkins, Best, & Coney. 13. Crossing the Chasm: Marketing and Selling High-Tech Products to Mainstream Customers By Geoffrey A. Moore. 14. Mind and Heart of the Negotiator, The (3rd Edition) By Leigh Thompson. 15. Radically Transparent By Andy Beal & Judy Strauss.	
Unit- III	Consumer Behavior: 1. Introduction and importance, model of consumer behaviour, characteristics affecting consumer behaviour.	2		Theory, project and assignments, PPT etc
Unit- IV	Segmentation, Targeting & Positioning: 1. Segmentation - Bases and process of segmentation, requirements for effective segmentation, niche marketing, segmenting consumer markets, segmenting business markets.2. Targeting- Evaluating market segments, selecting target market segments.3. Positioning- Positioning maps, differentiation and positioning strategy, communicating and delivering the chosen position	3		Theory, project and assignments, PPT etc
Unit- V	Introduction to the concept of IMC: Introduction & Familiarization, Definition of	3		Theory, project and assignments, PPT etc

	Promotion & Promotion Mix, Tools of Promotion Mix, IMC Planning Process, Creative Strategy, Media Strategy			
Unit- VI	Packaging for film & television: The art of Promo, Advertisement & In serial promotions, Art of Writing Copy, designing for various mediums, Public Relations, Planning, organizing and managing events. Managing the internet and social Media. Vendor selection and management, Media Planning & Buying	3		Theory, project and assignments, PPT etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2021-2022**
SUBJECT**: ADVANCED PRACTICAL FILM MAKING - MUSIC VIDEOS**

LEARNING OBJECTIVE/S: To introduce the process of Music Video
To understand the production pipeline of Music Video
To understand the entire workflow in Music Video making process
To gain exposure on various cameras and software used for production of Music Video
The students will undergo the process of Music Video. The students will be exposed to professional HD cameras & software and will work on projects ranging from 5Mins-8mins. The students will be exposed to the production workflow in music Video.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **VI**
ACADEMIC YEAR: **2021-2022**
SUBJECT**: FINAL PROJECT- SHORT FILM (30 MINUTES)**

LEARNING OBJECTIVE/S: Comprehensive, which will include writing an original story to production and distribution of film in the national and international circuit. It will also involve creating a blog, FB page, website for the film. Write a report on the roles performed by each student. The students will have to make a 30 minute short fiction project.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

DEPARTMENT OF FILM, TELEVISION AND NEW MEDIA PRODUCTION
5.3. TEACHING PLAN (UNIT PLAN) 2020-21

NAME OF THE STAFF: **ZEBA SIDDIQUI**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **EFFECTIVE COMMUNICATION SKILLS**

LEARNING OBJECTIVE/S: To prepare students in the production aspects of Film Television & New Media, as required by the present media environment all across globe. To empower the students in the production and managerial aspects of the media business with due emphasis on latest production techniques, along with marketing and branding management of various media products and associated services. To develop creative temperament and mindset needed in the content production segment of media industry. To provide an active industry interface by way of co-learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Fundamentals of Communication: Developing reading & writing skills (Marathi, Hindi and English), Editing & Summarizing (Marathi, Hindi and English), Oral Communication (Marathi, Hindi and English)	3	Textbooks: 1. Crucial Conversations: Tools for Talking When Stakes are High , by Kerry Patterson. 2. Presenting to Win: The Art of Telling Your Story, by Jerry Weissman. Reference Books: 1. Verbal Judo: The Gentle Art of Persuasion, by George J. Thompson. 2. Write to the Top: Writing for Corporate Success,	Theory, project and assignments PPT etc
Unit- II	Enhanced Communication Skills Development: Enhancing communication skills – verbal, Enhancing communication skills - non-verbal, Body type- posture- body language reading, Analysing body language signals and meanings	3		Theory, project and assignments PPT etc
Unit- III	Psychology of communication:	3		Theory, project and

	Gestures- expressions - facial language, eye contact, shake hands, sitting posture, Maintaining comfort distance from people, mirroring, Dressing sense, corporate dressing, formal, semi formal, casual, dressing for various occasions & events, Understanding personalities - auditory / visuals / kinesthetic, eye movement, facial expressions, emotions, smile		by Deborah Dumaine.	assignments PPT etc
Unit- IV	Personality Development: Verbal communication, voice training, speech, clarity, grammar speed, volume, enunciation, pronunciation, ends of sentences, humour, pauses, Stress management, breathing pattern, mind psyching, right attitude, understanding your limitations and strengths, Table manners & etiquettes correct use of spoon knife, etc, Choosing the right accessories i.e shoes, handbags, jewellery, etc.	3		Theory, project and assignments PPT etc

NAME OF THE STAFF: **SAMEER RANE, EESHA INGLE, HASAN SANADI**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **INTRODUCTION TO HISTORY OF ART/ STORYTELLING THROUGH OTHER FORMS OF ART**

LEARNING OBJECTIVE/S: To understand the basics and genres of Music, dance and theatre.
To learn the basics of various acting schools and the art of drama.
To learn the evolution of visual techniques from painting to cinema.
To learn the basic relationship between music and dance in relation to Film making.
Students should be exposed to the canonical text of Natya shastra from where all the traditional performing arts have emerged.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Music : Genres of Music, Introduction to Contemporary Music (Hindi, Regional & POP), Music Directors & Composers, Use of Folk music in Indian Cinema	3	Textbooks: 1) Natya Shastra by Bharata Muni. 2) Melodrama and Popular Culture: Ira Bhaskar. 3) History of Art – Bernard.S. Myers, Trawin Copplestone. 4) Framing Film- Cinema and the Visual Arts, EDITED BY STEVEN ALLEN AND LAURA HUBNER. Reference Books: 1. Dancing: The Pleasure, Power, and Art of Movement; by Gerald Jonas. Harry N. Abrams in association with	Theory, project and assignments PPT etc
Unit- II	Genres of Dance – Understanding storytelling through Folk Dance & Contemporary Dance, Role of Dance in Hindi Cinema	3		Theory, project and assignments PPT etc
Unit- III	The development of theatre, Acting Schools, Make-up, Managing Play, Study of one English and one Hindi or regional play. Influence of theatre on cinema.	3		Theory, project and assignments PPT etc
Unit- IV	1. European Paintings and Painters- A brief overview starting from the renaissance to modern painters. Idea of Perspective coming into painting and changing	3		Theory, project and assignments PPT etc

	the way we perceive the world 2. Indian Paintings & Painters- A look at the rich historical tradition of Indian PaintingsMiniature Paintings to Modern Painters. Difference between the formal aspects of Painting & Cinema. Exploring the idea of time and space in painting in relation to cinema 3. Important Movements- Analysing the important movements that have taken place in postcolonial India in painting to the contemporary scenario.		Thirteen/WNET 1992. 2. History of Dance: An Interactive Arts Approach; by Gayle Kassing.	

NAME OF THE STAFF: **ZEBA SIDDIQUI**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **INITIATION TO LITERATURE & CREATIVE WRITING**

LEARNING OBJECTIVE/S: To introduce basic tenets of Indian literature including regional literature
To introduce and appreciate various forms of literature (Novel, Poetry, Drama, Essay)
To help build skills for creative writing
To help understand the structure of Story, poetry and drama
To introduce writing for internet

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Introduction to Indian Writers – Hindi/Marathi/Urdu & other regional languages: History of Indian literature, prominent writes, important works, cultural significance.	3	Textbooks: 1.) A Concise History of Indian Literature in English by Arvind Mehrotra. 2) The Creative Writing Course book: Forty Authors Share Advice and Exercises for Fiction and Poetry. 3) Creative Writing By Adele Ramet. 4) Creative Writing for People Who Can't Not Write By Kathryn Lindskoog. Reference Books: 1. Creative Writing: A Workbook with Readings By Linda Anderson. 2. Teaching Creative Writing By Graeme Harper. 3. The Everything Creative Writing	Theory, project and assignments PPT etc
Unit- II	A Brief Introduction to Creative Writing: What is creative writing, various forms of writing, various form of writing styles, how to build creative writing skills.	3		Theory, project and assignments PPT etc
Unit- III	Formal structure of the short story: Various forms of writing styles, Genres of story, how to develop an engaging idea, Prominent writers, Pick your style.	3		Theory, project and assignments PPT etc
Unit- IV	Formal aspects of Poetry: Elements of poetry, types of Poetry, Difference between various styles, Famous poets and their works, Study of the Epic Ballad - Mahabharata.	3		Theory, project and assignments PPT etc

			Book By Wendy Burt-Thomas. 4. The Soul of Creative Writing By Richard Goodman, Goodman, Chong.	
Unit- V	Formal aspects of Drama: Structure of drama, one act-two act-three act play, Characterization, Freytag's triangle, Subject specific drama	3		Theory, project and assignments PPT etc
Unit- VI	Writing for the internet: How internet writing is different from conventional writing, Blogging, Reputation management, Development of Blogs, writing for social media, writing for SEO & SMO	3		Theory, project and assignments PPT etc

NAME OF THE STAFF: **K. SUDHESH**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **BASICS OF PHOTOGRAPHY**

LEARNING OBJECTIVE/S: To learn the basics of art of Photography.
To understand the basic intricacies involved in taking a photograph.
To understand what makes a good picture.
To develop basic photographic sense and knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Development of Photography over the years: Brief History of Photography, early photography methods, switch from film to digital, difference between film and digital photography, formats of images in digital.	3	Textbooks: 1. The Art of Photography; by Bruce Barnbaum. 2. Creative Nature & Outdoor Photography; Brenda Tharp. 3. Chasing the Light by Ibarionex Perello. Reference Books: 1. The Camera by Larry Hills. 2. The Creative Black Book. 3. The Print by Ansel Adams, Robert Baker. 4. 500 poses for Photographing Women by Michelle Perkins. 5. Creative Landscapes: Digital Photography Tips & Techniques by Author: Davis, Harold.	Theory, Practical project and assignments PPT etc
Unit- II	Cameras & Techniques: Types of camera, film cameras V/S digital cameras, lenses and their importance, Story Design and Development, Laws of Composition, Gestalt Law and Visual Perception, Semiotic photography.	3		Theory, Practical project and assignments PPT etc
Unit- III	Lighting - Theory & practice: Sources of Lighting, 2 point lighting, 3 point lighting, creating contrast, outdoor natural lighting, related accessories for lighting.	3		Theory, Practical project and assignments PPT etc
Unit- IV	Post production of Photos, Digital Image Editing – Photoshop: Processing of Raw images, Introduction to	3		Theory, Practical project and

	Adobe Photoshop and image ready software, how to enhance the photo digitally.			assignments PPT etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **FILM APPRECIATION – GENRES**

LEARNING OBJECTIVE/S: What is cinema, Film theory – form and function, Film analysis, Auteur Theory,
effect of auteur, Contributions of D W, Griffith, Alfred Hitchcock, Jean Du Godard, Digital Aesthetics, Music and choreography, film genre.
Cinema and society, History of Cinema, Hollywood cinema, early cinema and film form
the studio system, rise and decline of the studio system.
Indian Cinema
History of Indian cinema, history of regional cinema, legends of Indian cinema, Hindi film industry, the Hindi film industry, music and choreography in Indian cinema, contemporary cinema

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	What is cinema, Film theory – form and function, Film analysis, Auteur Theory, effect of auteur, Contributions of D W, Griffith, Alfred Hitchcock, Jean Du Godard	3	Textbooks : 1) The Oxford History of World Cinema. 2) The Cinematic ImagiNation : Indian Popular Films as Social History by Jyotika Virdi. 3) History of Indian Cinema by Renu Saran.	Theory, project and assignments PPT etc
Unit- II	Music and choreography, film genre. Cinema and society, History of Cinema, Hollywood cinema, early cinema and film form the studio system, rise and decline of the studio system.	3		Theory, project and assignments PPT etc
Unit- III	History of Indian cinema, history of regional cinema,	3		Theory, project and assignments

	legends of Indian cinema, Hindi film industry, the Hindi film industry			PPT etc
Unit- IV	music and choreography in Indian cinema, contemporary cinema	3		Theory, project and assignments PPT etc

NAME OF THE STAFF: **BISWARANJAN SWAIN**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **GRAPHIC DESIGNING (PHOTOSHOP, ILLUSTRATOR, ETC.)**

LEARNING OBJECTIVE/S: The learners are exposed to the industry of graphic design. The domain of skills and tools is largely devoted to learning graphic reproduction methods using both modern, that is electronic,
as well as old school techniques. These inputs enable learners to solve simple problems of visual communication related to corporate identity or social communication. Learners use software like Adobe Photoshop and Adobe Illustrator.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	COLOUR THEORY : Colour psychology, Colour schemes, Colour wheel, Colour combination, Hue.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- II	PERSPECTIVE STUDY : 1-point perspective, 2-point perspective, 3-point perspective, Mixed perspective.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- III	STILL LIFE : Sketching & rendering, Light study, Photography.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- IV	TEXTURE STUDY : Texture creation, mixed media, Water/Pastel painting.	1		Theory, Software (Adobe illustration, photoshop) project and assignments

				PPT etc
Unit- V	PORTRAIT PAINTING : Portrait Caricature, Cartoon.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit-VI	PHOTOSHOP : Basic tools in Photoshop, Photo editing, Colour correction.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- VII	ILLUSTRATOR : Basic tools in Illustrator, Vector graphics, Graphics design.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- VIII	COMIC BOOKS : Understanding storyboards, Styles of contemporary comics, Colour tones.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- IX	COMPOSITION : Basic composition skills, Rule of thirds, Understanding of subject and its relation to light and depth of field, Application in comic books.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- X	TYPOGRAPHY : Understanding of typos & fonts, Application of	1		Theory, Software (Adobe illustration, photoshop)

	appropriate typos on art works.			project and assignments PPT etc

NAME OF THE STAFF: **BISWARANJAN SWAIN**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **BASICS OF POST PRODUCTION**

LEARNING OBJECTIVE/S: An editor's job is to decide, 24/25/30 times a second, where the audience needs to be. Do we
stay in a shot or transition to another, and if so, what shot and how do we get there? Working side-by-side with the director to craft the movie that ultimately hits the screen – or your phone – editing is really about manipulating the audience, in the best possible way, all in the service of storytelling.
In this class, we will study terminology and concepts, learning both the rules and how to break them, as we look at the aesthetics choices and the technological workflow for both picture and sound editing. We will examine the historical role of editing, from the earliest silent film through the digital revolution that has transformed moviemaking today.
INTRO TO EDITING THEORY
Introduction to the history of film editing. Lumiere Brothers, Thomas Edison, Edwin Porter, DW Griffith); the manipulation of editing; Lev Kuleshov's experiment; the language of cinema;
introduction to the editor as storyteller and understanding the narrative structure.
INTRO TO PREMIERE PRO
Screening of Examples. The Premiere Pro interface features and functions, how to import and organize footage, basic editing techniques
EDITING EXERCISE
Watch the work of a Master Editor, Basic Production techniques, Practicing/Reviewing skills
PROJECT: Interview and Film a classmate telling a story for 10 minutes or talking about something they're excited about. Edit together a two minute version of this.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Effective Editing Bird's-eye view of the modern process of editing, Setting Up for Editing Efficient editing habits to work faster, Thinking creatively. Efficient workflow, Configure factory-standard systems, Optimal media management from ingest through to	4	Grammar of the Edit Roy Thompson, Christopher J. Bowen SUGGESTED TEXTS: Film Art: An Introduction, David Bordwell and Kristin Thompson The Invisible Cut: How Editors Make Movie Magic, Bobbie O'Steen	Theory, Software (Adobe Premiere pro) project and assignments PPT etc

	final output. Non Linear Editing Concepts Interface of NLE system, The Three-Point Edit, Additional Edits		Cut By Cut: Editing Your Film or Video, Gael Chandler In the Blink of an Eye: A Perspective on Film Editing, Walter Murch The History of Film Editing, Karel Reisz, Gavin Miller On Film Editing, Edward Dmytrk Film Editing: Great Cuts Every Filmmaker Should Know, Gael Chandler First Cut: Conversations with Film Editors, Gabriella Oldham	
Unit- II	Working in the Timeline, Transitions, Keyframing, Filters, Ingesting	4		Theory, Software (Adobe Premiere pro) project and assignments PPT etc
Unit- III	Compositing, Color Correction, Audio, Titling, Review and Look Forward	4		Theory, Software (Adobe Premiere pro) project and assignments PPT etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **HISTORY OF NON- FICTION FILM**

LEARNING OBJECTIVE/S: This course explores the history and theory of non-fiction film and video, with an emphasis on
work that falls under the rubric of "documentary."
Documentary is a unique form of non-fiction moving image media that claims a special relationship to reality and truth. Through screenings, readings and class discussion, we will explore such questions as:
• How does documentary relate to narrative fiction filmmaking? To other non-fiction forms of television like reality TV or news reports?
• How "real" are documentary representations, and how much does it matter?
• What are some different formal approaches documentary, and how does each mediate the representation of real life it offers?
• How has documentary image-making changed over time? What can we learn from this history that is relevant to media-making today?
• What are the particular ethics of representing others in a medium like video or film?
• What responsibility do documentarians have to their subjects, to the form, and to society at large?
• How do people watch documentaries, and what is the impact of these films on the world they aim to represent?
Be familiar with efforts to create more democratic systems of media production and distribution.
Learn how to watch earlier films both as an audience THEN (with understanding of the film's social, cultural, historical context), and NOW (with understanding of your own future goals and
with critical, analytical eyes to study history).
Be able to think – and write — critically about non-fiction media.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Screen and analyze a wide range of documentaries, exploring the genre as narrative, journalism, propaganda, rhetoric, activism, diary, art, archive, and entertainment. Course Objectives	4	The texts for this class Documentary: A History of the Non-Fiction Film (2nd Edition) by Erik Barnouw (available at Shakespeare and Co) and Crafting Truth: Documentary Form and	Theory, project and assignments, Screenings (T.V.) PPT etc

	By the end of the semester, you should: Be familiar with key periods in the history of non-fiction film and video from 1895 to the present. Be able to recognize and write about various forms and conventions of documentary storytelling, including the basic grammar of documentary moving images.		Meaning, by Louise Spence and Vinicius Navarro (available at Shakespeare and Co.). Additional readings will be available through e-res. As some readings will be accessed electronically, please bring either a printed version of the article (preferred) OR a digital version of the article to class.	
	Explore central questions surrounding the representation of reality and truth, including voice, authority, evidence and point of view. Explore key issues in the ethics of documentary representation, including maker-subject relationships, informed consent, fairness, and evidence.	4		Theory, project and assignments, Screenings (T.V.) PPT etc
2	Be familiar with efforts to create more democratic systems of media production and distribution. Learn how to watch earlier films both as an audience THEN	4		Theory, project and assignments, Screenings (T.V.) PPT etc

	(with understanding of the film's social, cultural, historical context), and NOW (with understanding of your own future goals and with critical, analytical eyes to study history).			
3	Be able to think – and write — critically about non-fiction media.			Theory, project and assignments, Screenings (T.V.) PPT etc

NAME OF THE STAFF: **DR. ZEBA SIDDIQUI**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **WRITING FOR VISUAL MEDIA**

LEARNING OBJECTIVE/S: To understand the basic structure of screenplay
To introduce to the basic skills for screen writing
To understand the intricacies of screen writing
To learn the build characters and write meaning full dialogues

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Preparing to Think Visually: Diving In to the Screenwriter's Mind, Approaching Screenwriting as a Craft, Breaking Down the Elements of a Story, Unpacking Your Idea	3	Textbooks: 1. How not to write a screenplay: 101 common mistakes most screenwriters make by Denny Martin Flinn 2. Screen Adaptation: A Scriptwriting Handbook by Kenneth Portnoy 3. Screenplay: The Foundations Of Screenwriting By Syd Field Reference Books: 1. The Screenwriter's Bible By David Trottier 2. The Bare Bones Book of Screenwriting: The Definitive Beginner's Guide to ... By J. T. Clark 3. Screenwriting for a Global Market: Selling Your Scripts from Hollywood to ... By Andrew Horton	Theory, project and assignments, PPT etc
Unit- II	Structure of Story & Screenplay: Plot Part I: Beginnings, Plot Part II: Middles, Plot Part III: Endings	3		Theory, project and assignments, PPT etc
Unit- III	Dynamics of Characterization: Character Building, Constructing Dynamic Dialogues, Non – traditional Film	3		Theory, project and assignments, PPT etc
Unit- IV	Finalizing the Script: Maintaining an Audience's Trust, Turning Your Story into a Script, Take Two: Rewriting Your Script, Adaptation and Collaboration: Two	3		Theory, project and assignments, PPT etc

	Alternate Ways to Work		4. Screenwriting For Dummies By Laura Schellhardt 5. Screenwriting: The Sequence Approach By Paul Joseph Gulino 6. The Tools of Screenwriting By David Howard, Edward Mabley 7. The Art of Screenwriting: An A to Z Guide to Writing a Successful Screenplay By William Packard 8. Writing the Character-Centered Screenplay By Andrew Horton	

NAME OF THE STAFF: **ABHIJEET DEO**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **IMPORTANCE OF SOUND AND SOUND SFX**

LEARNING OBJECTIVE/S: To learn about the basic of sound |To understand the nature of sound and recording devices |
To learn the basics of sync sound, mixing console, analog v/s digital workflow | To understand the need for sound and importance of sound in film | To learn to record a song

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Basics of Sound: Nature of acoustical waves; concepts of amplitude and frequency -wavelength and harmonics. Psycho-acoustics: Nature of hearing and perception of sound, including concepts of pitch, loudness, and timbre; the precedence effect; localization in rooms; equal loudness contours; and other mysteries of hearing. Principles of Stereophony	2	Textbooks: 1. Pro Tools 9: Music Production, Recording, Editing and Mixing By Mike Collins 2. Pro Tools All-in-One Desk Reference For Dummies By Jeff Strong 3. Sound for Film and Television By Tomlinson Holman Reference Books: 1. Sound For Digital Video By Tomlinson Holman 2. Producing for TV And Video: A Real-world Approach By Cathrine Kellison 3. Sound for picture: an inside look at audio production for film and television By Jeff Forlenza, Terri Stone 4. Audio in Media By Stanley R. Alten 5. Master Handbook of	Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- II	Sound for Film and Video: The sound track – its importance in an AV medium, Different elements of a sound track, Explanation of how sound is put to the film	2		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc

Unit- III	Sync Sound: The size of the role sound should play in your film will vary depending on your professor's requests, but when it comes to the technical side of things, you are at least required to know how to achieve synchronized sound and picture with film. Interconnectivity of Analog & Digital Equipment: Basic analog connectors, cabling, patch – bay, interconnectivity between various recording studio equipment. Various Digital interconnects and their sockets on the digital equipment. Microphones Types: Dynamic, Condenser, Ribbon, Polar Pattern, Sensitivity. Microphone designs for special applications Acoustics I (Fundamentals): The behavior of sound in outdoors and in closed spaces; Absorption, reflection, diffraction, refraction, reverberation.	2	AcousticsByF.Alton Everest 6. Modern Recording Techniques By David Miles Huber 7. Mastering Audio By Bob Katz 8. Mixing Audio By Roey Izhaki 9. Practical Recording Techniques By Jenny Bartlett 10. Critical Listening Skills for Audio Professionals By F.Alton Everest 11. The Audible Past By Jonathan Sterne	Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc

Unit- IV	The signal flow and various auxiliary systems. Digital Audio: Analog to Digital to Analog conversion. Sampling Frequency, Bit Rates. Problems in digital audio. Different digital media, Standard digital recording & mastering formats. Audio file formats, storage mediums – optical, magnetic, Jitter etc. Computers in Audio: Different platforms – different operating systems, Configuration of a PC for sound recording. Mother Boards, Processor, Sound Card, Graphic card, Monitors Recorders: Analog, Digital, Tape Based & Tapeless. Digital Audio Workstations (DAW's)	3		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- V	– Film Showcase: Case studies of famous Indian as well as foreign films	2		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- VI	Microphone Techniques: Placement, Applications, Proximity effects	2		Theory, project and assignments, Screenings (T.V.) PPT, Protool and

	etc. microphones and placement techniques for stereo recording. Monitoring Systems: Active & Passive types, Domestic and professional listening environment, Stereo and surround monitoring.			Audacity software etc
Unit- VII	The Production Process of a Song: Music Basics. – Types of Music, Concepts of Melody, Harmony, Rhythm & counter melody etc. Format of a song. Preproduction, Tracking, Overdubbing, Editing, Mixing and Mastering. Processors: Theory of Tonal, Dynamic & Spatial processors. Equalizers – types and their application, Compressors & Limiters - theory and application, Effects processors - Reverberation and Delay devices and their plug in counterparts.	3		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- VIII	Location sound , Radio mics - uses and potential	3		Theory, project and assignments, Screenings

	difficulties. Boom operation for sync sound, Hands-on training in location sound recording for video. Nuendo Basic: Basic principles, understanding the process from initial set up to completion of a project. To set up for a vocal/instruments dub. Hands-on training - You will share a Nuendo workstation during the class. Principles of Mixing: The basic techniques of mixing and the fundamental approach. The Building Blocks of Mixing Setting the sound stage, and the sonic implications of panning and of placing instruments at varying distances from the listener; Consideration of different approaches to getting desired results from EQ; A comprehensive review of the uses of dynamic processor; on Individual channels and Mix master. Finishing a mix with automation.			(T.V.) PPT, Protool and Audacity software etc

	"Mixing in the box." And “Mixing through the board.” Production of the Sound Track for the student project film: Discussing sound design strategy with the director of the film at pre production stage. Attending film sync shoots. Video File formats, Acquiring picture for post production from edit suite. Dubbing the dialogues wherever necessary, Selecting SFX and BG music from the library, recording Foley and music as per the demand of the script. Mixing the final track. Export it to the editor, supervise the final assembly of the film.			

NAME OF THE STAFF: **SANJANA SAWANT**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **BASICS OF CINEMATOGRAPHY-1**

LEARNING OBJECTIVE/S: To understand the importance of cinematography in film making | To enhance the basic knowledge about lighting and its use | To understand various equipment's required for various form of lighting | To understand the basics of various camera, lenses and digital cinematography

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Power of a Picture: Power of a still picture | Shooting a good Still picture | Composition-Framing | Understanding & Use of color | Capturing the Drama | Black and white Photography;	4	Textbooks: 1. Camera Terms and Concepts by David Elkins 2. The Camera Assistant by Doug Hart 3. Motion Picture Camera and Lighting Equipment by David Samuelson Reference Books: 1. Motion Picture Camera Techniques by David Samuelson 2. The 16mm Camera Book by Douglas Underdahl 3. The Hands On Manual for Cinematographers by David Samuelson 4. The Professional Lighting Handbook by Verne Carlson 5. The Filmmakers Pocket Reference by Blain Brown	Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- II	Light: Role of light | Lighting techniques | Concept of lighting various planes | Understanding Various types: Tungsten lamps, Cool Lights, HMI, Cyclorama/background lights, Soft Box lights. | Use of cutter stand, black cloth and Camera filters | barn doors | use of reflectors | Three point lighting | Ratio lighting: 1:2, 1:3, 1:4 | Creating various Background patterns and types | Lighting – Situations | Studio lighting for three cameras set up: Talk Show, Game Show	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

	| Available day light situations | Shooting for Documentary style | Face lighting. Key, fill, back light | Depth of field Exercise | High key lighting | Low key lighting;		6. American Cinematographer ASC Manual 47. The Zone System for Photographers by Carson Graves 8. Cinematography: Screen craft by Peter Ettedgui 9. Contemporary Cinematographers-On Their Art by Pauline Rodgers 10. Operating Cinematography for Film and Video by William Hines 11. Cinematography-A Guide for Filmmakers and Film Teachers by Kris Mankiewicz 12. Film Lighting: Talks with Hollywood's Cinematographers and Gaffers by Kris Malkiewicz 13. The Five C's of Cinematography: Motion Picture Filming Techniques by Joseph V. Mascali 14. The Art of the Cinematographer: A Survey and Interviews with Five Masters by Leonard Maltin 15. Anton Wilson's Cinema Workshop by Anton Wilson 16. Image Control-Motion Picture and Video Camera Filters and Lab	
Unit- III	–Lenses: Type of Lenses | Power of Lenses | Understanding the shot requirement and usage of a lens | Idea of perspective: Depth Of Field, Depth of focus, Critical understanding of Fixed Lens Vs. Zoom Lens | Focus pulling | 18% grey card | Metering | Color temperature meter;	3		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- IV	Movements: Basic grammar of shots | Primary Camera Movement: Pan, Tilt, Zoom, Character Movement | Usage and need of Track and trolly, Crane, jimy gip, Poll Cam | Managing Movements | Single camera Setup | Multi camera setup | Continuity Exercise | Do’s and don’ts of camera movements | Aesthetics and Psychological Impact of Moving Images | Various parts of Motion picture cameras | Moving Image-Motion Picture | Impact of collective moving	3		Theory, project and assignments, Screenings (T.V.) PPT, etc

	Images | Motion Picture Dynamics;		Techniques by Gerald Hirschfeld 17. Lighting for Film and Electronic Cinematography by John David Viera and Dave Viera 18. Painting with Light by John Alton 19. Picture Composition for Film and Television by Peter Ward 20. Matters of Light and Depth-Creating Memorable Images for Video, Film and Stills Through Lighting by Ross Lowell 21. Lighting Technology by Fitt and Thornley Set Lighting Technician's Handbook by Harry C. Box 22. Digital Cinematography by Ben De Leeuw 23. If It's Purple, Someone's Gonna Die: The Power Of Color In Visual Storytelling By Patti Bellantoni 24. High Definition Cinematography By Paul Wheeler	
Unit- V	Understanding digital video recording Principle of video recording | Digital Recording Formats | Editing and compression | Digital			Theory, project and assignments, Screenings (T.V.) PPT, etc

	sampling and storage | Technical formats of video- PAL, NTSC | “Time Code” in Video Recording | Film Stock and Processing			

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2020-2021**
SUBJECT**: PRACTICAL FILM MAKING 1 (ONLY NON-FICTION FILM)**

LEARNING OBJECTIVE/S: To understand the film making process for multiple locations in non-fiction films
To understand the entire workflow
To gain exposure on various cameras and software used for production
The students will undergo the process of making a non-fiction film.
The students will be exposed to Semi-professional camera cameras & software. The students will also undergo same basic exercises such as 3 shot and 6 shot to give them a basic sense of framing, composition, movement and editing. The final project will be a non-fiction film with the duration of 5-10 minutes.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2020-2021**
SUBJECT**: INTRODUCTION TO DIRECTION FOR TELEVISION**

LEARNING OBJECTIVE/S: 1. Understanding of the process of Direction for Television
2. Theoretical framework and practical approach to Direction
3. Creating Ads for various categories

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Understanding Television Culture & Semiotics. Understanding Space & Time, Ideology, Aesthetics, Stylistics & Setting. Construction: mise-en-scene & technical codes -1 Writing For Television: Research, Ideation and Conceptualization, Understanding The IV Act Structure for TV, Elements of a TV Program Constructing a plot w.r.t a family tree for serials. Constructing Character biography Writing for Humour Popular Indian TV Discourse- eg.: Aahat (Horror), Daily Soap (any) & Tarak Mehta (comedy) Syntagmatic & Paradigmatic analysis Polysemy Popular TV Discourse- Friends	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

	Principles of Affinity & Contrast Director's Role in Television Inter-textuality & Role and Impression of Women Exploring Non-fiction Reality TV Exploring Non-fiction AD Filmmaking -1 Linear Motif in TV Creating content for TV- Directing for a Webisode			
Unit- II	The course aims to develop the sensibilities and sensitivities of the taught to comprehend the process of direction for television that entails understanding and analysis of different genres of television.	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- III	The learning includes understanding the television medium vis-à-vis the film, ideating, plotting and writing for different genres followed by inspecting the Director's role. Analysing the present day scenario. Experimenting by devising for short versions.	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- IV	The sessions could be designed to give a thorough understanding of both – theory as well as practical's. All lectures will be in the form of interactive sessions and it is expected that the	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

	student reads/watches television as directed before attending lectures.			

NAME OF THE STAFF: **SANJANA SAWANT**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2020-2021**
SUBJECT**: BASICS OF CINEMATOGRAPHY-2**

LEARNING OBJECTIVE/S: To understand the basic structure of film and digital camera | To enhance the basic knowledge about lighting and its use | To understand various equipment's required for various form of mood lighting | To understand basics of various digital cameras, lenses and digital cinematography | To learn the basics of special effects cinematography |To understand the needs of co-creators

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	– Structure of Film and Digital Camera: Understanding the internal structure of camera | perforation loop | pressure plate | Pull down claw | Magazine: Types of magazine | Threading of film | Intermittent Movement | Analysis of Claw motion | Registration pin | Sprocket wheel | Frames per sec | Camera Motors | Slow motion and Fast motion | Reverse Movement | Lens Mount Flange Depth | Magazine Cover/rain cover | Digital Process of Image capturing | Latitude of film Camera format | Latitude of digital	4	Textbooks: 1. Camera Terms and Concepts by David Elkins 2. The Camera Assistant by Doug Hart 3. Motion Picture Camera and Lighting Equipment by David Samuelson Reference Books: 1. Motion Picture Camera Techniques by David Samuelson 2. The 16mm Camera Book by Douglas Underdahl 3. The Hands On Manual for Cinematographers by David Samuelson 4. The Professional Lighting Handbook by Verne Carlson 5. The Filmmakers Pocket Reference by Blain Brown 6. American Cinematographer ASC Manual	Theory, project and assignments, Screenings (T.V.) PPT, etc

	format | Shooting Format-16-mm/35-mm/70-mm/super.16/I-max/3-D | Convenience of Digital format | The Future of Film Formats		7. The Zone System for Photographers by Carson Graves 8. Cinematography: Screen craft by Peter Ettedgui 9. Contemporary Cinematographers-On Their Art by Pauline Rodgers 10. Operating Cinematography for Film and Video by William Hines 11. Cinematography-A Guide for Filmmakers and Film Teachers by Kris Mankiewicz 12. Film Lighting: Talks with Hollywood's Cinematographers and Gaffers by Kris Malkiewicz 13. The Five C's of Cinematography: Motion Picture Filming Techniques by Joseph V. Mascali 14. The Art of the Cinematographer: A Survey and Interviews with Five Masters by Leonard Maltin 15. Anton Wilson's Cinema Workshop by Anton Wilson 16. Image Control-Motion Picture and Video Camera Filters and Lab Techniques by Gerald Hirschfeld 17. Lighting for Film and Electronic Cinematography by	
Unit- II	– Special Effects and Cinematography: Chrome key Concept | Preparation for chrome key | Compositing a digital Picture | Digital matte painting;	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- III	Mood Lighting & Colour Lighting Theory & Practice: Red, Blue, Green , Purple & Orange lights and Treatments for Various Scenes | Colour and Cultural;	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- IV	Image formation (Understanding requirements of a director): Understanding a Screenplay writing | Writing for visuals-STORY BOARDING | Capturing the drama on the camera | How to create packets of emotional experience-Scene | Creation of Drama-Ingredients of a Drama;	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

			John David Viera and Dave Viera 18. Painting with Light by John Alton 19. Picture Composition for Film and Television by Peter Ward 20. Matters of Light and Depth-Creating Memorable Images for Video, Film and Stills Through Lighting by Ross Lowell 21. Lighting Technology by Fitt and Thornley Set Lighting Technician's Handbook by Harry C. Box 22. Digital Cinematography by Ben De Leeuw 23. If It's Purple, Someone's Gonna Die: The Power Of Color In Visual Storytelling By Patti Bellantoni 24. High Definition Cinematography By Paul Wheeler	
Unit- V	– Understanding the needs of Co-creators (Director, Editor, Sound Recordist...) Working in team | Team Building | Conflict formation | Conflict Resolution	1		Theory, project and assignments, Screenings (T.V.) PPT, etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **UNDERSTANDING TV FORMATS & GENRES**

LEARNING OBJECTIVE/S: To understand how television programming works | To learn about TRPs and drama creation | To study the impact of niche programming | To learn about various genres of television programming

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Nature of drama in television: Various shows, formats and genres, telecast patterns, audience viewership performance	4	Textbooks: 1. Fundamentals of Film Directing By David K. Irving 2. Writing, Directing, and Producing Documentary Films and Videos By Alan Rosenthal 3. Breaking into Film by Kenna McHugh 4. Before You Shoot : A Guide to Low Budget Film and Video Production by Helen Garvey Reference Books: 1. Film Directing Cinematic Motion: A Workshop for Staging Scenes By Steven Douglas Katz 2. Film Directing Fundamentals: See Your Film Before Shooting By Nicholas T. Proferes 3. Problems Of Film Direction By Sergei Eisenstein	Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- II	– Creating Drama for TRPs: Building the story, herd culture existing in current times, breaking the barriers	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- III	Creating niche television programming: Importance of niche content, niche content channels, producing niche content in wake of DTH connections	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- IV	Differentiation of infotainment, edutainment, entertainment, lifestyle genres: Differentiation of genres, Specialty of different genres,	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

	popularity of genres, content on demand, Study of BBC & Discovery, Study of GECs			

NAME OF THE STAFF: **SANJANA SAWANT**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **CONCEPTS OF STORY BOARDING**

LEARNING OBJECTIVE/S: To understand the need for storyboarding | To learn the fundamentals of shoot taking and division | To understand various storyboarding techniques | To understand the importance of perspective and lighting while storyboarding

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	– Intro to Storyboarding/Visual Story telling & Storyboards: Origins of Story boards and aspect ratio	2	Text Books: 1. Exploring Storyboarding By Wendy Tumminello 2. The Art of the Storyboard: Storyboarding for Film, Tv, and Animation By John Hart 3. Directing the Story By Francis Glebes Reference Books: 1. Beginning Illustration And Storyboarding For Games By Les Pardew 2. Storyboards: Motion In Art By Mark Simon 3. From Word to Image: Storyboarding and the Filmmaking Process By Marcie Beg Leiter 4. Prepare to board! By Nancy Beiman 5. Storyboarding 101: A Crash	Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- II	Fundamentals of Shots: Terminology of Shoots, Camera Framing, Camera Angles and Movements	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- III	Storyboarding Techniques: · Concept- what the story is about, Drawing the components of the storyboard · Indicating motion in the storyboard, Increased reality- perspective and lighting	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- IV	Composition, Perspective & Lighting: Compositional	4		Theory, project and assignments, Drawing sheets, Adobe

	Elements, line-shape-contrast, creating meaning within image, Creation of depth through lens choice and linear, atmospheric and size perspective, High- Key Lighting, Low key Lighting, 3 point Lighting, Tonal quality of lighting.		Course in Professional Storyboarding By James O. Fraioli 6. Writing with pictures: how to write and illustrate children's books By Uri Shulevitz	illustration, Coral draw software, PPT, etc
Unit- V	Continuity: Basic Rules of continuity, 180 – Degree rule, screen direction, Cutaways & Cut-ins	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- VI	– Story Boards for Animations & Special Effects Films: Structure of animation films, Special effects breakdown, creating the environment	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- VII	Story Boarding for Commercials and New Media: Structure of commercials, elements of brand building to be implemented, special colour scheme for brands and products	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc

NAME OF THE STAFF: **BISWARANJAN SWAIN**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2020-2021**
SUBJECT**: GRAPHICS AND POST PRODUCTION (FLASH, EDITING SOFTWARE, AFTER EFFECTS)**

LEARNING OBJECTIVE/S: Basics of 2D animation, Vector and Raster Graphics, Basic Animation in Flash, Advanced editing
using Flash Elements in the film, Using After Effects, The interface of After Effects, Importing graphics and film, Keyframes, After effects and timeline, Animating using after effects, Compositing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Basics of 2D animation	4	-	Theory, project and assignments, After effects, Flash software PPT, etc
Unit- II	After Effects	4		Theory, project and assignments, After effects, Flash software PPT, etc
Unit- III	Basic Animation in Flash	4		Theory, project and assignments, After effects, Flash software PPT, etc
Unit- IV	Advanced editing	4		Theory, project and assignments, After effects, Flash software PPT, etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **TV PRODUCTION / AD FILM MAKING**

LEARNING OBJECTIVE/S: To introduce the process of 25 mins Television series making To understand the production pipeline of 25 mins Television series making process | To understand the entire workflow 25 mins Television series making process To gain exposure on various cameras and software used for production of 25 mins Television series making The students will undergo the process of 25 mins Television series. The students will be exposed to professional HD cameras & software and will work on projects ranging from 5Mins-25mins. The students will be exposed to the entire process of film making and the production workflow in television Series. The students can also work on an Ad film for about 60 seconds depending on the kind of TV series they are making.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **INTRODUCTION TO DIRECTION FOR FILM**

LEARNING OBJECTIVE/S: To understand the need for direction in films | To understand the role played by a director | To understand the Qualities required to be a director | To learn how to manage creativity and creative team | To learn about drama and continuity for films | To learn the details involve in the production of a feature films

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	ARTISTIC IDENTITY AND DRAMA: The World of the Film Director, Identifying Your Themes	2	Textbooks: 1. Film Directing Cinematic Motion: A Workshop for Staging Scenes By Steven Douglas Katz 2. Film Directing Fundamentals: See Your Film Before Shooting By Nicholas T. Proferes 3. Problems Of Film Direction By Sergei Eisenstein Reference Books: 1. Directing: Film Techniques and Aesthetics By Michael Rabiger 2. On directing film By David Mamet 3. Directing Actors: Creating Memorable Performances for Film and Television By Judith Weston	Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	SCREENCRAFT: A Director's Screen Grammar, Seeing with a Moviemaker's Eye, Shooting Projects	2		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	THE STORY AND ITS DEVELOPMENT: Recognizing the Superior Screenplay – How to create drama, Analysing a Screenplay, Director's Development Strategies, Alternative Story Sources, Setting Creative Limitations	2		Theory, project and assignments, Screening (TV) PPT, etc
Unit- IV	AESTHETICS AND AUTHORSHIP: Point of View, Subtext, Genre, and Archetypes, Time, Structure, and Plot, Space,	2		Theory, project and assignments, Screening (TV) PPT, etc

	Stylized Environments, and Performances, Form and Style		4. Art Direction for Film and Video By Robert L. Olson 5. The film director's team By Alain Silver, Elizabeth Ward 6. Notes of a film director By Sergei Eisenstein 7. Producing and Directing the Short Film and Video By Peter W. Rea, David K. Irving 8. Fundamentals of Film Directing By David K. Irving 9. Writing, Directing, and Producing Documentary Films and Videos By Alan Rosenthal 10. Breaking into Film by Kenna McHugh 11. Before You Shoot : A Guide to Low Budget Film and Video Production by Helen Garvey	
Unit- V	PRODUCTION: Developing a Crew, Mise-en-Scene, Producing a Shooting Script, Before the Camera Rolls, Roll Camera, Location Sound, Continuity, Directing the Actors, Directing the Crew, Monitoring Progress	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- VI	ORGANIZING ACTION IN AN ACTION SCENE: Staging and Camera for Over Easy Action Scene, Development of Screenplay, Director’s Preparation for Directing an Action Scene, Over Easy Action Scene/Staging and Camera Angles for - Storyboard Artist	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- VII	– ORGANIZING ACTION IN A NARRATIVE SCENE: Staging and Camera for Narrative Scene, Choosing a Location, Staging, Camera Style	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- VIII	Styles And Dramatic Structures: Style, Narrative, Dramatic, and Poetic Visual Styles, The Variety of Dramatic Structures,	2		Theory, project and assignments, Screening (TV) PPT, etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **BASICS OF VISUAL COMMUNICATION**

LEARNING OBJECTIVE/S: Aesthetics, Perception, Representation, Visual Rhetoric, Cognition, Semiotics, Reception
Theory, Narrative, Media Aesthetics, Ethics, Visual Literacy, Cultural Studies.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Aesthetics, Perception, Representation	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	Visual Rhetoric, Cognition, Semiotics, Reception	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	Theory, Narrative, Media Aesthetics	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit-IV	Ethics, Visual Literacy, Cultural Studies	4		Theory, project and assignments, Screening (TV) PPT, etc

NAME OF THE STAFF: **NIKITA GOYAL**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **CONVERGENCE AND BASICS OF WEB DESIGNING**

LEARNING OBJECTIVE/S: Convergence and Basics of Web Designing
Concept of Convergence, Internet Key Terms, New Media. Web Designing, HTML programming,
Basic Java Script, Designing your own website, uploading the website, links and navigation

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Convergence and Basics of Web Designing	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	Concept of Convergence, Internet Key Terms, New Media.	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	HTML programming,	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- IV	Basic Java Script, Designing your own website, uploading the website, links and navigation	4		Theory, project and assignments, Screening (TV) PPT, etc

NAME OF THE STAFF: **BISWARANJAN SWAIN**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **CONCEPTS OF POST PRODUCTION & COMPUTER GRAPHICS (INCLUDING VFX)**

LEARNING OBJECTIVE/S: To understand the basics of visual effects | To understand the basic process of visual effects |
To learn about GUI
and CG | To understand the basics of 3D and creating real world in the digital world | To learn about compositing and camera tracking | To understand the process of vfx and final rendering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Introduction to pre-production, production and post-production: Visual effects' a relatively new term describes what used to be more appropriately called 'special photographic effects'. What makes an effect 'special'? The decision as to which medium and format VFX elements are going to be shot with is directly dependent on how they shall be employed and what the specifications are for their final resting place. Methods of creating visual effects, Implementation	4		Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- II	Introduction to the User Interface (GUI): Introduction to 3D Space and the GUI, Introduction to Modeling, Introduction to Polygonal Box Modeling,			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc

	Introduction to Shell Modeling			
Unit- III	CG Basics: Animation Basics, Animation Hierarchies and Deformation, Joints Hierarchies and Constraints, Cameras, Rendering and Path Animation | Understanding Pipeline and integration: Digital image manipulation, 2D digital image manipulation, Compositing software, New life into old methods, Perfecting the illusion, 3D computer-generated imaging (CGI), Digitizing (getting information into the computer)			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- IV	Introduction to Lighting and Rendering: Light Properties, Defining Shadows, Defining Highlights and Specular, Diffuse Inter-reflection and Global Illumination, Render Layers, Rendering Engines and methods			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- V	Introduction to Compositing: Camera Staging and Composition, Renderers and Algorithms Benefits/Disadvantages, Rendering Passes, Introduction to Specific Compositing Software, Compositing 3D			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- VI	Study of VFX and Camera Tracking: Overview of			Theory, project and assignments,

	Production Pipelines, Rendering Utility Nodes, Camera Tracking Foundation 2D and 3D			Screening (TV) PPT, Software and Computer etc
Unit- VII	Introduction to FX (Effects): Overview of Dynamics, Rigid Body and Fluids, Introduction to Particles, Expressions, Introduction to Fields, Project Work			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- VII	Compositing and Rendering: The Interface, Keying, Rotoscoping, Color Correction, Keying, Multi-Pass Compositing			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **DRAMA PRODUCTION**

LEARNING OBJECTIVE/S: The module is intended to provide an introduction to the process of digital short film
production for the purpose of making works of drama and fiction. The focus will therefore be on enabling the development of the practical and theoretical skills in pitching, planning, writing,
shooting and editing necessary to produce a coherent and competent fictional moving image project.

The module will seek to introduce the student to a range of creative and scheduling skills which will assist them in the production of their projects. It will foreground the inherently collaborative and collective aspects of the production process by aiding the student to refine a range of communication and inter-personal skills to accomplish a broad range of tasks, including identification and planning of a suitable production idea; Allocation of roles for the pre-production, shooting and editing phases, as well as encouraging collective responsibility and accountability which is absolutely essential to the completion of any professional or team production. The module will also build upon the more technical grounding offered in Techniques 2 in order to develop the practical vocabulary and skills required to produce moving
image projects. Students will be encouraged to investigate and undertake a role throughout their productions. In crews, they will produce two shorts for inclusion in their personal practice portfolio.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Introduction to the process of digital short film	4	Textbook Rabinger, M (2007) Directing: Film Techniques and Aesthetics, 4th Edition, Hoboken, Taylor and Francis Jones, C. and Jollige, G. (2000), The Guerilla Film Makers Handbook: London: Continuum Reference Books Catliff, S & Granville J. (2013) The Casting	Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	Making works of drama and fiction	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	Enabling the development of the practical and theoretical skills in pitching, planning, writing,	4		Theory, project and assignments, Screening (TV) PPT, etc

Unit- IV	Shooting and editing necessary to produce a coherent and competent fictional moving image project.	4	Handbook: For Film and Theatre Makers, UK, Routledge Cartwright, S. (2012) Pre-Production planning for Video, Film and Multimedia, Hoboken, Taylor and Francis Field, S. (2005) Screenplay: The foundations of Screenwriting, New York, Delta Landry. P (2012) Scheduling and Budgeting your Film, Focal Press La Motte, R (2010) Costume Design 101: 2nd Edition: The Business and Art of Creating Costumes for Film and Television, Michael Wiese Productions Murch, W (2001) In the Blink of an Eye: A Perspective on Film Editing, Silman James Press Potter, C. (2001) Screen Language from Film Writing to Film Making: London Methuen	Theory, project and assignments, Screening (TV) PPT, etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **INTERMEDIATE PRACTICAL FILM MAKING (AD AND SHORT FICTION FILM)**

LEARNING OBJECTIVE/S: To understand the production pipeline of film making process in advertisement film making | To introduce the process of Advertisement Film (product as well as PSU) Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film making | To understand the entire workflow in Advertisement Film (product as well as PSU) Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film | To gain exposure on various cameras and software used for production of Advertisement Film (product as well as PSU) Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film The students will undergo the process of Advertisement Film (product as well as PSU), Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film. The students will be exposed to professional HD cameras & software and will work on projects ranging from 30Seconds-15mins. The students will be exposed to the entire process of film making and the production workflow in Advertisement and Multiple Character multiple location Short Film production.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

NAME OF THE STAFF: **SALOME DIAS**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **LAWS RELATED TO FILMS, TV AND INTERNET**

LEARNING OBJECTIVE/S: To understand the various laws pertaining to media | To understand the need and importance of Copyright |To learn about intellectual property rights | To understand about media business ethics and issues pertaining to it

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	– Indian Contract Act, 1872: Essentials of valid contract discharge of contract, remedies for breach of contract. Contracts of Indemnity, Guarantee, Bailment, Pledge and Agency.	3	Text Books: 1. Maheshwari, S.N. and S.K. Maheshwari; A Manual of Business Law, 2nd Edition, Himalaya Publishing House, 2004. 2. Kushal M.C.,"Modern Indian Company Law",2004,Shree Mahavir Book Depot. 3. Kushal, M. C.; Business Law, Vikas Publishing House, New Delhi, 2004. Reference Books: 1. Kapoor, N. D.; Elements of Mercantile Law, Sultan Chand & Sons, NewDelhi,2003 2. Memoria & Memoria - Business Policy 3. David J. Fritzsche - Business Ethics: A Global & Management Perspective - Tata McGraw-Hill 4. Ramaswamy Namakumari - Strategic Planning - Corporate Strategy - MacMillan India Ltd 5. Velasquez - Business Ethics - Prentice - Hall of India	Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	The Negotiable Instruments Act 1881: Essentials of a Negotiable instruments, Kinds of Negotiable Instrument Holder and Holder in Due Course, Negotiation by endorsements, crossing of a cheque and Dishonour of a cheque.	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	Media Law, Copyright and	3		Theory, project and

	Intellectual Property: IPR & copyright laws, Copyright Agreements : Short-Term vs. Long-Term Agreements, Media Law and Infringements : Case Studies, Menace of piracy and remedies to counter piracy, Statutory and non-statutory bodies formed to fight piracy		6. Dr.S. Shankaran - Business Ethics & values 7. Gulshan S.S. and Kapoor G.K., "Business Law including CompanyLaw",2003,New Age International Private Limited Publishers. 8. Aggarwal S.K., "Business Law ,2003",Galgotia publishing Company. 9. Bargiel, Ashok; Company Law, Vikas Publishing House, 2004.4. Kapoor, N. D.; 10. Elements of Company Law, Sultan Chand & Sons, New Delhi, 2003.5. Dr. Singh, Avtar; 11. Company Law, Eastern Book Co. Lucknow, Bharat LawHouse, Delhi, 2004 12. Peter Madsen & Jay M. Shafritz - Essential of Business Ethics 13. Ken Smith and Phil Johnson - Business Ethics and Business Behavior 14. Pratley - Essence of Business Ethics - Prentice - Hall of India	assignments, Screening (TV) PPT, etc
Unit- IV	– Role and importance of Business Ethics and Values in Business - Definition of Business, Ethics Impact on Business Policy and Business Strategy - Role of CEO - Impact on the Business Culture.	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- V	Types of Ethical issues - Bribes - Coercion - Deception - Theft - Unfair Discrimination.	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- VI	Vendors, Government, & Social Audit. | CSR- Definition and Importance, examples of various	3		Theory, project and assignments, Screening (TV) PPT, etc

	initiatives taken by various business groups like TATAs, Infosys, Birla and others | Difference between Cause Related Marketing (CRM) and CSR Case Studies: Reliance WLL license, 2G Scam, Satyam Scam and PWC's role in the scam!!! | Role of bodies like Competition Commission of India, SEC, SEBI, TRAI, etc in curbing unethical practices			

NAME OF THE STAFF: **NIKITA GOYAL**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2020-2021**
SUBJECT**: NEW MEDIA THEORY AND PRACTICE (WITH ADVANCED WEB DESIGN AND APP MAKING)**

LEARNING OBJECTIVE/S: Web Designing – Adobe Dreamweaver, Designing a web page without the graphic user
interface (HTML using notepad), Frames, Layers, Search Engine Optimization, HTML and DHTML, Using JavaScript, Embedding Java Applets, Using Activex Controls, Embedding Video and Audio into web pages, Streaming media, Using YouTube, Creating Forms, Learning basic PHP and MYSQL, Creating Database and using it in the web design, Creating a website for Mobile phones, Creating a news site, creating a brochure site, designing a portal interface, using vernacular language in web sites, dynamic fonts, creating a vernacular medium website, New media and popular culture, social networking, emerging identities, games as advanced new media, mobile journalism, new media as a pedagogical tool.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Web Designing	4		Theory, project and assignments, Screening (TV) PPT Computer, etc
Unit- II	Adobe Dreamweaver	4		Theory, project and assignments, Screening (TV) PPT Computer, etc
Unit- III	HTML and DHTML, Using JavaScript, Embedding Java Applets	4		Theory, project and assignments, Screening (TV) PPT Computer, etc
Unit- IV	Basic PHP and MYSQL, Creating Database and using it in the web design, Creating a website	4		Theory, project and assignments, Screening (TV) PPT Computer, etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **UNDERSTANDING INDIAN CONTEMPORARY CINEMA**

LEARNING OBJECTIVE/S: Exploring the changing trends in Hindi Popular cinema in terms of storytelling, performances
technological and production aspects. Emergence of Film Festivals as a mode of exhibition and the kind of films selected for such prestigious film festivals. Focus on the changing aesthetic trends of regional films, popular films and festival films. Looking at the emergence of digital media and internet being a source of exhibition for films.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Exploring the changing trends in Hindi Popular cinema in terms of storytelling, performances	4		Theory, project and assignments, Screening (TV) PPT etc
Unit- II	Technological and production aspects	4		Theory, project and assignments, Screening (TV) PPT etc
Unit- III	Emergence of Film Festivals as a mode of exhibition and the kind of films selected for such prestigious film festivals.	4		Theory, project and assignments, Screening (TV) PPT etc
Unit- IV	Focus on the changing aesthetic trends of regional films, popular films and festival films. Looking at the emergence of digital media and internet being a source of exhibition for films.	4		Theory, project and assignments, Screening (TV) PPT etc

NAME OF THE STAFF: **SACHIN YADAV**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2020-2021**
SUBJECT**: INTRODUCTION TO MEDIA PROJECT MANAGEMENT**

LEARNING OBJECTIVE/S: To educate about the basics involved in a media project management | To educate about the basic project production workflow and management | To educate about the role of a project manager | To help understand the details involving a new business project or proposal

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Production Management: The production Manager's job, The process of Production Management, The Business of Film-Pre production, production & post production, Preparing for production, Special Low Budget Indie productions, Locations & unions Management, Cast & Crew – Selection, contracts, agreements, work permits, etc., Budget preparation and budget forms, Insurance & competition bonds	3	Textbooks: 1. Film Production Management 101 Management and Coordination by Deborah S Patz 2. Surviving Production: The Art of Production Management for Film and Television by Deborah S Patz 3. Film Production Management by Bastian Cleve Reference Books: 1. Character Animation & Film Production By Chris Neuhahn, Josh Book 2. Producing and Directing the Short Film and Video By Peter W. Rea, David K. Irving 3. Film Production Theory By Jean Pierre Gegens 4. Production Management for Film and Video By Richard Gates	Theory, project and assignments, PPT etc
Unit- II	Business Creation: Business Plans and Ideation: Entrepreneurship Routes, Case Studies (Relevant and time specific), Introduction to	3		Theory, project and assignments, PPT etc

	Company Creation, Processes of Registration and Incorporation, Company Law, Introduction to Company Law, Registration Procedures and Exceptions, Company Procedure and Ethics		5. The Independent Film Producer's Survival Guide: A Business and Legal Sourcebook By Gunnar Erickson, Harris Tulchin, Mark Halloran 6. The Complete Film Production Handbook by Eve Light Honthaner 7. Independent feature film production By Gregory Goodell 8. Film Production By Steven Bernstein 9. Film production: the complete uncensored guide to independent filmmaking By Greg Merritt	
Unit- III	Contracts and Negotiations: Revenue sharing model, Minimum guarantee model, Share in profits model	3		Theory, project and assignments, PPT etc
Unit- IV	Conflict Resolutions: Negotiations and Bargaining : Role Play Exercise, Research Methodology for Business Planning	3		Theory, project and assignments, PPT etc
Unit- V	Scouting for business opportunities: Investor Pitch Exercises, Business Plan Formulation and Redesign, Financial Projections for Businesses	3		Theory, project and assignments, PPT etc

NAME OF THE STAFF: **PUJA DAS**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2020-2021**
SUBJECT: **BASICS OF MARKETING AND PUBLICITY**

LEARNING OBJECTIVE/S: To introduce the basics of marketing and publicity design | To educate about the importance of marketing in today's world | To help understand the various tools needed for marketing and publicity design | To learn about the marketing plan and market research | To help get insight into consumer consumption behaviour

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Introduction to Marketing: 1. Importance of marketing, definition of marketing, scope of marketing, functions of marketing, marketing and its relation to other business functions, difference between sales and marketing. 2. Key marketing terms and concepts- need, want, demand, exchange, marketing myopia and marketing orientations, distinction between selling and marketing.3. Marketing Mix, 4Ps, 7Ps, 4Cs.	2	Reference books: 1. Competing For The Future By C.K. Prahalad & Gary Hamel. 2. Kotler on Marketing: How to Create, Win, and Dominate Markets By Philip Kotler. 3. How to Win Friends and Influence People By Dale Carnigie. 4. Market Research: A Guide to Planning, Methodology and Evaluation By Paul Hague. 5. Art of War By Sun Tzu. 6. Strategic Management By Gregory Dess, Lumpkin & Taylor. 7. How Winners Sell: 21 Proven Strategies to Outsell Your Competition and Win the Big Sale ByDave Stein. 8. Beyond Bullet Points: Using	Theory, project and assignments, PPT etc
Unit- II	Marketing Research: Definition, Marketing Research	2		Theory, project and assignments, PPT etc

	Process, Types of Research: Primary, Secondary, Qualitative, Quantitative		Microsoft® Office PowerPoint® 2007 to Create Presentations That Inform, Motivate, and Inspire By Cliff Atkinson. 9. Selling the Invisible: A Field Guide to Modern Marketing By Harry Beckwith. 10. Marketing Services: Competing Through Quality By Parasuraman & Leonard L. Berry. 11. Marketing Management (12th Edition) (Marketing Management) By Philip Kotler. 12. Consumer Behavior: Building Marketing Strategy, 9/e, (with DDB Needham Data Disk) By Hawkins, Best, & Coney. 13. Crossing the Chasm: Marketing and Selling High-Tech Products to Mainstream Customers By Geoffrey A. Moore. 14. Mind and Heart of the Negotiator, The (3rd Edition) By Leigh Thompson. 15. Radically Transparent By Andy Beal & Judy Strauss.	
Unit- III	Consumer Behavior: 1. Introduction and importance, model of consumer behaviour, characteristics affecting consumer behaviour.	2		Theory, project and assignments, PPT etc
Unit- IV	Segmentation, Targeting & Positioning: 1. Segmentation - Bases and process of segmentation, requirements for effective segmentation, niche marketing, segmenting consumer markets, segmenting business markets.2. Targeting- Evaluating market segments, selecting target market segments.3. Positioning- Positioning maps, differentiation and positioning strategy, communicating and delivering the chosen position	3		Theory, project and assignments, PPT etc
Unit- V	Introduction to the concept of IMC: Introduction & Familiarization, Definition of	3		Theory, project and assignments, PPT etc

	Promotion & Promotion Mix, Tools of Promotion Mix, IMC Planning Process, Creative Strategy, Media Strategy			
Unit- VI	Packaging for film & television: The art of Promo, Advertisement & In serial promotions, Art of Writing Copy, designing for various mediums, Public Relations, Planning, organizing and managing events. Managing the internet and social Media. Vendor selection and management, Media Planning & Buying	3		Theory, project and assignments, PPT etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **V**
ACADEMIC YEAR: **2020-2021**
SUBJECT**: ADVANCED PRACTICAL FILM MAKING - MUSIC VIDEOS**

LEARNING OBJECTIVE/S: To introduce the process of Music Video
To understand the production pipeline of Music Video
To understand the entire workflow in Music Video making process
To gain exposure on various cameras and software used for production of Music Video
The students will undergo the process of Music Video. The students will be exposed to professional HD cameras & software and will work on projects ranging from 5Mins-8mins. The students will be exposed to the production workflow in music Video.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **T.Y.B.A.**
SEMESTER: **VI**
ACADEMIC YEAR: **2020-2021**
SUBJECT**: FINAL PROJECT- SHORT FILM (30 MINUTES)**

LEARNING OBJECTIVE/S: Comprehensive, which will include writing an original story to production and distribution of film in the national and international circuit. It will also involve creating a blog, FB page, website for the film. Write a report on the roles performed by each student. The students will have to make a 30 minute short fiction project.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

DEPARTMENT OF FILM, TELEVISION AND NEW MEDIA PRODUCTION
5.3. TEACHING PLAN (UNIT PLAN) 2019-20

NAME OF THE STAFF: **ARCHANA RAUT**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **EFFECTIVE COMMUNICATION SKILLS**

LEARNING OBJECTIVE/S: To prepare students in the production aspects of Film Television & New Media, as required by the present media environment all across globe. To empower the students in the production and managerial aspects of the media business with due emphasis on latest production techniques, along with marketing and branding management of various media products and associated services. To develop creative temperament and mind set needed in the content production segment of media industry. To provide an active industry interface by way of co-learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Fundamentals of Communication: Developing reading & writing skills (Marathi, Hindi and English), Editing & Summarizing (Marathi, Hindi and English), Oral Communication (Marathi, Hindi and English)	3	Textbooks: 1. Crucial Conversations: Tools for Talking When Stakes are High , by Kerry Patterson. 2. Presenting to Win: The Art of Telling Your Story, by Jerry Weissman. Reference Books: 1. Verbal Judo: The Gentle Art of Persuasion, by George J. Thompson. 2. Write to the Top: Writing for Corporate Success,	Theory, project and assignments PPT etc
Unit- II	Enhanced Communication Skills Development: Enhancing communication skills – verbal, Enhancing communication skills - non-verbal, Body type- posture- body language reading, Analysing body language signals and meanings	3		Theory, project and assignments PPT etc
Unit- III	Psychology of communication:	3		Theory, project and

	Gestures- expressions - facial language, eye contact, shake hands, sitting posture, Maintaining comfort distance from people, mirroring, Dressing sense, corporate dressing, formal, semi formal, casual, dressing for various occasions & events, Understanding personalities - auditory / visuals / kinesthetic, eye movement, facial expressions, emotions, smile		by Deborah Dumaine.	assignments PPT etc
Unit- IV	Personality Development: Verbal communication, voice training, speech, clarity, grammar speed, volume, enunciation, pronunciation, ends of sentences, humour, pauses, Stress management, breathing pattern, mind psyching, right attitude, understanding your limitations and strengths, Table manners & etiquettes correct use of spoon knife, etc, Choosing the right accessories i.e shoes, handbags, jewellery, etc.	3		Theory, project and assignments PPT etc

NAME OF THE STAFF: **SAMEER RANE, SANDEEP PATIL**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **INTRODUCTION TO HISTORY OF ART/ STORYTELLING THROUGH OTHER FORMS OF ART**

LEARNING OBJECTIVE/S: To understand the basics and genres of Music, dance and theatre.
To learn the basics of various acting schools and the art of drama.
To learn the evolution of visual techniques from painting to cinema.
To learn the basic relationship between music and dance in relation to Film making.
Students should be exposed to the canonical text of Natya shastra from where all the traditional performing arts have emerged.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Music : Genres of Music, Introduction to Contemporary Music (Hindi, Regional & POP), Music Directors & Composers, Use of Folk music in Indian Cinema	3	Textbooks: 1) Natya Shastra by Bharata Muni. 2) Melodrama and Popular Culture: Ira Bhaskar. 3) History of Art – Bernard.S. Myers, Trawin Copplestone. 4) Framing Film- Cinema and the Visual Arts, EDITED BY STEVEN ALLEN AND LAURA HUBNER. Reference Books: 1. Dancing: The Pleasure, Power, and Art of Movement; by Gerald Jonas. Harry N. Abrams in association with	Theory, project and assignments PPT etc
Unit- II	Genres of Dance – Understanding storytelling through Folk Dance & Contemporary Dance, Role of Dance in Hindi Cinema	3		Theory, project and assignments PPT etc
Unit- III	The development of theatre, Acting Schools, Make-up, Managing Play, Study of one English and one Hindi or regional play. Influence of theatre on cinema.	3		Theory, project and assignments PPT etc
Unit- IV	1. European Paintings and Painters- A brief overview starting from the renaissance to modern painters. Idea of Perspective coming into painting and changing	3		Theory, project and assignments PPT etc

	the way we perceive the world 2. Indian Paintings & Painters- A look at the rich historical tradition of Indian PaintingsMiniature Paintings to Modern Painters. Difference between the formal aspects of Painting & Cinema. Exploring the idea of time and space in painting in relation to cinema 3. Important Movements- Analysing the important movements that have taken place in postcolonial India in painting to the contemporary scenario.		Thirteen/WNET 1992. 2. History of Dance: An Interactive Arts Approach; by Gayle Kassing.	

NAME OF THE STAFF: **SAMEER RANE**

DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **INITIATION TO LITERATURE & CREATIVE WRITING**

LEARNING OBJECTIVE/S: To introduce basic tenets of Indian literature including regional literature
To introduce and appreciate various forms of literature (Novel, Poetry, Drama, Essay)
To help build skills for creative writing
To help understand the structure of Story, poetry and drama
To introduce writing for internet

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Introduction to Indian Writers – Hindi/Marathi/Urdu & other regional languages: History of Indian literature, prominent writes, important works, cultural significance.	3	Textbooks: 1.) A Concise History of Indian Literature in English by Arvind Mehrotra. 2) The Creative Writing Course book: Forty Authors Share Advice and Exercises for Fiction and Poetry. 3) Creative Writing By Adele Ramet. 4) Creative Writing for People Who Can't Not Write By Kathryn Lindskoog. Reference Books: 1. Creative Writing: A Workbook with Readings By Linda Anderson. 2. Teaching Creative Writing By Graeme Harper. 3. The Everything Creative Writing	Theory, project and assignments PPT etc
Unit- II	A Brief Introduction to Creative Writing: What is creative writing, various forms of writing, various form of writing styles, how to build creative writing skills.	3		Theory, project and assignments PPT etc
Unit- III	Formal structure of the short story: Various forms of writing styles, Genres of story, how to develop an engaging idea, Prominent writers, Pick your style.	3		Theory, project and assignments PPT etc
Unit- IV	Formal aspects of Poetry: Elements of poetry, types of Poetry, Difference between various styles, Famous poets and their works, Study of the Epic Ballad - Mahabharata.	3		Theory, project and assignments PPT etc

			Book By Wendy Burt-Thomas. 4. The Soul of Creative Writing By Richard Goodman, Goodman, Chong.	
Unit- V	Formal aspects of Drama: Structure of drama, one act-two act-three act play, Characterization, Freytag's triangle, Subject specific drama	3		Theory, project and assignments PPT etc
Unit- VI	Writing for the internet: How internet writing is different from conventional writing, Blogging, Reputation management, Development of Blogs, writing for social media, writing for SEO & SMO	3		Theory, project and assignments PPT etc

NAME OF THE STAFF: **VIVEK PATHAK**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **BASICS OF PHOTOGRAPHY**

LEARNING OBJECTIVE/S: To learn the basics of art of Photography.
To understand the basic intricacies involved in taking a photograph.
To understand what makes a good picture.
To develop basic photographic sense and knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Development of Photography over the years: Brief History of Photography, early photography methods, switch from film to digital, difference between film and digital photography, formats of images in digital.	3	Textbooks: 1. The Art of Photography; by Bruce Barnbaum. 2. Creative Nature & Outdoor Photography; Brenda Tharp. 3. Chasing the Light by Ibarionex Perello. Reference Books: 1. The Camera by Larry Hills. 2. The Creative Black Book. 3. The Print by Ansel Adams, Robert Baker. 4. 500 poses for Photographing Women by Michelle Perkins. 5. Creative Landscapes: Digital Photography Tips & Techniques by Author: Davis, Harold.	Theory, Practical project and assignments PPT etc
Unit- II	Cameras & Techniques: Types of camera, film cameras V/S digital cameras, lenses and their importance, Story Design and Development, Laws of Composition, Gestalt Law and Visual Perception, Semiotic photography.	3		Theory, Practical project and assignments PPT etc
Unit- III	Lighting - Theory & practice: Sources of Lighting, 2 point lighting, 3 point lighting, creating contrast, outdoor natural lighting, related accessories for lighting.	3		Theory, Practical project and assignments PPT etc
Unit- IV	Post production of Photos, Digital Image Editing – Photoshop: Processing of Raw images, Introduction to	3		Theory, Practical project and

	Adobe Photoshop and image ready software, how to enhance the photo digitally.			assignments PPT etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **FILM APPRECIATION – GENRES**

LEARNING OBJECTIVE/S: What is cinema, Film theory – form and function, Film analysis, Auteur Theory,
effect of auteur, Contributions of D W, Griffith, Alfred Hitchcock, Jean Du Godard, Digital Aesthetics, Music and choreography, film genre.
Cinema and society, History of Cinema, Hollywood cinema, early cinema and film form
the studio system, rise and decline of the studio system.
Indian Cinema
History of Indian cinema, history of regional cinema, legends of Indian cinema, Hindi film industry, the Hindi film industry, music and choreography in Indian cinema, contemporary cinema

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	What is cinema, Film theory – form and function, Film analysis, Auteur Theory, effect of auteur, Contributions of D W, Griffith, Alfred Hitchcock, Jean Du Godard	3	Textbooks : 1) The Oxford History of World Cinema. 2) The Cinematic ImagiNation : Indian Popular Films as Social History by Jyotika Virdi. 3) History of Indian Cinema by Renu Saran.	Theory, project and assignments PPT etc
Unit- II	Music and choreography, film genre. Cinema and society, History of Cinema, Hollywood cinema, early cinema and film form the studio system, rise and decline of the studio system.	3		Theory, project and assignments PPT etc
Unit- III	History of Indian cinema, history of regional cinema,	3		Theory, project and assignments

	legends of Indian cinema, Hindi film industry, the Hindi film industry			PPT etc
Unit- IV	music and choreography in Indian cinema, contemporary cinema	3		Theory, project and assignments PPT etc

NAME OF THE STAFF: **CHANDRASHEKAHAR THAKRE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **GRAPHIC DESIGNING (PHOTOSHOP, ILLUSTRATOR, ETC.)**

LEARNING OBJECTIVE/S: The learners are exposed to the industry of graphic design. The domain of skills and tools is largely devoted to learning graphic reproduction methods using both modern, that is electronic,
as well as old school techniques. These inputs enable learners to solve simple problems of visual communication related to corporate identity or social communication. Learners use software like Adobe Photoshop and Adobe Illustrator.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	COLOUR THEORY : Colour psychology, Colour schemes, Colour wheel, Colour combination, Hue.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- II	PERSPECTIVE STUDY : 1-point perspective, 2-point perspective, 3-point perspective, Mixed perspective.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- III	STILL LIFE : Sketching & rendering, Light study, Photography.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- IV	TEXTURE STUDY : Texture creation, mixed media, Water/Pastel painting.	1		Theory, Software (Adobe illustration, photoshop) project and assignments

				PPT etc
Unit- V	PORTRAIT PAINTING : Portrait Caricature, Cartoon.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit-VI	PHOTOSHOP : Basic tools in Photoshop, Photo editing, Colour correction.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- VII	ILLUSTRATOR : Basic tools in Illustrator, Vector graphics, Graphics design.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- VIII	COMIC BOOKS : Understanding storyboards, Styles of contemporary comics, Colour tones.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- IX	COMPOSITION : Basic composition skills, Rule of thirds, Understanding of subject and its relation to light and depth of field, Application in comic books.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- X	TYPOGRAPHY : Understanding of typos & fonts, Application of	1		Theory, Software (Adobe illustration, photoshop)

	appropriate typos on art works.			project and assignments PPT etc

NAME OF THE STAFF: **CHANDRASHEKAHAR THAKRE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **BASICS OF POST PRODUCTION**

LEARNING OBJECTIVE/S: An editor's job is to decide, 24/25/30 times a second, where the audience needs to be. Do we
stay in a shot or transition to another, and if so, what shot and how do we get there? Working side-by-side with the director to craft the movie that ultimately hits the screen – or your phone – editing is really about manipulating the audience, in the best possible way, all in the service of storytelling.
In this class, we will study terminology and concepts, learning both the rules and how to break them, as we look at the aesthetics choices and the technological workflow for both picture and sound editing. We will examine the historical role of editing, from the earliest silent film through the digital revolution that has transformed moviemaking today.
INTRO TO EDITING THEORY
Introduction to the history of film editing. Lumiere Brothers, Thomas Edison, Edwin Porter, DW Griffith); the manipulation of editing; Lev Kuleshov's experiment; the language of cinema;
introduction to the editor as storyteller and understanding the narrative structure.
INTRO TO PREMIERE PRO
Screening of Examples. The Premiere Pro interface features and functions, how to import and organize footage, basic editing techniques
EDITING EXERCISE
Watch the work of a Master Editor, Basic Production techniques, Practicing/Reviewing skills
PROJECT: Interview and Film a classmate telling a story for 10 minutes or talking about something they're excited about. Edit together a two minute version of this.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Effective Editing Bird's-eye view of the modern process of editing, Setting Up for Editing Efficient editing habits to work faster, Thinking creatively. Efficient workflow, Configure factory-standard systems, Optimal media management from ingest through to	4	Grammar of the Edit Roy Thompson, Christopher J. Bowen SUGGESTED TEXTS: Film Art: An Introduction, David Bordwell and Kristin Thompson The Invisible Cut: How Editors Make Movie Magic, Bobbie O'Steen	Theory, Software (Adobe Premiere pro) project and assignments PPT etc

	final output. Non Linear Editing Concepts Interface of NLE system, The Three-Point Edit, Additional Edits		Cut By Cut: Editing Your Film or Video, Gael Chandler In the Blink of an Eye: A Perspective on Film Editing, Walter Murch The History of Film Editing, Karel Reisz, Gavin Miller On Film Editing, Edward Dmytrk Film Editing: Great Cuts Every Filmmaker Should Know, Gael Chandler First Cut: Conversations with Film Editors, Gabriella Oldham	
Unit- II	Working in the Timeline, Transitions, Keyframing, Filters, Ingesting	4		Theory, Software (Adobe Premiere pro) project and assignments PPT etc
Unit- III	Compositing, Color Correction, Audio, Titling, Review and Look Forward	4		Theory, Software (Adobe Premiere pro) project and assignments PPT etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **HISTORY OF NON- FICTION FILM**

LEARNING OBJECTIVE/S: This course explores the history and theory of non-fiction film and video, with an emphasis on
work that falls under the rubric of "documentary."
Documentary is a unique form of non-fiction moving image media that claims a special relationship to reality and truth. Through screenings, readings and class discussion, we will explore such questions as:
• How does documentary relate to narrative fiction filmmaking? To other non-fiction forms of television like reality TV or news reports?
• How "real" are documentary representations, and how much does it matter?
• What are some different formal approaches documentary, and how does each mediate the representation of real life it offers?
• How has documentary image-making changed over time? What can we learn from this history that is relevant to media-making today?
• What are the particular ethics of representing others in a medium like video or film?
• What responsibility do documentarians have to their subjects, to the form, and to society at large?
• How do people watch documentaries, and what is the impact of these films on the world they aim to represent?
Be familiar with efforts to create more democratic systems of media production and distribution.
Learn how to watch earlier films both as an audience THEN (with understanding of the film's social, cultural, historical context), and NOW (with understanding of your own future goals and
with critical, analytical eyes to study history).
Be able to think – and write — critically about non-fiction media.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Screen and analyze a wide range of documentaries, exploring the genre as narrative, journalism, propaganda, rhetoric, activism, diary, art, archive, and entertainment. Course Objectives	4	The texts for this class Documentary: A History of the Non-Fiction Film (2nd Edition) by Erik Barnouw (available at Shakespeare and Co) and Crafting Truth: Documentary Form and	Theory, project and assignments, Screenings (T.V.) PPT etc

	By the end of the semester, you should: Be familiar with key periods in the history of non-fiction film and video from 1895 to the present. Be able to recognize and write about various forms and conventions of documentary storytelling, including the basic grammar of documentary moving images.		Meaning, by Louise Spence and Vinicius Navarro (available at Shakespeare and Co.). Additional readings will be available through e-res. As some readings will be accessed electronically, please bring either a printed version of the article (preferred) OR a digital version of the article to class.	
	Explore central questions surrounding the representation of reality and truth, including voice, authority, evidence and point of view. Explore key issues in the ethics of documentary representation, including maker-subject relationships, informed consent, fairness, and evidence.	4		Theory, project and assignments, Screenings (T.V.) PPT etc
2	Be familiar with efforts to create more democratic systems of media production and distribution. Learn how to watch earlier films both as an audience THEN	4		Theory, project and assignments, Screenings (T.V.) PPT etc

	(with understanding of the film's social, cultural, historical context), and NOW (with understanding of your own future goals and with critical, analytical eyes to study history).			
3	Be able to think – and write — critically about non-fiction media.			Theory, project and assignments, Screenings (T.V.) PPT etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **WRITING FOR VISUAL MEDIA**

LEARNING OBJECTIVE/S: To understand the basic structure of screenplay
To introduce to the basic skills for screen writing
To understand the intricacies of screen writing
To learn the build characters and write meaning full dialogues

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Preparing to Think Visually: Diving In to the Screenwriter's Mind, Approaching Screenwriting as a Craft, Breaking Down the Elements of a Story, Unpacking Your Idea	3	Textbooks: 1. How not to write a screenplay: 101 common mistakes most screenwriters make by Denny Martin Flinn 2. Screen Adaptation: A Scriptwriting Handbook by Kenneth Portnoy 3. Screenplay: The Foundations Of Screenwriting By Syd Field Reference Books: 1. The Screenwriter's Bible By David Trottier 2. The Bare Bones Book of Screenwriting: The Definitive Beginner's Guide to ... By J. T. Clark 3. Screenwriting for a Global Market: Selling Your Scripts from Hollywood to ... By Andrew Horton	Theory, project and assignments, PPT etc
Unit- II	Structure of Story & Screenplay: Plot Part I: Beginnings, Plot Part II: Middles, Plot Part III: Endings	3		Theory, project and assignments, PPT etc
Unit- III	Dynamics of Characterization: Character Building, Constructing Dynamic Dialogues, Non – traditional Film	3		Theory, project and assignments, PPT etc
Unit- IV	Finalizing the Script: Maintaining an Audience's Trust, Turning Your Story into a Script, Take Two: Rewriting Your Script, Adaptation and Collaboration: Two	3		Theory, project and assignments, PPT etc

	Alternate Ways to Work		4. Screenwriting For Dummies By Laura Schellhardt 5. Screenwriting: The Sequence Approach By Paul Joseph Gulino 6. The Tools of Screenwriting By David Howard, Edward Mabley 7. The Art of Screenwriting: An A to Z Guide to Writing a Successful Screenplay By William Packard 8. Writing the Character-Centered Screenplay By Andrew Horton	

NAME OF THE STAFF: **ABHIJEET DEO**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **IMPORTANCE OF SOUND AND SOUND SFX**

LEARNING OBJECTIVE/S: To learn about the basic of sound |To understand the nature of sound and recording devices |
To learn the basics of sync sound, mixing console, analog v/s digital workflow | To understand the need for sound and importance of sound in film | To learn to record a song

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Basics of Sound: Nature of acoustical waves; concepts of amplitude and frequency -wavelength and harmonics. Psycho-acoustics: Nature of hearing and perception of sound, including concepts of pitch, loudness, and timbre; the precedence effect; localization in rooms; equal loudness contours; and other mysteries of hearing. Principles of Stereophony	2	Textbooks: 1. Pro Tools 9: Music Production, Recording, Editing and Mixing By Mike Collins 2. Pro Tools All-in-One Desk Reference For Dummies By Jeff Strong 3. Sound for Film and Television By Tomlinson Holman Reference Books: 1. Sound For Digital Video By Tomlinson Holman 2. Producing for TV And Video: A Real-world Approach By Cathrine Kellison 3. Sound for picture: an inside look at audio production for film and television By Jeff Forlenza, Terri Stone 4. Audio in Media By Stanley R. Alten 5. Master Handbook of	Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- II	Sound for Film and Video: The sound track – its importance in an AV medium, Different elements of a sound track, Explanation of how sound is put to the film	2		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc

Unit- III	Sync Sound: The size of the role sound should play in your film will vary depending on your professor's requests, but when it comes to the technical side of things, you are at least required to know how to achieve synchronized sound and picture with film. Interconnectivity of Analog & Digital Equipment: Basic analog connectors, cabling, patch – bay, interconnectivity between various recording studio equipment. Various Digital interconnects and their sockets on the digital equipment. Microphones Types: Dynamic, Condenser, Ribbon, Polar Pattern, Sensitivity. Microphone designs for special applications Acoustics I (Fundamentals): The behavior of sound in outdoors and in closed spaces; Absorption, reflection, diffraction, refraction, reverberation.	2	AcousticsByF.Alton Everest 6. Modern Recording Techniques By David Miles Huber 7. Mastering Audio By Bob Katz 8. Mixing Audio By Roey Izhaki 9. Practical Recording Techniques By Jenny Bartlett 10. Critical Listening Skills for Audio Professionals By F.Alton Everest 11. The Audible Past By Jonathan Sterne	Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc

Unit- IV	The signal flow and various auxiliary systems. Digital Audio: Analog to Digital to Analog conversion. Sampling Frequency, Bit Rates. Problems in digital audio. Different digital media, Standard digital recording & mastering formats. Audio file formats, storage mediums – optical, magnetic, Jitter etc. Computers in Audio: Different platforms – different operating systems, Configuration of a PC for sound recording. Mother Boards, Processor, Sound Card, Graphic card, Monitors Recorders: Analog, Digital, Tape Based & Tapeless. Digital Audio Workstations (DAW's)	3		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- V	– Film Showcase: Case studies of famous Indian as well as foreign films	2		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- VI	Microphone Techniques: Placement, Applications, Proximity effects	2		Theory, project and assignments, Screenings (T.V.) PPT, Protool and

	etc. microphones and placement techniques for stereo recording. Monitoring Systems: Active & Passive types, Domestic and professional listening environment, Stereo and surround monitoring.			Audacity software etc
Unit- VII	The Production Process of a Song: Music Basics. – Types of Music, Concepts of Melody, Harmony, Rhythm & counter melody etc. Format of a song. Preproduction, Tracking, Overdubbing, Editing, Mixing and Mastering. Processors: Theory of Tonal, Dynamic & Spatial processors. Equalizers – types and their application, Compressors & Limiters - theory and application, Effects processors - Reverberation and Delay devices and their plug in counterparts.	3		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- VIII	Location sound , Radio mics - uses and potential	3		Theory, project and assignments, Screenings

	difficulties. Boom operation for sync sound, Hands-on training in location sound recording for video. Nuendo Basic: Basic principles, understanding the process from initial set up to completion of a project. To set up for a vocal/instruments dub. Hands-on training - You will share a Nuendo workstation during the class. Principles of Mixing: The basic techniques of mixing and the fundamental approach. The Building Blocks of Mixing Setting the sound stage, and the sonic implications of panning and of placing instruments at varying distances from the listener; Consideration of different approaches to getting desired results from EQ; A comprehensive review of the uses of dynamic processor; on Individual channels and Mix master. Finishing a mix with automation.			(T.V.) PPT, Protool and Audacity software etc

	"Mixing in the box." And “Mixing through the board.” Production of the Sound Track for the student project film: Discussing sound design strategy with the director of the film at pre production stage. Attending film sync shoots. Video File formats, Acquiring picture for post production from edit suite. Dubbing the dialogues wherever necessary, Selecting SFX and BG music from the library, recording Foley and music as per the demand of the script. Mixing the final track. Export it to the editor, supervise the final assembly of the film.			

NAME OF THE STAFF: **PRAMOD PATHAK**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **BASICS OF CINEMATOGRAPHY-1**

LEARNING OBJECTIVE/S: To understand the importance of cinematography in film making | To enhance the basic knowledge about lighting and its use | To understand various equipment's required for various form of lighting | To understand the basics of various camera, lenses and digital cinematography

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Power of a Picture: Power of a still picture | Shooting a good Still picture | Composition-Framing | Understanding & Use of color | Capturing the Drama | Black and white Photography;	4	Textbooks: 1. Camera Terms and Concepts by David Elkins 2. The Camera Assistant by Doug Hart 3. Motion Picture Camera and Lighting Equipment by David Samuelson Reference Books: 1. Motion Picture Camera Techniques by David Samuelson 2. The 16mm Camera Book by Douglas Underdahl 3. The Hands On Manual for Cinematographers by David Samuelson 4. The Professional Lighting Handbook by Verne Carlson 5. The Filmmakers Pocket Reference by Blain Brown	Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- II	Light: Role of light | Lighting techniques | Concept of lighting various planes | Understanding Various types: Tungsten lamps, Cool Lights, HMI, Cyclorama/background lights, Soft Box lights. | Use of cutter stand, black cloth and Camera filters | barn doors | use of reflectors | Three point lighting | Ratio lighting: 1:2, 1:3, 1:4 | Creating various Background patterns and types | Lighting – Situations | Studio lighting for three cameras set up: Talk Show, Game Show	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

	| Available day light situations | Shooting for Documentary style | Face lighting. Key, fill, back light | Depth of field Exercise | High key lighting | Low key lighting;		6. American Cinematographer ASC Manual 47. The Zone System for Photographers by Carson Graves 8. Cinematography: Screen craft by Peter Ettedgui 9. Contemporary Cinematographers-On Their Art by Pauline Rodgers 10. Operating Cinematography for Film and Video by William Hines 11. Cinematography-A Guide for Filmmakers and Film Teachers by Kris Mankiewicz 12. Film Lighting: Talks with Hollywood's Cinematographers and Gaffers by Kris Malkiewicz 13. The Five C's of Cinematography: Motion Picture Filming Techniques by Joseph V. Mascali 14. The Art of the Cinematographer: A Survey and Interviews with Five Masters by Leonard Maltin 15. Anton Wilson's Cinema Workshop by Anton Wilson 16. Image Control-Motion Picture and Video Camera Filters and Lab	
Unit- III	–Lenses: Type of Lenses | Power of Lenses | Understanding the shot requirement and usage of a lens | Idea of perspective: Depth Of Field, Depth of focus, Critical understanding of Fixed Lens Vs. Zoom Lens | Focus pulling | 18% grey card | Metering | Color temperature meter;	3		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- IV	Movements: Basic grammar of shots | Primary Camera Movement: Pan, Tilt, Zoom, Character Movement | Usage and need of Track and trolly, Crane, jimy gip, Poll Cam | Managing Movements | Single camera Setup | Multi camera setup | Continuity Exercise | Do’s and don’ts of camera movements | Aesthetics and Psychological Impact of Moving Images | Various parts of Motion picture cameras | Moving Image-Motion Picture | Impact of collective moving	3		Theory, project and assignments, Screenings (T.V.) PPT, etc

	Images | Motion Picture Dynamics;		Techniques by Gerald Hirschfeld 17. Lighting for Film and Electronic Cinematography by John David Viera and Dave Viera 18. Painting with Light by John Alton 19. Picture Composition for Film and Television by Peter Ward 20. Matters of Light and Depth-Creating Memorable Images for Video, Film and Stills Through Lighting by Ross Lowell 21. Lighting Technology by Fitt and Thornley Set Lighting Technician's Handbook by Harry C. Box 22. Digital Cinematography by Ben De Leeuw 23. If It's Purple, Someone's Gonna Die: The Power Of Color In Visual Storytelling By Patti Bellantoni 24. High Definition Cinematography By Paul Wheeler	
Unit- V	Understanding digital video recording Principle of video recording | Digital Recording Formats | Editing and compression | Digital			Theory, project and assignments, Screenings (T.V.) PPT, etc

	sampling and storage | Technical formats of video- PAL, NTSC | “Time Code” in Video Recording | Film Stock and Processing			

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2019-2020**
SUBJECT**: PRACTICAL FILM MAKING 1 (ONLY NON-FICTION FILM)**

LEARNING OBJECTIVE/S: To understand the film making process for multiple locations in non-fiction films
To understand the entire workflow
To gain exposure on various cameras and software used for production
The students will undergo the process of making a non-fiction film.
The students will be exposed to Semi-professional camera cameras & software. The students will also undergo same basic exercises such as 3 shot and 6 shot to give them a basic sense of framing, composition, movement and editing. The final project will be a non-fiction film with the duration of 5-10 minutes.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

NAME OF THE STAFF: **RAGUNANDAN BARVE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2019-2020**
SUBJECT**: INTRODUCTION TO DIRECTION FOR TELEVISION**

LEARNING OBJECTIVE/S: 1. Understanding of the process of Direction for Television
2. Theoretical framework and practical approach to Direction
3. Creating Ads for various categories

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Understanding Television Culture & Semiotics. Understanding Space & Time, Ideology, Aesthetics, Stylistics & Setting. Construction: mise-en-scene & technical codes -1 Writing For Television: Research, Ideation and Conceptualization, Understanding The IV Act Structure for TV, Elements of a TV Program Constructing a plot w.r.t a family tree for serials. Constructing Character biography Writing for Humour Popular Indian TV Discourse- eg.: Aahat (Horror), Daily Soap (any) & Tarak Mehta (comedy) Syntagmatic & Paradigmatic analysis Polysemy Popular TV Discourse- Friends	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

	Principles of Affinity & Contrast Director's Role in Television Inter-textuality & Role and Impression of Women Exploring Non-fiction Reality TV Exploring Non-fiction AD Filmmaking -1 Linear Motif in TV Creating content for TV- Directing for a Webisode			
Unit- II	The course aims to develop the sensibilities and sensitivities of the taught to comprehend the process of direction for television that entails understanding and analysis of different genres of television.	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- III	The learning includes understanding the television medium vis-à-vis the film, ideating, plotting and writing for different genres followed by inspecting the Director's role. Analysing the present day scenario. Experimenting by devising for short versions.	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- IV	The sessions could be designed to give a thorough understanding of both – theory as well as practical's. All lectures will be in the form of interactive sessions and it is expected that the	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

	student reads/watches television as directed before attending lectures.			

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2019-2020**
SUBJECT**: BASICS OF CINEMATOGRAPHY-2**

LEARNING OBJECTIVE/S: To understand the basic structure of film and digital camera | To enhance the basic knowledge about lighting and its use | To understand various equipment's required for various form of mood lighting | To understand basics of various digital cameras, lenses and digital cinematography | To learn the basics of special effects cinematography |To understand the needs of co-creators

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	– Structure of Film and Digital Camera: Understanding the internal structure of camera | perforation loop | pressure plate | Pull down claw | Magazine: Types of magazine | Threading of film | Intermittent Movement | Analysis of Claw motion | Registration pin | Sprocket wheel | Frames per sec | Camera Motors | Slow motion and Fast motion | Reverse Movement | Lens Mount Flange Depth | Magazine Cover/rain cover | Digital Process of Image capturing | Latitude of film Camera format | Latitude of digital	4	Textbooks: 1. Camera Terms and Concepts by David Elkins 2. The Camera Assistant by Doug Hart 3. Motion Picture Camera and Lighting Equipment by David Samuelson Reference Books: 1. Motion Picture Camera Techniques by David Samuelson 2. The 16mm Camera Book by Douglas Underdahl 3. The Hands On Manual for Cinematographers by David Samuelson 4. The Professional Lighting Handbook by Verne Carlson 5. The Filmmakers Pocket Reference by Blain Brown 6. American Cinematographer ASC Manual	Theory, project and assignments, Screenings (T.V.) PPT, etc

	format | Shooting Format-16-mm/35-mm/70-mm/super.16/I-max/3-D | Convenience of Digital format | The Future of Film Formats		7. The Zone System for Photographers by Carson Graves 8. Cinematography: Screen craft by Peter Ettedgui 9. Contemporary Cinematographers-On Their Art by Pauline Rodgers 10. Operating Cinematography for Film and Video by William Hines 11. Cinematography-A Guide for Filmmakers and Film Teachers by Kris Mankiewicz 12. Film Lighting: Talks with Hollywood's Cinematographers and Gaffers by Kris Malkiewicz 13. The Five C's of Cinematography: Motion Picture Filming Techniques by Joseph V. Mascali 14. The Art of the Cinematographer: A Survey and Interviews with Five Masters by Leonard Maltin 15. Anton Wilson's Cinema Workshop by Anton Wilson 16. Image Control-Motion Picture and Video Camera Filters and Lab Techniques by Gerald Hirschfeld 17. Lighting for Film and Electronic Cinematography by	
Unit- II	– Special Effects and Cinematography: Chrome key Concept | Preparation for chrome key | Compositing a digital Picture | Digital matte painting;	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- III	Mood Lighting & Colour Lighting Theory & Practice: Red, Blue, Green , Purple & Orange lights and Treatments for Various Scenes | Colour and Cultural;	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- IV	Image formation (Understanding requirements of a director): Understanding a Screenplay writing | Writing for visuals-STORY BOARDING | Capturing the drama on the camera | How to create packets of emotional experience-Scene | Creation of Drama-Ingredients of a Drama;	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

			John David Viera and Dave Viera 18. Painting with Light by John Alton 19. Picture Composition for Film and Television by Peter Ward 20. Matters of Light and Depth-Creating Memorable Images for Video, Film and Stills Through Lighting by Ross Lowell 21. Lighting Technology by Fitt and Thornley Set Lighting Technician's Handbook by Harry C. Box 22. Digital Cinematography by Ben De Leeuw 23. If It's Purple, Someone's Gonna Die: The Power Of Color In Visual Storytelling By Patti Bellantoni 24. High Definition Cinematography By Paul Wheeler	
Unit- V	– Understanding the needs of Co-creators (Director, Editor, Sound Recordist...) Working in team | Team Building | Conflict formation | Conflict Resolution	1		Theory, project and assignments, Screenings (T.V.) PPT, etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **UNDERSTANDING TV FORMATS & GENRES**

LEARNING OBJECTIVE/S: To understand how television programming works | To learn about TRPs and drama creation | To study the impact of niche programming | To learn about various genres of television programming

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Nature of drama in television: Various shows, formats and genres, telecast patterns, audience viewership performance	4	Textbooks: 1. Fundamentals of Film Directing By David K. Irving 2. Writing, Directing, and Producing Documentary Films and Videos By Alan Rosenthal 3. Breaking into Film by Kenna McHugh 4. Before You Shoot : A Guide to Low Budget Film and Video Production by Helen Garvey Reference Books: 1. Film Directing Cinematic Motion: A Workshop for Staging Scenes By Steven Douglas Katz 2. Film Directing Fundamentals: See Your Film Before Shooting By Nicholas T. Proferes 3. Problems Of Film Direction By Sergei Eisenstein	Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- II	– Creating Drama for TRPs: Building the story, herd culture existing in current times, breaking the barriers	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- III	Creating niche television programming: Importance of niche content, niche content channels, producing niche content in wake of DTH connections	4		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- IV	Differentiation of infotainment, edutainment, entertainment, lifestyle genres: Differentiation of genres, Specialty of different genres,	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

	popularity of genres, content on demand, Study of BBC & Discovery, Study of GECs			

NAME OF THE STAFF: **AMOL SULE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **CONCEPTS OF STORY BOARDING**

LEARNING OBJECTIVE/S: To understand the need for storyboarding | To learn the fundamentals of shoot taking and division | To understand various storyboarding techniques | To understand the importance of perspective and lighting while storyboarding

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	– Intro to Storyboarding/Visual Story telling & Storyboards: Origins of Story boards and aspect ratio	2	Text Books: 1. Exploring Storyboarding By Wendy Tumminello 2. The Art of the Storyboard: Storyboarding for Film, Tv, and Animation By John Hart 3. Directing the Story By Francis Glebes Reference Books: 1. Beginning Illustration And Storyboarding For Games By Les Pardew 2. Storyboards: Motion In Art By Mark Simon 3. From Word to Image: Storyboarding and the Filmmaking Process By Marcie Beg Leiter 4. Prepare to board! By Nancy Beiman 5. Storyboarding 101: A Crash	Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- II	Fundamentals of Shots: Terminology of Shoots, Camera Framing, Camera Angles and Movements	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- III	Storyboarding Techniques: · Concept- what the story is about, Drawing the components of the storyboard · Indicating motion in the storyboard, Increased reality- perspective and lighting	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- IV	Composition, Perspective & Lighting: Compositional	4		Theory, project and assignments, Drawing sheets, Adobe

	Elements, line-shape-contrast, creating meaning within image, Creation of depth through lens choice and linear, atmospheric and size perspective, High- Key Lighting, Low key Lighting, 3 point Lighting, Tonal quality of lighting.		Course in Professional Storyboarding By James O. Fraioli 6. Writing with pictures: how to write and illustrate children's books By Uri Shulevitz	illustration, Coral draw software, PPT, etc
Unit- V	Continuity: Basic Rules of continuity, 180 – Degree rule, screen direction, Cutaways & Cut-ins	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- VI	– Story Boards for Animations & Special Effects Films: Structure of animation films, Special effects breakdown, creating the environment	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc
Unit- VII	Story Boarding for Commercials and New Media: Structure of commercials, elements of brand building to be implemented, special colour scheme for brands and products	2		Theory, project and assignments, Drawing sheets, Adobe illustration, Coral draw software, PPT, etc

NAME OF THE STAFF: **CHANDRASHEKAHAR THAKRE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2019-2020**
SUBJECT**: GRAPHICS AND POST PRODUCTION (FLASH, EDITING SOFTWARE, AFTER EFFECTS)**

LEARNING OBJECTIVE/S: Basics of 2D animation, Vector and Raster Graphics, Basic Animation in Flash, Advanced editing
using Flash Elements in the film, Using After Effects, The interface of After Effects, Importing graphics and film, Keyframes, After effects and timeline, Animating using after effects, Compositing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Basics of 2D animation	4	-	Theory, project and assignments, After effects, Flash software PPT, etc
Unit- II	After Effects	4		Theory, project and assignments, After effects, Flash software PPT, etc
Unit- III	Basic Animation in Flash	4		Theory, project and assignments, After effects, Flash software PPT, etc
Unit- IV	Advanced editing	4		Theory, project and assignments, After effects, Flash software PPT, etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **III**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **TV PRODUCTION / AD FILM MAKING**

LEARNING OBJECTIVE/S: To introduce the process of 25 mins Television series making To understand the production pipeline of 25 mins Television series making process | To understand the entire workflow 25 mins Television series making process To gain exposure on various cameras and software used for production of 25 mins Television series making The students will undergo the process of 25 mins Television series. The students will be exposed to professional HD cameras & software and will work on projects ranging from 5Mins-25mins. The students will be exposed to the entire process of film making and the production workflow in television Series. The students can also work on an Ad film for about 60 seconds depending on the kind of TV series they are making.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **INTRODUCTION TO DIRECTION FOR FILM**

LEARNING OBJECTIVE/S: To understand the need for direction in films | To understand the role played by a director | To understand the Qualities required to be a director | To learn how to manage creativity and creative team | To learn about drama and continuity for films | To learn the details involve in the production of a feature films

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	ARTISTIC IDENTITY AND DRAMA: The World of the Film Director, Identifying Your Themes	2	Textbooks: 1. Film Directing Cinematic Motion: A Workshop for Staging Scenes By Steven Douglas Katz 2. Film Directing Fundamentals: See Your Film Before Shooting By Nicholas T. Proferes 3. Problems Of Film Direction By Sergei Eisenstein Reference Books: 1. Directing: Film Techniques and Aesthetics By Michael Rabiger 2. On directing film By David Mamet 3. Directing Actors: Creating Memorable Performances for Film and Television By Judith Weston	Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	SCREENCRAFT: A Director's Screen Grammar, Seeing with a Moviemaker's Eye, Shooting Projects	2		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	THE STORY AND ITS DEVELOPMENT: Recognizing the Superior Screenplay – How to create drama, Analysing a Screenplay, Director's Development Strategies, Alternative Story Sources, Setting Creative Limitations	2		Theory, project and assignments, Screening (TV) PPT, etc
Unit- IV	AESTHETICS AND AUTHORSHIP: Point of View, Subtext, Genre, and Archetypes, Time, Structure, and Plot, Space,	2		Theory, project and assignments, Screening (TV) PPT, etc

	Stylized Environments, and Performances, Form and Style		4. Art Direction for Film and Video By Robert L. Olson 5. The film director's team By Alain Silver, Elizabeth Ward 6. Notes of a film director By Sergei Eisenstein 7. Producing and Directing the Short Film and Video By Peter W. Rea, David K. Irving 8. Fundamentals of Film Directing By David K. Irving 9. Writing, Directing, and Producing Documentary Films and Videos By Alan Rosenthal 10. Breaking into Film by Kenna McHugh 11. Before You Shoot : A Guide to Low Budget Film and Video Production by Helen Garvey	
Unit- V	PRODUCTION: Developing a Crew, Mise-en-Scene, Producing a Shooting Script, Before the Camera Rolls, Roll Camera, Location Sound, Continuity, Directing the Actors, Directing the Crew, Monitoring Progress	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- VI	ORGANIZING ACTION IN AN ACTION SCENE: Staging and Camera for Over Easy Action Scene, Development of Screenplay, Director’s Preparation for Directing an Action Scene, Over Easy Action Scene/Staging and Camera Angles for - Storyboard Artist	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- VII	– ORGANIZING ACTION IN A NARRATIVE SCENE: Staging and Camera for Narrative Scene, Choosing a Location, Staging, Camera Style	3		Theory, project and assignments, Screening (TV) PPT, etc
Unit- VIII	Styles And Dramatic Structures: Style, Narrative, Dramatic, and Poetic Visual Styles, The Variety of Dramatic Structures,	2		Theory, project and assignments, Screening (TV) PPT, etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **BASICS OF VISUAL COMMUNICATION**

LEARNING OBJECTIVE/S: Aesthetics, Perception, Representation, Visual Rhetoric, Cognition, Semiotics, Reception
Theory, Narrative, Media Aesthetics, Ethics, Visual Literacy, Cultural Studies.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Aesthetics, Perception, Representation	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	Visual Rhetoric, Cognition, Semiotics, Reception	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	Theory, Narrative, Media Aesthetics	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit-IV	Ethics, Visual Literacy, Cultural Studies	4		Theory, project and assignments, Screening (TV) PPT, etc

NAME OF THE STAFF: **NIKITA GOYAL**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **CONVERGENCE AND BASICS OF WEB DESIGNING**

LEARNING OBJECTIVE/S: Convergence and Basics of Web Designing
Concept of Convergence, Internet Key Terms, New Media. Web Designing, HTML programming,
Basic Java Script, Designing your own website, uploading the website, links and navigation

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Convergence and Basics of Web Designing	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	Concept of Convergence, Internet Key Terms, New Media.	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	HTML programming,	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- IV	Basic Java Script, Designing your own website, uploading the website, links and navigation	4		Theory, project and assignments, Screening (TV) PPT, etc

NAME OF THE STAFF: **CHANDRASHEKAHAR THAKRE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **CONCEPTS OF POST PRODUCTION & COMPUTER GRAPHICS (INCLUDING VFX)**

LEARNING OBJECTIVE/S: To understand the basics of visual effects | To understand the basic process of visual effects |
To learn about GUI
and CG | To understand the basics of 3D and creating real world in the digital world | To learn about compositing and camera tracking | To understand the process of vfx and final rendering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Introduction to pre-production, production and post-production: Visual effects' a relatively new term describes what used to be more appropriately called 'special photographic effects'. What makes an effect 'special'? The decision as to which medium and format VFX elements are going to be shot with is directly dependent on how they shall be employed and what the specifications are for their final resting place. Methods of creating visual effects, Implementation	4		Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- II	Introduction to the User Interface (GUI): Introduction to 3D Space and the GUI, Introduction to Modeling, Introduction to Polygonal Box Modeling,			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc

	Introduction to Shell Modeling			
Unit- III	CG Basics: Animation Basics, Animation Hierarchies and Deformation, Joints Hierarchies and Constraints, Cameras, Rendering and Path Animation | Understanding Pipeline and integration: Digital image manipulation, 2D digital image manipulation, Compositing software, New life into old methods, Perfecting the illusion, 3D computer-generated imaging (CGI), Digitizing (getting information into the computer)			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- IV	Introduction to Lighting and Rendering: Light Properties, Defining Shadows, Defining Highlights and Specular, Diffuse Inter-reflection and Global Illumination, Render Layers, Rendering Engines and methods			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- V	Introduction to Compositing: Camera Staging and Composition, Renderers and Algorithms Benefits/Disadvantages, Rendering Passes, Introduction to Specific Compositing Software, Compositing 3D			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- VI	Study of VFX and Camera Tracking: Overview of			Theory, project and assignments,

	Production Pipelines, Rendering Utility Nodes, Camera Tracking Foundation 2D and 3D			Screening (TV) PPT, Software and Computer etc
Unit- VII	Introduction to FX (Effects): Overview of Dynamics, Rigid Body and Fluids, Introduction to Particles, Expressions, Introduction to Fields, Project Work			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc
Unit- VII	Compositing and Rendering: The Interface, Keying, Rotoscoping, Color Correction, Keying, Multi-Pass Compositing			Theory, project and assignments, Screening (TV) PPT, Software and Computer etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **DRAMA PRODUCTION**

LEARNING OBJECTIVE/S: The module is intended to provide an introduction to the process of digital short film
production for the purpose of making works of drama and fiction. The focus will therefore be on enabling the development of the practical and theoretical skills in pitching, planning, writing,
shooting and editing necessary to produce a coherent and competent fictional moving image project.

The module will seek to introduce the student to a range of creative and scheduling skills which will assist them in the production of their projects. It will foreground the inherently collaborative and collective aspects of the production process by aiding the student to refine a range of communication and inter-personal skills to accomplish a broad range of tasks, including identification and planning of a suitable production idea; Allocation of roles for the pre-production, shooting and editing phases, as well as encouraging collective responsibility and accountability which is absolutely essential to the completion of any professional or team production. The module will also build upon the more technical grounding offered in Techniques 2 in order to develop the practical vocabulary and skills required to produce moving
image projects. Students will be encouraged to investigate and undertake a role throughout their productions. In crews, they will produce two shorts for inclusion in their personal practice portfolio.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Introduction to the process of digital short film	4	Textbook Rabinger, M (2007) Directing: Film Techniques and Aesthetics, 4th Edition, Hoboken, Taylor and Francis Jones, C. and Jollige, G. (2000), The Guerilla Film Makers Handbook: London: Continuum Reference Books Catliff, S & Granville J. (2013) The Casting	Theory, project and assignments, Screening (TV) PPT, etc
Unit- II	Making works of drama and fiction	4		Theory, project and assignments, Screening (TV) PPT, etc
Unit- III	Enabling the development of the practical and theoretical skills in pitching, planning, writing,	4		Theory, project and assignments, Screening (TV) PPT, etc

Unit- IV	Shooting and editing necessary to produce a coherent and competent fictional moving image project.	4	Handbook: For Film and Theatre Makers, UK, Routledge Cartwright, S. (2012) Pre-Production planning for Video, Film and Multimedia, Hoboken, Taylor and Francis Field, S. (2005) Screenplay: The foundations of Screenwriting, New York, Delta Landry. P (2012) Scheduling and Budgeting your Film, Focal Press La Motte, R (2010) Costume Design 101: 2nd Edition: The Business and Art of Creating Costumes for Film and Television, Michael Wiese Productions Murch, W (2001) In the Blink of an Eye: A Perspective on Film Editing, Silman James Press Potter, C. (2001) Screen Language from Film Writing to Film Making: London Methuen	Theory, project and assignments, Screening (TV) PPT, etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **S.Y.B.A.**
SEMESTER: **IV**
ACADEMIC YEAR: **2019-2020**
SUBJECT: **INTERMEDIATE PRACTICAL FILM MAKING (AD AND SHORT FICTION FILM)**

LEARNING OBJECTIVE/S: To understand the production pipeline of film making process in advertisement film making | To introduce the process of Advertisement Film (product as well as PSU) Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film making | To understand the entire workflow in Advertisement Film (product as well as PSU) Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film | To gain exposure on various cameras and software used for production of Advertisement Film (product as well as PSU) Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film The students will undergo the process of Advertisement Film (product as well as PSU), Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film. The students will be exposed to professional HD cameras & software and will work on projects ranging from 30Seconds-15mins. The students will be exposed to the entire process of film making and the production workflow in Advertisement and Multiple Character multiple location Short Film production.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

DEPARTMENT OF FILM, TELEVISION AND NEW MEDIA PRODUCTION
5.3. TEACHING PLAN (UNIT PLAN) 2018-19

NAME OF THE STAFF: **ANERI THAKAR**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2018-2019**
SUBJECT: **EFFECTIVE COMMUNICATION SKILLS**

LEARNING OBJECTIVE/S: To prepare students in the production aspects of Film Television & New Media, as required by the present media environment all across globe. To empower the students in the production and managerial aspects of the media business with due emphasis on latest production techniques, along with marketing and branding management of various media products and associated services. To develop creative temperament and mindset needed in the content production segment of media industry. To provide an active industry interface by way of co-learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Fundamentals of Communication: Developing reading & writing skills (Marathi, Hindi and English), Editing & Summarizing (Marathi, Hindi and English), Oral Communication (Marathi, Hindi and English)	3	Textbooks: 1. Crucial Conversations: Tools for Talking When Stakes are High , by Kerry Patterson. 2. Presenting to Win: The Art of Telling Your Story, by Jerry Weissman. Reference Books: 1. Verbal Judo: The Gentle Art of Persuasion, by George J. Thompson. 2. Write to the Top: Writing for Corporate Success,	Theory, project and assignments PPT etc
Unit- II	Enhanced Communication Skills Development: Enhancing communication skills – verbal, Enhancing communication skills - non-verbal, Body type- posture- body language reading, Analysing body language signals and meanings	3		Theory, project and assignments PPT etc
Unit- III	Psychology of communication:	3		Theory, project and

	Gestures- expressions - facial language, eye contact, shake hands, sitting posture, Maintaining comfort distance from people, mirroring, Dressing sense, corporate dressing, formal, semi formal, casual, dressing for various occasions & events, Understanding personalities - auditory / visuals / kinesthetic, eye movement, facial expressions, emotions, smile		by Deborah Dumaine.	assignments PPT etc
Unit- IV	Personality Development: Verbal communication, voice training, speech, clarity, grammar speed, volume, enunciation, pronunciation, ends of sentences, humour, pauses, Stress management, breathing pattern, mind psyching, right attitude, understanding your limitations and strengths, Table manners & etiquettes correct use of spoon knife, etc, Choosing the right accessories i.e shoes, handbags, jewellery, etc.	3		Theory, project and assignments PPT etc

NAME OF THE STAFF: **SAMEER RANE and DEEPAK RAJADHYAAKSH**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2018-2019**
SUBJECT: **INTRODUCTION TO HISTORY OF ART/ STORYTELLING THROUGH OTHER FORMS OF ART**

LEARNING OBJECTIVE/S: To understand the basics and genres of Music, dance and theatre.
To learn the basics of various acting schools and the art of drama.
To learn the evolution of visual techniques from painting to cinema.
To learn the basic relationship between music and dance in relation to Film making.
Students should be exposed to the canonical text of Natya shastra from where all the traditional performing arts have emerged.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Music : Genres of Music, Introduction to Contemporary Music (Hindi, Regional & POP), Music Directors & Composers, Use of Folk music in Indian Cinema	3	Textbooks: 1) Natya Shastra by Bharata Muni. 2) Melodrama and Popular Culture: Ira Bhaskar. 3) History of Art – Bernard.S. Myers, Trawin Copplestone. 4) Framing Film- Cinema and the Visual Arts, EDITED BY STEVEN ALLEN AND LAURA HUBNER. Reference Books: 1. Dancing: The Pleasure, Power, and Art of Movement; by Gerald Jonas. Harry N. Abrams in association with	Theory, project and assignments PPT etc
Unit- II	Genres of Dance – Understanding storytelling through Folk Dance & Contemporary Dance, Role of Dance in Hindi Cinema	3		Theory, project and assignments PPT etc
Unit- III	The development of theatre, Acting Schools, Make-up, Managing Play, Study of one English and one Hindi or regional play. Influence of theatre on cinema.	3		Theory, project and assignments PPT etc
Unit- IV	1. European Paintings and Painters- A brief overview starting from the renaissance to modern painters. Idea of Perspective coming into painting and changing	3		Theory, project and assignments PPT etc

	the way we perceive the world 2. Indian Paintings & Painters- A look at the rich historical tradition of Indian PaintingsMiniature Paintings to Modern Painters. Difference between the formal aspects of Painting & Cinema. Exploring the idea of time and space in painting in relation to cinema 3. Important Movements- Analysing the important movements that have taken place in postcolonial India in painting to the contemporary scenario.		Thirteen/WNET 1992. 2. History of Dance: An Interactive Arts Approach; by Gayle Kassing.	

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2018-2019**
SUBJECT: **INITIATION TO LITERATURE & CREATIVE WRITING**

LEARNING OBJECTIVE/S: To introduce basic tenets of Indian literature including regional literature
To introduce and appreciate various forms of literature (Novel, Poetry, Drama, Essay)
To help build skills for creative writing
To help understand the structure of Story, poetry and drama
To introduce writing for internet

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Introduction to Indian Writers – Hindi/Marathi/Urdu & other regional languages: History of Indian literature, prominent writes, important works, cultural significance.	3	Textbooks: 1.) A Concise History of Indian Literature in English by Arvind Mehrotra. 2) The Creative Writing Course book: Forty Authors Share Advice and Exercises for Fiction and Poetry. 3) Creative Writing By Adele Ramet. 4) Creative Writing for People Who Can't Not Write By Kathryn Lindskoog. Reference Books: 1. Creative Writing: A Workbook with Readings By Linda Anderson. 2. Teaching Creative Writing By Graeme Harper. 3. The Everything Creative Writing	Theory, project and assignments PPT etc
Unit- II	A Brief Introduction to Creative Writing: What is creative writing, various forms of writing, various form of writing styles, how to build creative writing skills.	3		Theory, project and assignments PPT etc
Unit- III	Formal structure of the short story: Various forms of writing styles, Genres of story, how to develop an engaging idea, Prominent writers, Pick your style.	3		Theory, project and assignments PPT etc
Unit- IV	Formal aspects of Poetry: Elements of poetry, types of Poetry, Difference between various styles, Famous poets and their works, Study of the Epic Ballad - Mahabharata.	3		Theory, project and assignments PPT etc

			Book By Wendy Burt-Thomas. 4. The Soul of Creative Writing By Richard Goodman, Goodman, Chong.	
Unit- V	Formal aspects of Drama: Structure of drama, one act-two act-three act play, Characterization, Freytag's triangle, Subject specific drama	3		Theory, project and assignments PPT etc
Unit- VI	Writing for the internet: How internet writing is different from conventional writing, Blogging, Reputation management, Development of Blogs, writing for social media, writing for SEO & SMO	3		Theory, project and assignments PPT etc

NAME OF THE STAFF: **ARVIND PARULEKAR**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2018-2019**
SUBJECT: **BASICS OF PHOTOGRAPHY**

LEARNING OBJECTIVE/S: To learn the basics of art of Photography.
To understand the basic intricacies involved in taking a photograph.
To understand what makes a good picture.
To develop basic photographic sense and knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Development of Photography over the years: Brief History of Photography, early photography methods, switch from film to digital, difference between film and digital photography, formats of images in digital.	3	Textbooks: 1. The Art of Photography; by Bruce Barnbaum. 2. Creative Nature & Outdoor Photography; Brenda Tharp. 3. Chasing the Light by Ibarionex Perello. Reference Books: 1. The Camera by Larry Hills. 2. The Creative Black Book. 3. The Print by Ansel Adams, Robert Baker. 4. 500 poses for Photographing Women by Michelle Perkins. 5. Creative Landscapes: Digital Photography Tips & Techniques by Author: Davis, Harold.	Theory, Practical project and assignments PPT etc
Unit- II	Cameras & Techniques: Types of camera, film cameras V/S digital cameras, lenses and their importance, Story Design and Development, Laws of Composition, Gestalt Law and Visual Perception, Semiotic photography.	3		Theory, Practical project and assignments PPT etc
Unit- III	Lighting - Theory & practice: Sources of Lighting, 2 point lighting, 3 point lighting, creating contrast, outdoor natural lighting, related accessories for lighting.	3		Theory, Practical project and assignments PPT etc
Unit- IV	Post production of Photos, Digital Image Editing – Photoshop: Processing of Raw images, Introduction to	3		Theory, Practical project and

	Adobe Photoshop and image ready software, how to enhance the photo digitally.			assignments PPT etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2018-2019**
SUBJECT: **FILM APPRECIATION – GENRES**

LEARNING OBJECTIVE/S: What is cinema, Film theory – form and function, Film analysis, Auteur Theory,
effect of auteur, Contributions of D W, Griffith, Alfred Hitchcock, Jean Du Godard, Digital Aesthetics, Music and choreography, film genre.
Cinema and society, History of Cinema, Hollywood cinema, early cinema and film form
the studio system, rise and decline of the studio system.
Indian Cinema
History of Indian cinema, history of regional cinema, legends of Indian cinema, Hindi film industry, the Hindi film industry, music and choreography in Indian cinema, contemporary cinema

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	What is cinema, Film theory – form and function, Film analysis, Auteur Theory, effect of auteur, Contributions of D W, Griffith, Alfred Hitchcock, Jean Du Godard	3	Textbooks : 1) The Oxford History of World Cinema. 2) The Cinematic ImagiNation : Indian Popular Films as Social History by Jyotika Virdi. 3) History of Indian Cinema by Renu Saran.	Theory, project and assignments PPT etc
Unit- II	Music and choreography, film genre. Cinema and society, History of Cinema, Hollywood cinema, early cinema and film form the studio system, rise and decline of the studio system.	3		Theory, project and assignments PPT etc
Unit- III	History of Indian cinema, history of regional cinema, legends of Indian cinema, Hindi film	3		Theory, project and assignments PPT etc

	industry, the Hindi film industry			
Unit- IV	music and choreography in Indian cinema, contemporary cinema	3		Theory, project and assignments PPT etc

NAME OF THE STAFF: **CHANDRASHEKHAR THAKRE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2018-2019**
SUBJECT: **GRAPHIC DESIGNING (PHOTOSHOP, ILLUSTRATOR, ETC.)**

LEARNING OBJECTIVE/S: The learners are exposed to the industry of graphic design. The domain of skills and tools is largely devoted to learning graphic reproduction methods using both modern, that is electronic,
as well as old school techniques. These inputs enable learners to solve simple problems of visual communication related to corporate identity or social communication. Learners use software like Adobe Photoshop and Adobe Illustrator.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	COLOUR THEORY : Colour psychology, Colour schemes, Colour wheel, Colour combination, Hue.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- II	PERSPECTIVE STUDY : 1-point perspective, 2-point perspective, 3-point perspective, Mixed perspective.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- III	STILL LIFE : Sketching & rendering, Light study, Photography.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- IV	TEXTURE STUDY : Texture creation, mixed media, Water/Pastel painting.	1		Theory, Software (Adobe illustration, photoshop) project and assignments

				PPT etc
Unit- V	PORTRAIT PAINTING : Portrait Caricature, Cartoon.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit-VI	PHOTOSHOP : Basic tools in Photoshop, Photo editing, Colour correction.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- VII	ILLUSTRATOR : Basic tools in Illustrator, Vector graphics, Graphics design.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- VIII	COMIC BOOKS : Understanding storyboards, Styles of contemporary comics, Colour tones.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- IX	COMPOSITION : Basic composition skills, Rule of thirds, Understanding of subject and its relation to light and depth of field, Application in comic books.	1		Theory, Software (Adobe illustration, photoshop) project and assignments PPT etc
Unit- X	TYPOGRAPHY : Understanding of typos & fonts, Application of	1		Theory, Software (Adobe illustration, photoshop)

	appropriate typos on art works.			project and assignments PPT etc

NAME OF THE STAFF: **JAYANT JATHAR**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **I**
ACADEMIC YEAR: **2018-2019**
SUBJECT: **BASICS OF POST PRODUCTION**

LEARNING OBJECTIVE/S: An editor's job is to decide, 24/25/30 times a second, where the audience needs to be. Do we
stay in a shot or transition to another, and if so, what shot and how do we get there? Working side-by-side with the director to craft the movie that ultimately hits the screen – or your phone – editing is really about manipulating the audience, in the best possible way, all in the service of storytelling.
In this class, we will study terminology and concepts, learning both the rules and how to break them, as we look at the aesthetics choices and the technological workflow for both picture and sound editing. We will examine the historical role of editing, from the earliest silent film through the digital revolution that has transformed moviemaking today.
INTRO TO EDITING THEORY
Introduction to the history of film editing. Lumiere Brothers, Thomas Edison, Edwin Porter, DW Griffith); the manipulation of editing; Lev Kuleshov's experiment; the language of cinema;
introduction to the editor as storyteller and understanding the narrative structure.
INTRO TO PREMIERE PRO
Screening of Examples. The Premiere Pro interface features and functions, how to import and organize footage, basic editing techniques
EDITING EXERCISE
Watch the work of a Master Editor, Basic Production techniques, Practicing/Reviewing skills
PROJECT: Interview and Film a classmate telling a story for 10 minutes or talking about something they're excited about. Edit together a two minute version of this.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Effective Editing Bird's-eye view of the modern process of editing, Setting Up for Editing Efficient editing habits to work faster, Thinking creatively. Efficient workflow, Configure factory-standard systems, Optimal media management from ingest through to	4	Grammar of the Edit Roy Thompson, Christopher J. Bowen SUGGESTED TEXTS: Film Art: An Introduction, David Bordwell and Kristin Thompson The Invisible Cut: How Editors Make Movie Magic, Bobbie O'Steen	Theory, Software (Adobe Premiere pro) project and assignments PPT etc

	final output. Non Linear Editing Concepts Interface of NLE system, The Three-Point Edit, Additional Edits		Cut By Cut: Editing Your Film or Video, Gael Chandler In the Blink of an Eye: A Perspective on Film Editing, Walter Murch The History of Film Editing, Karel Reisz, Gavin Miller On Film Editing, Edward Dmytrk Film Editing: Great Cuts Every Filmmaker Should Know, Gael Chandler First Cut: Conversations with Film Editors, Gabriella Oldham	
Unit- II	Working in the Timeline, Transitions, Keyframing, Filters, Ingesting	4		Theory, Software (Adobe Premiere pro) project and assignments PPT etc
Unit- III	Compositing, Color Correction, Audio, Titling, Review and Look Forward	4		Theory, Software (Adobe Premiere pro) project and assignments PPT etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2018-2019**
SUBJECT: **HISTORY OF NON- FICTION FILM**

LEARNING OBJECTIVE/S: This course explores the history and theory of non-fiction film and video, with an emphasis on
work that falls under the rubric of "documentary."
Documentary is a unique form of non-fiction moving image media that claims a special relationship to reality and truth. Through screenings, readings and class discussion, we will explore such questions as:
• How does documentary relate to narrative fiction filmmaking? To other non-fiction forms of television like reality TV or news reports?
• How "real" are documentary representations, and how much does it matter?
• What are some different formal approaches documentary, and how does each mediate the representation of real life it offers?
• How has documentary image-making changed over time? What can we learn from this history that is relevant to media-making today?
• What are the particular ethics of representing others in a medium like video or film?
• What responsibility do documentarians have to their subjects, to the form, and to society at large?
• How do people watch documentaries, and what is the impact of these films on the world they aim to represent?
Be familiar with efforts to create more democratic systems of media production and distribution.
Learn how to watch earlier films both as an audience THEN (with understanding of the film's social, cultural, historical context), and NOW (with understanding of your own future goals and
with critical, analytical eyes to study history).
Be able to think – and write — critically about non-fiction media.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Screen and analyze a wide range of documentaries, exploring the genre as narrative, journalism, propaganda, rhetoric, activism, diary, art, archive, and entertainment. Course Objectives	4	The texts for this class Documentary: A History of the Non-Fiction Film (2nd Edition) by Erik Barnouw (available at Shakespeare and Co) and Crafting Truth: Documentary Form and	Theory, project and assignments, Screenings (T.V.) PPT etc

	By the end of the semester, you should: Be familiar with key periods in the history of non-fiction film and video from 1895 to the present. Be able to recognize and write about various forms and conventions of documentary storytelling, including the basic grammar of documentary moving images.		Meaning, by Louise Spence and Vinicius Navarro (available at Shakespeare and Co.). Additional readings will be available through e-res. As some readings will be accessed electronically, please bring either a printed version of the article (preferred) OR a digital version of the article to class.	
	Explore central questions surrounding the representation of reality and truth, including voice, authority, evidence and point of view. Explore key issues in the ethics of documentary representation, including maker-subject relationships, informed consent, fairness, and evidence.	4		Theory, project and assignments, Screenings (T.V.) PPT etc
2	Be familiar with efforts to create more democratic systems of media production and distribution. Learn how to watch earlier films both as an audience THEN (with	4		Theory, project and assignments, Screenings (T.V.) PPT etc

	understanding of the film's social, cultural, historical context), and NOW (with understanding of your own future goals and with critical, analytical eyes to study history).			
3	Be able to think – and write — critically about non-fiction media.			Theory, project and assignments, Screenings (T.V.) PPT etc

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2018-2019**
SUBJECT: **WRITING FOR VISUAL MEDIA**

LEARNING OBJECTIVE/S: To understand the basic structure of screenplay
To introduce to the basic skills for screen writing
To understand the intricacies of screen writing
To learn the build characters and write meaning full dialogues

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Preparing to Think Visually: Diving In to the Screenwriter's Mind, Approaching Screenwriting as a Craft, Breaking Down the Elements of a Story, Unpacking Your Idea	3	Textbooks: 1. How not to write a screenplay: 101 common mistakes most screenwriters make by Denny Martin Flinn 2. Screen Adaptation: A Scriptwriting Handbook by Kenneth Portnoy 3. Screenplay: The Foundations Of Screenwriting By Syd Field Reference Books: 1. The Screenwriter's Bible By David Trottier 2. The Bare Bones Book of Screenwriting: The Definitive Beginner's Guide to ... By J. T. Clark 3. Screenwriting for a Global Market: Selling Your Scripts from Hollywood to ... By Andrew Horton	Theory, project and assignments, PPT etc
Unit- II	Structure of Story & Screenplay: Plot Part I: Beginnings, Plot Part II: Middles, Plot Part III: Endings	3		Theory, project and assignments, PPT etc
Unit- III	Dynamics of Characterization: Character Building, Constructing Dynamic Dialogues, Non – traditional Film	3		Theory, project and assignments, PPT etc
Unit- IV	Finalizing the Script: Maintaining an Audience's Trust, Turning Your Story into a Script, Take Two: Rewriting Your Script, Adaptation and Collaboration: Two	3		Theory, project and assignments, PPT etc

	Alternate Ways to Work		4. Screenwriting For Dummies By Laura Schellhardt 5. Screenwriting: The Sequence Approach By Paul Joseph Gulino 6. The Tools of Screenwriting By David Howard, Edward Mabley 7. The Art of Screenwriting: An A to Z Guide to Writing a Successful Screenplay By William Packard 8. Writing the Character-Centered Screenplay By Andrew Horton	

NAME OF THE STAFF: **ABHIJEET DEO**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2018-2019**
SUBJECT: **IMPORTANCE OF SOUND AND SOUND SFX**

LEARNING OBJECTIVE/S: To learn about the basic of sound |To understand the nature of sound and recording devices |
To learn the basics of sync sound, mixing console, analog v/s digital workflow | To understand the need for sound and importance of sound in film | To learn to record a song

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Basics of Sound: Nature of acoustical waves; concepts of amplitude and frequency -wavelength and harmonics. Psycho-acoustics: Nature of hearing and perception of sound, including concepts of pitch, loudness, and timbre; the precedence effect; localization in rooms; equal loudness contours; and other mysteries of hearing. Principles of Stereophony	2	Textbooks: 1. Pro Tools 9: Music Production, Recording, Editing and Mixing By Mike Collins 2. Pro Tools All-in-One Desk Reference For Dummies By Jeff Strong 3. Sound for Film and Television By Tomlinson Holman Reference Books: 1. Sound For Digital Video By Tomlinson Holman 2. Producing for TV And Video: A Real-world Approach By Cathrine Kellison 3. Sound for picture: an inside look at audio production for film and television By Jeff Forlenza, Terri Stone 4. Audio in Media By Stanley R. Alten 5. Master Handbook of	Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- II	Sound for Film and Video: The sound track – its importance in an AV medium, Different elements of a sound track, Explanation of how sound is put to the film	2		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc

Unit- III	Sync Sound: The size of the role sound should play in your film will vary depending on your professor's requests, but when it comes to the technical side of things, you are at least required to know how to achieve synchronized sound and picture with film. Interconnectivity of Analog & Digital Equipment: Basic analog connectors, cabling, patch – bay, interconnectivity between various recording studio equipment. Various Digital interconnects and their sockets on the digital equipment. Microphones Types: Dynamic, Condenser, Ribbon, Polar Pattern, Sensitivity. Microphone designs for special applications Acoustics I (Fundamentals): The behavior of sound in outdoors and in closed spaces; Absorption, reflection, diffraction, refraction, reverberation.	2	AcousticsByF.Alton Everest 6. Modern Recording Techniques By David Miles Huber 7. Mastering Audio By Bob Katz 8. Mixing Audio By Roey Izhaki 9. Practical Recording Techniques By Jenny Bartlett 10. Critical Listening Skills for Audio Professionals By F.Alton Everest 11. The Audible Past By Jonathan Sterne	Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc

Unit- IV	The signal flow and various auxiliary systems. Digital Audio: Analog to Digital to Analog conversion. Sampling Frequency, Bit Rates. Problems in digital audio. Different digital media, Standard digital recording & mastering formats. Audio file formats, storage mediums – optical, magnetic, Jitter etc. Computers in Audio: Different platforms – different operating systems, Configuration of a PC for sound recording. Mother Boards, Processor, Sound Card, Graphic card, Monitors Recorders: Analog, Digital, Tape Based & Tapeless. Digital Audio Workstations (DAW's)	3		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- V	– Film Showcase: Case studies of famous Indian as well as foreign films	2		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- VI	Microphone Techniques: Placement, Applications, Proximity effects	2		Theory, project and assignments, Screenings (T.V.) PPT, Protool and

	etc. microphones and placement techniques for stereo recording. Monitoring Systems: Active & Passive types, Domestic and professional listening environment, Stereo and surround monitoring.			Audacity software etc
Unit- VII	The Production Process of a Song: Music Basics. – Types of Music, Concepts of Melody, Harmony, Rhythm & counter melody etc. Format of a song. Preproduction, Tracking, Overdubbing, Editing, Mixing and Mastering. Processors: Theory of Tonal, Dynamic & Spatial processors. Equalizers – types and their application, Compressors & Limiters - theory and application, Effects processors - Reverberation and Delay devices and their plug in counterparts.	3		Theory, project and assignments, Screenings (T.V.) PPT, Protool and Audacity software etc
Unit- VIII	Location sound , Radio mics - uses and potential	3		Theory, project and assignments, Screenings

	difficulties. Boom operation for sync sound, Hands-on training in location sound recording for video. Nuendo Basic: Basic principles, understanding the process from initial set up to completion of a project. To set up for a vocal/instruments dub. Hands-on training - You will share a Nuendo workstation during the class. Principles of Mixing: The basic techniques of mixing and the fundamental approach. The Building Blocks of Mixing Setting the sound stage, and the sonic implications of panning and of placing instruments at varying distances from the listener; Consideration of different approaches to getting desired results from EQ; A comprehensive review of the uses of dynamic processor; on Individual channels and Mix master. Finishing a mix with automation.			(T.V.) PPT, Protool and Audacity software etc

	"Mixing in the box." And “Mixing through the board.” Production of the Sound Track for the student project film: Discussing sound design strategy with the director of the film at pre production stage. Attending film sync shoots. Video File formats, Acquiring picture for post production from edit suite. Dubbing the dialogues wherever necessary, Selecting SFX and BG music from the library, recording Foley and music as per the demand of the script. Mixing the final track. Export it to the editor, supervise the final assembly of the film.			

NAME OF THE STAFF: **PRAMOD PATHAK**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2018-2019**
SUBJECT: **BASICS OF CINEMATOGRAPHY-1**

LEARNING OBJECTIVE/S: To understand the importance of cinematography in film making | To enhance the basic knowledge about lighting and its use | To understand various equipment's required for various form of lighting | To understand the basics of various camera, lenses and digital cinematography

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- I	Power of a Picture: Power of a still picture | Shooting a good Still picture | Composition-Framing | Understanding & Use of color | Capturing the Drama | Black and white Photography;	4	Textbooks: 1. Camera Terms and Concepts by David Elkins 2. The Camera Assistant by Doug Hart 3. Motion Picture Camera and Lighting Equipment by David Samuelson Reference Books: 1. Motion Picture Camera Techniques by David Samuelson 2. The 16mm Camera Book by Douglas Underdahl 3. The Hands On Manual for Cinematographers by David Samuelson 4. The Professional Lighting Handbook by Verne Carlson 5. The Filmmakers Pocket Reference by Blain Brown	Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- II	Light: Role of light | Lighting techniques | Concept of lighting various planes | Understanding Various types: Tungsten lamps, Cool Lights, HMI, Cyclorama/background lights, Soft Box lights. | Use of cutter stand, black cloth and Camera filters | barn doors | use of reflectors | Three point lighting | Ratio lighting: 1:2, 1:3, 1:4 | Creating various Background patterns and types | Lighting – Situations | Studio lighting for three cameras set up: Talk Show, Game Show	4		Theory, project and assignments, Screenings (T.V.) PPT, etc

	| Available day light situations | Shooting for Documentary style | Face lighting. Key, fill, back light | Depth of field Exercise | High key lighting | Low key lighting;		6. American Cinematographer ASC Manual 47. The Zone System for Photographers by Carson Graves 8. Cinematography: Screen craft by Peter Ettedgui 9. Contemporary Cinematographers-On Their Art by Pauline Rodgers 10. Operating Cinematography for Film and Video by William Hines 11. Cinematography-A Guide for Filmmakers and Film Teachers by Kris Mankiewicz 12. Film Lighting: Talks with Hollywood's Cinematographers and Gaffers by Kris Malkiewicz 13. The Five C's of Cinematography: Motion Picture Filming Techniques by Joseph V. Mascali 14. The Art of the Cinematographer: A Survey and Interviews with Five Masters by Leonard Maltin 15. Anton Wilson's Cinema Workshop by Anton Wilson 16. Image Control-Motion Picture and Video Camera Filters and Lab	
Unit- III	–Lenses: Type of Lenses | Power of Lenses | Understanding the shot requirement and usage of a lens | Idea of perspective: Depth Of Field, Depth of focus, Critical understanding of Fixed Lens Vs. Zoom Lens | Focus pulling | 18% grey card | Metering | Color temperature meter;	3		Theory, project and assignments, Screenings (T.V.) PPT, etc
Unit- IV	Movements: Basic grammar of shots | Primary Camera Movement: Pan, Tilt, Zoom, Character Movement | Usage and need of Track and trolly, Crane, jimy gip, Poll Cam | Managing Movements | Single camera Setup | Multi camera setup | Continuity Exercise | Do’s and don’ts of camera movements | Aesthetics and Psychological Impact of Moving Images | Various parts of Motion picture cameras | Moving Image-Motion Picture | Impact of collective moving	3		Theory, project and assignments, Screenings (T.V.) PPT, etc

	Images | Motion Picture Dynamics;		Techniques by Gerald Hirschfeld 17. Lighting for Film and Electronic Cinematography by John David Viera and Dave Viera 18. Painting with Light by John Alton 19. Picture Composition for Film and Television by Peter Ward 20. Matters of Light and Depth-Creating Memorable Images for Video, Film and Stills Through Lighting by Ross Lowell 21. Lighting Technology by Fitt and Thornley Set Lighting Technician's Handbook by Harry C. Box 22. Digital Cinematography by Ben De Leeuw 23. If It's Purple, Someone's Gonna Die: The Power Of Color In Visual Storytelling By Patti Bellantoni 24. High Definition Cinematography By Paul Wheeler	
Unit- V	Understanding digital video recording Principle of video recording | Digital Recording Formats | Editing and compression | Digital sampling and storage | Technical formats of			Theory, project and assignments, Screenings (T.V.) PPT, etc

	video- PAL, NTSC | “Time Code” in Video Recording | Film Stock and Processing			

NAME OF THE STAFF: **SAMEER RANE**
DEPARTMENT: **FTNMP**
CLASS: **F.Y.B.A.**
SEMESTER: **II**
ACADEMIC YEAR: **2018-2019**
SUBJECT**: PRACTICAL FILM MAKING 1 (ONLY NON-FICTION FILM)**

LEARNING OBJECTIVE/S: To understand the film making process for multiple locations in non-fiction films
To understand the entire workflow
To gain exposure on various cameras and software used for production
The students will undergo the process of making a non-fiction film.
The students will be exposed to Semi-professional camera cameras & software. The students will also undergo same basic exercises such as 3 shot and 6 shot to give them a basic sense of framing, composition, movement and editing. The final project will be a non-fiction film with the duration of 5-10 minutes.

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Unit- I	Design and structure	4	-	Screenings (T.V.)
Unit- II	Pre-Production	4		
Unit- III	Production	4		
Unit- IV	Post Production	4		

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SAGAR R. CHAUDHARY** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: II

MONTH: **JANUARY 2023 – APRIL 2023** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- The different types of Menus and principles of menu planning.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	1. MEALS AND MENU PLANNING 1.1 Menu – Origin, definition & objectives 1.2 Types of meals (Breakfast, Brunch, Lunch, Afternoon tea, High tea, Dinner) Types of Menu a. A la c arte b. Table d' hote c. Cyclic menu d. Banquet menu e. Carte du jour / plat du jour f. Californian menu g. Take-away Other types of menu a) Children's menu b) Club menu c) Ethnic menu d) Health menu e) Spa Menu f) Ayurvedic Menu 1.4 Principles of Menu planning 1.5 Breakfast: English, Continental, American, Indian 1.6 Types of Tea Service: Full Afternoon Tea, High Tea.	7 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question
	Revision Lectures	3 Lectures		1) Classroom Theory Test 2) Viva

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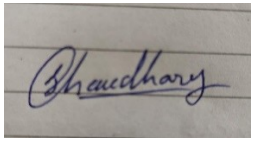
HOTEL & TOURISM MANAGEMENT STUDIES

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SAGAR R. CHAUDHARY** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: II

MONTH: **JANUARY 2023 – APRIL 2023** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Sequence and course in the French classical menu also identify general accompaniments.
- Types, storage and service of Tobacco

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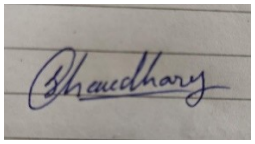
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II	1.FRENCH CLASSICAL MENU 1.1 a. Sequence and Courses. b. General Accompaniments. 1.2 Ice creams: Types & categories of Ice creams	6 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question
	2.TOBACCO a) Introduction to Cigars and cigarettes. b) Types of tobacco c) Shape, size, color & Brand names with country of origin.	7 Lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question
	Revision Lectures	5 Lectures		1. Classroom Theory Test 2. Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18



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DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SAGAR R. CHAUDHARY** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: II

MONTH: **JANUARY 2023 – APRIL 2023** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Types, storage and service Non alcoholic beverages.
- Simple control system followed in a restaurant.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III	1.1 NON-ALCOHOLIC BEVERAGES a. Definition of beverages b. Classification chart –alcoholic & non alcoholic drinks. c. Stimulating -Tea, Coffee & Cocoa, (origin, manufacture, Method of preparation, types & brands) d. Nourishing -health drinks e. Refreshing –juices, squashes, crushes, syrups & aerated water Table Water (origin, types & brands) & carbonated water.	9 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question
	1.2 SIMPLE CONTROL S YSTEMS. a. Restaurant reservation system b. KOT Checking System c. Types of KOT / BOT d. Method of billing (manual & computerized)	4 Lectures		1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question
	Revision Lectures	4 Lectures		1) Classroom Theory Test 2) Viva

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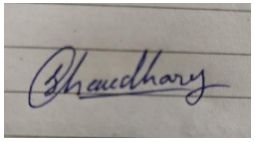
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17



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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: I

MONTH: **AUGUST 2022 – DECEMBER 2022** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Student should be able to identify the role of the Food and Beverage Service department and explain its organization structure and importance.
- Explain how "moments of truth" affect guests, staff members, and managers, and describe the value of guests and staff members to a food Service operation.
- Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	**1.** INTRODUCTION TO HOTEL AND CATERING INDUSTRY 1.1 Role of catering establishment in travel / tourism industry 1.2 Types of F& B operation (Classification). Commercial (residential / Non Residential) • Welfare • Institutional • Transport (Roads, Railways, Airlines, Marine) 1.3 Structure of hospitality industry and career opportunities	4 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet
	2. DEPARTMENTAL ORGANISATION AND STAFFING 2.1 Organization of F & B Department of a Hotel (English & French) 2.2 Etiquette & Attributes of an F & B Personnel. 2.3 Duties and responsibilities of F & B Staff. a) F & B Manager. b) Banquet manager. c) Outlet Manager (All day dining/ Bar/ In Room Dining/Specialty Restaurant, etc.) d) Senior captain/ Captain/ Supervisor. e) Steward. f) Sommelier. g) Hostess. h) Cashier. 2.4 Departmental Relationship of F& B with other Departments.	5 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet
	Revision Lectures	3 Lectures		1) Google Classroom 2) Google Slides 3) Google Meet 4) Google Quiz

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: I

MONTH: **AUGUST 2022 – DECEMBER 2022** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Identify the operational and auxiliary areas as well as equipment's used in the Food and Beverage department.
- Understand the various service methods and procedures followed in the department.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II	1. OPERATIONAL & AUXILLARY AREAS OF FOOD AND BEVERAGE DEPARTMENT: IMPORTANCE & LAYOUTS a) Coffee shop b) Snack bar/ counter service c) Kiosks d) Specialty restaurant/ theme restaurant e) Banquet operations/ outdoor catering f) In-Room Dining g) Dispense Bar / Discotheque/ night club/ pub h) Pantry/Still room i) Kitchen stewarding j) Silver room k) Linen room l) Vending machine	5 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet
	2. FOOD AND BEVERAGE SERVICE EQUIPMENT 2.1 Classification of equipment. (Familiarization of equipment). 2.2 Criteria for selection and requirements. • Tableware/ silverware (cutlery/ hollowware/flatware) • Glassware • Crockery • Bar equipment(For all of the above Brands, Measures & Quality suppliers) • Special equipment with their uses. • Furniture (Tables/Chairs/Trolleys/Dumb Waiter) • Linen. • Light and décor • Care and maintenance of equipment. • Napkin folds. 2.3 Table d' hôte, A'la carte Mis-en –place, Mis -en –Scene	7 Lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) Google Classroom 2) Google Slides 3) Video Links 4) Google Meet
	Revision Lectures	5 Lectures		1. Google Classroom 2. Google Slides 3. Google Meet

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: I

MONTH: **AUGUST 2022 – DECEMBER 2022** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Understand the various service methods and procedures followed in the department.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III	1. DINING SERVICES METHOD AND PROCEDURES 1.1 Different methods of services a. Table service • Silver service/ English service • American/ Plated • Family • Russian • French/ butler • Guéridon b. Bar Counter c. Assisted Service • Carvery • Buffets d. Self Service •Cafeteria: a).Counter b).free-flow c).Echelon d).Supermarket e. Single point service •Take-away •Drive through •Fast food •Vending •Kiosk •Food court •Bar f. Specialized (in-situ) •Tray •Trolley •Home delivery •Lounge •Room •Drive in 1.2 Special Service • Formal Service	9 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	5. Google Classroom 6. Google Slides 7. Video Links 8. Google Meet

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattanaik** DEPARTMENT: Room Division Management (Front Office) CLASS: F.Y. BSc HS

SEMESTER: I

MONTH: July to November ACADEMIC YEAR: **2022 - 2023**

LEARNING OBJECTIVE: To introduce the students to the hotel & tourism Industry. Students would develop the necessary skill required as an efficient and effective receptionist and to handle situations and types of guest in the job.

The learners will be able to:

• Understand the appropriate organization structures and duties in the Front Office and related departments.
• Develop, prepare guest relations, and evaluate practical aspect with guests.
• Understand the role of public relations with hotel industry.
• Understanding the functioning of the Telecommunication department.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	**Introduction to the Hotel & Tourism Industry** ● An account of development & growth of hotel & tourism Industry in the World ● Development and growth of Hotel & Tourism Industry In India. **Classification of Hotels by** ● Location ● Architectural Design	15	Jatashankar Tiwari – Front Office Management. Sudhir Andrews – Hotel Front Office Training Manual.	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

UNIT – 2	● Number of rooms ● Ownership ● Pricing Plan ● Type of Clientele ● Duration of Guest Stay ● Facilities Offered ● Star ratings criteria in India (HRACC) ● Supplementary Accommodation			
	Tariff Structure 1.Types of Rooms Single, Double, Twin, Hollywood twin, Interconnecting, Adjacent, Adjoining, Lanai, Penthouse, Duplex, Efficiency, Physically Challenged, Studio, Parlour, Hospitality Room, Suite (Types). 2.Tariff Fixation ● Check-in and Check-out basis, 24 hour basis, on the basis of competitor's rate, Night basis, Day rate. 3.Types of Meal Plans European, Continental, Bermuda Plan, Modified	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	American Plan (Half- Board, Demi- Pension), and American Plan (Full-Board: En Pension). 4. Packages and Special Rates Rack rate, Group rate, Volume rate, Government rate, FIT, Wholesale net rate, discounted rates, Seasonal rate, Crib Rate, Extra bed rate, Family rate, Crew rate, Week day/Weekend rates, Membership rates, Executives of the other units of the same chian, Corporate rate, Commercial rate, Advance purchase rate Package rate, Ad-hoc rate 5. Taxation • Luxury tax, Expenditure tax, Sales tax, Value added tax and other statutory taxes. • Service Charges. **Organisation of the Front Office Department** Organisation charts of • Small Hotel • Medium Hotel • Large Hotel			

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UNIT – 3	Sections of the Front Office Department Inter and Intra departmental Co-ordination Job Specifications and Job Description • Front Office Manager • Duty Manager ● Guest Relations Executive **Telecommunications** Introduction • Types of Exchange- PBX, PABX, EPABX • Other Communication Equipment- Walkie- Talkies, Pagers, Mobile Phones, Telephone Instruments, Pay Phones, Facsimile. • Organisation of the Telecommunications department • Job descriptions of the Telecommunications department supervisor & Operator • Skills and Competencies of the Telephone Operator • General duties of a Telephone Operator • Internet Access- Introduction, Dial up access, High speed with wired access, High speed with warless access • Future of Hotel telephones- Voice-over-internet-protocol (VOIP) • AYS – at your service	15		1. Slides 2. Videos 3. Quiz 4. Power Point 5. Presentation 6. PDF 7. Word 8. White Board 9. Projector 10. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Deepika Vibhad** DEPARTMENT: Room Division Management (Front Office) CLASS: FY BSc HS

SEMESTER: II

MONTH: November to March ACADEMIC YEAR: **2022 -2023**

LEARNING OBJECTIVE: The student should be able to understand the concept and functioning of room reservations, reception & guest services.

The learners will be able to: know the entire procedure of room reservations and its types, different situations of check in along with the guest services.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	RESERVATIONS • Sources of Reservations • Modes of Reservations • Types of Reservations • Systems of reservations • Overbooking • Job Description of Reservation Personnel	15	Jata Shankar Tiwari – Front Office Management Sudhir Andrews – Front Office Training Manual	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF

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			B K Chakravati – Front Office Management in Hotel	6. Word 7. White Board 8. Projector 9. Discussion
UNIT – 2	RECEPTION • Profiling the guest • Guest Registration Process • Regular and Non Regular Guest • 'C'Form & 'F' From	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion
UNIT -3	GUEST SERVICES • Handling Guest Mail • Message Handling • Custody and Handling of Keys • Guest Paging • Safe Deposit Locker • Guest Room Change • Custody of Deposited Luggage	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KIRTI T. CHALKE **DEPARTMENT**: FOOD SAFETY AND NUTRITION CLASS: **FY.Bsc.HS**

SEMESTER: **I** MONTH: **JUNE TO NOVEMBER** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE:
Objective of this course is to familiarize the students with importance of hygiene and Food Safety in Hospitality Industry
The learners will be able to:
- To learn about the importance of hygiene & sanitation in the catering industry
- To get acquainted with the food standards.
- To learn about ways to minimize food poisoning and infections.
- To understand function, sources & deficiency of nutrients.
- To gain basic knowledge of nutrition
- To gain knowledge about maintenance of good health.
- To understand the changes brought about in food nutrients during processing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1. INTRODUCTION TO HYGIENE** 1.1 Rules & importance of hygiene 1.2 Personal Hygiene 1.3 Cleaning of premises 1.4 Pest Control 1.5 Waste disposal 1.6 Dishwashing methods 2.HACCP 2.1 Introduction 2.2 Importance 2.3 VII Critical Control Points	**15 HRS**	Hobbs, Betty & Roberts, Food Poisoning and Food Trickett Jills Food Hygiene for FOOD Handlers Hobbs, Loken Joan How To Prevent Food, The HACCP Food Safety Manual	White board PPT Notes Videos

	3.MICROBES 3.1 Introduction (Bacteria, Yeast, Mould) 3.2 Classification 3.3 Factors for growth 3.4 Role of microbes in manufacture of fermented foods (dairy products, Veg. & bakery preparations, alcoholic Bev., vinegar, fermented Indian foods)			
Unit 2	**FOOD BORNE ILLNESS** 1.1 Natural Toxins (Kesari Dal, Potatoes, Mushrooms, Shell Fish, Peanuts) 1.2 Chemical (Tin, Copper, Arsenic, Lead) 1.3 Bacterial toxins (staphylococcus, salmonella, Clostridium perfringens, Clostridium botulinum) 1.4 Food poisoning & Infections • Definitions • Food contamination & Spoilage • Differentiation • Examples **FOOD ADULTERATION** 2.1 Definition and types 2.2 Test to detect (coffee, semolina, flour, ghee, butter, margarine, oil, milk, turmeric, coriander powder, pepper corn , meat etc. 2.3 Food standards in India (PFA, FPO, MPO, BIS-ISI, AGMARK, ISO)	**15HRS**	● Food & Nutrition Vol-I ● Food Science & Nutrition ● Food additives ● Food Preservation	White Board PPT Notes Videos

	FOOD ADDITIVES 3.1 Colours& Flavours 3.2 Browning reactions-causes, desirable & undesirable effects) **FOOD PRESERVATION** **Methods of Preservation** 4.1 Natural & Chemical Preservation 4.2 Low temperature (Refrigeration, Freezing) 4.3 High Temperature (Pasteurisation, Sterilization, Canning) 4.4 Irradiation			
Unit 3	**INTRODUCTION TO NUTRITION** 1.1- Definitions(Food, balanced diet, nutrition, over nutrition, under nutrition, malnutrition, health) 1.2 - Balanced diet-Food pyramid 1.3 - Meal planning steps **CARBOHYDRATES** 2.1 - Classification & composition 2.2 - Functions & requirements, sources 2.3 - Excess & Deficiency 2.4 -Uses in food preparation (Gelatinization, Gel formation, Dextrinization, Gluten formation, Caremelization) **FATS&OILS** 4.1 - Classification & Composition 4.2 - Functions & requirements, Sources 4.3 - Excess & Deficiency 4.4 - Types, Sources, Uses	**15 Hrs**	● Food & Nutrition Vol-I ● Food Science & Nutrition	White board PPT Notes

	4.5 - Factors causing deterioration 4.6 - Rancidity 4.7 - Flavour reversion 4.8 - Shortening 4.9 –Polymerisation **PROTEINS** 3.1 - Classification & Composition 3.2 - Functions & requirements, Sources 3.3 - Excess & Deficiency 3.4 - Uses in food preparation 3.5 - Effect of heat (Denaturation, Coagulation) 3.6 - Gel formation 3.7 – Foaming **VITAMINS, MINERALS, WATER & COLLOIDS** 5.1 - Functions 5.2 - Sources 5.3 - Deficiency & Excess 5. 4 - Fat soluble & water soluble Vitamins (A,D,E,K,B1,B2,B3,C) 5.5 - Minerals (Ca,P, Na,K,Fe,I,Fl) 5.6 - Importance, balance & Sources 5.7 - Cooking losses & prevention 5. 8 - Definitions (sol, gels, foam, emulsion) 5. 9 - Examples(roasting, grilling, frying, baking, boiling, poaching, microwave) 5.10 - Importance in food industry			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 hrs

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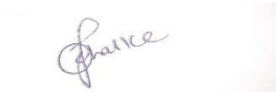

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VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: RAMEEZ SHAKEEL PATEL **DEPARTMENT**: Food Production & Patisserie I **CLASS:** FY.Bsc.Hs

SEMESTER: I MONTH: ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE:

- To inculcate a right attitude and the required basic knowledge and technical skills in the art of culinary and the food production department.
- To introduce the various equipments and utensils used in the kitchen.

The learners will be able to:

- The learners will be able to:
- Define microbes and conditions for growth of microbes
- List the importance and basic principles of HACCP
- List micro organisms
- Define Food Adulteration and adulterants
- State the types and uses of Food Additives
- State the importance of Hygiene
- List various methods of Food Preservation
- State the regulations and regulating bodies governing Food Safety and Hygiene.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1 Introduction to the Food Production Department** 1.1 Levels of Skills and Experience 1.2 Attitude and Behavior in the Kitchen 1.3 Kitchen Uniforms 1.4 Personal Hygiene 1.5 Safety Procedures for Handling Equipment **2 Culinary History and Culinary Terms** (Explanation with Examples) Origins of Modern Cookery	**01.HRS** **02.HRS** **04HRS**	Thangam Philip – Modern Cookery I & II – Orient Longman – 2001 Auguste Escoffier – Ma Cuisine – Hamlyn – 2000 Digvijay Singh – Cooking Delight of the Maharajas – Vakils, Feffer & Son's Ltd. –	1. POWER POINT PRESENTATION 2. GOOGLE CLASSROOM 3. GOOGLE MEET 4. YOUTUBE VIDEOS 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS.

UNIT 2	**3 Equipment and Hand Tools used in Kitchen & Different Types of Fuels used in Kitchen** 3.1 Hand tools and utensils used in Kitchen 3.2 Various Fuels used in the Kitchen 3.3 Advantages & Disadvantages of Various Fuels 3.4 Various Equipment used in the Kitchen **4 Introduction to Cooking** 4.1 Aims and Objectives of Cooking 4.2 Classification of Various Raw Materials according to Functions 4.3 Various Textures and Consistencies 4.4 Methods and Techniques of Preparation **5 Stocks** 5.1 Definition of Stock 5.2 Types of Stocks 5.3 Preparation (Recipe), Storage, Care and Precautions in Preparation **6 Culinary Terms**	**04.HRS** **02.HRS** **02.HRS**	1982 Philip Dowell & Adrian Barley – The Book of Ingredients – Mermaid Books – 1987 Wayne Gisslen – Professional Baking – John Wiley & Sons – 1994 Martha Day – Baking – Lorenz Books – 1999 M. J. Leto & Bode – The Larder Chef – Heinemann Publishing House – 1989 Parvinder S. Bali - Food Production Operations Thangam E. Philip - Modern Cookery for Teaching and Trade - 4th Vol. – 1996 Krishna Arora - Theory of Cookery – 2nd – 1992 Wayne Gisselen - Professional Cooking – 4th – 1992 Wayne Gisselen - Professional Baking – 2nd – 1994 J. C. Dubey - Basic Bakery - 1st – 1992 Kinton Ceserani - Theory of Catering – 7th – 1996 Bernard Davis - Food Commodities - 4th – 1998 Daniel R. Stevenson - Basic Cookery The Process Approach - 5th – 1997	
	7 Methods of Cooking 7.1 Various Methods of Cooking Foods (Roasting, Grilling, Frying, Baking, Boiling, Poaching, Microwave)	**04.HRS**		

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	7.2 Principles of each Method and Precaution to be taken	**03.HRS**		1. POWER POINT PRESENTATION 2. GOOGLE CLASSROOM 3. GOOGLE MEET 4. YOUTUBE VIDEOS 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS
	8 Hierarchy and Kitchen Staffing 8.1 Classical Kitchen Brigade 8.2 Modern Staffing in Various Category Hotels 8.3 Duties and Responsibilities of Various Chefs 8.4 Role and Duties of the Executive Chef 8.5 Inter-Departmental Co-operation and Co-ordination			
	9 Egg 9.1 Selection of Eggs 9.2 Structure of Eggs 9.3 Uses of Eggs 9.4 Nutritive Value of Eggs	**02.HRS**		
	10 Vegetables & Fruits 10.1 Classification of Vegetables 10.2 Colour Pigments in Vegetables and Effects of Heat, Acid and Alkali on each of them 10.3 Cuts of Vegetables 10.4 Classification of Fruits 10.5 Uses of Fruits 10.6 Salad & Salad Dressing	**04.HRS**		
UNIT3	**11 Bakery & Pastry Sugar** 11.1 Importance of Sugar 11.2 Types of Sugar 11.3 Cooking Stages and Temperature of Various Stages 11.4 Uses of Sugar	**02.HRS**		1. POWER POINT PRESENTATION 2. GOOGLE CLASSROOM 3. GOOGLE MEET 4. YOUTUBE VIDEOS 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS
	12 Sauces 12.1 Classification of Sauces / Composition 12.2 Mother Sauces and its Recipes (1 Liter) 12.3 Derivatives	**04.HRS**		
	13 Bakery & Pastry	**03.HRS**		

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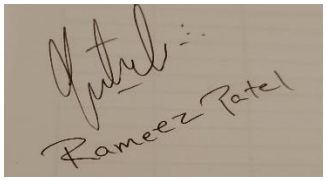
	13.1 Bread Making Principles of Bread Making Role of Each Ingredient Simple Yeast Bread Baking Temperature & its Importance 13.2 Cookies Types of Cookies Methods of Preparation 13.3 Flour – Structure of Wheat Types of Wheat Types of Flour Milling of Flour Nutritive Value 13.4 Raising Agents Classification and Role of Raising Agents	**02.HRS** **04.HRS**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: RAMEEZ SHAKEEL PATEL **DEPARTMENT**: Food Production and Patisserie **CLASS:** FY.Bsc.Hs

SEMESTER: 2

MONTH: ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE:
• To develop a keen interest in food production and to enable students to experiment, innovate and progressively produce a variety of preparation / dishes.
• To gain confidence to adapt to the technical skills and the art of preparing different menus, Indian as well as Continental.
• By the end of the second semester students should be confident enough in their skills which would boost their morale to take up the challenge of bulk cookery in the third and fourth semester

The learners will be able to:

- Define microbes and conditions for growth of microbes
- List the importance and basic principles of HACCP
- List micro organisms
- Define Food Adulteration and adulterants
- State the types and uses of Food Additives
- State the importance of Hygiene
- List various methods of Food Preservation
- State the regulations and regulating bodies governing Food Safety and Hygiene.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	1.Culinary Terms with Explanation &	03.HRS		

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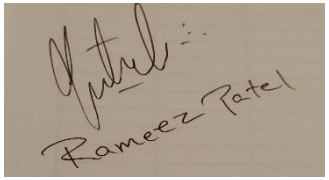
	Examples **2.Layout of kitchen** 2.1 General Layout of the Kitchen 2.2 Receiving Area 2.3 Storage 2.4 Wash up **3.Soups** 3.1 Classification with Examples 3.2 Consommé and Garnishes with their names (Any 10 common name) **4.Fish Mongery** 4.1 Classification of Fish with examples 4.2 Selection, Cooking & Storage of Fish 4.3 Local Names of Fin Fish and Shell Fish 4.4 Cuts of Fish **5.Poultry** 5.1 Cuts of Poultry 5.2 Selection and Uses of Cuts **6.Rice, Cereals & Pulses** 6.1 Introduction, Classification of Cereals and Pulses 6.2 Varieties of Rice and Byproducts 6.3 Nutritive Value of Various Cereals 6.4 Sprouts and Uses **7.Meat**	**03.HRS** **02.HRS** **02.HRS** **02.HRS** **03.HRS** **04.HRS**	Thangam Philip – Modern Cookery I & II – Orient Longman – 2001 Auguste Escoffier – Ma Cuisine – Hamlyn – 2000 Digvijay Singh – Cooking Delight of the Maharajas – Vakils, Feffer & Son's Ltd. – 1982 Philip Dowell & Adrian Barley – The Book of Ingredients – Mermaid Books – 1987 Wayne Gisslen – Professional Baking – John Wiley & Sons – 1994 Martha Day – Baking – Lorenz Books – 1999 M. J. Leto & Bode – The Larder Chef – Heinemann Publishing House – 1989 Parvinder S. Bali - Food Production Operations Thangam E. Philip - Modern Cookery for Teaching and Trade - 4th Vol. – 1996 Krishna Arora - Theory of Cookery – 2nd – 1992 Wayne Gisselen - Professional Cooking – 4th – 1992 Wayne Gisselen - Professional Baking – 2nd – 1994 J. C. Dubey - Basic Bakery - 1st – 1992 Kinton Ceserani - Theory of Catering – 7th – 1996 Bernard Davis - Food Commodities - 4th – 1998	1. POWER POINT PRESENTATION 2. GOOGLE CLASSROOM 3. GOOGLE MEET 4. YOUTUBE VIDEOS 5. RESEARCH MATERIALS HOME STUDY AND QUIZ FOR STUDENTS.
UNIT 2				

	7.1 Introduction to Meat Cookery 7.2 Cuts of Lamb, Pork, Beef / Veal 7.3 Variety of Meats / Offal 7.4 Selection and Storage of Meats **8.Milk and Milk Products** 8.1 Introduction, Processing of Milk, Pasteurization, Homogenization, Milk in Various Forms e.g. Toned, Powder, Skimmed, Condensed & Evaporated. 8.2 Cream – Introduction, Processing & Types 8.3 Butter – Introduction, Processing & Types 8.4 Cheese – Introduction, Classification with Examples, Processing, Types, Cooking with Cheese and Uses.	**05.HRS**	Daniel R. Stevenson - Basic Cookery The Process Approach - 5th – 1997	
UNIT3	**9,Bakery & Pastry** **Shortening – Fats and Oils** 9.1 Saturated and Un-saturated Fats 9.2 Advantages & Disadvantages of Using Fats 9.3 Varieties of Shortening **10.Tea & Coffee** 10.1 Introduction 10.2 Producing Regions/Country 10.3 Types and Methods of Preparation 10.4 Popular Brands and Variety Available **11.Thickening Agents used in Indian Gravies** 11.1 Role of Thickening Agents **12.Indian Cookery** 12.1 History of Spices and Trade Routes	**03.HRS** **02.HRS** **01.HRS** **03.HRS**		1.

	12.2 Basic Spices, Condiments and Masalas 12.3 Role of Spices in Indian Cuisine 12.4 Indian Equivalent name 12.5 Blending of Spices 12.6 Concept of Wet and Dry Masalas 12.7 Regional Varieties of Basic Masalas 12.8 Basic Composition of Some Important Masalas	**02.HRS**		
	13.Menu Planning 13.1 History of Menu 13.2 Types of Menu 13.3 Menu Planning Principles	**04. HRS**		
	14.Bakery & Pastry 14.1 **Pastries** • Classification of Pastries • Varieties • Role of Each Ingredient • Baking Temperature and Time of Each Pastry	**03.HRS**		
	14.2 **Pastry Cream** • Basic Pastry Cream • Use in Confectionery • Preparation and Care in Production 14.3 **Cocoa and Chocolate** • Introduction, Production and Manufacture • Varieties of Chocolates	**03.HRS**		

	• Tempering of Chocolates			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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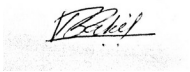

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dipti Dilip Khadpe.** DEPARTMENT: **Room Division Management-I.**

CLASS: **F.Y.BSc.HS.** SEMESTER: **I.**

MONTH: **Academic Year 2022-2023.** SUBJECT: **Housekeeping.**

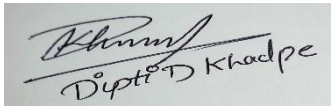
LEARNING OBJECTIVE:

The student will be able to identify the role of the housekeeping department and explain its organization structure and importance.
The student will be able to list the basic cleaning equipment's, cleaning agents and explain their use.
Will be able to perform basic cleaning procedures of various surfaces.

The learners will be able to understand organization structure, types of cleaning equipment and agent and surface.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I	1. INTRODUCTION TO HOUSE KEEPING DEPARTMENT	15	Hotel Housekeeping Operations and Management (G. Raghubalan & Smritee Raghubalan – Oxford University Press).	1. PPT 2. VIDEO
II	1. ORGANIZATION OF HOUSEKEEPING DEPARTMENT	09		1. PPT
	2. CLEANING EQUIPMENT	06	Professional Management of Housekeeping Operations – (Thomas J. A. Jones – John Wiley & Sons)	1. PPT 2. VIDEO
III	1. CLEANING AGENTS	08		1. PPT 2. VIDEO
	2. CLEANING & POLISHING OF DIFFERENT SURFACES	07		1. PPT 2. VIDEO

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HOURS.



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dipti Dilip Khadpe.** DEPARTMENT: **Room Division Management-II.**

CLASS: **F.Y.BSc.HS.** SEMESTER: **II.**

MONTH: **Academic Year 2022-2023 (December-March)** SUBJECT: **Housekeeping.**

LEARNING OBJECTIVE:
The learners will be able to:

The student will be able to identify the which are the different area in hotels which are cleaned by housekeeping department.
The students will be got to know different types of services and amenities offered by housekeeping.
This semester students will learned about different format used by housekeeping in day-day to operations.
Students will learned about how to handle maids trolley.
The students will be learned about how to handle lost and found, key and control and pest control.
In this semester they will learn how to handle any situation.

The learners will be able to understand organization structure, types of cleaning equipment and agent and surface.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I	1. CLEANING OF DIFFERENT AREAS	15	Hotel Hostel and Hospital Housekeeping – Joan Branson & Margaret Lennox	1. PPT
II	1. TYPES OF ROOM SERVICES	03	Housekeeping Management – Margaret Kappa, Aleta Nitschken, Patricia B. Schappert – A.H. & L.A.	1. VIDEO 2. PPT
	2. MAIDS SERVICE ROOM / HOUSE KEEPING PANTRY	04		1.VIDEO 2. PPT
	3. GUEST ROOM SUPPLIES & AMENITIES	04		1. VIDEO 2. PPT
	4. FORMATS USED IN THE HOUSEKEEPING DEPARTMENT	04		1. PPT
III	1. LOST & FOUND	04	Housekeeping Operations, Design and	1.VIDEO

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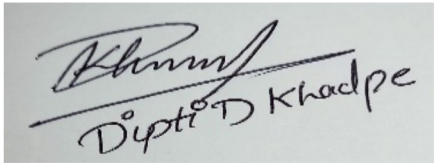
			Management – Malini Singh & Jaya B. George – Jaico Publications	**2. PPT**
	2. KEY & KEY CONTROLS	**02**		**1.VIDEO** **2. PPT**
	3. SITUATION HANDLING	**06**		**1.VIDEO**
	4. PEST CONTROL	**03**		**1. VIDEO** **2. PPT**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HOURS.



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DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DIPTI DILIP KHADPE** DEPARTMENT: **HOTEL MANAGEMENT** CLASS: F.Y.H.S SEMESTER: I

MONTH: **November to December** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Computer Fundamentals	5 Parts of Computer • Difference between Hardware & Software • Difference Between Data and Information • Types of Computers – Server (Types), Clients (Types of Portable Computer) • Application Software • System Software • Software Copyright – Freeware, Shareware, Licensed	2		Google classroom White board Quiz Google slide Jam board
	Application Software – Word Processor, Spreadsheet, Database Management, Presentation, Media, Outlook, Browser and Utility Software like Acrobat Reader • System Software – Operating System (Windows, Linux, Android) • Device Driver • Utility Software – VLC Player, File Converter	3		Google classroom White board Quiz Google slide Jam board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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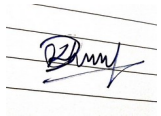
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES



TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DIPTI DILIP KHADPE** DEPARTMENT: **HOTEL MANAGEMENT** CLASS: F.Y.H.S SEMESTER: I

MONTH: **November to December** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

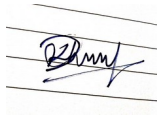
The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	**Hardware** • Introduction of Central Processing Unit • Processor – Intel, AMD, Clock Speed • Input Devices – Keyboard, Mouse, Mic, Scanner, Barcode Reader, RFID, Touch Screen • Output Devices – Displays (CRT, TFT, LCD, Plasma, LED, Projector) • Display Resolution • Printers – Inkjet, Laser, Thermal • Storage Devices – Primary (RAM & ROM), Secondary (HDD, Flash Drive, USB, CD/DVD, Blue Ray, Media Players)	3		Google classroom White board Quiz Google slide Jam board

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**



TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DIPTI DILIP KHADPE** DEPARTMENT: **HOTEL MANAGEMENT** CLASS: F.Y.H.S SEMESTER: I

MONTH: **November to December** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	Networking • Types of Network (LAN, WAN, MAN) • Topology (Bus, Star, Ring, Mesh & Tree) • Network Hardware – (Cables – RJ45, RJ11, MTRJ, Switch, Routers, Access Point, Modem) • IP and MAC Address, Subnet, Gateway, DNS • Understanding Network Address & Node Address • Network Security – Firewalls (Hardware & Software)	4		Google classroom White board Quiz Google slide Jam board

	• Bandwidth			
	Internet • Intranet, Internet & Extranet • WWW, HTTP, Domains • VPN & VoIP • Search Engines • ISP & Bandwidth	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Principle of Management – Hotel Management CLASS: FY BSc HS

SEMESTER: II

MONTH: November to March ACADEMIC YEAR: **2022 -2023**

LEARNING OBJECTIVE: To learn about the emerging Indian corporate world and global phenomenon with stress upon hospitality Industry.

The learners will be able to:

- To train the student as future managers and make them understand the working of an organisation.

• Teaching through PowerPoint presentations, case studies, activities, brain storming sessions, SWOT/PEST analysis etc.
• Trying to bridge the gap between management studies and real corporate world through real time stories from newspapers, journals and business magazines, books.
• Encouraging students to read more so as to refine their analytical power and sharpen business sense and become more aware of the business environment.
• Opportunity to participate in business discussions, article/book reviews and presentations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	1. INTRODUCTION TO MANAGEMENT 1.1 Evolution of management 1.2 Definitions and Importance of Management 1.3 Management as a Science and Art 1.4 Principles of Management (14 principles of Fayol)	15	Principle of Management – P C Tripathi & Reddy Harold Koontz – Principle of Management	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word

	1.5 Levels of Management and their functions 1.6 Managerial skills 1.7 Functions of Management 1.8 Process of communication 1.9 Business communication 2. PLANNING 2.1 Definition and Characteristics 2.2 Planning Process (Steps in Planning) 2.3 Essentials of a Good Plan 2.4 Vision and mission Statements 2.5 Planning with relation to hospitality industry 2.6 Meaning and Process of MBO 2.7 Meaning and steps in Decision Making			7. White Board 8. Projector 9. Discussion
	3. ORGANIZING 3.1 Meaning and Process of Organizing 3.2 Formal and Informal Organization and Distinction 3.3 Span of control (Meaning and Importance) 3.4 Tall and Flat Organization 3.5 Definition and Process of Delegation 3.6 Centralization and Decentralization of Authority 3.7 Departmentation and Basis of Departmentation 3.8 Organisation chart 3.9 Closed vs open system of organisation 3.10 Line and Staff organization	15	Management Principles and Practices – Dr.M.Sakthivel Murugan	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

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	4. STAFFING AND COORDINATION 4.1 Meaning and Imporance of Staffing 4.2 Internal and External Sources of Recruitment 4.3 Coordination - As an essence of Management 4.4 Principles of Coordination			
	5. DIRECTING, MOTIVATING AND LEADING 5.1 Meaning and importance of Directing 5.2 Element of Directions / Components 5.3 Definition of Motivation and factors 5.4 Maslow's Need Hierarchy Theory 5.5 Mc Gregor's Theory X and Theroy Y 5.6 Definition of Leadership and Leader 5.7 Qualities of a Leader 5.8 Leadership Styles 5.9 Leaders from hospitality industry 5.10 Leadership theory 6. CONTROLLING 6.1 Meaning 6.2 Steps in Control process 6.3 Types of control:feed forward,feedback,concurrent 6.4 Time Management	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF HOTEL & TOURISM MANAGEMENT
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **Food & Beverage Service** CLASS: **S.Y.B.Sc.H.S.** SEMESTER: IV

MONTH: **NOVEMBR-2022 to APRIL-2023** ACADEMIC YEAR: **2022-2023**

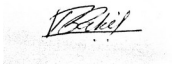
LEARNING OBJECTIVE: Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine. • Understanding the production process of Beer, Wine and Spirits.

The learners will be able to: Understand the different types of Alcoholic Beverages. Students will learn the types of Alcoholic beverages as per the production methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
● **UNIT 1** ALCOHOLIC BEVERAGES	● ALCOHOLIC BEVERAGES a. Definition, history of Alcoholic Beverages & classification. b. Benefits and harmful effects of alcohol.	02	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide
	WINES ● **1.1 Definition & history of wines.** ● **1.2 Types of Wines:** ● **Still (red, white & rose), sparkling/Champagne, Fortified (sherry, port, Madeira, Marsala & Malaga), Aromatized wines (Vermouth).** ● **1.3 Methods of production, Still (red,**	13	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service •Larousse Christopher Foulkes- Encyclopedia of Wines-	Google classroom White board Quiz Google slide

	white, rose). ● **a) Viticulture** ● **(Wine calendar, terroir, vine species, grape varieties & diseases).** ● **b) Vinification** ● **(Manufacturing process, elements of wine & faults in wines).** ● **c) Champagne & Sparkling Wines.** ● **(History, districts, grape varieties, Methode Champenoise, cuvee close, transfer method, charmat & impregnation, Names & bottle sizes).** ● **d) Fortified Wines (Production & types).** ● **1) Sherry (Solera system)** ● **2) Port** ● **3) Madeira (estufagen)** ● **4) Marsala** ● **5) Malaga** ● **e) Aromatized wines (Definition & types)**			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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DEPARTMENT OF HOTEL & TOURISM MANAGEMENT

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **Food & Beverage Service** CLASS: **S.Y.B.Sc.H.S.** SEMESTER: IV

MONTH: **NOVEMBR-2022 to APRIL-2023** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine. • Understanding the production process of Beer, Wine and Spirits.

The learners will be able to: Understand the different types of Alcoholic Beverages. Students will learn the types of Alcoholic beverages as per the production methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II	2.1 Wine producing countries of the world (Regions, Wine laws, labels & shippers). a) Old world wine producing countries (France, Italy, Germany, Spain & Portugal).	10	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service •Larousse Christopher	Google classroom White board Quiz Google slide

	b) New World wine producing countries (Australia, New Zealand, South Africa, U.S.A. & India).		Foulkes- Encyclopedia of Wines-	
	2.2 Wine tasting, Storage & Service	02	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide
	2.3 Food and wine Harmony.	03		Google classroom White board Quiz Google slide

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **Food & Beverage Service** CLASS: **S.Y.B.Sc.H.S.** SEMESTER: IV

MONTH: **NOVEMBR-2022 to APRIL-2023** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine. • Understanding the production process of Beer, Wine and Spirits.

VIVA COLLEGE
DEPARTMENT OF HOTEL & TOURISM MANAGEMENT

The learners will be able to: Understand the different types of Alcoholic Beverages. Students will learn the types of Alcoholic beverages as per the production methods

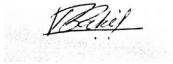
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNITIII BEER & OTHER FERMENTED BEVERAGES	a) Definition, History & Brewing process. (Components of beer, top fermentation, bottom fermentation) b) Types of Beer, Storage & Service (Lager, Pilsner, Draught, Ale, Stout, Porter, Ice, Lambic & Smoked) c) Other fermented beverages (Cider, Perry, Mead, Sake & Toddy).	03	● Shatbi Basu- The can't go wrong Cocktail book ● Brian Glover- The world encyclopedia of Beer	Google classroom White board Quiz Google slide
	3.2 SPIRITS a) Introduction and definition b) Pot and patent still method of production. 3.3 History, Production, types & Brand names (national & International) a) Whisky (Scotch, American, Canadian, Irish & Japanese) b) Rum (White, Gold, Dark & Flavoured) c) Brandy (Cognac, Armagnac & Fruit) d) Gin e) Vodka, flavoured vodka	03	•Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide

	f) Tequila & Mezcal			
	3.4 Alcoholic Strength :Proof, GL, Sykes, U.S., British (OIML) 3.5 Other Spirits (Aquavit, schnapps, Pastis, ouzo, arrack) 3.6 LIQUEURS Introduction, definition, classification & production of liqueurs a) Different types of liqueurs: Base, Flavours, Country of origin. b) Brand names of liqueurs (Generic & Proprietary)	04	Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide
	3.7 APERITIFS & BITTERS a) Definition b) Brand names	02	Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide
	3.8 GLOSSARY OF TERMS RELATED TO Alcoholic beverages, Menu terminologies.	02	Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide

VIVA COLLEGE

DEPARTMENT OF HOTEL & TOURISM MANAGEMENT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Front Office Hotel Management CLASS: SY BSc HS

SEMESTER: IV

MONTH: June to October ACADEMIC YEAR: **2022 -2023**

LEARNING OBJECTIVE: To possess knowledge & skills with respect to handling group reservations, assigning rooms, check-in, cashiering & security systems.

The learners will be able to:

- To train the students as future managers and make them understand the working of an organization.

• Teaching through PowerPoint presentations, case studies, activities, brain storming sessions, SWOT/PEST analysis etc.
• Trying to bridge the gap between management studies and real hospitality world through real time stories from practical exposure at hotels, books.
• Encouraging students to read more so as to refine their analytical power and sharpen Hospitality sense and become more aware to facing the guests.
• Opportunity to participate in group discussions, and to handle the VVIP, assigning rooms, check in, cashiering & security systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	**Advanced Guest Cycle (Reservation, Assigning Rooms, Check-in)** • Group (Tourist/ Conference/ Convention) • Crew (Airline- Layovers/ Cruise lines/ Cargo) • Regular Guests Special Attention Guests (Handle With Care, Single	15	Front Office management Jatashankar Tiwari	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word

	ladies, unaccompanied children, Sr. Citizens, Disabled Guest) **ROOM CHANGE PROCEDURES** • By Hotel (Upgrade/ Up sell) By Guest (Discrepancy/ Personal Preference)			7. White Board 8. Projector 9. Discussion
UNIT - 2	**HANDLING OF COMPLAINTS** • Types of Complaints(Service related/ Attitudinal/ Mechanical/ Unusual complaints) Guidelines to handle complaints **FRONT OFFICE ACCOUNTING SYSTEM AND SETTLEMENT** • Guest and Non Guest Folio • Types of Folio • Types of Vouchers • City Ledger • Billing Procedure instruction • Methods of settlement(Cash/ CC- Direct currency converter/ BTC/ TAV/ PSO/ COMP Voucher)	15	Hotel Front Office Training Manual Andrews, Sudhir	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion
UNIT - 3	**SECURITY SYSTEMS IN HOTELS** • Fire Alarm Systems • Burglar Alarm Systems • Electronic Locking Systems	15	Front Office management Jatashankar Tiwari Hotel Front Office Training Manual Andrews, Sudhir	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dipti Dilip Khadpe.** DEPARTMENT: **Room Division Management-III.**

CLASS: **S.Y.BSc.HS.** SEMESTER: **III.**

MONTH: **Academic Year 2022-2023.** SUBJECT: **Housekeeping.**

LEARNING OBJECTIVE:
The student will be able to explain various operational procedures and formats pertaining to linen, uniforms, and laundry.
The student will be able to create formats and design layouts of linen room, uniform room and laundry.
The student will be able to create Flower Arrangements for various occasions and locations.
The student will be able to plan and implement décor for special occasions.
The learners will be able to understand how to handle different fabrics, Flower arrangement & implement décor for special occasions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I	1. LINEN ROOM OPERATIONS	10	Hotel Housekeeping Operations and Management (G. Raghubalan & Smritee Raghubalan – Oxford University Press).	1. PPT 2. VIDEO
	2. FORMATS	05		1. PPT
II	1. UNIFORM AND SEWING ROOM	05	Textile and Laundry in Hotel Industry – (Dr. D.K.Agrawal - Aman Publications). Stain Removal – (Stephanie Zia – Bounty Books).	1. PPT

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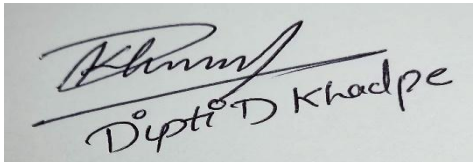
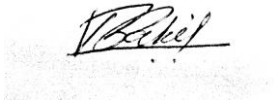
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

	2. LAUNDRY OPERATIONS	10		
III	1. FLOWER ARRANGEMENT	10	The Art of Flower Arranging – (Ian Hall & Sarah Waterkeyn - Smithmark Publications).	1. PPT 2. VIDEO
	2. ERONOMICS IN HOUSEKEEPING	05	Professional Management of Housekeeping Operations – Thomas J. A. Jones – John Wiley & Sons	1. PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HOURS.





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **TY BSC HS**

SEMESTER: **VI** MONTH: **NOV 2022 - MAR 2023** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE:

- To educate students on basic to advance culinary skills.
- To give an overview of culinary specialties across the globe.
- To educate students on latest food trends.
- To highlight the importance of food safety.
- To train students for better employment prospects.

The learners will be able to:

- Understand importance of food safety.
- Understand latest food trends.
- Understand culinary specialties across the globe.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Kitchen Management	7	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	Kitchen Stewarding	8	Bali Parvinder S., (2012),	1 PowerPoint

			International Cuisine & Food Production Management, Oxford University, New Delhi	2 Black board 3 YouTube videos 4 Class test 5 Home study

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2	Sandwich	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	Classical garnishes	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	Horsd'oeuvres	5	Ingram Christine, (2008), Appetizer, Starter Horsd'oeuvres, Hermes House , London	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3	Non-Edible Displays	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management,	1 PowerPoint 2 Black board 3 YouTube videos

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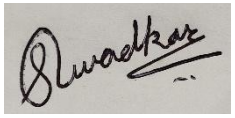
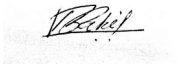
			Oxford University, New Delhi	4 Class test 5 Home study
	Uses of wines, herbs and spices in cooking	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study
	Organoleptic & sensory evaluation of food	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	Contemporary cooking trends	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study
	Culinary terms	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June - November** ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE: Identify Food & Beverage setup and planning of various outlets in the department.

- Describe casual, theme restaurants etc. and how they are operated.
- How food service managers develop and manage labour & revenue control system.
- Explain how banquets and catering events are booked and planned, and describe how managers and staff members provide service for these events.
- Explain the operations of various catering establishments such as Railway, Airline & Marine caterings.

The learners will be able to: Students will learn Food & Beverage setup and planning of various outlets, how banquets and catering events are booked and planned.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	1.1 F & B Outlet Planning 1.1.1 Objective of a good layout 1.1.2 Steps in planning of layout. (Specialty Restaurants, Coffee Shop, Room Service) 1.1.3 Factors to be considered while planning the actual ambience (Colour, light, décor, furniture & uniform) 1.2 Operational aspects of various F & B Outlets (Specialty Restaurants, Coffee Shop, Room Service) 1.2.1 Menu planning 1.2.2 Constraints of Menu planning 1.2.3 Planning of staff requirement 1.2.4 Shifts (Panzer, Straight, Split & Reliever)	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi	1)Power point presentation 2) Videos 3) Google classroom 4)White board 5)Quiz 6) Google slide 7) Jam board

	1.2.5 Factors to be considered for selecting appropriate Crockery, Cutlery, Glassware, and Linen. 1.3 Elements of cost 1.3.1 Types of cost (Material, Labour & Overhead) 1.3.2 Cost Groups (Fixed, semi-fixed & variable) & types of profit (gross & net) 1.3.3 Breakeven / Cost volume profit analysis			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June - November** ACADEMIC YEAR: 2022-24

LEARNING OBJECTIVE: Identify Food & Beverage setup and planning of various outlets in the department.

- Describe casual, theme restaurants etc. and how they are operated.
- How food service managers develop and manage labour & revenue control system.
- Explain how banquets and catering events are booked and planned, and describe how managers and staff members provide service for these events.
- Explain the operations of various catering establishments such as Railway, Airline & Marine caterings.

The learners will be able to: Students will learn Food & Beverage setup and planning of various outlets, how banquets and catering events are booked and planned.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	Function Catering / Banquets 2.1 Definition, History & Importance 2.2 Organization of Banquet dept., duties and responsibilities. 2.3 Types of Banquets: Formal, Semiformal & Informal 2.4 Banquet Sales 2.5 Banquet reservation diary and booking procedure. 2.6 Function contract & Function prospectus 2.7 Banquet Menus 2.8 Types of service in the banquets. 2.9 Staffing & Duty allocation	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi	1)Power point presentation 2) Videos 3) Google classroom 4)White board 5)Quiz 6) Google slide 7) Jam board

	2.10 Toast procedure at wedding reception & Protocol 2.11 Outdoor catering. 2.12 Glossary **Glossary**			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June - November** ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE: Identify Food & Beverage setup and planning of various outlets in the department.
- Describe casual, theme restaurants etc. and how they are operated.
- How food service managers develop and manage labour & revenue control system.
- Explain how banquets and catering events are booked and planned, and describe how managers and staff members provide service for these events.
- Explain the operations of various catering establishments such as Railway, Airline & Marine caterings.

The learners will be able to: Students will learn Food & Beverage setup and planning of various outlets, how banquets and catering events are booked and planned.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	3.1 Buffet. 3.1.1 Definition & Types of buffets. (Meal period, manner of consumption, food served & other types – Display, Gourmet & Running) 3.1.2 Points to be considered while planning a buffet. 3.1.3 Buffet equipment 3.1.4 Banquet layout (formal, informal & cabaret) & Space area calculation	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi	1)Power point presentation 2) Videos 3) Google classroom 4)White board 5)Quiz 6) Google slide 7) Jam board

	3.1.5 Meeting room setups: (U Shape, Hollow Square, Classroom Theatre, Board of Directors, 'T' Shape) 3.2 Food and Beverage Management in various catering establishments 3.2.1 Railway Catering & Airline catering 3.2.2 Marine Catering (offshore & cruise liners) 3.2.3 Industrial catering			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Adv Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: VI

MONTH: **November - April** ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE: Identify factors to create impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley.

· Plan & operate a Bar operation, Manage inventory and maintain records pertaining to beverage control.

· Understand and apply cost dynamics as related to the Food & Beverage industry. · Demonstrate a detailed understanding of the various facets of the Food & Beverage cycle of control in the operational & post operational phase.

.

The learners will be able to: Students will learn impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley, Plan & operate a Bar operation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	1 Gueridon Service 1.1 Origin, history and definition 1.2 Factors to create impulse buying. 1.3 Advantages and disadvantages of Gueridon service 1.4 Principles of Gueridon service. 1.5 Flambé trolley & other trolleys (Carving, Cheese, Liqueur, Salad & Dessert). 1.6 Gueridon equipment & ingredients, Mise en place & Presentation.	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi 3) Andrews S, (2009), Food & Beverage Service A Training Manual,(Second Edition),	1)Power point presentation 2) Videos 3) Google classroom 4)White board 5)Quiz 6) Google slide 7) Jam board

	2 Food and Beverage Management. 2.1 Objectives of Food & Beverage Management. 2.2 Food and Beverage Management/ Function 2.3 Cost and Market orientation 3 Food and Beverage Control 3.1 Objective of F& B Control. 3.2 Obstacles of F& B Control. 3.3 Food Control checklists. 3.4 Beverage Control checklist			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Adv Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: VI

MONTH: **November - April** ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE: Identify factors to create impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley.

· Plan & operate a Bar operation, Manage inventory and maintain records pertaining to beverage control.

· Understand and apply cost dynamics as related to the Food & Beverage industry. · Demonstrate a detailed understanding of the various facets of the Food & Beverage cycle of control in the operational & post operational phase.

.

The learners will be able to: Students will learn impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley, Plan & operate a Bar operation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	Bar Operations 4.1 Definition & classification. 4.2 Layout & parts for Front of the house dispense bar. 4.3 Bar Thefts and frauds. (Nature and prevention.) 4.4 Records & Licenses maintained in a Bar (Naukarnama, Permit, TPIN, Bill book, & B.O.T.). 5.1 Cocktails & Mixed drinks a) Introduction, History & Definition b) Bar Equipment. (glassware, fixed & movable equipment) c) Methods of Mixing Cocktails. (Stirred, Shaken, Built up/Layered, Blended & Muddled)	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi 3) Andrews S, (2009), Food & Beverage Service A Training Manual,(Second Edition),	1)Power point presentation 2) Videos 3) Google classroom 4)White board 5)Quiz 6) Google slide 7) Jam board

	d) Styles of Cocktails (Collins, cobblers, coolers, crustas, cups, e) daisies, eggnogs, flips, frappes, fixes, fizzes, Highball, juleps, f) Pick-me-ups, pousse café, smashes, sours, swizzles & toddies). g) Rules to be observed while making cocktails. 5.2 Recipes of classic & exotic cocktails. a) Whisky: (Godfather, Manhattan, Mint Julep, Whisky Sour			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Adv Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: VI

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

MONTH: **November - April** ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE: Identify factors to create impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley.

· Plan & operate a Bar operation, Manage inventory and maintain records pertaining to beverage control.

· Understand and apply cost dynamics as related to the Food & Beverage industry. · Demonstrate a detailed understanding of the various facets of the Food & Beverage cycle of control in the operational & post operational phase.

.

The learners will be able to: Students will learn impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley, Plan & operate a Bar operation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	Cycle of control. 6.1 Operational phase 6.1.1 Purchasing 6.1.1.1Methods of purchasing Food / Beverage. (Contract / Daily / Weekly/ Fortnight / Cash and Carry) 6.1.1.2 Selection of a supplier 6.1.1.3 Purchase specification 6.1.1.4 Purchase order. 6.1.2 Receiving 6.1.2.1 Quality inspection 6.1.2.2 Quantity inspection 6.1.2.3 Receiving records Maintained 6.1.3Storing & Issuing 6.1.3.1Bin card 6.1.3.2Store ledger	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi 3) Andrews S, (2009), Food & Beverage Service A Training Manual,(Second Edition),	1)Power point presentation 2) Videos 3) Google classroom 4)White board 5)Quiz 6) Google slide 7) Jam board

	6.1.3.3 Indent/ requisition 6.2 Post Operational Control: Management after the event phase. 6.2.1 Methods of Food control. 6.2.2 Methods of Beverage control 6.2.3 Detailed Daily Food cost report			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **TY BSC HS**

SEMESTER: **V** MONTH: **Aug 2022 - Nov 2022** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE:

- To educate students on basic to advance culinary skills.
- To give an overview of culinary specialties across the globe.
- To educate students on latest food trends.
- To highlight the importance of food safety.
- To train students for better employment prospects.

The learners will be able to:

- Understand importance of food safety.
- Understand latest food trends.
- Understand culinary specialties across the globe.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Basic of Food Production	4	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	Basics of Bakery & Confectionery	3	Bali Parvinder S., (2012), International Cuisine & Food	1 PowerPoint 2 Google meet 3 YouTube videos

			Production Management, Oxford University, New Delhi	4 Online quiz 5 Google classroom
	Modern Cooking Techniques & Processes	4	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	Larder	4	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2	Charcuterie	10	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	Cheese	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom

	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

VIVA COLLEGE
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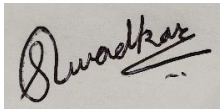
HOTEL & TOURISM MANAGEMENT STUDIES

PAPER, UNIT, TITLE				
3	International cuisine	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	Chocolate	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Google meet 3 YouTube videos 4 Online quiz 5 Google classroom
	Icings	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Google meet 3 YouTube videos 4 Online quiz 5 Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Front Office Hotel Management CLASS: TY BSc HS

SEMESTER: V

MONTH: July to November ACADEMIC YEAR: **2022 -2023**

LEARNING OBJECTIVE: To posses knowledge & skills with respect to handling operations of front Office & understand the formulas that are applied in the front office for forecasting & evaluating, understand the concept of foreign currency exchange.

The learners will be able to:

- To understand the formulas that are applied in the front Office for forecasting & evaluating.
- Decision Making through statistical data in Front Office Operations.
- Understand the rules & acceptance of foreign Currency exchange.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	Planning Operations 1.1 Management Function 1.1.1 Planning, Organising, 1.1.2 Co-ordinating, 1.1.3 Staffing, Leading, 1.1.4 Controlling, Evaluating 1.2 Establishing Room Rate 1.2.1 Different Approaches for pricing rooms 1.2.2 Market Condition Approach, 1.2.3 Rule of Thumb, 1.2.4 Hubbart's Formula-Determining single and double	15	Hotel Front Office Training Manual - Sudhir Andrews	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	rate 1.3 Special Room Rates Offered 1.3.1 Corporate / Commercial Rate, 1.3.2 Group Rate, 1.3.3 Promotional Rate, 1.3.4 Incentive Rate, 1.3.5 Family Rate, 1.3.6 Package, 1.3.7 Complimentary Rate 1.4 Forecasting Room Availability 1.4.1 Forecasting Data 1.4.1.1 Percentage of No-show, 1.4.1.2 Percentage of Cancellations, 1.4.1.3 Percentage of walk-ins, 1.4.1.4 Percentage of overstay, 1.4.1.5 Percentage of under stay, 1.4.2 Forecast formula; 1.4.3 Sample 3 and 10 days forecast; 1.4.4 Refining Forecast 1.5 Budgeting for Operations 1.5.1 Three Day Forecast; 1.5.2 Forecasting room revenue, 1.5.3 Estimating expenses, 1.5.4 Refining budget plans 1.6 Key Terms		Front Office management & Operations - Sudhir Andrews	

			Front Office Management - SK Bhatnagar	
UNIT - 2	Evaluating Operations 2.1 Evaluating front office operations 2.1.1 Daily Operations Report, 2.1.2 Monthly Income Statement 2.1.3 Occupancy Ratios; 2.1.3.1 Occupancy Percentage 2.1.3.2 Room Count 2.1.3.3 House Count 2.1.3.4 Double Occupancy percentage 2.1.3.5 Bed Occupancy Percentage 2.1.3.6 Foreign Guest Percentage 2.1.3.7 Average Daily Rate 2.1.3.8 Revenue Per Available Room (RevPAR) 2.1.3.9 Average Rate Per Guest (ARG) 2.1.4 Yield Statistic.	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	2.1.5 Market Share Index/ Fare Market Share 2.1.6 Evaluation of Hotels By Guests 2.2 Key Terms			
UNIT - 3	3.1 Handling Foreign Currency 3.2 Foreign Currency Exchange 3.3 Procedures to be followed while exchanging Foreign Currency 3.4 Currencies accepted by RBI 3.5 Foreign Exchange Certificate- Format 3.6 Foreign Exchange Settlements using Credit Cards. 3.7 Export Promotion Capital Goods Scheme (EPCG)	15	Front Office management In Hotel - BK Chakravarti	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Advanced Front Office CLASS: T.Y. BSc HS SEMESTER: **VI**

MONTH: November to March ACADEMIC YEAR: **2022 - 2023**

LEARNING OBJECTIVE: The students would be able to understand yield Management & its application in the Hotel Industry. Passport & Visa Regulations.
The learners will be able to:

- Yield management and its application in the Hotel Industry.
- Measurement of Yield for Management Decision Making.
- Passport & Visa regulations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	Yield Management 1.1 Introduction 1.2 Concept of Yield Management 1.2.1 Applications(Hospitality Industry) 1.3 Various strategies to maximise yield 1.3.1 Capacity Management, Discount Allocation, Duration Control 1.4 Measuring Yield 1.4.1 Potential Average Single Rate 1.4.2 Potential Average Double Rate	15	Jatashankar Tiwari – Front Office Management. Sudhir Andrews – Hotel Front Office Training Manual.	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	1.4.3 Multiple Occupancy Percentage 1.4.4 Rate Spread/ Rate Differential 1.4.5 Potential Average Rate 1.4.6 Room Rate Achievement Factor 1.4.7 Revenue Per Available Room (RevPAR) 1.4.8 Equivalent Occupancy 1.5 Elements of Yield Management 1.5.1 Group Room Sale (Group Booking Data, Group booking pace, Anticipated Group Business, Lead Time, Displacement of Transient Business) 1.5.1.1 Transient/ FIT Room Sales 1.5.1.2 Food and Beverage Activity 1.5.1.3 Local and Area-wide activities 1.5.1.4 Special Events 1.6 Using Yield Management 1.6.1 Potential High and Low Demand Tactics 1.7 Implementing Yield Strategies 1.7.1 Hurdle rate 1.7.2 Minimum length of stay 1.7.3 Close to arrival 1.7.4 Sell-through 1.8 Key Terms			
	Passport and Visa 2.1 Passport 2.1.1 Definition and Types of Passport 2.1.2 Guidelines for Indian Passport Holders 2.1.3 Issue of New Passport 2.1.4 Renewal Of Passport 2.1.5 Passport for Minor 2.1.6 Replacement of Lost/ Damaged Passport	15	Jatashankar Tiwari – Front Office Management. Sudhir Andrews – Hotel Front Office Training Manual.	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board

UNIT – 2	(Duplicate) 2.1.7 Extension of short validity passport 2.1.8 Change of Name/ Surname after marriage 2.1.9 Change of appearance 2.1.10 Change in Date of Birth/ Place of Birth 2.1.11 Emergency Travel Document 2.1.12 Fee Structure 2.2 Visa 2.2.1 Definition and types of visas 2.2.2 Requirement for visa, 2.2.3 Tourist visa, 2.2.4 Collective visa, 2.2.5 Transient visa & exemption from registration 2.2.6 Other types of Visas 2.2.7 Business visa, 2.2.8 Student visa, 2.2.9 Conference visa, 2.2.10 Employment visa, 2.2.11 Recreation visa, 2.2.12 Research visa, 2.2.13 Missionary visa, 2.2.14 Landing Permit Facilities, 2.2.15 PIO card(Person of Indian Origin) UNIT - 3 Revenue Management Terms (100 Terms) 1. 90-Day Forecast 2. Action Plan 3. Average Daily Rate (ADR). 4. Best Available Rate 5. Best-Rate Guarantee Program 6. Booking Pace 7. Brand Equity 8. Branding 9. Bundling 10. Cannibalization 11. Capacity 12. Central Reservation Office (CRO). 13. Central Reservation System 14. Channel 15. Channel Contribution Percentage			8. Projector 9. Discussion

UNIT – 3	16. Closed Or Closed Out 17. Closed To Arrival 18. Competitive Advantage 19. Competitive Intelligence 20. Competitive Set 21. Customer-Centric Approach 22. Customer Relationship Management 23. Cut-Off Date 24. Data Mining 25. Decline Stage 26. Demand 27. Demand Drainer 28. Demand Forecasting 29. Demand Generator 30. Denial 31. Discounting 32. Distressed Inventory 33. Dynamic Packaging 34. Elastic 35. Electronic Distribution 36. Environmental Scanning 37. Extended Stay Business 38. Fair Price 39. Fixed Costs 40. Flash Report 41. Forecasting 42. Forecasts 43. Full Pattern Length Of Stay Restriction 44. Global Distribution Systems 45. Group 46. Induce Trial 47. Inelastic 48. Internet Distribution System (IDS) 49. Introductory Stage 50. Inventory 51. Inventory Management 52. Law Of Demand 53. Law Of Supply 54. Long-Term Goals And Objectives 55. Long-Term Strategies 56. Lost Business 57. Loyalty Program 58. Managing Demand 59. Market Segmentation 60. Market Share 61. Market Skimming 62. Maximum Length Of Stay Restriction 63. Minimum Length Of Stay Restriction 64. Must-Stay Restriction 65. Net Rate 66. Off-Season 67. Pace 68. Peak Season 69. Perfectly Elastic 70. Perfectly Inelastic 71. Perishable 72. Pick-Up 73. Prestige Pricing 74. Price Elasticity Of Demand 75. Price Elasticity Of Supply 76. Price Leader 77. Promotional Pricing 78. Property Management System 79. Rack Rate 80. Rate Integrity 81. Regret. 82. Reservation Conversion Percentage 83. Run Of House 84. Short-Term 3 To 5-Day Forecast 85. Shortage 86. Shoulder Season 87. Stay Controls 88. Stay Pattern 89. Strategic Revenue Management Process 90. Strategy 91. SWOT Analysis 92. Tactics 93. Transient 94. Valley Season 95. Value-Based Pricing 96. Values 97. Wash Factor 98. Weak Season 99. Wholesale Rate 100.Yield Management	15	Jatashankar Tiwari – Front Office Management. Sudhir Andrews – Hotel Front Office Training Manual.	1. Slides 2. Videos 3. Quiz 4. Power Point 5. Presentation 6. PDF 7. Word 8. White Board 9. Projector 10. Discussion

VIVA COLLEGE
DEPARTMENT OF
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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Hotel Management** CLASS: **T.Y.H.S** SEMESTER: **V**

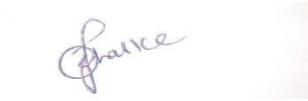
MONTH: **June – November** ACADEMIC YEAR: **2022-23** **Subject : Housekeeping V**

LEARNING OBJECTIVE: Explain and apply the guidelines for hiring various housekeeping contract services. Manage the manpower planning in the housekeeping department in different category of hotels.

The learners will be able to: Students will learn trends used in housekeeping, contract services used in housekeeping and determining staff strength.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**Chapter 1 Current trends in Housekeeping** 1.1 Green housekeeping Practices 1.2 Cleaning Equipment and agents 1.3 Guest supplies and amenities 1.4 Level of Service	3	Hotel Housekeeping Operations and Management.	• Notes • White board • Videos
	Chapter 2 Contract Services/Outsourcing 2.1 Types of Contracts 2.2 Guidelines for hiring contract Services 2.3 Advantages and disadvantages of contract service	3	Hotel Housekeeping Operations and Management. Housekeeping Operations, Design and Management	• Notes • White board
	Chapter 3 Manpower Planning 3.1 Determining staff Strength 3.2 Scheduling Staff (duty Roasters)	3	Hotel Housekeeping Operations and Management.	• Notes • White board • Charts

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Hotel Management** CLASS: **T.Y.H.S** SEMESTER: **V**

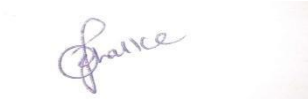
MONTH: **June - November** ACADEMIC YEAR: **2022-23** **Subject : Housekeeping V**

LEARNING OBJECTIVE: Explain the Importance of lighting, various types of lighting. Plan window treatments for various types of windows. Identify the various ceiling and wall coverings.

The learners will be able to: Students will learn various methods of lighting, types of windows and various wall and ceiling finishes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	**4. Lighting and Lighting Fixtures** 4.1 Lighting for different areas of the hotel. 4.2 Functional and aesthetic aspects of light	3	Hotel Housekeeping Operations and Management.	Notes White board Pictures
	5. Windows and window treatment 5.1 Types of Windows & Window Treatment 5.2 Selection and Care	3	Hotel Housekeeping Operations and Management.	Notes White board Pictures
	6. Wall and Ceiling Finishes 6.1 Types 6.2 Selection 6.3 Care	3	Hotel Housekeeping Operations and Management.	Notes White board Pictures Samples

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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HOTEL & TOURISM MANAGEMENT STUDIES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Housekeeping V** CLASS: **T.Y.H.S** SEMESTER: **V**

MONTH: **June - November** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE: Distinguish the various kinds of carpets in terms of construction and design and its maintenance procedure. Utilize the principles of designs while coordinating interiors.

The learners will be able to: Students will learn how to apply the elements and concept of interior decorations & elevations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	**7. Carpets and Floor Coverings** 7.1 Types 7.2 Selection 7.3 Care	7	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes White board Videos
	8. Interior Designing 8.1 Elements of Design 8.2 Principles of Design 8.3 Color Schemes	8	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes White board Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Advanced Housekeeping** CLASS: **T.Y.H.S** SEMESTER: **VI**

MONTH: **November to December** ACADEMIC YEAR:**2022-23**

LEARNING OBJECTIVE: To plan and evaluate budgets.

The learners will be able to: Students will learn various types of budget and planning process. To understand various roles of supervisor in housekeeping.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1.Budget and Budgetary Control** 1.1 Introduction 1.2 Types of Budget 1.3 Budget planning Process ● Preparing the budget ● Formats 1.4 Controlling Expenses 1.5 Inventory Control	8	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes Tables and charts Google classroom PPT
	2. Supervisory Skills 2.1 Job Description and daily routine of ● Guest room Supervisor ● Public area Supervisor ● Linen and Uniform Room Supervisor	7	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes Google classroom PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Advanced Housekeeping** CLASS: **T.Y.H.S** SEMESTER: **VI**

MONTH: **November to December** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE: To create and evaluate the aspects of Interior Design in a Guest Room Layout. Plan and draw the layout of Guest Rooms to scale. Set up the housekeeping department of a new property and create a timeline for the countdown to the opening.

The learners will be able to: Students will learn about various types of rooms in terms of sizes, interior and furniture and fixtures used in it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II	**3. Preopening Property Operations** 3.1 Setting up Housekeeping 3.2 Countdown to Opening 3.3 Preparing Snagging List	5	Housekeeping Operations and Management	• Notes • PPT • Checklist • Google Classroom
	4. Furniture and Accessories 4.1 Types 4.2 Selection 4.3 Care	5	Housekeeping Operations and Management	• Notes • Pictures • PPT • Google Classroom
	5. Guestroom Layout 5.1 Planning Room Layouts 5.2 Sizes of Room	5	Housekeeping Operations and Management	• Notes • Layouts • Google classroom

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

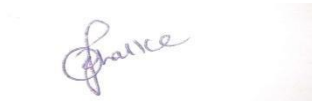
NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Advanced Housekeeping** CLASS: **T.Y.H.S** SEMESTER: **VI**

MONTH: **November to December** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE: To Identify safety hazards and implement preventive and remedial measures.
The learners will be able to: Students will learn to handle various emergency situations like fire, bomb threat etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III	**6. Risk and Environment Management** 6.1 Fire Safety and Accident Prevention ● Hazards ● Prevention ● Crisis Handling 6.2 First Aid 6.3 Dealing with Emergencies ● Fire ● Bomb threat ● Death ● Natural Disasters	15	Housekeeping Operations and Management	● Notes ● Google Classroom ● PPT

	6.4 Minimizing Theft ● Guest theft ● Employee theft			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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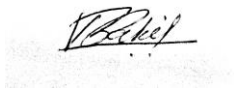

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VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio D'souza** DEPARTMENT:HOTEL MANAGEMENT CLASS: T.Y.H.S SEMESTER: VI

MONTH:NOVEMBER TO APRIL ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE: The objective of Organizational Behaviour is to provide students with the opportunity to diagnose Individual and Group Behaviour. • The study of Structure, Motivation & Change helps to develop skills in improving individual and group performance in entrepreneurial and established ventures. • To develop the overall personality and sustain in the dynamic environment

The learners will be able to: .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Computer Fundamentals	**Introduction to Organizational Behaviour** **1.1 Definition of Organizational Behaviour** **1.2 What Managers Do** 1.2.1 Management Functions 1.2.2 Management Roles 1.2.3 Management Skills 1.2.4 Effective v/s Successful Managerial activities **1.3 Disciplines that contribute to the Organizational Behaviour field** **1.4 Individual Behaviour** 1.4.1 Ability 1.4.2 Biographical characteristics 1.4.3 Learning & Process of Learning 1.4.4 Introduction & Importance to Perception, Values & Attitude 1.4.5 Personality & Its Determinants **1.5 Group Behaviour** 1.5.1 Types of Groups	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	● Notes Whiteboard ● PPT

	1.5.2 The Five stage model (Group Dynamics / Development)			
	Organizational Structure 2.1 What is Organizational Structure 2.1.1 Six Elements of organizational structure 2.2 Organizational Designs 2.2.1 Common Organizational Designs (Simple, Bureaucratic, Matrix)			
	Motivational Concepts 3.1 Define Motivation 3.2 Early Theories of Motivation 3.2.1 Maslow Abraham's Hierarchy of Needs theory 3.2.2 Douglas McGregor's Theory X & Theory Y 3.2.3 Fredrick Herzberg's Two Factor Theory 3.2.4 Mc Cleland's Theory of Needs 3.3 Contemporary Theories of Motivation 3.3.1 Cognitive Evaluation Theory (Definition) 3.3.2 Goal setting Theory (Definition) 3.3.3 Self Efficacy Theory (Definition) 3.3.4 Reinforcement Theory (Definition) 3.3.5 Equity Theory (Definition) 3.3.6 Expectancy Theory (Definition) 3.4 Leadership & Types of Leadership 2.2.2 New Design options (Virtual, Team, Boundaryless)	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	● Notes Whiteboard PPT
	Stress Management 4.1 What is Stress? 4.2 Potential Sources of stress			

	4.3 Consequences of Stress 4.4 Managing stress 4.5 Introduction to Quality of Work Life			
	Organizational Change 5.1 What is change? 5.2 Elements / Factors of Change (External & Internal) 5.3 Planned Change 5.4 Resistance to change 5.5 Overcoming Resistance to Change 5.6 Approaches to Managing Organizational change 5.6.1 Lewin's 3 step model 5.6.2 Action Research 5.6.3 Meaning of Organizational Development & Techniques / Intervention 5.7 Introduction to Diversity & Managing Diversity	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	● Notes Whiteboard PPT
	Conflict Management 6.1 Definition of Conflict 6.2 Sources & Types of Conflict 6.3 Conflict Management Styles 6.4 Power and Politics 6.4.1 Concept & Basis of Power 6.4.2 Organization Politics			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

VIVA COLLEGE
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VIVA COLLEGE
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:NAMRATA BHOLANATH KHAKANDI **DEPARTMENT**: ENVIRONMENTAL SCIENCE

CLASS: FY. BACA **SEMESTER:** II

MONTH: DECEMBER 2022-FEBRUARY 23 **ACADEMIC YEAR:** 2022-2023

LEARNING OBJECTIVE:
The Objective of the course is to familiarize the students with the need and ways to conserve the environment.

The learners will be able to:
After the completion of this course the students shall be able to

- list and define various components of environment,
- need of its conservation and role of human beings in its conservation as per the learning material provided by Ministry of Human Resources, Govt. of India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	THE MULTIDISCIPLINARY NATURE OF ENVIRONMENTAL STUDIES Definition, scope and importance Need for public awareness Natural resources Renewable and non-renewable resources Natural resources & associated problem. a. Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people. b. Water resources: Use and over-utilization of surface and ground water,	**15.HRS**	ENVIRONMENTAL STUDIES FOR UNDERGRADUATE COURSE BY ERACH BHARUCHA	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

	floods, drought, conflicts over water, dams benefits and problems. c. Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies. d. Food resources: World food problems overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies. e. Energy resources: Growing energy needs, renewable and nonrenewable energy sources, use of alternate energy sources. Case studies. f. Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification. • Role of an individual in conservation of natural resources. Equitable use of resources for sustainable lifestyles. Ecosystems • Concepts of an ecosystem. • Structure and function of an ecosystem. • Producers, consumers and decomposers. • Energy flow in the ecosystem. • Ecological succession. • Food chains, food webs and ecological pyramids. • Introduction, types, characteristic features, structure and function of th following ecosystem: a. Forest ecosystem b. Grassland ecosystem c. Desert ecosystem d. Aquatic ecosystem (ponds, stream lakes, rivers, oceans, estuaries)			
UNIT 2	BIODIVERSITY AND ITS CONSERVATION, ENVIRONMENTAL POLLUTION & SOCIAL ISSUES Biodiversity and Its Conservation • Introduction-Definition: genetic species and ecosystem diversity • Bio-geographical classification of India • Value of biodiversity : Consumptive use, productive use, social, ethical, aesthetic and option values	**15.HRS**		1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

	• Bio-diversity at global, national, local levels • India as a mega diversity nation • Hot spots of bio-diversity • Threats to biodiversity: Habitat loss, poaching of wild life, manwildlife conflicts • Endangered and endemic species of India • Conservation of biodiversity: In- situ and Ex-situ conservation of biodiversity Environmental Pollution Definition – • Causes, effects and control measures of: a. Air pollution b. Water pollution c. Soil pollution d. Marine pollution e. Noise pollution f. Thermal pollution g. Nuclear Hazards • Solid waste management: Causes, effect and control measures of urban and industrial wastes • Role of an individual in prevention of pollution • Pollution case studies • Disaster management: floods, earthquake, cyclone and land slides Social issues and environment 15 hrs 15 hrs • From unsustainable to sustainable development • Urban problems related to energy • Water conservation, rain water harvesting, and watershed management • Re-settlement and rehabilitation of people: Its problems and concerns. Case studies. • Environmental ethics: issues and possible solution • Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies. • Wasteland reclamation • Consumerism and waste products • Environment protection act • Air(Prevention and control of pollution) act			

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UNIT 3	• Water (Prevention and control of pollution) act • Wildlife protection act • Forest conservation act • Issues involved in enforcement of environmental legislation • Public awareness **HUMAN POPULATION & THE ENVIRONMENT AND UNDERSTANDING EXISTENCE AND CO-EXISTENCE** Human Population & The Environment • Population growth, variation among nations • Population Explosion- family welfare program • Environment and human health • Human rights • Value education • HIV/AIDS • Women and child welfare • Role of information technology in environment and human health • Case studies Understanding Existence and Co-existence • Interrelation and Cyclicity between Material order, Bio-order, Animal order and Human order •Understanding the human conduct : Relationship in Family, Justice in Relationship, Relationship of human with nature (environment),human Behaviour, Human Values, Nature & Morality •Understanding the Human society: Dimensions of Human Endeavour and Objectives, Interrelationship in Society, Mutual Fulfillment and Cyclist in nature.	**15.HRS**		1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.A.C.A.** SEMESTER: I

MONTH: **AUGUST 2022 – DECEMBER 2022** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: FUNDAMENTALS FOOD & BEVERGE SERVICE

The learners will be able to:

- Student should be able to Identify the role of the Food and Beverage Service department and explain its organization structure and importance.
- Explain how "moments of truth" affect guests, staff members, and managers, and describe the value of guests and staff members to a food service operation.
- Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	**1.** INTRODUCTION TO HOTEL AND CATERING INDUSTRY 1.1 Role of catering establishment in travel / tourism industry 1.2 Types of F& B operation (Classification). Commercial (residential / Non Residential) • Welfare • Institutional • Transport (Roads, Railways, Airlines, Marine) 1.3 Structure of hospitality industry and career opportunities	4 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet
	2. DEPARTMENTAL ORGANISATION AND STAFFING 2.1 Organization of F & B Department of a Hotel (English & French) 2.2 Etiquette & Attributes of an F & B Personnel.	5 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet

	2.3 Duties and responsibilities of F & B Staff. a) F & B Manager. b) Banquet manager. c) Outlet Manager (All day dining/ Bar/ In Room Dining/Specialty Restaurant, etc.) d) Senior captain/ Captain/ Supervisor. e) Steward. f) Sommelier. g) Hostess. h) Cashier. 2.4 Departmental Relationship of F& B with other Departments.			
	Revision Lectures	3 Lectures		1) Google Classroom 2) Google Slides 3) Google Meet 4) Google Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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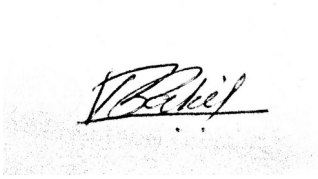

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.A.C.A.** SEMESTER: I

MONTH: **AUGUST 2022 – DECEMBER 2022** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: FUNDAMENTALS FOOD & BEVERGE SERVICE
The learners will be able to:

- Identify the operational and Auxiliary areas as well as equipment's used in the Food and Beverage department.
- Understand the various service methods and procedures followed in the department.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II	1. OPERATIONAL & AUXILLARY AREAS OF FOOD AND BEVERAGE DEPARTMENT: IMPORTANCE & LAYOUTS a) Coffee shop b) Snack bar/ counter service c) Kiosks d) Specialty restaurant/ theme restaurant e) Banquet operations/ outdoor catering f) In-Room Dining g) Dispense Bar / Discotheque/ night club/ pub h) Pantry/Still room i) Kitchen stewarding j) Silver room k) Linen room l) Vending machine	5 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet

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	2. FOOD AND BEVERAGE SERVICE EQUIPMENT 2.1 Classification of equipment. (Familiarization of equipment). 2.2 Criteria for selection and requirements. • Tableware/ silverware (cutlery/ hollowware/flatware) • Glassware • Crockery • Bar equipment(For all of the above Brands, Measures & Quality suppliers) • Special equipment with their uses. • Furniture (Tables/Chairs/Trolleys/Dumb Waiter) • Linen. • Light and décor • Care and maintenance of equipment. • Napkin folds. 2.3 Table d' hôte, A'la carte Mis-en –place, Mis -en –Scene	7 Lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) Google Classroom 2) Google Slides 3) Video Links 4) Google Meet
	Revision Lectures	5 Lectures		1. Google Classroom 2. Google Slides 3. Google Meet 4. Google Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

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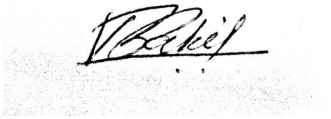

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.A.C.A.** SEMESTER: I

MONTH: **AUGUST 2022 – DECEMBER 2022** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: FUNDAMENTALS FOOD & BEVERGE SERVICE

The learners will be able to:

- Understand the various service methods and procedures followed in the department.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III	1. DINING SERVICES METHOD AND PROCEDURES 1.1 Different methods of services a. Table service • Silver service/ English service • American/ Plated • Family • Russian • French/ butler • Guéridon b. Bar Counter c. Assisted Service • Carvery	9 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) Google Classroom 2) Google Slides 3) Video Links 4) Google Meet

	• Buffets d. Self Service •Cafeteria: a).Counter b).free-flow c).Echelon d).Supermarket e. Single point service •Take-away •Drive through •Fast food •Vending •Kiosk •Food court •Bar f. Specialized (in-situ) •Tray •Trolley •Home delivery •Lounge •Room •Drive in 1.2 Special Service • Formal Service • Wave service • Carlton club service 1.3a. Rules to be observed while laying the table. b. Rules to be observed while waiting at the table. c. Dos & don'ts in a restaurant			
	Revision Lectures	5 Lectures		1) Google Classroom 2) Google Slides 3) Google Meet 4) Google Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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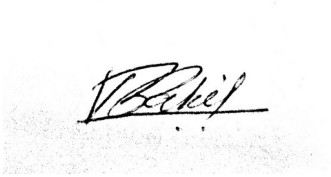

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SAGAR R. CHAUDHARY** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.A.C.A.** SEMESTER: II

MONTH: **JANUARY 2023 – APRIL 2023** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: FOOD & BEVERGE STUDIES

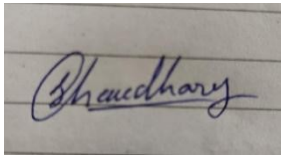
The learners will be able to:

- The different types of Menus and principles of menu planning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	1. MEALS AND MENU PLANNING 1.1 Menu – Origin, definition & objectives 1.2 Types of meals (Breakfast, Brunch, Lunch, Afternoon tea, High tea, Dinner) Types of Menu a. A la c arte b. Table d' hote c. Cyclic menu d. Banquet menu e. Carte du jour / plat du jour f. Californian menu g. Take-away Other types of menu a) Children's menu b) Club menu	7 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question

	c) Ethnic menu d) Health menu e) Spa Menu f) Ayurvedic Menu 1.4 Principles of Menu planning 1.5 Breakfast: English, Continental, American, Indian 1.6 Types of Tea Service: Full Afternoon Tea, High Tea.			
	Revision Lectures	3 Lectures		1) Classroom Theory Test 2) Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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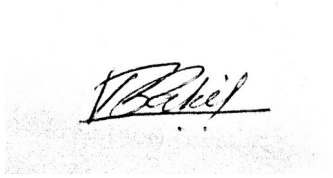

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SAGAR R. CHAUDHARY** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.A.C.A.** SEMESTER: II

MONTH: **JANUARY 2023 – APRIL 2023** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: FOOD & BEVERGE STUDIES

The learners will be able to:

- Sequence and course in the French classical menu also identify general accompaniments.
- Types, storage and service of Tobacco

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II	1.FRENCH CLASSICAL MENU 1.1 a. Sequence and Courses. b. General Accompaniments. 1.2 Ice creams: Types & categories of Ice creams	6 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question
	2.TOBACCO a) Introduction to Cigars and cigarettes. b) Types of tobacco c) Shape, size, color & Brand names with country of origin.	7 Lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question

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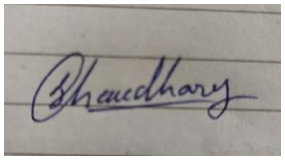
	Revision Lectures	5 Lectures		1. Classroom Theory Test 2. Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18



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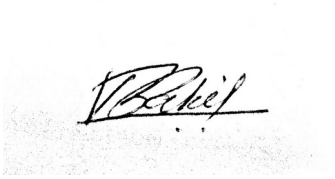

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SAGAR R. CHAUDHARY** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.A.C.A.** SEMESTER: II

MONTH: **JANUARY 2023 – APRIL 2023** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: FOOD & BEVERGE STUDIES

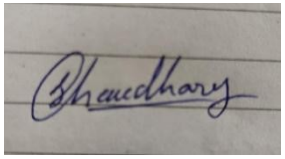
The learners will be able to:

- Types, storage and service Non alcoholic beverages.
- Simple control system followed in a restaurant.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III	1.1 NON ALCOHOLIC BEVERAGES a. Definition of beverages b. Classification chart –alcoholic & non alcoholic drinks. c. Stimulating -Tea, Coffee & Cocoa, (origin, manufacture, Method of preparation, types & brands) d. Nourishing -health drinks e. Refreshing –juices, squashes, crushes,	9 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question

	syrups & aerated water Table Water (origin, types & brands) & carbonated water.			
	1.2 SIMPLE CONTROL S YSTEMS. a. Restaurant reservation system b. KOT Checking System c. Types of KOT / BOT d. Method of billing (manual & computerized)	4 Lectures		1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question
	Revision Lectures	4 Lectures		1) Classroom Theory Test 2) Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17



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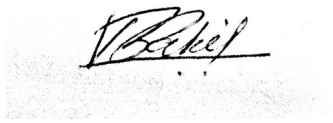

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KIRTI TUSHAR CHALKE **DEPARTMENT:** HOTEL MANAGEMENT **CLASS: F.Y BACA**

SEMESTER: I **SUBJECT: Food Safety and Hygiene**

MONTH: ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE: To make students aware about nutritional facts about various products and balanced diet and various new trends in diet.
The learners will be able to:

- After completion of this unit students will be able to state the relation between food and various factors influencing eating habits.
- After completion of this unit students will be able to state the breakup of protein carbohydrate and fat component of food.
- After completion of this unit students will be able to understand the basic need of vitamins and minerals.
- Students will be able to cater new trends in diet.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1.1 HOSPITALITY INDUSTRY & FOOD SAFETY** 1.1.1 Importance of Food Safety in Hospitality Industry	**5 HRS**	Sumitra Deshmukh & Dr. Asmita Thakur Catering Science & Food Safety	Notes White board PPT
	1.1.2 Responsibilities of Owner, Managers & Food Handlers	**5 HRS**		Notes White board PPT
	1.1.3 Economic consequences of food safety hazards **1.2 FOOD MICROBIOLOGY**		Rodey S Food- Hygiene& Sanitation	

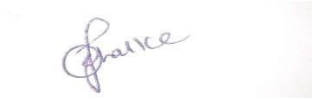
	1.2.1 What are microbes (Bacteria, Yeast & Mould) 1.2.2. Classification of Microorganisms and their characteristics 1.2.3 Factors for growth 1.2.4 Role of Microbes in manufacture of fermented foods (Dairy products, veg & bakery preparation, alcoholic beverages, vinegar, fermented Indian foods). **1.3 HAZARD ANALYSIS CRITICAL CONTROL POINT (HACCP)** 1.3.1 Introduction 1.3.2 Importance 1.3.3 HACCP Principles 1.3.4 HACCP in India 1.3.5 Food Regulation in India & HACCP 1.3.6 Food Service Management & HACCP 1.3.7 7 Critical Control Points	**5 HRS**	Food Hygiene for Food Macmillion Handlers	Notes White board PPT
UNIT 2	**2.1 FOOD BORNE INFECTIONS & MICROBIAL AGENTS** 2.1.1 Classification of Food Borne Diseases	**5 HRS**	Food Safety in the Hospitality -Butterworth Heinamann	Notes White board PPT

	2.1.2 Mode of Transmission of Diseases 2.1.3 Food Borne Illness 2.1.4 Food Poisoning (Intoxication) 2.1.5 Food Infections 2.1.6 Food Borne Bacterial Agents 2.1.7 Food Borne Viruses 2.1.8 Protozoans 2.1.9 Food Borne Helminths 2.1.10 Prions - Staphylococci, Salmonella, Escherichia coli, Hepatitis, 2.1.11 Listeria, clostridium botulinum, Vibrio-cholera, Shigella, Ameobic Dysentery, and Trichnia) 2.1.12 Natural Toxins (Kesari Dal, Potatoes, Mushroom, Shell Fish & Peanuts) 2.1.13 Chemical Toxins (Tin, Copper, Lead, Arsenic) Types of Infections & Microbial Agents Emerging versus Contemporary Food Borne Infections **2.2 FOOD ADULTERATION**	**5 HRS** **5 HRS**		White board PPT Notes Videos White board PPT Notes Videos

		2.2.1 Definition and types 2.2.2 Tests to detect (coffee, semolina, flour, ghee, butter, margarine, oil, milk, turmeric, coriander powder, pepper corns, meats) 2.2.3 Foods Laws, authorities and related standards (PFA, FPO, MFPO, MMPO, Agmark, BIS & FSSAI, Organic Certification, Vegetarian and non-vegetarian visual symbols on packed foods) **2.3 FOOD ADDITIVES** 2.3.1Definition 2.3.2 Uses of Food Additives 2.3.3 Types of Additives 2.3.4 Colours & Flavours 2.3.5 Browning reactions			
UNIT 3	**3.1 HYGIENE** 3.1.1Rules & Importance of Hygiene 3.1.2Types of Hygiene 3.1.3Personal Hygiene 3.1.4Workplace Hygiene 3.1.5Food Hygiene 3.1.6Waste Disposal- Types of waste, Waste disposal management, staff training 3.1.7Pest Control- Types of Pests, Inspection of Premises, Pests 3.1.8 Prevention	**5 HRS**	The Prevention of Food Commercial law Adulteration Act, 1954 Publishers	White board PPT Notes Videos	

	3.1.9 Methods of Pest Control. 3.1.10 Cleaning & Sanitation- Methods of cleaning & Sanitizing 3.1.11Factors affecting sanitizers Methods of cleaning & Sanitizing **3.2 FOOD PRESERVATION& STORAGE** 3.2.1Methods of Preservation 3.2.2 Natural & Chemical Preservation 3.2.3 Low Temperature (refrigeration, freezing, blast freezing) 3.2.4 High Temperature (pasteurization, sterilization, canning) 3.2.5 Irradiation 3.2.6 Advantages & Disadvantages of various methods 3.2.7Saving the nutrients in food 3.2.8 Types of Food Storage 3.2.9 Dry, Refrigerated & Freezer 3.2.10 FIFO 3.2.11 Stock Rotation & Cross Contamination	**5 HRS**		White board PPT Notes Videos
	3.3 REGULATION & REGULATING BODIES Governing bodies controlling hygiene practices in food outlets Rules & Regulations Food Establishment Inspections Record Maintenance System Food Safety Certification Food Safety Training Program	**5 HRS**		White board PPT Notes Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45HRS



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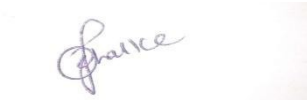

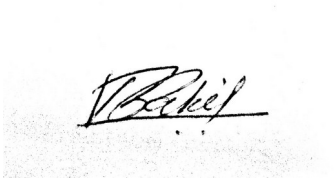

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VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Hotel Management - Introduction to Hospitality Studies CLASS: F.Y. BACA

SEMESTER: I

MONTH: July to November ACADEMIC YEAR: **2022 - 2023**

LEARNING OBJECTIVE: The objective of this course is to familarize student with the hospitality Industry and prospects of developing a career in Hospitality.

The learners will be able to:
State the career opportunities in the Hospitality Profession.
Define Service industry and its objectives.
List the impact of travel and tourism on Hotel Industry.
State the economic significance of Tourism.
State the features of Food & Beverage Industry.
List popular chains of Hotels.
Draw the organisation chart of different categories of Hotels.
State the various departments in hotels & their functions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	**PERSPECTIVES ON CAREERS IN HOSPITALITY.** □ Etymology, meaning & definitions of hospitality □ Origin, history & evolution of hospitality & hotels	15	Introduction to Hospitality Studies - Clayton W, Tom Powers & Denis Reynolds - Wiley Publications Management in	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector

	☐ International & Indian perspective ☐ What is hospitality Management? ☐ The managers role in the hospitality Industry ☐ Why study a hospitality management program ☐ Employment opportunities ☐ Planning a career ☐ Employment as an important part of education ☐ Profiting from work experience ☐ Learning on the job ☐ Other ways of profiting from the job ☐ The outlook for hospitality ☐ Polarization in hospitality service organizations		Hospitality Industry - Clayton W, Tom Powers- Wiley Publications	9. Discussion

UNIT – 2	☐ Accelerating competition ☐ Service is the difference ☐ Value consciousness ☐ Technology ☐ Empowerment ☐ Concern with security ☐ Concern with food safety & sanitation ☐ Sustainability ☐ Diversity HOSPITALITY AS A SERVICE INDUSTRY ☐ What is service ☐ Types of service ☐ Rendering Personal Service			

UNIT - 3	☐ Task ☐ Interpersonal Skills ☐ Managing the service transactions ☐ The product view of service ☐ The product view: Empowerment ☐ Service culture ☐ Employment as a product: Importance of people ☐ Employees as Internal customers ☐ Service as a sustainable competitive advantage TRAVEL & TOURISM ☐ The economic significance of Tourism ☐ Travel & Tourism Industry ☐ Nature of the travel & tourism Industry			

	□ Interrelationships within the travel & tourism industry □ Reason & need for people to travel □ The impact of travel on the hotel industry			
	THE FOOD SERVICE INDUSTRY □ The dinning market versus the eating market □ Categories of restaurants ✓ Fine dining restaurants ✓ Casual Upscale Dining ✓ Mid-Scale Restaurants ✓ Quick service restaurants ✓ Restaurants in retail stores ✓ Restaurants in shopping malls DEFINITION & EVOLUTION OF HOTELS &	15	Introduction to Hospitality Studies - Clayton W, Tom Powers & Denis Reynolds - Wiley Publications Management in Hospitality Industry - Clayton W, Tom Powers- Wiley Publications	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	MAJOR HOTEL CHAINS □ Inns & Hotels □ History & development of the Hotel Industry □ Origin of Hotels □ The Taj Hotel group □ Oberoi Hotels □ Leela Palaces & Hotels □ Lemon Tree Hotels □ ITC Hotels □ Hyatt Hotels □ Holiday Inn □ Hilton □ Four Seasons	15		1. Slides 2. Videos 3. Quiz 4. Power Point 5. Presentation 6. PDF 7. Word 8. White Board 9. Projector 10. Discussion

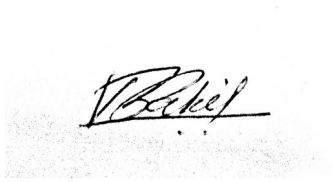
	▫ The Marriott Group ORGANISATION STRUCTURE OF THE HOTEL ▫ Organization chart of medium size & large size hotel ▫ The concept of revenue earning & support departments in a hotel ▫ Hotels – Different types of hotels **HOTEL FOOD & BEVERAGE OUTLETS & OPERATIONS.** ▫ Coffee Shops ▫ Introduction to Banquets & Function Catering ▫ Organization & fundamentals of room service & operations ▫ Specialty restaurant in hotels ▫ Bar Operation			

	☐ Minibar Bar Operations ACCOMMODATION DEPARTMENT ☐ Organization Chart of front office & Housekeeping ☐ Responsibilities of each section of the Front Office ☐ Responsibilities of each section of Housekeeping Department ☐ Activities involved in the guest cycle (from check in to check out) ☐ The concept of public areas in Housekeeping. OTHER DEPARTMENTS IN THE HOTEL ☐ Security Department ☐ Accounts & Food & Beverage controls department ☐ Engineering / Maintenance Department ☐ Sales & Marketing Department			

	☐ Human Resource & Personnel Department ☐ Spa & Health Club ☐ Purchasing & Receiving department & Stores			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**



VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMRATA BHOLANATH KHARKANDI & SAGAR VAZE **SUBJECT : PRINCIPLES OF FOOD PRODUCTION**

CLASS: F.Y BACA **SEMESTER: I**

MONTH: AUG 2022- OCT 2023 **ACADEMIC YEAR: 2022-2023**

LEARNING OBJECTIVE: Objective of this course is orientation to development of Culinary as profession, introduction to basic baking techniques and pre-preparation techniques of cooking.

The learners will be able to:

- Define aims of cooking, draw organization chart of classical kitchen brigade and list the duties of kitchen staff
- List ingredients, tools and equipment used in bakery and the methods of bread and cookies making
- List the kitchen, tools, equipments and fuels used in commercial kitchen.
- Pre-preparation, methods and list the methods of cooking food.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**INTRODUCTION TO CULINARY ARTS** **1.1** Aims and Objectives of Cooking Food Hotels 1.1.2 Level of skills & experience 1.1.3 Attitude & Behavior in the kitchen 1.1.4 Career avenues open to chefs. 1.1.5 Classical Kitchen Brigade 1.1.6 Organizational Structure of The Kitchen 1.1.7 Modern Staffing in Various Category 1.1.8 Duties & Responsibilities Of Various Chefs	7 HRS	Basic Cookery – Daniel R. Stevenson Modern Cookery for Teaching & Trade – Thangam Philip	1. GOOGLE MEET 2. POWER POINT PRESENTATION 3. GOOGLE CLASSROOM 4. YOUTUBE VIDEOS 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS

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	1.1.9 Coordination of Kitchen with Other Departments **1.2 INTRODUCTION TO BAKING (SAGAR VAZE)** 1.2.1 Safe food Handling practices 1.2.2 Tools, Equipment & Key Ingredients required in Baking 1.2.3 Understanding different types of bread 1.2.4 Understanding different methods in bread making 1.2.5 Basic faults in bread making 1.2.6 Various types of Cookies 1.2.7 Different method of making Cookies **1.3 INTRODUCTION TO INDIAN COOKING** 1.3.1 Introduction 1.3.2 Philosophy of Indian 1.3.3 Food Influences of the Invaders &travelers on Indian Cuisine 1.3.4 Equipment used in Indian Cooking 1.3.5 Regional & Religious Influences on Indian Cuisine	4 HRS 4 HRS	Bakery materials & methods, A. R. Daniel	
UNIT 2	**2.1 TYPES & SECTIONS OF A KITCHEN** 2.1.1 Commissary 2.1.2 Butchery 2.1.3 Garde Manger 2.1.4 Satellite Kitchen 2.1.5 Bakry & Confectionery 2.1.6 Pantry Kitchen 2.1.7 Stewarding 2.1.8 Show Kitchen 2.1.9 Cafeteria Kitchen 2.1.10 Walk-in cooler & walk-in freezer **2.2 TOOLS, EQUIPMENT & FUELS USED IN THE KITCHEN**	8 HRS 7 HRS	Food & Beverage Management – Davis & Stone Published by Butterworth-Heinemann Ltd. Food Preparation & Cooking – Stanly Thorues	1. GOOGLE MEET 2. POWER POINT PRESENTATION 3. YOUTUBE VIDEOS 4. GOOGLE CLASSROOM 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS 7. ASSIGNMENT

	2.2.1 Identification, Classification, & Uses of Equipment 2.2.2 Capital & Operational Equipment 2.2.3 Types & Uses of various knives, 2.2.4 care & maintenance of knives, 2.2.5 how to choose a knife Fuels used in the kitchen			
UNIT 3	**3.1 PREPARATION & MIXING OF INGREDIENTS** **3.2 COOKING TEMPERATURES & METHODS OF COOKING** 3.2.1 Heat Transfer & its relationship to Food Preparation 3.2.2 British Thermal Unit (BTU) 3.2.3 Heat Fusion Thermal Conductivity 3.2.4 Induction Cooking 3.2.5 Heat Removal-Cooling 3.2.5 Freezing of Foods 3.2.6 Thawing of Foods 3.2.7 Re-heating of Food 3.2.8 Effects of Heat on Foods 3.2.9 Boiling 3.2.10 Poaching 3.2.11 Stewing 3.2.12 Indian Dum Phukt 3.2.13 Braising 3.2.14 Frying a) Shallow b) Deep 3.2.15 Baking 3.2.16 Roasting Spit Roasting /Indian Tandoor Roasting 3.2.17 Microwave Cooking 3.2.18 Blanching	**7.5 HRS** **7.5 HRS**	Food Production Operations – Parvinder S. Bali-Oxford Publication	1. GOOGLE MEET 2. POWER POINT PRESENTATION 3. YOUTUBE VIDEOS 4. GOOGLE CLASSROOM 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS 7. ASSIGNMENT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45HRS

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMRATA BHOLANATH KHARKANDI & SAGAR VAZE **DEPARTMENT: HOTEL MANAGEMENT**

SUBJECT: PRINCIPLES OF FOOD PRODUCTION

CLASS: F.Y BACA **SEMESTER: II**

MONTH: DEC 2022 – MARCH 2023 **ACADEMIC YEAR: 2022-2023**

LEARNING OBJECTIVE: The Objective of this course is to familiarize the student towards analysis of food, stocks, soups, salads, eggs, fish and basic Indian cuisine

The learners will be able to:

- Furnish the basics of Food analysis List the methods of preparation of soups and stocks as mentioned in the syllabus.
- List the methods of preparation of sauces as mentioned in the syllabus.
- List various types of salads
- List various cuts of Fish
- Define various cuts of meat
- State basic principles of baking sponges and pastries
- List various masala combinations as mentioned in their learning material

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**SENSORY, IDENTIFICATION & EVALUATION OF FOOD INGREDIENTS** Organoleptic Sensory Evaluation (wherever	5 HRS	Sensory evaluation of food and Practices by Harry T. Lawless	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH

1.2	necessary) (Taste, smell, hearing, eyes) Identification of Ingredients Presentation Basic Factors of presentation (temperature, flavour, colour, shapes) Texture & Consistency (Firm & Close, short & crumbly, spongy, light & even, flaky, coarse, tough, hard, roping, pouring, soft peak, medium peak, stiff peak) **STOCKS, GLAZES, COOKING LIQUORS& THICKENING AGENTS** Introduction Definition of Stock & Glazes Uses of Stock & Glazes Classification of Stock White Stock (fond Blanc) Brown Stock (fond brun) & Indian Yakhni Stock Fish Stock (fumet) Vegetable Stock Neutral Stock Remouillage Court Bouillon Pot Liquor Emergency Stock /	5 HRS	FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE	MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. PRACTICAL OF HENDONIC TESTING (ORGANIC MATERIAL IDENTIFCATION OF SMELL, TASTE, TOUCH, VISUAL) IN CLASSROOM 1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. PRACTICE IN PRACTICALS

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HOTEL & TOURISM MANAGEMENT STUDIES

1.3 **UNIT 2** **2.1** **2.2**	Convenience Bases Elements of Stocks & its Characteristics Precautions to be taken while preparing Stock Definition Starches as Thickening Agent Definition of Roux Types of Roux (white, blond, slack, brown) Other thickening agents • White wash (fecule) • Cornstarch (cornflour) • Arrowroot **SOUPS** Classification of soups with examples Clear Soup Broth Consommé Thick soup Puree Cream Velouté Bisque Chowder Cold Soup Speciality Soup Tips for Making Good Soups	5 HRS	FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. PRACTICE IN PRACTICALS
	SAUCES Definitions Functions & Uses Structure of Sauces	5 HRS	FOOD PRODUCTION OPERATIONS BY PARVINDER BALI	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS

2.3	Classification of Sauces Emulsions Definition of Emulsion Types of Emulsions a) Miscible b) Immiscible) Stabilisation of Emulsifiers Causes of Breakdown of the Emulsions Preparation of Basic Mother Sauces & Derivatives of Each **SALADS** Introduction Composition of a Salad Types of Salad Various Types of Lettuce Used in Salads Salad Dressing Emerging Trends in Salad Making Salient Features of Preparing Good Salads Classification of Vegetables **EGGS & FISH** Introduction Cooking of eggs for breakfast Identification & Classification of Fish Cuts of Fish Darne,Trançon ,Fillet,Suprême, Delice, Goujon Goujonettes Paupiette, En tresse, En Loregnette Pavé Cravate	5 HRS 5 HRS	THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY	3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT 1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT 1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT

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	(plaited) Cooking of Fish			
UNIT 3	**3.1 INTRODUCTION TO MEATS** Lamb, Pork, Beef, Veal & Furred Game Introduction Cuts of lamb, beef, veal and pork (with diagram) Processing of a Whole Animal Classification of Meats Yield Tests Introduction to Poultry & Game Bird Introduction Physical & Chemical Characteristics of Poultry Trussing Methods Some Classical Preparations of Poultry	**5 HRS**	FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT 6. PRACTICAL DISSECTION OF MEAT
	3.2 BASIC SPONGE, CAKE & PASTRY (SAGAR VAZE) Introduction Pastry Techniques and Principles Principles Behind Making of Sponge Points to be Kept in Mind While Making Sponges & Cakes Different types of Pastry Basic method of making pastry	**5 HRS**	FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT 6. PRACTICAL DISSECTION OF MEAT
	3.3 MASALAS, PASTES & INDIAN GRAVIES Introduction Blending of Spices & Concept of Masalas Concept of Dry & Wet Masalas Pastes used in Indian Cooking Difference between Gravies & Curries Regional Gravies Preparation of Gravies	**5 HRS**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45HRS

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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VIVA COLLEGE
DEPARTMENT OF HOTEL & TOURISM MANAGEMENT
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **Food & Beverage Service** CLASS: **S.Y.B.A.C.A.** SEMESTER: III

MONTH: **JUNE-2022 to OCTOBER-2022** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine. • Understanding the production process of Beer, Wine and Spirits.

The learners will be able to: Understand the different types of Alcoholic Beverages. Students will learn the types of Alcoholic beverages as per the production methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
● **UNIT 1** ALCOHOLIC BEVERAGES	● ALCOHOLIC BEVERAGES a. Definition, history of Alcoholic Beverages & classification. b. Benefits and harmful effects of alcohol.	02	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Google slide
	WINES ● **1.1 Definition & history of wines.** ● **1.2 Types of Wines:** ● **Still (red, white & rose), sparkling/Champagne, Fortified (sherry, port, Madeira, Marsala & Malaga), Aromatized wines (Vermouth).** ● **1.3 Methods of production, Still (red, white, rose).**	13	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service •Larousse Christopher Foulkes- Encyclopedia of Wines-	Google classroom White board Google slide

	● a) Viticulture ● (Wine calendar, terroir, vine species, grape varieties & diseases). ● b) Vinification ● (Manufacturing process, elements of wine & faults in wines). ● c) Champagne & Sparkling Wines. ● (History, districts, grape varieties, Methode Champenoise, cuvee close, transfer method, charmat & impregnation, Names & bottle sizes). ● d) Fortified Wines (Production & types). ● 1) Sherry (Solera system) ● 2) Port ● 3) Madeira (estufagen) ● 4) Marsala ● 5) Malaga ● e) Aromatized wines (Definition & types)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF HOTEL & TOURISM MANAGEMENT

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **Food & Beverage Service** CLASS: **S.Y.B.A.C.A.** SEMESTER: III

MONTH: **JUNE-2022 to OCTOBER-2022** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine. • Understanding the production process of Beer, Wine and Spirits.

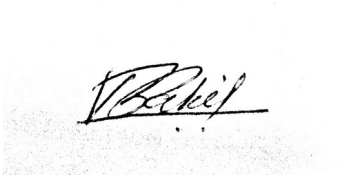
The learners will be able to: Understand the different types of Alcoholic Beverages. Students will learn the types of Alcoholic beverages as per the production methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II	2.1 Wine producing countries of the world (Regions, Wine laws, labels & shippers). a) Old world wine producing countries (France, Italy, Germany, Spain & Portugal). b) New World wine producing countries	10	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service •Larousse Christopher Foulkes- Encyclopedia of	Google classroom White board Google slide

	(Australia, New Zealand, South Africa, U.S.A. & India).		Wines-	
	2.2 Wine tasting, Storage & Service	02	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Google slide
	2.3 Food and wine Harmony.	03		Google classroom White board Google slide

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF



SIGNATURE OF THE H.O.D.

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **Food & Beverage Service** CLASS: **S.Y.B.A.C.A.** SEMESTER: III

MONTH: **JUNE-2022 to OCTOBER-2022** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE: Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine. • Understanding the production process of Beer, Wine and Spirits.

The learners will be able to: Understand the different types of Alcoholic Beverages. Students will learn the types of Alcoholic beverages as per the production methods

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNITIII BEER & OTHER FERMENTED BEVERAGES	a) Definition, History & Brewing process. (Components of beer, top fermentation, bottom fermentation) b) Types of Beer, Storage & Service (Lager, Pilsner, Draught, Ale, Stout, Porter, Ice, Lambic & Smoked) c) Other fermented beverages (Cider, Perry, Mead, Sake & Toddy).	03	● Shatbi Basu- The can't go wrong Cocktail book ● Brian Glover- The world encyclopedia of Beer	Google classroom White board Google slide
	3.2 SPIRITS a) Introduction and definition b) Pot and patent still method of production. 3.3 History, Production, types & Brand names (national & International) a) Whisky (Scotch, American, Canadian, Irish & Japanese) b) Rum (White, Gold, Dark & Flavoured) c) Brandy (Cognac, Armagnac & Fruit) d) Gin e) Vodka, flavoured vodka f) Tequila & Mezcal	03	•Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Google slide
	3.4 Alcoholic Strength :Proof, GL, Sykes, U.S., British (OIML)	04	Vijay Dhawan- Food and Beverage Service	Google classroom

	3.5 Other Spirits (Aquavit, schnapps, Pastis, ouzo, arrack) 3.6 LIQUEURS Introduction, definition, classification & production of liqueurs a) Different types of liqueurs: Base, Flavours, Country of origin. b) Brand names of liqueurs (Generic & Proprietary)		**FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	White board Google slide
	3.7 APERITIFS & BITTERS a) Definition b) Brand names	02	Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Google slide
	3.8 GLOSSARY OF TERMS RELATED TO Alcoholic beverages, Menu terminologies.	02	Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Google slide

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

VIVA COLLEGE
DEPARTMENT OF HOTEL & TOURISM MANAGEMENT

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:NAMRATA BHOLANATH KHAKANDI SUB: FOOD COST CONTROL

CLASS: SY. BACA **SEMESTER:** III

MONTH: JULY 2022- OCTOBER 2023 **ACADEMIC YEAR:** 2022-2023

LEARNING OBJECTIVE:
To provide the basic understanding to the students in management controls- purchase, stores and production , costing, cost dynamics & cost control

The learners will be able to:
After completion of this units students will be able to understand cost analysis overhead cost elements and control of cost
understand controls- purchase, stores and production
understand costing, cost dynamics & cost control

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Management Management objectives Importance of financial control in catering establishments Elements of Costs Cost analysis food cost labour cost Overheard cost elements Control of labour cost and over head cost	**15.HRS**	Food & Beverage Management – Davis & Stone Published by Butterworth-Heinemann Ltd.	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

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HOTEL & TOURISM MANAGEMENT STUDIES

UNIT 2	Purchase Control Objectives of purchasing Purchasing procedures Methods of purchasing Essentials of a good supplier ABC analysis Yield testing, yield calculations & yield percentages Centralized & decentralized purchasing Formats of: Purchase requisition & purchase order Stores Control Objectives of store keeping Methods of store keeping classification of material , Minimum stock, maximum stock & reorder level Method of receiving : Delivery Challans, cross checking with P.O & its documentation Computerized records Methods of stock valuation Continuous / perpetual stock taking Annual stock taking Causes of difference in book stock & physical stock Avoidable & unavoidable causes of food spoilage Production Control Stores issues procedure opening balances of raw material / Left over & material in process Production planning Pricing menu card Daily material consumption record	**15.HRS**	Food & Beverage Management – Davis & Stone Published by Butterworth-Heinemann Ltd.	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

UNIT 3	Daily food cost / gross profit with percentage & control. Standard portion size Standard beverage cost Food cost percentage Seat turnover ratio Average check Sales per menu Gross profit method of pricing Importance of pricing Methods of pricing concept Calculating kitchen profit	**15.HRS**		1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:NAMRATA BHOLANATH KHAKANDI **SUB:** GASTRONOMY

CLASS: SY. BACA **SEMESTER:** IV

MONTH: DEC 2022- MARCH 2023 **ACADEMIC YEAR:** 2022-2023

LEARNING OBJECTIVE:

The students will be able to understand the food gastronomy

The learners will be able to:
After completion of this unit student will be able to state the meaning, perception and factors of Gastronomy.
After completion of this unit student will be able to state history of European Gastronomy and the new contributors to develop the modern Gastronomy.
After completion of this unit student will be able to state the history and growth of Indian Gastronomy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	What is Gastronomy? The perception of Gastronomy in society Factors contributing dissemination of Gastronomic knowledge. Orientation to European Gastronomy. Modern approach towards study of Gastronomy Developing the skills of Gastronomic analysis	**15.HRS**	Larrouse Gastronomy	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

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UNIT 2	History of European Gastronomy Birth and growth till 18th century The 19th century-The golden age The 20th Century Cuisines Nouvelles Contributors to development of modern cuisine and gastronomy Escoffier Fernand Point Ferran Adria Grant Achatz Assignment: 1. Current trends of Gastronomy 2. Report of top ten restaurant list (Present/previous year) 3. Growth story of any two Michelin star chefs-European chefs	**15.HRS**	Gastronomique Ma cusine by Auguste Escofier	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

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UNIT 3	History & growth of Indian Gastronomy Philosophy of ancient Indian cuisine Contributors to modern school of Indian cuisine Padamashri Chef Imtiyaz Quershi, Chef Vikas khanna, Gaggan Anand, Ms Camelia Punjabi, Padamashri Ms Thangam Philip, Chef Vineet Bhatia, Chef Atul Kochar, Padamashri Chef Sanjeev Kapoor, Ms Tarla Dalal etc. Current trends in Indian cuisine Factors contributing towards acceptance of Indian cuisine globally.	**15.HRS**	Theory of cookery - Krishna Arora Quantity food production- Thangam Phillip	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

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SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KIRTI TUSHAR CHALKE **DEPARTMENT: HOTEL MANAGEMENT** **CLASS: S.Y BACA**

SEMESTER: I **SUBJECT: NUTRITION AND FOOD SCIENCE**

MONTH: ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE: To make students aware about nutritional facts about various products and balanced diet and various new trends in diet.

The learners will be able to:

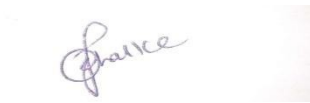
- After completion of this unit students will be able to state the relation between food and various factors influencing eating habits.
- After completion of this unit students will be able to state the breakup of protein carbohydrate and fat component of food .
- After completion of this unit students will be able to understand the basic need of vitamins and minerals.
- Students will be able to cater new trends in diet

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1.1 NUTRITION** Definition Relation of food & Health Malnutrition, under nutrition, over nutrition, diet, kilo calories, health. Food & Its Functions Psychological Functions – Physiological Functions Social Functions Factors affecting food intake & Food Habits - Geographical Reasons - Economical Reasons - Religious Reasons -	7 HRS		1. GOOGLE MEET 2. POWER POINT PRESENTATION 3. GOOGLE CLASSROOM 4. YOUTUBE VIDEOS 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS

	Social Reasons Classification of Nutrients Digestion, Absorption & Metabolism of Food			
UNIT 2	**2.1 CARBOHYDRATES** Classification & Composition Functions, Daily Requirements & Sources Excess & Deficiency Uses in food Preparation (gelatinization, gel formation, dextrinization, gluten formation & Caramalization **2.2 PROTEINS** Classification & Composition Functions Requirements & Sources Excess & Deficiency Uses in food preparation Effect of Heat (Denaturation, Coagulation) Gel Formation Foaming **2.3 FATS & OILS** Classification & Composition Functions, Requirements & Sources Excess & Deficiency Types, Sources & Uses Factors causing deterioration	15 HRS	Food & Beverage Management – Davis & Stone Published by Butterworth-Heinemann Ltd. Food Preparation & Cooking – Stanly Thorues	1. GOOGLE MEET 2. POWER POINT PRESENTATION 3. YOUTUBE VIDEOS 4. GOOGLE CLASSROOM 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS 7. ASSIGNMENT
UNIT 3	**3.1 VITAMINS, MINERALS, WATER & COLLOIDS** Functions	**7.5 HRS**		1. GOOGLE MEET

	Sources Deficiency & Excess Fat Soluble & Water soluble Vitamins (A,D,E,K,B1,B2,B3,C) Minerals (Ca,P,Na,K,Fe,I,FI) Importance, Balance & Sources Cooking Losses & Prevention **3.2 BALANCED DIET** Introduction Recommended Dietary - Allowances - RDAs for Specific Nutrients Basic Food Groups - Cereals & Millets Group - Protein or body building Group - Protective Food Group - Secondary Protective Food Group Food Pyramid- Bread, Grains, Cereals & Pasta from the base - Fruits & Vegetables - Beans, Eggs, Lean Meat & Fish - Dairy Products - Fats & Sweets New Food Pyramid **3.3 ORIENTATION TO SPECIAL NUTRITIONAL REQUIREMENTS** Introduction and need of special diet Special Nutritional Requirements - Gluten free - Sugar free- Vegan - Anti-Allergen Diet (mushroom, nuts, lactose, sea-food) - High Protein - Low fat	**7.5 HRS**	Food Production Operations – Parvinder S. Bali-Oxford Publication	2. POWER POINT PRESENTATION 3. YOUTUBE VIDEOS 4. GOOGLE CLASSROOM 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS 7. ASSIGNMENT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45HRS



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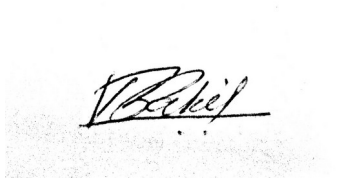

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HOTEL & TOURISM MANAGEMENT STUDIES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **ADVANCED CULINARY ARTS** CLASS: **TY BACA**

SEMESTER: **VI** MONTH: **NOV 2023 - MAR 2023** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE:

- To teach students them about International Cuisine

The learners will be able to:

- List the features of International cuisine
- To define the features of International cuisine, its history and modern development region wise and
- Will be able to state the preparation methods, Meal structure and regional variation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	**1.1 Middle Eastern- Morocco, Lebanon, Turkey** 1.1.1 History and development of Middle Eastern cuisine. 1.1.2 Meal structure. 1.1.3 Main ingredients used in Middle Eastern cuisine 1.1.4 Regional variations	7	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	1.2 Africa 1.2.1 History and development of Africa cuisine. 1.2.2 Meal structure. 1.2.3 Main ingredients used in Africa cuisine 1.2.4 Regional variations	8	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

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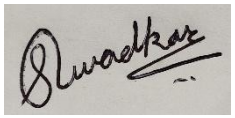
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2	2.1 USA 2.1.1 History and development of USA cuisine. 2.1.2 Meal structure. 2.1.3 Main ingredients used in USA cuisine 2.1.4 Regional variations	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	2.2 Mexico 2.2.1 History and development of Mexico cuisine. 2.2.2 Meal structure. 2.2.3 Main ingredients used in Mexico cuisine 2.2.4 Regional variations	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	2.3 Caribbean 2.3.1 History and development of Caribbean cuisine. 2.3.2 Meal structure. 2.3.3 Main ingredients used in Caribbean cuisine 2.3.4 Regional variations	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3	Modern cooking technics and process and layout of different types of buffet	15	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

	3.1 Modern cooking technics and process 3.2 Sousvide cooking, cook chill, cook freeze 3.3 Buffet components cooked in the below buffets 3.4 Breakfast- Indian, continental, American 3.5 Hi-Tea 3.6 Brunch			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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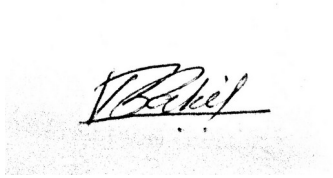

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Advanced Food Production** CLASS: **TY BACA**

SEMESTER: **V** MONTH: **AUG 2022 - NOV 2022** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE:

- To educate students on Lifestyle food.
- To educate students on Food with medicinal value,
- To educate students on Religious food.
- To educate students on invalid cuisine & traditional practices for cooking

The learners will be able to:

- Understand Lifestyle food,
- Understand Religious food.
- Understand Food with medicinal value.
- Understand invalid cuisine.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	1. Influence of Ayurveda on Indian cuisine 1.1 Basic principles of healthy cooking 1.2 Ayurvedic diet	15	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study

	1.3 Satvik food , Tamasik , 1.4 Ayurvedic ingredients 1.5 Ayurvedic Receipes 1.6 Latest Food trends 1.6.1 Farm to Fork 1.6.2 Organic Food 1.6.3 Reducing food mileage 1.6.4 Sousvide cooking 1.6.5 Progressive cooking			

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2	2 Healthy and dietary 2.1 Sugar free 2.2 Gluten Free 2.3 High Protein 2.4 Low Fat 2.5 High Fiber 2.6 Low calories 2.7 Low sodium	7	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	3 Special Cuisine, Diet	8	Bali Parvinder S., (2012),	1. PowerPoint

	3.1 Vegan Food 3.2 Kosher 3.3 keto diet 3.4 Macrobiotic diet 3.5 Mediterranean 3.6 VLCD Diet 3.7 DASH Diet 3.8 Intermittent Fasting		International Cuisine & Food Production Management, Oxford University, New Delhi	2. Black board 3. YouTube videos 4. Class test 5. Home study

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3	3.8 Intermittent Fasting Unit III 3.1 Platted Dessert ● French dessert ● Italian dessert ● Russian dessert ● Indian dessert ● American dessert 3.2 Frozen dessert	15	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

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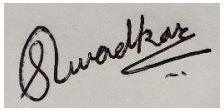
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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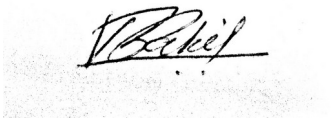

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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:NAMRATA BHOLANATH KHAKANDI **SUB:**: FOOD LEGISLATION

CLASS: TY. BACA **SEMESTER:** V

MONTH: DEC 2022- MARCH 2023 **ACADEMIC YEAR:** 2022-2023

LEARNING OBJECTIVE:

On successful completion of this course students will be able to assimilate various

food laws. Students will be able to understand the various licenses required for starting a

commercial property

The learners will be able to:
After completion of this unit student will be able to learn laws and different Acts regarding food and beverage establishment.
After completion of this unit student will be able to state what is Safe food handling, Food adulteration, Food additives and Penalty and compensation for serving unsafe food.
After completion of this unit student will be able to state different liquor laws, tobaco laws, labor laws and difference between Contract and agreement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	1 General Laws regarding food 1.1 Meaning and definition of food 1.2 1.2 Prevention of food adulteration act 1.3 What is food adulteration	**15.HRS**	FSSAI website	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH

	1.3 What is an adulterant and adulterated food 1.5 Food poisoning 1.5.1 Food additives 1.5.2food preservatives 1.5.3 Penalty / compensation for serving unsafe food 1.6 Food quality and standard 1.7 Prohibition and restriction			MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS
UNIT 2	2 Role of various authorities 2.1 Food safety & standard acts 2.2 Licensing (Basic license required for food service establishment) 2.3 Role of management 2.4 Role of food safety officer & auditor 2.5 Role of food analysts 2.6 Role of adjudicating officer 2.7 Ethical responsibilities of service establishment 2.8 Garbage disposal	**15.HRS**		1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

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UNIT 3	3 Licenses and business contracts 3.1 Liquor license and types 3.2 Procedure to acquire liquor license 3.3 Off premises or offsite premises 3.4 Procedure to acquire liquor license for guests 3.5 Liquor legislation in India 3.5.1 Prohibition 3.5.2 Dry days 3.5.3 Legal age for drinking 3.6 Sale of cigarette, cigar and tobacco	**15.HRS**		1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

	3.7 Business contracts 3.7.1 Introduction 3.7.2 Indian contract act 1872 3.7.3 Proposal agreement and contract 3.7.4 Essential elements of a contract 3.7.5 Void / voidable contracts 3.7.6 Types of contract 3.7.7 Hospitality contracts 3.7.8 Labour Laws that provide for rights of catering employees at work place			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **FOOD TOURISM** CLASS: **TY BACA**

SEMESTER: **VI** MONTH: **NOV 2022 - MAR 2023** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE:

- To understand the importance of food tourism and its increasing popularity around the world.

The learners will be able to:

- To know the history and importance of food tourism.
- To know the growing popularity in India.
- To understand the festivals and culture around the world and its importance.
- To know the festivals in India who plays major role in tourism.
- Will able to understand the new trends changing in hotels industry and restaurants to promote and encourage food tourism.
- Role of social media in world food tourism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	**1.1 Introduction to food tourism, Food Tourism in India, Food Tourism all around the world.** 1)Introduction 2) Food tourism an innovative concept 3) Increase in demand of world tourism 4) Food tourism in India. a) Lassi- Punjab b) Biryani – Hydrebad	15	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study

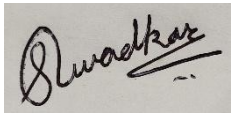
	c) Pani Puri/gol gappa(Indian street food) 5) food Tourism around the world a) food in Egupt b) food in Denmark c) food in France e) food in Japan f) food in America g) food in China h) Coastal Food			

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2	2.1 Seasons and festivals 1) Learning the seasons 2) History 3) Food Festival a) USA b) Hong Kong c) Auckland seafood festival d) Eastern Africa i) Kenya ii) Nairobi iii) Mombasa carnival e) North Africa f) South Africa 4) Festivals in India a) Rathyatra b) Saraswati puja c) Muharram d) Kali puja e) Makar sankranti	15	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study

	f) Lakshmi pooja g) Durga Puja h) Christmas			

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3	Modern revolution and contribution of hotel and restaurants. 1) Food promotion in Indian and world hotels 2) Modern Food Tourism a) Organic food Tourism b) Wine tourism (Increase in Demand of Wine tourism in India. c) Contribution of social Media in advancing food Tourism all around the world.	15	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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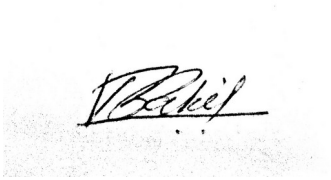

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VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VAIBHAV PATIL **DEPARTMENT**: HOTEL MANAGEMENT

SUBJECT: INTRODUCTION TO MARITIME HOSPITALITY

CLASS: FY. BACA **SEMESTER:** II

MONTH: DECEMBER 2022-FEBRUARY 23 **ACADEMIC YEAR:** 2022-2023

LEARNING OBJECTIVE:
Objective Of this course is to teach students about the varieties of Indian desserts.

The learners will be able to:
After completion of this unit student will be able to:

- List the features of Indian confectionary.
- To define the features of Indian confectionary, its history and modern development region wise and will be able to state the preparation methods, Meal structure and regional variation.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	1. Introduction to maritime hospitality 1.1 What is maritime hospitality management ? 1.2 Managers & employees role in maritime hospitality industry 1.3 Importance of study in maritime hospitality management programme 1.4 Planning a career 1.5 Employment as an important part of education 1.6 Getting a job 1.7 Maritime hospitality industry and environment 1.8 Safety and security of guest 1.9 Other support departments	**15HRS**		1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3 3. HOME STUDY AND QUIZ FOR STUDENTS
UNIT 2	2. Room & Restaurant business in maritime hospitality 2.1 Types of travelers	**15HRS**		1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS

	2.2 Types of rooms 2.3 Guest handling 2.4 Room management 2.5 Types of restaurant in maritime hospitality 2.6 Restaurant operation 2.7 Food products and its promotion 2.8 Service program for ageing personal 2.9 Customer concern – Health & wellness & Nutritional food			3. HOME STUDY AND QUIZ FOR STUDENTS
UNIT 3	3.1 Features of good galley 3.2 Layout of galley 3.3 Equipment‟s required in galley 3.4 Care and maintains of kitchen galley 3.5 Quantity food production & quality control 3.6 Receiving, storage and inventory control	**15HRS**		1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. HOME STUDY AND QUIZ FOR STUDENTS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HRS

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio dsouza** DEPARTMENT:HOTEL MANAGEMENT CLASS: BACA SEMESTER: V

MONTH:NOVEMBER TO APRIL ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE: The objective of Organizational Behaviour is to provide students with the opportunity to diagnose Individual and Group Behaviour. • The study of Structure, Motivation & Change helps to develop skills in improving individual and group performance in entrepreneurial and established ventures. • To develop the overall personality and sustain in the dynamic environment

The learners will be able to: .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Computer Fundamentals	**Introduction to Organizational Behaviour** **1.1 Definition of Organizational Behaviour** **1.2 What Managers Do** 1.2.1 Management Functions 1.2.2 Management Roles 1.2.3 Management Skills 1.2.4 Effective v/s Successful Managerial activities **1.3 Disciplines that contribute to the Organizational Behaviour field** **1.4 Individual Behaviour** 1.4.1 Ability 1.4.2 Biographical characteristics 1.4.3 Learning & Process of Learning 1.4.4 Introduction & Importance to Perception, Values & Attitude 1.4.5 Personality & Its Determinants **1.5 Group Behaviour** 1.5.1 Types of Groups	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	● Notes Whiteboard ● PPT

	1.5.2 The Five stage model (Group Dynamics / Development)			
	Organizational Structure 2.1 What is Organizational Structure 2.1.1 Six Elements of organizational structure 2.2 Organizational Designs 2.2.1 Common Organizational Designs (Simple, Bureaucratic, Matrix)			
	Motivational Concepts 3.1 Define Motivation 3.2 Early Theories of Motivation 3.2.1 Maslow Abraham's Hierarchy of Needs theory 3.2.2 Douglas McGregor's Theory X & Theory Y 3.2.3 Fredrick Herzberg's Two Factor Theory 3.2.4 Mc Cleland's Theory of Needs 3.3 Contemporary Theories of Motivation 3.3.1 Cognitive Evaluation Theory (Definition) 3.3.2 Goal setting Theory (Definition) 3.3.3 Self Efficacy Theory (Definition) 3.3.4 Reinforcement Theory (Definition) 3.3.5 Equity Theory (Definition) 3.3.6 Expectancy Theory (Definition) 3.4 Leadership & Types of Leadership 2.2.2 New Design options (Virtual, Team, Boundaryless)	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	● Notes Whiteboard PPT
	Stress Management 4.1 What is Stress? 4.2 Potential Sources of stress			

	4.3 Consequences of Stress 4.4 Managing stress 4.5 Introduction to Quality of Work Life			
	Organizational Change 5.1 What is change? 5.2 Elements / Factors of Change (External & Internal) 5.3 Planned Change 5.4 Resistance to change 5.5 Overcoming Resistance to Change 5.6 Approaches to Managing Organizational change 5.6.1 Lewin's 3 step model 5.6.2 Action Research 5.6.3 Meaning of Organizational Development & Techniques / Intervention 5.7 Introduction to Diversity & Managing Diversity	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	● Notes Whiteboard PPT
	Conflict Management 6.1 Definition of Conflict 6.2 Sources & Types of Conflict 6.3 Conflict Management Styles 6.4 Power and Politics 6.4.1 Concept & Basis of Power 6.4.2 Organization Politics			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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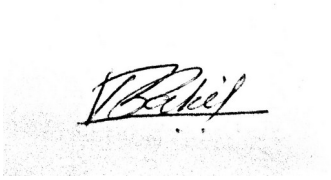
HOTEL & TOURISM MANAGEMENT STUDIES



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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:LEJESH KELOTH DEPARTMENT: CLASS: F.Y.H.S SEMESTER: I

MONTH: ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE: Objective of this course is to enhance the communication skills in English/ French required of a Culinary Professional

The learners will be able to: Frame grammatically correct sentences in English

· Apply the correct conjugation of verbs in sentences

· Frame simple sentences in French

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit – I	The Sentence – Kinds of Sentences – Subject & Predicate The Phrase & The Clause Parts of Speech – Noun, Adjective, Pronoun, Verb, Adverb, Preposition, Conjunction, Interjection Noun – Kinds of Noun (Common, Proper, Collective, Abstract) The Noun : Gender (Masculine, Feminine, Common, Neuter) The Adjective – Kinds of Adjective, Comparison of Adjectives (Positive, Comparative, & Superlative Degrees. The Correct use of some Adjectives Articles - Use of Definite & Indefinite Articles Personal Pronouns – Forms of the Personal Pronouns **French:** Translate the Dialogue into English Culinary Terms – Translate to French using match the columns / crosswords	15	1.Business Communication- Meenakshi Raman & Prakash Singh 2. High School English- Wren and Martin 3. Business Communication- Chaturvedi	● Notes Whiteboard
Unit - II	The Verb Transitive & Intransitive Verbs Person & Number Active & Passive Voice Direct & Indirect Speech Tense (Past, Present & Future) Kinds of Adverbs The Preposition Kinds of Prepositions Using appropriate Prepositions The Conjunction Use of Appropriate Conjunctions Classes of Conjunctions The Interjection Meaning & Some Examples	15	1.Business Communication- Meenakshi Raman & Prakash Singh 2. High School English- Wren and Martin	● Notes Whiteboard

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	Punctuation Commonly confused words / Common Errors / Antonyms / Synonyms		3. Business Communication- Chaturvedi	
Unit-III	French Days, Months, Numbers, Seasons Plan a Five Course menu in French Newspaper reading – Current Affairs Comprehension Précis Writing Paragraph Writing Conversation / Role Play Public Speaking Make Negative, Make Plurals, Conjugate in the Present tense ; avoir, entrée, Faire, Manger, Boire, Mettre	15	1.Oxford French Dictionary 2.E.J. Neather- Mastering of French I & II- Macmillan- 1982	• Notes Whiteboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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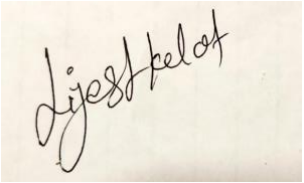

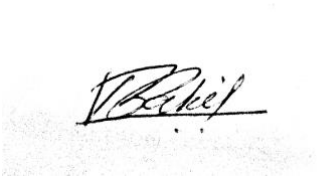

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Lejesh Keloth** DEPARTMENT: **HOTEL MANAGEMENT** CLASS: **F.Y.H.S** SEMESTER: **II**

MONTH: **NOVEMBER TO APRIL** ACADEMIC YEAR: 2021-22 SUB: **PRINCIPLES OF HOTEL ACCOUNTANCY**
LEARNING OBJECTIVE: The student will be able to understand the basics of accounting concepts and also its application in practical life.
The learners will be able to: Understand the concept of accountancy, application of accounting concepts in their practical life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Accounting & Double Entry Book-Keeping	1. Introduction to Accounting & Double Entry Book-Keeping: 1.1 Terms 1.2 Nature, Importance, Objectives & advantages of accounting 1.3 Nature & advantages of Double Entry Book-keeping 1.4 Classification of Accounts 1.5 Applying Debit & Credit rules to a Transaction.	03		● White Board ● Notes
	2. Journal 2.1 Importance of Journal & its format 2.2 Narrations 2.3 Journalising simple & compound entries 2.4 Practical problems	04		● White Board Notes
	3. Ledger 3.1 importance of ledger & its format 3.2 posting entries & balancing ledger accounts	03		● White Board Notes
	4. CASH BOOK 4.1 triple column cash book			

	4.2 contra entries 4.3 practical problems 4.4 types of bank account, types of cheques	05		● White Board Notes
Unit- 2 Subsidiary Books	1 Subsidiary Books 1.1 Advantages of subsidiary Books 1.2 Types of subsidiary Books 1.3 Simple Practical problems on Purchase Book, Sales Book, Purchase – Return Book & Sales Return Book. 2. Elements of cost & concept of Profit 2.1 Material cost (food & Beverage), Labour cost, overhead cost, Gross Profit, After wage profit & Net Profit. 2.2 Practical Problems 3. Bank Reconciliation Statement 3.1 Purpose of Preparing B.R.S 3.2 Advantages 3.3 Simple Practical Problems 4 Trial Balance 4.1 Importance of Trial Balance 4.2 Net format of T.B	03 06 05 01		● White Board Notes
UNIT –III Capital & Revenue Expenditure & Deferred Revenue Expenditure	1. Capital & Revenue Expenditure & Deferred Revenue Expenditure 1.1 Nature of Capital & Revenue Expenditure 1.2 Nature of Deferred Revenue Expenditure 1.3 Examples 2. Final Accounts of sole – Trader (with Adjustments)	01		● White Board Notes

	2.1 Importance, Purpose & Need for preparation of Final accounts. 2.2 Practical Problems covering the following adjustments:- Closing stock Prepaid Expenses Outstanding Expenses Depreciation Bad Debts & Provision for Bad debts	10		• White Board Notes
	3. Break Even Analysis :- 3.1 Variable cost, fixed cost & semi variable cost. 3.2 Contribution, Profit/Volume Ratio & Break Even Point. 3.3 Simple Practical Problems	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO ALL THE UNITS: 45 HOURS

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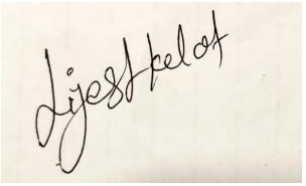

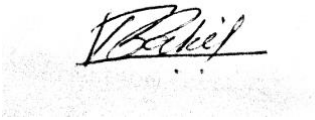

VIVA COLLEGE
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr lejesh keloth** DEPARTMENT: **HOTEL MANAGEMENT** CLASS: F.Y.H.S SEMESTER: II

MONTH: NOVEMBER TO APRIL ACADEMIC YEAR: 2021-2022 SUB: COMMUNICATION SKILLS (ENGLISH & FRENCH)

LEARNING OBJECTIVE:

The learners will be able to: Have a good control over language.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	CONCEPT OF COMMUNICATION 1.1 Process of Communication / 1.2 Feed Back 1.3 Methods of Communication – Verbal / Non-Verbal 1.4 Channels of communication 1.5 Barriers of Communication 2 ORGANIZATIONAL COMMUNICATION 2.1 Upward, downward, lateral communication and their purposes functions, grapevine 2.2 Written communication – Memos, Circulars, notices **French** 1 Time, At the Office in a restaurant, Asking direction	4 2	•Business Communication – Meenakshi Raman and Prakash Singh •Business Correspondence and Report writing – R.K.Sharma and Krishna Mohan •Business Communication – Chaturvedi •High School English – Wren and Martin •Understanding Human Communication – Ronald B Adler and George Rodman (with CD) •Skills Development for Business and Management Students - Kevin Gallagher λE. J. Neather - Mastering of French I & II - Macmillan - 1982 λBridget Anfossy - Speak French Today - Augo - 1991	• Notes • Whiteboard

			λR. Diez La Cortina - Cortina's French Method - Grosset & Dunlop - 1988 λMathuram Bondo - Modern French Course - D. C. Heath & Co. - .1983. λCourse de langue et civilizaiion Franchises. G. Mauger. λOxford French Dictionary	
UINT 2	BUSINESS COMMUNICATION 1.1 Planning the right look of a letter 1.2 Types of letters- quotations, orders, claim and adjustment, sales, application, complaint / apology REPORT WRITING 2.1 Types of Reports 2.2 Structure of a report 2.3 Types of Reports **(French)** 1 Receipes-put in the correct order, Translate to English, Making Tea, Coffee, Bechamel,Veloute, Simple soups and salads 2 Culinary Terms	05 10	•Business Communication – Meenakshi Raman and Prakash Singh •Business Correspondence and Report writing – R.K.Sharma and Krishna Mohan •Business Communication – Chaturvedi •High School English – Wren and Martin •Understanding Human Communication – Ronald B Adler and George Rodman (with CD) •Skills Development for Business and Management Students - Kevin Gallagher E. J. Neather - Mastering of French I & II - Macmillan - 1982	• Notes Whiteboard

			Bridget Anfossy - Speak French Today - Augo - 1991 R. Diez La Cortina - Cortina's French Method - Grosset & Dunlop - 1988 Mathuram Bondo - Modern French Course - D. C. Heath & Co. -.1983. Course de langue et civilizaiion Franchises. G. Mauger. Oxford French Dictionary	
UINT 3	GROUP COMMUNICATION 1.1 Types of meetings /Advantages and Disadvantages 1.2 Participants Responsibilities / Brain Storming 1.3 Structure of a meeting – Agenda and Minutes 2 PRESENTATION 2.1 Making effective presentation /Speaker's appearance and personality 2.2 Using Visual aids 3 INTERVIEWS 3.1 Purpose / Types 2 Hours 3.2 Candidate's preparation – GD / PI **(French)** 1 French Basic Conversation and Translation of Passages from French to English U	02 02 02 07	•Business Communication – Meenakshi Raman and Prakash Singh •Business Correspondence and Report writing – R.K.Sharma and Krishna Mohan •Business Communication – Chaturvedi •High School English – Wren and Martin •Understanding Human Communication – Ronald B Adler and George Rodman (with CD) •Skills Development for Business and Management Students - Kevin Gallagher	• Notes Whiteboard

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			E. J. Neather - Mastering of French I & II - Macmillan - 1982 Bridget Anfossy - Speak French Today - Augo - 1991 R. Diez La Cortina - Cortina's French Method - Grosset & Dunlop - 1988 Mathuram Bondo - Modern French Course - D. C. Heath & Co. -.1983. Course de langue et civilizaiion Franchises. G. Mauger. Oxford French Dictionary	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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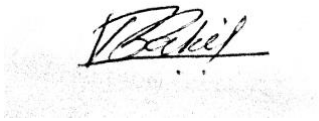

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **FOOD & BEVERAGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: II

MONTH: **FEBRUARY 2022 – MAY 2022** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE: FOOD & BEVERAGE SERVICE OPERATIONS

The learners will be able to:

- The different types of Menus and principles of menu planning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	**1.** MEALS AND MENU PLANNING 1.1 Menu – Origin, definition & objectives 1.2 Types of meals (Breakfast, Brunch, Lunch, Afternoon tea, High tea, Dinner) Types of Menu a. A la c arte b. Table d' hote c. Cyclic menu d. Banquet menu e. Carte du jour / plat du jour f. Californian menu g. Take-away Other types of menu a) Children's menu b) Club menu c) Ethnic menu	7 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question

	d) Health menu e) Spa Menu f) Ayurvedic Menu 1.4 Principles of Menu planning 1.5 Breakfast: English, Continental, American, Indian 1.6 Types of Tea Service: Full Afternoon Tea, High Tea.			
	Revision Lectures	3 Lectures		1) Classroom Theory Test 2) Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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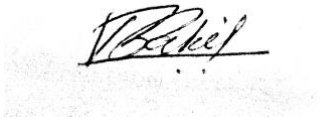

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VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **FOOD & BEVERAGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: II

MONTH: **FEBRUARY 2022 – MAY 2022** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE: FOOD & BEVERAGE SERVICE OPERATIONS

The learners will be able to:

- Sequence and course in the French classical menu also identify general accompaniments.
- Types, storage and service of Tobacco

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II	1.FRENCH CLASSICAL MENU 1.1 a. Sequence and Courses. b. General Accompaniments. 1.2 Ice creams: Types & categories of Ice creams	6 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question
	2.TOBACCO a) Introduction to Cigars and cigarettes. b) Types of tobacco c) Shape, size, color & Brand names with country of origin.	7 Lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question
	Revision Lectures	5 Lectures		1. Classroom Theory Test 2. Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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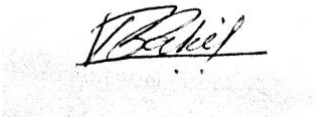

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **FOOD & BEVERAGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: II

MONTH: **FEBRUARY 2022 – MAY 2022** ACADEMIC YEAR: **2021-2022**

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LEARNING OBJECTIVE: FOOD & BEVERAGE SERVICE OPERATIONS

The learners will be able to:

- Types, storage and service Non alcoholic beverages.
- Simple control system followed in a restaurant.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III	1.1 NON-ALCOHOLIC BEVERAGES a. Definition of beverages b. Classification chart –alcoholic & non alcoholic drinks. c. Stimulating -Tea, Coffee & Cocoa, (origin, manufacture, Method of preparation, types & brands) d. Nourishing -health drinks e. Refreshing –juices, squashes, crushes, syrups & aerated water Table Water (origin, types & brands) & carbonated water.	9 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question
	1.2 SIMPLE CONTROL S YSTEMS. a. Restaurant reservation system b. KOT Checking System c. Types of KOT / BOT d. Method of billing (manual & computerized)	4 Lectures		1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question

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	Revision Lectures	4 Lectures		1) Classroom Theory Test 2) Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

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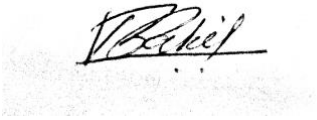

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VIVA COLLEGE
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: I

MONTH: **SEPTEMBER 2021 – JANURARY 2022** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Student should be able to identify the role of the Food and Beverage Service department and explain its organization structure and importance.
- Explain how "moments of truth" affect guests, staff members, and managers, and describe the value of guests and staff members to a food Service operation.
- Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	**1.** INTRODUCTION TO HOTEL AND CATERING INDUSTRY 1.1 Role of catering establishment in travel / tourism industry 1.2 Types of F& B operation (Classification). Commercial (residential / Non Residential) • Welfare • Institutional • Transport (Roads, Railways, Airlines, Marine) 1.3 Structure of hospitality industry and career opportunities	4 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet

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	2. DEPARTMENTAL ORGANISATION AND STAFFING 2.1 Organization of F & B Department of a Hotel (English & French) 2.2 Etiquette & Attributes of an F & B Personnel. 2.3 Duties and responsibilities of F & B Staff. a) F & B Manager. b) Banquet manager. c) Outlet Manager (All day dining/ Bar/ In Room Dining/Specialty Restaurant, etc.) d) Senior captain/ Captain/ Supervisor. e) Steward. f) Sommelier. g) Hostess. h) Cashier. 2.4 Departmental Relationship of F& B with other Departments.	5 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet
	Revision Lectures	3 Lectures		1) Google Classroom 2) Google Slides 3) Google Meet 4) Google Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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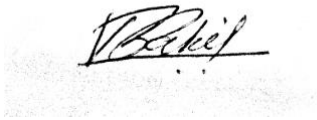

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: I

MONTH: **SEPTEMBER 2021 – JANURARY 2022** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Identify the operational and Auxiliary areas as well as equipment's used in the Food and Beverage department.
- Understand the various service methods and procedures followed in the department.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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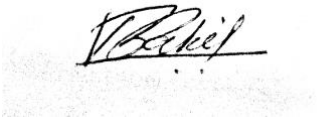
Unit II	1. OPERATIONAL & AUXILLARY AREAS OF FOOD AND BEVERAGE DEPARTMENT: IMPORTANCE & LAYOUTS a) Coffee shop b) Snack bar/ counter service c) Kiosks d) Specialty restaurant/ theme restaurant e) Banquet operations/ outdoor catering f) In-Room Dining g) Dispense Bar / Discotheque/ night club/ pub h) Pantry/Still room i) Kitchen stewarding j) Silver room k) Linen room l) Vending machine	5 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet
	2. FOOD AND BEVERAGE SERVICE EQUIPMENT 2.1 Classification of equipment. (Familiarization of equipment). 2.2 Criteria for selection and requirements. • Tableware/ silverware (cutlery/ hollowware/flatware) • Glassware • Crockery • Bar equipment(For all of the above Brands, Measures & Quality suppliers) • Special equipment with their uses. • Furniture (Tables/Chairs/Trolleys/Dumb Waiter) • Linen. • Light and décor • Care and maintenance of equipment. • Napkin folds.	7 Lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) Google Classroom 2) Google Slides 3) Video Links 4) Google Meet

	2.3 Table d' hôte, A'la carte Mis-en –place, Mis -en –Scene			
	Revision Lectures	5 Lectures		1. Google Classroom 2. Google Slides 3. Google Meet 4. Google Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: I

MONTH: **SEPTEMBER 2021 – JANURARY 2022** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Understand the various service methods and procedures followed in the department.

	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER, UNIT, TITLE				
Unit III	1. DINING SERVICES METHOD AND PROCEDURES 1.1 Different methods of services a. Table service • Silver service/ English service • American/ Plated • Family • Russian • French/ butler • Guéridon b. Bar Counter c. Assisted Service • Carvery • Buffets d. Self Service •Cafeteria: a).Counter b).free-flow c).Echelon d).Supermarket e. Single point service •Take-away •Drive through •Fast food •Vending •Kiosk •Food court	9 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	5. Google Classroom 6. Google Slides 7. Video Links 8. Google Meet

	•Bar f. Specialized (in-situ) •Tray •Trolley •Home delivery •Lounge •Room •Drive in 1.2 Special Service • Formal Service • Wave service • Carlton club service 1.3a. Rules to be observed while laying the table. b. Rules to be observed while waiting at the table. c. Dos & don’ts in a restaurant			
	Revision Lectures	5 Lectures		1) Google Classroom 2) Google Slides 3) Google Meet 4) Google Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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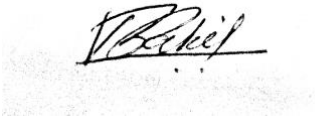

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KIRTI T. CHALKE **DEPARTMENT**: FOOD SAFETY AND NUTRITION CLASS: **FY.Bsc.HS**

SEMESTER: **I** MONTH: **JUNE TO NOVEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE:

Objective of this course is to familiarize the students with importance of hygiene and Food Safety in Hospitality Industry

The learners will be able to:

- To learn about the importance of hygiene & sanitation in the catering industry
- To get acquainted with the food standards.
- To learn about ways to minimize food poisoning and infections.
- To understand function, sources & deficiency of nutrients.
- To gain basic knowledge of nutrition
- To gain knowledge about maintenance of good health.
- To understand the changes brought about in food nutrients during processing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1. INTRODUCTION TO HYGIENE** 1.1 Rules & importance of hygiene 1.2 Personal Hygiene 1.3 Cleaning of premises 1.4 Pest Control 1.5 Waste disposal 1.6 Dishwashing methods 2.HACCP 2.1 Introduction 2.2 Importance 2.3 VII Critical Control Points	**15 HRS**	Hobbs, Betty & Roberts, Food Poisoning and Food Trickett Jills Food Hygiene for FOOD Handlers Hobbs, Loken Joan How To Prevent Food, The HACCP Food Safety Manual	White board PPT Notes Videos

	3.MICROBES 3.1 Introduction (Bacteria, Yeast, Mould) 3.2 Classification 3.3 Factors for growth 3.4 Role of microbes in manufacture of fermented foods (dairy products, Veg. & bakery preparations, alcoholic Bev., vinegar, fermented Indian foods)			
Unit 2	**FOOD BORNE ILLNESS** 1.1 Natural Toxins (Kesari Dal, Potatoes, Mushrooms, Shell Fish, Peanuts) 1.2 Chemical (Tin, Copper, Arsenic, Lead) 1.3 Bacterial toxins (staphylococcus, salmonella, Clostridium perfringens, Clostridium botulinum) 1.4 Food poisoning & Infections • Definitions • Food contamination & Spoilage • Differentiation • Examples **FOOD ADULTERATION** 2.1 Definition and types 2.2 Test to detect (coffee, semolina, flour, ghee, butter, margarine, oil, milk, turmeric, coriander powder, pepper corn , meat etc. 2.3 Food standards in India (PFA, FPO, MPO, BIS-ISI, AGMARK, ISO)	**15HRS**	• Food & Nutrition Vol-I • Food Science & Nutrition • Food additives • Food Preservation	White Board PPT Notes Videos

	FOOD ADDITIVES 3.1 Colours& Flavours 3.2 Browning reactions-causes, desirable & undesirable effects) **FOOD PRESERVATION** **Methods of Preservation** 4.1 Natural & Chemical Preservation 4.2 Low temperature (Refrigeration, Freezing) 4.3 High Temperature (Pasteurisation, Sterilization, Canning) 4.4 Irradiation			
Unit 3	**INTRODUCTION TO NUTRITION** 1.1- Definitions(Food, balanced diet, nutrition, over nutrition, under nutrition, malnutrition, health) 1.2 - Balanced diet-Food pyramid 1.3 - Meal planning steps **CARBOHYDRATES** 2.1 - Classification & composition 2.2 - Functions & requirements, sources 2.3 - Excess & Deficiency 2.4 -Uses in food preparation (Gelatinization, Gel formation, Dextrinization, Gluten formation, Caremelization) **FATS&OILS** 4.1 - Classification & Composition 4.2 - Functions & requirements, Sources 4.3 - Excess & Deficiency 4.4 - Types, Sources, Uses	**15 Hrs**	• Food & Nutrition Vol-I • Food Science & Nutrition	White board PPT Notes

	4.5 - Factors causing deterioration 4.6 - Rancidity 4.7 - Flavour reversion 4.8 - Shortening 4.9 –Polymerisation **PROTEINS** 3.1 - Classification & Composition 3.2 - Functions & requirements, Sources 3.3 - Excess & Deficiency 3.4 - Uses in food preparation 3.5 - Effect of heat (Denaturation, Coagulation) 3.6 - Gel formation 3.7 – Foaming **VITAMINS, MINERALS, WATER & COLLOIDS** 5.1 - Functions 5.2 - Sources 5.3 - Deficiency & Excess 5. 4 - Fat soluble & water soluble Vitamins (A,D,E,K,B1,B2,B3,C) 5.5 - Minerals (Ca,P, Na,K,Fe,I,Fl) 5.6 - Importance, balance & Sources 5.7 - Cooking losses & prevention 5. 8 - Definitions (sol, gels, foam, emulsion) 5. 9 - Examples(roasting, grilling, frying, baking, boiling, poaching, microwave) 5.10 - Importance in food industry			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 hrs

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: RAMEEZ SHAKEEL PATEL **DEPARTMENT**: Food Production and Patisserie **II**

CLASS: FY.Bsc.Hs SEMESTER: 2

MONTH: ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE:

• To develop a keen interest in food production and to enable students to experiment, innovate and progressively produce a variety of preparation / dishes.

• To gain confidence to adapt to the technical skills and the art of preparing different menus, Indian as well as Continental.

• By the end of the second semester students should be confident enough in their skills which would boost their morale to take up the challenge of bulk cookery in the third and fourth semester

The learners will be able to:

- Define microbes and conditions for growth of microbes
- List the importance and basic principles of HACCP
- List micro organisms
- Define Food Adulteration and adulterants
- State the types and uses of Food Additives
- State the importance of Hygiene
- List various methods of Food Preservation
- State the regulations and regulating bodies governing Food Safety and Hygiene.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1.Culinary Terms with Explanation & Examples** **2.Layout of kitchen** 2.1 General Layout of the Kitchen	**03.HRS** **03.HRS**	Thangam Philip – Modern Cookery I & II – Orient Longman – 2001 Auguste Escoffier – Ma	1. POWER POINT PRESENTATION 2. WHITE BOARD AND MARKER 3. RELATED TOPIC VIDEOS

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UNIT 2	2.2 Receiving Area 2.3 Storage 2.4 Wash up **3.Soups** 3.1 Classification with Examples 3.2 Consommé and Garnishes with their names (Any 10 common name) **4.Fish Mongery** 4.1 Classification of Fish with examples 4.2 Selection, Cooking & Storage of Fish 4.3 Local Names of Fin Fish and Shell Fish 4.4 Cuts of Fish **5.Poultry** 5.1 Cuts of Poultry 5.2 Selection and Uses of Cuts **6.Rice, Cereals & Pulses** 6.1 Introduction, Classification of Cereals and Pulses 6.2 Varieties of Rice and Byproducts 6.3 Nutritive Value of Various Cereals 6.4 Sprouts and Uses **7.Meat** 7.1 Introduction to Meat Cookery 7.2 Cuts of Lamb, Pork, Beef / Veal 7.3 Variety of Meats / Offal 7.4 Selection and Storage of Meats	**02.HRS** **02.HRS** **02.HRS** **03.HRS** **04.HRS** **05.HRS**	Cuisine – Hamlyn – 2000 Digvijay Singh – Cooking Delight of the Maharajas – Vakils, Feffer & Son's Ltd. – 1982 Philip Dowell & Adrian Barley – The Book of Ingredients – Mermaid Books – 1987 Wayne Gisslen – Professional Baking – John Wiley & Sons – 1994 Martha Day – Baking – Lorenz Books – 1999 M. J. Leto & Bode – The Larder Chef – Heinemann Publishing House – 1989 Parvinder S. Bali - Food Production Operations Thangam E. Philip - Modern Cookery for Teaching and Trade - 4th Vol. – 1996 Krishna Arora - Theory of Cookery – 2nd – 1992 Wayne Gisselen - Professional Cooking – 4th – 1992 Wayne Gisselen - Professional Baking – 2nd – 1994 J. C. Dubey - Basic Bakery - 1st – 1992 Kinton Ceserani - Theory of Catering – 7th – 1996 Bernard Davis - Food Commodities - 4th – 1998 Daniel R. Stevenson - Basic Cookery The Process Approach - 5th – 1997	4. THEORY NOTES ALONG WITH QUESTIONS.

	8.Milk and Milk Products 8.1 Introduction, Processing of Milk, Pasteurization**,** Homogenization, Milk in Various Forms e.g. Toned, Powder, Skimmed, Condensed & Evaporated. 8.2 Cream – Introduction, Processing & Types 8.3 Butter – Introduction, Processing & Types 8.4 Cheese – Introduction, Classification with Examples, Processing, Types, Cooking with Cheese and Uses.			
UNIT3	**9,Bakery & Pastry** **Shortening – Fats and Oils** 9.1 Saturated and Un-saturated Fats 9.2 Advantages & Disadvantages of Using Fats 9.3 Varieties of Shortening **10.Tea & Coffee** 10.1 Introduction 10.2 Producing Regions/Country 10.3 Types and Methods of Preparation 10.4 Popular Brands and Variety Available **11.Thickening Agents used in Indian Gravies** 11.1 Role of Thickening Agents **12.Indian Cookery** 12.1 History of Spices and Trade Routes 12.2 Basic Spices, Condiments and Masalas 12.3 Role of Spices in Indian Cuisine 12.4 Indian Equivalent name 12.5 Blending of Spices 12.6 Concept of Wet and Dry Masalas 12.7 Regional Varieties of Basic Masalas	**03.HRS** **02.HRS** **01.HRS** **03.HRS**		1.

	12.8 Basic Composition of Some Important Masalas **13.Menu Planning** 13.1 History of Menu 13.2 Types of Menu 13.3 Menu Planning Principles	**02.HRS** **04. HRS**		
	14.Bakery & Pastry 14.1 **Pastries** • Classification of Pastries • Varieties • Role of Each Ingredient • Baking Temperature and Time of Each Pastry 14.2 **Pastry Cream** • Basic Pastry Cream • Use in Confectionery • Preparation and Care in Production 14.3 **Cocoa and Chocolate** • Introduction, Production and Manufacture • Varieties of Chocolates • Tempering of Chocolates	**03.HRS** **03.HRS**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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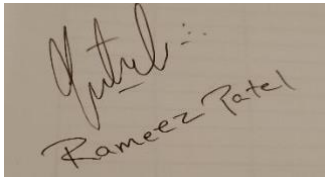

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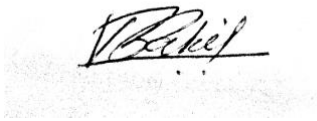

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: RAMEEZ SHAKEEL PATEL **DEPARTMENT**: Food Production and Patisserie I

CLASS: FY.Bsc.Hs SEMESTER: I

MONTH: ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE:

- To inculcate a right attitude and the required basic knowledge and technical skills in the art of culinary and the food production department.
- To introduce the various equipments and utensils used in the kitchen.

The learners will be able to:

- The learners will be able to:
- Define microbes and conditions for growth of microbes
- List the importance and basic principles of HACCP
- List micro organisms
- Define Food Adulteration and adulterants
- State the types and uses of Food Additives
- State the importance of Hygiene
- List various methods of Food Preservation
- State the regulations and regulating bodies governing Food Safety and Hygiene.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1 Introduction to the Food Production Department** 1.1 Levels of Skills and Experience 1.2 Attitude and Behavior in the Kitchen 1.3 Kitchen Uniforms 1.4 Personal Hygiene 1.5 Safety Procedures for Handling Equipment **2 Culinary History and Culinary Terms**	**01.HRS** **02.HRS**	Thangam Philip – Modern Cookery I & II – Orient Longman – 2001 Auguste Escoffier – Ma Cuisine – Hamlyn – 2000 Digvijay Singh – Cooking Delight of the Maharajas –	1. POWER POINT PRESENTATION 2. WHITE BOARD AND MARKER 3. RELATED TOPIC VIDEOS 4. THEORY NOTES ALONG WITH QUESTIONS.

UNIT 2	(Explanation with Examples) Origins of Modern Cookery **3 Equipment and Hand Tools used in Kitchen & Different Types of Fuels used in Kitchen** 3.1 Hand tools and utensils used in Kitchen 3.2 Various Fuels used in the Kitchen 3.3 Advantages & Disadvantages of Various Fuels 3.4 Various Equipment used in the Kitchen **4 Introduction to Cooking** 4.1 Aims and Objectives of Cooking 4.2 Classification of Various Raw Materials according to Functions 4.3 Various Textures and Consistencies 4.4 Methods and Techniques of Preparation **5 Stocks** 5.1 Definition of Stock 5.2 Types of Stocks 5.3 Preparation (Recipe), Storage, Care and Precautions in Preparation **6 Culinary Terms**	**04HRS** **04.HRS** **02.HRS** **02.HRS**	Vakils, Feffer & Son's Ltd. – 1982 Philip Dowell & Adrian Barley – The Book of Ingredients – Mermaid Books – 1987 Wayne Gisslen – Professional Baking – John Wiley & Sons – 1994 Martha Day – Baking – Lorenz Books – 1999 M. J. Leto & Bode – The Larder Chef – Heinemann Publishing House – 1989 Parvinder S. Bali - Food Production Operations Thangam E. Philip - Modern Cookery for Teaching and Trade - 4th Vol. – 1996 Krishna Arora - Theory of Cookery – 2nd – 1992 Wayne Gisselen - Professional Cooking – 4th – 1992 Wayne Gisselen - Professional Baking – 2nd – 1994 J. C. Dubey - Basic Bakery - 1st – 1992 Kinton Ceserani - Theory of Catering – 7th – 1996 Bernard Davis - Food Commodities - 4th – 1998 Daniel R. Stevenson - Basic Cookery The Process Approach - 5th – 1997	
	7 Methods of Cooking 7.1 Various Methods of Cooking Foods (Roasting, Grilling, Frying, Baking, Boiling, Poaching, Microwave)	**04.HRS**		1. POWER POINT PRESENTATION

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UNIT3	7.2 Principles of each Method and Precaution to be taken **8 Hierarchy and Kitchen Staffing** 8.1 Classical Kitchen Brigade 8.2 Modern Staffing in Various Category Hotels 8.3 Duties and Responsibilities of Various Chefs 8.4 Role and Duties of the Executive Chef 8.5 Inter-Departmental Cooperation and Coordination	**03.HRS**		2. WHITE BOARD AND MARKER 3. RELATED TOPIC VIDEOS 4. THEORY NOTES ALONG WITH QUESTIONS.
	9 Egg 9.1 Selection of Eggs 9.2 Structure of Eggs 9.3 Uses of Eggs 9.4 Nutritive Value of Eggs	**02.HRS**		
	10 Vegetables & Fruits 10.1 Classification of Vegetables 10.2 Colour Pigments in Vegetables and Effects of Heat, Acid and Alkali on each of them 10.3 Cuts of Vegetables 10.4 Classification of Fruits 10.5 Uses of Fruits 10.6 Salad & Salad Dressing	**04.HRS**		
	11 Bakery & Pastry Sugar 11.1 Importance of Sugar 11.2 Types of Sugar 11.3 Cooking Stages and Temperature of Various Stages 11.4 Uses of Sugar	**02.HRS**		
	12 Sauces 12.1 Classification of Sauces / Composition 12.2 Mother Sauces and its Recipes (1 Liter) 12.3 Derivatives **13 Bakery & Pastry**	**04.HRS**		

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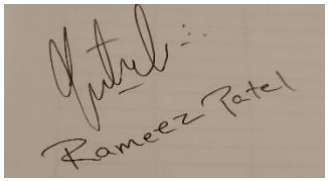
	13.1 Bread Making Principles of Bread Making Role of Each Ingredient Simple Yeast Bread Baking Temperature & its Importance	**03.HRS**		
	13.2 Cookies Types of Cookies Methods of Preparation	**02.HRS**		
	13.3 Flour – Structure of Wheat Types of Wheat Types of Flour Milling of Flour Nutritive Value	**04.HRS**		
	13.4 Raising Agents Classification and Role of Raising Agents			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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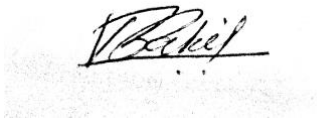

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Room Division Management (Front Office) CLASS: F.Y. BSc HS

SEMESTER: I

MONTH: July to November ACADEMIC YEAR: **2021 - 2022**

LEARNING OBJECTIVE: To introduce the students to the hotel & tourism Industry. Students would develop the necessary skills required as an efficient and effective receptionist to handle situations and types of guests.

The learners will be able to:

- Understand the appropriate organization structures and duties in the Front Office and related departments.
- Develop, prepare guest relations, and evaluate practical aspects with guests.
- Understand the role of public relations in the hotel industry.
- Understanding the functioning of the Telecommunication department.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	**Introduction to the Hotel & Tourism Industry** ● An account of development & growth of hotel & tourism Industry in the World ● Development and growth of Hotel & Tourism Industry In India. **Classification of Hotels by** ● Location ● Architectural Design ● Number of rooms ● Ownership	15	Jatashankar Tiwari – Front Office Management. Sudhir Andrews – Hotel Front Office Training Manual.	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	● Pricing Plan ● Type of Clientele ● Duration of Guest Stay ● Facilities Offered ● Star ratings criteria in India (HRACC) ● Supplementary Accommodation			
UNIT – 2	**Tariff Structure** 1.Types of Rooms Single, Double, Twin, Hollywood twin, Interconnecting, Adjacent, Adjoining, Lanai, Penthouse, Duplex, Efficiency, Physically Challenged, Studio, Parlour, Hospitality Room, Suite (Types). 2.Tariff Fixation ● Check-in and Check-out basis, 24 hour basis, on the basis of competitor's rate, Night basis, Day rate. 3.Types of Meal Plans European, Continental, Bermuda Plan, Modified American Plan (Half- Board, Demi- Pension), and American Plan (Full-Board: En Pension). 4. Packages and Special Rates	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	Rack rate, Group rate, Volume rate, Government rate, FIT, Wholesale net rate, discounted rates, Seasonal rate, Crib Rate, Extra bed rate, Family rate, Crew rate, Week day/Weekend rates, Membership rates, Executives of the other units of the same chian, Corporate rate, Commercial rate, Advance purchase rate Package rate, Ad-hoc rate 5. Taxation • Luxury tax, Expenditure tax, Sales tax, Value added tax and other statutory taxes. • Service Charges. **Organisation of the Front Office Department** Organisation charts of • Small Hotel • Medium Hotel • Large Hotel Sections of the Front Office Department Inter and Intra departmental Co-ordination Job Specifications and Job Description • Front Office Manager • Duty Manager ● Guest Relations Executive **Telecommunications**			

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UNIT – 3	Introduction • Types of Exchange- PBX, PABX, EPABX • Other Communication Equipment- Walkie- Talkies, Pagers, Mobile Phones, Telephone Instruments, Pay Phones, Facsimile. • Organisation of the Telecommunications department • Job descriptions of the Telecommunications department supervisor & Operator • Skills and Competencies of the Telephone Operator • General duties of a Telephone Operator • Internet Access- Introduction, Dial up access, High speed with wired access, High speed with warless access • Future of Hotel telephones- Voice-over-internet-protocol (VOIP) • AYS – at your service	15		1. Slides 2. Videos 3. Quiz 4. Power Point 5. Presentation 6. PDF 7. Word 8. White Board 9. Projector 10. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Room Division Management (Front Office) CLASS: FY BSc HS

SEMESTER: II

MONTH: November to March ACADEMIC YEAR: **2021 -2022**

LEARNING OBJECTIVE: The student should be able to understand the concept and functioning of room reservations, reception & guest services.

The learners will be able to: know the entire procedure of room reservations and their types, different situations of check-in in along with the guest services.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	RESERVATIONS • Sources of Reservations • Modes of Reservations • Types of Reservations • Systems of reservations • Overbooking • Job Description of Reservation Personnel	15	Jata Shankar Tiwari – Front Office Management Sudhir Andrews – Front Office Training Manual B K Chakravati – Front Office Management in Hotel	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

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UNIT – 2	RECEPTION • Profiling the guest • Guest Registration Process • Regular and Non Regular Guest • 'C'Form & 'F' From	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion
UNIT -3	GUEST SERVICES • Handling Guest Mail • Message Handling • Custody and Handling of Keys • Guest Paging • Safe Deposit Locker • Guest Room Change • Custody of Deposited Luggage	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dipti Dilip Khadpe.** DEPARTMENT: **Room Division Management-I.**

CLASS: **F.Y.BSc.HS.** SEMESTER: **I.**

MONTH: **Academic Year 2021-2022(July-October)** SUBJECT: **Housekeeping.**

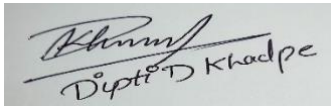
LEARNING OBJECTIVE:

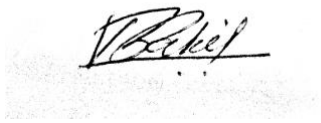
The student will be able to identify the role of the housekeeping department and explain its organization structure and importance.
The student will be able to list the basic cleaning equipment's, cleaning agents and explain their use.
Will be able to perform basic cleaning procedures of various surfaces.

The learners will be able to understand organization structure, types of cleaning equipment and agent and surface.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I	1. INTRODUCTION TO HOUSE KEEPING DEPARTMENT	15	Hotel Housekeeping Operations and Management (G. Raghubalan & Smritee Raghubalan – Oxford University Press).	1. PPT 2. VIDEO
II	1. ORGANIZATION OF HOUSEKEEPING DEPARTMENT	09		1. PPT
	2. CLEANING EQUIPMENT	06	Professional Management of Housekeeping Operations – (Thomas J. A. Jones – John Wiley & Sons)	1. PPT 2. VIDEO
III	1. CLEANING AGENTS	08		1. PPT 2. VIDEO
	2. CLEANING & POLISHING OF DIFFERENT SURFACES	07		1. PPT 2. VIDEO

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HOURS.





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SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dipti Dilip Khadpe.** DEPARTMENT: **Room Division Management-II.**

CLASS: **F.Y.BSc.HS.** SEMESTER: **II.**

MONTH: **Academic Year 2021-2022 (December-March)** SUBJECT: **Housekeeping.**

LEARNING OBJECTIVE:

The student will be able to identify the which are the different area in hotels which are cleaned by housekeeping department.
The students will be got to know different types of services and amenities offered by housekeeping.
This semester students will learned about different format used by housekeeping in day-day to operations.
Students will learned about how to handle maids trolley.
The students will be learned about how to handle lost and found, key and control and pest control.
In this semester they will learn how to handle any situation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I	1. CLEANING OF DIFFERENT AREAS	**15**	Hotel Hostel and Hospital Housekeeping – Joan Branson & Margaret Lennox	**1. PPT**
II	1. TYPES OF ROOM SERVICES	**03**	Housekeeping Management – Margaret Kappa, Aleta Nitschken, Patricia B. Schappert – A.H. & L.A.	**1. VIDEO 2. PPT**
	2. MAIDS SERVICE ROOM / HOUSE KEEPING PANTRY	**04**		**1.VIDEO 2. PPT**
	3. GUEST ROOM SUPPLIES & AMENITIES	**04**		**1. VIDEO 2. PPT**

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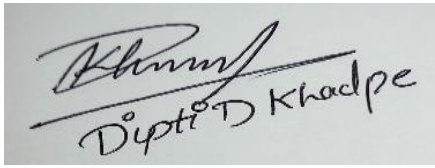
	4. FORMATS USED IN THE HOUSEKEEPING DEPARTMENT	**04**		**1. PPT**
III	1. LOST & FOUND	**04**	Housekeeping Operations, Design and Management – Malini Singh & Jaya B. George – Jaico Publications	**1.VIDEO** **2. PPT**
	2. KEY & KEY CONTROLS	**02**		**1.VIDEO** **2. PPT**
	3. SITUATION HANDLING	**06**		**1.VIDEO**
	4. PEST CONTROL	**03**		**1. VIDEO** **2. PPT**

The learners will be able to understand organization structure, types of cleaning equipment and agent and surface.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HOURS.



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Principle of Management – Hotel Management CLASS: FY BSc HS

SEMESTER: II

MONTH: November to March ACADEMIC YEAR: **2021 -2022**

LEARNING OBJECTIVE: To learn about the emerging Indian corporate world and global phenomenon with stress upon hospitality Industry.

The learners will be able to:

- To train the student as future managers and make them understand the working of an organisation.

• Teaching through PowerPoint presentations, case studies, activities, brain storming sessions, SWOT/PEST analysis etc.
• Trying to bridge the gap between management studies and real corporate world through real time stories from newspapers, journals and business magazines, books.
• Encouraging students to read more so as to refine their analytical power and sharpen business sense and become more aware of the business environment.
• Opportunity to participate in business discussions, article/book reviews and presentations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	1. INTRODUCTION TO MANAGEMENT 1.1 Evolution of management 1.2 Definitions and Importance of Management 1.3 Management as a Science and Art 1.4 Principles of Management (14 principles of Fayol)	15	Principle of Management – P C Tripathi & Reddy Harold Koontz – Principle of Management	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word

	1.5 Levels of Management and their functions 1.6 Managerial skills 1.7 Functions of Management 1.8 Process of communication 1.9 Business communication 2. PLANNING 2.1 Definition and Characteristics 2.2 Planning Process (Steps in Planning) 2.3 Essentials of a Good Plan 2.4 Vision and mission Statements 2.5 Planning with relation to hospitality industry 2.6 Meaning and Process of MBO 2.7 Meaning and steps in Decision Making			7. White Board 8. Projector 9. Discussion
	3. ORGANIZING 3.1 Meaning and Process of Organizing 3.2 Formal and Informal Organization and Distinction 3.3 Span of control (Meaning and Importance) 3.4 Tall and Flat Organization 3.5 Definition and Process of Delegation 3.6 Centralization and Decentralization of Authority 3.7 Departmentation and Basis of Departmentation 3.8 Organisation chart 3.9 Closed vs open system of organisation 3.10 Line and Staff organization	15	Management Principles and Practices – Dr.M.Sakthivel Murugan	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	4. STAFFING AND COORDINATION 4.1 Meaning and Imporance of Staffing 4.2 Internal and External Sources of Recruitment 4.3 Coordination - As an essence of Management 4.4 Principles of Coordination			
	5. DIRECTING, MOTIVATING AND LEADING 5.1 Meaning and importance of Directing 5.2 Element of Directions / Components 5.3 Definition of Motivation and factors 5.4 Maslow's Need Hierarchy Theory 5.5 Mc Gregor's Theory X and Theroy Y 5.6 Definition of Leadership and Leader 5.7 Qualities of a Leader 5.8 Leadership Styles 5.9 Leaders from hospitality industry 5.10 Leadership theory 6. CONTROLLING 6.1 Meaning 6.2 Steps in Control process 6.3 Types of control:feed forward,feedback,concurrent 6.4 Time Management	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **Food & Beverage Service** CLASS: **S.Y.B.Sc.H.S.** SEMESTER: IV

MONTH: **JUNE-2021 to OCTOBER-2021** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE: Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine. • Understanding the production process of Beer, Wine and Spirits.

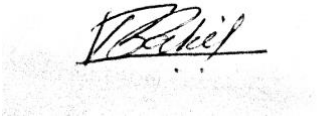
The learners will be able to: Understand the different types of Alcoholic Beverages. Students will learn the types of Alcoholic beverages as per the production methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• **UNIT 1** ALCOHOLIC BEVERAGES	• ALCOHOLIC BEVERAGES a. Definition, history of Alcoholic Beverages & classification. b. Benefits and harmful effects of alcohol.	02	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide
	WINES • **1.1 Definition & history of wines.** • **1.2 Types of Wines:** • **Still (red, white & rose), sparkling/Champagne, Fortified (sherry, port, Madeira, Marsala & Malaga), Aromatized wines (Vermouth).** • **1.3 Methods of production, Still (red, white, rose).** • **a) Viticulture** • **(Wine calendar, terroir, vine species, grape varieties & diseases).** • **b) Vinification**	13	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service •Larousse Christopher Foulkes- Encyclopedia of Wines-	Google classroom White board Quiz Google slide

	• (Manufacturing process, elements of wine & faults in wines). • c) Champagne & Sparkling Wines. • (History, districts, grape varieties, Methode Champenoise, cuvee close, transfer method, charmat & impregnation, Names & bottle sizes). • d) Fortified Wines (Production & types). • 1) Sherry (Solera system) • 2) Port • 3) Madeira (estufagen) • 4) Marsala • 5) Malaga • e) Aromatized wines (Definition & types)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **Food & Beverage Service** CLASS: **S.Y.B.Sc.H.S.** SEMESTER: III

MONTH: **JUNE-2021 to OCTOBER-2021** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE: Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine. • Understanding the production process of Beer, Wine and Spirits.

The learners will be able to: Understand the different types of Alcoholic Beverages. Students will learn the types of Alcoholic beverages as per the production methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II	2.1 Wine producing countries of the world (Regions, Wine laws, labels & shippers). a) Old world wine producing countries (France, Italy, Germany, Spain & Portugal). b) New World wine producing countries (Australia, New Zealand, South Africa, U.S.A. & India).	10	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service •Larousse Christopher Foulkes- Encyclopedia of Wines-	Google classroom White board Quiz Google slide
	2.2 Wine tasting, Storage & Service	02	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide
	2.3 Food and wine Harmony.	03		Google classroom White board Quiz Google slide

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **Food & Beverage Service** CLASS: **S.Y.B.Sc.H.S.** SEMESTER: III

MONTH: **JUNE-2021 to OCTOBER-2021** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE: Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine. • Understanding the production process of Beer, Wine and Spirits.

The learners will be able to: Understand the different types of Alcoholic Beverages. Students will learn the types of Alcoholic beverages as per the production methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNITIII BEER & OTHER FERMENTED BEVERAGES	a) Definition, History & Brewing process. (Components of beer, top fermentation, bottom fermentation) b) Types of Beer, Storage & Service (Lager, Pilsner, Draught, Ale, Stout, Porter, Ice, Lambic & Smoked) c) Other fermented beverages (Cider, Perry, Mead, Sake & Toddy).	03	• Shatbi Basu- The can't go wrong Cocktail book • Brian Glover- The world encyclopedia of Beer	Google classroom White board Quiz Google slide
	3.2 SPIRITS a) Introduction and definition b) Pot and patent still method of production. 3.3 History, Production, types & Brand names (national & International)	03	•Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide

	a) Whisky (Scotch, American, Canadian, Irish & Japanese) b) Rum (White, Gold, Dark & Flavoured) c) Brandy (Cognac, Armagnac & Fruit) d) Gin e) Vodka, flavoured vodka f) Tequila & Mezcal			
	3.4 Alcoholic Strength :Proof, GL, Sykes, U.S., British (OIML) 3.5 Other Spirits (Aquavit, schnapps, Pastis, ouzo, arrack) 3.6 LIQUEURS Introduction, definition, classification & production of liqueurs a) Different types of liqueurs: Base, Flavours, Country of origin. b) Brand names of liqueurs (Generic & Proprietary)	04	Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide
	3.7 APERITIFS & BITTERS a) Definition b) Brand names	02	Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide
	3.8 GLOSSARY OF TERMS RELATED TO Alcoholic beverages, Menu terminologies.	02	Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dipti Dilip Khadpe.** DEPARTMENT: **Room Division Management-III.**

CLASS: **S.Y.BSc.HS.** SEMESTER: **III.**

MONTH: **Academic Year 2021-2022.** SUBJECT: **Housekeeping.**

LEARNING OBJECTIVE:

The student will be able to explain various operational procedures and formats pertaining to linen, uniforms, and laundry.
The student will be able to create formats and design layouts of linen room, uniform room and laundry.
The student will be able to create Flower Arrangements for various occasions and locations.
The student will be able to plan and implement décor for special occasions.

The learners will be able to understand how to handle different fabrics, Flower arrangement & implement décor for special occasions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I	1. LINEN ROOM OPERATIONS	10	Hotel Housekeeping Operations and Management (G. Raghubalan & Smritee Raghubalan – Oxford University Press).	1. PPT 2. VIDEO
	2. FORMATS	05		1. PPT
II	1. UNIFORM AND SEWING ROOM	05	Textile and Laundry in Hotel Industry – (Dr. D.K.Agrawal - Aman Publications). Stain Removal – (Stephanie Zia – Bounty Books).	1. PPT

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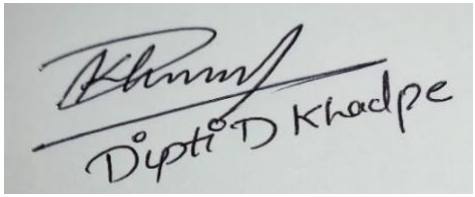
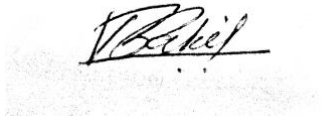
	2. LAUNDRY OPERATIONS	10		
III	1. FLOWER ARRANGEMENT	10	The Art of Flower Arranging – (Ian Hall & Sarah Waterkeyn - Smithmark Publications).	1. PPT 2. VIDEO
	2. ERONOMICS IN HOUSEKEEPING	05	Professional Management of Housekeeping Operations – Thomas J. A. Jones – John Wiley & Sons	1. PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HOURS.





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr lejesh keloth** DEPARTMENT: **HOTEL MANAGEMENT** CLASS: S.Y.H.S SEMESTER: IV

MONTH: NOVEMBER TO APRIL ACADEMIC YEAR: 2021-2022 SUB: COMMUNICATION SKILLS (ENGLISH & FRENCH)

LEARNING OBJECTIVE:

The learners will be able to: Have a good control over language.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	CONCEPT OF COMMUNICATION 1.1 Process of Communication / 1.2 Feed Back 1.3 Methods of Communication – Verbal / Non-Verbal 1.4 Channels of communication 1.5 Barriers of Communication 2 ORGANIZATIONAL COMMUNICATION 2.1 Upward, downward, lateral communication and their purposes functions, grapevine 2.2 Written communication – Memos, Circulars, notices **French** 1 Time, At the Office in a restaurant, Asking direction	4 2	•Business Communication – Meenakshi Raman and Prakash Singh •Business Correspondence and Report writing – R.K.Sharma and Krishna Mohan •Business Communication – Chaturvedi •High School English – Wren and Martin •Understanding Human Communication – Ronald B Adler and George Rodman (with CD) •Skills Development for Business and Management Students - Kevin Gallagher λE. J. Neather - Mastering of French I & II - Macmillan - 1982 λBridget Anfossy - Speak French Today - Augo - 1991	• Notes • Whiteboard

			λR. Diez La Cortina - Cortina's French Method - Grosset & Dunlop - 1988 λMathuram Bondo - Modern French Course - D. C. Heath & Co. - .1983. λCourse de langue et civilizaiion Franchises. G. Mauger. λOxford French Dictionary	
UINT 2	BUSINESS COMMUNICATION 1.1 Planning the right look of a letter 1.2 Types of letters- quotations, orders, claim and adjustment, sales, application, complaint / apology REPORT WRITING 2.1 Types of Reports 2.2 Structure of a report 2.3 Types of Reports **(French)** 1 Receipes-put in the correct order, Translate to English, Making Tea, Coffee, Bechamel,Veloute, Simple soups and salads 2 Culinary Terms	05 10	•Business Communication – Meenakshi Raman and Prakash Singh •Business Correspondence and Report writing – R.K.Sharma and Krishna Mohan •Business Communication – Chaturvedi •High School English – Wren and Martin •Understanding Human Communication – Ronald B Adler and George Rodman (with CD) •Skills Development for Business and Management Students - Kevin Gallagher E. J. Neather - Mastering of French I & II - Macmillan - 1982	• Notes Whiteboard

			Bridget Anfossy - Speak French Today - Augo - 1991 R. Diez La Cortina - Cortina's French Method - Grosset & Dunlop - 1988 Mathuram Bondo - Modern French Course - D. C. Heath & Co. -.1983. Course de langue et civilizaiion Franchises. G. Mauger. Oxford French Dictionary	
UINT 3	GROUP COMMUNICATION 1.1 Types of meetings /Advantages and Disadvantages 1.2 Participants Responsibilities / Brain Storming 1.3 Structure of a meeting – Agenda and Minutes 2 PRESENTATION 2.1 Making effective presentation /Speaker's appearance and personality 2.2 Using Visual aids 3 INTERVIEWS 3.1 Purpose / Types 2 Hours 3.2 Candidate's preparation – GD / PI **(French)** 1 French Basic Conversation and Translation of Passages from French to English U	02 02 02 07	•Business Communication – Meenakshi Raman and Prakash Singh •Business Correspondence and Report writing – R.K.Sharma and Krishna Mohan •Business Communication – Chaturvedi •High School English – Wren and Martin •Understanding Human Communication – Ronald B Adler and George Rodman (with CD) •Skills Development for Business and Management Students - Kevin Gallagher	• Notes Whiteboard

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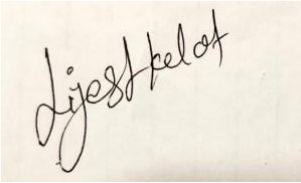
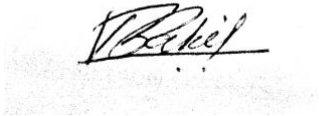
			E. J. Neather - Mastering of French I & II - Macmillan - 1982 Bridget Anfossy - Speak French Today - Augo - 1991 R. Diez La Cortina - Cortina's French Method - Grosset & Dunlop - 1988 Mathuram Bondo - Modern French Course - D. C. Heath & Co. -.1983. Course de langue et civilizaiion Franchises. G. Mauger. Oxford French Dictionary	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5





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VIVA COLLEGE
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **TY BSC HS**

SEMESTER: **VI** MONTH: **NOV 2021 - MAR 2022** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE:

- To educate students on basic to advance culinary skills.
- To give an overview of culinary specialties across the globe.
- To educate students on latest food trends.
- To highlight the importance of food safety.
- To train students for better employment prospects.

The learners will be able to:

- Understand importance of food safety.
- Understand latest food trends.
- Understand culinary specialties across the globe.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Kitchen Management	7	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	Kitchen Stewarding	8	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

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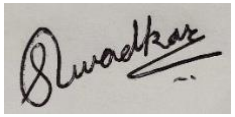
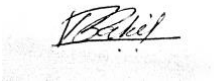
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **TY BSC HS**

SEMESTER: **VI** MONTH: **NOV 2021 – MAR 2022** **ACADEMIC YEAR: 2021-2022**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2	Sandwich	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	Classical garnishes	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test

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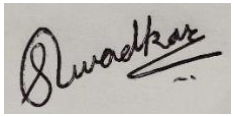
				5. Home study
	Horsd'oeuvres	5	Ingram Christine, (2008), Appetizer, Starter Horsd'oeuvres, Hermes House , London	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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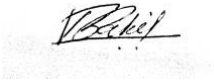

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **TY BSC HS**

SEMESTER: **VI** MONTH: **NOV 2021 - MAR 2022** ACADEMIC YEAR: **2021-2022**

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- Understand culinary specialties across the globe.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3	Non-Edible Displays	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study
	Uses of wines, herbs and spices in cooking	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

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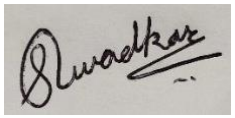
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

	Organoleptic & sensory evaluation of food	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	Contemporary cooking trends	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study
	Culinary terms	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June - November** ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE: Identify Food & Beverage setup and planning of various outlets in the department.

- Describe casual, theme restaurants etc. and how they are operated.
- How food service managers develop and manage labour & revenue control system.
- Explain how banquets and catering events are booked and planned, and describe how managers and staff members provide service for these events.
- Explain the operations of various catering establishments such as Railway, Airline & Marine caterings.

The learners will be able to: Students will learn Food & Beverage setup and planning of various outlets, how banquets and catering events are booked and planned.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	1.1 F & B Outlet Planning 1.1.1 Objective of a good layout 1.1.2 Steps in planning of layout. (Specialty Restaurants, Coffee Shop, Room Service) 1.1.3 Factors to be considered while planning the actual ambience (Colour, light, décor, furniture & uniform) 1.2 Operational aspects of various F & B Outlets (Specialty Restaurants, Coffee Shop, Room Service) 1.2.1 Menu planning 1.2.2 Constraints of Menu planning 1.2.3 Planning of staff requirement 1.2.4 Shifts (Panzer, Straight, Split & Reliever)	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi	1)Power point presentation 2) Videos 3) Google classroom 4)White board 5)Quiz 6) Google slide 7) Jam board

	1.2.5 Factors to be considered for selecting appropriate Crockery, Cutlery, Glassware, and Linen. 1.3 Elements of cost 1.3.1 Types of cost (Material, Labour & Overhead) 1.3.2 Cost Groups (Fixed, semi-fixed & variable) & types of profit (gross & net) 1.3.3 Breakeven / Cost volume profit analysis			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June - November** ACADEMIC YEAR: 2022-24

LEARNING OBJECTIVE: Identify Food & Beverage setup and planning of various outlets in the department.

- Describe casual, theme restaurants etc. and how they are operated.
- How food service managers develop and manage labour & revenue control system.
- Explain how banquets and catering events are booked and planned, and describe how managers and staff members provide service for these events.
- Explain the operations of various catering establishments such as Railway, Airline & Marine caterings.

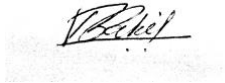
The learners will be able to: Students will learn Food & Beverage setup and planning of various outlets, how banquets and catering events are booked and planned.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	Function Catering / Banquets 2.1 Definition, History & Importance 2.2 Organization of Banquet dept., duties and responsibilities. 2.3 Types of Banquets: Formal, Semiformal & Informal 2.4 Banquet Sales 2.5 Banquet reservation diary and booking procedure. 2.6 Function contract & Function prospectus 2.7 Banquet Menus 2.8 Types of service in the banquets. 2.9 Staffing & Duty allocation 2.10 Toast procedure at wedding reception & Protocol 2.11 Outdoor catering.	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi	1)Power point presentation 2) Videos 3) Google classroom 4)White board 5)Quiz 6) Google slide 7) Jam board

	2.12 Glossary **<u>Glossary</u>**			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**



VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June - November** ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE: Identify Food & Beverage setup and planning of various outlets in the department.

- Describe casual, theme restaurants etc. and how they are operated.
- How food service managers develop and manage labour & revenue control system.
- Explain how banquets and catering events are booked and planned, and describe how managers and staff members provide service for these events.
- Explain the operations of various catering establishments such as Railway, Airline & Marine caterings.

The learners will be able to: Students will learn Food & Beverage setup and planning of various outlets, how banquets and catering events are booked and planned.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	3.1 Buffet. 3.1.1 Definition & Types of buffets. (Meal period, manner of consumption, food served & other types – Display, Gourmet & Running) 3.1.2 Points to be considered while planning a buffet. 3.1.3 Buffet equipment 3.1.4 Banquet layout (formal, informal & cabaret) & Space area calculation 3.1.5 Meeting room setups: (U Shape, Hollow Square, Classroom Theatre, Board of Directors, 'T' Shape)	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi	1)Power point presentation 2) Videos 3) Google classroom 4)White board 5)Quiz 6) Google slide 7) Jam board

	3.2 Food and Beverage Management in various catering establishments 3.2.1 Railway Catering & Airline catering 3.2.2 Marine Catering (offshore & cruise liners) 3.2.3 Industrial catering			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Adv Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: VI

MONTH: **November - April** ACADEMIC YEAR: 2022-23

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

LEARNING OBJECTIVE: Identify factors to create impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley.

• Plan & operate a Bar operation, Manage inventory and maintain records pertaining to beverage control.

• Understand and apply cost dynamics as related to the Food & Beverage industry. • Demonstrate a detailed understanding of the various facets of the Food & Beverage cycle of control in the operational & post operational phase.

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The learners will be able to: Students will learn impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley, Plan & operate a Bar operation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	1 Gueridon Service 1.1 Origin, history and definition 1.2 Factors to create impulse buying. 1.3 Advantages and disadvantages of Gueridon service 1.4 Principles of Gueridon service. 1.5 Flambé trolley & other trolleys (Carving, Cheese, Liqueur, Salad & Dessert). 1.6 Gueridon equipment & ingredients, Mise en place & Presentation.	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi 3) Andrews S, (2009), Food & Beverage Service A Training Manual,(Second Edition),	1)Power point presentation 2) Videos 3) Google classroom 4)White board 5)Quiz 6) Google slide 7) Jam board
	2 Food and Beverage Management.			

	2.1 Objectives of Food & Beverage Management. 2.2 Food and Beverage Management/ Function 2.3 Cost and Market orientation 3 Food and Beverage Control 3.1 Objective of F& B Control. 3.2 Obstacles of F& B Control. 3.3 Food Control checklists. 3.4 Beverage Control checklist			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Adv Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: VI

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

MONTH: **November - April** ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE: Identify factors to create impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley.

• Plan & operate a Bar operation, Manage inventory and maintain records pertaining to beverage control.

• Understand and apply cost dynamics as related to the Food & Beverage industry. • Demonstrate a detailed understanding of the various facets of the Food & Beverage cycle of control in the operational & post operational phase.

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The learners will be able to: Students will learn impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley, Plan & operate a Bar operation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	Bar Operations 4.1 Definition & classification. 4.2 Layout & parts for Front of the house dispense bar. 4.3 Bar Thefts and frauds. (Nature and prevention.) 4.4 Records & Licenses maintained in a Bar (Naukarnama, Permit, TPIN, Bill book, & B.O.T.). 5.1 Cocktails & Mixed drinks a) Introduction, History & Definition b) Bar Equipment. (glassware, fixed & movable equipment) c) Methods of Mixing Cocktails. (Stirred, Shaken, Built up/Layered, Blended & Muddled)	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi 3) Andrews S, (2009), Food & Beverage Service A Training Manual,(Second Edition),	1)Power point presentation 2) Videos 3) Google classroom 4)White board 5)Quiz 6) Google slide 7) Jam board

	d) Styles of Cocktails (Collins, cobblers, coolers, crustas, cups, e) daisies, eggnogs, flips, frappes, fixes, fizzes, Highball, juleps, f) Pick-me-ups, pousse café, smashes, sours, swizzles & toddies). g) Rules to be observed while making cocktails. 5.2 Recipes of classic & exotic cocktails. a) Whisky: (Godfather, Manhattan, Mint Julep, Whisky Sour			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Adv Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: VI

MONTH: **November - April** ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE: Identify factors to create impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley.

- Plan & operate a Bar operation, Manage inventory and maintain records pertaining to beverage control.
- Understand and apply cost dynamics as related to the Food & Beverage industry. • Demonstrate a detailed understanding of the various facets of the Food & Beverage cycle of control in the operational & post operational phase.

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The learners will be able to: Students will learn impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley, Plan & operate a Bar operation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	Cycle of control. 6.1 Operational phase 6.1.1 Purchasing 6.1.1.1Methods of purchasing Food / Beverage. (Contract / Daily / Weekly/ Fortnight / Cash and Carry) 6.1.1.2 Selection of a supplier 6.1.1.3 Purchase specification	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi	1)Power point presentation 2) Videos 3) Google classroom 4)White board 5)Quiz 6) Google slide 7) Jam board

	6.1.1.4 Purchase order. 6.1.2 Receiving 6.1.2.1 Quality inspection 6.1.2.2 Quantity inspection 6.1.2.3 Receiving records Maintained 6.1.3Storing & Issuing 6.1.3.1Bin card 6.1.3.2Store ledger 6.1.3.3 Indent/ requisition 6.2 Post Operational Control: Management after the event phase. 6.2.1 Methods of Food control. 6.2.2 Methods of Beverage control 6.2.3 Detailed Daily Food cost report		3) Andrews S, (2009), Food & Beverage Service A Training Manual,(Second Edition),	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Front Office Hotel Management CLASS: TY BSc HS

SEMESTER: V

MONTH: July to November ACADEMIC YEAR: **2021 -2022**

LEARNING OBJECTIVE: To posses knowledge & skills with respect to handling operations of front Office & understand the formulas that are applied in the front office for forecasting & evaluating, understand the concept of foreign currency exchange.

The learners will be able to:

- To understand the formulas that are applied in the front Office for forecasting & evaluating.
- Decision Making through statistical data in Front Office Operations.
- Understand the rules & acceptance of foreign Currency exchange.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	Planning Operations 1.1 Management Function 1.1.1 Planning, Organising, 1.1.2 Co-ordinating, 1.1.3 Staffing, Leading, 1.1.4 Controlling, Evaluating 1.2 Establishing Room Rate 1.2.1 Different Approaches for pricing rooms 1.2.2 Market Condition Approach, 1.2.3 Rule of Thumb, 1.2.4 Hubbart's Formula-Determining single and double rate	15	Hotel Front Office Training Manual - Sudhir Andrews	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	1.3 Special Room Rates Offered 1.3.1 Corporate / Commercial Rate, 1.3.2 Group Rate, 1.3.3 Promotional Rate, 1.3.4 Incentive Rate, 1.3.5 Family Rate, 1.3.6 Package, 1.3.7 Complimentary Rate 1.4 Forecasting Room Availability 1.4.1 Forecasting Data 1.4.1.1 Percentage of No-show, 1.4.1.2 Percentage of Cancellations, 1.4.1.3 Percentage of walk-ins, 1.4.1.4 Percentage of overstay, 1.4.1.5 Percentage of under stay, 1.4.2 Forecast formula; 1.4.3 Sample 3 and 10 days forecast; 1.4.4 Refining Forecast 1.5 Budgeting for Operations 1.5.1 Three Day Forecast; 1.5.2 Forecasting room revenue, 1.5.3 Estimating expenses, 1.5.4 Refining budget plans 1.6 Key Terms		Front Office management & Operations - Sudhir Andrews	

			Front Office Management - SK Bhatnagar	
UNIT - 2	Evaluating Operations 2.1 Evaluating front office operations 2.1.1 Daily Operations Report, 2.1.2 Monthly Income Statement 2.1.3 Occupancy Ratios; 2.1.3.1 Occupancy Percentage 2.1.3.2 Room Count 2.1.3.3 House Count 2.1.3.4 Double Occupancy percentage 2.1.3.5 Bed Occupancy Percentage 2.1.3.6 Foreign Guest Percentage 2.1.3.7 Average Daily Rate 2.1.3.8 Revenue Per Available Room (RevPAR) 2.1.3.9 Average Rate Per Guest (ARG) 2.1.4 Yield Statistic. 2.1.5 Market Share Index/ Fare Market Share	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

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DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

	2.1.6 Evaluation of Hotels By Guests 2.2 Key Terms			
UNIT - 3	3.1 Handling Foreign Currency 3.2 Foreign Currency Exchange 3.3 Procedures to be followed while exchanging Foreign Currency 3.4 Currencies accepted by RBI 3.5 Foreign Exchange Certificate- Format 3.6 Foreign Exchange Settlements using Credit Cards. 3.7 Export Promotion Capital Goods Scheme (EPCG)	15	Front Office management In Hotel - BK Chakravarti	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Advanced Front Office CLASS: T.Y. BSc HS SEMESTER: VI

MONTH: November to March ACADEMIC YEAR: **2021 - 2022**

LEARNING OBJECTIVE: The students would be able to understand yield Management & its application in the Hotel Industry. Passport & Visa Regulations.

The learners will be able to:

- Yield management and its application in the Hotel Industry.
- Measurement of Yield for Management Decision Making.
- Passport & Visa regulations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	Yield Management 1.1 Introduction 1.2 Concept of Yield Management 1.2.1 Applications(Hospitality Industry) 1.3 Various strategies to maximise yield 1.3.1 Capacity Management, Discount Allocation, Duration Control 1.4 Measuring Yield 1.4.1 Potential Average Single Rate 1.4.2 Potential Average Double Rate 1.4.3 Multiple Occupancy Percentage	15	Jatashankar Tiwari – Front Office Management. Sudhir Andrews – Hotel Front Office Training Manual.	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	1.4.4 Rate Spread/ Rate Differential 1.4.5 Potential Average Rate 1.4.6 Room Rate Achievement Factor 1.4.7 Revenue Per Available Room (RevPAR) 1.4.8 Equivalent Occupancy 1.5 Elements of Yield Management 1.5.1 Group Room Sale (Group Booking Data, Group booking pace, Anticipated Group Business, Lead Time, Displacement of Transient Business) 1.5.1.1 Transient/ FIT Room Sales 1.5.1.2 Food and Beverage Activity 1.5.1.3 Local and Area-wide activities 1.5.1.4 Special Events 1.6 Using Yield Management 1.6.1 Potential High and Low Demand Tactics 1.7 Implementing Yield Strategies 1.7.1 Hurdle rate 1.7.2 Minimum length of stay 1.7.3 Close to arrival 1.7.4 Sell-through 1.8 Key Terms			
	Passport and Visa 2.1 Passport 2.1.1 Definition and Types of Passport 2.1.2 Guidelines for Indian Passport Holders 2.1.3 Issue of New Passport 2.1.4 Renewal Of Passport 2.1.5 Passport for Minor 2.1.6 Replacement of Lost/ Damaged Passport (Duplicate)	15	Jatashankar Tiwari – Front Office Management. Sudhir Andrews – Hotel Front Office Training Manual.	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector

UNIT – 2	2.1.7 Extension of short validity passport 2.1.8 Change of Name/ Surname after marriage 2.1.9 Change of appearance 2.1.10 Change in Date of Birth/ Place of Birth 2.1.11 Emergency Travel Document 2.1.12 Fee Structure 2.2 Visa 2.2.1 Definition and types of visas 2.2.2 Requirement for visa, 2.2.3 Tourist visa, 2.2.4 Collective visa, 2.2.5 Transient visa & exemption from registration 2.2.6 Other types of Visas 2.2.7 Business visa, 2.2.8 Student visa, 2.2.9 Conference visa, 2.2.10 Employment visa, 2.2.11 Recreation visa, 2.2.12 Research visa, 2.2.13 Missionary visa, 2.2.14 Landing Permit Facilities, 2.2.15 PIO card(Person of Indian Origin) UNIT - 3 Revenue Management Terms (100 Terms) 1. 90-Day Forecast 2. Action Plan 3. Average Daily Rate (ADR). 4. Best Available Rate 5. Best-Rate Guarantee Program 6. Booking Pace 7. Brand Equity 8. Branding 9. Bundling 10. Cannibalization 11. Capacity 12. Central Reservation Office (CRO). 13. Central Reservation System 14. Channel 15. Channel Contribution Percentage 16. Closed Or Closed Out 17. Closed To Arrival 18. Competitive			9. Discussion

UNIT – 3	Advantage 19. Competitive Intelligence 20. Competitive Set 21. Customer-Centric Approach 22. Customer Relationship Management 23. Cut-Off Date 24. Data Mining 25. Decline Stage 26. Demand 27. Demand Drainer 28. Demand Forecasting 29. Demand Generator 30. Denial 31. Discounting 32. Distressed Inventory 33. Dynamic Packaging 34. Elastic 35. Electronic Distribution 36. Environmental Scanning 37. Extended Stay Business 38. Fair Price 39. Fixed Costs 40. Flash Report 41. Forecasting 42. Forecasts 43. Full Pattern Length Of Stay Restriction 44. Global Distribution Systems 45. Group 46. Induce Trial 47. Inelastic 48. Internet Distribution System (IDS) 49. Introductory Stage 50. Inventory 51. Inventory Management 52. Law Of Demand 53. Law Of Supply 54. Long-Term Goals And Objectives 55. Long-Term Strategies 56. Lost Business 57. Loyalty Program 58. Managing Demand 59. Market Segmentation 60. Market Share 61. Market Skimming 62. Maximum Length Of Stay Restriction 63. Minimum Length Of Stay Restriction 64. Must-Stay Restriction 65. Net Rate 66. Off-Season 67. Pace 68. Peak Season 69. Perfectly Elastic 70. Perfectly Inelastic 71. Perishable 72. Pick-Up 73. Prestige Pricing 74. Price Elasticity Of Demand 75. Price Elasticity Of Supply 76. Price Leader 77. Promotional Pricing 78. Property Management System 79. Rack Rate 80. Rate Integrity 81. Regret. 82. Reservation Conversion Percentage 83. Run Of House 84. Short-Term 3 To 5-Day Forecast 85. Shortage 86. Shoulder Season 87. Stay Controls 88. Stay Pattern 89. Strategic Revenue Management Process 90. Strategy 91. SWOT Analysis 92. Tactics 93. Transient 94. Valley Season 95. Value-Based Pricing 96. Values 97. Wash Factor 98. Weak Season 99. Wholesale Rate 100.Yield Management	15	Jatashankar Tiwari – Front Office Management. Sudhir Andrews – Hotel Front Office Training Manual.	1. Slides 2. Videos 3. Quiz 4. Power Point 5. Presentation 6. PDF 7. Word 8. White Board 9. Projector 10. Discussion

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Housekeeping V** CLASS: **T.Y.H.S** SEMESTER: **V**

MONTH: **June – November** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE: Explain and apply the guidelines for hiring various housekeeping contract services. Manage the manpower planning in the housekeeping department in different category of hotels.

The learners will be able to: Students will learn trends used in housekeeping, contract services used in housekeeping and determining staff strength.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**Chapter 1 Current trends in Housekeeping** 1.1 Green housekeeping Practices 1.2 Cleaning Equipment and agents 1.3 Guest supplies and amenities 1.4 Level of Service	3	Hotel Housekeeping Operations and Management.	• Notes • White board • Videos
	Chapter 2 Contract Services/Outsourcing 2.1 Types of Contracts 2.2 Guidelines for hiring contract Services 2.3 Advantages and disadvantages of contract service	3	Hotel Housekeeping Operations and Management. Housekeeping Operations, Design and Management	• Notes • White board
	Chapter 3 Manpower Planning 3.1 Determining staff Strength 3.2 Scheduling Staff (duty Roasters)	3	Hotel Housekeeping Operations and Management.	• Notes • White board • Charts

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Housekeeping V** CLASS: **T.Y.H.S** SEMESTER: **V**

MONTH: **June - November** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE: Explain the Importance of lighting, various types of lighting. Plan window treatments for various types of windows. Identify the various ceiling and wall coverings.

The learners will be able to: Students will learn various methods of lighting, types of windows and various wall and ceiling finishes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	**4. Lighting and Lighting Fixtures** 4.1 Lighting for different areas of the hotel. 4.2 Functional and aesthetic aspects of light	3	Hotel Housekeeping Operations and Management.	Notes White board Pictures
	5. Windows and window treatment 5.1 Types of Windows & Window Treatment 5.2 Selection and Care	3	Hotel Housekeeping Operations and Management.	Notes White board Pictures
	6. Wall and Ceiling Finishes 6.1 Types 6.2 Selection 6.3 Care	3	Hotel Housekeeping Operations and Management.	Notes White board Pictures Samples

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Housekeeping V** CLASS: **T.Y.H.S** SEMESTER: **V**

MONTH: **June - November** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE: Distinguish the various kinds of carpets in terms of construction and design and its maintenance procedure. Utilize the principles of designs while coordinating interiors.

The learners will be able to: Students will learn how to apply the elements and concept of interior decorations & elevations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	**7. Carpets and Floor Coverings** 7.1 Types 7.2 Selection 7.3 Care	7	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes White board Videos
	8. Interior Designing 8.1 Elements of Design 8.2 Principles of Design 8.3 Color Schemes	8	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes White board Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Advanced Housekeeping** CLASS: **T.Y.H.S** SEMESTER: **VI**

MONTH: **November to December** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE: To plan and evaluate budgets.

The learners will be able to: Students will learn various types of budget and planning process. To understand various roles of supervisor in housekeeping.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1.Budget and Budgetary Control** 1.1 Introduction 1.2 Types of Budget 1.3 Budget planning Process ● Preparing the budget ● Formats 1.4 Controlling Expenses 1.5 Inventory Control	8	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes Tables and charts Google classroom PPT
	2. Supervisory Skills 2.1 Job Description and daily routine of ● Guest room Supervisor ● Public area Supervisor ● Linen and Uniform Room Supervisor	7	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes Google classroom PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Advanced Housekeeping** CLASS: **T.Y.H.S** SEMESTER: **VI**

MONTH: **November to December** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE: To create and evaluate the aspects of Interior Design in a Guest Room Layout. Plan and draw the layout of Guest Rooms to scale. Set up the housekeeping department of a new property and create a timeline for the countdown to the opening.

The learners will be able to: Students will learn about various types of rooms in terms of sizes, interior and furniture and fixtures used in it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II	**3. Preopening Property Operations** 3.1 Setting up Housekeeping 3.2 Countdown to Opening 3.3 Preparing Snagging List	5	Housekeeping Operations and Management	• Notes • PPT • Checklist • Google Classroom
	4. Furniture and Accessories 4.1 Types 4.2 Selection 4.3 Care	5	Housekeeping Operations and Management	• Notes • Pictures • PPT • Google Classroom
	5. Guestroom Layout 5.1 Planning Room Layouts 5.2 Sizes of Room	5	Housekeeping Operations and Management	• Notes • Layouts • Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Advanced Housekeeping** CLASS: **T.Y.H.S** SEMESTER: **VI**

MONTH: **November to December** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE: To Identify safety hazards and implement preventive and remedial measures.

The learners will be able to: Students will learn to handle various emergency situations like fire, bomb threat etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III	**6. Risk and Environment Management** 6.1 Fire Safety and Accident Prevention ● Hazards ● Prevention ● Crisis Handling 6.2 First Aid 6.3 Dealing with Emergencies ● Fire ● Bomb threat ● Death ● Natural Disasters 6.4 Minimizing Theft ● Guest theft ● Employee theft	15	Housekeeping Operations and Management	● Notes ● Google Classroom ● PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

VIVA COLLEGE
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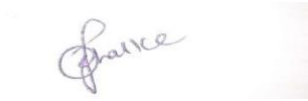
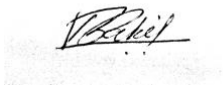


SIGNATURE OF THE STAFF



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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio D'souza** DEPARTMENT:HOTEL MANAGEMENT CLASS: T.Y.H.S SEMESTER: VI

MONTH:NOVEMBER TO APRIL ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE: The objective of Organizational Behaviour is to provide students with the opportunity to diagnose Individual and Group Behaviour. · The study of Structure, Motivation & Change helps to develop skills in improving individual and group performance in entrepreneurial and established ventures. · To develop the overall personality and sustain in the dynamic environment

The learners will be able to: .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Computer Fundamentals	**Introduction to Organizational Behaviour** **1.1 Definition of Organizational Behaviour** **1.2 What Managers Do** 1.2.1 Management Functions 1.2.2 Management Roles 1.2.3 Management Skills 1.2.4 Effective v/s Successful Managerial activities **1.3 Disciplines that contribute to the Organizational Behaviour field** **1.4 Individual Behaviour** 1.4.1 Ability 1.4.2 Biographical characteristics 1.4.3 Learning & Process of Learning 1.4.4 Introduction & Importance to Perception, Values & Attitude 1.4.5 Personality & Its Determinants **1.5 Group Behaviour** 1.5.1 Types of Groups	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	• Notes Whiteboard • PPT

	1.5.2 The Five stage model (Group Dynamics / Development)			
	Organizational Structure 2.1 What is Organizational Structure 2.1.1 Six Elements of organizational structure 2.2 Organizational Designs 2.2.1 Common Organizational Designs (Simple, Bureaucratic, Matrix)			
	Motivational Concepts 3.1 Define Motivation 3.2 Early Theories of Motivation 3.2.1 Maslow Abraham's Hierarchy of Needs theory 3.2.2 Douglas McGregor's Theory X & Theory Y 3.2.3 Fredrick Herzberg's Two Factor Theory 3.2.4 Mc Cleland's Theory of Needs 3.3 Contemporary Theories of Motivation 3.3.1 Cognitive Evaluation Theory (Definition) 3.3.2 Goal setting Theory (Definition) 3.3.3 Self Efficacy Theory (Definition) 3.3.4 Reinforcement Theory (Definition) 3.3.5 Equity Theory (Definition) 3.3.6 Expectancy Theory (Definition) 3.4 Leadership & Types of Leadership 2.2.2 New Design options (Virtual, Team, Boundaryless)	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	• Notes Whiteboard PPT
	Stress Management 4.1 What is Stress? 4.2 Potential Sources of stress			

	4.3 Consequences of Stress 4.4 Managing stress 4.5 Introduction to Quality of Work Life			
	Organizational Change 5.1 What is change? 5.2 Elements / Factors of Change (External & Internal) 5.3 Planned Change 5.4 Resistance to change 5.5 Overcoming Resistance to Change 5.6 Approaches to Managing Organizational change 5.6.1 Lewin's 3 step model 5.6.2 Action Research 5.6.3 Meaning of Organizational Development & Techniques / Intervention 5.7 Introduction to Diversity & Managing Diversity	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	• Notes Whiteboard PPT
	Conflict Management 6.1 Definition of Conflict 6.2 Sources & Types of Conflict 6.3 Conflict Management Styles 6.4 Power and Politics 6.4.1 Concept & Basis of Power 6.4.2 Organization Politics			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

VIVA COLLEGE
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SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **LEJESH KELOTH** DEPARTMENT: HOTEL MANAGEMENT CLASS: T.Y.BACA SEMESTER: V

MONTH: NOVEMBER TO APRIL ACADEMIC YEAR: 2021-22

SUB: STRATEGIC MANAGEMENT

LEARNING OBJECTIVE: · The students will identify the operating strategy of the organization. · Develop skills in decision making · Students will be able to strategize and participate in policy making.

The learners will be able to: . · The students will identify the operating strategy of the organization. · Develop skills in decision making · Students will be able to strategize and participate in policy making.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Introduction to Strategic management 1.1 Definition – Strategy, Strategic Management and its relevance 1.2 Process of Strategic Management 1.3 Levels of Strategy : Corporate, Divisional Business, Operational or Functional 1.4 7 'S' Frame Work 2 Strategic Intent 2.1 Vision , Mission, Business definition, Goals and Objectives 2.2 Mission Statement and its Characteristics 2.3 Corporate Social Responsibility	15	Kazmi, A.(2011) Strategic Management and Business Policy 3 rd ed., The McGraw Hill Companies.B.Sc.(Hospitality Studies) Page 9 of 64 2. David,F.(2011) Strategic Management Concept and Cases 13th ed., Pearson Education 3. Ramswamy ,V.S., Namakumari, S.(2007) Strategic Planning Formulation of Corporate Strategy, Macmillen 4. Srinivasan, R., (2006), Strategic Management The Indian Context , 2nd Prentice Hall of India 5. Enz,C., (2010), Hospitality Strategic	• Notes Whiteboard

			Management 2 nd ed. John Wiley and Sons, Inc.	
UNIT 2	Environmental Analysis 3.1 Concept of Organizational Environment : Internal and External Environment 3.2 Process of SWOT analysis 3.3 Need for Environmental analysis (External Environment) 3.4 External Factor Evaluation Matrix (EFE) 4 Organizational Appraisal 4.1 Dynamics of Internal Environment 4.2 Six Organizational Capability factors 4.3 Internal Factor Evaluation Matrix (IFE) 4.4 Competitive Profile Matrix (CPM) 4.5 Industry Analysis (Porter's Five Force Analysis)	15	Kazmi, A.(2011) Strategic Management and Business Policy 3 rd ed., The McGraw Hill Companies.B.Sc.(Hospitality Studies) Page 9 of 64 2. David,F.(2011) Strategic Management Concept and Cases 13th ed., Pearson Education 3. Ramswamy ,V.S., Namakumari, S.(2007) Strategic Planning Formulation of Corporate Strategy, Macmillen 4. Srinivasan, R., (2006), Strategic Management The Indian Context , 2nd Prentice Hall of India 5. Enz,C., (2010), Hospitality Strategic Management 2 nd ed. John Wiley and Sons, Inc.	• Notes Whiteboard
UNIT 3	Strategy Formulation 5.1 Types of Strategy 5.1.1 Intensification Strategies : 5.1.1.1 Market penetration 5.1.1.2 Market Development 5.1.1.3 New Product Development 5.1.1.4 Innovation 5.1.2 Integrative Strategies: 5.1.2.1 Horizontal	15	Kazmi, A.(2011) Strategic Management and Business Policy 3 rd ed., The McGraw Hill Companies.B.Sc.(Hospitality Studies) Page 9 of 64 2. David,F.(2011) Strategic Management Concept and Cases 13th ed., Pearson Education 3. Ramswamy ,V.S., Namakumari, S.(2007)	• Notes Whiteboard

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DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

	5.1.2.2 Vertical 5.1.3 Diversification Strategies 5.1.3.1 Concentric (Related) 5.1.3.2 Conglomeratic (Unrelated) 5.1.4 Restructuring / Retrenchment Strategies: 5.1.4.1 Turnaround 5.1.4.2 Divestment 5.1.4.3 Liquidation 5.1.4.4 Merger 5.1.4.5 Acquisition (Take Over) 5.1.4.6 Joint Venture 6.Strategic Evaluation 6.1 Nature and its importance B.Sc.(Hospitality Studies) 6.2 Process of Strategic Evaluation		Strategic Planning Formulation of Corporate Strategy, Macmillen 4. Srinivasan, R., (2006), Strategic Management The Indian Context , 2nd Prentice Hall of India 5. Enz,C., (2010), Hospitality Strategic Management 2 nd ed. John Wiley and Sons, Inc.	

TOTAL NUMBER OF LECTURES ALLOCATED TO ALL THE UNITS: 45

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **LEJESH KELOTH** DEPARTMENT: HOTEL MANAGEMENT CLASS: T.Y.H.S SEMESTER: VI

MONTH: NOVEMBER TO APRIL ACADEMIC YEAR: 2021-22
SUB: STRATEGIC MANAGEMENT

LEARNING OBJECTIVE: · The students will identify the operating strategy of the organization. · Develop skills in decision making · Students will be able to strategize and participate in policy making.

The learners will be able to: . · The students will identify the operating strategy of the organization. · Develop skills in decision making · Students will be able to strategize and participate in policy making.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Introduction to Strategic management 1.1 Definition – Strategy, Strategic Management and its relevance 1.2 Process of Strategic Management 1.3 Levels of Strategy : Corporate, Divisional Business, Operational or Functional 1.4 7 'S' Frame Work 2 Strategic Intent 2.1 Vision , Mission, Business definition, Goals and Objectives 2.2 Mission Statement and its Characteristics 2.3 Corporate Social Responsibility	15	Kazmi, A.(2011) Strategic Management and Business Policy 3 rd ed., The McGraw Hill Companies.B.Sc.(Hospitality Studies) Page 9 of 64 2. David,F.(2011) Strategic Management Concept and Cases 13th ed., Pearson Education 3. Ramswamy ,V.S., Namakumari, S.(2007) Strategic Planning Formulation of Corporate Strategy, Macmillen 4. Srinivasan, R., (2006), Strategic Management The Indian Context , 2nd Prentice Hall of India 5. Enz,C., (2010), Hospitality Strategic	• Notes Whiteboard

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HOTEL & TOURISM MANAGEMENT STUDIES

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TOTAL NUMBER OF LECTURES ALLOCATED TO ALL THE UNITS: 45

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio dsouza** DEPARTMENT:HOTEL MANAGEMENT CLASS: BACA SEMESTER: V

MONTH:NOVEMBER TO APRIL ACADEMIC YEAR: 2022-23 SUBJECT: Organizational Behaviour

LEARNING OBJECTIVE: The objective of Organizational Behaviour is to provide students with the opportunity to diagnose Individual and Group Behaviour. · The study of Structure, Motivation & Change helps to develop skills in improving individual and group performance in entrepreneurial and established ventures. · To develop the overall personality and sustain in the dynamic environment

The learners will be able to: .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Computer Fundamentals	**Introduction to Organizational Behaviour** **1.1 Definition of Organizational Behaviour** **1.2 What Managers Do** 1.2.1 Management Functions 1.2.2 Management Roles 1.2.3 Management Skills 1.2.4 Effective v/s Successful Managerial activities **1.3 Disciplines that contribute to the Organizational Behaviour field** **1.4 Individual Behaviour** 1.4.1 Ability 1.4.2 Biographical characteristics 1.4.3 Learning & Process of Learning 1.4.4 Introduction & Importance to Perception, Values & Attitude 1.4.5 Personality & Its Determinants **1.5 Group Behaviour** 1.5.1 Types of Groups	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational	• Notes Whiteboard • PPT

	1.5.2 The Five stage model (Group Dynamics / Development)		Behaviour Text & Cases; Second Edition ; McGraw Hill	
	Organizational Structure 2.1 What is Organizational Structure 2.1.1 Six Elements of organizational structure 2.2 Organizational Designs 2.2.1 Common Organizational Designs (Simple, Bureaucratic, Matrix)			
	Motivational Concepts 3.1 Define Motivation 3.2 Early Theories of Motivation 3.2.1 Maslow Abraham's Hierarchy of Needs theory 3.2.2 Douglas McGregor's Theory X & Theory Y 3.2.3 Fredrick Herzberg's Two Factor Theory 3.2.4 Mc Cleland's Theory of Needs 3.3 Contemporary Theories of Motivation 3.3.1 Cognitive Evaluation Theory (Definition) 3.3.2 Goal setting Theory (Definition) 3.3.3 Self Efficacy Theory (Definition) 3.3.4 Reinforcement Theory (Definition) 3.3.5 Equity Theory (Definition) 3.3.6 Expectancy Theory (Definition) 3.4 Leadership & Types of Leadership 2.2.2 New Design options (Virtual, Team, Boundaryless)	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	• Notes Whiteboard PPT
	Stress Management 4.1 What is Stress? 4.2 Potential Sources of stress			

	4.3 Consequences of Stress 4.4 Managing stress 4.5 Introduction to Quality of Work Life			
	Organizational Change 5.1 What is change? 5.2 Elements / Factors of Change (External & Internal) 5.3 Planned Change 5.4 Resistance to change 5.5 Overcoming Resistance to Change 5.6 Approaches to Managing Organizational change 5.6.1 Lewin's 3 step model 5.6.2 Action Research 5.6.3 Meaning of Organizational Development & Techniques / Intervention 5.7 Introduction to Diversity & Managing Diversity	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	• Notes Whiteboard PPT
	Conflict Management 6.1 Definition of Conflict 6.2 Sources & Types of Conflict 6.3 Conflict Management Styles 6.4 Power and Politics 6.4.1 Concept & Basis of Power 6.4.2 Organization Politics			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

VIVA COLLEGE
DEPARTMENT OF
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SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VAIBHAV PATIL **DEPARTMENT**: HOTEL MANAGEMENT

SUBJECT: INTRODUCTION TO MARITIME HOSPITALITY

CLASS: FY. BACA **SEMESTER:** II

MONTH: DECEMBER 2021-FEBRUARY 22 **ACADEMIC YEAR:** 2021-2022

LEARNING OBJECTIVE:
Objective Of this course is to teach students about the varieties of Indian desserts.

The learners will be able to:
After completion of this unit student will be able to:

- List the features of Indian confectionary.
- To define the features of Indian confectionary, its history and modern development region wise and will be able to state the preparation methods, Meal structure and regional variation.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	1. Introduction to maritime hospitality 1.1 What is maritime hospitality management ? 1.2 Managers & employees role in maritime hospitality industry 1.3 Importance of study in maritime hospitality management programme 1.4 Planning a career 1.5 Employment as an important part of education 1.6 Getting a job 1.7 Maritime hospitality industry and environment 1.8 Safety and security of guest 1.9 Other support departments	**15HRS**		1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3 3. HOME STUDY AND QUIZ FOR STUDENTS
UNIT 2	2. Room & Restaurant business in maritime hospitality 2.1 Types of travelers 2.2 Types of rooms	**15HRS**		1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS

	2.3 Guest handling 2.4 Room management 2.5 Types of restaurant in maritime hospitality 2.6 Restaurant operation 2.7 Food products and its promotion 2.8 Service program for ageing personal 2.9 Customer concern – Health & wellness & Nutritional food			3. HOME STUDY AND QUIZ FOR STUDENTS
UNIT 3	3.1 Features of good galley 3.2 Layout of galley 3.3 Equipment‟s required in galley 3.4 Care and maintains of kitchen galley 3.5 Quantity food production & quality control 3.6 Receiving, storage and inventory control	**15HRS**		1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. HOME STUDY AND QUIZ FOR STUDENTS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HRS

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Samir Kogaonkar** DEPARTMENT: **HOTEL &TOURISM MANAGEMENT**

CLASS: **T.Y.BA.CA** SEMESTER: **VI.**

MONTH: **Academic Year 2021-2022 (December-March)** SUBJECT: **Indian Snacks.**

LEARNING OBJECTIVE:
The learners will be able to:

- To educate students on basic to advance culinary skills.
- To give an overview of culinary specialties across the globe.
- To educate students on latest food trends.
- To highlight the importance of food safety.
- To train students for better employment prospects.

The learners will be able to understand

- Understand importance of food safety.
- Understand latest food trends.
- Understand culinary specialties across the globe.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

1.	1.1 Introduction to Indian snacks 1.2 Introduction to Indian snacks 1.3 Origin & history of Indian snacks 1.4 Methods of cooking used in Indian snacks 1.5 Ingredients used in Indian snacks 1.6 Healthy snacks 1.7 Accompaniments of Indian snacks	**15**	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
2.	2.1 Regional influence on Snacks 2.2 Religious influence on Indian Snacks 2.3 Festival influence on Indian snacks 2.4 Famous snacks from western India 2.5 Famous snacks from Eastern India 2.6 Famous snacks from Northern India 2.7 Famous snacks from Southern India	**15**	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. 2. 3.

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				4. 5.

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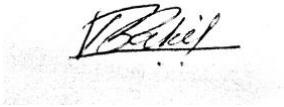
HOTEL & TOURISM MANAGEMENT STUDIES

3.	3.1 Snack & convenient Indian food 3.2 What is convenient India food 3.3 Need of the convenient food 3.4 packaged food processing system 3.5 Advantages of convenient food 3.6 Limitations & ill effects of convenient food	**15**	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HOURS.



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Samir Kogaonkar** DEPARTMENT: **HOTEL &TOURISM MANAGEMENT**

CLASS: **T.Y.BA.CA** SEMESTER: **V.**

MONTH: **Academic Year 2021-2022 (December-March)** SUBJECT: **Indian Culture and Tradition.**

LEARNING OBJECTIVE:
The learners will be able to:

- To educate students on basic to advance culinary skills.
- To give an overview of culinary specialties across the globe.
- To educate students on latest food trends.
- To highlight the importance of food safety.
- To train students for better employment prospects.

The learners will be able to understand

- Understand importance of food safety.
- Understand latest food trends.
- Understand culinary specialties across the globe.

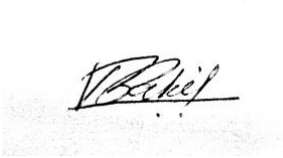
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

1.	1 Festivals celebrated in India and festival Cuisine ● Navroze (parsi) ● Baisakhi ● Padwa ● Navratri ● Onam ● Pongal ● Bakri-Id ● Holi ● Diwali ● Easter ● Christmas	**15**	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
2.	Occasion and Ceremony food ● Wedding ● Fasting	**15**	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
3.	● Food destination of India ● Street Food ● Indian Eating habits and serving styles	**15**	Regional Indian Cuisine and Larder – cracknel Prasad: Cooking with Indian Masters, Kalra, J Inder Singh,	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom

			Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HOURS.



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **FOOD TOURISM** CLASS: **TY BACA**

SEMESTER: **VI** MONTH: **NOV 2021 - MAR 2022** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE:

- To understand the importance of food tourism and its increasing popularity around the world.

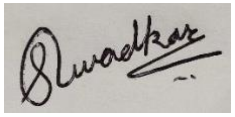
The learners will be able to:

- To know the history and importance of food tourism.
- To know the growing popularity in India.
- To understand the festivals and culture around the world and its importance.
- To know the festivals in India who plays major role in tourism.
- Will able to understand the new trends changing in hotels industry and restaurants to promote and encourage food tourism.
- Role of social media in world food tourism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	**1.1 Introduction to food tourism, Food Tourism in India, Food Tourism all around the world.** 1)Introduction 2) Food tourism an innovative concept 3) Increase in demand of world tourism 4) Food tourism in India. a) Lassi- Punjab b) Biryani – Hydrebad c) Pani Puri/gol gappa(Indian street food) 5) food Tourism around the world a) food in Egupt b) food in Denmark c) food in France	15	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study

	e) food in Japan f) food in America g) food in China h) Coastal Food			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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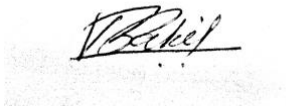

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **FOOD TOURISM** CLASS: **TY BACA**

SEMESTER: **VI** MONTH: **NOV 2021 - MAR 2022** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE:

- To understand the importance of food tourism and its increasing popularity around the world.

The learners will be able to:

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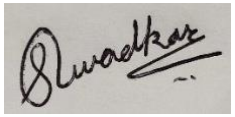
- Will able to understand the new trends changing in hotels industry and restaurants to promote and encourage food tourism.
- Role of social media in world food tourism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2	2.1 Seasons and festivals 1) Learning the seasons 2) History 3) Food Festival a) USA b) Hong Kong c) Auckland seafood festival d) Eastern Africa i) Kenya ii) Nairobi iii) Mombasa carnival e) North Africa f) South Africa	15	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study

	4) Festivals in India a) Rathyatra b) Saraswati puja c) Muharram d) Kali puja e) Makar sankranti f) Lakshmi pooja g) Durga Puja h) Christmas			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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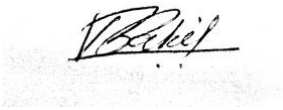

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **FOOD TOURISM** CLASS: **TY BACA**

SEMESTER: **VI** MONTH: **NOV 2021 - MAR 2022** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE:

- To understand the importance of food tourism and its increasing popularity around the world.

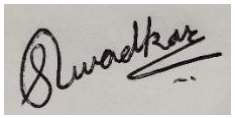
The learners will be able to:

- To know the history and importance of food tourism.
- To know the growing popularity in India.
- To understand the festivals and culture around the world and its importance.
- To know the festivals in India who plays major role in tourism.
- Will able to understand the new trends changing in hotels industry and restaurants to promote and encourage food tourism.
- Role of social media in world food tourism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3	Modern revolution and contribution of hotel and restaurants. 1) Food promotion in Indian and world hotels 2) Modern Food Tourism a) Organic food Tourism b) Wine tourism (Increase in Demand of Wine tourism in India.	15	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

	c) Contribution of social Media in advancing food Tourism all around the world.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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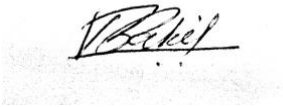

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **ADVANCED CULINARY ARTS** CLASS: **TY BACA**

SEMESTER: **VI** MONTH: **NOV 2021 - MAR 2022** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE:

- To teach students them about International Cuisine

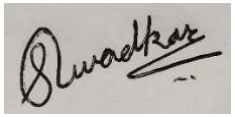
The learners will be able to:

- List the features of International cuisine
- To define the features of International cuisine, its history and modern development region wise and
- Will be able to state the preparation methods, Meal structure and regional variation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	**1.1 Middle Eastern- Morocco, Lebanon, Turkey** 1.1.1 History and development of Middle Eastern cuisine. 1.1.2 Meal structure. 1.1.3 Main ingredients used in Middle Eastern cuisine 1.1.4 Regional variations	7	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	1.2 Africa 1.2.1 History and development of Africa cuisine. 1.2.2 Meal structure. 1.2.3 Main ingredients used in Africa cuisine 1.2.4 Regional variations	8	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES



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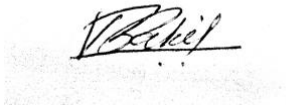

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **ADVANCED CULINARY ARTS** CLASS: **TY BACA**

SEMESTER: **VI** MONTH: **NOV 2021 – MAR 2022** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE:

- To teach students them about International Cuisine

The learners will be able to:

- List the features of International cuisine
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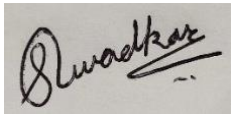
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2	2.1 USA 2.1.1 History and development of USA cuisine. 2.1.2 Meal structure. 2.1.3 Main ingredients used in USA cuisine 2.1.4 Regional variations	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	2.2 Mexico 2.2.1 History and development of Mexico cuisine. 2.2.2 Meal structure. 2.2.3 Main ingredients used in Mexico cuisine 2.2.4 Regional variations	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	2.3 Caribbean 2.3.1 History and development of Caribbean cuisine.	5	Bali Parvinder S., (2012), International Cuisine & Food	1. PowerPoint 2. Black board 3. YouTube videos

	2.3.2 Meal structure. 2.3.3 Main ingredients used in Caribbean cuisine 2.3.4 Regional variations		Production Management, Oxford University, New Delhi	4. Class test 5. Home study

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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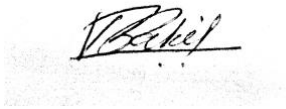

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **ADVANCED CULINARY ARTS** CLASS: **TY BACA**

SEMESTER: **VI** MONTH: **NOV 2021 - MAR 2022** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE:

- To teach students them about International Cuisine

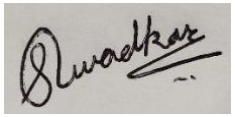
The learners will be able to:

- List the features of International cuisine
- To define the features of International cuisine, its history and modern development region wise and
- Will be able to state the preparation methods, Meal structure and regional variation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3	Modern cooking technics and process and layout of different types of buffet 3.1 Modern cooking technics and process 3.2 Sousvide cooking, cook chill, cook freeze 3.3 Buffet components cooked in the below buffets 3.4 Breakfast- Indian, continental, American 3.5 Hi-Tea 3.6 Brunch	15	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES



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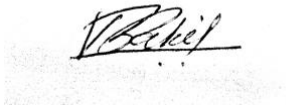

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: RAMEEZ SHAKIL PATEL **DEPARTMENT:** HOTEL MANAGEMENT

CLASS: T.Y BACA **SEMESTER: I**

SUBJECT: KITCHEN FACILITY PLANNING AND ENVIRONMENT CONSCIOUSNESS

MONTH: DECEMBER 2021-MARCH 2022 **ACADEMIC YEAR: 2021-2022**

LEARNING OBJECTIVE: Objective of this course is to familiarize the students with various ingredients used in Food Production, Its properties and quality checks.

The learners will be able to:

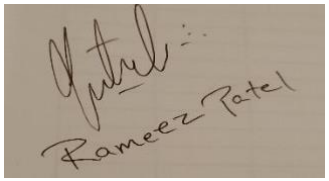
- State the properties , nutritional value and quality checks of dairy products , cereals and eggs
- State the properties , nutritional value and quality checks of vegetables, fruits and herbs
- State the properties , nutritional value and quality checks of meat products , fish and Fats and oils

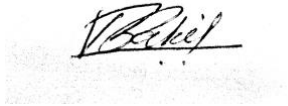
PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**KITCHEN DESIGN** ● **Basis of Physical layout** ● **Area requirement** ● **Structural features – Drainage, , Electricity , Gas , Water Supply, Floor, Wall and Ceiling surfaces, work surfaces, lighting, Ventilation** ● **Work Centres in a layout – Commissary, Butchery, Garde Manger, Bakery, Pastry , Banquet or Main, Kitchen, Satellite Kitchens ,** ● **Fire Safety**		1. Erach Bharucha text book of environmental studies- Universities press/Orient Blackswan. 2. Jagdish Krishnaswami, RJ Ranjit Daniels, "Environmental Studies" Wiley India Pvt Ltd. New Delhi. 3. Deeksha Dave. "Text Book of 'Environmental Studies'.	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. WHITE BOARD

			Cengage learning, Thomason India edition.	
UNIT 2	**Equipment planning** ● **Types of equipment – Food Preparation Equipment, Cooking Equipment, Holding Serving and Cleaning Equipment, Washing and Storage Equipment** ● **Factor to be considered while selecting Kitchen Equipment** ● **Types of fuel used in a kitchen** ● **Installation, Preventive / routine and reactive maintenance** ● **Commonly used equipment and their operating Procedures**	**7.5HRS**	4 Benny Joseph , 'Environmental Studies", Tata McGRAW HILL 5 D L Manjunath, , 'Environmental Studies",Pearson 6 R Rajgopalan, , 'Environmental Studies", Oxford 7 Alok Debi, 'Environmental science and Engineering", University press 8. A Nagraj, Jeevan Vidya-A Primer.	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT 6. WHITE BOARD
UNIT 3	● **Garbage Segregation** ● **Chemical and pollution reduction** ● **Reducing carbon footprint , Energy efficiency** ● **Water efficiency**			1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS

	• **Waste reduction** • **Recycling** • **Exhaust and drainage requirements**	**7.5 HRS**		4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45HRS





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Samir Korgaonkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **SY BSc HS**

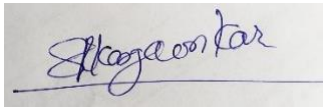
SEMESTER: **III** MONTH: **JUL 2021 – NOV 2021** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE: To get trained on various aspects of regional Indian cuisine – Quantity Food Production (QFP)

The learners will be able to: Understand various aspects of regional Indian cuisine – Quantity Food Production (QFP)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	MENU PLANNING & ITS TYPES (QFP)	7	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	INDIAN CULINARY TERMS	4	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	INTRODUCTION TO CAKE MAKING	4	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Samir Korgaonkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **SY BSc HS**

SEMESTER: **III** MONTH: **JUL 2021 – NOV 2021** ACADEMIC YEAR: **2021-2022**

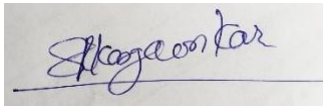
LEARNING OBJECTIVE: To get trained on various aspects of regional Indian cuisine – Quantity Food Production (QFP)

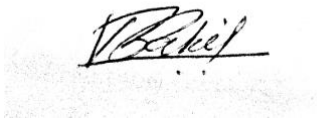
The learners will be able to: Understand various aspects of regional Indian cuisine – Quantity Food Production (QFP)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2	EQUIPMENT (QFP)	3	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	QUANTITY PURCHASE AND STORAGE (QFP)	3	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	INDENTING (QFP)	5	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	PASTRY	4	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz

				5. Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Samir Korgaonkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **SY BSc HS**

SEMESTER: **III** MONTH: **JUL 2021 – NOV 2021** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE: To get trained on various aspects of regional Indian cuisine – Quantity Food Production (QFP)

The learners will be able to: Understand various aspects of regional Indian cuisine – Quantity Food Production (QFP)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3	INDIAN COOKERY (QFP)	11	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	VOLUME FEEDING (QFP)	4	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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DEPARTMENT OF
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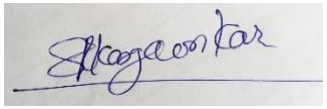

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMRATA BHOLANATH KHARKANDI & SAGAR VAZE **DEPARTMENT:** PRINCIPLES OF FOOD PRODUCTION

CLASS: F.Y BACA **SEMESTER: I**

MONTH: JULY 2021– OCT 2022 **ACADEMIC YEAR: 2021-2022**

LEARNING OBJECTIVE: The Objective of this course is to familiarize the student towards analysis of food, stocks, soups, salads, eggs, fish and basic Indian cuisine

The learners will be able to:

- Furnish the basics of Food analysis List the methods of preparation of soups and stocks as mentioned in the syllabus.
- List the methods of preparation of sauces as mentioned in the syllabus.
- List various types of salads
- List various cuts of Fish
- Define various cuts of meat
- State basic principles of baking sponges and pastries
- List various masala combinations as mentioned in their learning material

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**SENSORY, IDENTIFICATION & EVALUATION OF FOOD INGREDIENTS** Organoleptic Sensory Evaluation (wherever necessary) (Taste, smell, hearing, eyes) Identification of Ingredients Presentation Basic Factors of presentation (temperature, flavour, colour, shapes)	5 HRS	Sensory evaluation of food and Practices by Harry T. Lawless	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

	Texture & Consistency (Firm & Close, short & crumbly, spongy, light & even, flaky, coarse, tough, hard, roping, pouring, soft peak, medium peak, stiff peak)			5. PRACTICAL OF HENDONIC TESTING (ORGANIC MATERIAL IDENTIFCATION OF SMELL, TASTE, TOUCH, VISUAL) IN CLASSROOM
1.2	**STOCKS, GLAZES, COOKING LIQUORS& THICKENING AGENTS** Introduction Definition of Stock & Glazes Uses of Stock & Glazes Classification of Stock White Stock (fond Blanc) Brown Stock (fond brun) & Indian Yakhni Stock Fish Stock (fumet) Vegetable Stock Neutral Stock Remouillage Court Bouillon Pot Liquor Emergency Stock / Convenience Bases Elements of Stocks & its Characteristics Precautions to be taken while preparing Stock Definition Starches as Thickening Agent Definition of Roux Types of Roux (white, blond, slack, brown) Other thickening agents • White wash (fecule) • Cornstarch (cornflour) • Arrowroot	5 HRS	FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. PRACTICE IN PRACTICALS
1.3	**SOUPS** Classification of soups with examples Clear Soup			

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	Broth Consommé Thick soup Puree Cream Velouté Bisque Chowder Cold Soup Speciality Soup Tips for Making Good Soups	5 HRS	FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. PRACTICE IN PRACTICALS
UNIT 2 **2.1**	**SAUCES** Definitions Functions & Uses Structure of Sauces Classification of Sauces Emulsions Definition of Emulsion Types of Emulsions a) Miscible b) Immiscible) Stabilisation of Emulsifiers Causes of Breakdown of the Emulsions Preparation of Basic Mother Sauces & Derivatives of Each	5 HRS 5 HRS	FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT
2.2	**SALADS** Introduction Composition of a Salad Types of Salad Various Types of Lettuce Used in Salads Salad Dressing Emerging Trends in Salad Making	5 HRS	FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT

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2.3	Salient Features of Preparing Good Salads Classification of Vegetables **EGGS & FISH** Introduction Cooking of eggs for breakfast Identification & Classification of Fish Cuts of Fish Darne,Trançon ,Fillet,Suprême, Delice, Goujon Goujonettes Paupiette, En tresse, En Loregnette Pavé Cravate (plaited) Cooking of Fish		FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT
UNIT 3	**3.1 INTRODUCTION TO MEATS** Lamb, Pork, Beef, Veal & Furred Game Introduction Cuts of lamb, beef, veal and pork (with diagram) Processing of a Whole Animal Classification of Meats Yield Tests Introduction to Poultry & Game Bird Introduction Physical & Chemical Characteristics of Poultry Trussing Methods Some Classical Preparations of Poultry **3.2 BASIC SPONGE, CAKE & PASTRY (SAGAR VAZE)** Introduction Pastry Techniques and Principles Principles Behind Making of Sponge Points to be Kept in Mind While Making Sponges & Cakes Different types of Pastry Basic method of making pastry **3.3 MASALAS, PASTES & INDIAN GRAVIES** Introduction Blending of Spices & Concept of Masalas Concept of Dry & Wet Masalas Pastes used in Indian Cooking Difference between Gravies & Curries	**5 HRS** **5 HRS** **5 HRS**	FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT 6. PRACTICAL DISSECTION OF MEAT 1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT 6. PRACTICAL DISSECTION OF MEAT

	Regional Gravies Preparation of Gravies			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45HRS

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Principle of Management – Hotel Management CLASS: FY BSc HS

SEMESTER: II

MONTH: November to March ACADEMIC YEAR: **2020 -2021**

LEARNING OBJECTIVE: To learn about the emerging Indian corporate world and global phenomenon with stress upon hospitality Industry.

The learners will be able to:

- To train the student as future managers and make them understand the working of an organisation.

• Teaching through PowerPoint presentations, case studies, activities, brain storming sessions, SWOT/PEST analysis etc.
• Trying to bridge the gap between management studies and real corporate world through real time stories from newspapers, journals and business magazines, books.
• Encouraging students to read more so as to refine their analytical power and sharpen business sense and become more aware of the business environment.
• Opportunity to participate in business discussions, article/book reviews and presentations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	1. INTRODUCTION TO MANAGEMENT 1.1 Evolution of management 1.2 Definitions and Importance of Management 1.3 Management as a Science and Art 1.4 Principles of Management (14 principles of Fayol)	15	Principle of Management – P C Tripathi & Reddy Harold Koontz – Principle of Management	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word

	1.5 Levels of Management and their functions 1.6 Managerial skills 1.7 Functions of Management 1.8 Process of communication 1.9 Business communication 2. PLANNING 2.1 Definition and Characteristics 2.2 Planning Process (Steps in Planning) 2.3 Essentials of a Good Plan 2.4 Vision and mission Statements 2.5 Planning with relation to hospitality industry 2.6 Meaning and Process of MBO 2.7 Meaning and steps in Decision Making			7. White Board 8. Projector 9. Discussion
	3. ORGANIZING 3.1 Meaning and Process of Organizing 3.2 Formal and Informal Organization and Distinction 3.3 Span of control (Meaning and Importance) 3.4 Tall and Flat Organization 3.5 Definition and Process of Delegation 3.6 Centralization and Decentralization of Authority 3.7 Departmentation and Basis of Departmentation 3.8 Organisation chart 3.9 Closed vs open system of organisation 3.10 Line and Staff organization	15	Management Principles and Practices – Dr.M.Sakthivel Murugan	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	4. STAFFING AND COORDINATION 4.1 Meaning and Imporance of Staffing 4.2 Internal and External Sources of Recruitment 4.3 Coordination - As an essence of Management 4.4 Principles of Coordination			
	5. DIRECTING, MOTIVATING AND LEADING 5.1 Meaning and importance of Directing 5.2 Element of Directions / Components 5.3 Definition of Motivation and factors 5.4 Maslow's Need Hierarchy Theory 5.5 Mc Gregor's Theory X and Theroy Y 5.6 Definition of Leadership and Leader 5.7 Qualities of a Leader 5.8 Leadership Styles 5.9 Leaders from hospitality industry 5.10 Leadership theory 6. CONTROLLING 6.1 Meaning 6.2 Steps in Control process 6.3 Types of control:feed forward,feedback,concurrent 6.4 Time Management	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

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DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: RAMEEZ SHAKEEL PATEL **DEPARTMENT**: Food Production and Patisserie **CLASS:** FY.Bsc.Hs

SEMESTER: 2

MONTH: ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE:
• To develop a keen interest in food production and to enable students to experiment, innovate and progressively produce a variety of preparation / dishes.
• To gain confidence to adapt to the technical skills and the art of preparing different menus, Indian as well as Continental.
• By the end of the second semester students should be confident enough in their skills which would boost their morale to take up the challenge of bulk cookery in the third and fourth semester

The learners will be able to:

- Define microbes and conditions for growth of microbes
- List the importance and basic principles of HACCP
- List micro organisms
- Define Food Adulteration and adulterants
- State the types and uses of Food Additives
- State the importance of Hygiene
- List various methods of Food Preservation
- State the regulations and regulating bodies governing Food Safety and Hygiene.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1.Culinary Terms with Explanation & Examples**	**03.HRS**		

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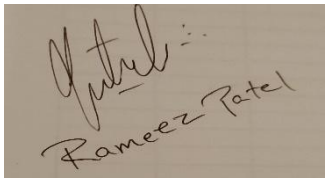
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

UNIT 2	**2.Layout of kitchen** 2.1 General Layout of the Kitchen 2.2 Receiving Area 2.3 Storage 2.4 Wash up **3.Soups** 3.1 Classification with Examples 3.2 Consommé and Garnishes with their names (Any 10 common name) **4.Fish Mongery** 4.1 Classification of Fish with examples 4.2 Selection, Cooking & Storage of Fish 4.3 Local Names of Fin Fish and Shell Fish 4.4 Cuts of Fish **5.Poultry** 5.1 Cuts of Poultry 5.2 Selection and Uses of Cuts **6.Rice, Cereals & Pulses** 6.1 Introduction, Classification of Cereals and Pulses 6.2 Varieties of Rice and Byproducts 6.3 Nutritive Value of Various Cereals 6.4 Sprouts and Uses **7.Meat** 7.1 Introduction to Meat Cookery 7.2 Cuts of Lamb, Pork, Beef / Veal 7.3 Variety of Meats / Offal 7.4 Selection and Storage of Meats	**03.HRS** **02.HRS** **02.HRS** **02.HRS** **03.HRS** **04.HRS**	Thangam Philip – Modern Cookery I & II – Orient Longman – 2001 Auguste Escoffier – Ma Cuisine – Hamlyn – 2000 Digvijay Singh – Cooking Delight of the Maharajas – Vakils, Feffer & Son's Ltd. – 1982 Philip Dowell & Adrian Barley – The Book of Ingredients – Mermaid Books – 1987 Wayne Gisslen – Professional Baking – John Wiley & Sons – 1994 Martha Day – Baking – Lorenz Books – 1999 M. J. Leto & Bode – The Larder Chef – Heinemann Publishing House – 1989 Parvinder S. Bali - Food Production Operations Thangam E. Philip - Modern Cookery for Teaching and Trade - 4th Vol. – 1996 Krishna Arora - Theory of Cookery – 2nd – 1992 Wayne Gisselen - Professional Cooking – 4th – 1992 Wayne Gisselen - Professional Baking – 2nd – 1994 J. C. Dubey - Basic Bakery - 1st – 1992 Kinton Ceserani - Theory of Catering – 7th – 1996	1. POWER POINT PRESENTATION 2. GOOGLE CLASSROOM 3. GOOGLE MEET 4. YOUTUBE VIDEOS 5. RESEARCH MATERIALS HOME STUDY AND QUIZ FOR STUDENTS.

	8.Milk and Milk Products 8.1 Introduction, Processing of Milk, Pasteurization, Homogenization, Milk in Various Forms e.g. Toned, Powder, Skimmed, Condensed & Evaporated. 8.2 Cream – Introduction, Processing & Types 8.3 Butter – Introduction, Processing & Types 8.4 Cheese – Introduction, Classification with Examples, Processing, Types, Cooking with Cheese and Uses.	**05.HRS**	Bernard Davis - Food Commodities - 4th – 1998 Daniel R. Stevenson - Basic Cookery The Process Approach - 5th – 1997	
UNIT3	**9,Bakery & Pastry** **Shortening – Fats and Oils** 9.1 Saturated and Un-saturated Fats 9.2 Advantages & Disadvantages of Using Fats 9.3 Varieties of Shortening **10.Tea & Coffee** 10.1 Introduction 10.2 Producing Regions/Country 10.3 Types and Methods of Preparation 10.4 Popular Brands and Variety Available **11.Thickening Agents used in Indian Gravies** 11.1 Role of Thickening Agents **12.Indian Cookery** 12.1 History of Spices and Trade Routes 12.2 Basic Spices, Condiments and Masalas 12.3 Role of Spices in Indian Cuisine 12.4 Indian Equivalent name 12.5 Blending of Spices 12.6 Concept of Wet and Dry Masalas 12.7 Regional Varieties of Basic Masalas 12.8 Basic Composition of Some Important Masalas **13.Menu Planning**	**03.HRS** **02.HRS** **01.HRS** **03.HRS**		1.

	13.1 History of Menu 13.2 Types of Menu 13.3 Menu Planning Principles	**02.HRS**		
	14.Bakery & Pastry 14.1 **Pastries** • Classification of Pastries • Varieties • Role of Each Ingredient • Baking Temperature and Time of Each Pastry	**04. HRS**		
	14.2 **Pastry Cream** • Basic Pastry Cream • Use in Confectionery • Preparation and Care in Production	**03.HRS**		
	14.3 **Cocoa and Chocolate** • Introduction, Production and Manufacture • Varieties of Chocolates • Tempering of Chocolates	**03.HRS**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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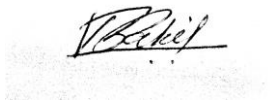

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: RAMEEZ SHAKEEL PATEL **DEPARTMENT**: Food Production & Patisserie I **CLASS:** FY.Bsc.Hs

SEMESTER: I MONTH: ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE:

- To inculcate a right attitude and the required basic knowledge and technical skills in the art of culinary and the food production department.
- To introduce the various equipments and utensils used in the kitchen.

The learners will be able to:

- The learners will be able to:
- Define microbes and conditions for growth of microbes
- List the importance and basic principles of HACCP
- List micro organisms
- Define Food Adulteration and adulterants
- State the types and uses of Food Additives
- State the importance of Hygiene
- List various methods of Food Preservation
- State the regulations and regulating bodies governing Food Safety and Hygiene.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1 Introduction to the Food Production Department** 1.1 Levels of Skills and Experience 1.2 Attitude and Behavior in the Kitchen 1.3 Kitchen Uniforms 1.4 Personal Hygiene	**01.HRS** **02.HRS**	Thangam Philip – Modern Cookery I & II – Orient Longman – 2001 Auguste Escoffier – Ma	1. POWER POINT PRESENTATION 2. GOOGLE CLASSROOM 3. GOOGLE MEET 4. YOUTUBE VIDEOS

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UNIT 2	1.5 Safety Procedures for Handling Equipment **2 Culinary History and Culinary Terms** (Explanation with Examples) Origins of Modern Cookery **3 Equipment and Hand Tools used in Kitchen & Different Types of Fuels used in Kitchen** 3.1 Hand tools and utensils used in Kitchen 3.2 Various Fuels used in the Kitchen 3.3 Advantages & Disadvantages of Various Fuels 3.4 Various Equipment used in the Kitchen **4 Introduction to Cooking** 4.1 Aims and Objectives of Cooking 4.2 Classification of Various Raw Materials according to Functions 4.3 Various Textures and Consistencies 4.4 Methods and Techniques of Preparation **5 Stocks** 5.1 Definition of Stock 5.2 Types of Stocks 5.3 Preparation (Recipe), Storage, Care and Precautions in Preparation **6 Culinary Terms**	**04HRS** **04.HRS** **02.HRS** **02.HRS**	Cuisine – Hamlyn – 2000 Digvijay Singh – Cooking Delight of the Maharajas – Vakils, Feffer & Son's Ltd. – 1982 Philip Dowell & Adrian Barley – The Book of Ingredients – Mermaid Books – 1987 Wayne Gisslen – Professional Baking – John Wiley & Sons – 1994 Martha Day – Baking – Lorenz Books – 1999 M. J. Leto & Bode – The Larder Chef – Heinemann Publishing House – 1989 Parvinder S. Bali - Food Production Operations Thangam E. Philip - Modern Cookery for Teaching and Trade - 4th Vol. – 1996 Krishna Arora - Theory of Cookery – 2nd – 1992 Wayne Gisselen - Professional Cooking – 4th – 1992 Wayne Gisselen - Professional Baking – 2nd – 1994 J. C. Dubey - Basic Bakery - 1st – 1992 Kinton Ceserani - Theory of Catering – 7th – 1996 Bernard Davis - Food Commodities - 4th – 1998 Daniel R. Stevenson - Basic Cookery The Process Approach - 5th – 1997	5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS.

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UNIT3	**7 Methods of Cooking** 7.1 Various Methods of Cooking Foods (Roasting, Grilling, Frying, Baking, Boiling, Poaching, Microwave) 7.2 Principles of each Method and Precaution to be taken **8 Hierarchy and Kitchen Staffing** 8.1 Classical Kitchen Brigade 8.2 Modern Staffing in Various Category Hotels 8.3 Duties and Responsibilities of Various Chefs 8.4 Role and Duties of the Executive Chef 8.5 Inter-Departmental Co-operation and Co-ordination **9 Egg** 9.1 Selection of Eggs 9.2 Structure of Eggs 9.3 Uses of Eggs 9.4 Nutritive Value of Eggs **10 Vegetables & Fruits** 10.1 Classification of Vegetables 10.2 Colour Pigments in Vegetables and Effects of Heat, Acid and Alkali on each of them 10.3 Cuts of Vegetables 10.4 Classification of Fruits 10.5 Uses of Fruits 10.6 Salad & Salad Dressing **11 Bakery & Pastry Sugar** 11.1 Importance of Sugar 11.2 Types of Sugar 11.3 Cooking Stages and Temperature of Various Stages 11.4 Uses of Sugar **12 Sauces** 12.1 Classification of Sauces / Composition	**04.HRS** **03.HRS** **02.HRS** **04.HRS** **02.HRS** **04.HRS**		1. POWER POINT PRESENTATION 2. GOOGLE CLASSROOM 3. GOOGLE MEET 4. YOUTUBE VIDEOS 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS 1. POWER POINT PRESENTATION 2. GOOGLE CLASSROOM 3. GOOGLE MEET 4. YOUTUBE VIDEOS 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS

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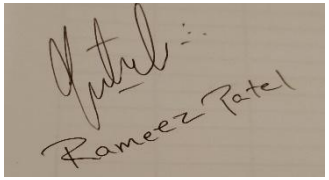
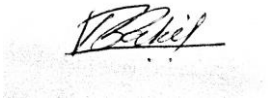
	12.2 Mother Sauces and its Recipes (1 Liter) 12.3 Derivatives **13 Bakery & Pastry** 13.1 Bread Making Principles of Bread Making Role of Each Ingredient Simple Yeast Bread Baking Temperature & its Importance 13.2 Cookies Types of Cookies Methods of Preparation 13.3 Flour – Structure of Wheat Types of Wheat Types of Flour Milling of Flour Nutritive Value 13.4 Raising Agents Classification and Role of Raising Agents	**03.HRS** **02.HRS** **04.HRS**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KIRTI T. CHALKE **DEPARTMENT**: FOOD SAFETY AND NUTRITION CLASS: **FY.Bsc.HS**

SEMESTER: **I** MONTH: **JUNE TO NOVEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE:

Objective of this course is to familiarize the students with importance of hygiene and Food Safety in Hospitality Industry

The learners will be able to:

- To learn about the importance of hygiene & sanitation in the catering industry
- To get acquainted with the food standards.
- To learn about ways to minimize food poisoning and infections.
- To understand function, sources & deficiency of nutrients.
- To gain basic knowledge of nutrition
- To gain knowledge about maintenance of good health.
- To understand the changes brought about in food nutrients during processing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1. INTRODUCTION TO HYGIENE** 1.1 Rules & importance of hygiene 1.2 Personal Hygiene 1.3 Cleaning of premises 1.4 Pest Control 1.5 Waste disposal 1.6 Dishwashing methods 2.HACCP 2.1 Introduction 2.2 Importance 2.3 VII Critical Control Points	**15 HRS**	Hobbs, Betty & Roberts, Food Poisoning and Food Trickett Jills Food Hygiene For FOOD HandlersHobbs, Loken Joan How To Prevent Food, The HACCP Food Safety Manual	White board PPT Notes Videos

	3.MICROBES 3.1 Introduction (Bacteria, Yeast, Mould) 3.2 Classification 3.3 Factors for growth 3.4 Role of microbes in manufacture of fermented foods (dairy products, Veg. & bakery preparations, alcoholic Bev., vinegar, fermented Indian foods)			
Unit 2	**FOOD BORNE ILLNESS** 1.1 Natural Toxins (Kesari Dal, Potatoes, Mushrooms, Shell Fish, Peanuts) 1.2 Chemical (Tin, Copper, Arsenic, Lead) 1.3 Bacterial toxins (staphylococcus, salmonella, Clostridium perfringens, Clostridium botulinum) 1.4 Food poisoning & Infections • Definitions • Food contamination & Spoilage • Differentiation • Examples **FOOD ADULTERATION** 2.1 Definition and types 2.2 Test to detect (coffee, semolina, flour, ghee, butter, margarine, oil, milk, turmeric, coriander powder, pepper corn , meat etc. 2.3 Food standards in India (PFA, FPO, MPO, BIS-ISI, AGMARK, ISO)	**15HRS**	• Food & Nutrition Vol-I • Food Science & Nutrition • Food additives • Food Preservation	White Board PPT Notes Videos

	FOOD ADDITIVES 3.1 Colours& Flavours 3.2 Browning reactions-causes, desirable & undesirable effects) **FOOD PRESERVATION** **Methods of Preservation** 4.1 Natural & Chemical Preservation 4.2 Low temperature (Refrigeration, Freezing) 4.3 High Temperature (Pasteurisation, Sterilization, Canning) 4.4 Irradiation			
Unit 3	**INTRODUCTION TO NUTRITION** 1.1- Definitions(Food, balanced diet, nutrition, over nutrition, under nutrition, malnutrition, health) 1.2 - Balanced diet-Food pyramid 1.3 - Meal planning steps **CARBOHYDRATES** 2.1 - Classification & composition 2.2 - Functions & requirements, sources 2.3 - Excess & Deficiency 2.4 -Uses in food preparation (Gelatinization, Gel formation, Dextrinization, Gluten formation, Caremelization) **FATS&OILS** 4.1 - Classification & Composition 4.2 - Functions & requirements, Sources 4.3 - Excess & Deficiency 4.4 - Types, Sources, Uses	**15 Hrs**	• Food & Nutrition Vol-I • Food Science & Nutrition	White board PPT Notes

	4.5 - Factors causing deterioration 4.6 - Rancidity 4.7 - Flavour reversion 4.8 - Shortening 4.9 –Polymerisation **PROTEINS** 3.1 - Classification & Composition 3.2 - Functions & requirements, Sources 3.3 - Excess & Deficiency 3.4 - Uses in food preparation 3.5 - Effect of heat (Denaturation, Coagulation) 3.6 - Gel formation 3.7 – Foaming **VITAMINS, MINERALS, WATER & COLLOIDS** 5.1 - Functions 5.2 - Sources 5.3 - Deficiency & Excess 5. 4 - Fat soluble & water soluble Vitamins (A,D,E,K,B1,B2,B3,C) 5.5 - Minerals (Ca,P, Na,K,Fe,I,Fl) 5.6 - Importance, balance & Sources 5.7 - Cooking losses & prevention 5. 8 - Definitions (sol, gels, foam, emulsion) 5. 9 - Examples(roasting, grilling, frying, baking, boiling, poaching, microwave) 5.10 - Importance in food industry			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 hrs

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KIRTI T. CHALKE **DEPARTMENT**: FOOD SAFETY AND NUTRITION CLASS: **FY.Bsc.HS**

SEMESTER: **I** MONTH: **JUNE TO NOVEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE:

Objective of this course is to familiarize the students with importance of hygiene and Food Safety in Hospitality Industry

The learners will be able to:

- To learn about the importance of hygiene & sanitation in the catering industry
- To get acquainted with the food standards.
- To learn about ways to minimize food poisoning and infections.
- To understand function, sources & deficiency of nutrients.
- To gain basic knowledge of nutrition
- To gain knowledge about maintenance of good health.
- To understand the changes brought about in food nutrients during processing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1. INTRODUCTION TO HYGIENE** 1.1 Rules & importance of hygiene 1.2 Personal Hygiene 1.3 Cleaning of premises 1.4 Pest Control 1.5 Waste disposal 1.6 Dishwashing methods 2.HACCP 2.1 Introduction 2.2 Importance 2.3 VII Critical Control Points	**15 HRS**	Hobbs, Betty & Roberts, Food Poisoning and Food Trickett Jills Food Hygiene For FOOD HandlersHobbs, Loken Joan How To Prevent Food, The HACCP Food Safety Manual	White board PPT Notes Videos

	3.MICROBES 3.1 Introduction (Bacteria, Yeast, Mould) 3.2 Classification 3.3 Factors for growth 3.4 Role of microbes in manufacture of fermented foods (dairy products, Veg. & bakery preparations, alcoholic Bev., vinegar, fermented Indian foods)			
Unit 2	**FOOD BORNE ILLNESS** 1.1 Natural Toxins (Kesari Dal, Potatoes, Mushrooms, Shell Fish, Peanuts) 1.2 Chemical (Tin, Copper, Arsenic, Lead) 1.3 Bacterial toxins (staphylococcus, salmonella, Clostridium perfringens, Clostridium botulinum) 1.4 Food poisoning & Infections • Definitions • Food contamination & Spoilage • Differentiation • Examples **FOOD ADULTERATION** 2.1 Definition and types 2.2 Test to detect (coffee, semolina, flour, ghee, butter, margarine, oil, milk, turmeric, coriander powder, pepper corn , meat etc. 2.3 Food standards in India (PFA, FPO, MPO, BIS-ISI, AGMARK, ISO)	**15HRS**	• Food & Nutrition Vol-I • Food Science & Nutrition • Food additives • Food Preservation	White Board PPT Notes Videos

	FOOD ADDITIVES 3.1 Colours& Flavours 3.2 Browning reactions-causes, desirable & undesirable effects) **FOOD PRESERVATION** **Methods of Preservation** 4.1 Natural & Chemical Preservation 4.2 Low temperature (Refrigeration, Freezing) 4.3 High Temperature (Pasteurisation, Sterilization, Canning) 4.4 Irradiation			
Unit 3	**INTRODUCTION TO NUTRITION** 1.1- Definitions(Food, balanced diet, nutrition, over nutrition, under nutrition, malnutrition, health) 1.2 - Balanced diet-Food pyramid 1.3 - Meal planning steps **CARBOHYDRATES** 2.1 - Classification & composition 2.2 - Functions & requirements, sources 2.3 - Excess & Deficiency 2.4 -Uses in food preparation (Gelatinization, Gel formation, Dextrinization, Gluten formation, Caremelization) **FATS&OILS** 4.1 - Classification & Composition 4.2 - Functions & requirements, Sources 4.3 - Excess & Deficiency 4.4 - Types, Sources, Uses	**15 Hrs**	• Food & Nutrition Vol-I • Food Science & Nutrition	White board PPT Notes

	4.5 - Factors causing deterioration 4.6 - Rancidity 4.7 - Flavour reversion 4.8 - Shortening 4.9 –Polymerisation **PROTEINS** 3.1 - Classification & Composition 3.2 - Functions & requirements, Sources 3.3 - Excess & Deficiency 3.4 - Uses in food preparation 3.5 - Effect of heat (Denaturation, Coagulation) 3.6 - Gel formation 3.7 – Foaming **VITAMINS, MINERALS, WATER & COLLOIDS** 5.1 - Functions 5.2 - Sources 5.3 - Deficiency & Excess 5. 4 - Fat soluble & water soluble Vitamins (A,D,E,K,B1,B2,B3,C) 5.5 - Minerals (Ca,P, Na,K,Fe,I,Fl) 5.6 - Importance, balance & Sources 5.7 - Cooking losses & prevention 5. 8 - Definitions (sol, gels, foam, emulsion) 5. 9 - Examples(roasting, grilling, frying, baking, boiling, poaching, microwave) 5.10 - Importance in food industry			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 hrs

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dipti Dilip Khadpe.** DEPARTMENT: **Room Division Management-I.**

CLASS: **F.Y.BSc.HS.** SEMESTER: **I.**

MONTH: **Academic Year 2020-2021(July-October)** SUBJECT: **Housekeeping.**

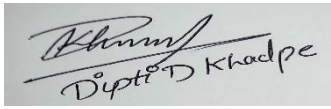
LEARNING OBJECTIVE:

The student will be able to identify the role of the housekeeping department and explain its organization structure and importance.
The student will be able to list the basic cleaning equipment's, cleaning agents and explain their use.
Will be able to perform basic cleaning procedures of various surfaces.

The learners will be able to understand organization structure, types of cleaning equipment and agent and surface.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I	1. INTRODUCTION TO HOUSE KEEPING DEPARTMENT	15	Hotel Housekeeping Operations and Management (G. Raghubalan & Smritee Raghubalan – Oxford University Press).	1. PPT 2. VIDEO
II	1. ORGANIZATION OF HOUSEKEEPING DEPARTMENT	09		1. PPT
	2. CLEANING EQUIPMENT	06	Professional Management of Housekeeping Operations – (Thomas J. A. Jones – John Wiley & Sons)	1. PPT 2. VIDEO
III	1. CLEANING AGENTS	08		1. PPT 2. VIDEO
	2. CLEANING & POLISHING OF DIFFERENT SURFACES	07		1. PPT 2. VIDEO

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HOURS.



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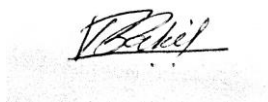

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dipti Dilip Khadpe.** DEPARTMENT: **Room Division Management-II.**

CLASS: **F.Y.BSc.HS.** SEMESTER: **II.**

MONTH: **Academic Year 2020-2021 (December-March)** SUBJECT: **Housekeeping.**

LEARNING OBJECTIVE:

The student will be able to identify the which are the different area in hotels which are cleaned by housekeeping department.
The students will be got to know different types of services and amenities offered by housekeeping.
This semester students will learned about different format used by housekeeping in day-day to operations.
Students will learned about how to handle maids trolley.
The students will be learned about how to handle lost and found, key and control and pest control.
In this semester they will learn how to handle any situation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I	1. CLEANING OF DIFFERENT AREAS	**15**	Hotel Hostel and Hospital Housekeeping – Joan Branson & Margaret Lennox	**PPT**
II	1. TYPES OF ROOM SERVICES	**03**	Housekeeping Management – Margaret Kappa, Aleta Nitschken, Patricia B. Schappert – A.H. & L.A.	**VIDEO** **PPT**
	2. MAIDS SERVICE ROOM / HOUSE KEEPING PANTRY	**04**		**VIDEO** **PPT**
	3. GUEST ROOM SUPPLIES & AMENITIES	**04**		**VIDEO** **PPT**

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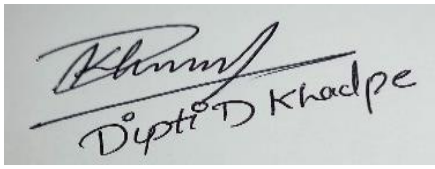
	4. FORMATS USED IN THE HOUSEKEEPING DEPARTMENT	**04**		**1. PPT**
III	1. LOST & FOUND	**04**	Housekeeping Operations, Design and Management – Malini Singh & Jaya B. George – Jaico Publications	**1.VIDEO** **2. PPT**
	2. KEY & KEY CONTROLS	**02**		**1.VIDEO** **2. PPT**
	3. SITUATION HANDLING	**06**		**1.VIDEO**
	4. PEST CONTROL	**03**		**1. VIDEO** **2. PPT**

The learners will be able to understand organization structure, types of cleaning equipment and agent and surface.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HOURS.



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DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR LEJESH KELOTH** DEPARTMENT: **HOTEL MANAGEMENT** CLASS: **F.Y.H.S** SEMESTER: **II**

MONTH: **NOVEMBER TO APRIL** ACADEMIC YEAR: 2020-21 SUB: **PRINCIPLES OF HOTEL ACCOUNTANCY**

LEARNING OBJECTIVE: The student will be able to understand the basics of accounting concepts and also its application in practical life.

The learners will be able to: Understand the concept of accountancy, application of accounting concepts in their practical life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Accounting & Double Entry Book-Keeping	1. Introduction to Accounting & Double Entry Book-Keeping: 1.1 Terms 1.2 Nature, Importance, Objectives & advantages of accounting 1.3 Nature & advantages of Double Entry Book-keeping 1.4 Classification of Accounts 1.5 Applying Debit & Credit rules to a Transaction.	03		• White Board • Notes
	2. Journal 2.1 Importance of Journal & its format 2.2 Narrations 2.3 Journalising simple & compound entries 2.4 Practical problems	04		• White Board Notes
	3. Ledger 3.1 importance of ledger & its format 3.2 posting entries & balancing ledger accounts	03		• White Board Notes
	4. CASH BOOK 4.1 triple column cash book			

	4.2 contra entries 4.3 practical problems 4.4 types of bank account, types of cheques	05		● White Board Notes
Unit- 2 Subsidiary Books	1 Subsidiary Books 1.1 Advantages of subsidiary Books 1.2 Types of subsidiary Books 1.3 Simple Practical problems on Purchase Book, Sales Book, Purchase – Return Book & Sales Return Book. 2. Elements of cost & concept of Profit 2.1 Material cost (food & Beverage), Labour cost, overhead cost, Gross Profit, After wage profit & Net Profit. 2.2 Practical Problems 3. Bank Reconciliation Statement 3.1 Purpose of Preparing B.R.S 3.2 Advantages 3.3 Simple Practical Problems 4 Trial Balance 4.1 Importance of Trial Balance 4.2 Net format of T.B	03 06 05 01		● White Board Notes
UNIT –III Capital & Revenue Expenditure & Deferred Revenue Expenditure	1. Capital & Revenue Expenditure & Deferred Revenue Expenditure 1.1 Nature of Capital & Revenue Expenditure 1.2 Nature of Deferred Revenue Expenditure 1.3 Examples 2. Final Accounts of sole – Trader (with Adjustments)	01		● White Board Notes

	2.1 Importance, Purpose & Need for preparation of Final accounts. 2.2 Practical Problems covering the following adjustments:- Closing stock Prepaid Expenses Outstanding Expenses Depreciation Bad Debts & Provision for Bad debts	10		● White Board Notes
	3. Break Even Analysis :- 3.1 Variable cost, fixed cost & semi variable cost. 3.2 Contribution, Profit/Volume Ratio & Break Even Point. 3.3 Simple Practical Problems	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO ALL THE UNITS: 45 HOURS

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VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: I

MONTH: **OCTOBER 2020 - DECEMBER 2020** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Student should be able to identify the role of the Food and Beverage Service department and explain its organization structure and importance.
- Explain how "moments of truth" affect guests, staff members, and managers, and describe the value of guests and staff members to a food Service operation.
- Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	**1.** INTRODUCTION TO HOTEL AND CATERING INDUSTRY 1.1 Role of catering establishment in travel / tourism industry 1.2 Types of F& B operation (Classification). Commercial (residential / Non Residential) • Welfare • Institutional • Transport (Roads, Railways, Airlines, Marine) 1.3 Structure of hospitality industry and career opportunities	4 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet

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	2. DEPARTMENTAL ORGANISATION AND STAFFING 2.1 Organization of F & B Department of a Hotel (English & French) 2.2 Etiquette & Attributes of an F & B Personnel. 2.3 Duties and responsibilities of F & B Staff. a) F & B Manager. b) Banquet manager. c) Outlet Manager (All day dining/ Bar/ In Room Dining/Specialty Restaurant, etc.) d) Senior captain/ Captain/ Supervisor. e) Steward. f) Sommelier. g) Hostess. h) Cashier. 2.4 Departmental Relationship of F& B with other Departments.	5 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet
	Revision Lectures	3 Lectures		1) Google Classroom 2) Google Slides 3) Google Meet 4) Google Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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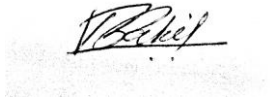

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VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: I

MONTH: **OCTOBER 2020 - DECEMBER 2020** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Identify the operational and Auxiliary areas as well as equipment's used in the Food and Beverage department.
- Understand the various service methods and procedures followed in the department.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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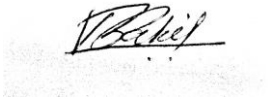
Unit II	1. OPERATIONAL & AUXILLARY AREAS OF FOOD AND BEVERAGE DEPARTMENT: IMPORTANCE & LAYOUTS a) Coffee shop b) Snack bar/ counter service c) Kiosks d) Specialty restaurant/ theme restaurant e) Banquet operations/ outdoor catering f) In-Room Dining g) Dispense Bar / Discotheque/ night club/ pub h) Pantry/Still room i) Kitchen stewarding j) Silver room k) Linen room l) Vending machine	5 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet
	2. FOOD AND BEVERAGE SERVICE EQUIPMENT 2.1 Classification of equipment. (Familiarization of equipment). 2.2 Criteria for selection and requirements. • Tableware/ silverware (cutlery/ hollowware/flatware) • Glassware • Crockery • Bar equipment(For all of the above Brands, Measures & Quality suppliers) • Special equipment with their uses. • Furniture (Tables/Chairs/Trolleys/Dumb Waiter) • Linen. • Light and décor • Care and maintenance of equipment.	7 Lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) Google Classroom 2) Google Slides 3) Video Links 4) Google Meet

	• Napkin folds. 2.3 Table d' hôte, A'la carte Mis-en –place, Mis -en –Scene			
	Revision Lectures	5 Lectures		1. Google Classroom 2. Google Slides 3. Google Meet 4. Google Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: I

MONTH: **OCTOBER 2020 - DECEMBER 2020** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Understand the various service methods and procedures followed in the department.

	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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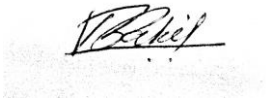
PAPER, UNIT, TITLE				
Unit III	1. DINING SERVICES METHOD AND PROCEDURES 1.1 Different methods of services a. Table service • Silver service/ English service • American/ Plated • Family • Russian • French/ butler • Guéridon b. Bar Counter c. Assisted Service • Carvery • Buffets d. Self Service •Cafeteria: a).Counter b).free-flow c).Echelon d).Supermarket e. Single point service •Take-away •Drive through •Fast food •Vending •Kiosk •Food court	9 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	5. Google Classroom 6. Google Slides 7. Video Links 8. Google Meet

	•Bar f. Specialized (in-situ) •Tray •Trolley •Home delivery •Lounge •Room •Drive in 1.2 Special Service • Formal Service • Wave service • Carlton club service 1.3a. Rules to be observed while laying the table. b. Rules to be observed while waiting at the table. c. Dos & don’ts in a restaurant			
	Revision Lectures	5 Lectures		1) Google Classroom 2) Google Slides 3) Google Meet 4) Google Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

SIGNATURE OF THE STAFF



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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: II

MONTH: **JANUARY 2021- APRIL 2021** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

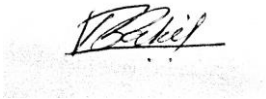
The learners will be able to:

- The different types of Menus and principles of menu planning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	**1.** MEALS AND MENU PLANNING 1.1 Menu – Origin, definition & objectives 1.2 Types of meals (Breakfast, Brunch, Lunch, Afternoon tea, High tea, Dinner) Types of Menu a. A la c arte b. Table d' hote c. Cyclic menu d. Banquet menu e. Carte du jour / plat du jour f. Californian menu g. Take-away Other types of menu a) Children's menu b) Club menu c) Ethnic menu	7 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question

	d) Health menu e) Spa Menu f) Ayurvedic Menu 1.4 Principles of Menu planning 1.5 Breakfast: English, Continental, American, Indian 1.6 Types of Tea Service: Full Afternoon Tea, High Tea.			
	Revision Lectures	3 Lectures		1) Classroom Theory Test 2) Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: II

MONTH: **JANUARY 2021- APRIL 2021** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Sequence and course in the French classical menu also identify general accompaniments.
- Types, storage and service of Tobacco

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II	1.FRENCH CLASSICAL MENU 1.1 a. Sequence and Courses. b. General Accompaniments. 1.2 Ice creams: Types & categories of Ice creams	6 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question
	2.TOBACCO a) Introduction to Cigars and cigarettes. b) Types of tobacco c) Shape, size, color & Brand names with country of origin.	7 Lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question

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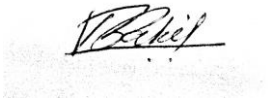
	Revision Lectures	5 Lectures		1. Classroom Theory Test 2. Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: II

MONTH: **JANUARY 2021- APRIL 2021** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Types, storage and service Non alcoholic beverages.
- Simple control system followed in a restaurant.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Unit III	1.1 NON-ALCOHOLIC BEVERAGES a. Definition of beverages b. Classification chart –alcoholic & non alcoholic drinks. c. Stimulating -Tea, Coffee & Cocoa, (origin, manufacture, Method of preparation, types & brands) d. Nourishing -health drinks e. Refreshing –juices, squashes, crushes, syrups & aerated water Table Water (origin, types & brands) & carbonated water.	9 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question
	1.2 SIMPLE CONTROL S YSTEMS. a. Restaurant reservation system b. KOT Checking System c. Types of KOT / BOT d. Method of billing (manual & computerized)	4 Lectures		1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question
	Revision Lectures	4 Lectures		1) Classroom Theory Test 2) Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

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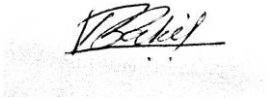

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Tamanna Upadhaya DEPARTMENT: Communication Skills CLASS: F.Y.H.S SEMESTER: I

MONTH: ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE: Objective of this course is to enhance the communication skills in English/ French required of a Culinary Professional

The learners will be able to: Frame grammatically correct sentences in English

· Apply the correct conjugation of verbs in sentences

· Frame simple sentences in French

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit – I	The Sentence – Kinds of Sentences – Subject & Predicate The Phrase & The Clause Parts of Speech – Noun, Adjective, Pronoun, Verb, Adverb, Preposition, Conjunction, Interjection Noun – Kinds of Noun (Common, Proper, Collective, Abstract) The Noun : Gender (Masculine, Feminine, Common, Neuter) The Adjective – Kinds of Adjective, Comparison of Adjectives (Positive, Comparative, & Superlative Degrees. The Correct use of some Adjectives Articles - Use of Definite & Indefinite Articles Personal Pronouns – Forms of the Personal Pronouns **French:** Translate the Dialogue into English Culinary Terms – Translate to French using match the columns / crosswords	15	1.Business Communication- Meenakshi Raman & Prakash Singh 2. High School English- Wren and Martin 3. Business Communication- Chaturvedi	• Notes Whiteboard
Unit - II	The Verb Transitive & Intransitive Verbs Person & Number Active & Passive Voice Direct & Indirect Speech Tense (Past, Present & Future) Kinds of Adverbs The Preposition Kinds of Prepositions Using appropriate Prepositions The Conjunction Use of Appropriate Conjunctions Classes of Conjunctions The Interjection Meaning & Some Examples	15	1.Business Communication- Meenakshi Raman & Prakash Singh 2. High School English- Wren and Martin	• Notes Whiteboard

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	Punctuation Commonly confused words / Common Errors / Antonyms / Synonyms		3. Business Communication- Chaturvedi	
Unit-III	French Days, Months, Numbers, Seasons Plan a Five Course menu in French Newspaper reading – Current Affairs Comprehension Précis Writing Paragraph Writing Conversation / Role Play Public Speaking Make Negative, Make Plurals, Conjugate in the Present tense ; avoir, entrée, Faire, Manger, Boire, Mettre	15	1.Oxford French Dictionary 2.E.J. Neather- Mastering of French I & II- Macmillan- 1982	• Notes Whiteboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dipti Dilip Khadpe.** DEPARTMENT: **Room Division Management-III.**

CLASS: **S.Y.BSc.HS.** SEMESTER: **III.**

MONTH: **Academic Year 2020-2021.** SUBJECT: **Housekeeping.**

LEARNING OBJECTIVE:

The student will be able to explain various operational procedures and formats pertaining to linen, uniforms, and laundry.
The student will be able to create formats and design layouts of linen room, uniform room and laundry.
The student will be able to create Flower Arrangements for various occasions and locations.
The student will be able to plan and implement décor for special occasions.

The learners will be able to understand how to handle different fabrics, Flower arrangement & implement décor for special occasions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I	1. LINEN ROOM OPERATIONS	10	Hotel Housekeeping Operations and Management (G. Raghubalan & Smritee Raghubalan – Oxford University Press).	1. PPT 2. VIDEO
	2. FORMATS	05		1. PPT
II	1. UNIFORM AND SEWING ROOM	05	Textile and Laundry in Hotel Industry – (Dr. D.K.Agrawal - Aman Publications). Stain Removal – (Stephanie Zia – Bounty Books).	1. PPT

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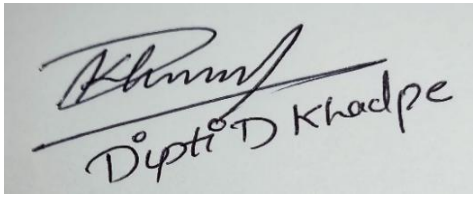
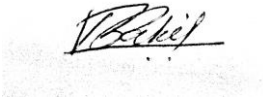
	2. LAUNDRY OPERATIONS	10		
III	1. FLOWER ARRANGEMENT	10	The Art of Flower Arranging – (Ian Hall & Sarah Waterkeyn - Smithmark Publications).	1. PPT 2. VIDEO
	2. ERONOMICS IN HOUSEKEEPING	05	Professional Management of Housekeeping Operations – Thomas J. A. Jones – John Wiley & Sons	1. PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HOURS.





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Front Office Hotel Management CLASS: SY BSc HS

SEMESTER: III

MONTH: June to October ACADEMIC YEAR: **2020 -2021**

LEARNING OBJECTIVE: To posses knowledge & skills with respect to handling group reservations, assigning rooms, check in, cashiering & security systems.

The learners will be able to:

- To train the student as future managers and make them understand the working of an organisation.

• Teaching through PowerPoint presentations, case studies, activities, brain storming sessions, SWOT/PEST analysis etc.
• Trying to bridge the gap between management studies and real hospitality world through real time stories from practical exposure at hotels, books.
• Encouraging students to read more so as to refine their analytical power and sharpen Hospitality sense and become more aware to facing the guests.
• Opportunity to participate in group discussions, and to handle the VVIP, assigning rooms, check in, cashiering & security systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	**Advanced Guest Cycle (Reservation, Assigning Rooms, Check-in)** • Group (Tourist/ Conference/ Convention) • Crew (Airline- Layovers/ Cruise lines/ Cargo) • Regular Guests Special Attention Guests (Handle With Care, Single	15	Front Office management Jatashankar Tiwari	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word

	ladies, unaccompanied children, Sr. Citizens, Disabled Guest) **ROOM CHANGE PROCEDURES** • By Hotel (Upgrade/ Up sell) By Guest (Discrepancy/ Personal Preference)			7. White Board 8. Projector 9. Discussion
UNIT - 2	**HANDLING OF COMPLAINTS** • Types of Complaints(Service related/ Attitudinal/ Mechanical/ Unusual complaints) Guidelines to handle complaints **FRONT OFFICE ACCOUNTING SYSTEM AND SETTLEMENT** • Guest and Non Guest Folio • Types of Folio • Types of Vouchers • City Ledger • Billing Procedure instruction • Methods of settlement(Cash/ CC- Direct currency converter/ BTC/ TAV/ PSO/ COMP Voucher)	15	Hotel Front Office Training Manual Andrews, Sudhir	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion
UNIT - 3	**SECURITY SYSTEMS IN HOTELS** • Fire Alarm Systems • Burglar Alarm Systems • Electronic Locking Systems	15	Front Office management Jatashankar Tiwari Hotel Front Office Training Manual Andrews, Sudhir	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Samir Korgaonkar** DEPARTMENT: **Food Production & Patisserie- III** CLASS: **SY BSc HS**

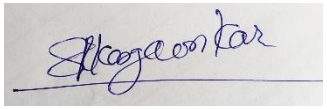
SEMESTER: **III** MONTH: **JUL 2020 – NOV 2020** ACADEMIC YEAR: **2020-2021**

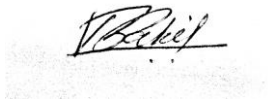
LEARNING OBJECTIVE: To get trained on various aspects of regional Indian cuisine – Quantity Food Production (QFP)

The learners will be able to: Understand various aspects of regional Indian cuisine – Quantity Food Production (QFP)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	MENU PLANNING & ITS TYPES (QFP)	7	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	INDIAN CULINARY TERMS	4	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	INTRODUCTION TO CAKE MAKING	4	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Samir Korgaonkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **SY BSc HS**

SEMESTER: **III** MONTH: **JUL 2020 – NOV 2020** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: To get trained on various aspects of regional Indian cuisine – Quantity Food Production (QFP)

The learners will be able to: Understand various aspects of regional Indian cuisine – Quantity Food Production (QFP)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2	EQUIPMENT (QFP)	3	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	QUANTITY PURCHASE AND STORAGE (QFP)	3	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	INDENTING (QFP)	5	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	PASTRY	4	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz

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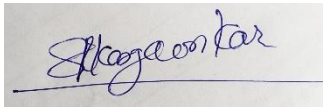
				5. Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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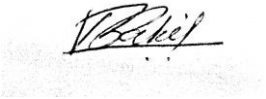

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Samir Korgaonkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **SY BSc HS**

SEMESTER: **III** MONTH: **JUL 2020 – NOV 2020** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: To get trained on various aspects of regional Indian cuisine – Quantity Food Production (QFP)

The learners will be able to: Understand various aspects of regional Indian cuisine – Quantity Food Production (QFP)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3	INDIAN COOKERY (QFP)	11	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	VOLUME FEEDING (QFP)	4	Food Production Operation – Parvinder S. Bali	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom

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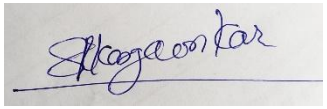

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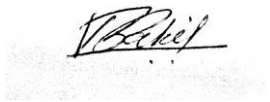

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VIVA COLLEGE
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **Food & Beverage Service** CLASS: **S.Y.B.Sc.H.S.** SEMESTER: III

MONTH: **JUNE-2020 to OCTOBER-2020** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine. • Understanding the production process of Beer, Wine and Spirits.

The learners will be able to: Understand the different types of Alcoholic Beverages. Students will learn the types of Alcoholic beverages as per the production methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• **UNIT 1** ALCOHOLIC BEVERAGES	• ALCOHOLIC BEVERAGES a. Definition, history of Alcoholic Beverages & classification. b. Benefits and harmful effects of alcohol.	02	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide
	WINES • **1.1 Definition & history of wines.** • **1.2 Types of Wines:** • **Still (red, white & rose), sparkling/Champagne, Fortified (sherry, port, Madeira, Marsala & Malaga), Aromatized wines (Vermouth).** • **1.3 Methods of production, Still (red, white, rose).** • **a) Viticulture** • **(Wine calendar, terroir, vine species, grape varieties & diseases).** • **b) Vinification**	13	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service •Larousse Christopher Foulkes- Encyclopedia of Wines-	Google classroom White board Quiz Google slide

	• (Manufacturing process, elements of wine & faults in wines). • c) Champagne & Sparkling Wines. • (History, districts, grape varieties, Methode Champenoise, cuvee close, transfer method, charmat & impregnation, Names & bottle sizes). • d) Fortified Wines (Production & types). • 1) Sherry (Solera system) • 2) Port • 3) Madeira (estufagen) • 4) Marsala • 5) Malaga • e) Aromatized wines (Definition & types)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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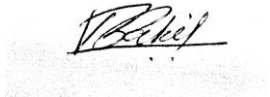

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VIVA COLLEGE
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **Food & Beverage Service** CLASS: **S.Y.B.Sc.H.S.** SEMESTER: III

MONTH: **JUNE-2020 to OCTOBER-2020** ACADEMIC YEAR: **2020-2021**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II	2.1 Wine producing countries of the world (Regions, Wine laws, labels & shippers). a) Old world wine producing countries (France, Italy, Germany, Spain & Portugal). b) New World wine producing countries (Australia, New Zealand, South Africa, U.S.A. & India).	10	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service •Larousse Christopher Foulkes- Encyclopedia of Wines-	Google classroom White board Quiz Google slide
	2.2 Wine tasting, Storage & Service	02	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide
	2.3 Food and wine Harmony.	03		Google classroom White board Quiz Google slide

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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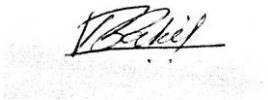

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **Food & Beverage Service** CLASS: **S.Y.B.Sc.H.S.** SEMESTER: III

MONTH: **JUNE-2020 to OCTOBER-2020** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine. • Understanding the production process of Beer, Wine and Spirits.

The learners will be able to: Understand the different types of Alcoholic Beverages. Students will learn the types of Alcoholic beverages as per the production methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNITIII BEER & OTHER FERMENTED BEVERAGES	a) Definition, History & Brewing process. (Components of beer, top fermentation, bottom fermentation) b) Types of Beer, Storage & Service (Lager, Pilsner, Draught, Ale, Stout, Porter, Ice, Lambic & Smoked) c) Other fermented beverages (Cider, Perry, Mead, Sake & Toddy).	03	• Shatbi Basu- The can't go wrong Cocktail book • Brian Glover- The world encyclopedia of Beer	Google classroom White board Quiz Google slide
	3.2 SPIRITS a) Introduction and definition b) Pot and patent still method of production.	03	•Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE**	Google classroom White board Quiz Google slide

	3.3 History, Production, types & Brand names (national & International) a) Whisky (Scotch, American, Canadian, Irish & Japanese) b) Rum (White, Gold, Dark & Flavoured) c) Brandy (Cognac, Armagnac & Fruit) d) Gin e) Vodka, flavoured vodka f) Tequila & Mezcal		•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	
	3.4 Alcoholic Strength :Proof, GL, Sykes, U.S., British (OIML) 3.5 Other Spirits (Aquavit, schnapps, Pastis, ouzo, arrack) 3.6 LIQUEURS Introduction, definition, classification & production of liqueurs a) Different types of liqueurs: Base, Flavours, Country of origin. b) Brand names of liqueurs (Generic & Proprietary)	04	Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide
	3.7 APERITIFS & BITTERS a) Definition b) Brand names	02	Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide
	3.8 GLOSSARY OF TERMS RELATED TO Alcoholic beverages, Menu terminologies.	02	Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide

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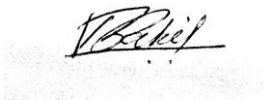
DEPARTMENT OF HOTEL & TOURISM MANAGEMENT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF



SIGNATURE OF THE H.O.D.

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **LEJESH KELOTH** DEPARTMENT: **HOTEL MANAGEMENT** CLASS: **S.Y.H.S** SEMESTER: V**I**

MONTH: **NOVEMBER TO APRIL** ACADEMIC YEAR: 2020-21 SUB: **PRINCIPLES OF HOTEL ACCOUNTANCY**
LEARNING OBJECTIVE: The student will be able to understand the basics of accounting concepts and also its application in practical life.
The learners will be able to: Understand the concept of accountancy, application of accounting concepts in their practical life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Accounting & Double Entry Book-Keeping	1. Introduction to Accounting & Double Entry Book-Keeping: 1.1 Terms 1.2 Nature, Importance, Objectives & advantages of accounting 1.3 Classification of Accounts 1.4 Applying Debit & Credit rules to a Transaction.	03		● White Board ● Notes
	2. Journal 2.1 Importance of Journal & its format 2.2 Narrations 2.3 Journalising simple & compound entries 2.4 Practical problems	04		● White Board Notes
	3. Ledger 3.1 importance of ledger & its format	03		● White Board Notes
	4. CASH BOOK 4.1 contra entries 4.2 practical problems 4.3 types of bank account, types of cheques	05		● White Board

				Notes
Unit- 2 Subsidiary Books	1 Subsidiary Books 1.1 Advantages of subsidiary Books 1.2 Types of subsidiary Books 1.3 Simple Practical problems on Purchase Book, Sales Book, Purchase – Return Book & Sales Return Book. 2. Elements of cost & concept of Profit 2.1 Material cost (food & Beverage), Labour cost, overhead cost, Gross Profit, After wage profit & Net Profit. 2.2 Practical Problems 3 Trial Balance 3.1 Importance of Trial Balance 3.2 Net format of T.B	03 06 05 01		● White Board Notes
UNIT –III Capital & Revenue Expenditure & Deferred Revenue Expenditure	1. Capital & Revenue Expenditure & Deferred Revenue Expenditure 1.1 Nature of Capital & Revenue Expenditure 1.2 Nature of Deferred Revenue Expenditure 1.3 Examples 2. Final Accounts of sole – Trader (with Adjustments) 2.1 Importance, Purpose & Need for preparation of Final accounts. 2.2 Practical Problems covering the following adjustments:- Closing stock	01 10		● White Board Notes ● White Board Notes

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	Prepaid Expenses Outstanding Expenses Depreciation Bad Debts & Provision for Bad debts 3. Break Even Analysis :- 3.1 Variable cost, fixed cost & semi variable cost. 3.2 Contribution, Profit/Volume Ratio & Break Even Point. 3.3 Simple Practical Problems	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO ALL THE UNITS: 45 HOURS

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **LEJESH KELOTH** DEPARTMENT: HOTEL MANAGEMENT CLASS: T.Y.H.S SEMESTER: VI

MONTH: NOVEMBER TO APRIL ACADEMIC YEAR: 2020-21
SUB: STRATEGIC MANAGEMENT

LEARNING OBJECTIVE: · The students will identify the operating strategy of the organization. · Develop skills in decision making · Students will be able to strategize and participate in policy making.

The learners will be able to: . · The students will identify the operating strategy of the organization. · Develop skills in decision making · Students will be able to strategize and participate in policy making.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Introduction to Strategic management 1.1 Definition – Strategy, Strategic Management and its relevance 1.2 Process of Strategic Management 1.3 Levels of Strategy : Corporate, Divisional Business, Operational or Functional 1.4 7 'S' Frame Work 2 Strategic Intent 2.1 Vision , Mission, Business definition, Goals and Objectives 2.2 Mission Statement and its Characteristics 2.3 Corporate Social Responsibility	15	Kazmi, A.(2011) Strategic Management and Business Policy 3 rd ed., The McGraw Hill Companies.B.Sc.(Hospitality Studies) Page 9 of 64 2. David,F.(2011) Strategic Management Concept and Cases 13th ed., Pearson Education 3. Ramswamy ,V.S., Namakumari, S.(2007) Strategic Planning Formulation of Corporate Strategy, Macmillen 4. Srinivasan, R., (2006), Strategic Management The Indian Context , 2nd Prentice Hall of India 5. Enz,C., (2010), Hospitality Strategic	• Notes Whiteboard

			Management 2 nd ed. John Wiley and Sons, Inc.	
UNIT 2	Environmental Analysis 3.1 Concept of Organizational Environment : Internal and External Environment 3.2 Process of SWOT analysis 3.3 Need for Environmental analysis (External Environment) 3.4 External Factor Evaluation Matrix (EFE) 4 Organizational Appraisal 4.1 Dynamics of Internal Environment 4.2 Six Organizational Capability factors 4.3 Internal Factor Evaluation Matrix (IFE) 4.4 Competitive Profile Matrix (CPM) 4.5 Industry Analysis (Porter's Five Force Analysis)	15	Kazmi, A.(2011) Strategic Management and Business Policy 3 rd ed., The McGraw Hill Companies.B.Sc.(Hospitality Studies) Page 9 of 64 2. David,F.(2011) Strategic Management Concept and Cases 13th ed., Pearson Education 3. Ramswamy ,V.S., Namakumari, S.(2007) Strategic Planning Formulation of Corporate Strategy, Macmillen 4. Srinivasan, R., (2006), Strategic Management The Indian Context , 2nd Prentice Hall of India 5. Enz,C., (2010), Hospitality Strategic Management 2 nd ed. John Wiley and Sons, Inc.	• Notes Whiteboard
UNIT 3	Strategy Formulation 5.1 Types of Strategy 5.1.1 Intensification Strategies : 5.1.1.1 Market penetration 5.1.1.2 Market Development 5.1.1.3 New Product Development 5.1.1.4 Innovation 5.1.2 Integrative Strategies: 5.1.2.1 Horizontal	15	Kazmi, A.(2011) Strategic Management and Business Policy 3 rd ed., The McGraw Hill Companies.B.Sc.(Hospitality Studies) Page 9 of 64 2. David,F.(2011) Strategic Management Concept and Cases 13th ed., Pearson Education 3. Ramswamy ,V.S., Namakumari, S.(2007)	• Notes Whiteboard

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DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

	5.1.2.2 Vertical 5.1.3 Diversification Strategies 5.1.3.1 Concentric (Related) 5.1.3.2 Conglomeratic (Unrelated) 5.1.4 Restructuring / Retrenchment Strategies: 5.1.4.1 Turnaround 5.1.4.2 Divestment 5.1.4.3 Liquidation 5.1.4.4 Merger 5.1.4.5 Acquisition (Take Over) 5.1.4.6 Joint Venture 6.Strategic Evaluation 6.1 Nature and its importance B.Sc.(Hospitality Studies) 6.2 Process of Strategic Evaluation		Strategic Planning Formulation of Corporate Strategy, Macmillen 4. Srinivasan, R., (2006), Strategic Management The Indian Context , 2nd Prentice Hall of India 5. Enz,C., (2010), Hospitality Strategic Management 2 nd ed. John Wiley and Sons, Inc.	

TOTAL NUMBER OF LECTURES ALLOCATED TO ALL THE UNITS: 45

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio dsouza** DEPARTMENT:HOTEL MANAGEMENT CLASS: T.Y.H.S SEMESTER: VI

MONTH:NOVEMBER TO APRIL ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE: The objective of Organizational Behaviour is to provide students with the opportunity to diagnose Individual and Group Behaviour. ·
The study of Structure, Motivation & Change helps to develop skills in improving individual and group performance in entrepreneurial and established ventures. ·
To develop the overall personality and sustain in the dynamic environment

The learners will be able to: .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Computer Fundamentals	**Introduction to Organizational Behaviour** **1.1 Definition of Organizational Behaviour** **1.2 What Managers Do** 1.2.1 Management Functions 1.2.2 Management Roles 1.2.3 Management Skills 1.2.4 Effective v/s Successful Managerial activities **1.3 Disciplines that contribute to the Organizational Behaviour field** **1.4 Individual Behaviour** 1.4.1 Ability 1.4.2 Biographical characteristics 1.4.3 Learning & Process of Learning 1.4.4 Introduction & Importance to Perception, Values & Attitude 1.4.5 Personality & Its Determinants **1.5 Group Behaviour** 1.5.1 Types of Groups	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	• Notes Whiteboard • PPT

	1.5.2 The Five stage model (Group Dynamics / Development)			
	Organizational Structure 2.1 What is Organizational Structure 2.1.1 Six Elements of organizational structure 2.2 Organizational Designs 2.2.1 Common Organizational Designs (Simple, Bureaucratic, Matrix)			
	Motivational Concepts 3.1 Define Motivation 3.2 Early Theories of Motivation 3.2.1 Maslow Abraham's Hierarchy of Needs theory 3.2.2 Douglas McGregor's Theory X & Theory Y 3.2.3 Fredrick Herzberg's Two Factor Theory 3.2.4 Mc Cleland's Theory of Needs 3.3 Contemporary Theories of Motivation 3.3.1 Cognitive Evaluation Theory (Definition) 3.3.2 Goal setting Theory (Definition) 3.3.3 Self Efficacy Theory (Definition) 3.3.4 Reinforcement Theory (Definition) 3.3.5 Equity Theory (Definition) 3.3.6 Expectancy Theory (Definition) 3.4 Leadership & Types of Leadership 2.2.2 New Design options (Virtual, Team, Boundaryless)	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	• Notes Whiteboard
	Stress Management 4.1 What is Stress? 4.2 Potential Sources of stress			

	4.3 Consequences of Stress 4.4 Managing stress 4.5 Introduction to Quality of Work Life			
	Organizational Change 5.1 What is change? 5.2 Elements / Factors of Change (External & Internal) 5.3 Planned Change 5.4 Resistance to change 5.5 Overcoming Resistance to Change 5.6 Approaches to Managing Organizational change 5.6.1 Lewin's 3 step model 5.6.2 Action Research 5.6.3 Meaning of Organizational Development & Techniques / Intervention 5.7 Introduction to Diversity & Managing Diversity	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	• Notes Whiteboard
	Conflict Management 6.1 Definition of Conflict 6.2 Sources & Types of Conflict 6.3 Conflict Management Styles 6.4 Power and Politics 6.4.1 Concept & Basis of Power 6.4.2 Organization Politics			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

VIVA COLLEGE
DEPARTMENT OF
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SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June - November** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE: Identify Food & Beverage setup and planning of various outlets in the department.

- Describe casual, theme restaurants etc. and how they are operated.
- How food service managers develop and manage labour & revenue control system.
- Explain how banquets and catering events are booked and planned, and describe how managers and staff members provide service for these events.
- Explain the operations of various catering establishments such as Railway, Airline & Marine caterings.

The learners will be able to: Students will learn Food & Beverage setup and planning of various outlets, how banquets and catering events are booked and planned.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	1.1 F & B Outlet Planning 1.1.1 Objective of a good layout 1.1.2 Steps in planning of layout. (Specialty Restaurants, Coffee Shop, Room Service) 1.1.3 Factors to be considered while planning the actual ambience (Colour, light, décor, furniture & uniform) 1.2 Operational aspects of various F & B Outlets (Specialty Restaurants, Coffee Shop, Room Service) 1.2.1 Menu planning 1.2.2 Constraints of Menu planning 1.2.3 Planning of staff requirement 1.2.4 Shifts (Panzer, Straight, Split & Reliever)	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi	1)Power point presentation 2) Videos 3) Interactive session on the topic 4) Class test

	1.2.5 Factors to be considered for selecting appropriate Crockery, Cutlery, Glassware, and Linen. 1.3 Elements of cost 1.3.1 Types of cost (Material, Labour & Overhead) 1.3.2 Cost Groups (Fixed, semi-fixed & variable) & types of profit (gross & net) 1.3.3 Breakeven / Cost volume profit analysis			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June - November** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE: Identify Food & Beverage setup and planning of various outlets in the department.
- Describe casual, theme restaurants etc. and how they are operated.
- How food service managers develop and manage labour & revenue control system.
- Explain how banquets and catering events are booked and planned, and describe how managers and staff members provide service for these events.
- Explain the operations of various catering establishments such as Railway, Airline & Marine caterings.

The learners will be able to: Students will learn Food & Beverage setup and planning of various outlets, how banquets and catering events are booked and planned.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	Function Catering / Banquets 2.1 Definition, History & Importance 2.2 Organization of Banquet dept., duties and responsibilities. 2.3 Types of Banquets: Formal, Semiformal & Informal 2.4 Banquet Sales	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi	1)Power point presentation 2) Videos 3) Interactive session on the topic 4) Class test

	2.5 Banquet reservation diary and booking procedure. 2.6 Function contract & Function prospectus 2.7 Banquet Menus 2.8 Types of service in the banquets. 2.9 Staffing & Duty allocation 2.10 Toast procedure at wedding reception & Protocol 2.11 Outdoor catering. 2.12 Glossary **Glossary**		2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June - November** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE: Identify Food & Beverage setup and planning of various outlets in the department.

- Describe casual, theme restaurants etc. and how they are operated.
- How food service managers develop and manage labour & revenue control system.
- Explain how banquets and catering events are booked and planned, and describe how managers and staff members provide service for these events.
- Explain the operations of various catering establishments such as Railway, Airline & Marine caterings.

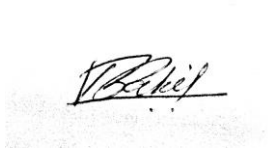
The learners will be able to: Students will learn Food & Beverage setup and planning of various outlets, how banquets and catering events are booked and planned.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	3.1 Buffet. 3.1.1 Definition & Types of buffets. (Meal period, manner of consumption, food served & other types – Display, Gourmet & Running) 3.1.2 Points to be considered while planning a buffet. 3.1.3 Buffet equipment 3.1.4 Banquet layout (formal, informal & cabaret) & Space area calculation 3.1.5 Meeting room setups: (U Shape, Hollow Square, Classroom Theatre, Board of Directors, 'T' Shape) 3.2 Food and Beverage Management in various catering establishments	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi	1)Power point presentation 2) Videos 3) Interactive session on the topic 4) Class test

	3.2.1 Railway Catering & Airline catering 3.2.2 Marine Catering (offshore & cruise liners) 3.2.3 Industrial catering			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**



VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Adv Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: VI

MONTH: **November - April** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE: Identify factors to create impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley.

· Plan & operate a Bar operation, Manage inventory and maintain records pertaining to beverage control.

· Understand and apply cost dynamics as related to the Food & Beverage industry. · Demonstrate a detailed understanding of the various facets of the Food & Beverage cycle of control in the operational & post operational phase.

.

The learners will be able to: Students will learn impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley, Plan & operate a Bar operation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	1 Gueridon Service 1.1 Origin, history and definition 1.2 Factors to create impulse buying. 1.3 Advantages and disadvantages of Gueridon service 1.4 Principles of Gueridon service. 1.5 Flambé trolley & other trolleys (Carving, Cheese, Liqueur, Salad & Dessert). 1.6 Gueridon equipment & ingredients, Mise en place & Presentation.	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi 3) Andrews S, (2009), Food & Beverage Service A Training Manual,(Second Edition),	1)Power point presentation 2) Videos 3) Interactive session on the topic 4) Class test

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HOTEL & TOURISM MANAGEMENT STUDIES

	2 Food and Beverage Management. 2.1 Objectives of Food & Beverage Management. 2.2 Food and Beverage Management/ Function 2.3 Cost and Market orientation 3 Food and Beverage Control 3.1 Objective of F& B Control. 3.2 Obstacles of F& B Control. 3.3 Food Control checklists. 3.4 Beverage Control checklist			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Adv Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: VI

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

MONTH: **November - April** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE: Identify factors to create impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley.

· Plan & operate a Bar operation, Manage inventory and maintain records pertaining to beverage control.

· Understand and apply cost dynamics as related to the Food & Beverage industry. · Demonstrate a detailed understanding of the various facets of the Food & Beverage cycle of control in the operational & post operational phase.

.

The learners will be able to: Students will learn impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley, Plan & operate a Bar operation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	Bar Operations 4.1 Definition & classification. 4.2 Layout & parts for Front of the house dispense bar. 4.3 Bar Thefts and frauds. (Nature and prevention.) 4.4 Records & Licenses maintained in a Bar (Naukarnama, Permit, TPIN, Bill book, & B.O.T.). 5.1 Cocktails & Mixed drinks a) Introduction, History & Definition b) Bar Equipment. (glassware, fixed & movable equipment) c) Methods of Mixing Cocktails. (Stirred, Shaken, Built up/Layered, Blended & Muddled) d) Styles of Cocktails (Collins, cobblers, coolers, crustas, cups, e) daisies, eggnogs, flips, frappes, fixes, fizzes, Highball, juleps,	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi 3) Andrews S, (2009), Food & Beverage Service A Training Manual,(Second Edition),	1)Power point presentation 2) Videos 3) Interactive session on the topic 4) Class test

	f) Pick-me-ups, pousse café, smashes, sours, swizzles & toddies). g) Rules to be observed while making cocktails. 5.2 Recipes of classic & exotic cocktails. a) Whisky: (Godfather, Manhattan, Mint Julep, Whisky Sour			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Adv Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: VI

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

MONTH: **November - April** ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE: Identify factors to create impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley.

· Plan & operate a Bar operation, Manage inventory and maintain records pertaining to beverage control.

· Understand and apply cost dynamics as related to the Food & Beverage industry. · Demonstrate a detailed understanding of the various facets of the Food & Beverage cycle of control in the operational & post operational phase.

.

The learners will be able to: Students will learn impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley, Plan & operate a Bar operation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	Cycle of control. 6.1 Operational phase 6.1.1 Purchasing 6.1.1.1Methods of purchasing Food / Beverage. (Contract / Daily / Weekly/ Fortnight / Cash and Carry) 6.1.1.2 Selection of a supplier 6.1.1.3 Purchase specification 6.1.1.4 Purchase order. 6.1.2 Receiving 6.1.2.1 Quality inspection 6.1.2.2 Quantity inspection 6.1.2.3 Receiving records Maintained 6.1.3Storing & Issuing 6.1.3.1Bin card 6.1.3.2Store ledger	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi 3) Andrews S, (2009), Food & Beverage Service A Training Manual,(Second Edition),	1)Power point presentation 2) Videos 3) Interactive session on the topic 4) Class test

	6.1.3.3 Indent/ requisition 6.2 Post Operational Control: Management after the event phase. 6.2.1 Methods of Food control. 6.2.2 Methods of Beverage control 6.2.3 Detailed Daily Food cost report			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Housekeeping V** CLASS: **T.Y.H.S** SEMESTER: **V**

MONTH: **June – November** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: Explain and apply the guidelines for hiring various housekeeping contract services. Manage the manpower planning in the housekeeping department in different category of hotels.

The learners will be able to: Students will learn trends used in housekeeping, contract services used in housekeeping and determining staff strength.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**Chapter 1 Current trends in Housekeeping** 1.1 Green housekeeping Practices 1.2 Cleaning Equipment and agents 1.3 Guest supplies and amenities 1.4 Level of Service	3	Hotel Housekeeping Operations and Management.	● Notes ● White board ● Videos
	Chapter 2 Contract Services/Outsourcing 2.1 Types of Contracts 2.2 Guidelines for hiring contract Services 2.3 Advantages and disadvantages of contract service	3	Hotel Housekeeping Operations and Management. Housekeeping Operations, Design and Management	● Notes ● White board
	Chapter 3 Manpower Planning 3.1 Determining staff Strength 3.2 Scheduling Staff (duty Roasters)	3	Hotel Housekeeping Operations and Management.	● Notes ● White board ● Charts

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Housekeeping V** CLASS: **T.Y.H.S** SEMESTER: **V**

MONTH: **June - November** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: Explain the Importance of lighting, various types of lighting. Plan window treatments for various types of windows. Identify the various ceiling and wall coverings.

The learners will be able to: Students will learn various methods of lighting, types of windows and various wall and ceiling finishes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	**4. Lighting and Lighting Fixtures** 4.1 Lighting for different areas of the hotel. 4.2 Functional and aesthetic aspects of light	3	Hotel Housekeeping Operations and Management.	Notes White board Pictures
	5. Windows and window treatment 5.1 Types of Windows & Window Treatment 5.2 Selection and Care	3	Hotel Housekeeping Operations and Management.	Notes White board Pictures
	6. Wall and Ceiling Finishes 6.1 Types 6.2 Selection 6.3 Care	3	Hotel Housekeeping Operations and Management.	Notes White board Pictures Samples

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DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Housekeeping V** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June - November** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE: Distinguish the various kinds of carpets in terms of construction and design and its maintenance procedure. Utilize the principles of designs while coordinating interiors.

The learners will be able to: Students will learn how to apply the elements and concept of interior decorations & elevations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	**7. Carpets and Floor Coverings** 7.1 Types 7.2 Selection 7.3 Care	7	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes White board Videos
	8. Interior Designing 8.1 Elements of Design 8.2 Principles of Design 8.3 Color Schemes	8	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes White board Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Advanced Housekeeping** CLASS: **T.Y.H.S** SEMESTER: **VI**

MONTH: **November to December** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE: To plan and evaluate budgets.

The learners will be able to: Students will learn various types of budget and planning process. To understand various roles of supervisor in housekeeping.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1.Budget and Budgetary Control** 1.1 Introduction 1.2 Types of Budget 1.3 Budget planning Process ● Preparing the budget ● Formats 1.4 Controlling Expenses 1.5 Inventory Control	8	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes Tables and charts Google classroom PPT

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	2. Supervisory Skills 2.1 Job Description and daily routine of ● Guest room Supervisor ● Public area Supervisor ● Linen and Uniform Room Supervisor	7	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes Google classroom PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Advanced Housekeeping** CLASS: **T.Y.H.S** SEMESTER: **VI**

MONTH: **November to December** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: To create and evaluate the aspects of Interior Design in a Guest Room Layout. Plan and draw the layout of Guest Rooms to scale. Set up the housekeeping department of a new property and create a timeline for the countdown to the opening.

The learners will be able to: Students will learn about various types of rooms in terms of sizes, interior and furniture and fixtures used in it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II	**3. Preopening Property Operations** 3.1 Setting up Housekeeping 3.2 Countdown to Opening 3.3 Preparing Snagging List	5	Housekeeping Operations and Management	● Notes ● PPT ● Checklist ● Google Classroom

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	4. Furniture and Accessories 4.1 Types 4.2 Selection 4.3 Care	5	Housekeeping Operations and Management	• Notes • Pictures • PPT • Google Classroom
	5. Guestroom Layout 5.1 Planning Room Layouts 5.2 Sizes of Room	5	Housekeeping Operations and Management	• Notes • Layouts • Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Advanced Housekeeping** CLASS: T.Y.H.S SEMESTER: VI

MONTH: **November to December** ACADEMIC YEAR: **2020-2021**
LEARNING OBJECTIVE: To Identify safety hazards and implement preventive and remedial measures.
The learners will be able to: Students will learn to handle various emergency situations like fire, bomb threat etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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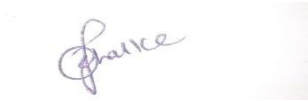
UNIT III	**6. Risk and Environment Management** 6.1 Fire Safety and Accident Prevention ● Hazards ● Prevention ● Crisis Handling 6.2 First Aid 6.3 Dealing with Emergencies ● Fire ● Bomb threat ● Death ● Natural Disasters 6.4 Minimizing Theft ● Guest theft ● Employee theft	15	Housekeeping Operations and Management	● Notes ● Google Classroom ● PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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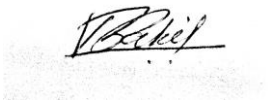

SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Front Office Hotel Management CLASS: TY BSc HS

SEMESTER: V

MONTH: July to November ACADEMIC YEAR: **2020 -2021**

LEARNING OBJECTIVE: To posses knowledge & skills with respect to handling operations of front Office & understand the formulas that are applied in the front office for forecasting & evaluating, understand the concept of foreign currency exchange.

The learners will be able to:

- To understand the formulas that are applied in the front Office for forecasting & evaluating.
- Decision Making through statistical data in Front Office Operations.
- Understand the rules & acceptance of foreign Currency exchange.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	Planning Operations 1.1 Management Function 1.1.1 Planning, Organising, 1.1.2 Co-ordinating, 1.1.3 Staffing, Leading, 1.1.4 Controlling, Evaluating 1.2 Establishing Room Rate 1.2.1 Different Approaches for pricing rooms 1.2.2 Market Condition Approach, 1.2.3 Rule of Thumb, 1.2.4 Hubbart's Formula-Determining single and double rate	15	Hotel Front Office Training Manual - Sudhir Andrews	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	1.3 Special Room Rates Offered 1.3.1 Corporate / Commercial Rate, 1.3.2 Group Rate, 1.3.3 Promotional Rate, 1.3.4 Incentive Rate, 1.3.5 Family Rate, 1.3.6 Package, 1.3.7 Complimentary Rate 1.4 Forecasting Room Availability 1.4.1 Forecasting Data 1.4.1.1 Percentage of No-show, 1.4.1.2 Percentage of Cancellations, 1.4.1.3 Percentage of walk-ins, 1.4.1.4 Percentage of overstay, 1.4.1.5 Percentage of under stay, 1.4.2 Forecast formula; 1.4.3 Sample 3 and 10 days forecast; 1.4.4 Refining Forecast 1.5 Budgeting for Operations 1.5.1 Three Day Forecast; 1.5.2 Forecasting room revenue, 1.5.3 Estimating expenses, 1.5.4 Refining budget plans 1.6 Key Terms		Front Office management & Operations - Sudhir Andrews	

			Front Office Management - SK Bhatnagar	
UNIT - 2	Evaluating Operations 2.1 Evaluating front office operations 2.1.1 Daily Operations Report, 2.1.2 Monthly Income Statement 2.1.3 Occupancy Ratios; 2.1.3.1 Occupancy Percentage 2.1.3.2 Room Count 2.1.3.3 House Count 2.1.3.4 Double Occupancy percentage 2.1.3.5 Bed Occupancy Percentage 2.1.3.6 Foreign Guest Percentage 2.1.3.7 Average Daily Rate 2.1.3.8 Revenue Per Available Room (RevPAR) 2.1.3.9 Average Rate Per Guest (ARG) 2.1.4 Yield Statistic. 2.1.5 Market Share Index/ Fare Market Share	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	2.1.6 Evaluation of Hotels By Guests 2.2 Key Terms			
UNIT - 3	3.1 Handling Foreign Currency 3.2 Foreign Currency Exchange 3.3 Procedures to be followed while exchanging Foreign Currency 3.4 Currencies accepted by RBI 3.5 Foreign Exchange Certificate- Format 3.6 Foreign Exchange Settlements using Credit Cards. 3.7 Export Promotion Capital Goods Scheme (EPCG)	15	Front Office management In Hotel - BK Chakravarti	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Advanced Front Office CLASS: T.Y. BSc HS SEMESTER: VI

MONTH: November to March ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE: The students would be able to understand yield Management & its application in the Hotel Industry. Passport & Visa Regulations.

The learners will be able to:

- Yield management and its application in the Hotel Industry.
- Measurement of Yield for Management Decision Making.
- Passport & Visa regulations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	Yield Management 1.1 Introduction 1.2 Concept of Yield Management 1.2.1 Applications(Hospitality Industry) 1.3 Various strategies to maximise yield 1.3.1 Capacity Management, Discount Allocation, Duration Control 1.4 Measuring Yield 1.4.1 Potential Average Single Rate 1.4.2 Potential Average Double Rate 1.4.3 Multiple Occupancy Percentage	15	Jatashankar Tiwari – Front Office Management. Sudhir Andrews – Hotel Front Office Training Manual.	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	1.4.4 Rate Spread/ Rate Differential 1.4.5 Potential Average Rate 1.4.6 Room Rate Achievement Factor 1.4.7 Revenue Per Available Room (RevPAR) 1.4.8 Equivalent Occupancy 1.5 Elements of Yield Management 1.5.1 Group Room Sale (Group Booking Data, Group booking pace, Anticipated Group Business, Lead Time, Displacement of Transient Business) 1.5.1.1 Transient/ FIT Room Sales 1.5.1.2 Food and Beverage Activity 1.5.1.3 Local and Area-wide activities 1.5.1.4 Special Events 1.6 Using Yield Management 1.6.1 Potential High and Low Demand Tactics 1.7 Implementing Yield Strategies 1.7.1 Hurdle rate 1.7.2 Minimum length of stay 1.7.3 Close to arrival 1.7.4 Sell-through 1.8 Key Terms			

UNIT – 2	Passport and Visa 2.1 Passport 2.1.1 Definition and Types of Passport 2.1.2 Guidelines for Indian Passport Holders 2.1.3 Issue of New Passport 2.1.4 Renewal Of Passport 2.1.5 Passport for Minor 2.1.6 Replacement of Lost/ Damaged Passport (Duplicate) 2.1.7 Extension of short validity passport 2.1.8 Change of Name/ Surname after marriage 2.1.9 Change of appearance 2.1.10 Change in Date of Birth/ Place of Birth 2.1.11 Emergency Travel Document 2.1.12 Fee Structure 2.2 Visa 2.2.1 Definition and types of visas 2.2.2 Requirement for visa, 2.2.3 Tourist visa, 2.2.4 Collective visa, 2.2.5 Transient visa & exemption from registration 2.2.6 Other types of Visas 2.2.7 Business visa, 2.2.8 Student visa, 2.2.9 Conference visa, 2.2.10 Employment visa, 2.2.11 Recreation visa, 2.2.12 Research visa, 2.2.13 Missionary visa, 2.2.14 Landing Permit Facilities,	15	Jatashankar Tiwari – Front Office Management. Sudhir Andrews – Hotel Front Office Training Manual.	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

UNIT – 3	2.2.15 PIO card(Person of Indian Origin) UNIT - 3 Revenue Management Terms (100 Terms) 1. 90-Day Forecast 2. Action Plan 3. Average Daily Rate (ADR). 4. Best Available Rate 5. Best-Rate Guarantee Program 6. Booking Pace 7. Brand Equity 8. Branding 9. Bundling 10. Cannibalization 11. Capacity 12. Central Reservation Office (CRO). 13. Central Reservation System 14. Channel 15. Channel Contribution Percentage 16. Closed Or Closed Out 17. Closed To Arrival 18. Competitive Advantage 19. Competitive Intelligence 20. Competitive Set 21. Customer-Centric Approach 22. Customer Relationship Management 23. Cut-Off Date 24. Data Mining 25. Decline Stage 26. Demand 27. Demand Drainer 28. Demand Forecasting 29. Demand Generator 30. Denial 31. Discounting 32. Distressed Inventory 33. Dynamic Packaging 34. Elastic 35. Electronic Distribution 36. Environmental Scanning 37. Extended Stay Business 38. Fair Price 39. Fixed Costs 40. Flash Report 41. Forecasting 42. Forecasts 43. Full Pattern Length Of Stay Restriction 44. Global Distribution Systems 45. Group 46. Induce Trial 47. Inelastic 48. Internet Distribution System (IDS) 49. Introductory Stage 50. Inventory 51. Inventory Management 52. Law Of Demand 53. Law Of Supply 54. Long-Term Goals And Objectives 55. Long-Term Strategies 56. Lost Business 57. Loyalty Program 58. Managing Demand 59. Market Segmentation 60. Market Share 61. Market Skimming 62. Maximum Length Of Stay Restriction 63. Minimum Length Of Stay Restriction 64. Must-Stay Restriction 65. Net Rate 66. Off-Season 67. Pace 68. Peak Season 69. Perfectly Elastic 70. Perfectly Inelastic 71. Perishable 72. Pick-Up 73. Prestige Pricing 74. Price Elasticity Of Demand 75. Price Elasticity Of Supply 76. Price Leader 77. Promotional Pricing 78. Property Management System 79. Rack Rate 80. Rate Integrity 81. Regret. 82. Reservation Conversion Percentage 83. Run Of House 84. Short-Term 3 To		Jatashankar Tiwari – Front Office Management. Sudhir Andrews – Hotel Front Office Training Manual.	1. Slides 2. Videos 3. Quiz 4. Power Point 5. Presentation 6. PDF 7. Word 8. White Board 9. Projector 10. Discussion

	5-Day Forecast 85. Shortage 86. Shoulder Season 87. Stay Controls 88. Stay Pattern 89. Strategic Revenue Management Process 90. Strategy 91. SWOT Analysis 92. Tactics 93. Transient 94. Valley Season 95. Value-Based Pricing 96. Values 97. Wash Factor 98. Weak Season 99. Wholesale Rate 100.Yield Management	15		

VIVA COLLEGE
DEPARTMENT OF
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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **TY BSC HS**

SEMESTER: **V** MONTH: **Aug 2020 - Nov 2020** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE:

- To educate students on basic to advance culinary skills.
- To give an overview of culinary specialties across the globe.
- To educate students on latest food trends.
- To highlight the importance of food safety.
- To train students for better employment prospects.

The learners will be able to:

- Understand importance of food safety.
- Understand latest food trends.
- Understand culinary specialties across the globe.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Basic of Food Production	4	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	Basics of Bakery & Confectionery	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Google meet 3 YouTube videos 4 Online quiz 5 Google classroom
	Modern Cooking Techniques & Processes	4	Bali Parvinder S., (2012), International Cuisine & Food	1. PowerPoint 2. Google meet

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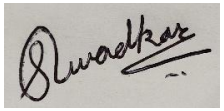
			Production Management, Oxford University, New Delhi	3. YouTube videos 4. Online quiz 5. Google classroom
	Larder	4	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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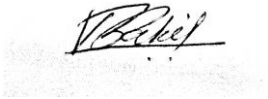

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **TY BSC HS**

SEMESTER: **V** MONTH: **Aug 2020 - Nov 2020** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE:

- To educate students on basic to advance culinary skills.
- To give an overview of culinary specialties across the globe.
- To educate students on latest food trends.
- To highlight the importance of food safety.
- To train students for better employment prospects.

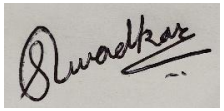
The learners will be able to:

- Understand importance of food safety.
- Understand latest food trends.
- Understand culinary specialties across the globe.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2	Charcuterie	10	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	Cheese	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz

				5. Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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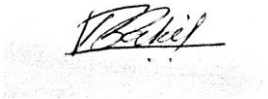

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VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **TY BSC HS**

SEMESTER: **V** MONTH: **Aug 2020 - Nov 2020** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE:

- To educate students on basic to advance culinary skills.
- To give an overview of culinary specialties across the globe.
- To educate students on latest food trends.
- To highlight the importance of food safety.
- To train students for better employment prospects.

The learners will be able to:

- Understand importance of food safety.
- Understand latest food trends.
- Understand culinary specialties across the globe.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3	International cuisine	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	Chocolate	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Google meet 3 YouTube videos 4 Online quiz 5 Google classroom
	Icings	5	Bali Parvinder S., (2012), International Cuisine & Food	1 PowerPoint 2 Google meet 3 YouTube videos

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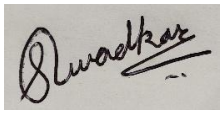
			Production Management, Oxford University, New Delhi	4 Online quiz 5 Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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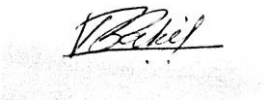

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **TY BSC HS**

SEMESTER: **VI** MONTH: **NOV 2020 - MAR 2021** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE:

- To educate students on basic to advance culinary skills.
- To give an overview of culinary specialties across the globe.
- To educate students on latest food trends.
- To highlight the importance of food safety.
- To train students for better employment prospects.

The learners will be able to:

- Understand importance of food safety.
- Understand latest food trends.
- Understand culinary specialties across the globe.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Kitchen Management	7	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	Kitchen Stewarding	8	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

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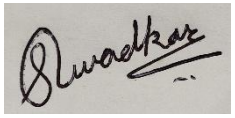
HOTEL & TOURISM MANAGEMENT STUDIES

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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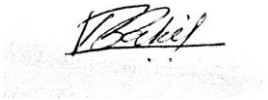

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **TY BSC HS**

SEMESTER: **VI** MONTH: **NOV 2020 – MAR 2021** **ACADEMIC YEAR: 2020-2021**

LEARNING OBJECTIVE:

- To educate students on basic to advance culinary skills.
- To give an overview of culinary specialties across the globe.
- To educate students on latest food trends.
- To highlight the importance of food safety.
- To train students for better employment prospects.

The learners will be able to:

- Understand importance of food safety.
- Understand latest food trends.
- Understand culinary specialties across the globe.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2	Sandwich	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	Classical garnishes	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study

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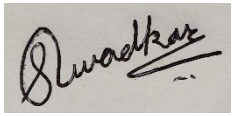
	Horsd'oeuvres	5	Ingram Christine, (2008), Appetizer, Starter Horsd'oeuvres, Hermes House , London	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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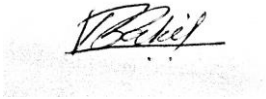

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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **TY BSC HS**

SEMESTER: **VI** MONTH: **NOV 2020 - MAR 2021** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE:

- To educate students on basic to advance culinary skills.
- To give an overview of culinary specialties across the globe.
- To educate students on latest food trends.
- To highlight the importance of food safety.
- To train students for better employment prospects.

The learners will be able to:

- Understand importance of food safety.
- Understand latest food trends.
- Understand culinary specialties across the globe.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3	Non-Edible Displays	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study
	Uses of wines, herbs and spices in cooking	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

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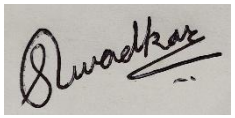
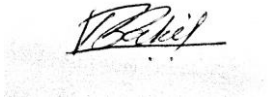
	Organoleptic & sensory evaluation of food	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	Contemporary cooking trends	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study
	Culinary terms	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMRATA BHOLANATH KHARKANDI & SAGAR VAZE (5 HRS) **SUBJECT:** PRINCIPLES OF FOOD PRODUCTION

CLASS: F.Y BACA **SEMESTER: II**

MONTH: DEC 2020 – MARCH 2021 **ACADEMIC YEAR: 2020-2021**

LEARNING OBJECTIVE: The Objective of this course is to familiarize the student towards analysis of food, stocks, soups, salads, eggs, fish and basic Indian cuisine

The learners will be able to:

- Furnish the basics of Food analysis List the methods of preparation of soups and stocks as mentioned in the syllabus.
- List the methods of preparation of sauces as mentioned in the syllabus.
- List various types of salads
- List various cuts of Fish
- Define various cuts of meat
- State basic principles of baking sponges and pastries
- List various masala combinations as mentioned in their learning material

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**SENSORY, IDENTIFICATION & EVALUATION OF FOOD INGREDIENTS** Organoleptic Sensory Evaluation (wherever necessary) (Taste, smell, hearing, eyes) Identification of Ingredients Presentation Basic Factors of presentation (temperature, flavour, colour, shapes)	5 HRS	Sensory evaluation of food and Practices by Harry T. Lawless	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. PRACTICAL OF HENDONIC TESTING (ORGANIC MATERIAL

	Texture & Consistency (Firm & Close, short & crumbly, spongy, light & even, flaky, coarse, tough, hard, roping, pouring, soft peak, medium peak, stiff peak)	5 HRS		IDENTIFCATION OF SMELL, TASTE, TOUCH, VISUAL) IN CLASSROOM
1.2	**STOCKS, GLAZES, COOKING LIQUORS& THICKENING AGENTS** Introduction Definition of Stock & Glazes Uses of Stock & Glazes Classification of Stock White Stock (fond Blanc) Brown Stock (fond brun) & Indian Yakhni Stock Fish Stock (fumet) Vegetable Stock Neutral Stock Remouillage Court Bouillon Pot Liquor Emergency Stock / Convenience Bases Elements of Stocks & its Characteristics Precautions to be taken while preparing Stock Definition Starches as Thickening Agent Definition of Roux Types of Roux (white, blond, slack, brown)		FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. PRACTICE IN PRACTICALS
1.3	Other thickening agents • White wash (fecule) • Cornstarch (cornflour) • Arrowroot **SOUPS** Classification of soups with examples Clear Soup	5 HRS		1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS

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UNIT 2	Broth Consommé Thick soup Puree Cream Velouté Bisque Chowder Cold Soup Speciality Soup Tips for Making Good Soups		FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE	4. HOME STUDY AND QUIZ FOR STUDENTS 5. PRACTICE IN PRACTICALS
2.1

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2.3	Salient Features of Preparing Good Salads Classification of Vegetables **EGGS & FISH** Introduction Cooking of eggs for breakfast Identification & Classification of Fish Cuts of Fish Darne,Trançon ,Fillet,Suprême, Delice, Goujon Goujonettes Paupiette, En tresse, En Loregnette Pavé Cravate (plaited) Cooking of Fish		FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT
UNIT 3	**3.1 INTRODUCTION TO MEATS** Lamb, Pork, Beef, Veal & Furred Game Introduction Cuts of lamb, beef, veal and pork (with diagram) Processing of a Whole Animal Classification of Meats Yield Tests Introduction to Poultry & Game Bird Introduction Physical & Chemical Characteristics of Poultry Trussing Methods Some Classical Preparations of Poultry **3.2 BASIC SPONGE, CAKE & PASTRY (Sagar Vaze)** Introduction Pastry Techniques and Principles Principles Behind Making of Sponge Points to be Kept in Mind While Making Sponges & Cakes Different types of Pastry Basic method of making pastry **3.3 MASALAS, PASTES & INDIAN GRAVIES** Introduction Blending of Spices & Concept of Masalas Concept of Dry & Wet Masalas Pastes used in Indian Cooking Difference between Gravies & Curries	**5 HRS** **5 HRS** **5 HRS**	FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT 6. PRACTICAL DISSECTION OF MEAT 1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT 6. PRACTICAL DISSECTION OF MEAT

	Regional Gravies Preparation of Gravies			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45HRS

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Hotel Management - Introduction to Hospitality Studies CLASS: F.Y. BACA

SEMESTER: I

MONTH: July to November ACADEMIC YEAR: **2020 - 2021**

LEARNING OBJECTIVE: The objective of this course is to familarize student with the hospitality Industry and prospects of developing a career in Hospitality.

The learners will be able to:

State the career opportunities in the Hospitality Profession.
Define Service industry and its objectives.
List the impact of travel and tourism on Hotel Industry.
State the economic significance of Tourism.
State the features of Food & Beverage Industry.
List popular chains of Hotels.
Draw the organisation chart of different categories of Hotels.
State the various departments in hotels & their functions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	**PERSPECTIVES ON CAREERS IN HOSPITALITY.** ▪ Etymology, meaning & definitions of hospitality ▪ Origin, history & evolution of hospitality & hotels ▪ International & Indian perspective	15	Introduction to Hospitality Studies - Clayton W, Tom Powers & Denis Reynolds - Wiley Publications	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word

	▪ What is hospitality Management? ▪ The managers role in the hospitality Industry ▪ Why study a hospitality management program ▪ Employment opportunities ▪ Planning a career ▪ Employment as an important part of education ▪ Profiting from work experience ▪ Learning on the job ▪ Other ways of profiting from the job ▪ The outlook for hospitality ▪ Polarization in hospitality service organizations ▪ Accelerating competition ▪ Service is the difference ▪ Value consciousness ▪ Technology ▪ Empowerment ▪ Concern with security ▪ Concern with food safety & sanitation ▪ Sustainability		Management in Hospitality Industry - Clayton W, Tom Powers- Wiley Publications	7. White Board 8. Projector 9. Discussion

UNIT – 2	▪ Diversity HOSPITALITY AS A SERVICE INDUSTRY ▪ What is service ▪ Types of service ▪ Rendering Personal Service ▪ Task ▪ Interpersonal Skills ▪ Managing the service transactions ▪ The product view of service ▪ The product view: Empowerment ▪ Service culture ▪ Employment as a product: Importance of people ▪ Employees as Internal customers ▪ Service as a sustainable competitive advantage TRAVEL & TOURISM ▪ The economic significance of Tourism ▪ Travel & Tourism Industry ▪ Nature of the travel & tourism Industry ▪ Interrelationships within the travel & tourism industry			

	▪ Reason & need for people to travel ▪ The impact of travel on the hotel industry			
UNIT - 3	**THE FOOD SERVICE INDUSTRY** ▪ The dinning market versus the eating market ▪ Categories of restaurants ✓ Fine dining restaurants ✓ Casual Upscale Dining ✓ Mid-Scale Restaurants ✓ Quick service restaurants ✓ Restaurants in retail stores ✓ Restaurants in shopping malls DEFINITION & EVOLUTION OF HOTELS & MAJOR HOTEL CHAINS ▪ Inns & Hotels ▪ History & development of the Hotel Industry ▪ Origin of Hotels ▪ The Taj Hotel group ▪ Oberoi Hotels	15	Introduction to Hospitality Studies - Clayton W, Tom Powers & Denis Reynolds - Wiley Publications Management in Hospitality Industry - Clayton W, Tom Powers- Wiley Publications	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	▪ Leela Palaces & Hotels ▪ Lemon Tree Hotels ▪ ITC Hotels ▪ Hyatt Hotels ▪ Holiday Inn ▪ Hilton ▪ Four Seasons ▪ The Marriott Group ORGANISATION STRUCTURE OF THE HOTEL ▪ Organization chart of medium size & large size hotel ▪ The concept of revenue earning & support departments in a hotel ▪ Hotels – Different types of hotels **HOTEL FOOD & BEVERAGE OUTLETS & OPERATIONS.** ▪ Coffee Shops ▪ Introduction to Banquets & Function Catering ▪ Organization & fundamentals of room service & operations	15		1. Slides 2. Videos 3. Quiz 4. Power Point 5. Presentation 6. PDF 7. Word 8. White Board 9. Projector 10. Discussion

	▪ Specialty restaurant in hotels ▪ Bar Operation ▪ Minibar Bar Operations ACCOMMODATION DEPARTMENT ▪ Organization Chart of front office & Housekeeping ▪ Responsibilities of each section of the Front Office ▪ Responsibilities of each section of Housekeeping Department ▪ Activities involved in the guest cycle (from check in to check out) ▪ The concept of public areas in Housekeeping. OTHER DEPARTMENTS IN THE HOTEL ▪ Security Department ▪ Accounts & Food & Beverage controls department ▪ Engineering / Maintenance Department ▪ Sales & Marketing Department ▪ Human Resource & Personnel Department ▪ Spa & Health Club			

	▪ Purchasing & Receiving department & Stores			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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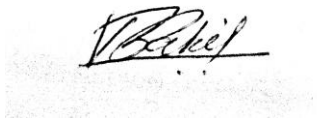

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KIRTI TUSHAR CHALKE **DEPARTMENT:** HOTEL MANAGEMENT **CLASS: F.Y BACA**

SEMESTER: I **SUBJECT: Food Safety and Hygiene**

MONTH: ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE: To make students aware about nutritional facts about various products and balanced diet and various new trends in diet.

The learners will be able to:

- After completion of this unit students will be able to state the relation between food and various factors influencing eating habits.
- After completion of this unit students will be able to state the breakup of protein carbohydrate and fat component of food.
- After completion of this unit students will be able to understand the basic need of vitamins and minerals.
- Students will be able to cater new trends in diet.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1.1 HOSPITALITY INDUSTRY & FOOD SAFETY** 1.1.1 Importance of Food Safety in Hospitality Industry 1.1.2 Responsibilities of Owner, Managers & Food Handlers 1.1.3 Economic consequences of food safety hazards	**5 HRS**	Sumitra Deshmukh & Dr. Catering Science & Food Asmita Thakur Safety	Notes White board PPT
	1.2 FOOD MICROBIOLOGY 1.2.1 What are microbes (Bacteria, Yeast & Mould) 1.2.2. Classification of Microorganisms and their characteristics 1.2.3 Factors for growth 1.2.4 Role of Microbes in manufacture of fermented foods (Dairy products, veg & bakery preparation,	**5 HRS**	Rodey S Food- Hygiene& Sanitation	Notes White board PPT

	alcoholic beverages, vinegar, fermented Indian foods). **1.3 HAZARD ANALYSIS CRITICAL CONTROL POINT (HACCP)** 1.3.1 Introduction 1.3.2 Importance 1.3.3 HACCP Principles 1.3.4 HACCP in India 1.3.5 Food Regulation in India & HACCP 1.3.6 Food Service Management & HACCP 1.3.7 7 Critical Control Points	**5 HRS**	Food Hygiene for Food Macmillion Handlers	Notes White board PPT
UNIT 2	**2.1 FOOD BORNE INFECTIONS & MICROBIAL AGENTS** 2.1.1 Classification of Food Borne Diseases 2.1.2 Mode of Transmission of Diseases 2.1.3 Food Borne Illness 2.1.4 Food Poisoning (Intoxication) 2.1.5 Food Infections 2.1.6 Food Borne Bacterial Agents 2.1.7 Food Borne Viruses 2.1.8 Protozoans 2.1.9 Food Borne Helminths 2.1.10 Prions -Staphylococci, Salmonella, Escherichia coli, Hepatitis, 2.1.11 Listeria, clostridium botulinum, Vibrio-cholera, Shigella, Ameobic Dysentery, and Trichnia) 2.1.12 Natural Toxins (Kesari Dal, Potatoes, Mushroom, Shell Fish & Peanuts)	**5 HRS**	Food Safety in the Hospitality -Butterworth Heinamann	Notes White board PPT

	2.1.13 Chemical Toxins (Tin, Copper, Lead, Arsenic) Types of Infections & Microbial Agents Emerging versus Contemporary Food Borne Infections **2.2 FOOD ADULTERATION** 2.2.1 Definition and types 2.2.2 Tests to detect (coffee, semolina, flour, ghee, butter, margarine, oil, milk, turmeric, coriander powder, pepper corns, meats) 2.2.3 Foods Laws, authorities and related standards (PFA, FPO, MFPO, MMPO, Agmark, BIS & FSSAI, Organic Certification, Vegetarian and non-vegetarian visual symbols on packed foods)	**5 HRS**		White board PPT Notes Videos
	2.3 FOOD ADDITIVES 2.3.1Definition 2.3.2 Uses of Food Additives 2.3.3 Types of Additives 2.3.4 Colours & Flavours 2.3.5 Browning reactions	**5 HRS**		White board PPT Notes Videos
UNIT 3	**3.1 HYGIENE** 3.1.1Rules & Importance of Hygiene 3.1.2Types of Hygiene 3.1.3Personal Hygiene 3.1.4Workplace Hygiene 3.1.5Food Hygiene 3.1.6Waste Disposal- Types of waste, Waste disposal management, staff training 3.1.7Pest Control- Types of Pests, Inspection of Premises, Pests 3.1.8 Prevention 3.1.9 Methods of Pest Control.	**5 HRS**	The Prevention of Food Commercial law Adulteration Act, 1954 Publishers	White board PPT Notes Videos

	3.1.10 Cleaning & Sanitation- Methods of cleaning & Sanitizing 3.1.11Factors affecting sanitizers Methods of cleaning & Sanitizing **3.2 FOOD PRESERVATION& STORAGE** 3.2.1Methods of Preservation 3.2.2 Natural & Chemical Preservation 3.2.3 Low Temperature (refrigeration, freezing, blast freezing) 3.2.4 High Temperature (pasteurization, sterilization, canning) 3.2.5 Irradiation 3.2.6 Advantages & Disadvantages of various methods 3.2.7Saving the nutrients in food 3.2.8 Types of Food Storage 3.2.9 Dry, Refrigerated & Freezer 3.2.10 FIFO 3.2.11 Stock Rotation & Cross Contamination	**5 HRS**		White board PPT Notes Videos
	3.3 REGULATION & REGULATING BODIES Governing bodies controlling hygiene practices in food outlets Rules & Regulations Food Establishment Inspections Record Maintenance System Food Safety Certification Food Safety Training Program	**5 HRS**		White board PPT Notes Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45HRS

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **LEJESH KELOTH** DEPARTMENT: **HOTEL MANAGEMENT** CLASS: F.Y.C.A SEMESTER: II

MONTH: NOVEMBER TO APRIL ACADEMIC YEAR: 2021-2022 SUB: COMMUNICATION SKILLS (ENGLISH & FRENCH)

LEARNING OBJECTIVE: Objective of this course is to enhance the communication skills in English/ French required of a Culinary Professional

The learners will be able to: Frame grammatically correct sentences in English • Apply the correct conjugation of verbs in sentences • Frame simple sentences in French.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	CONCEPT OF COMMUNICATION 1.1 Process of Communication / 1.2 Feed Back 1.3 Methods of Communication – Verbal / Non-Verbal 1.4 Channels of communication 1.5 Barriers of Communication 2 ORGANIZATIONAL COMMUNICATION 2.1 Upward, downward, lateral communication and their purposes functions, grapevine 2.2 Written communication – Memos, Circulars, notices **French** 1 Time, At the Office in a restaurant, Asking direction	4 2	•Business Communication – Meenakshi Raman and Prakash Singh •Business Correspondence and Report writing – R.K.Sharma and Krishna Mohan •Business Communication – Chaturvedi •High School English – Wren and Martin •Understanding Human Communication – Ronald B Adler and George Rodman (with CD) •Skills Development for Business and Management Students - Kevin Gallagher λE. J. Neather - Mastering of French I & II - Macmillan - 1982 λBridget Anfossy - Speak	• Notes Whiteboard

			French Today - Augo - 1991 λR. Diez La Cortina - Cortina's French Method - Grosset & Dunlop - 1988 λMathuram Bondo - Modern French Course - D. C. Heath & Co. - .1983. λCourse de langue et civilizaiion Franchises. G. Mauger. λOxford French Dictionary	
UINT 2	BUSINESS COMMUNICATION 1.1 Planning the right look of a letter 1.2 Types of letters- quotations, orders, claim and adjustment, sales, application, complaint / apology REPORT WRITING 2.1 Types of Reports 2.2 Structure of a report 2.3 Types of Reports **(French)** 1 Receipes-put in the correct order, Translate to English, Making Tea, Coffee, Bechamel,Veloute, Simple soups and salads 2 Culinary Terms	05 10	•Business Communication – Meenakshi Raman and Prakash Singh •Business Correspondence and Report writing – R.K.Sharma and Krishna Mohan •Business Communication – Chaturvedi •High School English – Wren and Martin •Understanding Human Communication – Ronald B Adler and George Rodman (with CD) •Skills Development for Business and Management Students - Kevin Gallagher E. J. Neather - Mastering of French I & II - Macmillan - 1982	● Notes Whiteboard

			Bridget Anfossy - Speak French Today - Augo - 1991 R. Diez La Cortina - Cortina's French Method - Grosset & Dunlop - 1988 Mathuram Bondo - Modern French Course - D. C. Heath & Co. -.1983. Course de langue et civilizaiion Franchises. G. Mauger. Oxford French Dictionary	
UINT 3	GROUP COMMUNICATION 1.1 Types of meetings /Advantages and Disadvantages 1.2 Participants Responsibilities / Brain Storming 1.3 Structure of a meeting – Agenda and Minutes 2 PRESENTATION 2.1 Making effective presentation /Speaker's appearance and personality 2.2 Using Visual aids 3 INTERVIEWS 3.1 Purpose / Types 2 Hours 3.2 Candidate's preparation – GD / PI **(French)** 1 French Basic Conversation and Translation of Passages from French to English U	02 02 02 07	•Business Communication – Meenakshi Raman and Prakash Singh •Business Correspondence and Report writing – R.K.Sharma and Krishna Mohan •Business Communication – Chaturvedi •High School English – Wren and Martin •Understanding Human Communication – Ronald B Adler and George Rodman (with CD) •Skills Development for Business and Management Students - Kevin Gallagher	• Notes Whiteboard

			E. J. Neather - Mastering of French I & II - Macmillan - 1982 Bridget Anfossy - Speak French Today - Augo - 1991 R. Diez La Cortina - Cortina's French Method - Grosset & Dunlop - 1988 Mathuram Bondo - Modern French Course - D. C. Heath & Co. -.1983. Course de langue et civilizaiion Franchises. G. Mauger. Oxford French Dictionary	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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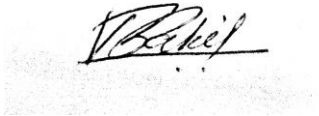

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.A.C.A.** SEMESTER: I

MONTH: **OCTOBER 2020 - DECEMBER 2020** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: FUNDAMENTALS FOOD & BEVERGE SERVICE

The learners will be able to:

- Student should be able to Identify the role of the Food and Beverage Service department and explain its organization structure and importance.
- Explain how "moments of truth" affect guests, staff members, and managers, and describe the value of guests and staff members to a food service operation.
- Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	**1.** INTRODUCTION TO HOTEL AND CATERING INDUSTRY 1.1 Role of catering establishment in travel / tourism industry 1.2 Types of F& B operation (Classification). Commercial (residential / Non Residential) • Welfare • Institutional • Transport (Roads, Railways, Airlines, Marine) 1.3 Structure of hospitality industry and career opportunities	4 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet

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	2. DEPARTMENTAL ORGANISATION AND STAFFING 2.1 Organization of F & B Department of a Hotel (English & French) 2.2 Etiquette & Attributes of an F & B Personnel. 2.3 Duties and responsibilities of F & B Staff. a) F & B Manager. b) Banquet manager. c) Outlet Manager (All day dining/ Bar/ In Room Dining/Specialty Restaurant, etc.) d) Senior captain/ Captain/ Supervisor. e) Steward. f) Sommelier. g) Hostess. h) Cashier. 2.4 Departmental Relationship of F& B with other Departments.	5 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet
	Revision Lectures	3 Lectures		1) Google Classroom 2) Google Slides 3) Google Meet 4) Google Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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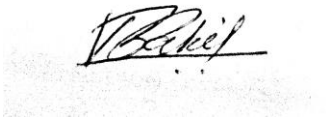
HOTEL & TOURISM MANAGEMENT STUDIES

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.A.C.A.** SEMESTER: I

MONTH: **OCTOBER 2020 - DECEMBER 2020** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: FUNDAMENTALS FOOD & BEVERGE SERVICE

The learners will be able to:

- Identify the operational and Auxiliary areas as well as equipment's used in the Food and Beverage department.
- Understand the various service methods and procedures followed in the department.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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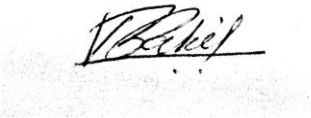
Unit II	1. OPERATIONAL & AUXILLARY AREAS OF FOOD AND BEVERAGE DEPARTMENT: IMPORTANCE & LAYOUTS a) Coffee shop b) Snack bar/ counter service c) Kiosks d) Specialty restaurant/ theme restaurant e) Banquet operations/ outdoor catering f) In-Room Dining g) Dispense Bar / Discotheque/ night club/ pub h) Pantry/Still room i) Kitchen stewarding j) Silver room k) Linen room l) Vending machine	5 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet
	2. FOOD AND BEVERAGE SERVICE EQUIPMENT 2.1 Classification of equipment. (Familiarization of equipment). 2.2 Criteria for selection and requirements. • Tableware/ silverware (cutlery/ hollowware/flatware) • Glassware • Crockery • Bar equipment(For all of the above Brands, Measures & Quality suppliers) • Special equipment with their uses. • Furniture (Tables/Chairs/Trolleys/Dumb Waiter) • Linen. • Light and décor	7 Lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) Google Classroom 2) Google Slides 3) Video Links 4) Google Meet

	• Care and maintenance of equipment. • Napkin folds. 2.3 Table d' hôte, A'la carte Mis-en –place, Mis -en –Scene			
	Revision Lectures	5 Lectures		1. Google Classroom 2. Google Slides 3. Google Meet 4. Google Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.A.C.A.** SEMESTER: I

MONTH: **OCTOBER 2020 - DECEMBER 2020** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: FUNDAMENTALS FOOD & BEVERGE SERVICE

The learners will be able to:

- Understand the various service methods and procedures followed in the department.

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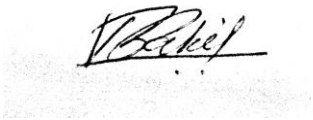
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III	1. DINING SERVICES METHOD AND PROCEDURES 1.1 Different methods of services a. Table service • Silver service/ English service • American/ Plated • Family • Russian • French/ butler • Guéridon b. Bar Counter c. Assisted Service • Carvery • Buffets d. Self Service •Cafeteria: a).Counter b).free-flow c).Echelon d).Supermarket e. Single point service •Take-away •Drive through •Fast food •Vending	9 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) Google Classroom 2) Google Slides 3) Video Links 4) Google Meet

	•Kiosk •Food court •Bar f. Specialized (in-situ) •Tray •Trolley •Home delivery •Lounge •Room •Drive in 1.2 Special Service • Formal Service • Wave service • Carlton club service 1.3a. Rules to be observed while laying the table. b. Rules to be observed while waiting at the table. c. Dos & don'ts in a restaurant			
	Revision Lectures	5 Lectures		1) Google Classroom 2) Google Slides 3) Google Meet 4) Google Quiz

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.A.C.A.** SEMESTER: II

MONTH: **JANUARY 2021- APRIL 2021** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: FOOD & BEVERGE STUDIES

The learners will be able to:

- The different types of Menus and principles of menu planning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	**1.** MEALS AND MENU PLANNING 1.1 Menu – Origin, definition & objectives 1.2 Types of meals (Breakfast, Brunch, Lunch, Afternoon tea, High tea, Dinner) Types of Menu a. A la c arte b. Table d' hote c. Cyclic menu d. Banquet menu e. Carte du jour / plat du jour f. Californian menu g. Take-away Other types of menu a) Children's menu b) Club menu c) Ethnic menu d) Health menu	7 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question

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	e) Spa Menu f) Ayurvedic Menu 1.4 Principles of Menu planning 1.5 Breakfast: English, Continental, American, Indian 1.6 Types of Tea Service: Full Afternoon Tea, High Tea.			
	Revision Lectures	3 Lectures		1) Classroom Theory Test 2) Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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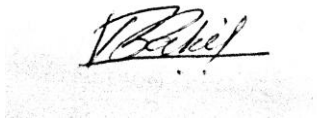

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.A.C.A.** SEMESTER: II

MONTH: **JANUARY 2021- APRIL 2021** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: FOOD & BEVERGE STUDIES

The learners will be able to:

- Sequence and course in the French classical menu also identify general accompaniments.
- Types, storage and service of Tobacco

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II	1.FRENCH CLASSICAL MENU 1.1 a. Sequence and Courses. b. General Accompaniments. 1.2 Ice creams: Types & categories of Ice creams	6 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question
	2.TOBACCO a) Introduction to Cigars and cigarettes. b) Types of tobacco c) Shape, size, color & Brand names with country of origin.	7 Lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question
	Revision Lectures	5 Lectures		1. Classroom Theory Test 2. Viva

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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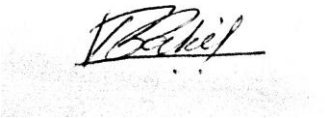

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B. DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.A.C.A.** SEMESTER: II

MONTH: **JANUARY 2021- APRIL 2021** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: FOOD & BEVERGE STUDIES

The learners will be able to:

- Types, storage and service Non alcoholic beverages.
- Simple control system followed in a restaurant.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III	1.1 NON ALCOHOLIC BEVERAGES a. Definition of beverages b. Classification chart –alcoholic & non alcoholic drinks. c. Stimulating -Tea, Coffee & Cocoa, (origin, manufacture, Method of preparation, types & brands) d. Nourishing -health drinks e. Refreshing –juices, squashes, crushes, syrups & aerated water	9 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question

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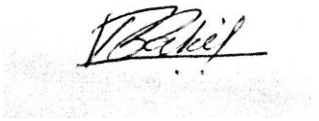
	Table Water (origin, types & brands) & carbonated water.			
	1.2 SIMPLE CONTROL S YSTEMS. a. Restaurant reservation system b. KOT Checking System c. Types of KOT / BOT d. Method of billing (manual & computerized)	4 Lectures		1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question
	Revision Lectures	4 Lectures		1) Classroom Theory Test 2) Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:NAMRATA BHOLANATH KHAKANDI **DEPARTMENT**: ENVIRONMENTAL SCIENCE

CLASS: FY. BACA **SEMESTER:** II

MONTH: DECEMBER 2020-FEBRUARY 21 **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE:
The Objective of the course is to familiarize the students with the need and ways to conserve the environment.

The learners will be able to:
After the completion of this course the students shall be able to

- list and define various components of environment,
- need of its conservation and role of human beings in its conservation as per the learning material provided by Ministry of Human Resources, Govt. of India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	THE MULTIDISCIPLINARY NATURE OF ENVIRONMENTAL STUDIES Definition, scope and importance Need for public awareness Natural resources Renewable and non-renewable resources Natural resources & associated problem. a. Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people. b. Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams benefits and	**15.HRS**	ENVIRONMENTAL STUDIES FOR UNDERGRADUATE COURSE BY ERACH BHARUCHA	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

	problems. c. Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies. d. Food resources: World food problems overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies. e. Energy resources: Growing energy needs, renewable and nonrenewable energy sources, use of alternate energy sources. Case studies. f. Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification. • Role of an individual in conservation of natural resources. Equitable use of resources for sustainable lifestyles. Ecosystems • Concepts of an ecosystem. • Structure and function of an ecosystem. • Producers, consumers and decomposers. • Energy flow in the ecosystem. • Ecological succession. • Food chains, food webs and ecological pyramids. • Introduction, types, characteristic features, structure and function of th following ecosystem: a. Forest ecosystem b. Grassland ecosystem c. Desert ecosystem d. Aquatic ecosystem (ponds, stream lakes, rivers, oceans, estuaries)			
UNIT 2	BIODIVERSITY AND ITS CONSERVATION, ENVIRONMENTAL POLLUTION & SOCIAL ISSUES Biodiversity and Its Conservation • Introduction-Definition: genetic species and ecosystem diversity • Bio-geographical classification of India • Value of biodiversity : Consumptive use, productive use, social, ethical, aesthetic and option values	**15.HRS**		1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

	• Bio-diversity at global, national, local levels • India as a mega diversity nation • Hot spots of bio-diversity • Threats to biodiversity: Habitat loss, poaching of wild life, manwildlife conflicts • Endangered and endemic species of India • Conservation of biodiversity: In- situ and Ex-situ conservation of biodiversity Environmental Pollution Definition – • Causes, effects and control measures of: a. Air pollution b. Water pollution c. Soil pollution d. Marine pollution e. Noise pollution f. Thermal pollution g. Nuclear Hazards • Solid waste management: Causes, effect and control measures of urban and industrial wastes • Role of an individual in prevention of pollution • Pollution case studies • Disaster management: floods, earthquake, cyclone and land slides Social issues and environment 15 hrs 15 hrs • From unsustainable to sustainable development • Urban problems related to energy • Water conservation, rain water harvesting, and watershed management • Re-settlement and rehabilitation of people: Its problems and concerns. Case studies. • Environmental ethics: issues and possible solution • Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies. • Wasteland reclamation • Consumerism and waste products • Environment protection act • Air(Prevention and control of pollution) act			

UNIT 3	• Water (Prevention and control of pollution) act • Wildlife protection act • Forest conservation act • Issues involved in enforcement of environmental legislation • Public awareness **HUMAN POPULATION & THE ENVIRONMENT AND UNDERSTANDING EXISTENCE AND CO-EXISTENCE** Human Population & The Environment • Population growth, variation among nations • Population Explosion- family welfare program • Environment and human health • Human rights • Value education • HIV/AIDS • Women and child welfare • Role of information technology in environment and human health • Case studies Understanding Existence and Co-existence • Interrelation and Cyclicity between Material order, Bio-order, Animal order and Human order •Understanding the human conduct : Relationship in Family, Justice in Relationship, Relationship of human with nature (environment),human Behaviour, Human Values, Nature & Morality •Understanding the Human society: Dimensions of Human Endeavour and Objectives, Interrelationship in Society, Mutual Fulfillment and Cyclist in nature.	**15.HRS**		1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:LEJESH KELOTH DEPARTMENT: HOTEL MAMAGEMENT CLASS: F.Y. BA.CA

SEMESTER: I SUBJECT: COMMUNICATION SKILL

MONTH: ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE: Objective of this course is to enhance the communication skills in English/ French required of a Culinary Professional

The learners will be able to: Frame grammatically correct sentences in English

· Apply the correct conjugation of verbs in sentences

· Frame simple sentences in French

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit – I	The Sentence – Kinds of Sentences – Subject & Predicate The Phrase & The Clause Parts of Speech – Noun, Adjective, Pronoun, Verb, Adverb, Preposition, Conjunction, Interjection Noun – Kinds of Noun (Common, Proper, Collective, Abstract) The Noun : Gender (Masculine, Feminine, Common, Neuter) The Adjective – Kinds of Adjective, Comparison of Adjectives (Positive, Comparative, & Superlative Degrees. The Correct use of some Adjectives Articles - Use of Definite & Indefinite Articles Personal Pronouns – Forms of the Personal Pronouns **French:** Translate the Dialogue into English Culinary Terms – Translate to French using match the columns / crosswords	15	1.Business Communication- Meenakshi Raman & Prakash Singh 2. High School English- Wren and Martin 3. Business Communication- Chaturvedi	• Notes Whiteboard
Unit - II	The Verb Transitive & Intransitive Verbs Person & Number Active & Passive Voice Direct & Indirect Speech Tense (Past, Present & Future) Kinds of Adverbs The Preposition Kinds of Prepositions Using appropriate Prepositions The Conjunction Use of Appropriate Conjunctions Classes of	15	1.Business Communication- Meenakshi Raman & Prakash Singh	• Notes Whiteboard

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	Conjunctions The Interjection Meaning & Some Examples Punctuation Commonly confused words / Common Errors / Antonyms / Synonyms		2. High School English- Wren and Martin 3. Business Communication- Chaturvedi	
Unit-III	French Days, Months, Numbers, Seasons Plan a Five Course menu in French Newspaper reading – Current Affairs Comprehension Précis Writing Paragraph Writing Conversation / Role Play Public Speaking Make Negative, Make Plurals, Conjugate in the Present tense ; avoir, entrée, Faire, Manger, Boire, Mettre	15	1.Oxford French Dictionary 2.E.J. Neather- Mastering of French I & II- Macmillan- 1982	• Notes Whiteboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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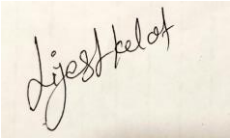

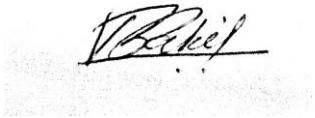

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMRATA BHOLANATH KHARKANDI & SAGAR VAZE **SUB: PRINCIPLES OF FOOD PRODUCTION**

CLASS: F.Y BACA **SEMESTER: I**

MONTH: AUG 2020- OCT 2021 **ACADEMIC YEAR: 2020-2021**

LEARNING OBJECTIVE: Objective of this course is orientation to development of Culinary as profession, introduction to basic baking techniques and pre-preparation techniques of cooking.

The learners will be able to:

- Define aims of cooking, draw organization chart of classical kitchen brigade and list the duties of kitchen staff
- List ingredients, tools and equipment used in bakery and the methods of bread and cookies making
- List the kitchen, tools, equipments and fuels used in commercial kitchen.
- Pre-preparation, methods and list the methods of cooking food.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**INTRODUCTION TO CULINARY ARTS** **1.1** Aims and Objectives of Cooking Food Hotels 1.1.2 Level of skills & experience 1.1.3 Attitude & Behavior in the kitchen 1.1.4 Career avenues open to chefs. 1.1.5 Classical Kitchen Brigade 1.1.6 Organizational Structure of The Kitchen 1.1.7 Modern Staffing in Various Category 1.1.8 Duties & Responsibilities Of Various Chefs	7 HRS	Basic Cookery – Daniel R. Stevenson Modern Cookery for Teaching & Trade – Thangam Philip	1. GOOGLE MEET 2. POWER POINT PRESENTATION 3. GOOGLE CLASSROOM 4. YOUTUBE VIDEOS 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS

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	1.1.9 Coordination of Kitchen with Other Departments **1.2 INTRODUCTION TO BAKING** 1.2.1 Safe food Handling practices 1.2.2 Tools, Equipment & Key Ingredients required in Baking 1.2.3 Understanding different types of bread 1.2.4 Understanding different methods in bread making 1.2.5 Basic faults in bread making 1.2.6 Various types of Cookies 1.2.7 Different method of making Cookies **1.3 INTRODUCTION TO INDIAN COOKING** 1.3.1 Introduction 1.3.2 Philosophy of Indian 1.3.3 Food Influences of the Invaders &travelers on Indian Cuisine 1.3.4 Equipment used in Indian Cooking 1.3.5 Regional & Religious Influences on Indian Cuisine	4 HRS 4 HRS	Bakery materials & methods, A. R. Daniel	
UNIT 2	**2.1 TYPES & SECTIONS OF A KITCHEN** 2.1.1 Commissary 2.1.2 Butchery 2.1.3 Garde Manger 2.1.4 Satellite Kitchen 2.1.5 Bakry & Confectionery 2.1.6 Pantry Kitchen 2.1.7 Stewarding 2.1.8 Show Kitchen 2.1.9 Cafeteria Kitchen 2.1.10 Walk-in cooler & walk-in freezer **2.2 TOOLS, EQUIPMENT & FUELS USED IN THE KITCHEN**	8 HRS 7 HRS	Food & Beverage Management – Davis & Stone Published by Butterworth-Heinemann Ltd. Food Preparation & Cooking – Stanly Thorues	1. GOOGLE MEET 2. POWER POINT PRESENTATION 3. YOUTUBE VIDEOS 4. GOOGLE CLASSROOM 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS 7. ASSIGNMENT

	2.2.1 Identification, Classification, & Uses of Equipment 2.2.2 Capital & Operational Equipment 2.2.3 Types & Uses of various knives, 2.2.4 care & maintenance of knives, 2.2.5 how to choose a knife Fuels used in the kitchen			
UNIT 3	**3.1 PREPARATION & MIXING OF INGREDIENTS** **3.2 COOKING TEMPERATURES & METHODS OF COOKING** 3.2.1 Heat Transfer & its relationship to Food Preparation 3.2.2 British Thermal Unit (BTU) 3.2.3 Heat Fusion Thermal Conductivity 3.2.4 Induction Cooking 3.2.5 Heat Removal-Cooling 3.2.5 Freezing of Foods 3.2.6 Thawing of Foods 3.2.7 Re-heating of Food 3.2.8 Effects of Heat on Foods 3.2.9 Boiling 3.2.10 Poaching 3.2.11 Stewing 3.2.12 Indian Dum Phukt 3.2.13 Braising 3.2.14 Frying a) Shallow b) Deep 3.2.15 Baking 3.2.16 Roasting Spit Roasting /Indian Tandoor Roasting 3.2.17 Microwave Cooking 3.2.18 Blanching	**7.5 HRS** **7.5 HRS**	Food Production Operations – Parvinder S. Bali-Oxford Publication	1. GOOGLE MEET 2. POWER POINT PRESENTATION 3. YOUTUBE VIDEOS 4. GOOGLE CLASSROOM 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS 7. ASSIGNMENT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45HRS

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SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:NAMRATA BHOLANATH KHAKANDI **SUB:** FOOD COST SONTROL

CLASS: SY. BACA **SEMESTER:** III

MONTH: JULY 2020- OCTOBER 2021 **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE:
To provide the basic understanding to the students in management controls- purchase, stores and production , costing, cost dynamics & cost control

The learners will be able to:
After completion of this units students will be able to understand cost analysis overhead cost elements and control of cost
understand controls- purchase, stores and production
understand costing, cost dynamics & cost control

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Management Management objectives Importance of financial control in catering establishments Elements of Costs Cost analysis food cost labour cost Overheard cost elements Control of labour cost and over head cost	**15.HRS**	Food & Beverage Management – Davis & Stone Published by Butterworth-Heinemann Ltd.	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

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UNIT 2	Purchase Control Objectives of purchasing Purchasing procedures Methods of purchasing Essentials of a good supplier ABC analysis Yield testing, yield calculations & yield percentages Centralized & decentralized purchasing Formats of: Purchase requisition & purchase order Stores Control Objectives of store keeping Methods of store keeping classification of material , Minimum stock, maximum stock & reorder level Method of receiving : Delivery Challans, cross checking with P.O & its documentation Computerized records Methods of stock valuation Continuous / perpetual stock taking Annual stock taking Causes of difference in book stock & physical stock Avoidable & unavoidable causes of food spoilage Production Control Stores issues procedure opening balances of raw material / Left over & material in process Production planning Pricing menu card Daily material consumption record	**15.HRS**	Food & Beverage Management – Davis & Stone Published by Butterworth-Heinemann Ltd.	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

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UNIT 3	Daily food cost / gross profit with percentage & control. Standard portion size Standard beverage cost Food cost percentage Seat turnover ratio Average check Sales per menu Gross profit method of pricing Importance of pricing Methods of pricing concept Calculating kitchen profit	**15.HRS**		1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

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SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:NAMRATA BHOLANATH KHAKANDI **DEPARTMENT**: GASTRONOMY

CLASS: SY. BACA **SEMESTER:** IV

MONTH: DEC 2020- MARCH 2021 **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE:

The students will be able to understand the food gastronomy

The learners will be able to:
After completion of this unit student will be able to state the meaning, perception and factors of Gastronomy. □
After completion of this unit student will be able to state history of European Gastronomy and the new contributors to develop the modern Gastronomy.□
After completion of this unit student will be able to state the history and growth of Indian Gastronomy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	What is Gastronomy? The perception of Gastronomy in society Factors contributing dissemination of Gastronomic knowledge. Orientation to European Gastronomy. Modern approach towards study of Gastronomy Developing the skills of Gastronomic analysis	**15.HRS**	Larrousse gastronomy	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS
	History of European Gastronomy □ Birth and growth till 18th century □	**15.HRS**	Gastronamique	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS

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UNIT 2	The 19th century-The golden age □ The 20th Century □ Cuisines Nouvelles Contributors to development of modern cuisine and gastronomy □ Escoffier □ Fernand Point □ Ferran Adria □ Grant Achatz Assignment: 1. Current trends of Gastronomy 2. Report of top ten restaurant list (Present/previous year) 3. Growth story of any two Michelin star chefs-European chefs			3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

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UNIT 3	History & growth of Indian Gastronomy Philosophy of ancient Indian cuisine Contributors to modern school of Indian cuisine Padamashri Chef Imtiyaz Quershi, Chef Vikas khanna, Gaggan Anand, Ms Camelia Punjabi, Padamashri Ms Thangam Philip, Chef Vineet Bhatia, Chef Atul Kochar, Padamashri Chef Sanjeev Kapoor, Ms Tarla Dalal etc. Current trends in Indian cuisine Factors contributing towards acceptance of Indian cuisine globally.	**15.HRS**	Theory of cookery - Krishna Arora Quantity food production- Thangam Phillip	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

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SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SAMIR KORGAONKAR** DEPARTMENT: **QUANTITY KITCHEN** CLASS: **S.Y.B.A.C.A.** SEMESTER: III

MONTH: **JULY-2020 - SEPTEMBER 2021** ACADEMIC YEAR: **2020-2021** **SUBJECT: Indian Ethnic cuisine**

LEARNING OBJECTIVE: Objective Of this course is to teach them about Indian and international (Italian, Spanish, French, Chinese and Japanese) ethnic cuisines.

The learners will be able to:

- After completion of this unit student will be able to list the features of Indian cuisine and its early development of regional Indian menus.
- After completion of this unit student will be able to define the features of French, Spanish, Italian cuisine, its History and modern development region wise.
- And will be able to state the preparation methods of Icing, Butter cream and meringue based sponge, as stated in the syllabus.

PAPER, UNIT, TITLE	SUBTOPICS	Total No. Hrs	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	Features of early Indian cuisine Development of Indian Cuisine between 1st and 16th centuries. Features, tradition, cookware, ingredients, festive cooking, and popular menus of following cuisines: ● Northern India: North-west frontier, Kashmiri, Delhi, and Avadhi (Dum Pukht) ● Eastern India: Bengal, Bihar, Orissa, and Arunachal Pradesh Western India: Goa, Gujrat, Kolhapuri, Malwani, Konkan and Agri –Koli. ● Southern India: Karnataka, Kerala, Hyderabadi and Chettinad	15hrs		1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet
	French Cuisine ● Introduction to classical cuisine ● Provinces of France and its classical dishes. ● Key cooking terms of /French cuisine: Aioli Confit Florentine Gretine	15hrs		1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet

	Brule Fumet Abats Canard Coq au vin Jambon Tartare Tornedos Crème Brulee Glace Alsacienne Bourguigonne Normande Bearnaise Bordelaise Rouille Description and example (Traditional dishes) of French Classical menu. **Spanish Cuisine** History and Development of Spanish Cuisine Meal Routines Spanish Regional Variations **Italian Cuisine** History and development of Italian Cuisine. Meal structure. Main ingredients used in Italian cuisine Regional Variations			
	Introduction to Chinese Cuisine History and development of Chinese Cuisine. Meal structure. Main ingredients used in Chinese cuisine Regional Variations Introduction to Japanese Cuisine History and development of Japanese Cuisine. Main ingredients used in Japanese cuisine Regional Variations Dining Etiquette Bakery & Confectionary Icings Butter Creams- French, Italian, German Based Sponge-Dacquiose, Japonaise, Jaconde, Alhambra	15Hrs		

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NAME OF THE STAFF: **SAMIR KORGAONKAR** DEPARTMENT: **QUANTITY KITCHEN** CLASS: **S.Y.B.A.C.A.** SEMESTER: IV

MONTH: **NOVEMBER 2020 - APRIL 2021** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: REGIONAL INDIAN CUISINE AND LARDER

The learners will be able to:

- After completion of this unit student will be able to list the heritage of regional Indian cuisine availability of raw material and different community cuisine.
- After completion of this unit student will be able to state the staff organization duties and responsibilities of ladder staff and different larder products.
- After completion of this unit student will be able to state the advance ladder preparation, edible and non-edible display products.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	**REGIONAL INDIAN CUISINE** ● Heritage of Indian Cuisine ● Regional Commodities, Spices & Masalas (Wet & Dry) ● Geographical location, Historical background, Availability of raw material (seasonal), Equipment and fuel (special), Staple diet, Speciality Cuisine, ● Food prepared for festivals and occasions of the following states: - Madhya Pradesh, Maharashtra, North Eastern States, Rajasthan, Tamandu, Uttar Pradesh. ● Communities / Styles such as: Parsee, Bohra, Satvik, Malbari, Malwani, Konkani, Kohlapuri, Vidarbh (Varhadi) etc. ● Indian Gravies.	10 lectures	Prasad, Indian Curry's Morden cookery. Indian cookery by Maharaj Digvijay Singh Food production operations, quantity food production Indian cuisine, International cuisine and food production management and by Parminder Bali	1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet
		3 Lectures		1) Google Classroom 2) Google Slides

	Revision Lectures			3) Google Meet 4) Google Quiz
Unit II	**INTRODUCTION TO LARDER COOKERY** ● **Staff organization, duties and responsibilities and layout of:** Larder kitchen Larder products Introduction to Salad Composition of a Salad ● **Types of Salad** ➢ Vegetable Salads ➢ Meat and poultry salads ➢ Sea Foods Salads ➢ Fruit Salad ● **Salad dressing, proper dressing amount, handling and storage** ● **SANDWICHES:** Introduction Components of sandwiches Classification of sandwiches Guidelines on sandwich making. Garnishes Presentation Styles Popular sandwiches from around the world ● **Guidelines for preparing horsd‟oeuvre** Cold Horsd O‟euvres- Canapes Preparation of canapes Barquettes, Tartlets and Profiteroles. Dips Exotic Horsd O‟euvre Serving of Horsd O‟euvres	10 lectures	Prasad, Indian Curry's Morden cookery. Indian cookery by Maharaj Digvijay Singh Food production operations, quantity food production Indian cuisine, International cuisine and food production management and by Parminder Bali	1. Google Classroom 2. Google Slides 3. Video Links 4. Google Meet

	Revision Lectures	3 Lectures		1. Google Classroom 2. Google Slides

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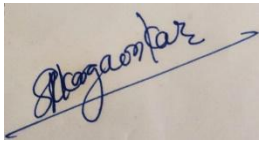
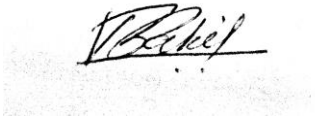
				3. Google Meet 4. Google Quiz
Unit III	**ADVANCED LARDER PREPARATIONS** ● Nonedible displays ● Mousse, parfait, roulade, aspic ● Chaudfroid ● Pate, terrines, pies, galantine, ballotine ● Ham, bacon and gammon ● Forcemeat, brine cure and marinade ● Sausages.		Prasad, Indian Curry's Morden cookery. Indian cookery by Maharaj Digvijay Singh Food production operations, quantity food production Indian cuisine, International cuisine and food production management and by Parminder Bali	1) Google Classroom 2) Google Slides 3) Google Meet 4) Google Quiz
	Revision Lecture	4 Lectures		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Hotel Management – Principle of Management CLASS: SY BACA

SEMESTER: III

MONTH: July to November ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE: To understand the management process function & principles.

The learners will be able to:

- The basic **principle of management** with management process functions and principle. Students will also learn the idea about of new development in management.
- The students will be able to describe and discuss the elements of effective management.
- The students will be able to discuss the elements of effective management like leadership, directing, motivating within the contemporary organization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	**Introduction to Management** Meaning, Definition of Management Six M"s of Management Features & Importance of Management Management is Art, Science and Profession Managerial skills – roles Levels of Management and its Functions Concept of PODSCORB	15	Principles of Management – P.C. Tripathi & Reddy Management Principles & Practices – Dr. M Sakhthivel Murugan Management & Organizational	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	Frederick Winslow Taylors‟s Scientific Management Henri Fayol‟s Principals of Management		Development – Micheal Vaz & Meeta Seta Principle of Management – Harold Koontz	
UNIT – 2	**Planning & Organizing** Planning Definition, nature and importance of Planning Elements of Planning Planning process Limitation of Planning Organizing Definition , nature of Organising Importance of Organizing Organization structure : meaning and factors of Organization Structure Importance of Organization structure Types of Organization Structure : Formal and Informal Formal Organization Structure Informal Organization Structure Departmentation : Meaning And Types Formal Organization Structure Span of control: Meaning and importance Centralization : Meaning, Features and Factors Decentralization : Meaning, and Factors Delegation: Meaning and Relationship	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

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UNIT -3	**Directing, Leadership, Co-ordination, Controlling & MBO** Directing Meaning and Principals of Directing Leadership Definitions and Features of Leadership Leadership Qualities of A Good Leader Motivation Maslow‟s hierarchy of needs, Hertzberg's theory of motivation Co-ordination Meaning, Importance of Co-ordination Steps in Effective Co-ordination Controlling Meaning, Importance of Controlling Steps in Control Process MBO Definition and Features of MBO Process of MBO	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **LEJESH KELOTH** DEPARTMENT: **HOTEL MANAGEMENT** CLASS: **S.Y.C.A** SEMESTER: V**I**

MONTH: **NOVEMBER TO APRIL** ACADEMIC YEAR: 2021-22 SUB: **PRINCIPLES OF HOTEL ACCOUNTANCY**
LEARNING OBJECTIVE: The student will be able to understand the basics of accounting concepts and also its application in practical life.
The learners will be able to: Understand the concept of accountancy, application of accounting concepts in their practical life.

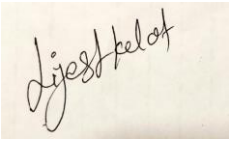
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Accounting & Double Entry Book-Keeping	1. Introduction to Accounting & Double Entry Book-Keeping: 1.1 Terms 1.2 Nature, Importance, Objectives & advantages of accounting 1.3 Classification of Accounts 1.4 Applying Debit & Credit rules to a Transaction.	03		● White Board ● Notes
	2. Journal 2.1 Importance of Journal & its format 2.2 Narrations 2.3 Journalising simple & compound entries 2.4 Practical problems	04		● White Board Notes
	3. Ledger 3.1 importance of ledger & its format	03		● White Board Notes
	4. CASH BOOK 4.1 contra entries 4.2 practical problems 4.3 types of bank account, types of cheques	05		● White Board

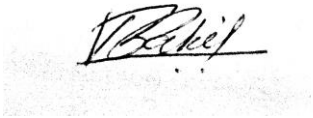
				Notes
Unit- 2 Subsidiary Books	1 Subsidiary Books 1.1 Advantages of subsidiary Books 1.2 Types of subsidiary Books 1.3 Simple Practical problems on Purchase Book, Sales Book, Purchase – Return Book & Sales Return Book. 2. Elements of cost & concept of Profit 2.1 Material cost (food & Beverage), Labour cost, overhead cost, Gross Profit, After wage profit & Net Profit. 2.2 Practical Problems 3 Trial Balance 3.1 Importance of Trial Balance 3.2 Net format of T.B	03 06 05 01		● White Board Notes
UNIT –III Capital & Revenue Expenditure & Deferred Revenue Expenditure	1. Capital & Revenue Expenditure & Deferred Revenue Expenditure 1.1 Nature of Capital & Revenue Expenditure 1.2 Nature of Deferred Revenue Expenditure 1.3 Examples 2. Final Accounts of sole – Trader (with Adjustments) 2.1 Importance, Purpose & Need for preparation of Final accounts. 2.2 Practical Problems covering the following adjustments:- Closing stock	01 10		● White Board Notes ● White Board Notes

	Prepaid Expenses Outstanding Expenses Depreciation Bad Debts & Provision for Bad debts 3. Break Even Analysis :- 3.1 Variable cost, fixed cost & semi variable cost. 3.2 Contribution, Profit/Volume Ratio & Break Even Point. 3.3 Simple Practical Problems	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO ALL THE UNITS: 45 HOURS

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KIRTI TUSHAR CHALKE **DEPARTMENT:** HOTEL MANAGEMENT **CLASS: S.Y BACA**

SEMESTER: III **SUBJECT: NUTRITION AND FOOD SCIENCE**

MONTH: ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE: To make students aware about nutritional facts about various products and balanced diet and various new trends in diet.

The learners will be able to:

- After completion of this unit students will be able to state the relation between food and various factors influencing eating habits.
- After completion of this unit students will be able to state the breakup of protein carbohydrate and fat component of food.
- After completion of this unit students will be able to understand the basic need of vitamins and minerals.
- Students will be able to cater new trends in diet

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1.1 NUTRITION** Definition Relation of food & Health Malnutrition, under nutrition, over nutrition, diet, kilo calories, health. Food & Its Functions Psychological Functions – Physiological Functions Social Functions Factors affecting food intake & Food Habits - Geographical Reasons - Economical Reasons - Religious Reasons - Social Reasons Classification of Nutrients Digestion, Absorption & Metabolism of Food	7 HRS	Basic Cookery – Daniel R. Stevenson Modern Cookery for Teaching & Trade – Thangam Philip	1. GOOGLE MEET 2. POWER POINT PRESENTATION 3. GOOGLE CLASSROOM 4. YOUTUBE VIDEOS 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS

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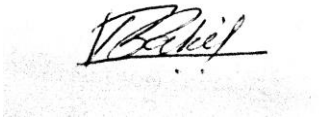
UNIT 2	**2.1 CARBOHYDRATES** Classification & Composition Functions, Daily Requirements & Sources Excess & Deficiency Uses in food Preparation (gelatinization, gel formation, dextrinization, gluten formation & Caramalization **2.2 PROTEINS** Classification & Composition Functions Requirements & Sources Excess & Deficiency Uses in food preparation Effect of Heat (Denaturation, Coagulation) Gel Formation Foaming **2.3 FATS & OILS** Classification & Composition Functions, Requirements & Sources Excess & Deficiency Types, Sources & Uses Factors causing deterioration	15 HRS	Food & Beverage Management – Davis & Stone Published by Butterworth-Heinemann Ltd. Food Preparation & Cooking – Stanly Thorues	1. GOOGLE MEET 2. POWER POINT PRESENTATION 3. YOUTUBE VIDEOS 4. GOOGLE CLASSROOM 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS 7. ASSIGNMENT
UNIT 3	**3.1 VITAMINS, MINERALS, WATER & COLLOIDS** Functions Sources Deficiency & Excess Fat Soluble & Water soluble Vitamins (A,D,E,K,B1,B2,B3,C) Minerals (Ca,P,Na,K,Fe,I,FI) Importance, Balance & Sources Cooking Losses & Prevention **3.2 BALANCED DIET** Introduction Recommended Dietary - Allowances - RDAs for Specific Nutrients Basic Food Groups - Cereals & Millets Group - Protein or body building Group	**7.5 HRS** **7.5 HRS**	Food Production Operations – Parvinder S. Bali-Oxford Publication	1. GOOGLE MEET 2. POWER POINT PRESENTATION 3. YOUTUBE VIDEOS 4. GOOGLE CLASSROOM 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS 7. ASSIGNMENT

	- Protective Food Group - Secondary Protective Food Group Food Pyramid- Bread, Grains, Cereals & Pasta from the base - Fruits & Vegetables - Beans, Eggs, Lean Meat & Fish - Dairy Products - Fats & Sweets New Food Pyramid **3.3 ORIENTATION TO SPECIAL NUTRITIONAL REQUIREMENTS** Introduction and need of special diet Special Nutritional Requirements - Gluten free - Sugar free- Vegan - Anti-Allergen Diet (mushroom, nuts, lactose, sea-food) - High Protein - Low fat			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45HRS

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: I

MONTH: **JULY 2019 - NOVEMBER 2019** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Student should be able to Identify the role of the Food and Beverage Service department and explain its organization structure and importance.
- Explain how "moments of truth" affect guests, staff members, and managers, and describe the value of guests and staff members to a food service operation.
- Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	**1.** INTRODUCTION TO HOTEL AND CATERING INDUSTRY 1.1 Role of catering establishment in travel / tourism industry 1.2 Types of F& B operation (Classification). Commercial (residential / Non Residential) • Welfare • Institutional • Transport (Roads, Railways, Airlines, Marine) 1.3 Structure of hospitality industry and career opportunities	4 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question
	2. DEPARTMENTAL ORGANISATION AND STAFFING 2.1 Organization of F & B Department of a Hotel (English & French) 2.2 Etiquette & Attributes of an F & B Personnel. 2.3 Duties and responsibilities of F & B Staff.	5 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question

	a) F & B Manager. b) Banquet manager. c) Outlet Manager (All day dining/ Bar/ In Room Dining/Specialty Restaurant, etc.) d) Senior captain/ Captain/ Supervisor. e) Steward. f) Sommelier. g) Hostess. h) Cashier. 2.4 Departmental Relationship of F& B with other Departments.			
	Revision Lectures	3 Lectures		1) Classroom Theory Test 2) Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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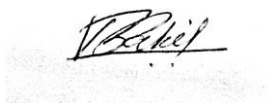

SIGNATURE OF THE H.O.D.

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: I

MONTH:**JULY 2019 - NOVEMBER 2019** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Identify the operational and Auxiliary areas as well as equipment's used in the Food and Beverage department.

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- Understand the various service methods and procedures followed in the department.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II	1. OPERATIONAL & AUXILLARY AREAS OF FOOD AND BEVERAGE DEPARTMENT: IMPORTANCE & LAYOUTS a) Coffee shop b) Snack bar/ counter service c) Kiosks d) Specialty restaurant/ theme restaurant e) Banquet operations/ outdoor catering f) In-Room Dining g) Dispense Bar / Discotheque/ night club/ pub h) Pantry/Still room i) Kitchen stewarding j) Silver room k) Linen room l) Vending machine	5 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question
	2. FOOD AND BEVERAGE SERVICE EQUIPMENT 2.1 Classification of equipment. (Familiarization of equipment). 2.2 Criteria for selection and requirements. • Tableware/ silverware (cutlery/ hollowware/flatware) • Glassware • Crockery • Bar equipment(For all of the above Brands, Measures & Quality suppliers) • Special equipment with their uses. • Furniture (Tables/Chairs/Trolleys/Dumb Waiter) • Linen.	7 Lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question

	• Light and décor • Care and maintenance of equipment. • Napkin folds. 2.3 Table d' hôte, A'la carte Mis-en –place, Mis -en –Scene			
	Revision Lectures	5 Lectures		1. Classroom Theory Test 2. Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

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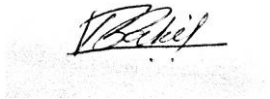

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: I

MONTH: **JULY 2019 - NOVEMBER 2019** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Understand the various service methods and procedures followed in the department.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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HOTEL & TOURISM MANAGEMENT STUDIES

Unit III	1. DINING SERVICES METHOD AND PROCEDURES 1.1 Different methods of services a. Table service • Silver service/ English service • American/ Plated • Family • Russian • French/ butler • Guéridon b. Bar Counter c. Assisted Service • Carvery • Buffets d. Self Service •Cafeteria: a).Counter b).free-flow c).Echelon d).Supermarket e. Single point service •Take-away •Drive through •Fast food •Vending •Kiosk •Food court •Bar f. Specialized (in-situ) •Tray •Trolley •Home delivery •Lounge •Room •Drive in	9 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question

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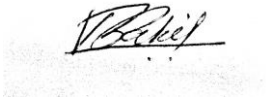
	1.2 Special Service • Formal Service • Wave service • Carlton club service 1.3a. Rules to be observed while laying the table. b. Rules to be observed while waiting at the table. c. Dos & don’ts in a restaurant			
	Revision Lectures	5 Lectures		1) Classroom Theory Test 2) Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

SIGNATURE OF THE STAFF



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VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: II

MONTH: **NOVEMBER 2019- APRIL 2020** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- The different types of Menus and principles of menu planning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	**1.** MEALS AND MENU PLANNING 1.1 Menu – Origin, definition & objectives 1.2 Types of meals (Breakfast, Brunch, Lunch, Afternoon tea, High tea, Dinner) Types of Menu a. A la c arte b. Table d' hote c. Cyclic menu d. Banquet menu e. Carte du jour / plat du jour f. Californian menu g. Take-away Other types of menu a) Children's menu b) Club menu c) Ethnic menu d) Health menu e) Spa Menu f) Ayurvedic Menu 1.4 Principles of Menu planning	7 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question

	1.5 Breakfast: English, Continental, American, Indian 1.6 Types of Tea Service: Full Afternoon Tea, High Tea.			
	Revision Lectures	3 Lectures		1) Classroom Theory Test 2) Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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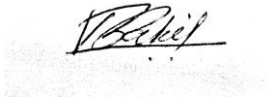

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: II

MONTH: **NOVEMBER 2019- APRIL 2020** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

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The learners will be able to:

- Sequence and course in the French classical menu also identify general accompaniments.
- Types, storage and service of Tobacco

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II	1.FRENCH CLASSICAL MENU 1.1 a. Sequence and Courses. b. General Accompaniments. 1.2 Ice creams: Types & categories of Ice creams	6 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question
	2.TOBACCO a) Introduction to Cigars and cigarettes. b) Types of tobacco c) Shape, size, color & Brand names with country of origin.	7 Lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question
	Revision Lectures	5 Lectures		1. Classroom Theory Test 2. Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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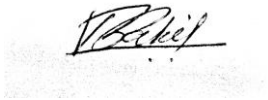

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VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: II

MONTH: **NOVEMBER 2019- APRIL 2020** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Types, storage and service Non alcoholic beverages.
- Simple control system followed in a restaurant.

PAPER, UNIT,	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TITLE				
Unit III	1.1 NON ALCOHOLIC BEVERAGES a. Definition of beverages b. Classification chart –alcoholic & non alcoholic drinks. c. Stimulating -Tea, Coffee & Cocoa, (origin, manufacture, Method of preparation, types & brands) d. Nourishing -health drinks e. Refreshing –juices, squashes, crushes, syrups & aerated water Table Water (origin, types & brands) & carbonated water.	9 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question
	1.2 SIMPLE CONTROL S YSTEMS. a. Restaurant reservation system b. KOT Checking System c. Types of KOT / BOT d. Method of billing (manual & computerized)	4 Lectures		1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question
	Revision Lectures	4 Lectures		1) Classroom Theory Test 2) Viva

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

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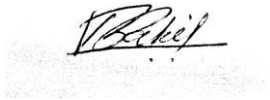

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Principle of Management – Hotel Management CLASS: FY BSc HS

SEMESTER: II

MONTH: November to March ACADEMIC YEAR: **2019 -2020**

LEARNING OBJECTIVE: To learn about the emerging Indian corporate world and global phenomenon with stress upon hospitality Industry.

The learners will be able to:

- To train the student as future managers and make them understand the working of an organisation.
- Teaching through PowerPoint presentations, case studies, activities, brain storming sessions, SWOT/PEST analysis etc.
- Trying to bridge the gap between management studies and real corporate world through real time stories from newspapers, journals and business magazines, books.
- Encouraging students to read more so as to refine their analytical power and sharpen business sense and become more aware of the business environment.
- Opportunity to participate in business discussions, article/book reviews and presentations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	1. INTRODUCTION TO MANAGEMENT 1.1 Evolution of management 1.2 Definitions and Importance of Management 1.3 Management as a Science and Art	15	Principle of Management – P C Tripathi & Reddy	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation

	1.4 Principles of Management (14 principles of Fayol) 1.5 Levels of Management and their functions 1.6 Managerial skills 1.7 Functions of Management 1.8 Process of communication 1.9 Business communication 2. PLANNING 2.1 Definition and Characteristics 2.2 Planning Process (Steps in Planning) 2.3 Essentials of a Good Plan 2.4 Vision and mission Statements 2.5 Planning with relation to hospitality industry 2.6 Meaning and Process of MBO 2.7 Meaning and steps in Decision Making		Harold Koontz – Principle of Management	5. PDF 6. Word 7. White Board 8. Projector 9. Discussion
	3. ORGANIZING 3.1 Meaning and Process of Organizing 3.2 Formal and Informal Organization and Distinction 3.3 Span of control (Meaning and Importance) 3.4 Tall and Flat Organization 3.5 Definition and Process of Delegation 3.6 Centralization and Decentralization of Authority 3.7 Departmentation and Basis of Departmentation 3.8 Organisation chart 3.9 Closed vs open system of organisation 3.10 Line and Staff organization	15	Management Principles and Practices – Dr.M.Sakthivel Murugan	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

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	4. STAFFING AND COORDINATION 4.1 Meaning and Imporance of Staffing 4.2 Internal and External Sources of Recruitment 4.3 Coordination - As an essence of Management 4.4 Principles of Coordination			
	5. DIRECTING, MOTIVATING AND LEADING 5.1 Meaning and importance of Directing 5.2 Element of Directions / Components 5.3 Definition of Motivation and factors 5.4 Maslow's Need Hierarchy Theory 5.5 Mc Gregor's Theory X and Theroy Y 5.6 Definition of Leadership and Leader 5.7 Qualities of a Leader 5.8 Leadership Styles 5.9 Leaders from hospitality industry 5.10 Leadership theory 6. CONTROLLING 6.1 Meaning 6.2 Steps in Control process 6.3 Types of control:feed forward,feedback,concurrent 6.4 Time Management	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Hotel Management – Principle of Management CLASS: SY BACA

SEMESTER: III

MONTH: July to November ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE: To understand the management process function & principles.

The learners will be able to:

- The basic **principle of management** with management process functions and principle. Students will also learn the idea about of new development in management.
- The students will be able to describe and discuss the elements of effective management.
- The students will be able to discuss the elements of effective management like leadership, directing, motivating within the contemporary organization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	**Introduction to Management** Meaning, Definition of Management Six M‟s of Management Features & Importance of Management Management is Art, Science and Profession Managerial skills – roles Levels of Management and its Functions Concept of PODSCORB Frederick Winslow Taylors‟s Scientific Management Henri Fayol‟s Principals of Management	15	Principles of Management – P.C. Tripathi & Reddy Management Principles & Practices – Dr. M Sakhthivel Murugan Management & Organizational Development – Micheal Vaz & Meeta Seta	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

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			Principle of Management – Harold Koontz	
UNIT – 2	**Planning & Organizing** Planning Definition, nature and importance of Planning Elements of Planning Planning process Limitation of Planning Organizing Definition , nature of Organising Importance of Organizing Organization structure : meaning and factors of Organization Structure Importance of Organization structure Types of Organization Structure : Formal and Informal Formal Organization Structure Informal Organization Structure Departmentation : Meaning And Types Formal Organization Structure Span of control: Meaning and importance Centralization : Meaning, Features and Factors Decentralization : Meaning, and Factors Delegation: Meaning and Relationship	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

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UNIT -3	**Directing, Leadership, Co-ordination, Controlling & MBO** Directing Meaning and Principals of Directing Leadership Definitions and Features of Leadership Leadership Qualities of A Good Leader Motivation Maslow‟s hierarchy of needs, Hertzberg's theory of motivation Co-ordination Meaning, Importance of Co-ordination Steps in Effective Co-ordination Controlling Meaning, Importance of Controlling Steps in Control Process MBO Definition and Features of MBO Process of MBO	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KIRTI T. CHALKE **DEPARTMENT**: FOOD SAFETY AND NUTRITION CLASS: **FY.Bsc.HS**

SEMESTER: **I** MONTH: **JUNE TO NOVEMBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE:

Objective of this course is to familiarize the students with importance of hygiene and Food Safety in Hospitality Industry

The learners will be able to:

- To learn about the importance of hygiene & sanitation in the catering industry
- To get acquainted with the food standards.
- To learn about ways to minimize food poisoning and infections.
- To understand function, sources & deficiency of nutrients.
- To gain basic knowledge of nutrition
- To gain knowledge about maintenance of good health.
- To understand the changes brought about in food nutrients during processing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1. INTRODUCTION TO HYGIENE** 1.1 Rules & importance of hygiene 1.2 Personal Hygiene 1.3 Cleaning of premises 1.4 Pest Control 1.5 Waste disposal 1.6 Dishwashing methods 2.HACCP 2.1 Introduction 2.2 Importance 2.3 VII Critical Control Points	**15 HRS**	Hobbs, Betty & Roberts, Food Poisoning and Food Trickett Jills Food Hygiene For FOOD HandlersHobbs, Loken Joan How To Prevent Food, The HACCP Food Safety Manual	White board PPT Notes Videos

	3.MICROBES 3.1 Introduction (Bacteria, Yeast, Mould) 3.2 Classification 3.3 Factors for growth 3.4 Role of microbes in manufacture of fermented foods (dairy products, Veg. & bakery preparations, alcoholic Bev., vinegar, fermented Indian foods)			
Unit 2	**FOOD BORNE ILLNESS** 1.1 Natural Toxins (Kesari Dal, Potatoes, Mushrooms, Shell Fish, Peanuts) 1.2 Chemical (Tin, Copper, Arsenic, Lead) 1.3 Bacterial toxins (staphylococcus, salmonella, Clostridium perfringens, Clostridium botulinum) 1.4 Food poisoning & Infections • Definitions • Food contamination & Spoilage • Differentiation • Examples **FOOD ADULTERATION** 2.1 Definition and types 2.2 Test to detect (coffee, semolina, flour, ghee, butter, margarine, oil, milk, turmeric, coriander powder, pepper corn , meat etc. 2.3 Food standards in India (PFA, FPO, MPO, BIS-ISI, AGMARK, ISO) **FOOD ADDITIVES** 3.1 Colours& Flavours	**15HRS**	• Food & Nutrition Vol-I • Food Science & Nutrition • Food additives • Food Preservation	White Board PPT Notes Videos

	3.2 Browning reactions-causes, desirable & undesirable effects) **FOOD PRESERVATION** **Methods of Preservation** 4.1 Natural & Chemical Preservation 4.2 Low temperature (Refrigeration, Freezing) 4.3 High Temperature (Pasteurisation, Sterilization, Canning) 4.4 Irradiation			
Unit 3	**INTRODUCTION TO NUTRITION** 1.1- Definitions(Food, balanced diet, nutrition, over nutrition, under nutrition, malnutrition, health) 1.2 - Balanced diet-Food pyramid 1.3 - Meal planning steps **CARBOHYDRATES** 2.1 - Classification & composition 2.2 - Functions & requirements, sources 2.3 - Excess & Deficiency 2.4 -Uses in food preparation (Gelatinization, Gel formation, Dextrinization, Gluten formation, Caremelization) **FATS&OILS** 4.1 - Classification & Composition 4.2 - Functions & requirements, Sources 4.3 - Excess & Deficiency 4.4 - Types, Sources, Uses 4.5 - Factors causing deterioration 4.6 - Rancidity	**15 Hrs**	• Food & Nutrition Vol-I • Food Science & Nutrition	White board PPT Notes

	4.7 - Flavour reversion 4.8 - Shortening 4.9 –Polymerisation **PROTEINS** 3.1 - Classification & Composition 3.2 - Functions & requirements, Sources 3.3 - Excess & Deficiency 3.4 - Uses in food preparation 3.5 - Effect of heat (Denaturation, Coagulation) 3.6 - Gel formation 3.7 – Foaming **VITAMINS, MINERALS, WATER & COLLOIDS** 5.1 - Functions 5.2 - Sources 5.3 - Deficiency & Excess 5. 4 - Fat soluble & water soluble Vitamins (A,D,E,K,B1,B2,B3,C) 5.5 - Minerals (Ca,P, Na,K,Fe,I,Fl) 5.6 - Importance, balance & Sources 5.7 - Cooking losses & prevention 5. 8 - Definitions (sol, gels, foam, emulsion) 5. 9 - Examples(roasting, grilling, frying, baking, boiling, poaching, microwave) 5.10 - Importance in food industry			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 hrs

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Sumit S.Pote** DEPARTMENT: **Information Technology** CLASS: F.Y.H.S SEMESTER: I

MONTH: **August- November** ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Computer Fundamentals	5 Parts of Computer • Difference between Hardware & Software • Difference Between Data and Information • Types of Computers – Server (Types), Clients (Types of Portable Computer) • Application Software • System Software • Software Copyright – Freeware, Shareware, Licensed	2		Google classroom White board Quiz Google slide Jam board
	Application Software – Word Processor, Spreadsheet, Database Management, Presentation, Media, Outlook, Browser and Utility Software like Acrobat Reader • System Software – Operating System (Windows, Linux, Android) • Device Driver • Utility Software – VLC Player, File Converter	3		Google classroom White board Quiz Google slide Jam board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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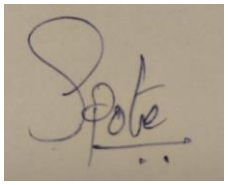

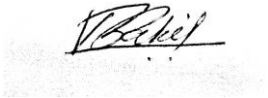

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Sumit S.Pote** DEPARTMENT: **Information Technology** CLASS: F.Y.H.S SEMESTER: I

MONTH: **August- November** ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	**Hardware** • Introduction of Central Processing Unit • Processor – Intel, AMD, Clock Speed • Input Devices – Keyboard, Mouse, Mic, Scanner, Barcode Reader, RFID, Touch Screen • Output Devices – Displays (CRT, TFT, LCD, Plasma, LED, Projector) • Display Resolution • Printers – Inkjet, Laser, Thermal • Storage Devices – Primary (RAM & ROM), Secondary (HDD, Flash Drive, USB, CD/DVD, Blue Ray, Media Players)	3		Google classroom White board Quiz Google slide Jam board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3

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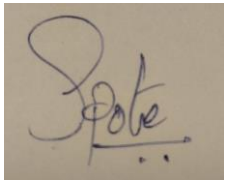

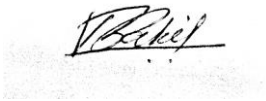

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Sumit S.Pote** DEPARTMENT: **Information Technology** CLASS: F.Y.H.S SEMESTER: I

MONTH: **August- November** ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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UNIT 3	Networking • Types of Network (LAN, WAN, MAN) • Topology (Bus, Star, Ring, Mesh & Tree) • Network Hardware – (Cables – RJ45, RJ11, MTRJ, Switch, Routers, Access Point, Modem) • IP and MAC Address, Subnet, Gateway, DNS • Understanding Network Address & Node Address • Network Security – Firewalls (Hardware & Software) • Bandwidth	4		Google classroom White board Quiz Google slide Jam board
	Internet • Intranet, Internet & Extranet • WWW, HTTP, Domains • VPN & VoIP • Search Engines • ISP & Bandwidth	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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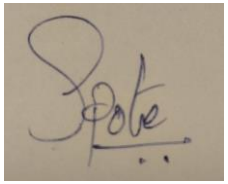

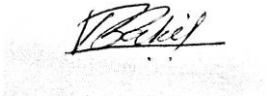

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dipti Dilip Khadpe.** DEPARTMENT: **Room Division Management-I**

CLASS: **F.Y.BSc.HS.** SEMESTER: **I.**

MONTH: **Academic Year 2019-2020(July-October)** SUBJECT: **Housekeeping.**

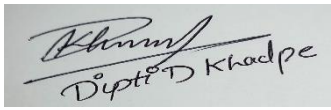
LEARNING OBJECTIVE:

The student will be able to identify the role of the housekeeping department and explain its organization structure and importance.
The student will be able to list the basic cleaning equipment's, cleaning agents and explain their use.
Will be able to perform basic cleaning procedures of various surfaces.

The learners will be able to understand organization structure, types of cleaning equipment and agent and surface.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I	1. INTRODUCTION TO HOUSE KEEPING DEPARTMENT	15	Hotel Housekeeping Operations and Management (G. Raghubalan & Smritee Raghubalan – Oxford University Press).	1. PPT 2. VIDEO
II	1. ORGANIZATION OF HOUSEKEEPING DEPARTMENT	09		1. PPT
	2. CLEANING EQUIPMENT	06	Professional Management of Housekeeping Operations – (Thomas J. A. Jones – John Wiley & Sons)	1. PPT 2. VIDEO
III	1. CLEANING AGENTS	08		1. PPT 2. VIDEO
	2. CLEANING & POLISHING OF DIFFERENT SURFACES	07		1. PPT 2. VIDEO

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HOURS.



SIGNATURE OF THE STAFF

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I	1. CLEANING OF DIFFERENT AREAS	**15**	Hotel Hostel and Hospital Housekeeping – Joan Branson & Margaret Lennox	**1. PPT**
II	1. TYPES OF ROOM SERVICES	**03**	Housekeeping Management – Margaret Kappa, Aleta Nitschken, Patricia B. Schappert – A.H. & L.A.	**1. VIDEO 2. PPT**
	2. MAIDS SERVICE ROOM / HOUSE KEEPING PANTRY	**04**		**1.VIDEO 2. PPT**
	3. GUEST ROOM SUPPLIES & AMENITIES	**04**		**1. VIDEO 2. PPT**
	4. FORMATS USED IN THE HOUSEKEEPING DEPARTMENT	**04**		**1. PPT**
III	1. LOST & FOUND	**04**	Housekeeping Operations, Design and Management – Malini Singh & Jaya B. George – Jaico Publications	**1.VIDEO 2. PPT**
	2. KEY & KEY CONTROLS	**02**		**1.VIDEO 2. PPT**
	3. SITUATION HANDLING	**06**		**1.VIDEO**
	4. PEST CONTROL	**03**		**1. VIDEO 2. PPT**

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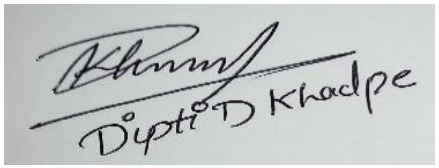
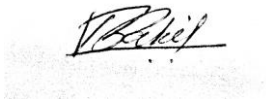
HOTEL & TOURISM MANAGEMENT STUDIES

The learners will be able to understand organization structure, types of cleaning equipment and agent and surface.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HOURS.





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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: RAMEEZ SHAKEEL PATEL **DEPARTMENT**: Food Production and Patisserie I

CLASS: FY.Bsc.Hs SEMESTER: I

MONTH: ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE:

- To inculcate a right attitude and the required basic knowledge and technical skills in the art of culinary and the food production department.
- To introduce the various equipments and utensils used in the kitchen.

The learners will be able to:

- The learners will be able to:
- Define microbes and conditions for growth of microbes
- List the importance and basic principles of HACCP
- List micro organisms
- Define Food Adulteration and adulterants
- State the types and uses of Food Additives
- State the importance of Hygiene
- List various methods of Food Preservation
- State the regulations and regulating bodies governing Food Safety and Hygiene.

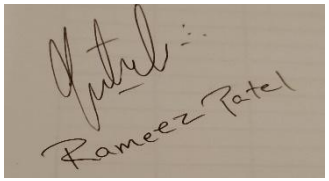
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1 Introduction to the Food Production Department** 1.1 Levels of Skills and Experience 1.2 Attitude and Behavior in the Kitchen 1.3 Kitchen Uniforms 1.4 Personal Hygiene 1.5 Safety Procedures for Handling Equipment **2 Culinary History and Culinary Terms**	**01.HRS** **02.HRS**	Thangam Philip – Modern Cookery I & II – Orient Longman – 2001 Auguste Escoffier – Ma Cuisine – Hamlyn – 2000 Digvijay Singh – Cooking Delight of the Maharajas –	1. POWER POINT PRESENTATION 2. WHITE BOARD AND MARKER 3. RELATED TOPIC VIDEOS 4. THEORY NOTES ALONG WITH QUESTIONS.

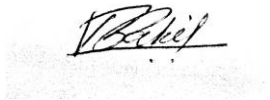
UNIT 2	(Explanation with Examples) Origins of Modern Cookery **3 Equipment and Hand Tools used in Kitchen & Different Types of Fuels used in Kitchen** 3.1 Hand tools and utensils used in Kitchen 3.2 Various Fuels used in the Kitchen 3.3 Advantages & Disadvantages of Various Fuels 3.4 Various Equipment used in the Kitchen **4 Introduction to Cooking** 4.1 Aims and Objectives of Cooking 4.2 Classification of Various Raw Materials according to Functions 4.3 Various Textures and Consistencies 4.4 Methods and Techniques of Preparation **5 Stocks** 5.1 Definition of Stock 5.2 Types of Stocks 5.3 Preparation (Recipe), Storage, Care and Precautions in Preparation **6 Culinary Terms**	**04HRS** **04.HRS** **02.HRS** **02.HRS**	Vakils, Feffer & Son's Ltd. – 1982 Philip Dowell & Adrian Barley – The Book of Ingredients – Mermaid Books – 1987 Wayne Gisslen – Professional Baking – John Wiley & Sons – 1994 Martha Day – Baking – Lorenz Books – 1999 M. J. Leto & Bode – The Larder Chef – Heinemann Publishing House – 1989 Parvinder S. Bali - Food Production Operations Thangam E. Philip - Modern Cookery for Teaching and Trade - 4th Vol. – 1996 Krishna Arora - Theory of Cookery – 2nd – 1992 Wayne Gisselen - Professional Cooking – 4th – 1992 Wayne Gisselen - Professional Baking – 2nd – 1994 J. C. Dubey - Basic Bakery - 1st – 1992 Kinton Ceserani - Theory of Catering – 7th – 1996 Bernard Davis - Food Commodities - 4th – 1998 Daniel R. Stevenson - Basic Cookery The Process Approach - 5th – 1997	
	7 Methods of Cooking 7.1 Various Methods of Cooking Foods (Roasting, Grilling, Frying, Baking, Boiling, Poaching, Microwave)	**04.HRS**		1.

	7.2 Principles of each Method and Precaution to be taken **8 Hierarchy and Kitchen Staffing** 8.1 Classical Kitchen Brigade 8.2 Modern Staffing in Various Category Hotels 8.3 Duties and Responsibilities of Various Chefs 8.4 Role and Duties of the Executive Chef 8.5 Inter-Departmental Cooperation and Coordination	**03.HRS**		
	9 Egg 9.1 Selection of Eggs 9.2 Structure of Eggs 9.3 Uses of Eggs 9.4 Nutritive Value of Eggs	**02.HRS**		
	10 Vegetables & Fruits 10.1 Classification of Vegetables 10.2 Colour Pigments in Vegetables and Effects of Heat, Acid and Alkali on each of them 10.3 Cuts of Vegetables 10.4 Classification of Fruits 10.5 Uses of Fruits 10.6 Salad & Salad Dressing	**04.HRS**		
UNIT3	**11 Bakery & Pastry Sugar** 11.1 Importance of Sugar 11.2 Types of Sugar 11.3 Cooking Stages and Temperature of Various Stages 11.4 Uses of Sugar	**02.HRS**		
	12 Sauces 12.1 Classification of Sauces / Composition 12.2 Mother Sauces and its Recipes (1 Liter) 12.3 Derivatives **13 Bakery & Pastry**	**04.HRS**		

	13.1 Bread Making Principles of Bread Making Role of Each Ingredient Simple Yeast Bread Baking Temperature & its Importance 13.2 Cookies Types of Cookies Methods of Preparation 13.3 Flour – Structure of Wheat Types of Wheat Types of Flour Milling of Flour Nutritive Value 13.4 Raising Agents Classification and Role of Raising Agents	**03.HRS** **02.HRS** **04.HRS**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: RAMEEZ SHAKEEL PATEL **DEPARTMENT**: Food Production and Patisserie

CLASS: FY.Bsc.Hs SEMESTER: 2

MONTH: ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE:

• To develop a keen interest in food production and to enable students to experiment, innovate and progressively produce a variety of preparation / dishes.

• To gain confidence to adapt to the technical skills and the art of preparing different menus, Indian as well as Continental.

• By the end of the second semester students should be confident enough in their skills which would boost their morale to take up the challenge of bulk cookery in the third and fourth semester

The learners will be able to:

- Define microbes and conditions for growth of microbes
- List the importance and basic principles of HACCP
- List micro organisms
- Define Food Adulteration and adulterants
- State the types and uses of Food Additives
- State the importance of Hygiene
- List various methods of Food Preservation
- State the regulations and regulating bodies governing Food Safety and Hygiene.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1.Culinary Terms with Explanation & Examples** **2.Layout of kitchen** 2.1 General Layout of the Kitchen 2.2 Receiving Area 2.3 Storage	**03.HRS** **03.HRS**	Thangam Philip – Modern Cookery I & II – Orient Longman – 2001 Auguste Escoffier – Ma	1. POWER POINT PRESENTATION 2. WHITE BOARD AND MARKER 3. RELATED TOPIC VIDEOS

UNIT 2	2.4 Wash up **3.Soups** 3.1 Classification with Examples 3.2 Consommé and Garnishes with their names (Any 10 common name) **4.Fish Mongery** 4.1 Classification of Fish with examples 4.2 Selection, Cooking & Storage of Fish 4.3 Local Names of Fin Fish and Shell Fish 4.4 Cuts of Fish **5.Poultry** 5.1 Cuts of Poultry 5.2 Selection and Uses of Cuts **6.Rice, Cereals & Pulses** 6.1 Introduction, Classification of Cereals and Pulses 6.2 Varieties of Rice and Byproducts 6.3 Nutritive Value of Various Cereals 6.4 Sprouts and Uses **7.Meat** 7.1 Introduction to Meat Cookery 7.2 Cuts of Lamb, Pork, Beef / Veal 7.3 Variety of Meats / Offal 7.4 Selection and Storage of Meats **8.Milk and Milk Products** 8.1 Introduction, Processing of Milk, Pasteurization, Homogenization,	**02.HRS** **02.HRS** **02.HRS** **03.HRS** **04.HRS** **05.HRS**	Cuisine – Hamlyn – 2000 Digvijay Singh – Cooking Delight of the Maharajas – Vakils, Feffer & Son's Ltd. – 1982 Philip Dowell & Adrian Barley – The Book of Ingredients – Mermaid Books – 1987 Wayne Gisslen – Professional Baking – John Wiley & Sons – 1994 Martha Day – Baking – Lorenz Books – 1999 M. J. Leto & Bode – The Larder Chef – Heinemann Publishing House – 1989 Parvinder S. Bali - Food Production Operations Thangam E. Philip - Modern Cookery for Teaching and Trade - 4th Vol. – 1996 Krishna Arora - Theory of Cookery – 2nd – 1992 Wayne Gisselen - Professional Cooking – 4th – 1992 Wayne Gisselen - Professional Baking – 2nd – 1994 J. C. Dubey - Basic Bakery - 1st – 1992 Kinton Ceserani - Theory of Catering – 7th – 1996 Bernard Davis - Food Commodities - 4th – 1998 Daniel R. Stevenson - Basic Cookery The Process Approach - 5th – 1997	4. THEORY NOTES ALONG WITH QUESTIONS.

	Milk in Various Forms e.g. Toned, Powder, Skimmed, Condensed & Evaporated. 8.2 Cream – Introduction, Processing & Types 8.3 Butter – Introduction, Processing & Types 8.4 Cheese – Introduction, Classification with Examples, Processing, Types, Cooking with Cheese and Uses.			
UNIT3	**9,Bakery & Pastry** **Shortening – Fats and Oils** 9.1 Saturated and Un-saturated Fats 9.2 Advantages & Disadvantages of Using Fats 9.3 Varieties of Shortening **10.Tea & Coffee** 10.1 Introduction 10.2 Producing Regions/Country 10.3 Types and Methods of Preparation 10.4 Popular Brands and Variety Available **11.Thickening Agents used in Indian Gravies** 11.1 Role of Thickening Agents **12.Indian Cookery** 12.1 History of Spices and Trade Routes 12.2 Basic Spices, Condiments and Masalas 12.3 Role of Spices in Indian Cuisine 12.4 Indian Equivalent name 12.5 Blending of Spices 12.6 Concept of Wet and Dry Masalas 12.7 Regional Varieties of Basic Masalas 12.8 Basic Composition of Some Important Masalas **13.Menu Planning** 13.1 History of Menu 13.2 Types of Menu 13.3 Menu Planning Principles	**03.HRS** **02.HRS** **01.HRS** **03.HRS** **02.HRS**		1.

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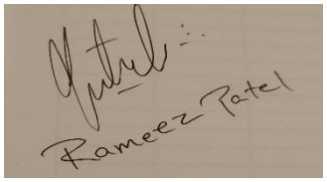
	14.Bakery & Pastry 14.1 **Pastries** • Classification of Pastries • Varieties • Role of Each Ingredient • Baking Temperature and Time of Each Pastry 14.2 **Pastry Cream** • Basic Pastry Cream • Use in Confectionery • Preparation and Care in Production 14.3 **Cocoa and Chocolate** • Introduction, Production and Manufacture • Varieties of Chocolates • Tempering of Chocolates	**04. HRS** **03.HRS** **03.HRS**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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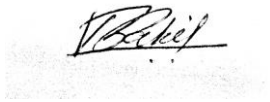

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Room Division Management (Front Office) CLASS: F.Y. BSc HS

SEMESTER: I

MONTH: July to November ACADEMIC YEAR: **2019 - 2020**

LEARNING OBJECTIVE: To introduce the students to the hotel & tourism Industry. Students would develop the necessary skill required as an efficient and effective receptionist and to handle situations and types of guest in the job.

The learners will be able to:

• Understand the appropriate organization structures and duties in the Front Office and related departments.
• Develop, prepare guest relations, and evaluate practical aspect with guests.
• Understand the role of public relations with hotel industry.
• Understanding the functioning of the Telecommunication department.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	**Introduction to the Hotel & Tourism Industry** ● An account of development & growth of hotel & tourism Industry in the World ● Development and growth of Hotel & Tourism Industry In India. **Classification of Hotels by** ● Location ● Architectural Design ● Number of rooms ● Ownership	15	Jatashankar Tiwari – Front Office Management. Sudhir Andrews – Hotel Front Office Training Manual.	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	● Pricing Plan ● Type of Clientele ● Duration of Guest Stay ● Facilities Offered ● Star ratings criteria in India (HRACC) ● Supplementary Accommodation			
UNIT – 2	**Tariff Structure** 1.Types of Rooms Single, Double, Twin, Hollywood twin, Interconnecting, Adjacent, Adjoining, Lanai, Penthouse, Duplex, Efficiency, Physically Challenged, Studio, Parlour, Hospitality Room, Suite (Types). 2.Tariff Fixation ● Check-in and Check-out basis, 24 hour basis, on the basis of competitor's rate, Night basis, Day rate. 3.Types of Meal Plans European, Continental, Bermuda Plan, Modified American Plan (Half- Board, Demi- Pension), and American Plan (Full-Board: En Pension). 4. Packages and Special Rates	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	Rack rate, Group rate, Volume rate, Government rate, FIT, Wholesale net rate, discounted rates, Seasonal rate, Crib Rate, Extra bed rate, Family rate, Crew rate, Week day/Weekend rates, Membership rates, Executives of the other units of the same chian, Corporate rate, Commercial rate, Advance purchase rate Package rate, Ad-hoc rate 5. Taxation • Luxury tax, Expenditure tax, Sales tax, Value added tax and other statutory taxes. • Service Charges. **Organisation of the Front Office Department** Organisation charts of • Small Hotel • Medium Hotel • Large Hotel Sections of the Front Office Department Inter and Intra departmental Co-ordination Job Specifications and Job Description • Front Office Manager • Duty Manager • Guest Relations Executive **Telecommunications**			

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UNIT – 3	Introduction • Types of Exchange- PBX, PABX, EPABX • Other Communication Equipment- Walkie- Talkies, Pagers, Mobile Phones, Telephone Instruments, Pay Phones, Facsimile. • Organisation of the Telecommunications department • Job descriptions of the Telecommunications department supervisor & Operator • Skills and Competencies of the Telephone Operator • General duties of a Telephone Operator • Internet Access- Introduction, Dial up access, High speed with wired access, High speed with warless access • Future of Hotel telephones- Voice-over-internet-protocol (VOIP) • AYS – at your service	15		1. Slides 2. Videos 3. Quiz 4. Power Point 5. Presentation 6. PDF 7. Word 8. White Board 9. Projector 10. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Room Division Management (Front Office) CLASS: FY BSc HS

SEMESTER: II

MONTH: November to March ACADEMIC YEAR: **2019 -2020**

LEARNING OBJECTIVE: The student should be able to understand the concept and functioning of room reservations, reception & guest services.

The learners will be able to: know the entire procedure of room reservations and its types, different situations of check in along with the guest services.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	RESERVATIONS • Sources of Reservations • Modes of Reservations • Types of Reservations • Systems of reservations • Overbooking • Job Description of Reservation Personnel	15	Jata Shankar Tiwari – Front Office Management Sudhir Andrews – Front Office Training Manual B K Chakravati – Front Office Management in Hotel	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

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UNIT – 2	RECEPTION • Profiling the guest • Guest Registration Process • Regular and Non Regular Guest • 'C'Form & 'F' From	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion
UNIT -3	GUEST SERVICES • Handling Guest Mail • Message Handling • Custody and Handling of Keys • Guest Paging • Safe Deposit Locker • Guest Room Change • Custody of Deposited Luggage	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms.Tammana Upadhyay** DEPARTMENT: **HOTEL MANAGEMENT** CLASS: F.Y.H.S SEMESTER: II

MONTH: NOVEMBER TO APRIL ACADEMIC YEAR: 2019-2020 SUB: COMMUNICATION SKILLS (ENGLISH & FRENCH)

LEARNING OBJECTIVE:

The learners will be able to: Have a good control over language.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	CONCEPT OF COMMUNICATION 1.1 Process of Communication / 1.2 Feed Back 1.3 Methods of Communication – Verbal / Non-Verbal 1.4 Channels of communication 1.5 Barriers of Communication 2 ORGANIZATIONAL COMMUNICATION 2.1 Upward, downward, lateral communication and their purposes functions, grapevine 2.2 Written communication – Memos, Circulars, notices **French** 1 Time, At the Office in a restaurant, Asking direction	4 2	•Business Communication – Meenakshi Raman and Prakash Singh •Business Correspondence and Report writing – R.K.Sharma and Krishna Mohan •Business Communication – Chaturvedi •High School English – Wren and Martin •Understanding Human Communication – Ronald B Adler and George Rodman (with CD) •Skills Development for Business and Management Students - Kevin Gallagher λE. J. Neather - Mastering of French I & II - Macmillan - 1982 λBridget Anfossy - Speak French Today - Augo - 1991	● Notes ● Whiteboard

			λR. Diez La Cortina - Cortina's French Method - Grosset & Dunlop - 1988 λMathuram Bondo - Modern French Course - D. C. Heath & Co. - .1983. λCourse de langue et civilizaiion Franchises. G. Mauger. λOxford French Dictionary	
UINT 2	BUSINESS COMMUNICATION 1.1 Planning the right look of a letter 1.2 Types of letters- quotations, orders, claim and adjustment, sales, application, complaint / apology REPORT WRITING 2.1 Types of Reports 2.2 Structure of a report 2.3 Types of Reports **(French)** 1 Receipes-put in the correct order, Translate to English, Making Tea, Coffee, Bechamel,Veloute, Simple soups and salads 2 Culinary Terms	05 10	•Business Communication – Meenakshi Raman and Prakash Singh •Business Correspondence and Report writing – R.K.Sharma and Krishna Mohan •Business Communication – Chaturvedi •High School English – Wren and Martin •Understanding Human Communication – Ronald B Adler and George Rodman (with CD) •Skills Development for Business and Management Students - Kevin Gallagher E. J. Neather - Mastering of French I & II - Macmillan - 1982	● Notes Whiteboard

			Bridget Anfossy - Speak French Today - Augo - 1991 R. Diez La Cortina - Cortina's French Method - Grosset & Dunlop - 1988 Mathuram Bondo - Modern French Course - D. C. Heath & Co. -.1983. Course de langue et civilizaiion Franchises. G. Mauger. Oxford French Dictionary	
UINT 3	GROUP COMMUNICATION 1.1 Types of meetings /Advantages and Disadvantages 1.2 Participants Responsibilities / Brain Storming 1.3 Structure of a meeting – Agenda and Minutes 2 PRESENTATION 2.1 Making effective presentation /Speaker's appearance and personality 2.2 Using Visual aids 3 INTERVIEWS 3.1 Purpose / Types 2 Hours 3.2 Candidate's preparation – GD / PI **(French)** 1 French Basic Conversation and Translation of Passages from French to English U	02 02 02 07	•Business Communication – Meenakshi Raman and Prakash Singh •Business Correspondence and Report writing – R.K.Sharma and Krishna Mohan •Business Communication – Chaturvedi •High School English – Wren and Martin •Understanding Human Communication – Ronald B Adler and George Rodman (with CD) •Skills Development for Business and Management Students - Kevin Gallagher	● Notes Whiteboard

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			E. J. Neather - Mastering of French I & II - Macmillan - 1982 Bridget Anfossy - Speak French Today - Augo - 1991 R. Diez La Cortina - Cortina's French Method - Grosset & Dunlop - 1988 Mathuram Bondo - Modern French Course - D. C. Heath & Co. -.1983. Course de langue et civilizaiion Franchises. G. Mauger. Oxford French Dictionary	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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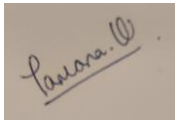
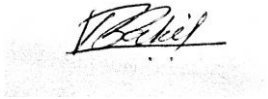




VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms.Tarika Patel** DEPARTMENT: **HOTEL MANAGEMENT** CLASS: **F.Y.H.S** SEMESTER: **II**

MONTH: **NOVEMBER TO APRIL** ACADEMIC YEAR: 2019- 2020 SUB: **PRINCIPLES OF HOTEL ACCOUNTANCY**

LEARNING OBJECTIVE: The student will be able to understand the basics of accounting concepts and also its application in practical life.

The learners will be able to: Understand the concept of accountancy, application of accounting concepts in their practical life.

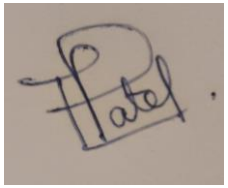
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Accounting & Double Entry Book-Keeping	1. Introduction to Accounting & Double Entry Book-Keeping: 1.1 Terms 1.2 Nature, Importance, Objectives & advantages of accounting 1.3 Nature & advantages of Double Entry Book-keeping 1.4 Classification of Accounts 1.5 Applying Debit & Credit rules to a Transaction.	03		● White Board ● Notes
	2. Journal 2.1 Importance of Journal & its format 2.2 Narrations 2.3 Journalising simple & compound entries 2.4 Practical problems	04		● White Board Notes
	3. Ledger 3.1 importance of ledger & its format 3.2 posting entries & balancing ledger accounts	03		● White Board Notes
	4. CASH BOOK 4.1 triple column cash book			

	4.2 contra entries 4.3 practical problems 4.4 types of bank account, types of cheques	05		● White Board Notes
Unit- 2 Subsidiary Books	1 Subsidiary Books 1.1 Advantages of subsidiary Books 1.2 Types of subsidiary Books 1.3 Simple Practical problems on Purchase Book, Sales Book, Purchase – Return Book & Sales Return Book. 2. Elements of cost & concept of Profit 2.1 Material cost (food & Beverage), Labour cost, overhead cost, Gross Profit, After wage profit & Net Profit. 2.2 Practical Problems 3. Bank Reconciliation Statement 3.1 Purpose of Preparing B.R.S 3.2 Advantages 3.3 Simple Practical Problems 4 Trial Balance 4.1 Importance of Trial Balance 4.2 Net format of T.B	03 06 05 01		● White Board Notes
UNIT –III Capital & Revenue Expenditure & Deferred Revenue Expenditure	1. Capital & Revenue Expenditure & Deferred Revenue Expenditure 1.1 Nature of Capital & Revenue Expenditure 1.2 Nature of Deferred Revenue Expenditure 1.3 Examples 2. Final Accounts of sole – Trader (with Adjustments)	01		● White Board Notes

	2.1 Importance, Purpose & Need for preparation of Final accounts. 2.2 Practical Problems covering the following adjustments:- Closing stock Prepaid Expenses Outstanding Expenses Depreciation Bad Debts & Provision for Bad debts	10		● White Board Notes
	3. Break Even Analysis :- 3.1 Variable cost, fixed cost & semi variable cost. 3.2 Contribution, Profit/Volume Ratio & Break Even Point. 3.3 Simple Practical Problems	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO ALL THE UNITS: 45 HOURS

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**



VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Tammana Updhyay** DEPARTMENT: CLASS: F.Y.BSC. H.S. SEMESTER: I

MONTH: ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE: Objective of this course is to enhance the communication skills in English/ French required of a Culinary Professional

The learners will be able to: Frame grammatically correct sentences in English

- Apply the correct conjugation of verbs in sentences
- Frame simple sentences in French

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit – I	The Sentence – Kinds of Sentences – Subject & Predicate The Phrase & The Clause Parts of Speech – Noun, Adjective, Pronoun, Verb, Adverb, Preposition, Conjunction, Interjection Noun – Kinds of Noun (Common, Proper, Collective, Abstract) The Noun : Gender (Masculine, Feminine, Common, Neuter) The Adjective – Kinds of Adjective, Comparison of Adjectives (Positive, Comparative, & Superlative Degrees. The Correct use of some Adjectives Articles - Use of Definite & Indefinite Articles Personal Pronouns – Forms of the Personal Pronouns **French:** Translate the Dialogue into English Culinary Terms – Translate to French using match the columns / crosswords	15	1.Business Communication- Meenakshi Raman & Prakash Singh 2. High School English- Wren and Martin 3. Business Communication- Chaturvedi	● Notes Whiteboard
Unit - II	The Verb Transitive & Intransitive Verbs Person & Number Active & Passive Voice Direct & Indirect Speech Tense (Past, Present & Future) Kinds of Adverbs The Preposition Kinds of Prepositions Using appropriate Prepositions The Conjunction Use of Appropriate Conjunctions Classes of Conjunctions The Interjection Meaning & Some Examples	15	1.Business Communication- Meenakshi Raman & Prakash Singh 2. High School English- Wren and Martin	● Notes Whiteboard

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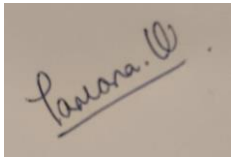
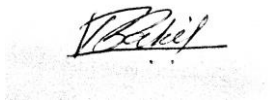
HOTEL & TOURISM MANAGEMENT STUDIES

	Punctuation Commonly confused words / Common Errors / Antonyms / Synonyms		3. Business Communication- Chaturvedi	
Unit-III	French Days, Months, Numbers, Seasons Plan a Five Course menu in French Newspaper reading – Current Affairs Comprehension Précis Writing Paragraph Writing Conversation / Role Play Public Speaking Make Negative, Make Plurals, Conjugate in the Present tense ; avoir, entrée, Faire, Manger, Boire, Mettre	15	1.Oxford French Dictionary 2.E.J. Neather- Mastering of French I & II- Macmillan- 1982	● Notes Whiteboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**





VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(THEORY)** CLASS: **S.Y.BSc HS** SEMESTER: **IV**

MONTH: **November to April** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of Front Office Operations.

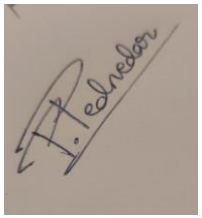
The learners will be able to: Students will learn required basic knowledge and technical skills in Front office operations.

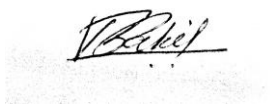
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Advanced Guest Cycle	**ADVANCED GUEST CYCLE** ● Group (Tourist/ Conference/ Convention) ● Crew (Airline- Layovers/ Cruise lines/ Cargo) Regular Guests ● Special Attention Guests ● (Handle With Care, Single ladies, unaccompanied children, Sr. Citizens, Disabled Guest)	8	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation
	GUEST ROOM CHANGE ● ROOM CHANGE PROCEDURES ● By Hotel (Upgrade/ Up sell) By Guest , ● (Discrepancy/ Personal Preference)	7	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**





TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(THEORY)** CLASS: **S.Y.BSc HS** SEMESTER: **IV**

MONTH: **November to April** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of Front Office Operations

The learners will be able to: Students will learn required basic knowledge and technical skills in Front Office

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	**HANDLING OF COMPLAINTS** ● Types of Complaints(Service related/ Attitudinal/ Mechanical/ Unusual complaints) ● Guidelines to handle complaints FRONT	5	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation
	OFFICE ACCOUNTING SYSTEM AND SETTLEMENT ● Guest and Non Guest Folio	10		White board Power point Presentation

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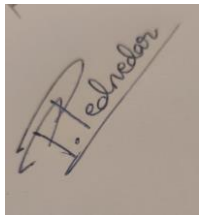
	• Types of Folio • Types of Vouchers • City Ledger • Billing Procedure instruction • Methods of settlement • (Cash/ CC- Direct currency converter/ BTC/ TAV/ PSO/ COMP Voucher)		Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**



TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA PEDNEKAR** DEPARTMENT: **FRONT OFFICE(THEORY)** CLASS: **SYBSc.HS** SEMESTER: **IV**

MONTH: **November to Apri** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of Front Office Operations

The learners will be able to: Students will learn required basic knowledge and technical skills in Front Office

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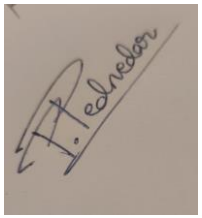
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	**SECURITY SYSTEMS IN HOTELS** • Fire Alarm Systems • Burglar Alarm Systems • Electronic Locking Systems	15	Front Office Operations by Kasavana	White board Power point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF



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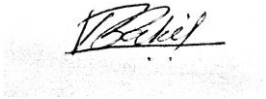

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DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(PRACTICAL)** CLASS: **S.Y.BSc HS** SEMESTER: **IV**

MONTH: **November to April** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of Front Office Operations

The learners will be able to: Students will learn required basic knowledge and technical skills in Front Office

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	**SELECTION OF THE FRONT OFFICE MANAGEMENT SYSTEM** Software –Shawmans Property Management System-Amadeus. Fidelio	5	Hotel Front Office by Jatashankar Tiwari	Computer Internet
2	**ROOM MANAGEMENT SOFTWARE** Room Inventory, Room Status availability	5	Hotel Front Office by Jatashankar Tiwari	Computer Internet
3	**REGISTRATION** Reservation/ Guest data (profile) GHC, Reports /self check-in	5	Hotel Front Office by Jatashankar Tiwari	Computer Internet
4	**POSTING** Paid Out/ Miscellaneous Voucher, Telephone, Display Folio (bill), Reports	5	Hotel Front Office by Jatashankar Tiwari	Computer Internet

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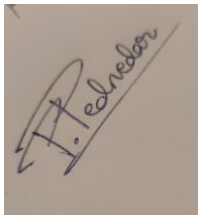
HOTEL & TOURISM MANAGEMENT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**



TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(PRACTICAL)** CLASS: **S.Y.BSc HS** SEMESTER: **IV**

MONTH: **November to April** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate Property Management System.

The learners will be able to: Students will learn required basic knowledge and technical skills in PMS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
5	**CALL ACCOUNTING** Guest Information/ Employee Information/ Post Charges/ Messages/ Wake Calls 5 6	5	Hotel Front Office by Jatashankar Tiwari	Computer Internet
6	**CHECK OUT** Folio /Adjustment/ Cashier/ Back Office Guest History	5	Hotel Front Office by Jatashankar Tiwari	Computer Internet

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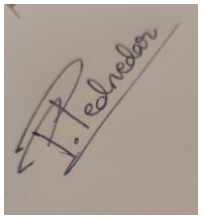
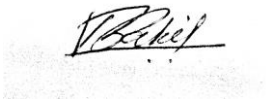
HOTEL & TOURISM MANAGEMENT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**





VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAZIA SAJID SHAIKH DEPARTMENT: COMMERCE CLASS: S.Y.H.S SEMESTER: IV

MONTH: November - March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE:

The learners will be able to: .Human resource Development, Job Analysis and Job design, and Challenges of Human resource Management

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 HUMAN RESOURCE DEVELOPMENT. **UNIT 2. JOB ANALYSIS AND JOB DESIGN** **UNIT 3. HUMAN RESOURCE PLANNING.** **UNIT 4. RECRUITMENT AND SELECTION.** **UNIT 5. CHALLENGES**	*Introduction ,Importance and Evolution of HRM,HRD culture and Climate.	08	**Human Resource and Personnel Management. K.Aswathapa, (Tata Mc Graw Hill)** **Human Resource Management. (Michael Vaz)**	● Notes Whiteboard
	***JOB ANALYSIS: M**eaning, Objectives, Process , Components, Job Description, Job Specification. ***JOB DESIGN:** Meaning , factors affecting job Design, Approaches to Job design. ***HRP:** Meaning, Planning Process, HR Demand forecast, HR supply forecast, **HRIS, HRA.** ***Recruitment:** Meaning, Process , importance.	08 10		● Notes Whiteboard

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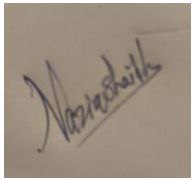
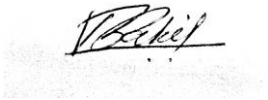
OF HRM	*__Selection:__ Meaning , Steps , Importance. *__Training and development:__ Meaning Importance, Methods of Training. *__Performance Appraisal.__ ***Absenteeism and Turnover.** ***Balancing Work with life.** ***Managing Diversity.** **Ethical issues in HRM.**	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**





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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dipti Dilip Khadpe.** DEPARTMENT: **Room Division Management-III.**

CLASS: **S.Y.BSc.HS.** SEMESTER: **III.**

MONTH: **Academic Year 2019-2020.** SUBJECT: **Housekeeping.**

LEARNING OBJECTIVE:

The student will be able to explain various operational procedures and formats pertaining to linen, uniforms, and laundry.
The student will be able to create formats and design layouts of linen room, uniform room and laundry.
The student will be able to create Flower Arrangements for various occasions and locations.
The student will be able to plan and implement décor for special occasions.

The learners will be able to understand how to handle different fabrics, Flower arrangement & implement décor for special occasions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I	1. LINEN ROOM OPERATIONS	10	Hotel Housekeeping Operations and Management (G. Raghubalan & Smritee Raghubalan – Oxford University Press).	1. PPT 2. VIDEO
	2. FORMATS	05		1. PPT
II	1. UNIFORM AND SEWING ROOM	05	Textile and Laundry in Hotel Industry – (Dr. D.K.Agrawal - Aman Publications). Stain Removal – (Stephanie Zia – Bounty Books).	1. PPT

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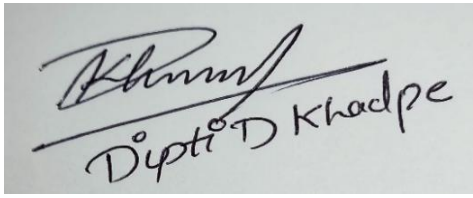
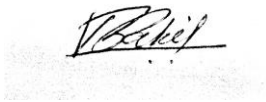
	2. LAUNDRY OPERATIONS	10		
III	1. FLOWER ARRANGEMENT	10	The Art of Flower Arranging – (Ian Hall & Sarah Waterkeyn - Smithmark Publications).	1. PPT 2. VIDEO
	2. ERONOMICS IN HOUSEKEEPING	05	Professional Management of Housekeeping Operations – Thomas J. A. Jones – John Wiley & Sons	1. PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HOURS.





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Sumit S.Pote** DEPARTMENT: **Food & Beverage Service** CLASS: S.Y.H.S SEMESTER: IV

MONTH: **July to December** ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE: Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine. • Understanding the production process of Beer, Wine and Spirits.

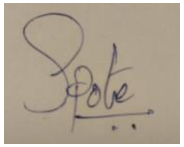
The learners will be able to: Understand the different types of Alcoholic Beverages . Students will learn the types of Alcoholic beverages as per the production methods

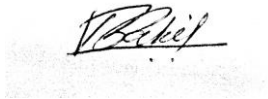
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
• **UNIT 1** ALCOHOLIC BEVERAGES	• ALCOHOLIC BEVERAGES a. Definition, history of Alcoholic Beverages & classification. b. Benefits and harmful effects of alcohol.	02	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide
	WINES • **1.1 Definition & history of wines.** • **1.2 Types of Wines:** • **Still (red, white & rose), sparkling/Champagne, Fortified (sherry, port, Madeira, marsala & malaga), Aromatized wines (Vermouth).** • **1.3 Methods of production, Still (red, white, rose).** • **a) Viticulture** • **(Wine calendar, terroir, vine species, grape varieties & diseases).** • **b) Vinification**	13	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service •Larousse Christopher Foulkes- Encyclopedia of Wines-	Google classroom White board Quiz Google slide

	• **(Manufacturing process, elements of wine & faults in wines).** • **c) Champagne & Sparkling Wines.** • **(History, districts, grape varieties, Methode Champenoise, cuvee close, transfer method, charmat & impregnation, Names & bottle sizes).** • **d) Fortified Wines (Production & types).** • **1) Sherry (Solera system)** • **2) Port** • **3) Madeira (estufagen)** • **4) Marsala** • **5) Malaga** • **e) Aromatised wines (Definition & types)**			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**





NAME OF THE STAFF: **Sumit S.Pote** DEPARTMENT: **Food & Beverage Service** CLASS: S.Y.H.S SEMESTER: IV

MONTH: **November to December** ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE:

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

The learners will be able to:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II	2.1 Wine producing countries of the world (Regions, Wine laws, labels & shippers). a) Old world wine producing countries (France, Italy, Germany, Spain & Portugal). b) New World wine producing countries (Australia, New Zealand, South Africa, U.S.A. & India).	10	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service •Larousse Christopher Foulkes- Encyclopedia of Wines-	Google classroom White board Quiz Google slide
	2.2 Wine tasting, Storage & Service	02	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide
	2.3 Food and wine Harmony.	03		Google classroom White board Quiz Google slide

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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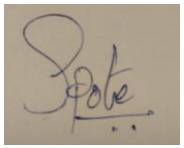
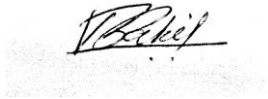




NAME OF THE STAFF: **Sumit S.Pote** DEPARTMENT: **Food & Beverage Service** CLASS: S.Y.H.S SEMESTER: IV

MONTH: **November to December** ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE:

The learners will be able to:

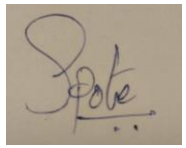
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNITIII BEER & OTHER FERMENTED BEVERAGES	a) Definition, History & Brewing process. (Components of beer, top fermentation, bottom fermentation) b) Types of Beer, Storage & Service (Lager, Pilsner, Draught, Ale, Stout, Porter, Ice, Lambic & Smoked) c)Other fermented beverages (Cider, Perry, Mead, Sake & Toddy).	03	• Shatbi Basu- The can't go wrong Cocktail book • Brian Glover- The world encyclopedia of Beer	Google classroom White board Quiz Google slide
	3.2 SPIRITS a) Introduction and definition b) Pot and patent still method of production. 3.3 History, Production, types & Brand names (national & International) a) Whisky (Scotch, American, Canadian, Irish & Japanese)	03	•Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide

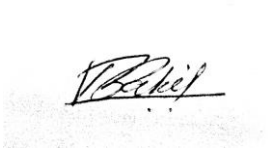
	b) Rum (White, Gold, Dark & Flavoured) c) Brandy (Cognac, Armagnac & Fruit) d) Gin e) Vodka, flavoured vodka f) Tequila & Mezcal			
	3.4 Alcoholic Strength :Proof, GL, Sykes, U.S., British (OIML) 3.5 Other Spirits (Aquavit, schnapps, Pastis, ouzo, arrack) 3.6 LIQUEURS Introduction, definition, classification & production of liqueurs a) Different types of liqueurs: Base, Flavours, Country of origin. b) Brand names of liqueurs (Generic & Proprietary)	04	Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide
	3.7 APERITIFS & BITTERS a) Definition b) Brand names	02	Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide
	3.8 GLOSSARY OF TERMS RELATED TO Alcoholic beverages, Menu terminologies.	02	Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	Google classroom White board Quiz Google slide

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**





VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Nileshwari Ghumre** DEPARTMENT: HOTEL MANAGEMENT CLASS: T.Y.H.S SEMESTER: VI

MONTH: NOVEMBER TO APRIL ACADEMIC YEAR: 2019-20
SUB: STRATEGIC MANAGEMENT

LEARNING OBJECTIVE: • The students will identify the operating strategy of the organization. • Develop skills in decision making • Students will be able to strategize and participate in policy making.

The learners will be able to: . • The students will identify the operating strategy of the organization. • Develop skills in decision making • Students will be able to strategize and participate in policy making.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Introduction to Strategic management 1.1 Definition – Strategy, Strategic Management and its relevance 1.2 Process of Strategic Management 1.3 Levels of Strategy : Corporate, Divisional Business, Operational or Functional 1.4 7 'S' Frame Work 2 Strategic Intent 2.1 Vision , Mission, Business definition, Goals and Objectives 2.2 Mission Statement and its Characteristics 2.3 Corporate Social Responsibility	15	Kazmi, A.(2011) Strategic Management and Business Policy 3 rd ed., The McGraw Hill Companies.B.Sc.(Hospitality Studies) Page 9 of 64 2. David,F.(2011) Strategic Management Concept and Cases 13th ed., Pearson Education 3. Ramswamy ,V.S., Namakumari, S.(2007) Strategic Planning Formulation of Corporate Strategy, Macmillen 4. Srinivasan, R., (2006), Strategic Management The Indian Context , 2nd Prentice Hall of India 5. Enz,C., (2010), Hospitality Strategic	• Notes Whiteboard

			Management 2 nd ed. John Wiley and Sons, Inc.	
UNIT 2	Environmental Analysis 3.1 Concept of Organizational Environment : Internal and External Environment 3.2 Process of SWOT analysis 3.3 Need for Environmental analysis (External Environment) 3.4 External Factor Evaluation Matrix (EFE) 4 Organizational Appraisal 4.1 Dynamics of Internal Environment 4.2 Six Organizational Capability factors 4.3 Internal Factor Evaluation Matrix (IFE) 4.4 Competitive Profile Matrix (CPM) 4.5 Industry Analysis (Porter's Five Force Analysis)	15	Kazmi, A.(2011) Strategic Management and Business Policy 3 rd ed., The McGraw Hill Companies.B.Sc.(Hospitality Studies) Page 9 of 64 2. David,F.(2011) Strategic Management Concept and Cases 13th ed., Pearson Education 3. Ramswamy ,V.S., Namakumari, S.(2007) Strategic Planning Formulation of Corporate Strategy, Macmillen 4. Srinivasan, R., (2006), Strategic Management The Indian Context , 2nd Prentice Hall of India 5. Enz,C., (2010), Hospitality Strategic Management 2 nd ed. John Wiley and Sons, Inc.	● Notes Whiteboard
UNIT 3	Strategy Formulation 5.1 Types of Strategy 5.1.1 Intensification Strategies : 5.1.1.1 Market penetration 5.1.1.2 Market Development 5.1.1.3 New Product Development 5.1.1.4 Innovation 5.1.2 Integrative Strategies: 5.1.2.1 Horizontal	15	Kazmi, A.(2011) Strategic Management and Business Policy 3 rd ed., The McGraw Hill Companies.B.Sc.(Hospitality Studies) Page 9 of 64 2. David,F.(2011) Strategic Management Concept and Cases 13th ed., Pearson Education 3. Ramswamy ,V.S., Namakumari, S.(2007)	● Notes Whiteboard

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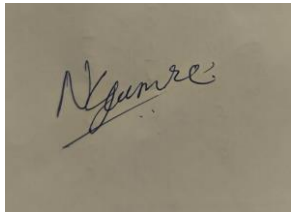
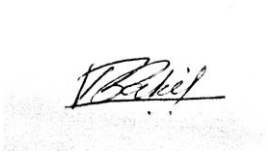
	5.1.2.2 Vertical 5.1.3 Diversification Strategies 5.1.3.1 Concentric (Related) 5.1.3.2 Conglomeratic (Unrelated) 5.1.4 Restructuring / Retrenchment Strategies: 5.1.4.1 Turnaround 5.1.4.2 Divestment 5.1.4.3 Liquidation 5.1.4.4 Merger 5.1.4.5 Acquisition (Take Over) 5.1.4.6 Joint Venture 6.Strategic Evaluation 6.1 Nature and its importance B.Sc.(Hospitality Studies) 6.2 Process of Strategic Evaluation		Strategic Planning Formulation of Corporate Strategy, Macmillen 4. Srinivasan, R., (2006), Strategic Management The Indian Context , 2nd Prentice Hall of India 5. Enz,C., (2010), Hospitality Strategic Management 2 nd ed. John Wiley and Sons, Inc.	

TOTAL NUMBER OF LECTURES ALLOCATED TO ALL THE UNITS: 45

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**





VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DEEPA P DALVI** DEPARTMENT: CLASS: T.Y.H.S SEMESTER: VI

MONTH: November - March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE: To familiarize students with marketing fundamentals.
To explain the importance of service marketing to a hospitality management student& to fit the subject into his/her understanding of Hospitality.
The learners will be able to: Understand importance and scope of service marketing in hospitality industry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	***CH: 1 Introduction to Marketing*** 1.1 Concise evaluation of marketing 1.2 Definitions – Marketing, Sales etc. 1.3 Introduction to service marketing 1.4 Distinguish between Sales & Marketing 1.5 Distinguish between Goods & Services 1.6 Characteristics of Service Marketing 1.7 Service Gaps 1.8 Service Encounter & Service Chain 1.9 Service Encounter Analysis	10	Marketing of Hospitality and Tourism Services by Prasanna Kumar. Services Marketing by C. Bhattacharjee	● Notes Whiteboard
	CH: 2 Service Marketing Concepts 2.1 Segmentation -Types of Segmentation 2.2 Positioning 2.3 Components of marketing plan	05		

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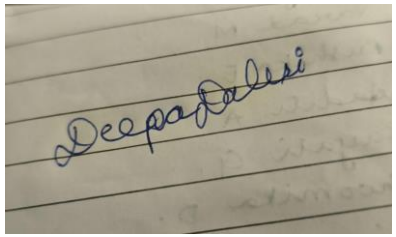
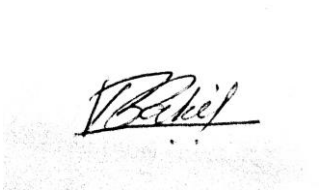
TOTAL NUMBER OF LECTURES ALLOTED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**





PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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UNIT 2	***CH: 3 P's of Service Marketing*** 3.1 *Product/Service Mix* Levels of product, New product Development, Product Life Cycle, Marketing Strategy in PLC, Branding 3.2 *Price Mix* Pricing Objectives, Factors affecting Pricing Decision, Scheming and Penetration, Creative Pricing of hostels and restaurants 3.3 *Distribution/Place Mix* Different Distribution network, Types of distribution channels, Push and Pull Strategy, Need and Role of distribution channel 3.4 *Promotion Mix* Communication process, Types of Media, Public Relations and Publicity, Stages & Techniques of Personal Selling in House Merchandising, Sales Promotion – Types & Techniques 3.5 *People* Employees and Customers 3.6 *Physical Evidence* Ambience, Equipment, Employee Dress, Facility Design 3.7 *Process/ System* Service Blueprint, service delivery	15	Marketing of Hospitality and Tourism Services by Prasanna Kumar. Services Marketing by C. Bhattacharjee	● Notes Whiteboard
	TOTAL NUMBER OF LECTURES ALLOTED TO THE UNIT: 15			

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**

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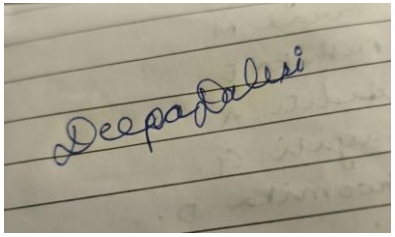
UNIT 3	***CH: 4 Consumer Behavior*** 4.1 Introduction and definition of consumer behavior 4.2 Factors influencing Consumer Behavior 4.3 5 stages in purchase behavior 4.4 Guest of tomorrow and Guest Lifestyles ***CH: 5 E-Marketing for Services*** 5.1 Introduction and Objectives of E-Marketing 5.2 Ways to conduct online marketing activities 5.3 Benefits of E-Marketing	15	Marketing of Hospitality and Tourism Services by Prasanna Kumar. Services Marketing by C. Bhattacharjee	● Notes Whiteboard
	TOTAL NUMBER OF LECTURES ALLOTED TO THE UNIT: 15			

SIGNATURE OF THE STAFF



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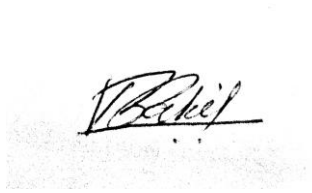

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June - November** ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE: Identify Food & Beverage setup and planning of various outlets in the department.

- Describe casual, theme restaurants etc. and how they are operated.
- How food service managers develop and manage labour & revenue control system.
- Explain how banquets and catering events are booked and planned, and describe how managers and staff members provide service for these events.
- Explain the operations of various catering establishments such as Railway, Airline & Marine caterings.

The learners will be able to: Students will learn Food & Beverage setup and planning of various outlets, how banquets and catering events are booked and planned.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	1.1 F & B Outlet Planning 1.1.1 Objective of a good layout 1.1.2 Steps in planning of layout. (Specialty Restaurants, Coffee Shop, Room Service) 1.1.3 Factors to be considered while planning the actual ambience (Colour, light, décor, furniture & uniform) 1.2 Operational aspects of various F & B Outlets (Specialty Restaurants, Coffee Shop, Room Service) 1.2.1 Menu planning 1.2.2 Constraints of Menu planning 1.2.3 Planning of staff requirement 1.2.4 Shifts (Panzer, Straight, Split & Reliever)	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi	1)Power point presentation 2) Videos 3) Google classroom 4)White board 5)Quiz 6) Google slide 7) Jam board

	1.2.5 Factors to be considered for selecting appropriate Crockery, Cutlery, Glassware, and Linen. 1.3 Elements of cost 1.3.1 Types of cost (Material, Labour & Overhead) 1.3.2 Cost Groups (Fixed, semi-fixed & variable) & types of profit (gross & net) 1.3.3 Breakeven / Cost volume profit analysis			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June - November** ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE: Identify Food & Beverage setup and planning of various outlets in the department.
- Describe casual, theme restaurants etc. and how they are operated.
- How food service managers develop and manage labour & revenue control system.
- Explain how banquets and catering events are booked and planned, and describe how managers and staff members provide service for these events.
- Explain the operations of various catering establishments such as Railway, Airline & Marine caterings.

The learners will be able to: Students will learn Food & Beverage setup and planning of various outlets, how banquets and catering events are booked and planned.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	Function Catering / Banquets 2.1 Definition, History & Importance 2.2 Organization of Banquet dept., duties and responsibilities. 2.3 Types of Banquets: Formal, Semiformal & Informal 2.4 Banquet Sales	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi	1)Power point presentation 2) Videos 3) Google classroom 4)White board 5)Quiz 6) Google slide

	2.5 Banquet reservation diary and booking procedure. 2.6 Function contract & Function prospectus 2.7 Banquet Menus 2.8 Types of service in the banquets. 2.9 Staffing & Duty allocation 2.10 Toast procedure at wedding reception & Protocol 2.11 Outdoor catering. 2.12 Glossary **Glossary**		2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi	7) Jam board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June - November** ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE: Identify Food & Beverage setup and planning of various outlets in the department.

- Describe casual, theme restaurants etc. and how they are operated.
- How food service managers develop and manage labour & revenue control system.
- Explain how banquets and catering events are booked and planned, and describe how managers and staff members provide service for these events.
- Explain the operations of various catering establishments such as Railway, Airline & Marine caterings.

The learners will be able to: Students will learn Food & Beverage setup and planning of various outlets, how banquets and catering events are booked and planned.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	3.1 Buffet.	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage	1)Power point presentation 2) Videos 3) Google classroom

	3.1.1 Definition & Types of buffets. (Meal period, manner of consumption, food served & other types – Display, Gourmet & Running) 3.1.2 Points to be considered while planning a buffet. 3.1.3 Buffet equipment 3.1.4 Banquet layout (formal, informal & cabaret) & Space area calculation 3.1.5 Meeting room setups: (U Shape, Hollow Square, Classroom Theatre, Board of Directors, 'T' Shape) 3.2 Food and Beverage Management in various catering establishments 3.2.1 Railway Catering & Airline catering 3.2.2 Marine Catering (offshore & cruise liners) 3.2.3 Industrial catering		Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi	4)White board 5)Quiz 6) Google slide 7) Jam board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Adv Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: VI

MONTH: **November - April** ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE: Identify factors to create impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley.

· Plan & operate a Bar operation, Manage inventory and maintain records pertaining to beverage control.

· Understand and apply cost dynamics as related to the Food & Beverage industry. · Demonstrate a detailed understanding of the various facets of the Food & Beverage cycle of control in the operational & post operational phase.

.

The learners will be able to: Students will learn impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley, Plan & operate a Bar operation.

	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

PAPER, UNIT, TITLE				
UNIT 1	1 Gueridon Service 1.1 Origin, history and definition 1.2 Factors to create impulse buying. 1.3 Advantages and disadvantages of Gueridon service 1.4 Principles of Gueridon service. 1.5 Flambé trolley & other trolleys (Carving, Cheese, Liqueur, Salad & Dessert). 1.6 Gueridon equipment & ingredients, Mise en place & Presentation.	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi 3) Andrews S, (2009), Food & Beverage Service A Training Manual,(Second Edition),	1)Power point presentation 2) Videos 3) Google classroom 4)White board 5)Quiz 6) Google slide 7) Jam board
	2 Food and Beverage Management. 2.1 Objectives of Food & Beverage Management. 2.2 Food and Beverage Management/ Function 2.3 Cost and Market orientation 3 Food and Beverage Control 3.1 Objective of F& B Control. 3.2 Obstacles of F& B Control. 3.3 Food Control checklists.			

	3.4 Beverage Control checklist			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Adv Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: VI

MONTH: **November - April** ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE: Identify factors to create impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley.

· Plan & operate a Bar operation, Manage inventory and maintain records pertaining to beverage control.

· Understand and apply cost dynamics as related to the Food & Beverage industry. · Demonstrate a detailed understanding of the various facets of the Food & Beverage cycle of control in the operational & post operational phase.

.

The learners will be able to: Students will learn impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley, Plan & operate a Bar operation.

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HOTEL & TOURISM MANAGEMENT STUDIES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	Bar Operations 4.1 Definition & classification. 4.2 Layout & parts for Front of the house dispense bar. 4.3 Bar Thefts and frauds. (Nature and prevention.) 4.4 Records & Licenses maintained in a Bar (Naukarnama, Permit, TPIN, Bill book, & B.O.T.). 5.1 Cocktails & Mixed drinks a) Introduction, History & Definition b) Bar Equipment. (glassware, fixed & movable equipment) c) Methods of Mixing Cocktails. (Stirred, Shaken, Built up/Layered, Blended & Muddled) d) Styles of Cocktails (Collins, cobblers, coolers, crustas, cups, e) daisies, eggnogs, flips, frappes, fixes, fizzes, Highball, juleps, f) Pick-me-ups, pousse café, smashes, sours, swizzles & toddies). g) Rules to be observed while making cocktails. 5.2 Recipes of classic & exotic cocktails. a) Whisky: (Godfather, Manhattan, Mint Julep, Whisky Sour	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi 3) Andrews S, (2009), Food & Beverage Service A Training Manual,(Second Edition),	1)Power point presentation 2) Videos 3) Google classroom 4)White board 5)Quiz 6) Google slide 7) Jam board

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Savio Dsouza** DEPARTMENT: **Adv Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: VI

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

MONTH: **November - April** ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE: Identify factors to create impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley.

· Plan & operate a Bar operation, Manage inventory and maintain records pertaining to beverage control.

· Understand and apply cost dynamics as related to the Food & Beverage industry. · Demonstrate a detailed understanding of the various facets of the Food & Beverage cycle of control in the operational & post operational phase.

.

The learners will be able to: Students will learn impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley, Plan & operate a Bar operation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	Cycle of control. 6.1 Operational phase 6.1.1 Purchasing 6.1.1.1Methods of purchasing Food / Beverage. (Contract / Daily / Weekly/ Fortnight / Cash and Carry) 6.1.1.2 Selection of a supplier 6.1.1.3 Purchase specification 6.1.1.4 Purchase order. 6.1.2 Receiving 6.1.2.1 Quality inspection 6.1.2.2 Quantity inspection 6.1.2.3 Receiving records Maintained 6.1.3Storing & Issuing 6.1.3.1Bin card 6.1.3.2Store ledger	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi 3) Andrews S, (2009), Food & Beverage Service A Training Manual,(Second Edition),	1)Power point presentation 2) Videos 3) Google classroom 4)White board 5)Quiz 6) Google slide 7) Jam board

	6.1.3.3 Indent/ requisition 6.2 Post Operational Control: Management after the event phase. 6.2.1 Methods of Food control. 6.2.2 Methods of Beverage control 6.2.3 Detailed Daily Food cost report			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(THEORY)** CLASS: **T.Y.BSc HS** SEMESTER: **VI**

MONTH: **NOVEMBER TO APRIL** ACADEMIC YEAR: **2019-20**

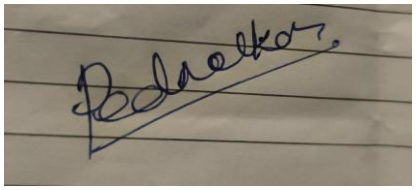
LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of Revenue Management,
The learners will be able to: Students will learn required basic knowledge and technical skills in Revenue Management.

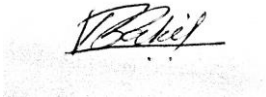
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 YIELD MANAGEMENT	Introduction ● Concept of Yield Management ● Applications(Hospitality Industry) ● Various strategies to maximise yield ● Capacity Management, Discount Allocation, Duration Control 1.4 Measuring Yield	3	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation
	● Potential Average Single Rate ● Potential Average Double Rate ● Multiple Occupancy Percentage ● Rate Spread/ Rate Differential ● Potential Average Rate ● Room Rate Achievement Factor ● Revenue Per Available Room (RevPAR) ● Equivalent Occupancy	7	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation
	● Elements of Yield Management ● Group Room Sale (Group Booking Data, Group booking pace, Anticipated Group	5	Hotel Front Office by Jatashankar Tiwari	White board Power point Presentation

	Business, Lead Time, Displacement of Transient Business) ● Transient/ FIT Room Sales ● Food and Beverage Activity ● Local and Area-wide activities ● Special Events ● Using Yield Management ● Potential High and Low Demand Tactics ● Implementing Yield Strategies ● Hurdle rate ● Minimum length of stay ● Close to arrival ● Sell-through ● Key Terms		Front Office by Rajeev Mishra	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**





VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(THEORY)** CLASS: **T.Y.BSc HS** SEMESTER: **VI**

MONTH: **NOVEMBER TO APRIL** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of Passport and Visa

The learners will be able to: Students will learn required basic knowledge and technical skills in Passport and Visa

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 PASSPORT AND VISA	• Passport • Definition and Types of Passport • Guidelines for Indian Passport Holders • Issue of New Passport • Renewal Of Passport • Passport for Minor • Replacement of Lost/ Damaged Passport (Duplicate) • Extension of short validity passport • Change of Name/ Surname after marriage • Change of appearance • Change in Date of Birth/ Place of Birth • Emergency Travel Document • Fee Structure	8	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation
				White board Power point Presentation

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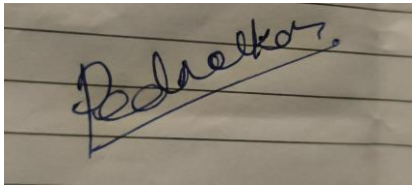
	VISA ● Definition and types of visas ● Requirement for visa	7	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF



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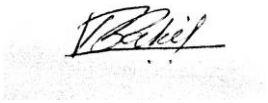

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HOTEL & TOURISM MANAGEMENT

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA PEDNEKAR** DEPARTMENT: **FRONT OFFICE(THEORY)** CLASS: **TYBSc.HS** SEMESTER: **VI**

MONTH: **NOVEMBER TO APRIL** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals Revenue Terms

The learners will be able to: Students will learn required basic knowledge of Revenue Terms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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UNIT 3	**REVENUE TERMS**	15	Front Office Management by BK Chakravarthy	White board Power point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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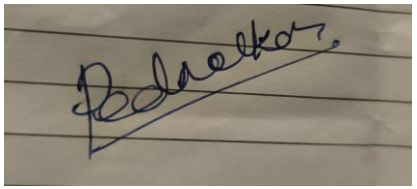

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(PRACTICAL)** CLASS: **T.Y.BSc HS** SEMESTER: **VI**
MONTH: **NOVEMBER TO APRIL** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of Role Plays and Handling Guest Complaints

The learners will be able to: Students will learn required basic knowledge and technical skills in Role Plays and Handling Guest Complaints.

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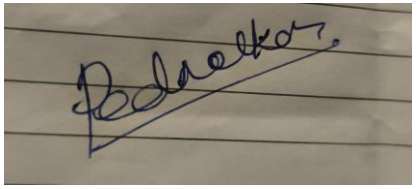
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	• **Role Play Activities:** (Transient FIT's, Groups & Special Category Guest) • Pre-arrival stage • Arrival Stage • Occupancy • Departure	40	Hotel Front Office by Jatashankar Tiwari	Power point Presentation
2 3	• **Handling Guest Complaints & Situations** Theft, Drunken guest & Difficult guest, Bomb Threat, Fire, Death, Guest with Health Problems, Service related complaint, Black Listed Guest, Wake up call, Discrepancy in charges, Pet Policy.	40	Hotel Front Office by Jatashankar Tiwari	Power point Presentation
	• **Case Study (10 Case Studies)**	40	Hotel Front Office by Jatashankar Tiwari	Power point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 120

SIGNATURE OF THE STAFF



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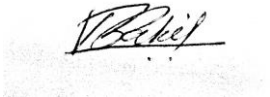

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(THEORY)** CLASS: **T.Y.BSc.HS** SEMESTER: **V**

MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of Planning Operations.
The learners will be able to: Students will learn required basic knowledge and technical skills inPlanning Operations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 **PLANNING OPERATIONS**	• Management Function • Planning, Organising, Co-ordinating, Staffing, Leading, Controlling, Evaluating	5	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation
	• Establishing Room Rate • Different Approaches for pricing rooms • Market Condition Approach • Rule of Thumb • Hubbart's Formula-Determining single and double rate • Special Room Rates Offered Corporate / Commercial Rate, Group Rate, Promotional Rate, Incentive Rate, Family Rate, Package, Complimentary Rate	5	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation
	• Forcasting Room Availability • Forecasting Data	5	Hotel Front Office by Jatashankar Tiwari	White board Power point Presentation

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	• Percentage of No-show • percentage of Cancellations • Percentage of walk-ins • Percentage of overstay • Percentage of under stay • Forecast formula; S • Sample 3 and 10 days forecast • Refining Forecast • Budgeting for Operations • Three Day Forecast • Forecasting room revenue • Estimating expenses		Front Office by Rajeev Mishra	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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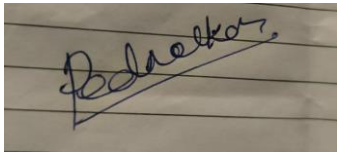

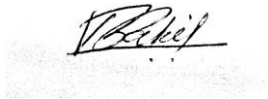

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HOTEL & TOURISM MANAGEMENT

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(THEORY)** CLASS: **T.Y.BSc HS** SEMESTER: **V**

MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals Evaluating Operations

The learners will be able to: Students will learn required basic knowledge and technical skills in Evaluating Front Office Operations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 EVALUATING OPERATIONS	• Daily Operations Report, Monthly Income Statement,	2	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation
	• Occupancy Ratios • Occupancy Percentage • Room Count • House Count • Double Occupancy percentage • Bed Occupancy Percentage • Foreign Guest Percentage • Average Daily Rate • Revenue Per Available Room (RevPAR) • Average Rate Per Guest (ARG) • Yield Statistic.	10	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation

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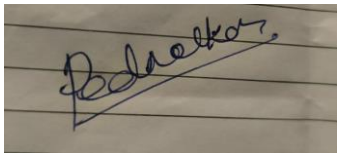
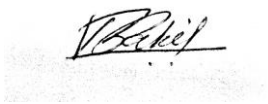
	•			
	• Market Share Index/ Fare Market Share • Evaluation of the hotel by guest	3	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**





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HOTEL & TOURISM MANAGEMENT

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA PEDNEKAR** DEPARTMENT: **FRONT OFFICE(THEORY)** CLASS: **TYBSc.HS** SEMESTER: **V**

MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of Foreign Currency Exchange

The learners will be able to: Students will learn required basic knowledge and technical skills in Foreign Currency Exchange

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 **HANDLING FOREIGN CURRENCY**	• Foreign Currency Exchange • Procedures to be followed while exchanging Foreign Currency Currencies accepted by RBI • Foreign Exchange Certificate- Format • Foreign Exchange Settlements using Credit Cards. • Export Promotion Capital Goods Scheme (EPCG)	15	Front Office Operations by Jatashankar Tiwari	White board Power point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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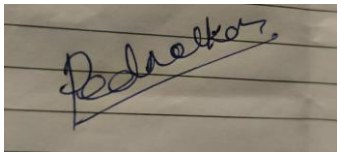

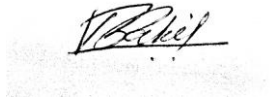

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DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(PRACTICAL)** CLASS: **T.Y.BSc HS** SEMESTER: **V**

MONTH: **JUNE TO OCTOBER** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of Group Discussion , various Situations and Manpower Planning

The learners will be able to: Students will learn required basic knowledge and technical skills in GD, Situation Handling and Manpower Planning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	**GROUP DISCUSSION**	10	INTERNET	Computer Internet
2	**SITUATION HANDLING**	10	Hotel Front Office by Jatashankar Tiwari	Power point Presentation
3	**MANPOWER PLANNING**	10	Hotel Front Office by Jatashankar Tiwari	Power point Presentation White Board , Marketr

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

VIVA COLLEGE
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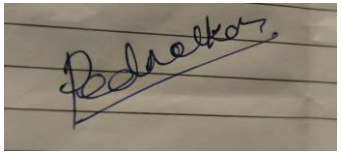

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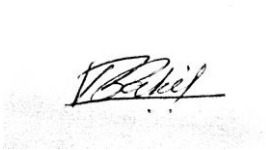

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** SUBJECT: **EVENT PLANNING MARKETING AND MANAGEMENT** CLASS: **T.Y.BSc HS**
SEMESTER: **VI** MONTH: **NOVEMBER TO APRIL** ACADEMIC YEAR: **2019-20 LEARNING OBJECTIVE:** To equip the student with the theory inputs with respect to understanding the fundamentals of Event Planning Marketing and Managemnt **The learners will be able to:** Students will learn required basic knowledge and technical skills Event Planning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	• Importance of Event Management • Financial Management (Projected, Estimated, Formats etc….) • Concept, Theme, Design & Interiors (Housekeeping) • Publicity, Promotion and Guest Relation (Front Office)	20	Event Management by Bowdin,Glenn & Mcdonnell,	Power point Presentation
	• Revenue Generation (Sales & Marketing) • Production Planning & Menu Designing (Food Production) • Service, Planning & Delivery (Food & Beverage) • Entertainment, Licenses, Security etc…. (Management)	20	Event Management by Bowdin,Glenn & Mcdonnell,	Power point Presentation
	• Industry Guest Speakers • Drafting of Reports • Final Report Presentation & Viva	20	Event Management by Bowdin,Glenn & Mcdonnell,	Power point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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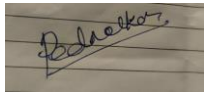

SIGNATURE OF THE H.O.D.

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **RASHMI GURUNANI** DEPARTMENT:HOTEL MANAGEMENT CLASS: T.Y.H.S SEMESTER: VI

MONTH:NOVEMBER TO APRIL ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE: The objective of Organizational Behaviour is to provide students with the opportunity to diagnose Individual and Group Behaviour. • The study of Structure, Motivation & Change helps to develop skills in improving individual and group performance in entrepreneurial and established ventures. • To develop the overall personality and sustain in the dynamic environment

The learners will be able to: .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Computer Fundamentals	**Introduction to Organizational Behaviour** **1.1 Definition of Organizational Behaviour** **1.2 What Managers Do** 1.2.1 Management Functions 1.2.2 Management Roles 1.2.3 Management Skills 1.2.4 Effective v/s Successful Managerial activities **1.3 Disciplines that contribute to the Organizational Behaviour field** **1.4 Individual Behaviour** 1.4.1 Ability 1.4.2 Biographical characteristics 1.4.3 Learning & Process of Learning 1.4.4 Introduction & Importance to Perception, Values & Attitude 1.4.5 Personality & Its Determinants **1.5 Group Behaviour** 1.5.1 Types of Groups	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	• Notes Whiteboard

	1.5.2 The Five stage model (Group Dynamics / Development)			
	Organizational Structure 2.1 What is Organizational Structure 2.1.1 Six Elements of organizational structure 2.2 Organizational Designs 2.2.1 Common Organizational Designs (Simple, Bureaucratic, Matrix)			
	Motivational Concepts 3.1 Define Motivation 3.2 Early Theories of Motivation 3.2.1 Maslow Abraham's Hierarchy of Needs theory 3.2.2 Douglas McGregor's Theory X & Theory Y 3.2.3 Fredrick Herzberg's Two Factor Theory 3.2.4 Mc Cleland's Theory of Needs 3.3 Contemporary Theories of Motivation 3.3.1 Cognitive Evaluation Theory (Definition) 3.3.2 Goal setting Theory (Definition) 3.3.3 Self Efficacy Theory (Definition) 3.3.4 Reinforcement Theory (Definition) 3.3.5 Equity Theory (Definition) 3.3.6 Expectancy Theory (Definition) 3.4 Leadership & Types of Leadership 2.2.2 New Design options (Virtual, Team, Boundaryless)	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	• Notes Whiteboard
	Stress Management 4.1 What is Stress? 4.2 Potential Sources of stress			

	4.3 Consequences of Stress 4.4 Managing stress 4.5 Introduction to Quality of Work Life			
	Organizational Change 5.1 What is change? 5.2 Elements / Factors of Change (External & Internal) 5.3 Planned Change 5.4 Resistance to change 5.5 Overcoming Resistance to Change 5.6 Approaches to Managing Organizational change 5.6.1 Lewin's 3 step model 5.6.2 Action Research 5.6.3 Meaning of Organizational Development & Techniques / Intervention 5.7 Introduction to Diversity & Managing Diversity	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	• Notes Whiteboard
	Conflict Management 6.1 Definition of Conflict 6.2 Sources & Types of Conflict 6.3 Conflict Management Styles 6.4 Power and Politics 6.4.1 Concept & Basis of Power 6.4.2 Organization Politics			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Housekeeping V** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June – November** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE: Explain and apply the guidelines for hiring various housekeeping contract services. Manage the manpower planning in the housekeeping department in different category of hotels.

The learners will be able to: Students will learn trends used in housekeeping, contract services used in housekeeping and determining staff strength.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**Chapter 1 Current trends in Housekeeping** 1.1 Green housekeeping Practices 1.2 Cleaning Equipment and agents 1.3 Guest supplies and amenities 1.4 Level of Service	3	Hotel Housekeeping Operations and Management.	• Notes • White board • Videos
	Chapter 2 Contract Services/Outsourcing 2.1 Types of Contract 2.2 Guidelines for hiring contract Services 2.3 Advantages and disadvantages of contract service	3	Hotel Housekeeping Operations and Management. Housekeeping Operations, Design and Management	• Notes • White board
	Chapter 3 Manpower Planning 3.1 Determining staff Strength 3.2 Scheduling Staff (duty Roasters)	3	Hotel Housekeeping Operations and Management.	• Notes • White board • Charts

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Housekeeping V** CLASS: T.Y.H.S SEMESTER: V

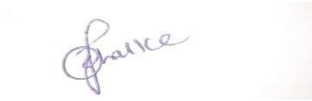
MONTH: **June - November** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE: Explain the Importance of lighting, various types of lighting. Plan window treatments for various types of windows. Identify the various ceiling and wall coverings.

The learners will be able to: Students will learn various methods of lighting, types of windows and various wall and ceiling finishes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	**4. Lighting and Lighting Fixtures** 4.1 Lighting for different areas of the hotel. 4.2 Functional and aesthetic aspects of light	3	Hotel Housekeeping Operations and Management.	Notes White board Pictures
	5. Windows and window treatment 5.1 Types of Windows & Window Treatment 5.2 Selection and Care	3	Hotel Housekeeping Operations and Management.	Notes White board Pictures
	6. Wall and Ceiling Finishes 6.1 Types 6.2 Selection 6.3 Care	3	Hotel Housekeeping Operations and Management.	Notes White board Pictures Samples

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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HOTEL & TOURISM MANAGEMENT STUDIES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Housekeeping V** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June - November** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE: Distinguish the various kinds of carpets in terms of construction and design and its maintenance procedure. Utilize the principles of designs while coordinating interiors.

The learners will be able to: Students will learn how to apply the elements and concept of interior decorations & elevations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	**7. Carpets and Floor Coverings** 7.1 Types 7.2 Selection 7.3 Care	7	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes White board Videos
	8. Interior Designing 8.1 Elements of Design 8.2 Principles of Design 8.3 Color Schemes	8	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes White board Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Advanced Housekeeping** CLASS: T.Y.H.S SEMESTER: VI

MONTH: **July to December** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE: To plan and evaluate budgets.

The learners will be able to: Students will learn various types of budget and planning process. To understand various roles of supervisor in housekeeping.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1.Budget and Budgetary Control** 1.1 Introduction 1.2 Types of Budget 1.3 Budget planning Process • Preparing the budget • Formats 1.4 Controlling Expenses 1.5 Inventory Control	8	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes White board Tables and charts
	2. Supervisory Skills 2.1 Job Description and daily routine of • Guest room Supervisor • Public area Supervisor • Linen and Uniform Room Supervisor	7	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Advanced Housekeeping** CLASS: T.Y.H.S SEMESTER: VI

MONTH: **November to December** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE: To create and evaluate the aspects of Interior Design in a Guest Room Layout. Plan and draw the layout of Guest Rooms to scale. Set up the housekeeping department of a new property and create a timeline for the countdown to the opening.

The learners will be able to: Students will learn about various types of rooms in terms of sizes, interior and furniture and fixtures used in it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II	**3. Preopening Property Operations** 3.1 Setting up Housekeeping 3.2 Countdown to Opening 3.3 Preparing Snagging List	5	Housekeeping Operations and Management	• Notes • White board • Checklist
	4. Furniture and Accessories 4.1 Types 4.2 Selection 4.3 Care	5	Housekeeping Operations and Management	• Notes • White board • Pictures
	5. Guestroom Layout 5.1 Planning Room Layouts 5.2 Sizes of Room	5	Housekeeping Operations and Management	• Notes • White board • Layouts

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Advanced Housekeeping** CLASS: T.Y.H.S SEMESTER: VI

MONTH: **November to December** ACADEMIC YEAR: **2019-2020**

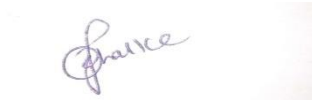
LEARNING OBJECTIVE: To Identify safety hazards and implement preventive and remedial measures.

The learners will be able to: Students will learn to handle various emergency situations like fire, bomb threat etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III	**6. Risk and Environment Management** 6.1 Fire Safety and Accident Prevention • Hazards • Prevention • Crisis Handling 6.2 First Aid 6.3 Dealing with Emergencies • Fire • Bomb threat • Death • Natural Disasters	15	Housekeeping Operations and Management	• Notes • White board • Demonstration

	6.4 Minimizing Theft • Guest theft • Employee theft			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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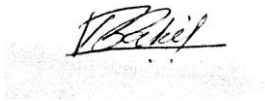

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **TY BSC HS**

SEMESTER: **V** MONTH: **Aug 2019 - Nov 2019** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE:

- To educate students on basic to advance culinary skills.
- To give an overview of culinary specialties across the globe.
- To educate students on latest food trends.
- To highlight the importance of food safety.
- To train students for better employment prospects.

The learners will be able to:

- Understand importance of food safety.
- Understand latest food trends.
- Understand culinary specialties across the globe.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Basic of Food Production	4	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	Basics of Bakery & Confectionery	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Google meet 3 YouTube videos 4 Online quiz 5 Google classroom

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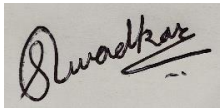
	Modern Cooking Techniques & Processes	4	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	Larder	4	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **TY BSC HS**

SEMESTER: **V** MONTH: **Aug 2020 - Nov 2020** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE:

- To educate students on basic to advance culinary skills.
- To give an overview of culinary specialties across the globe.
- To educate students on latest food trends.
- To highlight the importance of food safety.
- To train students for better employment prospects.

The learners will be able to:

- Understand importance of food safety.
- Understand latest food trends.
- Understand culinary specialties across the globe.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2	Charcuterie	10	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom

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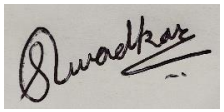
	Cheese	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **TY BSC HS**

SEMESTER: **V** MONTH: **Aug 2020 - Nov 2020** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE:

- To educate students on basic to advance culinary skills.
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	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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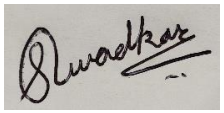
PAPER, UNIT, TITLE				
3	International cuisine	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Google meet 3. YouTube videos 4. Online quiz 5. Google classroom
	Chocolate	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Google meet 3 YouTube videos 4 Online quiz 5 Google classroom
	Icings	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Google meet 3 YouTube videos 4 Online quiz 5 Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Osden Gren Thomas Ferreira** DEPARTMENT: **HS** CLASS: T.Y.H.S SEMESTER: V

MONTH: August 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE:

The learners will be able to:

- Understand and explain the importance of Environmental and environmental studies
- Identify and explain Environmental changes
- Comprehend the historical background of travel and tourism industry
- Understand about the World's fastest growing Travel & Tourism industry and various modes of travel

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Environmental studies & Introduction to tourism & travel	Definition, Scope and Importance Need for public awareness Renewable & Non-renewable Resources Consumerism & Waste Products	2	Tourism Management Sumitra Roday	• Notes • White board
	Flashback – From early times till today (Purpose of travel in ancient times, invention of wheel, contribution of Thomas Cook, today's scenario). Definition of Tourism as stated by U.N.W.T.O. Types of Tourism Definition of Travel Various modes of Transport – Land (Rail and Road), Water (Ferries and Cruises), Air.	3	Tourism Management Sumitra Roday	• Notes • White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Osden Gren Thomas Ferreira** DEPARTMENT: **HS** CLASS: T.Y.H.S SEMESTER: V

MONTH: August 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE:

The learners will be able to:

- Understand and relate the various tourism organizations working at different levels
- Determine the key roles of tourism and related organizations
- Comprehend the meaning of sustainable development and relate it to tourism development
- Understand the positive & negative impacts of tourism on the world

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Tourism organizations & Sustainable development	National/Domestic Organisations (M.T.D.C., I.T.D.C.) International Organisations (U.N.W.T.O., W.T.T.C., U.F.T.A.A., U.N.E.S.C.O., S.T.I.)	2	Tourism Management Sumitra Roday	• Notes • White board
	Why Sustainable Development? Rio Summit Impact of Tourism on the World	3	Tourism Management Sumitra Roday	• Notes • White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Osden Gren Thomas Ferreira** DEPARTMENT: **HS** CLASS: T.Y.H.S SEMESTER: V

MONTH: November - September 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE:

The learners will be able to:

- Understand and relate the various concepts of sustainable tourism
- Determine the key tourism locations for sustainability around the world, India and in Mumbai
- Comprehend the meaning of responsible tourism and understand the stakeholders in it
- Understand the positive & negative impacts of travel and tourist stay on sustainable tourism

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 Sustainable tourism	Introduction to sustainable tourism Sustainable tourism with respect to developed and developing countries Sustainable tourism in India & Mumbai	2	Tourism Management Sumitra Roday	• Notes

	Sustainable tourism umbrella – UNESCO sites Impact of travel & accommodation on sustainable tourism Responsible tourism	3	Tourism Management Sumitra Roday	• White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **TY BSC HS**

SEMESTER: **VI** MONTH: **NOV 2019 - MAR 2020** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE:

- To educate students on basic to advance culinary skills.
- To give an overview of culinary specialties across the globe.
- To educate students on latest food trends.
- To highlight the importance of food safety.
- To train students for better employment prospects.

The learners will be able to:

- Understand importance of food safety.
- Understand latest food trends.
- Understand culinary specialties across the globe.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Kitchen Management	7	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	Kitchen Stewarding	8	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

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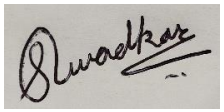

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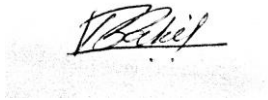

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **TY BSC HS**

SEMESTER: **VI** MONTH: **NOV 2019 - MAR 2020** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE:

- To educate students on basic to advance culinary skills.
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- To highlight the importance of food safety.
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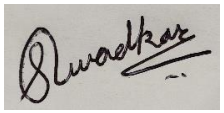
2	Sandwich	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	Classical garnishes	5	Bali Parvinder S., (2012), International Cuisine & Food	1. PowerPoint 2. Black board 3. YouTube videos

			Production Management, Oxford University, New Delhi	4. Class test 5. Home study
	Horsd'oeuvres	5	Ingram Christine, (2008), Appetizer, Starter Horsd'oeuvres, Hermes House , London	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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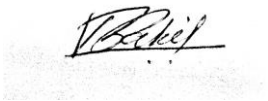

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NAME OF THE STAFF: **Siddhesh Wadkar** DEPARTMENT: **Food Production & Patisserie** CLASS: **TY BSC HS**

SEMESTER: **VI** MONTH: **NOV 2019 - MAR 2020** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE:

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3	Non-Edible Displays	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study
	Uses of wines, herbs and spices in cooking	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

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	Organoleptic & sensory evaluation of food	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	Contemporary cooking trends	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study
	Culinary terms	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

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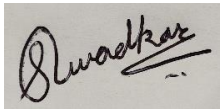

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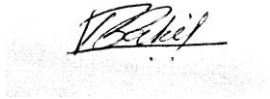

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.A.C.A.** SEMESTER: II

MONTH: **NOVEMBER 2019- APRIL 2020** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE: FOOD & BEVERGE STUDIES

The learners will be able to:

- The different types of Menus and principles of menu planning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	**1.** MEALS AND MENU PLANNING 1.1 Menu – Origin, definition & objectives 1.2 Types of meals (Breakfast, Brunch, Lunch, Afternoon tea, High tea, Dinner) Types of Menu a. A la c arte b. Table d' hote c. Cyclic menu d. Banquet menu e. Carte du jour / plat du jour f. Californian menu g. Take-away Other types of menu a) Children's menu b) Club menu c) Ethnic menu	7 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question

	d) Health menu e) Spa Menu f) Ayurvedic Menu 1.4 Principles of Menu planning 1.5 Breakfast: English, Continental, American, Indian 1.6 Types of Tea Service: Full Afternoon Tea, High Tea.			
	Revision Lectures	3 Lectures		1) Classroom Theory Test 2) Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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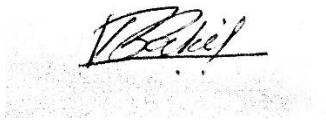

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VIVA COLLEGE
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.A.C.A.** SEMESTER: II

MONTH: **NOVEMBER 2019- APRIL 2020** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE: FOOD & BEVERGE STUDIES

The learners will be able to:

- Sequence and course in the French classical menu also identify general accompaniments.
- Types, storage and service of Tobacco

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II	1.FRENCH CLASSICAL MENU 1.1 a. Sequence and Courses. b. General Accompaniments. 1.2 Ice creams: Types & categories of Ice creams	6 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question
	2.TOBACCO a) Introduction to Cigars and cigarettes. b) Types of tobacco c) Shape, size, color & Brand names with country of origin.	7 Lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question

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	Revision Lectures	5 Lectures		1. Classroom Theory Test 2. Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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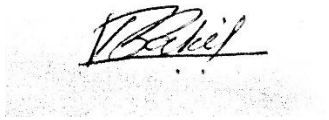

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.A.C.A.** SEMESTER: II

MONTH: **NOVEMBER 2019- APRIL 2020** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE: FOOD & BEVERGE STUDIES

The learners will be able to:

- Types, storage and service Non alcoholic beverages.
- Simple control system followed in a restaurant.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Unit III	1.1 NON ALCOHOLIC BEVERAGES a. Definition of beverages b. Classification chart –alcoholic & non alcoholic drinks. c. Stimulating -Tea, Coffee & Cocoa, (origin, manufacture, Method of preparation, types & brands) d. Nourishing -health drinks e. Refreshing –juices, squashes, crushes, syrups & aerated water Table Water (origin, types & brands) & carbonated water.	9 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question
	1.2 SIMPLE CONTROL SYSTEMS. a. Restaurant reservation system b. KOT Checking System c. Types of KOT / BOT d. Method of billing (manual & computerized)	4 Lectures		1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question
	Revision Lectures	4 Lectures		1) Classroom Theory Test 2) Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SAGAR R VAZE** DEPARTMENT**: ESSENTIAL BAKERY** CLASS: F.Y.B.A.C.A SEMESTER: I

MONTH: **JULY TO OCTOBER** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE: Objective of this course is orientation to development of Culinary as profession, introduction to basic baking techniques.

The learners will be able to: After completion of the below units, a student will be able to:

List ingredients, tools and equipment used in bakery and the methods of bread and cookies making.

UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Safe food Handling practices Tools, Equipment & Key Ingredients required in Baking Understanding different types of bread Understanding different methods in bread making Basic faults in bread making Various types of Cookies Different method of making Cookies	5		Google classroom White board Quiz PPT NOTES

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SAGAR R VAZR** DEPARTMENT: **ESSENTIAL BAKERY** CLASS: F.Y.B.A.C.A SEMESTER: 2

MONTH: **November to APRIL** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE: The Objective of this course is to familiarize the student towards analysis of food.

The learners will be able to: • State basic principles of baking sponges and pastries

UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	Introduction Pastry Techniques and Principles Principles Behind Making of Sponge Points to be Kept in Mind While Making Sponges & Cakes Different types of Pastry Basic method of making pastry	5		Google classroom White board Quiz PPT NOTES

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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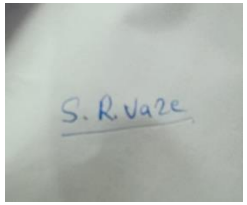

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Hotel Management - Introduction to Hospitality Studies CLASS: F.Y. BACA

SEMESTER: I

MONTH: July to November ACADEMIC YEAR: **2019 - 2020**

LEARNING OBJECTIVE: The objective of this course is to familarize student with the hospitality Industry and prospects of developing a career in Hospitality.

The learners will be able to:

State the career opportunities in the Hospitality Profession.
Define Service industry and its objectives.
List the impact of travel and tourism on Hotel Industry.
State the economic significance of Tourism.
State the features of Food & Beverage Industry.
List popular chains of Hotels.
Draw the organisation chart of different categories of Hotels.
State the various departments in hotels & their functions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	**PERSPECTIVES ON CAREERS IN HOSPITALITY.** ▪ Etymology, meaning & definitions of hospitality ▪ Origin, history & evolution of hospitality & hotels ▪ International & Indian perspective	15	Introduction to Hospitality Studies - Clayton W, Tom Powers & Denis Reynolds - Wiley Publications	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word

	▪ What is hospitality Management? ▪ The managers role in the hospitality Industry ▪ Why study a hospitality management program ▪ Employment opportunities ▪ Planning a career ▪ Employment as an important part of education ▪ Profiting from work experience ▪ Learning on the job ▪ Other ways of profiting from the job ▪ The outlook for hospitality ▪ Polarization in hospitality service organizations ▪ Accelerating competition ▪ Service is the difference ▪ Value consciousness ▪ Technology ▪ Empowerment ▪ Concern with security ▪ Concern with food safety & sanitation		Management in Hospitality Industry - Clayton W, Tom Powers- Wiley Publications	7. White Board 8. Projector 9. Discussion

UNIT – 2	▪ Sustainability ▪ Diversity HOSPITALITY AS A SERVICE INDUSTRY ▪ What is service ▪ Types of service ▪ Rendering Personal Service ▪ Task ▪ Interpersonal Skills ▪ Managing the service transactions ▪ The product view of service ▪ The product view: Empowerment ▪ Service culture ▪ Employment as a product: Importance of people ▪ Employees as Internal customers ▪ Service as a sustainable competitive advantage TRAVEL & TOURISM ▪ The economic significance of Tourism ▪ Travel & Tourism Industry			

UNIT - 3	▪ Nature of the travel & tourism Industry ▪ Interrelationships within the travel & tourism industry ▪ Reason & need for people to travel ▪ The impact of travel on the hotel industry			
	THE FOOD SERVICE INDUSTRY ▪ The dinning market versus the eating market ▪ Categories of restaurants ✓ Fine dining restaurants ✓ Casual Upscale Dining ✓ Mid-Scale Restaurants ✓ Quick service restaurants ✓ Restaurants in retail stores ✓ Restaurants in shopping malls DEFINITION & EVOLUTION OF HOTELS & MAJOR HOTEL CHAINS ▪ Inns & Hotels ▪ History & development of the Hotel Industry	15	Introduction to Hospitality Studies - Clayton W, Tom Powers & Denis Reynolds - Wiley Publications Management in Hospitality Industry - Clayton W, Tom Powers- Wiley Publications	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	▪ Origin of Hotels ▪ The Taj Hotel group ▪ Oberoi Hotels ▪ Leela Palaces & Hotels ▪ Lemon Tree Hotels ▪ ITC Hotels ▪ Hyatt Hotels ▪ Holiday Inn ▪ Hilton ▪ Four Seasons ▪ The Marriott Group ORGANISATION STRUCTURE OF THE HOTEL ▪ Organization chart of medium size & large size hotel ▪ The concept of revenue earning & support departments in a hotel ▪ Hotels – Different types of hotels **HOTEL FOOD & BEVERAGE OUTLETS & OPERATIONS.**	15		1. Slides 2. Videos 3. Quiz 4. Power Point 5. Presentation 6. PDF 7. Word 8. White Board 9. Projector 10. Discussion

	▪ Coffee Shops ▪ Introduction to Banquets & Function Catering ▪ Organization & fundamentals of room service & operations ▪ Specialty restaurant in hotels ▪ Bar Operation ▪ Minibar Bar Operations ACCOMMODATION DEPARTMENT ▪ Organization Chart of front office & Housekeeping ▪ Responsibilities of each section of the Front Office ▪ Responsibilities of each section of Housekeeping Department ▪ Activities involved in the guest cycle (from check in to check out) ▪ The concept of public areas in Housekeeping. OTHER DEPARTMENTS IN THE HOTEL ▪ Security Department ▪ Accounts & Food & Beverage controls department			

	▪ Engineering / Maintenance Department ▪ Sales & Marketing Department ▪ Human Resource & Personnel Department ▪ Spa & Health Club ▪ Purchasing & Receiving department & Stores			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMRATA BHOLANATH KHARKANDI **DEPARTMENT:** HOTEL MANAGEMENT

CLASS: F.Y BACA **SEMESTER: I**

SUBJECT: PRODUCT KNOWLEDGE **MONTH:JULY 2019-OCT 2019 ACADEMIC YEAR: 2019-2020**

LEARNING OBJECTIVE: Objective of this course is to familiarize the students with various ingredients used in Food Production, Its properties and quality checks.

The learners will be able to:

- State the properties , nutritional value and quality checks of dairy products , cereals and eggs
- State the properties , nutritional value and quality checks of vegetables, fruits and herbs
- State the properties , nutritional value and quality checks of meat products , fish and Fats and oils

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1.1 DAIRY PRODUCTS** Identify & Name the Dairy Products Milk Nutritional value of dairy products Factors to consider when choosing dairy products Storage of dairy products Use of suitable methods when preparing and cooking dishes using dairy products. **1.2 CEREAL PRODUCTS** Identify & Name the types of cereals : • Wheat, Corn, Oats, Rice, Barley, Rye, Quinoa, Millet, Beans, Lentils, Peas • Cereal Grain- Semolina, Cracked Wheat, Bran, Wheat Flakes, Cous Cous, Bulgur Wheat • Cereal Products Flours, Bread, Pasta, Noodles, Asian Wrappers, Raising Agent (Fresh Yeast, Dried Yeast, Baking	7 HRS	Basic Cookery – Daniel R. Stevenson Modern Cookery for Teaching & Trade – Thangam Philip Bakery materials & methods,	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. FAMILIARISATION DURING PRACTICALS

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	Powder , Baking Soda, Cream of Tartar) Nutritional value of the different types of cereals and cereal products Identify the basic structure of cereal grains Factors to consider when choosing cereals and cereal products How cereals and cereal products should be stored Suitable methods when preparing and cooking cereals and cereal products **1.3 EGGS** Identify different types of egg (hen, quail, duck, emu, ostrich, bantam, goose, turkey, guinea fowl eggs, pheasant, wild bird eggs & preserved eggs). Identify the structure of an egg State the nutritional value of an egg Explain the factors to consider when choosing eggs Explain how eggs should be stored Describe the uses of eggs Demonstrate the use of suitable methods when preparing and cooking eggs.	4 HRS 4 HRS	A. R. Daniel	
UNIT 2	2.1 VEGETABLES Name & Classify the different vegetables : - Roots, tubers, bulbs, shoots, green leaves, Chinese greens, peas, beans, pods, squashes, vegetable fruits, salad vegetables, mushrooms, fungi, stems, flowers, fruit, seeds, (pulses and legumes) State the nutritional value of vegetables Explain the factors to consider when choosing vegetables Explain how vegetables should be stored Demonstrate the use of suitable methods when preparing and cooking vegetables	8 HRS	Food & Beverage Management – Davis & Stone Published by Butterworth-Heinemann Ltd. Food Preparation & Cooking – Stanly Thorues	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT 6. FAMILIARISATION WITH INGREDIENTS IN PRATICALS

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	2.2 FRUITS Name & Classify the different Fruits: - Apples, Pears, Quinces, Medlars, - Melons, grapes, figs, rhubarb, - Berries, currants, citrus, pome, stones, tropical - Dried, bottled & crystallised fruits State the nutritional value fruit Explain the factors to consider when choosing fruits Explain how fruits should be stored **2.3 FLAVOURINGS & HERBS** Uses of flavourings & herbs Common Herbs & Spices Storage of herbs and spices. Use of spices & herbs in preparation of dishes / meals.	7 HRS		
UNIT 3	**3.1 MEAT, POULTRY & GAME** Identify &Name the different types of Meat : Beef & Veal - Pork, Lamb, Chicken, Turkey Duck & Goose - Furred & Feathered Game Sausages & Salami - Ham, Bacon & Cured Meat State the nutritional value of the different types of Meat Identify the cuts of meat Describe the structure of meat and its effects on preparation and cooking Explain the factors to consider while choosing meat	**7.5 HRS** **7.5 HRS**	Food Production Operations – Parvinder S. Bali-Oxford Publication	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT 6. PRACTICALS OF MEAT CUTS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45HRS

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMRATA BHOLANATH KHARKANDI **DEPARTMENT:** PRINCIPLES OF FOOD PRODUCTION

CLASS: F.Y BACA **SEMESTER: II**

MONTH: DEC 2019 – MARCH 2020 **ACADEMIC YEAR: 2019-2020**

LEARNING OBJECTIVE: The Objective of this course is to familiarize the student towards analysis of food, stocks, soups, salads, eggs, fish and basic Indian cuisine

The learners will be able to:

- Furnish the basics of Food analysis List the methods of preparation of soups and stocks as mentioned in the syllabus.
- List the methods of preparation of sauces as mentioned in the syllabus.
- List various types of salads
- List various cuts of Fish
- Define various cuts of meat
- State basic principles of baking sponges and pastries
- List various masala combinations as mentioned in their learning material

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**SENSORY, IDENTIFICATION & EVALUATION OF FOOD INGREDIENTS** Organoleptic Sensory Evaluation (wherever necessary) (Taste, smell, hearing, eyes) Identification of Ingredients Presentation Basic Factors of presentation (temperature, flavour, colour, shapes) Texture & Consistency (Firm & Close, short & crumbly,	5 HRS	Sensory evaluation of food and Practices by Harry T. Lawless	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. PRACTICAL OF HENDONIC TESTING

	spongy, light & even, flaky, coarse, tough, hard, roping, pouring, soft peak, medium peak, stiff peak)			(ORGANIC MATERIAL IDENTIFCATION OF SMELL, TASTE, TOUCH, VISUAL) IN CLASSROOM
1.2	**STOCKS, GLAZES, COOKING LIQUORS& THICKENING AGENTS** Introduction Definition of Stock & Glazes Uses of Stock & Glazes Classification of Stock White Stock (fond Blanc) Brown Stock (fond brun) & Indian Yakhni Stock Fish Stock (fumet) Vegetable Stock Neutral Stock Remouillage Court Bouillon Pot Liquor Emergency Stock / Convenience Bases Elements of Stocks & its Characteristics Precautions to be taken while preparing Stock Definition Starches as Thickening Agent Definition of Roux Types of Roux (white, blond, slack, brown) Other thickening agents • White wash (fecule) • Cornstarch (cornflour) • Arrowroot	5 HRS	FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. PRACTICE IN PRACTICALS
1.3	**SOUPS** Classification of soups with examples Clear Soup	5 HRS	FOOD PRODUCTION	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS

	Broth Consommé Thick soup Puree Cream Velouté Bisque Chowder Cold Soup Speciality Soup Tips for Making Good Soups		OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE	3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. PRACTICE IN PRACTICALS
UNIT 2 **2.1**	**SAUCES** Definitions Functions & Uses Structure of Sauces Classification of Sauces Emulsions Definition of Emulsion Types of Emulsions a) Miscible b) Immiscible) Stabilisation of Emulsifiers Causes of Breakdown of the Emulsions Preparation of Basic Mother Sauces & Derivatives of Each	5 HRS 5 HRS	FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT
2.2	**SALADS** Introduction Composition of a Salad Types of Salad Various Types of Lettuce Used in Salads Salad Dressing Emerging Trends in Salad Making Salient Features of Preparing Good Salads Classification of	5 HRS	FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT

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2.3	Vegetables **EGGS & FISH** Introduction Cooking of eggs for breakfast Identification & Classification of Fish Cuts of Fish Darne,Trançon ,Fillet,Suprême, Delice, Goujon Goujonettes Paupiette, En tresse, En Loregnette Pavé Cravate (plaited) Cooking of Fish		FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT
UNIT 3	**3.1 INTRODUCTION TO MEATS** Lamb, Pork, Beef, Veal & Furred Game Introduction Cuts of lamb, beef, veal and pork (with diagram) Processing of a Whole Animal Classification of Meats Yield Tests Introduction to Poultry & Game Bird Introduction Physical & Chemical Characteristics of Poultry Trussing Methods Some Classical Preparations of Poultry	**5 HRS**	FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT 6. PRACTICAL DISSECTION OF MEAT
	3.2 BASIC SPONGE, CAKE & PASTRY Introduction Pastry Techniques and Principles Principles Behind Making of Sponge Points to be Kept in Mind While Making Sponges & Cakes Different types of Pastry Basic method of making pastry	**5 HRS**	FOOD PRODUCTION OPERATIONS BY PARVINDER BALI THEORY OF COOKERY LAROUSSE GASTROMIQUE ON COOKING PROFESSIONAL COOKERY	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS 5. ASSIGNMENT 6. PRACTICAL DISSECTION OF MEAT
	3.3 MASALAS, PASTES & INDIAN GRAVIES Introduction Blending of Spices & Concept of Masalas Concept of Dry & Wet Masalas Pastes used in Indian Cooking Difference between Gravies & Curries	**5 HRS**		

	Regional Gravies Preparation of Gravies			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45HRS

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMRATA BHOLANATH KHARKANDI **DEPARTMENT:** HOTEL MANAGEMENT

CLASS: F.Y BACA **SEMESTER: I**

MONTH: JUNE 2019- OCT 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE: Objective of this course is orientation to development of Culinary as profession, introduction to basic baking techniques and pre-preparation techniques of cooking.

The learners will be able to:

- Define aims of cooking, draw organization chart of classical kitchen brigade and list the duties of kitchen staff
- List ingredients, tools and equipment used in bakery and the methods of bread and cookies making
- List the kitchen, tools, equipments and fuels used in commercial kitchen.
- Pre-preparation, methods and list the methods of cooking food.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**INTRODUCTION TO CULINARY ARTS** **1.1** Aims and Objectives of Cooking Food Hotels 1.1.2 Level of skills & experience 1.1.3 Attitude & Behavior in the kitchen 1.1.4 Career avenues open to chefs. 1.1.5 Classical Kitchen Brigade 1.1.6 Organizational Structure of The Kitchen 1.1.7 Modern Staffing in Various Category 1.1.8 Duties & Responsibilities Of Various Chefs 1.1.9 Coordination of Kitchen with Other Departments **1.2 INTRODUCTION TO BAKING**	7 HRS	Basic Cookery – Daniel R. Stevenson Modern Cookery for Teaching & Trade – Thangam Philip	1. GOOGLE MEET 2. POWER POINT PRESENTATION 3. GOOGLE CLASSROOM 4. YOUTUBE VIDEOS 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS

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	1.2.1 Safe food Handling practices 1.2.2 Tools, Equipment & Key Ingredients required in Baking 1.2.3 Understanding different types of bread 1.2.4 Understanding different methods in bread making 1.2.5 Basic faults in bread making 1.2.6 Various types of Cookies 1.2.7 Different method of making Cookies **1.3 INTRODUCTION TO INDIAN COOKING** 1.3.1 Introduction 1.3.2 Philosophy of Indian 1.3.3 Food Influences of the Invaders &travelers on Indian Cuisine 1.3.4 Equipment used in Indian Cooking 1.3.5 Regional & Religious Influences on Indian Cuisine	4 HRS 4 HRS	Bakery materials & methods, A. R. Daniel	
UNIT 2	**2.1 TYPES & SECTIONS OF A KITCHEN** 2.1.1 Commissary 2.1.2 Butchery 2.1.3 Garde Manger 2.1.4 Satellite Kitchen 2.1.5 Bakry & Confectionery 2.1.6 Pantry Kitchen 2.1.7 Stewarding 2.1.8 Show Kitchen 2.1.9 Cafeteria Kitchen 2.1.10 Walk-in cooler & walk-in freezer **2.2 TOOLS, EQUIPMENT & FUELS USED IN THE KITCHEN** 2.2.1 Identification, Classification, & Uses of Equipment 2.2.2 Capital & Operational Equipment 2.2.3 Types & Uses of various knives,	8 HRS 7 HRS	Food & Beverage Management – Davis & Stone Published by Butterworth-Heinemann Ltd. Food Preparation & Cooking – Stanly Thorues	1. GOOGLE MEET 2. POWER POINT PRESENTATION 3. YOUTUBE VIDEOS 4. GOOGLE CLASSROOM 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS 7. ASSIGNMENT

	2.2.4 care & maintenance of knives, 2.2.5 how to choose a knife Fuels used in the kitchen			
UNIT 3	**3.1 PREPARATION & MIXING OF INGREDIENTS** **3.2 COOKING TEMPERATURES & METHODS OF COOKING** 3.2.1 Heat Transfer & its relationship to Food Preparation 3.2.2 British Thermal Unit (BTU) 3.2.3 Heat Fusion Thermal Conductivity 3.2.4 Induction Cooking 3.2.5 Heat Removal-Cooling 3.2.5 Freezing of Foods 3.2.6 Thawing of Foods 3.2.7 Re-heating of Food 3.2.8 Effects of Heat on Foods 3.2.9 Boiling 3.2.10 Poaching 3.2.11 Stewing 3.2.12 Indian Dum Phukt 3.2.13 Braising 3.2.14 Frying a) Shallow b) Deep 3.2.15 Baking 3.2.16 Roasting Spit Roasting /Indian Tandoor Roasting 3.2.17 Microwave Cooking 3.2.18 Blanching	**7.5 HRS** **7.5 HRS**	Food Production Operations – Parvinder S. Bali-Oxford Publication	1. GOOGLE MEET 2. POWER POINT PRESENTATION 3. YOUTUBE VIDEOS 4. GOOGLE CLASSROOM 5. RESEARCH MATERIALS 6. HOME STUDY AND QUIZ FOR STUDENTS 7. ASSIGNMENT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45HRS

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:NAMRATA BHOLANATH KHAKANDI **DEPARTMENT**: ENVIRONMENTAL SCIENCE

CLASS: FY. BACA **SEMESTER:** II

MONTH: DECEMBER 2019-FEBRUARY 20 **ACADEMIC YEAR:** 2019-2020

LEARNING OBJECTIVE:
The Objective of the course is to familiarize the students with the need and ways to conserve the environment.

The learners will be able to:
After the completion of this course the students shall be able to

- list and define various components of environment,
- need of its conservation and role of human beings in its conservation as per the learning material provided by Ministry of Human Resources, Govt. of India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	THE MULTIDISCIPLINARY NATURE OF ENVIRONMENTAL STUDIES Definition, scope and importance Need for public awareness Natural resources Renewable and non-renewable resources Natural resources & associated problem. a. Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people. b. Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams benefits and	**15.HRS**	ENVIRONMENTAL STUDIES FOR UNDERGRADUATE COURSE BY ERACH BHARUCHA	1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

	problems. c. Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies. d. Food resources: World food problems overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies. e. Energy resources: Growing energy needs, renewable and nonrenewable energy sources, use of alternate energy sources. Case studies. f. Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification. • Role of an individual in conservation of natural resources. Equitable use of resources for sustainable lifestyles. Ecosystems • Concepts of an ecosystem. • Structure and function of an ecosystem. • Producers, consumers and decomposers. • Energy flow in the ecosystem. • Ecological succession. • Food chains, food webs and ecological pyramids. • Introduction, types, characteristic features, structure and function of th following ecosystem: a. Forest ecosystem b. Grassland ecosystem c. Desert ecosystem d. Aquatic ecosystem (ponds, stream lakes, rivers, oceans, estuaries)			
UNIT 2	BIODIVERSITY AND ITS CONSERVATION, ENVIRONMENTAL POLLUTION & SOCIAL ISSUES Biodiversity and Its Conservation • Introduction-Definition: genetic species and ecosystem diversity • Bio-geographical classification of India • Value of biodiversity : Consumptive use, productive use, social, ethical, aesthetic and option values	**15.HRS**		1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

	• Bio-diversity at global, national, local levels • India as a mega diversity nation • Hot spots of bio-diversity • Threats to biodiversity: Habitat loss, poaching of wild life, manwildlife conflicts • Endangered and endemic species of India • Conservation of biodiversity: In- situ and Ex-situ conservation of biodiversity Environmental Pollution Definition – • Causes, effects and control measures of: a. Air pollution b. Water pollution c. Soil pollution d. Marine pollution e. Noise pollution f. Thermal pollution g. Nuclear Hazards • Solid waste management: Causes, effect and control measures of urban and industrial wastes • Role of an individual in prevention of pollution • Pollution case studies • Disaster management: floods, earthquake, cyclone and land slides Social issues and environment 15 hrs 15 hrs • From unsustainable to sustainable development • Urban problems related to energy • Water conservation, rain water harvesting, and watershed management • Re-settlement and rehabilitation of people: Its problems and concerns. Case studies. • Environmental ethics: issues and possible solution • Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies. • Wasteland reclamation • Consumerism and waste products • Environment protection act • Air(Prevention and control of pollution) act			

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UNIT 3	• Water (Prevention and control of pollution) act • Wildlife protection act • Forest conservation act • Issues involved in enforcement of environmental legislation • Public awareness **HUMAN POPULATION & THE ENVIRONMENT AND UNDERSTANDING EXISTENCE AND CO-EXISTENCE** Human Population & The Environment • Population growth, variation among nations • Population Explosion- family welfare program • Environment and human health • Human rights • Value education • HIV/AIDS • Women and child welfare • Role of information technology in environment and human health • Case studies Understanding Existence and Co-existence • Interrelation and Cyclicity between Material order, Bio-order, Animal order and Human order •Understanding the human conduct : Relationship in Family, Justice in Relationship, Relationship of human with nature (environment),human Behaviour, Human Values, Nature & Morality •Understanding the Human society: Dimensions of Human Endeavour and Objectives, Interrelationship in Society, Mutual Fulfillment and Cyclist in nature.	**15.HRS**		1. POWER POINT PRESENTATION 2. YOUTUBE VIDEOS 3. RESEARCH MATERIALS 4. HOME STUDY AND QUIZ FOR STUDENTS

VIVA COLLEGE
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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KIRTI T. CHALKE **DEPARTMENT: HOTEL MANAGEMENT** **CLASS: F.Y BACA**

SEMESTER: I **SUBJECT: FOOD SAFETY & HYGEINE**

MONTH: ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE: Objective of this course is to familiarize the students with importance of hygiene and Food Safety in Hospitality Industry.

The learners will be able to:

- Define microbes and conditions for growth of microbes.
- List the importance and basic principles of HACCP.
- List micro organisms.
- State the regulations and regulating bodies governing Food Safety and Hygiene.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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UNIT 1	**1.1 HOSPITALITY INDUSTRY & FOOD SAFETY** 1.1.1 Importance of Food Safety in Hospitality Industry 1.1.2 Responsibilities of Owner, Managers & Food Handlers 1.1.3 Economic consequences of food safety hazards **1.2 FOOD MICROBIOLOGY** 1.2.1 What are microbes (Bacteria, Yeast & Mould) 1.2.2. Classification of Microorganisms and their characteristics 1.2.3 Factors for growth 1.2.4 Role of Microbes in manufacture of fermented foods (Dairy products, veg & bakery preparation, alcoholic beverages, vinegar, fermented Indian foods). **1.3 HAZARD ANALYSIS CRITICAL CONTROL POINT (HACCP)** 1.3.1 Introduction 1.3.2 Importance 1.3.3 HACCP Principles 1.3.4 HACCP in India 1.3.5 Food Regulation in India & HACCP 1.3.6 Food Service Management & HACCP 1.3.7 7 Critical Control Points	7 HRS 4 HRS	Sumitra Deshmukh & Dr. Asmita Thakur Catering Science & Food Safety Rodey S Food- Hygiene& Sanitation Food Hygiene for Food Handlers Macmillion	Notes White board PPT

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15HRS

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KIRTI T. CHALKE **DEPARTMENT: HOTEL MANAGEMENT** **CLASS: F.Y BACA**

SEMESTER: I **SUBJECT: FOOD SAFETY & HYGEINE**

MONTH: ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE: Objective of this course is to familiarize the students with importance of hygiene and Food Safety in Hospitality Industry.

The learners will be able to:

- Define Food Adulteration and adulterants.
- State the types and uses of Food Additives.
- List various methods of Food Preservation.
- State the regulations and regulating bodies governing Food Safety and Hygiene.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	**2.1 FOOD BORNE INFECTIONS & MICROBIAL AGENTS** 2.1.1 Classification of Food Borne Diseases 2.1.2 Mode of Transmission of Diseases 2.1.3 Food Borne Illness 2.1.4 Food Poisoning (Intoxication) 2.1.5 Food Infections 2.1.6 Food Borne Bacterial Agents 2.1.7 Food Borne Viruses 2.1.8 Protozoans 2.1.9 Food Borne Helminths 2.1.10 Prions -Staphylococci, Salmonella,	8 HRS 7 HRS	Food Safety in the Hospitalty -Butterworth Heinamann	Notes White board PPT

	Escherichia coli, Hepatitis, 2.1.11 Listeria, clostridium botulinum, Vibrio-cholera, Shigella, Ameobic Dysentery, and Trichnia) 2.1.12 Natural Toxins (Kesari Dal, Potatoes, Mushroom, Shell Fish & Peanuts) 2.1.13 Chemical Toxins (Tin, Copper, Lead, Arsenic) Types of Infections & Microbial Agents Emerging versus Contemporary Food Borne Infections **2.2 FOOD ADULTERATION** 2.2.1 Definition and types 2.2.2 Tests to detect (coffee, semolina, flour, ghee, butter, margarine, oil, milk, turmeric, coriander powder, pepper corns, meats) 2.2.3 Foods Laws, authorities and related standards (PFA, FPO, MFPO, MMPO, Agmark, BIS & FSSAI, Organic Certification, Vegetarian and non-vegetarian visual symbols on packed foods) **2.3 FOOD ADDITIVES** 2.3.1Definition 2.3.2 Uses of Food Additives 2.3.3 Types of Additives 2.3.4 Colours & Flavours 2.3.5 Browning reactions			

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DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KIRTI T. CHALKE **DEPARTMENT: HOTEL MANAGEMENT** **CLASS: F.Y BACA**

SEMESTER: I **SUBJECT: FOOD SAFETY & HYGEINE**

MONTH: ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE: Objective of this course is to familiarize the students with importance of hygiene and Food Safety in Hospitality Industry.

The learners will be able to:

- State the regulations and regulating bodies governing Food Safety and Hygiene.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	**3.1 HYGIENE** 3.1.1Rules & Importance of Hygiene 3.1.2Types of Hygiene 3.1.3Personal Hygiene 3.1.4Workplace Hygiene 3.1.5Food Hygiene 3.1.6Waste Disposal- Types of waste, Waste disposal management, staff training 3.1.7Pest Control- Types of Pests, Inspection of Premises, Pests 3.1.8 Prevention 3.1.9 Methods of Pest Control. 3.1.10 Cleaning & Sanitation- Methods of cleaning & Sanitizing 3.1.11Factors affecting sanitizers Methods of cleaning & Sanitizing	**7.5 HRS** **7.5 HRS**	The Prevention of Food Commercial law Adulteration Act, 1954 Publishers	White board PPT Notes Videos

	3.2 FOOD PRESERVATION& STORAGE 3.2.1Methods of Preservation 3.2.2 Natural & Chemical Preservation 3.2.3 Low Temperature (refrigeration, freezing, blast freezing) 3.2.4 High Temperature (pasteurization, sterilization, canning) 3.2.5 Irradiation 3.2.6 Advantages & Disadvantages of various methods 3.2.7Saving the nutrients in food 3.2.8 Types of Food Storage 3.2.9 Dry, Refrigerated & Freezer 3.2.10 FIFO 3.2.11 Stock Rotation & Cross Contamination **3.3 REGULATION & REGULATING BODIES** Governing bodies controlling hygiene practices in food outlets Rules & Regulations Food Establishment Inspections Record Maintenance System Food Safety Certification Food Safety Training Program			

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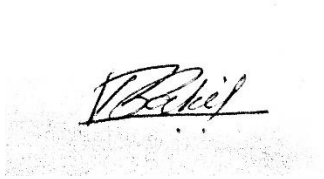
Faculty **HOD**



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Tammana Upadhyay** DEPARTMENT: CLASS: F.Y.B.A.C.A. SEMESTER: I

MONTH: ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE: Objective of this course is to enhance the communication skills in English/ French required of a Culinary Professional

The learners will be able to: Frame grammatically correct sentences in English

- Apply the correct conjugation of verbs in sentences
- Frame simple sentences in French

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit – I	The Sentence – Kinds of Sentences – Subject & Predicate The Phrase & The Clause Parts of Speech – Noun, Adjective, Pronoun, Verb, Adverb, Preposition, Conjunction, Interjection Noun – Kinds of Noun (Common, Proper, Collective, Abstract) The Noun : Gender (Masculine, Feminine, Common, Neuter) The Adjective – Kinds of Adjective, Comparison of Adjectives (Positive, Comparative, & Superlative Degrees. The Correct use of some Adjectives Articles - Use of Definite & Indefinite Articles Personal Pronouns – Forms of the Personal Pronouns **French:** Translate the Dialogue into English Culinary Terms – Translate to French using match the columns / crosswords	15	1.Business Communication- Meenakshi Raman & Prakash Singh 2. High School English- Wren and Martin 3. Business Communication- Chaturvedi	• Notes Whiteboard
Unit - II	The Verb Transitive & Intransitive Verbs Person & Number Active & Passive Voice Direct & Indirect Speech Tense (Past, Present & Future) Kinds of Adverbs The Preposition Kinds of Prepositions Using appropriate Prepositions The Conjunction Use of Appropriate Conjunctions Classes of Conjunctions The Interjection Meaning & Some Examples	15	1.Business Communication- Meenakshi Raman & Prakash Singh 2. High School English- Wren and Martin	• Notes Whiteboard

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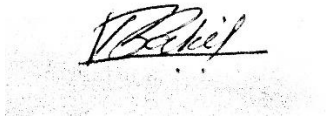
	Punctuation Commonly confused words / Common Errors / Antonyms / Synonyms		3. Business Communication- Chaturvedi	
Unit-III	French Days, Months, Numbers, Seasons Plan a Five Course menu in French Newspaper reading – Current Affairs Comprehension Précis Writing Paragraph Writing Conversation / Role Play Public Speaking Make Negative, Make Plurals, Conjugate in the Present tense ; avoir, entrée, Faire, Manger, Boire, Mettre	15	1.Oxford French Dictionary 2.E.J. Neather- Mastering of French I & II- Macmillan- 1982	● Notes Whiteboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**



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DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms.Tammanna Upadhyay** DEPARTMENT: **HOTEL MANAGEMENT** CLASS: F.Y.C.A SEMESTER: II

MONTH: NOVEMBER TO APRIL ACADEMIC YEAR: 2019-2020 SUB: COMMUNICATION SKILLS (ENGLISH & FRENCH)

LEARNING OBJECTIVE: Objective of this course is to enhance the communication skills in English/ French required of a Culinary Professional

The learners will be able to: Frame grammatically correct sentences in English • Apply the correct conjugation of verbs in sentences • Frame simple sentences in French.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	CONCEPT OF COMMUNICATION 1.1 Process of Communication / 1.2 Feed Back 1.3 Methods of Communication – Verbal / Non-Verbal 1.4 Channels of communication 1.5 Barriers of Communication 2 ORGANIZATIONAL COMMUNICATION 2.1 Upward, downward, lateral communication and their purposes functions, grapevine 2.2 Written communication – Memos, Circulars, notices **French** 1 Time, At the Office in a restaurant, Asking direction	4 2	•Business Communication – Meenakshi Raman and Prakash Singh •Business Correspondence and Report writing – R.K.Sharma and Krishna Mohan •Business Communication – Chaturvedi •High School English – Wren and Martin •Understanding Human Communication – Ronald B Adler and George Rodman (with CD) •Skills Development for Business and Management Students - Kevin Gallagher λE. J. Neather - Mastering of French I & II - Macmillan - 1982 λBridget Anfossy - Speak	● Notes Whiteboard

			French Today - Augo - 1991 λR. Diez La Cortina - Cortina's French Method - Grosset & Dunlop - 1988 λMathuram Bondo - Modern French Course - D. C. Heath & Co. - .1983. λCourse de langue et civilizaiion Franchises. G. Mauger. λOxford French Dictionary	
UINT 2	BUSINESS COMMUNICATION 1.1 Planning the right look of a letter 1.2 Types of letters- quotations, orders, claim and adjustment, sales, application, complaint / apology REPORT WRITING 2.1 Types of Reports 2.2 Structure of a report 2.3 Types of Reports **(French)** 1 Receipes-put in the correct order, Translate to English, Making Tea, Coffee, Bechamel,Veloute, Simple soups and salads 2 Culinary Terms	05 10	•Business Communication – Meenakshi Raman and Prakash Singh •Business Correspondence and Report writing – R.K.Sharma and Krishna Mohan •Business Communication – Chaturvedi •High School English – Wren and Martin •Understanding Human Communication – Ronald B Adler and George Rodman (with CD) •Skills Development for Business and Management Students - Kevin Gallagher E. J. Neather - Mastering of French I & II - Macmillan - 1982	● Notes Whiteboard

			Bridget Anfossy - Speak French Today - Augo - 1991 R. Diez La Cortina - Cortina's French Method - Grosset & Dunlop - 1988 Mathuram Bondo - Modern French Course - D. C. Heath & Co. -.1983. Course de langue et civilizaiion Franchises. G. Mauger. Oxford French Dictionary	
UINT 3	GROUP COMMUNICATION 1.1 Types of meetings /Advantages and Disadvantages 1.2 Participants Responsibilities / Brain Storming 1.3 Structure of a meeting – Agenda and Minutes 2 PRESENTATION 2.1 Making effective presentation /Speaker's appearance and personality 2.2 Using Visual aids 3 INTERVIEWS 3.1 Purpose / Types 2 Hours 3.2 Candidate's preparation – GD / PI **(French)** 1 French Basic Conversation and Translation of Passages from French to English U	02 02 02 07	•Business Communication – Meenakshi Raman and Prakash Singh •Business Correspondence and Report writing – R.K.Sharma and Krishna Mohan •Business Communication – Chaturvedi •High School English – Wren and Martin •Understanding Human Communication – Ronald B Adler and George Rodman (with CD) •Skills Development for Business and Management Students - Kevin Gallagher	● Notes Whiteboard

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			E. J. Neather - Mastering of French I & II - Macmillan - 1982 Bridget Anfossy - Speak French Today - Augo - 1991 R. Diez La Cortina - Cortina's French Method - Grosset & Dunlop - 1988 Mathuram Bondo - Modern French Course - D. C. Heath & Co. -.1983. Course de langue et civilizaiion Franchises. G. Mauger. Oxford French Dictionary	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Hotel Management – Principle of Management CLASS: SY BACA

SEMESTER: III

MONTH: July to November ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE: To understand the management process function & principles.

The learners will be able to:

- The basic **principle of management** with management process functions and principle. Students will also learn the idea about of new development in management.
- The students will be able to describe and discuss the elements of effective management.
- The students will be able to discuss the elements of effective management like leadership, directing, motivating within the contemporary organization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	**Introduction to Management** Meaning, Definition of Management Six M‟s of Management Features & Importance of Management Management is Art, Science and Profession Managerial skills – roles Levels of Management and its Functions Concept of PODSCORB Frederick Winslow Taylors‟s Scientific Management	15	Principles of Management – P.C. Tripathi & Reddy Management Principles & Practices – Dr. M Sakhthivel Murugan Management & Organizational Development – Micheal Vaz & Meeta Seta	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

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UNIT – 2	Henri Fayol‟s Principals of Management		Principle of Management – Harold Koontz	
	Planning & Organizing Planning Definition, nature and importance of Planning Elements of Planning Planning process Limitation of Planning Organizing Definition , nature of Organising Importance of Organizing Organization structure : meaning and factors of Organization Structure Importance of Organization structure Types of Organization Structure : Formal and Informal Formal Organization Structure Informal Organization Structure Departmentation : Meaning And Types Formal Organization Structure Span of control: Meaning and importance Centralization : Meaning, Features and Factors Decentralization : Meaning, and Factors Delegation: Meaning and Relationship	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

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UNIT -3	**Directing, Leadership, Co-ordination, Controlling & MBO** Directing Meaning and Principals of Directing Leadership Definitions and Features of Leadership Leadership Qualities of A Good Leader Motivation Maslow‟s hierarchy of needs, Hertzberg's theory of motivation Co-ordination Meaning, Importance of Co-ordination Steps in Effective Co-ordination Controlling Meaning, Importance of Controlling Steps in Control Process MBO Definition and Features of MBO Process of MBO	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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HOTEL & TOURISM MANAGEMENT STUDIES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KIRTI T. CHALKE **DEPARTMENT**: FOOD SAFETY AND NUTRITION CLASS: **FY.Bsc.HS**

SEMESTER: **I** MONTH: **JUNE TO NOVEMBER** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE:

Objective of this course is to familiarize the students with importance of hygiene and Food Safety in Hospitality Industry

The learners will be able to:

- To learn about the importance of hygiene & sanitation in the catering industry
- To get acquainted with the food standards.
- To learn about ways to minimize food poisoning and infections.
- To understand function, sources & deficiency of nutrients.
- To gain basic knowledge of nutrition
- To gain knowledge about maintenance of good health.
- To understand the changes brought about in food nutrients during processing

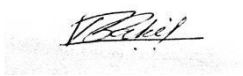
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1. INTRODUCTION TO HYGIENE** 1.1 Rules & importance of hygiene 1.2 Personal Hygiene 1.3 Cleaning of premises 1.4 Pest Control 1.5 Waste disposal 1.6 Dishwashing methods 2.HACCP 2.1 Introduction 2.2 Importance 2.3 VII Critical Control Points	**15 HRS**	Hobbs, Betty & Roberts, Food Poisoning and Food Trickett Jills Food Hygiene For FOOD HandlersHobbs, Loken Joan How To Prevent Food, The HACCP Food Safety Manual	White board PPT Notes Videos

	3.MICROBES 3.1 Introduction (Bacteria, Yeast, Mould) 3.2 Classification 3.3 Factors for growth 3.4 Role of microbes in manufacture of fermented foods (dairy products, Veg. & bakery preparations, alcoholic Bev., vinegar, fermented Indian foods)			
Unit 2	**FOOD BORNE ILLNESS** 1.1 Natural Toxins (Kesari Dal, Potatoes, Mushrooms, Shell Fish, Peanuts) 1.2 Chemical (Tin, Copper, Arsenic, Lead) 1.3 Bacterial toxins (staphylococcus, salmonella, Clostridium perfringens, Clostridium botulinum) 1.4 Food poisoning & Infections • Definitions • Food contamination & Spoilage • Differentiation • Examples **FOOD ADULTERATION** 2.1 Definition and types 2.2 Test to detect (coffee, semolina, flour, ghee, butter, margarine, oil, milk, turmeric, coriander powder, pepper corn , meat etc. 2.3 Food standards in India (PFA, FPO, MPO, BIS-ISI, AGMARK, ISO) **FOOD ADDITIVES** 3.1 Colours& Flavours	**15HRS**	• Food & Nutrition Vol-I • Food Science & Nutrition	White Board PPT Notes Videos

	3.2 Browning reactions-causes, desirable & undesirable effects) **FOOD PRESERVATION** **Methods of Preservation** 4.1 Natural & Chemical Preservation 4.2 Low temperature (Refrigeration, Freezing) 4.3 High Temperature (Pasteurisation, Sterilization, Canning) 4.4 Irradiation			
Unit 3	**INTRODUCTION TO NUTRITION** 1.1- Definitions(Food, balanced diet, nutrition, over nutrition, under nutrition, malnutrition, health) 1.2 - Balanced diet-Food pyramid 1.3 - Meal planning steps **CARBOHYDRATES** 2.1 - Classification & composition 2.2 - Functions & requirements, sources 2.3 - Excess & Deficiency 2.4 -Uses in food preparation (Gelatinization, Gel formation, Dextrinization, Gluten formation, Caremelization) **FATS&OILS** 4.1 - Classification & Composition 4.2 - Functions & requirements, Sources 4.3 - Excess & Deficiency 4.4 - Types, Sources, Uses 4.5 - Factors causing deterioration 4.6 - Rancidity	**15 Hrs**	• Food & Nutrition Vol-I • Food Science & Nutrition	White board PPT Notes

	4.7 - Flavour reversion 4.8 - Shortening 4.9 –Polymerisation **PROTEINS** 3.1 - Classification & Composition 3.2 - Functions & requirements, Sources 3.3 - Excess & Deficiency 3.4 - Uses in food preparation 3.5 - Effect of heat (Denaturation, Coagulation) 3.6 - Gel formation 3.7 – Foaming **VITAMINS, MINERALS, WATER & COLLOIDS** 5.1 - Functions 5.2 - Sources 5.3 - Deficiency & Excess 5. 4 - Fat soluble & water soluble Vitamins (A,D,E,K,B1,B2,B3,C) 5.5 - Minerals (Ca,P, Na,K,Fe,I,Fl) 5.6 - Importance, balance & Sources 5.7 - Cooking losses & prevention 5. 8 - Definitions (sol, gels, foam, emulsion) 5. 9 - Examples(roasting, grilling, frying, baking, boiling, poaching, microwave) 5.10 - Importance in food industry			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 hrs



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Sumit S.Pote** DEPARTMENT: **Information Technology** CLASS: F.Y.H.S SEMESTER: I

MONTH: **November to December** ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Computer Fundamentals	5 Parts of Computer • Difference between Hardware & Software • Difference Between Data and Informationcccccccc • Types of Computers – Server (Types), Clients (Types of Portable Computer) • Application Software • System Software • Software Copyright – Freeware, Shareware, Licensed	2		White board PPT Notes Videos
	Application Software – Word Processor, Spreadsheet, Database Management, Presentation, Media, Outlook, Browser and Utility Software like Acrobat Reader • System Software – Operating System (Windows, Linux, Android) • Device Driver • Utility Software – VLC Player, File Converter	3		White board PPT Notes Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Sumit S.Pote** DEPARTMENT: **Information Technology** CLASS: F.Y.H.S SEMESTER: I

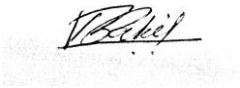
MONTH: **November to December** ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	**Hardware** • Introduction of Central Processing Unit • Processor – Intel, AMD, Clock Speed • Input Devices – Keyboard, Mouse, Mic, Scanner, Barcode Reader, RFID, Touch Screen • Output Devices – Displays (CRT, TFT, LCD, Plasma, LED, Projector) • Display Resolution • Printers – Inkjet, Laser, Thermal • Storage Devices – Primary (RAM & ROM), Secondary (HDD, Flash Drive, USB, CD/DVD, Blue Ray, Media Players)	3		White board PPT Notes Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Sumit S.Pote** DEPARTMENT: **Information Technology** CLASS: F.Y.H.S SEMESTER: I

MONTH: **November to December** ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	Networking • Types of Network (LAN, WAN, MAN) • Topology (Bus, Star, Ring, Mesh & Tree) • Network Hardware – (Cables – RJ45, RJ11, MTRJ, Switch, Routers, Access Point, Modem) • IP and MAC Address, Subnet, Gateway, DNS • Understanding Network Address & Node Address • Network Security – Firewalls (Hardware & Software) • Bandwidth	4		White board PPT Notes Videos
	Internet • Intranet, Internet & Extranet • WWW, HTTP, Domains • VPN & VoIP • Search Engines • ISP & Bandwidth	3		White board PPT Notes Videos

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: II

MONTH: **NOVEMBER 2018- APRIL 2019** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- The different types of Menus and principles of menu planning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	**1.** MEALS AND MENU PLANNING 1.1 Menu – Origin, definition & objectives 1.2 Types of meals (Breakfast, Brunch, Lunch, Afternoontea, High tea, Dinner) Types of Menu a. A la c arte b. Table d' hote c. Cyclic menu d. Banquet menu e. Carte du jour / plat du jour f. Californian menu g. Take-away Other types of menu a) Children's menu b) Club menu c) Ethnic menu	7 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question

	d) Health menu e) Spa Menu f) Ayurvedic Menu 1.4 Principles of Menu planning 1.5 Breakfast: English, Continental, American, Indian 1.6 Types of Tea Service: Full Afternoon Tea, High Tea.			
	Revision Lectures	3 Lectures		1) Classroom Theory Test 2) Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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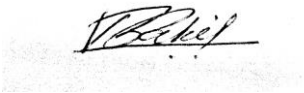

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: II

MONTH: **NOVEMBER 2018- APRIL 2019** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Sequence and course in the French classical menu also identify general accompaniments.
- Types, storage and service of Tobacco

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II	1.FRENCH CLASSICAL MENU 1.1 a. Sequence and Courses. b. General Accompaniments. 1.2 Ice creams: Types & categories of Ice creams	6 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question
	2.TOBACCO a) Introduction to Cigars and cigarettes. b) Types of tobacco c) Shape, size, color & Brand names with country of origin.	7 Lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question
	Revision Lectures	5 Lectures		1. Classroom Theory Test 2. Viva

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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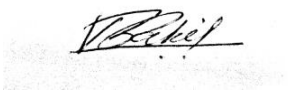

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: II

MONTH: **NOVEMBER 2018- APRIL 2019** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Types, storage and service Non alcoholic beverages.
- Simple control system followed in a restaurant.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III	1.1 NON ALCOHOLIC BEVERAGES a. Definition of beverages b. Classification chart –alcoholic & non alcoholic drinks. c. Stimulating -Tea, Coffee & Cocoa, (origin, manufacture, Method of preparation, types & brands) d. Nourishing -health drinks e. Refreshing –juices, squashes, crushes, syrups & aerated water Table Water (origin, types & brands) & carbonated water.	9 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question

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	1.2 SIMPLE CONTROL SYSTEMS. a. Restaurant reservation system b. KOT Checking System c. Types of KOT / BOT d. Method of billing (manual & computerized)	4 Lectures		1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question
	Revision Lectures	4 Lectures		1) Classroom Theory Test 2) Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

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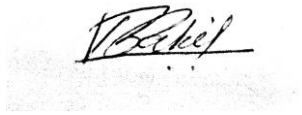

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: I

MONTH: **JULY 2018 - NOVEMBER 2018** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

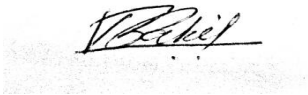
The learners will be able to:

- Student should be able to Identify the role of the Food and Beverage Service department and explain its organization structure and importance.
- Explain how "moments of truth" affect guests, staff members, and managers, and describe the value of guests and staff members to a food service operation.
- Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	**1.** INTRODUCTION TO HOTEL AND CATERING INDUSTRY 1.1 Role of catering establishment in travel / tourism industry 1.2 Types of F& B operation (Classification). Commercial (residential / Non Residential) • Welfare • Institutional • Transport (Roads, Railways, Airlines, Marine) 1.3 Structure of hospitality industry and career opportunities	4 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question
	2. DEPARTMENTAL ORGANISATION AND STAFFING 2.1 Organization of F & B Department of a Hotel (English & French) 2.2 Etiquette & Attributes of an F & B Personnel. 2.3 Duties and responsibilities of F & B Staff. a) F & B Manager.	5 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question

	b) Banquet manager. c) Outlet Manager (All day dining/ Bar/ In Room Dining/Specialty Restaurant, etc.) d) Senior captain/ Captain/ Supervisor. e) Steward. f) Sommelier. g) Hostess. h) Cashier. 2.4 Departmental Relationship of F& B with other Departments.			
	Revision Lectures	3 Lectures		1) Classroom Theory Test 2) Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: I

MONTH: **JULY 2018 - NOVEMBER 2018** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

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DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

The learners will be able to:

- Identify the operational and Auxiliary areas as well as equipment's used in the Food and Beverage department.
- Understand the various service methods and procedures followed in the department.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II	1. OPERATIONAL & AUXILLARY AREAS OF FOOD AND BEVERAGE DEPARTMENT: IMPORTANCE & LAYOUTS a) Coffee shop b) Snack bar/ counter service c) Kiosks d) Specialty restaurant/ theme restaurant e) Banquet operations/ outdoor catering f) In-Room Dining g) Dispense Bar / Discotheque/ night club/ pub h) Pantry/Still room i) Kitchen stewarding j) Silver room k) Linen room l) Vending machine	5 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question
	2. FOOD AND BEVERAGE SERVICE EQUIPMENT 2.1 Classification of equipment. (Familiarization of equipment). 2.2 Criteria for selection and requirements. • Tableware/ silverware (cutlery/ hollowware/flatware) • Glassware • Crockery • Bar equipment(For all of the above Brands, Measures & Quality suppliers) • Special equipment with their uses.	7 Lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1) P.P.T. 2) Related Topic Videos 3) Theory Notes Along With Question

	• Furniture (Tables/Chairs/Trolleys/Dumb Waiter) • Linen. • Light and décor • Care and maintenance of equipment. • Napkin folds. 2.3 Table d' hôte, A'la carte Mis-en –place, Mis -en –Scene			
	Revision Lectures	5 Lectures		1. Classroom Theory Test 2. Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17

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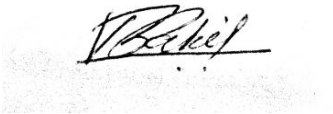

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRIKANT B.DHARNE** DEPARTMENT: **FOOD & BEVERGE SERVICE** CLASS: **F.Y.B.Sc.Hs.** SEMESTER: I

MONTH: **JULY 2018 - NOVEMBER 2018** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE: FOOD & BEVERGE SERVICE OPERATIONS

The learners will be able to:

- Understand the various service methods and procedures followed in the department.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III	1. DINING SERVICES METHOD AND PROCEDURES 1.1 Different methods of services a. Table service • Silver service/ English service • American/ Plated • Family • Russian • French/ butler • Guéridon b. Bar Counter c. Assisted Service • Carvery • Buffets d. Self Service •Cafeteria: a).Counter b).free-flow c).Echelon	9 lectures	Food & Beverage Service 9 Edition- John Cousins Dennis Lillicrap	1. P.P.T. 2. Related Topic Videos 3. Theory Notes Along With Question

	d).Supermarket e. Single point service •Take-away •Drive through •Fast food •Vending •Kiosk •Food court •Bar f. Specialized (in-situ) •Tray •Trolley •Home delivery •Lounge •Room •Drive in 1.2 Special Service • Formal Service • Wave service • Carlton club service 1.3a. Rules to be observed while laying the table. b. Rules to be observed while waiting at the table. c. Dos & don’ts in a restaurant			
	Revision Lectures	5 Lectures		1) Classroom Theory Test 2) Viva

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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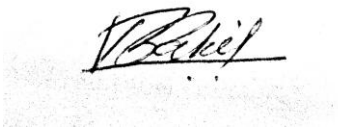

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: RAMEEZ SHAKEEL PATEL **DEPARTMENT**: Food Production and Patisserie

CLASS: FY.Bsc.Hs SEMESTER: 2

MONTH: ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE:

• To develop a keen interest in food production and to enable students to experiment, innovate and progressively produce a variety of preparation / dishes.

• To gain confidence to adapt to the technical skills and the art of preparing different menus, Indian as well as Continental.

• By the end of the second semester students should be confident enough in their skills which would boost their morale to take up the challenge of bulk cookery in the third and fourth semester

The learners will be able to:

- Define microbes and conditions for growth of microbes
- List the importance and basic principles of HACCP
- List micro organisms
- Define Food Adulteration and adulterants
- State the types and uses of Food Additives
- State the importance of Hygiene
- List various methods of Food Preservation
- State the regulations and regulating bodies governing Food Safety and Hygiene.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1.Culinary Terms with Explanation & Examples** **2.Layout of kitchen** 2.1 General Layout of the Kitchen 2.2 Receiving Area 2.3 Storage	**03.HRS** **03.HRS**	Thangam Philip – Modern Cookery I & II – Orient Longman – 2001 Auguste Escoffier – Ma	1. POWER POINT PRESENTATION 2. WHITE BOARD AND MARKER 3. RELATED TOPIC VIDEOS

UNIT 2	2.4 Wash up **3.Soups** 3.1 Classification with Examples 3.2 Consommé and Garnishes with their names (Any 10 common name) **4.Fish Mongery** 4.1 Classification of Fish with examples 4.2 Selection, Cooking & Storage of Fish 4.3 Local Names of Fin Fish and Shell Fish 4.4 Cuts of Fish **5.Poultry** 5.1 Cuts of Poultry 5.2 Selection and Uses of Cuts **6.Rice, Cereals & Pulses** 6.1 Introduction, Classification of Cereals and Pulses 6.2 Varieties of Rice and Byproducts 6.3 Nutritive Value of Various Cereals 6.4 Sprouts and Uses **7.Meat** 7.1 Introduction to Meat Cookery 7.2 Cuts of Lamb, Pork, Beef / Veal 7.3 Variety of Meats / Offal 7.4 Selection and Storage of Meats **8.Milk and Milk Products** 8.1 Introduction, Processing of Milk, Pasteurization, Homogenization,	**02.HRS** **02.HRS** **02.HRS** **03.HRS** **04.HRS** **05.HRS**	Cuisine – Hamlyn – 2000 Digvijay Singh – Cooking Delight of the Maharajas – Vakils, Feffer & Son's Ltd. – 1982 Philip Dowell & Adrian Barley – The Book of Ingredients – Mermaid Books – 1987 Wayne Gisslen – Professional Baking – John Wiley & Sons – 1994 Martha Day – Baking – Lorenz Books – 1999 M. J. Leto & Bode – The Larder Chef – Heinemann Publishing House – 1989 Parvinder S. Bali - Food Production Operations Thangam E. Philip - Modern Cookery for Teaching and Trade - 4th Vol. – 1996 Krishna Arora - Theory of Cookery – 2nd – 1992 Wayne Gisselen - Professional Cooking – 4th – 1992 Wayne Gisselen - Professional Baking – 2nd – 1994 J. C. Dubey - Basic Bakery - 1st – 1992 Kinton Ceserani - Theory of Catering – 7th – 1996 Bernard Davis - Food Commodities - 4th – 1998 Daniel R. Stevenson - Basic Cookery The Process Approach - 5th – 1997	4. THEORY NOTES ALONG WITH QUESTIONS.

	Milk in Various Forms e.g. Toned, Powder, Skimmed, Condensed & Evaporated. 8.2 Cream – Introduction, Processing & Types 8.3 Butter – Introduction, Processing & Types 8.4 Cheese – Introduction, Classification with Examples, Processing, Types, Cooking with Cheese and Uses.			
UNIT3	**9,Bakery & Pastry** **Shortening – Fats and Oils** 9.1 Saturated and Un-saturated Fats 9.2 Advantages & Disadvantages of Using Fats 9.3 Varieties of Shortening **10.Tea & Coffee** 10.1 Introduction 10.2 Producing Regions/Country 10.3 Types and Methods of Preparation 10.4 Popular Brands and Variety Available **11.Thickening Agents used in Indian Gravies** 11.1 Role of Thickening Agents **12.Indian Cookery** 12.1 History of Spices and Trade Routes 12.2 Basic Spices, Condiments and Masalas 12.3 Role of Spices in Indian Cuisine 12.4 Indian Equivalent name 12.5 Blending of Spices 12.6 Concept of Wet and Dry Masalas 12.7 Regional Varieties of Basic Masalas 12.8 Basic Composition of Some Important Masalas **13.Menu Planning** 13.1 History of Menu 13.2 Types of Menu 13.3 Menu Planning Principles	**03.HRS** **02.HRS** **01.HRS** **03.HRS** **02.HRS**		1.

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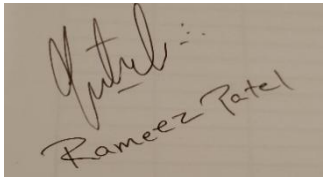
	14.Bakery & Pastry 14.1 **Pastries** • Classification of Pastries • Varieties • Role of Each Ingredient • Baking Temperature and Time of Each Pastry 14.2 **Pastry Cream** • Basic Pastry Cream • Use in Confectionery • Preparation and Care in Production 14.3 **Cocoa and Chocolate** • Introduction, Production and Manufacture • Varieties of Chocolates • Tempering of Chocolates	**04. HRS** **03.HRS** **03.HRS**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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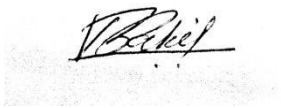

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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Room Division Management (Front Office) CLASS: F.Y. BSc HS

SEMESTER: I

MONTH: July to November ACADEMIC YEAR: **2018 - 2019**

LEARNING OBJECTIVE: To introduce the students to the hotel & tourism Industry. Students would develop the necessary skill required as an efficient and effective receptionist and to handle situations and types of guest in the job.

The learners will be able to:

• Understand the appropriate organization structures and duties in the Front Office and related departments.
• Develop, prepare guest relations, and evaluate practical aspect with guests.
• Understand the role of public relations with hotel industry.
• Understanding the functioning of the Telecommunication department.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	**Introduction to the Hotel & Tourism Industry** • An account of development & growth of hotel & tourism Industry in the World • Development and growth of Hotel & Tourism Industry In India. **Classification of Hotels by** • Location • Architectural Design • Number of rooms • Ownership	15	Jatashankar Tiwari – Front Office Management. Sudhir Andrews – Hotel Front Office Training Manual.	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	• Pricing Plan • Type of Clientele • Duration of Guest Stay • Facilities Offered • Star ratings criteria in India (HRACC) • Supplementary Accommodation			
UNIT – 2	**Tariff Structure** 1.Types of Rooms Single, Double, Twin, Hollywood twin, Interconnecting, Adjacent, Adjoining, Lanai, Penthouse, Duplex, Efficiency, Physically Challenged, Studio, Parlour, Hospitality Room, Suite (Types). 2.Tariff Fixation • Check-in and Check-out basis, 24 hour basis, on the basis of competitor's rate, Night basis, Day rate. 3.Types of Meal Plans European, Continental, Bermuda Plan, Modified American Plan (Half- Board, Demi- Pension), and American Plan (Full-Board: En Pension).	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

	4. Packages and Special Rates Rack rate, Group rate, Volume rate, Government rate, FIT, Wholesale net rate, discounted rates, Seasonal rate, Crib Rate, Extra bed rate, Family rate, Crew rate, Week day/Weekend rates, Membership rates, Executives of the other units of the same chian, Corporate rate, Commercial rate, Advance purchase rate Package rate, Ad-hoc rate 5. Taxation • Luxury tax, Expenditure tax, Sales tax, Value added tax and other statutory taxes. • Service Charges. **Organisation of the Front Office Department** Organisation charts of • Small Hotel • Medium Hotel • Large Hotel Sections of the Front Office Department Inter and Intra departmental Co-ordination Job Specifications and Job Description • Front Office Manager • Duty Manager • Guest Relations Executive			

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HOTEL & TOURISM MANAGEMENT STUDIES

UNIT – 3	**Telecommunications** Introduction • Types of Exchange- PBX, PABX, EPABX • Other Communication Equipment- Walkie- Talkies, Pagers, Mobile Phones, Telephone Instruments, Pay Phones, Facsimile. • Organisation of the Telecommunications department • Job descriptions of the Telecommunications department supervisor & Operator • Skills and Competencies of the Telephone Operator • General duties of a Telephone Operator • Internet Access- Introduction, Dial up access, High speed with wired access, High speed with warless access • Future of Hotel telephones- Voice-over-internet-protocol (VOIP) • AYS – at your service	15		1. Slides 2. Videos 3. Quiz 4. Power Point 5. Presentation 6. PDF 7. Word 8. White Board 9. Projector 10. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pratyasha Pattnaik** DEPARTMENT: Room Division Management (Front Office) CLASS: FY BSc HS

SEMESTER: II

MONTH: November to March ACADEMIC YEAR: **2018 -2019**

LEARNING OBJECTIVE: The student should be able to understand the concept and functioning of room reservations, reception & guest services.

The learners will be able to: know the entire procedure of room reservations and its types, different situations of check in along with the guest services.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1	RESERVATIONS • Sources of Reservations • Modes of Reservations • Types of Reservations • Systems of reservations • Overbooking • Job Description of Reservation Personnel	15	Jata Shankar Tiwari – Front Office Management Sudhir Andrews – Front Office Training Manual B K Chakravati – Front Office Management in Hotel	1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

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UNIT – 2	RECEPTION • Profiling the guest • Guest Registration Process • Regular and Non Regular Guest • 'C'Form & 'F' From	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion
UNIT -3	GUEST SERVICES • Handling Guest Mail • Message Handling • Custody and Handling of Keys • Guest Paging • Safe Deposit Locker • Guest Room Change • Custody of Deposited Luggage	15		1. Slides 2. Videos 3. Quiz 4. Power Point Presentation 5. PDF 6. Word 7. White Board 8. Projector 9. Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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HOTEL & TOURISM MANAGEMENT STUDIES

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HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ms.Nileshwari Ghumare** DEPARTMENT: **HOTEL MANAGEMENT** CLASS: **F.Y.H.S** SEMESTER: **II**

MONTH: **NOVEMBER TO APRIL** ACADEMIC YEAR: 2018-19 SUB: **PRINCIPLES OF HOTEL ACCOUNTANCY**
LEARNING OBJECTIVE: The student will be able to understand the basics of accounting concepts and also its application in practical life.
The learners will be able to: Understand the concept of accountancy, application of accounting concepts in their practical life.

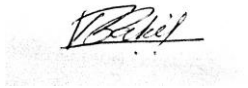
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Accounting & Double Entry Book-Keeping	1. Introduction to Accounting & Double Entry Book-Keeping: 1.1 Terms 1.2 Nature, Importance, Objectives & advantages of accounting 1.3 Nature & advantages of Double Entry Book-keeping 1.4 Classification of Accounts 1.5 Applying Debit & Credit rules to a Transaction.	03		● White Board ● Notes
	2. Journal 2.1 Importance of Journal & its format 2.2 Narrations 2.3 Journalising simple & compound entries 2.4 Practical problems	04		● White Board Notes
	3. Ledger 3.1 importance of ledger & its format 3.2 posting entries & balancing ledger accounts	03		● White Board Notes
	4. CASH BOOK 4.1 triple column cash book			

	4.2 contra entries 4.3 practical problems 4.4 types of bank account, types of cheques	05		● White Board Notes
Unit- 2 Subsidiary Books	1 Subsidiary Books 1.1 Advantages of subsidiary Books 1.2 Types of subsidiary Books 1.3 Simple Practical problems on Purchase Book, Sales Book, Purchase – Return Book & Sales Return Book. 2. Elements of cost & concept of Profit 2.1 Material cost (food & Beverage), Labour cost, overhead cost, Gross Profit, After wage profit & Net Profit. 2.2 Practical Problems 3. Bank Reconciliation Statement 3.1 Purpose of Preparing B.R.S 3.2 Advantages 3.3 Simple Practical Problems 4 Trial Balance 4.1 Importance of Trial Balance 4.2 Net format of T.B	03 06 05 01		● White Board Notes
UNIT –III Capital & Revenue Expenditure & Deferred Revenue Expenditure	1. Capital & Revenue Expenditure & Deferred Revenue Expenditure 1.1 Nature of Capital & Revenue Expenditure 1.2 Nature of Deferred Revenue Expenditure 1.3 Examples 2. Final Accounts of sole – Trader (with Adjustments)	01		● White Board Notes

	2.1 Importance, Purpose & Need for preparation of Final accounts. 2.2 Practical Problems covering the following adjustments:- Closing stock Prepaid Expenses Outstanding Expenses Depreciation Bad Debts & Provision for Bad debts	10		● White Board Notes
	3. Break Even Analysis :- 3.1 Variable cost, fixed cost & semi variable cost. 3.2 Contribution, Profit/Volume Ratio & Break Even Point. 3.3 Simple Practical Problems	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO ALL THE UNITS: 45 HOURS

SIGNATURE OF THE STAFF



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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pallavi Naik** DEPARTMENT: CLASS: F.Y.BSC. H.S. SEMESTER: I

MONTH: ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE: Objective of this course is to enhance the communication skills in English/ French required of a Culinary Professional

The learners will be able to: Frame grammatically correct sentences in English

- Apply the correct conjugation of verbs in sentences
- Frame simple sentences in French

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit – I	The Sentence – Kinds of Sentences – Subject & Predicate The Phrase & The Clause Parts of Speech – Noun, Adjective, Pronoun, Verb, Adverb, Preposition, Conjunction, Interjection Noun – Kinds of Noun (Common, Proper, Collective, Abstract) The Noun : Gender (Masculine, Feminine, Common, Neuter) The Adjective – Kinds of Adjective, Comparison of Adjectives (Positive, Comparative, & Superlative Degrees. The Correct use of some Adjectives Articles - Use of Definite & Indefinite Articles Personal Pronouns – Forms of the Personal Pronouns **French:** Translate the Dialogue into English Culinary Terms – Translate to French using match the columns / crosswords	15	1.Business Communication- Meenakshi Raman & Prakash Singh 2. High School English- Wren and Martin 3. Business Communication- Chaturvedi	• Notes Whiteboard
Unit - II	The Verb Transitive & Intransitive Verbs Person & Number Active & Passive Voice Direct & Indirect Speech Tense (Past, Present & Future) Kinds of Adverbs The Preposition Kinds of Prepositions Using appropriate Prepositions The Conjunction Use of Appropriate Conjunctions Classes of Conjunctions The Interjection Meaning & Some Examples	15	1.Business Communication- Meenakshi Raman & Prakash Singh 2. High School English- Wren and Martin	• Notes Whiteboard

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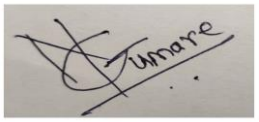
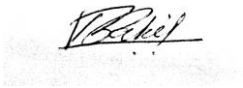
	Punctuation Commonly confused words / Common Errors / Antonyms / Synonyms		3. Business Communication- Chaturvedi	
Unit-III	French Days, Months, Numbers, Seasons Plan a Five Course menu in French Newspaper reading – Current Affairs Comprehension Précis Writing Paragraph Writing Conversation / Role Play Public Speaking Make Negative, Make Plurals, Conjugate in the Present tense ; avoir, entrée, Faire, Manger, Boire, Mettre	15	1.Oxford French Dictionary 2.E.J. Neather- Mastering of French I & II- Macmillan- 1982	● Notes Whiteboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dipti Dilip Khadpe.** DEPARTMENT: **Room Division Management-II.**

CLASS: **F.Y.BSc.HS.** SEMESTER: **I.**

MONTH: **Academic Year 2018-2019 (July-October)** SUBJECT: **Housekeeping.**

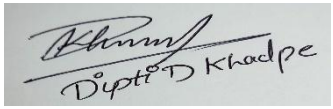
LEARNING OBJECTIVE:

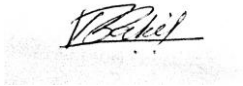
The student will be able to identify the role of the housekeeping department and explain its organization structure and importance.
The student will be able to list the basic cleaning equipment's, cleaning agents and explain their use.
Will be able to perform basic cleaning procedures of various surfaces.

The learners will be able to understand organization structure, types of cleaning equipment and agent and surface.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I	1. INTRODUCTION TO HOUSE KEEPING DEPARTMENT	15	Hotel Housekeeping Operations and Management (G. Raghubalan & Smritee Raghubalan – Oxford University Press).	1. PPT 2. VIDEO
II	1. ORGANIZATION OF HOUSEKEEPING DEPARTMENT	09		1. PPT
	2. CLEANING EQUIPMENT	06	Professional Management of Housekeeping Operations – (Thomas J. A. Jones – John Wiley & Sons)	1. PPT 2. VIDEO
III	1. CLEANING AGENTS	08		1. PPT 2. VIDEO
	2. CLEANING & POLISHING OF DIFFERENT SURFACES	07		1. PPT 2. VIDEO

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HOURS.





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dipti Dilip Khadpe.** DEPARTMENT: **Room Division Management-II.**

CLASS: **F.Y.BSc.HS.** SEMESTER: **II.**

MONTH: **Academic Year 2018-2019 (December-March)** SUBJECT: **Housekeeping.**

LEARNING OBJECTIVE:

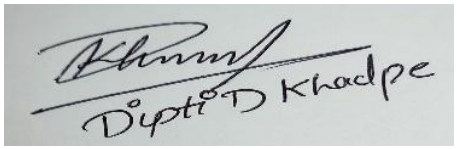
The student will be able to identify the which are the different area in hotels which are cleaned by housekeeping department.
The students will be got to know different types of services and amenities offered by housekeeping.
This semester students will learned about different format used by housekeeping in day-day to operations.
Students will learned about how to handle maids trolley.
The students will be learned about how to handle lost and found, key and control and pest control.
In this semester they will learn how to handle any situation.

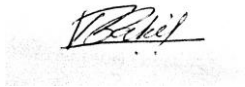
I9\	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I	1. CLEANING OF DIFFERENT AREAS	15	Hotel Hostel and Hospital Housekeeping – Joan Branson & Margaret Lennox	
II	1. TYPES OF ROOM SERVICES	03	Housekeeping Management – Margaret Kappa, Aleta Nitschken, Patricia B. Schappert – A.H. & L.A.	
	2. MAIDS SERVICE ROOM / HOUSE KEEPING PANTRY	04		
	3. GUEST ROOM SUPPLIES & AMENITIES	04		
	4. FORMATS USED IN THE HOUSEKEEPING DEPARTMENT	04		
III	1. LOST & FOUND	04		

	2. KEY & KEY CONTROLS	**02**	Housekeeping Operations, Design and Management – Malini Singh & Jaya B. George – Jaico Publications	
	3. SITUATION HANDLING	**06**		
	4. PEST CONTROL	**03**		

The learners will be able to understand organization structure, types of cleaning equipment and agent and surface.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HOURS.





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAZIA SAJID SHAIKH DEPARTMENT: COMMERCE CLASS: S.Y.H.S SEMESTER: IV

MONTH: November - March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE:

The learners will be able to: .Human resource Development, Job Analysis and Job design, and Challenges of Human resource Management

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 HUMAN RESOURCE DEVELOPMENT . **UNIT 2. JOB ANALYSIS AND JOB DESIGN**	*Introduction ,Importance and Evolution of HRM,HRD culture and Climate.	08	**Human Resource and Personnel Management. K.Aswathapa, (Tata Mc Graw Hill)** **Human Resource Management. (Michael Vaz)**	● Notes Whiteboard
UNIT 3. HUMAN RESOURCE PLANNING. **UNIT 4. RECRUITMENT AND SELECTION.** **UNIT 5.**	*__JOB ANALYSIS:__ **M**eaning, Objectives, Process , Components, Job Description, Job Specification. *__JOB DESIGN:__ Meaning , factors affecting job Design, Approaches to Job design. *__HRP:__ Meaning, Planning Process, HR Demand forecast, HR supply forecast, **HRIS, HRA.** *__Recruitment:__ Meaning, Process , importance.	08 10		● Notes Whiteboard

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CHALLENGES OF HRM	*__Selection:__ Meaning , Steps , Importance. *__Training and development:__ Meaning Importance, Methods of Training. *__Performance Appraisal.__ *__Absenteeism and Turnover.__ *__Balancing Work with life.__ *__Managing Diversity.__ **Ethical issues in HRM.**	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHER'S PLAN

NAME OF THE STAFF: **Sumit S.Pote** DEPARTMENT: **Food & Beverage Service** CLASS: S.Y.H.S SEMESTER: IV

MONTH: **November to March** ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE: Describe the duties and responsibilities of beverage service staff members, and summarize techniques and procedures for responsibly selling and serving cocktails, beer, and wine. • Understanding the production process of Beer, Wine and Spirits.

The learners will be able to: Understand the different types of Alcoholic Beverages . Students will learn the types of Alcoholic beverages as per the production methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
● **UNIT 1** ALCOHOLIC BEVERAGES	● ALCOHOLIC BEVERAGES a. Definition, history of Alcoholic Beverages & classification. b. Benefits and harmful effects of alcohol.	02	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	White board PPT Notes Videos
	WINES ● **1.1 Definition & history of wines.** ● **1.2 Types of Wines:** ● **Still (red, white & rose), sparkling/Champagne, Fortified (sherry, port, Madeira, marsala & malaga), Aromatized wines (Vermouth).** ● **1.3 Methods of production, Still (red, white, rose).**	13	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service •Larousse Christopher Foulkes- Encyclopedia of Wines-	White board PPT Notes Videos

	● a) Viticulture ● (Wine calendar, terroir, vine species, grape varieties & diseases). ● b) Vinification ● (Manufacturing process, elements of wine & faults in wines). ● c) Champagne & Sparkling Wines. ● (History, districts, grape varieties, Methode Champenoise, cuvee close, transfer method, charmat & impregnation, Names & bottle sizes). ● d) Fortified Wines (Production & types). ● 1) Sherry (Solera system) ● 2) Port ● 3) Madeira (estufagen) ● 4) Marsala ● 5) Malaga ● e) Aromatised wines (Definition & types)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

NAME OF THE STAFF: **Sumit S.Pote** DEPARTMENT: **Food & Beverage Service** CLASS: S.Y.H.S SEMESTER: IV

MONTH: **November to March** ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE:

The learners will be able to:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II	2.1 Wine producing countries of the world (Regions, Wine laws, labels & shippers). a) Old world wine producing countries (France, Italy, Germany, Spain & Portugal). b) New World wine producing countries (Australia, New Zealand, South Africa, U.S.A. & India).	10	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service •Larousse Christopher Foulkes- Encyclopedia of Wines-	White board PPT Notes Videos

	2.2 Wine tasting, Storage & Service	02	•Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	White board PPT Notes Videos
	2.3 Food and wine Harmony.	03		White board PPT Notes Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

NAME OF THE STAFF: **Sumit S.Pote** DEPARTMENT: **Food & Beverage Service** CLASS: S.Y.H.S SEMESTER: IV

MONTH: **November to March** ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE:

The learners will be able to:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNITIII BEER & OTHER FERMENTED BEVERAGES	a) Definition, History & Brewing process. (Components of beer, top fermentation, bottom fermentation) b) Types of Beer, Storage & Service (Lager, Pilsner, Draught, Ale, Stout, Porter, Ice, Lambic & Smoked) c)Other fermented beverages (Cider, Perry, Mead, Sake & Toddy).	03	● Shatbi Basu- The can't go wrong Cocktail book ● Brian Glover- The world encyclopedia of Beer	White board PPT Notes Videos

	3.2 SPIRITS a) Introduction and definition b) Pot and patent still method of production. 3.3 History, Production, types & Brand names (national & International) a) Whisky (Scotch, American, Canadian, Irish & Japanese) b) Rum (White, Gold, Dark & Flavoured) c) Brandy (Cognac, Armagnac & Fruit) d) Gin e) Vodka, flavoured vodka f) Tequila & Mezcal	03	•Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	White board PPT Notes Videos
	3.4 Alcoholic Strength :Proof, GL, Sykes, U.S., British (OIML) 3.5 Other Spirits (Aquavit, schnapps, Pastis, ouzo, arrack) 3.6 LIQUEURS Introduction, definition, classification & production of liqueurs a) Different types of liqueurs: Base, Flavours, Country of origin. b) Brand names of liqueurs (Generic & Proprietary)	04	Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	White board PPT Notes Videos
	3.7 APERITIFS & BITTERS a) Definition b) Brand names	02	Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	White board PPT Notes Videos

	3.8 GLOSSARY OF TERMS RELATED TO Alcoholic beverages, Menu terminologies.	02	Vijay Dhawan- Food and Beverage Service **FOOD & BEVERAGE SERVICE** •Dennis Lillicrap, John Cousins and Robert Smith- Food and Beverage Service	White board PPT Notes Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(THEORY)** CLASS: **S.Y.BSc HS** SEMESTER: **IV**

MONTH: **November to April** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Advanced Guest Cycle	**ADVANCED GUEST CYCLE** • Group (Tourist/ Conference/ Convention) • Crew (Airline- Layovers/ Cruise lines/ Cargo) Regular Guests • Special Attention Guests • (Handle With Care, Single ladies, unaccompanied children, Sr. Citizens, Disabled Guest)	8	Hotel Front Office by Jatashankar Tiwari	White board Power point Presentation
	GUEST ROOM CHANGE • ROOM CHANGE PROCEDURES • By Hotel (Upgrade/ Up sell) By Guest , • (Discrepancy/ Personal Preference)	7	Hotel Front Office by Jatashankar Tiwari	White board Power point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(THEORY)** CLASS: **S.Y.BSc HS** SEMESTER: **IV**

MONTH: **November to April** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	**HANDLING OF COMPLAINTS** • Types of Complaints(Service related/ Attitudinal/ Mechanical/ Unusual complaints) • Guidelines to handle complaints FRONT	5	Hotel Front Office by Jatashankar Tiwari	White board Power point Presentation
	OFFICE ACCOUNTING SYSTEM AND SETTLEMENT • Guest and Non Guest Folio • Types of Folio • Types of Vouchers • City Ledger • Billing Procedure instruction • Methods of settlement • (Cash/ CC- Direct currency converter/ BTC/ TAV/ PSO/ COMP Voucher)	10	Hotel Front Office by Jatashankar Tiwari	White board Power point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA PEDNEKAR** DEPARTMENT: **FRONT OFFICE (THEORY)** CLASS: **SYBSc.HS** SEMESTER: **IV**

MONTH: **November to April** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	**SECURITY SYSTEMS IN HOTELS** • Fire Alarm Systems • Burglar Alarm Systems • Electronic Locking Systems	15	Front Office Operations by Kasavana	White board Power point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(PRACTICAL)** CLASS: **S.Y.BSc HS** SEMESTER: **IV**

MONTH: **November to April** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	**SELECTION OF THE FRONT OFFICE MANAGEMENT SYSTEM** Software –Shawmans Property Management System-Amadeus. Fidelio	5	Hotel Front Office by Jatashankar Tiwari	Computer Internet
2	**ROOM MANAGEMENT SOFTWARE** Room Inventory, Room Status availability	5	Hotel Front Office by Jatashankar Tiwari	Computer Internet
3	**REGISTRATION** Reservation/ Guest data (profile) GHC, Reports /self check-in	5	Hotel Front Office by Jatashankar Tiwari	Computer Internet
4	**POSTING** Paid Out/ Miscellaneous Voucher, Telephone, Display Folio (bill), Reports	5	Hotel Front Office by Jatashankar Tiwari	Computer Internet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(PRACTICAL)** CLASS: **S.Y.BSc HS** SEMESTER: **IV**

MONTH: **November to April** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
5	**CALL ACCOUNTING** Guest Information/ Employee Information/ Post Charges/ Messages/ Wake Calls 5 6	5	Hotel Front Office by Jatashankar Tiwari	Computer Internet
6	**CHECK OUT** Folio /Adjustment/ Cashier/ Back Office Guest History	5	Hotel Front Office by Jatashankar Tiwari	Computer Internet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dipti Dilip Khadpe.** DEPARTMENT: **Room Division Management-II.**

CLASS: **S.Y.BSc.HS.** SEMESTER: **III.**

MONTH: **Academic Year 2018-2019 (July-October).** SUBJECT: **Housekeeping.**

LEARNING OBJECTIVE:

The student will be able to explain various operational procedures and formats pertaining to linen, uniforms, and laundry.
The student will be able to create formats and design layouts of linen room, uniform room and laundry.
The student will be able to create Flower Arrangements for various occasions and locations.
The student will be able to plan and implement décor for special occasions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I	1. LINEN ROOM OPERATIONS	10	Hotel Housekeeping Operations and Management (G. Raghubalan & Smritee Raghubalan – Oxford University Press).	1. PPT 2. VIDEO
	2. FORMATS	05		1. PPT
II	1. UNIFORM AND SEWING ROOM	05	Textile and Laundry in Hotel Industry – (Dr. D.K.Agrawal - Aman Publications). Stain Removal – (Stephanie Zia – Bounty Books).	1. PPT

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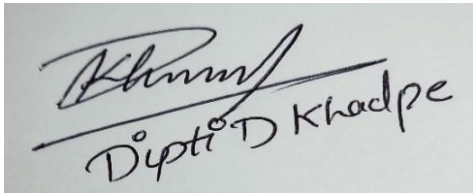
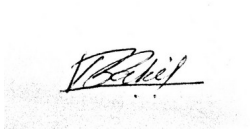
	2. LAUNDRY OPERATIONS	10		
III	1. FLOWER ARRANGEMENT	10	The Art of Flower Arranging – (Ian Hall & Sarah Waterkeyn - Smithmark Publications).	1. PPT 2. VIDEO
	2. ERONOMICS IN HOUSEKEEPING	05	Professional Management of Housekeeping Operations – Thomas J. A. Jones – John Wiley & Sons	1. PPT

The learners will be able to understand how to handle different fabrics, Flower arrangement & implement décor for special occasions.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45 HOURS.





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jay shetty** DEPARTMENT: **Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June - November** ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE: Identify Food & Beverage setup and planning of various outlets in the department.

- Describe casual, theme restaurants etc. and how they are operated.
- How food service managers develop and manage labour & revenue control system.
- Explain how banquets and catering events are booked and planned, and describe how managers and staff members provide service for these events.
- Explain the operations of various catering establishments such as Railway, Airline & Marine caterings.

The learners will be able to: Students will learn Food & Beverage setup and planning of various outlets, how banquets and catering events are booked and planned.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	1.1 F & B Outlet Planning 1.1.1 Objective of a good layout 1.1.2 Steps in planning of layout. (Specialty Restaurants, Coffee Shop, Room Service) 1.1.3 Factors to be considered while planning the actual ambience (Colour, light, décor, furniture & uniform) 1.2 Operational aspects of various F & B Outlets (Specialty Restaurants, Coffee Shop, Room Service) 1.2.1 Menu planning 1.2.2 Constraints of Menu planning 1.2.3 Planning of staff requirement 1.2.4 Shifts (Panzer, Straight, Split & Reliever) 1.2.5 Factors to be considered for selecting	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi	1)Power point presentation 2) Videos 3) Interactive session on the topic 4) Class test

	appropriate Crockery, Cutlery, Glassware, and Linen. 1.3 Elements of cost 1.3.1 Types of cost (Material, Labour & Overhead) 1.3.2 Cost Groups (Fixed, semi-fixed & variable) & types of profit (gross & net) 1.3.3 Breakeven / Cost volume profit analysis			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jay shetty** DEPARTMENT: **Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June - November** ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE: Identify Food & Beverage setup and planning of various outlets in the department.

- Describe casual, theme restaurants etc. and how they are operated.
- How food service managers develop and manage labour & revenue control system.
- Explain how banquets and catering events are booked and planned, and describe how managers and staff members provide service for these events.
- Explain the operations of various catering establishments such as Railway, Airline & Marine caterings.

The learners will be able to: Students will learn Food & Beverage setup and planning of various outlets, how banquets and catering events are booked and planned.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	Function Catering / Banquets 2.1 Definition, History & Importance 2.2 Organization of Banquet dept., duties and responsibilities. 2.3 Types of Banquets: Formal, Semiformal & Informal 2.4 Banquet Sales 2.5 Banquet reservation diary and booking procedure. 2.6 Function contract & Function prospectus 2.7 Banquet Menus 2.8 Types of service in the banquets. 2.9 Staffing & Duty allocation	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi	1)Power point presentation 2) Videos 3) Interactive session on the topic 4) Class test

	2.10 Toast procedure at wedding reception & Protocol 2.11 Outdoor catering. 2.12 Glossary **Glossary**			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

NAME OF THE STAFF: **Jay shetty** DEPARTMENT: **Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: V

MONTH: **June - November** ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE: Identify Food & Beverage setup and planning of various outlets in the department.

- Describe casual, theme restaurants etc. and how they are operated.
- How food service managers develop and manage labour & revenue control system.
- Explain how banquets and catering events are booked and planned, and describe how managers and staff members provide service for these events.
- Explain the operations of various catering establishments such as Railway, Airline & Marine caterings.

The learners will be able to: Students will learn Food & Beverage setup and planning of various outlets, how banquets and catering events are booked and planned.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	3.1 Buffet. 3.1.1 Definition & Types of buffets. (Meal period, manner of consumption, food served & other types – Display, Gourmet & Running) 3.1.2 Points to be considered while planning a buffet. 3.1.3 Buffet equipment 3.1.4 Banquet layout (formal, informal & cabaret) & Space area calculation 3.1.5 Meeting room setups: (U Shape, Hollow Square, Classroom Theatre, Board of Directors, 'T' Shape) 3.2 Food and Beverage Management in various catering establishments	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi	1)Power point presentation 2) Videos 3) Interactive session on the topic 4) Class test

	3.2.1 Railway Catering & Airline catering 3.2.2 Marine Catering (offshore & cruise liners) 3.2.3 Industrial catering			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

NAME OF THE STAFF: **Jay shetty** DEPARTMENT: **Adv Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: VI

MONTH: **November - April** ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE: Identify factors to create impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley.

· Plan & operate a Bar operation, Manage inventory and maintain records pertaining to beverage control.

· Understand and apply cost dynamics as related to the Food & Beverage industry. · Demonstrate a detailed understanding of the various facets of the Food & Beverage cycle of control in the operational & post operational phase.

.

The learners will be able to: Students will learn impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley, Plan & operate a Bar operation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	1 Gueridon Service 1.1 Origin, history and definition 1.2 Factors to create impulse buying. 1.3 Advantages and disadvantages of Gueridon service 1.4 Principles of Gueridon service. 1.5 Flambé trolley & other trolleys (Carving, Cheese, Liqueur, Salad & Dessert). 1.6 Gueridon equipment & ingredients, Mise en place & Presentation.	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi 3) Andrews S, (2009), Food & Beverage Service A Training Manual,(Second Edition),	1)Power point presentation 2) Videos 3) Interactive session on the topic 4) Class test

	2 Food and Beverage Management. 2.1 Objectives of Food & Beverage Management. 2.2 Food and Beverage Management/ Function 2.3 Cost and Market orientation 3 Food and Beverage Control 3.1 Objective of F& B Control. 3.2 Obstacles of F& B Control. 3.3 Food Control checklists. 3.4 Beverage Control checklist			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jay shetty** DEPARTMENT: **Adv Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: VI

MONTH: **November - April** ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE: Identify factors to create impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley.

· Plan & operate a Bar operation, Manage inventory and maintain records pertaining to beverage control.

· Understand and apply cost dynamics as related to the Food & Beverage industry. · Demonstrate a detailed understanding of the various facets of the Food & Beverage cycle of control in the operational & post operational phase.

.

The learners will be able to: Students will learn impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley, Plan & operate a Bar operation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	Bar Operations 4.1 Definition & classification. 4.2 Layout & parts for Front of the house dispense bar. 4.3 Bar Thefts and frauds. (Nature and prevention.) 4.4 Records & Licenses maintained in a Bar (Naukarnama, Permit, TPIN, Bill book, & B.O.T.). 5.1 Cocktails & Mixed drinks a) Introduction, History & Definition b) Bar Equipment. (glassware, fixed & movable equipment) c) Methods of Mixing Cocktails. (Stirred, Shaken, Built up/Layered,	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi 3) Andrews S, (2009), Food & Beverage Service A Training Manual,(Second Edition),	1)Power point presentation 2) Videos 3) Interactive session on the topic 4) Class test

	Blended & Muddled) d) Styles of Cocktails (Collins, cobblers, coolers, crustas, cups, e) daisies, eggnogs, flips, frappes, fixes, fizzes, Highball, juleps, f) Pick-me-ups, pousse café, smashes, sours, swizzles & toddies). g) Rules to be observed while making cocktails. 5.2 Recipes of classic & exotic cocktails. a) Whisky: (Godfather, Manhattan, Mint Julep, Whisky Sour			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jay shetty** DEPARTMENT: **Adv Food & Beverage Ops. Mgm.** CLASS: T.Y.H.S SEMESTER: VI

MONTH: **November - April** ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE: Identify factors to create impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley.

· Plan & operate a Bar operation, Manage inventory and maintain records pertaining to beverage control.

· Understand and apply cost dynamics as related to the Food & Beverage industry. · Demonstrate a detailed understanding of the various facets of the Food & Beverage cycle of control in the operational & post operational phase.

.

The learners will be able to: Students will learn impulse buying; prepare, fillet, carve, flambé & finish food items from a Gueridon trolley, Plan & operate a Bar operation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	Cycle of control. 6.1 Operational phase 6.1.1 Purchasing 6.1.1.1Methods of purchasing Food / Beverage. (Contract / Daily / Weekly/ Fortnight / Cash and Carry) 6.1.1.2 Selection of a supplier 6.1.1.3 Purchase specification 6.1.1.4 Purchase order. 6.1.2 Receiving 6.1.2.1 Quality inspection 6.1.2.2 Quantity inspection	15	1) Lilicrap, Dennis & Cousins, John, (1994), Food and Beverage Service, Common Wealth Publication, New Delhi 2) Singaravelavan .R, (2011), *Food and Beverage Service*, Oxford University Press, Delhi 3) Andrews S, (2009), Food & Beverage Service A Training Manual,(Second Edition),	1)Power point presentation 2) Videos 3) Interactive session on the topic 4) Class test

	6.1.2.3 Receiving records Maintained 6.1.3Storing & Issuing 6.1.3.1Bin card 6.1.3.2Store ledger 6.1.3.3 Indent/ requisition 6.2 Post Operational Control: Management after the event phase. 6.2.1 Methods of Food control. 6.2.2 Methods of Beverage control 6.2.3 Detailed Daily Food cost report			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Osden Gren Thomas Ferreira** DEPARTMENT: **HS** CLASS: T.Y.H.S SEMESTER: V

MONTH: August 2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE:

The learners will be able to:

- Understand and explain the importance of Environmental and environmental studies
- Identify and explain Environmental changes
- Comprehend the historical background of travel and tourism industry
- Understand about the World's fastest growing Travel & Tourism industry and various modes of travel

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Environmental studies & Introduction to tourism & travel	Definition, Scope and Importance Need for public awareness Renewable & Non-renewable Resources Consumerism & Waste Products	2	Tourism Management Sumitra Roday	• Notes • White board
	Flashback – From early times till today (Purpose of travel in ancient times, invention of wheel, contribution of Thomas Cook, today's scenario). Definition of Tourism as stated by U.N.W.T.O. Types of Tourism Definition of Travel Various modes of Transport – Land (Rail and Road), Water (Ferries and Cruises), Air.	3	Tourism Management Sumitra Roday	• Notes • White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Osden Gren Thomas Ferreira** DEPARTMENT: **HS** CLASS: T.Y.H.S SEMESTER: V

MONTH: August 2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE:

The learners will be able to:

- Understand and relate the various tourism organizations working at different levels
- Determine the key roles of tourism and related organizations
- Comprehend the meaning of sustainable development and relate it to tourism development
- Understand the positive & negative impacts of tourism on the world

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Tourism organizations & Sustainable development	National/Domestic Organisations (M.T.D.C., I.T.D.C.) International Organisations (U.N.W.T.O., W.T.T.C., U.F.T.A.A., U.N.E.S.C.O., S.T.I.)	2	Tourism Management Sumitra Roday	• Notes • White board
	Why Sustainable Development? Rio Summit Impact of Tourism on the World	3	Tourism Management Sumitra Roday	• Notes • White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. Osden Gren Thomas Ferreira** DEPARTMENT: **HS** CLASS: T.Y.H.S SEMESTER: V

MONTH: November - September 2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE:

The learners will be able to:

- Understand and relate the various concepts of sustainable tourism
- Determine the key tourism locations for sustainability around the world, India and in Mumbai
- Comprehend the meaning of responsible tourism and understand the stakeholders in it
- Understand the positive & negative impacts of travel and tourist stay on sustainable tourism

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 Sustainable tourism	Introduction to sustainable tourism Sustainable tourism with respect to developed and developing countries Sustainable tourism in India & Mumbai	2	Tourism Management Sumitra Roday	• Notes
	Sustainable tourism umbrella – UNESCO sites Impact of travel & accommodation on sustainable tourism Responsible tourism	3	Tourism Management Sumitra Roday	• White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Housekeeping V** CLASS: **T.Y.H.S** SEMESTER: **V**

MONTH: **June – November** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE: Explain and apply the guidelines for hiring various housekeeping contract services. Manage the manpower planning in the housekeeping department in different category of hotels.

The learners will be able to: Students will learn trends used in housekeeping, contract services used in housekeeping and determining staff strength.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**Chapter 1 Current trends in Housekeeping** 1.1 Green housekeeping Practices 1.2 Cleaning Equipment and agents 1.3 Guest supplies and amenities 1.4 Level of Service	3	Hotel Housekeeping Operations and Management.	• Notes • White board • Videos
	Chapter 2 Contract Services/Outsourcing 2.1 Types of Contract 2.2 Guidelines for hiring contract Services 2.3 Advantages and disadvantages of contract service	3	Hotel Housekeeping Operations and Management. Housekeeping Operations, Design and Management	• Notes • White board
	Chapter 3 Manpower Planning 3.1 Determining staff Strength 3.2 Scheduling Staff (duty Roasters)	3	Hotel Housekeeping Operations and Management.	• Notes • White board • Charts

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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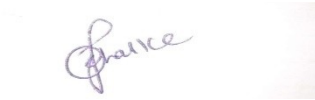
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Housekeeping V** CLASS: **T.Y.H.S** SEMESTER: **V**

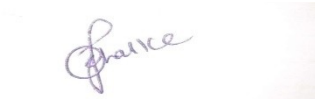
MONTH: **June - November** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE: Explain the Importance of lighting, various types of lighting. Plan window treatments for various types of windows. Identify the various ceiling and wall coverings.

The learners will be able to: Students will learn various methods of lighting, types of windows and various wall and ceiling finishes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	**4. Lighting and Lighting Fixtures** 4.1 Lighting for different areas of the hotel. 4.2 Functional and aesthetic aspects of light	3	Hotel Housekeeping Operations and Management.	Notes White board Pictures
	5. Windows and window treatment 5.1 Types of Windows & Window Treatment 5.2 Selection and Care	3	Hotel Housekeeping Operations and Management.	Notes White board Pictures
	6. Wall and Ceiling Finishes 6.1 Types 6.2 Selection 6.3 Care	3	Hotel Housekeeping Operations and Management.	Notes White board Pictures Samples

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Housekeeping V** CLASS: T.Y.H.S SEMESTER: V

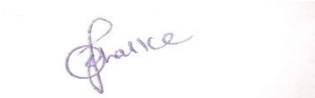
MONTH: **June - November** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE: Distinguish the various kinds of carpets in terms of construction and design and its maintenance procedure. Utilize the principles of designs while coordinating interiors.

The learners will be able to: Students will learn how to apply the elements and concept of interior decorations & elevations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	**7. Carpets and Floor Coverings** 7.1 Types 7.2 Selection 7.3 Care	7	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes White board Videos
	8. Interior Designing 8.1 Elements of Design 8.2 Principles of Design 8.3 Color Schemes	8	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes White board Videos

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Advanced Housekeeping** CLASS: T.Y.H.S SEMESTER: VI

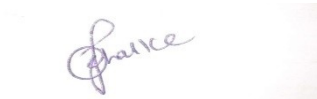
MONTH: **July to December** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE: To plan and evaluate budgets.

The learners will be able to: Students will learn various types of budget and planning process. To understand various roles of supervisor in housekeeping.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**1.Budget and Budgetary Control** 1.1 Introduction 1.2 Types of Budget 1.3 Budget planning Process • Preparing the budget • Formats 1.4 Controlling Expenses 1.5 Inventory Control	8	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes White board Tables and charts
	2. Supervisory Skills 2.1 Job Description and daily routine of • Guest room Supervisor • Public area Supervisor • Linen and Uniform Room Supervisor	7	Housekeeping Operations, Design and Management Hotel Housekeeping Operations and Management.	Notes White board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Advanced Housekeeping** CLASS: T.Y.H.S SEMESTER: VI

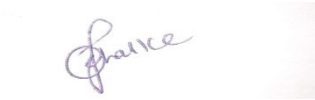
MONTH: **November to December** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE: To create and evaluate the aspects of Interior Design in a Guest Room Layout. Plan and draw the layout of Guest Rooms to scale. Set up the housekeeping department of a new property and create a timeline for the countdown to the opening.

The learners will be able to: Students will learn about various types of rooms in terms of sizes, interior and furniture and fixtures used in it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II	**3. Preopening Property Operations** 3.1 Setting up Housekeeping 3.2 Countdown to Opening 3.3 Preparing Snagging List	5	Housekeeping Operations and Management	• Notes • White board • Checklist
	4. Furniture and Accessories 4.1 Types 4.2 Selection 4.3 Care	5	Housekeeping Operations and Management	• Notes • White board • Pictures
	5. Guestroom Layout 5.1 Planning Room Layouts 5.2 Sizes of Room	5	Housekeeping Operations and Management	• Notes • White board • Layouts

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Kirti T. Chalke** DEPARTMENT: **Advanced Housekeeping** CLASS: T.Y.H.S SEMESTER: VI

MONTH: **November to December** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE: To Identify safety hazards and implement preventive and remedial measures.

The learners will be able to: Students will learn to handle various emergency situations like fire, bomb threat etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III	**6. Risk and Environment Management** 6.1 Fire Safety and Accident Prevention • Hazards • Prevention • Crisis Handling 6.2 First Aid 6.3 Dealing with Emergencies • Fire • Bomb threat • Death • Natural Disasters 6.4 Minimizing Theft • Guest theft • Employee theft	15	Housekeeping Operations and Management	• Notes • White board • Demonstration

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **NAMRATA KHARKANDI** DEPARTMENT: **FOOD PRODUCTION AND PATISSERIE** CLASS: **TY BSC HS**

SEMESTER: **VI** MONTH: **OCT 2018 – DEC 2018** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE:

- To educate students on basic to advance culinary skills.
- To give an overview of culinary specialties across the globe.
- To educate students on latest food trends.
- To highlight the importance of food safety.
- To train students for better employment prospects.

The learners will be able to:

- Understand importance of food safety.
- Understand latest food trends.
- Understand culinary specialties across the globe.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Kitchen Management	7	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	Kitchen Stewarding	8	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2	Sandwich	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	Classical garnishes (25)	5	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	Horsd'oeuvres	5	Ingram Christine, (2008), Appetizer, Starter Horsd'oeuvres, Hermes House , London	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study

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HOTEL & TOURISM MANAGEMENT STUDIES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3	Non Edible Displays	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study
	Uses of wines, herbs and spices in cooking	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study
	Organoleptic & sensory evaluation of food	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1. PowerPoint 2. Black board 3. YouTube videos 4. Class test 5. Home study
	Contemporary cooking trends	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study
	Culinary terms	3	Bali Parvinder S., (2012), International Cuisine & Food Production Management, Oxford University, New Delhi	1 PowerPoint 2 Black board 3 YouTube videos 4 Class test 5 Home study

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

VIVA COLLEGE
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VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT STUDIES

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr.Jay Shetty** DEPARTMENT:HOTEL MANAGEMENT CLASS: T.Y.H.S SEMESTER: VI

MONTH:NOVEMBER TO APRIL ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE: The objective of Organizational Behaviour is to provide students with the opportunity to diagnose Individual and Group Behaviour. • The study of Structure, Motivation & Change helps to develop skills in improving individual and group performance in entrepreneurial and established ventures. • To develop the overall personality and sustain in the dynamic environment

The learners will be able to: .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Computer Fundamentals	**Introduction to Organizational Behaviour** **1.1 Definition of Organizational Behaviour** **1.2 What Managers Do** 1.2.1 Management Functions 1.2.2 Management Roles 1.2.3 Management Skills 1.2.4 Effective v/s Successful Managerial activities **1.3 Disciplines that contribute to the Organizational Behaviour field** **1.4 Individual Behaviour** 1.4.1 Ability 1.4.2 Biographical characteristics 1.4.3 Learning & Process of Learning 1.4.4 Introduction & Importance to Perception, Values & Attitude 1.4.5 Personality & Its Determinants **1.5 Group Behaviour** 1.5.1 Types of Groups	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	• Notes Whiteboard

	1.5.2 The Five stage model (Group Dynamics / Development)			
	Organizational Structure 2.1 What is Organizational Structure 2.1.1 Six Elements of organizational structure 2.2 Organizational Designs 2.2.1 Common Organizational Designs (Simple, Bureaucratic, Matrix)			
	Motivational Concepts 3.1 Define Motivation 3.2 Early Theories of Motivation 3.2.1 Maslow Abraham's Hierarchy of Needs theory 3.2.2 Douglas McGregor's Theory X & Theory Y 3.2.3 Fredrick Herzberg's Two Factor Theory 3.2.4 Mc Cleland's Theory of Needs 3.3 Contemporary Theories of Motivation 3.3.1 Cognitive Evaluation Theory (Definition) 3.3.2 Goal setting Theory (Definition) 3.3.3 Self Efficacy Theory (Definition) 3.3.4 Reinforcement Theory (Definition) 3.3.5 Equity Theory (Definition) 3.3.6 Expectancy Theory (Definition) 3.4 Leadership & Types of Leadership 2.2.2 New Design options (Virtual, Team, Boundaryless)	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	• Notes Whiteboard
	Stress Management 4.1 What is Stress? 4.2 Potential Sources of stress			

	4.3 Consequences of Stress 4.4 Managing stress 4.5 Introduction to Quality of Work Life			
	Organizational Change 5.1 What is change? 5.2 Elements / Factors of Change (External & Internal) 5.3 Planned Change 5.4 Resistance to change 5.5 Overcoming Resistance to Change 5.6 Approaches to Managing Organizational change 5.6.1 Lewin's 3 step model 5.6.2 Action Research 5.6.3 Meaning of Organizational Development & Techniques / Intervention 5.7 Introduction to Diversity & Managing Diversity	15	1. Stephen P. Robbins, Timothy A. Judge, Seema Sanghi; (2010); Organizational Behavior; Tenth Edition; Pearson Education Publication 2. Fred Luthans; (2007); Organizational Behavior; Eleventh Edition; McGraw Hill Publication 3. Udai Pareek; (2011); Understanding Organizational Behaviour; Third Edition ; Oxford Publication 4. S S Khanka; (2012); Organizational Behaviour Text & Cases; Fourth Edition ; S Chand & Co. Limited 5. Uma Sekaran; (2004); Organizational Behaviour Text & Cases; Second Edition ; McGraw Hill	• Notes Whiteboard
	Conflict Management 6.1 Definition of Conflict 6.2 Sources & Types of Conflict 6.3 Conflict Management Styles 6.4 Power and Politics 6.4.1 Concept & Basis of Power 6.4.2 Organization Politics			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(THEORY)** CLASS: **T.Y.BSc.HS** SEMESTER: **V**

MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 **PLANNING OPERATIONS**	• Management Function • Planning, Organising, Co-ordinating, Staffing, Leading, Controlling, Evaluating	5	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation
	• Establishing Room Rate • Different Approaches for pricing rooms • Market Condition Approach • Rule of Thumb • Hubbart's Formula-Determining single and double rate • Special Room Rates Offered Corporate / Commercial Rate, Group Rate, Promotional Rate, Incentive Rate, Family Rate, Package, Complimentary Rate	5	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation
	• Forcasting Room Availability • Forecasting Data • Percentage of No-show	5	Hotel Front Office by Jatashankar Tiwari	White board Power point Presentation

	• percentage of Cancellations • Percentage of walk-ins • Percentage of overstay • Percentage of under stay • Forecast formula; S • Sample 3 and 10 days forecast • Refining Forecast • Budgeting for Operations • Three Day Forecast • Forecasting room revenue • Estimating expenses		Front Office by Rajeev Mishra	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(THEORY)** CLASS: **T.Y.BSc HS** SEMESTER: **V**

MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 EVALUATING OPERATIONS	• Daily Operations Report, Monthly Income Statement,	2	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation
	• Occupancy Ratios • Occupancy Percentage • Room Count • House Count • Double Occupancy percentage • Bed Occupancy Percentage • Foreign Guest Percentage • Average Daily Rate • Revenue Per Available Room (RevPAR) • Average Rate Per Guest (ARG) • Yield Statistic. •	10	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation
	• Market Share Index/ Fare Market Share	3	Hotel Front Office by Jatashankar Tiwari	White board Power point Presentation

	• Evaluation of the hotel by guest		Front Office by Rajeev Mishra	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

NAME OF THE STAFF: **POOJA PEDNEKAR** DEPARTMENT: **FRONT OFFICE(THEORY)** CLASS: **TYBSc.HS** SEMESTER: **V**

MONTH: **JUNE-OCTOBER** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 HANDLING FOREIGN CURRENCY	• Foreign Currency Exchange • Procedures to be followed while exchanging Foreign Currency Currencies accepted by RBI • Foreign Exchange Certificate- Format • Foreign Exchange Settlements using Credit Cards. • Export Promotion Capital Goods Scheme (EPCG)	15	Front Office Operations by Jatashankar Tiwari	White board Power point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(PRACTICAL)** CLASS: **T.Y.BSc HS** SEMESTER: **V**

MONTH: **JUNE TO OCTOBER** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	GROUP DISCUSSION	10	INTERNET	Computer Internet
2	SITUATION HANDLING	10	Hotel Front Office by Jatashankar Tiwari	Power point Presentation
3	MANPOWER PLANNING	10	Hotel Front Office by Jatashankar Tiwari	Power point Presentation White Board , Marketr

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(THEORY)** CLASS: **T.Y.BSc HS** SEMESTER: **VI**

MONTH: **NOVEMBER TO APRIL** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 YIELD MANAGEMENT	Introduction • Concept of Yield Management • Applications(Hospitality Industry) • Various strategies to maximise yield • Capacity Management, Discount Allocation, Duration Control 1.4 Measuring Yield	3	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation
	• Potential Average Single Rate • Potential Average Double Rate • Multiple Occupancy Percentage • Rate Spread/ Rate Differential • Potential Average Rate • Room Rate Achievement Factor • Revenue Per Available Room (RevPAR) • Equivalent Occupancy	7	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation
	• Elements of Yield Management • Group Room Sale (Group Booking Data, Group booking pace, Anticipated Group Business, Lead Time, Displacement of Transient Business)	5	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation

	• Transient/ FIT Room Sales • Food and Beverage Activity • Local and Area-wide activities • Special Events • Using Yield Management • Potential High and Low Demand Tactics • Implementing Yield Strategies • Hurdle rate • Minimum length of stay • Close to arrival • Sell-through • Key Terms			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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VIVA COLLEGE
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HOTEL & TOURISM MANAGEMENT

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(THEORY)** CLASS: **T.Y.BSc HS** SEMESTER: **VI**

MONTH: **NOVEMBER TO APRIL** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 PASSPORT AND VISA	• Passport • Definition and Types of Passport • Guidelines for Indian Passport Holders • Issue of New Passport • Renewal Of Passport • Passport for Minor • Replacement of Lost/ Damaged Passport (Duplicate) • Extension of short validity passport • Change of Name/ Surname after marriage • Change of appearance • Change in Date of Birth/ Place of Birth • Emergency Travel Document • Fee Structure	8	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation
	VISA • Definition and types of visas • Requirement for visa	7	Hotel Front Office by Jatashankar Tiwari Front Office by Rajeev Mishra	White board Power point Presentation

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HOTEL & TOURISM MANAGEMENT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

NAME OF THE STAFF: **POOJA PEDNEKAR** DEPARTMENT: **FRONT OFFICE(THEORY)** CLASS: **TYBSc.HS** SEMESTER: **VI**

MONTH: **NOVEMBER TO APRIL** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	**REVENUE TERMS**	15	Front Office Management by BK Chakravarthy	White board Power point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **POOJA S PEDNEKAR** DEPARTMENT: **FRONT OFFICE(PRACTICAL)** CLASS: **T.Y.BSc HS** SEMESTER: **VI**

VIVA COLLEGE
DEPARTMENT OF
HOTEL & TOURISM MANAGEMENT

MONTH: **NOVEMBER TO APRIL** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE: To equip the student with the theory inputs with respect to understanding the fundamentals of computers and necessary skills to operate the generic applications and standard operating systems

The learners will be able to: Students will learn required basic knowledge and technical skills in the Information Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	• **Role Play Activities:** (Transient FIT's, Groups & Special Category Guest) • Pre-arrival stage • Arrival Stage • Occupancy • Departure	40	Hotel Front Office by Jatashankar Tiwari	Power point Presentation
2 3	• **Handling Guest Complaints & Situations** Theft, Drunken guest & Difficult guest, Bomb Threat, Fire, Death, Guest with Health Problems, Service related complaint, Black Listed Guest, Wake up call, Discrepancy in charges, Pet Policy.	40	Hotel Front Office by Jatashankar Tiwari	Power point Presentation
	• **Case Study (10 Case Studies)**	40	Hotel Front Office by Jatashankar Tiwari	Power point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 120

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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VIVA COLLEGE
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr.Akhilesh Subramanian** DEPARTMENT: CLASS: T.Y.H.S SEMESTER: VI

MONTH: November - March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE: To familiarize students with marketing fundamentals.
To explain the importance of service marketing to a hospitality management student& to fit the subject into his/her understanding of Hospitality.
The learners will be able to: Understand importance and scope of service marketing in hospitality industry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	***CH: 1 Introduction to Marketing*** 1.1 Concise evaluation of marketing 1.2 Definitions – Marketing, Sales etc. 1.3 Introduction to service marketing 1.4 Distinguish between Sales & Marketing 1.5 Distinguish between Goods & Services 1.6 Characteristics of Service Marketing 1.7 Service Gaps 1.8 Service Encounter & Service Chain 1.9 Service Encounter Analysis	10	Marketing of Hospitality and Tourism Services by Prasanna Kumar. Services Marketing by C. Bhattacharjee	● Notes Whiteboard
	CH: 2 Service Marketing Concepts 2.1 Segmentation -Types of Segmentation 2.2 Positioning 2.3 Components of marketing plan	05		

TOTAL NUMBER OF LECTURES ALLOTED TO THE UNIT: 15

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	SUBTOPICS	NO	REFERENCE/S	TEACHING METHOD/ ICT TOOLS

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PAPER, UNIT, TITLE		OF LECTURES ALLOTED		USED
UNIT 2	***CH: 3 P's of Service Marketing*** 3.1 *Product/Service Mix* Levels of product, New product Development, Product Life Cycle, Marketing Strategy in PLC, Branding 3.2 *Price Mix* Pricing Objectives, Factors affecting Pricing Decision, Scheming and Penetration, Creative Pricing of hostels and restaurants 3.3 *Distribution/Place Mix* Different Distribution network, Types of distribution channels, Push and Pull Strategy, Need and Role of distribution channel 3.4 *Promotion Mix* Communication process, Types of Media, Public Relations and Publicity, Stages & Techniques of Personal Selling in House Merchandising, Sales Promotion – Types & Techniques 3.5 *People* Employees and Customers 3.6 *Physical Evidence* Ambience, Equipment, Employee Dress, Facility Design 3.7 *Process/ System* Service Blueprint, service delivery	15	Marketing of Hospitality and Tourism Services by Prasanna Kumar. Services Marketing by C. Bhattacharjee	● Notes Whiteboard
	TOTAL NUMBER OF LECTURES ALLOTED TO THE UNIT: 15			

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	***CH: 4 Consumer Behavior*** 4.1 Introduction and definition of consumer behavior 4.2 Factors influencing Consumer Behavior 4.3 5 stages in purchase behavior 4.4 Guest of tomorrow and Guest Lifestyles ***CH: 5 E-Marketing for Services*** 5.1 Introduction and Objectives of E-Marketing 5.2 Ways to conduct online marketing activities 5.3 Benefits of E-Marketing	15	Marketing of Hospitality and Tourism Services by Prasanna Kumar. Services Marketing by C. Bhattacharjee	● Notes Whiteboard
	TOTAL NUMBER OF LECTURES ALLOTED TO THE UNIT: 15			

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Nileshwari Ghumre** DEPARTMENT: HOTEL MANAGEMENT CLASS: T.Y.H.S SEMESTER: VI

MONTH: NOVEMBER TO APRIL ACADEMIC YEAR: 2018-19
SUB: STRATEGIC MANAGEMENT

LEARNING OBJECTIVE: • The students will identify the operating strategy of the organization. • Develop skills in decision making • Students will be able to strategize and participate in policy making.

The learners will be able to: . • The students will identify the operating strategy of the organization. • Develop skills in decision making • Students will be able to strategize and participate in policy making.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Introduction to Strategic management 1.1 Definition – Strategy, Strategic Management and its relevance 1.2 Process of Strategic Management 1.3 Levels of Strategy : Corporate, Divisional Business, Operational or Functional 1.4 7 'S' Frame Work 2 Strategic Intent 2.1 Vision , Mission, Business definition, Goals and Objectives 2.2 Mission Statement and its Characteristics 2.3 Corporate Social Responsibility	15	Kazmi, A.(2011) Strategic Management and Business Policy 3 rd ed., The McGraw Hill Companies.B.Sc. (Hospitality Studies) Page 9 of 64 2. David,F.(2011) Strategic Management Concept and Cases 13th ed., Pearson Education 3. Ramswamy ,V.S., Namakumari, S.(2007) Strategic Planning Formulation of Corporate Strategy, Macmillen 4. Srinivasan, R., (2006), Strategic Management The Indian Context , 2nd Prentice Hall of India 5. Enz,C., (2010), Hospitality Strategic Management 2 nd ed. John Wiley and Sons, Inc.	● Notes Whiteboard

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UNIT 2	Environmental Analysis 3.1 Concept of Organizational Environment : Internal and External Environment 3.2 Process of SWOT analysis 3.3 Need for Environmental analysis (External Environment) 3.4 External Factor Evaluation Matrix (EFE) 4 Organizational Appraisal 4.1 Dynamics of Internal Environment 4.2 Six Organizational Capability factors 4.3 Internal Factor Evaluation Matrix (IFE) 4.4 Competitive Profile Matrix (CPM) 4.5 Industry Analysis (Porter's Five Force Analysis)	15	Kazmi, A.(2011) Strategic Management and Business Policy 3 rd ed., The McGraw Hill Companies.B.Sc. (Hospitality Studies) Page 9 of 64 2. David,F.(2011) Strategic Management Concept and Cases 13th ed., Pearson Education 3. Ramswamy ,V.S., Namakumari, S.(2007) Strategic Planning Formulation of Corporate Strategy, Macmillen 4. Srinivasan, R., (2006), Strategic Management The Indian Context , 2nd Prentice Hall of India 5. Enz,C., (2010), Hospitality Strategic Management 2 nd ed. John Wiley and Sons, Inc.	● Notes Whiteboard
UNIT 3	Strategy Formulation 5.1 Types of Strategy 5.1.1 Intensification Strategies : 5.1.1.1 Market penetration 5.1.1.2 Market Development 5.1.1.3 New Product Development 5.1.1.4 Innovation 5.1.2 Integrative Strategies: 5.1.2.1 Horizontal 5.1.2.2 Vertical 5.1.3 Diversification Strategies	15	Kazmi, A.(2011) Strategic Management and Business Policy 3 rd ed., The McGraw Hill Companies.B.Sc. (Hospitality Studies) Page 9 of 64 2. David,F.(2011) Strategic Management Concept and Cases 13th ed., Pearson Education 3. Ramswamy ,V.S., Namakumari, S.(2007) Strategic Planning Formulation of Corporate Strategy, Macmillen 4. Srinivasan, R., (2006),	● Notes Whiteboard

	5.1.3.1 Concentric (Related) 5.1.3.2 Conglomeratic (Unrelated) 5.1.4 Restructuring / Retrenchment Strategies: 5.1.4.1 Turnaround 5.1.4.2 Divestment 5.1.4.3 Liquidation 5.1.4.4 Merger 5.1.4.5 Acquisition (Take Over) 5.1.4.6 Joint Venture 6.Strategic Evaluation 6.1 Nature and its importance B.Sc.(Hospitality Studies) 6.2 Process of Strategic Evaluation		Strategic Management The Indian Context , 2nd Prentice Hall of India 5. Enz,C., (2010), Hospitality Strategic Management 2 nd ed. John Wiley and Sons, Inc.	

TOTAL NUMBER OF LECTURES ALLOCATED TO ALL THE UNITS: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: T.Y. BSc (IT) DIV-C SEMESTER:SEM -5 MONTH: JUL-OCT ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand what is a The Internet of Things and its applications .
- Introduction of Prototyping the Physical Design and online design.
- Understand different techniques of Prototyping.
- Learn the concept of automation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT502 Internet Of Things UNIT 1	**The Internet of Things:** An Overview: The Flavour of the Internet of Things, The "Internet" of "Things", The Technology of the Internet of Things, Enchanted Objects, Who is Making the Internet of Things?	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally WILEY First 2014	Laptop, power point, jamboard
	Design Principles for Connected Devices: Calm and Ambient Technology, Magic as Metaphor, Privacy, Keeping Secrets, Whose Data Is It Anyway? Web Thinking for Connected Devices, Small Pieces, Loosely Joined, First-Class Citizens on The Internet, Graceful Degradation, Affordances.	4		
	Internet Principles: Internet Communications: An Overview, IP, TCP, The IP Protocol Suite (TCP/IP), UDP, IP Addresses,	4		

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	DNS, Static IP Address Assignment, Dynamic IP Address Assignment, IPv6, MAC Addresses, TCP and UDP Ports, An Example: HTTP Ports, Other Common Ports, Application Layer Protocols, HTTP, HTTPS: Encrypted HTTP, Other Application Layer Protocols.			
USIT502 Internet Of Things UNIT 2	**Thinking About Prototyping**: Sketching, Familiarity, Costs versus Ease of Prototyping, Prototypes and Production, Changing Embedded Platform, Physical Prototypes and Mass Personalisation	4	1.Designing the Internetof Things Adrian McEwen, Hakim Cassimally WILEY First 2014 , 2.Internet of Things – Architecture and Design Raj Kamal McGraw Hill First 201	Laptop, power point, jamboard
	Climbing into the Cloud Open Source versus Closed Source, Why Closed? Why Open? Mixing Open and Closed Source, Closed Source for Mass Market Projects, Tapping into the Community	4		
	Prototyping Embedded Devices: Electronics, Sensors, Actuators, Scaling Up the Electronics, Embedded Computing Basics, Microcontrollers, System-on-Chips, Choosing Your Platform, Arduino, developing on the Arduino, Some Notes on the Hardware, Openness, Raspberry Pi, Cases and Extension Boards, Developing on the Raspberry Pi, Some Notes on the Hardware, Openness	4		
USIT502 Internet Of Things	**Prototyping the Physical Design:** Preparation, Sketch, Iterate, and Explore, Nondigital Methods, Laser Cutting, Choosing a Laser Cutter, Software, Hinges and Joints, 3D Printing, Types of 3D Printing, Software, CNC Milling, Repurposing/Recycling.	5	Designing the Internet of Things Adrian McEwen, Hakim Cassimally WILEY First 2014	

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UNIT 3	**Prototyping Online Components**: Getting Started with an API, Mashing Up APIs, Scraping, Legalities, writing a New API, Clockodillo, Security, implementing the API, Using Curl to Test, Going Further	3		Laptop, power point, jamboard
	Real-Time Reactions, Polling, Comet, Other Protocols, MQ Telemetry Transport, Extensible Messaging and Presence Protocol, Constrained Application Protocol.	4		
USIT502 Internet Of Things UNIT 4	**Techniques for Writing Embedded Code:** Memory Management,Types of Memory, Making the Most of Your RAM, Performance and Battery Life, Libraries,Debugging.	5	Designing the Internet of Things Adrian McEwen, Hakim Cassimally WILEY First 2014	Laptop, power point, jamboard
	Business Models: A Short History of Business Models, Space and Time, From Craft to Mass Production, The Long Tail of the Internet, Learning from History, The Business Model Canvas, Who Is the Business Model For? Models	3		
	Make Thing, Sell Thing, Subscriptions, Customisation, be a Key Resource, Provide Infrastructure: Sensor Networks, take a Percentage, Funding an Internet of Things Startup, Hobby Projects and Open Source, Venture Capital, Government Funding, Crowdfunding, Lean Startups.	4		
USIT502	**Moving to Manufacture:** What Are You Producing? Designing Kits, Designing Printed circuit boards, Software Choices, The Design	5	1.DesigningtheInternetof Things Adrian McEwen, Hakim Cassimally WILEY First 2014 ,	

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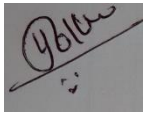
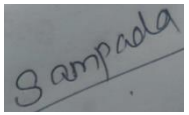
Internet Of Things UNIT 5	Process, Manufacturing Printed Circuit Boards, Etching Boards, Milling Boards. Assembly, Testing, Mass-Producing the Case and Other Fixtures.		2.Getting Started with Raspberry Pi Matt Richardson and Shawn Wallace SPD Third 2016	Laptop, power point, jamboard
	Certification, Costs, Scaling Up Software, Deployment, Correctness and Maintainability, Security, Performance, User Community.	3		
	Ethics: Characterizing the Internet of Things, Privacy, Control, Disrupting Control, Crowdsourcing, Environment, Physical Thing, Electronics, Internet Service, Solutions, The Internet of Things as Part of the Solution, Cautious Optimism, The Open Internet of Things Definition	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: IT

CLASS: SY BSc IT. DIV-C SEMESTER: SEM 3 MONTH:JUNE-SEPT ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

1. To have a broad understanding of database concepts and database management system software
2. To have a high-level understanding of major DBMS components and their function
3. To be able to model an application's data requirements using conceptual modeling tools like ER diagrams and design database schemas based on the conceptual model.
4. To be able to write SQL commands to create tables and indexes, insert/update/delete data, and query data in a relational DBMS.
5. To be able to program a data-intensive application using DBMS APIs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 DBMS UNIT 1	Introduction to Databases and Transactions What is database system, purpose of database system, view of data, relational databases, database architecture, transaction management.	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	POWER POINT PRESENTATION
	Data Models The importance of data models, Basic building blocks, Business rules, The evolution of data models, Degrees of data abstraction.	4		
	Database Design, ER Diagram and Unified Modelling Language Database design and ER Model: overview, ER Model, Constraints, ER Diagrams, ERD Issues, weak entity sets, Codd's rules, Relational Schemas, Introduction to UML	4		
	Relational database model: Logical view of data, keys, integrity rules,	2		POWER POINT PRESENTATION

UNIT 2	Relational Database design: features of good relational database design, atomic domain and Normalization (1NF, 2NF, 3NF, BCNF).	3	DATABASE SYSTEM AND CONCEPTS BY H KORTH	
	Relational Algebra and Calculus Relational algebra: introduction, Selection and projection, set operations, renaming, Joins, Division, syntax, semantics	3		
	Operators, grouping and ungrouping, relational comparison	2		
	Calculus: Tuple relational calculus, Domain relational Calculus, calculus vs algebra, computational capabilities	2		
UNIT 3	Constraints, Views and SQL Constraints, types of constrains, Integrity constraints,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	POWER POINT PRESENTATION
	Views: Introduction to views, data independence, security, updates on views, comparison between tables and views	4		
	SQL: data definition, aggregate function, Null Values, nested sub queries, Joined relations. Triggers	4		
UNIT 4	Transaction management and Concurrency Control Transaction management: ACID properties, serializability and concurrency control,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	POWER POINT PRESENTATION
	Lock based concurrency control (2PL, Deadlocks),Time stamping methods,	4		
	Optimistic methods, database recovery management.	4		
UNIT 5	PL-SQL: Beginning with PL / SQL, Identifiers and Keywords, Operators, Expressions, Sequences	4	PROGRAMMING WITH PL/SQL FOR BEGINNERS BY H. DAND,R. PATIL	POWER POINT PRESENTATION
	,Control Structures, Cursors and Transaction,	4		
	Collections and composite data types, Procedures and Functions, Exceptions Handling, Packages with Clause and Hierarchical Retrieval, Triggers.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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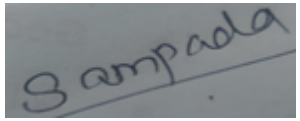

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TEACHING PLAN (UNIT PLAN)

NAME OF Archana Malpathak DEPARTMENT:Mathematics _(IT)___CLASS: FYIT SEMESTER: _I MONTH:____AUG TO OCTOMBER_

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	Technique of counting- Introduction, Basic counting principle, Mathematical functions,Permutation and combination, the Piegeo hole principle ,The inclusion exclusion principle, Tree diagram Advance Counting Technique, Recursion Introduction, Combination with reputation, ordered and un ordered partitions inclusion exclusion 4revisited pigeonhole principle revisited ,Recurrence Relation ,Linear Recurrence relation with constant coefficients, solving second order homogenous linear Recurrence, relation, solving general homogenous linear Recurrence relation	12	Discrete Mathematics	Blackboard and chalk

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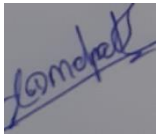
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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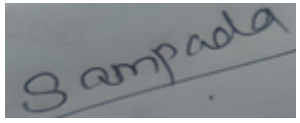

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TEACHING PLAN (UNIT PLAN)

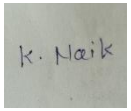
NAME OF THE STAFF: Komal Sudhir Naik DEPARTMENT: Mathematics CLASS: FYIT (A,B,C)

SEMESTER: I MONTH: July-November ACADEMIC YEAR:- 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMPUTATIONAL LOGIC AND DISCRETE STRUCTURES	**Binary Trees**: Introduction, Binary trees, Complete and Extended binary trees, Representing binary trees in memory, Traversing binary trees, Binary Search Trees, Heaps, Huffman's algorithm.	06	Discrete Mathematics and It's Applications	Chalk and board
UNIT V	**Ordered Sets and Lattices:** Introduction, Ordered sets, Hasse diagram of Partially Ordered Sets, Supremum and Infimum, Isomorphic (similar) Ordered Sets, Well Ordered Sets, Lattices, Bounded Lattices, Distributive Lattices, Complements, Complemented Lattices	06	Discrete Mathematics and It's Applications	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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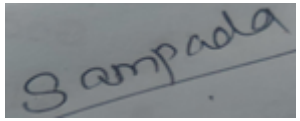

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONALI DATTTARAY SALVANIKAR DEPARTMENT: IT

CLASS: FYIT SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

- Define and describe the fundamental elements of relational database management system.
- Design ER-models to represent simple database.
- Remove redundant data by normalization.
- Understand basic database storage structures and access techniques and database recovery.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Fundamentals of Database Management Systems (USIT103) Unit I	Database system- concept and Architecture: DBMS, its need, applications, components of DBMS, DBA, Database users, transaction management, database system architecture- 2 tier, 3 tier.	05	Database System Concepts by Abraham Silberschatz, Henry F. Korth, S. Sudarshan	Black Board and Chalk
	Relational model and Relational database constraints: Domain, tuples, Primary key, Foreign Key, Candidate Key, Super Key, Alternate Key	04		
	Relational Algebra: Selection, Projection, Minus, Cross Join, Union, Intersection, Natural Join, Full Outer Join, Left Outer Join	03		

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Fundamentals of Database Management Systems (USIT103) Unit II	Conceptual modelling and database design: Data modelling using the Entity Relationship model (ER).	04	Fundamentals of Database systems by Shamkant B Navathe.	Black Board and Chalk
	The enhanced entity relationship model.	03		
	Relational database design by ER and EER model.	02		
	Database design methodology and use of UML Diagram.	03		
Fundamentals of Database Management Systems (USIT103) Unit III	Database Design theory and normalization.	04	Fundamentals of Database systems by Shamkant B Navathe.	Black Board and Chalk
	Basics of functional dependencies and normalization for relational databases.	04		
	Relational database design and further dependencies.	04		
Fundamentals of Database Management Systems (USIT103) Unit IV	Introduction to SQL: SQL introduction, datatypes, DDL-create,alter(schema modification), drop, DML-insert, update, delete, DQL-select-from clause, where clause-search conditions, order by clause, group by clause, having clause,	04	SQL Complete Reference by James Groff	Black Board and Chalk
	Complex queries-search conditions-comparison, IN, Exists, triggers-insert, update, views-create, update, drop, joining database tables- equi, non-equi, inner join, outer join, multitable queries consideration	05		
	Query Processing and optimization. File structure, Hashing and Indexing	03		

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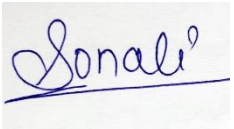
Fundamentals of Database Management Systems (USIT103) Unit V	Transaction management and concurrency control and recovery: Introduction to transaction processing concepts and theory.	05	Database System Concepts by Abraham Silberschatz, Henry F. Korth, S. Sudarshan, Database Management System by Ramakrishnan	Black Board and Chalk
	Concurrency control technique.	03		
	Database recovery technique.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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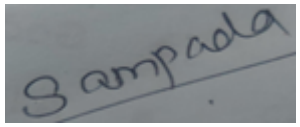

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gauri Vartak DEPARTMENT: IT

CLASS: FYIT DIV A SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVES:

- To understand and assess number systems and the conversions of number systems
- To learn the basics of logic in digital electronics.
- To learn basic logic gates.
- To analyze the boolean expressions and reduce the expression to the minimum.
- To design simple logic circuits using tools such as Boolean Algebra and Karnaugh Mapping.
- To learn the state of a memory cell and its types using flip-flops.
- To create simple digital systems using counters, registers etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Digital Logic and Applications (USIT102) Unit I	Digital Systems and Binary numbers: Introduction to Number systems, Positional Number systems, Conversions (converting between bases), Non positional number systems, Unsigned and Signed binary numbers, Binary Codes, Number representation and storage in computer system.	08	Digital Logic Design Sonali Singh BPB publications	Black Board and Chalk
	Logic gates and Logic Circuits: Basic and Universal Gates	04		
	Boolean algebra and Gate level minimization:	12	Digital Logic Design Sonali Singh	Black Board and Chalk

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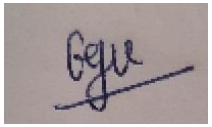
Digital Logic and Applications (USIT102) Unit II	Introduction, Postulates of Boolean Algebra, Two Valued Boolean Algebra, Principle of Duality, Basic Theorems of Boolean Algebra, Boolean Functions and their Representation, Gate-Level Minimization (Simplification of Boolean Function), QuineMcCluskey Method, Review questions		BPB publications.	
Digital Logic and Applications (USIT102) Unit III	Combinational logic: Introduction, Analysis and Design Procedure for Combinational Logic Circuits, Types of Combinational Circuit, Review Questions	12	Digital Logic Design Sonali Singh BPB publications	Black Board and Chalk
Digital Logic and Applications (USIT102) Unit IV	Sequential circuits: Introduction, Latch, Flip-Flops, Registers, Counters, Review Questions	12	Digital Logic Design Sonali Singh BPB publications	Black Board and Chalk,Projector
Digital Logic and Applications (USIT102) Unit V	Applications: Bit Arithmetic and Logic unit, Carry lookahead generator, Binary Multiplication and Division algorithm, Booth's multiplication algorithm	12	Digital Logic Design Sonali Singh BPB publications	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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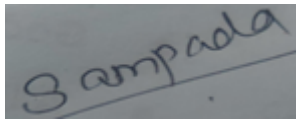

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT:CS

CLASS:FYIT-DIV A SEMESTER: SEM-1 MONTH: SEP-NOV ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop logics which will help them to create programs, applications in C. Also by learning the basic programming constructs they can easily switch over to any other language in future.

PAPER, TITLE, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1, Programming Principles with C, UNIT 1	**Introduction**: Algorithms, History of C, Structure of C Program. Program Characteristics, Compiler, Linker and preprocessor, pseudo code statements and flowchart symbols, Desirable program characteristics. Program structure.	6	Let us c-by Yashwant Kanetkar/Programming in ANSI C-by E.Balagurusamy	CHALK AND BOARD
	Compilation and Execution of a Program, C Character Set, identifiers and keywords, data types and sizes , constants and its types, variables, Character and character strings, typedef, typecasting	6		
UNIT 2	**Type of operators**: Arithmetic operators, relational and logical operators, Increment and Decrement operators, assignment operators, the conditional operator, Assignment operators and expression, Precedence and order of Evaluation	5	Let us c-by Yashwant Kanetkar/Programming in ANSI C-by	CHALK AND BOARD

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	Block Structure, Initialization, C Preprocessor	1	E.Balagurusamy	
	Control Flow: Statements and Blocks, If-Else, Else-If, Switch, Loops-While and For LoopsDo-while, Break and Continue, Goto and Labels	6		
Unit 3	**Functions and Program Structure**: Basics of functions. User defined and Library functions, Function parameters, Return values, Recursion	6	Let us c-by Yashwant kanetkar/Programming in ANSI C-by E.Balagurusamy	CHALK AND BOARD
	External variables, Scope Rules, Standard Input and Output, Formatted Output-printf() and Formatted Input- scanf(), Line Input and Output, Error Handling- StdErr and Exit, Header Files	6		
UNIT 4	**Pointer and Arrays** Pointer and Addresses, Pointer and Function Arguments, Pointer and Arrays, Address Arithmetic, Character Pointers and Functions,.	6	Let us c-by Yashwant Kanetkar/Programming in ANSI C-by E.Balagurusamy	CHALK AND BOARD
	Pointer Arrays: Pointers and Functions, Multidimensional Array, Command-line Arguments, Pointers to Functions, Dynamic memory allocation	6		
Unit 5	**Structures**: Basics of structures, Structures and Functions, Arrays of Structures, Pointers to Structures, Unions, Bit-fields,	6	Let us c-by Yashwant kanetkar/Programming in ANSI C-by E.Balagurusamy	CHALK AND BOARD
	File management in C: Defining and Opening file, Closing a file, Input / Output operations on file, Error handling in C, Random access to files, Command line arguments.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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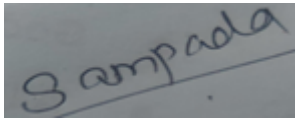

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHA TUSHAR VAZE. DEPARTMENT: IT

CLASS: FYIT DIV A SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVES:

- To communicate effectively with a range of audiences both technical and non-technical.
- To understand the dynamics in different forms of formal communication.
- To learn the art of business writing and ethics in business communication across functional areas.
- To evaluate, analyze and interpret technical data.
- Understand and apply the art of written communication in writing reports, proposals.
- Understand the functions of graphs, maps, charts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Technical Communication Skills (USIT105) Unit I	Fundamentals of Technical Communication Introduction, The process of communication, Language as tool of communication, levels of communication, The flow of communication, Communication Networks, The importance of technical communication	05	Technical communication : principles and practices By Meenakshi Raman & Sangeeta Sharma	Black Board and Chalk
	Barriers to communication Definition of Noise, classification of Barriers	03		
	Non-verbal Communication Introduction, Definition, significance of nonverbal, forms of non -verbal communication, types of non-verbal communication	04		
Technical	The Seven Cs of Effective Communication: Completeness, Conciseness, Consideration, Concreteness, Clarity, Courtesy,	03	Business Communication	Black Board and Chalk

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Communication Skills (USIT105) Unit II	Correctness.		Meenakshi Raman &Prakash singh.	
	Conversations :Introduction, Importance of Business conversion, Essential of Business conversion, Conversation Management	01		
	Meeting and conferences Introduction, Purpose of Meeting, planning a meeting, Meeting Process, Leading effective meeting, Evaluating meeting, planning conference, teleconferencing	03		
	Group Discussion and team presentation Introduction, Benefits of GD, Workplace GD guidelines, Functional and non functional roles in GD, Improving group performance, Assessment of group discussion ,Team presentation	03		
	Email communication Introduction, Advantages of email, problems in email communication, Email etiquettes, Techniques of writing Effective Email	02		
Technical Communication Skills (USIT105) Unit III	Active Listening Introduction, Type of listening, Traits of good listener, Active vs Passive listening, Implication of effective listening	05	Business Communication Meenakshi Raman &Prakash singh	Black Board and Chalk
	Effective presentation Strategies Introduction, Defining purpose, Analyzing audience and Locale, Organizing contents, preparing outline, Visual Aids, Understanding Nuances of delivery, Kinesics	04		
	Interview Introduction, objectives, types of interview, job interviews	03		
Technical Communication Skills (USIT105)	Business writing Introduction, Importance of written Business, Five main strategies of writing business messages.	03	Effective Business Communication by Tata McGraw Hill	Black Board and Chalk
	Business correspondence Business letter writing, common component of Business letter, Strategies for writing body of a letter, Types of Business letter, writing memos.	03		

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Unit IV	Business reports and proposal What is report? Steps in writing routine Business report, parts of report, corporate reports and Business proposals.	03		
	Careers and Resume Introduction to career building, resume format, traditional, electronic and video resumes, sending resume, follow up letters and online recruitment process.	03		
Technical Communication Skills (USIT105) Unit V	Communication across Functional areas Financial communication, MIS.	04	Professional Communication By Aruna Koneru.	Black Board and Chalk
	Ethics in Business Communication Ethical communication, Values, ethics and communication, ethical dilemmas facing manager, strategic approaches to corporate ethics	04		
	Creating and Using Visual Aids Object, Models, Handouts, Charts and Graphs, Text Visuals , Formatting Computer generated charts, graphs and visuals	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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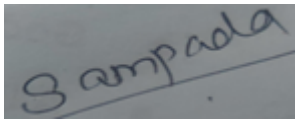

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VRUNDA VISHAL GHARAT DEPARTMENT: IT

CLASS: FYIT SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- To develop the logical ability of the student.
- Basic concepts to be cleared using suitable examples.
- Different approach towards the problem.
- To handle the errors and find suitable solution.
- Debugging the code.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Programming Principles with C (USIT101) Unit III	**Functions and Program Structure**: Basics of functions. User defined and Library functions, Function parameters, Return values, Recursion External variables, Scope Rules, Standard Input and Output, Formatted Output-printf() and Formatted Input- scanf(), Line Input and Output, Error Handling- StdErr and Exit, Header Files	12	Let us C Yashwant P. Kanetkar BPB publication	Black board and chalk

Programming Principles with C (USIT101)	**Structures**: Basics of structures, Structures and Functions, Arrays of Structures, Pointers to Structures, Unions, Bit-fields, File management in C: Defining and Opening file, Closing a file, Input / Output operations on file, Error	12	Let us C Yashwant P. Kanetkar BPB publication	Black board and chalk

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Unit IV	handling in C, Random access to files, Command line arguments.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12

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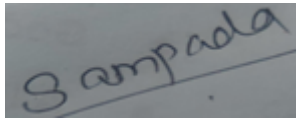

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUILEE KIRAN PATIL. DEPARTMENT: IT

CLASS: FYIT SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

- Define and describe the fundamental elements of relational database management system.
- Design ER-models to represent simple database application scenarios.
- Improve the database design by normalization.
- Understand basic database storage structures and access techniques: file and page organizations, indexing methods and hashing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Fundamentals of Database Management Systems (USIT103) Unit II	Conceptual modelling and database design: Data modelling using the Entity Relationship model (ER).	03	Fundamentals of Database systems by Shamkant B Navathe.	Black Board and Chalk
	The enhanced entity relationship model.	03		
	Relational database design by ER and EER model.	03		
	Database design methodology and use of UML Diagram.	03		
Fundamentals of Database Management Systems (USIT103) Unit III	Database Design theory and normalization.	04	Fundamentals of Database systems by Shamkant B Navathe.	Black Board and Chalk
	Basics of functional dependencies and normalization for relational databases.	04		
	Relational database design and further dependencies.	04		

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Fundamentals of Database Management Systems (USIT103) Unit V	Transaction management and concurrency control and recovery: Introduction to transaction processing concepts and theory.	04	Database Systems: Design implementation and management By Carlos Coronel.	Black Board and Chalk
	Concurrency control technique.	04		
	Database recovery technique.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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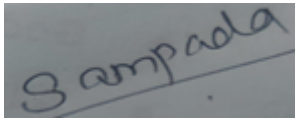

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: FYIT DIV B SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVES:

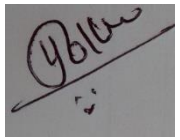
- To understand and assess number systems and the conversions of number systems
- To learn the basics of logic in digital electronics.
- To learn basic logic gates.
- To analyze the boolean expressions and reduce the expression to the minimum.
- To design simple logic circuits using tools such as Boolean Algebra and Karnaugh Mapping.
- To learn the state of a memory cell and its types using flip-flops.
- To create simple digital systems using counters, registers etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Digital Logic and Applications (USIT102) Unit I	Digital Systems and Binary numbers: Introduction to Number systems, Positional Number systems, Conversions (converting between bases), Non positional number systems, Unsigned and Signed binary numbers, Binary Codes, Number representation and storage in computer system.	08	Digital Logic Design Sonali Singh BPB publications	Black Board and Chalk
	Logic gates and Logic Circuits: Basic and Universal Gates	04		
	Boolean algebra and Gate level minimization:	12	Digital Logic Design Sonali Singh	Black Board and Chalk

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Digital Logic and Applications (USIT102) Unit II	Introduction, Postulates of Boolean Algebra, Two Valued Boolean Algebra, Principle of Duality, Basic Theorems of Boolean Algebra, Boolean Functions and their Representation, Gate-Level Minimization (Simplification of Boolean Function), QuineMcCluskey Method, Review questions		BPB publications.	
Digital Logic and Applications (USIT102) Unit III	Combinational logic: Introduction, Analysis and Design Procedure for Combinational Logic Circuits, Types of Combinational Circuit, Review Questions	12	Digital Logic Design Sonali Singh BPB publications	Black Board and Chalk
Digital Logic and Applications (USIT102) Unit IV	Sequential circuits: Introduction, Latch, Flip-Flops, Registers, Counters, Review Questions	12	Digital Logic Design Sonali Singh BPB publications	Black Board and Chalk,Projector
Digital Logic and Applications (USIT102) Unit V	Applications: Bit Arithmetic and Logic unit, Carry lookahead generator, Binary Multiplication and Division algorithm, Booth's multiplication algorithm	12	Digital Logic Design Sonali Singh BPB publications	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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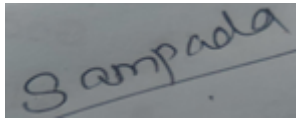

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS:FYIT-DIV B SEMESTER: SEM-1 MONTH: AUG-NOV ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop logics which will help them to create programs, applications in C. Also by learning the basic programming constructs they can easily switch over to any other language in future.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 1 IP UNIT 1	**Introduction: Algorithms, History of C, Structure of C Program. Program Characteristics,** **Compiler, Linker and preprocessor, pseudo code statements and flowchart symbols, Desirable** **program characteristics. Program structure. Compilation and Execution of a Program, C** **Character Set, identifiers and keywords, data types and sizes , constants and its types,** **variables, Character and character strings, typedef, typecasting**	12	Let us c-by Yashwant Kanetkar	BLACK BOARD AND CHALK

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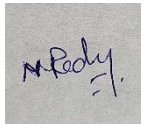
UNIT 2	Type of operators: Arithmetic operators, relational and logical operators, Increment and Decrement operators, assignment operators, the conditional operator, Assignment operators and expression, Precedence and order of Evaluation Block Structure, Initialization, C Preprocessor Control Flow: Statements and Blocks, If-Else, Else-If, Switch, Loops- While and For Loops- Do-while, Break and Continue, Goto and Labels	12	Let us c-by Yashwant Kanetkar	BLACK BOARD AND CHALK
UNIT 4	Pointer and Arrays Pointer and Addresses, Pointer and Function Arguments, Pointer and Arrays, Address Arithmetic, Character Pointers and Functions, Pointer Arrays: Pointers and Functions, Multidimensional Array, Command-line Arguments, Pointers to Functions, Dynamic memory allocation	12	Let us c-by Yashwant Kanetkar	BLACK BOARD AND CHALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 33



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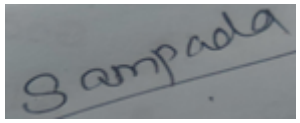

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

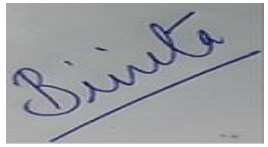
CLASS: F. Y. B. Sc. IT –B SEMESTER: I MONTH: September to November ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

a. Define and describe the fundamental elements of relational database management system.
b. Transform the ER-model to relational tables, populate relational database and formulate SQL queries on data.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Fundamentals of Database Management Systems Unit -I	**Database system- concept and Architecture:** DBMS, its need, applications, components of DBMS, DBA, Database users, transaction management, database system architecture- 2 tier, 3 tier.	6	Database System Concepts by Abraham Silberschatz, Henry F. Korth, S. Sudarshan	Black Board
	Relational model and Relational database constraints: Domain, tuples, Primary key, Foreign Key, Candidate Key, Super Key, Alternate Key	3		Black Board
	Relational Algebra: Selection, Projection, Minus, Cross Join, Union, Intersection, Natural Join, Full Outer Join, Left Outer Join	3		Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

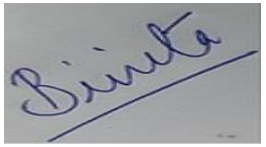
CLASS: F. Y. B. Sc. IT –B SEMESTER: I MONTH: September to November ACADEMIC YEAR: 2022-2023

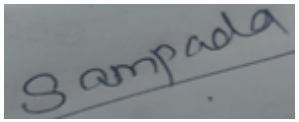
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Define and describe the fundamental elements of relational database management system.
b. Transform the ER-model to relational tables, populate relational database and formulate SQL queries on data.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Fundamentals of Database Management Systems Unit -IV	Introduction to SQL: SQL introduction, datatypes, DDL-create, alter(schema modification), drop, DML-insert, update, delete, DQL-select-from clause, where clause-search conditions, order by clause, group by clause, having clause,	4	SQL Complete Reference by James Groff	Black Board
	Complex queries-search conditions-comparison, IN, Exists, triggers-insert, update, views-create, update, drop, joining database tables- equi, non-equi, inner join, outer join, multi-table queries consideration	4		Black Board
	Query Processing and optimization. File structure, hashing and indexing	4		Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWANE. DEPARTMENT: IT

CLASS: FYIT DIV B SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVES:

- To communicate effectively with a range of audiences both technical and non-technical.
- To understand the dynamics in different forms of formal communication.
- To learn the art of business writing and ethics in business communication across functional areas.
- To evaluate, analyze and interpret technical data.
- Understand and apply the art of written communication in writing reports, proposals.
- Understand the functions of graphs, maps, charts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Technical Communication Skills (USIT105) Unit I	Fundamentals of Technical Communication Introduction, The process of communication, Language as tool of communication, levels of communication, The flow of communication, Communication Networks, The importance of technical communication	05	Technical communication : principles and practices By Meenakshi Raman & Sangeeta Sharma	Black Board and Chalk
	Barriers to communication Definition of Noise, classification of Barriers	03		
	Non-verbal Communication Introduction, Definition, significance of nonverbal, forms of non -verbal communication, types of non-verbal communication	04		
Technical Communication	The Seven Cs of Effective Communication: Completeness, Conciseness, Consideration, Concreteness, Clarity, Courtesy, Correctness.	03	Business Communication	Black Board and Chalk

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Skills (USIT105) Unit II			Meenakshi Raman &Prakash singh.	
	Conversations :Introduction, Importance of Business conversion, Essential of Business conversion, Conversation Management	01		
	Meeting and conferences Introduction, Purpose of Meeting, planning a meeting, Meeting Process, Leading effective meeting, Evaluating meeting, planning conference, teleconferencing	03		
	Group Discussion and team presentation Introduction, Benefits of GD, Workplace GD guidelines, Functional and non functional roles in GD, Improving group performance, Assessment of group discussion ,Team presentation	03		
	Email communication Introduction, Advantages of email, problems in email communication, Email etiquettes, Techniques of writing Effective Email	02		
Technical Communication Skills (USIT105) Unit III	Active Listening Introduction, Type of listening, Traits of good listener, Active vs Passive listening, Implication of effective listening	05	Business Communication Meenakshi Raman &Prakash singh	Black Board and Chalk
	Effective presentation Strategies Introduction, Defining purpose, Analyzing audience and Locale, Organizing contents, preparing outline, Visual Aids, Understanding Nuances of delivery, Kinesics	04		
	Interview Introduction, objectives, types of interview, job interviews	03		
Technical Communication Skills (USIT105)	Business writing Introduction, Importance of written Business, Five main strategies of writing business messages.	03	Effective Business Communication by Tata McGraw Hill	Black Board and Chalk
	Business correspondence Business letter writing, common component of Business letter, Strategies for writing body of a letter, Types of Business letter, writing memos.	03		

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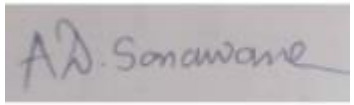
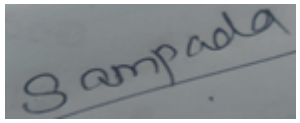
Unit IV	Business reports and proposal What is report? Steps in writing routine Business report, parts of report, corporate reports and Business proposals.	03		
	Careers and Resume Introduction to career building, resume format, traditional, electronic and video resumes, sending resume, follow up letters and online recruitment process.	03		
Technical Communication Skills (USIT105) Unit V	Communication across Functional areas Financial communication, MIS.	04	Professional Communication By Aruna Koneru.	Black Board and Chalk
	Ethics in Business Communication Ethical communication, Values, ethics and communication, ethical dilemmas facing manager, strategic approaches to corporate ethics	04		
	Creating and Using Visual Aids Object, Models, Handouts, Charts and Graphs, Text Visuals , Formatting Computer generated charts, graphs and visuals	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: RUTUJA PRASHANT GUPTA DEPARTMENT: IT

CLASS: FYIT SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- To develop the logical ability of the student.
- Basic concepts to be cleared using suitable examples.
- Different approach towards the problem.
- To handle the errors and find suitable solution.
- Debugging the code.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Programming Principles with C (USIT101) Unit II	Type of operators: Arithmetic operators, relational and logical operators, Increment and Decrement operators, assignment operators	04	Programming with c Byron Gottfried Tata McGRAWHill 1996	Black board and chalk
	The conditional operator, Assignment operators and expression, Precedence and order of Evaluation Block Structure, Initialization, C Preprocessor	04		
	Control Flow: Statements and Blocks, If-Else, Else-If, Switch, Loops- While and For LoopsDo-while, Break and Continue, Goto and Labels	04		

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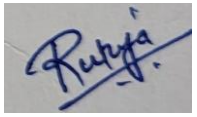
Programming Principles with C (USIT101) Unit IV	Pointer and Arrays Pointer and Addresses, Pointer and Function Arguments, Pointer and Arrays	04	Let us C Yashwant P. Kanetkar BPB publication	Black board and chalk
	Address Arithmetic, Character Pointers and Functions, Pointer Arrays: Pointers and Functions,	04		
	Multidimensional Array, Command-line Arguments, Pointers to Functions, Dynamic memory allocation	04		
Programming Principles with C (USIT101) Unit V	Structures: Basics of structures, Structures and Functions, Arrays of Structures	04	Let us C Yashwant P. Kanetkar BPB publication	Black board and chalk
	Pointers to Structures, Unions, Bit-fields	04		
	File management in C: Defining and Opening file, Closing a file, Input / Output operations on file, Error handling in C, Random access to files, Command line arguments.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12



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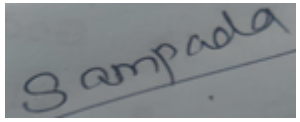

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHA TUSHAR VAZE. DEPARTMENT: IT

CLASS: FYIT DIV C SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

- Define and describe the fundamental elements of relational database management system.
- Design ER-models to represent simple database.
- Remove redundant data by normalization.
- Understand basic database storage structures and access techniques and database recovery.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Fundamentals of Database Management Systems (USIT103) Unit I	Database system- concept and Architecture: DBMS, its need, applications, components of DBMS, DBA, Database users, transaction management, database system architecture- 2 tier, 3 tier.	06	Database System Concepts by Abraham Silberschatz, Henry F. Korth, S. Sudarshan	Black Board and Chalk
	Relational model and Relational database constraints: Domain, tuples, Primary key, Foreign Key, Candidate Key, Super Key, Alternate Key	03		
	Relational Algebra: Selection, Projection, Minus, Cross Join, Union, Intersection, Natural Join, Full Outer Join, Left Outer Join	03		

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Fundamentals of Database Management Systems (USIT103) Unit II	Conceptual modelling and database design: Data modelling using the Entity Relationship model (ER).	03	Fundamentals of Database systems by Shamkant B Navathe.	Black Board and Chalk
	The enhanced entity relationship model.	03		
	Relational database design by ER and EER model.	03		
	Database design methodology and use of UML Diagram.	03		
Fundamentals of Database Management Systems (USIT103) Unit III	Database Design theory and normalization.	04	Fundamentals of Database systems by Shamkant B Navathe.	Black Board and Chalk
	Basics of functional dependencies and normalization for relational databases.	04		
	Relational database design and further dependencies.	04		
Fundamentals of Database Management Systems (USIT103) Unit IV	Introduction to SQL: SQL introduction, datatypes, DDL-create,alter(schema modification), drop, DML-insert, update, delete, DQL-select-from clause, where clause-search conditions, order by clause, group by clause, having clause,	04	SQL Complete Reference by James Groff	Black Board and Chalk
	Complex queries-search conditions-comparison, IN, Exists, triggers-insert, update, views-create, update, drop, joining database tables- equi, non-equi, inner join, outer join, multitable queries consideration	04		
	Query Processing and optimization. File structure, Hashing and Indexing	O4		

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Fundamentals of Database Management Systems (USIT103) Unit V	Transaction management and concurrency control and recovery: Introduction to transaction processing concepts and theory.	04	Database System Concepts by Abraham Silberschatz, Henry F. Korth, S. Sudarshan, Database Management System by Ramakrishnan	Black Board and Chalk
	Concurrency control technique.	04		
	Database recovery technique.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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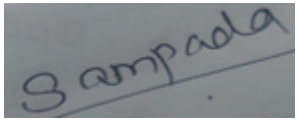

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHLESHA DATTARAM GURAV DEPARTMENT: IT

CLASS: FYIT DIV C SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVES:

- To understand and assess number systems and the conversions of number systems
- To learn the basics of logic in digital electronics.
- To learn basic logic gates.
- To analyze the boolean expressions and reduce the expression to the minimum.
- To design simple logic circuits using tools such as Boolean Algebra and Karnaugh Mapping.
- To learn the state of a memory cell and its types using flip-flops.
- To create simple digital systems using counters, registers etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Digital Logic and Applications (USIT102) Unit I	Digital Systems and Binary numbers: Introduction to Number systems, Positional Number systems, Conversions (converting between bases), Non positional number systems, Unsigned and Signed binary numbers, Binary Codes, Number representation and storage in computer system.	08	Digital Logic Design Sonali Singh BPB publications	Black Board and Chalk
	Logic gates and Logic Circuits: Basic and Universal Gates	04		

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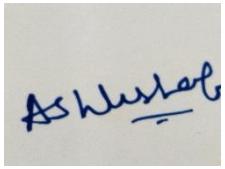
Digital Logic and Applications (USIT102) Unit II	Boolean algebra and Gate level minimization: Introduction, Postulates of Boolean Algebra, Two Valued Boolean Algebra, Principle of Duality, Basic Theorems of Boolean Algebra, Boolean Functions and their Representation, Gate-Level Minimization (Simplification of Boolean Function), QuineMcCluskey Method, Review questions	12	Digital Logic Design Sonali Singh BPB publications.	Black Board and Chalk
Digital Logic and Applications (USIT102) Unit III	Combinational logic: Introduction, Analysis and Design Procedure for Combinational Logic Circuits, Types of Combinational Circuit, Review Questions	12	Digital Logic Design Sonali Singh BPB publications	Black Board and Chalk
Digital Logic and Applications (USIT102) Unit IV	Sequential circuits: Introduction, Latch, Flip-Flops, Registers, Counters, Review Questions	12	Digital Logic Design Sonali Singh BPB publications	Black Board and Chalk
Digital Logic and Applications (USIT102) Unit V	Applications: Bit Arithmetic and Logic unit, Carry lookahead generator, Binary Multiplication and Division algorithm, Booth's multiplication algorithm	12	Digital Logic Design Sonali Singh BPB publications	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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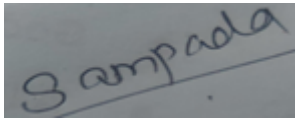

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANT WANI DEPARTMENT:IT CLASS:FYIT-DIV C SEMESTER: SEM-1

MONTH: August to November ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop logics which will help them to create programs, applications in C. Also by learning the basic programming constructs they can easily switch over to any other language in future.

PAPER, TITLE, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 Programming Principles With C, UNIT 1	**Introduction**: Algorithms, flowcharts Types of Programming languages, History, features and application. Simple program logic, program development cycle.	3	Let us c-by Yashwant Kanetkar	Black Board, Chalk, PPT
	pseudocode statements and flowchart symbols, sentinel value to end a program, programming and user environments, evolution of programming models., desirable program characteristics	3		
	Structure of a program. Compilation and Execution of a Program,Character Set, identifiers and keywords, data types	3		
	constants, variables and arrays, declarations, expressions, statements, Variable definition, Constants and its types, Character and character Strings, typedef, typecasting	3		

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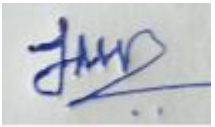
Unit 3	**Functions:** Overview, Basic of Functon, defining a function, accessing a function, passing arguments to a function, specifying argument data types, function prototypes, recursion, modular programming and functions, standard library of c functions	5	Let us c-by Yashwant kanetkar	Black Board, Chalk, PPT
	prototype of a function: foo1lal parameter list, return type,function call, block structure, passing arguments to a function: call by reference,call by value. Standard input and output	4		
	Line Input and Output, Error Handling- Std Error and Exit, Header Files.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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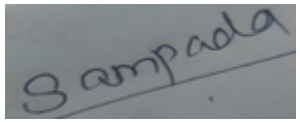

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUILEE KIRAN PATIL. DEPARTMENT: IT

CLASS: FYIT SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVES:

- To communicate effectively with a range of audiences both technical and non-technical.
- To understand the dynamics in different forms of formal communication.
- To learn the art of business writing and ethics in business communication across functional areas.
- To evaluate, analyze and interpret technical data.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Technical Communication Skills (USIT105) Unit II	The Seven Cs of Effective Communication: Completeness, Conciseness, Consideration, Concreteness, Clarity, Courtesy, Correctness. Conversations Introduction, Importance of Business conversion, Essential of Business conversion, Conversation Management	03	Business Communication Meenakshi Raman &Prakash singh.	Black Board and Chalk
	Meeting and conferences Introduction, Purpose of Meeting, planning a meeting, Meeting Process, Leading effective meeting, Evaluating meeting, planning conference, teleconferencing	03		
	Group Discussion and team presentation Introduction, Benefits of GD, Workplace GD guidelines, Functional and non functional roles in GD, Improving group performance, Assessment of group discussion ,Team presentation	03		
	Email communication Introduction, Advantages of email, problems in email communication, Email etiquettes, Techniques of writing Effective Email	03		

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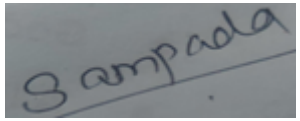
Technical Communication Skills (USIT105) Unit IV	Business writing Introduction, Importance of written Business, Five main strategies of writing business messages.	03	Effective Business Communication by Tata McGraw Hill	Black Board and Chalk
	Business correspondence Business letter writing, common component of Business letter, Strategies for writing body of a letter, Types of Business letter, writing memos.	03		
	Business reports and proposal What is report? Steps in writing routine Business report, parts of report, corporate reports and Business proposals.	03		
	Careers and Resume Introduction to career building, resume format, traditional, electronic and video resumes, sending resume, follow up letters and online recruitment process.	03		
Technical Communication Skills (USIT105) Unit V	Communication across Functional areas Financial communication, MIS.	04	Professional Communication By Aruna Koneru.	Black Board and Chalk
	Ethics in Business Communication Ethical communication, Values, ethics and communication, ethical dilemmas facing manager, strategic approaches to corporate ethics	04		
	Creating and Using Visual Aids Object, Models, Handouts, Charts and Graphs, Text Visuals , Formatting Computer generated charts, graphs and visuals	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYIT DIV: C SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVES:

- To communicate effectively with a range of audiences both technical and non-technical.
- To understand the dynamics in different forms of formal communication.
- To learn the art of business writing and ethics in business communication across functional areas.
- To evaluate, analyze and interpret technical data.
- Understand and apply the art of written communication in writing reports, proposals.
- Understand the functions of graphs, maps, charts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Technical Communication Skills (USIT105) Unit I	Fundamentals of Technical Communication Introduction, The process of communication, Language as tool of communication, levels of communication, The flow of communication, Communication Networks, The importance of technical communication	05	Technical communication : principles and practices By Meenakshi Raman & Sangeeta Sharma	Black Board and Chalk
	Barriers to communication Definition of Noise, classification of Barriers	03		
	Non-verbal Communication Introduction, Definition, significance of nonverbal, forms of non -verbal communication, types of non-verbal communication	04		

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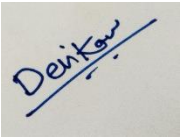
Technical Communication Skills (USIT105) Unit III	Active Listening Introduction, Type of listening, Traits of good listener, Active vs Passive listening, Implication of effective listening	04	Business Communication Meenakshi Raman &Prakash singh	Black Board and Chalk
	Effective presentation Strategies Introduction, Defining purpose, Analyzing audience and Locale, Organizing contents, preparing outline, Visual Aids, Understanding Nuances of delivery, Kinesics	05		
	Interview Introduction, objectives, types of interview, job interviews	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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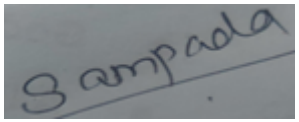

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TEACHING PLAN (UNIT PLAN)

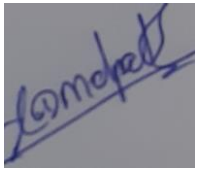
NAME OF Archana Malpathak DEPARTMENT:Mathematics _(IT)__ CLASS: FYIT SEMESTER: _I MONTH: ___AUG TO OCTOMBER_

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	FUNCTIONS AND ALGORITHMS-Introduction, One to one function, onto function, invertible function, Exponential function, Logarithmic function,			
	Sequence, Indexed classes of sets ,Recursively defined function, Cardinality,Algorithms and function, Complexity of Algorithms PROBABLITY:- Introduction, sample space and events ,finite probability spaces, Conditional Probability, Independent Events, Independent Repeat Trial ,Binomial Distribution, Random variables, Chebyshevs Inequality, Low of large number	12	Discrete Mathematics	Blackboard and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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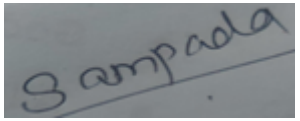

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TEACHING PLAN (UNIT PLAN)

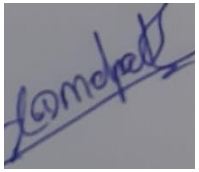
12NAME OF Archana Malpathak DEPARTMENT:Mathematics _(IT)__ CLASS: FYIT SEMESTER: _I MONTH: ___AUG TO OCTOMBER_

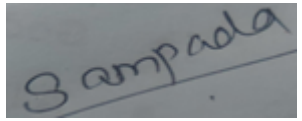
ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4	Graph Theory- Introduction, Data structure, Graph and multi graph,subgroup, Isomorphic Graph, Bridges of konigsbergs,Labeled and weighted graphs, Complete graphs, regular and biparatite graph, tree graph, planner graphs, graph coloring,graph algorithm, Traveling salesman problems solved problem DIRECTED GRAPHS Inttrroduction ,Directed graph, Basic definition rooted Trees, sequential representation of Directed graph, wRshall's algorithm shortest path,linked representation of directed graphs,Depth first and breath first searches,directed cycle free graphs ,Topological sort,pruning Algorithms for shortest path	12	Discrete Mathematics	Blackboard and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

SIGNATURE OF THE STAFF 



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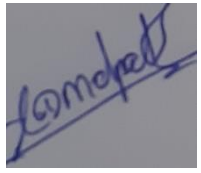
TEACHING PLAN (UNIT PLAN)

NAME OF Archana Malpathak DEPARTMENT:Mathematics _(IT)___CLASS: FYIT SEMESTER: _II MONTH:____FEB tO April ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4	Numerical solution of 1st and 2nd order differential equations- Taylor series, Euler's simple formula Modified Euler's Method R-K seconds and fourth order. Least square Regression- Linear Regression, Polynomial Regression, Multilinear Regression, Nonlinear Regression, General Linear Least Squares Method	12	Numerical Techniques-R.M Baphana ,	Blackboard and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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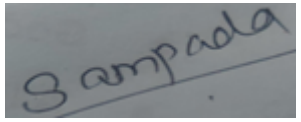

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SYIT SEM-III SUB-APPLIED MATHS-II DIV A

PROF –ARCHANA MALPATHAK

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT:Mathematics CLASS: SYIT SEMESTER: III MONTH: Aug to Nov ACADEMIC YEAR: 2022-2023 LEARNING OBJECTIVE/S

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD / ICT TOOLS USED
Applied Maths II Unit-I Matrices and Complex Number	Matrices : Inverse,properties,Rank by Normal and Echelon form,Linearequations,Linear dependent and independent Linear transformation,ch roots and ch vectors Caley Hamiltonian theroem,Similarity of matrix,Digonal matrix Complex number - complex number equality of complex numberArgand digram,polar form and exponential of complex numberHyperbolic and Logarithmic function of complex number	12	Applied Maths by G.V.Kumbojkar Higher Engineering of mathematics TechMax	Black board and chalk

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana
Malpathak. DEPARTMENT: Mathematics CLASS: SYIT SEMESTER: II
MONTH: Aug to November ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : ___Variable separable,subtitutionmethod,Homogenous,Non homogeneous, Exavt differential equation,Non exact fifgerential equation, Integrating factor ,bernoullis differential,higher order differential equation solvable for Y,P,X .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD / ICT TOOLS USED
Applied Maths -II UNIT -II Differential equations	1) Equation of the first order and first degree :Sepratation of variables,Equation homogenous in x and y ,Non homogenous,Exactdifferential, 2)Integrating factor,Bernouils Equation ,Subtitution method general method,other methods 3)Diff equ of higher degree - Solvable for p, for X ,for YClairauts form of equationMethod of sepration, 4)Linear differential with constant coefficients - Differential operator,f(D)=0.f(D)=x ,1/f(D),1/f(D) X	3+3+3+3 =12	G.v.kumbojkar Higher Engineering of mathematics Balguru swami TechMax R.M.Baphna	Blackboard ,chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana
Malpathak. DEPARTMENT: Mathematics. CLASS: SYIT. SEMESTER: III MONTH: J uly To Nov
ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : Double integration ,Types of double ,Triple Integration,Types oftriple, Area volume for double and triple integration_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Mathematics UNIT -IV Multiple integral 1) Multiple Intigration Double Integral,Change of.	the order of the integration,Double integral in polar co - ordinates 2) Triple integral.	3) Application of integration :Areas,Volumes of. solids 4+4+4 =12	Higher Engineering of Mathematics TechMax R .M.Baphna	Black board ,chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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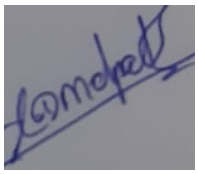
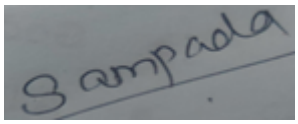
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -ARCHANA MALPATHAK Malpathak
DEPARTMENT: Mathematics CLASS: -SYIT SEMESTER:
III MONTH: -JULLY TO_ NOVEMBER ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II (SYIT) UNIT-V Beta Gamma Function	1) Beta Gamma function -Defination,properties and problems,Duplication Formula 2) Differentiation Under Integral Sign 3)Error functions	5+4+3=12	Tech max Higher Engineering of mathematics Applied Maths II Nirali publication	Blackboard,chalk





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAYATREE KARNIK DEPARTMENT: IT SUB: Computer Networks CLASS:SYIT DIV: A

SEMESTER:III

MONTH:JUNE-SEPTEMBER ACADEMIC YEAR:2022-2023

LEARNING OBJECTIVE/S:

The learners will be able to:

To adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct. To be capable of managing complex IT projects with consideration of the human, financial and environmental factors. To work effectively as a part of a team to achieve a common stated goal.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Computer Networks USIT 303 Unit - 1	**Introduction:** Data communications, networks, network types, Internet history, standards and administration. **Network Models**: Protocol layering, TCP/IP protocol suite, The OSI model. **Introduction to Physical layer:** Data and signals, periodic analog signals, digital signals, transmission impairment, data rate limits, performance. **Digital and Analog transmission**: Digital-to-digital conversion, analog-to-digital conversion, transmission modes, digital-to-analog conversion, analog-to-analog conversion.	12	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition	Computer, Power point

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Computer Networks USIT 303 Unit - 2	**Bandwidth Utilization**: Multiplexing and Spectrum Spreading: Multiplexing, Spread Spectrum **Transmission media**: Guided Media, Unguided Media **Switching:** Introduction, circuit switched networks, packet switching, structure of a switch. **Introduction to the Data Link Layer:** Link layer addressing, Data Link Layer Design Issues, Error detection and correction, block coding, cyclic codes, checksum, forward error correction, error correcting codes, error detecting codes.	12	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition	Computer, Power point
Computer Networks USIT303 Unit - 3	**Data Link Control:** DLC services, data link layer protocols, HDLC, Point-to-point protocol. **Media Access Control**: Random access, controlled access, channelization, Wired LANs – Ethernet Protocol, standard ethernet, fast ethernet, gigabit ethernet, 10 gigabit ethernet, **Wireless LANs:** Introduction, IEEE 802.11 project, Bluetooth, WiMAX, Cellular telephony, Satellite networks. **Connecting devices and Virtual LANs**.	10	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition	Computer, Power point

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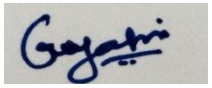
Computer Networks USIT303 Unit - 4	**Introduction to the Network Layer**: Network layer services, packet switching, network layer performance, IPv4 addressing, forwarding of IP packets, Internet Protocol, ICMPv4, Mobile IP **Unicast Routing:** Introduction, routing algorithms, unicast routing protocols. **Next generation IP:** IPv6 addressing, IPv6 protocol, ICMPv6 protocol, transition from IPv4 to IPv6	10	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition	Computer, Power point
Compute Networks USIT303 Unit - 5	**Introduction to the Transport Layer:** Introduction, Transport layer protocols (Simple protocol, Stop-and-wait protocol, Go-Back-n 12 9 protocol, Selective repeat protocol, Bidirectional protocols), Transport layer services, User datagram protocol, Transmission control protocol, **Standard Client0Server Protocols**: World wide-web and HTTP, FTP, Electronic mail, Telnet, Secured Shell, Domain name system	8	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition	Computer, Power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __60_____



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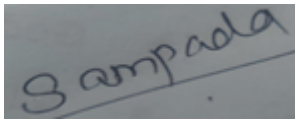

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____Information Technology___ CLASS: __SYIT_(A)

SEMESTER - III MONTH: ____July_ ACADEMIC YEAR: ____2022-23__

LEARNING OBJECTIVE/S:
The learners will be able to: Develop understanding of the concept of Transaction.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Database Management Systems USIT304 Unit 1	**Introduction to Databases and Transactions-** What is database system, purpose of database system. View of data, relational databases, Database architecture and transaction management.	5	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Black Board and Chalk, Google Meet and Power Point Presentation
	Data Models , ER-Diagram and UML	3	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Black Board and Chalk, Google Meet and Power Point Presentation
	Database design and ER-Model: overview, ER_model Constraints, ERD Issues, Codd's Ruls.	4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Black Board and Chalk, Google Meet and Power Point Presentation

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____Information Technology___ CLASS: __SYIT_(A)

SEMESTER - III MONTH: ____August_ ACADEMIC YEAR: ____2022-23____

LEARNING OBJECTIVE/S: The learners will be able to: Relational Algebra and also learning the Constraints.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Database Management Systems USIT304 Unit 2	Relational Database model: Logical views of data, keys, integrity rules, Relational Database design. Normalization.	5	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Black Board and Chalk, Google Meet and Power Point Presentation
	Relational algebra**:** introduction, Selection and projection set operations, renaming, Joins, Division, syntax, semantics. Operators, grouping and ungrouping.	4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Black Board and Chalk, Google Meet and Power Point Presentation
	Calculus: Tuple relational calculus, Domain relational calculus, calculus vs algebra	3	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Black Board and Chalk, Google Meet and Power Point Presentation
DBMS USIT304	Constraints, types of constraints, integrity constraints.	4	Database System and Concepts by	Black Board and Chalk, Google Meet

Unit 3	Views: Introduction to views, data independence, security.		A Silberschatz, H Korth, S Sudarshan	and Power Point Presentation
Database Mgmt. Systems USIT304 Unit 3	Updates on views, comparison on tables and views.	4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Black Board and Chalk, Google Meet and Power Point Presentation
	SQL: Data definition, aggregate function, Null values, nested queries, join relations. Triggers.	4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Black Board and Chalk, Google Meet and Power Point Presentation

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NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____Information Technology___ CLASS: __SYIT_(A)

SEMESTER - III MONTH: ____September_ ACADEMIC YEAR: _____2022-23____

LEARNING OBJECTIVE/S: PL/SQL, Cursors

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DBMS USIT304 Unit 4	Transaction mgmt. ACID Properties, serializability and concurrency control,	5	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Black Board and Chalk, Google Meet and Power Point Presentation
	2PL and Deadlocks, Time stamping methods, optimistic.	4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Black Board and Chalk, Google Meet and Power Point Presentation
	Database Recover Management	3	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Black Board and Chalk, Google Meet and Power Point Presentation
DBMS USIT304 Unit 5	PL-SQL: Beginning with PL/SQL, Identifiers and keywords, Operators, Expressions, Sequences, Cursors and its types.	5	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Black Board and Chalk, Google Meet and Power Point Presentation

DBMS USIT304 Unit 5	Transaction, Collection and composite data types, Procedures and functions, Exception Handling, Packages.	4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Black Board and Chalk, Google Meet and Power Point Presentation
	With clause and Hierarchical Retrieval, Triggers.	3	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Black Board and Chalk, Google Meet and Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

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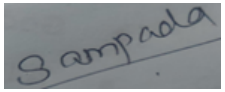

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: SY IT SEMESTER: III

MONTH: October. ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to: Understand Concept of Differential Equations and its types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper V: Applied Mathematics Unit II: Differential Equations	Separation of variables, Equations homogeneous in x and y, Non-homogeneous linear equations,	2	Higher Engineering Mathematics	Chalk And Board
	Exact differential Equation, Integrating Factor, Linear Equation and equation reducible to this form, Method of substitution	3		
	Solvable for p (or the method of factors), Solve for y, Solve for x, Clairaut's form of the equation, Methods of Substitution	2		
	Introduction, The Differential Operator, Linear Differential Equation f(D) y = 0, Different cases depending on the nature of the root of the equation f(D) = 0, Linear differential equation f(D) y = X, The complimentary Function	3		
	The inverse operator 1/f(D) and the symbolic expiration for the particular integral 1/f(D) X; the general methods, Short methods,Other methods, Differential equations reducible to the linear differential equations with constant coefficients.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF D. Pawar

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MRS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**SY.B SC(IT)-A**_____ SEMESTER: ____**III**_____ MONTH: _____**JUNE-SEPTEMBER**_____ ACADEMIC YEAR: _____**2022-2023**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

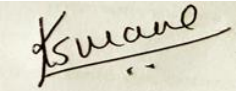
Understand the concept of data structure and how it is stored. The varieties of symbols used to store data, analysis on data, algorithms used to reduce the complexity regarding time, space and programs. Understanding the concept of Arrays and operations on array, Stack and Queue and variation of operation on them. To make understand applications where it is used , advantages and disadvantages of operation. To enable to practically generate code for it and implement it for data storage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 (USIT302) Data Structures **Unit No -01**	**Introduction:** Data and Information, Data Structure, Classification of Data Structures, Primitive Data Types, Abstract Data Types, Data structure vs. File Organization, Operations on Data Structure, Algorithm, Importance of Algorithm Analysis, Complexity of an Algorithm, Asymptotic Analysis and Notations, Big O Notation, Big Omega Notation, Big Theta Notation, Rate of Growth and Big O Notation.	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Textbook, Laptop, Projector, Chalk and Duster, Blackboard.

	Array: Introduction, One Dimensional Array, Memory Representation of One Dimensional Array, Traversing, Insertion, Deletion, Searching, Sorting, Merging of Arrays, Multidimensional Arrays, Memory Representation of Two Dimensional Arrays, General Multi-Dimensional Arrays, Sparse Arrays, SparseMatrix, Memory Representation of Special kind of Matrices, Advantages and Limitations of Arrays.	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Textbook, Laptop, Projector, Chalk and Duster, Blackboard.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -03	**Stack**: Introduction, Operations on the Stack Memory Representation of Stack, Array Representation of Stack, Applications of Stack, Evaluation of Arithmetic Expression, Matching Parenthesis, infix and postfix operations, Recursion**.**	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Textbook, Laptop, Projector, Chalk and Duster, Blackboard.
	Queue: Introduction, Queue, Operations on the Queue, Memory Representation of Queue, Array representation of queue, Linked List Representation of Queue, Circular Queue, Some special kinds of queues, Deque, Priority Queue, Application of Priority Queue, Applications of Queues.	06	A Simplified Approach to Data Structures by	Textbook, Laptop, Projector, Chalk and Duster, Blackboard.

			Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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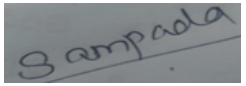

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT

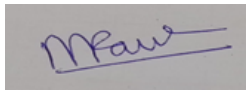
CLASS: SYIT-A SEMESTER: III MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to learn different structures of data, their operations, and algorithms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DATA STRUCTURES (USIT302) Unit II	**Linked List:** Introduction to Subject, Syllabus, Linked List, One-way Linked List, Traversal of Linked List, Searching, Memory Allocation and De-allocation, Insertion in Linked List, Deletion from Linked List, copying a List into Other List, Merging Two Linked Lists, splitting a List into Two Lists, Reversing One-way linked List, Circular Linked List, Applications of Circular Linked List	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	Black Board and Chalk
	Two-way Linked List, traversing a Two-way Linked List, searching in a Two-way linked List, Insertion of an element in Two-way Linked List, deleting a node from Two-way Linked List, Header Linked List, Applications of the Linked list, Representation of Polynomials, Storage of Sparse Arrays, Implementing other Data Structures	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	Black Board and Chalk
DATA STRUCTURES (USIT302) Unit IV	**Sorting and Searching Techniques:** Bubble, Selection, Insertion, Merge Sort. Searching: Sequential, Binary, Indexed Sequential Searches, Binary Search.	3	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	PPT, Black Board and Chalk
	Tree: Tree, Binary Tree, Properties of Binary Tree, Memory Representation of Binary Tree, Operations Performed on Binary	6		PPT, Black Board and Chalk

	Tree, Reconstruction of Binary Tree from its Traversals, Huffman Algorithm, Binary Search Tree, Operations on Binary Search Tree, Heap, Memory Representation of Heap, Operation on Heap, Heap Sort			
	Advanced Tree Structures: Red Black Tree, Operations Performed on Red Black Tree, AVL Tree, and Operations performed on AVL Tree, 23 Tree, B-Tree.	3		PPT, Black Board and Chalk
DATA STRUCTURES (USIT302) Unit V	**Hashing Techniques** Hash function, Address calculation techniques, Common hashing functions Collision resolution, Linear probing, Quadratic, Double hashing, Bucket hashing, Deletion, and rehashing	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	Black Board and Chalk
	Graph: Introduction, Graph, Graph Terminology, Memory Representation of Graph, Adjacency Matrix Representation of Graph, Adjacency List or Linked Representation of Graph, Operations Performed on Graph, Graph Traversal, Applications of the Graph, Reachability, Shortest Path Problems, Spanning Trees	6		Black Board and Chalk, https://liveexample.pearsoncmg.com/dsanimation13ejava/GraphLearningTool.html

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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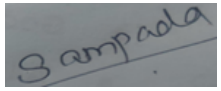

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: INFORMATION TECHNOLOGY CLASS: S.Y.B.Sc.IT

SEMESTER: III MONTH: JUNE - SEPTEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

- Students should be able to understand the concepts of programming before actually starting to write programs.
- Students should be able to develop logic for Problem Solving.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Unit I Python Programming	**Introduction:** The Python Programming Language, History, features, Installing Python, Running Python program,	3	Think Python Allen Downey O'Reilly 1st2012	BLACKBOARD & CHALK
	Debugging : Syntax Errors, Runtime Errors, Semantic Errors, Experimental Debugging, Formal and Natural Languages, The Difference Between Brackets, Braces, and Parentheses,	3		BLACKBOARD & CHALK
	Variables and Expressions Values and Types, Variables, Variable Names and Keywords, Type conversion, Operators and Operands, Expressions, Interactive Mode and Script Mode, Order of Operations.	3		BLACKBOARD & CHALK
	Conditional Statements: if, if-else, nested if –else	1		BLACKBOARD & CHALK
	Looping: for, while, nested loops Control	1		BLACKBOARD & CHALK

	statements: Terminating loops, skipping specific conditions	1		BLACKBOARD & CHALK
Paper-I Unit II Python Programming	**Functions:** Function Calls, Type Conversion Functions, Math Functions, Composition, Adding New Functions,	2	Think Python Allen Downey O'Reilly 1st2012	BLACKBOARD & CHALK
	Definitions and Uses, Flow of Execution, Parameters and Arguments, Variables and Parameters Are Local, Stack Diagrams, Fruitful Functions and Void Functions, Why Functions?	3		BLACKBOARD & CHALK
	Importing with from, Return Values, Incremental Development, Composition, Boolean Functions, More Recursion, Leap of Faith, Checking Types	3		BLACKBOARD & CHALK
	Strings: A String Is a Sequence, Traversal with a for Loop, String Slices, Strings Are Immutable, Searching, Looping and Counting, String Methods, The in Operator, String Comparison, String Operations	4		BLACKBOARD & CHALK
Paper-I Unit III Python Programming	**Lists:** Values and Accessing Elements, Lists are mutable, traversing a List, Deleting elements from List, Built-in List Operators, Concatenation, Repetition, In Operator, Built-in List functions and methods	4	Think Python Allen Downey O'Reilly 1st2012	PPT BLACKBOARD & CHALK
	Tuples and Dictionaries: Tuples, Accessing values in Tuples, Tuple Assignment, Tuples as return values, Variable-length argument tuples, Basic tuples operations, Concatenation, Repetition, in Operator, Iteration, Built-in Tuple Functions Creating a Dictionary, Accessing Values in a dictionary, Updating Dictionary, Deleting Elements from Dictionary, Properties of Dictionary keys, Operations in Dictionary, Built-In Dictionary Functions, Built-in Dictionary Methods	4		PPT BLACKBOARD & CHALK
	Files: Text Files, The File Object Attributes, Directories	2		PPT BLACKBOARD & CHALK
	Exceptions: Built-in Exceptions, Handling Exceptions, Exception with Arguments, User-defined Exceptions	2		PPT BLACKBOARD & CHALK

Paper-I Unit IV Python Programming	**Regular Expressions –** Concept of regular expression, various types of regular expressions, using match function.	2	Think Python Allen Downey O'Reilly 1st2012	PPT BLACKBOARD & CHALK
	Classes and Objects: Overview of OOP (Object Oriented Programming), Class Definition, Creating Objects, Instances as Arguments, Instances as return values, Built-in Class Attributes, Inheritance, Method Overriding, Data Encapsulation, Data Hiding	4		PPT BLACKBOARD & CHALK
	Multithreaded Programming: Thread Module, creating a thread, synchronizing threads, multithreaded priority queue	3		PPT BLACKBOARD & CHALK
	Modules: Importing module, Creating and exploring modules, Math module, Random module, Time module	3		PPT BLACKBOARD & CHALK
Paper-I Unit V Python Programming	**Creating the GUI Form and Adding Widgets:** **Widgets:** Button, Canvas, Checkbutton, Entry, Frame, Label, Listbox, Menubutton, Menu, Message, Radiobutton, Scale, Scrollbar, text, Toplevel, Spinbox, PanedWindow, LabelFrame, tkMessagebox. Handling Standard attributes and Properties of Widgets.	4	Think Python Allen Downey O'Reilly 1st2012	PPT BLACKBOARD & CHALK
	Layout Management: Designing GUI applications with proper Layout Management features.	2		PPT BLACKBOARD & CHALK
	Look and Feel Customization: Enhancing Look and Feel of GUI using different appearances of widgets.	2		PPT BLACKBOARD & CHALK
	Storing Data in Our MySQL Database via Our GUI : Connecting to a MySQL database from Python, Configuring the MySQL connection, Designing the Python GUI database, Using the INSERT command, Using the UPDATE command, Using the DELETE command, Storing and retrieving data from MySQL database.	4		PPT BLACKBOARD & CHALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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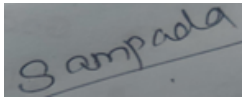

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Sampada Deshmukh DEPARTMENT: Information Technology

CLASS:S.Y.B.Sc.(I.T) SEMESTER: III MONTH:JUNE-SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the basics of Data Communication and concept of networking
- Understand the concept of Analog and Digital Signal.
- Understand the Network Model and their working for data transmission.
- Learn conversion of digital to analog and vice-versa.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 1	**Introduction**: Data communications, networks, network types, Internet history,standards and administration.	4	Data Communication and Networking By Behrouz A. Forouzan	PowerPoint Presentation , Black board chalk
	Network Models:Protocol layering, TCP/IP protocol suite, The OSI model.	2	Data Communication and Networking By Behrouz A. Forouzan	PowerPoint Presentation , Black board chalk
	Introduction to Physical layer:Data and signals, periodic analog signals, digital signals, transmission impairment, data rate limits, performance.	3	Data Communication and Networking By Behrouz A. Forouzan	PowerPoint Presentation , Black board chalk

	Digital and Analog transmission: Digital-to-digital conversion, analog-to-digital conversion, transmission modes, digital-to-analog conversion, analog-to-analog conversion.	3	Data Communication and Networking By Behrouz A. Forouzan	PowerPoint Presentation , Black board chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Dr. Sampada Deshmukh DEPARTMENT:Information Technology

CLASS:S.Y.B.Sc.(I.T) SEMESTER: III MONTH: JUNE-SEPTEMBER ACADEMIC YEAR:2022-23

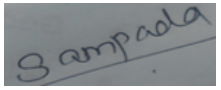
LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand different transmission level protocol.
- Learn Client server Protocol and their application

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 5	**Introduction to the Transport Layer:** Introduction, Transport layer protocols (Simple protocol, Stop-and-wait protocol, Go-Back-n protocol, Selective repeat protocol, Bidirectional protocols), Transport layer services, User datagram protocol, Transmission control protocol	8	TCP/IP Protocol Suite By Behrouz A. Forouzan	PowerPoint Presentation , Black board chalk

	Standard Client Server Protocols: World-wide-web and HTTP, FTP, Electronic mail, Telnet, Secured Shell, Domain name system.	4	TCP/IP Protocol Suite By Behrouz A. Forouzan	PowerPoint Presentation , Black board chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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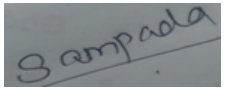

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:S.Y.BSC(I.T) DIV-B SEMESTER: **III** MONTH:JULY-OCT ACADEMIC YEAR: 2022-2023

SUBJECT:COMPUTER NETWORKS

LEARNING OBJECTIVE/S:
The learners will be able to : The **course objectives** include **learning** about **computer network** organization and implementation, obtaining a theoretical understanding of data communication and **computer networks**, and gaining practical experience in installation, monitoring, and troubleshooting of current LAN systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMPUTER NETWORKS USIT303 Unit-2	**Bandwidth Utilization:** Multiplexing and SpectrumSpreading: Multiplexing, Spread Spectrum	5	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill	PowerPoint Presentation
	Transmission media: Guided Media, Unguided Media	4		
	Switching: Introduction, circuit switched networks, packet switching, structure of a switch.	5		

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	Introduction to the Data Link Layer:Link layer addressing, Data Link Layer Design Issues, Error detection and correction, block coding, cyclic codes, checksum, forward error correction, error correcting codes, error detecting codes.	5	Fifth Edition 2013	
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**19**		
COMPUTER NETWORKS USIT303 Unit-3	**Data Link Control:**DLC services, data link layer protocols, HDLC, Point-to-point protocol.	5	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition	PowerPoint Presentation
	Media Access Control: Random access, controlled access, channelization, Wired LANs – Ethernet Protocol, standard ethernet, fast ethernet, gigabit ethernet, 10 gigabit ethernet,	5		
	Wireless LANs: Introduction, IEEE 802.11 project, Bluetooth, WiMAX, Cellular telephony, Satellite networks.	3		
	Connecting devices and Virtual LANs.	3		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**16**		
COMPUTER NETWORKS USIT303 Unit-4	**Introduction to the Network Layer:** Network layer services, packet switching, network layer performance, IPv4 addressing, forwarding of IP packets, Internet Protocol, ICMPv4, Mobile IP	5	Data Communication and Networking	

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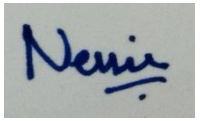
	Unicast Routing:Introduction, routing algorithms, unicast routing protocols.	4	Behrouz A. Forouzan Tata McGraw Hill Fifth Edition	
	Next generation IP: IPv6 addressing, IPv6 protocol, ICMPv6 protocol, transition from IPv4 to IPv6.	4		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**13**		



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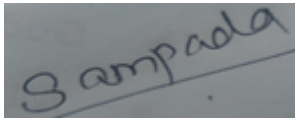

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYBSc(IT) DIV:B SEMESTER: III MONTH: JUNE-SEPTEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the different types of data structures and develop programs to search and sort for elements.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: USIT302 unit:1, Title: Data Structures	**Introduction:** Data and Information, Data Structure, Classification of Data Structures, Primitive Data Types, Abstract Data Types, Data structure vs. File Organization, Operations on Data Structure, Algorithm, Importance of Algorithm Analysis, Complexity of an Algorithm, Asymptotic Analysis and Notations, Big O Notation, Big Omega Notation, Big Theta Notation, Rate of Growth and Big O Notation.	5	A Simplified Approach to Data Structures	Blackboard Projector
	Array:Introduction, One Dimensional Array, Memory Representation of One Dimensional Array, Traversing, Insertion, Deletion, Searching, Sorting, Merging of Arrays, Multidimensional Arrays, Memory Representation of Two Dimensional Arrays, General Multi-Dimensional Arrays, Sparse Arrays, SparseMatrix, Memory Representation of Special kind of Matrices, Advantages and Limitations of Arrays.	7	A Simplified Approach to Data Structures	Blackboard Projector

Paper: USIT302 unit:2, Title: Data Structures	**Linked List:** Linked List, One-way Linked List, Traversal of Linked List, Searching, Memory Allocation and De-allocation, Insertion in Linked List, Deletion from Linked List, Copying a List into Other List, Merging Two Linked Lists, Splitting a List into Two Lists, Reversing One way linked List, Circular Linked List, Applications of Circular Linked List,	6	A Simplified Approach to Data Structures	Blackboard Projector
	Two way Linked List, Traversing a Two way Linked List, Searching in a Two way linked List, Insertion of an element in Two way Linked List, Deleting a node from Two way Linked List, Header Linked List, Applications of the Linked list, Representation of Polynomials, Storage of Sparse Arrays, Implementing other Data Structures.	6	A Simplified Approach to Data Structures	Blackboard Projector
Paper: USIT302 unit:3, Title: Data Structures	**Stack**: Introduction, Operations on the Stack Memory Representation of Stack, Array Representation of Stack, Applications of Stack, Evaluation of Arithmetic Expression, Matching Parenthesis, infix and postfix operations, Recursion**.**	5	A Simplified Approach to Data Structures	Blackboard Projector
	Queue: Introduction, Queue, Operations on the Queue, Memory Representation of Queue, Array representation of queue, Linked List Representation of Queue, Circular Queue,Some special kinds of queues, Deque,Priority Queue, Application of Priority Queue, Applications of Queues.	7	A Simplified Approach to Data Structures	Blackboard Projector
Paper: USIT302 unit:4, Title:	**Sorting and Searching Techniques** Bubble, Selection, Insertion, Merge Sort. Searching: Sequential, Binary, Indexed Sequential Searches, Binary Search.	4	A Simplified Approach to Data Structures	Blackboard Projector

Data Structures	**Tree:**Tree,Binary Tree, Properties of Binary Tree, Memory Representation of Binary Tree, Operations Performed on Binary Tree,Reconstruction of Binary Tree from its Traversals, Huffman Algorithm, Binary Search Tree, Operations on Binary Search Tree, Heap, Memory Representation of Heap, Operation on Heap, Heap Sort.	4	A Simplified Approach to Data Structures	Blackboard Projector
	Advanced Tree Structures: Red Black Tree, Operations Performed on Red Black Tree, AVL Tree, Operations performed on AVL Tree, 2-3 Tree, B-Tree.	4	A Simplified Approach to Data Structures	Blackboard Projector
Paper: USIT302 unit:5, Title: Data Structures	**Hashing Techniques** Hash function, Address calculation techniques, Common hashing functions Collision resolution, Linear probing, Quadratic,Double hashing, Buckethashing, Deletion and rehashing	6	A Simplified Approach to Data Structures	Blackboard Projector
	Graph: Introduction, Graph, Graph Terminology, Memory Representation of Graph, Adjacency Matrix Representation of Graph, Adjacency List or Linked Representation of Graph, Operations Performed on Graph, GraphTraversal, Applications of the Graph, Reachability, Shortest Path Problems, Spanning Trees.	6	A Simplified Approach to Data Structures	Blackboard Projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS: SY BSc IT DIV-B(DBMS) SEMESTER:SEM 3 MONTH: JUN-SEP ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- The learners will be able to : have a broad understanding of database concepts and database management system software
- have a high-level understanding of major DBMS components and their function
- be able to model an application's data requirements using conceptual modeling tools like ER diagrams and design database schemas based on the conceptual model.
- be able to write SQL commands to create tables and indexes, insert/update/delete data, and query data in a relational DBMS.
- be able to program a data-intensive application using DBMS APIs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 DBMS UNIT 1	Introduction to Databases and Transactions What is database system, purpose of database system, view of data, relational databases, database architecture, transaction management	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Black board and chalk
	Data Models The importance of data models, Basic building blocks, Business rules, The evolution of data models, Degrees of data abstraction.	4		
	Database Design,ER Diagram and Unified Modeling Language Database design and ER Model:overview, ERModel, Constraints, ERDiagrams, ERDIssues, weak entity sets, Codd's rules, Relational Schemas, Introduction to UML	4		
	Relational database model: Logical view of data, keys, integrity rules,	3		Black board and chalk

UNIT 2	Relational Database design: features of good relational database design, atomic domain and Normalization (1NF, 2NF, 3NF, BCNF).	3	DATABASE SYSTEM AND CONCEPTS BY H KORTH	
	Relational Algebra and Calculus Relational algebra: introduction, Selection and projection, set operations, renaming,Joins, Division, syntax, semantics	3		
	. Operators, grouping and ungrouping,relational comparison	2		
	Calculus: Tuple relational calculus, Domain relational Calculus, calculus vsalgebra,computational capabilities	4		
UNIT 3	Constraints, Views and SQL Constraints, types of constrains, Integrity constraints,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Black board and chalk
	Views: Introduction to views, data independence, security, updates on views,comparison between tables and views	4		
	SQL: data definition, aggregate function, Null Values, nested sub queries, Joined relations. Triggers	4		
UNIT 4	Transaction management and Concurrency Control Transaction management: ACID properties, serializability and concurrency control,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Black board and chalk
	Lock based concurrency control (2PL, Deadlocks),Time stamping methods,	4		
	optimistic methods, database recovery management.	4		
UNIT 5	PL-SQL: Beginning with PL / SQL,Identifiers and Keywords, Operators, Expressions, Sequences	4	PROGRAMMING WITH PL/SQL FOR BEGINNERS BY H. DAND,R. PATIL	Black board and chalk
	,Control Structures, Cursors and Transaction,	4		
	Collections and composite data types, Procedures and Functions, Exceptions Handling ,Packages,With Clause and Hierarchical Retrieval,Triggers.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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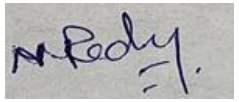

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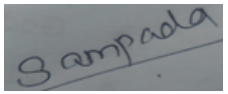

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANT WANI. DEPARTMENT: INFORMATION TECHNOLOGY CLASS: S.Y.B.Sc.IT

SEMESTER: III MONTH: JULY-OCTOBER ACADEMIC YEAR: 2022-2023

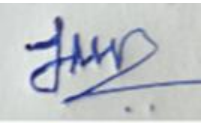
LEARNING OBJECTIVE/S:
The learners will be able to :

- Students should be able to understand the concepts of programming before actually starting to write programs.
- Students should be able to develop logic for Problem Solving.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Unit IV Python Programming	**Regular Expressions –** Concept of regular expression, various types of regular expressions, using match function.	2	Think Python Allen Downey O'Reilly 1st2012	Google Meet, PPT
	Classes and Objects: Overview of OOP (Object Oriented Programming), Class Definition, Creating Objects, Instances as Arguments, Instances as return values, Built-in Class Attributes, Inheritance, Method Overriding, Data Encapsulation, Data Hiding	4		Google Meet, PPT
	Multithreaded Programming: Thread Module, creating a thread, synchronizing threads, multithreaded priority queue	3		Blackboard, Chalk
	Modules: Importing module, Creating and exploring modules, Math module, Random module, Time module	3		Blackboard, Chalk
Paper-I Unit V Python Programming	**Creating the GUI Form and Adding Widgets:** **Widgets:** Button, Canvas, Checkbutton, Entry, Frame, Label, Listbox, Menubutton, Menu, Message, Radiobutton, Scale, Scrollbar, text, Toplevel, Spinbox, PanedWindow, LabelFrame, tkMessagebox. Handling Standard attributes and Properties of Widgets.	4	Think Python Allen Downey O'Reilly 1st2012	Blackboard, Chalk

	Layout Management: Designing GUI applications with proper Layout Management features.	2		Blackboard, Chalk
	Look and Feel Customization: Enhancing Look and Feel of GUI using different appearances of widgets.	2		Blackboard, Chalk
	Storing Data in Our MySQL Database via Our GUI : Connecting to a MySQL database from Python, Configuring the MySQL connection, Designing the Python GUI database, Using the INSERT command, Using the UPDATE command, Using the DELETE command, Storing and retrieving data from MySQL database.	4		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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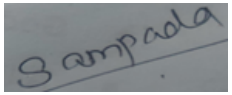

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: SY IT SEMESTER: III

MONTH: October. ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to: Understand Concept of Differential Equations and its types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper V: Applied Mathematics Unit II: Differential Equations	Separation of variables, Equations homogeneous in x and y, Non-homogeneous linear equations,	2	Higher Engineering Mathematics	Chalk And Board
	Exact differential Equation, Integrating Factor, Linear Equation and equation reducible to this form, Method of substitution	3		
	Solvable for p (or the method of factors), Solve for y, Solve for x, Clairaut's form of the equation, Methods of Substitution	2		
	Introduction, The Differential Operator, Linear Differential Equation f(D) y = 0, Different cases depending on the nature of the root of the equation f(D) = 0, Linear differential equation f(D) y = X, The complimentary Function	3		
	The inverse operator 1/f(D) and the symbolic expiration for the particular integral 1/f(D) X; the general methods, Short methods,Other methods, Differential equations reducible to the linear differential equations with constant coefficients.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)- DATA STRUCTURE

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: SYIT (C)

SEMESTER: III MONTH: JULY- SEPT ACADEMIC YEAR: 2022-23

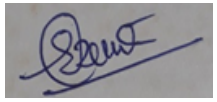
LEARNING OBJECTIVE/S:
The learners will be able to:

- Get deep knowledge about different types of data structures and also the importance of algorithm and its complexity.
- Understand the use of array and different types of linked list.
- Learn about stack, stack operations, queue and different types of it.
- Understand the use of different sorting and searching techniques.
- Learn about graph theory and different types of hashing techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT302, Data Structures, Unit I	**Introduction:** Data and Information, Data Structure, Classification of Data Structures, Primitive Data Types, Abstract Data Types, Data structure vs. File Organization, Operations on Data Structure, Algorithm, Importance of Algorithm Analysis, Complexity of an Algorithm, Asymptotic Analysis and Notations, Big O Notation, Big Omega Notation, Big Theta Notation, Rate of Growth and Big O Notation	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Array: Introduction, One Dimensional Array, Memory Representation of One Dimensional Array, Traversing, Insertion, Deletion, Searching, Sorting, Merging of Arrays, Multidimensional Arrays, Memory Representation of Two Dimensional Arrays, General MultiDimensional Arrays, Sparse Arrays, Sparse Matrix, Memory Representation of Special kind of Matrices, Advantages and Limitations of Arrays.	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint

USIT302, Data Structures, Unit III	**Stack**: Introduction, Operations on the Stack Memory Representation of Stack, Array Representation of Stack, Applications of Stack, Evaluation of Arithmetic Expression, Matching Parenthesis, infix and postfix operations, Recursion**.**	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Queue: Introduction, Queue, Operations on the Queue, Memory Representation of Queue, Array representation of queue, Linked List Representation of Queue, Circular Queue, Some special kinds of queues, Deque, Priority Queue, Application of Priority Queue, Applications of Queues.	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
USIT302, Data Structures, Unit IV	**Sorting and Searching Techniques** Bubble, Selection, Insertion, Merge Sort. Searching: Sequential, Binary, Indexed Sequential Searches, Binary Search.	04	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Tree: Tree, Binary Tree, Properties of Binary Tree, Memory Representation of Binary Tree, Operations Performed on Binary Tree, Reconstruction of Binary Tree from its Traversals, Huffman Algorithm, Binary Search Tree, Operations on Binary Search Tree, Heap, Memory Representation of Heap, Operation on Heap, Heap Sort.	05	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Advanced Tree Structures: Red Black Tree, Operations Performed on Red Black Tree, AVL Tree, Operations performed on AVL Tree, 23 Tree, B-Tree	03	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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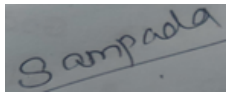

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: COMPUTER SCIENCE

CLASS: S.Y.B.Sc.IT SEMESTER: III MONTH: JULY-SEP ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: to be capable of managing complex IT projects with consideration of the human, financial and environmental factors. to work effectively as a part of a team to achieve a common stated goal.to adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:-III TITLE:- Computer Networks UNIT 1	**Introduction:** Data communications, networks, network types, Internet history, standards and administration.	3	Data Communication and Networking By Behrouz A. Forouzan	Chalk and Board
	Network Models: Protocol layering, TCP/IP protocol suite, The OSI model.	2		
	Introduction to Physical layer: Data and signals, periodic analog signals, digital signals, transmission impairment, data rate limits, performance.	3		
	Digital and Analog transmission: Digital-to-digital conversion, analog-to-digital conversion, transmission modes, digital-to-analog conversion, analog-to-analog conversion.	2		
UNIT 2	**Bandwidth Utilization: Multiplexing and Spectrum Spreading:** Multiplexing, Spread Spectrum	3	Data Communication and Networking By Behrouz A.	Chalk and Board
	Transmission media: Guided Media**,** Unguided Media	2		
	Switching: Introduction, circuit switched networks, packet switching, structure of a switch.	3		

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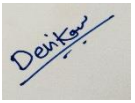
	Introduction to the Data Link Layer: Link layer addressing, Data Link Layer Design Issues, Error detection and correction, block coding, cyclic codes, checksum, forward error correction, error correcting codes, error detecting codes.	3	Forouzan	
UNIT 3	**Data Link Control:** DLC services, data link layer protocols, HDLC, Point-to-point protocol.	2	Data Communication and Networking By Behrouz A. Forouzan	Chalk and Board
	Media Access Control: Random access, controlled access, channelization, Wired LANs – Ethernet Protocol, standard ethernet, fast ethernet, gigabit ethernet, 10 gigabit ethernet,	3		
	Wireless LANs: Introduction, IEEE 802.11 project, Bluetooth, WiMAX, Cellular telephony, Satellite networks.	2		
	Connecting devices and Virtual LANs.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 31



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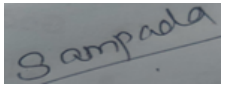

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYIT DIV: C SEMESTER: III MONTH: JUNE-SEPTEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to : List various applications of computer networks, describe the concepts, protocols, design, implementation and use of computer networks. Also implement and evaluate new ideas for solving computer network design issues.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT303, Computer Networks, UNIT-IV	Introduction to the Network Layer: Network layer services, packet switching, network layer performance, IPv4 addressing, forwarding of IP packets, Internet Protocol, ICMPv4, Mobile IP	05	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2, Computer Networks Andrew Tanenbaum Pearson Fifth 2013, TCP/IP Protocol Suite Behrouz A. Forouzan Tata McGraw Hill Fourth Edition 2010	PowerPoint Presentation, OHP, Chalk and Black Board
	Unicast Routing: Introduction, routing algorithms, unicast routing protocols.	02		PowerPoint Presentation, OHP, Chalk and Black Board
	Next generation IP: IPv6 addressing, IPv6 protocol, ICMPv6 protocol, transition from IPv4 to IPv6	05		PowerPoint Presentation, OHP, Chalk and Black Board
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT303, Computer Networks, UNIT-V	Introduction to the Transport Layer: Introduction, Transport layer protocols (Simple protocol, Stop-and-wait protocol, Go-Back-n protocol, Selective repeat protocol, Bidirectional protocols), Transport 12 8 layer services, User datagram protocol, Transmission control protocol,	07	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth	PowerPoint Presentation, OHP, Chalk and Black Board

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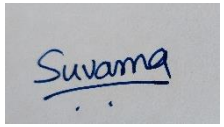
	Standard Client0Server Protocols: World wide-web and HTTP, FTP, Electronic mail, Telnet, Secured Shell, Domain name system.	05	Edition 2, Computer Networks Andrew Tanenbaum Pearson Fifth 2013, TCP/IP Protocol Suite Behrouz A. Forouzan Tata McGraw Hill Fourth Edition 2010	PowerPoint Presentation, OHP, Chalk and Black Board
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		



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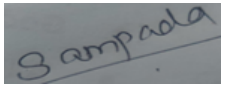

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS: SY BSc IT DIV-C(DS) SEMESTER:SEM 3 MONTH: JUN-SEP ACADEMIC YEAR: 2022-2023

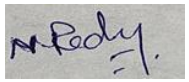
LEARNING OBJECTIVE/S:

- To understand the different data structure techniques .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Data Strucures Paper 2 Code: USIT302 Unit 2	Linked List: Linked List, One-way Linked List, Traversal of Linked List, Searching, Memory Allocation and De-allocation, Insertion in Linked List, Deletion from Linked List, Copying a List into Other List, Merging Two Linked Lists, Splitting a List into Two Lists, Reversing One way linked List, Circular Linked List, Applications of Circular Linked List, Two way Linked List, Traversing a Two way Linked List, Searching in a Two way linked List, Insertion of an element in Two way Linked List, Deleting a node from Two way Linked List, Header Linked List, Applications of the Linked list, Representation of Polynomials, Storage of Sparse Arrays, Implementing other Data Structures.	12	An Introduction to Data Structure with Applications Jean – Paul Tremblay and Paul Sorenson Tata MacGraw Hill	Black board& Chalk
	Hashing Techniques Hash function, Address calculation techniques, Common hashing functions Collision resolution, Linear probing, Quadratic, Double hashing, Bucket hashing, Deletion and rehashing	6	An Introduction to Data Structure with Applications Jean – Paul Tremblay and Paul Sorenson	Black board& Chalk

Data Strucures Paper 2 Code: USIT302 Unit 5			Tata MacGraw HillMcEwen, Hakim Cassimally	
	Graph: Introduction, Graph, Graph Terminology, Memory Representation of Graph, Adjacency Matrix Representation of Graph, Adjacency List or Linked Representation of Graph, Operations Performed on Graph, GraphTraversal, Applications of the Graph, Reachability, Shortest Path Problems, Spanning Trees	6	An Introduction to Data Structure with Applications Jean – Paul Tremblay and Paul Sorenson Tata MacGraw Hill	Black board& Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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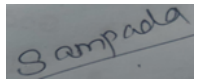

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: SY IT SEMESTER: III

MONTH: October. ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to: Understand Concept of Differential Equations and its types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper V: Applied Mathematics Unit II: Differential Equations	Separation of variables, Equations homogeneous in x and y, Non-homogeneous linear equations,	2	Higher Engineering Mathematics	Chalk And Board
	Exact differential Equation, Integrating Factor, Linear Equation and equation reducible to this form, Method of substitution	3		
	Solvable for p (or the method of factors), Solve for y, Solve for x, Clairaut's form of the equation, Methods of Substitution	2		
	Introduction, The Differential Operator, Linear Differential Equation f(D) y = 0, Different cases depending on the nature of the root of the equation f(D) = 0, Linear differential equation f(D) y = X, The complimentary Function	3		
	The inverse operator 1/f(D) and the symbolic expiration for the particular integral 1/f(D) X; the general methods, Short methods,Other methods, Differential equations reducible to the linear differential equations with constant coefficients.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. **Advanced Web Programming** DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: Jun to Sept ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: To learn the fundamental aspects of the JavaScript programming language and how to program using document object model application programming

The learners will be able to :

- To understand .Net framework and its run time environment.
- To gain basic knowledge of C# language with its object oriented concept.
- To gain the knowledge of namespaces and assemblies.
- To understand fundamentals of web application development.
- To make use of different server controls like validation, navigation and rich server control.
- To understand back hand connectivity with SQL using ADO .Net Frame.
- To use data binding with data controls like grid view, details view and form view.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT503 **Advanced Web Programming** UNIT-1	**Introducing .NET**: The .NET Framework, C#, VB, and the .NET Languages, The Common Language Runtime, The .NET Class Library. **The C# Language**: C# Language Basics, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods. **Types, Objects, and Namespaces**: The Basics About Classes,	12	1.Beginning Visual C# 2010 2.Murach's ASP.NET 4 Web Programming with C# 2010, 3. Beginning ASP.NET 4 in C# and VB,	PPT, Google meets.

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	Building a Basic Class, Value Types and Reference Types, Understanding Namespaces and Assemblies, Advanced Class Programming.			
USIT503 **Advanced Web Programming** UNIT-2	**Web Form Fundamentals**: Writing Code, Using the Code-Behind Class, Adding Event Handlers, Understanding the Anatomy of an ASP.NET Application, Introducing Server Controls, Using the Page Class, Using Application Events, Configuring an ASP.NET Application. **Form Controls**: Stepping Up to Web Controls, Web Control Classes, List Controls, Table Controls, Web Control Events and AutoPostBack, Validation, Understanding Validation, Using the Validation Controls, Rich Controls, The Calendar, The AdRotator, Pages with Multiple Views, User Controls and Graphics, User Controls, Dynamic Graphics, The Chart Control, Website Navigation: Site Maps, URL Mapping and Routing, The SiteMapPath Control, The TreeView Control, The Menu Control.	12	1.Beginning Visual C# 2010 2.Murach's ASP.NET 4 Web Programming with C# 2010, 3. Beginning ASP.NET 4 in C# and VB	PPT, Google meets.
USIT503 **Advanced Web Programming** UNIT-3	**Error Handling, Logging, and Tracing**: Avoiding Common Errors, Understanding Exception Handling, Handling Exceptions, Throwing Your Own Exceptions, Using Page Tracing **State Management**: Understanding the Problem of State, Using View State, Transferring Information Between Pages, Using Cookies,	12	1.Beginning Visual C# 2010 2.Murach's ASP.NET 4 Web Programming with C# 2010, 3. Beginning ASP.NET 4 in C# and VB	PPT, Google meets.

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	Managing Session State, Configuring Session State, Using Application State, Comparing State Management Options **Styles, Themes, and Master Pages**: Styles, Themes, Master Page Basics, Advanced Master Pages,			
USIT503 **Advanced Web Programming** UNIT-4	**ADO.NET Fundamentals**: Understanding Databases, Configuring Your Database, Understanding SQL Basics, Understanding the Data Provider Model, Using Direct Data Access, Using Disconnected Data Access. **Data Binding**: Introducing Data Binding, Using Single-Value Data Binding, Using Repeated-Value Data Binding, Working with Data Source Controls, **The Data Controls**: The GridView, Formatting the GridView, selecting a GridView Row, Editing with the GridView, Sorting and Paging the GridView, Using GridView Templates, The DetailsView and FormView	12	1.Beginning Visual C# 2010 2.Murach's ASP.NET 4 Web Programming with C# 2010, 3. Beginning ASP.NET 4 in C# and VB	PPT, Google meets.
USIT503 **Advanced Web Programming** UNIT-5	**XML**: XML Explained, The XML Classes, XML Validation, XML Display and Transforms. **Security Fundamentals**: Understanding Security Requirements, Authentication and Authorization, Forms Authentication, Windows Authentication. **ASP.NET AJAX**: Understanding Ajax, Using Partial Refreshes, Using Progress Notification, Implementing Timed Refreshes, Working with the ASP.NET AJAX Control Toolkit.	12	1.Beginning Visual C# 2010 2.Murach's ASP.NET 4 Web Programming with C# 2010, 3. Beginning ASP.NET 4 in C# and VB	PPT, Google meets.

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Vidhya Dayanand Patil College of Arts
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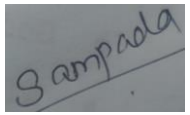
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)-ENTERPRISE JAVA

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: TYIT (A)

SEMESTER: V MONTH: JUNE-SEPT ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the Java EE Architecture, Server and Containers.
- Describe the different servlet API and lifecycle of servlet.
- Get the difference between cookies, session and request dispatcher.
- Understand the use of tag library, naming directory, interceptors.
- Familiar with java beans, JPA, hibernate and JSP.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506, Enterprise Java Unit I	**Understanding Java EE:** What is an Enterprise Application? What is java enterprise edition? Java EE Technologies, Java EE evolution, Glassfish server	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Java EE Architecture, Server and Containers: Types of System Architecture, Java EE Server, Java EE Containers.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint

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	Introduction to Java Servlets: The Need for Dynamic Content, Java Servlet Technology, Why Servlets? What can Servlets do?	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Servlet API and Lifecycle: Java Servlet API, The Servlet Skeleton, The Servlet Life Cycle, A Simple Welcome Servlet	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Working With Servlets: Getting Started, Using Annotations Instead of Deployment Descriptor.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Working with Databases: What Is JDBC? JDBC Architecture, Accessing Database, The Servlet GUI and Database Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
USIT506, Enterprise Java Unit II	**Request Dispatcher:** Resquestdispatcher Interface, Methods of Requestdispatcher, Requestdispatcher Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	COOKIES: Kinds Of Cookies, Where Cookies Are Used? Creating Cookies Using Servlet, Dynamically Changing The Colors Of A Page	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	SESSION: What Are Sessions? Lifecycle Of Http Session, Session Tracking With Servlet API, A Servlet Session Example	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint

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	Working With Files: Uploading Files, Creating an Upload File Application, Downloading Files, Creating a Download File Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Working With Non-Blocking I/O: Creating a Non-Blocking Read Application, Creating The Web Application, Creating Java Class, Creating Servlets, Retrieving The File, Creating index.jsp	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
USIT506, Enterprise Java Unit III	**Introduction To Java Server Pages:** Why use Java Server Pages? Disadvantages Of JSP, JSP v\s Servlets, Life Cycle of a JSP Page, How does a JSP function? How does JSP execute? About Java Server Pages	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Getting Started With Java Server Pages: Comments, JSP Document, JSP Elements, JSP GUI Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Action Elements: Including other Files, Forwarding JSP Page to Another Page, Passing Parameters for other Actions, Loading a Javabean.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Implicit Objects, Scope And El Expressions: Implicit Objects, Character Quoting Conventions, Unified Expression Language [Unified El], Expression Language.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint

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	Java Server Pages Standard Tag Libraries: What is wrong in using JSP Scriptlet Tags? How JSTL Fixes JSP Scriptlet's Shortcomings? Disadvantages Of JSTL, Tag Libraries.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
USIT506, Enterprise Java Unit IV	**Introduction To Enterprise Javabeans:** Enterprise Bean Architecture, Benefits of Enterprise Bean, Types of Enterprise Bean, Accessing Enterprise Beans, Enterprise Bean Application, Packaging Enterprise Beans	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Working With Session Beans: When to use Session Beans? Types of Session Beans, Remote and Local Interfaces, Accessing Interfaces, Lifecycle of Enterprise Beans, Packaging Enterprise Beans, Example of Stateful Session Bean, Example of Stateless Session Bean, Example of Singleton Session Beans.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Working with Message Driven Beans: Lifecycle of a Message Driven Bean, Uses of Message Driven Beans, The Message Driven Beans Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Interceptors: Request And Interceptor, Defining An Interceptor, AroundInvoke Method, Applying Interceptor, Adding An Interceptor To An Enterprise Bean, Build and Run the Web Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Java Naming and Directory Interface: What is Naming Service? What is Directory Service? What is Java Naming and Directory interface? Basic Lookup, JNDI Namespace in Java EE, Resources and JNDI, Datasource Resource Definition in Java EE.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint

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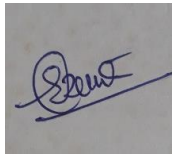
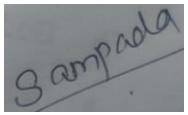
USIT506, Enterprise Java Unit V	**Persistence, Object/Relational Mapping And JPA:** What is Persistence? Persistence in Java, Current Persistence Standards in Java, Why another Persistence Standards? Object/Relational Mapping,	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Introduction to Java Persistence API: The Java Persistence API, JPA, ORM, Database and the Application, Architecture of JPA, How JPA Works? JPA Specifications.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Writing JPA Application: Application Requirement Specifications, Software Requirements, The Application Development Approach, Creating Database And Tables in Mysql, Creating a Web Application, Adding the Required Library Files, Creating a Javabean Class, Creating Persistence Unit [Persistence.Xml], Creating JSPS, The JPA Application Structure, Running The JPA Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Introduction to Hibernate: What is Hibernate? Why Hibernate? Hibernate, Database and The Application, Components of Hibernate, Architecture of Hibernate, How Hibernate Works?	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Writing Hibernate Application: Application Requirement Specifications, Software Requirements, The Application Development Approach, Creating Database and Tables in Mysql, Creating a Web Application, Adding The Required Library Files, Creating a Javabean Class, Creating Hibernate Configuration File, Adding a Mapping Class, Creating JSPS, Running The Hibernate Application.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF 



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gauri Gaurav Vartak DEPARTMENT: Information Technology CLASS: TYIT

SEMESTER: V MONTH: June to Oct ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

To determine the market perspective of IoT

To compare and contrast the use of devices, gateways and Data management in IoT

To illustrate the applications of IoT in Industrial Automation and identify Real world design constraints.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 Internet Of Things Unit 1	**The Internet of Things:** An Overview: The Flavour of the Internet of Things, The "Internet" of "Things", The Technology of the Internet of Things, Enchanted Objects, Who is Making the Internet of Things?	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet
	Design Principles for Connected Devices: Calm and Ambient Technology, Magic as Metaphor, Privacy, Keeping Secrets, Whose Data Is It Anyway? Web Thinking for Connected Devices, Small Pieces, Loosely Joined, First-Class Citizens on The Internet, Graceful Degradation, Affordances	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet

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	Internet Principles: Internet Communications: An Overview, IP, TCP, The IP Protocol Suite (TCP/IP), UDP, IP Addresses, DNS, Static IP Address Assignment, Dynamic IP Address Assignment, IPv6, MAC Addresses, TCP and UDP Ports, An Example: HTTP Ports, Other Common Ports, Application Layer Protocols, HTTP, HTTPS: Encrypted HTTP, Other Application Layer Protocols.	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet
Paper-02 Internet Of Things Unit 2	**Thinking About Prototyping:** Sketching, Familiarity, Costs versus Ease of Prototyping, Prototypes and Production, Changing Embedded Platform, Physical Prototypes and Mass Personalisation, climbing into the Cloud, Open Source versus Closed Source, Why Closed? Why Open? Mixing Open and Closed Source, Closed Source for Mass Market Projects, Tapping into the Community.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet
	Prototyping Embedded Devices: Electronics, Sensors, Actuators, Scaling Up the Electronics, Embedded Computing Basics, Microcontrollers, System-on-Chips, Choosing Your Platform, Arduino, developing on the Arduino, Some Notes on the Hardware, Openness, Raspberry Pi, Cases and Extension Boards, Developing on the Raspberry Pi, Some Notes on the Hardware, Openness.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet
Paper-02 Internet Of Things Unit 3	**Prototyping the Physical Design:** Preparation, Sketch, Iterate, and Explore, Nondigital Methods, Laser Cutting, Choosing a Laser Cutter, Software, Hinges and Joints, 3D Printing, Types of 3D Printing, Software, CNC Milling, Repurposing/Recycling. Prototyping and Presence Protocol, Constrained Application Protocol.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet

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	Online Components: Getting Started with an API, Mashing Up APIs, Scraping, Legalities, writing a New API, Clockodillo, Security, implementing the API, Using Curl to Test, Going Further, Real-Time Reactions, Polling, Comet, Other Protocols, MQ Telemetry Transport, Extensible Messaging	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet
Paper-02 Internet Of Things Unit 4	**Techniques for Writing Embedded Code:** Memory Management, 12 8 Types of Memory, Making the Most of Your RAM, Performance and Battery Life, Libraries, Debugging.	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet
	Business Models: A Short History of Business Models, Space and Time, From Craft to Mass Production, The Long Tail of the Internet, Learning from History, The Business Model Canvas, Who Is the Business Model For? Models, Make Thing, Sell Thing, Subscriptions, Customisation, be a Key Resource, Provide Infrastructure: Sensor Networks, take a Percentage, Funding an Internet of Things Startup, Hobby Projects and Open Source, Venture Capital, Government Funding, Crowdfunding, Lean Startups.	8	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet
Paper-02 Internet Of Things Unit 5	**Moving to Manufacture:** What Are You Producing? Designing Kits, Designing Printed circuit boards, Software Choices, The Design Process, Manufacturing Printed Circuit Boards, Etching Boards, Milling Boards. Assembly, Testing, Mass-Producing the Case and Other Fixtures, Certification, Costs, Scaling Up Software, Deployment, Correctness and Maintainability, Security, Performance, User Community.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet
	Ethics: Characterizing the Internet of Things, Privacy, Control, Disrupting Control,Crowdsourcing, Environment, Physical	6	Designing the Internet of Things Adrian	Laptop, PPT, Google Meet

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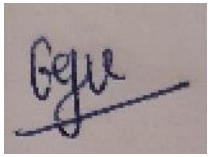
	Thing, Electronics, Internet Service, Solutions, The Internet of Things as Part of the Solution, Cautious Optimism, The Open Internet of Things Definition.		McEwen, Hakim Cassimally	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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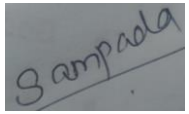

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: TYBSc(IT) Div:A SEMESTER: V MONTH: JUNE-SEPTEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the importance of software project management, project evaluation and programme management was easy,to provide knowledge of step wise planning and monitoring, understand the importance of becoming a team and decision making and project closeout.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: USIT501 unit:1, Title: Software Project Management	**Introduction to Software Project Management**:Introduction, Why is Software Project Management Important? What is a Project? Software Projects versus Other Types of Project, Contract Management and Technical Project Management, Activities Covered by Software Project Management, Plans, Methods and Methodologies, Some Ways of Categorizing Software Projects, Project Charter, Stakeholders, Setting Objectives, The Business Case, Project Success and Failure, What is Management? Management Control, Project Management Life Cycle, Traditional versus Modern Project Management Practices.	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Blackboard Projector

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	Project Evaluation and Programme Management: Introduction, Business Case, Project Portfolio Management, Evaluation of Individual Projects, Cost–benefit Evaluation Techniques, Risk Evaluation, Programme Management, Managing the Allocation of Resources within Programmes, Strategic Programme Management, Creating a Programme, Aids to Programme Management, Some Reservations about Programme Management, Benefits Management.	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Blackboard Projector
	An Overview of Project Planning:Introduction to Step Wise Project Planning, Step 0: Select Project, Step 1: Identify Project Scope and Objectives, Step 2: Identify Project Infrastructure, Step 3: Analyse Project Characteristics, Step 4: Identify Project Products and Activities, Step 5: Estimate Effort for Each Activity, Step 6: Identify Activity Risks, Step 7: Allocate Resources, Step 8: Review/Publicize Plan, Steps 9 and 10: Execute Plan/Lower Levels of Planning	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Blackboard Projector
Paper: USIT501 unit:5, Title:	**Working in Teams:** Introduction, becoming a Team, Decision Making, Organization and Team Structures, Coordination Dependencies, Dispersed and Virtual Teams, Communication Genres, Communication Plans, Leadership.	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Blackboard Projector

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Software Project Management	**Software Quality:** Introduction, The Place of Software Quality in Project Planning, Importance of Software Quality, Defining Software Quality, Software Quality Models, ISO 9126, Product and Process Metrics, Product versus Process Quality Management, Quality Management Systems, Process Capability Models, Techniques to Help Enhance Software Quality, Testing, Software Reliability, Quality Plans.	5	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Blackboard Projector
	Project Closeout: Introduction, Reasons for Project Closure, Project Closure Process, Performing a Financial Closure, Project Closeout Report.	3	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Blackboard Projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUVARNA S KANNAV DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:T.Y.BSC(I.T) DIV-A SEMESTER: **V** MONTH:JUNE-OCTOBER ACADEMIC YEAR: 2022-2023

SUBJECT:SOFTWARE PROJECT MANAGEMENT

LEARNING OBJECTIVE/S:
The learners will be able to : Apply project management concepts and techniques to an IT project. Identify issues that could lead to IT project success or failure. Explain project management in terms of the software development process. Describe the responsibilities of IT project managers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Software Project Management USIT501 Unit-2	**Selection of an Appropriate Project Approach:** Introduction, Build or Buy? Choosing Methodologies and Technologies, Software Processes and Process Models, Choice of Process Models, Structure versus Speed of Delivery, The Waterfall Model, The Spiral Model, Software Prototyping, Other Ways of Categorizing Prototypes, Incremental Delivery, Atern/Dynamic Systems Development Method, Rapid Application Development, Agile Methods, Extreme Programming (XP), Scrum, Lean Software Development, Managing Iterative Processes, Selecting the Most Appropriate Process Model.	5	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation, OHP, Chalk and Black Board
	Software Effort Estimation: Introduction, where are the Estimates Done? Problems with Over- and Under-Estimates, The	5		

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	Basis for Software Estimating, Software Effort Estimation Techniques, Bottom up Estimating, The Top-down Approach and Parametric Models, Expert Judgement, Estimating by Analogy, Albrecht Function Point Analysis, Function Points Mark II, COSMIC Full Function Points, COCOMO II: A Parametric Productivity Model, Cost Estimation, Staffing Pattern, Effect of Schedule Compression, Capers Jones Estimating Rules of Thumb.			
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**10**		
Software Project Management USIT501 Unit-3	**Activity Planning:** Introduction, Objectives of Activity Planning, When to Plan, Project Schedules, Projects and Activities, Sequencing and Scheduling Activities, Network Planning Models, Formulating a Network Model, Adding the Time Dimension, The Forward Pass, Backward Pass, Identifying the Critical Path, Activity Float, Shortening the Project Duration, Identifying Critical Activities, Activity-on-Arrow Networks.	4	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation, OHP, Chalk and Black Board
	Risk Management: Introduction, Risk, Categories of Risk, Risk Management Approaches, A Framework for Dealing with Risk, Risk Identification, Risk Assessment, Risk Planning, Risk Management, Evaluating Risks to the Schedule, Boehm"s Top 10 Risks and Countermeasures, Applying the PERT Technique, Monte Carlo Simulation, Critical Chain Concepts.	4		
	Resource Allocation: Introduction, Nature of Resources, Identifying Resource Requirements, Scheduling Resources, Creating Critical Paths, Counting the Cost, Being Specific, Publishing the Resource Schedule, Cost Schedules, Scheduling Sequence.	3		

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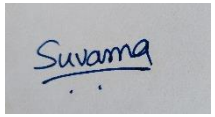
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**11**		
Software Project Management USIT501 Unit-4	**Monitoring and Control:** Introduction, Creating the Framework, Collecting the Data, Review, Visualizing Progress, Cost Monitoring, Earned Value Analysis, Prioritizing Monitoring, Getting the Project Back to Target, Change Control, Software Configuration Management (SCM).	4	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation, OHP, Chalk and Black Board
	Managing Contracts: Introduction, Types of Contract, Stages in Contract Placement, Typical Terms of a Contract, Contract Management, Acceptance.	4		
	Managing People in Software Environments: Introduction, Understanding Behaviour, Organizational Behaviour: A Background, Selecting the Right Person for the Job, Instruction in the Best Methods, Motivation, The Oldham–Hackman Job Characteristics Model, Stress, Stress Management, Health and Safety, Some Ethical and Professional Concerns.	3		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**11**		



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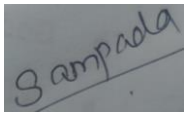

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: TYBSCIT SEMESTER:V

MONTH: **JUNE-OCT** ACADEMIC YEAR:**22-23**

LEARNING OBJECTIVE/S:

The learners will be able to :

Understand fundanentals of project

Be familiar with diff methods and tools used for project management

Do the project planning,scheduling,costing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT501 Software Project Management UNIT-1	**Introduction to Software Project Management**:Introduction, Whyis Software Project Management Important? What is a Project?Software Projects versus Other Types of Project, Contract Management and Technical Project Management, Activities Covered by Software Project Management, Plans, Methods and Methodologies,Some Ways of Categorizing Software Projects, Project Charter, Stakeholders, Setting Objectives, The Business Case, Project Successand Failure, What is Management? Management Control, Project Management Life Cycle, Traditional versus Modern Project Management Practices.	05	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point,blackboard
	Project Evaluation and Programme Management: Introduction, Business Case, Project Portfolio Management, Evaluation of Individual Projects, Cost–benefit Evaluation Techniques, Risk Evaluation, Programme Management,	04	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point,blackboard

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	Managing the Allocation of Resources within Programmes, Strategic Programme Management, Creating a Programme, Aids to Programme Management, Some Reservations about Programme Management, Benefits Management.			
	An Overview of Project Planning :Introduction to Step Wise Project Planning, Step 0: Select Project, Step 1: Identify Project Scope and Objectives, Step 2: Identify Project Infrastructure, Step 3: Analyse Project Characteristics, Step 4: Identify Project Products and Activities, Step 5: Estimate Effort for Each Activity, Step 6: Identify Activity Risks, Step 7: Allocate Resources, Step 8: Review/Publicize Plan, Steps 9 and 10: Execute Plan/Lower Levels of Planning	03	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point,blackboard
USIT501 Software Project Management UNIT-2	**Selection of an Appropriate Project Approach:**Introduction, Build or Buy? Choosing Methodologies and Technologies, Software Processes and Process Models, Choice of Process Models, Structure versus Speed of Delivery, The Waterfall Model, The Spiral Model, Software Prototyping, Other Ways of Categorizing Prototypes, Incremental Delivery, Atern/Dynamic Systems Development Method, Rapid Application Development, Agile Methods, Extreme Programming (XP), Scrum, Lean Software Development, Managing Iterative Processes, Selecting the Most Appropriate Process Model.	06	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point,blackboard
	Software Effort Estimation: Introduction, Where are the Estimates Done? Problems with Over- and Under-Estimates, The Basis for Software Estimating, Software Effort Estimation Techniques, Bottomup Estimating, The Top-down Approach and Parametric Models,Expert Judgement, Estimating by Analogy, Albrecht Function Point Analysis, Function Points Mark II, COSMIC Full Function Points,COCOMO II: A Parametric Productivity Model, Cost Estimation, Staffing Pattern, Effect of	06	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point,blackboard

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	Schedule Compression, Capers Jones Estimating Rules of Thumb.			
USIT501 Software Project Management UNIT-3	**Activity Planning:** Introduction, Objectives of Activity Planning,When to Plan, Project Schedules, Projects and Activities, Sequencing and Scheduling Activities, Network Planning Models, Formulating aNetwork Model, Adding the Time Dimension, The Forward Pass,Backward Pass, Identifying the Critical Path, Activity Float,Shortening the Project Duration, Identifying Critical Activities,Activity-on-Arrow Networks.	04	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point,blackboard
	Risk Management: Introduction, Risk, Categories of Risk, Risk Management Approaches, A Framework for Dealing with Risk, RiskIdentification, Risk Assessment, Risk Planning, Risk Management,Evaluating Risks to the Schedule, Boehm"s Top 10 Risks and Counter Measures, Applying the PERT Technique, Monte Carlo Simulation,Critical Chain Concepts	04	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point,blackboard
	Resource Allocation: Introduction, Nature of Resources, Identifying Resource Requirements, Scheduling Resources, Creating Critical Paths, Counting the Cost, Being Specific, Publishing the Resource Schedule, Cost Schedules, Scheduling Sequence	04	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point,blackboard
USIT501 Software Project Management UNIT-4	**Monitoring and Control**: Introduction, Creating the Framework, Collecting the Data, Review, Visualizing Progress, Cost Monitoring, Earned Value Analysis, Prioritizing Monitoring, Getting the Project Back to Target, Change Control, Software Configuration Management (SCM).	05	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point,blackboard
	Managing Contracts: Introduction, Types of Contract, Stages in Contract Placement, Typical Terms of a Contract, Contract Management, Acceptance.	04	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point,blackboard

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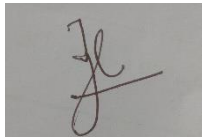
	Managing People in Software Environments: Introduction, Understanding Behaviour, Organizational Behaviour: A Background, Selecting the Right Person for the Job, Instruction in the Best Methods, Motivation, The Oldham–Hackman Job Characteristics Model, Stress, Stress Management, Health and Safety, Some Ethical and Professional Concerns.	03	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point,blackboard
USIT501 Software Project Management UNIT-5	**Working in Teams:** Introduction, Becoming a Team, Decision Making, Organization and Team Structures, Coordination Dependencies, Dispersed and Virtual Teams, Communication Genres, Communication Plans, Leadership	05	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point,blackboard
	Software Quality : Introduction, The Place of Software Quality in Project Planning, Importance of Software Quality, Defining Software Quality, Software Quality Models, ISO 9126, Product and Process Metrics, Product versus Process Quality Management, Quality Management Systems, Process Capability Models, Techniques to Help Enhance Software Quality, Testing, Software Reliability,Quality Plans.	05	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point,blackboard
	Project Closeout: Introduction, Reasons for Project Closure, Project Closure Process, Performing a Financial Closure, Project CloseoutReport	02	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point,blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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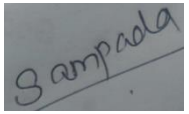

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TEACHING PLAN (UNIT PLAN)-ENTERPRISE JAVA

NAME OF THE STAFF: DR. PRIYANKA ROSHAN BRID DEPARTMENT: IT CLASS: TYIT (B)

SEMESTER: V MONTH: JUNE-SEPT ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the Java EE Architecture, Server and Containers.
- Describe the different servlet API and lifecycle of servlet.
- Get the difference between cookies, session and request dispatcher.
- Understand the use of tag library, naming directory, interceptors.
- Familiar with java beans, JPA, hibernate and JSP.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506, Enterprise Java Unit I	**Understanding Java EE:** What is an Enterprise Application? What is java enterprise edition? Java EE Technologies, Java EE evolution, Glassfish server	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Java EE Architecture, Server and Containers: Types of System Architecture, Java EE Server, Java EE Containers.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Introduction to Java Servlets: The Need for Dynamic Content, Java Servlet Technology, Why Servlets? What can Servlets do?	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint

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	Servlet API and Lifecycle: Java Servlet API, The Servlet Skeleton, The Servlet Life Cycle, A Simple Welcome Servlet	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Working With Servlets: Getting Started, Using Annotations Instead of Deployment Descriptor.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Working with Databases: What Is JDBC? JDBC Architecture, Accessing Database, The Servlet GUI and Database Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
USIT506, Enterprise Java Unit II	**Request Dispatcher:** Resquestdispatcher Interface, Methods of Requestdispatcher, Requestdispatcher Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	COOKIES: Kinds Of Cookies, Where Cookies Are Used? Creating Cookies Using Servlet, Dynamically Changing The Colors Of A Page	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	SESSION: What Are Sessions? Lifecycle Of Http Session, Session Tracking With Servlet API, A Servlet Session Example	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Working With Files: Uploading Files, Creating an Upload File Application, Downloading Files, Creating a Download File Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint

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	Working With Non-Blocking I/O: Creating a Non-Blocking Read Application, Creating The Web Application, Creating Java Class, Creating Servlets, Retrieving The File, Creating index.jsp	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
USIT506, Enterprise Java Unit III	**Introduction To Java Server Pages:** Why use Java Server Pages? Disadvantages Of JSP, JSP v\s Servlets, Life Cycle of a JSP Page, How does a JSP function? How does JSP execute? About Java Server Pages	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Getting Started With Java Server Pages: Comments, JSP Document, JSP Elements, JSP GUI Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Action Elements: Including other Files, Forwarding JSP Page to Another Page, Passing Parameters for other Actions, Loading a Javabean.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Implicit Objects, Scope And El Expressions: Implicit Objects, Character Quoting Conventions, Unified Expression Language [Unified El], Expression Language.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Java Server Pages Standard Tag Libraries: What is wrong in using JSP Scriptlet Tags? How JSTL Fixes JSP Scriptlet's Shortcomings? Disadvantages Of JSTL, Tag Libraries.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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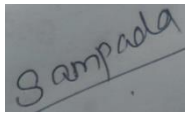

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

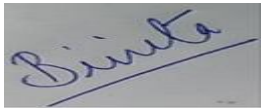
NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: mid-June to mid-October ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with various Linux OS commands
b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -I	**Introduction to Red Hat Enterprise Linux:** Linux, Open Source and Red Hat, Origins of Linux, Distributions, Duties of Linux System Administrator.	2	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	PowerPoint Presentation
	Command Line: Working with the Bash Shell, Getting the Best of Bash, Useful Bash Key Sequences, Working with Bash History, Performing Basic File System Management Tasks, Working with Directories, Piping and Redirection, Finding Files	4		PowerPoint Presentation
	System Administration Tasks: Job Tasks, Process Monitoring and Management, Mounting Devices, Links, Backups, Printers, Logging, Rsyslog, Common Log Files, Setting Up Logrotate	4		PowerPoint Presentation
	Managing Software: Understanding RPM, Understanding Meta Package Handlers, Creating Your Own Repositories, Managing Repositories, Installing Software with Yum, Querying Software, Extracting Files from RPM Packages	2		PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: mid-June to mid-October ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
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a. Work with various Linux OS commands
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -II	**Configuring and Managing Storage:** Partitions, File systems, logical volumes, Snapshots, Replacing Failing Storage Devices, Swap Space, Encrypted Volumes	4	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	PowerPoint Presentation
	Connecting to the Network: Configuring the Network with NetworkManager and command line, Services and Runlevels, system-config-network, Network Service Scripts, Troubleshooting, IPv6, Configuring SSH Server and Client, Key-Based SSH Authentication, SSH Port Forwarding, VNC Server Access	4		PowerPoint Presentation
	Working with Users, Groups, and Permissions: Creating, deleting and modifying Users, Groups, user accounts with Commands and GUI , Passwords, Using External Authentication Sources, sssd, nsswitch, Pluggable Authentication Modules, Managing Permissions, the Role of Ownership, Basic Permissions: Read, Write, and Execute, Advanced Permissions, ACL, umask, Attributes	4		PowerPoint Presentation

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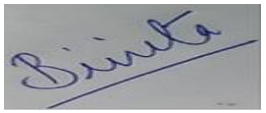

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TEACHING PLAN (UNIT PLAN)

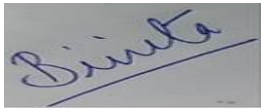
NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: mid-June to mid-October ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with various Linux OS commands
b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -III	**Securing Server with iptables:** Understanding Firewalls, Setting Up a Firewall with system-config-firewall, Allowing Services, Trusted Interfaces, Masquerading, Configuration Files, Setting Up a Firewall with iptables, Tables, Chains, and Rules, Composition of Rule, Configuration Example, Advanced iptables Configuration, Configuring Logging, The Limit Module, Configuring NAT	4	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	PowerPoint Presentation
	Setting Up Cryptographic Services: Introducing SSL, Proof of Authenticity: the Certificate Authority, Managing Certificates with openssl, Creating a Signing Request, Working with GNU Privacy Guard, Creating GPG Keys, Key Transfer, Managing GPG Keys, Encrypting Files with GPG, GPG Signing, Signing RPM Files	4		PowerPoint Presentation
	Configuring Server for File Sharing: What is NFS? Advantages and Disadvantages of NFS, Configuring NFS4, Setting Up NFSv4, Mounting an NFS Share, Making NFS Mounts Persistent, Configuring Automount, Configuring Samba, Setting Up a Samba File Server, Samba Advanced Authentication Options, Accessing Samba Shares, Offering FTP Services.	4		PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

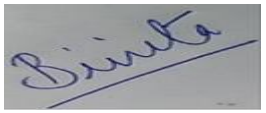
NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: mid-June to mid-October ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with various Linux OS commands
b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -IV	**Configuring DNS and DHCP:** Introduction to DNS, The DNS Hierarchy, DNS Server Types, The DNS Lookup Process, DNS Zone Types, Setting Up a DNS Server, Setting Up a Cache-Only Name Server, Setting Up a Primary Name Server, Setting Up a Secondary Name Server, Understanding DHCP, Setting Up a DHCP Server	4	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	PowerPoint Presentation
	Setting Up a Mail Server: Using the Message Transfer Agent, the Mail Delivery Agent, the Mail User Agent, Setting Up Postfix as an SMTP Server, Working with Mutt, Basic Configuration, Internet Configuration, Configuring Dovecot for POP and IMAP	4		PowerPoint Presentation
	Configuring Apache on Red Hat Enterprise Linux: Configuring the Apache Web Server, Creating a Basic Website, Understanding the Apache Configuration Files, Apache Log Files, Working with Virtual Hosts, Securing the Web Server with TLS Certificates, Configuring Authentication, Setting Up Authentication with .htpasswd, Configuring LDAP Authentication, Setting Up MySQL	4		PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

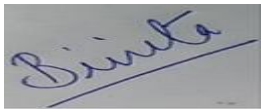
NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

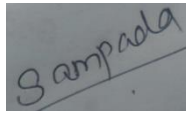
CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: mid-June to mid-October ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with various Linux OS commands
b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -V	**Introducing Bash Shell Scripting:** Introduction, Elements of a Good Shell Script, Executing the Script, Variables and Input, Subshells, Script Arguments, Asking for Input, Command Substitution, Substitution Operators, Pattern Matching, Performing Calculations, Using Control Structures- if...then...else, case, while, until, for, Configuring booting with GRUB.	6	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	PowerPoint Presentation
	High-Availability Clustering: Workings of High Availability- Requirements, Add-on Software, Components, Cluster-Based Services, Bonding, Shared Storage, Installing the Red Hat High Availability Add-On, Building the Initial State of the Cluster, Additional Cluster Properties, Quorum Disk, Fencing, Resources and Services, Troubleshooting a Nonoperational Cluster, Configuring GFS2 File Systems	3		PowerPoint Presentation
	Setting Up an Installation Server: Network Server as an Installation Server, Installing the TFTP Server, Configuring DHCP for PXE Boot, Kickstart File, system-config-kickstart, Manual Modifications to the Kickstart File	3		PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Brijesh Yatindra Joshi **Advanced Web Programming** DEPARTMENT: Information Technology. CLASS: T.Y.B.Sc. SEMESTER: V MONTH: Jun to Sept ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: To learn the fundamental aspects of the JavaScript programming language and how to program using document object model application programming

The learners will be able to :

- To understand .Net framework and its run time environment.
- To gain basic knowledge of C# language with its object oriented concept.
- To gain the knowledge of namespaces and assemblies.
- To understand fundamentals of web application development.
- To make use of different server controls like validation, navigation and rich server control.
- To understand back hand connectivity with SQL using ADO .Net Frame.
- To use data binding with data controls like grid view, details view and form view.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT503 **Advanced Web Programming** UNIT-1	**Introducing .NET**: The .NET Framework, C#, VB, and the .NET Languages, The Common Language Runtime, The .NET Class Library. **The C# Language**: C# Language Basics, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods. **Types, Objects, and Namespaces**: The Basics About Classes, Building a Basic Class, Value Types and Reference Types, Understanding Namespaces and Assemblies, Advanced Class Programming.	12	1.Beginning Visual C# 2010 2.Murach's ASP.NET 4 Web Programming with C# 2010, 3. Beginning ASP.NET 4 in C# and VB,	PPT, Google meets.

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USIT503 **Advanced Web Programming** UNIT-2	**Web Form Fundamentals**: Writing Code, Using the Code-Behind Class, Adding Event Handlers, Understanding the Anatomy of an ASP.NET Application, Introducing Server Controls, Using the Page Class, Using Application Events, Configuring an ASP.NET Application. **Form Controls**: Stepping Up to Web Controls, Web Control Classes, List Controls, Table Controls, Web Control Events and AutoPostBack, Validation, Understanding Validation, Using the Validation Controls, Rich Controls, The Calendar, The AdRotator, Pages with Multiple Views, User Controls and Graphics, User Controls, Dynamic Graphics, The Chart Control, Website Navigation: Site Maps, URL Mapping and Routing, The SiteMapPath Control, The TreeView Control, The Menu Control.	12	1.Beginning Visual C# 2010 2.Murach's ASP.NET 4 Web Programming with C# 2010, 3. Beginning ASP.NET 4 in C# and VB	PPT, Google meets.
USIT503 **Advanced Web Programming** UNIT-3	**Error Handling, Logging, and Tracing**: Avoiding Common Errors, Understanding Exception Handling, Handling Exceptions, Throwing Your Own Exceptions, Using Page Tracing **State Management**: Understanding the Problem of State, Using View State, Transferring Information Between Pages, Using Cookies, Managing Session State, Configuring Session State, Using Application State, Comparing State Management Options **Styles, Themes, and Master Pages**: Styles, Themes, Master Page Basics, Advanced Master Pages,	12	1.Beginning Visual C# 2010 2.Murach's ASP.NET 4 Web Programming with C# 2010, 3. Beginning ASP.NET 4 in C# and VB	PPT, Google meets.
USIT503 **Advanced Web**	**ADO.NET Fundamentals**: Understanding Databases, Configuring Your Database, Understanding SQL Basics, Understanding the Data Provider Model, Using Direct Data Access, Using Disconnected Data Access.	12	1.Beginning Visual C# 2010 2.Murach's ASP.NET 4 Web Programming with C# 2010,	PPT, Google meets.

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Programming UNIT-4	**Data Binding**: Introducing Data Binding, Using Single-Value Data Binding, Using Repeated-Value Data Binding, Working with Data Source Controls, **The Data Controls**: The GridView, Formatting the GridView, selecting a GridView Row, Editing with the GridView, Sorting and Paging the GridView, Using GridView Templates, The DetailsView and FormView		3. Beginning ASP.NET 4 in C# and VB	
USIT503 A**dvanced Web Programming** UNIT-5	**XML**: XML Explained, The XML Classes, XML Validation, XML Display and Transforms. **Security Fundamentals**: Understanding Security Requirements, Authentication and Authorization, Forms Authentication, Windows Authentication. **ASP.NET AJAX**: Understanding Ajax, Using Partial Refreshes, Using Progress Notification, Implementing Timed Refreshes, Working with the ASP.NET AJAX Control Toolkit.	12	1.Beginning Visual C# 2010 2.Murach's ASP.NET 4 Web Programming with C# 2010, 3. Beginning ASP.NET 4 in C# and VB	PPT, Google meets.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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Yashvant Keshav Patil College of Commerce
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. **Enterprise JAVA** DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: Jun To Sept ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- To support for many industry standards and continues simplification of enterprise ready APIs.

The learners will be able to :

- To understand Java Enterprise edition with its different technologies.
- To understand Java EE architectural server and contains.
- To understand server side technology like Java Servlets with its API and life cycle.
- To make data base connectivity using JDBC.
- To navigate using request dispatcher interface.
- To understand state management using cookies and session.
- To understand how to upload and download the file.
- To be able to work with non-blocking I/O resources.
- To understand server side technology like Java Server Pages.
- To make use of action elements, implicit objects, expression language and JSTL.
- To understand enterprise bill, architectural and its bill.
- To be able to working with session beans and message driven beans.
- To understand interceptors and JNDI.
- To make use of ORM and JPA with its API.
- To understand writing JPA application.
- To be able to understand hibernate architectural and components.
- To understand writing hibernate application.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 **ENTERPRISE JAVA** UNIT-1	**Understanding Java EE:** WhatisanEnterpriseApplication? Whatisjavaenterpriseedition? JavaEETechnologies, JavaEEevolution, Glassfishserver **JavaEE Architecture,Serverand Containers:** TypesofSystemArchitecture, JavaEEServer, JavaEEContainers. **Introduction to Java Servlets:** TheNeedforDynamicContent, JavaServletTechnology, WhyServlets? WhatcanServletsdo? **Servlet API and Lifecycle:** JavaServletAPI, TheServletSkeleton, TheServletLifeCycle, ASimpleWelcomeServlet **WorkingwithServlets:** GettingStarted, UsingAnnotationsInsteadofDeploymentDescriptor. **Working with Databases:** WhatIsJDBC? JDBCArchitecture, AccessingDatabase, TheServletGUI and DatabaseExample.	12	**1.** Java Complete Reference, **2.** Core Java Vol. II – Advanced Features, **3.** Java EE 6 Beginners,	PPT, Google meets.
USIT506 **ENTERPRISE JAVA** UNIT-2	**Request Dispatcher:** Resquestdispatcher Interface, Methods of Requestdispatcher, Requestdispatcher Application. **COOKIES:** KindsofCookies, WhereCookiesAreUsed? CreatingCookiesUsingServlet, DynamicallyChangingtheColorsofAPage **SESSION:** WhatAreSessions? LifecycleofHttpSession, SessionTrackingWithServletAPI, AServlet Session Example **Workingwith Files:** UploadingFiles, CreatinganUploadFileApplication, DownloadingFiles, CreatingaDownloadFileApplication. **Workingwith Non-Blocking I/O:** CreatingaNon-BlockingReadApplication, CreatingTheWeb Application, CreatingJavaClass, Creating Servlets, Retrieving The File, Creating index.jsp	12	**1.** Java Complete Reference, **2.** Core Java Vol. II – Advanced Features, **3.** Java EE 6 Beginners,	PPT, Google meets.

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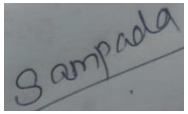
USIT506 **ENTERPRISE JAVA** UNIT-3	**Introduction To Java ServerPages:** WhyuseJava ServerPages? DisadvantagesOfJSP, JSPv\sServlets, LifeCycleofaJSPPage, HowdoesaJSPfunction? HowdoesJSPexecute? AboutJava ServerPages **Getting Started With Java ServerPages:** Comments, JSPDocument, JSPElements, JSPGUIExample. **Action Elements:** IncludingotherFiles, ForwardingJSPPagetoAnotherPage, PassingParametersforotherActions, LoadingaJavabean. **Implicit Objects, Scopeand ElExpressions:** ImplicitObjects, CharacterQuotingConventions, UnifiedExpressionLanguage[UnifiedEl], ExpressionLanguage. **Java Server Pages Standard Tag Libraries:** WhatiswronginusingJSPScriptletTags? HowJSTLFixesJSPScriptlet'sShortcomings? DisadvantagesOfJSTL, TagLibraries.	12	**1.** Java Complete Reference, **2.** Core Java Vol. II – Advanced Features, **3.** Java EE 6 Beginners,	Black Board, Projector, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)-ENTERPRISE JAVA

NAME OF THE STAFF: DR.PRIYANKA ROSHAN BRID DEPARTMENT: IT CLASS: TYIT (C)

SEMESTER: V MONTH: JUNE-SEPT ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the Java EE Architecture, Server and Containers.
- Describe the different servlet API and lifecycle of servlet.
- Get the difference between cookies, session and request dispatcher.
- Understand the use of tag library, naming directory, interceptors.
- Familiar with java beans, JPA, hibernate and JSP.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506, Enterprise Java Unit IV	**Introduction To Enterprise Javabeans:** Enterprise Bean Architecture, Benefits of Enterprise Bean, Types of Enterprise Bean, Accessing Enterprise Beans, Enterprise Bean Application, Packaging Enterprise Beans	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Working With Session Beans: When to use Session Beans? Types of Session Beans, Remote and Local Interfaces, Accessing Interfaces, Lifecycle of Enterprise Beans, Packaging Enterprise Beans, Example of Stateful Session Bean, Example of Stateless Session Bean, Example of Singleton Session Beans.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint

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	Working with Message Driven Beans: Lifecycle of a Message Driven Bean, Uses of Message Driven Beans, The Message Driven Beans Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Interceptors: Request And Interceptor, Defining An Interceptor, AroundInvoke Method, Applying Interceptor, Adding An Interceptor To An Enterprise Bean, Build and Run the Web Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Java Naming and Directory Interface: What is Naming Service? What is Directory Service? What is Java Naming and Directory interface? Basic Lookup, JNDI Namespace in Java EE, Resources and JNDI, Datasource Resource Definition in Java EE.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
USIT506, Enterprise Java Unit V	**Persistence, Object/Relational Mapping And JPA:** What is Persistence? Persistence in Java, Current Persistence Standards in Java, Why another Persistence Standards? Object/Relational Mapping,	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Introduction to Java Persistence API: The Java Persistence API, JPA, ORM, Database and the Application, Architecture of JPA, How JPA Works? JPA Specifications.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Writing JPA Application: Application Requirement Specifications, Software Requirements, The Application Development Approach, Creating Database And Tables in Mysql, Creating a Web Application, Adding the Required Library Files, Creating a Javabean Class, Creating Persistence Unit [Persistence.Xml], Creating JSPS, The JPA Application Structure, Running The JPA Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint

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	Introduction to Hibernate: What is Hibernate? Why Hibernate? Hibernate, Database and The Application, Components of Hibernate, Architecture of Hibernate, How Hibernate Works?	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint
	Writing Hibernate Application: Application Requirement Specifications, Software Requirements, The Application Development Approach, Creating Database and Tables in Mysql, Creating a Web Application, Adding The Required Library Files, Creating a Javabean Class, Creating Hibernate Configuration File, Adding a Mapping Class, Creating JSPS, Running The Hibernate Application.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop, Projector, Black Board and chalk,PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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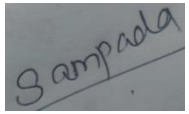

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MRS. KSHITIJA. P. MANE (PALAV)** _____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____

CLASS: ____**T.Y.B.SC (IT)** _____ SEMESTER: ____**V**_____ MONTH: _____**JUNE-SEPTEMBER** _____ ACADEMIC YEAR: _____**2022-2023**_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- **Understand the background of Red Hat Linux administration as an operating system.**
- **How to work with various commands and their implementation in Linux bash shell system.**
- **To understand basic management tasks, administrative tasks and managing different services with RPM.**
- **Helps to make you configure and install the software, working with the networks and creation of users, groups and permissions in system.**
- **To make you understand the security concept of the system and cryptographic services.**
- **It also make you understand how to configure and to install different servers(FTP, Mail services, DHCP, Samba etc.) and to enable its services and to provide client server architecture working.**
- **Helps to create clusters and provide better understanding of shell scripting.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-04 (USIT505) **Linux System Administration**	**Introduction to Red Hat Enterprise Linux:** Linux, Open Source and Red Hat, Origins of Linux, Distributions, Duties of Linux System Administrator.	02	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Textbook, Laptop, Projector, Chalk and Duster, Blackboard.

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Unit No -01			John Wiley and Sons	
	Command Line: Working with the Bash Shell, Getting the Best of Bash, Useful Bash Key Sequences, Working with Bash History, Performing Basic File System Management Tasks, Working with Directories, Piping and Redirection, Finding Files	04		Textbook, Laptop, Projector, Chalk and Duster, Blackboard.
	System Administration Tasks: Performing Job Management Tasks, System and Process Monitoring and Management, Managing Processes with ps, Sending Signals to Processes with the kill Command, Using top to Show Current System Activity, Managing Process Niceness, Scheduling Jobs, Mounting Devices, Working with Links, Creating Backups, Managing Printers, Setting Up System Logging, Setting Up Rsyslog, Common Log Files, Setting Up Logrotate	04		Textbook, Laptop, Projector.
	Managing Software: Understanding RPM, Understanding Meta Package Handlers, Creating Your Own Repositories, Managing Repositories, Installing Software with Yum, Querying Software, Extracting Files from RPM Packages	02		Textbook, Laptop, Projector.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -02	**Configuring and Managing Storage:** Understanding Partitions and Logical Volumes, Creating Partitions, Creating File Systems, File Systems Overview, Creating File Systems, Changing File System Properties, Checking the File System Integrity, Mounting File Systems Automatically Through fstab, Working with	04	Red Hat Enterprise Linux 6 Administration By	Textbook, Laptop, Projector.

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	Logical Volumes, Creating Logical Volumes, Resizing Logical Volumes, Working with Snapshots, Replacing Failing Storage Devices, Creating Swap Space, Working with Encrypted Volumes .		Sander van Vugt , John Wiley and Sons	
	Connecting to the Network: Understanding NetworkManager, Working with Services and Runlevels, Configuring the Network with NetworkManager, Working with system-config-network, NetworkManager Configuration Files, Network Service Scripts, Networking from the Command Line, Troubleshooting Networking, Setting Up IPv6, Configuring SSH, Enabling the SSH Server, Using the SSH Client, Using PuTTY on Windows Machines, Configuring Key-Based SSH Authentication, Using Graphical Applications with SSH, Using SSH Port Forwarding, Configuring VNC Server Access	04		Textbook, Laptop, Projector.
	Working with Users, Groups, and Permissions: Managing Users and Groups, Commands for User Management, Managing Passwords, Modifying and Deleting User Accounts, Configuration Files, Creating Groups, Using Graphical Tools for User, and Group Management, Using External Authentication Sources, the Authentication Process, sssd, nsswitch, Pluggable Authentication Modules, Managing Permissions, the Role of Ownership, Basic Permissions: Read, Write, and Execute, Advanced Permissions, Working with Access Control Lists, Setting Default Permissions with umask, Working with Attributes	04		Textbook, Laptop, Projector.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			

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Unit No -03	**Securing Server with iptables:** Understanding Firewalls, Setting Up a Firewall with system-config-firewall, Allowing Services, Trusted Interfaces, Masquerading, Configuration Files, Setting Up a Firewall with iptables, Tables, Chains, and Rules, Composition of Rule, Configuration Example, Advanced iptables Configuration, Configuring Logging, The Limit Module, Configuring NAT	04	Red Hat Enterprise Linux 6 Administration By Sander van Vugt John Wiley and Sons	Textbook, Laptop, Projector.
	Setting Up Cryptographic Services: Introducing SSL, Proof of Authenticity: the Certificate Authority, Managing Certificates with openssl, Creating a Signing Request, Working with GNU Privacy Guard, Creating GPG Keys, Key Transfer, Managing GPG Keys, Encrypting Files with GPG, GPG Signing, Signing RPM Files	04		Textbook, Laptop, Projector.
	Configuring Server for File Sharing: What is NFS? Advantages and Disadvantages of NFS, Configuring NFS4, Setting Up NFSv4, Mounting an NFS Share, Making NFS Mounts Persistent, Configuring Automount, Configuring Samba, Setting Up a Samba File Server, Samba Advanced Authentication Options, Accessing Samba Shares, Offering FTP Services.	04		Textbook, Laptop, Projector.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	**Configuring DNS and DHCP:** Introduction to DNS, The DNS Hierarchy, DNS Server Types, The DNS Lookup Process, DNS Zone Types, Setting Up a DNS Server, Setting Up a Cache-Only Name Server, Setting Up a Primary Name Server, Setting Up a Secondary Name Server, Understanding DHCP, Setting Up a DHCP Server	04	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Textbook, Laptop, Projector.

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			John Wiley and Sons	
	Setting Up a Mail Server: Using the Message Transfer Agent, the Mail Delivery Agent, the Mail User Agent, Setting Up Postfix as an SMTP Server, Working with Mutt, Basic Configuration, Internet Configuration, Configuring Dovecot for POP and IMAP	03		Textbook, Laptop, Projector.
	Configuring Apache on Red Hat Enterprise Linux: Configuring the Apache Web Server, Creating a Basic Website, Understanding the Apache Configuration Files, Apache Log Files, Working with Virtual Hosts, Securing the Web Server with TLS Certificates, Configuring Authentication, Setting Up Authentication with .htpasswd, Configuring LDAP Authentication, Setting Up MySQL	05		Textbook, Laptop, Projector.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	**Introducing Bash Shell Scripting:** Introduction, Elements of a Good Shell Script, Executing the Script, Working with Variables and Input, Understanding Variables, Variables, Subshells, and Sourcing, Working with Script Arguments, Asking for Input, Using Command Substitution, Substitution Operators, Changing Variable Content with Pattern Matching, Performing Calculations, Using Control Structures, Using if...then...else, Using case, Using while, Using until, Using for, Configuring booting with GRUB.	03	Red Hat Enterprise Linux 6 Administration By Sander van Vugt John Wiley and Sons	Textbook, Laptop, Projector.
	High-Availability Clustering: High-Availability Clustering, The Workings of High Availability, High-Availability Requirements, Red Hat High-Availability Add-on Software,	05		Textbook, Laptop, Projector.

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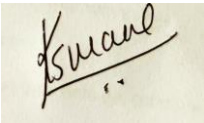
	Components, Configuring Cluster-Based Services, Setting Up Bonding, Setting Up Shared Storage, Installing the Red Hat High Availability Add-On, Building the Initial State of the Cluster, Configuring Additional Cluster Properties, Configuring a Quorum Disk, Setting Up Fencing, Creating Resources and Services, Troubleshooting a Nonoperational Cluster, Configuring GFS2 File Systems			
	Setting Up an Installation Server: Configuring a Network Server as an Installation Server, Setting Up a TFTP and DHCP Server for PXE Boot, Installing the TFTP Server, Configuring DHCP for PXE Boot, Creating the TFTP PXE Server Content, Creating a Kickstart File, Using a Kickstart File to Perform an Automated, Installation, Modifying the Kickstart File with, system-config-kickstart, Making Manual Modifications to the Kickstart File	04		Textbook, Laptop, Projector.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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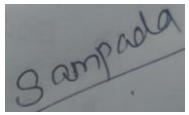

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:T.Y.BSC(I.T) DIV-C SEMESTER: **V** MONTH:JULY-OCT ACADEMIC YEAR: 2022-2023

SUBJECT:SOFTWARE PROJECT MANAGEMENT

LEARNING OBJECTIVE/S:
The learners will be able to : Apply project management concepts and techniques to an IT project. Identify issues that could lead to IT project success or failure. Explain project management in terms of the software development process. Describe the responsibilities of IT project managers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Software Project Management USIT501 Unit-1	**Introduction to Software Project Management:**Introduction, Why is Software Project Management Important? What is a Project? Software Projects versus Other Types of Project, Contract Management and Technical Project Management, Activities Covered by Software Project Management, Plans, Methods and Methodologies, Some Ways of Categorizing Software Projects, Project Charter, Stakeholders, Setting Objectives, The Business Case, Project Success and Failure, What is Management? Management Control, Project Management Life Cycle , Traditional versus Modern Project Management Practices.	5	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation

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	Project Evaluation and Programme Management: Introduction, Business Case, Project PortfolioManagement, Evaluation of Individual Projects, Cost–benefit Evaluation Techniques, Risk Evaluation, Programme Management, Managing the Allocation of Resources within Programmes, Strategic Programme Management, Creating a Programme, Aids to Programme Management, Some Reservations about Programme Management, Benefits Management.	5		
	An Overview of Project Planning: Introduction to Step Wise Project Planning, Step 0: Select Project, Step 1: Identify Project Scope and Objectives, Step 2: Identify Project Infrastructure, Step 3: Analyse Project Characteristics, Step 4: Identify Project Products and Activities, Step 5: Estimate Effort for Each Activity, Step 6: Identify Activity Risks, Step 7: Allocate Resources, Step 8: Review/Publicize Plan, Steps 9 and 10: Execute Plan/Lower Levels of Planning	5		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		

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Software Project Management USIT501 Unit-2	**Selection of an Appropriate Project Approach:** Introduction, Build or Buy? Choosing Methodologies and Technologies, Software Processes and Process Models, Choice of Process Models, Structure versus Speed of Delivery, The Waterfall Model, The Spiral Model, Software Prototyping, Other Ways of Categorizing Prototypes, Incremental Delivery, Atern/Dynamic Systems Development Method, Rapid Application Development, Agile Methods, Extreme Programming (XP), Scrum, Lean Software Development, Managing Iterative Processes, Selecting the Most Appropriate Process Model.	5	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation
	Software Effort Estimation: Introduction, Where are the Estimates Done? Problems with Over- and Under-Estimates, The Basis for Software Estimating, Software Effort Estimation Techniques, Bottom up Estimating, The Top-down Approach and Parametric Models, Expert Judgement, Estimating by Analogy, Albrecht Function Point Analysis, Function Points Mark II, COSMIC Full Function Points, COCOMO II: A Parametric Productivity Model, Cost Estimation, Staffing Pattern, Effect of Schedule Compression, Capers Jones Estimating Rules of Thumb.	5		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	10		
Software Project Management USIT501 Unit-3	**Activity Planning:** Introduction, Objectives of Activity Planning, When to Plan, Project Schedules, Projects and Activities, Sequencing and Scheduling Activities, Network Planning Models, Formulating a Network Model, Adding the Time Dimension, The Forward Pass, Backward Pass, Identifying the Critical Path, Activity Float, Shortening the Project Duration, Identifying Critical Activities, Activity-on-Arrow Networks.	4	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation

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	Risk Management: Introduction, Risk, Categories of Risk, Risk Management Approaches, A Framework for Dealing with Risk, Risk Identification, Risk Assessment, Risk Planning, Risk Management, Evaluating Risks to the Schedule, Boehm‟s Top 10 Risks and Countermeasures, Applying the PERT Technique, Monte Carlo Simulation, Critical Chain Concepts.	4		
	Resource Allocation: Introduction, Nature of Resources, Identifying Resource Requirements, Scheduling Resources, Creating Critical Paths, Counting the Cost, Being Specific, Publishing the Resource Schedule, Cost Schedules, Scheduling Sequence.	3		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	11		
Software Project Management USIT501 Unit-4	**Monitoring and Control**: Introduction, Creating the Framework, Collecting the Data, Review, Visualizing Progress, Cost Monitoring, Earned Value Analysis, Prioritizing Monitoring, Getting the Project Back to Target, Change Control, Software Configuration Management (SCM).	3	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation
	Managing Contracts: Introduction, Types of Contract, Stages in Contract Placement, Typical Terms of a Contract, Contract Management, Acceptance	2		
	Managing People in Software Environments: Introduction, Understanding Behaviour, Organizational Behaviour: A Background, Selecting the Right Person for the Job, Instruction in the Best Methods, Motivation, The Oldham–Hackman Job Characteristics Model, Stress, Stress Management, Health and Safety, Some Ethical and Professional Concerns	4		

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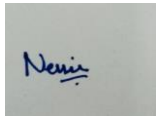
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	9		
Software Project Management USIT501 Unit-5	**Working in Teams:** Introduction, Becoming a Team, Decision Making, Organization and Team Structures, Coordination Dependencies, Dispersed and Virtual Teams, Communication Genres,Communication Plans, Leadership.	3	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation
	Software Quality : Introduction, The Place of Software Quality in Project Planning, Importance of Software Quality, Defining Software Quality, Software Quality Models, ISO 9126, Product and Process Metrics, Product versus Process Quality Management, Quality Management Systems, Process Capability Models, Techniques to Help Enhance Software Quality, Testing, Software Reliability, Quality Plans.	5		
	Project Closeout: Introduction, Reasons for Project Closure, Project Closure Process, Performing a Financial Closure, Project Closeout Report.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**10**		



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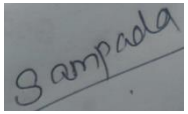

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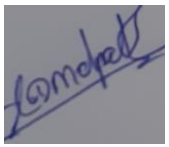
TEACHING PLAN (UNIT PLAN)

NAME OF Archana Malpathak DEPARTMENT:Mathematics _(IT)__ CLASS: FYIT SEMESTER: _II MONTH: ___FEB tO April ACADEMIC YEAR: 2022-2023

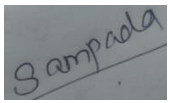
LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4	Numerical solution of 1st and 2nd order differential equations- Taylor series, Euler's simple formula Modified Euler's Method R-K seconds and fourth order. Least square Regression Linear Regression, Polynomial Regression, Multilinear Regression, Nonlinear Regression, General Linear Least Squares Method	12	Numerical Techniques- R.M Baphana ,	Blackboard and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



SIGNATURE OF THE STAFF



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Late Shri. Vishnu Waman Thakur Charitable Trust
BhaskarWaman Thakur College of Science
YashvantKeshavPatil College of Commerce
VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

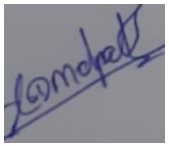
NAME OF THE STAFF: Mrs. ARCHANA MALPATHAK DEPARTMENT: MATHEMATICS CLASS: S.Y.B.Sc. I. T.

SEMESTER: IV MONTH: NOVEMBER – MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Mean ,mode,Median,with it's different method ,Quartile Quartile deviation,percentile Decile ,Mean deviatin.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMPUTER ORIENTED STATISTICAL THEORY UNIT – I **The Mean, Median, Mode, and Other Measures of Central Tendency**	**1) The Mean, Median, Mode, and Other Measures of Central Tendency**: Index, or Subscript, Notation, Summation Notation, Averages, or Measures of Central Tendency ,The Arithmetic Mean , The Weighted Arithmetic Mean ,Properties of the Arithmetic Mean ,The Arithmetic Mean Computed from Grouped Data ,The Median ,The Mode, The Empirical Relation Between the Mean, Median, and Mode, The Geometric Mean G, The Harmonic Mean H ,The Relation Between the Arithmetic, Geometric, and Harmonic Means, The Root Mean Square, Quartiles, Deciles, and Percentiles, Software and Measures of Central Tendency. **2)The Standard Deviation and Other Measures of Dispersion**: Dispersion, or Variation, The Range, The Mean Deviation, The Semi Interquartile Range, The 10–90 Percentile Range, The Standard Deviation, The Variance, Short Methods for Computing the Standard Deviation, Properties of the Standard Deviation, Charlie's Check, Sheppard's Correction for Variance, Empirical Relations Between Measures of Dispersion, Absolute and Relative Dispersion; Coefficient of Variation, Standardized Variable; Standard Scores, Software and Measures of Dispersion. **Introduction to R:** Basic syntax, data types, variables, operators, control statements, R-functions, R –Vectors, R – lists, R Arrays.	6+6=12	FUNDAMENTAL. OF MATHEMATICAL STATISTICS S.C. GUPTA and V.K. KAPOOR	Black Board,chalk, online teaching method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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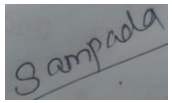

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande DEPARTMENT: Computer Science

CLASS: T.Y.I.T SEMESTER: VI

MONTH: Dec - April ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

Student will able to understand the importance of software quality.
Aspects that the related to software quality.
Stakeholders and their relationship.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCSIT601 Software Quality Assurance UNIT - I	**Introduction to Quality:** Historical Perspective of Quality, What is Quality? (Is it a fact or perception?), Definitions of Quality, Core Components of Quality, Quality View, Financial Aspect of Quality, Customers, Suppliers and Processes, Total Quality Management (TQM), Quality Principles of Total Quality Management, Quality Management Through Statistical Process Control, Quality Management Through Cultural Changes, Continual (Continuous) Improvement Cycle, Quality in Different Areas, Benchmarking and Metrics, Problem Solving Techniques, Problem Solving Software Tools.	6	Software Testing and Continuous Quality Improvement Software Testing: Principles, Techniques and Tools	PPT
	Software Quality: Introduction, Constraints of Software Product Quality Assessment, Customer is a King, Quality and Productivity Relationship, Requirements of a Product, Organisation Culture,	6		PPT

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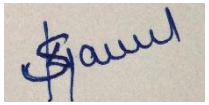
	Characteristics of Software, Software Development Process, Types of Products, Schemes of Criticality Definitions, Problematic Areas of Software Development Life Cycle, Software Quality Management, Why Software Has Defects? Processes Related to Software Quality, Quality Management System Structure, Pillars of Quality Management System, Important Aspects of Quality Management.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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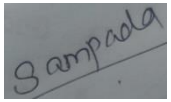

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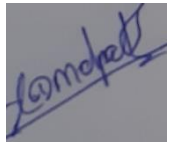
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics. CLASS: SYIT SEMESTER. -: IV

MONTH: November- March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : _Moments,central moment skewness,kurtosis charlichecks,sheppard's ,probability,venn diagram, small sampling .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST UNIT-II Moments skewness and kurtosis and Sampling Theory	1)Moments,moments for Grouped data,computation of moments for grouped data,charlie'sCheck and Sheppard's correction,skewness ,kurtosis,population Moments,Skewness	06	Techmax Higher Engineering of Maths	Blackboard ,chalk,,Calculator
	2)Elementary probablity Theory- Def of probability,conditional probablity,Independent and dependent event,Mutually Exclusive events,probablity distribution,Mathematical Expectation,Relation between population,Striling to n!,veen Diagram, 3) Elementary Sampling Theory :sampling Theory,Random sample,Sampling with and without replacement,Sampling Distribution,sampling distribution of mean,Sampling distribution of difference and sums,Standard Error.	06	Statistics by Gupta Cost by Sheth publication	



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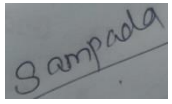

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Patil College of Commerce Vidhya
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TEACHING PLAN
(UNIT PLAN)

NAME OF THE STAFF Archana Malpathak DEPARTMENT:_Mathematics_CLASS:_SYIT_SEMESTER:_I

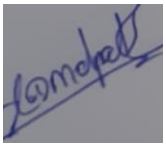
MONTH: November To march

ACADEMIC Year 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to ***:***

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit. -IV Small Sampling Theory	Small sample,Student t-distribution,confidence interval,Test of Hypothesis and Significance,The Chi-Square Distribution,Confidence interval by sigma,Degree of freedom,The F-Distribution The chi squre test :Observed snd therotical Frequencies,Defination of chi squre,Significance Tests,Goodness of fit ,Contigency tables,Yate's Correction,simple formula for chi squre	12	Tech Max Higher Engineering of Mathematics Sheth publication Statistics byGupta	Blackboard, chalk, Calculato online teaching methodr.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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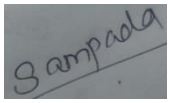

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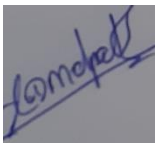
TEACHINGPLAN(UNITPLAN)

NAMEOFTHESTAFF:ArchanaMalpathak DEPARTMENT:Mathematics CLASS: SYIT SEMESTER:-IVMONTH: NOV To March ACADEMICYEAR:__2022 -2023

LEARNINGOBJECTIVE/S:
Thelearnerswillbeableto:____Curvefitting,Leastsquaremethodforlinearandnon-linear,RegressionoflineRegressioncoefficient,correlationcoefficientsamplingtheoryofregression,StandardError._____

PAPER, UNIT,TITLE	SUBTOPICS	NOOF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICTTOOLS USED
COST Unit-IV Curve FittingandCorrelationTheory.	Curvefitting,Freehandmethodofcurvefitting,Equationoflinebyleastsquaremethod,Leastsqureline,NonlinearRelationships,TheLeastSquare Parabola,Regression,Correlation Theory-Correlation and regression,Linear correlation,Measure of Correlation,TheLeastSquareRegressionlines,Standard Error,Explain Dandun explained variations Short computational formula,samplingtheory of regression.	12	Techmax Higher Engineeringof Mathematics StatisticsbyGupta	Black board. chalk, Calculator online method



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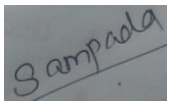

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TEACHING PLAN (UNIT PLAN)-CORE JAVA

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: SYIT (B)

SEMESTER: IV MONTH: JAN-MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to:

- Acquire knowledge of programming language java.
- Understand data types, control flow statements, iterations and classes.
- Gain proficiency in inheritance and packages.
- Understand enumeration, arrays, exceptions and byte stream.
- Acquire knowledge of event handling and layouts.

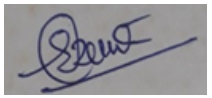
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401, Core Java, Unit I	**Introduction:** History, architecture and its components, Java Class File, Java Runtime Environment, The Java Virtual Machine, JVM Components, The Java API, java platform, java development kit,Lambda Expressions, Methods References, Type Annotations, Method Parameter Reflection, setting the path environment variable, Java Compiler and Interpreter, java programs, java applications, main (), public, static, void, string [] args, statements, white space, case sensitivity, identifiers, keywords, comments, braces and code blocks, variables, variable name	06	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Blackboard,chalk and duster, powerpoint presentation, projector
	Data types: primitive data types, Object Reference Types, Strings, Auto boxing, operators and properties of operators, Arithmetic operators, operator, logical operator, bitwise	06	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Blackboard,chalk and duster, powerpoint presentation, projector

	operator, conditional operator assignment operators, increment and decrement operator, relational operators			
USIT401, Core Java, Unit II	**Control Flow Statements:** The If…Else If…Else Statement, The Switch…Case Statement	04	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Blackboard,chalk and duster, powerpoint presentation, projector
	Iterations: The While Loop, The Do … While Loop, The For Loop, The Foreach Loop, Labeled Statements, The Break And Continue Statements, The Return Statement	04	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Blackboard,chalk and duster, powerpoint presentation, projector
	Classes: Types of Classes, Scope Rules, Access Modifier, Instantiating Objects From A Class, Initializing The Class Object And Its Attributes, Class Methods, Accessing A Method, Method Returning A Value, Method's Arguments, Method Overloading,Variable Arguments [Varargs], Constructors, this Instance, super Instance, Characteristics Of Members Of A Class, constants, this instance, static fields of a class, static methods of a class, garbage collection.	04	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Blackboard,chalk and duster, powerpoint presentation, projector
USIT401, Core Java, Unit III	**Inheritance:** Derived Class Objects, Inheritance and Access Control, Default Base Class Constructors, this and super keywords.	04	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Blackboard,chalk and duster, powerpoint presentation, projector
	Abstract Classes And Interfaces, Abstract Classes, Abstract Methods, Interfaces, What Is An Interface? How Is An Interface Different From An Abstract Class?, Multiple Inheritance, Default Implementation, Adding New Functionality, Method Implementation, Classes V/s Interfaces, Defining An Interface, Implementing Interfaces.	05	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Blackboard,chalk and duster, powerpoint presentation, projector

	Packages: Creating Packages, Default Package, Importing Packages, Using A Package.	03	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Blackboard,chalk and duster, powerpoint presentation, projector
USIT401, Core Java, Unit IV	**Enumerations,Arrays:** Two Dimensional Arrays, Multi-Dimensional Arrays, Vectors, Adding Elements To A Vector, Accessing Vector Elements, Searching For Elements In A Vector, Working With The Size of The Vector.	03	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Blackboard,chalk and duster, powerpoint presentation, projector
	Multithreading: the thread control methods, thread life cycle, the main thread, creating a thread, extending the thread class.	03	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Blackboard,chalk and duster, powerpoint presentation, projector
	Exceptions: Catching Java Exceptions, Catching Run-Time Exceptions, Handling Multiple Exceptions, The finally Clause, The throws Clause	03	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Blackboard,chalk and duster, powerpoint presentation, projector
	Byte streams: reading console input, writing console output, reading file, writing file, writing binary data, reading binary data, getting started with character streams, writing file, reading file	03	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Blackboard,chalk and duster, powerpoint presentation, projector
USIT401, Core Java, Unit V	**Event Handling:** Delegation Event Model, Events, Event classes, Event listener interfaces, Using delegation event model, adapter classes and inner classes.	03	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Blackboard,chalk and duster, powerpoint presentation, projector

	Abstract Window Toolkit: Window Fundamentals, Component, Container, Panel, Window, Frame, Canvas. Components – Labels, Buttons, Check Boxes, Radio Buttons, Choice Menus, Text Fields, Text, Scrolling List, Scrollbars, Panels, Frames	07	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Blackboard,chalk and duster, powerpoint presentation, projector
	Layouts: Flow Layout, Grid Layout, Border Layout, Card Layout.	02	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Blackboard,chalk and duster, powerpoint presentation, projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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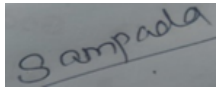

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT:IT CLASS: SYIT A SEMESTER: IV

MONTH: December to March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to:

To adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct. To be capable of managing complex IT projects with consideration of the human, financial and environmental factors. To work effectively as a part of a team to achieve a common stated goal.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Software Engineering USIT404 Unit - 1	**Introduction**: What is software engineering? Software Development Life Cycle, Requirements Analysis, Software Design, Coding, Testing, Maintenance etc. Software Requirements: Functional and Non-functional requirements, User Requirements, System Requirements, Interface Specification, Documentation of the software requirements. Software Processes: Process and Project, Component Software Processes. Software Development Process Models. Waterfall Model. Prototyping. Iterative	2 2 2	Ian Somerville Roger Pressman	Chalk, Blackboard

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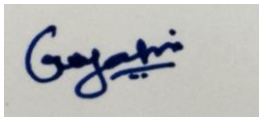
	Development. Rational Unified Process. The RAD Model Time boxing Model. Agile software development: Agile methods. Plan-driven and agile development, Extreme programming, Agile project management methods.	2		
Software Engineering USIT404 Unit - 5	**Process Improvement:** Process and product quality, Process Classification, Process Measurement, Process Analysis and Modeling, Process Change. The CMMI Process Improvement Framework. Service Oriented Software Engineering: Services as reusable components, Service Engineering. Software Development with Services. Software reuse: The reuse landscape, Application frameworks, Software product lines, COTS product reuse. Distributed software engineering: Distributed systems issues, Client–server computing, Architectural patterns for distributed systems, Software as a service.	2 2 2 2	Ian Somerville Roger Pressman	Chalk, Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __16_____



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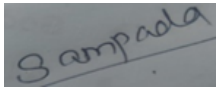

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____BSC-IT___ CLASS: __SYIT_B___ SEMESTER: ___IV____

MONTH: ____December to March_____ ACADEMIC YEAR: ____2022-23__

LEARNING OBJECTIVE/S:
The learners will be able to:

To adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct. To be capable of managing complex IT projects with consideration of the human, financial and environmental factors. To work effectively as a part of a team to achieve a common stated goal.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Software Engineering USIT404 Unit - 1	**Introduction**: What is software engineering? Software Development Life Cycle, Requirements Analysis, Software Design, Coding, Testing, Maintenance etc. Software Requirements: Functional and Non-functional requirements, User Requirements, System Requirements, Interface Specification, Documentation of the software requirements. Software Processes: Process and Project, Component Software Processes. Software Development Process Models. • Waterfall Model. • Prototyping. • Iterative Development. • Rational Unified Process. • The RAD	3 4 3	Ian Somerville Roger Pressman	Chalk, Blackboard

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	Model • Time boxing Model. Agile software development: Agile methods. Plan-driven and agile development, Extreme programming, Agile project management methods.	2		
Software Engineering USIT404 Unit - 2	**Socio-technical system:** Essential characteristics of socio technical systems, Emergent System Properties, Systems Engineering. Components of system such as organization, people and computers, Dealing Legacy Systems. Critical system: Types of critical system. A simple safety critical system, Dependability of a system, Availability and Reliability, Safety and Security of Software systems. Requirements Engineering Processes: Feasibility study, Requirements elicitation and analysis, Requirements Validations, Requirements Management	3 3 3 3	Ian Somerville Roger Pressman	Chalk, Blackboard
Software Engineering USIT404 Unit - 3	**Architectural Design:** Architectural Design Decisions, System Organisation, Modular Decomposition Styles, Control Styles, Reference Architectures. User Interface Design: Need of UI design, Design issues, The UI design Process, User analysis, User Interface Prototyping, Interface Evaluation. Project Management Software Project Management, Management activities, Project Planning, Project Scheduling, Risk Management. Quality Management: Process and Product Quality, Quality assurance and Standards, Quality Planning, Quality Control, Software Measurement and Metrics.	2 3 2 2 3	Ian Somerville Roger Pressman	Chalk, Blackboard

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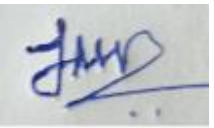
Software Engineering USIT404 Unit - 4	**Verification and Validation:** Planning Verification and Validation, Software Inspections, Automated Static Analysis, Verification and Formal Methods. Software Testing: System Testing, Component Testing, Test Case Design, Test Automation. Software Measurement: Size-Oriented Metrics, Function-Oriented Metrics, Extended Function Point Metrics **Software Cost Estimation:** Software Productivity, Estimation Techniques, Algorithmic Cost Modelling, Project Duration and Staffing.	3 3 3 3	Ian Somerville Roger Pressman	Chalk, Blackboard
Software Engineering USIT404 Unit - 5	**Process Improvement:** Process and product quality, Process Classification, Process Measurement, Process Analysis and Modeling, Process Change. The CMMI Process Improvement Framework. Service Oriented Software Engineering: Services as reusable components, Service Engineering. Software Development with Services. Software reuse: The reuse landscape, Application frameworks, Software product lines, COTS product reuse. Distributed software engineering: Distributed systems issues, Client–server computing, Architectural patterns for distributed systems, Software as a service.	3 3 3 3	Ian Somerville Roger Pressman	Chalk, Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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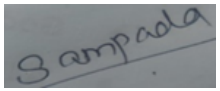

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYBSc(IT) DIV:A SEMESTER: IV MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 2022-2023

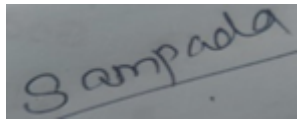
LEARNING OBJECTIVE/S:
The learners will be able to : Understand programming language and tools to develop computer programs and systems that are effective solutions to problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper:USIT401, unit:2, Title:Core Java	**Control Flow Statements:** The If…Else If…Else Statement, The Switch…Case Statement	3	Core Java 8 for Beginners , Java: The Complete Reference	Black Board
	Iterations: The While Loop, The Do … While Loop, The For Loop, The Foreach Loop, Labeled Statements, The Break And Continue Statements, The Return Statement	4	Core Java 8 for Beginners , Java: The Complete Reference	Black Board

	Classes: Types of Classes, Scope Rules, Access Modifier, Instantiating Objects From A Class, Initializing The Class Object And Its Attributes, Class Methods, Accessing A Method, Method Returning A Value, Method's Arguments, Method Overloading, Variable Arguments [Varargs], Constructors, this Instance, super Instance, Characteristics Of Members Of A Class, constants, this instance, static fields of a class, static methods of a class, garbage collection.	5	Core Java 8 for Beginners , Java: The Complete Reference	Black Board
Paper:USIT401, unit:3, Title:Core Java	**Inheritance:** Derived Class Objects, Inheritance and Access Control, Default Base Class Constructors, this and super keywords. Abstract Classes And Interfaces, Abstract Classes, Abstract Methods, Interfaces,	4	Core Java 8 for Beginners , Java: The Complete Reference	Black Board
	What Is An Interface? How Is An Interface Different From An Abstract Class?, Multiple Inheritance, Default Implementation, Adding New Functionality, Method Implementation, Classes V/s Interfaces, Defining An Interface, Implementing Interfaces.	4	Core Java 8 for Beginners , Java: The Complete Reference	Black Board
	Packages: Creating Packages, Default Package, Importing Packages, Using A Package.	4	Core Java 8 for Beginners , Java: The Complete Reference	Black Board

Paper:USIT401, unit:4, Title:Core Java	**Enumerations,Arrays:** Two Dimensional Arrays, Multi-Dimensional Arrays, Vectors, Adding Elements To A Vector, Accessing Vector Elements, Searching For Elements In A Vector, Working With The Size of The Vector.	3	Core Java 8 for Beginners , Java: The Complete Reference	Black Board
	Multithreading: the thread control methods, thread life cycle, the main thread, creating a thread, extending the thread class.	3	Core Java 8 for Beginners , Java: The Complete Reference	Black Board
	Exceptions: Catching Java Exceptions, Catching Run-Time Exceptions, Handling Multiple Exceptions, The finally Clause, The throws Clause	3	Core Java 8 for Beginners , Java: The Complete Reference	Black Board
	Byte streams: reading console input, writing console output, reading file, writing file, writing binary data, reading binary data, getting started with character streams, writing file, reading file	3	Core Java 8 for Beginners , Java: The Complete Reference	Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT:IT

CLASS: SY BSc IT DIV-A(CJ) SEMESTER:SEM-4 MONTH:DEC-MAR ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

The learners will be able to :

- To learn why Java is useful for the design of desktop and web applications.
- To learn how to implement object-oriented designs with Java.
- To identify Java language components and how they work together in applications.
- To design and program stand-alone Java applications.
- To learn how to design a graphical user interface (GUI) .
- To understand how to use Java APIs for program development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CORE JAVA PAPER-1 Unit 1	**Introduction:**History, architecture and its components,Java Class File, Java Runtime Environment, The Java Virtual Machine, JVM Components, The Java API, java platform, java development kit,	2	Core Java 8 for Beginners BY Vaishali Shah, Sharnam Shah	BLACK BOARD AND CHALK
	Lambda Expressions, Methods References, Type Annotations, Method Parameter Reflection, setting the path environment variable, Java Compiler And Interpreter, java programs, java applications,	2		
	main(), public, static, void, string[] args, statements, white space, case sensitivity, identifiers, keywords, comments, braces and code blocks, variables, variable name	2		
	Data types: primitive data types, Object Reference Types, Strings, Auto boxing, operators and properties of operator	4		

Unit 5	Arithmetic operators, assignment operators, increment and decrement operator, relational operator, logical operator,		Core Java 8 for Beginners BY Vaishali Shah, Sharnam Shah	BLACK BOARD AND CHALK
	bitwise operator, conditional operator.	2		
	Event Handling: Delegation Event Model, Events, Event classes, Event listener interfaces, Using delegation event model, adapter classes and inner classes.	3		
	Abstract Window Toolkit: Window Fundamentals, Component, Container, Panel, Window, Frame, Canvas	3		
	.Components – Labels, Buttons, Check Boxes, Radio Buttons, Choice Menus, Text Fields, Text, Scrolling List, Scrollbars, Panels, Frames	3		
	Layouts: Flow Layout, Grid Layout, Border Layout, Card Layout.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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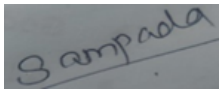

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. (Mrs.) Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: SYIT SEMESTER: **IV** MONTH: NOV to MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

To provide experience to integrate hardware and software for microcontroller applications systems.

To acquire knowledge about microcontrollers embedded processors and their applications

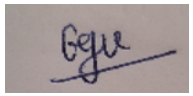
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 Embedded System Unit 1	**Introduction:** Embedded Systems and general purpose computer systems, history, classifications, applications and purpose of embedded systems	3	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Core of embedded systems: microprocessors and microcontrollers, RISC and CISC controllers, Big endian and Little endian processors, Application specific ICs, Programmable logic devices, COTS, sensors and actuators, communication interface, embedded firmware, other system components.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Characteristics and quality attributes of embedded systems: Characteristics, operational and non-operational quality attributes.	3	Introduction to embedded systems Shibu K V	Projector, Laptop, Black board & Chalk

			Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	
Paper-02 Embedded System Unit 2	**Embedded Systems – Application and Domain Specific:** Application specific – washing machine, domain specific - automotive.	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Embedded Hardware: Memory map, i/o map, interrupt map, processor family, external peripherals, memory – RAM , ROM, types of RAM and ROM, memory testing, CRC ,Flash memory.	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Peripherals: Control and Status Registers, Device Driver, Timer Driver - Watchdog Timers.	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
Paper-02	**The 8051 Microcontrollers:** Microcontrollers and Embedded processors, Overview of 8051 family.8051 Microcontroller hardware, Input/output pins, Ports, and Circuits, External Memory.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And	Projector, Laptop, Black board & Chalk

Embedded System Unit 3			Embedded Systems Rajkamal Tata Mcgraw-Hill	
	8051 Programming in C: Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
Paper-02 Embedded System Unit 4	**Designing Embedded System with 8051 Microcontroller:** Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Programming embedded systems: structure of embedded program, infinite loop, compiling, linking and debugging.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
Paper-02 Embedded System Unit 5	**Real Time Operating System (RTOS):** Operating system basics, types of operating systems, Real-Time Characteristics, Selection Process of an RTOS	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk

	Design and Development: Embedded system development Environment – IDE, types of file generated on cross compilation, disassembler/ de-compiler, simulator, emulator and debugging, embedded product development life-cycle, trends in embedded industry.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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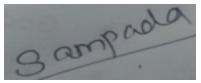

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr.Hemant Wani DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYIT Div:B SEMESTER: IV MONTH: DEC-MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: To provide a understanding of software engineering, its basic concepts and functioning. Develop and master understanding of various models used by software industries for various purposes. Also conceptual learning of various aspects of it such as cost estimation techniques, project management, quality assurance etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT404, Software Engineering Unit-I	Introduction: What is software engineering? Software Development Life Cycle, Requirements Analysis, Software Design, Coding, Testing, Maintenance etc. Agile software development: Agile methods, Plan-driven and agile development, Extreme programming, Agile project management, Scaling agile methods.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Blackboard, Chalk
	Software Requirements: Functional and Non-functional requirements, User Requirements, System Requirements, Interface Specification, Documentation of the software requirements.	02		Blackboard, Chalk
	Software Processes: Process and Project, Component Software Processes. Software Development Process Models. • Waterfall Model. • Prototyping. • Iterative Development. • Rational Unified Process. • The RAD Model • Time boxing Model.	04		Blackboard, Chalk
	Agile software development: Agile methods, Plan-driven and agile development, Extreme programming, Agile project management, Scaling agile methods.	03		Blackboard, Chalk

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USIT404, Software Engineering Unit-II	Socio-technical system:Essential characteristics of socio technical systems, Emergent System Properties, Systems Engineering, Components of system such as organization, people and computers, Dealing Legacy Systems.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Blackboard, Chalk
	Critical system: Types of critical system, A simple safety critical system, Dependability of a system, Availability and Reliability, Safety and Security of Software systems.	03		Blackboard, Chalk
	Requirements Engineering Processes: Feasibility study, Requirementselicitation and analysis, Requirements Validations, Requirements Management.	03		Blackboard, Chalk
	System Models: Models and its types, Context Models, Behavioural Models, Data Models, Object Models, Structured Methods	03		Blackboard, Chalk
USIT404, Software Engineering Unit-III	Architectural Design: Architectural Design Decisions, System Organisation, Modular Decomposition Styles, Control Styles, Reference Architectures.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata	Blackboard, Chalk
	User Interface Design: Need of UI design, Design issues, The UI design Process, User analysis, User Interface Prototyping, Interface Evaluation	03		Blackboard, Chalk
	Project Management Software Project Management, Management activities, Project Planning, Project Scheduling, Risk Management.	03		Blackboard, Chalk
	Quality Management: Process and Product Quality, Quality assurance and Standards, Quality Planning, Quality Control, Software Measurement and Metrics	03		Blackboard, Chalk

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			Mcgraw-hill Seventh edition	
USIT404, Software Engineering Unit-IV	Verification and Validation: Planning Verification and Validation, Software Inspections, Automated Static Analysis, Verification and Formal Methods.	04	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Blackboard, Chalk
	Software Testing: System Testing, Component Testing, Test Case Design, Test Automation. Software Measurement: Size-Oriented Metrics, Function-Oriented Metrics, Extended Function Point Metrics	04		Blackboard, Chalk
	Software Cost Estimation:Software Productivity, Estimation Techniques, Algorithmic Cost Modelling, Project Duration and Staffing	04		Blackboard, Chalk
USIT404, Software Engineering Unit-V	Process Improvement: Process and product quality, Process Classification, Process Measurement, Process Analysis and Modeling, Process Change, The CMMI Process Improvement Framework.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication ,	Blackboard, Chalk
	Service Oriented Software Engineering: Services as reusable components, Service Engineering, Software Development with Services.	03		Blackboard, Chalk
	Software reuse: The reuse landscape, Application frameworks, Software product lines, COTS product reuse.	03		Blackboard, Chalk

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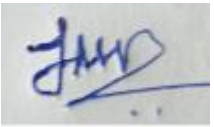
	Distributed software engineering: Distributed systems issues, Client–server computing, Architectural patterns for distributed systems, Software as a service	03	Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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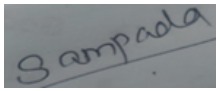

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TEACHING PLAN (UNIT PLAN)

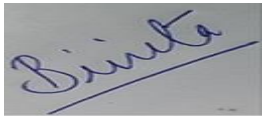
NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: S. Y. B. Sc. IT –B SEMESTER: IV MONTH: November-March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with various transformations
b. Create various objects and applications using graphics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-V Computer Graphics and Applications Unit -II	**Two-Dimensional Transformations:** Transformations and Matrices, Homogeneous Coordinates and Matrix Representation of-Translations, Rotation, Reflection, Scaling, Combined Transformation, Transformation of Points, Unit Square, Solid Body Transformations, Rotation About an Arbitrary Point, Reflection through an Arbitrary Line, The Window-to-Viewport Transformations.	7	Computer Graphics by Rajesh Maurya	Black Board
	Three-Dimensional Transformations: 3D- Scaling, Shearing, Rotation, Reflection, Translation, Multiple Transformation, Rotation about an Arbitrary Axis in Space, Reflection through an Arbitrary Plane, Composition of 3D Transformations, Affine and Perspective Geometry, Perspective Transformations, Vanishing Points, the Perspective Geometry, Orthographic Projections, Axonometric Projections, Oblique Projections, View volumes for projections.	5		Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: S. Y. B. Sc. I. T –B SEMESTER: IV MONTH: November-March ACADEMIC YEAR: 2022-2023

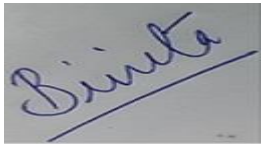
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various transformations

b. Create various objects and applications using graphics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-V Computer Graphics and Applications Unit -V	**Computer Animation:** Principles of Animation, Key framing, Deformations, Character Animation, Physics-Based Animation, Procedural Techniques, Groups of Objects.	3	Computer Graphics by Rajesh Maurya	PowerPoint presentation
	Image Manipulation and Storage: What is an Image? Digital image file formats, Image compression standard – JPEG, Image Processing - Digital image enhancement, contrast stretching, Histogram Equalization, smoothing and median Filtering.	9	Image Processing by Dhananjay	Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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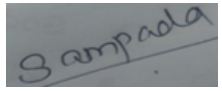

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: IT

CLASS: SY BSc IT SEMESTER:IV MONTH: JAN-MAR ACADEMICYEAR: 2022-2023

LEARNING OBJECTIVE/S:

The learners will be able to :

1. Understand what is a microcontroller, microcomputer, embedded system.
2. Understand different components of a micro-controller and their interactions.
3. Become familiar with programming environment used to develop embedded systems .
4. Understand key concepts of embedded systems like IO, timers, interrupts, interaction with peripheral devices .
5. Learn debugging techniques for an embedded system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 ES UNIT 1	Embedded Systems and general purpose computer systems, history, classifications, applications and purpose of embedded systems	4	Introduction to embedded systems by Shibu K V	Black Board & Chalk
	Microprocessors and microcontrollers ,RISC and CISC controllers, Big endian and Little endian processors, Application specific ICs, Programmable logic devices, COTS.	3		
	Sensors and actuators, communication interface, embedded firmware, other system components.	3		

	Characteristics, operational and non-operational quality attributes.	2		
UNIT 2	Application specific – washing machine, domain specific - automotive.	3	Introduction to embedded systems by Shibu K V	POWER POINT PRESENTATION/ Black Board & Chalk
	Memory map, i/o map, interrupt map, processor family, external peripherals	3		
	memory – RAM , ROM, types of RAM and ROM, memory testing, CRC ,Flash memory .	3		
	Control and Status Registers, Device Driver, Timer Driver - Watchdog Timers.	3		
UNIT 3	Microcontrollers and Embedded processors, Overview of 8051 family.8051 Microcontroller hardware	4	Programming Embedded Systems in C C++ by Michael Barr	POWER POINT PRESENTATION/ Black Board & Chalk
	Input/output pins, Ports, and Circuits, External Memory.	4		
	Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs.	4		
UNIT 4	Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	4	https://www.tutorialspoint.com/embedded_systems Introduction to embedded systems by Shibu K V	POWER POINT PRESENTATION/ Black Board & Chalk
	structure of embedded program, infinite loop	4		

	compiling, linking and debugging	4		
UNIT 5	Operating system basics, types of operating systems, Real-Time Characteristics, Selection Process of an RTOS.	4	https://www.tutorialspoint.com/embedded_systems.	POWER POINT PRESENTATION/ Black Board & Chalk
	Embedded system development Environment – IDE, types of file generated on cross compilation, disassembler/ de-compiler,	4		
	simulator, emulator and debugging, embedded product development life-cycle, trends in embedded industry.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS: SYBSc(IT) DIV:C SEMESTER: IV MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : Understand programming language and tools to develop computer programs and systems that are effective solutions to problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Core Java (USIT401) Unit I	Introduction: History, architecture and its components, Java Class File, Java Runtime Environment, The Java Virtual Machine, JVM Components, The Java API, java platform, java development kit, Lambda Expressions, Methods References, Type Annotations, Method Parameter Reflection, setting the path environment variable, Java Compiler and Interpreter, java programs, java applications, main (), public, static, void, string [] args, statements, white space, case sensitivity, identifiers, keywords, comments, braces and code blocks, variables, variable name	05	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th Edition	Google Jam board, Slides, Docs
	Data types: primitive data types, Object Reference Types, Strings, Auto boxing, operators and properties of operators, Arithmetic operators, assignment operators, increment and decrement operator, relational operator, logical operator, bitwise operator, conditional operator	03		

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Paper:USIT401, unit:2, Title:Core Java	**Control Flow Statements:** The If…Else If…Else Statement, The Switch…Case Statement	3	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
	Iterations: The While Loop, The Do … While Loop, The For Loop, The Foreach Loop, Labeled Statements, The Break And Continue Statements, The Return Statement	4	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
	Classes: Types of Classes, Scope Rules, Access Modifier, Instantiating Objects From A Class, Initializing The Class Object And Its Attributes, Class Methods, Accessing A Method, Method Returning A Value, Method's Arguments, Method Overloading, Variable Arguments [Varargs], Constructors, this Instance, super Instance, Characteristics Of Members Of A Class, constants, this instance, static fields of a class, static methods of a class, garbage collection.	5	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
Paper:USIT401, unit:3, Title:Core Java	**Inheritance:** Derived Class Objects, Inheritance and Access Control, Default Base Class Constructors, this and super keywords. Abstract Classes And Interfaces, Abstract Classes, Abstract Methods, Interfaces,	4	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.

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	What Is An Interface? How Is An Interface Different From An Abstract Class?, Multiple Inheritance, Default Implementation, Adding New Functionality, Method Implementation, Classes V/s Interfaces, Defining An Interface, Implementing Interfaces.	4	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
	Packages: Creating Packages, Default Package, Importing Packages, Using A Package.	4	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
Paper:USIT401, unit:4, Title:Core Java	Enumerations,Arrays: Two Dimensional Arrays, Multi-Dimensional Arrays, Vectors, Adding Elements To A Vector, Accessing Vector Elements, Searching For Elements In A Vector, Working With The Size of The Vector.		Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th Edition	Online mode Google meet Google slides.
	Multithreading: the thread control methods, thread life cycle, the main thread, creating a thread, extending the thread class.			
	Exceptions: Catching Java Exceptions, Catching Run-Time Exceptions, Handling Multiple Exceptions, The finally Clause, The throws Clause			
	Byte streams: reading console input, writing console output, reading file, writing file, writing binary data, reading binary data, getting started with character streams, writing file, reading file			

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Paper:USIT401, unit:5, Title:Core Java	Event Handling: Delegation Event Model, Events, Event classes, Event listener interfaces, Using delegation event model, adapter classes and inner classes.	02	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th Edition	Online mode Google meet Google slides.
	Abstract Window Toolkit: Window Fundamentals, Component, Container, Panel, Window, Frame, Canvas. Components – Labels, Buttons, Check Boxes, Radio Buttons, Choice Menus, Text Fields, Text, Scrolling List, Scrollbars, Panels, Frames	03		
	Layouts: Flow Layout, Grid Layout, Border Layout, Card Layout	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PRANALI DAYANAND THAKARE** DEPARTMENT: **IT**

CLASS: **S.Y.BSc(IT)-C** SEMESTER:**IV** MONTH: **JAN-MAR** ACADEMICYEAR: **2022-2023**

LEARNING OBJECTIVE/S:

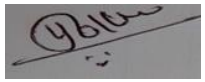
The learners will be able to :

1. Understand what is a microcontroller, microcomputer, embedded system.
2. Understand different components of a micro-controller and their interactions.
3. Become familiar with programming environment used to develop embedded systems .
4. Understand key concepts of embedded systems like IO, timers, interrupts, interaction with peripheral devices .
5. Learn debugging techniques for an embedded system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 ES UNIT 1	Embedded Systems and general purpose computer systems, history, classifications, applications and purpose of embedded systems	4	Introduction to embedded systems by Shibu K V	Black Board & Chalk
	Microprocessors and microcontrollers ,RISC and CISC controllers, Big endian and Little endian processors, Application specific ICs, Programmable logic devices, COTS.	3		
	Sensors and actuators, communication interface, embedded firmware, other system components.	3		

	Characteristics, operational and non-operational quality attributes.	2		
UNIT 2	Application specific – washing machine, domain specific - automotive.	3	Introduction to embedded systems by Shibu K V	POWER POINT PRESENTATION/ Black Board & Chalk
	Memory map, i/o map, interrupt map, processor family, external peripherals	3		
	memory – RAM , ROM, types of RAM and ROM, memory testing, CRC ,Flash memory .	3		
	Control and Status Registers, Device Driver, Timer Driver - Watchdog Timers.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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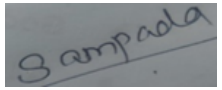

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **SYBSCIT** SEMESTER:**IV**

MONTH: **NOV-MARCH** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:

The learners will be able to :

- Be able to demonstrate an understanding of advanced knowledge of the practice of software engineering, from vision to analysis, design, validation and deployment.
- Be able to tackle complex engineering problems and tasks, using contemporary engineering principles, methodologies and tools.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT404 Software Engineering UNIT-1	**Introduction**: What is software engineering? Software Development Life Cycle, Requirements Analysis, Software Design, Coding, Testing, Maintenance etc	03	Software Engineering, edition, Ian Somerville Pearson Education. Ninth	power point, Black Board
	Software Requirements: Functional and Non-functional requirements, User Requirements, System Requirements, Interface Specification, Documentation of the software requirements.	03		
	Software Processes: Process and Project, Component Software Processes.	02		
	Software Development Process Models. • Waterfall Model. • Prototyping. • Iterative Development. • Rational Unified Process. • The RAD Model • Time boxing Model	02		

	Agile software development: Agile methods, Plan-driven and agile development, Extreme programming, Agile project management, Scaling agile methods.	02		
US404 Software Engineering UNIT-2	**Verification and Validation**: Planning Verification and Validation, Software Inspections, Automated Static Analysis, Verification and Formal Methods.	03	Software Engineering, edition, Ian Somerville Pearson Education. Ninth	power point, Black Board
	Software Testing: System Testing, Component Testing, Test Case Design, Test Automation	03		
	Software Measurement: Size-Oriented Metrics, Function-Oriented Metrics, Extended Function Point Metrics	03		
	Software Cost Estimation:Software Productivity, Estimation Techniques, Algorithmic Cost Modelling, Project Duration and Staffing	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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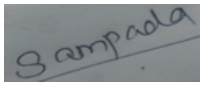

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___ **MRS. KSHITIJA. A. PALAV (MANE))**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**SY.B S C(IT)-C**_____ SEMESTER: ____**IV**_____ MONTH: _____**NOVEMBER-MARCH**_____ ACADEMIC YEAR: _____**2022-2023**_____

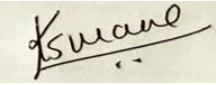
LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the concept of transformations and its types in 2D and 3D in computer graphics and how those can be implemented in variation of applications including Animation. Understanding the representation of matrices, projection in CG and its usage. To implement concepts, creation and how it works with different types of animation. To make understand what is image , how it is created and how it is used in varieties of processing, To make understand the concept of image enhancement, compression, filtering and histogram of image to study subjective improvisation of image in applications to reduce the noise

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-05 (USIT405) **Computer Graphics and Animation** **Unit No -02**	**Two-Dimensional Transformations:** Transformations and Matrices, Transformation Conventions, 2D Transformations, Homogeneous Coordinates and Matrix Representation of 2D Transformations, Translations and Homogeneous Coordinates, Rotation, Reflection, Scaling, Combined Transformation, Transformation of Points, Transformation of The Unit Square, Solid Body Transformations, Rotation About an Arbitrary Point, Reflection through an	06	Computer Graphics by R.K Maurya	Projector, Blackboard, PPTs, Textbook

	Arbitrary Line, A Geometric Interpretation of Homogeneous Coordinates, The Window-to-Viewport Transformations.			
	Three-Dimensional Transformations: Three-Dimensional Scaling, Three-Dimensional Shearing, Three-Dimensional Rotation, Three-Dimensional Reflection, Three-Dimensional Translation, Multiple Transformation, Rotation about an Arbitrary Axis in Space, Reflection through an Arbitrary Plane, Matrix Representation of 3D Transformations, Composition of 3D Transformations,. Affine and Perspective Geometry, Perspective Transformations, Techniques for Generating Perspective Views, Vanishing Points, the Perspective Geometry and camera models, Orthographic Projections, Axonometric Projections, Oblique Projections, View volumes for projections.	06	Computer Graphics by R.K Maurya	Projector, Blackboard, PPTs, Textbook
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	**Computer Animation:** Principles of Animation, Key framing, Deformations, Character Animation, Physics-Based Animation, Procedural Techniques, Groups of Objects.	06	Computer Graphics by R.K Maurya.	Projector, Blackboard, PPTs, Textbook
	Image Manipulation and Storage: What is an Image? Digital image file formats, Image compression standard – JPEG, Image Processing - Digital image enhancement,	06	Digital Image Processing by Dhananjay.	Projector, Blackboard, PPTs, Textbook

	contrast stretching, Histogram Equalization, smoothing and median Filtering.			
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			



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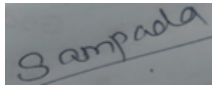

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___ **MRS. KSHITIJA. A. PALAV (MANE))**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**SY.B S C(IT)-C**_____ SEMESTER: ____**IV**_____ MONTH: _____**NOVEMBER-MARCH**_____ ACADEMIC YEAR: _____**2022-2023**_____

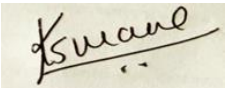
LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the concept of transformations and its types in 2D and 3D in computer graphics and how those can be implemented in variation of applications including Animation. Understanding the representation of matrices, projection in CG and its usage. To implement concepts, creation and how it works with different types of animation. To make understand what is image , how it is created and how it is used in varieties of processing, To make understand the concept of image enhancement, compression, filtering and histogram of image to study subjective improvisation of image in applications to reduce the noise

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-05 (USIT405) **Computer Graphics and Animation** **Unit No -02**	**Two-Dimensional Transformations:** Transformations and Matrices, Transformation Conventions, 2D Transformations, Homogeneous Coordinates and Matrix Representation of 2D Transformations, Translations and Homogeneous Coordinates, Rotation, Reflection, Scaling, Combined Transformation, Transformation of Points, Transformation of The Unit Square, Solid Body Transformations, Rotation About an Arbitrary Point, Reflection through an	06	Computer Graphics by R.K Maurya	Projector, Blackboard, PPTs, Textbook

	Arbitrary Line, A Geometric Interpretation of Homogeneous Coordinates, The Window-to-Viewport Transformations.			
	Three-Dimensional Transformations: Three-Dimensional Scaling, Three-Dimensional Shearing, Three-Dimensional Rotation, Three-Dimensional Reflection, Three-Dimensional Translation, Multiple Transformation, Rotation about an Arbitrary Axis in Space, Reflection through an Arbitrary Plane, Matrix Representation of 3D Transformations, Composition of 3D Transformations,. Affine and Perspective Geometry, Perspective Transformations, Techniques for Generating Perspective Views, Vanishing Points, the Perspective Geometry and camera models, Orthographic Projections, Axonometric Projections, Oblique Projections, View volumes for projections.	06	Computer Graphics by R.K Maurya	Projector, Blackboard, PPTs, Textbook
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	**Computer Animation:** Principles of Animation, Key framing, Deformations, Character Animation, Physics-Based Animation, Procedural Techniques, Groups of Objects.	06	Computer Graphics by R.K Maurya.	Projector, Blackboard, PPTs, Textbook
	Image Manipulation and Storage: What is an Image? Digital image file formats, Image compression standard – JPEG, Image Processing - Digital image enhancement,	06	Digital Image Processing by Dhananjay.	Projector, Blackboard, PPTs, Textbook

	contrast stretching, Histogram Equalization, smoothing and median Filtering.			
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			



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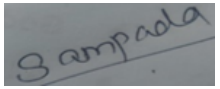

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.PRANALI DAYANAND THAKARE** DEPARTMENT: **IT** CLASS: **TYBSCIT**

SEMESTER:**VI** MONTH: **NOV-MARCH** ACADEMIC YEAR:**2022-23**

LEARNING OBJECTIVE/S:

The learners will be able to :

Understanding the customers priority for **quality assurance** while developing ...
that **will** be created by the organization, The scope of **Software** Testing applies to ... improvements of the processes through **learning** & innovation
Understand Manual and automated testing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT601 Software Quality Assurance UNIT-1	**Introduction to Quality:** Historical Perspective of Quality, What is Quality? (Is it a fact or perception?), Definitions of Quality, Core Components of Quality, Quality View, Financial Aspect of Quality, Customers, Suppliers and Processes, Total Quality Management (TQM), Quality Principles of Total Quality Management, Quality Management Through Statistical Process Control, Quality Management Through Cultural Changes, Continual (Continuous) Improvement Cycle, Quality in Different Areas, Benchmarking and Metrics, Problem Solving Techniques, Problem Solving Software Tools.	07	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
	Software Quality: Introduction, Constraints of Software Product Quality Assessment, Customer is a King, Quality and Productivity Relationship, Requirements of a Product, Organisation Culture, Characteristics of Software, Software Development Process, Types of Products, Schemes of Criticality Definitions, Problematic Areas of Software Development Life	05	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet

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	Cycle, Software Quality Management, Why Software Has Defects?Processes Related to Software Quality, Quality Management System Structure, Pillars of Quality Management System, Important Aspects of Quality Management..			
USIT601 Software Quality Assurance UNIT-3	**Unit Testing: Boundary Value Testing:** Normal Boundary ValueTesting, Robust Boundary Value Testing, Worst-Case Boundary ValueTesting, Special Value Testing, Examples, Random Testing, Guidelines for Boundary Value Testing, **Equivalence Class Testing:** Equivalence Classes, Traditional Equivalence Class Testing, Improved Equivalence Class Testing, Edge Testing, Guidelines and Observations.	05	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
	Decision Table–Based Testing: Decision Tables, Decision Table Techniques, Cause-and-Effect Graphing, Guidelines and Observations, **Path Testing:** Program Graphs, DD-Paths, Test Coverage Metrics, Basis Path Testing, Guidelines and Observations,**Data Flow Testing:** Define/Use Testing, Slice-Based Testing,Program Slicing Tools.	07	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
USIT601 Software Quality Assurance UNIT-5	**Levels of Testing:** Introduction, Proposal Testing, Requirement Testing, Design Testing, Code Review, Unit Testing, Module Testing, Integration Testing, Big-Bang Testing, Sandwich Testing, Critical Path First, Sub System Testing, System Testing, Testing Stages.	04	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point
	Special Tests: Introduction, GUI testing, Compatibility Testing, Security Testing, Performance Testing, Volume Testing, Stress Testing, Recovery Testing, Installation Testing, Requirement Testing,Regression Testing, Error Handling Testing, Manual Support Testing,Intersystem Testing, Control Testing, Smoke Testing, Adhoc Testing,Parallel Testing, Execution Testing,	08	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point

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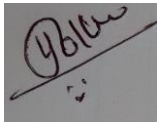
	Operations Testing, Compliance Testing, Usability Testing, Decision Table Testing, Documentation Testing, Training testing, Rapid Testing, Control flow graph, Generating tests on the basis of Combinatorial Designs, State Graph,Risk Associated with New Technologies, Process maturity level of Technology, Testing Adequacy of Control in New technology usage,Object Oriented Application Testing, Testing of Internal Controls COTS Testing, Client Server Testing, Web Application Testing,Mobile Application Testing, eBusiness eCommerce Testing, Agile Development Testing, Data Warehousing Testing.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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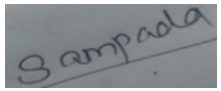

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TEACHING PLAN (UNIT PLAN)- BUSINESS INTELLIGENCE

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: TYIT (C)

SEMESTER: VI MONTH: DEC-MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the use of business intelligence in real life.
- Describe the different mathematical models to develop decision making systems.
- Get the difference between supervised learning and unsupervised learning techniques.
- Understand the use of mathematical models in relational marketing, support chain optimization, CCR model.
- Familiar with knowledge management and Artificial intelligence and expert systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT603, Business Intelligence Unit I	**Business intelligence:** Effective and timely decisions, Data, information and knowledge, The role of mathematical models, Business intelligence architectures, Ethics and business intelligence	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, Powerpoint
	Decision support systems: Definition of system, Representation of the decision-making process, Evolution of information systems, Definition of decision support system, Development of a decision support system	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint

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USIT603, Business Intelligence Unit II	**Mathematical models for decision making:** Structure of mathematical models, Development of a model, Classes of models	05	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Data mining: Definition of data mining, Representation of input data , Data mining process, Analysis methodologies	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Data preparation: Data validation, Data transformation, Data reduction	03	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
USIT603, Business Intelligence Unit III	**Classification**: Classification problems, Evaluation of classification models, Bayesian methods, Logistic regression, Neural networks, Support vector machines	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Clustering: Clustering methods, Partition methods, Hierarchical methods, Evaluation of clustering models	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
USIT603, Business Intelligence Unit IV	**Marketing models**: Relational marketing, Sales force management,	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Logistic and production models: Supply chain optimization, Optimization models for logistics planning, Revenue management systems.	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Data envelopment analysis: Efficiency measures, Efficient frontier, The CCR model, Identification of good operating practices	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint

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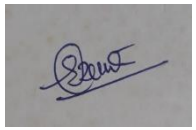
USIT603, Business Intelligence Unit V	**Knowledge Management:** Introduction to Knowledge Management, Organizational Learning and Transformation, Knowledge Management Activities, Approaches to Knowledge Management, Information Technology (IT) In Knowledge Management, Knowledge Management Systems Implementation, Roles of People in Knowledge Management	06	Decision support and Business Intelligence Systems by Efraim Turban, Ramesh Sharda, Dursun Delen , Pearson,Ninth,2011	Black Board and chalk, PowerPoint
	Artificial Intelligence and Expert Systems: Concepts and Definitions of Artificial Intelligence, Artificial Intelligence Versus Natural Intelligence, Basic Concepts of Expert Systems, Applications of Expert Systems, Structure of Expert Systems, Knowledge Engineering, Development of Expert Systems	06	Decision support and Business Intelligence Systems by Efraim Turban, Ramesh Sharda, Dursun Delen , Pearson,Ninth,2011	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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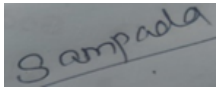

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Gayatree Karnik DEPARTMENT: Information technology CLASS: TYIT (A)

SEMESTER: VI MONTH: November to March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand Legal aspects of Information technology
- Conceptual arrangements of Laws and amendments
- Pass on the legal information about how one should use technology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Unit 2	Contracts in the Infotech World: Contracts in the Infotech World, Click-Wrap and Shrink-Wrap Contract: Status under the Indian Contract Act, 1872, Contract Formation Under the Indian Contract Act, 1872, Contract Formation on the Internet, Terms and Conditions of Contracts. Jurisdiction in the Cyber World: Questioning the Jurisdiction and Validity of the Present Law of Jurisdiction, Civil Law of Jurisdiction in India, Cause of Action, Jurisdiction and the Information Technology Act,2000, Foreign Judgements in India, Place of Cause of Action in Contractual and IPR Disputes, Exclusion Clauses in	12	Cyber Law Simplified – Vivek Sood	Computer and Powerpoint,Chalk & Board

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	Contracts, Abuse of Exclusion Clauses, Objection of Lack of Jurisdiction, Misuse of the Law of Jurisdiction, Legal Principles on Jurisdiction in the United State of America, Jurisdiction Disputes w.r.t. the Internet in the United State of America.			
UNIT 3 Unit 4	Battling Cyber Squatters and Copyright Protection in the Cyber World: Concept of Domain Name and Reply to Cyber Squatters, Meta- Tagging, Legislative and Other Innovative Moves Against Cyber Squatting, The Battle Between Freedom and Control on the Internet, Works in Which Copyright Subsists and meaning of Copyright, Copyright Ownership and Assignment, License of Copyright, Copyright Terms and Respect for Foreign works, Copyright Infringement, Remedies and Offences, Copyright Protection of Content on the Internet; Copyright Notice, Disclaimer and Acknowledgement, Downloading for Viewing Content on the Internet, Hyper-Linking and Framing, Liability of ISPs for Copyright Violation in the Cyber World: Legal Developments in the US, Napster and its Cousins: A Revolution on the Internet but a Crisis for Copyright Owners, Computer Software Piracy.	12	Cyber Law Simplified – Vivek Sood	Chalk & Board
	E-Commerce Taxation: Real Problems in the Virtual World: A Tug of War on the Concept of 'Permanent Establishment', Finding the PE in Cross Border E-Commerce, The United Nations Model Tax Treaty, The	12	Cyber Law Simplified – Vivek Sood	Chalk & Board

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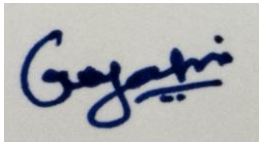
Unit 5	Law of Double Taxation Avoidance Agreements and Taxable Jurisdiction Over Non-Residents, Under the Income Tax Act, 1961, Tax Agents of Non-Residents under the Income Tax Act,1961 and the Relevance to E-Commerce, Source versus Residence and Classification between Business Income and Royalty, The Impact of the Internet on Customer Duties, Taxation Policies in India: At a Glance. Digital Signature, Certifying Authorities and E-Governance: Digital Signatures, Digital Signature Certificate, Certifying Authorities and Liability in the Event of Digital Signature Compromise, E- Governance in India: A Warning to Babudom!			
	The Indian Evidence Act of 1872 v. Information Technology Act, 2000: Status of Electronic Records as Evidence, Proof and Management of Electronic Records; Relevancy, Admissibility and Probative Value of E-Evidence, Proving Digital Signatures, Proof of Electronic Agreements, Proving Electronic Messages, Other Amendments in the Indian Evidence Act by the IT Act, Amendments to the Bankers Books Evidence Act, 1891 and Reserve Bank of India Act, 1934. Protection of Cyber Consumers in India: Are Cyber Consumers 12 Covered Under the Consumer Protection Act? Goods and Services, Consumer Complaint, Defect in Goods and Deficiency in Services, Restrictive and Unfair Trade Practices, Instances of Unfair Trade Practices, Reliefs Under CPA, Beware Consumers, Consumer Foras, Jurisdiction and Implications on cyber Consumers in India, Applicability of CPA to Manufacturers, Distributors, Retailers and Service Providers Based in Foreign Lands Whose Goods are Sold or Services	12	Cyber Law Simplified – Vivek Sood	Chalk & Board

	Provided to a Consumer in India. Amendments in Indian IT Act 2000			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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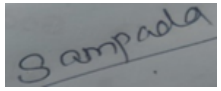

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**Ms. Prajakta Hatkar** DEPARTMENT: **IT** CLASS: **TYBSc IT** SEMESTER: **VI**

MONTH: **NOV-APRIL** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:

The learners will be able to :

- ✔ Understanding the customers priority for quality assurance while developing that will be created by the organization
- ✔ The scope of Software Testing applies to improvements of the processes through learning & innovation
- ✔ Understand Manual and automated testing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT601 Software Quality Assurance UNIT-2	**Fundamentals of testing:** Introduction, Necessity of testing, What is testing? Fundamental test process, The psychology of testing,Historical Perspective of Testing, Definitions of Testing, Approaches to Testing, Testing During Development Life Cycle, Requirement Traceability Matrix, Essentials of Software Testing, Workbench,Important Features of Testing Process, Misconceptions About Testing,Principles of Software Testing, Salient Features of Good Testing, Test Policy, Test Strategy or Test Approach, Test Planning, Testing Process and Number of Defects Found in Testing, Test Team Efficiency, Mutation Testing, Challenges in Testing, Test Team Approach, Process Problems Faced by Testing, Cost Aspect of Testing, Establishing Testing Policy, Methods	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	Power Point Presentation
	Structured Approach to Testing, Categories of Defect, Defect, Error, or Mistake in Software, Developing Test Strategy, Developing Testing Methodologies (Test Plan), Testing Process,	06	Software Testing:	Power Point Presentation

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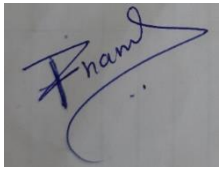
	Attitude Towards Testing (Common People Issues), Test Methodologies/Approaches, People Challenges in Software Testing, Raising Management Awareness for Testing, Skills Required by Tester, Testing throughout the software life cycle, Software development models, Test levels, Test types, the targets of testing, Maintenance testing		Principles, Techniques and Tools M. G. Limaye	
USIT601 Software Quality Assurance UNIT-4	**Software Verification and Validation:**Introduction, Verification, Verification Workbench, Methods of Verification, Types of reviews on the basis od Stage Phase, Entities involved in verification, Reviews in testing lifecycle, Coverage in Verification, Concerns of Verification, Validation, Validation Workbench, Levels of Validation,Coverage in Validation, Acceptance Testing, Management of Verification and Validation, Software development verification and validation activities	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	Power Point Presentation
	V-test Model: Introduction, V-model for software, Testing during Proposal stage, Testing during requirement stage, Testing during test planning phase, Testing during design phase, Testing during coding,VV Model, Critical Roles and Responsibilities.	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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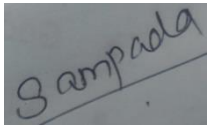

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. **Security In Computing** DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc. SEMESTER: VI MONTH: Dec to April ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To provide security against users, software, devices, operating systems, networks, cloud and data.

The learners will be able to :

- To understand the concept of Information Security.
- To know how to use Security Methodology, Strategy and Tactics.
- To analyze Risk by identifying possible Threat, Types of Attacks.
- To learn about Secure Design Principles like the CIA Triad and Other Models, Defense Models.
- To know Intrusion Detection and Prevention Systems.
- To learn Voice over IP (VoIP) and PBX Security, TEM (Telecom Expense Management).
- To understand Operating System Security Models, International Standards for Operating System Security.
- To have information related to Virtual Machines and Cloud Computing.
- To study Secure Application Design in Web Application Security, Client Application Security, Remote Administration Security.
- To know how to implement Physical Security by Choosing Site Location for Security, Securing Assets - Locks and Entry Controls, Physical Intrusion Detection.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT602	**Information Security Overview**: The Importance of Information Protection, The Evolution of Information Security, Justifying Security	12	1. The Complete Reference: Information Security	Black Board, Projector, Google Meet PPT

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Security In Computing UNIT-1	Investment, Security Methodology, How to Build a Security Program, The Impossible Job, The Weakest Link, Strategy and Tactics, Business Processes vs. Technical Controls. **Risk Analysis**: Threat Definition, Types of Attacks, Risk Analysis. **Secure Design Principles**: The CIA Triad and Other Models, Defense Models, Zones of Trust, Best Practices for Network Defense.		2. Essential Cybersecurity Science 3. Principles of Computer Security: CompTIA Security+ and Beyond	
USIT603 **Security In Computing** UNIT-4	**Intrusion Detection and Prevention Systems**: IDS Concepts, IDS Types and Detection Models, IDS Features, IDS Deployment Considerations, Security Information and Event Management (SIEM). **Voice over IP (VoIP) and PBX Security**: Background, VoIP Components,VoIP Vulnerabilities and Countermeasures, PBX, TEM: Telecom Expense Management. **Operating System Security Models**: Operating System Models, Classic Security Models, Reference Monitor, Trustworthy Computing, International Standards for Operating System Security.	12	1. The Complete Reference: Information Security 2. Essential Cybersecurity Science 3. Principles of Computer Security: CompTIA Security+ and Beyond	Black Board, Projector, Google Meet PPT
USIT603 **Security In Computing** UNIT-5	**Virtual Machines and Cloud Computing**: Virtual Machines, Cloud Computing. **Secure Application Design**: Secure Development Lifecycle, Application Security Practices, Web Application Security, Client Application Security, Remote Administration Security.	12	1. The Complete Reference: Information Security 2. Essential Cybersecurity Science	Black Board, Projector, Google Meet PPT

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	Physical Security: Classification of Assets, Physical Vulnerability Assessment, Choosing Site Location for Security, Securing Assets: Locks and Entry Controls, Physical Intrusion Detection.		3. Principles of Computer Security: CompTIA Security+ and Beyond	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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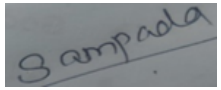

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TEACHING PLAN (UNIT PLAN)- BUSINESS INTELLIGENCE

NAME OF THE STAFF: Ms. SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT CLASS: TYIT (B)

SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the use of business intelligence in real life.
- Describe the different mathematical models to develop decision making systems.
- Get the difference between supervised learning and unsupervised learning techniques.
- Understand the use of mathematical models in relational marketing, support chain optimization, CCR model.
- Familiar with knowledge management and Artificial intelligence and expert systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT603, Business Intelligence Unit I	**Business intelligence:** Effective and timely decisions, Data, information and knowledge, The role of mathematical models, Business intelligence architectures, Ethics and business intelligence	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, Powerpoint
	Decision support systems: Definition of system, Representation of the decision-making process, Evolution of information systems, Definition of decision support system, Development of a decision support system	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint

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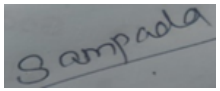
USIT603, Business Intelligence Unit III	**Classification**: Classification problems, Evaluation of classification models, Bayesian methods, Logistic regression, Neural networks, Support vector machines	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Clustering: Clustering methods, Partition methods, Hierarchical methods, Evaluation of clustering models	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
USIT603, Business Intelligence Unit IV	**Marketing models**: Relational marketing, Sales force management,	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Logistic and production models: Supply chain optimization, Optimization models for logistics planning, Revenue management systems.	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Data envelopment analysis: Efficiency measures, Efficient frontier, The CCR model, Identification of good operating practices	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:GAURI KETAN THAKUR DEPARTMENT:-IT

CLASS: TY BSc IT DIV-B(BI) SEMESTER:SEM-6 MONTH:DEC-MAR ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

The learners will be able to :

- Introduce the concepts and components of Business Intelligence (BI)
- Evaluate the technologies that make up BI (data warehousing, OLAP)
- Define how BI will help an organization and whether it will help yours
- Identify the technological architecture that makes up BI systems
- Plan the implementation of a BI system

PAPER, UNIT, TITLE		SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Intelligence Unit 1		**Mathematical models for decision making:** Structure of mathematical models, Development of a model, Classes of models	3	Business Intelligence: Data Mining and Optimization for Decision Making	BLACK BOARD AND CHALK
		Data mining: Definition of data mining, Representation of input data ,Data mining process, Analysis methodologies	5		

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Unit 5		**Data preparation:** Data validation, Data transformation, Data reduction	4		
		Knowledge Management: Introduction to Knowledge Management, Organizational Learning and Transformation, Knowledge Management Activities, Approaches to Knowledge Management, Information Technology (IT) In Knowledge Management, Knowledge Management Systems Implementation, Roles of People in Knowledge Management	6	Decision support and Business Intelligence Systems	BLACK BOARD AND CHALK POWER POINT PRESENTATION
		Artificial Intelligence and Expert Systems: Concepts and Definitions of Artificial Intelligence, Artificial Intelligence Versus Natural Intelligence, Basic Concepts of Expert Systems, Applications of Expert Systems, Structure of Expert Systems, Knowledge Engineering, Development of Expert Systems	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. (Mrs.) Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: TYIT SEMESTER: VI MONTH: NOV to MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

To develop the understanding of relationship between commerce and cyberspace

To enable learner to understand, explore, and acquire a critical understanding Cyber Law.

To give learners in depth knowledge of Information Technology Act and legal frame work of Right to Privacy, Data Security and Data Protection

To make learner conversant with the social and intellectual property issues emerging from 'Cyberspace

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-07 Cyber Law Unit 3	**Battling Cyber Squatters and Copyright Protection in the Cyber World:** Concept of Domain Name and Reply to Cyber Squatters, Meta-Tagging, Legislative and Other Innovative Moves Against Cyber Squatting, The Battle Between Freedom and Control on the Internet, Works in Which Copyright Subsists and meaning of Copyright, Copyright Ownership and Assignment, License of Copyright, Copyright Terms and Respect for Foreign Works, Copyright Infringement, Remedies and Offences, Copyright Protection of Content on the Internet; Copyright Notice, Disclaimer and Acknowledgement, Downloading for Viewing Content on the Internet, Hyper-Linking and Framing, Liability of ISPs for Copyright Violation in the Cyber World: Legal Developments in the US, Napster and its Cousins: A Revolution on the Internet but a Crisis for Copyright Owners, Computer Software Piracy.	12	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
Paper-07 Cyber Law Unit 4	**E-Commerce Taxation:** Real Problems in the Virtual World: A Tug of War on the Concept of „Permanent Establishment", Finding the PE in Cross Border E-Commerce, The United Nations Model Tax Treaty, The Law of Double Taxation Avoidance Agreements and Taxable Jurisdiction Over Non-Residents, Under the Income Tax Act, 1961, Tax Agents of Non-Residents under the Income Tax Act,1961 and the Relevance to E-Commerce, Source versus Residence and Classification between Business Income and Royalty, The Impact of the Internet on Customer Duties, Taxation Policies in India: At a Glance.	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk

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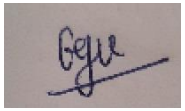
	Digital Signature, Certifying Authorities and E-Governance: Digital Signatures, Digital Signature Certificate, Certifying Authorities and Liability in the Event of Digital Signature Compromise, E-Governance in India: A Warning to Babudom!	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
Paper-07 Cyber Law Unit 5	**The Indian Evidence Act of 1872 v. Information Technology Act, 2000:** Status of Electronic Records as Evidence, Proof and Management of Electronic Records; Relevancy, Admissibility and Probative Value of E-Evidence, Proving Digital Signatures, Proof of Electronic Agreements, Proving Electronic Messages, Other Amendments in the Indian Evidence Act by the IT Act, Amendments to the Bankers Books Evidence Act, 1891 and Reserve Bank of India Act, 1934.	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
	Protection of Cyber Consumers in India: Are Cyber Consumers Covered Under the Consumer Protection Act? Goods and Services, Consumer Complaint, Defect in Goods and Deficiency in Services, Restrictive and Unfair Trade Practices, Instances of Unfair Trade Practices, Reliefs Under CPA, Beware Consumers, Consumer Foras, Jurisdiction and Implications on cyber Consumers in India, Applicability of CPA to Manufacturers, Distributors, Retailers and Service Providers Based in Foreign Lands Whose Goods are Sold or Services Provided to a Consumer in India. Amendments in Indian IT Act 2000	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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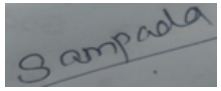

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. IT –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2022-2023

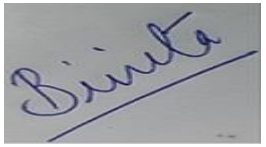
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -I	**Information Security Overview** : The Importance of Information Protection, The Evolution of Information Security, Justifying Security Investment, Security Methodology, How to Build a Security Program, The Impossible Job, The Weakest Link, Strategy and Tactics, Business Processes vs. Technical Controls.	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation / Black Board
	Risk Analysis: Threat Definition, Types of Attacks, Risk Analysis.	4		PowerPoint presentation / Black Board
	Secure Design Principles: The CIA Triad and Other Models, Defense Models, Zones of Trust, Best Practices for Network Defense.	4		PowerPoint presentation / Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. IT –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

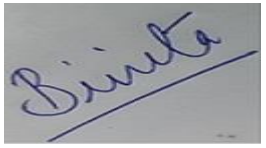
The learners will be able to:

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -II	**Authentication and Authorization**: Authentication, Authorization	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation / Black Board
	Encryption: A Brief History of Encryption, Symmetric-Key Cryptography, Public Key Cryptography, Public Key Infrastructure.	5		PowerPoint presentation / Black Board
	Storage Security: Storage Security Evolution, Modern Storage Security, Risk Remediation, Best Practices.	2		PowerPoint presentation / Black Board
	Database Security: General Database Security Concepts, Understanding Database Security Layers, Understanding Database-Level Security, Using Application Security, Database Backup and Recovery, Keeping Your Servers Up to Date, Database Auditing and Monitoring.	2		PowerPoint presentation / Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. IT –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

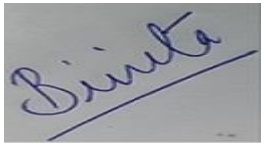
The learners will be able to:

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -III	**Secure Network Design**: Introduction to Secure Network Design, Performance, Availability, Security.	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation / Black Board
	Network Device Security: Switch and Router Basics, Network Hardening.	3		PowerPoint presentation / Black Board
	Firewalls: Overview, The Evolution of Firewalls, Core Firewall Functions, Additional Firewall Capabilities, Firewall Design.	3		PowerPoint presentation / Black Board
	Wireless Network Security: Radio Frequency Security Basics, Data-Link Layer Wireless Security Features, Flaws, and Threats, Wireless Vulnerabilities and Mitigations, Wireless Network Hardening Practices and Recommendations, Wireless Intrusion Detection and Prevention, Wireless Network Positioning and Secure Gateways.	3		PowerPoint presentation / Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. IT –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2022-2023

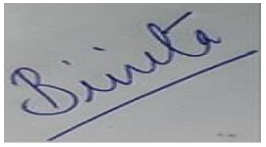
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -IV	**Intrusion Detection and Prevention Systems**: IDS Concepts, IDS Types and Detection Models, IDS Features, IDS Deployment Considerations, Security Information and Event Management (SIEM).	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation / Black Board
	Voice over IP (VoIP) and PBX Security: Background, VoIP Components, VoIP Vulnerabilities and Countermeasures, PBX, TEM: Telecom Expense Management.	4		PowerPoint presentation / Black Board
	Operating System Security Models: Operating System Models, Classic Security Models, Reference Monitor, Trustworthy Computing, International Standards for Operating System Security.	4		PowerPoint presentation / Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. IT –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

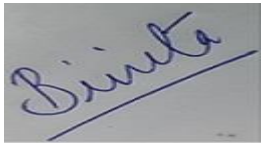
The learners will be able to:

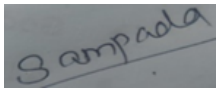
a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -V	**Virtual Machines and Cloud Computing**: Virtual Machines, Cloud Computing.	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation / Black Board
	Secure Application Design: Secure Development Lifecycle, Application Security Practices, Web Application Security, Client Application Security, Remote Administration Security.	4		PowerPoint presentation / Black Board
	Physical Security: Classification of Assets, Physical Vulnerability Assessment, Choosing Site Location for Security, Securing Assets: Locks and Entry Controls, Physical Intrusion Detection.	4		PowerPoint presentation / Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)- BUSINESS INTELLIGENCE

NAME OF THE STAFF: DR.BRIJESH YATINDRA JOSHI DEPARTMENT: IT CLASS: TYIT (C)

SEMESTER: VI MONTH: DEC-MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the use of business intelligence in real life.
- Describe the different mathematical models to develop decision making systems.
- Get the difference between supervised learning and unsupervised learning techniques.
- Understand the use of mathematical models in relational marketing, support chain optimization, CCR model.
- Familiar with knowledge management and Artificial intelligence and expert systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT603, Business Intelligence Unit I	**Business intelligence:** Effective and timely decisions, Data, information and knowledge, The role of mathematical models, Business intelligence architectures, Ethics and business intelligence	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, Powerpoint
	Decision support systems: Definition of system, Representation of the decision-making process, Evolution of information systems, Definition of decision support system, Development of a decision support system	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint

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USIT603, Business Intelligence Unit II	**Mathematical models for decision making:** Structure of mathematical models, Development of a model, Classes of models	05	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Data mining: Definition of data mining, Representation of input data , Data mining process, Analysis methodologies	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Data preparation: Data validation, Data transformation, Data reduction	03	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
USIT603, Business Intelligence Unit III	**Classification**: Classification problems, Evaluation of classification models, Bayesian methods, Logistic regression, Neural networks, Support vector machines	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Clustering: Clustering methods, Partition methods, Hierarchical methods, Evaluation of clustering models	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
USIT603, Business Intelligence Unit IV	**Marketing models**: Relational marketing, Sales force management,	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Logistic and production models: Supply chain optimization, Optimization models for logistics planning, Revenue management systems.	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Data envelopment analysis: Efficiency measures, Efficient frontier, The CCR model, Identification of good operating practices	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint

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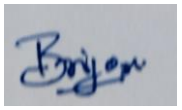
USIT603, Business Intelligence Unit V	**Knowledge Management:** Introduction to Knowledge Management, Organizational Learning and Transformation, Knowledge Management Activities, Approaches to Knowledge Management, Information Technology (IT) In Knowledge Management, Knowledge Management Systems Implementation, Roles of People in Knowledge Management	06	Decision support and Business Intelligence Systems by Efraim Turban, Ramesh Sharda, Dursun Delen , Pearson,Ninth,2011	Black Board and chalk, PowerPoint
	Artificial Intelligence and Expert Systems: Concepts and Definitions of Artificial Intelligence, Artificial Intelligence Versus Natural Intelligence, Basic Concepts of Expert Systems, Applications of Expert Systems, Structure of Expert Systems, Knowledge Engineering, Development of Expert Systems	06	Decision support and Business Intelligence Systems by Efraim Turban, Ramesh Sharda, Dursun Delen , Pearson,Ninth,2011	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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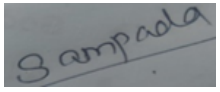

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: INFORMATION TECHNOLOGY CLASS: TYIT-C

SEMESTER: VI MONTH: JANUARY-MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the concepts of information security, Risk Analysis.
- Understand various security areas such as storage, database, Physical, application, operating system.
- Be familiar about the basic designing of secure network.
- Detect intrusion and how to prevent it, introduction to virtual machines and cloud computing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT602, Unit 1, Security in Computing	Information Security Overview: The Importance of Information Protection, The Evolution of Information Security, Justifying Security Investment, Security Methodology, How to Build a Security Program, The Impossible Job, The Weakest Link, Strategy and Tactics, Business Processes vs. Technical Controls.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Risk Analysis: Threat Definition, Types of Attacks, Risk Analysis	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Secure Design Principles: The CIA Triad and Other Models, Defense Models, Zones of Trust, Best Practices for Network Defense.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation

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USIT602, Unit 2, Security in Computing	Authentication and Authorization: Authentication, Authorization	03	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Encryption: A Brief History of Encryption, Symmetric-Key Cryptography, Public Key Cryptography, Public Key Infrastructure.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Storage Security: Storage Security Evolution, Modern Storage Security, Risk Remediation, Best Practices.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Database Security: General Database Security Concepts, Understanding Database Security Layers, Understanding DatabaseLevel Security, Using Application Security, Database Backup and Recovery, Keeping Your Servers Up to Date, Database Auditing and Monitoring.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
USIT602, Unit 3, Security in Computing	Secure Network Design: Introduction to Secure Network Design, Performance, Availability, Security.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Network Device Security: Switch and Router Basics, Network Hardening.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Firewalls: Overview, The Evolution of Firewalls, Core Firewall 12 38 Functions, Additional Firewall Capabilities, Firewall Design.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Wireless Network Security: Radio Frequency Security Basics, DataLink Layer Wireless Security Features, Flaws, and Threats, Wireless Vulnerabilities and Mitigations, Wireless Network Hardening Practices and Recommendations, Wireless Intrusion Detection and Prevention, Wireless Network Positioning and Secure Gateways	03	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
USIT602, Unit 4, Security in Computing	Intrusion Detection and Prevention Systems: IDS Concepts, IDS Types and Detection Models, IDS Features, IDS Deployment Considerations, Security Information and Event Management (SIEM).	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Voice over IP (VoIP) and PBX Security: Background, VoIP Components,VoIP Vulnerabilities and Countermeasures, PBX, TEM: Telecom Expense Management	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Operating System Security Models: Operating System Models, Classic Security Models, Reference Monitor, Trustworthy Computing, International Standards for Operating System Security.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
USIT602, Unit 5, Security in Computing	Virtual Machines and Cloud Computing: Virtual Machines, Cloud Computing.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation

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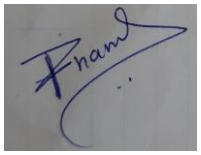
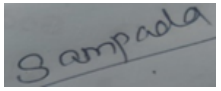
	Secure Application Design: Secure Development Lifecycle, Application Security Practices, Web Application Security, Client Application Security, Remote Administration Security	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Physical Security: Classification of Assets, Physical Vulnerability Assessment, Choosing Site Location for Security, Securing Assets: Locks and Entry Controls, Physical Intrusion Detection.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Asst. Prof. Hemant Wani DEPARTMENT: Information Technology

CLASS: TYIT SEMESTER: VI MONTH: NOV to MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

To develop the understanding of relationship between commerce and cyberspace

To enable learner to understand, explore, and acquire a critical understanding Cyber Law.

To give learners in depth knowledge of Information Technology Act and legal frame work of Right to Privacy, Data Security and Data Protection

To make learner conversant with the social and intellectual property issues emerging from ‘Cyberspace

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-07 Cyber Law Unit 1	**Power of Arrest Without Warrant Under the IT Act, 2000:** A Critique, Crimes of this Millennium, Section 80 of the IT Act, 2000 – A Weapon or a Farce? Forgetting the Line Between Cognizable and Non Cognizable Offences, Necessity of Arrest without Warrant from Any Place, Public or Otherwise, Check and Balances Against Arbitrary Arrests, Arrest for "About to Commit" an Offence Under the IT Act: A Tribute to Draco, Arrest, But NO Punishment! **Cyber Crime and Criminal Justice:** Penalties, Adjudication and Appeals Under the IT Act, 2000: Concept of "Cyber Crime " and the IT Act , 2000, Hacking, Teenage Web Vandals, Cyber Fraud and Cyber Cheating, Virus on the Internet, Defamation, Harassment and Email Abuse, Cyber Pornography, Other IT Act Offences, Monetary Penalties, Adjudication and Appeals Under IT Act , 2000, Network Service Providers, Jurisdiction and Cyber Crime, Nature of Cyber Criminality, Strategies to Tackle Cyber Crime and Trends, Criminal Justice in India and Implications on Cyber Crime	12	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk

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Paper-07 Cyber Law Unit 2	**Contracts in the InfoTech World:** Contracts in the InfoTech World, Click-Wrap and Shrink-Wrap Contract: Status under the Indian Contract Act, 1872, Contract Formation Under the Indian Contract Act, 1872, Contract Formation on the Internet, Terms and Conditions of Contracts. **Jurisdiction in the Cyber World:** Questioning the Jurisdiction and Validity of the Present Law of Jurisdiction, Civil Law of Jurisdiction in India, Cause of Action, Jurisdiction and the Information Technology Act,2000, Foreign Judgments in India, Place of Cause of Action in Contractual and IPR Disputes, Exclusion Clauses in Contracts, Abuse of Exclusion Clauses, Objection of Lack of Jurisdiction, Misuse of the Law of Jurisdiction, Legal Principles on Jurisdiction in the United State of America, Jurisdiction Disputes w.r.t. the Internet in the United State of America	12	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
Paper-07 Cyber Law Unit 3	**Battling Cyber Squatters and Copyright Protection in the Cyber World:** Concept of Domain Name and Reply to Cyber Squatters, Meta-Tagging, Legislative and Other Innovative Moves Against Cyber Squatting, The Battle Between Freedom and Control on the Internet, Works in Which Copyright Subsists and meaning of Copyright, Copyright Ownership and Assignment, License of Copyright, Copyright Terms and Respect for Foreign Works, Copyright Infringement, Remedies and Offences, Copyright Protection of Content on the Internet; Copyright Notice, Disclaimer and Acknowledgement, Downloading for Viewing Content on the Internet, Hyper-Linking and Framing, Liability of ISPs for Copyright Violation in the Cyber World: Legal Developments in the US, Napster and its Cousins: A Revolution on the Internet but a Crisis for Copyright Owners, Computer Software Piracy.	12	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk

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Paper-07 Cyber Law Unit 4	**E-Commerce Taxation:** Real Problems in the Virtual World: A Tug of War on the Concept of „Permanent Establishment‟, Finding the PE in Cross Border E-Commerce, The United Nations Model Tax Treaty, The Law of Double Taxation Avoidance Agreements and Taxable Jurisdiction Over Non-Residents, Under the Income Tax Act, 1961, Tax Agents of Non-Residents under the Income Tax Act,1961 and the Relevance to E-Commerce, Source versus Residence and Classification between Business Income and Royalty, The Impact of the Internet on Customer Duties, Taxation Policies in India: At a Glance.	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
	Digital Signature, Certifying Authorities and E-Governance: Digital Signatures, Digital Signature Certificate, Certifying Authorities and Liability in the Event of Digital Signature Compromise, E-Governance in India: A Warning to Babudom!	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk

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Paper-07 Cyber Law Unit 5	**The Indian Evidence Act of 1872 v. Information Technology Act, 2000:** Status of Electronic Records as Evidence, Proof and Management of Electronic Records; Relevancy, Admissibility and Probative Value of E-Evidence, Proving Digital Signatures, Proof of Electronic Agreements, Proving Electronic Messages, Other Amendments in the Indian Evidence Act by the IT Act, Amendments to the Bankers Books Evidence Act, 1891 and Reserve Bank of India Act, 1934.	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
	Protection of Cyber Consumers in India: Are Cyber Consumers Covered Under the Consumer Protection Act? Goods and Services, Consumer Complaint, Defect in Goods and Deficiency in Services, Restrictive and Unfair Trade Practices, Instances of Unfair Trade Practices, Reliefs Under CPA, Beware Consumers, Consumer Foras, Jurisdiction and Implications on cyber Consumers in India, Applicability of CPA to Manufacturers, Distributors, Retailers and Service Providers Based in Foreign Lands Whose Goods are Sold or Services Provided to a Consumer in India. Amendments in Indian IT Act 2000	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk

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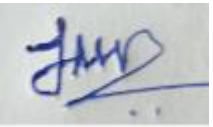

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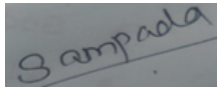

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Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. MONIKA MADHUKAR RAUT DEPARTMENT: IT

CLASS: TYIT-C SEMESTER: IV MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- Students should be able to understand and evaluate efficiency of the Geographic Information System.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Principles of Geographic Information Systems (USIT604) Unit I	A Gentle Introduction to GIS The nature of GIS: Some fundamental observations, Defining GIS, GISystems, GIScience and GIApplications, Spatial data and Geoinformation. The real world and representations of it: Models and modelling, Maps, Databases, Spatial databases and spatial analysis Geographic Information and Spatial Database Models and Representations of the real-world Geographic Phenomena: Defining geographic phenomena, types of geographic phenomena, Geographic fields, Geographic objects, Boundaries	6	Principles of Geographic Information Systems an Introductory Text Book	PPT, Chalk and black board
	Computer Representations of Geographic Information: Regular tessellations, irregular tessellations, Vector representations, Topology and Spatial relationships, Scale and Resolution, Representation of Geographic fields, Representation of Geographic objects Organizing and Managing Spatial Data the Temporal Dimension	6		

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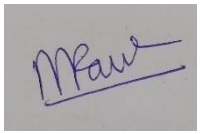
Principles of Geographic Information Systems (USIT604) Unit II	Data Management and Processing Systems Hardware and Software Trends Geographic Information Systems: GIS Software, GIS Architecture and functionality, Spatial Data Infrastructure (SDI) Stages of Spatial Data handling: Spatial data handling and preparation, Spatial Data Storage and maintenance, Spatial Query and Analysis, Spatial Data presentation	6	Principles of Geographic Information Systems an Introductory Text Book	PPT, Chalk and black board
	Database management Systems: Reasons for using a DBMS, Alternatives for data management, the relational data model, Querying the relational database. GIS and Spatial Databases: Linking GIS and DBMS, Spatial database functionality	6		
Principles of Geographic Information Systems (USIT604) Unit III	Spatial Referencing and Positioning Spatial Referencing: Reference surfaces for mapping, Coordinate Systems, Map Projections, Coordinate Transformations Satellite-based Positioning: Absolute positioning, Errors in absolute positioning, Relative positioning, Network positioning, code versus phase measurements, Positioning technology	6	Principles of Geographic Information Systems an Introductory Text Book	PPT, Chalk and black board
	Data Entry and Preparation Spatial Data Input: Direct spatial data capture, Indirect spatial data capture, obtaining spatial data elsewhere Data Quality: Accuracy and Positioning, Positional accuracy, Attribute accuracy, temporal accuracy, Lineage, Completeness, Logical consistency Data Preparation: Data checks and repairs, combining data from multiple sources Point Data Transformation: Interpolating discrete data, Interpolating continuous data	6		
Principles of Geographic Information Systems (USIT604) Unit IV	Spatial Data Analysis Classification of analytical GIS Capabilities Retrieval, classification and measurement: Measurement, Spatial selection queries, Classification Overlay functions: Vector overlay operators,Raster overlay operators Neighbourhood functions: Proximity computations, Computation of diffusion, Flow computation, Raster based surface analysis	6	Principles of Geographic Information Systems an Introductory Text Book	PPT, Chalk and black board

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Analysis: Network analysis, interpolation, terrain modelling GIS and Application models:GPS, Open GIS Standards, GIS Applications and Advances Error Propagation in spatial data processing: How Errors propagate, Quantifying error propagation	6		
Principles of Geographic Information Systems (USIT604) Unit V	Data Visualization GIS and Maps, The Visualization Process Visualization Strategies: Present or explore? The cartographic toolbox: What kind of data do I have? How can I map my data? How to map? How to map qualitative data, how to map quantitative data, How to map the terrain elevation, How to map time series Map Cosmetics, Map Dissemination	12	Principles of Geographic Information Systems an Introductory Text Book	PPT, Chalk and black board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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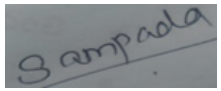

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: TYBSc(IT) DIV:C SEMESTER: VI MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : Understand fundamentals of testing, Level of testing software, verification and validation models and other special tests which helps to enhance knowledge and keep the software uptodate.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper:USIT601, unit:2, Title:SQA	**Fundamentals of testing:** Introduction, Necessity of testing, What is testing? Fundamental test process, The psychology of testing, Historical Perspective of Testing, Definitions of Testing, Approaches to Testing, Testing During Development Life Cycle, Requirement Traceability Matrix, Essentials of Software Testing, Workbench, Important Features of Testing Process, Misconceptions About Testing,	3	Software Testing: Principles, Techniques and Tools	PPT, Blackboard
	Principles of Software Testing, Salient Features of Good Testing, Test Policy, Test Strategy or Test Approach, Test Planning, Testing Process and Number of Defects Found in Testing, Test Team Efficiency, Mutation Testing, Challenges in Testing, Test Team Approach, Process Problems Faced by Testing, Cost Aspect of Testing, Establishing Testing Policy, Methods, Structured Approach to Testing, Categories of Defect, Defect, Error, or Mistake in Software, Developing Test Strategy,	4	Software Testing: Principles, Techniques and Tools	PPT, Blackboard

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	Developing Testing Methodologies (Test Plan), Testing Process, Attitude Towards Testing (Common People Issues), Test Methodologies/Approaches, People Challenges in Software Testing, Raising Management Awareness for Testing, Skills Required by Tester, Testing throughout the software life cycle, Software development models, Test levels, Test types, the targets of testing, Maintenance testing.	5	Software Testing: Principles, Techniques and Tools	PPT, Blackboard
Paper:USIT601, unit:3, Title:SQA	**Unit Testing**: Boundary Value Testing: Normal Boundary Value Testing, Robust Boundary Value Testing, Worst-Case Boundary ValueTesting, Special Value Testing, Examples, Random Testing, Guidelines for Boundary Value Testing,	4	Software Testing: Principles, Techniques and Tools	PPT, Blackboard
	Equivalence Class Testing: Equivalence Classes, Traditional Equivalence Class Testing, Improved Equivalence Class Testing, Edge Testing, Guidelines and Observations.	3	Software Testing: Principles, Techniques and Tools	PPT, Blackboard
	Decision Table–Based Testing: Decision Tables, Decision Table Techniques, Cause-and-Effect Graphing, Guidelines and Observations, **Path Testing**: Program Graphs, DD-Paths, Test Coverage Metrics, Basis Path Testing, Guidelines and Observations, **Data Flow Testing:** Define/Use Testing, Slice-Based Testing, Program Slicing Tools.	5	Software Testing: Principles, Techniques and Tools	PPT, Blackboard
Paper:USIT601, unit:4, Title:SQA	**Software Verification and Validation:**Introduction, Verification, Verification Workbench, Methods of Verification, Types of reviews on the basis od Stage Phase, Entities involved in verification, Reviews in testing lifecycle, Coverage in Verification, Concerns of Verification, Validation, Validation Workbench, Levels of Validation, Coverage in Validation, Acceptance Testing, Management of Verification and Validation, Software development verification and validation activities	6	Software Testing: Principles, Techniques and Tools	PPT, Blackboard

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	V-test Model: Introduction, V-model for software, testing during Proposal stage, Testing during requirement stage, Testing during test planning phase, Testing during design phase, Testing during coding, VV Model, Critical Roles and Responsibilities.	6	Software Testing: Principles, Techniques and Tools	PPT, Blackboard
Paper:USIT601, unit:5, Title:SQA	**Levels of Testing:** Introduction, Proposal Testing, Requirement Testing, Design Testing, Code Review, Unit Testing, Module Testing, Integration Testing, Big-Bang Testing, Sandwich Testing, Critical Path First, Sub System Testing, System Testing, Testing Stages.	3	Software Testing: Principles, Techniques and Tools	PPT, Blackboard
	Special Tests: Introduction, GUI testing, Compatibility Testing, Security Testing, Performance Testing, Volume Testing, Stress Testing, Recovery Testing, Installation Testing, Requirement Testing, Regression Testing, Error Handling Testing, Manual Support Testing, 12 36 Intersystem Testing, Control Testing, Smoke Testing, Adhoc Testing, Parallel Testing, Execution Testing, Operations Testing, Compliance Testing, Usability Testing, Decision Table Testing, Documentation Testing, Training testing, Rapid Testing, Control flow graph, Generating tests on the basis of Combinatorial Designs, State Graph,	5	Software Testing: Principles, Techniques and Tools	PPT, Blackboard
	Risk Associated with New Technologies, Process maturity level of Technology, Testing Adequacy of Control in New technology usage, Object Oriented Application Testing, Testing of Internal Controls, COTS Testing, Client Server Testing, Web Application Testing, Mobile Application Testing, eBusiness eCommerce Testing, Agile Development Testing, Data Warehousing Testing.	4	Software Testing: Principles, Techniques and Tools	PPT, Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12

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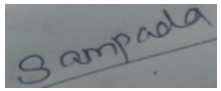

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. KSHITIJA. A. PALAV (MANE)** DEPARTMENT: **INFORMATION TECHNOLOGY** CLASS: **T.Y.B.SC (IT)-A**

SEMESTER: **VI** MONTH: **DECEMBER-APRIL** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the Geographical Information System for processing standard geographic data.
- Make you understand where GIS system can be applied. Learning about different applications (example: GPS).
- How geographic data are capture, updated, profiled, stored and represented in the system.
- Enable to understand software and hardware trends, DBMS and varieties of Models.
- To understand how geographic data can be display with help of Maps and to understand the making of Maps.
- Studying about spatial referencing and positioning of data in system.
- To understand different operations and functions on data and to analyze and explore information in the system.
- To provide better visualization of data both in vector and raster manner.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-04 (USIT604) **Principles of Geographic**	**A Gentle Introduction to GIS** **The nature of GIS:** Some fundamental observations, Defining GIS, GISystems, GIScience and GIApplications, Spatial data and Geoinformation. **The real world and representations of it:** Models and	04	Principles of Geographic Information Systems- An Introductory	Projector, Blackboard, PPTs, Textbook

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Information Systems **Unit No -01**	modelling, Maps, Databases, Spatial databases and spatial analysis		Text Book By Editors: Otto Huisman and Rolf A. , The International Institute of Geoinformation Science and Earth Observation Introduction to Geographic Information Systems Chang Kang-tsung McGrawHill	
	Geographic Information and Spatial Database **Models and Representations of the real world** **Geographic Phenomena:** Defining geographic phenomena, types of geographic phenomena, Geographic fields, Geographic objects, Boundaries	03		
	Computer Representations of Geographic Information: Regular tessellations, irregular tessellations, Vector representations, Topology and Spatial relationships, Scale and Resolution, Representation of Geographic fields, Representation of Geographic objects	03		
	Organizing and Managing Spatial Data **The Temporal Dimension**	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -02	**Data Management and Processing Systems** **Hardware and Software Trends** **Geographic Information Systems:** GIS Software, GIS Architecture and functionality, Spatial Data Infrastructure (SDI)	04	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto	Projector, Blackboard,Textbook PPTs.
	Stages of Spatial Data handling: Spatial data handling and preparation, Spatial Data Storage and maintenance, Spatial Query and Analysis, Spatial Data Presentation.	03		

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	Database management Systems: Reasons for using a DBMS, Alternatives for data management, The relational data model, Querying the relational database.	03	Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	
	GIS and Spatial Databases: Linking GIS and DBMS, Spatial database functionality.	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -03	**Spatial Referencing and Positioning** **Spatial Referencing:** Reference surfaces for mapping, Coordinate Systems, Map Projections, Coordinate Transformations	03	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Projector, Blackboard, Textbook PPTs.
	Satellite-based Positioning: Absolute positioning, Errors in absolute positioning, Relative positioning, Network positioning, code versus phase measurements, Positioning technology	03		
	Data Entry and Preparation **Spatial Data Input:** Direct spatial data capture, Indirect spatial data captiure, Obtaining spatial data elsewhere	02		
	Data Quality: Accuracy and Positioning, Positional accuracy, Attribute accuracy, Temporal accuracy, Lineage, Completeness, Logical consistency	02		
	Data Preparation: Data checks and repairs, Combining data from multiple sources	01		
	Point Data Transformation: Interpolating discrete data, Interpolating continuous data	01		

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	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -04	**Spatial Data Analysis** **Classification of analytical GIS Capabilities** **Retrieval, classification and measurement:** Measurement, Spatial selection queries, Classification	03	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Projector, Blackboard, Textbook PPTs.
	Overlay functions: Vector overlay operators,Raster overlay operators	01		
	Neighbourhood functions: Proximity computations, Computation of diffusion, Flow computation, Raster based surface analysis	03		
	Analysis: Network analysis, interpolation, terrain modelling	01		
	GIS and Application models: GPS, Open GIS Standards, GIS Applications and Advances	02		
	Error Propagation in spatial data processing: How Errors propagate, Quantifying error propagation	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -05	**Data Visualization** **GIS and Maps, The Visualization Process** **Visualization Strategies: Present or explore?**	04	Principles of Geographic Information	Projector, Blackboard, Textbook PPTs.

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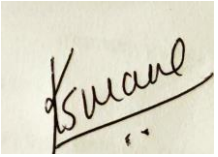
	The cartographic toolbox: What kind of data do I have?, How can I map my data?	03	Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	
	How to map?: How to map qualitative data, How to map quantitative data, How to map the terrain elevation, How to map time series	03		
	Map Cosmetics, Map Dissemination	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			



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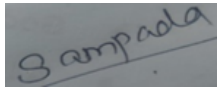

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. PRANALI DAYANAND THAKARE** DEPARTMENT: **INFORMATION TECHNOLOGY**

CLASS: **T.Y.B.SC (IT)-B** SEMESTER: **VI** MONTH: **DECEMBER-APRIL** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the Geographical Information System for processing standard geographic data.
- Make you understand where GIS system can be applied. Learning about different applications (example: GPS).
- How geographic data are capture, updated, profiled, stored and represented in the system.
- Enable to understand software and hardware trends, DBMS and varieties of Models.
- To understand how geographic data can be display with help of Maps and to understand the making of Maps.
- Studying about spatial referencing and positioning of data in system.
- To understand different operations and functions on data and to analyze and explore information in the system.
- To provide better visualization of data both in vector and raster manner.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-04 (USIT604)	**A Gentle Introduction to GIS** **The nature of GIS:** Some fundamental observations, Defining GIS, GISystems, GIScience and GIApplications, Spatial data and Geoinformation.	04	Principles of Geographic Information Systems- An	Projector, Blackboard, PPTs, Textbook

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Principles of Geographic Information Systems **Unit No -01**	**The real world and representations of it:** Models and modelling, Maps, Databases, Spatial databases and spatial analysis		Introductory Text Book By Editors: Otto Huisman and Rolf A. , The International Institute of Geoinformation Science and Earth Observation Introduction to Geographic Information Systems Chang Kang-tsung McGrawHill	
	Geographic Information and Spatial Database Models and Representations of the real world **Geographic Phenomena:** Defining geographic phenomena, types of geographic phenomena, Geographic fields, Geographic objects, Boundaries	03		
	Computer Representations of Geographic Information: Regular tessellations, irregular tessellations, Vector representations, Topology and Spatial relationships, Scale and Resolution, Representation of Geographic fields, Representation of Geographic objects	03		
	Organizing and Managing Spatial Data The Temporal Dimension	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -02	**Data Management and Processing Systems Hardware and Software Trends** **Geographic Information Systems:** GIS Software, GIS Architecture and functionality, Spatial Data Infrastructure (SDI)	04	Principles of Geographic Information Systems- An Introductory Text Book By	Projector, Blackboard,Textbook PPTs.
	Stages of Spatial Data handling: Spatial data handling and preparation, Spatial Data Storage and maintenance, Spatial Query and Analysis, Spatial Data Presentation.	03		

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	Database management Systems: Reasons for using a DBMS, Alternatives for data management, The relational data model, Querying the relational database.	03	Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	
	GIS and Spatial Databases: Linking GIS and DBMS, Spatial database functionality.	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -03	**Spatial Referencing and Positioning** **Spatial Referencing:** Reference surfaces for mapping, Coordinate Systems, Map Projections, Coordinate Transformations	03	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Projector, Blackboard, Textbook PPTs.
	Satellite-based Positioning: Absolute positioning, Errors in absolute positioning, Relative positioning, Network positioning, code versus phase measurements, Positioning technology	03		
	Data Entry and Preparation **Spatial Data Input:** Direct spatial data capture, Indirect spatial data captiure, Obtaining spatial data elsewhere	02		
	Data Quality: Accuracy and Positioning, Positional accuracy, Attribute accuracy, Temporal accuracy, Lineage, Completeness, Logical consistency	02		
	Data Preparation: Data checks and repairs, Combining data from multiple sources	01		

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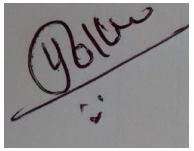
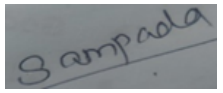
	Point Data Transformation: Interpolating discrete data, Interpolating continuous data	01		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -04	**Spatial Data Analysis** **Classification of analytical GIS Capabilities** **Retrieval, classification and measurement:** Measurement, Spatial selection queries, Classification	03	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Projector, Blackboard, Textbook PPTs.
	Overlay functions: Vector overlay operators,Raster overlay operators	01		
	Neighbourhood functions: Proximity computations, Computation of diffusion, Flow computation, Raster based surface analysis	03		
	Analysis: Network analysis, interpolation, terrain modelling	01		
	GIS and Application models: GPS, Open GIS Standards, GIS Applications and Advances	02		
	Error Propagation in spatial data processing: How Errors propagate, Quantifying error propagation	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -05	**Data Visualization** **GIS and Maps, The Visualization Process** **Visualization Strategies: Present or explore?**	04	Principles of Geographic Information	Projector, Blackboard, Textbook PPTs.

	The cartographic toolbox: What kind of data do I have?, How can I map my data?	03	Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	
	How to map?: How to map qualitative data, How to map quantitative data, How to map the terrain elevation, How to map time series	03		
	Map Cosmetics, Map Dissemination	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **TYBSCIT** SEMESTER:**VI**

MONTH: **NOV-MARCH** ACADEMIC YEAR:**2022-23**

LEARNING OBJECTIVE/S:

The learners will be able to :

Understanding the customers priority for **quality assurance** while developing ...
that **will** be created by the organization, The scope of **Software** Testing applies to ... improvements of the processes through **learning** & innovation
Understand Manual and automated testing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT601 Software Quality Assurance UNIT-1	**Introduction to Quality:** Historical Perspective of Quality, What is Quality? (Is it a fact or perception?), Definitions of Quality, Core Components of Quality, Quality View, Financial Aspect of Quality, Customers, Suppliers and Processes, Total Quality Management (TQM), Quality Principles of Total Quality Management, Quality Management Through Statistical Process Control, Quality Management Through Cultural Changes, Continual (Continuous) Improvement Cycle, Quality in Different Areas, Benchmarking and Metrics, Problem Solving Techniques, Problem Solving Software Tools.	07	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
	Software Quality: Introduction, Constraints of Software Product Quality Assessment, Customer is a King, Quality and Productivity Relationship, Requirements of a Product, Organisation Culture, Characteristics of Software, Software Development Process, Types of Products, Schemes of Criticality Definitions, Problematic Areas of Software Development Life	05	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet

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	Cycle, Software Quality Management, Why Software Has Defects?Processes Related to Software Quality, Quality Management System Structure, Pillars of Quality Management System, Important Aspects of Quality Management..			
USIT601 Software Quality Assurance UNIT-2	**Fundamentals of testing:** Introduction, Necessity of testing, What is testing? Fundamental test process, The psychology of testing,Historical Perspective of Testing, Definitions of Testing, Approaches to Testing, Testing During Development Life Cycle, Requirement Traceability Matrix, Essentials of Software Testing, Workbench,Important Features of Testing Process, Misconceptions About Testing,Principles of Software Testing, Salient Features of Good Testing, Test Policy, Test Strategy or Test Approach, Test Planning, Testing Process and Number of Defects Found in Testing, Test Team Efficiency, Mutation Testing, Challenges in Testing, Test Team Approach, Process Problems Faced by Testing, Cost Aspect of Testing, Establishing Testing Policy, Methods	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
	Structured Approach to Testing, Categories of Defect, Defect, Error, or Mistake in Software, Developing Test Strategy, Developing Testing Methodologies (Test Plan), Testing Process, Attitude Towards Testing (Common People Issues), Test Methodologies/Approaches, People Challenges in Software Testing, Raising Management Awareness for Testing, Skills Required by Tester, Testing throughout the software life cycle, Software development models, Test levels, Test types, the targets of testing, Maintenance testing	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
USIT601	**Unit Testing: Boundary Value Testing:** Normal Boundary ValueTesting, Robust Boundary Value Testing, Worst-Case Boundary ValueTesting, Special Value Testing, Examples,	05	Software Testing:	power point,google meet

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Software Quality Assurance UNIT-3	Random Testing, Guidelines for Boundary Value Testing, **Equivalence Class Testing:** Equivalence Classes, Traditional Equivalence Class Testing, Improved Equivalence Class Testing, Edge Testing, Guidelines and Observations.		Principles, Techniques and Tools M. G. Limaye	
	Decision Table–Based Testing: Decision Tables, Decision Table Techniques, Cause-and-Effect Graphing, Guidelines and Observations, **Path Testing:** Program Graphs, DD-Paths, Test Coverage Metrics, Basis Path Testing, Guidelines and Observations,**Data Flow Testing:** Define/Use Testing, Slice-Based Testing,Program Slicing Tools.	07	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
USIT601 Software Quality Assurance UNIT-4	**Software Verification and Validation:**Introduction, Verification, Verification Workbench, Methods of Verification, Types of reviews on the basis od Stage Phase, Entities involved in verification, Reviews in testing lifecycle, Coverage in Verification, Concerns of Verification, Validation, Validation Workbench, Levels of Validation,Coverage in Validation, Acceptance Testing, Management of Verification and Validation, Software development verification and validation activities	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point
	V-test Model: Introduction, V-model for software, Testing during Proposal stage, Testing during requirement stage, Testing during test planning phase, Testing during design phase, Testing during coding,VV Model, Critical Roles and Responsibilities.	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point
USIT601 Software Quality Assurance	**Levels of Testing:** Introduction, Proposal Testing, Requirement Testing, Design Testing, Code Review, Unit Testing, Module Testing, Integration Testing, Big-Bang Testing, Sandwich	04	Software Testing: Principles, Techniques	power point

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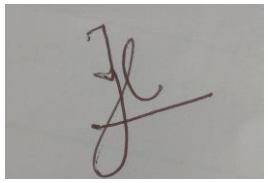
UNIT-5	Testing, Critical Path First, Sub System Testing, System Testing, Testing Stages.		and Tools M. G. Limaye	
	Special Tests: Introduction, GUI testing, Compatibility Testing, Security Testing, Performance Testing, Volume Testing, Stress Testing, Recovery Testing, Installation Testing, Requirement Testing,Regression Testing, Error Handling Testing, Manual Support Testing,Intersystem Testing, Control Testing, Smoke Testing, Adhoc Testing,Parallel Testing, Execution Testing, Operations Testing, Compliance Testing, Usability Testing, Decision Table Testing, Documentation Testing, Training testing, Rapid Testing, Control flow graph, Generating tests on the basis of Combinatorial Designs, State Graph,Risk Associated with New Technologies, Process maturity level of Technology, Testing Adequacy of Control in New technology usage,Object Oriented Application Testing, Testing of Internal Controls COTS Testing, Client Server Testing, Web Application Testing,Mobile Application Testing, eBusiness eCommerce Testing, Agile Development Testing, Data Warehousing Testing.	08	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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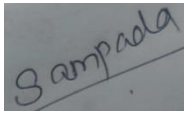

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Late Shri. Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts

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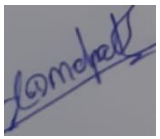
TEACHING PLAN (UNIT PLAN)

NAME OF Archana Malpathak DEPARTMENT:Mathematics _(IT)__ CLASS: FYIT SEMESTER: _II MONTH: ___FEB tO April ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	Gauss Jordan Method, Gauss-Seidel Method, Trapezoidal Rule, Simpson's 1/3 rd and 3/8th Rule, Numerical differentiation for Newton's Forward Difference Interpolation and Backward Difference Interpolation	12	Numerical Techniques- R.M Baphana ,	Blackboard and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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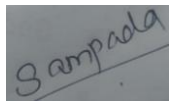

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JANHAVI YATIN NAIK DEPARTMENT: IT

CLASS: FYIT SEMESTER: II MONTH: JANUARY TO APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

1) To understand the basic concept of Micro Computer Systems
2) To develop background knowledge in 8085 Microprocessors

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT202: Fundamentals of Micro Processor and Microcontrollers **Unit 1**	**Microprocessor, microcomputers, and Assembly Language:** Microprocessor,Microprocessor Instruction Set and Computer Languages, From Large Computers to Single-Chip Microcontrollers, Applications.	**4**	**Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar.**	**Blackboard and chalk**
	Microprocessor Architecture and Microcomputer System: Microprocessor Architecture and its operation's, Memory, I/O Devices, Microcomputer System, Logic Devices and Interfacing, Microprocessor-Based System Application	**4**		
	8085 Microprocessor Architecture and Memory Interface: Introduction, 8085 Microprocessor unit, 8085-Based Microcomputer, Memory Interfacing,Interfacing the8085 Memory Segment	**4**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JANHAVI YATIN NAIK DEPARTMENT: IT

CLASS: FYIT SEMESTER: II MONTH: JANUARY TO APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- To understand the concept of Green Technology.
- To learn Green IT regulating Green IT and different standards.
- To understand the concept of minimizing power utilization in technology.
- To know about Green PCs, Green notebooks and servers and Green data centers.
- To know how the way of work is changing and understand implementation of Paperless work.
- To know the concept of Recycling.
- To understand Metrics for Green IT

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT205: Green IT **Unit 1**	**Overview to Green IT:** Problems: Toxins, Power Consumption, Equipment Disposal, Company's Carbon Footprint: Measuring, Details, reasons to bother, Plan for the Future, Cost Savings: Hardware, Power	**6**	**Harnessing Green IT: Principles and Practices by San Murugesan, G. R. Ganadharan AND Green IT by Deepak Shikarpur**	**Blackboard and chalk**
	Regulating Green IT: Laws, Standards and Protocols Introduction, The Regulatory Environment and IT Manufacturers RoHS, REACh, WEEE, Legislating for GHG Emissions and Energy Use of IT Equipment.	**6**		

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	Nonregulatory Government Initiatives, Industry Associations and Standards Bodies, Green Building Standards, Green Data Centres , Social Movements and Greenpeace			
USIT205: Green IT **Unit 2**	**Minimizing Power Usage:** Power Problems, Monitoring Power Usage, Servers, Low-CostOptions, Reducing Power Use, Data De-Duplication, Virtualization, Management, Bigger Drives, Involving the Utility Company, LowPower Computers, PCs, Linux, Components, Servers, ComputerSettings, Storage, Monitors, Power Supplies, Wireless Devices, Software.	**6**	**Harnessing Green IT: Principles and Practices by San Murugesan, G. R. Ganadharan** **AND** **Green IT by Deepak Shikarpur**	**Blackboard and chalk**
	Cooling: Cooling Costs, Power Cost, Causes of Cost, Calculating CoolingNeeds, Reducing Cooling Costs, Economizers, On-Demand Cooling, HP's Solution, Optimizing Airflow, Hot Aisle/Cold Aisle, Raised, Floors, Cable Management, Vapour Seal, Prevent Recirculation of Equipment Exhaust, Supply Air Directly to Heat Sources, Fans, Humidity, Adding Cooling, Fluid Considerations, System Design, Datacentre Design, Centralized Control, Design for Your Needs, Put Everything Together	**6**		
USIT205: Green IT **Unit 3**	**Greening IT**: Green PCs, Notebooks and Servers, Green Data Centres , Green Cloud Computing, Green Data Storage , Green Software, Green Networking and Communications	**4**	**Harnessing Green IT: Principles and Practices by San Murugesan, G. R. Ganadharan** **AND** **Green IT by Deepak Shikarpur**	**Blackboard and chalk**
	Changing the Way of Work: Old Behaviours,startingTop, Process Reengineering with Green in Mind,Analysing the Global Impact of Local Actions, Steps: Water, Recycling, Energy, Pollutants, Teleworkers and Outsourcing, Telecommuting, Outsourcing, how to Outsource.	**4**		

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	Going Paperless: Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Billing, Handheld Computers vs. the Clipboard, Unified Communications, Intranets, What to Include, Building an Intranet, Microsoft Office SharePoint Server 2007, Electronic Data Interchange (EDI), Nuts and Bolts, Value Added Networks, Advantages, Obstacles.	**4**		
USIT205: Green IT **Unit 4**	**Recycling:** Means of Disposal, Recycling, Refurbishing, Make the Decision, Life Cycle, from beginning to end, Life, Cost, Green Design, Recycling Companies, Finding the Best One, Checklist, Certifications, Hard Drive Recycling, Consequences, cleaning a Hard Drive, Pros and cons of each method, CDs and DVDs, good and bad about CD and DVDs disposal, Change the mindset, David vs. America Online.	**6**	**Harnessing Green IT: Principles and Practices by San Murugesan, G. R. Ganadharan** **AND** **Green IT by Deepak Shikarpur**	**Blackboard and chalk**
	Hardware Considerations: Certification Programs, EPEAT, RoHS, Energy Star, Computers, Monitors, Printers, Scanners, All-in-Ones, Thin Clients, Servers, Blade Servers, Consolidation, Products, Hardware Considerations, Planned Obsolescence, Packaging, Toxins, Other Factors, Remote Desktop, Using Remote Desktop, Establishing a Connection	**6**		
USIT205: Green IT **Unit 5**	**Greening Your Information Systems:** Initial Improvement Calculations, Selecting Metrics, Tracking Progress, Change Business Processes, Customer Interaction, Paper Reduction, Green Supply Chain, Improve Technology Infrastructure, Reduce PCs and Servers, Shared Services, Hardware Costs, Cooling.	**6**	**Harnessing Green IT: Principles and Practices by San Murugesan, G. R. Ganadharan** **AND**	**Blackboard and chalk**

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	Staying Green: Organizational Check-ups, Chief Green Officer, Evolution, Sell the CEO, SMART Goals, Equipment Check-ups, Gather Data, Tracking the data, Baseline Data, Benchmarking, Analyse Data, Conduct Audits, Certifications, Benefits, Realities, Helpful Organizations	**6**	**Green IT by Deepak Shikarpur**	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VRUNDA VISHAL GHARAT DEPARTMENT: IT

CLASS:FYIT SEMESTER: II MONTH: December to March ACADEMIC YEAR:2022-2023

LEARNING OBJECTIVE/S:

To understand the concept of Green Technology.

- To learn Green IT regulating Green IT and different standards.
- To understand the concept of minimizing power utilization in technology.
- To know about Green PCs, Green notebooks and servers and Green data centers.
- To know how the way of work is changing and understand implementation of Paperless
- work. To know the concept of Recycling.
- To understand Metrics for Green IT

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Green IT (USIT205) Unit – I	**Overview to Green IT**: Problems: Toxins, Power Consumption, Equipment Disposal, Company's Carbon Footprint: Measuring, Details, reasons to bother, Plan for the Future, Cost Savings: Hardware, Power. **Regulating Green IT**: Laws, Standards and Protocols Introduction, The Regulatory Environment and IT Manufacturers RoHS, REACh, WEEE, Legislating for GHG Emissions and Energy Use of IT Equipment.Nonregulatory Government Initiatives, Industry Associations and Standards Bodies, Green Building Standards, Green Data Centres , Social Movements and Greenpeace.	12	Toby Velte, Anthony Velte, Robert Elsenpeter McGraw Hill	Black board and chalk

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Green IT (USIT205) Unit –II	**Minimizing Power Usage**: Power Problems, Monitoring Power Usage, Servers, Low-CostOptions, Reducing Power Use, Data De-Duplication, Virtualization, Management, Bigger Drives, Involving the Utility Company, LowPower Computers, PCs, Linux, Components, Servers, ComputerSettings, Storage, Monitors, Power Supplies, Wireless Devices, Software. **Cooling:** Cooling Costs, Power Cost, Causes of Cost, Calculating CoolingNeeds, Reducing Cooling Costs, Economizers, On-Demand Cooling, HP's Solution, Optimizing Airflow, Hot Aisle/Cold Aisle, Raised, Floors, Cable Management, Vapour Seal, Prevent Recirculation of Equipment Exhaust, Supply Air Directly to Heat Sources, Fans, Humidity, Adding Cooling, Fluid Considerations, System Design, Datacentre Design, Centralized Control, Design for Your Needs, Put Everything Together.	12	Harnessing Green IT: Principles and Practices San Murugesan, G. R. Ganadharan, Wiley & IEEE	Black board and chalk
Green IT (USIT205) Unit –III	**Greening IT:** Green PCs, Notebooks and Servers, Green Data Centres , Green Cloud Computing, Green Data Storage , Green Software, Green Networking and Communications. Changing the Way of Work: Old Behaviours, starting at the Top, Process Reengineering with Green in Mind, Analysing the Global Impact of Local Actions, Steps: Water, Recycling, Energy, Pollutants, Teleworkers and Outsourcing, Telecommuting, Outsourcing, how to Outsource. **Going Paperless:** Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Billing, Handheld Computers vs. the Clipboard, Unified Communications, Intranets, What to Include, Building an Intranet, Microsoft Office SharePoint Server 2007, Electronic Data Interchange (EDI), Nuts and Bolts, Value Added Networks, Advantages, Obstacles. 12	12	Harnessing Green IT: Principles and Practices San Murugesan, G. R. Ganadharan, Wiley & IEEE	Black board and chalk
Green IT (USIT205)	**Recycling:** Means of Disposal, Recycling, Refurbishing, Make the Decision, Life Cycle, from beginning to end, Life, Cost, Green	12	Harnessing Green IT: Principles and Practices	Black board and chalk

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Unit –IV	Design, Recycling Companies, Finding the Best One, Checklist, Certifications, Hard Drive Recycling, Consequences, cleaning a Hard Drive, Pros and cons of each method, CDs and DVDs, good and bad about CD and DVDs disposal, Change the mindset, David vs. America Online. **Hardware Considerations**: Certification Programs, EPEAT, RoHS, Energy Star, Computers, Monitors, Printers, Scanners, All-in-Ones, Thin Clients, Servers, Blade Servers, Consolidation, Products, Hardware Considerations, Planned Obsolescence, Packaging, Toxins, Other Factors, Remote Desktop, Using Remote Desktop, Establishing a Connection		San Murugesan, G. R. Ganadharan, Wiley & IEEE	
Green IT (USIT205) Unit –V	**Greening Your Information Systems:** Initial Improvement Calculations, Selecting Metrics, Tracking Progress, Change Business Processes, Customer Interaction, Paper Reduction, Green Supply Chain, Improve Technology Infrastructure, Reduce PCs and Servers, Shared Services, Hardware Costs, Cooling. **Staying Green**: Organizational Check-ups, Chief Green Officer, Evolution, Sell the CEO, SMART Goals, Equipment Check-ups, Gather Data, Tracking the data, Baseline Data, Benchmarking, Analyse Data, Conduct Audits, Certifications, Benefits, Realities, Helpful Organizations.	12	Harnessing Green IT: Principles and Practices San Murugesan, G. R. Ganadharan, Wiley & IEEE	Black board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12

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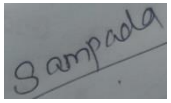

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHA TUSHAR VAZE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.IT - A SEMESTER: II MONTH: DECEMBER TO APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand and realize the Interfacing of memory & various I/O devices with 8085 microprocessors.
- Understand and classify the instruction set of 8085 microprocessor and distinguish the use of different instructions and apply it in assembly language programming.
- Design elementary aspects of Micro Controller based systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 Microprocessor and Microcontroller Unit 2	**Interfacing of I/O Devices** : Basic Interfacing concepts, Interfacing Output Displays, Interfacing Input Devices, Memory Mapped I/O, Testing and Troubleshooting I/O Interfacing Circuits.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Projector,laptop. Black board & Chalk
	Introduction to 8085 Assembly Language Programming: The 8085 Programming Model, Instruction Classification, Instruction, Data and Storage, Writing assembling and	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Projector,laptop. Black board & Chalk

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	Execution of a simple program, Overview of 8085 Instruction Set, Writing and Assembling Program.			
	Introduction to 8085 Instructions: Data Transfer Operations, Arithmetic Operations, Logic Operation, Branch Operation, Writing Assembly Languages Programs, Debugging a Program	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Projector,laptop. Black board & Chalk

PAPER-02 Microprocessor and Microcontroller UNIT-3	**Programming Techniques With Additional Instructions:** Programming Techniques: Looping, Counting and Indexing, Additional Data Transfer and 16-Bit Arithmetic Instructions, Arithmetic Instruction Related to Memory, Logic Operations: Rotate, Logics Operations: Compare, Dynamic Debugging.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Projector,laptop. Black board & Chalk
	Counters and Time Delays: Counters and Time Delays, Illustrative Program: Hexadecimal Counter, Illustrative Program: zero-to-nine (Modulo Ten) Counter, Generating Pulse Waveforms, Debugging Counter and Time-Delay Programs.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Projector,laptop. Black board & Chalk
	Stacks and Sub-Routines: Stack, Subroutine, Restart, Conditional Call, Return Instructions, Advanced Subroutine concepts.	2	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Projector,laptop. Black board & Chalk
	Interrupts: The 8085 Interrupt, 8085 Vectored and Non vectored Interrupts, Restart as S/W Instructions.	2	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Projector,laptop. Black board & Chalk

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Paper 02 Microprocessor and Microcontroller UNIT-4	**Micro Controllers:** Embedded Systems and general purpose computer systems,history, classifications, applications and purpose of embedded systems.	3	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill first 2012 and Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector,laptop. Black board & Chalk
	Embedded Hardware: Memory map, i/o map, interrupt map, processor family,external peripherals, memory – RAM , ROM, types of RAM and ROM, memorytesting, CRC ,Flash memory.	3	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill first 2012 and Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector,laptop. Black board & Chalk
	Peripherals: Control and Status Registers, Device Driver, Timer watch Timer	2	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill first 2012 and Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector,laptop. Black board & Chalk
	The 8051 Microcontrollers: Microcontrollers and Embedded processors, Overview of 8051 family.8051 Microcontroller hardware, Input/output pins, Ports, and Circuits,External Memory.	2	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill first 2012 and Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector,laptop. Black board & Chalk
	8051 Programming in C: Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs.	2	Introduction to embeddedsystems Shibu K V Tata Mcgraw-Hill first 2012 and Embedded Systems Rajkamal Tata Mcgraw-	Projector,laptop. Black board & Chalk

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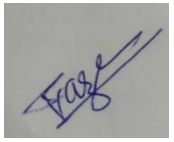
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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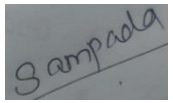

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. **OBJECT ORIENTED PROGRAMMING** DEPARTMENT: Information Technology.

CLASS: F.Y.B.Sc. SEMESTER: II MONTH: Dec To March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- Object-oriented programming aims to implement real-world entities like inheritance, hiding, polymorphism, etc in programming. The main aim of OOP is to bind together the data and the functions that operate on them so that no other part of the code can access this data except that function.

The learners will be able to :

- To understand difference between object oriented and procedural oriented language.
- To understand advantages benefits and applications of object oriented language.
- To understand characteristics of object oriented language.
- To gain how to implement classes, methods and objects.
- To understand constant variables, data types, operators of C++ language.
- To understand use of constructor and destructor and using its implementation.
- To enable use of arrays, pointers and objects.
- To understand polymorphism and its types.
- To understand virtual function and pure virtual function / abstract function.
- To understand inheritance and its types with constructor.
- To understand run time error handling using try, catch and throw key words and benefits of it.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT201 Object Oriented Programming UNIT-I	**INTRODUCTION OF OBJECT-ORIENTED DESIGN** : Introduction, Objects, Class and Instance, Polymorphism, Inheritance, Object-Oriented Analysis , Finding the Objects ,Conceptual Modeling Requirements Model , Analysis Model, The Design Model, The Implementation Model , Test Model, Object-Oriented Analysis and Design, The Evolution of Object Model, Object-Oriented Programming, Object-Oriented Design, Object-Oriented Analysis, Elements of Object Model ,The Role of OOAD in the Software Life Cycle, OOAD Methodologies, Grady Booch Approach, **STARTING WITH C++:** C++ Overview, C++ Character Set, C++ Tokens, Variables, Counting Tokens, Data Types, Qualifiers, Range of Data Types, Your First C++ Program, Structure of a C++ Program, Styles of, Writing C++ Programs, Programming Examples **FEATURES OF C++:** Introduction, Operators and Expressions, Declaring Constants, Type Conversion, Decision Making: An Introduction, Unconditional Branching Using Goto , Introduction to Looping **OPERATORS AND REFERENCES IN C++**: Introduction, Scope Resolution Operator, Reference Variables, The Bool Data Type, The Operator New and Delete, Malloc Vs. New ,Pointer Member Operators	12	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.
USIT201 Object Oriented Programming	**FUNCTION IN C++**: Introduction ,Function Declaration/Prototyping ,,The Main Function in C++,Recursion ,Call by Reference ,Call by Reference Vs Call by Address , Return by	12	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.

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UNIT-II	Reference ,,Inline Function ,Function Overloading ,Function with Default Arguments **CLASS AND OBJECTS IN C++** : Working with Class, Structure in C++ ,Accessing Private Data Passing and Returning Object ,Array of Object ,Friend Function ,Static Class Members ,Constant Member Function **WORKING WITH CONSTRUCTOR AND DESTRUCTOR:** Introduction, Constructor with Parameters, Implicit and Explicit Call to Constructor, Copy Constructor, Dynamic Initialization of Objects, Dynamic Constructor, Destructor **WORKING WITH OPERATOR OVERLOADING:** Introduction, Operator Overloading with Binary Operator Overloading Assignment (=) Operator, Overloading Unary Operators, Overloading Using Friend Function, Rules of Operator Overloading, Type Conversion			
USIT201 Object Oriented Programming UNIT-III	**WORKING WITH INHERITANCE IN C++:** Introduction, Types of Inheritance, Public, Private and Protected Inheritance, Multiple Inheritance, Hierarchical Inheritance, Virtual Base Class, Constructor and Destructor in Inheritance, Containership **POINTERS TO OBJECTS AND VIRTUAL FUNCTIONS:** Pointer to Objects, The This Pointer, What is Binding in C++? , Virtual Functions ,Working of a Virtual Function ,Rules for Virtual Function ,Pure Virtual Function and Abstract Class ,Object Slicing ,Some Facts about Virtual Function ,Virtual Destructor **INPUT-OUTPUT AND MANIPULATORS IN C++:** Introduction, C++ Stream Classes, Unformatted Input/Output, Formatted Input /Output Operations, Manipulators	12	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.
USIT201 Object Oriented Programming	**FILE HANDLING IN C++:** Introduction, File Streams, Opening and Closing a File, File Opening Modes Checking End of File, Random Access in File, Command Line Arguments, Working with Binary Mode Error Handling	12	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.

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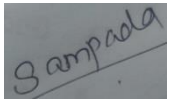
UNIT-IV	**TEMPLATE PROGRAMMING:** Introduction , Function Template , Class Template **EXCEPTION HANDLING IN C++ :** Introduction , Basics of Exception Handling , Exception Handling Mechanism , Programming Examples ,Exception Handling with Class Catching all Exceptions , Specifying Exception for a Function			
USIT201 Object Oriented Programming UNIT-V	**INTRODUCTION TO THE STANDARD TEMPLATE LIBRARY** : Introduction , Components of STL , Containers , Algorithms , Iterators ,Application of Container Classes Function Objects **MANIPULATING STRINGS** :Introduction , Creating (string) Objects , Manipulating String Objects , Relational Operations, String Characteristics , Accessing Characters in Strings , Comparing and Swapping **NEW FEATURES OF ANSI C++ STANDARD** : Introduction ,New Data Types , New Operators , Class Implementation , Namespace Scope , Operator Keywords , New Keywords , New Headers	12	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: IT

CLASS: FY BSc IT SEMESTER:II MONTH: JAN-MAR ACADEMICYEAR: 2022-2023

LEARNING OBJECTIVE/S:

The learners will be able to :

1. Understand what is a microcontroller, microcomputer, embedded system.
2. Understand different components of a micro-controller and their interactions.
3. Become familiar with programming environment used to develop embedded systems .
4. Understand key concepts of embedded systems like IO, timers, interrupts, interaction with peripheral devices .
5. Learn debugging techniques for an embedded system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 Mp/Mc	Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	4	https://www.tutorialspoint.com/embedded_systems Introduction to embedded systems by Shibu K V	POWER POINT PRESENTATION /BLACK BOARD &CHALK
	structure of embedded program, infinite loop compiling, linking and debugging	4		
	Embedded system development Environment – IDE, types of file generated on cross compilation, embedded product development life-cycle, trends in embedded industry.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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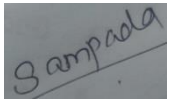

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: FYIT SEMESTER: II

MONTH: January. ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Understand mathematical modelling, types of errors Also conservation laws & engineering problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 - NM, Unit I, Mathematical modeling & engineering problem solving.	Simple Mathematical Model.	1	1. Introductory Methods of Numerical Methods by S. S. Shastri 2. Numerical Methods by Bal Guruswami	Chalk board method.
	Significant Figures, Accuracy and Precision.	2		
	Error Definitions, Round-Off Errors.	3		
	The Taylor Series, Error Propagation.	4		
	Total Numerical Errors, Formulation Errors and Data Uncertainty.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: FYIT SEMESTER: II

MONTH: January. ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Understand problem solving using iteration methods. To learn differentiation using numerical methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 - NM, Unit II, Solutions of Algebraic and Transcendental Equations Interpolation.	The Bisection Method, The Newton-Raphson Method	3	Numerical Methods by Bal Guruswami	Chalk board method.
	The Regula-falsi method, The Secant Method	3		
	Forward Difference, Backward Difference	1		
	Newton's Forward Difference Interpolation, Newton's Backward Difference Interpolation	3		
	Lagrange's Interpolation	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: FYIT SEMESTER: II

MONTH: January. ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Solve Linear Programming problem and Partial Differential Equations using different methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 - NM, Unit V, Linear Programming Partial Differential Equations	Linear optimization problem, Formulation and Graphical solution, Basic solution and Feasible solution	4	Numerical Methods by Bal Guruswami	Chalk board method.
	Classification of Partial Differential Equations of the second order	1		
	Difference equation corresponding to Laplace Equation, Liebman's Iteration Process,	2		
	Bender-Schmidt's Difference Equation corresponding to the parabolic equation, Crank Nicolson's difference equations corresponding to the parabolic equation	4		
	Difference equation corresponding to the Hyperbolic equation.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr.Avinash Sonawane DEPARTMENT: IT

CLASS: F. Y. B.Sc. IT SEMESTER: II MONTH: December to March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

a. Gain an insight into designing web pages.
b. Use different ways of styling web pages using CSS.

PAPER, UNIT, TITLE	**SUBTOPICS**	NO OF LECTURES ALLOTED	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
Paper-III Web Applications Development Unit -I	**Internet and the World Wide Web:** What is Internet? Applications of Internet, E-mail, Telnet, FTP, E-commerce and Ebusiness. Internet Service Providers, Domain Name Server, Internet Address, World Wide Web (WWW): World Wide Web and its Evolution, Uniform Resource Locator (URL), Browsers, Common Features of Browsers, Search Engine, Web Server, HTTP Protocol.	4	Step by Step HTML5, Faithe Wempon, Microsoft Press, 2011	Black Board/PowerPoint Presentation
	HTML5: Introduction, Formatting Text by using Tags, Using Lists, Creating Hyperlinks and Bookmarks, Defining Metadata about an HTML Document, Redirecting to another URL.	4		Black Board/PowerPoint Presentation
	CSS: Implementing Styles using CSS – Stylesheets, Formatting Text and Links using CSS, CSS Selectors, Changing Background, Adding Border, Margin and Padding, Setting Dimensions, Using Inline Container to mark up a part of a text.	4		Black Board/PowerPoint Presentation

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Paper-III Web Applications Development Unit -II	**HTML Page Layout:** Using Layout Elements, Semantic Elements, Creating, Positioning and Formatting Divisions, Floating Divisions next to each other, Responsive Web Design, Inline Frames.	2	Step by Step HTML5, Faithe Wempon, Microsoft Press, 2011	Black Board/PowerPoint Presentation
	HTML Media: Embedding Images, Creating Client-side and Server-side Image Map, adding Favicon, Embedding audio and video on web page.	3		Black Board/PowerPoint Presentation
	HTML Tables: Creating Simple Table, Table Dimension, Merging Table Cells, Formatting Tables: Applying Borders, Background and Foreground fills, Changing Cell Padding, Spacing and Alignment	4		Black Board/PowerPoint Presentation
	HTML Forms: Collecting user input with HTML Forms, Additional Input Types in HTML5.	3		Black Board/PowerPoint Presentation
Paper-III Web Applications Development Unit -III	**JavaScript:** Introduction, Difference between Client-side and Server-side Scripting, JavaScript Variables and Constants, Data Types, Statements, Comments, Functions, Variable Scope, Hoisting, Strict Mode, JavaScript Objects, Dialog Boxes, void Keyword	2	The Complete Reference JavaScript Thomas A. Powell & Fritz Schneider McGrawHill 3 rd 2012	Black Board/PowerPoint Presentation
	Operators: Arithmetic Operators, Assignment Operators, Comparison Operators, Logical Operators, Bitwise Operators	2		Black Board/PowerPoint Presentation
	Statements: Conditional Statements – if else, switch, Loops – while, do while, for, for in, for of, Loop Control – break, continue, labels	2		Black Board/PowerPoint Presentation
	JavaScript Objects: User-defined Objects, with Keyword, Native Objects – Array, String, Date, Math, Number, RegExp	2		Black Board/PowerPoint Presentation
	DOM: Introduction, DOM Properties and Methods. **Browser BOM:** Moving back and forward with History, Cookies	2		Black Board/PowerPoint Presentation
	Events and Event Handlers: HTML Events, DOM Events, DOM Event Listener, onAbort, onBlur, onChange, onClick, onDblClick, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove,	2		Black Board/PowerPoint Presentation

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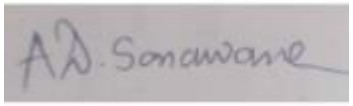
	onMouseOut, onMouseOver, onMouseUp, onReset, onResize, onSelect, on Submit, onUnload			
Paper-III Web Applications Development Unit -IV	**PHP:** Introduction, Server-side Scripting, PHP Syntax and Comments, Variables and Constants, Data Types, Control Structures, Looping, Loop Termination, Functions, PHP Form Handling, PHP Form Validation, Superglobals, PHP Arrays, PHP Strings, PHP RegEx, PHP Numbers, PHP Math, Basic PHP Error	12	PHP & MySQL Novice to Ninja Tom Butler SPD 7th 2022	Black Board/PowerPoint Presentation
Paper-III Web Applications Development Unit -V	**Advanced PHP:** PHP Date and Time, PHP Include, PHP Cookies, PHP Sessions, Validating and Sanitizing Data with PHP Filters	6	PHP & MySQL Novice to Ninja Tom Butler SPD 7th 2022	Black Board/PowerPoint Presentation
	PHP and MySQL Why PHP and MySQL? Connect to MySQL, Creating Database and Tables, Inserting Single and Multiple Rows, Retrieving Last ID, MySQL Prepared, Selecting Data, Updating Data, Deleting Data, Limiting Data	6	PHP & MySQL Novice to Ninja Tom Butler SPD 7th 2022	Black Board/PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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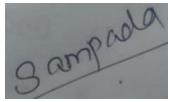

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TEACHING PLAN (UNIT PLAN)

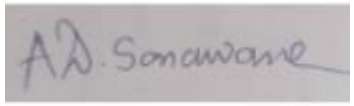
NAME OF THE STAFF: Mr. Avinash Dilip Sonawane DEPARTMENT: Information Technology CLASS: FYIT

SEMESTER: II MONTH: Jan to March ACADEMIC YEAR:2022-2023

Course Objectives: 1) To understand the basic concept of Micro Computer Systems
2) To develop background knowledge in 8085 Microprocessor
3) To write Assembly language Programs of 8085
4) To understand the peripheral devices and interfacing to 8051 Micro Controller and design aspects of Micro Controller

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Fundamentals of Micro Processor and Microcontrollers **USIT202** Unit V	Designing Embedded System with 8051 Microcontroller: Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM 5 th 2012 AND Internet	Black board & Chalk
	Programming embedded systems: structure of embedded program, infinite loop, compiling, linking and debugging	4		Black board & Chalk
	Design and Development: Embedded system, development Environment – IDE, types of file generated on cross compilation, Embedded Product Development cycle and Trends in embedded Industry	4		Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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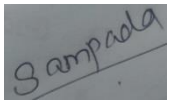

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS: FYIT

SEMESTER: II MONTH: Jan to March ACADEMIC YEAR:2022-2023

Course Objectives: 1) To understand the basic concept of Micro Computer Systems
2) To develop background knowledge in 8085 Microprocessor
3) To write Assembly language Programs of 8085
4) To understand the peripheral devices and interfacing to 8051 Micro Controller and design aspects of Micro Controller

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Fundamentals of Micro Processor and Microcontrollers **USIT202** Unit II	**Interfacing of I/O Devices** Basic Interfacing concepts, Interfacing Output Displays, Interfacing Input Devices, Memory Mapped I/O, Testing and Troubleshooting I/O Interfacing Circuits. **Introduction to 8085 Assembly Language Programming:** The 8085 Programming Model, Instruction Classification, Instruction, Data and Storage, Writing assembling and Execution of a simple program, Overview of 8085 Instruction Set, Writing and Assembling Program. **Introduction to 8085 Instructions:** Data Transfer Operations, Arithmetic Operations, Logic Operation, Branch Operation, Writing Assembly Languages Programs, Debugging a Program.	12	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM 5 th 2012 AND Internet	Black board & Chalk
Fundamentals of Micro Processor and	**Programming Techniques With Additional Instructions:** ProgrammingTechniques: Looping, Counting and Indexing,	12	Microprocessors Architecture, Programming and	Black board & Chalk

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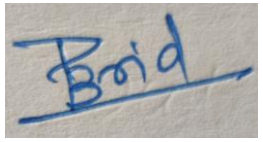
Microcontrollers **USIT202** Unit III	Additional Data Transfer and 16-Bit Arithmetic Instructions, Arithmetic Instruction Related to Memory, Logic Operations: Rotate, Logics Operations: Compare, Dynamic Debugging. **Counters and Time Delays:** Counters and Time Delays, Illustrative Program: Hexadecimal Counter, Illustrative Program: zero-to-nine (Modulo Ten) Counter, Generating Pulse Waveforms, Debugging Counter and Time-Delay Programs. **Stacks and Sub-Routines:** Stack, Subroutine, Restart, Conditional Call, Return Instructions, Advanced Subroutine concepts. **Interrupts:** The 8085 Interrupt, 8085 Vectored and Non vectored Interrupts, Restart as S/W Instructions.		Applications with the 8085. Ramesh Gaonkar PENRAM 5 th 2012 AND Internet	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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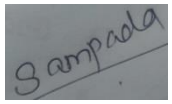

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: RUTUJA PRASHANT GUPTA DEPARTMENT: IT

CLASS: FYIT SEMESTER: II MONTH: DECEMBER TO APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: .

- To understand the concept of Green Technology.
- To learn Green IT regulating Green IT and different standards.
- To understand the concept of minimizing power utilization in technology.
- To know about Green PCs, Green notebooks and servers and Green data centers.
- To know how the way of work is changing and understand implementation of Paperless work.
- To know the concept of Recycling.
- To understand Metrics for Green IT.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Green IT (USIT205) Unit I	**Overview to Green IT:** Problems: Toxins, Power Consumption, Equipment Disposal, Company's Carbon Footprint: Measuring, Details, reasons to bother, Plan for the Future, Cost Savings: Hardware, Power.	04	Programming with c Byron Gottfried Tata McGRAWHill 1996	Black board and chalk
	Regulating Green IT: Laws, Standards and Protocols Introduction, The Regulatory Environment and IT Manufacturers RoHS, REACh, WEEE, Legislating for GHG Emissions and Energy Use of IT Equipment.	04		
	Nonregulatory Government Initiatives, Industry Associations and Standards Bodies, Green Building Standards, Green Data Centres , Social Movements and Greenpeace	04		

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Green IT (USIT205) Unit II	**Minimizing Power Usage:** Power Problems, Monitoring Power Usage, Servers, Low-CostOptions, Reducing Power Use, Data De-Duplication, Virtualization, Management,	04	Harnessing Green IT: Principles and Practices	Black board and chalk
	Bigger Drives, Involving the Utility Company, LowPower Computers, PCs, Linux, Components, Servers, ComputerSettings, Storage, Monitors, Power Supplies, Wireless Devices, Software.	04		
	Cooling: Cooling Costs, Power Cost, Causes of Cost, Calculating CoolingNeeds, Reducing Cooling Costs, Economizers, On-Demand Cooling, HP's Solution, Optimizing Airflow, Hot Aisle/Cold Aisle, Raised, Floors, Cable Management, Vapour Seal, Prevent Recirculation of Equipment Exhaust, Supply Air Directly to Heat Sources, Fans, Humidity, Adding Cooling, Fluid Considerations, System Design, Datacentre Design, Centralized Control, Design for Your Needs, Put Everything Together.	04		
Green IT (USIT205) Unit III	**Greening IT:** Green PCs, Notebooks and Servers, Green Data Centres , Green Cloud Computing, Green Data Storage , Green Software, Green Networking and Communications.	04	Harnessing Green IT: Principles and Practices	Black board and chalk
	Changing the Way of Work: Old Behaviours, starting at the Top, Process Reengineering with Green in Mind, Analysing the Global Impact of Local Actions, Steps: Water, Recycling, Energy, Pollutants, Teleworkers and Outsourcing, Telecommuting, Outsourcing, how to Outsource	04		
	Going Paperless: Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Billing, Handheld Computers	04		

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	vs. the Clipboard, Unified Communications, Intranets, What to Include, Building an Intranet, Microsoft Office SharePoint Server 2007, Electronic Data Interchange (EDI), Nuts and Bolts, Value Added Networks, Advantages, Obstacles.			

Green IT (USIT205) Unit IV	**Recycling:** Means of Disposal, Recycling, Refurbishing, Make the Decision, Life Cycle, from beginning to end, Life, Cost, Green Design, Recycling Companies, Finding the Best One, Checklist, Certifications,	04	Harnessing Green IT: Principles and Practices	Black board and chalk
	Hard Drive Recycling, Consequences, cleaning a Hard Drive, Pros and cons of each method, CDs and DVDs, good and bad about CD and DVDs disposal, Change the mind-set, David vs. America Online.	04		
	Hardware Considerations: Certification Programs, EPEAT, RoHS, Energy Star, Computers, Monitors, Printers, Scanners, All-in-Ones, Thin Clients, Servers, Blade Servers, Consolidation, Products, Hardware Considerations, Planned Obsolescence, Packaging, Toxins, Other Factors, Remote Desktop, Using Remote Desktop, Establishing a Connection	04		

Green IT (USIT205) Unit V	**Greening Your Information Systems:** Initial Improvement Calculations, Selecting Metrics, Tracking Progress, Change Business Processes, Customer Interaction, Paper Reduction, Green Supply Chain, Improve Technology Infrastructure, Reduce PCs and Servers, Shared Services, Hardware Costs, Cooling.	04	Harnessing Green IT: Principles and Practices	Black board and chalk
	Green Supply Chain, Improve Technology Infrastructure, Reduce PCs and Servers, Shared Services, Hardware Costs, Cooling.	04		
	Staying Green: Organizational Check-ups, Chief Green Officer, Evolution, Sell the	04		

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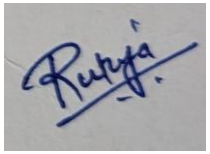
	CEO, SMART Goals, Equipment Check-ups, Gather Data, Tracking the data, Baseline Data, Benchmarking, Analyse Data, Conduct Audits, Certifications, Benefits, Realities, Helpful Organizations.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12



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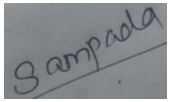

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHA TUSHAR VAZE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.IT - B SEMESTER: II MONTH: DECEMBER-APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand and realize the Interfacing of memory & various I/O devices with 8085 microprocessors.
- Understand and classify the instruction set of 8085 microprocessor and distinguish the use of different instructions and apply it in assembly language programming.
- Design elementary aspects of Micro Controller based systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-02 Microprocessor and Microcontroller UNIT-3	**Programming Techniques With Additional Instructions:** Programming Techniques: Looping, Counting and Indexing, Additional Data Transfer and 16-Bit Arithmetic Instructions, Arithmetic Instruction Related to Memory, Logic Operations: Rotate, Logics Operations: Compare, Dynamic Debugging.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Projector,laptop. Black board & Chalk
	Counters and Time Delays: Counters and Time Delays, Illustrative Program: Hexadecimal Counter, Illustrative Program: zero-to-nine (Modulo Ten) Counter, Generating Pulse Waveforms, Debugging Counter and Time-Delay Programs.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Projector,laptop. Black board & Chalk

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	Stacks and Sub-Routines: Stack, Subroutine, Restart, Conditional Call, Return Instructions, Advanced Subroutine concepts.	2	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Projector,laptop. Black board & Chalk
	Interrupts: The 8085 Interrupt, 8085 Vectored and Non vectored Interrupts, Restart as S/W Instructions.	2	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Projector,laptop. Black board & Chalk
Paper 02 Microprocessor and Microcontroller UNIT-4	**Micro Controllers:** Embedded Systems and general purpose computer systems,history, classifications, applications and purpose of embedded systems.	3	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill first 2012 and Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector,laptop. Black board & Chalk
	Embedded Hardware: Memory map, i/o map, interrupt map, processor family,external peripherals, memory – RAM , ROM, types of RAM and ROM, memorytesting, CRC ,Flash memory.	3	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill first 2012 and Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector,laptop. Black board & Chalk
	Peripherals: Control and Status Registers, Device Driver, Timer watch Timer	2	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill first 2012 and Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector,laptop. Black board & Chalk

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	The 8051 Microcontrollers: Microcontrollers and Embedded processors, Overview of 8051 family.8051 Microcontroller hardware, Input/output pins, Ports, and Circuits,External Memory.	2	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill first 2012 and Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector,laptop. Black board & Chalk
	8051 Programming in C: Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs.	2	Introduction to embeddedsystems Shibu K V Tata Mcgraw-Hill first 2012 and Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector,laptop. Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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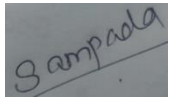

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI **OBJECT ORIENTED PROGRAMMING** DEPARTMENT: CS
CLASS: F.Y.B.Sc.IT DIV:B SEMESTER: II MONTH: DEC TO MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- Object-oriented programming aims to implement real-world entities like inheritance, hiding, polymorphism, etc in programming. The main aim of OOP is to bind together the data and the functions that operate on them so that no other part of the code can access this data except that function.

The learners will be able to :

- To understand difference between object oriented and procedural oriented language.
- To understand advantages benefits and applications of object oriented language.
- To understand characteristics of object oriented language.
- To gain how to implement classes, methods and objects.
- To understand constant variables, data types, operators of C++ language.
- To understand use of constructor and destructor and using its implementation.
- To enable use of arrays, pointers and objects.
- To understand polymorphism and its types.
- To understand virtual function and pure virtual function / abstract function.
- To understand inheritance and its types with constructor.
- To understand run time error handling using try, catch and throw key words and benefits of it.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT201 Object Oriented Programming UNIT-I	**INTRODUCTION OF OBJECT-ORIENTED DESIGN** : Introduction, Objects, Class and Instance, Polymorphism, Inheritance, Object-Oriented Analysis , Finding the Objects ,Conceptual Modeling Requirements Model , Analysis Model, The Design Model, The Implementation Model , Test Model, Object-Oriented Analysis and Design, The Evolution of Object Model, Object-Oriented Programming, Object-Oriented Design, Object-Oriented Analysis, Elements of Object Model ,The Role of OOAD in the Software Life Cycle, OOAD Methodologies, Grady Booch Approach, **STARTING WITH C++:** C++ Overview, C++ Character Set, C++ Tokens, Variables, Counting Tokens, Data Types, Qualifiers, Range of Data Types, Your First C++ Program, Structure of a C++ Program, Styles of, Writing C++ Programs, Programming Examples **FEATURES OF C++:** Introduction, Operators and Expressions, Declaring Constants, Type Conversion, Decision Making: An Introduction, Unconditional Branching Using Goto , Introduction to Looping **OPERATORS AND REFERENCES IN C++**: Introduction, Scope Resolution Operator, Reference Variables, The Bool Data Type, The Operator New and Delete, Malloc Vs. New ,Pointer Member Operators	12	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.
USIT201 Object Oriented Programming UNIT-III	**WORKING WITH INHERITANCE IN C++:** Introduction, Types of Inheritance, Public, Private and Protected Inheritance, Multiple Inheritance, Hierarchical Inheritance, Virtual Base Class, Constructor and Destructor in Inheritance, Containership **POINTERS TO OBJECTS AND VIRTUAL FUNCTIONS:** Pointer to Objects, The This Pointer, What is Binding in C++? , Virtual Functions ,Working of a Virtual Function ,Rules for Virtual Function ,Pure Virtual Function and Abstract Class ,Object Slicing ,Some Facts about Virtual Function ,Virtual Destructor	12	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.

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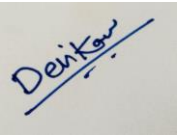
	INPUT-OUTPUT AND MANIPULATORS IN C++: Introduction, C++ Stream Classes, Unformatted Input/Output, Formatted Input /Output Operations, Manipulators			
USIT201 Object Oriented Programming UNIT-IV	**FILE HANDLING IN C++:** Introduction, File Streams, Opening and Closing a File, File Opening Modes Checking End of File, Random Access in File, Command Line Arguments, Working with Binary Mode Error Handling **TEMPLATE PROGRAMMING:** Introduction , Function Template , Class Template **EXCEPTION HANDLING IN C++ :** Introduction , Basics of Exception Handling , Exception Handling Mechanism , Programming Examples ,Exception Handling with Class Catching all Exceptions , Specifying Exception for a Function	12	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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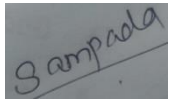

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: FYIT SEMESTER: II

MONTH: January. ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Understand mathematical modelling, types of errors Also conservation laws & engineering problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 - NM, Unit I, Mathematical modeling & engineering problem solving.	Simple Mathematical Model.	1	1. Introductory Methods of Numerical Methods by S. S. Shastri 2. Numerical Methods by Bal Guruswami	Chalk board method.
	Significant Figures, Accuracy and Precision.	2		
	Error Definitions, Round-Off Errors.	3		
	The Taylor Series, Error Propagation.	4		
	Total Numerical Errors, Formulation Errors and Data Uncertainty.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: FYIT SEMESTER: II

MONTH: January. ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Understand problem solving using iteration methods. To learn differentiation using numerical methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 - NM, Unit II, Solutions of Algebraic and Transcendental Equations Interpolation.	The Bisection Method, The Newton-Raphson Method	3	Numerical Methods by Bal Guruswami	Chalk board method.
	The Regula-falsi method, The Secant Method	3		
	Forward Difference, Backward Difference	1		
	Newton's Forward Difference Interpolation, Newton's Backward Difference Interpolation	3		
	Lagrange's Interpolation	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

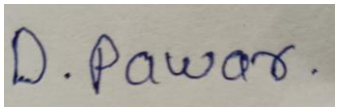
NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: FYIT SEMESTER: II

MONTH: January. ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Solve Linear Programming problem and Partial Differential Equations using different methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 - NM, Unit V, Linear Programming Partial Differential Equations	Linear optimization problem, Formulation and Graphical solution, Basic solution and Feasible solution	4	Numerical Methods by Bal Guruswami	Chalk board method.
	Classification of Partial Differential Equations of the second order	1		
	Difference equation corresponding to Laplace Equation, Liebman's Iteration Process,	2		
	Bender-Schmidt's Difference Equation corresponding to the parabolic equation, Crank Nicolson's difference equations corresponding to the parabolic equation	4		
	Difference equation corresponding to the Hyperbolic equation.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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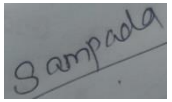

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUILEE KIRAN PATIL. DEPARTMENT: IT

CLASS: FYIT SEMESTER: II MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

- Design static web pages using Hyper Text Markup Language (HTML).
- 2. Enhance the look of web pages by implementing CSS.
- 3. Collect information from the user with HTML Forms.
- 4. Design interactive webpages using client-side script (JavaScript).
- 5. Implement Document Object Model and events in web pages using JavaScript.
- 6. Write and deploy basic PHP code to simplify web development.
- 7. Store and retrieve data from a server using PHP.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Web Applications Development (USIT203) Unit I	**Internet and the World Wide Web**: What is Internet? Applications of Internet, E-mail, Telnet, FTP, E-commerce and Ebusiness. Internet Service Providers, Domain Name Server, Internet Address, World Wide Web (WWW): World Wide Web and its Evolution, Uniform Resource Locator (URL), Browsers, Common Features of Browsers, Search Engine, Web Server, HTTP Protocol. **HTML5:** Introduction, Formatting Text by using Tags, Using Lists, Creating Hyperlinks and Bookmarks, Defining Metadata about an HTML Document, Redirecting to another URL.	12	The Complete Reference HTML & CSS. Thomas A. Powell	Black Board and Chalk

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	CSS: Implementing Styles using CSS – Stylesheets, Formatting Text and Links using CSS, CSS Selectors, Changing Background, Adding Border, Margin and Padding, Setting Dimensions, Using Inline Container to mark up a part of a text.			
Web Applications Development (USIT203) Unit II	**HTML Page Layout**: Using Layout Elements, Semantic Elements, Creating, Positioning and Formatting Divisions, Floating Divisions next to each other, Responsive Web Design, Inline Frames. **HTML Media, Tables and Forms**: Embedding Images, Creating Client-side and Server-side Image Map, adding Favicon, Embedding audio and video on web page. Creating Simple Table, Table Dimension, Merging Table Cells, Formatting Tables: Applying Borders, Background and Foreground fills, Changing Cell Padding, Spacing and Alignment Collecting user input with HTML Forms, Additional Input Types in HTML5.	12	Step by Step HTML5. Faithe Wempen.	Black Board and Chalk
Web Applications Development (USIT203) Unit III	**JavaScript:** Introduction, Difference between Client-side and Server-side Scripting, JavaScript Variables and Constants, Data Types, Statements, Comments, Functions, Variable Scope, Hoisting, Strict Mode, JavaScript Objects, Dialog Boxes, void Keyword **Operators:** Arithmetic Operators, Assignment Operators, Comparison Operators, Logical Operators, Bitwise Operators **Statements:** Conditional Statements – if else, switch, Loops – while, do while, for, for in, for of, Loop Control – break, continue, labels **JavaScript Objects**: User-defined Objects, with Keyword, Native Objects – Array, String, Date, Math, Number, RegExp **DOM**: Introduction, DOM Properties and Methods.	12	Learning Web Design A Beginner's Guide to Html, CSS, JavaScript, And Web Graphics Jennifer Niederst Robbins	Black Board and Chalk

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	Browser BOM: Moving back and forward with History, Cookies **Events and Event Handlers:** HTML Events, DOM Events, DOM Event Listener, onAbort, onBlur, onChange, onClick, onDblClick, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp, onReset, onResize, onSelect, onSubmit, onUnload			
Web Applications Development (USIT203) Unit IV	PHP: Introduction, Server-side Scripting, PHP Syntax and Comments, Variables and Constants, Data Types, Control Structures, Looping, Loop Termination, Functions, PHP Form Handling, PHP Form Validation, Superglobals, PHP Arrays, PHP Strings, PHP RegEx, PHP Numbers, PHP Math, Basic PHP Errors	12	PHP & MySQL Novice to Ninja Tom Butler	Black Board and Chalk
Web Applications Development (USIT203) Unit V	**Advanced PHP**: PHP Date and Time, PHP Include, PHP Cookies, PHP Sessions, Validating and Sanitizing Data with PHP Filters PHP and MySQL **Why PHP and MySQL?** Connect to MySQL, Creating Database and Tables, Inserting Single and Multiple Rows, Retrieving Last ID, MySQL Prepared, Selecting Data, Updating Data, Deleting Data, Limiting Data.	12	PHP & MySQL Novice to Ninja Tom Butler	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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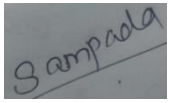

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS: FYIT

SEMESTER: II MONTH: Jan to March ACADEMIC YEAR:2022-2023

Course Objectives: 1) To understand the basic concept of Micro Computer Systems
2) To develop background knowledge in 8085 Microprocessor
3) To write Assembly language Programs of 8085
4) To understand the peripheral devices and interfacing to 8051 Micro Controller and design aspects of Micro Controller

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Fundamentals of Micro Processor and Microcontrollers **USIT202** Unit II	**Interfacing of I/O Devices** Basic Interfacing concepts, Interfacing Output Displays, Interfacing Input Devices, Memory Mapped I/O, Testing and Troubleshooting I/O Interfacing Circuits. **Introduction to 8085 Assembly Language Programming:** The 8085 Programming Model, Instruction Classification, Instruction, Data and Storage, Writing assembling and Execution of a simple program, Overview of 8085 Instruction Set, Writing and Assembling Program. **Introduction to 8085 Instructions:** Data Transfer Operations, Arithmetic Operations, Logic Operation, Branch Operation, Writing Assembly Languages Programs, Debugging a Program.	12	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM 5 th 2012 AND Internet	Black board & Chalk
Fundamentals of Micro Processor and	**Programming Techniques With Additional Instructions:** ProgrammingTechniques: Looping, Counting and Indexing,	12	Microprocessors Architecture, Programming and	Black board & Chalk

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Microcontrollers **USIT202** Unit III	Additional Data Transfer and 16-Bit Arithmetic Instructions, Arithmetic Instruction Related to Memory, Logic Operations: Rotate, Logics Operations: Compare, Dynamic Debugging. **Counters and Time Delays:** Counters and Time Delays, Illustrative Program: Hexadecimal Counter, Illustrative Program: zero-to-nine (Modulo Ten) Counter, Generating Pulse Waveforms, Debugging Counter and Time-Delay Programs. **Stacks and Sub-Routines:** Stack, Subroutine, Restart, Conditional Call, Return Instructions, Advanced Subroutine concepts. **Interrupts:** The 8085 Interrupt, 8085 Vectored and Non vectored Interrupts, Restart as S/W Instructions.		Applications with the 8085. Ramesh Gaonkar PENRAM 5 th 2012 AND Internet	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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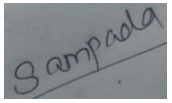

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: RUTUJA PRASHANT GUPTA. DEPARTMENT: INFORMATION TECHNOLOGY

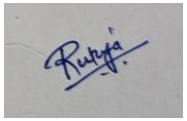
CLASS: F.Y.B.Sc.IT - C SEMESTER: II MONTH: DECEMBER TO APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand and realize the Interfacing of memory & various I/O devices with 8085 microprocessors.
- Understand and classify the instruction set of 8085 microprocessor and distinguish the use of different instructions and apply it in assembly language programming.
- Design elementary aspects of Micro Controller based systems.

PAPER-02 Microprocessor and Microcontroller	**Programming Techniques With Additional Instructions:** Programming Techniques: Looping, Counting and Indexing, Additional Data Transfer and 16-Bit Arithmetic Instructions, Arithmetic Instruction Related to Memory, Logic Operations: Rotate, Logics Operations: Compare, Dynamic Debugging.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Projector,laptop. Black board & Chalk
UNIT-3	**Counters and Time Delays:** Counters and Time Delays, Illustrative Program: Hexadecimal Counter, Illustrative Program: zero-to-nine (Modulo Ten) Counter, Generating Pulse Waveforms, Debugging Counter and Time-Delay Programs.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Projector,laptop. Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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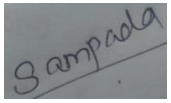

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Namita Nitin Rode. **OBJECT ORIENTED PROGRAMMING** DEPARTMENT: Information Technology.

CLASS: F.Y.B.Sc. SEMESTER: II MONTH: Dec To March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- Object-oriented programming aims to implement real-world entities like inheritance, hiding, polymorphism, etc in programming. The main aim of OOP is to bind together the data and the functions that operate on them so that no other part of the code can access this data except that function.

The learners will be able to :

- To understand difference between object oriented and procedural oriented language.
- To understand advantages benefits and applications of object oriented language.
- To understand characteristics of object oriented language.
- To gain how to implement classes, methods and objects.
- To understand constant variables, data types, operators of C++ language.
- To understand use of constructor and destructor and using its implementation.
- To enable use of arrays, pointers and objects.
- To understand polymorphism and its types.
- To understand virtual function and pure virtual function / abstract function.
- To understand inheritance and its types with constructor.
- To understand run time error handling using try, catch and throw key words and benefits of it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

USIT201 Object Oriented Programming UNIT-I	**INTRODUCTION OF OBJECT-ORIENTED DESIGN** : Introduction, Objects, Class and Instance, Polymorphism, Inheritance, Object-Oriented Analysis , Finding the Objects ,Conceptual Modeling Requirements Model , Analysis Model, The Design Model, The Implementation Model , Test Model, Object-Oriented Analysis and Design, The Evolution of Object Model, Object-Oriented Programming, Object-Oriented Design, Object-Oriented Analysis, Elements of Object Model ,The Role of OOAD in the Software Life Cycle, OOAD Methodologies, Grady Booch Approach, **STARTING WITH C++:** C++ Overview, C++ Character Set, C++ Tokens, Variables, Counting Tokens, Data Types, Qualifiers, Range of Data Types, Your First C++ Program, Structure of a C++ Program, Styles of, Writing C++ Programs, Programming Examples **FEATURES OF C++:** Introduction, Operators and Expressions, Declaring Constants, Type Conversion, Decision Making: An Introduction, Unconditional Branching Using Goto , Introduction to Looping **OPERATORS AND REFERENCES IN C++**: Introduction, Scope Resolution Operator, Reference Variables, The Bool Data Type, The Operator New and Delete, Malloc Vs. New ,Pointer Member Operators	12	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.
USIT201 Object Oriented Programming UNIT-II	**FUNCTION IN C++**: Introduction ,Function Declaration/Prototyping ,,The Main Function in C++,Recursion ,Call by Reference ,Call by Reference Vs Call by Address , Return by Reference ,,Inline Function ,Function Overloading ,Function with Default Arguments **CLASS AND OBJECTS IN C++** : Working with Class, Structure in C++ ,Accessing Private Data Passing and Returning Object ,Array of Object ,Friend Function ,Static Class Members ,Constant Member Function **WORKING WITH CONSTRUCTOR AND DESTRUCTOR:** Introduction, Constructor with Parameters, Implicit and Explicit Call to	12	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.

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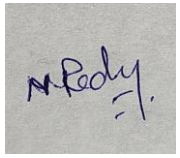
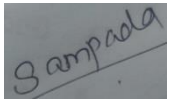
	Constructor, Copy Constructor, Dynamic Initialization of Objects, Dynamic Constructor, Destructor **WORKING WITH OPERATOR OVERLOADING:** Introduction, Operator Overloading with Binary Operator Overloading Assignment (=) Operator, Overloading Unary Operators, Overloading Using Friend Function, Rules of Operator Overloading, Type Conversion			
USIT201 Object Oriented Programming UNIT-III	**WORKING WITH INHERITANCE IN C++:** Introduction, Types of Inheritance, Public, Private and Protected Inheritance, Multiple Inheritance, Hierarchical Inheritance, Virtual Base Class, Constructor and Destructor in Inheritance, Containership **POINTERS TO OBJECTS AND VIRTUAL FUNCTIONS:** Pointer to Objects, The This Pointer, What is Binding in C++? , Virtual Functions ,Working of a Virtual Function ,Rules for Virtual Function ,Pure Virtual Function and Abstract Class ,Object Slicing ,Some Facts about Virtual Function ,Virtual Destructor **INPUT-OUTPUT AND MANIPULATORS IN C++:** Introduction, C++ Stream Classes, Unformatted Input/Output, Formatted Input /Output Operations, Manipulators	12	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHA TUSHAR VAZE DEPARTMENT: IT CLASS: FYIT-DIV C

SEMESTER: SEM-2 MONTH: DECEMBER -APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

- Perform object oriented programming to develop solution to problems demonstrating usage of control structures, modularity, I/O and other standard language constructs.
- Demonstrate adeptness of object oriented programming to develop solution to problem demonstration usage of data abstraction, encapsulation, and inheritance.

PAPER, TITLE,UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 1 OBJECT ORIENTED PROGRAMMING UNIT 4	**FILE HANDLING IN C++:** Introduction, File Streams, Opening and Closing a File,File Opening Modes Checking End of File, Random Access in File, Command LineArguments, Working with Binary Mode Error Handling	5	Object-oriented Programming C++ Simplified by Hari Mohan Pandey	PROJECTOR,LAPTOP, BLACK BOARD AND CHALK
	TEMPLATE PROGRAMMING: Introduction , Function Template , ClassTemplate	3	Object-oriented Programming C++ Simplified by Hari Mohan Pandey	

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	EXCEPTION HANDLING IN C++ : Introduction , Basics of Exception Handling ,Exception Handling Mechanism , Programming Examples Exception Handling with Class Catching all Exceptions , Specifying Exception for a Function	4	Object-oriented Programming C++ Simplified by Hari Mohan Pandey	
PAPER 1 OBJECT ORIENTED PROGRAMMING UNIT 5	INTRODUCTION TO THE STANDARD TEMPLATE LIBRARY : Introduction ,Components of STL , Containers , Algorithms , Iterators ,Application of Container Classes Function Objects	4	Object Oriented Programming with C++ by E.Balagurusamy	PROJECTOR,LAPTOP, BLACK BOARD AND CHALK
	MANIPULATING STRINGS :Introduction , Creating (string) Objects ,Manipulating String Objects , Relational Operations, String Characteristics, Accessing Characters in Strings , Comparing and Swapping	4	Object Oriented Programming with C++ by E.Balagurusamy	
	NEW FEATURES OF ANSI C++ STANDARD : Introduction ,New Data Types, New Operators , Class Implementation , Namespace Scope , Operator Keywords, New Keywords , New Headers.	4	Object Oriented Programming with C++ by E.Balagurusamy	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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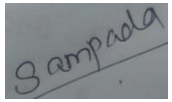

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: FYIT SEMESTER: II

MONTH: January. ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Understand mathematical modelling, types of errors Also conservation laws & engineering problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 - NM, Unit I, Mathematical modeling & engineering problem solving.	Simple Mathematical Model.	1	1. Introductory Methods of Numerical Methods by S. S. Shastri 2. Numerical Methods by Bal Guruswami	Chalk board method.
	Significant Figures, Accuracy and Precision.	2		
	Error Definitions, Round-Off Errors.	3		
	The Taylor Series, Error Propagation.	4		
	Total Numerical Errors, Formulation Errors and Data Uncertainty.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: FYIT SEMESTER: II

MONTH: January. ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Understand problem solving using iteration methods. To learn differentiation using numerical methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 - NM, Unit II, Solutions of Algebraic and Transcendental Equations Interpolation.	The Bisection Method, The Newton-Raphson Method	3	Numerical Methods by Bal Guruswami	Chalk board method.
	The Regula-falsi method, The Secant Method	3		
	Forward Difference, Backward Difference	1		
	Newton's Forward Difference Interpolation, Newton's Backward Difference Interpolation	3		
	Lagrange's Interpolation	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: FYIT SEMESTER: II

MONTH: January. ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Solve Linear Programming problem and Partial Differential Equations using different methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 - NM, Unit V, Linear Programming Partial Differential Equations	Linear optimization problem, Formulation and Graphical solution, Basic solution and Feasible solution	4	Numerical Methods by Bal Guruswami	Chalk board method.
	Classification of Partial Differential Equations of the second order	1		
	Difference equation corresponding to Laplace Equation, Liebman's Iteration Process,	2		
	Bender-Schmidt's Difference Equation corresponding to the parabolic equation, Crank Nicolson's difference equations corresponding to the parabolic equation	4		
	Difference equation corresponding to the Hyperbolic equation.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. (Mrs.) Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: FYIT SEMESTER: I**I** MONTH: NOV to MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

To understand the peripheral devices and interfacing to 8051 Micro Controller and design aspects of Micro Controller

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 Micro Processor and Microcontrollers Unit 4	**Micro Controllers:** Embedded Systems and general purpose computer systems, history, classifications, applications and purpose of embedded systems	2	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Embedded Hardware: Memory map, i/o map, interrupt map, processor family, external peripherals, memory – RAM , ROM, types of RAM and ROM, memory testing, CRC ,Flash memory	3	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Peripherals: Control and Status Registers, Device Driver, Timer watch Timer	2	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And	Projector, Laptop, Black board & Chalk

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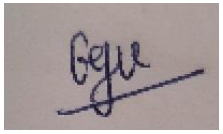
			Embedded Systems Rajkamal Tata Mcgraw-Hill	
	The 8051 Microcontrollers: Microcontrollers and Embedded processors, Overview of 8051 family.8051 Microcontroller hardware, Input/output pins, Ports, and Circuits, External Memory.	2	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	8051 Programming in C: Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs.	2	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Programming embedded systems: structure of embedded program, infinite loop, compiling, linking and debugging.	2	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
Paper-02 Micro Processor and Microcontrollers Unit 5	**Designing Embedded System with 8051 Microcontroller:** Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Programming embedded systems: structure of embedded program, infinite loop, compiling, linking and debugging.	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And	Projector, Laptop, Black board & Chalk

			Embedded Systems Rajkamal Tata Mcgraw-Hill	
	Design and Development: Embedded system, development Environment – IDE, types of file generated on cross compilation, Embedded Product Development cycle and Trends in embedded Industry	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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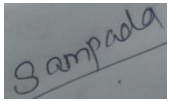

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

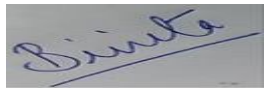
CLASS: F. Y. B.Sc. IT SEMESTER: II MONTH: January to March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

a. Gain an insight into designing web pages.
b. Use different ways of styling web pages using CSS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Web Applications Development Unit -II	**HTML Page Layout:** Using Layout Elements, Semantic Elements, Creating, Positioning and Formatting Divisions, Floating Divisions next to each other, Responsive Web Design, Inline Frames.	2	Step by Step HTML5, Faithe Wempon, Microsoft Press, 2011	Black Board/PowerPoint Presentation
	HTML Media: Embedding Images, Creating Client-side and Server-side Image Map, adding Favicon, Embedding audio and video on web page.	3		Black Board/PowerPoint Presentation
	HTML Tables: Creating Simple Table, Table Dimension, Merging Table Cells, Formatting Tables: Applying Borders, Background and Foreground fills, Changing Cell Padding, Spacing and Alignment	4		Black Board/PowerPoint Presentation
	HTML Forms: Collecting user input with HTML Forms, Additional Input Types in HTML5.	3		Black Board/PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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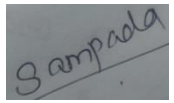

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gauri Gaurav Vartrak DEPARTMENT: Information Technology

CLASS: MScIT SEMESTER: III MONTH: SEP to DEC ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- This course aims to provide conceptual understanding of developing strong foundation in general writing, including research proposal and reports.
- It covers the technological developing skills for writing Article, Blog, E-Book, Commercial web Page design, Business Listing Press Release, E-Listing and Product Description.
- This course aims to provide conceptual understanding of innovation and entrepreneurship development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-01 **Technical Writing and Entrepreneurship Development**, Unit-3	**Creating Graphics:** The Functions of Graphics, The Characteristics of an Effective Graphic, Understanding the Process of Creating Graphics, Using Color Effectively, Choosing the Appropriate Kind of Graphic, Creating Effective Graphics for Multicultural Readers.	3	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet
	Researching Your Subject: Understanding the Differences Between Academic and Workplace Research, Understanding the Research Process, Conducting Secondary Research, Conducting Primary Research,	3	Technical Communication - Mike Markel	Laptop, PPT, Google Meet

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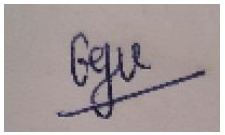
			Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	
	Research and Documentation: Literature Reviews, Interviewing for Information, Documenting Sources, Copyright, Paraphrasing, Questionnaires.	3	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet
	Report Components: Abstracts, Introductions, Tables of Contents, Executive Summaries, Feasibility Reports, Investigative Reports, Laboratory Reports, Test Reports, Trip Reports, Trouble Reports	3	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet
	Managing innovation within firms: Organisations and innovation, The dilemma of innovation management, Innovation dilemma in low technology sectors, Dynamic	2	Technical Communication - Mike Markel	Laptop, PPT, Google Meet

Paper-01 **Technical Writing and Entrepreneurship Development**, Unit-5	capabilities, Managing uncertainty, Managing innovation projects		Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	
	Operations and process innovation: Operations management, The nature of design and innovation in the context of operations, Process design, Process design and innovation	3	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet
	Managing intellectual property: Intellectual property, Trade secrets, An introduction to patents, Trademarks, Brand names, Copyright	2	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet
	Management of research and development: What is research and development?, R&D management and the industrial context, R&D investment and company success, Classifying R&D, R&D management and its link with	3	Technical Communication - Mike Markel	Laptop, PPT, Google Meet

	business strategy, Strategic pressures on R&D, Which business to support and how?, Allocation of funds to R&D, Level of R&D expenditure		Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	
	Managing R&D projects: Successful technology management, The changing nature of R&D management, The acquisition of external technology, Effective R&D management, The link with the product innovation process, Evaluating R&D projects.	2	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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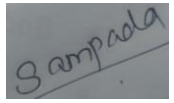

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: MSC(IT) PART 1 SEMESTER: I MONTH: OCTOBER-DECEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
Develop in depth understanding of the key technologies in data science and business analytics: data mining, machine learning, visualization techniques, predictive modeling, and statistics. Practice problem analysis and decision-making. Gain practical, hands-on experience with statistics programming languages and big data tools through coursework and appliedresearch experiences.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: PSIT102 unit:3, Title: : Data Science	Assess Superstep: Assess Superstep, Errors, Analysis of Data, Practical Actions, Engineering a Practical Assess Superstep,	12	Principles of Data Science Sinan Ozdemir PACKT 2016	PPT, Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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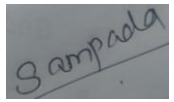

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.).Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. SEMESTER: I MONTH: September-January ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Understand the key technologies in data science and business analytics: data mining, machine learning, visualization techniques, predictive modeling, and statistics.
b. Practice problem analysis and decision-making.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Data Science Unit –I	**Data Science Technology Stack:** Rapid Information Factory Ecosystem, Data Science Storage Tools, Data Lake, Data Vault, DataWarehouse Bus Matrix, Data Science Processing Tools ,Spark, Mesos,Akka , Cassandra, Kafka, Elastic Search, R ,Scala, Python, MQTT, The Future	4	Practical Data Science Andreas François Vermeulen	Powerpoint presentation through Google Meet
	Layered Framework: Definition of Data Science Framework, Cross-Industry Standard Process for Data Mining (CRISP-DM), Homogeneous Ontology for Recursive Uniform Schema, The TopLayers of a Layered Framework, Layered Framework for High-LevelData Science and Engineering	4		Powerpoint presentation through Google Meet
	Business Layer: Business Layer, Engineering a Practical BusinessLayer	2		Powerpoint presentation through Google Meet
	Utility Layer: Basic Utility Design, Engineering a Practical Utility Layer	2		Powerpoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.) Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: I MONTH: September-January ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

a. understand the key technologies in data science and business analytics: data mining, machine learning, visualization techniques, predictive modeling, and statistics.
.b. Practice problem analysis and decision-making.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Data Science Unit –II	**Three Management Layers:** Operational Management Layer, Processing-Stream Definition and Management, Audit, Balance, andControl Layer, Balance, Control, Yoke Solution, Cause-and-Effect, Analysis System, Functional Layer, Data Science Process	6	Practical Data Science Andreas François Vermeulen	Powerpoint presentation through Google Meet
	Retrieve Superstep : Data Lakes, Data Swamps, Training the Trainer Model, Understanding the Business Dynamics of the Data Lake, Actionable Business Knowledge from Data Lakes, Engineering a Practical Retrieve Superstep, Connecting to Other Data Sources,	6		Powerpoint presentation through Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.) Sampada Deshmukh DEPARTMENT: IT

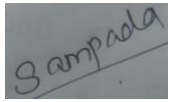
CLASS: Msc. I. T SEMESTER: I MONTH: September-January ACADEMIC YEAR: 2021-2022

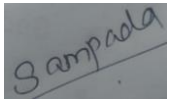
LEARNING OBJECTIVE/S:
The learners will be able to :

a. understand the key technologies in data science and business analytics: data mining, machine learning, visualization techniques, predictive modeling, and statistics.
.b. Practice problem analysis and decision-making.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Data Science Unit –V	**Transform Superstep:** Univariate Analysis, Bivariate Analysis, Multivariate Analysis, Linear Regression, Logistic Regression, Clustering Techniques, ANOVA, Principal Component Analysis (PCA), Decision Trees, Support Vector Machines, Networks, Clusters, and Grids, Data Mining, Pattern Recognition, Machine Learning, Bagging Data,Random Forests, Computer Vision (CV) , Natural Language Processing (NLP), Neural Networks, TensorFlow.	9	Practical Data Science Andreas François Vermeulen	Powerpoint presentation through Google Meet
	Organize and Report Supersteps : Organize Superstep, Report Superstep, Graphics, Pictures, Showing the Difference	3		Powerpoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF 

SIGNATURE OF THE H.O.D. 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. PALAV (MANE)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**MSC(IT)**_____ SEMESTER: ____**I**_____ MONTH: _ **SEPTEMBER-DECEMBER**_____ ACADEMIC YEAR: _____**2022-2023**_____

LEARNING OBJECTIVE/S:

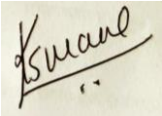
The learners will be able to :

- **Understand Soft computing concepts like fuzzy logic, neural networks and genetic algorithm, where Artificial Intelligence is mother branch of all.**
- **All these techniques will be more effective to solve the problem efficiently. Identify and describe soft computing techniques and their roles in building intelligent machines.**
- **Recognize the feasibility of applying a soft computing methodology or a particular problem**
- **Apply fuzzy logic and reasoning to handle uncertainty and solve engineering problems**
- **Apply genetic algorithms to combinatorial optimization problems**
- **Apply neural networks for classification and regression problems**
- **Effectively use existing software tools to solve real problems using a soft computing approach**
- **Evaluate and compare solutions by various soft computing approaches for a given problem.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT104 Soft Computing Techniques **Unit No -03**	UnSupervised Learning Networks: Fixed weight competitive nets, Kohonen self-organizing feature maps, learning vectors quantization, counter propogation networks, adaptive resonance theory networks. Special Networks: Simulated annealing, Boltzman machine, Gaussian Machine, Cauchy Machine, Probabilistic neural net, cascade correlation network, cognition network, neo-cognition network, cellular neural network, optical neural network.	05 05	Principles of Soft computing S.N.Sivanandam S.N.Deepa Wiley 3Rd 2019	Blackboard, Chalk and Duster. PPts.

	Third Generation Neural Networks: Spiking Neural networks, convolutional neural networks, deep learning neural networks, extreme learning machine model.	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	Introduction to Fuzzy Logic, Classical Sets and Fuzzy sets: Classical sets, Fuzzy sets. Classical Relations and Fuzzy Relations: Cartesian Product of relation, classical relation, fuzzy relations, tolerance and equivalence relations, non-iterative fuzzy sets. Membership Function: features of the membership functions, fuzzification, methods of membership value assignments. Defuzzification: Lambda-cuts for fuzzy sets, Lambda-cuts for fuzzy relations, Defuzzification methods. Fuzzy Arithmetic and Fuzzy measures: fuzzy arithmetic, fuzzy measures, measures of fuzziness, fuzzy integrals.	02 03 02 02 03	Principles of Soft computing S.N.Sivanandam S.N.Deepa Wiley 3Rd 2019	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	Fuzzy Rule base and Approximate reasoning: Fuzzy proportion, formation of rules, decomposition of rules, aggregation of fuzzy rules, fuzzy reasoning, fuzzy inference systems,Fuzzy logic control systems, control system design, architecture and operation of FLC system, FLC system models and applications of FLC System. Genetic Algorithm: Biological Background, Traditional optimization and search techniques, genetic algorithm and search space, genetic algorithm vs. traditional algorithms, basic terminologies, simple genetic algorithm, general genetic algorithm, operators in genetic algorithm, stopping condition for genetic algorithm flow, constraints in genetic algorithm, problem solving using genetic algorithm, the schema theorem, classification of genetic algorithm, Holland classifier systems, genetic programming, advantages and limitations and applications of genetic algorithm.	03 06	Principles of Soft computing S.N.Sivanandam S.N.Deepa Wiley 3Rd 2019	Blackboard, Chalk and Duster. PPts.

	Differential Evolution Algorithm, Hybrid soft computing techniques – neuro – fuzzy hybrid, genetic neuro-hybrid systems, genetic fuzzy hybrid and fuzzy genetic hybrid systems.	03		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			



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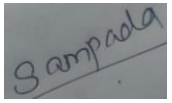

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. A. PALAV (MANE)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**MSC(IT)**_____ SEMESTER: ____**III**_____ MONTH: _____ **SEPTEMBER-DECEMBER** _____ ACADEMIC YEAR: _____**2022-2023**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

Understanding Human learning aspects.

Understanding primitives in learning process by computer.

Understanding nature of problems solved with Machine Learning

- Understand the key issues in Machine Learning and its associated applications in intelligent business and scientific computing.
- Acquire the knowledge about classification and regression techniques where a learner will be able to explore his skill to generate data base knowledge using the prescribed techniques.
- Understand and implement the techniques for extracting the knowledge using machine learning methods.
- Achieve adequate perspectives of big data analytics in various applications like recommender systems, social media applications etc.
- Understand the statistical approach related to machine learning. He will also Apply the algorithms to a real-world problem, optimize the models learned and report on the expected accuracy that can be achieved by applying the models.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Elective 2 PSIT303a Machine Learning **Unit No -03**	**Linear Models:** Least Squares method, Multivariate Linear Regression, Regularized Regression, Using Least Square regression for Classification. Perceptron, Support Vector Machines, Soft Margin SVM, Obtaining probabilities from Linear classifiers, Kernel methods for non-Linearity.	12	Machine Learning: The Art and Science of Algorithms that Make Sense of Data Peter Flach Cambridge University Press 2012	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	**Logic Based and Algebraic Model: Distance Based Models:** Neighbours and Examples, Nearest Neighbours Classification, Distance based clustering-K means Algorithm, Hierarchical clustering, **Rule Based Models:** Rule learning for subgroup discovery, Association rule mining. **Tree Based Models:** Decision Trees, Ranking and Probability estimation Trees, Regression trees, Clustering Trees.	06 03 03	Machine Learning: The Art and Science of Algorithms that Make Sense of Data Peter Flach Cambridge University Press 2012	Blackboard, Chalk and Duster. PPts.

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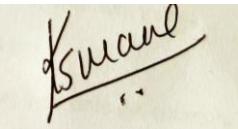
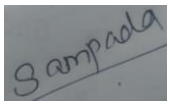
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	Probabilistic Model: Normal Distribution and Its Geometric Interpretations, Naïve Bayes Classifier, Discriminative learning with Maximum likelihood, Probabilistic Models with Hidden variables: Estimation-Maximization Methods, Gaussian Mixtures, and Compression based Models. **Trends In Machine Learning :** Model and Symbols- Bagging and Boosting, Multitask learning, Online learning and Sequence Prediction, Data Streams and Active Learning, Deep Learning, Reinforcement Learning.	07 05	Machine Learning: The Art and Science of Algorithms that Make Sense of Data Peter Flach Cambridge University Press 2012	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.).Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. SEMESTER: III MONTH: September-December ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

a. understad the developing strong foundation in general writing, including research proposal and reports.
b. prepare technological developing skills for writing Article, Blog, E-Book, Commercial web Page design, Business Listing Press Release, E-Listing and Product Description.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Technical Writing And Entrepreneurship Development Unit –II	**Introduction to Content Writing:** Types of Content (Article, Blog, E-Books, Press Release, Newsletters Etc), Exploring Content Publication Channels. Distribution of your content across various channels.	4	Handbook of Technical Writing Gerald J. Alred , Charles T. Brusaw , Walter E. Oliu	Google Meet with Powerpoint Presentation
	Blog Creation: Understand the psychology behind your web traffic, Creating killing landing pages which attract users, Using Landing Page Creators, Setting up Accelerated Mobile Pages, Identifying UI UX Experience of your website or blog.	4		Google Meet with Powerpoint Presentation
	Organizing Your Information: Understanding Three Principles for Organizing Technical Information, Understanding Conventional Organizational Patterns	2		Google Meet with Powerpoint Presentation

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	Emphasizing Important Information: Writing Clear, Informative Titles, Writing Clear, Informative Headings, Writing Clear Informative Lists, Writing Clear Informative Paragraphs.	2		Google Meet with Powerpoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.) Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: III MONTH:September -December ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

a. understad the developing strong foundation in general writing, including research proposal and reports.

b. prepare technological developing skills for writing Article, Blog, E-Book, Commercial web Page design, Business Listing Press Release, E-Listing and Product Description.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Technical Writing And Entrepreneurship Development Unit –IV	**Writing Proposals:** Understanding the Process of Writing Proposals, The Logistics of Proposals, The "Deliverables" of Proposals, Persuasion and Proposals, Writing a Proposal, The Structure of the Proposal.	4	Handbook of Technical Writing Gerald J. Alred , Charles T. Brusaw , Walter E. Oliu	Google Meet with Powerpoint Presentation
	Writing Informational Reports: Understanding the Process of Writing Informational Reports, Writing Directives, Writing Field Reports, Writing Progress and Status Reports, Writing Incident Reports, Writing Meeting Minutes. **Writing Recommendation Reports:** Understanding the Role of Recommendation Reports, Using a Problem-Solving Model for Preparing Recommendation Reports, Writing Recommendation Reports.	4		Google Meet with Powerpoint Presentation
	Reviewing, Evaluating, and Testing Documents and Websites: Understanding Reviewing, Evaluating, and Testing, Reviewing Documents and Websites, Conducting Usability Evaluations, Conducting Usability Tests, Using Internet tools to	4		Google Meet with Powerpoint Presentation

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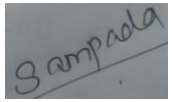
	check writing Quality, Duplicate Content Detector, What is Plagiarism?, How to avoid writing plagiarism content? **Innovation management: an introduction:** The importance of innovation, Models of innovation, Innovation as a management process. **Market adoption and technology diffusion:** Time lag between innovation and useable product, Innovation and the market , Innovation and market vision ,Analysing internet search data to help			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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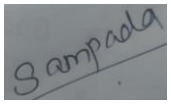

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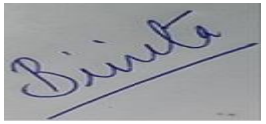
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT
CLASS: M. Sc. I. T SEMESTER: III MONTH: September-December ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S:
The learners will be able to:

a. To get the insight of the security loopholes in every aspect of computing.
b. To understand the threats and different types of attacks that can be launched on computing systems.
c. To know the countermeasures that can be taken to prevent attacks on computing systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Security Breaches and Countermeasures Unit -I	**Introduction to Security Breaching**: Overview of Information Security, Threats and Attack vectors, Concepts of Hacking – Ethical and Unethical, Information Security Controls, Concepts of penetration Testing, Information Security Laws and Standards.	3	CEHv10, Certified Ethical Hacker Study Guide by Ric Messier	PowerPoint presentation
	Evaluation Security of IT Organisation: Concepts, Methodology, Tools, Countermeasures, Penetration Testing.	3		PowerPoint presentation
	Network Scanning: Concepts, Scanning beyond IDS and firewalls, Tools, Banner Grabbing, Scanning Techniques, Network Diagrams, penetration testing.	3		PowerPoint presentation
	Enumeration: Concepts, Different types of enumeration: Netbios, SNMP, LDAP, NTP, SMTP, DNS, other enumeration techniques, Countermeasures, Penetration Testing	3		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

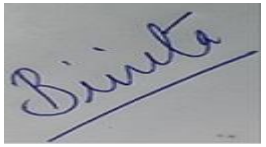
CLASS: M. Sc. I. T SEMESTER: III MONTH: September-December ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

d. To get the insight of the security loopholes in every aspect of computing.
e. To understand the threats and different types of attacks that can be launched on computing systems.
f. To know the countermeasures that can be taken to prevent attacks on computing systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Security Breaches and Countermeasures Unit -II	**Analysis of Vulnerability:** Concepts, Assessment Solutions, Scoring Systems, Assessment Tools, Assessment Reports.	3	CEHv10, Certified Ethical Hacker Study Guide by Ric Messier	PowerPoint presentation
	Breaching System Security: Concepts, Cracking passwords, Escalating privileges, Executing Applications, Hiding files, covering tracks, penetration testing.	3		PowerPoint presentation
	Threats due to malware: Concepts, Malware Analysis, Trojan concepts, countermeasures, Virus and worm concepts, anti-malware software, penetration testing.	3		PowerPoint presentation
	Network Sniffing: Concepts, countermeasures, sniffing techniques, detection techniques, tools, penetration testing.	3		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

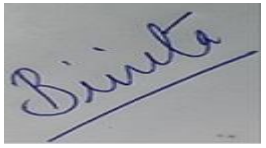
CLASS: M. Sc. I. T SEMESTER: III MONTH: September-December ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

a. To get the insight of the security loopholes in every aspect of computing.
b. To understand the threats and different types of attacks that can be launched on computing systems.
c. To know the countermeasures that can be taken to prevent attacks on computing systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Security Breaches and Countermeasures Unit -III	**Social Engineering:** Concepts, Impersonation on networking sites, Techniques, Identity theft, Insider threats, countermeasures, Pen testing.	3	CEHv10, Certified Ethical Hacker Study Guide by Ric Messier	PowerPoint presentation
	Denial of Service and Distributed Denial of service: Concepts, techniques, botnets, attack tools, countermeasures, protection tools, penetration testing.	3		PowerPoint presentation
	Hijacking an active session: Concepts, tools, application level session hijacking, countermeasures, network level session hijacking, and penetration testing.	3		PowerPoint presentation
	Evasion of IDS, Firewalls and Honeypots: Introduction and concepts, detecting honeypots, evading IDS, IDS and Firewall evasion countermeasures, evading firewalls, penetration testing.	3		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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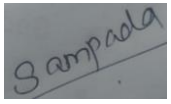

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Gauri Gaurav Vartrak DEPARTMENT: Information Technology

CLASS: MScIT SEMESTER: III MONTH: SEPT to DEC ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- To be able to conduct business research with an understanding of all the latest theories.
- To develop the ability to explore research techniques used for solving any real world or innovate problem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-01 Research in Computing, Unit-1	**Introduction:** Role of Business Research, Information Systems and Knowledge Management, Theory Building, Organization ethics and Issues	12	Business Research Methods--William G.Zikmund, B.J Babin, J.C. Carr,	Laptop, PPT, Google Meet
Paper-01 Research in Computing, Unit-2	**Beginning Stages of Research Process:** Problem definition, Qualitative research tools, Secondary data research	12	Business Research Methods--William G.Zikmund, B.J Babin, J.C. Carr,	Laptop, PPT, Google Meet

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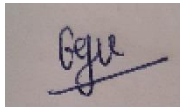

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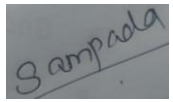

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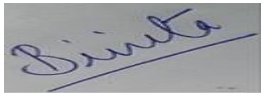
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT
CLASS: M. Sc. I. T SEMESTER: IV MONTH: February-April ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Investigate the cyber forensics with standard operating procedures.
b. Recover the data from the hard disk with legal procedure.
c. To recover and analyse the data using forensics tool

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Cyber Forensics Unit -I	Computer Forensics: The present Scenario: Introduction to computer forensics, History of computer forensics, Computer forensics flaws and risks, Cybercrime, Role of computer forensics, Reason for cyber-attacks, Modes of attacks, Cyber war	3	EC-Council CHFIv10 Study Guide by EC-Council And The official CHFI Exam 312-49 study Guide by Dave Kleiman	PowerPoint presentation
	The Investigation Process : Investigating methodology, Evaluating the case, Investigation plan, Importance of data-recovery workstations and software, Implementing an investigation, Collecting the evidence, Closing the case, Case evaluation	3		PowerPoint presentation
	Computers – Searching and Seizing, Electronic Evidence: Identifying Digital Evidence, Preparing for a Search, Seizing Digital Evidence at the Scene, Storing Digital Evidence, Reviewing a Case	3		PowerPoint presentation
	Procedures to be followed by the first responder: What is an incident?, Incident response team, How to report an incident?, CSIRT categorization, Need for CSIRT, What does CSIRT do?	3		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT
CLASS: M. Sc. I. T SEMESTER: IV MONTH: February-April ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Investigate the cyber forensics with standard operating procedures.
b. Recover the data from the hard disk with legal procedure.
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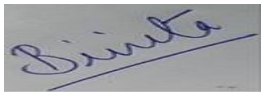
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Cyber Forensics Unit -II	Setting up a lab for Computer Forensics: Budget allocation for a forensic lab, Physical location, General configuration , Equipment needs, Basic workstation requirements, Ambience, Physical security recommendations, Auditing, Forensics lab licensing requisite, Forensics lab staff responsibilities	3	EC-Council CHFIv10 Study Guide by EC-Council And The official CHFI Exam 312-49 study Guide by Dave Kleiman	PowerPoint presentation
	Hard Disks and File Systems: Understanding file systems, examining MS-DOS, Windows, Linux, NTFS, Understanding Disk Partitions	3		PowerPoint presentation
	Forensics on Windows Machine: Locating evidence on Windows systems, Gathering volatile evidence, Investigating Windows file slack, Examining file systems, Checking Registry, Importance of Memory dump, System state backup, Investigating Internet traces	3		PowerPoint presentation
	Acquire and Duplicate Data: Determining the best data acquisition methods, Understanding data recovery contingencies, Data preservation commands, The need for data duplication, Data duplication tools	3		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT
CLASS: M. Sc. I. T SEMESTER: IV MONTH: February-April ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Investigate the cyber forensics with standard operating procedures.
b. Recover the data from the hard disk with legal procedure.
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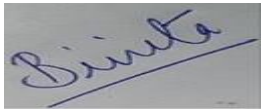
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Cyber Forensics Unit -III	Recovery of deleted files and partitions: Introduction to recovering image files, Digital evidence, Securing and recovering deleted files, Zero Assumption Digital Image Recovery, Data recovery in Linux, Data recovery tools	3	EC-Council CHFIv10 Study Guide by EC-Council And The official CHFI Exam 312-49 study Guide by Dave Kleiman	PowerPoint presentation
	Using Access Data FTK and Encase for forensics Investigation: Evaluating Computer Forensics Tool Needs, Computer Forensics Software Tools, Computer Forensics Hardware Tools, Validating and Testing Forensics Software	3		PowerPoint presentation
	Forensic analysis of Steganography and Image files : Recognize image files, data compression, Locate and recover image files, Analyze image file headers, Reconstructing file fragments, steganography in image files, Tools for viewing images	3		PowerPoint presentation
	Cracking Application passwords: Password- terminology, What is a password cracker?, Various cracking methods, Classification of cracking softwares, System software password cracking, Application software password cracking	3		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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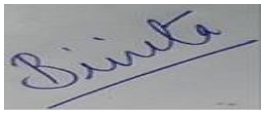
TEACHING PLAN (UNIT PLAN)

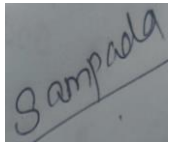
NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT
CLASS: M. Sc. I. T SEMESTER: IV MONTH: February-April ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Investigate the cyber forensics with standard operating procedures.
b. Recover the data from the hard disk with legal procedure.
c. To recover and analyse the data using forensics tool

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Cyber Forensics Unit -IV	Capturing logs and correlating to the events: Examining intrusion and security events, Event gathering, End-to-end forensic investigation, Correlating logfiles, IDS loganalysis	3	EC-Council CHFIv10 Study Guide by EC-Council And The official CHFI Exam 312-49 study Guide by Dave Kleiman	PowerPoint presentation
	Network Forensics – Investigating logs and Network traffic: Sources of evidence on a network, Evidence collection and documentation on a network, Gathering evidence on a network, Documenting the gathered evidence on a network, Evidence reconstruction for investigation, Tools	3		PowerPoint presentation
	Investigating Wireless and Web Attacks: Types of web attacks, Indications of a web attack, Responding to a web attack, Overview of web logs, Investigating static and dynamic IP address, Tools	3		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.).Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. SEMESTER: IV MONTH: January-May ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

a. understand of the function of Blockchain as a method of securing distributed ledgers, how consensus on their contents is achieved, and the new applications that they enable.
b. To cover the technological underpinnings of blockchain operations as distributed data structuresand decision-making systems, their functionality and different architecture types. C.To provide a critical evaluation of existing "smart contract" capabilities and platforms, and examine their future directions, opportunities, risks and challenges.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Blockchain Unit –I	Blockchain: Introduction, History, Centralised versus Decentralised systems, Layers of blockchain, Importance of blockchain, Blockchain uses and use cases.	4	Beginning BlockchainA Beginner's Guide to Building Blockchain Solutions Bikramaditya Singhal, Gautam Dhameja,Priyansu Sekhar Panda	Powerpoint presentation through Google Meet
	Working of Blockchain: Blockchain foundation, Cryptography, Game Theory, Computer Science Engineering, Properties of blockchain solutions, blockchain transactions, distributed consensus mechanisms, Blockchain mechanisms, Scaling blockchain	4		Powerpoint presentation through Google Meet
	Working of Bitcoin: Money, Bitcoin, Bitcoin blockchain, bitcoin network, bitcoin scripts, Full Nodes and SVPs, Bitcoin wallets.	4		Powerpoint presentation through Google Meet
				Powerpoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.) Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: IV MONTH: January-May ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

a. understand of the function of Blockchain as a method of securing distributed ledgers, how consensus on their contents is achieved, and the new applications that they enable.
b. To cover the technological underpinnings of blockchain operations as distributed data structuresand decision-making systems, their functionality and different architecture types. C.To provide a critical evaluation of existing "smart contract" capabilities and platforms, and examine their future directions, opportunities, risks and challenges.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Blockchain Unit –II	Ethereum:three parts of blockchain, Ether as currency and commodity, Building trustlesssystems, Smart contracts, Ethereum Virtual Machine, The Mist browser, Wallets as a Computing Metaphor, The Bank Teller Metaphor, Breaking with Banking History, How Encryption Leads to Trust, System Requirements, Using Parity with Geth, Anonymity in Cryptocurrency, Central Bank Network, Virtual Machines, EVM Applications, State Machines, Guts of the EVM, Blocks, Mining's Place in the State Transition Function, Renting Time on the EVM, Gas, Working with Gas, Accounts, Transactions, and Messages, Transactionsand Messages, Estimating Gas Fees for Operations, Opcodes in the EVM.	6	Beginning BlockchainA Beginner's Guide to Building Blockchain Solutions Bikramaditya Singhal, Gautam Dhameja,Priyansu Sekhar Panda	Powerpoint presentation through Google Meet
	Solidity Programming: Introduction,Global Banking Made Real, Complementary Currency, Programming the EVM, Design Rationale, Importance of Formal Proofs, Automated Proofs, Testing, Formatting	6		Powerpoint presentation through Google meet

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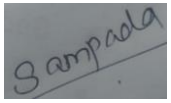
	Solidity Files, Reading Code, Statements and Expressions in Solidity, Value Types, Global Special Variables, Units, and Functions,			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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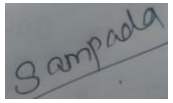

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRS. ARCHANA SANTOSH RAUT** DEPARTMENT: **_INFORMATION TECHNOLOGY**

CLASS: **MSC(IT)** SEMESTER: **III** MONTH: **SEPT-DEC** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:

The learners will be able to :

- To make the students aware about the automation today in the industry.
- To make the students aware about the tools used for automation.
- To help the students automate a complete process

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT304a Robotic Process Automation	**Sequence, Flowchart, and Control Flow:** Sequencing the workflow, Activities, Control flow, various types of loops, and decision making, Step-by-step example using Sequence and Flowchart, Step-by-step example using Sequence and Control flow	06	Learning Robotic Process Automation,Alok Mani Tripathi, Packt, 1st, 2018 Robotic ProcessAutomation Tools, Process Automation and their benefits: Understanding RPA and Intelligent Automation, Srikanth Merianda, 1st, 2018	Desktop and Laptop, Powerpoint Presentations,Projector
Unit II	**Data Manipulation:** Variables and scope, Collections, Arguments – Purpose and use, Data table usage with examples, Clipboard	06	Learning Robotic Process Automation,Alok Mani Tripathi, Packt, 1st, 2018	Desktop and Laptop, Powerpoint Presentations,Projector

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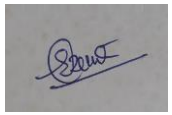
	management, File operation with step-by-step example, CSV/Excel to data table and vice versa (with a step-by-step example)		Robotic ProcessAutomation Tools, Process Automation and their benefits: Understanding RPA and Intelligent Automation, Srikanth Merianda, 1st, 2018	
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
PSIT304a Robotic Process Automation	**Managing and Maintaining the Code:** Project organization, Nesting workflows, Reusability ofworkflows, Commenting techniques, State Machine, When to use Flowcharts, State Machines, or Sequences, Using config files and examples of a config file, Integrating a TFS server	**06**	Learning Robotic Process Automation,Alok Mani Tripathi, Packt, 1st, 2018 Robotic ProcessAutomation Tools, Process Automation and their benefits: Understanding RPA and Intelligent Automation, Srikanth Merianda, 1st, 2018	Desktop and Laptop, Powerpoint Presentations,Projector
Unit V	**Deploying and Maintaining the Bot:** Publishing using publish utility, Overview of Orchestration Server, Using Orchestration Server to control bots, Using Orchestration Server to deploy bots, License management, Publishing and managing updates	**06**	Learning Robotic Process Automation,Alok Mani Tripathi, Packt, 1st, 2018 Robotic ProcessAutomation Tools, Process Automation and their benefits: Understanding RPA and Intelligent Automation, Srikanth Merianda, 1st, 2018	Desktop and Laptop, Powerpoint Presentations,Projector
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			



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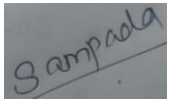

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. A. PALAV (MANE)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**MSC(IT)**_____ SEMESTER: ____**IV**_____ MONTH: _____ **FEBRUARY-MAY** _____ ACADEMIC YEAR: _____**2022-2023**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

- To present the mathematical, statistical and computational challenges of building neural networks
- To study the concepts of deep learning
- To enable the students to know deep learning techniques to support real-time applications
- Describes basics of mathematical foundation that will help the learner to understand the concepts of Deep Learning.
- Understand and describe model of deep learning
- Design and implement various deep supervised learning architectures for text & image data.
- Design and implement various deep learning models and architectures.
- Apply various deep learning techniques to design efficient algorithms for real-world applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Elective 2 **PSIT403a** **Deep Learning** **Unit No -01**	**Applied Math and Machine Learning Basics:** Linear Algebra: Scalars, Vectors, Matrices and Tensors , Multiplying Matrices and Vectors , Identity and Inverse Matrices, Linear Dependence and Span , norms, special matrices and vectors, eigen decompositions. **Numerical Computation:** Overflow and under flow, poor	07	Deep Learning Ian Goodfellow, Yoshua Bengio, Aaron Courvile	Blackboard, Chalk and Duster. PPts.

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	conditioning, Gradient Based Optimization, Constraint optimization.	05	An MIT Press book 1st, 2016. Fundamentals of Deep Learning Nikhil Buduma O'Reilly 1st, 2017.	
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -02	Deep Learning Research: Linear Factor Models, Autoencoders, representation learning	12	Deep Learning Ian Goodfellow, Yoshua Bengio, Aaron Courvile An MIT Press book 1st, 2016. Fundamentals of Deep Learning Nikhil Buduma O'Reilly 1st, 2017.	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			

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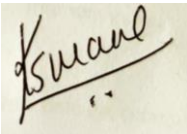

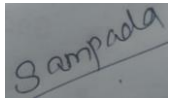

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. (Mrs.) Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: MScIT SEMESTER: IV MONTH: JAN to MAY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- To provide conceptual understanding of the function of Blockchain as a method of securing distributed ledgers, how consensus on their contents is achieved, and the new applications that they enable.
- To cover the technological underpinnings of blockchain operations as distributed data structures and decision-making systems, their functionality and different architecture types.
- To provide a critical evaluation of existing "smart contract" capabilities and platforms, and examine their future directions, opportunities, risks and challenges.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-01 **Block Chain**, Unit-3	**Hyperledger:** Overview, Fabric, composer, installing hyperledger fabric and composer, deploying, running the network, error troubleshooting.	6	Beginning Blockchain A Beginner's Guide to Building Blockchain Solutions-- Bikramaditya Singhal, Gautam Dhameja, Priyansu Sekhar Panda	Laptop, PPT, Google Meet
	Smart Contracts and Tokens: EVM as Back End, Assets Backed by Anything, Cryptocurrency Is a Measure of Time, Function of Collectibles in Human Systems, Platforms for High-Value Digital Collectibles, Tokens as Category of Smart Contract, Creating a Token, Deploying the Contract, Playing with Contracts.	6	Beginning Blockchain A Beginner's Guide to Building Blockchain Solutions-- Bikramaditya Singhal, Gautam Dhameja, Priyansu Sekhar	Laptop, PPT, Google Meet

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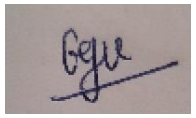
			Panda	
Paper-01 **Block Chain**, Unit-4	**Mining Ether:** Why? Ether's Source, Defining Mining, Difficulty, Self-Regulation, and the Race for Profit, How Proof of Work Helps Regulate Block Time, DAG and Nonce, Faster Blocks, Stale Blocks, Difficulties, Ancestry of Blocks and Transactions, Ethereum and Bitcoin, Forking, Mining, Geth on Windows, Executing Commands in the EVM via the Geth Console, Launching Geth with Flags, Mining on the Testnet, GPU Mining Rigs, Mining on a Pool with Multiple GPUs.	6	Beginning Blockchain A Beginner's Guide to Building Blockchain Solutions-- Bikramaditya Singhal, Gautam Dhameja, Priyansu Sekhar Panda	Laptop, PPT, Google Meet
	Cryptoecnomics: Introduction, Usefulness of cryptoeconomics, Speed of blocks, Ether Issuance scheme, Common Attack Scenarios.	6	Beginning Blockchain A Beginner's Guide to Building Blockchain Solutions-- Bikramaditya Singhal, Gautam Dhameja, Priyansu Sekhar Panda	Laptop, PPT, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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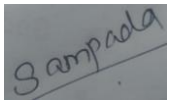

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: M.Sc. IT (Human Computer Interaction) SEMESTER:IV MONTH: FEB-APR ACADEMICYEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the important aspects of implementation of human-computer interfaces.
- Identify the various tools and techniques for interface analysis, design, and evaluation.
- Identify the impact of usable interfaces in the acceptance and performance utilization of information systems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Human Computer Interaction	**The Interaction**: Models of interaction, Design Focus, Frameworks and HCI, Ergonomics, Interaction styles, **Elements of the WIMP interface,Interactivity** **Paradigms**: Introduction, Paradigms for interaction **Interaction design basics**: What is design?, The process of design, User focus, Cultural probes, Navigation design, the big button trap, Modes, Screen design and layout, Alignment and layout matters, Checking screen colors, Iteration and prototyping **HCI in the software process**: The software life cycle, Usability engineering , Iterative design and prototyping, Prototyping in practice, Design rationale	12	1.Human Computer Interaction-Alan Dix, Janet Finlay, Gregory Abowd, Russell Beale Pearson Education 3rd 2. Designing the User Interface -Shneiderman B., Plaisant C., Cohen M., Jacobs S. Pearson 5th 2013	POWER POINT PRESENTATION

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UNIT 2 Human Computer Interaction	**Design**: Principles to support usability, Standards, Guidelines, Golden rules and heuristics, HCI patterns **Implementation support**: Elements of windowing systems, Programming the application, Going with the grain, Using toolkits, User interface management **Systems Evaluation techniques:** What is evaluation?, Goals of evaluation, Evaluation through expert analysis,Evaluation through user participation, Choosing an evaluation method	12	1.Human Computer Interaction-Alan Dix, Janet Finlay, Gregory Abowd, Russell Beale Pearson Education 3rd 2. Designing the User Interface -Shneiderman B., Plaisant C., Cohen M., Jacobs S. Pearson 5th 2013	POWER POINT PRESENTATION
UNIT 3 Human Computer Interaction	**Design**: Principles to support usability, Standards, Guidelines, Golden rules and heuristics **HCI patterns Implementation support**: Elements of windowing systems, Programming the application, Going with the grain, Using toolkits, User interface management systems **Evaluation techniques**: What is evaluation?, Goals of evaluation, Evaluation through expert analysis, Evaluation through user participation, Choosing an evaluation method	12	1.Human Computer Interaction-Alan Dix, Janet Finlay, Gregory Abowd, Russell Beale Pearson Education 3rd 2. Designing the User Interface -Shneiderman B., Plaisant C., Cohen M., Jacobs S. Pearson 5th 2013	POWER POINT PRESENTATION

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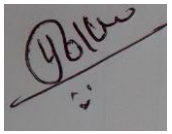
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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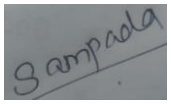

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

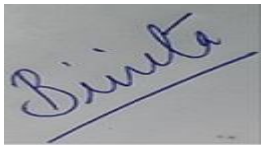
CLASS: M. Sc. I. T SEMESTER: II MONTH: February-April ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

a. To understand the state-of-the-art in network protocols, architectures and applications.
b. Analyze existing network protocols and networks.
c. Develop new protocols in networking

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Modern Networking Unit -I	Elements of Modern Networking- The Networking Ecosystem ,Example Network Architectures, Ethernet, Wi-Fi, 4G/5G Cellular, Cloud Computing, Internet of Things, Network Convergence Unified Communications	6	Foundations of Modern Networking: SDN, NFV, QoE, IoT, and Cloud by William Stallings	PowerPoint presentation
	Requirements and Technology- Types of Network and Internet Traffic, Demand: Big Data, Cloud Computing, and Mobile Traffic, Requirements: QoS and QoE, Routing, Congestion Control , SDN and NFV	6		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

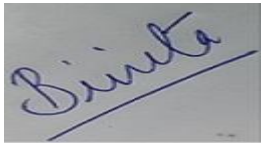
CLASS: M. Sc. I. T SEMESTER: II MONTH: February-April ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

a. To understand the state-of-the-art in network protocols, architectures and applications.
b. Analyze existing network protocols and networks.
c. Develop new protocols in networking

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Modern Networking Unit -IV	Defining and Supporting User Needs, Quality of Service, Integrated Services Architecture, Queuing Discipline, Differentiated Services, Forwarding PHB, Service Level Agreements, IP Performance Metrics	4	Foundations of Modern Networking: SDN, NFV, QoE, IoT, and Cloud by William Stallings	PowerPoint presentation
	QoE: User Quality of Experience, QoE Considerations The QoE/QoS Layered Model, Measurements of QoE, Summarizing the QoE, Measurement Methods, Applications of QoE	4		PowerPoint presentation
	Network Design Implications of QoS and QoE Classification of QoE/ QoS Mapping Models, Black-Box Media-Based QoS/QoE Mapping Models, Glass- Box Parameter-Based QoS/QoE Mapping Models,Gray-Box QoS/QoE Mapping Models	4		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

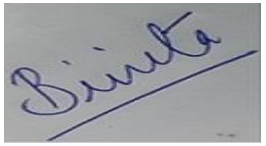
CLASS: M. Sc. I. T SEMESTER: II MONTH: February-April ACADEMIC YEAR: 2022-2023

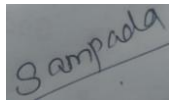
LEARNING OBJECTIVE/S:
The learners will be able to:

a. To understand the state-of-the-art in network protocols, architectures and applications.
b. Analyze existing network protocols and networks.
c. Develop new protocols in networking

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Modern Networking Unit -V	Modern Network Architecture: Clouds and Fog, Cloud Computing, Cloud, Deployment Models, Cloud Architecture	4	Foundations of Modern Networking: SDN, NFV, QoE, IoT, and Cloud by William Stallings	PowerPoint presentation
	The Internet of Things: Components The IoT Era Begins, Components of IoT-Enabled Things, The Internet of Things: Architecture and Implementation, IoT Architecture	4		PowerPoint presentation
	Security Requirements, SDN Security Threats to SDN, NFV Security, Cloud Security, IoT Security	4		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. A.PALAV (MANE)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**MSC(IT)**_____ SEMESTER: ____**II**_____ MONTH: _____ **FEBRUARY-MAY** _____ ACADEMIC YEAR: _____**2022-2023**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

- **Review the fundamental concepts of a digital image processing system.**
- **Analyze images in the frequency domain using various transforms.**
- **Evaluate the techniques for image enhancement and image restoration.**
- **Categorize various compression techniques.**
- **Interpret Image compression standards.**
- **Interpret image segmentation and representation techniques.**
- **Understand the relevant aspects of digital image representation and their practical implications.**
- **Have the ability to design pointwise intensity transformations to meet stated specifications and understand 2-D convolution, the 2-D DFT, and have the abitilty to design systems using these concepts.**
- **Have a command of basic image restoration techniques. Understand the role of alternative color spaces, and the design requirements leading to choices of color space.**
- **Appreciate the utility of wavelet decompositions and their role in image processing systems. Have an understanding of the underlying mechanisms of image compression, and the ability to design systems using standard algorithms to meet design specifications.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT204 Image Processing Unit No -01	Introduction: Digital Image Processing, Origins of Digital Image Processing, Applications and Examples of Digital Image Processing, Fundamental Steps in Digital Image Processing, Components of an Image Processing System,	04	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Blackboard, Chalk and Duster. PPts.
	Digital Image Fundamentals: Elements of Visual Perception, Light and the Electromagnetic Spectrum, Image Sensing and Acquisition, Image Sampling and Quantization, Basic Relationships Between Pixels, Basic Mathematical Tools Used in Digital Image Processing,	04	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Blackboard, Chalk and Duster. PPts
	Intensity Transformations and Spatial Filtering: Basics, Basic Intensity Transformation Functions, Basic Intensity Transformation Functions, Histogram Processing, Fundamentals of Spatial Filtering, Smoothing (Lowpass) Spatial Filters, Sharpening (Highpass) Spatial Filters, Highpass, Bandreject, and Bandpass Filters from Lowpass Filters, Combining Spatial Enhancement Methods, Using Fuzzy Techniques for Intensity Transformations and Spatial Filtering	04	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -02	Filtering in the Frequency Domain: Background, Preliminary Concepts, Sampling and the Fourier Transform of Sampled Functions, The Discrete Fourier Transform of One Variable, Extensions to Functions of Two Variables, Properties of the 2-D DFT and IDFT, Basics of Filtering in the Frequency Domain, Image Smoothing Using Lowpass Frequency Domain	06	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Blackboard, Chalk and Duster. PPts.

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	Filters, Image Sharpening Using Highpass Filters, Selective Filtering, Fast Fourier Transform.			
	Image Restoration and Reconstruction: A Model of the Image Degradation/Restoration Process, Noise Models, Restoration in the Presence of Noise Only-----Spatial Filtering, Periodic Noise Reduction Using Frequency Domain Filtering, Linear, Position-Invariant Degradations, Estimating the Degradation Function, Inverse Filtering, Minimum Mean Square Error (Wiener) Filtering, Constrained Least Squares Filtering, Geometric Mean Filter, Image Reconstruction from Projections	06	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -03	Wavelet and Other Image Transforms: Preliminaries, Matrix-based Transforms, Correlation, Basis Functions in the Time-Frequency Plane, Basis images, Fourier-Related Transforms, Walsh-Hadamard Transforms, Slant Transform, Haar Transform, Wavelet Transforms	04	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Blackboard, Chalk and Duster. PPts.
	Color Image Processing: Color Fundamentals, Color Models, Pseudocolor Image Processing, Full-Color Image Processing, Color Transformations, Color Image Smoothing and Sharpening, Using Color in Image Segmentation, Noise in Color Images, Color Image Compression.	04	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Blackboard, Chalk and Duster. PPts.
	Image Compression and Watermarking: Fundamentals, Huffman Coding, Golomb Coding, Arithmetic Coding, LZW Coding, Run-length Coding, Symbol-based Coding, 8 Bit-plane Coding, Block Transform Coding,	04	Digital Image Processing Gonzalez and Woods 4 rd Edition	Blackboard, Chalk and Duster. PPts.

	Predictive Coding, Wavelet Coding, Digital Image Watermarking,		Pearson/Prentice Hall, 2018.	
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	Morphological Image Processing: Preliminaries, Erosion and Dilation, Opening and Closing, The Hit-or-Miss Transform, Morphological Algorithms, Morphological Reconstruction ¸Morphological Operations on Binary Images, Grayscale Morphology	06	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Blackboard, Chalk and Duster. PPts.
	Image Segmentation I: Edge Detection, Thresholding, and Region Detection: Fundamentals, Thresholding, Segmentation by Region Growing and by Region Splitting and Merging, Region Segmentation Using Clustering and Superpixels, Region Segmentation Using Graph Cuts, Segmentation Using Morphological Watersheds, Use of Motion in Segmentation	06	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	Image Segmentation II: Active Contours: Snakes and Level Sets: Background, Image Segmentation Using Snakes, Segmentation Using Level Sets.	06	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Blackboard, Chalk and Duster. PPts.
	Feature Extraction: Background, Boundary Preprocessing, Boundary Feature Descriptors, Region Feature Descriptors, Principal Components as Feature Descriptors, Whole-Image Features, Scale-Invariant Feature Transform (SIFT)	06	Digital Image Processing Gonzalez and Woods 4 rd Edition	Blackboard, Chalk and Duster. PPts.

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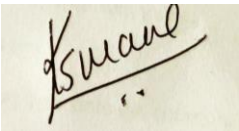
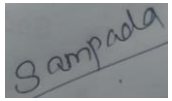
			Pearson/Prentice Hall, 2018.	
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: RUTUJA PRASHANT GUPTA DEPARTMENT: CS

CLASS: FYCS SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- To learn how to design and program Python applications.
- To explore the innards of Python Programming and understand components of Python Program
- To define the structure and components of a Python program.
- To learn how to write loops and decision statements in Python
- To learn about inbuilt input/output operations and compound data types in Python

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Programming with Python (USCS102) Unit I	**Overview of Python:** History & Versions, Features of Python, Executionof a Python Program, Flavours of Python, Innards of Python, PythonInterpreter, Memory Management in Python, Garbage Collection in Python,Comparison of Python with C and Java, Installing Python, Writing and Executing First Python Program, Getting Help, IDLE	04	Python: The Complete Reference, Martin C. Brown, McGraw Hill, 2018	Black board and chalk
	Data Types, Variables and Other Basic Elements: Comments, Docstrings, Data types- Numeric Data type, Compound Data Type, Boolean Data type, Dictionary, Sets, Mapping, Basic Elements of Python,Variables	04		
	Input and Output Operations: Input Function, Output Statements, The print() function, The print("string") function, The print(variables list) function, The print(object) function, The print(formatted string) function, Command Line Arguments	04		

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	Control Statements: The if statement, The if ... else Statement, The „if ...elif ... else" Statement, Loop Statement- while loop, for loop, Infinite loop, Nested loop, The else suite, break statement, continue statement, pass statement, assert statement, return statement	03		

Introduction to Programming with Python (USCS102) Unit II	**Operators**: Arithmetic operators, Assignment operators, Unary minus operator, Relational operators, Logical operators, Bitwise operators, Membership operators, Identity operators, Precedence of Operators, Associativity of Operators	04	Python: The Complete Reference, Martin C. Brown, McGraw Hill, 2018	Black board and chalk
	Arrays: Creating Arrays, Indexing and Slicing of Arrays, Basic Array Operations, Arrays Processing, Mathematical Operations on Array, Aliasing Arrays, Slicing and Indexing in NumPy Arrays, Basic slicing, Advanced Indexing, Dimensions of Arrays, Attributes of an Array, The ndim Attribute, The shape Attribute, The size Attribute, The itemsize Attribute	04		
	Functions: Function definition and call, Returning Results, Returning Multiple Values from a Function, Built-in Functions, Difference between a Function and a Method, Pass Value by Object Reference, Parameters and Arguments, Formal and Actual Arguments, Positional Arguments, Keyword Arguments, Default Arguments, Arbitrary Arguments, Recursive Functions, Anonymous or Lambda Functions, Using Lambda with the filter() Function, Using Lambda with the map() Function, Using Lambda with the reduce() Function	05		

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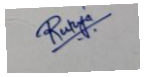
	Modules:Introduction to Modules in Python	02		
Introduction to Programming with Python (USCS102) Unit III	**Strings**: Creating Strings, Functions of Strings, Working with Strings, Length of a String, Indexing and Slicing, Repeating and Concatenating Strings, Checking Membership, Comparing Strings, Removing Spaces, Finding Substrings, Counting Substrings, Immutability, Splitting and	04	Python: The Complete Reference, Martin C. Brown, McGraw Hill, 2018	Black board and chalk
	Joining Strings, Changing Case, Checking Starting and Ending of a String, Sorting Strings, Searching in the Strings, Testing Methods, Formatting Strings, Finding the Number of Characters and Words, Inserting Substrings into a String	04		
	List and Tuples: Lists, List Functions and Methods, List Operations, List Slices, Nested Lists, Tuples, Functions in Tuple	03		
	Dictionaries: Creating a Dictionary, Operators in Dictionary, Dictionary Methods, Using for Loop with Dictionaries, Operations on Dictionaries, Converting Lists into Dictionary, Converting Strings into Dictionary, Passing Dictionaries to Functions, Sorting the Elements of a Dictionary using Lambda, Ordered Dictionaries	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: FYCS SEMESTER: I MONTH: SEPTEMBER-NOVEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to : Students will learn basic skills and increase their sustainable interest in the Linux Operating System. It will also assist you build a Linux solution for real world problems and increase the knowledge required to comprehend the Linux operating system and its practical application.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS103, LINUX Operating System, UNIT-I	**Linux operating system and Basics**: History, GNU Info and Utilities, Various Linux Distributions, The Unix/Linux architecture, Features of Unix/Linux, Starting the shell, Shell prompt, Command structure, File Systems and Directory Structure, man pages, more documentation pages	04	"Linux Command line and Shell Scripting Bible", Richard Blum, Wiley India. "Unix: Concepts and Applications", Sumitabha Das, 4th Edition, McGraw Hill.	PowerPoint Presentation, OHP, Chalk and Black Board
	Basic Bash shell commands: General purpose utility Commands, basic commands, Various file types, attributes and File handling Commands, Handling Ordinary Files. More file attributes	03		
	Advanced Bash shell commands: Simple Filters, Filters using regular expressions.	04		
	The Linux environment variable: Setting, Locating and removing environment variables like PATH etc, Default shell environment variables, Using command aliases.	04		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**15**		
	Understanding Linux file permission: Linux security, Using Linux groups, Decoding file permissions, Changing security setting, Sharing files.	04	"Linux Command line and Shell	PowerPoint Presentation, OHP, Chalk and Black Board

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USCS103, LINUX Operating System, UNIT-II	**Linux Security:** Understanding Linux Security, uses of root, sudo command, working with passwords, Understanding ssh.	04	Scripting Bible", Richard Blum, Wiley India. "Unix: Concepts and Applications", Sumitabha Das, 4th Edition, McGraw Hill.	
	Networking: TCP/IP Basics, TCP/IP Model, Resolving IP addresses, Applications, ping, telnet, ftp, DNS	04		
	Working withEditors: awk, sed and Introduction to vi	03		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**15**		
USCS103, LINUX Operating System, UNIT-III	**Basic script building:** Using multiple commands, Creating script files, Displaying messages, Using variables, Redirecting Input and Output, Pipes performing math, Exiting the script.	05	"Linux Command line and Shell Scripting Bible", Richard Blum, Wiley India. "Unix: Concepts and Applications", Sumitabha Das, 4th Edition, McGraw Hill. "Official Ubuntu Book", Matthew Helmke& Elizabeth K.	PowerPoint Presentation, OHP, Chalk and Black Board
	Using structured commands: Working with if-then, if-then-else and nested if statements, test command, Compound condition testing, while command, until command, case command.	04		
	Script and Process control: Handling signals, Running scripts in background mode, Running scripts without a console, Job control, Job scheduling commands: ps, nice, renice, at, batch, cron table, Running the script at boot	06		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**15**		

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			Joseph with Jose Antonio Rey and Philips Ballew, 8th Ed.	

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWANE DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: FYCS SEMESTER: I MONTH: SEPTEMBER-NOVEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to : Students learn differentiate between Open Source and Proprietary software and Licensing. Recognize the applications, benefits and features of Open-Source Technologies.Gain knowledge to start, manage open-source projects

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS104, Open Source Technologies UNIT-I	Introduction to Open-Source: Open Source, Need and Principles of OSS, Open-Source Standards, Requirements for Software, OSS success, Free Software, Examples, Licensing, Free Vs. Proprietary Software, Free Software Vs. Open-Source Software, Public Domain. History of free software, Proprietary Vs Open-Source Licensing Model, use of OpenSource Software, FOSS does not mean no cost. History: BSD, The Free Software Foundation and the GNU Project.	05	1.The Linux Documentation Project: http://www.tldp.org/ 2. Docker Project Home: http://www.docker.com 3. Linux kernel Home: http://kernel.org 4. Open Source Initiative: https://opensource.org/ 5. Linux Documentation Project: http://www.tldp.org/ 6. Wikipedia: https://en.wikipedia.org/ 7.https://en.wikipedia.org/wiki/Wikipedia:Contributing_to_Wikipedia 8. Github: https://help.github.com/ 9. The Linux Foundation: http://www.linuxfoundation.org/	Chalk and Black Board
	Open-Source Principles and Methodology: Open-Source History, OpenSource Initiatives, Open Standards Principles, Methodologies, Philosophy, Software freedom, Open-Source Software Development, Licenses, Copyright vs. Copy left, Patents, Zero marginal cost, Income-generation Opportunities, Internationalization.	05		
	. Licensing: What Is A License, How to create your own Licenses, Important FOSS Licenses (Apache, BSD, PL,	05		

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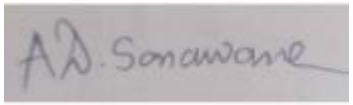
	LGPL), copyrights and copy lefts, Patent			
	TOTAL	15		
USCS104, Open Source Technologies UNIT-II	Open-Source projects: Starting and maintaining own Open-Source Project, Open-Source Hardware, Open-Source Design, Open-source Teaching, Open-source media.	05	1.The Linux Documentation Project: http://www.tldp.org/ 2. Docker Project Home: http://www.docker.com 3. Linux kernel Home: http://kernel.org 4. Open Source Initiative: https://opensource.org/ 5. Linux Documentation Project: http://www.tldp.org/ 6. Wikipedia: https://en.wikipedia.org/ 7.https://en.wikipedia.org/wiki/Wikipedia:Contributing_to_Wikipedia 8. Github: https://help.github.com/ 9. The Linux Foundation: http://www.linuxfoundation.org/	Chalk and Black Board
	Collaboration: Community and Communication, Contributing to Open Source Projects Introduction to GitHub, interacting with the community on GitHub, Communication and etiquette, testing open-source code, reporting 15 Page 17 of 50 issues, contributing code. Introduction to Wikipedia, contributing to Wikipedia or contributing to any prominent open-source project of student's choice.	05		
	Open-Source Ethics and Social Impact: Open source vs. closed source, Open-source Government, Ethics of Open-source, Social and Financial impacts of open-source technology, Shared software, Shared source, Open Source as a Business Strategy	05		
	TOTAL	15		
USCS104, Open Source Technologies	Understanding Open-Source Ecosystem: Open-Source Operating Systems: GNU/Linux, Android, Free BSD, Open Solaris. Open-Source Hardware, Virtualization Technologies, Containerization Technologies: Docker, Development tools, IDEs, Debuggers, Programming	05	1.The Linux Documentation Project:http://www.tldp.org/ 2. Docker Project Home: http://www.docker.com 3. Linux kernel Home: http://kernel.org 4. Open Source Initiative: https://opensource.org/	Chalk and Black Board

UNIT-III	languages, LAMP, Open-Source Database technologies		5. Linux Documentation Project: http://www.tldp.org/ 6. Wikipedia: https://en.wikipedia.org/ 7.https://en.wikipedia.org/wiki/Wikipedia:Contributing_to_Wikipedia 8. Github: https://help.github.com/ 9. The Linux Foundation:http://www.linuxfoundation.org/	
	Case Studies: Example Projects: Apache Web server, BSD, GNU/Linux, Android, Mozilla (Firefox), Wikipedia, Drupal, WordPress, Git, GCC, GDB, GitHub, Open Office, LibreOffice Study: Understanding the developmental models, licensing, mode of funding, commercial/non-commercial use.	10		
	TOTAL	15		



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Teaching plan for FYCS sem 1 2022-23

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: Computer Science

CLASS: Fybsc(CS)

SEMESTER: 1

MONTH: August to November

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

- The learners will be able to know descriptive statistical concepts
- The learner will able to study probability concepts required for computer learners.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	Reference /s	Teaching method Ict tool used
Paper:	**a) Data types and Data Presentation**: ● Data types: ➢ Attribute and variable ➢ discrete and continuous variable ➢ Different types of Scale: Nominal, Ordinal , Interval and Ratio ➢ Univariate and	**5**	**(Gupta & Kapoor: Chp 2: 2.1 - 2.2 and Schaum Series: Chp 1 & 2)**	Black board, chalk and Duster

	Bivariate Distribution ➢ Types of Classification			

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Descriptive statistics **<u>Unit 1</u>**	● Data presentation: frequency distribution,histogram, O give curves,			
	b) Introduction to R: ● Data input, Arithmetic operators, vector operations, Matrix operations, Data frames, Built-in Functions (e. g : seq(), round(), rep(), sort(), cut() , etc.) ● Frequency Distribution, Grouped frequency Distribution, Diagrams and Graphs, Summary Statistics for raw data and grouped frequency distribution.	**5**	(Statistics Using R by Purohit,S.G. , GoreS.D., Deshmukh S. R. (2008), Narosa Publishing House, New Delhi)	Black board, chalk and Duster
	Measures of Central Tendency: ● Concept of Average /Central tendency ● Characteristics of good	**5**	Gupta & Kapoor: Chp 2 and Schaum	Black board, chalk and Duster

	measure of central tendency ● Arithmetic mean , Median , Mode – Definition and example for ungrouped and grouped data, effect of shift of origin and change of scale, Merits and Demerits, Combined Arithmetic mean ● Partition values : Quartiles , Deciles and Percentiles – examples for ungrouped and grouped data		Series: Chp 3)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

	b) Moments: ● Concept of Moments, ● Raw moments, Central moments, ● Relation between raw and central moments.	3	Gupta, S.C. and kapoor V.k.(1987): fundamental of mathematical statistics	Black board, chalk and Duster

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	c) Measures of Skewness and Kurtosis: • Concept of Skewness and Kurtosis, • Measures based on moments, quartiles.	5	Gupta & Kapoor: Chp 3 and Schaum Series: Chp 5)	Black board, chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

Unit 3	**Correlation:** • Concept of correlation, Types and interpretation, • **Measure of Correlation:** ➢ Scatter diagram and interpretation; ➢ Karl Pearson's coefficient of correlation (r): Definition, examples for ungrouped and grouped data, effect of shift of origin and change of scale, properties; ➢ Spearman's rank correlation coefficient: Definition, examples of with and without repetition. ➢ Concept of Multiple correlation.	8	Gupta & Kapoor: Chp 10 and Schaum Series: Chp 14 & 15	Black board, chalk and Duster

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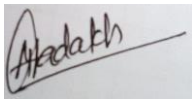
	b) Regression: ● Concept of dependent (response) and independent (predictor) variables, ● Concept of regression, Types and prediction, ● Difference between correlation and regression, Relation between correlation and regression. ● Linear Regression - Definition, examples using least square method and regression coefficient, coefficient of determination, properties. ● Concept of Multiple regression and Logistic regression.	7	Gupta & Kapoor: Chp 10 and Schaum Series: Chp 14 & 15)	Black board, chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lecture



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF-VRUNDA VISHAL GHARAT DEPARTMENT: CS

CLASS: FYCS SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

To have an understanding of Digital systems and operation of a digital computer.
To learn different architectures & organizations of memory systems, processor organization and control unit.
To understand the working principles of multiprocessor and parallel organization‟s as advanced computer architecture

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Digital Systems & Architecture (USCS101) UNIT I	**Fundamentals of Digital Logic**: Boolean algebra, Logic Gates, Simplification of Logic Circuits: Algebraic Simplification, Karnaugh Maps. Combinational Circuits: Adders, Mux, De-Mux, Sequential Circuits: FlipFlops (SR, JK & D), Counters: synchronous and asynchronous Counter **Computer System**: Comparison of Computer Organization & Architecture, Computer Components and Functions, Interconnection Structures. Bus Interconnections, Input / Output: I/O Module, Programmed I/O, Interrupt Driven I/O, Direct Memory Acces	15	1. M. Mano, Computer System Architecture 3rd edition, Pearson	Black board and chalk

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Digital Systems & Architecture (USCS101) UNIT II	**Memory System Organization:** Classification and design parameters, Memory Hierarchy, Internal Memory: RAM, SRAM and DRAM, Interleaved and Associative Memory. Cache Memory: Design Principles, Memory mappings, Replacement Algorithms, Cache performance, Cache Coherence. Virtual Memory, External Memory: Magnetic Discs, Optical Memory, Flash Memories, RAID Levels Processor Organization: Instruction Formats, Instruction Sets, Addressing Modes, Addressing Modes Examples with Assembly Language [8085/8086 CPU**],** **Processor Organization,** Structure and Function. Register 15 Page 9 of 50 Organization, Basic Microprocessor operations: Data Transfer (Register / Memory) Operations, Arithmetic & Logical Operations, Instruction Cycle, Instruction Pipelining. Introduction to RISC and CISC Architecture, Instruction Level Parallelism and Superscalar Processors: Design Issues III Control Unit: Micro-Operations, Functional Requirements, Processo	15	1. M. Mano, Computer System Architecture 3rd edition, Pearson	Black board and chalk
Digital Systems & Architecture (USCS101) UNIT III	**Control Unit:** Micro-Operations, Functional Requirements, Processor Control, Hardwired Implementation, Micro-programmed Control. Fundamentals of Advanced **Computer Architecture:** Parallel Architecture: Classification of Parallel Systems, Flynn‟s Taxonomy, Array Processors, Clusters, and NUMA Computers. Multiprocessor Systems: Structure & Interconnection Networks, Multi-Core Computers: Introduction, Organization and Performance.	15	1. M. Mano, Computer System Architecture 3rd edition, Pearson	Black board and chalk

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: I MONTH: AUGUST-SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define a function, its domain, co domain, range and bijective functions, composite and inverse functions
- Check whether a given relation is equivalence or partial order relation.
- Represent the given relation using diagraph, adjacency matrix and arrow diagram.
- Solve a recurrence relation using various methods like back tracking , generating function method etc.
- Explain and solve the tower of Hanoi puzzle.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DISCRETE MATHEMATICS Unit 1 Recurrence relations	➢ Functions, its domain, co domain and range ➢ Bijective, composite and inverse functions ➢ Relations: definition, examples and properties ➢ Equivalence & partial order relation, Hasse diagram ➢ Recurrence relation: definition, formulation & solving ➢ Tower of Hanoi puzzle	2 2 2 2 2 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, chalk, duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: I MONTH: October-November ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of fundamental principle of counting, permutations and combinations.
- State and prove binomial theorem, Pascal's identity, Vandermonde's identity.
- Find the number of ways of doing a task using permutations and combinations.
- State and use Pigeonhole principle to solve the problems.
- Understand the concept of finite state automata and finite state machine.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DISCRETE MATHEMATICS (Unit 2) Counting principles, Languages and Finite state machines	➢ FPC , permutations, combinations ➢ Binomial theorem, Pascal's & Vandermonde's identity ➢ Sum & product rule, pigeonhole principle ➢ Inclusion exclusion principle ➢ Languages, regular expression and regular grammar ➢ FSM, FSA, Godel numbers, turing machines	2 2 2 2 2 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, chalk, duster

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: I MONTH: November-December ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define graph and its types, adjacency and incidence matrix.
- Draw adjacency and incidence matrix of the given graph and vice versa.
- Find out the shortest path of weighted graph using Warshall's algorithm.
- Traverse a tree using inorder, preorder and postorder algorithm.
- Draw a tree for algebraic expressions and vice versa.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DISCRETE MATHEMATICS **(Unit 3)** Graphs & Trees	➢ Definition of Graphs and its types ➢ Diagraph, incidence and adjacency matrix ➢ Warshall's algorithm, BFS, DFS ➢ Trees : definition, types and properties ➢ Traversing binary trees ➢ Algorithms for searching, inserting and deleting in a binary tree	2 2 2 2 2 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, chalk, duster

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYCS SEMESTER: SEM-1 MONTH: AUG-DEC ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

- Develop their soft skills and develop their personality together with their technical skills.
- Understand various issues in personal and Profession communication and learn to overcome them.
- Know about various aspects of soft skills and learn ways to develop personality
- Understand the importance and type of communication in personal and professional environment.
- Learn about Leadership, team building, decision making and stress management

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
7 SOFT SKILLS DEVELOPMENT UNIT 1	**Introduction to Soft Skills** **Soft Skills: An Introduction –** Definition and Significance of Soft Skills; Process, Importance and Measurement of Soft Skill Development.	2	**Soft Skills: an Integrated Approach to Maximise Personality** by Gajendra S. Chauhan, Sangeeta Sharma, Wiley India	Chalk and Board
	Personality Development: Knowing Yourself, Positive Thinking, Johari's Window, Physical Fitness	2		
	Emotional Intelligence: Meaning and Definition, Need for Emotional Intelligence, Intelligence Quotient versus Emotional Intelligence Quotient, Components of Emotional Intelligence, Competencies of Emotional Intelligence, Skills to Develop Emotional Intelligence	3		

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	Positivity and Motivation: Developing Positive Thinking and Attitude; Driving out Negativity; Meaning and Theories of Motivation; Enhancing Motivation Levels	2		
	Etiquette and Mannerism: Introduction, Professional Etiquette, Technology Etiquette	2		
	Ethical Values: Ethics and Society, Theories of Ethics, Correlation between Values and Behavior, Nurturing Ethics, Importance of Work Ethics, Problems in the Absence of Work Ethics	3		
UNIT 2	**Basic Skills in Communication:** **Components of effective communication:** Communication process and handling them, Composing effective messages, Non – Verbal Communication: its importance and nuances: Facial Expression, Posture, Gesture, Eye contact, appearance (dress code).	3	**Soft Skills: an Integrated Approach to Maximise Personality** by Gajendra S. Chauhan, Sangeeta Sharma, Wiley India	Chalk and Board
	Communication Skills: Spoken English, Phonetics, Accent, Intonation	2		
	Employment Communication: Introduction, Resume, Curriculum Vitae, Scannable Resume, Developing an Impressive Resume, Formats of Resume, Job Application or Cover Letter	3		
	Job Interviews: Introduction, Importance of Resume, Definition of Interview, Background Information, Types of Interviews, Preparatory Steps for Job Interviews, Interview Skill Tips, Changes in the Interview Process, FAQ During Interviews	3		
	Group Discussion: Introduction, Ambience/Seating Arrangement for Group Discussion, Importance of Group Discussions, Difference between Group Discussion, Panel Discussion and Debate, Traits,	3		

	Types of Group Discussions, topic based and Case based Group Discussion, Individual Traits			
UNIT 3	**Academic and Professional Skills:** **Professional Presentation:** Nature of Oral Presentation, planning a Presentation, Preparing the Presentation, Delivering the Presentation	3	**Soft Skills: an Integrated Approach to Maximise Personality** by Gajendra S. Chauhan, Sangeeta Sharma, Wiley India	Chalk and Board
	Creativity at Workplace: Introduction, Current Workplaces, Creativity, Motivation, Nurturing Hobbies at Work, The Six Thinking Hat Method.	3		
	Capacity Building: Learn, Unlearn and Relearn*:* Capacity Building, Elements of Capacity Building, Zones of Learning, Ideas for Learning, Strategies for Capacity Building	3		
	Leadership and Team Building*:* Leader and Leadership, Leadership Traits, Culture and Leadership, Leadership Styles and Trends, Team Building, Types of Teams,	3		
	Decision Making and Negotiation: Introduction to Decision Making, Steps for Decision Making, Decision Making Techniques, Negotiation Fundamentals, Negotiation Styles, Major Negotiation Concepts	3		
	Stress and Time Management*:* Stress, Sources of Stress, Ways to Cope with Stress	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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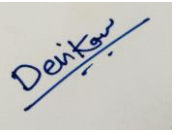

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT:CS

CLASS:SYCS SEMESTER: SEM-3 MONTH:JUN-SEP ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
Have a knowledge and understanding of geometrical transformations and 3D viewing.
Have a knowledge and understanding of techniques for representing 3D geometrical objects
Explain different Image enhancement techniques
Understand and review image transforms

PAPER,TITLE , UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Data Structures UNIT 1	**Abstract Data Type**: Different Data Types, different types of data structures & their classifications, Introduction to ADT, Creating user-specific ADT **Linked Structures:** ADT for linked list, Advantages & Disadvantages, Singly Linked List-Traversing, Searching, Prepending and Removing Nodes, applications of linked list like polynomial equation	7	Data Structures And Algorithms Made Easy-by Narasimha Karumanchi	CHALK AND BOARD, PPT
	Stacks: Stack ADT for Stack, Advantages & Disadvantages, Applications of stack like balanced delimiter, prefix to postfix notation	4		

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	Queues: Queue ADT, Advantages & Disadvantages, linked representations. Circular Queue operations, Dequeues, applications of queue like job scheduling queues	4		
UNIT 2	**Doubly Linked list**: ADT of doubly linked list, Advantages & Disadvantages, Insertion and deletion of nodes at various positions**.**	6	Data Structures And Algorithms Made Easy-by Narasimha Karumanchi	CHALK AND BOARD,PPT
	Trees: ADT for Tree Structure. Advantages & disadvantages, Binary TreeProperties, Implementation and Traversals, Binary Search Tree, Balanced BST, Threaded Binary Trees, AVL Trees, Applications of Tree like Huffman Coding,	4		
	Priority Queues & Heaps: Priority Queue, Priority Queue ADT, Advantages and Disadvantages, Applications, Heaps, types of heaps, Heapifying the element,	5		
UNIT 3	**Graph**: Introduction, Graph ADT, Advantages and Disadvantages, Graph Representation using adjacency matrix and adjacency list, Graph operations like insertion and deletion of nodes, Graph Traversals using BFS & DFS, Applications of Graphs like shortest path algorithms,	8	Data Structures And Algorithms Made Easy-by Narasimha Karumanchi	CHALK AND BOARD,PPT

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	Hashing: Hash Table ADT, Advantages & Disadvantages, Concept of hashing, hash table, hash functions, collision, collision avoidance techniques, Applications of hashing	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAYATREE KARNIK DEPARTMENT:IT SUBJECT:OS CLASS: SYCS SEM:III

MONTH:JUNE-SEPT ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

The learners will be able to :

1. To provide a understanding of operating system, its structures and functioning
2. Develop and master understanding of algorithms used by operating systems for various purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
303 UNIT I	**Introduction and Operating-Systems Structures**: Definition of Operating system, Operating System's role, **Operating-System Operations**, Functions of Operating System, Computing Environments Operating-System Structures: Operating-System Services, User and Operating-System Interface, System Calls, Types of System Calls, Operating-System Structure **Processes:** Process Concept, Process Scheduling, Operations on Processes, Interprocess Communication **Threads**: Overview, Multicore Programming, Multithreading Models	18	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Computer, Power point

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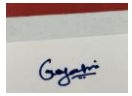
303 UNIT II	**Process Synchronization**: General structure of a typical process, race condition, The Critical-Section Problem, Peterson's Solution, Synchronization Hardware, Mutex Locks, Semaphores, Classic Problems of Synchronization, Monitors **CPU Scheduling**: Basic Concepts, Scheduling Criteria, Scheduling Algorithms (FCFS, SJF, SRTF, Priority, RR, Multilevel Queue Scheduling, Multilevel Feedback Queue Scheduling), Thread Scheduling **Deadlocks:** System Model, Deadlock Characterization, Methods for Handling Deadlocks, Deadlock Prevention, Deadlock Avoidance, Deadlock Detection, Recovery from Deadlock	15	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Computer, Power point
303 UNIT III	**Main Memory**: Background, Logical address space, Physical address space, MMU, Swapping, Contiguous Memory Allocation, Segmentation, Paging, Structure of the Page Table **Virtual Memory:** Background, Demand Paging, Copy-on-Write, Page Replacement, Allocation of Frames, Thrashing **Mass-Storage Structure**: Overview, Disk Structure, Disk Scheduling, Disk Management **File-System Interface**: File Concept, Access Methods, Directory and Disk Structure, File-System Mounting, File Sharing **File-System Implementation**: File-System Structure, File-System Implementation, Directory Implementation, Allocation Methods, Free-Space Management	15	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Computer, Power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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Teaching plan sycs sem 3 2022-23

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: computer science

CLASS: S.Y.B.Sc.(CS)

SEMESTER: June to September

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to :

- Appreciate the relevance of linear algebra in the field of computer science.
- Understand the concepts through program implementation
- Instill a computational thinking while learning linear algebra.
- Express clear understanding of the concept of a solution to a system of equations.
- Find eigenvalues and corresponding eigenvectors for a square matrix.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS302 **Linear Algebra**	Field: • Introduction to complex number,numbers in python,Abstracting over field • playing with GF(2),	4	Linear Algebra and Its Applications, Gilbert Strang, Cengage	Black board, chalk and duster

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Unit 1			Learning, 4th Edition, 2007	
	Vectors: ● Vectors are functions, ● Vector addition and scalar multiplication ● Combining vector addition and scalar multiplication ● Geometry of sets of vectors	3	Linear Algebra and Its Applications, Gilbert Strang, Cengage Learning, 4th Edition, 2007	Black board, chalk and duster
	● Dictionary based representation of vectors ● Dot product ● Solving triangular system of linear equations ● Support vector Machine-Introduction, Mechanism	4	Linear Algebra and Its Applications, Gilbert Strang, Cengage Learning, 4th Edition, 2007	Black board, chalk and duster
	The Vector Space : ● Homogeneous and no- homogeneous equation	2	Linear Algebra and Its Applications, Gilbert Strang, Cengage Learning, 4th Edition, 2007	Black board, chalk and duster
	● Linear combination and linear span	2	Linear Algebra and Its Applications, Gilbert Strang, Cengage Learning, 4th Edition, 2007	Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS 302 **Linear Algebra** **<u>Unit 2</u>**	Matrix: ● Matrices as vectors, Column space and row space, transpose ● Matrix -vector and vector-matrix multiplication in terms of linear combination ● Matrix -vector and vector-matrix multiplication in terms of dot-product	3	Linear Algebra and Its Applications, Gilbert Strang, Cengage Learning, 4th Edition, 2007	Black board,chalk and duster
	● Null space, computing Sparse matrix, vector product ● Linear function ● Inner product and outer product ● From function inverse to matrix inverse	3	Linear Algebra and Its Applications, Gilbert Strang, Cengage Learning, 4th Edition, 2007	Black board,chalk and duster
	Basis: ● Coordinate system,Two greedy algorithm for finding set of generators ● Minimum spanning forest and GF(2) ● Linear dependence and independence	2	Linear Algebra and Its Applications, Gilbert Strang, Cengage Learning, 4th Edition, 2007	Black board,chalk and duster
	Basis: ● Basis, unique representation,change of basis ● Computational problems involving finding a basis	3	Linear Algebra and Its Applications, Gilbert Strang, Cengage	Black board,chalk and duster

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			Learning, 4th Edition, 2007	
	Dimensions: ● Dimension and rank, ● Direct sum ● Dimension and linear function ● The annihilator Gaussian elimination: ● Row echelon form, Gaussian elimination over GF(2) ● Solving matrix - vector equation using Gaussian distribution ● Finding basis for null space Factoring integers	4	Linear Algebra and Its Applications, Gilbert Strang, Cengage Learning, 4th Edition, 2007	Black board,chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS 302				
Linear Algebra **<u>Unit 3</u>**	Inner product: ● The inner product for vectors over field ● Orthogonality	3	Linear Algebra and Its Applications, Gilbert Strang, Cengage	Black board, chalk and duster

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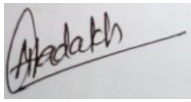
			Learning, 4th Edition, 2007	
	Orthogonalisation: ● Projection orthogonal to multiple vectors ● Projecting orthogonal to mutually orthogonal vectors ● Finding an orthogonal set of generators ● Orthogonal complement	4	Linear Algebra and Its Applications, Gilbert Strang, Cengage Learning, 4th Edition, 2007	Black board, chalk and duster
	Eigen vectors: ● Modeling discrete dynamic processes ● Diagonalization of the Fibonacci matrix ● Finding Eigen values and Eigen vectors ● Coordinate representation in terms of Eigen vectors	5	Linear Algebra and Its Applications, Gilbert Strang, Cengage Learning, 4th Edition, 2007	Black board, chalk and duster
	● The internet worm ● Markow chains ● Modeling a web surfer-page rank	3	Linear Algebra and Its Applications, Gilbert Strang, Cengage Learning, 4th Edition, 2007	Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: CS

CLASS: SYCS SEMESTER: III MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

- To understand the concepts of Hyper Text Markup Language and Cascading Style Sheets.
- To learn JavaScript for creating dynamic websites.
- To learn various operations performed on data among web applications using XML
- To learn Server-Side Programming using PHP

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
WEB TECHNOLOGIES (USCS306) Unit I	**HTML5:** Fundamental Elements of HTML, Formatting Text in HTML, Organizing Text in HTML, Links and URLs in HTML, Tables in HTML, Images on a Web Page, Image Formats, Image Maps, Colours, FORMs in HTML, Interactive Elements, Working with Multimedia - Audio and Video File Formats, HTML elements for inserting Audio / Video on a web page	8	HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP and jQuery, 2ed, Dreamtech Press	PPT, Black Board and Chalk
	CSS: Understanding the Syntax of CSS, CSS Selectors, Inserting CSS in an HTML Document, CSS properties to work with background of a Page, CSS properties to work with Fonts and Text Styles, CSS properties for positioning an element	7		
WEB TECHNOLOGIES (USCS306)	**JavaScript:** Using JavaScript in an HTML Document, Programming Fundamentals of JavaScript – Variables, Operators, Control Flow Statements, Popup Boxes, Functions – Defining and Invoking a Function, Defining Function	6	HTML 5 Black Book, Covers CSS 3, JavaScript,	PPT, Black Board and Chalk

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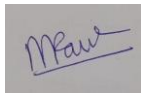
Unit II	arguments, Defining a Return Statement, Calling Functions with Timer		XML, XHTML, AJAX, PHP and jQuery, 2ed, Dreamtech Press	
	JavaScript Objects - String, RegExp, Math, Date, Browser Objects - Window, Navigator, History, Location, Document, Cookies, Document Object Model, Form Validation using JavaScript	2		PPT, Black Board and Chalk
	XML: Comparing XML with HTML, Advantages and Disadvantages of XML, Structure of an XML Document, XML Entity References, DTD, XSLT: XSLT Elements and Attributes - xsl:template, xsl:apply-templates, xsl:import, xsl:call-template, xsl:include, xsl:element, xsl:attribute, xsl:attribute-set, xsl:value-of	7		PPT, Black Board and Chalk
WEB TECHNOLOGIES (USCS306) Unit III	**AJAX**: AJAX Web Application Model, How AJAX Works, XMLHttpRequest Object – Properties and Methods, Handling asynchronous requests using AJAX	4	HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP and jQuery, 2ed, Dreamtech Press, PHP: A Beginners Guide, Vikram Vaswani, TMH	PPT, Black Board and Chalk
	PHP: Variables and Operators, Program Flow, Arrays, Working with Files and Directories, Working with Databases, Working with Cookies, Sessions and Headers	7		PPT, Wamp Server, Black Board and Chalk
	Introduction to jQuery: Fundamentals, Selectors, methods to access HTML attributes, methods for traversing, manipulators, events, effects	4		PPT, Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **S.Y.B.Sc.(CS)**

SEMESTER: **III** MONTH: **June - September** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able:

- Understand the fundamentals of content creation for Blog, Website etc.
- Acquire the ability to write and edit in a variety of styles and procedures
- To develop the creative abilities.
- To acquire essential language skills for editors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS3071 Paper 7 **Creative Content Writing** **UNIT I**	**Basics of Content writing:** Introduction to Content Writing, Learning Tone in Writing and Its Types, Comprehending style in writing and its Types, Common Grammatical Errors.	5	Content Writing Handbook, Author:Kounal Gupta, 2020, Henry Harvin. Feldar, Lynda. Writing for the Web: Creating Compelling Web Content Using Words, Pictures, and Sound. New Riders, CA, USA, 2011	Microsoft Powerpoint Presentation
	Best Practices for Writing for the Web: Making our story Elegant, Professional, Write with an Attitude, Keep Verbs Active, List Items, Chunk Information, Title and Subtitle, Organize for Your Audience.	5		
	Things Marketers Write: The Ideal Length for Blog Posts, Podcast, Facebook Posts, Tweets, and Other Marketing Content.	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS3071 Paper 7 **Creative Content Writing** **UNIT II**	**Social Media Writing:** Writing for Twitter, writing with Hashtags, Writing Social Media with Humor, writing for Facebook, writing for LinkedIn, Writing Your LinkedIn Profile, writing for Email, Writing Landing Pages, Writing Headlines, writing a Home Page, Writing the About Us Page, Writing Better Blog Posts, Writing Annual Reports.	7	Content Writing Handbook, Author:Kounal Gupta, 2020, Henry Harvin. Feldar, Lynda. Writing for the Web: Creating Compelling Web Content Using Words, Pictures, and Sound. New Riders, CA, USA, 2011	Microsoft Powerpoint Presentation
	Infographics: Visual Communication- What Are Infographics?, The Science of Visualization, Creating Infographics- Purpose, The Art of Observation, Processing Your Ideas, Designing Your Infographics, Publishing Your Infographics.	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT-CS

CLASS:SYCS SEMESTER: SEM-III MONTH: JULLY- SEPTEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

- Master concepts of stored procedure and triggers and its use.
- Learn about using PL/SQL for data management and understand concepts.
- Implementations of transaction management and crash recovery.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-4 DBMS, UNIT-1	**Stored Procedures:** Types and benefits of stored procedures, creating stored procedures, executing stored procedures, altering stored procedures, viewing stored procedures.	4	SQL,PL/SQL - The Programming language of Oracle by Ivan Bayross ,	PPT, GoogleMeet, Jamboard , slido, SQL command line ,Google form.
	Triggers: Concept of triggers, Implementing triggers – creating triggers, Insert, delete, and update triggers, nested triggers, viewing, deleting and modifying triggers, and enforcing data integrity through triggers.	4		
	Sequences: creating sequences, referencing, altering and dropping a sequence.	2		

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	File Organization and Indexing: Cluster, Primary and secondary indexing, Index data structure: hash and Tree based indexing	3	Database Management Systems by Ramakrishnam, Gehrke.	
	Comparison of file organization: cost model, Heap files, sorted files, clustered files. Creating, dropping and maintaining indexes.	2		
UNIT-2	**Fundamentals of PL/SQL:** Defining variables and constants, PL/SQL expressions and comparisons: Logical Operators, Boolean Expressions, CASE Expressions Handling.	3	SQL,PL/SQL - The Programming language of Oracle by Ivan Bayross	PPT, GoogleMeet, Jamboard , slido, SQL command line , Google form..
	Null Values in Comparisons and Conditional Statements, PL/SQL Datatypes: Number Types, Character Types, Boolean Type, Datetime and Interval Types.	3		
	Overview of PL/SQL Control Structures: Conditional Control: IF and CASE Statements, IF-THEN Statement, IF-THEN-ELSE Statement,	5		
	CASE Statement, Iterative Control: LOOP and EXIT Statements, WHILE-LOOP, FOR-LOOP, Sequential Control: GOTO and NULL Statements	4		
UNIT 3	**Transaction Management:** ACID Properties, Serializability, Two-phase Commit Protocol, Concurrency Control, Lock Management	3	SQL,PL/SQL - The Programming	
	Lost Update Problem, Inconsistent Read Problem , Read-Write Locks, Deadlocks Handling, Two Phase Locking protocol	4		

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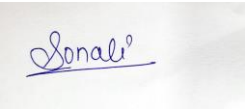
	DCL Statements: Defining a transaction, Making Changes Permanent with COMMIT, Undoing Changes with ROLLBACK, Undoing Partial Changes with SAVEPOINT and ROLLBACK.	2	language of Oracle by Ivan Bayross, Database Management Systems by Ramakrishnam, Gehrke	PPT, GoogleMeet, Jamboard , slido, SQL command line ,Google form.
	Crash Recovery: ARIES algorithm. The log based recovery, recovery related structures like transaction and dirty page table	4		
	Write-ahead log protocol, check points, recovery from a system crash, Redo and Undo phases.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SAMPADA DESHMUKH DEPARTMENT: INFORMATION TECHNOLOGY CLASS: T.Y.C.S.

SEMESTER: V MONTH: JUNE - SEPTEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concepts of basic computer security, Network Security and Cryptography.
- Understand different techniques of cryptography.
- Learn security threats and vulnerabilities and identify security problems.
- Identify threats of Network Security and apply protocol for the network.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS504 Unit 1, **Information and Network Security**	Security Trends, The OSI Security Architecture, Security Attacks, Security Services, Security Mechanisms	03	Cryptography and Network Security: Principles and Practice 5th Edition, William	PowerPoint Presentation , Black board chalk
	Classical Encryption Techniques: Symmetric Cipher Model, Substitution Techniques . Transposition Techniques, Steganography, Block Cipher Principles, The Data Encryption Standard, The Strength of DES	04	Cryptography and Network Security, Atul Kahate, Tata McGraw-Hill, 2013.	PowerPoint Presentation , Black board chalk

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	Multiple encryption Triple DES Advanced Encryption Algorithm	02	Cryptography and Network Security, Atul Kahate, Tata McGraw-Hill, 2013.	PowerPoint Presentation , Black board chalk
	Principles of public key cryptosystem concept and working Modes of operation Block cipher	03	Cryptography and Network Security: Principles and Practice 5th Edition, William	PowerPoint Presentation , Black board chalk
	Stream cipher RSA Algorithm concept RSA algorithm problem solving	03	Cryptography and Network Security, Atul Kahate, Tata McGraw-Hill, 2013.	PowerPoint Presentation , Black board chalk
USCS504, Unit 2, **Information and Network Security**	**Key Management:** Public-Key Cryptosystems Key Management Diffie-Hellman Key Exchange	03	Cryptography and Network Security: Principles and Practice 5th Edition, William	PowerPoint Presentation , Black board chalk
	Message Authentication and Hash Functions: Authentication Requirements, Authentication Functions, Message Authentication Codes Hash Functions, Security of Hash Functions and Macs,	04	Cryptography and Network Security, Atul Kahate, Tata McGraw-Hill, 2013.	PowerPoint Presentation , Black board chalk
	HMAC Secure Hash Algorithm	04	Cryptography and Network Security: Principles and Practice 5th Edition, William	PowerPoint Presentation , Black board chalk

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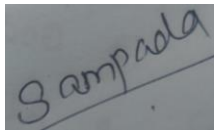
	Digital Signatures and Authentication: Digital Signatures, Authentication Protocols			
	Digital Signature Standard **Authentication Applications:** Kerberos, X.509 Authentication, Public-Key Infrastructure	04	Cryptography and Network Security: Principles and Practice 5th Edition, William	PowerPoint Presentation , Black board chalk
USCS504, Unit 3, **Information and Network Security**	**Electronic Mail Security:** Pretty Good Privacy, S/MIME **IP Security:** Overview, Architecture, Authentication Header, Encapsulating Security Payload, Combining Security Associations, Key Management	05	Cryptography and Network Security: Principles and Practice 5th Edition, William	PowerPoint Presentation , Black board chalk
	Web Security: Web Security Considerations, Secure Socket Layer and Transport Layer Security, Secure Electronic Transaction **Intrusion:** Intruders, Intrusion Techniques, Intrusion Detection	05	Cryptography and Network Security: Principles and Practice 5th Edition, William	PowerPoint Presentation , Black board chalk
	Malicious Software: Viruses and Related Threats, Virus Countermeasures, DDOS **Firewalls:** Firewall Design Principles, Types of Firewalls	05	Cryptography and Network Security: Principles and Practice 5th Edition, William	PowerPoint Presentation , Black board chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS: TYCS

SEMESTER: V MONTH: July-Sept ACADEMIC YEAR:2022-2023

LEARNING OBJECTIVE/S:

•To understand the details of web services technologies like SOAP, WSDL, and UDDI. To learn how to implement and deploy web service client and server.

•To understand the design principles and application of SOAP and REST based web services (JAX-Ws and JAX-RS).

•To understand WCF service. To design secure web services and QoS of Web Services

The learners will be able to:

•Emphasis on SOAP based web services and associated standards such as WSDL. Design SOAP based / RESTful / WCF services Deal with Security and QoS issues of Web Services

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Web Services Elective-II USCS506 Unit 1	**Web services basics:** What Are Web Services? Types of Web Services Distributed computing infrastructure, overview of XML, SOAP, Building Web Services with JAX-WS, Registering and Discovering Web Services, Service Oriented Architecture, Web Services Development Life Cycle, Developing and consuming simple Web Services across platform	15	Web Services: Principles and Technology,Michael P. Papazoglou, Pearson Education Limited, 2008	Laptop,ppt

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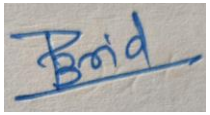
Web Services Elective-II USCS506 Unit 2	**The REST Architectural style:** Introducing HTTP, The core architectural elements of a RESTful system, Description and discovery of RESTful web services, Java tools and frameworks for building RESTful web services, JSON message format and tools and frameworks around JSON, Build RESTful web services with JAX-RS APIs, The Description and Discovery of RESTful Web Services, Design guidelines for building RESTful web services, Secure RESTful web services.	15	RESTful Java Web Services, Jobinesh Purushothaman, PACKT Publishing,2 nd Edition, 2015	Laptop,ppt
Web Services Elective-II USCS506 Unit 3	**Developing Service-Oriented Applications with WCF :** What Is Windows Communication Foundation, Fundamental Windows Communication Foundation Concepts, Windows Communication Foundation Architecture, WCF and .NET Framework Client Profile, Basic WCF Programming, WCF Feature Details. Web Service QoS	15	Developing Service-Oriented Applications with WCF, Microsoft, 2017 https://docs.microsoft.com/en-us/dotnet/framework/wcf/index	Laptop,ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **TYBSCCS** SEMESTER:**V**

MONTH: **JUNE-OCT** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:

The learners will be able to :

understand computer Graphics programming using Directx or Opengl. Along with the VR and AR they should also aware of GPU, newer technologies and programming using most important API for windows.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS507 **Game Programming** Unit-1	**Cartesian Coordinate system:** The Cartesian XY-plane, Function Graphs, Geometric Shapes, Polygonal Shapes, Areas of Shapes, Theorem of Pythagoras in 2D, Coordinates, Theorem of Pythagoras in 3D, 3D Polygons, Euler's Rule	04	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Laptop,power point,blackboard
	Vectors: Vector Manipulation, multiplying a Vector by a Scalar, Vector Addition and Subtraction, Position Vectors, Unit Vectors, Cartesian Vectors, Vector Multiplication, Scalar Product, Example of the Dot Product, The Dot Product in Lighting Calculations, The Dot Product in Back-Face Detection, The Vector Product, The Right-Hand Rule, deriving	03	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Laptop,power point,blackboard

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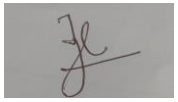
	a Unit Normal Vector for a Triangle Areas, Calculating 2D Areas			
	Transformations: 2D Transformations, Matrices, Homogeneous Coordinates, 3D Transformations, Change of Axes, Direction Cosines, rotating a Point about an Arbitrary Axis, Transforming Vectors, Determinants, Perspective Projection, Interpolation	06	Computer Graphics, C Version, Donald Hern and Pauline Baker, Pearson Education, 2nd Edition, 1997	Laptop,power point,blackboard
	DirectX: Understanding GPU and GPU architectures. How they are different from CPU Architectures? Understanding how to solve by GPU?	02	Introduction To 3D Game Programming With Directx® 11	Laptop,power point,blackboard
USCS507 **Game Programming** Unit-2	**Introduction To DirectX 11:** COM, Textures and Resources Formats, The swap chain and Page flipping, Depth Buffering, Texture Resource Views, Multisampling Theory and MS in Direct3D, Feature Levels	03	Introduction To 3D Game Programming With Directx® 11	Laptop,power point,blackboard
	Direct3D 11 Rendering Pipeline: Overview, Input Assembler Stage (IA), Vertex Shader Stage (VS), The Tessellation Stage (TS), Geometry Shader Stage (GS), Pixel Shader Stage (PS), Output merger Stage (OM) Understanding Meshes or Objects, Texturing, Lighting, Blending.	03	Introduction To 3D Game Programming With Directx® 11	Laptop,power point,blackboard
	Trigonometry: The Trigonometric Ratios, Inverse Trigonometric Ratios, Trigonometric Relationships, The Sine Rule, The Cosine	03	Introduction To 3D Game Programming With Directx® 11	Laptop,power point,blackboard

	Rule, Compound Angles, Perimeter Relationships			
	Interpolation: Linear Interpolant, Non-Linear Interpolation, Trigonometric Interpolation, Cubic Interpolation, Interpolating Vectors, Interpolating Quaternions	03	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Laptop,power point,blackboard
	Curves: Circle, Bezier, B-Splines **Analytic Geometry:** Review of Geometry, 2D Analytic Geometry, Intersection Points, Point in Triangle, and Intersection of circle with straight line.	03	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Laptop,power point,blackboard
USCS507 **Game Programming** Unit-3	**Introduction to Rendering Engines:** Understanding the current market Rendering Engines. Understanding AR, VR and MR.Depth Mappers, Mobile Phones, Smart Glasses, HMD's **Unity Engine: Multi-platform publishing, VR + AR:** Introduction and working in Unity, 2D, Graphics, Physics, Scripting, Animation, Timeline, Multiplayer and Networking, UI, Navigation and Pathfinding, XR, Publishing.	10	https://docs.unity3d.com/Manual/index.html	Laptop,power point,blackboard
	Scripting: Scripting Overview, Scripting Tools and Event Overview **XR:** VR, AR, MR, Conceptual Differences. SDK, Devices	05	https://docs.unity3d.com/Manual/index.html	Laptop,power point,blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **T.Y.B.Sc.(CS)**

SEMESTER: **V** MONTH: **June - September** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able:

- To get a clear understanding of AI and different search algorithms used for solving problems.
- To get acquainted with different learning algorithms and models used in machine learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 **Paper I** **Artificial Intelligence** **UNIT I**	**What Is AI:** Foundations, History and State of the Art of AI.	4	Artificial Intelligence: A Modern Approach, Stuart Russell and Peter Norvig,3rd Edition.	Microsoft PowerPoint Presentation
	Intelligent Agents: Agents and Environments, Nature of Environments, Structure of Agents.	3		
	Problem Solving by searching: Problem-Solving Agents, Example Problems, Searching for Solutions, Uninformed Search Strategies.	4		
	Informed (Heuristic) Search Strategies, Heuristic Functions.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 **Paper I** **Artificial Intelligence** **UNIT II**	**Learning from Examples:** Forms of Learning, Supervised Learning, Learning Decision Trees	3	Artificial Intelligence: A Modern Approach, Stuart Russell and Peter Norvig,3rd Edition.	Microsoft PowerPoint Presentation
	Evaluating and Choosing the Best Hypothesis, Theory of Learning	3		
	Regression and Classification with Linear Models ,Artificial Neural Networks	4		
	Nonparametric Models, Support Vector Machines, Ensemble Learning, Practical Machine Learning	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 **Paper I** **Artificial Intelligence** **UNIT III**	**Learning probabilistic models:** Statistical Learning, Learning with Complete Data.	4	Artificial Intelligence: A Modern Approach, Stuart Russell and Peter Norvig,3rd Edition.	Microsoft PowerPoint Presentation
	Learning with Hidden Variables: The EM Algorithm	3		
	Reinforcement learning: Passive Reinforcement Learning, Active Reinforcement Learning,	4		
	Generalization in Reinforcement Learning, Policy Search, Applications of Reinforcement Learning.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. **Design & Analysis of Algorithms** **DEPARTMENT: Information Technology.**

CLASS: F.Y.B.Sc.(CS) **SEMESTER: II** **MONTH: Dec to April** **ACADEMIC YEAR: 2022-23**

LEARNING OBJECTIVE/S:

- To make students understand the basic principles of algorithm design
- To give idea to students about the theoretical background of the basic data structures
- To familiarize the students with fundamental problem-solving strategies like searching, sorting, selection, recursion and help them to evaluate efficiencies of various algorithms.
- To teach students the important algorithm design paradigms and how they can be used to solve various real world problems.

The learners will be able to :

- Students should be able to understand and evaluate efficiency of the programs that they write based on performance of the algorithms used.
- Students should be able to appreciate the use of various data structures as per need
- To select, decide and apply appropriate design principle by understanding the requirements of any real life problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS201 Design & Analysis of Algorithms UNIT-2	Recursion - What is recursion, Recursion vs Iteration, recursion applications like Factorial of a number, Fibonacci series & their comparative analysis with respect to iterative version, Tower of Hanoi problem Basic Sorting Techniques - Bubble, Selection and Insertion Sort & their comparative analysis Searching Techniques - Linear Search and its types, Binary Search and their comparative analysis Selection Techniques - Selection by Sorting, Partition-	15	1. "Data Structure and Algorithm Using Python", Rance D. Necaise, Wiley India Edition, 2016. 2. "Data Structures and Algorithms Made Easy",	Black Board, Projector, Google Meet PPT

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	based Selection Algorithm, Finding the Kth Smallest Elements in Sorted Order & their comparative analysis String Algorithms - Pattern matching in strings, Brute Force Method & their comparative analysis		NarasimhaKarumanchi, CareerMonk Publications, 2016. 3. "Introduction to Algorithms", Thomas H. Cormen, 3rd Edition, PHI.	
USCS201 Design & Analysis of Algorithms UNIT-3	Algorithm Design Techniques - Introduction to various types of classifications/design criteria and design techniques Greedy Technique - Concept, Advantages & Disadvantages, Applications, Implementation using problems like - file merging problem Divide-n-Conquer - Concept, Advantages & Disadvantages, Applications, Implementation using problems like - merge sort, Strassen's Matrix Multiplication Dynamic Programming - Concept, Advantages & Disadvantages, Applications, Implementation using problems like - Fibonacci series, Factorial of a number, Longest Common subsequence Backtracking Programming - Concept, Advantages & Disadvantages, Applications, Implementation using problems like N-Queen Problem	15	1. "Data Structure and Algorithm Using Python", Rance D. Necaise, Wiley India Edition, 2016. 2. "Data Structures and Algorithms Made Easy", NarasimhaKarumanchi, CareerMonk Publications, 2016. 3. "Introduction to Algorithms", Thomas H. Cormen, 3rd Edition, PHI.	Black Board, Projector, Google Meet PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF-Ms.SONALI DATTATRAY SALVANIKAR DEPARTMENT: CS

CLASS:FYCS-A SEMESTER: II MONTH: December to April ACADEMIC YEAR:2022-2023

LEARNING OBJECTIVES:

- After successful completion of this course, To appreciate the importance of database design.
- Analyze database requirements and determine the entities involved in the system and their relationship to one another.
- Write simple queries to MySQL related to String, Maths and Date Functions.
- Create tables and insert/update/delete data, and query data in a relational DBMS using MySQL commands.
- Understand the normalization and its role in the database design process.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Database Systems (USCS204) UNIT I	**Introduction to DBMS** – Database, DBMS – Definition, Overview of DBMS, Advantages of DBMS, Levels of abstraction, Data independence, DBMS Architecture	2	1."Fundamentals of Database System", Elmasri Ramez, Navathe Shamkant, Pearson Education, Seventh edition, 2017	PPT , Projector, Google Meet Blackboard & Chalk Black board and chalk.
	Data models - Client/Server Architecture, Object Based Logical Model, Record Based Logical Model (relational, hierarchical, network)	2		
	Entity Relationship Model - Entities, attributes, entity sets, relations, relationship sets, Additional constraints (key constraints, participation constraints, weak entities, aggregation / generalization, Conceptual	3		

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	Design using ER (entities VS attributes, Entity Vs relationship, binary Vs ternary, constraints beyond ER)		2 "Database Management Systems", Raghu Ramakrishnan and Johannes Gehrke, 3rd Edition, 2014 3. "Murach's MySQL", Joel Murach, 3rd Edition, 3rd Edition, 2019	
	ER to Table- Entity to Table, Relationship to tables with and without key constraints.	2		
	DDL Statements - Creating Databases, Using Databases, datatypes, Creating Tables (with integrity constraints – primary key, default, check, not null), Altering Tables, Renaming Tables, Dropping Tables, Truncating Tables	3		
	DML Statements – Viewing the structure of a table insert, update, delete, Select all columns, specific columns, unique records, conditional select, in clause, between clause, limit, aggregate functions (count, min, max, avg, sum), group by clause, having clause.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF-VRUNDA VISHAL GHARAT DEPARTMENT: CS

CLASS:FYCS SEMESTER: II MONTH: December to April ACADEMIC YEAR:2022-2023

LEARNING OBJECTIVE/S:

- After successful completion of this course, students would be able to Work with numeric, character and textual data and arrays.
- Understand the importance of OOP approach over procedural language.
- Understand how to model classes and relationships using UML.
- Apply the concepts of OOPS like encapsulation, inheritance and polymorphism.
- Handle basic file operations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to OOPs using C++ (USCS203) UNIT I	**Introduction to Programming Concepts**: Object oriented programming paradigm, basic concepts of object oriented programming, benefits of object oriented programming, object oriented languages, applications of object oriented programming. Tokens-keywords, identifiers, constants-integer, real, character and string constants, backslash constants, features of C++ and its basic structure, simple C++ program without class, compiling and running C++program. **Data Types, Data Input Output and Operators:** Basic data types, variables, rules for naming variables, programming constants, the type cast operator, implicit and explicit type casting, cout and cin statements, operators, precedence of operators. **Decision Making, Loops, Arrays and Strings:** Conditional statements-if, if...else, switch loops- while, do...while, for, types of arrays and string and string manipulations	15	Object Oriented Programming with C++, Balagurusamy E., 8th Edition, McGraw Hill Education India. 2. UML & C++: A Practical Guide to Object Oriented Development, Lee/Tepfenhart, Pearson Education, 2nd Edition201	Black board and chalk

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	Unified Modeling Language (UML): Introduction to UML & class diagrams. **Classes, Abstraction & Encapsulation**: Classes and objects, Dot Operator, data members, member functions, passing data to functions, scope and visibility of variables in function.			

Introduction to OOPs using C++ (USCS203) UNIT II	**Constructors and Destructors**: Default constructor, parameterized constructor, copy constructor, private constructor, destructors. **Working with objects**: Accessor - mutator methods, static data and static function, access specifiers, array of objects. **Polymorphism** - Binding-static binding & overloading, constructor overloading function overloading, operator overloading, overloading unary and binary operators. **Modelling Relationships in Class Diagrams:** Association, AggregationComposition and examples covering these principle	15	Object Oriented Programming with C++, Balagurusamy E., 8th Edition, McGraw Hill Education India	Black board and chalk
Introduction to OOPs using C++ (USCS203) UNIT III	**Inheritance**: Defining base class and its derived class, access specifiers, types of inheritance-single, multiple, hierarchical, multilevel, hybrid inheritance, friend function and friend class, constructors in derived classes. **Modelling Relationships**: Generalization-Specialization and examples covering these principles Run time Polymorphism - Dynamic Binding, Function overriding, virtual function, pure virtual function, virtual base class, abstract class. **Pointers**: Introduction to pointers, * and & operators, assigning addresses to pointer variables, accessing values using pointers, pointers to objects & this pointer, pointers to derived classes **File Handling:** File Stream classes, opening and closing file-file opening modes, text file handling, binary file handling.	15	UML & C++: A Practical Guide to Object Oriented Development, Lee/Tepfenhart, Pearson Education, 2nd Edition201	Black board and chalk

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	Applying OOP to solve real life applications: To cover case studies like library management, order management etc. to design classes covering all relationships			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. MONIKA MADHUKAR RAUT DEPARTMENT: CS

CLASS: FYCS SEMESTER: II MONTH: JANUARY TO MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- Students should be able to understand and evaluate efficiency of the programs that they write based on performance of the algorithms used.
- Students should be able to appreciate the use of various data structures as per need.
- To select, decide and apply appropriate design principle by understanding the requirements of any real-life problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD
Design & Analysis of Algorithms (USCS201) Unit I	**Introduction to algorithms** - What is algorithm, analysis of algorithm, Types of complexity, Running time analysis, How to Compare Algorithms, Rate of Growth, Types of Analysis, Asymptotic Notation, Big-O Notation, Omega-Ω Notation, Theta-Θ Notation, Asymptotic Analysis, Performance characteristics of algorithms, Estimating running time / number of steps of executions on paper, Idea of Computability	08	Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	PPT, Chalk and board
	Introduction to Data Structures - What is data structure, types, Introduction to Array(1-d & 2-d), Stack and List data structures, operations on these data structures, advantages disadvantages and applications of these data structures like solving linear equations, Polynomial Representation, Infix-to-Postfix conversion	07		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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Teaching plan for FYCS sem 2 2022-23

lTEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: Computer Science

CLASS: Fybsc(CS)

SEMESTER: 2

MONTH: February to April

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners would be able to

- Calculate probability, conditional probability and independence.
- Apply the given discrete and continuous distributions whenever necessary.
- Define null hypothesis, alternative hypothesis, level of significance, test statistic and pvalue.
- Perform Test of Hypothesis as well as calculate confidence interval for a population parameter for single sample and two sample cases.
- Apply non-parametric test whenever necessary.
- Conduct and interpret one-way and two-way ANOVA.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	Reference /s	Teaching method Ict tool used
Paper: Statistical Methods **<u>Unit 1</u>**	**Probability:** ➢ Random experiment, sample space, events types and ➢ operations of events, Probability definition: classical, axiomatic, ➢ Elementary Theorems of probability (without proof). ➢ Conditional probability, „Bayes" theorem, independence, Examples on Probability.	**8**	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and	Black board, chalk and duster

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Teaching plan for FYCS sem 2 2022-23

			Sons, New Delhi	

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	Random Variables: ➢ Concept and definition of a discrete random variable and continuous random variable. ➢ Probability mass function, Probability density function and cumulative distribution function of discrete and continuous random variable, ➢ Properties of cumulative distribution function**.**	7	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New Delhi	Black board, chalk and duster

<u>Unit 2</u>	**Mathematical Expectation and Variance:** ➢ Expectation of a function,Variance and S.D of a random variable, ➢ properties.	6	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New	Black board, chalk and duster

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Teaching plan for FYCS sem 2 2022-23

			Delhi	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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	Standard Probability distributions: ➢ Introduction,properties, ➢ Examples and applications of each of the following distributions: Binomial distribution,Normal distribution,Chi-square distribution, t distribution, F distribution	9	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New Delhi	Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

Unit 3	**Hypothesis testing:** ➢ One sided,Two sided hypothesis, critical region, p-value, ➢ tests based on t, Normal and F, confidence intervals**.**	4	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New Delhi	Black board, chalk and duster

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Teaching plan for FYCS sem 2 2022-23

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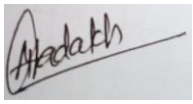
	Analysis of Variance: One-way, two-way analysis of variance. .	4	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New Delhi	Black board, chalk and duster
	Non-parametric tests: ➢ Need of non-parametric tests, ➢ Sign test,Wilicoxon's signed rank test, run test, Kruskal-Walistests, Chisquare test	7	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New Delhi	Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lecture



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BIJOYA SARMA DEPARTMENT: MATHEMATICS

CLASS: FYB.Sc (CS) SEMESTER: II MONTH: JANUARY- MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : understand concept of derivation and application how to apply.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:USCS205 UNIT I DERIVATIVES AND ITS APPLICATIONS	DERIVATIVES AND ITS APPLICATIONS: Review of Basic Concepts: Functions, limit of a function, continuity of a function, derivative function.	3	Calculus and analytic geometry (9th edition) By George B Thomas, Ross L Finney, Addison Wesley	Blackboard, Duster and Chalk
	Derivative In Graphing And Applications: Increase, Decrease, Concavity, Relative Extreme; Graphing Polynomials	5		
	Rational Functions, Cusps and Vertical Tangents. Absolute Maxima and Minima	4		
	Applied Maximum and Minimum Problems, Newton's Method.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BIJOYA SARMA DEPARTMENT: MATHEMATICS

CLASS: FYB.Sc (CS) SEMESTER: II MONTH: JANUARY- MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : understand the application of integration and how to implement in different field.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:USCS205, UNIT II INTEGRATION AND ITS APPLICATIONS	INTEGRATION AND ITS APPLICATIONS: Integration: An Overview of the Area Problem, Indefinite Integral	3	Calculus and analytic geometry (9th edition) By George B Thomas, Ross L Finney, Addison Wesley	Blackboard, Duster and Chalk
	Definition of Area as a Limit; Sigma Notation, Definite Integral, Evaluating	3		
	Definite Integrals by Substitution, Numerical Integration: Simpson's Rule.	3		
	Applications of Integration: Area between two curves, Length of a plane curve.	3		
	Mathematical Modeling with Differential Equations: Modeling with Differential Equations, Separation of Variables, Slope Fields, Euler's Method, First-Order Differential Equations and Applications.)	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

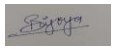
NAME OF THE STAFF: BIJOYA SARMA DEPARTMENT: MATHEMATICS

CLASS: FYB.Sc (CS) SEMESTER: II MONTH: JANUARY- MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : understand the concept of partial derivative.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:USCS205 UNIT III PARTIAL DERIVATIVES AND ITSAPPLICATIONS:	Functions of Several Variables: Functions of two or more variables, Limits and Continuity of functions of two or three variables	4	Calculus and analytic geometry (9th edition) By George B Thomas, Ross L Finney, Addison Wesley	Blackboard, Duster and Chalk
	Partial Derivatives: Partial Derivatives, Differentiability, Differentials, and Local Linearity, Chain Rule	3		
	Implicit Differentiation, Directional Derivatives and Gradients	4		
	Applications of Partial Derivatives: Tangent Planes and Normal Vectors, Maxima and Minima of Functions of Two Variables.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: COMPUTER SCIENCE CLASS: FYCS

SEMESTER: II MONTH: FEB-APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand how to read/write to files using python.
- Catch their own errors that happen during execution of programs.
- Get introductions to the concept of pattern matching.
- Be familiar with the concepts of GUI controls and designing GUI applications.
- Connect to the database to move the data to/from the application.
- Know how to connect to computers, read from URL and send email.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS202, Unit 1, Advanced Python Programming	Working with files: Files, opening and closing a file, working with text files containing strings, knowing whether a file exists or not, working with binary files, the „with" statement, the seek() and tell() methods, random accessing of binary files, zipping and unzipping files, working with directories, running other programs from python program	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	PowerPoint Presentation
	Regular expressions: What is a regular expression?, sequence characters in regular expressions, quantifiers in regular expressions, special characters in regular expressions, using regular expression on files, retrieving information from an html file, Threads in python: Difference between process and thread, types of threads, benefits of threads, creating threads, single	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	PowerPoint Presentation

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	tasking and multitasking, thread synchronization, deadlock in threads, daemon threads			
	Date and time in python: Date and time now, combining date and time, 15 Page 33 of 50 formatting dates and times, finding durations using "time delta", comparing two dates, sorting dates, stopping execution temporarily, knowing the time taken by a program, calendar module	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	PowerPoint Presentation
USCS202, Unit 2, Advanced Python Programming	Database in python: Using SQL with python, retrieving rows from a table, inserting rows into a table, deleting rows from a table, updating rows in a table, creating database tables through python, Exception handling in databases.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	PowerPoint Presentation
	Exceptions in python: Errors in a python program, compile & run-time errors, logical error, exceptions-exception handling, types of exceptions, the except block, the assert statement, user-defined exceptions, logging the exceptions Networking: Protocols,server-client architecture, tcp/ip and udp communication	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	PowerPoint Presentation
	Graphical user interface: Creating a GUI in python, Widget classes, Working with Fonts and Colours, working with Frames, Layout manager, Event handling	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	PowerPoint Presentation
USCS202, Unit 3, Advanced	OOPs in python: Features of Object Oriented Programming system (oops)- classes and objects, encapsulation, abstraction, inheritance, polymorphism, constructors and destructors Classes	05	Paul Gries, Programming: An Introduction	PowerPoint Presentation

Python Programming	and objects: Creating a class, the self-variable, types of variables, namespaces, types of methods, instance methods, class methods, static methods, passing members of one class to another class, inner classes		to Computer Science Using Python 3	
	Inheritance and polymorphism: Inheritance in python, types of inheritance- single inheritance, multilevel inheritance, hierarchical inheritance, multiple inheritance, constructors in inheritance, overriding super class constructors and methods, the super() method, method resolution order (mro), polymorphism, duck typing, operator overloading, method overloading, method overriding,	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	PowerPoint Presentation
	Abstract classes and interfaces: Abstract class, abstract method,interfaces in python, abstract classes vs. Interfaces	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: RUTUJA PRASHANT GUPTA DEPARTMENT: CS

CLASS: FYCS SEMESTER: II MONTH: DECEMBER TO APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- To learn how to design object-oriented programs with Python classes
- To learn about reading, writing and implementing other operation on files in Python.
- To implement threading concept and multithreading on Python.
- To design GUI Programs and implement database interaction using Python.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Advanced Python Programming (USCS202) Unit I	**Working with files:** Files, opening and closing a file, working with textfiles containing strings, knowing whether a file exists or not, working with binary files, the „with" statement, the seek() and tell() methods, random accessing of binary files, zipping and unzipping files, working with directories, running other programs from python program	04	Paul Gries , Jennifer Campbell, Jason Montojo, 3rd Edition, 2018	Black board and chalk
	Regular expressions: What is a regular expression?, sequence characters in regular expressions, quantifiers in regular expressions, special characters in regular expressions, using regular expression on files, retrieving information from an html file,	04		
	Threads in python: Difference between process and thread, types of threads, benefits of threads, creating threads, single tasking and multitasking, thread synchronization, deadlock in threads, daemon threads	04		
	Date and time in python: Date and time now, combining date and time formatting dates and times, finding durations using "time delta", comparing two dates, sorting dates, stopping execution	03		

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	temporarily, knowing the time taken by a program, calendar module			

Advanced Python Programming (USCS202) Unit II	**Database in python:** Using SQL with python, retrieving rows from a table, inserting rows into a table, deleting rows from a table, updating rows in a table, creating database tables through python, Exception handling in databases.	04	Paul Gries , Jennifer Campbell, Jason Montojo, 3rd Edition, 2018 ,	Black board and chalk
	Exceptions in python: Errors in a python program, compile & run-time errors, logical error, exceptions-exception handling, types of exceptions, the except block, the assert statement, user-defined exceptions, logging the exceptions	04		
	Networking: Protocols,server-client architecture, tcp/ip and udp communication	03		
	Graphical user interface: Creating a GUI in python, Widget classes, Working with Fonts and Colours, working with Frames, Layout manager, Event handling	04		
Advanced Python Programming (USCS202) Unit III	**OOPs in python:** Features of Object Oriented Programming system (oops)- classes and objects, encapsulation, abstraction, inheritance, polymorphism, constructors and destructors	04	Paul Gries , Jennifer Campbell, Jason Montojo, 3rd Edition, 2018	Black board and chalk
	Classes and objects: Creating a class, the self-variable, types of variables,namespaces, types of methods, instance methods, class methods, static methods, passing members of one class to another class, inner classes	04		
	Inheritance and polymorphism: Inheritance in python, types of inheritance- single inheritance, multilevel inheritance, hierarchical inheritance, multiple inheritance, constructors in inheritance, overriding super class constructors and methods, the super() method, method resolution order (mro), polymorphism, duck typing, operator overloading, method overloading, method overriding,	04		

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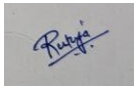
	Abstract classes and interfaces: Abstract class, abstract method, interfaces in python, abstract classes vs. Interfaces	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF-Ms.JUILEE KIRAN PATIL. DEPARTMENT: CS

CLASS:FYCS - B SEMESTER: II MONTH: December to April ACADEMIC YEAR:2022-2023

LEARNING OBJECTIVES:

- After successful completion of this course, To appreciate the importance of database design.
- Analyze database requirements and determine the entities involved in the system and their relationship to one another.
- Write simple queries to MySQL related to String, Maths and Date Functions.
- Create tables and insert/update/delete data, and query data in a relational DBMS using MySQL commands.
- Understand the normalization and its role in the database design process.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Database Systems (USCS204) UNIT I	**Introduction to DBMS** – Database, DBMS – Definition, Overview of DBMS, Advantages of DBMS, Levels of abstraction, Data independence, DBMS Architecture **Data models** - Client/Server Architecture, Object Based Logical Model, Record Based Logical Model (relational, hierarchical, network) **Entity Relationship Model** - Entities, attributes, entity sets, relations, relationship sets, Additional constraints (key constraints, participation constraints, weak entities, aggregation / generalization, Conceptual Design using ER (entities VS attributes, Entity Vs relationship, binary Vs ternary, constraints beyond ER) **ER to Table**- Entity to Table, Relationship to tables with and without key constraints. **DDL Statements** - Creating Databases, Using Databases, datatypes, Creating Tables (with integrity constraints – primary	15	1."Fundamentals of Database System", Elmasri Ramez, Navathe Shamkant, Pearson Education, Seventh edition, 2017 2 "Database Management Systems", Raghu Ramakrishnan and Johannes Gehrke, 3rd Edition, 2014	Black board and chalk.

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	key, default, check, not null), Altering Tables, Renaming Tables, Dropping Tables, Truncating Tables **DML Statements** – Viewing the structure of a table insert, update, delete, Select all columns, specific columns, unique records, conditional select, in clause, between clause, limit, aggregate functions (count, min, max, avg, sum), group by clause, having clause.		3. "Murach's MySQL", Joel Murach, 3rd Edition, 3rd Edition, 2019	

Database Systems (USCS204) UNIT II	**Relational data model**– Domains, attributes, Tuples and Relations, Relational Model Notation, Characteristics of Relations, Relational Constraints - primary key, referential integrity, unique constraint, Null constraint, Check constraint **Relational Algebra** operations (selection, projection, set operations union, intersection, difference, cross product, Joins – conditional, equi join and natural joins, division) **Functions** – String Functions (concat, instr, left, right, mid, length, lcase/lower, ucase/upper, replace, strcmp, trim, ltrim, rtrim), Math Functions (abs, ceil, floor, mod, pow, sqrt, round, truncate) Date Functions (adddate, datediff, day, month, year, hour, min, sec, now, reverse) **Joining Tables** – inner join, outer join (left outer, right outer, full outer) **Subqueries** – subqueries with IN, EXISTS, subqueries restrictions, Nested subqueries, ANY/ALL clause, correlated subqueries.	15	1."Fundamentals of Database System", Elmasri Ramez, Navathe Shamkant, Pearson Education, Seventh edition, 2017	Black board and chalk
Database Systems (USCS204) UNIT III	**Schema refinement and Normal forms**: Functional dependencies, first, second, third, and BCNF normal forms based on primary keys, lossless join decomposition.	15	2 "Database Management Systems", Raghu Ramakrishnan and Johannes Gehrke, 3rd Edition, 2014	Black board and chalk

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	Database Protection: Security Issues, Threats to Databases, Security Mechanisms, Role of DBA, Discretionary Access Control, Backing Up and Restoring databases **Views** (creating, altering dropping, renaming and manipulating views) **DCL Statements** (creating/dropping users, privileges introduction, granting/revoking privileges, viewing privileges), Transaction control commands – Commit, Rollback **Index Structures of Files**: Introduction, Primary index, Clustering Index, Multilevel indexes.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: CS

CLASS:FYCS SEMESTER: SEM-II MONTH: DECEMBER-APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The course aims to introduce a new programming paradigm called Object Oriented Programming. This will be covered using C++ programming language. C++ is a versatile programming language, which supports a variety of programming styles, including procedural, object-oriented, and functional programming. This makes C++ powerful as well as flexible. It can be used to develop software such as operating systems, databases, and compilers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3 Introduction to OOPs using C++, UNIT 1	**Introduction to Programming Concepts**: Object oriented programming paradigm, basic concepts of object oriented programming, benefits of object oriented programming, object oriented languages, applications of object oriented programming.	2	Object Oriented Programming with C++, Balagurusamy	PPT , Projector, Google Meet Blackboard & Chalk
	Tokens-keywords, identifiers, constants-integer, real, character and string constants, backslash constants, features of C++ and its basic structure, simple C++ program without class, compiling and running C++ program..	1		

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	Data Types, Data Input Output and Operators: Basic data types, variables, rules for naming variables, programming constants, the type cast operator, implicit and explicit type casting, cout and cin statements ,operators, precedence of operators.	2		
	Decision Making, Loops, Arrays and Strings: Conditional statements-if, if...else, switch loops- while, do...while, for, types of arrays and string and string manipulations.	5		
	Unified Modeling Language (UML): Introduction to UML & class diagrams.	2		
	Classes, Abstraction & Encapsulation: Classes and objects, Dot Operator, data members, member functions, passing data to functions, scope and visibility of variables in function.	3		
UNIT-2	**Constructors and Destructors:** Default constructor, parameterized , constructor, copy constructor, private constructor, destructors.	3	Object Oriented Programming with C++, Balagurusamy , UML & C++:	PPT , Projector, Google Meet Blackboard & Chalk,
	Working with objects: Accessor - mutator methods, static data and static function, access specifiers, array of objects**.**	4		
	Polymorphism - Binding-static binding & overloading, constructor overloading function overloading, operator overloading, overloading unary and binary operators.	5		
	Modelling Relationships in Class Diagrams: Association, Aggregation- Composition and examples covering these principles.	3		

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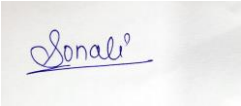
UNIT 3	**Inheritance:** Defining base class and its derived class, access specifiers, types of inheritance-single, multiple, hierarchical, multilevel, hybrid inheritance, friend function and friend class, constructors in derived classes**.**	4	Object Oriented Programming with C++, Balagurusamy, UML & C++	PPT, Projector, Google Meet Blackboard & Chalk.
	Modelling Relationships: Generalization-Specialization and examples covering these principles.	2		
	Run time Polymorphism - Dynamic Binding, Function overriding, virtual function, pure virtual function, virtual base class, abstract class.	2		
	Pointers: Introduction to pointers, * and & operators, assigning addresses to pointer variables, accessing values using pointers, pointers to objects &this pointer, pointers to derived classes	3		
	File Handling: File Stream classes, opening and closing file-file opening modes, text file handling, binary file handling.	2		
	Applying OOP to solve real life applications: To cover case studies like library management, order management etc. to design classes covering all relationships.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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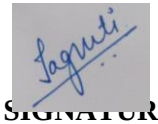

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Teaching plan for FYCS sem 2 2022-23

lTEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: Computer Science

CLASS: Fybsc(CS)

SEMESTER: 2

MONTH: February to April

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners would be able to

- Calculate probability, conditional probability and independence.
- Apply the given discrete and continuous distributions whenever necessary.
- Define null hypothesis, alternative hypothesis, level of significance, test statistic and pvalue.
- Perform Test of Hypothesis as well as calculate confidence interval for a population parameter for single sample and two sample cases.
- Apply non-parametric test whenever necessary.
- Conduct and interpret one-way and two-way ANOVA.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	Reference /s	Teaching method Ict tool used
Paper: Statistical Methods **<u>Unit 1</u>**	**Probability:** ➢ Random experiment, sample space, events types and ➢ operations of events, Probability definition: classical, axiomatic, ➢ Elementary Theorems of probability (without proof). ➢ Conditional probability, „Bayes" theorem, independence, Examples on Probability.	**8**	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and	Black board, chalk and duster

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Teaching plan for FYCS sem 2 2022-23

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	Random Variables: ➢ Concept and definition of a discrete random variable and continuous random variable. ➢ Probability mass function, Probability density function and cumulative distribution function of discrete and continuous random variable, ➢ Properties of cumulative distribution function**.**	7	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New Delhi	Black board, chalk and duster

<u>Unit 2</u>	**Mathematical Expectation and Variance:** ➢ Expectation of a function,Variance and S.D of a random variable, ➢ properties.	6	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New	Black board, chalk and duster

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Teaching plan for FYCS sem 2 2022-23

			Delhi	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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	Standard Probability distributions: ➢ Introduction,properties, ➢ Examples and applications of each of the following distributions: Binomial distribution,Normal distribution,Chi-square distribution, t distribution, F distribution	9	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New Delhi	Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

Unit 3	**Hypothesis testing:** ➢ One sided,Two sided hypothesis, critical region, p-value, ➢ tests based on t, Normal and F, confidence intervals**.**	4	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New Delhi	Black board, chalk and duster

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Teaching plan for FYCS sem 2 2022-23

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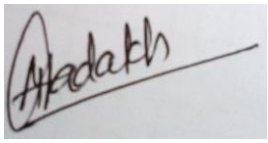
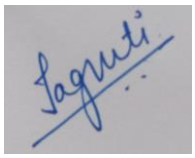
	Analysis of Variance: One-way, two-way analysis of variance. .	4	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New Delhi	Black board, chalk and duster
	Non-parametric tests: ➢ Need of non-parametric tests, ➢ Sign test,Wilicoxon's signed rank test, run test, Kruskal-Walistests, Chisquare test	7	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New Delhi	Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lecture





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BIJOYA SARMA DEPARTMENT: MATHEMATICS

CLASS: FYB.Sc (CS) SEMESTER: II MONTH: JANUARY- MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : understand concept of derivation and application how to apply.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:USCS205 UNIT I DERIVATIVES AND ITS APPLICATIONS	DERIVATIVES AND ITS APPLICATIONS: Review of Basic Concepts: Functions, limit of a function, continuity of a function, derivative function.	3	Calculus and analytic geometry (9th edition) By George B Thomas, Ross L Finney, Addison Wesley	Blackboard, Duster and Chalk
	Derivative In Graphing And Applications: Increase, Decrease, Concavity, Relative Extreme; Graphing Polynomials	5		
	Rational Functions, Cusps and Vertical Tangents. Absolute Maxima and Minima	4		
	Applied Maximum and Minimum Problems, Newton's Method.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BIJOYA SARMA DEPARTMENT: MATHEMATICS

CLASS: FYB.Sc (CS) SEMESTER: II MONTH: JANUARY- MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : understand the application of integration and how to implement in different field.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:USCS205, UNIT II INTEGRATION AND ITS APPLICATIONS	INTEGRATION AND ITS APPLICATIONS: Integration: An Overview of the Area Problem, Indefinite Integral	3	Calculus and analytic geometry (9th edition) By George B Thomas, Ross L Finney, Addison Wesley	Blackboard, Duster and Chalk
	Definition of Area as a Limit; Sigma Notation, Definite Integral, Evaluating	3		
	Definite Integrals by Substitution, Numerical Integration: Simpson's Rule.	3		
	Applications of Integration: Area between two curves, Length of a plane curve.	3		
	Mathematical Modeling with Differential Equations: Modeling with Differential Equations, Separation of Variables, Slope Fields, Euler's Method, First-Order Differential Equations and Applications.)	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

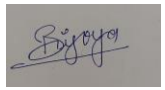
NAME OF THE STAFF: BIJOYA SARMA DEPARTMENT: MATHEMATICS

CLASS: FYB.Sc (CS) SEMESTER: II MONTH: JANUARY- MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : understand the concept of partial derivative.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:USCS205 UNIT III PARTIAL DERIVATIVES AND ITSAPPLICATIONS:	Functions of Several Variables: Functions of two or more variables, Limits and Continuity of functions of two or three variables	4	Calculus and analytic geometry (9th edition) By George B Thomas, Ross L Finney, Addison Wesley	Blackboard, Duster and Chalk
	Partial Derivatives: Partial Derivatives, Differentiability, Differentials, and Local Linearity, Chain Rule	3		
	Implicit Differentiation, Directional Derivatives and Gradients	4		
	Applications of Partial Derivatives: Tangent Planes and Normal Vectors, Maxima and Minima of Functions of Two Variables.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande

DEPARTMENT: Computer Science

CLASS: S.Y.C.S.

SEMESTER: IV

MONTH: Dec - March

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to:

Learner will able to understand the concept of networking.
Useful to proceed with industrial requirement and international vendor certification

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS403 Computer Networks UNIT - 1	Introduction to data communication, Components, Data Representation, Data Flow, Networks, Network Criteria, Physical Structures, Network types, Local Area Network, Wide Area Network, Switching, The Internet, Accessing the Internet, standards and administration Internet Standards.	02	Data Communication and Networking , Behrouz Forouzan	PPT
	Network Models, Protocol layering, Scenarios, Principles of Protocol Layering, Logical Connections, TCP/IP Protocol Suite, Layered Architecture, Layers in the TCP/IP Protocol Suite, Encapsulation and Decapsulation, Addressing, Multiplexing and Demultiplexing. Detailed introduction to Physical Layer, Detailed	08		PPT

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	introduction to Data-Link Layer, Detailed introduction to Network Layer, Detailed introduction to Transport Layer, Detailed introduction to Application Layer.			
	Data and Signals, Analog and Digital Data, Analog and Digital Signals, Sine Wave Phase, Wavelength, Time and Frequency Domains, Composite Signals, Bandwidth, Digital Signal, Bit Rate, Bit Length, Transmission of Digital Signals, Transmission Impairments, Attenuation, Distortion, Noise, Data Rate Limits, Performance, Bandwidth, Throughput, Latency (Delay)	05		PPT
USCS403 Computer Networks UNIT - 2	Digital Transmission digital-to-digital conversion, Line Coding, Line Coding Schemes, analog-to-digital conversion, Pulse Code Modulation (PCM), Transmission Modes, Parallel Transmission, Serial Transmission. Analog Transmission, digital-to-analog Conversion, Aspects of Digital-to-Analog Conversion, Amplitude Shift Keying, Frequency Shift Keying, Phase Shift Keying, analog-to-analog Conversion, Amplitude Modulation (AM), Frequency Modulation (FM), Phase Modulation (PM), Multiplexing, Frequency-Division Multiplexing, Wavelength-Division Multiplexing, Time-Division Multiplexing. Transmission Media, Guided Media, Twisted-Pair Cable, Coaxial Cable, Fiber-Optic Cable. Switching, Three Methods of Switching , Circuit Switched Networks, Packet Switching,	09	Data Communication and Networking , Behrouz Forouzan	PPT
	Introduction to Data-Link Layer, Nodes and Links, Services, Two Sub-layers, Three Types of addresses, Address Resolution Protocol (ARP). Error Detection and Correction, introduction, Types of Errors, Redundancy, Detection versus Correction,	06		PPT

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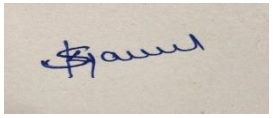
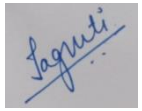
USCS403 Computer Networks UNIT - 3	Media Access Control (MAC), random access, CSMA, CSMA/CD, CSMA/CA, controlled access, Reservation, Polling, Token Passing, channelization, FDMA, TDMA, CDMA.	02	Data Communication and Networking , Behrouz Forouzan	PPT
	Connecting Devices and Virtual LANs, connecting devices, Hubs, Link-Layer	02		
	Introduction to Network Layer, network layer services, Packetizing, Routing and Forwarding, Other Services, IPv4 addresses, Address Space, Classful Addressing.	03		
	Unicast Routing, General Idea, Least-Cost Routing, Routing Algorithms, Distance-Vector Routing, Link-State Routing, Path-Vector Routing, Introduction to Transport Layer, Transport-Layer Services, Connectionless and Connection-Oriented Protocols.	03		
	Transport-Layer Protocols, Service, Port Numbers, User Datagram Protocol, User Datagram, UDP Services, UDP Applications, Transmission Control Protocol, TCP Services, TCP Features, Segment.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS: SYCS

SEMESTER: IV MONTH: Jan to March ACADEMIC YEAR:2022-2023

Course Objectives:

- To understand all the necessary and important technologies such as MongoDB, Express.js, AngularJS, and Node.js.
- To understand modern app development using Flutter

Learning Outcomes:

- Store the data in NoSQL, document-oriented MongoDB database that brings performance and scalability.
- Use Node.js and Express Framework for building fast, scalable network applications
- Use AngularJS framework that offers declarative, two-way data binding for web applications.
- Integrate the front-end and back-end components of the MEAN stack. • Develop robust mobile applications using Flutter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Advanced Application Development USCS406 Unit 1	**Node.js (N):** Introduction to Node.js. Installing Node.js. The package.json File. The Node.js Event Loop. The I/O Cycle. The Anatomy of a Node.js Module. Creating Node Modules. Exploring the Node.js HTTP Module. Creating an HTTP Webserver with Node.js. Responding to HTTP Requests. Routing in Node.js. Creating a Sample Node.js Application. **MongoDB(M):** Introduction to MongoDB. Installing MongoDB. Using MongoDB Compass. Using Mongo Shell Interface. Connecting to MongoDB. Creating Schemas and Models. Querying Documents Using find(). Inserting Documents Using create(). Updating Documents Using findOneAndUpdate(). Deleting Documents Using findOneAndDelete() & deleteMany()	15	Node.js, MongoDB and Angular Web Development: The definitive guide to using the MEAN stack to build web applications by Brad Dayley, Brendan Dayley, Caleb Dayley, Pearson, 2018. And Internet	Projector, PPT, Black board & Chalk

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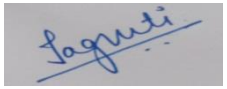
Advanced Application Development USCS406 Unit 2	**Server-Side Development with Express (E):** Introduction to the Express Framework. Installing and Testing Express. Creating a Node.js Express App. Restructuring an Express App. Creating Templates. Using Express Middleware Functions. Creating the List Page. Creating the Details Page. Creating the Edit Page. Creating the Add Page. Deleting Data. REST API Basics. Testing REST APIs. Refactoring APIs. **Understanding Angular.JS(A):** Getting Started with Angular. Creating an Angular Application. Angular Project File Structure. Anatomy of an Angular Component. One-way Data Binding. Two-way Data Binding. Using Nglf Directive. Using NgForOf Directive. Angular Modules. Creating NgModules Using Angular Router. Configuring Templates. Creating Navigations. Working with Template-driven Forms. Working with Reactive Forms. Validating Form Data. Services Dependency Injection (DI). Reading Data from Database. Inserting Data into Database. Updating Data in the Database. Delete Data from Database.	15	Full Stack Javascript Development with Mean - MongoDB, Express, AngularJS, and Node.JS by Adam Bretz, Colin J Ihrig, Shroff/SitePoint, 2015 And Internet	Projector, PPT, Black board & Chalk
Advanced Application Development USCS406 Unit 3	**Understanding Flutter:** Importance of Flutter, Flutter Framework, Android Studio, Flutter SDK, Installing and Configuring Flutter SDK. **Dart Programming**: main() function, Dart Variables, Dart Data Types, Dart Conditional Operators, Control Flow & Loops. Dart Functions - Functions, Function Structure, creating a Function, Function Returning Expression. Object-Oriented Programming (OOP) - Creating a Class, Adding Methods to Classes, Class — Getters and Setters, Class Inheritance, Abstract Class. **Flutter Widgets Fundamentals**: Scaffold Widget, Image Widget, Container Widget, Column and Row Widgets, Icon Widget, Layouts in Flutter, Card Widget, Hot Reload and Hot Restart, Stateful and	15	Beginning Flutter: A Hands On Guide to App Development by Marco L. Napoli, Wrox, 2019 And Internet	Projector, PPT, Black board & Chalk

	Stateless Widgets **Navigation and Routing:** Button Widget, App Structure and Navigation, Navigate to a New Screen and Back, Navigate with Named Routes, Send and Return Data among Screens, Animate a Widget across Screens, WebView Widget in Flutter			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS CLASS: SYCS

SEMESTER: SEM-4 MONTH: NOV-MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

- Plan a software engineering process life cycle, including the specification, design, implementation, and testing of software systems that meet specification, performance, maintenance and quality requirements
- Analyze and translate a specification into a design, and then realize that design practically, using an appropriate software engineering methodology.
- Know how to develop the code from the design and effectively apply relevant standards and perform testing, and quality management and practice
- Able to use modern engineering tools necessary for software project management, time management and software reuse..

PAPER, TITLE,UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3 SOFTWARE ENGINEERING UNIT 1	**Introduction:** The Nature of Software, Software Engineering, Professional Software Development, Layered Technology, Process framework, CMM	2	SOFTWARE ENGINEERING , A PRACTITIONER'S APPROACH, ROGER S, PRESSMAN, 2019	BLACK BOARD AND CHALK
	Process Patterns and Assessment Prescriptive Models: Waterfall Model, Incremental, RAD Models	3		
	Evolutionary Process Models: Prototyping, Spiral and Concurrent Development Model Specialized Models: Component based, Aspect Oriented development	3		
	The Unified Process Phases, Agile Development- Agility, Agile Process, Extreme Programming	2		

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	Requirement Analysis and System Modeling: Requirements Engineering, Eliciting Requirements, SRS Validation, Components of SRS, Characteristics of SRS,	2		
	the UML - Class diagram, Object diagram, Use case diagram, Sequence diagram, Collaboration diagram, State chart diagram, Activity diagram, Component diagram, Deployment diagram	3		
PAPER 3 SOFTWARE ENGINEERING UNIT 2	**System Design:** System/Software Design, Architectural Design, LowLevel Design Coupling and Cohesion, Functional-Oriented Versus ObjectOriented Approach, Design Specifications, Verification for Design, Monitoring and Control for Design	3	SOFTWARE ENGINEERING, A PRACTITIONER'S APPROACH, ROGER S, PRESSMAN, 2019	
	Software Measurement and Metrics: Process Metrics and Project Metrics, Software Measurement, Object Oriented Metrics, Software Project Estimation, Decomposition Techniques, LOC based, FP based and Use case based estimations, Empirical estimation Models	3		
	Software Project Management: Estimation in Project Planning Process –Software Scope and Feasibility, Resource Estimation, Empirical Estimation Models – COCOMO II, Estimation for Agile Development, The Make/Buy Decision	3		
	Project Scheduling - Basic Principles, Relationship Between People and Effort, Effort Distribution, Time-Line Charts	2		
PAPER 3 SOFTWARE ENGINEERING UNIT 3	**Risk Management** - Risk strategies, Software risks, Risk Identification, projection, RMMM Quality Concepts	2	SOFTWARE ENGINEERING, A PRACTITIONER'S APPROACH,	
	Software Quality Assurance SQA activities, Software reviews, FTR, Software reliability and measures, SQA plan Software Configuration Management, elements of SCM, SCM Process, Change Control Capability Maturity Model	3		

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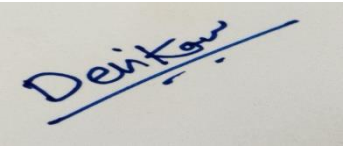
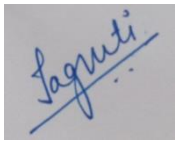
	Software Testing : Verification and Validation, Introduction to Testing, Testing Principles, Testing Objectives, Test Oracles, Levels of Testing, White-Box Testing/Structural Testing, Functional/Black-Box Testing, Test Plan, Test-Case Design	3	ROGER S, PRESSMAN, 2019	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 34





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **S.Y.B.Sc.(CS)**

SEMESTER: **IV** MONTH: **November - February** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able:

1. Understand Grammar and Languages.
2. Learn about Automata theory and its application in Language Design.
3. Learn about Turing Machines and Pushdown Automata.
4. Understand Linear Bound Automata and its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS401 Paper I **Theory of Computation** **UNIT I**	**Automata Theory:** Defining Automaton, Finite Automaton, Transitions and Its properties, Acceptability by Finite Automaton	4	Theory of Computer Science, K. L. P Mishra, Chandrasekharan, PHI,3rd Edition. Introduction to Computer Theory, Daniel Cohen, Wiley,2nd Edition.	Chalk and Board
	Nondeterministic Finite State Machines, DFA and NDFA equivalence, Mealy and Moore Machines, Minimizing Automata.	4		
	Formal Languages: Defining Grammar, Derivations, Languges generated by Grammar	3		
	Chomsky Classification of Grammar and Languages, Recursive Enumerable Sets, Operations on Languages, Languages and Automata	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS401 Paper I **Theory of Computation** **UNIT II**	**Regular Sets and Regular Grammar:** Regular Grammar, Regular Expressions, Finite automata and Regular Expressions	4	Theory of Computer Science, K. L. P Mishra, Chandrasekharan, PHI,3rd Edition. Introduction to Computer Theory, Daniel Cohen, Wiley,2nd Edition.	Chalk and Board
	Pumping Lemma and its Applications, Closure Properties, Regular Sets and Regular Grammar	4		
	Context Free Languages: Context-free Languages, Derivation Tree, Ambiguity of Grammar, CFG simplification, Normal Forms, Pumping Lemma for CFG	4		
	Pushdown Automata: Definitions, Acceptance by PDA, PDA and CFG	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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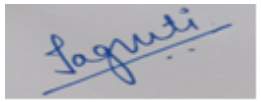
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS401 Paper I **Theory of Computation** **UNIT III**	**Linear Bound Automata:** The Linear Bound Automata Model, Linear Bound Automata and Languages.	4	Theory of Computer Science, K. L. P Mishra, Chandrasekharan, PHI,3rd Edition. Introduction to Computer Theory, Daniel Cohen, Wiley,2nd Edition.	Chalk and Board
	Turing Machines: Turing Machine Definition, Representations, Acceptability by Turing Machines.	4		
	Designing and Description of Turing Machines, Turing Machine Construction, Variants of Turing Machine,	3		
	Undecidability: The Church-Turing thesis, Universal Turing Machine, Halting Problem, Introduction to Unsolvable Problems	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYBSc(CS) DIV:C SEMESTER: IV MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The course aims to understand the basics research, how research problems are defined, research methods are adopted and/or developed, research is undertaken, and how research results are communicated to the peers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: USCS4071, unit1:, Title:RM	Introduction to Research Methodology: Meaning of Research, Objectives of Research, Motivations in Research, types of Research, Research Approaches, Significance of Research, Research Methods v/s Methodology, Research and Scientific Methods, Research Process, Criteria of Good Research	5	Kothari C.R., Research Methodology, Research Methodology-A Step-by-Step Guide for Beginners, (4th ed.), Ranjit Kumar.	PPT, Blackboard

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	Defining the Research Problem: Concept and need, Identification of Research problem, defining and delimiting Research problem. Formulating a Research Problem: Reviewing Literature, formulating a Research Problem, Research Question, Identifying Variables, Constructing Hypothesis	5	Kothari C.R., Research Methodology, Research Methodology-A Step-by-Step Guide for Beginners, (4th ed.), Ranjit Kumar.	PPT, Blackboard
	The Research Design: Meaning, Need for Research Design, Important Concepts, Different Research Designs, Basic Principles of Experimental Designs.	5	Kothari C.R., Research Methodology, Research Methodology-A Step-by-Step Guide for Beginners, (4th ed.), Ranjit Kumar.	PPT, Blackboard

Paper: USCS4071, unit2:, Title:RM	Tools for Data Collection: Collections of Primary Data, Collection of Data through questionnaire and Schedules, other Observation Interview Methods, Collection of Secondary Data, Selection of appropriate method for data collection, Case Study, Focus Group Discussion, Techniques of developing research tools, viz. Questionnaire and rating scales etc. Reliability and validity of Research tools.	5	Kothari C.R., Research Methodology, Research Methodology-A Step-by-Step Guide for Beginners, (4th ed.), Ranjit Kumar.	PPT, Blackboard
	Sampling Design: Steps in Sampling Design, Criteria of Selecting a Sampling Procedure, Characteristics of a Good Sample Design, Different Types of Sample Designs, how to Select a Random Sample. Probability and Non-Probability sampling types and criteria for selection, Developing sampling Frames.	5	Kothari C.R., Research Methodology, Research Methodology-A Step-by-Step Guide for Beginners, (4th ed.), Ranjit Kumar.	PPT, Blackboard
	Overview of Hypothesis Testing: What is a Hypothesis? Characteristics of good Hypothesis. Basic Concepts, Procedure for Hypothesis Testing, Flow Diagram for Hypothesis Testing, Tests of Hypotheses, and One sided and two-sided hypothesis, Type – I and Type – II errors, Null HypothesisAlternative Hypothesis.	5	Kothari C.R., Research Methodology, Research Methodology-A Step-by-Step Guide for Beginners, (4th ed.), Ranjit Kumar.	PPT, Blackboard

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Paper: USCS4071, unit3:, Title:RM	Technical Writing: Writing a Research Proposal, what is a Scientific Paper? Ethics in Scientific Publishing. Preparing the Text: How to Prepare the Title, how to List the Authors and Addresses, how to Prepare the Abstract, how to Write the Introduction, how to Write the Materials and Methods Section, how to Write the Results, how to Write the Discussion, how to State the Acknowledgments, how to Cite the References.	8	Kothari C.R., Research Methodology, Research Methodology-A Step-by-Step Guide for Beginners, (4th ed.), Ranjit Kumar.	PPT, Blackboard
	Preparing the Tables and Figures: How to Design Effective Tables, how to Prepare Effective Graphs, how to Prepare Effective Photographs. Publishing the Paper: Rights and Permissions, How to Submit the Manuscript, How and When to Use Abbreviations, How to Write a thesis, Outcome of Research, Ethical issues in research	7	Kothari C.R., Research Methodology, Research Methodology-A Step-by-Step Guide for Beginners, (4th ed.), Ranjit Kumar.	PPT, Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **SYBSCCS** SEMESTER:**IV**

MONTH: **NOV-MARCH** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:

The learners will be able to :

- Build useful mobile applications using Kotlin language on Android
- Install and configure Android Studio for application development
- Master basic to intermediate concepts of Kotlin required for mobile application development
- Use built-in widgets and components, work with the database to store data
- Master key Android programming concepts and deploy the application on Google Play

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS405 Android Application Development UNIT-1	**Introduction to Kotlin:** Basics of Kotlin, type conversions, comments, Kotlin operators, variables in Kotlin, packages, visibility modifiers, control flow statements, Concept of OOPS in Kotlin, classes in Kotlin, delegation and extension functions, the companion object,	03	Android Programming with Kotlin for Beginners, John Horton, Packt Publishing, 2019 Android Development with Kotlin:	power point, Black Board
	Advanced Concepts in Kotlin: declaring and calling functions, parameters, and arguments in Kotlin, default argument, variable number of arguments, unit-returning function, explicit return type, lambda expression, coroutines, Collections in Kotlin, Mutable and Immutable Collections, Ranges, type Checks, casting concept, this expression, Null safety, exception handling,	03		

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	annotations		Enhance your skills for Android development using Kotlin, Marcin Moskala, Packt Publishing	
	App Development with Android Studio: Android Architecture, Android Application Framework, Android Virtual Device, Creating and running First Android Application, working with Physical Android Device, Adding Kotlin Files in Android Studio	04		
	Basics Of Android- Application Components: Activities, Intent, and Broadcast Receiver, Services, Fragment, Activity Life Cycle, Content Provider, Widgets, and Notifications	05		
USCS405 Android Application Development UNIT-2	**Designing Android UI**: User Interface (UI), Layout and Its Types, Layout Attribute, working with Views, Android UI Controls, Styles and Themes, Event Handler, setting up themes in Manifest and from the application, dialog in activity, using intents, fragments	03	Android Programming with Kotlin for Beginners, John Horton, Packt Publishing, 2019 Android Development with Kotlin: Enhance your skills for Android development using Kotlin, Marcin Moskala, Packt Publishing	power point, Black Board
	Handle Images, Listview And Menu: ImageView, ImageSwitcher, ListView, Menu, and its types, Designing menu in XML, Option menu, Context menu, popup menu, Screen Navigation, RecyclerView, Interaction of Views	03		
	Data binding in Android-AdapterView, Spinner, Gallery view, AutotextCompleteView, screen orientation, Design the view dynamically	04		
	Implementing Data Persistence: Data Storage-Shared Preference, Internal And External Storage Storing Data Using SQLite Databases, Content Provider, Firebase Real-Time Data	05		
USCS405 Android Application Development	**Graphics, Animations, and Integrating Media in Android**: Drawable Class, Animation in Android, MediaPlayer API and in Android, Mediaplayer and AudioManger Class,	03	Android Programming with Kotlin for Beginners, John Horton, Packt Publishing, 2019	power point, Black Board
	Interacting With Camera and input gestures: Android Camera, Input gestures-multiple touch, swipe, drag, scroll, zoom, Recording	03		

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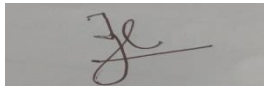
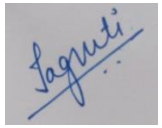
UNIT-3	**Managing Background Tasks**: Broadcaset Receivers, Services, Threads and Process, AsyncTask, JobScheduler, Manage device Awake State	04	Android Development with Kotlin: Enhance your skills for Android development using Kotlin, Marcin Moskala, Packt Publishing	
	Deploying Android applications on Google Play- Publishing/Deploy the application, Versioning, signing Application	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande

DEPARTMENT: Computer Science

CLASS: T.Y.C.S.

SEMESTER: VI

MONTH: Dec - March

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to:

After completion of this course, learner should be able to list various applications of wireless sensor networks, describe the concepts, protocols, design, implementation and use of wireless sensor networks. Also implement and evaluate new ideas for solving wireless sensor network design issues.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS601 **Wireless Sensor Networks and Mobile Communication** UNIT : 01	**Introduction:** Introduction to Sensor Networks, unique constraints and challenges. Advantage of Sensor Networks, Applications of Sensor Networks, Mobile Adhoc NETworks (MANETs) and Wireless Sensor Networks, Enabling technologies for Wireless Sensor Networks.	07	Protocols and Architectures for Wireless Sensor Network, Holger Kerl, Andreas Willig, John Wiley and Sons, 2005	PPT
	Sensor Node Hardware and Network Architecture: Single-node architecture, Hardware components & design constraints, Operating systems and execution environments, introduction to TinyOS and nesC. Network architecture, Optimization goals and figures of merit, Design principles for WSNs, Service interfaces of WSNs, Gateway concepts.	08		PPT

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USCS601 **Wireless Sensor Networks and Mobile Communication** UNIT : 02	**Medium Access Control Protocols:** Fundamentals of MAC Protocols, MAC Protocols for WSNs, Sensor-MAC Case Study.	05	Wireless Sensor Networks Technology, Protocols, and Applications ,Kazem Sohraby, Daniel Minoli and TaiebZnati, John Wiley & Sons, 2007	PPT
	Routing Protocols : Data Dissemination and Gathering, Routing Challenges and Design Issues in Wireless Sensor Networks, Routing Strategies in Wireless Sensor Networks.	05		PPT
	Transport Control Protocols : Traditional Transport Control Protocols, Transport Protocol Design Issues, Examples of Existing Transport Control Protocols, Performance of Transport Control Protocols.	05		PPT
USCS601 **Wireless Sensor Networks and Mobile Communication** UNIT : 03	**Introduction, Wireless Transmission and Medium Access Control:** Applications, A short history of wireless communication.	02	Mobile communications, Jochen Schiller,2nd Edition, Addison wisely , Pearson Education,2012	PPT
	Wireless Transmission: Frequency for radio transmission, Signals, Antennas, Signal propagation, Multiplexing, Modulation, Spread spectrum, Cellular systems.	05		PPT
	Telecommunication, Satellite and Broadcast Systems: GSM: Mobile services, System architecture, Radio interface, Protocols, Localization And Calling, Handover, security, New data services; DECT: System architecture, Protocol architecture; ETRA, UMTS and IMT- 2000. Satellite Systems: History, Applications, Basics: GEO, LEO, MEO; Routing, Localization, Handover.	08		PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS: TYCS

SEMESTER: VI MONTH: December to March ACADEMIC YEAR:2022-2023

LEARNING OBJECTIVE/S:

- To understand the ethics, legality, methodologies and techniques of hacking.

The learners will be able to:

- Learner will know to identify security vulnerabilities and weaknesses in the target applications.
- They will also know to test and exploit systems using various tools and understand the impact of hacking in real time machines.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Ethical Hacking Elective-II USCS506 Unit 1	**Information Security : Attacks and Vulnerabilities** **Introduction to information security :** Asset, Access Control, CIA, Authentication, Authorization, Risk, Threat, Vulnerability, Attack, Attack Surface, Malware, Security-Functionality-Ease of Use Triangle	4	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND Internet	Projector, Laptop, Black board& Chalk
	Types of malware : Worms, viruses, Trojans, Spyware, Rootkits	2	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND	Projector, Laptop, Black board& Chalk

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			Internet	
	Types of vulnerabilities : OWASP Top 10 : cross-site scripting (XSS), cross site request forgery (CSRF/XSRF), SQL injection, input parameter manipulation, broken authentication, sensitive information disclosure, XML External Entities, Broken access control, Security Misconfiguration, Using components with known vulnerabilities, Insufficient Logging and monitoring, OWASP Mobile Top 10, CVE Database	4	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND Internet	Projector, Laptop, Black board& Chalk
	Types of attacks and their common prevention mechanisms : Keystroke Logging, Denial of Service (DoS /DDoS), Waterhole attack, brute force, phishing and fake WAP, Eavesdropping, Man-in-the-middle, Session Hijacking, Clickjacking, Cookie Theft, URL Obfuscation, buffer overflow, DNS poisoning, ARP poisoning, Identity Theft, IoT Attacks, BOTs and BOTNETs	4	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND Internet	Projector, Laptop, Black board& Chalk
	Case-studies : Recent attacks – Yahoo, Adult Friend Finder, eBay, Equifax, WannaCry, Target Stores, Uber, JP Morgan Chase, Bad Rabbit	1	Internet	Projector, Laptop, Black board& Chalk
Ethical Hacking Elective-II USCS506 Unit 2	**Ethical Hacking – I (Introduction and pre-attack) Introduction:** Black Hat vs. Gray Hat vs. White Hat (Ethical) hacking, Why is Ethical hacking needed?, How is Ethical hacking different from security auditing and digital forensics?, Signing NDA, Compliance and Regulatory 15L concerns, Black box vs. White box vs. Black box, Vulnerability assessment and Penetration Testing.	5	CEH official Certified Ethical Hacking Review Guide, Wiley India Edition, 2007 AND Internet	Projector, Laptop, Black board& Chalk

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	Approach : Planning - Threat Modeling, set up security verification standards, Set up security testing plan – When, which systems/apps, understanding functionality, black/gray/white, authenticated vs. unauthenticated, internal vs. external PT, Information gathering, Perform Manual and automated (Tools: WebInspect/Qualys, Nessus, Proxies, Metasploit) VA and PT, How WebInspect/Qualys tools work: Crawling/Spidering, requests forging, pattern matching to known vulnerability database and Analyzing results, Preparing report, Fixing security gaps following the report	5	CEH official Certified Ethical Hacking Review Guide, Wiley India Edition, 2007 AND INTERNET	Projector, Laptop, Black board& Chalk
	Enterprise strategy : Repeated PT, approval by security testing team, Continuous Application Security Testing,	3	CEH official Certified Ethical Hacking Review Guide, Wiley India Edition, 2007 AND INTERNET	Projector, Laptop, Black board& Chalk
	Phases: Reconnaissance/foot-printing/Enumeration, Scanning, Sniffing	2	CEH official Certified Ethical Hacking Review Guide, Wiley India Edition, 2007 AND INTERNET	Projector, Laptop, Black board& Chalk
	Ethical Hacking : Enterprise Security Phases : Gaining and Maintaining Access : Systems hacking – Windows and Linux – Metasploit and Kali Linux, Keylogging, Buffer Overflows, Privilege Escalation, Network hacking - ARP Poisoning, Password Cracking, WEP Vulnerabilities, MAC Spoofing, MAC Flooding, IPSpoofing, SYN Flooding, Smurf attack,	5	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	Projector, Laptop, Black board& Chalk
Ethical Hacking Elective-II	**Applications hacking :** SMTP/Email-based attacks, VOIP vulnerabilities, Directory traversal, Input Manipulation, Brute force attack, Unsecured login mechanisms, SQL injection, XSS, Mobile	5	Certified Ethical Hacker Study Guide v9, Sean-Philip	Projector, Laptop, Black board& Chalk

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USCS506 Unit 3	apps security,		Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	
	Malware analysis : Netcat Trojan, wrapping definition, reverse engineering	1	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	Projector, Laptop, Black board& Chalk
	Phases : Covering your tracks : Steganography, Event Logs alteration	1	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	Projector, Laptop, Black board& Chalk
	Additional Security Mechanisms : IDS/IPS, Honeypots and evasion techniques, Secure Code Reviews (Fortify tool, OWASP Secure Coding Guidelines)	3	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	Projector, Laptop, Black board& Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAYATREE KARNIK DEPARTMENT:IT SUBJECT:IR CLASS: TYCS SEM:VI

MONTH: December to March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

The learners will be able to :

1. To provide a understanding of operating system, its structures and functioning
2. Develop and master understanding of algorithms used by operating systems for various purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
604 UNIT I	**Introduction to Information Retrieval:** Introduction, History of IR, Components of IR, and Issues related to IR, Boolean retrieval, Dictionaries and tolerant retrieval.	15	1) Introduction to Information Retrieval, C. Manning, P. Raghavan, and H. Schütze, Cambridge University Press, 2008 2) Modern Information Retrieval: The Concepts and Technology behind Search, Ricardo Baeza - Yates and Berthier Ribeiro – Neto, 2 nd Edition, ACM Press Books 2011.	Computer, Power point

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604 UNIT II	**Link Analysis and Specialized Search:** Link Analysis, hubs and authorities, Page Rank and HITS algorithms, Similarity, Hadoop & Map Reduce, Evaluation, Personalized search, Collaborative filtering and content-based recommendation of documents and products, handling "invisible" Web, Snippet generation, Summarization, Question and Answering, Cross-Lingual Retrieval	15	1) Introduction to Information Retrieval, C. Manning, P. Raghavan, and H. Schütze, Cambridge University Press, 2008 2) Modern Information Retrieval: The Concepts and Technology behind Search, Ricardo Baeza - Yates and Berthier Ribeiro – Neto, 2 nd Edition, ACM Press Books 2011.	Computer, Power point, Chalk and Black board
604 UNIT III	**Web Search Engine:** Web search overview, web structure, the user, paid placement, search engine optimization/spam, Web size measurement, search engine optimization/spam, Web Search Architectures. **XML retrieval:** Basic XML concepts, Challenges in XML retrieval, A vector space model for XML retrieval, Evaluation of XML retrieval, Text-centric versus data-centric XML retrieval.	15	1) Introduction to Information Retrieval, C. Manning, P. Raghavan, and H. Schütze, Cambridge University Press, 2008 2) Modern Information Retrieval: The Concepts and Technology behind Search, Ricardo Baeza - Yates and Berthier Ribeiro – Neto, 2 nd Edition, ACM Press Books 2011.	Computer, Power point, Chalk and Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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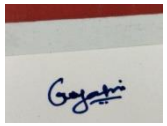

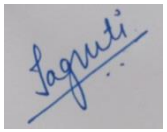

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **T.Y.B.Sc.(CS)**

SEMESTER: **VI** MONTH: **December- March** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able:

- To get a clear understanding of AI and different search algorithms used for solving problems.
- To get acquainted with different learning algorithms and models used in machine learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS606 **Paper 4** **Data Science** **UNIT I**	**Introduction to Data Science:** What is Data? Different kinds of data	3	Doing Data Science, Rachel Schutt and Cathy O'Neil, O'Reilly,2013 Mastering Machine Learning with R, Cory Lesmeister, PACKT Publication,2015	Microsoft PowerPoint Presentation R Tool
	Introduction to high level programming language + Integrated Development Environment (IDE)	4		
	Exploratory Data Analysis (EDA) + Data Visualization, Different types of data sources	4		
	Data Management: Data Collection, Data cleaning/extraction, Data analysis &Modeling	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS606 **Paper 4** **Data Science** **UNIT II**	**Data Curation:** Query languages and Operations to specify and transform data, Structured/schema based systems as users and acquirers of data	4	Doing Data Science, Rachel Schutt and Cathy O'Neil, O'Reilly,2013 Mastering Machine Learning with R, Cory Lesmeister, PACKT Publication,2015	Microsoft PowerPoint Presentation
	Semi-structured systems as users and acquirers of data, Unstructured systems in the acquisition and structuring of data,	3		
	Security and ethical considerations in relation to authenticating and authorizing access to data on remote systems,	4		
	Software development tools, Large scale data systems, Amazon Web Services (AWS)	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS606 **Paper 4** **Data Science** **UNIT III**	**Statistical Modelling and Machine Learning:** Introduction to model selection: Regularization, bias/variance tradeoff e.g. parsimony, AIC, BIC, Cross validation, Ridge regressions and penalized regression e.g. LASSO	5	Doing Data Science, Rachel Schutt and Cathy O'Neil, O'Reilly,2013 Mastering Machine Learning with R, Cory Lesmeister, PACKT Publication,2015	Microsoft PowerPoint Presentation R Tool
	Data transformations: Dimension reduction, Feature extraction, Smoothing and aggregating	2		
	Supervised Learning: Regression, linear models, Regression trees, Time-series Analysis, Forecasting, Classification: classification trees, Logistic regression, separating hyperplanes, k-NN	4		
	Unsupervised Learning: Principal Components Analysis (PCA), k-means clustering, Hierarchical clustering, Ensemble methods	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. C.S SEMESTER: I MONTH: September - December ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
Learners will be able to understand basic concepts of Software Defined Networking and network virtualization.. Learners will be able to explore OpenFlow specifications to build Software defined networks. Learners will be able to analyse and implement theories and practical related to Network management and Virtualization.. Learners will be able to apply knowledge of Software Defined Networking as per industry standards.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 PSCS102 Software Defined Networking Unit 1	Basic Concepts and Definitions: LAN, MAN, WAN, AD-Hoc, Wireless Network, Understanding the layered architecture of OSI/RM and TCP-IP Model, Concepts and implementation of IPV4 and IPV6, Study of various network Routing protocols, Introduction to Transport layer and Application layer protocols.	15	Software Defined Networks: A Comprehensive Approach by Paul Goransson and Chuck Black, Morgan Kaufmann Publications, 2014	PowerPoint presentation through google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. C.S SEMESTER: II MONTH: February-May ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:
Learn different computer attacks and different security techniques

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 PSCS102 Software Defined Networking Unit 2	Elements of Modern Networking, Requirements and Technology, SDN: Background and Motivation, SDN Data Plane and OpenFlow, SDN Control Plane, SDN Application Plane	15	Software Defined Networks: A Comprehensive Approach by Paul Goransson and Chuck Black, Morgan Kaufmann Publications, 2014	PowerPoint presentation through google meet
Paper 2 PSCS102 Software Defined Networking Unit 3	Concepts and Architecture, NFV Functionality, Network Virtualization Quality of Service, MODERN NETWORK ARCHITECTURE: CLOUDS AND FOG, Cloud Computing, The Internet of Things: Components	15	Software Defined Networks: A Comprehensive Approach by Paul Goransson and Chuck Black, Morgan Kaufmann Publications, 2014	PowerPoint presentation through google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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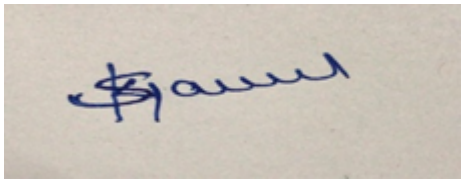

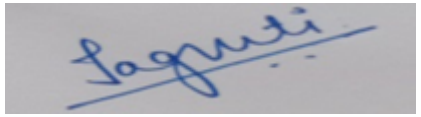

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

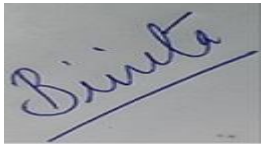
CLASS: M. Sc. C.S SEMESTER: I MONTH: September-December ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

a. Analyse and implement theories and practical related to Network management and Virtualization.
b. Apply knowledge of Software Defined Networking as per industry standards.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Software Defined Networking Unit -IV	Understand and implement Layer 2/3 switching techniques (VLAN/TRUNKING/ Managing Spanning Tree), Implementation of OSPF V2 and V3, Implementation BGP	5	Behrouz A Forouzan ―TCPIP Protocol Suite‖ Fourth Edition 2010	PowerPoint presentation
	Implementation Multicast Routing, Implementation of MPLS, Implementation of Traffic Filtering by using Standard and Extended Access Control List	5		PowerPoint presentation
	Implementation of Routing redistribution, Implementation of Policy Based Routing/ Load Balancing /QOS/Natting /VRF	5		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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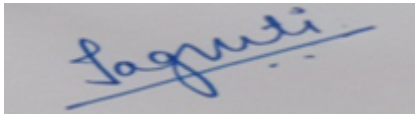

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TEACHING PLAN (UNIT PLAN)

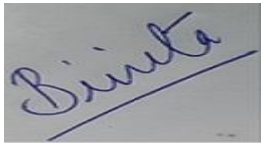
NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. CS SEMESTER: III MONTH: September-December ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:
a. To understand the role of cryptography in communication over an insecure channel.
b. To analyze and compare symmetric-key encryption and public-key encryption schemes based on different security models

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security (Cryptography and Cryptanalysis) Unit -I	**Cryptosystems and Basic Cryptographic Tools:** Introduction, Secret-key Cryptosystems, Public-key Cryptosystems, Block and Stream Ciphers, Hybrid Cryptography, Hybrid Cryptography, Message Integrity, Message Authentication Codes, Signature Schemes, Nonrepudiation, Certificates, Hash Functions, Cryptographic Protocols, Security	4	Cryptography Theory and Practice Douglas R. Stinson, , Fourth Edition, CRC Press, 2019	PowerPoint presentation
	Classical Cryptography: Introduction to Some Simple Cryptosystems, Shift Cipher, Substitution Cipher, Affine Cipher, Vigenere Cipher, Hill Cipher, Permutation Cipher, Stream Ciphers, Cryptanalysis, Cryptanalysis of the Affine Cipher, Cryptanalysis of the Substitution Cipher, Cryptanalysis of the Vigenere Cipher, Cryptanalysis of the Hill Cipher, Cryptanalysis of the LFSR Stream Cipher.	4		PowerPoint presentation
	Perfect Secrecy: Introduction, Perfect Secrecy, Entropy, Properties of Entropy, Spurious Keys, and Unicity Distance	4		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. CS SEMESTER: III MONTH: September-December ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:
a. To understand the role of cryptography in communication over an insecure channel.
b. To analyze and compare symmetric-key encryption and public-key encryption schemes based on different security models

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security (Cryptography and Cryptanalysis) Unit -II	**Block Ciphers and Stream Ciphers:** Substitution-Permutation Networks, Linear Cryptanalysis, Differential Cryptanalysis, Data Encryption Standard, Advanced Encryption Standard, Modes of Operation, Stream Ciphers	4	Cryptography Theory and Practice Douglas R. Stinson, , Fourth Edition, CRC Press, 2019	PowerPoint presentation
	Hash Functions and Message Authentication: Hash Functions and Data Integrity, Security of Hash Functions, Iterated Hash Functions, Sponge Construction, Message Authentication Codes, Unconditionally Secure MACs	4		PowerPoint presentation
	RSA Cryptosystem and Factoring: Public-key Cryptography, Number Theory-Euclidean Algorithm, Chinese Remainder Theorem, Other Useful Facts, RSA Cryptosystem, Primality Testing, Square Roots Modulo n, Factoring Algorithms, Rabin Cryptosystem, Semantic Security of RSA	4		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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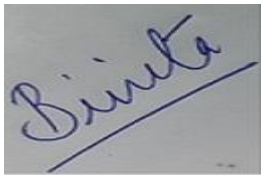

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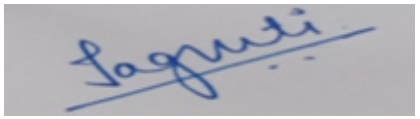

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: COMPUTER SCIENCE CLASS: MSc.Cs(Part I)

SEMESTER: I MONTH: OCTOBER-DECEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVES:

- Learners will be able to explore XML, and Mobile databases.
- Learners will be able to deal with methods used for dealing with spatial and Temporal Databases.
- Learner will have a solid grasp on business intelligence tools and XML.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS401 Unit 1, **Advanced Database Techniques**	**Enhanced Database Models** Object–Oriented Databases: Need of Object-oriented databases, Complex Data Types, Structured Types and Inheritance, Object-Identity and Reference, ODL and OQL, Implementing O-R Features, Persistent Programming Languages, Object-Oriented versus Object-Relational, Example of Object oriented and object relational database implementation, comparison of RDBMS, OODBMS, ORDBMS XML Databases: Structured Semi structure and unstructured data, XML hierarchical tree data model, Documents DTD and XML schema, XML Documents & Database, XML query and transformation, Storage of XML data, Xpath. XQuery, Join and Nesting Queries, XML database applications	07	Database Management Systems by Raghu Ramakrishnan and Johannes Gehrke, McGraw Hill, 3rd Edition, 2014	Power Point Presentation
	Spatial Databases: Types of spatial data, Geographical Information Systems (GIS), Conceptual Data Models for spatial databases, Logical data models for spatial databases: Raster and vector model. Physical data models for spatial databases: Clustering methods (space filling curves), Storage methods (R-tree). Query processing. Temporal Databases: Time ontology,	08	Database Management Systems by Raghu Ramakrishnan and Johannes	Power Point Presentation

	structure, and granularity, Temporal data models, Temporal relational algebra.		Gehrke, McGraw Hill, 3rd Edition, 2014	
PSCS401 Unit 3, **Advanced Database Techniques**	**Learning the NoSQL Basics** Introduction to NoSQL: Characteristics of NoSQL, NoSQL Storage types, Advantages and Drawbacks, NoSQL Products Interfacing and interacting with NoSQL: Storing Data In and Accessing Data from MongoDB, Redis, HBase and Apache Cassandra, Language Bindings for NoSQL Data Stores	07	Getting Started with NoSQL, Gaurav Vaish, Packt Publishing Ltd, 2013	Power Point Presentation
	Understanding the storage architecture: Working with Column-Oriented Databases, HBase Distributed Storage Architecture, Document Store Internals, Understanding Key/Value Stores in Memcached and Redis, Eventually Consistent Non-relational Databases Performing CRUD operations: Creating Records, Accessing Data, Updating and Deleting Data	08	Getting Started with NoSQL, Gaurav Vaish, Packt Publishing Ltd, 2013	Power Point Presentation
PSCS401 Unit 4, **Advanced Database Techniques**	**Gaining Proficiency With NoSQL** Querying NoSQL Stores: Similarities Between SQL and MongoDB Query Features, Accessing Data from Column-Oriented Databases Like HBase, Querying Redis Data Stores Indexing And Ordering Data Sets: Essential Concepts Behind a Database Index, Indexing and Ordering in MongoDB, ouchDB and Apache Cassandra	07	Getting Started with NoSQL, Gaurav Vaish, Packt Publishing Ltd, 2013	Power Point Presentation
	Managing Transactions And Data Integrity: RDBMS and ACID, Distributed ACID Systems, Upholding CAP, Consistency Implementations Using NoSQL in The Cloud: Google App Engine Data Store, Amazon SimpleDB	08	Getting Started with NoSQL, Gaurav Vaish, Packt Publishing Ltd, 2013	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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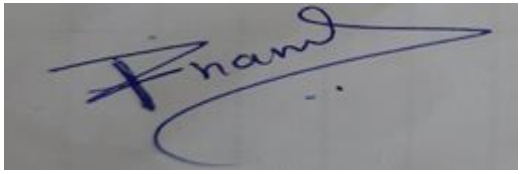

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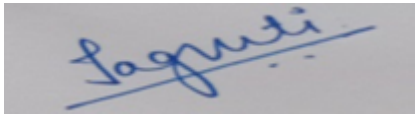

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **M.Sc. (CS)**

SEMESTER: **I** MONTH: **September - December** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able:

- To cover advanced topics of databases to become more proficient.
- To provide students with theoretical knowledge and practical skills in advanced topics in database systems, big data and modern data intensive systems.
- To expand students, view and introduce advanced topics and Business Intelligence.

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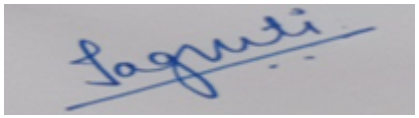
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS104 **Paper IV** **Advanced Database Techniques** **UNIT II**	**Unit II: Cooperative Transaction Model** Parallel and Distributed Databases: Architecture of parallel databases, Parallel query evaluation, Parallelizing individual operations, Sorting Joins Distributed Databases: Concepts, Data fragmentation, Replication and allocation techniques for distributed database design, Query processing, Concurrency control and recovery in distributed databases, Architecture and Design: Centralised versus non centralized Databases, Homogeneous and Heterogeneous DDBMS, Functions and Architecture, Distributed database design, query processing in DDBMS, Distributed concurrency management, deadlock management, Distributed Commit Protocols: 2 PC and 3 PC, Concepts of replication servers. Mobile Database: Overview, Features, Advantages and Disadvantages, Mobile databases in Android System	15	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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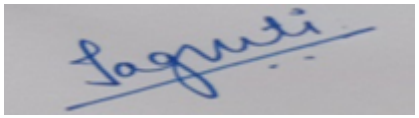

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **M.Sc. (CS)**

SEMESTER: **III** MONTH: **September - December** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able:

- Understands the fundamentals of Visualization.
- Working with different Data Collection Structures.
- Efficiently handle various source data using Tableau.
- Data Visualization and Analysis can be performed using Tableau.
- Handling and customizing Geospatial data using Tableau.
- Creating a story using the dashboard to analyze data

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS3041 **Paper IV** **Data Visualization** **UNIT I**	**Preparing and Storing Data** **Series**: Creating a Series with index, creating a Series from a Dictionary, Creating a Series from a Scalar Value, Vectorized Operations and Label Alignment with Series, Name Attribute. Accessing Data from a Series with a Position, Exploring and Analysing a Series, Operations on a Series. **Data Frames**: Creating a Data Frame from a Dict of Series or Dicts, Creating Data Frames from a Dict of Ndarrays, Creating Data Frames from a Structured	15	Dr. Ossama Embarak, Data Analysis and Visualization Using Python, Apress, 2018 Wes McKinney, "Python for Data Analysis: Data Wrangling with	Microsoft PowerPoint Presentation

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	or Record Array, Creating Data Frames from a List of Dicts, Creating Data Frames from a Dict of Tuples, Selecting, Adding, and Deleting Data Frame Columns, Assigning New Columns in Method Chains, Row Selection, Row Addition, Row Deletion, Exploring and Analysing a Data		Pandas, NumPy, and IPython", O'Reilly, 2nd Edition, 2018.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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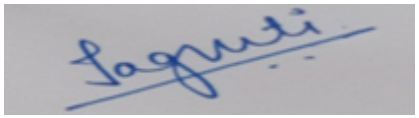
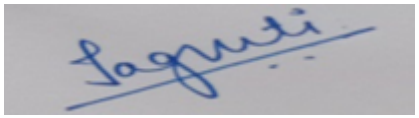
PSCS3041 **Paper IV** **Data Visualization** **UNIT II**	**Data Cleaning and Data Wrangling** **Data Gathering and Cleaning:** Cleaning Data, Checking for Missing Values, Handling the Missing Values, Reading and Cleaning CSV Data, Merging and Integrating Data, Reading Data from the JSON Format, HTML Format, XML Format. **Data Transformation Removing Duplicates:** Replacing Values, Renaming Axis Indexes **Hierarchical Indexing:** Reordering and Sorting Levels Summary' Statistics by Level Indexing with a DataFrame's columns. Combining and Merging Datasets Database-Style, DataFrame Joins Merging on Index Concatenating Along with an Axis Combining Data with Overlap **Reshaping and Pivoting:** Reshaping with Hierarchical Indexing Pivoting "Long" to "Wide" Format Pivoting "Wide" to "Long" Format **Statistical Analysis, Data Aggregation:** Data Grouping, Iterating Through Groups, Aggregations, Transformations, Filtration.	15	Dr. Ossama Embarak, Data Analysis and Visualization Using Python, Apress, 2018 Wes McKinney, "Python for Data Analysis: Data Wrangling with Pandas, NumPy, and IPython", O'Reilly, 2nd Edition, 2018.	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **MSCCS** SEMESTER:I

MONTH: **SEPT-DEC** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:

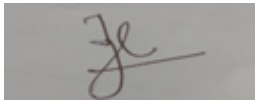
- You will be able to effectively implement optimization techniques to the Existing algorithm to improve its performance.
- You will be able to work in the areas of Machine Learning and Data Sciences Algorithms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS101Algorithm for Optimization **Unit I: Introduction to Optimization Process**	Basic Optimization Problem, Constraints, Critical Points, Conditions for Local Minima, Contour Plots. Unimodality, Fibonacci Search, Golden Section Search, Quadratic Fit Search.	15	Algorithms for Optimization Mykel J. Kochenderfer, Tim A. Wheeler, The MIT Press 2019. Introduction to Algorithms, By Thomas H.	Laptop,power point,blackboard

			Cormen, Charles E. Leiserson, Ronald L. Rivest and Clifford Stein 3Ed. (International Edition) (MIT Press) 2009	
PSCS101Algorithm for Optimization **Unit III: Sampling and Surrogate Models**	Sampling Plans, Full Factorial, Random Sampling, Uniform Projection Plans, Stratified Sampling, Space-Filling Metrics. Surrogate Models, Fitting Surrogate Models, Linear Models, Basis Functions, Fitting Noisy Objective Functions, Model Selection, Probabilistic Surrogate Models, Gaussian Distribution, Gaussian Processes, Prediction	15	Algorithms for Optimization Mykel J. Kochenderfer, Tim A. Wheeler, The MIT Press 2019. Introduction to Algorithms, By Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest and Clifford Stein 3Ed. (International Edition) (MIT Press) 2009	Laptop,power point,blackboard
	Optimization under Uncertainty, Uncertainty, Set-Based Uncertainty, Probabilistic Uncertainty. Uncertainty Propagation, Sampling	15	Algorithms for Optimization Mykel J. Kochenderfer,	Laptop,power point,blackboard

PSCS101Algorithm for Optimization **Unit IV: Optimization and Uncertainty**	Methods, Taylor Approximation, Polynomial Chaos, Bayesian Monte Carlo. Dynamic Programming, Ant Colony Optimization. Expression Optimization, Grammars, Genetic Programming, Grammatical Evolution, Probabilistic Grammars, Probabilistic Prototype Trees		Tim A. Wheeler, The MIT Press 2019. Introduction to Algorithms, By Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest and Clifford Stein 3Ed. (International Edition) (MIT Press) 2009	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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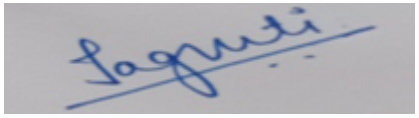

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Priyanka Roshan Brid DEPARTMENT: Computer Science CLASS:MScCS

SEMESTER: I MONTH:JAN to MAY ACADEMIC YEAR:2022-2023

Course Outcome: -

- To cover the technical aspects of cryptocurrencies, blockchain technologies, and distributed consensus.
- To familiarize potential applications for Bitcoin-like cryptocurrencies
- To Basics of smart contracts, decentralized apps, and decentralized anonymous organizations (DAOs)
- To know Solidity programming

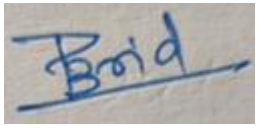
Course Specific Outcome: -

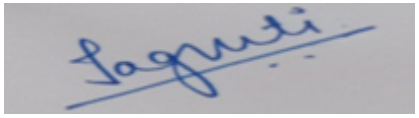
- Understand blockchain technology.
- Develop blockchain-based solutions and write smart contracts using Hyperledger Fabric and Ethereum frameworks.
- Build and deploy blockchain applications for on-premise and cloud-based architecture.
- Integrate ideas from various domains and implement them using blockchain technology from different perspectives.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS3011 Advanced Computing (Web3 Technologies) Unit-II	**Smart Contracts & Ethereum** Smart Contracts: History, Definition Ricardian contracts, Smart contract templates, Oracles, Deploying smart contracts, The DAO **Ethereum**: Overview, Ethereum network, Components of the Ethereum ecosystem, The Ethereum Virtual Machine (EVM), Smart contracts, Blocks and Blockchain, Wallets and client software, Nodes and miners, APIs, tools, and DApps, Supporting protocols, Programming languages,	15L	Andreas M. Antonopoulos, Dr.Gavin wood "Mastering Ethereum" O"Reilly Media Inc, 2019	Laptop, PPT

	Ethereum Development Environment: Overview, Test networks, Components of a private network, starting up the private network, mining on the private network, Remix IDE, MetaMask, Using MetaMask and Remix IDE to deploy a smart contract			
PSCS3011 Advanced Computing (Web3 Technologies) Unit-III	**Serenity, Ethereum, Hyperledger & Tokenization** **Web3:** Exploring Web3 with Geth, Contract deployment, interacting with contracts via frontends **Development frameworks:** Serenity, Ethereum 2.0—an overview, Development, phases, Architecture **Serenity:** Ethereum 2.0—an overview, Development phases, Architecture **Hyperledger:** Projects under Hyperledger, Hyperledger reference architecture, Hyperledger Fabric, Hyperledger Sawtooth, Setting up a sawtooth development environment. **Tokenization:** Tokenization on a blockchain, Types of tokens, Process of tokenization, Token offerings, Token standards, Trading and finance, DeFi, Building an ERC-20 token, emerging concepts	15L	Andreas M. Antonopoulos, Dr.Gavin wood "Mastering Ethereum" O"Reilly Media Inc, 2019	Laptop, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. PALAV (MANE)** DEPARTMENT: **INFORMATION TECHNOLOGY**

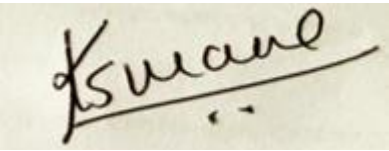
CLASS: ____**MSC (CS) ___** SEMESTER: ____**I**_____ MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Review the fundamental concepts of a digital image processing system.**
- **Analyze images in the frequency domain using various transforms.**
- **Interpret image segmentation and representation techniques.**
- **Understand the relevant aspects of digital image representation and their practical implications.**
- **Have the ability to design pointwise intensity transformations to meet stated specifications and understand 2-D convolution, the 2-D DFT, and have the ability to design systems using these concepts.**
- **Knowledge of Perform frequency domain operations on images.**
- **Ability to apply image segmentation and extract image featu**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS103 Applied Signal and Image Processing	**Structural and Morphological Operations:** Edge Detection: Sobel, Canny Prewitt, Robert edge detection techniques, LoG and DoG filters, Image Pyramids: Gaussian Pyramid, Laplacian Pyramid Morphological Image Processing: Erosion, Dilation, Opening and closing, Hit-or-Miss Transformation, Skeletonizing, Computing	07 08	Digital Image Processing by Rafael Gonzalez & Richard Woods, Pearson; 4th edition, 2018	Blackboard, Chalk and Duster. PPts.

Unit No -03	the 15L 15 convex hull, removing small objects, White and black top-hats, Extracting the boundary, Grayscale operations			
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15			
PSCS103 Applied Signal and Image Processing **Unit No -04**	**Advanced Image Processing Operations** Extracting Image Features and Descriptors: Feature detector versus descriptors, Boundary Processing and feature descriptor, Principal Components, Harris Corner Detector, Blob detector, Histogram of Oriented Gradients, Scale-invariant feature transforms, Haar-like features Image Segmentation: Hough Transform for detecting lines and circles, Thresholding and Otsu's segmentation, Edge-based/regionbased segmentation Region growing, Region splitting and Merging, Watershed algorithm, Active Contours, morphological snakes, and GrabCut algorithms	07 04 04	Digital Image Processing by Rafael Gonzalez & Richard Woods, Pearson; 4th edition, 2018	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15			



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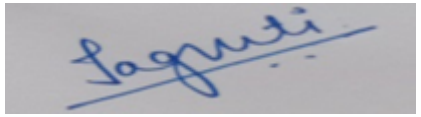

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: COMPUTER SCIENCE CLASS: MSc.Cs(Part II)

SEMESTER: **IV** MONTH: FEBRUARY-MAY ACADEMIC YEAR: 2022-23

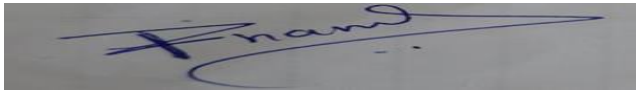
LEARNING OBJECTIVES:

- Knowledge about the fundamentals of Robotics and its applications
- Ability to use Raspberry Pi for programming Robotics
- Ability to apply robotics in speech and vision problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS401 Unit 1, **Robotics**	**Introduction to Robotics** Introduction to Robotics: What is a robot? Examples of Advanced and impressive robots, Robots in the home, Robots in industry	07	Danny Staple, Robotics Programming, Packt Publishing, 2nd edition, Feb 2021	Power Point Presentation
	Robotics in Action Exploring Robot Building Blocks - Code and Electronics Technical requirements, Introducing the Raspberry Pi - Starting with Raspbian Technical requirements, Raspberry Pi controller on a robot.	08	Danny Staple, Robotics Programming, Packt Publishing, 2nd edition, Feb 2021	Power Point Presentation
PSCS401 Unit 3, **Robotics**	**Servo Motors** Use and control of servo motors, pan, and tilt mechanism. Distance sensors, Introduction to distance sensors and their usage	07	Danny Staple, Robotics Programming, Packt Publishing, 2nd edition, Feb 2021	Power Point Presentation

	Connecting distance sensors to robot and their testing. Creating a smart object avoidance behavior. Creating a menu to select different robot behaviors, Distance and speed measuring sensors—encoders and odometry	08	Danny Staple, Robotics Programming, Packt Publishing, 2nd edition, Feb 2021	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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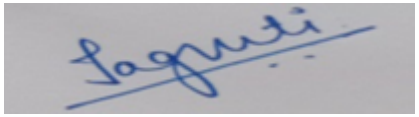

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **MSCCS** SEMESTER:IV

MONTH: **FEB-APRIL** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the context and use of neural networks and deep learning ● Understand the tools and libraries for deep learning ● Have a working knowledge of neural networks and deep learning ● Explore the parameters for neural networks ● Identify emerging applications of deep learning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS402 Advanced Deep Learning UNIT 1: Neural Network for Deep Learning	Optimization and Neural Network: Review of Neural Network fundamentals, the problem of Learning, Implementing single Neuron-Linear and Logistic Regression, Deep Learning: Fundamentals, Deep Learning Applications, Popular open-source libraries for deep learning Feed- Forward Networks: Networks architecture and Matrix notation, Overfitting, Multiclass Classification with Feed-Forward Neural Networks, Estimating Memory requirement of Models	15	Advanced Deep Learning with Keras, Rowel Atienza, Packt Publication, 2018	power point

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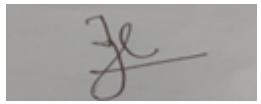
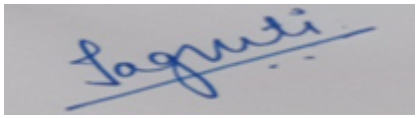
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **MSCCS** SEMESTER:II

MONTH: **FEB-APRIL** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:

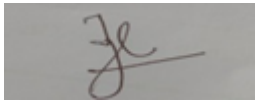
The learners will be able to :

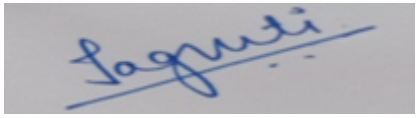
- Understand core concepts of ML through implementations in python.
- Working with diverse toolkits and packages useful for developing projects In ML
- Implement and understand deep learning and ANNs useful for industry today.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS201 Applied Machine and Deep Learning **UNIT 1: (Ability Enhancement)**	What is Machine Learning? Why use Machine Learning? Types of Machine Learning, Supervised Learning, Unsupervised Learning & Reinforcement Learning. Challenges of Machine Learning, Testing and Validation A First Application: Classification, MNIST Dataset, Performance	15	Hands-on Machine Learning with Scikit-Learn, Keras, and TensorFlow Concepts, Tools, and Techniques to Build Intelligent Systems by	power point

The Fundamentals of Machine Learning	Measures, Confusion Matrix, Precision and Recall, Precision/Recall Tradeoff, The ROC Curve, Multiclass Classification, Error Analysis.		AurélienGéron, Second Edition, O'reilly 2019	
PSCS201 Applied Machine and Deep Learning **UNIT 2: Training Models**	Linear Regression, Gradient Descent, Batch Gradient Descent, Stochastic Gradient Descent, Mini-batch Gradient Descent, Polynomial Regression, Learning Curves, The Bias/Variance Tradeoff, Ridge Regression, Lasso Regression, Early Stopping, Logistic Regression, Decision Boundaries, Softmax Regression, Cross Entropy.	15	Hands-on Machine Learning with Scikit-Learn, Keras, and TensorFlow Concepts, Tools, and Techniques to Build Intelligent Systems by AurélienGéron, Second Edition, O'reilly 2019	power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **M.Sc. (CS)**

SEMESTER: **II** MONTH: **February - April** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able:

- Understand core concepts of ML through implementations in python.
- Working with diverse toolkits and packages useful for developing projects in ML
- Implement and understand deep learning and ANNs useful for industry today.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS201 **Paper I** **Applied Machine and Deep Learning** **UNIT III**	**UNIT 3: Support Vector Machines** Linear SVM Classification, Soft Margin Classification, Nonlinear SVM Classification, Polynomial Kernel, Gaussian RBF Kernel, SVM Regression, Decision Trees, Training and Visualizing a Decision Tree, Making Predictions, The CART Training Algorithm, Gini Impurity vs Entropy, Regularization Hyperparameters.	15	Hands-on Machine Learning with Scikit-Learn, Keras, and TensorFlow Concepts, Tools, and Techniques to Build Intelligent Systems by AurélienGéron, Second Edition, O'reilly 2019	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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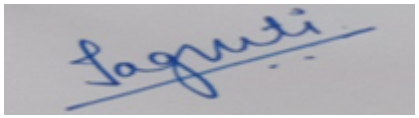
PSCS201 **Paper I** **Applied Machine and Deep Learning** **UNIT IV**	**UNIT 4: (Skill Enhancement)** **Fundamentals of Deep Learning** What is Deep Learning? Need Deep Learning? Introduction to Artificial Neural Network (ANN), Core components of neural networks, Multi-Layer Perceptron (MLP), Activation functions, Sigmoid, Rectified Linear Unit (ReLU), Introduction to Tensors and Operations, Tensorflow framework.	15	Deep Learning with Python by François Chollet Published by Manning 2018	Microsoft PowerPoint Presentation



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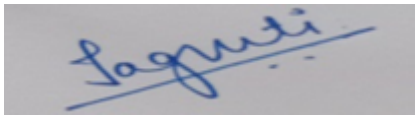

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **M.Sc. (CS)**

SEMESTER: **IV** MONTH: **February- April** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able:

- Knowledge of implementing neural network architectures for deep learning.
- Skill to implement regularization and optimization of neural network
- Ability to implement advanced networks like CNN, RNN and GAN
- Implement deep learning for advanced applications like object identification, speech, and

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS402 **Paper II** **Advanced Deep Learning (Online Mode)** **UNIT II**	**Convolutional and Recurrent Networks for Deep Learning** **Regularization:** Complex Network and Overfitting, Regularization and related concepts, Hyperparameter tuning **Convolutional Neural Networks:**Kernels and Filters,Building Blocks of CNN, Inception Network, Transfer Learning **Recurrent Neural Network:** Notation and Idea of recurrent neural networks, RNN Topologies, backpropagation through time, vanishing and exploding gradients	15	Python Deep Learning, Valentino Zocca, Packt Publication, 2017 Applied Deep Learning, with TensorFlow 2, Umberto Michelucci, Apress, 2022	Google Meet Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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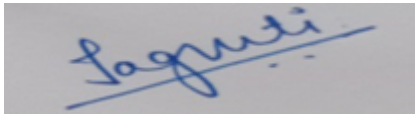
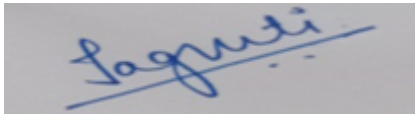
PSCS402 **Paper II** **Advanced Deep Learning (Online Mode)** **UNIT III**	**Advanced Concepts for Deep Learning** **Autoencoders**: Introduction, Network Design, Regularization in Autoencoders, Denoising autoencoders, Feed-Forward Autoencoders, spare and Contractive autoencoders **Unsupervised Feature Learning:** Hopfield networks and Boltzmann machines, restricted Boltzmann machine, Deep belief networks **Generative Adversarial Networks (GANs):**Introduction, training algorithms, Conditional GANs, applications, Deep convolutional generative adversarial networks	15	Python Deep Learning, Valentino Zocca, Packt Publication, 2017 Applied Deep Learning, with TensorFlow 2, Umberto Michelucci, Apress, 2022	Google Meet Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. MONIKA MADHUKAR RAUT DEPARTMENT: CS

CLASS: M.Sc. CS SEMESTER: II MONTH: APRIL TO JUNE ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- To Understand the difference between Web Mining and Data mining.
- To Understand the Basics and Needs of Web Mining.
- To Understand Web-based Data.
- To Understand Opinion Mining and Sentiment classification.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Web Mining (PSCS203) Unit III	Social Network & Link Analysis Link Analysis, Scrapy using python (without pipelining), Social Network Analysis	8	Web Data Mining: Exploring Hyperlinks, Contents, and Usage Data by Bing Liu (Springer Publications) 2017	PPT, Chalk and black board
	Co-Citation and Bibliographic Coupling, PageRank, HITS, Community Discovery	7		
Web Mining (PSCS203) Unit IV	Webpage crawlers and usage mining Basic Crawler Algorithm, Implementation Issues, Universal Crawlers, Focused Crawlers, Topical Crawlers, Crawler Ethics and Conflicts.	8	Web Data Mining: Exploring Hyperlinks, Contents, and Usage Data by Bing Liu (Springer Publications) 2017	PPT, Chalk and black board
	Data modelling and webpage usage mining., Discovery and analysis of web usage patterns, Recommender systems and collaborative filtering, query log mining	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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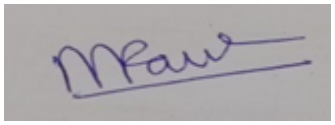

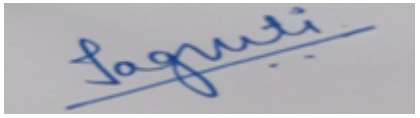

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. MONIKA MADHUKAR RAUT DEPARTMENT: CS

CLASS: M.Sc. CS SEMESTER: IV MONTH: FEBRUARY-MAY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- Knowledge about the fundamentals of Robotics and its applications
- Ability to use Raspberry Pi for programming Robotics
- Ability to apply robotics in speech and vision problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
(PSCS401) Unit II Robotics	**Building Robot Basics:** **Technical requirements**: Robot chassis kit with wheels and motors, a motor controller, Powering the robot, Test fitting the robot, Assembling the base.	8	Danny Staple, Robotics Programming, Packt Publishing, 2nd edition, Feb 2021	Google Meet, Jam board, PPT
	Robot Programming: Programming technique, adding line sensors to our robot, creating line-sensing behaviour, and Programming RGB Strips in robot.	7		
(PSCS401) Unit IV Robotics	**Robot Vision and Voice Communication (Skill Enhancement)** **Robotics setup:** Setting up a Raspberry Pi Camera on the robot (software and hardware), Check the robot vision on a phone or laptop, Mask images with RGB strips	8	Danny Staple, Robotics Programming, Packt Publishing, 2nd edition, Feb 2021	Google Meet, Jam board, PPT
	Robotics for Vision and Voice Applications: Colors, masking, and filtering – chasing coloured objects, detecting faces with Haar cascades, Finding objects in an image, Voice Communication with a robot	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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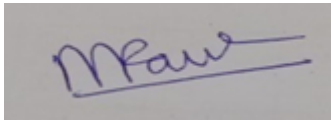

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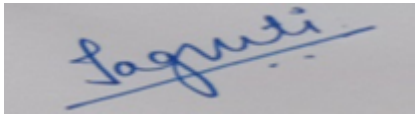

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pranali Dayanand Thakare DEPARTMENT: Information Technology CLASS:MScCS

SEMESTER: II MONTH:JAN to MAY ACADEMIC YEAR:2022-2023

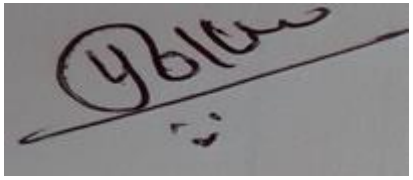
LEARNING OBJECTIVE/S:

- The course is designed to enable students, to understand and implement IoT in industry.
- Design and executive projects in IoT with Automatic Identification and Data Capture.
- Understand basic components and functionalities of Embedded System including its hardware.
- Effectively achieve collaboration of various technologies in IoT and enable the same using software programming like Python, Embedded C etc.
- Understand case studies in IoT and replicate the same for more detailed analysis of the IoT development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS204 Embedded and IoT **UNIT _1**	**UNIT 1: Embedded System Basics** **Introduction to Embedded Systems, Design of Embedded Systems,** **Memory Architecture, Input/Output. Basic electronics: Semiconductors, Transistors, BJT, Flip Flops, Resistors, Capacitors,** **CMOS, MOSFET, FPGA, Relays. Microcontrollers, UART Communications, SPI-peripherals interface, I2C communication,** **Wireless Sensor Network (WSN)**	15L	Enabling the Internet of Things Fundamentals, Design and Applications by Muhammad Azhar Iqbal, Sajjad Hussain, Huanlai Xing, Muhammad Ali Imran Wiley Pub.1stEdition 2021	Laptop, PPT
PSCS204 Embedded and IoT	**UNIT 4: (Skill Enhancement)** **Security, Communication and Data analytics in IOT** **IoT Security: Security constraints in IoT systems, security**	15L	Enabling the Internet of Things Fundamentals, Design and Applications by	Laptop, PPT

UNIT _4	**requirements of IoT systems, IoT attacks, security threats at each layer of IoT architecture, design secure IoT system for specific application Social IoT: Nature of social relationships among IoT Devices, functionality of different components of social IoT architecture, social aspects of smart devices in IoT applications Packet Tracer and IoT: Basics of Packet Tracer and Blockly programming language, design simple IoT projects in Packet Tracer.**		Muhammad Azhar Iqbal, Sajjad Hussain, Huanlai Xing, Muhammad Ali Imran Wiley Pub.1stEdition 2021	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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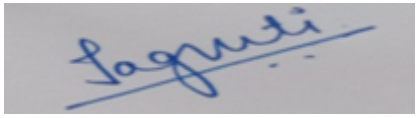

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS:MScCS

SEMESTER: II MONTH:JAN to MAY ACADEMIC YEAR:2022-2023

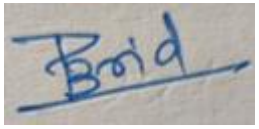
LEARNING OBJECTIVE/S:

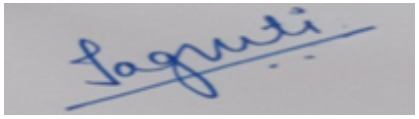
- The course is designed to enable students, to understand and implement IoT in industry.
- Design and executive projects in IoT with Automatic Identification and Data Capture.
- Understand basic components and functionalities of Embedded System including its hardware.
- Effectively achieve collaboration of various technologies in IoT and enable the same using software programming like Python, Embedded C etc.
- Understand case studies in IoT and replicate the same for more detailed analysis of the IoT development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS204 Embedded and IoT Technology Unit-II	**UNIT 2: Basics of IOTethics and Issue** **Introduction IoT**:Evolution of the IoT concept, vision and definition of IoT, basic characteristics of IoT, distinguish the IoT from other related technologies, IoT enablers, IoT architectures, pros and cons of IoT, IoT architecture concepts for specific IoT applications. **IoT Building Blocks -Hardware and Software:**The basic IoT building blocks, smart thing components and capabilities, basics of Packet Tracer with reference to IoT, basics of IoT gateway, Cloud, and analytics **Sensing Principles and Wireless Sensor Network:**Sensor fundamentals and classification of sensors, physical principles of some common sensors, basics of WSNs, WSN architecture and types, layer-level functionality of WSN protocol stack.	15L	Enabling the Internet of Things Fundamentals, Design and Applications by Muhammad Azhar Iqbal, Sajjad Hussain, Huanlai Xing, Muhammad Ali Imran Wiley Pub.1stEdition 2021	Laptop, PPT

PSCS204 Embedded and IoT Technology Unit-III	**UNIT 3: Advanced IOT Technologies** **IoT Gateway:**IoT architecture domains, IoT gateway architecture, IoT gateway functionalities, IoT gateway selection criteria, IoT gateway and edge computing, edge computing-based solution for specific IoT applications **IoT Protocol Stack**:Mapping of IoT protocols to layered IoT architecture, functionality of infrastructure, service discovery, and application layer protocols of IoT protocol stack **IoT Cloud and Fog Computing:**Components of IoT Cloud architecture, usage of application domains of IoT Cloud platforms, layered architecture of Fog computing, distinguish Fog computing from other related terms I**oT Applications:**Main applications of IoT, Implementation details of various IoT application domains	15L	Enabling the Internet of Things Fundamentals, Design and Applications by Muhammad Azhar Iqbal, Sajjad Hussain, Huanlai Xing, Muhammad Ali Imran Wiley Pub.1stEdition 2021	Laptop, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Avinash Dilip Sonawan DEPARTMENT: IT

CLASS: FYDS SEMESTER: I MONTH: September to December ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- Introducing the basic concepts of Internet and web design to learners.
- Providing brief knowledge about HTML5 concepts.
- Giving insight of the Page layout and navigation with HTML5.
- Making students aware about use of Tables, Forms and Media with HTML5.
- Providing knowledge of web page design using CSS. • Teaching data validation using Java Script

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Web Technology (USDS103) Unit I	Internet and the World Wide Web: What is Internet? Introduction to internet and its applications, E-mail, telnet, FTP, e-commerce, video conferencing, e-business. Internet service providers, domain name server, internet address,	04	HTML5 Step by Step Faithe Wempen Microsoft Press 2011 Web Design The Complete Reference Thomas Powell TMH 2009	Black board and chalk
	World Wide Web (WWW): World Wide Web and its evolution, uniform resource locator (URL), browsers – internet explorer, Netscape navigator, opera, Firefox, chrome, Mozilla. search engine, web saver – apache, IIS, proxy server, HTTP protocol What Is Web Design?: Defining Web Design, Web Design Themes, Learning Web Design	04		

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Web Technology (USDS103) Unit I	User-Centered Design: Usability, Who Are Web Users? Common User Characteristics, Memory, Response and Reaction Times, Dealing with Stimulus, Movement Capabilities, The User's World, General Types of Users, Web Conventions, Accessibility, Building a Usable Site HTML5: Introduction, Why HTML5? Formatting text by using tags, using lists and backgrounds, Creating hyperlinks and anchors.	04	HTML5 Step by Step Faithe Wempen Microsoft Press 2011 Web Design The Complete Reference Thomas Powell TMH 2009	Black board and chalk
Web Technology (USDS103) Unit II	**HTML5 Page layout and navigation:** Creating navigational aids: planning site organization, creating text based navigation bar, creating graphics based navigation bar, creating graphical navigation bar, creating image map, redirecting to another URL, creating division based layouts: HTML5 semantic tags, creating divisions, creating HTML5 semantic layout, positioning and formatting divisions	06	HTML5 Step by Step Faithe Wempen Microsoft Press 2011 Web Design The Complete Reference Thomas Powell TMH 2009	Black board and chalk
	HTML5 Tables, Forms and Media: Creating tables: creating simple table, specifying the size of the table, specifying the width of the column, merging table cells, using tables for page layout, formatting tables: applying table borders, applying background and foreground fills, changing cell padding, spacing and alignment, creating user forms: 12 creating basic form, using check boxes and option buttons, creating lists, additional input types in HTML5, Incorporating sound and video: audio and video in HTML5, HTML multimedia basics, embedding video clips, incorporating audio on web page	06	HTML5 Step by Step Faithe Wempen Microsoft Press 2011 Web Design The Complete Reference Thomas Powell TMH 2009	Black board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VRUNDA VISHAL GHARAT DEPARTMENT: IT

CLASS: FYDS SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- Introducing the basic concepts of Internet and web design to learners.
- Providing brief knowledge about HTML5 concepts.
- Giving insight of the Page layout and navigation with HTML5.
- Making students aware about use of Tables, Forms and Media with HTML5.
- Providing knowledge of web page design using CSS. • Teaching data validation using Java Script

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Web Technology (USDS103) Unit III	**Introduction to Style Sheets** : Understanding Styles, Constructing Style Rules, Creating Styles for Nested Tags, Creating Classes and IDs for Applying Styles, Applying Styles to Hyperlinks, Creating and Linking to External Style Sheets **Formatting Text by Using Style Sheets**: Specifying a Font Family, Specifying a Font Size and Color, Applying Bold and Italics, Applying Strikethrough and Underlining, Creating Inline Spans , Adjusting Spacing Between Letters	04	HTML5 Step by Step Faithe Wempen Microsoft Press 2011 Web Design The Complete Reference Thomas Powell TMH 2009	Black board and chalk
	Formatting Paragraphs by Using Style Sheets: Indenting Paragraphs, Applying a Border to a Paragraph, Specifying a Border Style, Setting Border Padding, Specifying Border Width and Color, Formatting Border Sides Individually,	04		

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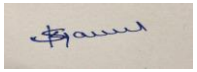
	Setting All Border Attributes at Once, Specifying the Horizontal Alignment of a Paragraph, Specifying Vertical Space within a Paragraph **Displaying Graphics**: Selecting a Graphics Format, Preparing Graphics for Web Use, Inserting Graphics, Arranging Elements on the Page, Controlling Image Size and Padding, Hyperlinking from Graphics, Using Thumbnail Graphics, Including Alternate Text for Graphics, Adding Figure Captions			

Web Technology (USDS103) Unit III	**Java Script:** Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, regExp **Document and its associated objects**: document, document object methods, Link, Area, Anchor, Image, Layer	04	JavaScript 2.0: The Complete Reference Thomas Powell and Fritz Schneider TMH 2 nd 2004	Black board and chalk
	Events and Event Handlers : General Information about Events, Defining Event Handlers, event, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp, onMove, onReset, onResize, onSelect, onSubmit, onUnload	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JANHAVI YATIN NAIK DEPARTMENT: DS

CLASS: FYDS SEMESTER: I MONTH: September to November ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

• To discuss various components of communication, explain how non-verbal communication techniques enhance communication and explain the barriers to communication.
• To discuss various business activities which are essential at workplace. To explain business communication covering the structure and layout of a letter, planning of a letter and use of language.
• To explain the use of agenda and minutes for effective functioning of any organisation.
• To direct the learners' attention to the significance of effective writing and the importance and structure of reports.
• To explain to interpret information ethics (IE) as the branch of the philosophy of information that investigates, in a broad sense, the ethical impact of Information and Communication Technologies (ICTs) on human life and society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USDS104:Business Communication and Information Ethics	**Interpretation of Communication** **B**asics of communication, Non-verbal communication, Barriers to communication	**6**	**Professional Communication by Aruna Koneru**	**Blackboard and chalk** **PPT , Projector**
Unit 1	**Business communication at workplace** Letter components and layout, Planning a letter, Process of letter writing	**6**		

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USDS104: Business Communication and Information Ethics Unit 2	**Business communication at workplace** Email communication, Memos and memo reports, Employment communication. Notice, Agenda and minutes of meeting, Brochures.	**12**	**Business Communication by A. C."Buddy" Krizan, Patricia Merrier, Joyce Logan, Karen Williams**	**Blackboard and chalk PPT , Projector**
USDS104: Business Communication and Information Ethics Unit 3	**Report Writing:** Effective writing, Types of business reports, Structure of reports, Gathering Information	**12**	**Business Communication by A. C."Buddy" Krizan, Patricia Merrier, Joyce Logan, Karen Williams**	**Blackboard and chalk**
USDS104: Business Communication and Information Ethics Unit 4	**Report Writing:** Organisation of material, writing abstracts and summaries, Writing definitions, Visual aids, User Instruction Manual.	**12**	**Business Communication by A. C."Buddy" Krizan, Patricia Merrier, Joyce Logan, Karen Williams**	**Blackboard and chalk**
USDS104: Business Communication and Information Ethics Unit 5	**Information Ethics** Ethics after the information revolution, what is information ethics? The method of abstraction	**12**	**The Ethics of Information by Luciano Floridi**	**Blackboard and chalk**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHA TUSHAR VAZE DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: FYDS SEMESTER: II MONTH: DECEMBER TO APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- Students should be able to understand the components of environments and the need to conserve it
- Students should be able to know the relationship between each and every organism and identify the problem which the world is facing.
- To select, the appropriate life style to save the life on earth

Unit 3	**Environmental Pollution** Air Pollution, Water Pollution, Soil Pollution, Marine Pollution, Noise Pollution, Thermal Pollution, Solid Waste Management, Hazardous Waste Management, Pollution Prevention, Disaster Management	**6**	**Environmental Studies by Benny Joseph**	**Blackboard and chalk PPT , Projector**
	Human Population and the Environment Population Growth, Human Rights, Value Education, HIV/AIDS, Environment and Human Health, Family Welfare Programmes, Women and Child Welfare, Role of Information Technology in Environment and Human Health	**6**	**Environmental Studies by Benny Joseph**	**Blackboard and chalk PPT , Projector**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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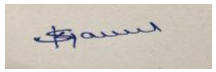

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHLESHA DATTARAM GURAV DEPARTMENT: IT

CLASS: FYDS SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVES:

- To learn the Programming fundamentals using Python
- To learn the concepts and usage data types, variables and other basic elements of Python
- To understand operators and control statements in Python
- To learn using arrays and strings in Python.
- To understand IPython architecture for Python.
- To understand data Science Tools
- To learn plotting data using appropriate Python visualization libraries

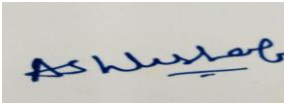
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Programming (USDS102) Unit I	Introduction to Python Language: Overview, Features of Python, Execution of a Python Program, Innards of Python, Frozen Binaries, Python Interpreter, Comparison of Python with C and Java, Installing Python, Writing & Executing, IDLE	03	Let Us Python Y. Kanetkar BPB	Black Board and Chalk
	Data Types, Variables And Other Basic Elements: Comments, Docstrings, Data types-Numeric, Compound, Boolean, Dictionary, Sets, Mapping, Basic Elements of Python, Variables	03		
	Input and Output Operations: Input Function, Output Statements,Command Line Arguments	03		

	Control Statements: Control Statements- Loop Statement, The else Suite, break Statement, continue Statement, pass Statement, assert Statement, return Statement	03		
Introduction to Programming (USDS102) Unit II	Functions: Defining & Calling a Function, Returning Results, Returning Multiple Values, Built-in Functions, Parameters and Arguments, Recursive Functions, Anonymous or Lambda Functions	03	Let Us Python Y. Kanetkar BPB	Black Board and Chalk
	Operators: Arithmetic operators, Assignment operators, Unary minus operator, Relational operators, Logical operators, Bitwise operators, Membership operators, Identity operators, Precedence of Operators, Associativity of Operators	03		
	Arrays: Creating Arrays, Indexing and Slicing, Basic Array Operations, Arrays Processing, Mathematical Operations on Array, Aliasing Arrays, Slicing and Indexing in NumPy Arrays, Basic Slicing. Advanced Indexing. Dimensions of Arrays, Attributes of an Array	03		
	Strings: Creating Strings, Functions of Strings, Working with Strings, Length of a String, Indexing & Slicing, Repeating & Concatenation of Strings, Checking Membership, Comparing Strings, Removing Spaces, Finding Substrings, Counting Substrings, Strings are Immutable, Splitting and Joining Strings, Changing Case, Checking Starting and Ending of a String, Sorting & Searching in the Strings, Formatting the Strings, Working with Characters	03		
Introduction to Programming (USDS102) Unit III	Lists and Tuples: Lists, List Functions and Methods, List Operations, Tuples	03	Let Us Python Y. Kanetkar BPB	Black Board and Chalk
	Dictionaries: Creating a Dictionary, Operators in Dictionary, Dictionary Methods, Using for Loop with Dictionaries, Operations on Dictionaries, Ordered Dictionaries	03		

	Regular Expressions: What is a Regular Expression? Sequence Characters in Regular Expressions, Quantifiers in Regular Expressions, Special Characters in Regular Expressions, Using Regular Expression on Files, Retrieving Information from an HTML File	03		
	Date and Time in Python: Date and Time, Date and Time Now, Combining Date and Time, Formatting Dates and Times, Finding Durations using "timedelta", Comparing Two Dates, Sorting Dates, Stopping Execution Temporarily, Knowing the Time taken by a Program, Working with Calendar Module	03		
Introduction to Programming (USDS102) Unit IV	IPython: Beyond Normal Python, Help and Documentation in IPython, Keyboard Shortcuts in the IPython Shell, IPython Magic Commands, Input and Output History, IPython and Shell Commands, Errors and Debugging, Profiling and Timing Code	06	Python Data Science Handbook Jake VanderPlas O'Reilly Media	Black Board and Chalk
	Introduction to NumPy: Understanding Data Types in Python, The Basics of NumPy Arrays, Computation on NumPy Arrays: Universal Functions, Aggregations: Min, Max, and Everything In Between, Computation on Arrays: Broadcasting, Comparisons, Masks, and Boolean Logic, Fancy Indexing, Sorting Arrays, Structured Data: NumPy's Structured Arrays	06		
Introduction to Programming (USDS102) Unit V	Data Manipulation with Pandas: Introducing Pandas Objects, Data Indexing and Selection, Operating on Data in Pandas, Handling Missing Data, Hierarchical Indexing, Combining Datasets: Concat and Append, Combining Datasets: Merge and Join, Aggregation and Grouping, Pivot Tables, Vectorized String Operations, Working with	06	Python Data Science Handbook Jake VanderPlas O'Reilly Media	Black Board and Chalk

	Time Series. High-Performance Pandas: eval( ) and query( )			
	Visualization with Matplotlib: Simple Line Plots, Simple Scatter Plots, Visualizing Errors, Density and Contour Plots, Histograms, Binnings, and Density, Customizing Plot Legends, Customizing Colorbars, Multiple Subplots, Text and Annotation, Customizing Ticks, Customizing Matplotlib: Configurations and Stylesheets, Three-Dimensional Plotting in Matplotlib, Geographic Data with Basemap, Visualization with Seaborn	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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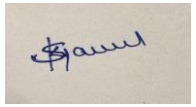

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Teaching plan for FYCS sem 1 2022-23

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: Data Science

CLASS: Fybsc(DS)

SEMESTER: 1

MONTH: September to December

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners would be able to

- To understand the use and importance of statistical data by tabulating and implementing sampling methods.
- identify association between the variables as well as computing consistent and inconsistent data.
- compute level of measures and apply as well as interpret data into graphs.
- Apply measure of central tendency to minimize the sum of squared deviation.
- Able to understand the basic assumption behind regression analysis and determine the model is significance as well as able to apply various techniques for the modelling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	Reference /s	Teaching method Ict tool used
Paper: Statistical Methods **<u>Unit 1</u>**	**Introduction to Statistics and Use in Business:** ➢ Meaning of Statistics as a Science, Importance of Statistics, ➢ Scope of Statistics : In the field of Industry, Biological Sciences,Medical Sciences, Economics Sciences, Social,	**5**	Statistical Methods and introductory text, Medhi J.,New Age International ltd, Second	Black board, chalk and Duster

	Sciences,Management Sciences, Agriculture, Insurance, InformationTechnology, Education and Psychology. ➢ Statistical organizations in India and their functions: CSO, ISI,NSS, IIPS (Devnar, Mumbai), Bureau of Economics andstatistics. ➢ Case Study.		edition	

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	Types of Data and Data Condensation: ➢ Method of sampling: Concept of population and sample. Finite Infinite population ,Notion ofSRS,SRSWOR and SRSWR ➢ Types of Characteristics, Different types of scales: nominal,ordinal, interval and ratio scale. Linear and circular scale. ➢ Types of Data: Primary data, Secondary data, Collection of data and concept of questionnaire and a schedule, Cross-sectional data,time series data, failure data, industrial data, and directional data. ➢ Tabulation. ➢ Dichotomous classification- for two and	4	Statistical Methods and introductory text, Medhi J.,New Age International ltd, Second edition	Black board, chalk and Duster

	three attributes, Verification for consistency. ➢ Association of attributes: Yule's coefficient of association Q. ➢ Yule's coefficient of Colligation, ➢ Notion of a statistical population: Finite population infinite ➢ population,homogeneous population and heterogeneous population. Notion of sample, random sample and non-random sample.			
	Presentation of Data ➢ Univariate frequency distribution of discrete and continuous variables. ➢ Cumulative frequency distribution and relative frequencydistribution. ➢ Graphical representation of frequency distribution by Histogram,frequency polygon, Cumulative frequency curve. Stem and leafdiagram ➢ Check sheet, Parato diagram	3	Statistical Methods and introductory text, Medhi J.,New Age International ltd, Second edition	Black board, chalk and Duster

<u>Unit 2</u>	**Measures of central tendencies** ➢ Concept of central tendency of data. Requirements of good measure ➢ Locational averages: Median, Mode, and Partition Values: Quartiles,Deciles, and	6	Statistical Methods, An n itroductory Text,Medhi J. New Age Internation alLtd. Second Edition	Black board, chalk and Duster

	Percentiles, Box Plot, Percentile ranks ➢ Mathematical averages Arithmetic mean (Simple, weighted mean, combinedmean), Geometricmean, Harmonic mean ➢ Empirical relation between mean, median and mode ➢ Merits and demerits of using different measures &their applicability ➢ Partition Values : Quartiles, Deciles and Percentiles, Box Plot, ➢ Percentile ranks			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

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	Measures of Dispersion, Skewness & Kurtosis ➢ Concept of dispersion. Requirements of good measure. ➢ Absolute and Relative measures of dispersion: Range, Quartile Deviation, Mean absolute deviation, Standard deviation. ➢ Variance and Combined variance, raw moments and central moments and relations between them. Their properties ➢ Concept of Skewness and	6	Statistical Methods and introductory text, Medhi J.,New Age International ltd, Second edition	Black board, chalk and Duster

	Kurtosis: Measures of Skewness: KarlPearson's, Bowley's and Coefficient of skewness based on moments. Measure of Kurtosis			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

Unit 3	**Mean square deviation:** ➢ **Definition, minimality property of mean square deviation (with proof),** ➢ **Variance and standard deviation: Definition, merits and demerits, effect of change of origin and scale, combined variance (derivation for 2 groups), combined standard deviation, generalization for n groups.**	7	Statistical Methods And introductory Text, Medhi J. New Age International Ltd. Second Edition	Black board, chalk and Duster

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	➢ **Measures of dispersion for comparison: coefficient of range, coefficient of quartile deviation and coefficient of mean deviation,coefficient of variation (C.V.).**	5	Statistical Methods, And introductory Text ,Medhi J. New Age International Ltd. Second Edition	Black board, chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lecture

SIGNATURE OF TEACHER

SIGNATURE OF THEH.O.D.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

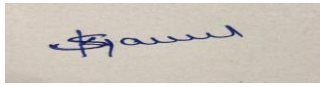
CLASS: SYBSc(Data Science) Div:A SEMESTER: III MONTH: JUNE-SEPTEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: learn the essential Python data structures; To learn the significant Python implementation of popular data structures; To learn about various data structure algorithms and design paradigms; To acquire knowledge of how to create complex data structures; To acquire basic understanding of complex data structures such as trees and graphs and their applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: USDS302 unit:1, Title: Data Structures and Algorithms Using Python	**Python Objects & Object-Oriented Programming**: Goals, Principles, and Patterns, Overview of data types and objects, Classes and object programming, Class Definitions, Inheritance, Data encapsulation and properties, Namespaces and Object-Orientation, Shallow and Deep Copying	4	Hands-On Data Structures andAlgorithms with Python	Blackboard
	Python Data Types and Strutures: Modules for data structures and algorithms- Collections, Deques, ChainMap objects Counter, Counter objects, Ordered dictionaries defaultdict, Learning about named tuples Arrays.	4	Hands-On Data Structures andAlgorithms with Python	Blackboard
	Principles of Algorithm Design: An introduction to algorithms, Algorithm design paradigms Recursion and backtracking, Backtracking, Divide and conquer - long multiplication The recursive approach Runtime analysis Asymptotic analysis Big O notation, Composing complexity classes Omega notation, Theta notation, Amortized analysis.	4	Hands-On Data Structures andAlgorithms with Python	Blackboard

Paper: USDS302 unit:2, Title: Data Structures and Algorithms Using Python	**Lists and Pointer Structures**:Arrays-Pointer structures. **Singly linked lists**-Singly linked list class, The append operation, A faster append operation, Getting the size of the list, Improving list traversal, Deleting nodes, List search, Clearing a list	4	Hands-On Data Structures andAlgorithms with Python	Blackboard
	Doubly linked lists-A doubly linked list node Doubly linked list class Append operation The delete operation List search.	3	Hands-On Data Structures andAlgorithms with Python	Blackboard
	Circular lists-Appending elements, Deleting an element in a circular list, Iterating through a circular list **Stacks:** Stack implementation, Push operation, Pop operation, Peek operation, Bracket-matching application,	5	Hands-On Data Structures andAlgorithms with Python	Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS CLASS: SYDS

SEMESTER: SEM-3 MONTH: JUN-SEP ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

- Perform object oriented programming to develop solution to problems demonstrating usage of control structures, modularity, I/O and other standard language constructs.
- Demonstrate adeptness of object oriented programming to develop solution to problem demonstration usage of data abstraction, encapsulation, and inheritance.

PAPER, TITLE,UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Data Warehousing and Mining UNIT 1	THE COMPELLING NEED FOR DATA WAREHOUSING: Escalating Need for Strategic Information, Failures of Past Decision-Support Systems, Operational Versus Decision-Support Systems, Data Warehousing—The Only Viable Solution, Data Warehouse Defined, The Data Warehousing Movement, Evolution of Business Intelligence	3	DATA WAREHOUSING FUNDAMENTALS FOR IT PROFESSIONALS BY- PAULRAJ PONNIAH	BLACK BOARD AND CHALK
	DATA WAREHOUSE: The Building Blocks: Defining Features, Data Warehouses and Data Marts, Architectural Types, Overview of The Components, Metadata in The Data Warehouse	3		
	TRENDS IN DATA WAREHOUSING: Continued Growth in Data Warehousing, Significant Trends, Emergence of Standards, Web-Enabled Data Warehouse	2		

	ARCHITECTURAL COMPONENTS: Understanding Data Warehouse Architecture, Distinguishing Characteristics, Architectural Framework, Technical Architecture, Architectural Types	2		
	THE SIGNIFICANT ROLE OF METADATA: Why Metadata Is Important, Metadata Types By Functional Areas, Business Metadata, 12 Books and References: Technical Metadata, How To Provide Metadata	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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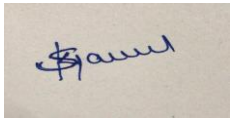

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT: CS

CLASS: SYDS SEMESTER: SEM-3 MONTH: JUN-SEP ACADEMIC YEAR: 2022-2023

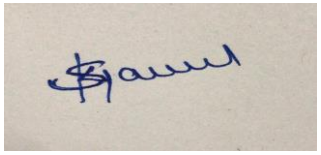
LEARNING OBJECTIVE/S:
The learners will be able to:

- Perform object oriented programming to develop solution to problems demonstrating usage of control structures, modularity, I/O and other standard language constructs.
- Demonstrate adeptness of object oriented programming to develop solution to problem demonstration usage of data abstraction, encapsulation, and inheritance.

PAPER, TITLE,UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Data Warehousing and Mining UNIT 3	**INTRODUCTION TO DATA MINING**: Introduction to Data Mining, Need of Data Mining, What Can Data Mining Do and Not Do? Data Mining Applications, Data Mining Process, Data Mining Techniques, Difference between Data Mining and Machine Learning	4	Data Mining and Data Warehousing : Principles and Practical Techniques- by Parteek Bhatia	BLACK BOARD AND CHALK
	BEGINNING WITH WEKA AND IRIS DATASET IN R: About Weka, Installing Weka, Understanding Fisher's Iris Flower Dataset, Preparing the Dataset, Understanding A RFF, Working with a Dataset in Weka, Working with the Iris dataset in R Data Preprocessing: Need for Data Preprocessing, Data Preprocessing Methods	4		
	CLASSIFICATION: Introduction to Classification, Types of Classification,	4		

	Input and Output Attributes, Guidelines for Size and Quality of the Training Dataset, Introduction to the Decision Tree Classifier, Naive Bayes Method, Understanding Metrics to Assess the Quality of Classifier			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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Teaching plan sycs sem 3 2022-23

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: Data science

CLASS: S.Y.B.Sc.(DS)

SEMESTER: June to September

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to :

- Appreciate the relevance of linear algebra in the field of computer science.
- Understand the concepts through program implementation
- Instill a computational thinking while learning linear algebra.
- Express clear understanding of the concept of a solution to a system of equations.
- Find eigenvalues and corresponding eigenvectors for a square matrix.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS305 **Linear Algebra and Discrete Mathematics** **<u>Unit 1</u>**	Matrices and Gaussian Elimination: ● Introduction, The Geometry of Linear Equations, ● An Example of Gaussian Elimination, ● Matrix Notation and Matrix Multiplication,	4	Linear Algebra and Its Applications Gilbert Strang Cengage Publication	Black board, chalk and duster

			Fourth Edition	
	• Triangular Factors and Row Exchanges, • Inverses and Transposes, • Special Matrices and Applications	3	Linear Algebra and Its Applications Gilbert Strang Cengage Publication Fourth Edition	Black board, chalk and duster
	Vector Spaces: • Vector Spaces and Subspaces, • Solving Ax= 0 and Ax= b,	4	Linear Algebra and Its Applications Gilbert Strang Cengage Publication Fourth Edition	Black board, chalk and duster
	• Linear Independence, • Basis, and Dimension,	2	Linear Algebra and Its Applications Gilbert Strang Cengage Publication Fourth Edition	Black board, chalk and duster
	• The Four Fundamental Subspaces, • Graphs and Networks, Linear Transformations	2	Linear Algebra and Its Applications Gilbert Strang Cengage	Black board, chalk and duster

			Publication Fourth Edition	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS 302 **Linear Algebra and Discrete** **Mathematics** **<u>Unit 2</u>**	Orthogonality: ● Orthogonal Vectors and Subspaces, ● Cosines and Projections onto Lines, ● Projections and Least Squares,	4		Black board,chalk and duster
	● Orthogonal Bases ● and Gram-Schmidt, The Fast Fourier Transform	4		Black board,chalk and duster
	Determinants: ● Introduction, ● Properties of the Determinant, ● Formulas for the Determinant,	4		Black board,chalk and duster
	● Applications of Determinants	3		Black board,chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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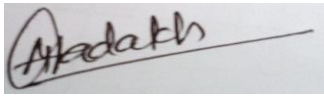
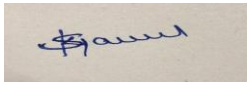
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS 302 **Linear Algebra and Discrete Mathematics** **<u>Unit 3</u>**				
	•	3		Black board, chalk and duster
	•	4		Black board, chalk and duster
	•	5		Black board, chalk and duster
	•	3		Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **S.Y.B.Sc.(DS)**

SEMESTER: **III** MONTH: **June - September** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able:1. Understand concept of clustering.

2. To align the Data Mining techniques for analyzing the datasets using tools like Weka, R or Python

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USDS304 Paper 3 **Data Warehousing and Mining** **UNIT IV**	CLUSTER ANALYSIS: Introduction to Cluster Analysis, Applications of Cluster Analysis, Desired Features of Clustering, Distance Metrics, Major Clustering Methods/Algorithms, Partitioning Clustering,	4	Data Mining and Data Warehousing : Principles and Practical Techniques, Parteek Bhatia, Cambridge University Press	Microsoft PowerPoint Presentation
	HIERARCHICAL CLUSTERING ALGORITHMS: Web Mining and Search Engines: Introduction, Web Content Mining	4		
	Web Usage Mining, Web Structure Mining, Hyperlink Induced Topic Search algorithm, Introduction to Modern Search Engines, Working of a Search Engine, PageRank Algorithm, Precision and Recall	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USDS304 Paper 3 **Data Warehousing and Mining** **UNIT IV**	INTRODUCTION TO ASSOCIATION RULE MINING: Defining Association Rule Mining, Representations of Items for Association Mining, The Metrics to Evaluate the Strength of Association Rules, The Naive Algorithm for Finding Association Rules, Approaches for Transaction Database Storage	6	Data Mining and Data Warehousing : Principles and Practical Techniques, Parteek Bhatia, Cambridge University Press	Microsoft PowerPoint Presentation
	THE APRIORI ALGORITHM, Closed and Maximal Itemsets, The Apriori–TID Algorithm for Generating Association Mining Rules, Direct Hashing and Pruning (DHP), Dynamic Itemset Counting (DIC), Mining Frequent Patterns without Candidate Generation (FP Growth)	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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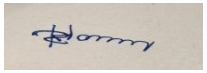

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: DS

CLASS: SYDS SEMESTER: III MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2022-23

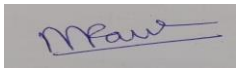
LEARNING OBJECTIVE/S:

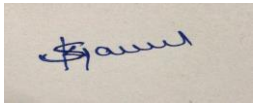
- To learn the essential Python data structures.
- To learn the significant Python implementation of popular data structures
- To learn about various data structure algorithms and design paradigms
- To acquire knowledge of how to create complex data structures.
- To acquire basic understanding of complex data structures such as trees and graphs and their applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DATA STRUCTURES AND ALGORITHMS USING PYTHON (USDS302) Unit III	**Queues:** List-based queues, Stack-based queues Node-based queues, Application of queues Media player queues	03	Hands-On Data Structures And Algorithms with Python Basant Agarwal, Benjamin Baka Packt Publishing 2nd 2018	Black Board and Chalk
	Trees: Terminology, Tree nodes, Tree traversal, Depth-first traversal In-order traversal and infix notation, Pre-order traversal and prefix notation, Post-order traversal and postfix notation, Breadth-first traversal	04		
	Binary trees-Binary search trees, Binary search tree implementation, Binary search tree operations, Finding the minimum and maximum nodes Inserting nodes Deleting nodes, Searching the tree, Benefits of a binary search tree, Balancing trees, Expression trees, Parsing a reverse Polish expression, Heaps, Ternary search tree	05		

DATA STRUCTURES AND ALGORITHMS USING PYTHON (USDS302) Unit IV	**Hashing and Symbol Tables**: Hashing- Perfect hashing functions Hash tables-Storing elements in a hash table, Retrieving elements from the hash table, Testing the hash table, Using [] with the hash table, Non-string keys, Growing a hash table, Open addressing, Chaining, Symbol tables	06	Hands-On Data Structures And Algorithms with Python Basant Agarwal, Benjamin Baka Packt Publishing 2nd 2018	Black Board and Chalk
	Graphs and Other Algorithms: Graphs-Directed and undirected graphs, Weighted graphs, Graph representations, Adjacency lists, Adjacency matrices, Graph traversals-Breadth-first traversal, Depth-first search, Other useful graph methods, Priority queues and heaps- Insert operation, Pop Operation, Selection Algorithm	06		
DATA STRUCTURES AND ALGORITHMS USING PYTHON (USDS302) Unit V	**Sorting:** Sorting algorithms- Bubble sort algorithms, Insertion sort algorithms, Selection sort algorithms, Quick sort algorithms	04	Hands-On Data Structures And Algorithms with Python Basant Agarwal, Benjamin Baka Packt Publishing 2nd 2018	Black Board and Chalk
	Selection Algorithms: Selection by sorting, Randomized selection Quick Select, Deterministic selection-Pivot selection Median of medians, Partitioning step	04		
	Pattern Matching Algorithms: The brute-force algorithm, The RabinKarp algorithm	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: SY B.SC DATA SCIENCE SEMESTER: III MONTH: AUGUST-SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Find the eigenvalues and eigenvectors of given matrix.
- Check whether the given matrix is diagonalizable.
- Solve the difference equation using eigenvalues & eigenvectors.
- Solve the differential equation using eigenvalues & eigenvectors.
- Understand the concept of similar matrices.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
LINEAR ALGEBRA&DISCRETE MATHEMATICS Unit 3 Eigenvalues & Eigenvectors	➢ Finding eigenvalues & eigenvectors ➢ Diagonalisation of a matrix ➢ Difference equations and powers Ak ➢ Differential equations & eAt ➢ Complex matrices ➢ Similarity transformations	2 2 2 2 2 2	LINEAR ALGEBRA & ITS APPLICATIONS (Gilbert Strang)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS: Blackboard, chalk, duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT 4 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: SY B.SC DATA SCIENCE SEMESTER: III MONTH: October-November ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Find out the minima, maxima and saddle points of the given function of two variables.
- Test whether the given quadratic form is positive definite.
- Find the singular value decomposition of the given matrix.
- Find the minimum value of the given quadratic form.
- Understand the concept of matrix norm, condition number and spectral norm.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
LINEAR ALGEBRA&DISCRETE MATHEMATICS (Unit 4) Positive definite matrices & Computation with matrices	➢ Minima, Maxima & Saddle points ➢ Tests for positive definiteness ➢ Singular value decomposition ➢ Minimum principles ➢ Finite element method ➢ Matrix norm & condition number	2 2 2 2 2 2	LINEAR ALGEBRA & ITS APPLICATIONS (Gilbert Strang)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS: Blackboard, chalk, duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT 5 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: SY B.SC DATA SCIENCE SEMESTER: III MONTH: November-December ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Find out the solution of linear inequalities graphically and numerically.
- Find out the solution of LPP using simplex method.
- Find the dual of the given primal problem.
- Understand various network models.
- Find out the saddle point of the given game problem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
LINEAR ALGEBRA&DISCRETE MATHEMATICS **(Unit 5)** LPP & Game theory	➢ Linear inequalities ➢ The simplex method ➢ The dual problem ➢ Network models ➢ Game theory	2 3ss 2 2 3	LINEAR ALGEBRA & ITS APPLICATIONS (Gilbert Strang)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS: Blackboard, chalk, duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: DATA SCIENCE

CLASS:S.Y.BSC(D.S) SEMESTER: **III** MONTH:JULY-OCT ACADEMIC YEAR: 2022-2023

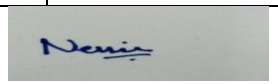
SUBJECT:RESEARCH METHODOLOGY

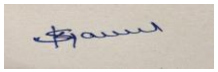
LEARNING OBJECTIVE/S:
The learners will be able to: To impart analytical skill in solving complex problems. To foster the ability to critically think in developing robust, extensible and highly maintainable solutions to simple and complex problems. To explore the unknown and unlock new possibilities in different dimensions of the system. To portray accurately the characteristics of a particular individual, situation or a group under study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY USDS301 Unit-2	**Sampling Design:** Census and Sample Survey, Implications of a Sample Design, Steps in Sampling Design, Criteria of Selecting a Sampling Procedure, Characteristics of a Good Sample Design, Different Types of Sample Designs, How to Select a Random Sample?, Random Sample from an Infinite Universe, Complex Random Sampling Designs	4	Research Methodology – Methods and techniques	PowerPoint Presentation

	Measurement and Scaling Techniques: Measurement in Research, Measurement Scales, Sources of Error in Measurement, Tests of Sound Measurement, Technique of Developing Measurement Tools, Scaling, Meaning of Scaling, Scale Classification Bases, Important Scaling Techniques, Scale Construction Techniques	4	C. R. Kothari New Age International (P) Ltd.,	
	Methods of Data Collection: Collection of Primary Data, Observation Method, Interview Method, Collection of Data through Questionnaires, Collection of Data through Schedules, Difference between Questionnaires and Schedules, Some Other Methods of Data Collection, Collection of Secondary Data, Selection of Appropriate Method for Data Collection, Case Study Method, (i) Guidelines for Constructing Questionnaire/Schedule (ii) Guidelines for Successful Interviewing (iii) Difference between Survey and Experiment	5		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**13**		
RESEARCH METHODOLOGY USDS301 Unit-4	**Interpretation of Data and Paper Writing –** Layout of a Research Paper, Journals in Computer Science, Impact factor of Journals, When and where to publish ?, UGC-CARE, Web of Science, SCOPUS, IEEE, ACM, Ethical issues related to publishing, Copyright, Data Privacy, Plagiarism and Self-Plagiarism, Software for detection of Plagiarism. ShodhShudhhi (PDS), smallseotools.com Use of Encyclopedias, Research Guides, Handbook etc., Academic Databases for Computer Science and Information Technology Discipline. Google Scholar, shodhganga, IEEE Xplore, ResearchGate, IDELS, DASH	8	Research Methodology – Methods and techniques C. R. Kothari New Age International (P) Ltd.,	PowerPoint Presentation
	Use of tools / techniques for Research: Chicago, Turabian, MLA and APA Style, Reference Management Software like EndNote, Zotero or Mendeley; Software for paper formatting like LaTeX/MS Office/	8		

	Scrivener/Open Office/Google Doc/DropBox Paper.			
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**16**		





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Teaching plan for FYCS sem 1 2022-23

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: Data Science

CLASS: Fybsc(DS)

SEMESTER: 1

MONTH: September to December

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners would be able to

- To understand the use and importance of statistical data by tabulating and implementing sampling methods.
- identify association between the variables as well as computing consistent and inconsistent data.
- compute level of measures and apply as well as interpret data into graphs.
- Apply measure of central tendency to minimize the sum of squared deviation.
- Able to understand the basic assumption behind regression analysis and determine the model is significance as well as able to apply various techniques for the modelling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	Reference /s	Teaching method Ict tool used
Paper: Statistical Methods **<u>Unit 1</u>**	**Introduction to Statistics and Use in Business:** ➢ Meaning of Statistics as a Science, Importance of Statistics, ➢ Scope of Statistics : In the field of Industry, Biological Sciences,Medical Sciences, Economics Sciences, Social,	**5**	Statistical Methods and introductory text, Medhi J.,New Age International	Black board, chalk and Duster

	Sciences,Management Sciences, Agriculture, Insurance, InformationTechnology, Education and Psychology. ➢ Statistical organizations in India and their functions: CSO, ISI,NSS, IIPS (Devnar, Mumbai), Bureau of Economics andstatistics. ➢ Case Study.		ltd, Second edition	

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	Types of Data and Data Condensation: ➢ Method of sampling: Concept of population and sample. Finite Infinite population ,Notion ofSRS,SRSWOR and SRSWR ➢ Types of Characteristics, Different types of scales: nominal,ordinal, interval and ratio scale. Linear and circular scale. ➢ Types of Data: Primary data, Secondary data, Collection of data and concept of questionnaire and a schedule, Cross-sectional data,time series data, failure data, industrial data, and directional data. ➢ Tabulation. ➢ Dichotomous classification- for two and	4	Statistical Methods and introductory text, Medhi J.,New Age International ltd, Second edition	Black board, chalk and Duster

	three attributes, Verification for consistency. ➢ Association of attributes: Yule's coefficient of association Q. ➢ Yule's coefficient of Colligation, ➢ Notion of a statistical population: Finite population infinite ➢ population,homogeneous population and heterogeneous population. Notion of sample, random sample and non-random sample.			
	Presentation of Data ➢ Univariate frequency distribution of discrete and continuous variables. ➢ Cumulative frequency distribution and relative frequencydistribution. ➢ Graphical representation of frequency distribution by Histogram,frequency polygon, Cumulative frequency curve. Stem and leafdiagram ➢ Check sheet, Parato diagram	3	Statistical Methods and introductory text, Medhi J.,New Age International ltd, Second edition	Black board, chalk and Duster

<u>Unit 2</u>	**Measures of central tendencies** ➢ Concept of central tendency of data. Requirements of good measure ➢ Locational averages: Median, Mode, and Partition Values: Quartiles,Deciles, and	6	Statistical Methods, An n itroductory Text,Medhi J. New Age Internation alLtd. Second Edition	Black board, chalk and Duster

	Percentiles, Box Plot, Percentile ranks ➢ Mathematical averages Arithmetic mean (Simple, weighted mean, combinedmean), Geometricmean, Harmonic mean ➢ Empirical relation between mean, median and mode ➢ Merits and demerits of using different measures &their applicability ➢ Partition Values : Quartiles, Deciles and Percentiles, Box Plot, ➢ Percentile ranks			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

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	Measures of Dispersion, Skewness & Kurtosis ➢ Concept of dispersion. Requirements of good measure. ➢ Absolute and Relative measures of dispersion: Range, Quartile Deviation, Mean absolute deviation, Standard deviation. ➢ Variance and Combined variance, raw moments and central moments and relations between them. Their properties	6	Statistical Methods and introductory text, Medhi J.,New Age International ltd, Second edition	Black board, chalk and Duster

	➢ Concept of Skewness and Kurtosis: Measures of Skewness: KarlPearson's, Bowley's and Coefficient of skewness based on moments. Measure of Kurtosis			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

<u>Unit 3</u>	**Mean square deviation:** ➢ **Definition, minimality property of mean square deviation (with proof),** ➢ **Variance and standard deviation: Definition, merits and demerits, effect of change of origin and scale, combined variance (derivation for 2 groups), combined standard deviation, generalization for n groups.**	7	Statistical Methods And introductory Text, Medhi J. New Age International Ltd. Second Edition	Black board, chalk and Duster

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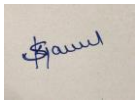
	➢ **Measures of dispersion for comparison: coefficient of range,** **coefficient of quartile deviation and coefficient of mean deviation,coefficient of variation (C.V.).**	5	Statistical Methods, And introductory Text ,Medhi J. New Age International Ltd. Second Edition	Black board, chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lecture



SIGNATURE OF TEACHER **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Avinash Dilip Sonawan DEPARTMENT: IT

CLASS: FYDS SEMESTER: I MONTH: September to December ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- Introducing the basic concepts of Internet and web design to learners.
- Providing brief knowledge about HTML5 concepts.
- Giving insight of the Page layout and navigation with HTML5.
- Making students aware about use of Tables, Forms and Media with HTML5.
- Providing knowledge of web page design using CSS. • Teaching data validation using Java Script

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Web Technology (USDS103) Unit I	Internet and the World Wide Web: What is Internet? Introduction to internet and its applications, E-mail, telnet, FTP, e-commerce, video conferencing, e-business. Internet service providers, domain name server, internet address,	04	HTML5 Step by Step Faithe Wempen Microsoft Press 2011 Web Design The Complete Reference Thomas Powell TMH 2009	Black board and chalk
	World Wide Web (WWW): World Wide Web and its evolution, uniform resource locator (URL), browsers – internet explorer, Netscape navigator, opera, Firefox, chrome, Mozilla. search engine, web saver – apache, IIS, proxy server, HTTP protocol What Is Web Design?: Defining Web Design, Web Design Themes, Learning Web Design	04		

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Web Technology (USDS103) Unit I	User-Centered Design: Usability, Who Are Web Users? Common User Characteristics, Memory, Response and Reaction Times, Dealing with Stimulus, Movement Capabilities, The User's World, General Types of Users, Web Conventions, Accessibility, Building a Usable Site HTML5: Introduction, Why HTML5? Formatting text by using tags, using lists and backgrounds, Creating hyperlinks and anchors.	04	HTML5 Step by Step Faithe Wempen Microsoft Press 2011 Web Design The Complete Reference Thomas Powell TMH 2009	Black board and chalk
Web Technology (USDS103) Unit II	**HTML5 Page layout and navigation:** Creating navigational aids: planning site organization, creating text based navigation bar, creating graphics based navigation bar, creating graphical navigation bar, creating image map, redirecting to another URL, creating division based layouts: HTML5 semantic tags, creating divisions, creating HTML5 semantic layout, positioning and formatting divisions	06	HTML5 Step by Step Faithe Wempen Microsoft Press 2011 Web Design The Complete Reference Thomas Powell TMH 2009	Black board and chalk
	HTML5 Tables, Forms and Media: Creating tables: creating simple table, specifying the size of the table, specifying the width of the column, merging table cells, using tables for page layout, formatting tables: applying table borders, applying background and foreground fills, changing cell padding, spacing and alignment, creating user forms: 12 creating basic form, using check boxes and option buttons, creating lists, additional input types in HTML5, Incorporating sound and video: audio and video in HTML5, HTML multimedia basics, embedding video clips, incorporating audio on web page	06	HTML5 Step by Step Faithe Wempen Microsoft Press 2011 Web Design The Complete Reference Thomas Powell TMH 2009	Black board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VRUNDA VISHAL GHARAT DEPARTMENT: IT

CLASS: FYDS SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- Introducing the basic concepts of Internet and web design to learners.
- Providing brief knowledge about HTML5 concepts.
- Giving insight of the Page layout and navigation with HTML5.
- Making students aware about use of Tables, Forms and Media with HTML5.
- Providing knowledge of web page design using CSS. • Teaching data validation using Java Script

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Web Technology (USDS103) Unit III	**Introduction to Style Sheets** : Understanding Styles, Constructing Style Rules, Creating Styles for Nested Tags, Creating Classes and IDs for Applying Styles, Applying Styles to Hyperlinks, Creating and Linking to External Style Sheets **Formatting Text by Using Style Sheets**: Specifying a Font Family, Specifying a Font Size and Color, Applying Bold and Italics, Applying Strikethrough and Underlining, Creating Inline Spans , Adjusting Spacing Between Letters	04	HTML5 Step by Step Faithe Wempen Microsoft Press 2011 Web Design The Complete Reference Thomas Powell TMH 2009	Black board and chalk
	Formatting Paragraphs by Using Style Sheets: Indenting Paragraphs, Applying a Border to a Paragraph, Specifying a Border Style, Setting Border Padding, Specifying Border Width and Color, Formatting Border Sides Individually,	04		

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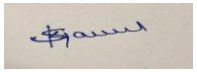
	Setting All Border Attributes at Once, Specifying the Horizontal Alignment of a Paragraph, Specifying Vertical Space within a Paragraph **Displaying Graphics**: Selecting a Graphics Format, Preparing Graphics for Web Use, Inserting Graphics, Arranging Elements on the Page, Controlling Image Size and Padding, Hyperlinking from Graphics, Using Thumbnail Graphics, Including Alternate Text for Graphics, Adding Figure Captions			

Web Technology (USDS103) Unit III	**Java Script:** Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, regExp **Document and its associated objects**: document, document object methods, Link, Area, Anchor, Image, Layer	04	JavaScript 2.0: The Complete Reference Thomas Powell and Fritz Schneider TMH 2 nd 2004	Black board and chalk
	Events and Event Handlers : General Information about Events, Defining Event Handlers, event, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp, onMove, onReset, onResize, onSelect, onSubmit, onUnload	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JANHAVI YATIN NAIK DEPARTMENT: DS

CLASS: FYDS SEMESTER: I MONTH: September to November ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

• To discuss various components of communication, explain how non-verbal communication techniques enhance communication and explain the barriers to communication.
• To discuss various business activities which are essential at workplace. To explain business communication covering the structure and layout of a letter, planning of a letter and use of language.
• To explain the use of agenda and minutes for effective functioning of any organisation.
• To direct the learners' attention to the significance of effective writing and the importance and structure of reports.
• To explain to interpret information ethics (IE) as the branch of the philosophy of information that investigates, in a broad sense, the ethical impact of Information and Communication Technologies (ICTs) on human life and society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USDS104:Business Communication and Information Ethics	**Interpretation of Communication** **B**asics of communication, Non-verbal communication, Barriers to communication	**6**	**Professional Communication by Aruna Koneru**	**Blackboard and chalk** **PPT , Projector**
Unit 1	**Business communication at workplace** Letter components and layout, Planning a letter, Process of letter writing	**6**		

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USDS104: Business Communication and Information Ethics Unit 2	**Business communication at workplace** Email communication, Memos and memo reports, Employment communication. Notice, Agenda and minutes of meeting, Brochures.	**12**	**Business Communication by A. C."Buddy" Krizan, Patricia Merrier, Joyce Logan, Karen Williams**	**Blackboard and chalk PPT , Projector**
USDS104: Business Communication and Information Ethics Unit 3	**Report Writing:** Effective writing, Types of business reports, Structure of reports, Gathering Information	**12**	**Business Communication by A. C."Buddy" Krizan, Patricia Merrier, Joyce Logan, Karen Williams**	**Blackboard and chalk**
USDS104: Business Communication and Information Ethics Unit 4	**Report Writing:** Organisation of material, writing abstracts and summaries, Writing definitions, Visual aids, User Instruction Manual.	**12**	**Business Communication by A. C."Buddy" Krizan, Patricia Merrier, Joyce Logan, Karen Williams**	**Blackboard and chalk**
USDS104: Business Communication and Information Ethics Unit 5	**Information Ethics** Ethics after the information revolution, what is information ethics? The method of abstraction	**12**	**The Ethics of Information by Luciano Floridi**	**Blackboard and chalk**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHA TUSHAR VAZE DEPARTMENT: INFORMATION TECHNOLOGY

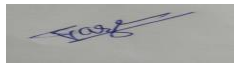
CLASS: FYDS SEMESTER: II MONTH: DECEMBER TO APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

- Students should be able to understand the components of environments and the need to conserve it
- Students should be able to know the relationship between each and every organism and identify the problem which the world is facing.
- To select, the appropriate life style to save the life on earth

Unit 3	**Environmental Pollution** Air Pollution, Water Pollution, Soil Pollution, Marine Pollution, Noise Pollution, Thermal Pollution, Solid Waste Management, Hazardous Waste Management, Pollution Prevention, Disaster Management	**6**	**Environmental Studies by Benny Joseph**	**Blackboard and chalk PPT , Projector**
	Human Population and the Environment Population Growth, Human Rights, Value Education, HIV/AIDS, Environment and Human Health, Family Welfare Programmes, Women and Child Welfare, Role of Information Technology in Environment and Human Health	**6**	**Environmental Studies by Benny Joseph**	**Blackboard and chalk PPT , Projector**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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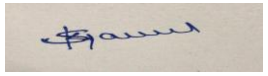

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHLESHA DATTARAM GURAV DEPARTMENT: IT

CLASS: FYDS SEMESTER: I MONTH: SEPTEMBER TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVES:

- To learn the Programming fundamentals using Python
- To learn the concepts and usage data types, variables and other basic elements of Python
- To understand operators and control statements in Python
- To learn using arrays and strings in Python.
- To understand IPython architecture for Python.
- To understand data Science Tools
- To learn plotting data using appropriate Python visualization libraries

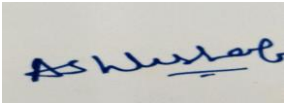
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Programming (USDS102) Unit I	Introduction to Python Language: Overview, Features of Python, Execution of a Python Program, Innards of Python, Frozen Binaries, Python Interpreter, Comparison of Python with C and Java, Installing Python, Writing & Executing, IDLE	03	Let Us Python Y. Kanetkar BPB	Black Board and Chalk
	Data Types, Variables And Other Basic Elements: Comments, Docstrings, Data types-Numeric, Compound, Boolean, Dictionary, Sets, Mapping, Basic Elements of Python, Variables	03		
	Input and Output Operations: Input Function, Output Statements,Command Line Arguments	03		

	Control Statements: Control Statements- Loop Statement, The else Suite, break Statement, continue Statement, pass Statement, assert Statement, return Statement	03		
Introduction to Programming (USDS102) Unit II	Functions: Defining & Calling a Function, Returning Results, Returning Multiple Values, Built-in Functions, Parameters and Arguments, Recursive Functions, Anonymous or Lambda Functions	03	Let Us Python Y. Kanetkar BPB	Black Board and Chalk
	Operators: Arithmetic operators, Assignment operators, Unary minus operator, Relational operators, Logical operators, Bitwise operators, Membership operators, Identity operators, Precedence of Operators, Associativity of Operators	03		
	Arrays: Creating Arrays, Indexing and Slicing, Basic Array Operations, Arrays Processing, Mathematical Operations on Array, Aliasing Arrays, Slicing and Indexing in NumPy Arrays, Basic Slicing. Advanced Indexing. Dimensions of Arrays, Attributes of an Array	03		
	Strings: Creating Strings, Functions of Strings, Working with Strings, Length of a String, Indexing & Slicing, Repeating & Concatenation of Strings, Checking Membership, Comparing Strings, Removing Spaces, Finding Substrings, Counting Substrings, Strings are Immutable, Splitting and Joining Strings, Changing Case, Checking Starting and Ending of a String, Sorting & Searching in the Strings, Formatting the Strings, Working with Characters	03		
Introduction to Programming (USDS102) Unit III	Lists and Tuples: Lists, List Functions and Methods, List Operations, Tuples	03	Let Us Python Y. Kanetkar BPB	Black Board and Chalk
	Dictionaries: Creating a Dictionary, Operators in Dictionary, Dictionary Methods, Using for Loop with Dictionaries, Operations on Dictionaries, Ordered Dictionaries	03		

	Regular Expressions: What is a Regular Expression? Sequence Characters in Regular Expressions, Quantifiers in Regular Expressions, Special Characters in Regular Expressions, Using Regular Expression on Files, Retrieving Information from an HTML File	03		
	Date and Time in Python: Date and Time, Date and Time Now, Combining Date and Time, Formatting Dates and Times, Finding Durations using "timedelta", Comparing Two Dates, Sorting Dates, Stopping Execution Temporarily, Knowing the Time taken by a Program, Working with Calendar Module	03		
Introduction to Programming (USDS102) Unit IV	IPython: Beyond Normal Python, Help and Documentation in IPython, Keyboard Shortcuts in the IPython Shell, IPython Magic Commands, Input and Output History, IPython and Shell Commands, Errors and Debugging, Profiling and Timing Code	06	Python Data Science Handbook Jake VanderPlas O'Reilly Media	Black Board and Chalk
	Introduction to NumPy: Understanding Data Types in Python, The Basics of NumPy Arrays, Computation on NumPy Arrays: Universal Functions, Aggregations: Min, Max, and Everything In Between, Computation on Arrays: Broadcasting, Comparisons, Masks, and Boolean Logic, Fancy Indexing, Sorting Arrays, Structured Data: NumPy's Structured Arrays	06		
Introduction to Programming (USDS102) Unit V	Data Manipulation with Pandas: Introducing Pandas Objects, Data Indexing and Selection, Operating on Data in Pandas, Handling Missing Data, Hierarchical Indexing, Combining Datasets: Concat and Append, Combining Datasets: Merge and Join, Aggregation and Grouping, Pivot Tables, Vectorized String Operations, Working with	06	Python Data Science Handbook Jake VanderPlas O'Reilly Media	Black Board and Chalk

	Time Series. High-Performance Pandas: eval( ) and query( )			
	Visualization with Matplotlib: Simple Line Plots, Simple Scatter Plots, Visualizing Errors, Density and Contour Plots, Histograms, Binnings, and Density, Customizing Plot Legends, Customizing Colorbars, Multiple Subplots, Text and Annotation, Customizing Ticks, Customizing Matplotlib: Configurations and Stylesheets, Three-Dimensional Plotting in Matplotlib, Geographic Data with Basemap, Visualization with Seaborn	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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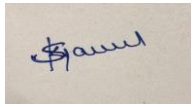

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

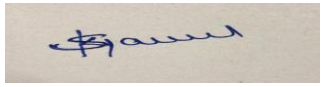
CLASS: SYBSc(Data Science) Div:A SEMESTER: III MONTH: JUNE-SEPTEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: learn the essential Python data structures; To learn the significant Python implementation of popular data structures; To learn about various data structure algorithms and design paradigms; To acquire knowledge of how to create complex data structures; To acquire basic understanding of complex data structures such as trees and graphs and their applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: USDS302 unit:1, Title: Data Structures and Algorithms Using Python	**Python Objects & Object-Oriented Programming**: Goals, Principles, and Patterns, Overview of data types and objects, Classes and object programming, Class Definitions, Inheritance, Data encapsulation and properties, Namespaces and Object-Orientation, Shallow and Deep Copying	4	Hands-On Data Structures andAlgorithms with Python	Blackboard
	Python Data Types and Strutures: Modules for data structures and algorithms- Collections, Deques, ChainMap objects Counter, Counter objects, Ordered dictionaries defaultdict, Learning about named tuples Arrays.	4	Hands-On Data Structures andAlgorithms with Python	Blackboard
	Principles of Algorithm Design: An introduction to algorithms, Algorithm design paradigms Recursion and backtracking, Backtracking, Divide and conquer - long multiplication The recursive approach Runtime analysis Asymptotic analysis Big O notation, Composing complexity classes Omega notation, Theta notation, Amortized analysis.	4	Hands-On Data Structures andAlgorithms with Python	Blackboard

Paper: USDS302 unit:2, Title: Data Structures and Algorithms Using Python	**Lists and Pointer Structures**:Arrays-Pointer structures. **Singly linked lists**-Singly linked list class, The append operation, A faster append operation, Getting the size of the list, Improving list traversal, Deleting nodes, List search, Clearing a list	4	Hands-On Data Structures andAlgorithms with Python	Blackboard
	Doubly linked lists-A doubly linked list node Doubly linked list class Append operation The delete operation List search.	3	Hands-On Data Structures andAlgorithms with Python	Blackboard
	Circular lists-Appending elements, Deleting an element in a circular list, Iterating through a circular list **Stacks:** Stack implementation, Push operation, Pop operation, Peek operation, Bracket-matching application,	5	Hands-On Data Structures andAlgorithms with Python	Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS CLASS: SYDS

SEMESTER: SEM-3 MONTH: JUN-SEP ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

- Perform object oriented programming to develop solution to problems demonstrating usage of control structures, modularity, I/O and other standard language constructs.
- Demonstrate adeptness of object oriented programming to develop solution to problem demonstration usage of data abstraction, encapsulation, and inheritance.

PAPER, TITLE,UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Data Warehousing and Mining UNIT 1	THE COMPELLING NEED FOR DATA WAREHOUSING: Escalating Need for Strategic Information, Failures of Past Decision-Support Systems, Operational Versus Decision-Support Systems, Data Warehousing—The Only Viable Solution, Data Warehouse Defined, The Data Warehousing Movement, Evolution of Business Intelligence	3	DATA WAREHOUSING FUNDAMENTALS FOR IT PROFESSIONALS BY- PAULRAJ PONNIAH	BLACK BOARD AND CHALK
	DATA WAREHOUSE: The Building Blocks: Defining Features, Data Warehouses and Data Marts, Architectural Types, Overview of The Components, Metadata in The Data Warehouse	3		
	TRENDS IN DATA WAREHOUSING: Continued Growth in Data Warehousing, Significant Trends, Emergence of Standards, Web-Enabled Data Warehouse	2		

	ARCHITECTURAL COMPONENTS: Understanding Data Warehouse Architecture, Distinguishing Characteristics, Architectural Framework, Technical Architecture, Architectural Types	2		
	THE SIGNIFICANT ROLE OF METADATA: Why Metadata Is Important, Metadata Types By Functional Areas, Business Metadata, 12 Books and References: Technical Metadata, How To Provide Metadata	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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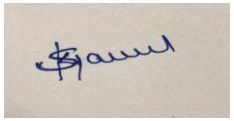

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT: CS

CLASS: SYDS SEMESTER: SEM-3 MONTH: JUN-SEP ACADEMIC YEAR: 2022-2023

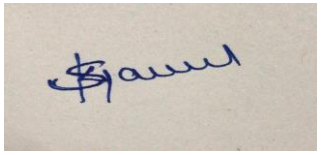
LEARNING OBJECTIVE/S:
The learners will be able to:

- Perform object oriented programming to develop solution to problems demonstrating usage of control structures, modularity, I/O and other standard language constructs.
- Demonstrate adeptness of object oriented programming to develop solution to problem demonstration usage of data abstraction, encapsulation, and inheritance.

PAPER, TITLE,UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Data Warehousing and Mining UNIT 3	**INTRODUCTION TO DATA MINING**: Introduction to Data Mining, Need of Data Mining, What Can Data Mining Do and Not Do? Data Mining Applications, Data Mining Process, Data Mining Techniques, Difference between Data Mining and Machine Learning	4	Data Mining and Data Warehousing : Principles and Practical Techniques- by Parteek Bhatia	BLACK BOARD AND CHALK
	BEGINNING WITH WEKA AND IRIS DATASET IN R: About Weka, Installing Weka, Understanding Fisher's Iris Flower Dataset, Preparing the Dataset, Understanding A RFF, Working with a Dataset in Weka, Working with the Iris dataset in R Data Preprocessing: Need for Data Preprocessing, Data Preprocessing Methods	4		
	CLASSIFICATION: Introduction to Classification, Types of Classification,	4		

	Input and Output Attributes, Guidelines for Size and Quality of the Training Dataset, Introduction to the Decision Tree Classifier, Naive Bayes Method, Understanding Metrics to Assess the Quality of Classifier			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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Teaching plan sycs sem 3 2022-23

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: Data science

CLASS: S.Y.B.Sc.(DS)

SEMESTER: June to September

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to :

- Appreciate the relevance of linear algebra in the field of computer science.
- Understand the concepts through program implementation
- Instill a computational thinking while learning linear algebra.
- Express clear understanding of the concept of a solution to a system of equations.
- Find eigenvalues and corresponding eigenvectors for a square matrix.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS305 **Linear Algebra and Discrete Mathematics** **Unit 1**	Matrices and Gaussian Elimination: ● Introduction, The Geometry of Linear Equations, ● An Example of Gaussian Elimination, ● Matrix Notation and Matrix Multiplication,	4	Linear Algebra and Its Applications Gilbert Strang Cengage Publication	Black board, chalk and duster

			Fourth Edition	
	• Triangular Factors and Row Exchanges, • Inverses and Transposes, • Special Matrices and Applications	3	Linear Algebra and Its Applications Gilbert Strang Cengage Publication Fourth Edition	Black board, chalk and duster
	Vector Spaces: • Vector Spaces and Subspaces, • Solving Ax= 0 and Ax= b,	4	Linear Algebra and Its Applications Gilbert Strang Cengage Publication Fourth Edition	Black board, chalk and duster
	• Linear Independence, • Basis, and Dimension,	2	Linear Algebra and Its Applications Gilbert Strang Cengage Publication Fourth Edition	Black board, chalk and duster
	• The Four Fundamental Subspaces, • Graphs and Networks, Linear Transformations	2	Linear Algebra and Its Applications Gilbert Strang Cengage	Black board, chalk and duster

			Publication Fourth Edition	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS 302 **Linear Algebra and Discrete** **Mathematics** **<u>Unit 2</u>**	Orthogonality: ● Orthogonal Vectors and Subspaces, ● Cosines and Projections onto Lines, ● Projections and Least Squares,	4		Black board,chalk and duster
	● Orthogonal Bases ● and Gram-Schmidt, The Fast Fourier Transform	4		Black board,chalk and duster
	Determinants: ● Introduction, ● Properties of the Determinant, ● Formulas for the Determinant,	4		Black board,chalk and duster
	● Applications of Determinants	3		Black board,chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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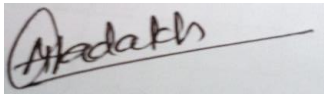
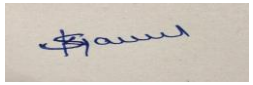
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS 302 **Linear Algebra and Discrete Mathematics** **<u>Unit 3</u>**				
	•	3		Black board, chalk and duster
	•	4		Black board, chalk and duster
	•	5		Black board, chalk and duster
	•	3		Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **S.Y.B.Sc.(DS)**

SEMESTER: **III** MONTH: **June - September** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able:1. Understand concept of clustering.

2. To align the Data Mining techniques for analyzing the datasets using tools like Weka, R or Python

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USDS304 Paper 3 **Data Warehousing and Mining** **UNIT IV**	CLUSTER ANALYSIS: Introduction to Cluster Analysis, Applications of Cluster Analysis, Desired Features of Clustering, Distance Metrics, Major Clustering Methods/Algorithms, Partitioning Clustering,	4	Data Mining and Data Warehousing : Principles and Practical Techniques, Parteek Bhatia, Cambridge University Press	Microsoft PowerPoint Presentation
	HIERARCHICAL CLUSTERING ALGORITHMS: Web Mining and Search Engines: Introduction, Web Content Mining	4		
	Web Usage Mining, Web Structure Mining, Hyperlink Induced Topic Search algorithm, Introduction to Modern Search Engines, Working of a Search Engine, PageRank Algorithm, Precision and Recall	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USDS304 Paper 3 **Data Warehousing and Mining** **UNIT IV**	INTRODUCTION TO ASSOCIATION RULE MINING: Defining Association Rule Mining, Representations of Items for Association Mining, The Metrics to Evaluate the Strength of Association Rules, The Naive Algorithm for Finding Association Rules, Approaches for Transaction Database Storage	6	Data Mining and Data Warehousing : Principles and Practical Techniques, Parteek Bhatia, Cambridge University Press	Microsoft PowerPoint Presentation
	THE APRIORI ALGORITHM, Closed and Maximal Itemsets, The Apriori–TID Algorithm for Generating Association Mining Rules, Direct Hashing and Pruning (DHP), Dynamic Itemset Counting (DIC), Mining Frequent Patterns without Candidate Generation (FP Growth)	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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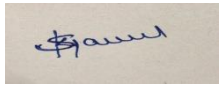

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: DS

CLASS: SYDS SEMESTER: III MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2022-23

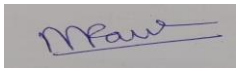
LEARNING OBJECTIVE/S:

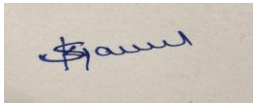
- To learn the essential Python data structures.
- To learn the significant Python implementation of popular data structures
- To learn about various data structure algorithms and design paradigms
- To acquire knowledge of how to create complex data structures.
- To acquire basic understanding of complex data structures such as trees and graphs and their applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DATA STRUCTURES AND ALGORITHMS USING PYTHON (USDS302) Unit III	**Queues:** List-based queues, Stack-based queues Node-based queues, Application of queues Media player queues	03	Hands-On Data Structures And Algorithms with Python Basant Agarwal, Benjamin Baka Packt Publishing 2nd 2018	Black Board and Chalk
	Trees: Terminology, Tree nodes, Tree traversal, Depth-first traversal In-order traversal and infix notation, Pre-order traversal and prefix notation, Post-order traversal and postfix notation, Breadth-first traversal	04		
	Binary trees-Binary search trees, Binary search tree implementation, Binary search tree operations, Finding the minimum and maximum nodes Inserting nodes Deleting nodes, Searching the tree, Benefits of a binary search tree, Balancing trees, Expression trees, Parsing a reverse Polish expression, Heaps, Ternary search tree	05		

DATA STRUCTURES AND ALGORITHMS USING PYTHON (USDS302) Unit IV	**Hashing and Symbol Tables**: Hashing- Perfect hashing functions Hash tables-Storing elements in a hash table, Retrieving elements from the hash table, Testing the hash table, Using [] with the hash table, Non-string keys, Growing a hash table, Open addressing, Chaining, Symbol tables	06	Hands-On Data Structures And Algorithms with Python Basant Agarwal, Benjamin Baka Packt Publishing 2nd 2018	Black Board and Chalk
	Graphs and Other Algorithms: Graphs-Directed and undirected graphs, Weighted graphs, Graph representations, Adjacency lists, Adjacency matrices, Graph traversals-Breadth-first traversal, Depth-first search, Other useful graph methods, Priority queues and heaps- Insert operation, Pop Operation, Selection Algorithm	06		
DATA STRUCTURES AND ALGORITHMS USING PYTHON (USDS302) Unit V	**Sorting:** Sorting algorithms- Bubble sort algorithms, Insertion sort algorithms, Selection sort algorithms, Quick sort algorithms	04	Hands-On Data Structures And Algorithms with Python Basant Agarwal, Benjamin Baka Packt Publishing 2nd 2018	Black Board and Chalk
	Selection Algorithms: Selection by sorting, Randomized selection Quick Select, Deterministic selection-Pivot selection Median of medians, Partitioning step	04		
	Pattern Matching Algorithms: The brute-force algorithm, The RabinKarp algorithm	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: SY B.SC DATA SCIENCE SEMESTER: III MONTH: AUGUST-SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Find the eigenvalues and eigenvectors of given matrix.
- Check whether the given matrix is diagonalizable.
- Solve the difference equation using eigenvalues & eigenvectors.
- Solve the differential equation using eigenvalues & eigenvectors.
- Understand the concept of similar matrices.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
LINEAR ALGEBRA&DISCRETE MATHEMATICS Unit 3 Eigenvalues & Eigenvectors	➢ Finding eigenvalues & eigenvectors ➢ Diagonalisation of a matrix ➢ Difference equations and powers Ak ➢ Differential equations & eAt ➢ Complex matrices ➢ Similarity transformations	2 2 2 2 2 2	LINEAR ALGEBRA & ITS APPLICATIONS (Gilbert Strang)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS: Blackboard, chalk, duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT 4 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: SY B.SC DATA SCIENCE SEMESTER: III MONTH: October-November ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Find out the minima, maxima and saddle points of the given function of two variables.
- Test whether the given quadratic form is positive definite.
- Find the singular value decomposition of the given matrix.
- Find the minimum value of the given quadratic form.
- Understand the concept of matrix norm, condition number and spectral norm.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
LINEAR ALGEBRA&DISCRETE MATHEMATICS (Unit 4) Positive definite matrices & Computation with matrices	➢ Minima, Maxima & Saddle points ➢ Tests for positive definiteness ➢ Singular value decomposition ➢ Minimum principles ➢ Finite element method ➢ Matrix norm & condition number	2 2 2 2 2 2	LINEAR ALGEBRA & ITS APPLICATIONS (Gilbert Strang)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS: Blackboard, chalk, duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT 5 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: SY B.SC DATA SCIENCE SEMESTER: III MONTH: November-December ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Find out the solution of linear inequalities graphically and numerically.
- Find out the solution of LPP using simplex method.
- Find the dual of the given primal problem.
- Understand various network models.
- Find out the saddle point of the given game problem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
LINEAR ALGEBRA&DISCRETE MATHEMATICS **(Unit 5)** LPP & Game theory	➢ Linear inequalities ➢ The simplex method ➢ The dual problem ➢ Network models ➢ Game theory	2 3ss 2 2 3	LINEAR ALGEBRA & ITS APPLICATIONS (Gilbert Strang)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS: Blackboard, chalk, duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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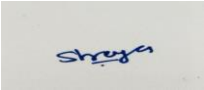

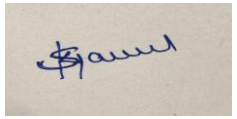

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: DATA SCIENCE

CLASS:S.Y.BSC(D.S) SEMESTER: **III** MONTH:JULY-OCT ACADEMIC YEAR: 2022-2023

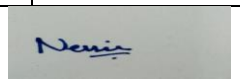
SUBJECT:RESEARCH METHODOLOGY

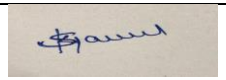
LEARNING OBJECTIVE/S:
The learners will be able to: To impart analytical skill in solving complex problems. To foster the ability to critically think in developing robust, extensible and highly maintainable solutions to simple and complex problems. To explore the unknown and unlock new possibilities in different dimensions of the system. To portray accurately the characteristics of a particular individual, situation or a group under study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RESEARCH METHODOLOGY USDS301 Unit-2	**Sampling Design:** Census and Sample Survey, Implications of a Sample Design, Steps in Sampling Design, Criteria of Selecting a Sampling Procedure, Characteristics of a Good Sample Design, Different Types of Sample Designs, How to Select a Random Sample?, Random Sample from an Infinite Universe, Complex Random Sampling Designs	4	Research Methodology – Methods and techniques	PowerPoint Presentation

	Measurement and Scaling Techniques: Measurement in Research, Measurement Scales, Sources of Error in Measurement, Tests of Sound Measurement, Technique of Developing Measurement Tools, Scaling, Meaning of Scaling, Scale Classification Bases, Important Scaling Techniques, Scale Construction Techniques	4	C. R. Kothari New Age International (P) Ltd.,	
	Methods of Data Collection: Collection of Primary Data, Observation Method, Interview Method, Collection of Data through Questionnaires, Collection of Data through Schedules, Difference between Questionnaires and Schedules, Some Other Methods of Data Collection, Collection of Secondary Data, Selection of Appropriate Method for Data Collection, Case Study Method, (i) Guidelines for Constructing Questionnaire/Schedule (ii) Guidelines for Successful Interviewing (iii) Difference between Survey and Experiment	5		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**13**		
RESEARCH METHODOLOGY USDS301 Unit-4	**Interpretation of Data and Paper Writing –** Layout of a Research Paper, Journals in Computer Science, Impact factor of Journals, When and where to publish ?, UGC-CARE, Web of Science, SCOPUS, IEEE, ACM, Ethical issues related to publishing, Copyright, Data Privacy, Plagiarism and Self-Plagiarism, Software for detection of Plagiarism. ShodhShudhhi (PDS), smallseotools.com Use of Encyclopedias, Research Guides, Handbook etc., Academic Databases for Computer Science and Information Technology Discipline. Google Scholar, shodhganga, IEEE Xplore, ResearchGate, IDELS, DASH	8	Research Methodology – Methods and techniques C. R. Kothari New Age International (P) Ltd.,	PowerPoint Presentation
	Use of tools / techniques for Research: Chicago, Turabian, MLA and APA Style, Reference Management Software like EndNote, Zotero or Mendeley; Software for paper formatting like LaTeX/MS Office/	8		

	Scrivener/Open Office/Google Doc/DropBox Paper.			
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**16**		





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: FYIT SEMESTER: I MONTH: SEPT to DEC ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

To understand the structure and operation of modern processors and their instruction sets.

To understand the basic of digital electronics needed for computers

To understand the basics of instruction set architecture for reduced and complex instruction sets.

To understand how data is transferred between the processor and I/O devices.

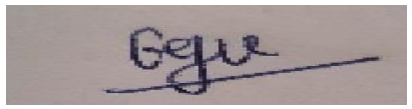
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 Digital Electronics Unit 1	**Number System:** Analog System, digital system, numbering system, binary number system, octal number system, hexadecimal number system, conversion from one number system to another floating point numbers, weighted codes binary coded decimal, non-weighted codes Excess – 3 code, Gray code, Alphanumeric codes – ASCII Code EBCDIC, ISCII Code, Hollerith Code, Morse Code, Teletypewriter (TTY), Error detection and correction, Universal Product Code, Code conversion	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Laptop, PPT, Google Meet
	Binary Arithmetic: Binary addition, Binary subtraction, Negative number	6	Digital Electronics and	Laptop, PPT, Google Meet

	representation, Subtraction using 1's complement and 2's complement, Binary multiplication and division, Arithmetic in octal number system, Arithmetic in hexadecimal number system, BCD and Excess – 3 arithmetic		Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	
Paper-02 Digital Electronics Unit 2	**Boolean Algebra and Logic Gates:** Introduction, Logic (AND OR NOT), Boolean theorems, Boolean Laws, De Morgan's Theorem, Perfect Induction, Reduction of Logic expression using Boolean Algebra, Deriving Boolean expression from given circuit, exclusive OR and Exclusive NOR gates, Universal Logic gates, Implementation of other gates using universal gates, Input bubbled logic, Assertion level.	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Laptop, PPT, Google Meet
	Minterm, Maxterm and Karnaugh Maps: Introduction, minterms and sum of minterm form, maxterm and Product of maxterm form, Reduction technique using Karnaugh maps – 2/3/4/5/6 variable K-maps, Grouping of variables in K-maps, K-maps for product of sum form, minimize Boolean expression using K-map and obtain K-map from Boolean expression, Quine Mc Cluskey Method	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Laptop, PPT, Google Meet

Paper-02 Digital Electronics Unit 3	**Combinational Logic Circuits:** Introduction, Multi-input, multi-output Combinational circuits, Code converters design and implementations **Arithmetic Circuits:** Introduction, Adder, BCD Adder, Excess – 3 Adder, Binary Subtractors, BCD Subtractor, Multiplier, Comparator	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Laptop, PPT, Google Meet
Paper-02 Digital Electronics Unit 4	**Multiplexer, Demultiplexer, ALU, Encoder and Decoder:** Introduction, Multiplexer, Demultiplexer, Decoder, ALU, Encoders.	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Laptop, PPT, Google Meet
	Sequential Circuits: Flip-Flop: Introduction, Terminologies used, S-R flip-flop, D flip-fop, JK flipflop, Race-around condition, Master – slave JK flip-flop, T flip-flop, conversion from one type of flip-flop to another, Application of flipflops.	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain	Laptop, PPT, Google Meet

			Tata McGraw Hill	
Paper-02 Digital Electronics Unit 5	**Counters:** Introduction, Asynchronous counter, Terms related to counters, IC 7493 (4-bit binary counter), Synchronous counter, Bushing, Type T Design, Type JK Design, Preset table counter, IC 7490, IC 7492, Synchronous counter ICs, Analysis of counter circuits.	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Laptop, PPT, Google Meet
	Shift Register: Introduction, parallel and shift registers, serial shifting, serial–in serial– out, serial–in parallel–out , parallel–in parallel–out, Ring counter, Johnson counter, Applications of shift registers, Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Laptop, PPT, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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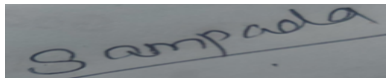

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: FY IT SEMESTER: I

MONTH: October. ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Understand sequences, methods like mathematical induction to prove statement Also concept of recurrence relation & functions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4: DM, Unit III: Sequences, Mathematical Induction, and Recursion.	Sequences, Mathematical Induction, Strong Induction and the Well Ordering Principle for the Integers.	3	Discrete Mathematics and its Applications by Kenneth H. Rosen	Google Meet
	Recurrence relation, Second order linear homogenous recurrence relations with constant coefficients.	3		Table top method
	general recursive definitions and structural induction.	1		
	Functions Defined on General Sets, One-to-One and Onto, Inverse Functions.	2		
	Composition of Functions, Cardinality with Applications to Computability.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: FY IT SEMESTER: I

MONTH: October. ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to: Understand concept of probability, counting principles, use Baye's formula and solve problems on finding expected value.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: DM, Unit V: Counting and Probability	Introduction, Possibility Trees and the Multiplication Rule	2	Discrete Mathematics and its Applications by Kenneth H. Rosen	Google Meet
	Counting Elements of Disjoint Sets: The Addition Rule, The Pigeonhole Principle	2		Table top method
	Counting Subsets of a Set: Combinations, rCombinations with Repetition Allowed	1		
	Probability Axioms and Expected Value,	3		
	Conditional Probability, Bayes' Formula, and Independent Events.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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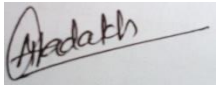

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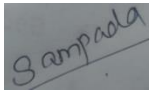

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT:CS

CLASS:FYIT-DIV A SEMESTER: SEM-1 MONTH: SEP-DEC ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: develop logics which will help them to create programs, applications in C. Also by learning the basic programming constructs they can easily switch over to any other language in future.

PAPER, TITLE, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1,Imperative programming, UNIT 1	**Introduction**: Types of Programming languages, History, features and application. Simple program logic, program development cycle	3	Let us c-by Yashwant Kanetkar	GOOGLE SLIDE, GOOGLE MEET,PPT
	pseudocode statements and flowchart symbols, sentinel value to end a program, programming and user environments, evolution of programming models., desirable program characteristics	3		
	Fundamentals: Structure of a program. Compilation and Execution of a Program,Character Set, identifiers and keywords, data types	3		

	constants, variables and arrays, declarations, expressions, statements, Variable definition, symbolic constants	4		
UNIT 2	**Operators and Expressions:** Arithmetic operators, unary operators, relational and logical operators	3	Let us c-by Yashwant Kanetkar	GOOGLE SLIDE, GOOGLE MEET,PPT
	assignment operators, assignment operators, the conditional operator, library functions.	3		
	Data Input and output: Single character input and output, entering input data	3		
	scanf function, printf function, gets and puts functions, interactive programming	3		
Unit 3	**Conditional Statements and Loops:** Decision Making Within AProgram,Conditions, Relational Operators, Logical Connectives, If Statement, If-Else Statement.	3	Let us c-by Yashwant kanetkar	GOOGLE SLIDE, GOOGLE MEET,PPT
	Loops: While Loop, Do While, For Loop. Nested Loops, Infinite Loops,Switch Statement	4		

	Functions: Overview, defining a function, accessing a function, passing arguments to a function, specifying argument data types, function prototypes,recursion, modular programming and functions, standard library of c functions	3		
	prototype of a function: foo1lal parameter list, return type,function call, block structure, passing arguments to a function: call by reference,call by value	3		
UNIT 4	**Program structure:** Storage classes, automatic variables, external variables, static variables,multifile programs	3	Let us c-by Yashwant Kanetkar	GOOGLE SLIDE, GOOGLE MEET,PPT
	more library functions,Preprocessor: Features, #define and #include, Directives and Macros	3		
	Arrays: Definition, processing, passing arrays to functions, multidimensional arrays, arrays and strings.	4		
Unit 5	**Pointers:** Fundamentals, declarations, Pointers Address Operators, Pointer Type	3	Let us c-by Yashwant kanetkar	GOOGLE SLIDE, GOOGLE MEET,PPT

	Declaration, Pointer Assignment, Pointer Initialization.			
	Pointer Arithmetic, Functions and Pointers, Arrays And Pointers, Pointer Arrays, passing functions to other functions	3		
	Structures and Unions: Structure Variables, Initialization, Structure Assignment, Nested Structure, Structures and Functions,	3		
	Structures and Arrays: Arrays of Structures, Structures Containing Arrays, Unions, Structures and pointer	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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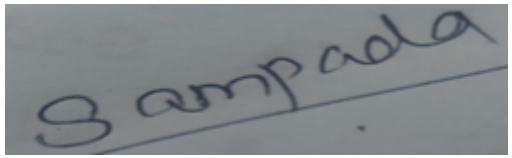

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYIT-A SEMESTER: SEM-1 MONTH: SEP-DEC ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand proper working of operating system. To provide a sound understanding of Computer operating system, its structures, functioning and algorithms.
- To provide a understanding of operating system, its structures and functioning
- Develop and master understanding of algorithms used by operating systems for various purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2 OPERATING SYSTEMS UNIT 1	**Introduction:** What is an Operating System? History of Operating System.	2	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	GOOGLE MEET AND PPT
	Computer hardware, different operating systems.	2		
	Operating system concepts, system calls, operating system structure.	2		
	Processes and Threads: Processes, threads	2		
	Interprocess communication, Scheduling, IPC problems.	4		

UNIT 4	**Virtualization and Cloud:** History, requirements for virtualization, type 1 and 2 hypervisors	3	Modern Operating Systems by Andrew S. Tanenbaum,Herbert Bos	GOOGLE MEET AND PPT
	Techniques for efficient virtualization, hypervisor microkernels.	2		
	Memory virtualization, I/O virtualization, Virtual appliances,Virtual machines on multicore CPUs, Clouds.	3		
	Multiple Processor Systems Multiprocessors, multicomputers, distributed systems.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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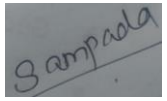

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT/CS

CLASS: FYIT-A SEMESTER: I MONTH: OCTOBER TO DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to learn about memory management, different file systems and deadlocks detection and recovery.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD
OPERATING SYSTEMS (USIT103) Unit II	**Memory Management:** No memory abstraction, memory abstraction: address spaces, virtual memory, page replacement algorithms, design issues for paging systems, implementation issues, segmentation.	6	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	PPT
	File Systems: Files, directories, file system implementation, file-system management and optimization, MS-DOS file system, UNIX V7 file system, CD ROM file system.	6		PPT
OPERATING SYSTEMS (USIT103) Unit III	**Input-Output:** Principles of I/O hardware, Principles of I/O software, I/O software layers, disks, clocks, **user interfaces:** keyboard, mouse, monitor, thin clients, power management	6	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	PPT
	Deadlocks: Resources, introduction to deadlocks, the ostrich algorithm, deadlock detection and recovery, deadlock avoidance, deadlock prevention, issues	6		PPT
OPERATING SYSTEMS (USIT103) Unit V	**Case Study on LINUX and ANDROID:** History of Unix and Linux, Linux Overview, Processes in Linux, Memory management in Linux, I/O in Linux, Linux file system, security in Linux. Android	6	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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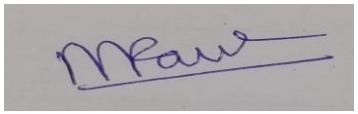

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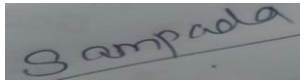

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.I.T**

CLASS: **FYIT A** SEMESTER: **I** MONTH: **SEPT-DEC** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVES:
The learners will be able to :

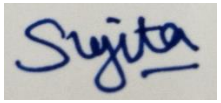
- Understand the Business Communication strategies and its importance.
- Also the paper acts like a personality development course for the student.
- Also the students gets confidence in facing the problems faced during interviews.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
V,1, Communication Skills	The Seven Cs of Effective Communication: Completeness, Conciseness, Consideration, Concreteness, Clarity, Courtesy, Correctness	4	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Meet, PPT
	Understanding Business Communication: Nature and Scope of Communication, Non-verbal Communication,	4	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Meet, PPT
	Cross-cultural communication, Technology-enabled Business Communication	4	Business Communication Edited by Meenakshi Raman and	Meet, PPT

V,2, Communication Skills	Writing Business Messages and Documents: Business writing, Business Correspondence, Instructions Business Reports and Proposals,	5	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Meet, PPT
	Career building and Resume writing, Developing Oral Communication Skills for Business: Effective Listening, Business Presentations and Public Speaking,	5	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Meet, PPT
	Conversations, Interviews	2	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Meet, PPT
V,3, Communication Skills	Developing Oral Communication Skills for Business: Meetings and Conferences,	5	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Meet, PPT
	Group Discussions and Team Presentations, Team Briefing,	5	Business Communication Edited by Meenakshi Raman and Prakash Singh	Meet, PPT
	Understanding Specific Communication Needs: Communication across Functional Areas	2	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Meet, PPT
	Understanding Specific Communication Needs:	6	Business Communication Edited	Meet, PPT

V,4, Communication Skills	Corporate Communication, Persuasive Strategies in Business Communication		by Meenakshi Raman and Prakash Singh Oxford University Press Second	
	Ethics in Business Communication, Business Communication Aids	4	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Meet, PPT
V,5, Communication Skills	Presentation Process: Planning the resentations, executing the presentations, Impressing the audience by performing,	4	Strategies for improving your business communication Prof. M. S. Rao Shroff publishers and distributors	Meet, PPT
	Planning stage: Brainstorming, mind maps / concept maps, executing stage: chunking theory, creating outlines, Use of templates. Adding graphics to your presentation: Visual communication, Impress stage: use of font, colour, layout, Importance of practice and performance.	4	Strategies for improving your business communication Prof. M. S. Rao Shroff publishers and distributors	Meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 54



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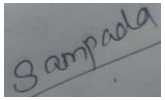

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Avinash Dilip Sonawane **DEPARTMENT**: IT

CLASS: FYIT-B SEMESTER: SEM-1 MONTH: SEP-DEC ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

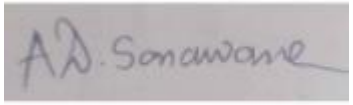
- Understand the process of communication and its effect on giving and receiving information.
- Learn about historical and theoretical developments in the field of communication.
- Apply effective communication skills in a variety of public and interpersonal settings.
- Develop analytical, research, and organizational skills.

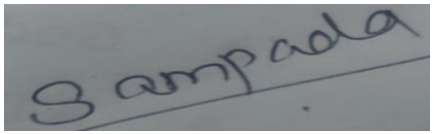
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
5 COMMUNICATION SKILLS UNIT 1	**The Seven Cs of Effective Communication:** Completeness, Conciseness, Consideration, Concreteness, Clarity, Courtesy, Correctness	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	GOOGLE MEET AND PPT
	Understanding Business Communication: Nature and Scope of Communication,	4		
	Non-verbal Communication, Cross-cultural communication,	3		
	Technology-enabled Business Communication	2		

5 COMMUNICATION SKILLS UNIT 2	**Writing Business Messages and Documents:** Business writing, Business Correspondence,	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	GOOGLE MEET AND PPT
	Instructions Business Reports and Proposals, Career building and	4		
	Resume writing. **Developing Oral Communication Skills for Business:** Effective Listening, Business Presentations and	3		
	Public Speaking ,Conversations, Interviews	3		
UNIT 3	**Developing Oral Communication Skills for Business:** Meetings and Conferences,	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	GOOGLE MEET AND PPT
	Group Discussions *and*	2		
	Team Presentations, Team Briefing,	3		
	Understanding Specific Communication Needs: Communication across Functional Areas	3		
UNIT 4	**Understanding Specific Communication Needs:** Corporate Communication,	2	Business Communication Edited by Meenakshi	GOOGLE MEET AND PPT
	Persuasive Strategies in Business Communication,	3		

	Ethics in Business Communication, Business Communication Aids	3	Raman and Prakash Singh	
UNIT 5	**Presentation Process:** Planning the presentations, executing the presentations, Impressing the audience by performing,	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	GOOGLE MEET AND PPT
	Planning stage: Brainstorming, mind maps / concept maps,	3		
	executing stage: chunking theory, creating outlines, Use of templates	3		
	Adding graphics to your presentation: Visual communication, Impress stage: use of font, colour, layout, Importance of practice and performance.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 55





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SURBHI SHAH DEPARTMENT: IT-CS CLASS:FYIT-DIV B SEMESTER: SEM-1

MONTH: SEPTEMBER-DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to learn and understand the basic concepts of digital electronics with its applications and various laws to be implemented in area of electronics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper no :2 Title of paper: - Digital Electronics UNIT 1	**Number System:** Analog System, digital system, numbering system, binary number system, octal number system, hexadecimal number system, conversion from one number system to another, floating point numbers	4	Digital Electronics and Logic Design By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	Reference book,google meet,google slides,jamboard,ppt,slido.
	weighted codes binary coded decimal, non-weighted codes Excess – 3 code, Gray code, Alphanumeric codes – ASCII Code, EBCDIC, ISCII Code, Hollerith Code, Morse Code, Teletypewriter (TTY)	3		
	Error detection and correction, Universal Product Code, Code conversion.	1		
	Binary Arithmetic Binary addition, Binary subtraction, Negative number representation, Subtraction using 1's complement and 2's complement	2		
	Binary multiplication and division, Arithmetic in octal number system, Arithmetic in hexadecimal number system BCD and Excess – 3 arithmetic	2		
UNIT 2	**Boolean Algebra and Logic Gates:-**Introduction, Logic (AND OR NOT), Boolean theorems, Boolean Laws, De Morgan's Theorem,	3	Digital Electronics and Logic Design	Reference book,google meet,google

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	Perfect Induction, Reduction of Logic expression using BooleanAlgebra,		By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	slides,jamboard,ppt,slido.
	Deriving Boolean expression from given circuit, exclusive OR and Exclusive NOR gates, Universal Logic gates,	2		
	Implementation of other gates using universal gates, Input bubbled logic, Assertion level	1		
	Minterm, Maxterm and Karnaugh Maps: Introduction, minterms and sum of minterm form, maxterm and Product of maxterm form, Reduction technique using Karnaugh maps – 2/3/4/5/6 variable K-maps Grouping of variables in K-maps, K-maps for product of sum form, minimize Boolean expression using K-map and obtain K-map from Boolean expression, Quine Mc Cluskey Method.	6		
UNIT 3	**Combinational Logic Circuits:** Introduction, Multi-input, multi-output Combinational circuits, Code converters design and implementations	4	Digital Electronics: Principles, Devices and Applications by Anil K. Maini	Reference book,google meet,google slides,jamboard,ppt,slido.
	Arithmetic Circuits: Introduction, Adder, BCD Adder, Excess – 3 Adder, Binary Subtractors, BCD Subtractor, Multiplier, Comparator.	4		
Unit 4	**Multiplexer, Demultiplexer, ALU, Encoder and Decoder:** Introduction, Multiplexer, Demultiplexer, Decoder, ALU, Encoders.	4	Modern Digital Electronics - R. P. Jain	Reference book,google meet,google slides,jamboard,ppt,slido.
	Sequential Circuits: Flip-Flop: Introduction, Terminologies used, S-R flip-flop, D flip-fop, JK flip-flop, Race-around condition, Master – slave JK flip-flop, T flip-flop	4		
	conversion from one type of flip-flop to another, Application of flip-flops	3		

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Unit 5	**Counters:** Introduction, Asynchronous counter, Terms related to counters, IC 7493 (4-bit binary counter), Synchronous counter,	3	Modern Digital Electronics - R. P. Jain	Reference book,google meet,google slides,jamboard,ppt,slido.
	Bushing, Type T Design, Type JK Design, Presettable counter, IC 7490, IC 7492, Synchronous counter ICs, Analysis of counter circuits	4		
	Shift Register: Introduction, parallel and shift registers, serial shifting, serial–in serial–out, serial–in parallel–out , parallel–in parallel–out,	3		
	Ring counter, Johnson counter, Applications of shift registers,	1		
	Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 51

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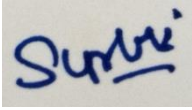

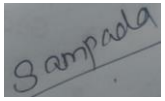

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TEACHING PLAN (UNIT PLAN)

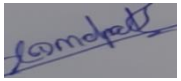
NAME OF THE STAFF: Mrs, Archana Malphatak DEPARTMENT: Mathematics. CLASS: FY IT SEMESTER: I

MONTH: October. ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Understand sequences, methods like mathematical induction to prove statement Also concept of recurrence relation & functions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4: DM, Unit III: Sequences, Mathematical Induction, and Recursion.	Sequences, Mathematical Induction, Strong Induction and the Well Ordering Principle for the Integers.	3	Discrete Mathematics and its Applications by Kenneth H. Rosen	Google Meet
	Recurrence relation, Second order linear homogenous recurrence relations with constant coefficients.	3		Table top method
	general recursive definitions and structural induction.	1		
	Functions Defined on General Sets, One-to-One and Onto, Inverse Functions.	2		
	Composition of Functions, Cardinality with Applications to Computability.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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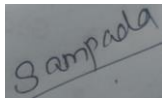

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: FY IT SEMESTER: I

MONTH: October. ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to: Understand concept of probability, counting principles, use Baye's formula and solve problems on finding expected value.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: DM, Unit V: Counting and Probability	Introduction, Possibility Trees and the Multiplication Rule	2	Discrete Mathematics and its Applications by Kenneth H. Rosen	Google Meet
	Counting Elements of Disjoint Sets: The Addition Rule, The Pigeonhole Principle	2		Table top method
	Counting Subsets of a Set: Combinations, rCombinations with Repetition Allowed	1		
	Probability Axioms and Expected Value,	3		
	Conditional Probability, Bayes' Formula, and Independent Events.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS:FY BSCIT-DIV B SEMESTER: SEM-1 MONTH: SEP-DEC ACADEMIC YEAR: 2021-2022

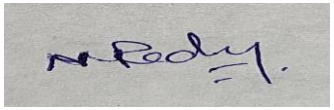
LEARNING OBJECTIVE/S:
The learners will be able to: develop logics which will help them to create programs, applications in C. Also by learning the basic programming constructs they can easily switch over to any other language in future.

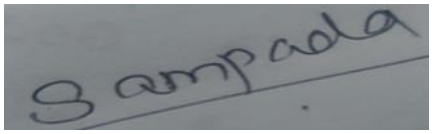
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1 IP UNIT 1	**Introduction**: Types of Programming languages, History, features and application. Simple program logic, program development cycle	3	Let us c-by Yashwant Kanetkar	PPT PRESENTATION
	pseudocode statements and flowchart symbols, sentinel value to end a program, programming and user environments, evolution of programming models., desirable program characteristics	3		
	Fundamentals: Structure of a program. Compilation and Execution of a Program,Character Set, identifiers and keywords, data types	3		
	constants, variables and arrays, declarations, expressions, statements, Variable definition,	3		

	symbolic constants			
UNIT 2	**Operators and Expressions:** Arithmetic operators, unary operators, relational and logical operators	3	Let us c-by Yashwant Kanetkar	PPT PRESENTATION
	assignment operators, assignment operators, the conditional operator, library functions.	3		
	Data Input and output: Single character input and output, entering input data	2		
	scanf function, printf function, gets and puts functions, interactive programming	3		
UNIT 4	**Program structure:** Storage classes, automatic variables, external variables, static variables,multifile programs	3	Let us c-by Yashwant Kanetkar	PPT PRESENTATION
	more library functions,Preprocessor: Features, #define and #include, Directives and Macros	3		

	Arrays: Definition, processing, passing arrays to functions, multidimensional arrays, arrays and strings.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 33





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT-CS

CLASS:FYIT-DIV B SEMESTER: SEM-I MONTH: SEP-DEC ACADEMIC YEAR: 2021-2022

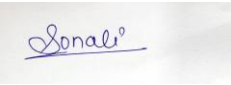
LEARNING OBJECTIVE/S:
The learners will be able to: Understand role of Operating System in terms of process, memory, file and I/O management. Apply and analysis the concept of a process, thread, mutual exclusion and deadlock. Evaluate performance of process scheduling algorithms and IPC. Apply and analysis the concepts of memory management techniques. Apply and analyze different techniques of file and I/O management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3, OS, UNIT-1	**Introduction:** What is an operating system? History of operating system, computer hardware, different operating systems, operating system concepts, system calls, operating system structure.	4	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	PPT, GoogleMeet, Jamboard , slido, Google form.
	Processes and Threads: Processes, threads	4		
	Interprocess communication, scheduling, IPC problems.	4		
UNIT-2	**Memory Management**: No memory abstraction, memory abstraction: address spaces, virtual memory	3	Modern Operating Systems-by Andrew S.	PPT, GoogleMeet,
	page replacement algorithms, design issues for paging systems, implementation issues, segmentation.	3		

	File Systems: Files, directories, file system implementation, file-system management and optimization	4	Tanenbaum, Herbert Bos	Slido , Google form ,Jamboard.
	MS-DOS file system, UNIX V7 file system, CD ROM file system.	2		
UNIT-3	**Input-Output:** Principles of I/O hardware, Principles of I/O software	4	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	PPT, GoogleMeet, Jamboard , slido, Google form.
	I/O software layers, disks, clocks, user interfaces: keyboard, mouse, monitor, thin clients, power management	3		
	Deadlocks: Resources, introduction to deadlocks, the ostrich algorithm,	2		
	deadlock detection and recovery, deadlock avoidance, deadlock prevention, issues.	3		
UNIT-4	**Virtualization and Cloud**: History, requirements for virtualization, type 1 and 2 hypervisors, techniques for efficient virtualization, hypervisor microkernels	2	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	PPT, GoogleMeet, Jamboard , slido, Google form.
	memory virtualization, I/O virtualization, Virtual appliances, virtual machines on multicore CPUs, Clouds.	2		
	Multiple Processor Systems : Multiprocessors	3		
	Multicomputers, Distributed systems.	5		

UNIT 5	**Case Study on LINUX and ANDROID:** History of Unix and Linux, Linux Overview, Processes in Linux	3	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	PPT, GoogleMeet, Jamboard , slido, Google form.
	Memory management in Linux, I/O in Linux, Linux file system, security in Linux. Android.	3		
	Case Study on Windows: History of windows through Windows 10, programming windows, system structure, processes and threads in windows	3		
	memory management, caching in windows, I/O in windows, Windows NT file system, Windows power management, Security in windows.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:60



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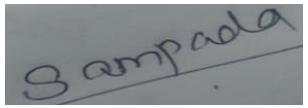

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.I.T**

CLASS: **FYIT B** SEMESTER: **I** MONTH: **SEPT-DEC** ACADEMIC YEAR: **2021-2022**

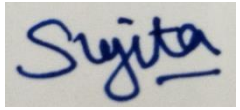
LEARNING OBJECTIVES:
The learners will be able to :

- Understand the basics of Object Oriented Programming.
- Since C being the basics for other learning high level language the student get the chance to understand the programming from its scratch.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I,3, Imperative Programming	Decision Making Within A Program, Conditions, Relational Operators, Logical Connectives, If Statement,	3	Let us C Yashwant P. Kanetkar, BPB publication	Meet, PPT
	If-Else Statement, Loops: While Loop, Do While, For Loop. Nested Loops, Infinite Loops, Switch Statement	3	C for beginners Madhusudan Mothe X-Team Series 1st 2008	Meet, PPT
	Functions: Overview, defining a function, accessing a function, passing arguments to a function, specifying argument data types, function prototypes,	3	Let us C Yashwant P. Kanetkar, BPB publication	Meet, PPT
	recursion, modular programming and functions, standard library of c functions, prototype of a function: foo1lal parameter list, return type,	3	Let us C Yashwant P. Kanetkar, BPB publication	Meet, PPT
I,5, Imperative Programming	Pointers: Fundamentals, declarations, Pointers Address Operators, Pointer Type Declaration	3	C for beginners Madhusudan Mothe X-Team Series 1st 2008	Meet, PPT

	Pointer Assignment, Pointer Initialization, Pointer Arithmetic, Functions and Pointers, Arrays And Pointers, Pointer Arrays, passing functions to other functions	3	Let us C Yashwant P. Kanetkar, BPB publication	Meet, PPT
	Structures and Unions: Structure Variables, Initialization, Structure Assignment, Nested Structure,	3	Let us C Yashwant P. Kanetkar, BPB publication	Meet, PPT
	Structures and Functions, Structures and Arrays: Arrays of Structures, Structures Containing Arrays, Unions, Structures and pointers	3	Let us C Yashwant P. Kanetkar, BPB publication	Meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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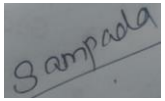

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYIT-C SEMESTER: SEM-1 MONTH: SEP-DEC ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the process of communication and its effect on giving and receiving information.
- Learn about historical and theoretical developments in the field of communication.
- Apply effective communication skills in a variety of public and interpersonal settings.
- Develop analytical, research, and organizational skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
5 COMMUNICATION SKILLS UNIT 1	**The Seven Cs of Effective Communication:** Completeness, Conciseness, Consideration, Concreteness, Clarity, Courtesy, Correctness	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	GOOGLE MEET AND PPT
	Understanding Business Communication: Nature and Scope of Communication,	4		
	Non-verbal Communication, Cross-cultural communication,	3		
	Technology-enabled Business Communication	2		

5 COMMUNICATION SKILLS UNIT 2	**Writing Business Messages and Documents:** Business writing, Business Correspondence,	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	GOOGLE MEET AND PPT
	Instructions Business Reports and Proposals, Career building and	4		
	Resume writing. **Developing Oral Communication Skills for Business:** Effective Listening, Business Presentations and	3		
	Public Speaking ,Conversations, Interviews	3		
UNIT 3	**Developing Oral Communication Skills for Business:** Meetings and Conferences,	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	BLACK BOARD AND CHALK
	Group Discussions *and*	2		
	Team Presentations, Team Briefing,	3		
	Understanding Specific Communication Needs: Communication across Functional Areas	3		
UNIT 4	**Understanding Specific Communication Needs:** Corporate Communication,	2	Business Communication Edited by Meenakshi Raman and	GOOGLE MEET AND PPT
	Persuasive Strategies in Business Communication,	3		

	Ethics in Business Communication, Business Communication Aids	3	Prakash Singh	
UNIT 5	**Presentation Process:** Planning the presentations, executing the presentations, Impressing the audience by performing,	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	GOOGLE MEET AND PPT
	Planning stage: Brainstorming, mind maps / concept maps,	3		
	executing stage: chunking theory, creating outlines, Use of templates	3		
	Adding graphics to your presentation: Visual communication, Impress stage: use of font, colour, layout, Importance of practice and performance.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 55

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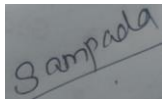

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TEACHING PLAN (UNIT PLAN)

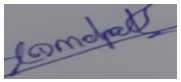
NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawa. DEPARTMENT: Mathematics. CLASS: FY IT SEMESTER: I

MONTH: October. ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Understand sequences, methods like mathematical induction to prove statement Also concept of recurrence relation & functions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4: DM, Unit III: Sequences, Mathematical Induction, and Recursion.	Sequences, Mathematical Induction, Strong Induction and the Well Ordering Principle for the Integers.	3	Discrete Mathematics and its Applications by Kenneth H. Rosen	Google Meet
	Recurrence relation, Second order linear homogenous recurrence relations with constant coefficients.	3		Table top method
	general recursive definitions and structural induction.	1		
	Functions Defined on General Sets, One-to-One and Onto, Inverse Functions.	2		
	Composition of Functions, Cardinality with Applications to Computability.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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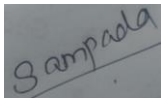

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: FY IT SEMESTER: I

MONTH: October. ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to: Understand concept of probability, counting principles, use Baye's formula and solve problems on finding expected value.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper IV: DM, Unit V: Counting and Probability	Introduction, Possibility Trees and the Multiplication Rule	2	Discrete Mathematics and its Applications by Kenneth H. Rosen	Google Meet
	Counting Elements of Disjoint Sets: The Addition Rule, The Pigeonhole Principle	2		Table top method
	Counting Subsets of a Set: Combinations, rCombinations with Repetition Allowed	1		
	Probability Axioms and Expected Value,	3		
	Conditional Probability, Bayes' Formula, and Independent Events.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

D. Pawar.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT:CS

CLASS:FYIT-DIV C SEMESTER: SEM-1 MONTH: SEP-DEC ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: develop logics which will help them to create programs, applications in C. Also by learning the basic programming constructs they can easily switch over to any other language in future.

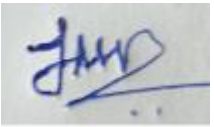
PAPER, TITLE, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1,Imperative programming, UNIT 1	**Introduction**: Types of Programming languages, History, features and application. Simple program logic, program development cycle	3	Let us c-by Yashwant Kanetkar	GOOGLE SLIDE, GOOGLE MEET,PPT
	pseudocode statements and flowchart symbols, sentinel value to end a program, programming and user environments, evolution of programming models., desirable program characteristics	3		
	Fundamentals: Structure of a program. Compilation and Execution of a Program,Character Set, identifiers and keywords, data types	3		

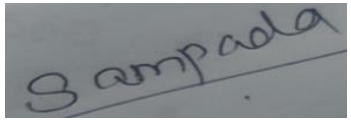
	constants, variables and arrays, declarations, expressions, statements, Variable definition, symbolic constants	4		
UNIT 2	**Operators and Expressions:** Arithmetic operators, unary operators, relational and logical operators	3	Let us c-by Yashwant Kanetkar	GOOGLE SLIDE, GOOGLE MEET,PPT
	assignment operators, assignment operators, the conditional operator, library functions.	3		
	Data Input and output: Single character input and output, entering input data	3		
	scanf function, printf function, gets and puts functions, interactive programming	3		
Unit 3	**Conditional Statements and Loops:** Decision Making Within AProgram,Conditions, Relational Operators, Logical Connectives, If Statement, If-Else Statement.	3	Let us c-by Yashwant kanetkar	GOOGLE SLIDE, GOOGLE MEET,PPT
	Loops: While Loop, Do While, For Loop. Nested Loops, Infinite Loops,Switch Statement	4		

	Functions: Overview, defining a function, accessing a function, passing arguments to a function, specifying argument data types, function prototypes,recursion, modular programming and functions, standard library of c functions	3		
	prototype of a function: foo1lal parameter list, return type,function call, block structure, passing arguments to a function: call by reference,call by value	3		
UNIT 4	**Program structure:** Storage classes, automatic variables, external variables, static variables,multifile programs	3	Let us c-by Yashwant Kanetkar	GOOGLE SLIDE, GOOGLE MEET,PPT
	more library functions,Preprocessor: Features, #define and #include, Directives and Macros	3		
	Arrays: Definition, processing, passing arrays to functions, multidimensional arrays, arrays and strings.	4		
Unit 5	**Pointers:** Fundamentals, declarations, Pointers Address Operators, Pointer Type	3	Let us c-by Yashwant kanetkar	GOOGLE SLIDE, GOOGLE MEET,PPT

	Declaration, Pointer Assignment, Pointer Initialization.			
	Pointer Arithmetic, Functions and Pointers, Arrays And Pointers, Pointer Arrays, passing functions to other functions	3		
	Structures and Unions: Structure Variables, Initialization, Structure Assignment, Nested Structure, Structures and Functions,	3		
	Structures and Arrays: Arrays of Structures, Structures Containing Arrays, Unions, Structures and pointer	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: F. Y. B. Sc. I. T –C SEMESTER: I MONTH: September-end to December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with Linux OS and Windows OS

b. Create various applications on different OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Operating Systems Unit -II	**Memory Management:** No memory abstraction, memory abstraction: address spaces, virtual memory	3	Modern Operating Systems by Andrew Tanenbaum	Lecture through PowerPoint Presentation on Google Meet
	Page replacement algorithms, design issues for paging systems, implementation issues, segmentation.	4		Lecture through PowerPoint Presentation on Google Meet
	File Systems: Files, directories, file system implementation, file-system management and optimization, MS-DOS file system, UNIX V7 file system, CD ROM file system.	5		Lecture through PowerPoint Presentation on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: F. Y. B. Sc. I. T –C SEMESTER: I MONTH: September-end to December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with Linux OS and Windows OS

b. Create various applications on different OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Operating Systems Unit -III	**Input-Output:** Principles of I/O hardware, Principles of I/O software, I/O software layers	3	Modern Operating Systems by Andrew Tanenbaum	Lecture through PowerPoint Presentation on Google Meet
	disks, clocks, user interfaces: keyboard, mouse, monitor, thin clients, power management	3		Lecture through PowerPoint Presentation on Google Meet
	Deadlocks: Resources, introduction to deadlocks, the ostrich algorithm, deadlock detection and recovery	3		Lecture through PowerPoint Presentation on Google Meet
	Deadlock avoidance, deadlock prevention, issues.	3		Lecture through PowerPoint Presentation on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYIT-C SEMESTER: SEM-1 MONTH: SEP-DEC ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand proper working of operating system. To provide a sound understanding of Computer operating system, its structures, functioning and algorithms.
- To provide a understanding of operating system, its structures and functioning
- Develop and master understanding of algorithms used by operating systems for various purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2 OPERATING SYSTEMS UNIT 4	multicomputers, distributed systems	3	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	BLACKBOARD AND CHALK
UNIT 5	History of windows through Windows 10, programming windows.	2	Modern Operating Systems by Andrew S. Tanenbaum,Herbert Bos	BLACKBOARD AND CHALK
	System structure, processes and threads in windows, Memory management, caching in windows, I/O in windows.	3		
	Windows NT file system, Windows power management, Security in windows.	3		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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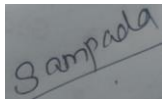

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: IT

CLASS: FY BSC IT SEMESTER: I MONTH: SEP-DEC ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to:

1. Learners must understand proper working of operating system.
2. To provide a sound understanding of Computer operating system, its structures, functioning and algorithms.
3. To provide a understanding of operating system, its structures and functioning.
4. Develop and master understanding of algorithms used by operating systems for various purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3 OS UNIT 1	What is an operating system? History of operating system, computer hardware, different operating systems	2	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	POWER POINT PRESENTATION
	Operating system concepts, system calls, operating system structure	3		
	Processes, threads	4		
	Interprocess communication, scheduling, IPC problem	4		

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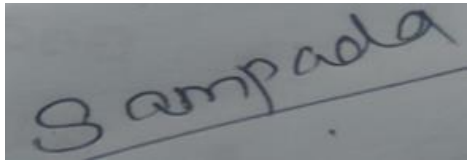
UNIT 4	History, requirements for virtualization, type 1 and 2 hypervisors, techniques for efficient virtualization.	3	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	POWER POINT PRESENTATION
	Hypervisor microkernels, memory virtualization, I/O virtualization, Virtual appliances.	3		
	Virtual machines on multicore CPUs, Clouds.	2		
	Multiprocessors, multicomputer, distributed systems.	4		
UNIT 5	History of Unix and Linux, Linux Overview, Processes in Linux, Memory management in Linux, I/O in Linux.	3	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	POWER POINT PRESENTATION
	Linux file system, security in Linux. Android, History of windows through Windows 10, programming windows.	3		
	System structure, processes and threads in windows, Memory management, caching in windows, I/O in windows.	3		
	Windows NT file system, Windows power management, Security in windows.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

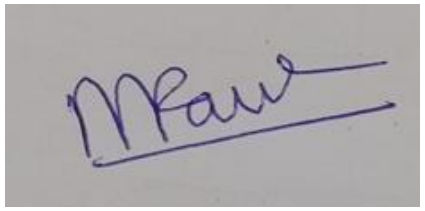
NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT/CS

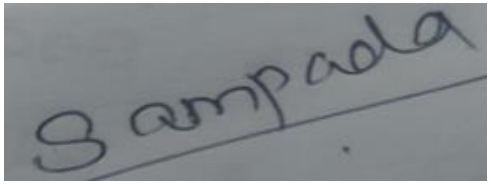
CLASS: FYIT-C SEMESTER: I MONTH: OCTOBER TO DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to learn about memory management, different file systems and deadlocks detection and recovery.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD
OPERATING SYSTEMS (USIT103) Unit I	**Introduction:** What is an operating system? History of operating system, computer hardware, different operating systems, operating system concepts, system calls, operating system structure.	6	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	PPT
	Processes and Threads: Processes, threads, interposes communication, scheduling, IPC problems.	6		PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

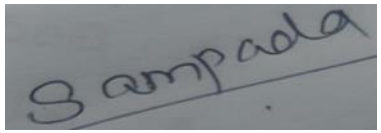
NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT

CLASS:FYIT-DIV B SEMESTER: SEM-I MONTH: SEP-DEC ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: Understand role of Operating System in terms of process, memory, file and I/O management. Apply and analysis the concept of a process, thread, mutual exclusion and deadlock. Evaluate performance of process scheduling algorithms and IPC. Apply and analysis the concepts of memory management techniques. Apply and analyze different techniques of file and I/O management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3, OS, UNIT-4	**Virtualization and Cloud**: History, requirements for virtualization, type 1 and 2 hypervisors, techniques for efficient virtualization, hypervisor microkernels	4	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	PPT, GoogleMeet, Jamboard , slido,
	memory virtualization, I/O virtualization, Virtual appliances, virtual machines on multicore CPUs, Clouds.	4		
	Multiple Processor Systems : Multiprocessors	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.I.T**

CLASS: **FYIT C** SEMESTER: **I** MONTH: **Sep-Dec** ACADEMIC YEAR: **2021-2022**

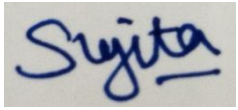
LEARNING OBJECTIVES:
The learners will be able to :

- Understand the basics concept of Digital circuit which includes MUX, DEMUX, Flip flops, counters etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II,4, Digital Electronics	Multiplexer, Demultiplexer, ALU, Encoder and Decoder: Introduction, Multiplexer, Demultiplexer, Decoder, ALU, Encoders	4	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT
	Sequential Circuits: Flip-Flop: Introduction, Terminologies used, S-R flip-flop, D flip-fop	4	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT
	JK flipflop, Race-around condition, Master – slave JK flip-flop, T flip-flop, conversion from one type of flip-flop to another, Application of flipflops.	4	Digital Principles and Applications Malvino and Leach Tata McGraw Hill	Meet, PPT
II,5, Digital Electronics	Counters: Introduction, Asynchronous counter, Terms related to counters, IC7493	3	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT

	(4-bit binary counter),			
	Synchronous counter, Bushing, Type T Design, Type JK Design, Presettable counter, IC 7490, IC 7492, Synchronous counter ICs, Analysis of counter circuits.	3	Digital Principles and Applications Malvino and Leach Tata McGraw Hill	Meet, PPT
	Shift Register: Introduction, parallel and shift registers, serial shifting, serial–in serial–out, serial–in parallel–out , parallel–in parallel–out,	2	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT
	Ring counter, Johnson counter, Applications of shift registers, Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters.	2	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT
	Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters.	2	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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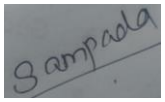

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS:FYIT-DIV C SEMESTER: SEM-1 MONTH: SEP-DEC ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- To able to learn and understand the basic concepts of digital electronics with its applications and various laws to be implemented in area of electronics.
- To think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT102 Digital Electronics UNIT 1	**Number System:** Analog System, digital system, numbering system, binary number system, octal number system, hexadecimal number system, conversion from one number system to another, floating point numbers	4	Digital Electronics and Logic Design By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	Laptop, power point, jamboard
	weighted codes binary coded decimal, non-weighted codes Excess – 3 code, Gray code, Alphanumeric codes – ASCII Code, EBCDIC, ISCII Code, Hollerith Code, Morse Code, Teletypewriter (TTY) Error detection and correction, Universal Product Code, Code conversion	4		
	Binary Arithmetic Binary addition, Binary subtraction, Negative number representation, Subtraction using 1's complement and 2's complement	2		
	Binary multiplication and division, Arithmetic in octal number system, Arithmetic in hexadecimal number system BCD and Excess – 3 arithmetic	2		
USIT102	**Boolean Algebra and Logic Gates:-**Introduction, Logic (AND OR NOT), Boolean theorems, Boolean Laws, De Morgan's Theorem,	3	Digital Electronics and Logic Design	

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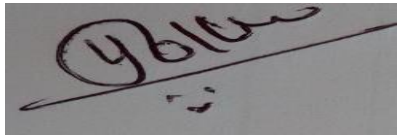
Digital Electronics UNIT 2	Perfect Induction, Reduction of Logic expression using Boolean Algebra,		By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	Laptop, power point, jamboard
	Deriving Boolean expression from given circuit, exclusive OR and Exclusive NOR gates, Universal Logic gates, Implementation of other gates using universal gates, Input bubbled logic, Assertion level, Implementation of other gates using universal gates, Input bubbled logic, Assertion level	3		
	Minterm, Maxterm and Karnaugh Maps: Introduction, minterms and sum of minterm form, maxterm and Product of maxterm form, Reduction technique using Karnaugh maps – 2/3/4/5/6 variable K-maps Grouping of variables in K-maps, K-maps for product of sum form, minimize Boolean expression using K-map and obtain K-map from Boolean expression, Quine Mc Cluskey Method.	6		
USIT102 Digital Electronics UNIT 3	**Combinational Logic Circuits:** Introduction, Multi-input, multi-output Combinational circuits, Code converters design and implementations	6	Digital Electronics: Principles, Devices and Applications by Anil K. Maini	Laptop, power point, jamboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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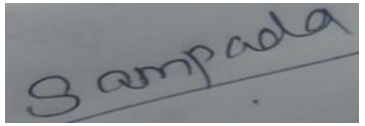

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAYATREE KARNIK DEPARTMENT: IT SUB: Computer Networks CLASS:SYIT DIV: A

SEMESTER:III

MONTH:July-October ACADEMIC YEAR:2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

To adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct. To be capable of managing complex IT projects with consideration of the human, financial and environmental factors. To work effectively as a part of a team to achieve a common stated goal.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Computer Networks USIT 303 Unit - 1	**Introduction:** Data communications, networks, network types, Internet history, standards and administration. **Network Models**: Protocol layering, TCP/IP protocol suite, The OSI model. **Introduction to Physical layer:** Data and signals, periodic analog signals, digital signals, transmission impairment, data rate limits, performance. **Digital and Analog transmission**: Digital-to-digital conversion, analog-to-digital conversion, transmission modes, digital-to-analog conversion, analog-to-analog conversion.	12	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition	Computer, Power point

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Computer Networks USIT 303 Unit - 2	**Bandwidth Utilization**: Multiplexing and Spectrum Spreading: Multiplexing, Spread Spectrum **Transmission media**: Guided Media, Unguided Media **Switching:** Introduction, circuit switched networks, packet switching, structure of a switch. **Introduction to the Data Link Layer:** Link layer addressing, Data Link Layer Design Issues, Error detection and correction, block coding, cyclic codes, checksum, forward error correction, error correcting codes, error detecting codes.	12	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition	Computer, Power point
Computer Networks USIT303 Unit - 3	**Data Link Control:** DLC services, data link layer protocols, HDLC, Point-to-point protocol. **Media Access Control**: Random access, controlled access, channelization, Wired LANs – Ethernet Protocol, standard ethernet, fast ethernet, gigabit ethernet, 10 gigabit ethernet, **Wireless LANs:** Introduction, IEEE 802.11 project, Bluetooth, WiMAX, Cellular telephony, Satellite networks. **Connecting devices and Virtual LANs**.	10	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition	Computer, Power point

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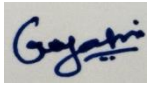
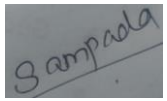
Computer Networks USIT303 Unit - 4	**Introduction to the Network Layer**: Network layer services, packet switching, network layer performance, IPv4 addressing, forwarding of IP packets, Internet Protocol, ICMPv4, Mobile IP **Unicast Routing:** Introduction, routing algorithms, unicast routing protocols. **Next generation IP:** IPv6 addressing, IPv6 protocol, ICMPv6 protocol, transition from IPv4 to IPv6	10	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition	Computer, Power point
Compute Networks USIT303 Unit - 5	**Introduction to the Transport Layer:** Introduction, Transport layer protocols (Simple protocol, Stop-and-wait protocol, Go-Back-n 12 9 protocol, Selective repeat protocol, Bidirectional protocols), Transport layer services, User datagram protocol, Transmission control protocol, **Standard Client0Server Protocols**: World wide-web and HTTP, FTP, Electronic mail, Telnet, Secured Shell, Domain name system	8	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition	Computer, Power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __60_____





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SYIT SEM-III SUB-APPLIED MATHS-II DIV A

PROF –ARCHANA MALPATHAK

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT:Mathematics CLASS: SYIT SEMESTER: III MONTH: Aug to Nov ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II Unit-I Matrices and Complex Number	Matrices : Inverse,properties,Rank by Normal and Echelon form,Linearequations,Linear dependent and independent Linear transformation,ch roots and ch vectors Caley Hamiltonian theroem,Similarity of matrix,Digonal matrix Complex number - complex number equality of complex numberArgand digram,polar form and exponential of complex numberHyperbolic and Logarithmic function of complex number	12	Applied Maths by G.V.Kumbojkar Higher Engineering of mathematics TechMax	Black board and chalk

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: SYIT SEMESTER: II
MONTH: Aug to November ACADEMIC YEAR: 2021-2022.
LEARNING OBJECTIVE/S:
The learners will be able to : ___Variable separable,subtitutionmethod,Homogenous,Non homogeneous, Exavt differential equation,Non exact fifgerential equation, Integrating factor ,bernoullis differential,higher order differential equation solvable for Y,P,X .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths -II UNIT -II Differential equations	1) Equation of the first order and first degree :Sepratation of variables,Equation homogenous in x and y ,Non homogenous,Exactdifferential, 2)Integrating factor,Bernouils Equation ,Subtitution method general method,other methods 3)Diff equ of higher degree - Solvable for p, for X ,for YClairauts form of equationMethod of sepration, 4)Linear differential with constant coefficients - Differential operator,f(D)=0.f(D)=x ,1/f(D),1/f(D) X	3+3+3+3 =12	G.v.kumbojkar Higher Engineering of mathematics Balguru swami TechMax R.M.Baphna	Blackboard ,chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

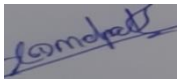
NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics. CLASS: SYIT. SEMESTER: III MONTH: July To Nov ACADEMIC YEAR: 2021-2022

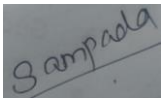
LEARNING OBJECTIVE/S:

The learners will be able to : Double integration ,Types of double ,Triple Integration,Types oftriple, Area volume for double and triple integration_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Mathematics UNIT -IV Multiple integral	1) Multiple Intigration Double Integral,Change of. the order of the integration,Double integral in polar co - ordinates 2) Triple integral. 3) Application of integration :Areas,Volumes of. solids	4+4+4 =12	Higher Engineering of Mathematics TechMax R .M.Baphna	Black board ,chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -ARCHANA MALPATHAK Malpathak
DEPARTMENT: Mathematics CLASS: -SYIT SEMESTER: III MONTH: -JULLY TO_ NOVEMBER ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II (SYIT) UNIT-V Beta Gamma Function	1) Beta Gamma function -Defination,properties and problems,Duplication Formula 2) Differentiation Under Integral Sign 3)Error functions	5+4+3=12	Tech max Higher Engineering of mathematics Applied Maths II Nirali publication	Blackboard,chalk

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____Information Technology___ CLASS: __SYIT_(A)

SEMESTER - III MONTH: ____July_ ACADEMIC YEAR: ____2021-22__

LEARNING OBJECTIVE/S:
The learners will be able to: Develop understanding of the concept of Transaction.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Database Management Systems USIT304 Unit 1	**Introduction to Databases and Transactions-** What is database system, purpose of database system. View of data, relational databases, Database architecture and transaction management.	5	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation
	Data Models , ER-Diagram and UML	3	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation
	Database design and ER-Model: overview, ER_model Constraints, ERD Issues, Codd's Ruls.	4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____Information Technology___ CLASS: __SYIT_(A)

SEMESTER - III MONTH: ____August_ ACADEMIC YEAR: ____2021-22____

LEARNING OBJECTIVE/S: The learners will be able to: Relational Algebra and also learning the Constraints.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Database Management Systems USIT304 Unit 2	Relational Database model: Logical views of data, keys, integrity rules, Relational Database design. Normalization.	5	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation
	Relational algebra**:** introduction, Selection and projection set operations, renaming, Joins, Division, syntax, semantics. Operators, grouping and ungrouping.	4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation
	Calculus: Tuple relational calculus, Domain relational calculus, calculus vs algebra	3	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation
DBMS USIT304 Unit 3	Constraints, types of constraints, integrity constraints. Views: Introduction to views, data independence, security.	4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation

Database Mgmt. Systems USIT304 Unit 3	Updates on views, comparison on tables and views.	4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation
	SQL: Data definition, aggregate function, Null values, nested queries, join relations. Triggers.	4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation

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NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____Information Technology___ CLASS: __SYIT_(A)

SEMESTER - III MONTH: ____September_ ACADEMIC YEAR: _____2021-22____

LEARNING OBJECTIVE/S: PL/SQL, Cursors

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DBMS USIT304 Unit 4	Transaction mgmt. ACID Properties, serializability and concurrency control,	5	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation
	2PL and Deadlocks, Time stamping methods, optimistic.	4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation
	Database Recover Management	3	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation
DBMS USIT304 Unit 5	PL-SQL: Beginning with PL/SQL, Identifiers and keywords, Operators, Expressions, Sequences, Cursors and its types.	5	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

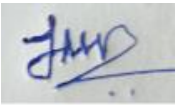
NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____Information Technology___ CLASS: __SYIT_(A)

SEMESTER - III MONTH: ____October____ ACADEMIC YEAR: _____2021-22____

LEARNING OBJECTIVE/S: Transaction and Functions

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DBMS USIT304 Unit 5	Transaction, Collection and composite data types, Procedures and functions, Exception Handling, Packages.	4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation
	With clause and Hierarchical Retrieval, Triggers.	3	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____



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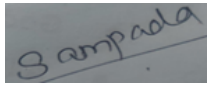

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MRS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**SY.B SC(IT)-A**_____ SEMESTER: ____**III**_____ MONTH: _____**JULY-OCTOBER**_____ ACADEMIC YEAR: _____**2021-2022**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

Understand the concept of data structure and how it is stored. The varieties of symbols used to store data, analysis on data, algorithms used to reduced the complexity regarding time, space and programs. Understanding the concept of Arrays and operations on array, Stack and Queue and variation of operation on them. To make understand applications where it is used , advantages and disadvantages of operation. To enable to practically generate code for it and implement it for data storage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 (USIT302) Data Structures **Unit No -01**	**Introduction:** Data and Information, Data Structure, Classification of Data Structures, Primitive Data Types, Abstract Data Types, Data structure vs. File Organization, Operations on Data Structure, Algorithm, Importance of Algorithm Analysis, Complexity of an Algorithm, Asymptotic Analysis and Notations, Big O Notation, Big Omega Notation, Big Theta Notation, Rate of Growth and Big O Notation.	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Online Google Meet PPTs

Unit No -03	**Array**: Introduction, One Dimensional Array, Memory Representation of One Dimensional Array, Traversing, Insertion, Deletion, Searching, Sorting, Merging of Arrays, Multidimensional Arrays, Memory Representation of Two Dimensional Arrays, General Multi-Dimensional Arrays, Sparse Arrays, SparseMatrix, Memory Representation of Special kind of Matrices, Advantages and Limitations of Arrays.	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Online Google Meet PPTs
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
	Stack: Introduction, Operations on the Stack Memory Representation of Stack, Array Representation of Stack, Applications of Stack, Evaluation of Arithmetic Expression, Matching Parenthesis, infix and postfix operations, Recursion**.**	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Textbook, Laptop, Projector, Chalk and Duster, Blackboard.
	Queue: Introduction, Queue, Operations on the Queue, Memory Representation of Queue, Array representation of queue, Linked List Representation of Queue, Circular Queue, Some special kinds of queues, Deque, Priority Queue, Application of Priority Queue, Applications of Queues.	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Textbook, Laptop, Projector, Chalk and Duster, Blackboard.

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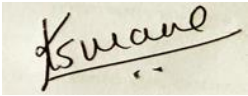
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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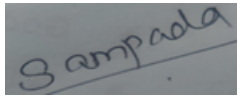

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT/CS

CLASS: SYIT-A SEMESTER: III MONTH: JULY TO OCTOBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to learn different structures of data, their operations and algorithms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DATA STRUCTURES (USIT302) Unit II	**Linked List:** Introduction to Subject, Syllabus, Linked List, One-way Linked List, Traversal of Linked List, Searching, Memory Allocation and De-allocation, Insertion in Linked List, Deletion from Linked List, copying a List into Other List, Merging Two Linked Lists, splitting a List into Two Lists, Reversing One-way linked List, Circular Linked List, Applications of Circular Linked List	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	PPT, Jam-board
	Two-way Linked List, traversing a Two-way Linked List, searching in a Two-way linked List, Insertion of an element in Two-way Linked List, deleting a node from Two-way Linked List, Header Linked List, Applications of the Linked list, Representation of Polynomials, Storage of Sparse Arrays, Implementing other Data Structures	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	PPT, Jam-board
DATA STRUCTURES (USIT302) Unit IV	**Sorting and Searching Techniques:** Bubble, Selection, Insertion, Merge Sort. Searching: Sequential, Binary, Indexed Sequential Searches, Binary Search.	3	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	PPT, Jam-board, https://yongdanielliang. github.io/animation
	Tree: Tree, Binary Tree, Properties of Binary Tree, Memory Representation of Binary Tree, Operations Performed on Binary	6		PPT, Jam-board, https://yongdanielliang.

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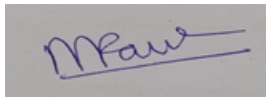
	Tree, Reconstruction of Binary Tree from its Traversals, Huffman Algorithm, Binary Search Tree, Operations on Binary Search Tree, Heap, Memory Representation of Heap, Operation on Heap, Heap Sort			github.io/animation
	Advanced Tree Structures: Red Black Tree, Operations Performed on Red Black Tree, AVL Tree, and Operations performed on AVL Tree, 23 Tree, B-Tree.	3		PPT, Jam-board, https://yongdanielliang. github.io/animation
DATA STRUCTURES (USIT302) Unit V	**Hashing Techniques** Hash function, Address calculation techniques, Common hashing functions Collision resolution, Linear probing, Quadratic, Double hashing, Bucket hashing, Deletion and rehashing	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	PPT, Jam-board
	Graph: Introduction, Graph, Graph Terminology, Memory Representation of Graph, Adjacency Matrix Representation of Graph, Adjacency List or Linked Representation of Graph, Operations Performed on Graph, Graph Traversal, Applications of the Graph, Reachability, Shortest Path Problems, Spanning Trees	6		PPT, Jam-board, https://liveexample.pearsoncmg.com /dsanimation13ejava/ GraphLearningTool.html

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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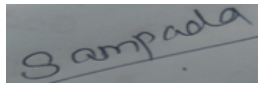

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHARVARI PATIL . DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: S.Y.B.Sc.IT SEMESTER: III MONTH: JULY-OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- Students should be able to understand the concepts of programming before actually starting to write programs.
- Students should be able to develop logic for Problem Solving.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Unit I Python Programming	**Introduction:** The Python Programming Language, History, features, Installing Python, Running Python program,	3	Think Python Allen Downey O'Reilly 1st2012	Google Meet, PPT
	Debugging : Syntax Errors, Runtime Errors, Semantic Errors, Experimental Debugging, Formal and Natural Languages, The Difference Between Brackets, Braces, and Parentheses,	3		Google Meet, PPT
	Variables and Expressions Values and Types, Variables, Variable Names and Keywords, Type conversion, Operators and Operands, Expressions, Interactive Mode and Script Mode, Order of Operations.	3		Google Meet, PPT
	Conditional Statements: if, if-else, nested if –else	1		Google Meet, PPT
	Looping: for, while, nested loops Control	1		Google Meet, PPT

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	statements: Terminating loops, skipping specific conditions	1		Google Meet, PPT
Paper-I Unit II Python Programming	**Functions:** Function Calls, Type Conversion Functions, Math Functions, Composition, Adding New Functions,	2	Think Python Allen Downey O'Reilly 1st2012	Google Meet, PPT
	Definitions and Uses, Flow of Execution, Parameters and Arguments, Variables and Parameters Are Local, Stack Diagrams, Fruitful Functions and Void Functions, Why Functions?	3		Google Meet, PPT
	Importing with from, Return Values, Incremental Development, Composition, Boolean Functions, More Recursion, Leap of Faith, Checking Types	3		Google Meet, PPT
	Strings: A String Is a Sequence, Traversal with a for Loop, String Slices, Strings Are Immutable, Searching, Looping and Counting, String Methods, The in Operator, String Comparison, String Operations	4		Google Meet, PPT
Paper-I Unit III Python Programming	**Lists:** Values and Accessing Elements, Lists are mutable, traversing a List, Deleting elements from List, Built-in List Operators, Concatenation, Repetition, In Operator, Built-in List functions and methods	4	Think Python Allen Downey O'Reilly 1st2012	Google Meet, PPT
	Tuples and Dictionaries: Tuples, Accessing values in Tuples, Tuple Assignment, Tuples as return values, Variable-length argument tuples, Basic tuples operations, Concatenation, Repetition, in Operator, Iteration, Built-in Tuple Functions Creating a Dictionary, Accessing Values in a dictionary, Updating Dictionary, Deleting Elements from Dictionary, Properties of Dictionary keys, Operations in Dictionary, Built-In Dictionary Functions, Built-in Dictionary Methods	4		Google Meet, PPT
	Files: Text Files, The File Object Attributes, Directories	2		Google Meet, PPT
	Exceptions: Built-in Exceptions, Handling Exceptions, Exception with Arguments, User-defined Exceptions	2		Google Meet, PPT

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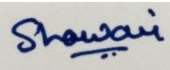
Paper-I Unit IV Python Programming	**Regular Expressions –** Concept of regular expression, various types of regular expressions, using match function.	2	Think Python Allen Downey O'Reilly 1st2012	Google Meet, PPT
	Classes and Objects: Overview of OOP (Object Oriented Programming), Class Definition, Creating Objects, Instances as Arguments, Instances as return values, Built-in Class Attributes, Inheritance, Method Overriding, Data Encapsulation, Data Hiding	4		Google Meet, PPT
	Multithreaded Programming: Thread Module, creating a thread, synchronizing threads, multithreaded priority queue	3		Blackboard, Chalk
	Modules: Importing module, Creating and exploring modules, Math module, Random module, Time module	3		Blackboard, Chalk
Paper-I Unit V Python Programming	**Creating the GUI Form and Adding Widgets:** **Widgets:** Button, Canvas, Checkbutton, Entry, Frame, Label, Listbox, Menubutton, Menu, Message, Radiobutton, Scale, Scrollbar, text, Toplevel, Spinbox, PanedWindow, LabelFrame, tkMessagebox. Handling Standard attributes and Properties of Widgets.	4	Think Python Allen Downey O'Reilly 1st2012	Blackboard, Chalk
	Layout Management: Designing GUI applications with proper Layout Management features.	2		Blackboard, Chalk
	Look and Feel Customization: Enhancing Look and Feel of GUI using different appearances of widgets.	2		Blackboard, Chalk
	Storing Data in Our MySQL Database via Our GUI : Connecting to a MySQL database from Python, Configuring the MySQL connection, Designing the Python GUI database, Using the INSERT command, Using the UPDATE command, Using the DELETE command, Storing and retrieving data from MySQL database.	4		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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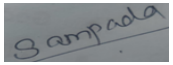

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHARVARI PATIL . DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: S.Y.B.Sc.IT SEMESTER: III MONTH: JULY-OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- Students should be able to understand the concepts of programming before actually starting to write programs.
- Students should be able to develop logic for Problem Solving.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Unit IV Python Programming	**Regular Expressions –** Concept of regular expression, various types of regular expressions, using match function.	2	Think Python Allen Downey O'Reilly 1st2012	Google Meet, PPT
	Classes and Objects: Overview of OOP (Object Oriented Programming), Class Definition, Creating Objects, Instances as Arguments, Instances as return values, Built-in Class Attributes, Inheritance, Method Overriding, Data Encapsulation, Data Hiding	4		Google Meet, PPT
	Multithreaded Programming: Thread Module, creating a thread, synchronizing threads, multithreaded priority queue	3		Blackboard, Chalk
	Modules: Importing module, Creating and exploring modules, Math module, Random module, Time module	3		Blackboard, Chalk
Paper-I Unit V Python Programming	**Creating the GUI Form and Adding Widgets:** **Widgets:** Button, Canvas, Checkbutton, Entry, Frame, Label, Listbox, Menubutton, Menu, Message, Radiobutton, Scale, Scrollbar, text, Toplevel, Spinbox, PanedWindow, LabelFrame, tkMessagebox. Handling Standard attributes and Properties of Widgets.	4	Think Python Allen Downey O'Reilly 1st2012	Blackboard, Chalk

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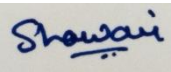
	Layout Management: Designing GUI applications with proper Layout Management features.	2		Blackboard, Chalk
	Look and Feel Customization: Enhancing Look and Feel of GUI using different appearances of widgets.	2		Blackboard, Chalk
	Storing Data in Our MySQL Database via Our GUI : Connecting to a MySQL database from Python, Configuring the MySQL connection, Designing the Python GUI database, Using the INSERT command, Using the UPDATE command, Using the DELETE command, Storing and retrieving data from MySQL database.	4		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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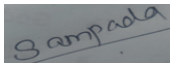

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:S.Y.BSC(I.T) DIV-B SEMESTER: **III** MONTH:JULY-OCT ACADEMIC YEAR: 2021-2022

SUBJECT:COMPUTER NETWORKS

LEARNING OBJECTIVE/S:
The learners will be able to : The **course objectives** include **learning** about **computer network** organization and implementation, obtaining a theoretical understanding of data communication and **computer networks**, and gaining practical experience in installation, monitoring, and troubleshooting of current LAN systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMPUTER NETWORKS USIT303 Unit-2	**Bandwidth Utilization:** Multiplexing and SpectrumSpreading: Multiplexing, Spread Spectrum	5	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill	PowerPoint Presentation,Slido,Google Forms
	Transmission media: Guided Media, Unguided Media	4		
	Switching: Introduction, circuit switched networks, packet switching, structure of a switch.	5		

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	Introduction to the Data Link Layer:Link layer addressing, Data Link Layer Design Issues, Error detection and correction, block coding, cyclic codes, checksum, forward error correction, error correcting codes, error detecting codes.	5	Fifth Edition 2013	
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**19**		
COMPUTER NETWORKS USIT303 Unit-3	**Data Link Control:**DLC services, data link layer protocols, HDLC, Point-to-point protocol.	5	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition	PowerPoint Presentation,Slido,Google Forms
	Media Access Control: Random access, controlled access, channelization, Wired LANs – Ethernet Protocol, standard ethernet, fast ethernet, gigabit ethernet, 10 gigabit ethernet,	5		
	Wireless LANs: Introduction, IEEE 802.11 project, Bluetooth, WiMAX, Cellular telephony, Satellite networks.	3		
	Connecting devices and Virtual LANs.	3		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**16**		
COMPUTER NETWORKS USIT303 Unit-4	**Introduction to the Network Layer:** Network layer services, packet switching, network layer performance, IPv4 addressing, forwarding of IP packets, Internet Protocol, ICMPv4, Mobile IP	5	Data Communication and Networking	

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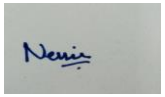
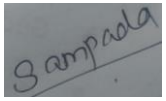
	Unicast Routing:Introduction, routing algorithms, unicast routing protocols.	4	Behrouz A. Forouzan Tata McGraw Hill Fifth Edition	
	Next generation IP: IPv6 addressing, IPv6 protocol, ICMPv6 protocol, transition from IPv4 to IPv6.	4		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**13**		





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Sampada Deshmukh DEPARTMENT: Information Technology

CLASS:S.Y.B.Sc.(I.T) SEMESTER: III MONTH:AUGUST-DECEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the basics of Data Communication and concept of networking
- Understand the concept of Analog and Digital Signal.
- Understand the Network Model and their working for data transmission.
- Learn conversion of digital to analog and vice-versa.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 1	**Introduction**: Data communications, networks, network types, Internet history,standards and administration.	4	Data Communication and Networking By Behrouz A. Forouzan	PPT , Google Meet
	Network Models:Protocol layering, TCP/IP protocol suite, The OSI model.	2	Data Communication and Networking By Behrouz A. Forouzan	PPT , Google Meet
	Introduction to Physical layer:Data and signals, periodic analog signals, digital signals, transmission impairment, data rate limits, performance.	3	Data Communication and Networking By Behrouz A. Forouzan	PPT , Google Meet

	Digital and Analog transmission: Digital-to-digital conversion, analog-to-digital conversion, transmission modes, digital-to-analog conversion, analog-to-analog conversion.	3	Data Communication and Networking By Behrouz A. Forouzan	PPT , Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Sampada Deshmukh DEPARTMENT:Information Technology

CLASS:S.Y.B.Sc.(I.T) SEMESTER: III MONTH: AUGUST-DECEMBER ACADEMIC YEAR:2020-2021

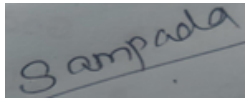
LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand different transmission level protocol.
- Learn Client server Protocol and their application

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 5	**Introduction to the Transport Layer:** Introduction, Transport layer protocols (Simple protocol, Stop-and-wait protocol, Go-Back-n protocol, Selective repeat protocol, Bidirectional protocols), Transport layer services, User datagram protocol, Transmission control protocol	8	TCP/IP Protocol Suite By Behrouz A. Forouzan	PPT , Google Meet

	Standard Client Server Protocols: World-wide-web and HTTP, FTP, Electronic mail, Telnet, Secured Shell, Domain name system.	4	TCP/IP Protocol Suite By Behrouz A. Forouzan	PPT , Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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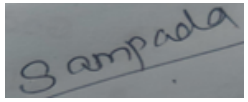

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS: SY BSc IT DIV-B(DBMS) SEMESTER:SEM 3 MONTH: JUL-OCT ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- The learners will be able to : have a broad understanding of database concepts and database management system software
- have a high-level understanding of major DBMS components and their function
- be able to model an application's data requirements using conceptual modeling tools like ER diagrams and design database schemas based on the conceptual model.
- be able to write SQL commands to create tables and indexes, insert/update/delete data, and query data in a relational DBMS.
- be able to program a data-intensive application using DBMS APIs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 DBMS UNIT 1	Introduction to Databases and Transactions What is database system, purpose of database system, view of data, relationaldatabases, database architecture, transaction management	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	PPT PRESENTATION
	Data Models The importance of data models, Basic building blocks, Business rules, The evolutionof data models, Degrees of data abstraction.	4		
	Database Design,ER Diagram and Unified Modeling Language Database design and ER Model:overview, ERModel, Constraints, ERDiagrams, ERDIssues, weak entity sets, Codd's rules, Relational Schemas, Introduction to UML	4		
	Relational database model: Logical view of data, keys, integrity rules,	3		PPT PRESENTATION

UNIT 2	Relational Database design: features of good relational database design, atomic domain and Normalization (1NF, 2NF, 3NF, BCNF).	3	DATABASE SYSTEM AND CONCEPTS BY H KORTH	
	Relational Algebra and Calculus Relational algebra: introduction, Selection and projection, set operations, renaming,Joins, Division, syntax, semantics	3		
	. Operators, grouping and ungrouping,relationalcomparison	2		
	Calculus: Tuple relational calculus, Domain relational Calculus, calculus vsalgebra,computational capabilities	4		
UNIT 3	Constraints, Views and SQL Constraints, types of constrains, Integrity constraints,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	PPT PRESENTATION
	Views: Introduction to views, data independence, security, updates on views,comparison between tables and views	4		
	SQL: data definition, aggregate function, Null Values, nested sub queries, Joined relations. Triggers	4		
UNIT 4	Transaction management and Concurrency Control Transaction management: ACID properties, serializability and concurrency control,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	PPT PRESENTATION
	Lock based concurrency control (2PL, Deadlocks),Time stamping methods,	4		
	optimistic methods, database recovery management.	4		
UNIT 5	PL-SQL: Beginning with PL / SQL,Identifiers and Keywords, Operators, Expressions, Sequences	4	PROGRAMMING WITH PL/SQL FOR BEGINNERS BY H. DAND,R. PATIL	PPT PRESENTATION
	,Control Structures, Cursors and Transaction,	4		
	Collections and composite data types, Procedures and Functions, Exceptions Handling ,Packages,With Clause and Hierarchical Retrieval,Triggers.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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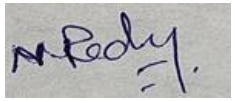

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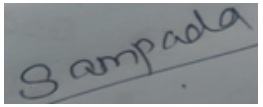

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYBSc(IT) DIV:B SEMESTER: III MONTH: JULY-OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the different types of data structures and develop programs to search and sort for elements.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: USIT302 unit:1, Title: Data Structures	**Introduction:** Data and Information, Data Structure, Classification of Data Structures, Primitive Data Types, Abstract Data Types, Data structure vs. File Organization, Operations on Data Structure, Algorithm, Importance of Algorithm Analysis, Complexity of an Algorithm, Asymptotic Analysis and Notations, Big O Notation, Big Omega Notation, Big Theta Notation, Rate of Growth and Big O Notation.	5	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
	Array:Introduction, One Dimensional Array, Memory Representation of One Dimensional Array, Traversing, Insertion, Deletion, Searching, Sorting, Merging of Arrays, Multidimensional Arrays, Memory Representation of Two Dimensional Arrays, General Multi-Dimensional Arrays, Sparse Arrays, SparseMatrix, Memory Representation of Special kind of Matrices, Advantages and Limitations of Arrays.	7	A Simplified Approach to Data Structures	Online mode Google meet Google slides.

Paper: USIT302 unit:2, Title: Data Structures	**Linked List:** Linked List, One-way Linked List, Traversal of Linked List, Searching, Memory Allocation and De-allocation, Insertion in Linked List, Deletion from Linked List, Copying a List into Other List, Merging Two Linked Lists, Splitting a List into Two Lists, Reversing One way linked List, Circular Linked List, Applications of Circular Linked List,	6	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
	Two way Linked List, Traversing a Two way Linked List, Searching in a Two way linked List, Insertion of an element in Two way Linked List, Deleting a node from Two way Linked List, Header Linked List, Applications of the Linked list, Representation of Polynomials, Storage of Sparse Arrays, Implementing other Data Structures.	6	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
Paper: USIT302 unit:3, Title: Data Structures	**Stack**: Introduction, Operations on the Stack Memory Representation of Stack, Array Representation of Stack, Applications of Stack, Evaluation of Arithmetic Expression, Matching Parenthesis, infix and postfix operations, Recursion**.**	5	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
	Queue: Introduction, Queue, Operations on the Queue, Memory Representation of Queue, Array representation of queue, Linked List Representation of Queue, Circular Queue,Some special kinds of queues, Deque,Priority Queue, Application of Priority Queue, Applications of Queues.	7	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
Paper: USIT302 unit:4, Title:	**Sorting and Searching Techniques** Bubble, Selection, Insertion, Merge Sort. Searching: Sequential, Binary, Indexed Sequential Searches, Binary Search.	4	A Simplified Approach to Data Structures	Online mode Google meet Google slides.

Data Structures	**Tree:**Tree,Binary Tree, Properties of Binary Tree, Memory Representation of Binary Tree, Operations Performed on Binary Tree,Reconstruction of Binary Tree from its Traversals, Huffman Algorithm, Binary Search Tree, Operations on Binary Search Tree, Heap, Memory Representation of Heap, Operation on Heap, Heap Sort.	4	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
	Advanced Tree Structures: Red Black Tree, Operations Performed on Red Black Tree, AVL Tree, Operations performed on AVL Tree, 2-3 Tree, B-Tree.	4	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
Paper: USIT302 unit:5, Title: Data Structures	**Hashing Techniques** Hash function, Address calculation techniques, Common hashing functions Collision resolution, Linear probing, Quadratic,Double hashing, Buckethashing, Deletion and rehashing	6	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
	Graph: Introduction, Graph, Graph Terminology, Memory Representation of Graph, Adjacency Matrix Representation of Graph, Adjacency List or Linked Representation of Graph, Operations Performed on Graph, GraphTraversal, Applications of the Graph, Reachability, Shortest Path Problems, Spanning Trees.	6	A Simplified Approach to Data Structures	Online mode Google meet Google slides.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12

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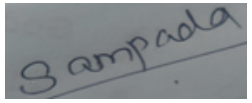

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Miss Shilpa James Rodrigues

DEPARTMENT: IT

CLASS: S.Y.I.T.-B (Python)

SEMESTER: III

MONTH: July - Oct

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S :
The learners will be able to :

- Understand why Python is a useful scripting language for developers.
- Learn how to design and program Python applications.
- Learn how to use lists, tuples, and dictionaries in Python programs.
- Write functions and pass arguments in Python also to read and write files in Python.
- Learn how to design object-oriented programs with Python classes.
- Use exception handling in Python applications for error handling
- Understand the basics of python GUI component and be able to create GUI based application.
- Create Python application that will manage user data with the knowledge of DBMS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT301 , Unit 1, Python .	**Introduction:** The Python Programming Language, History, features, Installing Python, Running Python program, Debugging , Experimental Debugging, Formal and Natural Languages, The Difference Between Brackets, Braces, and Parentheses,	04	Think Python -Allen Downey	Laptop, Google Meet, Power point presentation

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	Variables and Expressions Values and Types, Variables, Variable Names and Keywords, Type conversion, Operators and Operands, Expressions, Interactive Mode and Script Mode.	03	Think Python -Allen Downey	Laptop, Google Meet, Power point presentation
	Conditional Statements: if, if-else, nested if –else	02	Think Python -Allen Downey	Laptop, Google Meet, Power point presentation
	Looping: for, while, nested loops **Control statements:** Terminating loops, skipping specific conditions	03	Think Python -Allen Downey	Laptop, Google Meet, Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT301 , Unit 2, Python .	**Functions:** Function Calls, Type Conversion Functions, Math Functions, Composition, Adding New Functions, Flow of Execution, Parameters and Arguments, Variables and Parameters Are Local, Stack Diagrams, Fruitful Functions and Void Functions, Why Functions? Importing with from, Return Values, Incremental Development, Boolean Functions, More Recursion, Leap of Faith, Checking Types.	05	Think Python -Allen Downey	Laptop, Google Meet, Power point presentation
	Strings: A String Is a Sequence, Traversal with a for Loop, String Slices, Strings Are Immutable, Searching, Looping and Counting, String Methods, The in Operator, String Comparison, String Operations.	07	Think Python -Allen Downey	Laptop, Google Meet, Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT301 , Unit 3, Python .	**Lists:** traversing a List, Deleting elements from List, Built-in List Operators, Built-in List functions and methods	03	Think Python -Allen Downey	Laptop, Google Meet, Power point presentation
	Tuples and Dictionaries: Accessing values in Tuples, Tuple Assignment,Basic tuples operations, Built-in Tuple Functions Creating a Dictionary, Accessing Values in a dictionary, Updating Dictionary, Deleting Elements from Dictionary, Operations in Dictionary, Built-In Dictionary Functions and Methods.	04	Think Python -Allen Downey	Laptop, Google Meet, Power point presentation
	Files: Text Files, The File Object Attributes, Directories	02	Think Python -Allen Downey	Laptop, Google Meet, Power point presentation
	Exceptions: Built-in Exceptions, Handling Exceptions, Exception with Arguments, User-defined Exceptions	03	Think Python -Allen Downey	Laptop, Google Meet, Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SURBHI SHAH DEPARTMENT: IT-CS CLASS:SYIT-DIV C SEMESTER: SEM-III

MONTH: JULY – OCTOBER ACADEMIC YEAR: 2021-22.

LEARNING OBJECTIVE/S:
The learners will be able to: to be capable of managing complex IT projects with consideration of the human, financial and environmental factors. to work effectively as a part of a team to achieve a common stated goal.to adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:-III TITLE:-Computer Networks UNIT 1	**Introduction:** Data communications, networks, network types, Internet history, standards and administration.	3	Data Communication and Networking By Behrouz A. Forouzan	Reference book,google meet,google slides,jamboard,ppt,slido.
	Network Models: Protocol layering, TCP/IP protocol suite, The OSI model.	2		
	Introduction to Physical layer: Data and signals, periodic analog signals, digital signals, transmission impairment, data rate limits, performance.	3		
	Digital and Analog transmission: Digital-to-digital conversion, analog-to-digital conversion, transmission modes, digital-to-analog conversion, analog-to-analog conversion.	2		
UNIT 2	**Bandwidth Utilization: Multiplexing and Spectrum Spreading:** Multiplexing, Spread Spectrum	3	Data Communication and Networking By Behrouz A.	Reference book,google meet,google slides,jamboard,ppt,slido.
	Transmission media: Guided Media**,** Unguided Media	2		
	Switching: Introduction, circuit switched networks, packet switching, structure of a switch.	3		

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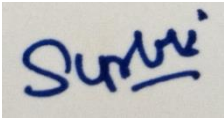
	Introduction to the Data Link Layer: Link layer addressing, Data Link Layer Design Issues, Error detection and correction, block coding, cyclic codes, checksum, forward error correction, error correcting codes, error detecting codes.	2/3	Forouzan	
UNIT 3	**Data Link Control:** DLC services, data link layer protocols, HDLC, Point-to-point protocol.	2	Data Communication and Networking By Behrouz A. Forouzan	Reference book,google meet,google slides,jamboard,ppt,slido.
	Media Access Control: Random access, controlled access, channelization, Wired LANs – Ethernet Protocol, standard ethernet, fast ethernet, gigabit ethernet, 10 gigabit ethernet,	3		
	Wireless LANs: Introduction, IEEE 802.11 project, Bluetooth, WiMAX, Cellular telephony, Satellite networks.	2		
	Connecting devices and Virtual LANs.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 31



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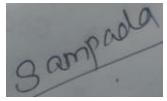

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYIT DIV: C SEMESTER: III MONTH: JULY-OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The learners will be able to : List various applications of computer networks, describe the concepts, protocols, design, implementation and use of computer networks. Also implement and evaluate new ideas for solving computer network design issues.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT303, Computer Networks, UNIT-IV	Introduction to the Network Layer: Network layer services, packet switching, network layer performance, IPv4 addressing, forwarding of IP packets, Internet Protocol, ICMPv4, Mobile IP	05	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2, Computer Networks Andrew Tanenbaum Pearson Fifth 2013, TCP/IP Protocol Suite Behrouz A. Forouzan Tata McGraw Hill Fourth Edition 2010	Meet, PPT
	Unicast Routing: Introduction, routing algorithms, unicast routing protocols.	02		Meet, PPT
	Next generation IP: IPv6 addressing, IPv6 protocol, ICMPv6 protocol, transition from IPv4 to IPv6	05		Meet, PPT
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT303, Computer Networks, UNIT-V	Introduction to the Transport Layer: Introduction, Transport layer protocols (Simple protocol, Stop-and-wait protocol, Go-Back-n protocol, Selective repeat protocol, Bidirectional protocols), Transport 12 8 layer services, User datagram protocol, Transmission control protocol,	07	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth	Meet, PPT

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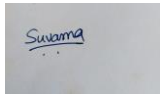
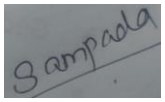
	Standard Client0Server Protocols: World wide-web and HTTP, FTP, Electronic mail, Telnet, Secured Shell, Domain name system.	05	Edition 2, Computer Networks Andrew Tanenbaum Pearson Fifth 2013, TCP/IP Protocol Suite Behrouz A. Forouzan Tata McGraw Hill Fourth Edition 2010	Meet, PPT
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: IT

CLASS: SY BSc IT. DIV-C SEMESTER: SEM 3 MONTH:JUL-OCT ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

1. To have a broad understanding of database concepts and database management system software
2. To have a high-level understanding of major DBMS components and their function
3. To be able to model an application's data requirements using conceptual modeling tools like ER diagrams and design database schemas based on the conceptual model.
4. To be able to write SQL commands to create tables and indexes, insert/update/delete data, and query data in a relational DBMS.
5. To be able to program a data-intensive application using DBMS APIs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 DBMS UNIT 1	Introduction to Databases and Transactions What is database system, purpose of database system, view of data, relational databases, database architecture, transaction management.	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	POWER POINT PRESENTATION
	Data Models The importance of data models, Basic building blocks, Business rules, The evolution of data models, Degrees of data abstraction.	4		
	Database Design, ER Diagram and Unified Modelling Language Database design and ER Model: overview, ER Model, Constraints, ER Diagrams, ERD Issues, weak entity sets, Codd's rules, Relational Schemas, Introduction to UML	4		
	Relational database model: Logical view of data, keys, integrity rules,	2		POWER POINT PRESENTATION

UNIT 2	Relational Database design: features of good relational database design, atomic domain and Normalization (1NF, 2NF, 3NF, BCNF).	3	DATABASE SYSTEM AND CONCEPTS BY H KORTH	
	Relational Algebra and Calculus Relational algebra: introduction, Selection and projection, set operations, renaming, Joins, Division, syntax, semantics	3		
	Operators, grouping and ungrouping, relational comparison	2		
	Calculus: Tuple relational calculus, Domain relational Calculus, calculus vs algebra, computational capabilities	2		
UNIT 3	Constraints, Views and SQL Constraints, types of constrains, Integrity constraints,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	POWER POINT PRESENTATION
	Views: Introduction to views, data independence, security, updates on views, comparison between tables and views	4		
	SQL: data definition, aggregate function, Null Values, nested sub queries, Joined relations. Triggers	4		
UNIT 4	Transaction management and Concurrency Control Transaction management: ACID properties, serializability and concurrency control,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	POWER POINT PRESENTATION
	Lock based concurrency control (2PL, Deadlocks),Time stamping methods,	4		
	Optimistic methods, database recovery management.	4		
UNIT 5	PL-SQL: Beginning with PL / SQL, Identifiers and Keywords, Operators, Expressions, Sequences	4	PROGRAMMING WITH PL/SQL FOR BEGINNERS BY H. DAND,R. PATIL	POWER POINT PRESENTATION
	,Control Structures, Cursors and Transaction,	4		
	Collections and composite data types, Procedures and Functions, Exceptions Handling, Packages with Clause and Hierarchical Retrieval, Triggers.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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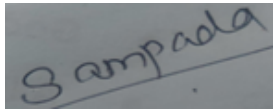

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: SYIT(C)

SEMESTER: III MONTH: MID JULY-OCT ACADEMIC YEAR: 2021-22

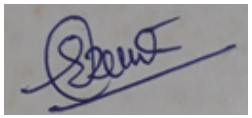
LEARNING OBJECTIVE/S:
The learners will be able to:

- Get deep knowledge about different types of data structures and also the importance of algorithm and its complexity.
- Understand the use of array and different types of linked list.
- Learn about stack, stack operations, queue and different types of it.
- Understand the use of different sorting and searching techniques.
- Learn about graph theory and different types of hashing techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT302, Data Structures, Unit I	**Introduction:** Data and Information, Data Structure, Classification of Data Structures, Primitive Data Types, Abstract Data Types, Data structure vs. File Organization, Operations on Data Structure, Algorithm, Importance of Algorithm Analysis, Complexity of an Algorithm, Asymptotic Analysis and Notations, Big O Notation, Big Omega Notation, Big Theta Notation, Rate of Growth and Big O Notation	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Array: Introduction, One Dimensional Array, Memory Representation of One Dimensional Array, Traversing, Insertion, Deletion, Searching, Sorting, Merging of Arrays, Multidimensional Arrays, Memory Representation of Two Dimensional Arrays, General MultiDimensional Arrays, Sparse Arrays, Sparse Matrix, Memory Representation of Special kind of Matrices, Advantages and Limitations of Arrays.	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint

USIT302, Data Structures, Unit III	**Stack**: Introduction, Operations on the Stack Memory Representation of Stack, Array Representation of Stack, Applications of Stack, Evaluation of Arithmetic Expression, Matching Parenthesis, infix and postfix operations, Recursion**.**	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Queue: Introduction, Queue, Operations on the Queue, Memory Representation of Queue, Array representation of queue, Linked List Representation of Queue, Circular Queue, Some special kinds of queues, Deque, Priority Queue, Application of Priority Queue, Applications of Queues.	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
USIT302, Data Structures, Unit IV	**Sorting and Searching Techniques** Bubble, Selection, Insertion, Merge Sort. Searching: Sequential, Binary, Indexed Sequential Searches, Binary Search.	04	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Tree: Tree, Binary Tree, Properties of Binary Tree, Memory Representation of Binary Tree, Operations Performed on Binary Tree, Reconstruction of Binary Tree from its Traversals, Huffman Algorithm, Binary Search Tree, Operations on Binary Search Tree, Heap, Memory Representation of Heap, Operation on Heap, Heap Sort.	05	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Advanced Tree Structures: Red Black Tree, Operations Performed on Red Black Tree, AVL Tree, Operations performed on AVL Tree, 23 Tree, B-Tree	03	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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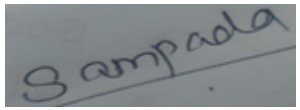

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: IT CLASS:SYIT SYSEMESTER: 3 MONTH: july-oct

ACADEMIC YEAR:2021-22

LEARNING OBJECTIVE/S:

- To understand the different data structure techniques .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Data Strucures Paper 2 Code: USIT302 Unit 2	**Linked List:** Linked List, One-way Linked List, Traversal of Linked List, Searching, Memory Allocation and De-allocation, Insertion in Linked List, Deletion from Linked List, Copying a List into Other List, Merging Two Linked Lists, Splitting a List into Two Lists, Reversing One way linked List, Circular Linked List, Applications of Circular Linked List, Two way Linked List, Traversing a Two way Linked List, Searching in a Two way linked List, Insertion of an element in Two way Linked List, Deleting a node from Two way Linked List, Header Linked List, Applications of the Linked list, Representation of Polynomials, Storage of Sparse Arrays, Implementing other Data Structures	12	An Introduction to Data Structure with Applications Jean – Paul Tremblay and Paul Sorenson Tata MacGraw Hill	Laptop
	Hashing Techniques : Hash function, Address calculation techniques, Common hashing functions Collision resolution, Linear probing, Quadratic,Double hashing, Buckethashing Deletion and rehashingCloud,	6	An Introduction to Data Structure with Applications Jean – Paul Tremblay and Paul Sorenson	Laptop

Data Strucures Paper 2 Code: USIT302 Unit 5			Tata MacGraw HillMcEwen, Hakim Cassimally	
	Graph: Introduction, Graph, Graph Terminology, Memory Representation of Graph, Adjacency Matrix Representation of Graph, Adjacency List or Linked Representation of Graph, Operations Performed on Graph, GraphTraversal, Applications of the Graph, Reachability, Shortest Path Problems, Spanning Trees.	6	An Introduction to Data Structure with Applications Jean – Paul Tremblay and Paul Sorenson Tata MacGraw Hill	Laptop

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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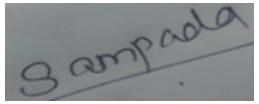

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: S.Y.B.Sc.IT SEMESTER: III MONTH: JULY-OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- Students should be able to understand the concepts of programming before actually starting to write programs.
- Students should be able to develop logic for Problem Solving.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Unit I Python Programming	**Introduction:** The Python Programming Language, History, features, Installing Python, Running Python program,	3	Think Python Allen Downey O'Reilly 1st2012	Google Meet, PPT
	Debugging : Syntax Errors, Runtime Errors, Semantic Errors, Experimental Debugging, Formal and Natural Languages, The Difference Between Brackets, Braces, and Parentheses,	3		Google Meet, PPT
	Variables and Expressions Values and Types, Variables, Variable Names and Keywords, Type conversion, Operators and Operands, Expressions, Interactive Mode and Script Mode, Order of Operations.	3		Google Meet, PPT
	Conditional Statements: if, if-else, nested if –else	1		Google Meet, PPT
	Looping: for, while, nested loops Control	1		Google Meet, PPT
	statements: Terminating loops, skipping specific conditions	1		Google Meet, PPT
Paper-I	**Functions:** Function Calls, Type Conversion Functions, Math Functions, Composition, Adding New Functions,	2	Think Python Allen Downey	Google Meet, PPT

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Unit II Python Programming	Definitions and Uses, Flow of Execution, Parameters and Arguments, Variables and Parameters Are Local, Stack Diagrams, Fruitful Functions and Void Functions, Why Functions?	3	O'Reilly 1st2012	Google Meet, PPT
	Importing with from, Return Values, Incremental Development, Composition, Boolean Functions, More Recursion, Leap of Faith, Checking Types	3		Google Meet, PPT
	Strings: A String Is a Sequence, Traversal with a for Loop, String Slices, Strings Are Immutable, Searching, Looping and Counting, String Methods, The in Operator, String Comparison, String Operations	4		Google Meet, PPT
Paper-I Unit III Python Programming	**Lists:** Values and Accessing Elements, Lists are mutable, traversing a List, Deleting elements from List, Built-in List Operators, Concatenation, Repetition, In Operator, Built-in List functions and methods	4	Think Python Allen Downey O'Reilly 1st2012	Google Meet, PPT
	Tuples and Dictionaries: Tuples, Accessing values in Tuples, Tuple Assignment, Tuples as return values, Variable-length argument tuples, Basic tuples operations, Concatenation, Repetition, in Operator, Iteration, Built-in Tuple Functions Creating a Dictionary, Accessing Values in a dictionary, Updating Dictionary, Deleting Elements from Dictionary, Properties of Dictionary keys, Operations in Dictionary, Built-In Dictionary Functions, Built-in Dictionary Methods	4		Google Meet, PPT
	Files: Text Files, The File Object Attributes, Directories	2		Google Meet, PPT
	Exceptions: Built-in Exceptions, Handling Exceptions, Exception with Arguments, User-defined Exceptions	2		Google Meet, PPT
Paper-I Unit IV Python	**Regular Expressions –** Concept of regular expression, various types of regular expressions, using match function.	2	Think Python Allen Downey O'Reilly 1st2012	Google Meet, PPT
	Classes and Objects: Overview of OOP (Object Oriented Programming), Class Definition, Creating Objects, Instances as Arguments, Instances as return values, Built-in Class Attributes, Inheritance, Method Overriding, Data Encapsulation, Data Hiding	4		Google Meet, PPT

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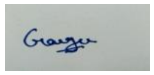
Programming	**Multithreaded Programming:** Thread Module, creating a thread, synchronizing threads, multithreaded priority queue	3		Blackboard, Chalk
	Modules: Importing module, Creating and exploring modules, Math module, Random module, Time module	3		Blackboard, Chalk
Paper-I Unit V Python Programming	**Creating the GUI Form and Adding Widgets:** **Widgets:** Button, Canvas, Checkbutton, Entry, Frame, Label, Listbox, Menubutton, Menu, Message, Radiobutton, Scale, Scrollbar, text, Toplevel, Spinbox, PanedWindow, LabelFrame, tkMessagebox. Handling Standard attributes and Properties of Widgets.	4	Think Python Allen Downey O'Reilly 1st2012	Blackboard, Chalk
	Layout Management: Designing GUI applications with proper Layout Management features.	2		Blackboard, Chalk
	Look and Feel Customization: Enhancing Look and Feel of GUI using different appearances of widgets.	2		Blackboard, Chalk
	Storing Data in Our MySQL Database via Our GUI : Connecting to a MySQL database from Python, Configuring the MySQL connection, Designing the Python GUI database, Using the INSERT command, Using the UPDATE command, Using the DELETE command, Storing and retrieving data from MySQL database.	4		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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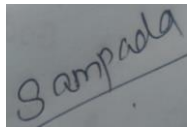

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: INFORMATION TECHNOLOGY CLASS: TYIT-A

SEMESTER: V MONTH: JULY-OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the concepts of open source operating system Linux, command line working, managing soft wares on Linux .
- Develop logic for connecting to network, giving permissions to users.
- Be familiar about the basic file sharing, setting iptables in linux .
- Apply the problem solving skills on high availability of cluster, installation of servers, bash shell scripting.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT505, Unit 1, Linux System Administration	Introduction to Red Hat Enterprise Linux: Linux, Open Source and Red Hat, Origins of Linux, Distributions, Duties of Linux System Administrator.	02	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
	Command Line: Working with the Bash Shell, Getting the Best of Bash, Useful Bash Key Sequences, Working with Bash History, Performing Basic File System Management Tasks, Working with Directories, Piping and Redirection, Finding Files.	03	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
	System Administration Tasks: Performing Job Management Tasks, System and Process Monitoring and Management, Managing Processes with ps, Sending Signals to Processes with	04	Red Hat Enterprise Linux6	Power Point Presentation

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	the kill Command, using top to Show Current System Activity, Managing Process Niceness, Scheduling Jobs, Mounting Devices, Working with Links, Creating Backups, Managing Printers, Setting Up System Logging, Setting Up Rsyslog, Common Log Files, Setting Up Logrotate		Administration by Sander van Vugt	
	Managing Software: Understanding RPM, Understanding Meta Package Handlers, Creating Your Own Repositories, Managing Repositories,Installing Software with Yum, Querying Software, Extracting Files from RPM Packages	03	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
USIT505, Unit 2, Linux System Administration	Configuring and Managing Storage: Understanding Partitions and Logical Volumes, Creating Partitions, Creating File Systems, File Systems Overview, Creating File Systems, Changing File System Properties, Checking the File System Integrity, Mounting File Systems Automatically Through fstab, Working with Logical Volumes, Creating Logical Volumes, Resizing Logical Volumes, Working with Snapshots, Replacing Failing Storage Devices, Creating Swap Space, Working with Encrypted Volumes	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
	Connecting to the Network: Understanding NetworkManager, Working with Services and Runlevels, Configuring the Network with NetworkManager, Working with system-config-network, NetworkManager Configuration Files, Network Service Scripts, Networking from the Command Line, Troubleshooting Networking, Setting Up IPv6, Configuring SSH, Enabling the SSH Server, Using the SSH Client, Using PuTTY on Windows Machines, Configuring Key-Based SSH Authentication, Using Graphical Applications with SSH, Using SSH Port Forwarding, Configuring VNC Server Access	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation

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	Working with Users, Groups, and Permissions: Managing Users and Groups, Commands for User Management, Managing Passwords, Modifying and Deleting User Accounts, Configuration Files, Creating Groups, Using Graphical Tools for User, and Group Management, Using External Authentication Sources, the Authentication Process, sssd, nsswitch, Pluggable Authentication Modules, Managing Permissions, the Role of Ownership, Basic Permissions: Read, Write, and Execute, Advanced Permissions, Working with Access Control Lists, Setting Default Permissions with umask, Working with Attributes.	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
USIT505, Unit 3, Linux System Administration	Securing Server with iptables: Understanding Firewalls, Setting Up a Firewall with system-config-firewall, Allowing Services, Trusted Interfaces, Masquerading, Configuration Files, Setting Up a Firewall with iptables, Tables, Chains, and Rules, Composition of Rule, Configuration Example, Advanced iptables Configuration, Configuring Logging, The Limit Module, Configuring NAT	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
	Setting Up Cryptographic Services: Introducing SSL, Proof of Authenticity: The Certificate Authority, Managing Certificates with openssl, Creating a Signing Request, Working with GNU Privacy Guard, Creating GPG Keys, Key Transfer, Managing GPG Keys, Encrypting Files with GPG, GPG Signing, Signing RPM Files	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
	Configuring Server for File Sharing: What is NFS? Advantages and Disadvantages of NFS, Configuring NFS4, Setting Up NFSv4, Mounting an NFS Share, Making NFS Mounts Persistent, Configuring Automount, Configuring Samba, Setting Up a Samba File Server, Samba Advanced Authentication Options, Accessing Samba Shares, Offering FTP Services	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation

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USIT505, Unit 4, Linux System Administration	Configuring DNS and DHCP:Introduction to DNS, The DNS Hierarchy, DNS Server Types, The DNS Lookup Process, DNS Zone Types, Setting Up a DNS Server, Setting Up a Cache-Only Name Server, Setting Up a Primary Name Server, Setting Up a Secondary Name Server, Understanding DHCP, Setting Up a DHCP Server	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
	Setting Up a Mail Server: Using the Message Transfer Agent, the Mail Delivery Agent, the Mail User Agent, Setting Up Postfix as an SMTP Server, Working with Mutt, Basic Configuration, Internet Configuration, Configuring Dovecot for POP and IMAP	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
	Configuring Apache on Red Hat Enterprise Linux: Configuring the Apache Web Server, creating a Basic Website, Understanding the Apache Configuration Files, Apache Log Files, Working with Virtual Hosts, Securing the Web Server with TLS Certificates, Configuring Authentication, Setting Up Authentication with .htpasswd, Configuring LDAP Authentication, Setting Up MySQL	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
USIT505, Unit 5, Linux System Administration	Introducing Bash Shell Scripting: Introduction, Elements of a Good Shell Script, Executing the Script, Working with Variables and Input, Understanding Variables, Variables, Subshells, and Sourcing, Working with Script Arguments, Asking for Input, Using Command Substitution, Substitution Operators, Changing Variable Content with Pattern Matching, Performing Calculations, Using Control Structures, Using if...then...else, Using case, Using while, Using until, Using for, Configuring booting with GRUB.	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
	High-Availability Clustering: High-Availability Clustering, The Workings of High Availability, High-Availability Requirements, Red Hat High-Availability Add-on Software, Components,	04	Red Hat Enterprise Linux6	Power Point Presentation

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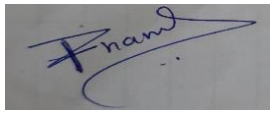
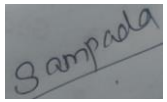
	Configuring Cluster-Based Services, Setting Up Bonding, Setting Up Shared Storage, Installing the Red Hat High Availability Add-On, Building the Initial State of the Cluster, Configuring Additional Cluster Properties, Configuring a Quorum Disk, Setting Up Fencing, Creating Resources and Services, Troubleshooting a Nonoperational Cluster, Configuring GFS2 File Systems		Administration by Sander van Vugt	
	Setting Up an Installation Server: Configuring a Network Server as an Installation Server, Setting Up a TFTP and DHCP Server for PXE Boot, Installing the TFTP Server, Configuring DHCP for PXE Boot, Creating the TFTP PXE Server Content, creating a Kickstart File, Using a Kickstart File to Perform an Automated, Installation, Modifying the Kickstart File with, system-config-kickstart, Making Manual Modifications to the Kickstart File	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. **Advanced Web Programming** DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: July to Nov ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: To learn the fundamental aspects of the JavaScript programming language and how to program using document object model application programming

The learners will be able to :

- To understand .Net framework and its run time environment.
- To gain basic knowledge of C# language with its object oriented concept.
- To gain the knowledge of namespaces and assemblies.
- To understand fundamentals of web application development.
- To make use of different server controls like validation, navigation and rich server control.
- To understand back hand connectivity with SQL using ADO .Net Frame.
- To use data binding with data controls like grid view, details view and form view.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT503 **Advanced Web Programming** UNIT-1	**Introducing .NET**: The .NET Framework, C#, VB, and the .NET Languages, The Common Language Runtime, The .NET Class Library. **The C# Language**: C# Language Basics, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods. **Types, Objects, and Namespaces**: The Basics About Classes, Building a Basic Class, Value Types and Reference	12	1.Beginning Visual C# 2010 2.Murach's ASP.NET 4 Web Programming with C# 2010, 3. Beginning ASP.NET 4 in C# and VB,	PPT, Google meets.

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	Types, Understanding Namespaces and Assemblies, Advanced Class Programming.			
USIT503 **Advanced Web Programming** UNIT-2	**Web Form Fundamentals**: Writing Code, Using the Code-Behind Class, Adding Event Handlers, Understanding the Anatomy of an ASP.NET Application, Introducing Server Controls, Using the Page Class, Using Application Events, Configuring an ASP.NET Application. **Form Controls**: Stepping Up to Web Controls, Web Control Classes, List Controls, Table Controls, Web Control Events and AutoPostBack, Validation, Understanding Validation, Using the Validation Controls, Rich Controls, The Calendar, The AdRotator, Pages with Multiple Views, User Controls and Graphics, User Controls, Dynamic Graphics, The Chart Control, Website Navigation: Site Maps, URL Mapping and Routing, The SiteMapPath Control, The TreeView Control, The Menu Control.	12	1.Beginning Visual C# 2010 2.Murach's ASP.NET 4 Web Programming with C# 2010, 3. Beginning ASP.NET 4 in C# and VB	PPT, Google meets.
USIT503 **Advanced Web Programming** UNIT-4	**ADO.NET Fundamentals**: Understanding Databases, Configuring Your Database, Understanding SQL Basics, Understanding the Data Provider Model, Using Direct Data Access, Using Disconnected Data Access. **Data Binding**: Introducing Data Binding, Using Single-Value Data Binding, Using Repeated-Value Data Binding, Working with Data Source Controls, **The Data Controls**: The GridView, Formatting the GridView, selecting a GridView Row, Editing with the GridView, Sorting and Paging the GridView, Using GridView	12	1.Beginning Visual C# 2010 2.Murach's ASP.NET 4 Web Programming with C# 2010, 3. Beginning ASP.NET 4 in C# and VB	PPT, Google meets.

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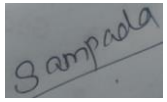
	Templates, The DetailsView and FormView			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sharvari Patil DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc.I.T. SEMESTER: V MONTH: June to October ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: To learn the fundamental aspects of the JavaScript programming language and how to program using document object model application programming

The learners will be able to :

- To understand .Net framework and its run time environment.
- To gain basic knowledge of C# language with its object oriented concept.
- To gain the knowledge of namespaces and assemblies.
- To understand fundamentals of web application development.
- To make use of different server controls like validation, navigation and rich server control.
- To understand back hand connectivity with SQL using ADO .Net Frame.
- To use data binding with data controls like grid view, details view and form view.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT503 Advance Web Programming UNIT- III	**Error Handling, Logging, and Tracing** : Avoiding Common Errors, Understanding Exception Handling, Handling Exceptions, Throwing Your Own Exceptions, Using Page Tracing	5	C# 2015 Murach‟s ASP.NET 4.6 Web Programming in C#2015 Beginning Visual C# 2010	PPT.
	State Management : Understanding the Problem of State, Using View State, Transferring Information Between Pages, Using Cookies, Managing Session State, Configuring Session State, Using Application State, Comparing State Management Options	4		, PPT.

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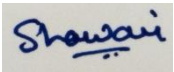
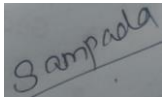
	Styles, Themes, and Master Pages : Styles, Themes, Master Page Basics, Advanced Master Pages,	3		PPT
USIT503 Advance Web Programming UNIT - V	**XML**: XML Explained, The XML Classes, XML Validation, XML Display and Transforms. .	3	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	PPT.
	Security Fundamentals: Understanding Security Requirements, Authentication and Authorization, Forms Authentication, Windows Authentication.	4		PPT.
	ASP.NET AJAX: Understanding Ajax, Using Partial Refreshes, Using Progress Notification, Implementing Timed Refreshes, Working with the ASP.NET AJAX Control Toolkit	5		PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Yashvant Keshav Patil College of Commerce
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: TYIT (A)

SEMESTER: V MONTH: MID JULY-OCT ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the Java EE Architecture, Server and Containers.
- Describe the different servlet API and lifecycle of servlet.
- Get the difference between cookies, session and request dispatcher.
- Understand the use of tag library, naming directory, interceptors.
- Familiar with java beans, JPA, hibernate and JSP.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506, Enterprise Java Unit I	**Understanding Java EE:** What is an Enterprise Application? What is java enterprise edition? Java EE Technologies, Java EE evolution, Glassfish server	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Java EE Architecture, Server and Containers: Types of System Architecture, Java EE Server, Java EE Containers.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint

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	Introduction to Java Servlets: The Need for Dynamic Content, Java Servlet Technology, Why Servlets? What can Servlets do?	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Servlet API and Lifecycle: Java Servlet API, The Servlet Skeleton, The Servlet Life Cycle, A Simple Welcome Servlet	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Working With Servlets: Getting Started, Using Annotations Instead of Deployment Descriptor.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Working with Databases: What Is JDBC? JDBC Architecture, Accessing Database, The Servlet GUI and Database Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
USIT506, Enterprise Java Unit II	**Request Dispatcher:** Resquestdispatcher Interface, Methods of Requestdispatcher, Requestdispatcher Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	COOKIES: Kinds Of Cookies, Where Cookies Are Used? Creating Cookies Using Servlet, Dynamically Changing The Colors Of A Page	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	SESSION: What Are Sessions? Lifecycle Of Http Session, Session Tracking With Servlet API, A Servlet Session Example	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint

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	Working With Files: Uploading Files, Creating an Upload File Application, Downloading Files, Creating a Download File Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Working With Non-Blocking I/O: Creating a Non-Blocking Read Application, Creating The Web Application, Creating Java Class, Creating Servlets, Retrieving The File, Creating index.jsp	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
USIT506, Enterprise Java Unit III	**Introduction To Java Server Pages:** Why use Java Server Pages? Disadvantages Of JSP, JSP v\s Servlets, Life Cycle of a JSP Page, How does a JSP function? How does JSP execute? About Java Server Pages	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Getting Started With Java Server Pages: Comments, JSP Document, JSP Elements, JSP GUI Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Action Elements: Including other Files, Forwarding JSP Page to Another Page, Passing Parameters for other Actions, Loading a Javabean.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Implicit Objects, Scope And El Expressions: Implicit Objects, Character Quoting Conventions, Unified Expression Language [Unified El], Expression Language.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Java Server Pages Standard Tag Libraries: What is wrong in using JSP Scriptlet Tags? How JSTL Fixes JSP Scriptlet's Shortcomings? Disadvantages Of JSTL, Tag Libraries.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

USIT506, Enterprise Java Unit IV	**Introduction To Enterprise Javabeans:** Enterprise Bean Architecture, Benefits of Enterprise Bean, Types of Enterprise Bean, Accessing Enterprise Beans, Enterprise Bean Application, Packaging Enterprise Beans	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Working With Session Beans: When to use Session Beans? Types of Session Beans, Remote and Local Interfaces, Accessing Interfaces, Lifecycle of Enterprise Beans, Packaging Enterprise Beans, Example of Stateful Session Bean, Example of Stateless Session Bean, Example of Singleton Session Beans.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Working with Message Driven Beans: Lifecycle of a Message Driven Bean, Uses of Message Driven Beans, The Message Driven Beans Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Interceptors: Request And Interceptor, Defining An Interceptor, AroundInvoke Method, Applying Interceptor, Adding An Interceptor To An Enterprise Bean, Build and Run the Web Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Java Naming and Directory Interface: What is Naming Service? What is Directory Service? What is Java Naming and Directory interface? Basic Lookup, JNDI Namespace in Java EE, Resources and JNDI, Datasource Resource Definition in Java EE.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
USIT506, Enterprise Java Unit V	**Persistence, Object/Relational Mapping And JPA:** What is Persistence? Persistence in Java, Current Persistence Standards in Java, Why another Persistence Standards? Object/Relational Mapping,	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Introduction to Java Persistence API: The Java Persistence API, JPA, ORM, Database and the Application, Architecture of JPA, How JPA Works? JPA Specifications.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint

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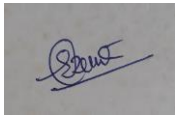
	Writing JPA Application: Application Requirement Specifications, Software Requirements, The Application Development Approach, Creating Database And Tables in Mysql, Creating a Web Application, Adding the Required Library Files, Creating a Javabean Class, Creating Persistence Unit [Persistence.Xml], Creating JSPS, The JPA Application Structure, Running The JPA Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Introduction to Hibernate: What is Hibernate? Why Hibernate? Hibernate, Database and The Application, Components of Hibernate, Architecture of Hibernate, How Hibernate Works?	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Writing Hibernate Application: Application Requirement Specifications, Software Requirements, The Application Development Approach, Creating Database and Tables in Mysql, Creating a Web Application, Adding The Required Library Files, Creating a Javabean Class, Creating Hibernate Configuration File, Adding a Mapping Class, Creating JSPS, Running The Hibernate Application.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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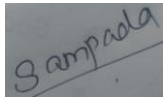

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: TYIT SEMESTER: V MONTH: JULY to OCT ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

To determine the market perspective of IoT

To compare and contrast the use of devices, gateways and Data management in IoT

To illustrate the applications of IoT in Industrial Automation and identify Real world design constraints.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 Internet Of Things Unit 3	**Prototyping the Physical Design:** Preparation, Sketch, Iterate, and Explore, Nondigital Methods, Laser Cutting, Choosing a Laser Cutter, Software, Hinges and Joints, 3D Printing, Types of 3D Printing, Software, CNC Milling, Repurposing/Recycling. Prototyping and Presence Protocol, Constrained Application Protocol.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet
	Online Components: Getting Started with an API, Mashing Up APIs, Scraping, Legalities, writing a New API, Clockodillo, Security, implementing the API, Using Curl to Test, Going Further, Real-Time Reactions, Polling, Comet, Other Protocols, MQ Telemetry Transport, Extensible Messaging	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet
	Techniques for Writing Embedded Code: Memory	4	Designing the Internet of	Laptop, PPT, Google Meet

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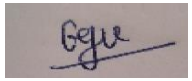
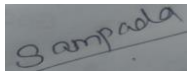
Paper-02 Internet Of Things Unit 4	Management, 12 8 Types of Memory, Making the Most of Your RAM, Performance and Battery Life, Libraries, Debugging.		Things Adrian McEwen, Hakim Cassimally	
	Business Models: A Short History of Business Models, Space and Time, From Craft to Mass Production, The Long Tail of the Internet, Learning from History, The Business Model Canvas, Who Is the Business Model For? Models, Make Thing, Sell Thing, Subscriptions, Customisation, be a Key Resource, Provide Infrastructure: Sensor Networks, take a Percentage, Funding an Internet of Things Startup, Hobby Projects and Open Source, Venture Capital, Government Funding, Crowdfunding, Lean Startups.	8	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet
Paper-02 Internet Of Things Unit 5	**Moving to Manufacture:** What Are You Producing? Designing Kits, Designing Printed circuit boards, Software Choices, The Design Process, Manufacturing Printed Circuit Boards, Etching Boards, Milling Boards. Assembly, Testing, Mass-Producing the Case and Other Fixtures, Certification, Costs, Scaling Up Software, Deployment, Correctness and Maintainability, Security, Performance, User Community.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet
	Ethics: Characterizing the Internet of Things, Privacy, Control, Disrupting Control,Crowdsourcing, Environment, Physical Thing, Electronics, Internet Service, Solutions, The Internet of Things as Part of the Solution, Cautious Optimism, The Open Internet of Things Definition.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: IT CLASS:TYIT SYSEMESTER: 5 MONTH: july-Sept

ACADEMIC YEAR:2021-22

LEARNING OBJECTIVE/S:

- To determine the market perspective of IoT
- To compare and contrast the use of devices, gateways and Data management in IoT
- To illustrate the applications of IoT in Industrial Automation and identify Real world design constraints.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Internet Of Things Paper 2 Code: USIT502 Unit 1	**The Internet of Things: An Overview**: The Flavour of the Internet of Things, The "Internet" of "Things", The Technology of the Internet of Things, Enchanted Objects, Who is Making the Internet of Things?	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop
	Design Principles for Connected Devices: Calm and Ambient Technology, Magic as Metaphor, Privacy, Keeping Secrets, Whose Data Is It Anyway? Web Thinking for Connected Devices, Small Pieces, Loosely Joined, First-Class Citizens on The Internet, Graceful Degradation, Affordances.	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop
	Internet Principles: Internet Communications: An Overview, IP, TCP, The IP Protocol Suite (TCP/IP), UDP, IP Addresses, DNS, Static IP Address Assignment, Dynamic IP Address Assignment,	4		Laptop

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	IPv6, MAC Addresses, TCP and UDP Ports, An Example: HTTP Ports, Other Common Ports,Application Layer Protocols, HTTP,HTTPS: Encrypted HTTP, Other Application Layer Protocols		Designing the Internet of Things Adrian McEwen, Hakim Cassimally	
Internet Of Things Paper 2 Code: USIT502 Unit 2	**Thinking About Prototyping:** Sketching, Familiarity, Costs versus Ease of Prototyping, Prototypes and Production, Changing Embedded Platform, Physical Prototypes and Mass Personalisation, climbing into the Cloud, Open Source versus Closed Source, Why Closed? Why Open? Mixing Open and Closed Source, Closed Source for Mass Market Projects, Tapping into the Community.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop
	Prototyping Embedded Devices: Electronics, Sensors, Actuators, Scaling Up the Electronics, Embedded Computing Basics, Microcontrollers, System-on-Chips, Choosing Your Platform, Arduino, developing on the Arduino, Some Notes on the Hardware, Openness, Raspberry Pi, Cases and Extension Boards, Developing on the Raspberry Pi, Some Notes on the Hardware, Openness.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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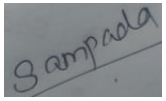
SIGNATURE OF THE H.O.D. 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: TYBSc(IT) Div:A SEMESTER: V MONTH: JULY-OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the importance of software project management, project evaluation and programme management was easy,to provide knowledge of step wise planning and monitoring, understand the importance of becoming a team and decision making and project closeout.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: USIT501 unit:1, Title: Software Project Management	**Introduction to Software Project Management**:Introduction, Why is Software Project Management Important? What is a Project? Software Projects versus Other Types of Project, Contract Management and Technical Project Management, Activities Covered by Software Project Management, Plans, Methods and Methodologies, Some Ways of Categorizing Software Projects, Project Charter, Stakeholders, Setting Objectives, The Business Case, Project Success and Failure, What is Management? Management Control, Project Management Life Cycle, Traditional versus Modern Project Management Practices.	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Online mode Google meet Google slides.

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	Project Evaluation and Programme Management: Introduction, Business Case, Project Portfolio Management, Evaluation of Individual Projects, Cost–benefit Evaluation Techniques, Risk Evaluation, Programme Management, Managing the Allocation of Resources within Programmes, Strategic Programme Management, Creating a Programme, Aids to Programme Management, Some Reservations about Programme Management, Benefits Management.	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Online mode Google meet Google slides.
	An Overview of Project Planning:Introduction to Step Wise Project Planning, Step 0: Select Project, Step 1: Identify Project Scope and Objectives, Step 2: Identify Project Infrastructure, Step 3: Analyse Project Characteristics, Step 4: Identify Project Products and Activities, Step 5: Estimate Effort for Each Activity, Step 6: Identify Activity Risks, Step 7: Allocate Resources, Step 8: Review/Publicize Plan, Steps 9 and 10: Execute Plan/Lower Levels of Planning	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Online mode Google meet Google slides.

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Paper: USIT501 unit:4 Title: Software Project Management	**Monitoring and Control**: Introduction, Creating the Framework, Collecting the Data, Review, Visualizing Progress, Cost Monitoring, Earned Value Analysis, Prioritizing Monitoring, Getting the Project Back to Target, Change Control, Software Configuration Management (SCM).	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Online mode Google meet Google slides.
	Managing Contracts: Introduction, Types of Contract, Stages in Contract Placement, Typical Terms of a Contract, Contract Management, Acceptance.	3	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Online mode Google meet Google slides.
	Managing People in Software Environments: Introduction, Understanding Behaviour, Organizational Behaviour: A Background, Selecting the Right Person for the Job, Instruction in the Best Methods, Motivation, The Oldham–Hackman Job Characteristics Model, Stress, Stress Management, Health and Safety, Some Ethical and Professional Concerns.	5	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Online mode Google meet Google slides.
Paper: USIT501 unit:5, Title:	**Working in Teams:** Introduction, becoming a Team, Decision Making, Organization and Team Structures, Coordination Dependencies, Dispersed and Virtual Teams, Communication Genres, Communication Plans, Leadership.	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Online mode Google meet Google slides.

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Software Project Management	**Software Quality:** Introduction, The Place of Software Quality in Project Planning, Importance of Software Quality, Defining Software Quality, Software Quality Models, ISO 9126, Product and Process Metrics, Product versus Process Quality Management, Quality Management Systems, Process Capability Models, Techniques to Help Enhance Software Quality, Testing, Software Reliability, Quality Plans.	5	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Online mode Google meet Google slides.
	Project Closeout: Introduction, Reasons for Project Closure, Project Closure Process, Performing a Financial Closure, Project Closeout Report.	3	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Online mode Google meet Google slides.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUVARNA S KANNAV DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:T.Y.BSC(I.T) DIV-A SEMESTER: **V** MONTH:JULy-OCTOBER ACADEMIC YEAR: 2021-2022

SUBJECT:SOFTWARE PROJECT MANAGEMENT

LEARNING OBJECTIVE/S:
The learners will be able to : Apply project management concepts and techniques to an IT project. Identify issues that could lead to IT project success or failure. Explain project management in terms of the software development process. Describe the responsibilities of IT project managers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Software Project Management USIT501 Unit-2	**Selection of an Appropriate Project Approach:** Introduction, Build or Buy? Choosing Methodologies and Technologies, Software Processes and Process Models, Choice of Process Models, Structure versus Speed of Delivery, The Waterfall Model, The Spiral Model, Software Prototyping, Other Ways of Categorizing Prototypes, Incremental Delivery, Atern/Dynamic Systems Development Method, Rapid Application Development, Agile Methods, Extreme Programming (XP), Scrum, Lean Software Development, Managing Iterative Processes, Selecting the Most Appropriate Process Model.	5	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation, google classroom, google meet
	Software Effort Estimation: Introduction, where are the Estimates Done? Problems with Over- and Under-Estimates, The	5		

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	Basis for Software Estimating, Software Effort Estimation Techniques, Bottom up Estimating, The Top-down Approach and Parametric Models, Expert Judgement, Estimating by Analogy, Albrecht Function Point Analysis, Function Points Mark II, COSMIC Full Function Points, COCOMO II: A Parametric Productivity Model, Cost Estimation, Staffing Pattern, Effect of Schedule Compression, Capers Jones Estimating Rules of Thumb.			
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**10**		
Software Project Management USIT501 Unit-3	**Activity Planning:** Introduction, Objectives of Activity Planning, When to Plan, Project Schedules, Projects and Activities, Sequencing and Scheduling Activities, Network Planning Models, Formulating a Network Model, Adding the Time Dimension, The Forward Pass, Backward Pass, Identifying the Critical Path, Activity Float, Shortening the Project Duration, Identifying Critical Activities, Activity-on-Arrow Networks.	4	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation, google classroom, google meet
	Risk Management: Introduction, Risk, Categories of Risk, Risk Management Approaches, A Framework for Dealing with Risk, Risk Identification, Risk Assessment, Risk Planning, Risk Management, Evaluating Risks to the Schedule, Boehm"s Top 10 Risks and Countermeasures, Applying the PERT Technique, Monte Carlo Simulation, Critical Chain Concepts.	4		
	Resource Allocation: Introduction, Nature of Resources, Identifying Resource Requirements, Scheduling Resources, Creating Critical Paths, Counting the Cost, Being Specific, Publishing the Resource Schedule, Cost Schedules, Scheduling Sequence.	3		

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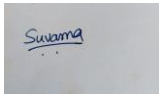
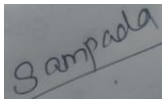
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**11**		





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande. DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc.I.T. SEMESTER: V MONTH: June to October ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: To learn the fundamental aspects of the JavaScript programming language and how to program using document object model application programming

The learners will be able to :

- To understand .Net framework and its run time environment.
- To gain basic knowledge of C# language with its object oriented concept.
- To gain the knowledge of namespaces and assemblies.
- To understand fundamentals of web application development.
- To make use of different server controls like validation, navigation and rich server control.
- To understand back hand connectivity with SQL using ADO .Net Frame.
- To use data binding with data controls like grid view, details view and form view.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT503 Advance Web Programming UNIT-I	**Introducing .NET**: The .NET Framework, C#, VB, and the .NET Languages, The Common Language Runtime, The .NET Class Library.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning	PPT.
	The C# Language: C# Language Basics, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods.	4		PPT.
	Types, Objects, and Namespaces: The Basics About Classes, Building a Basic Class, Value Types and Reference Types,	4		PPT.

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	Understanding Namespaces and Assemblies, Advanced Class Programming.		Visual C# 2010	
USIT503 Advance Web Programming UNIT-II	**Web Form Fundamentals**: Writing Code, Using the Code-Behind Class, Adding Event Handlers, Understanding the Anatomy of an ASP.NET Application, Introducing Server Controls, Using the Page Class, Using Application Events, Configuring an ASP.NET Application.	6	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	PPT.
	Form Controls: Stepping Up to Web Controls, Web Control Classes, List Controls, Table Controls, Web Control Events and AutoPostBack, Validation, Understanding Validation, Using the Validation Controls, Rich Controls, The Calendar, The AdRotator, Pages with Multiple Views, User Controls and Graphics, User Controls, Dynamic Graphics, The Chart Control, Website Navigation: Site Maps, URL Mapping and Routing, The SiteMapPath Control, The TreeView Control, The Menu Control.	6		
USIT503 Advance Web Programming UNIT- III	**Error Handling, Logging, and Tracing** : Avoiding Common Errors, Understanding Exception Handling, Handling Exceptions, Throwing Your Own Exceptions, Using Page Tracing	5	C# 2015 Murach"s ASP.NET 4.6 Web Programming in C#2015 Beginning Visual C# 2010	PPT.
	State Management : Understanding the Problem of State, Using View State, Transferring Information Between Pages, Using Cookies, Managing Session State, Configuring Session State, Using Application State, Comparing State Management Options	4		, PPT.
	Styles, Themes, and Master Pages : Styles, Themes, Master Page Basics, Advanced Master Pages,	3		PPT

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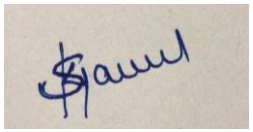
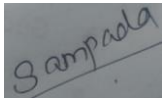
USIT503 Advance Web Programming UNIT-IV	**ADO.NET Fundamentals**: Understanding Databases, Configuring Your Database, Understanding SQL Basics, Understanding the Data Provider Model, Using Direct Data Access, Using Disconnected Data Access.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	PPT.
	Data Binding: Introducing Data Binding, Using Single-Value Data Binding, Using Repeated-Value Data Binding, Working with Data Source Controls,	4		
	The Data Controls: The GridView, Formatting the GridView, selecting a GridView Row, Editing with the GridView, Sorting and Paging the GridView, Using GridView Templates, The DetailsView and FormView	4		
USIT503 Advance Web Programming UNIT - V	**XML**: XML Explained, The XML Classes, XML Validation, XML Display and Transforms. .	3	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	PPT.
	Security Fundamentals: Understanding Security Requirements, Authentication and Authorization, Forms Authentication, Windows Authentication.	4		PPT.
	ASP.NET AJAX: Understanding Ajax, Using Partial Refreshes, Using Progress Notification, Implementing Timed Refreshes, Working with the ASP.NET AJAX Control Toolkit	5		PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Miss Shilpa James Rodrigues

DEPARTMENT: IT

CLASS: T.Y.I.T.-B (Enterprise Java)

SEMESTER: V

MONTH: July - Oct.

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S :
The learners will be able to :

- Learn advance technology of java programming.
- Develop web based java program.
- Create dynamic content providing java web application using servlets.
- Describe and explain various multi-tier software architecture framework using Java EE including the roles and responsibilities of each relevant tier
- Develop enterprise software applications using the Java EE framework.
- Understand and implements new technologies like JSP, Session, Cookies, JSTL, Hibernate etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 , Unit 1, Enterprise Java.	**Understanding Java EE:** What is an Enterprise Application? What is java enterprise edition? Java EE Technologies, Java EE evolution, Glass fish server	04	Java EE 7 For Beginners	Laptop, Google Meet, Power point presentation

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	JavaEE Architecture,Serverand Containers: Types of System Architecture, Java EE Server, Java EE Containers.		-Sharanam Shah, Vaishali Shah	
	Introduction to Java Servlets: The Need for Dynamic Content, Java Servlet Technology, Why Servlets? What can Servlets do? **Servlet API and Lifecycle:** Java Servlet API, The Servlet Skeleton, The Servlet LifeCycle, A Simple WelcomeS ervlet.	04	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	WorkingWithServlets: Getting Started, Using Annotations, Insteadof, Deployment Descriptor. **Working with Databases:** What Is JDBC? JDBC Architecture, Accessing Database, The Servlet GUI and Database Example.	04	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 , Unit 2, Enterprise Java.	**Request Dispatcher:** Resquest dispatcher Interface, Methods of Request dispatcher, Request dispatcher Application.	02	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	COOKIES: Kinds Of Cookies, Where Cookies Are Used? Creating Cookies.	02	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	SESSION: What Are Sessions? Lifecycle Of HttpSession, Session Tracking With Servlet API, AServlet Session Example	03	Java EE 7 For Beginners	Laptop, Google Meet, Power point presentation

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			-Sharanam Shah, Vaishali Shah	
	WorkingWith Files: Uploading Files, Creatingan Upload File Application, Downloading Files, Creatinga Download File Application.	02	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	Working With Non-Blocking I/O: Creatinga Non Blocking Read Application, Creating The Web Application, Creating Java Class, Creating Servlets, Retrieving The File, Creating index.jsp	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 , Unit 3 , Enterprise Java.	**Introduction To Java ServerPages:** Why use Java Server Pages? Disadvantages Of JSP, JSP v\s Servlets, Life Cycle of a JSP Page, How does a JSP function? How does JSP execute? About Java Server Pages **Getting Started With Java ServerPages:** Comments, JSP Document, JSP Elements, JSP GUI Example.	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	Action Elements: Including other Files, Forwarding JSP Page to Another Page, Passing Parameters for other Actions, Loadinga Javabean.	02	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation

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	Implicit Objects, ScopeAnd ElExpressions: Implicit Objects, Character Quoting Conventions, Unified Expression Language[UnifiedEl], Expression Language.	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	Java Server Pages Standard Tag Libraries: What is wrong in using JSP Scriptlet Tags? How JSTL Fixes JSP Scriptlet's Short comings? Disadvantages Of JSTL, TagLibraries.	04	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 , Unit 4, Enterprise Java.	**Introduction To EnterpriseJavabeans:** Enterprise Bean Architecture, Benefits of Enterprise Bean, Types of EnterpriseBean, Accessing Enterprise Beans, Enterprise Bean Application, Packaging Enterprise Beans .	02	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	Working With Session Beans: When to use SessionBeans? Types of SessionBeans, Remote and Local Interfaces, Accessing Interfaces, Lifecycle of EnterpriseBeans, Packaging EnterpriseBeans, Example of Stateful SessionBean, Example of Stateless SessionBean, Example of Singleton SessionBeans.	04	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation

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	Working with Message DrivenBeans: Lifecycle of a MessageDrivenBean, Uses of MessageDrivenBeans, The Message DrivenBeansExample.	01	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	Interceptors: Request And Interceptor, Defining An Interceptor, Around Invoke Method, Applying Interceptor, Adding An Interceptor To An Enterprise Bean, Build and Run the Web Application. JNDI, Datasource Resource Definition in Java EE.	02	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	Java Naming and Directory Interface: What is Naming Service? What is Directory Service? What is Java Naming and Directory interface? Basic Lookup, JNDI Namespace in Java EE, Resources and JNDI, Datasource Resource Definition in Java EE.	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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USIT506 , Unit 5, Enterprise Java.	**Persistence, Object/Relational Mapping And JPA:** What is Persistence? Persistence in Java, Current Persistence Standards in Java,Object/RelationalMapping, **Introduction to JavaPersistence API:** The Java Persistence API, JPA,ORM, Architecture of JPA, JPA Specifications.	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	Writing JPA Application: Software Requirements, Creating Database And Tables in Mysql, Creating a WebApplication, Adding the Required Library Files, Creating aJavabean Class, Creating Persistence Unit[Persistence.Xml], Creating JSPS, The JPA Application Structure, Running The JPA Application.	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	Introduction to Hibernate: What is Hibernate? Why Hibernate? , Database and The Application, Components of Hibernate, Architecture of Hibernate, How HibernateWorks? **WritingHibernateApplication:** Requirements, TheApplication Development Approach, Creating Database and Tables in Mysql, Creating aWeb Application, Adding The Required Library Files, Creatinga JavabeanClass, Creating Hibernate Configuration File, Addinga Mapping Class, Creating JSPS, Running The Hibernate Application.	06	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Vidhya Dayanand Patil College of Arts
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: TYIT DIV-B

SEMESTER: V MONTH: JULY- OCTOBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

- Able to understand the application areas of IOT ·
- Able to realize the revolution of Internet in Mobile Devices, Cloud & Sensor Networks ·
- Able to understand building blocks of Internet of Things and characteristics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT502, Internet of Things Unit 1	The Internet of Things: An Overview: The Flavour of the Internet of Things, The "Internet" of "Things", The Technology of the Internet of Things, Enchanted Objects, Who is Making the Internet of Things?	03	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, Powerpoint
	Design Principles for Connected Devices: Calm and Ambient Technology, Magic as Metaphor, Privacy, Keeping Secrets, Whose Data Is It Anyway? Web Thinking for Connected Devices, Small Pieces, Loosely Joined, First-Class Citizens on The Internet, Graceful Degradation, Affordances.	04	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Internet Principles: Internet Communications: An Overview, IP, TCP, The IP Protocol Suite (TCP/IP), UDP, IP Addresses, DNS, Static IP Address Assignment, Dynamic IP Address Assignment, IPv6, MAC Addresses, TCP and UDP Ports, An Example: HTTP Ports, Other	03	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint

	Common Ports, Application Layer Protocols, HTTP, HTTPS: Encrypted HTTP, Other Application Layer Protocols			
USIT502, Internet of Things **Unit 2**	Thinking About Prototyping: Sketching, Familiarity, Costs versus Ease of Prototyping, Prototypes and Production, Changing Embedded Platform, Physical Prototypes and Mass Personalisation, climbing into the Cloud, Open Source versus Closed Source, Why Closed? Why Open? Mixing Open and Closed Source, Closed Source for Mass Market Projects, Tapping into the Community	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Prototyping Embedded Devices: Electronics, Sensors, Actuators, Scaling Up the Electronics, Embedded Computing Basics, Microcontrollers, System-on-Chips, Choosing Your Platform, Arduino, developing on the Arduino, Some Notes on the Hardware, Openness, Raspberry Pi, Cases and Extension Boards, Developing on the Raspberry Pi, Some Notes on the Hardware, Openness.	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
USIT502, Internet of Things **Unit 3**	Prototyping the Physical Design: Preparation, Sketch, Iterate, and Explore, Nondigital Methods, Laser Cutting, Choosing a Laser Cutter, Software, Hinges and Joints, 3D Printing, Types of 3D Printing, Software, CNC Milling, Repurposing/Recycling	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Prototyping Online Components: Getting Started with an API, Mashing Up APIs, Scraping, Legalities, writing a New API, Clockodillo, Security, implementing the API, Using Curl to Test, Going Further, Real-Time Reactions, Polling, Comet, Other Protocols, MQ Telemetry Transport, Extensible Messaging and Presence Protocol, Constrained Application Protocol.	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint

USIT502, Internet of Things **Unit 4**	Techniques for Writing Embedded Code: Memory Management, 12 8 Types of Memory, Making the Most of Your RAM, Performance and Battery Life, Libraries,Debugging.	04	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Business Models: A Short History of Business Models, Space and Time, From Craft to Mass Production, The Long Tail of the Internet, Learning from History, The Business Model Canvas, Who Is the Business Model For? Models, Make Thing, Sell Thing, Subscriptions, Customisation, be a Key Resource, Provide Infrastructure: Sensor Networks, take a Percentage, Funding an Internet of Things Startup, Hobby Projects and Open Source, Venture Capital, Government Funding, Crowdfunding, Lean Startups.	06	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
USIT502, Internet of Things **Unit 5**	Moving to Manufacture: What Are You Producing? Designing Kits, Designing Printed circuit boards, Software Choices, The Design Process, Manufacturing Printed Circuit Boards, Etching Boards, Milling Boards. Assembly, Testing, Mass-Producing the Case and Other Fixtures, Certification, Costs, Scaling Up Software, Deployment, Correctness and Maintainability, Security, Performance, User Community.	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Ethics: Characterizing the Internet of Things, Privacy, Control, Disrupting Control,Crowdsourcing, Environment, Physical Thing, Electronics, Internet Service, Solutions, The Internet of Things as Part of the Solution, Cautious Optimism, The Open Internet of Things Definition	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

Sampada

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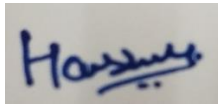
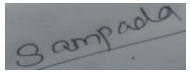


SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: mid-July to mid-October ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with various Linux OS commands
b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -I	**Introduction to Red Hat Enterprise Linux:** Linux, Open Source and Red Hat, Origins of Linux, Distributions, Duties of Linux System Administrator.	2	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Lecture through Google Slides o Google Meet
	Command Line: Working with the Bash Shell, Getting the Best of Bash, Useful Bash Key Sequences, Working with Bash History, Performing Basic File System Management Tasks, Working with Directories, Piping and Redirection, Finding Files	4		Lecture through Google Slides o Google Meet
	System Administration Tasks: Job Tasks, Process Monitoring and Management, Mounting Devices, Links, Backups, Printers, Logging, Rsyslog, Common Log Files, Setting Up Logrotate	4		Lecture through Google Slides o Google Meet
	Managing Software: Understanding RPM, Understanding Meta Package Handlers, Creating Your Own Repositories, Managing Repositories, Installing Software with Yum, Querying Software, Extracting Files from RPM Packages	2		Lecture through Google Slides o Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: mid-July to mid-October ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with various Linux OS commands
b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -II	**Configuring and Managing Storage:** Partitions, File systems, logical volumes, Snapshots, Replacing Failing Storage Devices, Swap Space, Encrypted Volumes	4	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Lecture through Google Slides on Google Meet
	Connecting to the Network: Configuring the Network with NetworkManager and command line, Services and Runlevels, system-config-network, Network Service Scripts, Troubleshooting, IPv6, Configuring SSH Server and Client, Key-Based SSH Authentication, SSH Port Forwarding, VNC Server Access	4		Lecture through PowerPoint Presentation on Google Meet
	Working with Users, Groups, and Permissions: Creating, deleting and modifying Users, Groups, user accounts with Commands and GUI , Passwords, Using External Authentication Sources, sssd, nsswitch, Pluggable Authentication Modules, Managing Permissions, the Role of Ownership, Basic Permissions: Read, Write, and Execute, Advanced Permissions, ACL, umask, Attributes	4		Lecture through PowerPoint Presentation on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: mid-July to mid-October ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with various Linux OS commands
b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -III	**Securing Server with iptables:** Understanding Firewalls, Setting Up a Firewall with system-config-firewall, Allowing Services, Trusted Interfaces, Masquerading, Configuration Files, Setting Up a Firewall with iptables, Tables, Chains, and Rules, Composition of Rule, Configuration Example, Advanced iptables Configuration, Configuring Logging, The Limit Module, Configuring NAT	4	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Lecture through PowerPoint Presentation on Google Meet
	Setting Up Cryptographic Services: Introducing SSL, Proof of Authenticity: the Certificate Authority, Managing Certificates with openssl, Creating a Signing Request, Working with GNU Privacy Guard, Creating GPG Keys, Key Transfer, Managing GPG Keys, Encrypting Files with GPG, GPG Signing, Signing RPM Files	4		Lecture through PowerPoint Presentation on Google Meet
	Configuring Server for File Sharing: What is NFS? Advantages and Disadvantages of NFS, Configuring NFS4, Setting Up NFSv4, Mounting an NFS Share, Making NFS Mounts Persistent, Configuring Automount, Configuring Samba, Setting Up a Samba File Server, Samba Advanced Authentication Options, Accessing Samba Shares, Offering FTP Services.	4		Lecture through PowerPoint Presentation on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: mid-July to mid-October ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with various Linux OS commands
b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -IV	**Configuring DNS and DHCP:** Introduction to DNS, The DNS Hierarchy, DNS Server Types, The DNS Lookup Process, DNS Zone Types, Setting Up a DNS Server, Setting Up a Cache-Only Name Server, Setting Up a Primary Name Server, Setting Up a Secondary Name Server, Understanding DHCP, Setting Up a DHCP Server	4	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Lecture through PowerPoint Presentation on Google Meet
	Setting Up a Mail Server: Using the Message Transfer Agent, the Mail Delivery Agent, the Mail User Agent, Setting Up Postfix as an SMTP Server, Working with Mutt, Basic Configuration, Internet Configuration, Configuring Dovecot for POP and IMAP	4		Lecture through PowerPoint Presentation on Google Meet
	Configuring Apache on Red Hat Enterprise Linux: Configuring the Apache Web Server, Creating a Basic Website, Understanding the Apache Configuration Files, Apache Log Files, Working with Virtual Hosts, Securing the Web Server with TLS Certificates, Configuring Authentication, Setting Up Authentication with .htpasswd, Configuring LDAP Authentication, Setting Up MySQL	4		Lecture through PowerPoint Presentation on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: mid-July to mid-October ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with various Linux OS commands
b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -V	**Introducing Bash Shell Scripting:** Introduction, Elements of a Good Shell Script, Executing the Script, Variables and Input, Subshells, Script Arguments, Asking for Input, Command Substitution, Substitution Operators, Pattern Matching, Performing Calculations, Using Control Structures- if...then...else, case, while, until, for, Configuring booting with GRUB.	6	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Lecture through PowerPoint Presentation on Google Meet
	High-Availability Clustering: Workings of High Availability-Requirements, Add-on Software, Components, Cluster-Based Services, Bonding, Shared Storage, Installing the Red Hat High Availability Add-On, Building the Initial State of the Cluster, Additional Cluster Properties, Quorum Disk, Fencing, Resources and Services, Troubleshooting a Nonoperational Cluster, Configuring GFS2 File Systems	3		Lecture through PowerPoint Presentation on Google Meet
	Setting Up an Installation Server: Network Server as an Installation Server, Installing the TFTP Server, Configuring DHCP for PXE Boot, Kickstart File, system-config-kickstart, Manual Modifications to the Kickstart File	3		Lecture through PowerPoint Presentation on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF Binita

SIGNATURE OF THE H.O.D. Sampada

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: TYBSCIT SEMESTER:V

MONTH: **JULY-OCT** ACADEMIC YEAR:**21-22**

LEARNING OBJECTIVE/S:

The learners will be able to :

Understand fundanentals of project

Be familiar with diff methods and tools used for project management

Do the project planning,scheduling,costing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT501 Software Project Management UNIT-1	**Introduction to Software Project Management**:Introduction, Whyis Software Project Management Important? What is a Project?Software Projects versus Other Types of Project, Contract Management and Technical Project Management, Activities Covered by Software Project Management, Plans, Methods and Methodologies,Some Ways of Categorizing Software Projects, Project Charter, Stakeholders, Setting Objectives, The Business Case, Project Successand Failure, What is Management? Management Control, Project Management Life Cycle, Traditional versus Modern Project Management Practices.	05	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
	Project Evaluation and Programme Management: Introduction, Business Case, Project Portfolio Management, Evaluation of Individual Projects, Cost–benefit Evaluation Techniques, Risk Evaluation, Programme Management,	04	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point

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	Managing the Allocation of Resources within Programmes, Strategic Programme Management, Creating a Programme, Aids to Programme Management, Some Reservations about Programme Management, Benefits Management.			
	An Overview of Project Planning :Introduction to Step Wise Project Planning, Step 0: Select Project, Step 1: Identify Project Scope and Objectives, Step 2: Identify Project Infrastructure, Step 3: Analyse Project Characteristics, Step 4: Identify Project Products and Activities, Step 5: Estimate Effort for Each Activity, Step 6: Identify Activity Risks, Step 7: Allocate Resources, Step 8: Review/Publicize Plan, Steps 9 and 10: Execute Plan/Lower Levels of Planning	03	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
USIT501 Software Project Management UNIT-2	**Selection of an Appropriate Project Approach:**Introduction, Build or Buy? Choosing Methodologies and Technologies, Software Processes and Process Models, Choice of Process Models, Structure versus Speed of Delivery, The Waterfall Model, The Spiral Model, Software Prototyping, Other Ways of Categorizing Prototypes, Incremental Delivery, Atern/Dynamic Systems Development Method, Rapid Application Development, Agile Methods, Extreme Programming (XP), Scrum, Lean Software Development, Managing Iterative Processes, Selecting the Most Appropriate Process Model.	06	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
	Software Effort Estimation: Introduction, Where are the Estimates Done? Problems with Over- and Under-Estimates, The Basis for Software Estimating, Software Effort Estimation Techniques, Bottomup Estimating, The Top-down Approach and Parametric Models,Expert Judgement, Estimating by Analogy, Albrecht Function Point Analysis, Function Points Mark II, COSMIC Full Function Points,COCOMO II: A Parametric Productivity Model, Cost Estimation, Staffing Pattern, Effect of	06	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point

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	Schedule Compression, Capers Jones Estimating Rules of Thumb.			
USIT501 Software Project Management UNIT-3	**Activity Planning:** Introduction, Objectives of Activity Planning,When to Plan, Project Schedules, Projects and Activities, Sequencing and Scheduling Activities, Network Planning Models, Formulating aNetwork Model, Adding the Time Dimension, The Forward Pass,Backward Pass, Identifying the Critical Path, Activity Float,Shortening the Project Duration, Identifying Critical Activities,Activity-on-Arrow Networks.	04	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
	Risk Management: Introduction, Risk, Categories of Risk, Risk Management Approaches, A Framework for Dealing with Risk, RiskIdentification, Risk Assessment, Risk Planning, Risk Management,Evaluating Risks to the Schedule, Boehm"s Top 10 Risks and Counter Measures, Applying the PERT Technique, Monte Carlo Simulation,Critical Chain Concepts	04	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
	Resource Allocation: Introduction, Nature of Resources, Identifying Resource Requirements, Scheduling Resources, Creating Critical Paths, Counting the Cost, Being Specific, Publishing the Resource Schedule, Cost Schedules, Scheduling Sequence	04	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
USIT501 Software Project Management UNIT-4	**Monitoring and Control**: Introduction, Creating the Framework, Collecting the Data, Review, Visualizing Progress, Cost Monitoring, Earned Value Analysis, Prioritizing Monitoring, Getting the Project Back to Target, Change Control, Software Configuration Management (SCM).	05	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
	Managing Contracts: Introduction, Types of Contract, Stages in Contract Placement, Typical Terms of a Contract, Contract Management, Acceptance.	04	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point

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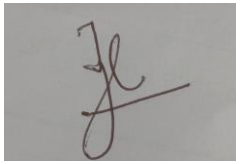
	Managing People in Software Environments: Introduction, Understanding Behaviour, Organizational Behaviour: A Background, Selecting the Right Person for the Job, Instruction in the Best Methods, Motivation, The Oldham–Hackman Job Characteristics Model, Stress, Stress Management, Health and Safety, Some Ethical and Professional Concerns.	03	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
USIT501 Software Project Management UNIT-5	**Working in Teams:** Introduction, Becoming a Team, Decision Making, Organization and Team Structures, Coordination Dependencies, Dispersed and Virtual Teams, Communication Genres, Communication Plans, Leadership	05	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
	Software Quality : Introduction, The Place of Software Quality in Project Planning, Importance of Software Quality, Defining Software Quality, Software Quality Models, ISO 9126, Product and Process Metrics, Product versus Process Quality Management, Quality Management Systems, Process Capability Models, Techniques to Help Enhance Software Quality, Testing, Software Reliability,Quality Plans.	05	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
	Project Closeout: Introduction, Reasons for Project Closure, Project Closure Process, Performing a Financial Closure, Project CloseoutReport	02	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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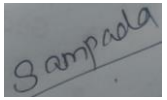

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Brijesh Joshi. DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc.I.T. SEMESTER: V MONTH: June to October ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: To learn the fundamental aspects of the JavaScript programming language and how to program using document object model application programming

The learners will be able to :

- To understand .Net framework and its run time environment.
- To gain basic knowledge of C# language with its object oriented concept.
- To gain the knowledge of namespaces and assemblies.
- To understand fundamentals of web application development.
- To make use of different server controls like validation, navigation and rich server control.
- To understand back hand connectivity with SQL using ADO .Net Frame.
- To use data binding with data controls like grid view, details view and form view.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT503 Advance Web Programming UNIT-I	**Introducing .NET**: The .NET Framework, C#, VB, and the .NET Languages, The Common Language Runtime, The .NET Class Library.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning	PPT.
	The C# Language: C# Language Basics, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods.	4		PPT.
	Types, Objects, and Namespaces: The Basics About Classes, Building a Basic Class, Value Types and Reference Types,	4		PPT.

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	Understanding Namespaces and Assemblies, Advanced Class Programming.		Visual C# 2010	
USIT503 Advance Web Programming UNIT-II	**Web Form Fundamentals**: Writing Code, Using the Code-Behind Class, Adding Event Handlers, Understanding the Anatomy of an ASP.NET Application, Introducing Server Controls, Using the Page Class, Using Application Events, Configuring an ASP.NET Application.	6	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	PPT.
	Form Controls: Stepping Up to Web Controls, Web Control Classes, List Controls, Table Controls, Web Control Events and AutoPostBack, Validation, Understanding Validation, Using the Validation Controls, Rich Controls, The Calendar, The AdRotator, Pages with Multiple Views, User Controls and Graphics, User Controls, Dynamic Graphics, The Chart Control, Website Navigation: Site Maps, URL Mapping and Routing, The SiteMapPath Control, The TreeView Control, The Menu Control.	6		
USIT503 Advance Web Programming UNIT- III	**Error Handling, Logging, and Tracing** : Avoiding Common Errors, Understanding Exception Handling, Handling Exceptions, Throwing Your Own Exceptions, Using Page Tracing	5	C# 2015 Murach"s ASP.NET 4.6 Web Programming in C#2015 Beginning Visual C# 2010	PPT.
	State Management : Understanding the Problem of State, Using View State, Transferring Information Between Pages, Using Cookies, Managing Session State, Configuring Session State, Using Application State, Comparing State Management Options	4		, PPT.
	Styles, Themes, and Master Pages : Styles, Themes, Master Page Basics, Advanced Master Pages,	3		PPT

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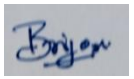
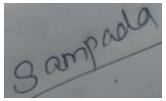
USIT503 Advance Web Programming UNIT-IV	**ADO.NET Fundamentals**: Understanding Databases, Configuring Your Database, Understanding SQL Basics, Understanding the Data Provider Model, Using Direct Data Access, Using Disconnected Data Access.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	PPT.
	Data Binding: Introducing Data Binding, Using Single-Value Data Binding, Using Repeated-Value Data Binding, Working with Data Source Controls,	4		
	The Data Controls: The GridView, Formatting the GridView, selecting a GridView Row, Editing with the GridView, Sorting and Paging the GridView, Using GridView Templates, The DetailsView and FormView	4		
USIT503 Advance Web Programming UNIT - V	**XML**: XML Explained, The XML Classes, XML Validation, XML Display and Transforms. .	3	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	PPT.
	Security Fundamentals: Understanding Security Requirements, Authentication and Authorization, Forms Authentication, Windows Authentication.	4		PPT.
	ASP.NET AJAX: Understanding Ajax, Using Partial Refreshes, Using Progress Notification, Implementing Timed Refreshes, Working with the ASP.NET AJAX Control Toolkit	5		PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. **Enterprise JAVA** DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: July To Nov ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- To support for many industry standards and continues simplification of enterprise ready APIs.

The learners will be able to :

- To understand Java Enterprise edition with its different technologies.
- To understand Java EE architectural server and contains.
- To understand server side technology like Java Servlets with its API and life cycle.
- To make data base connectivity using JDBC.
- To navigate using request dispatcher interface.
- To understand state management using cookies and session.
- To understand how to upload and download the file.
- To be able to work with non-blocking I/O resources.
- To understand server side technology like Java Server Pages.
- To make use of action elements, implicit objects, expression language and JSTL.
- To understand enterprise bill, architectural and its bill.
- To be able to working with session beans and message driven beans.
- To understand interceptors and JNDI.
- To make use of ORM and JPA with its API.
- To understand writing JPA application.
- To be able to understand hibernate architectural and components.
- To understand writing hibernate application.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 **ENTERPRISE JAVA** UNIT-1	**Understanding Java EE:** WhatisanEnterpriseApplication? Whatisjavaenterpriseedition? JavaEETechnologies, JavaEEevolution, Glassfishserver **JavaEE Architecture,Serverand Containers:** TypesofSystemArchitecture, JavaEEServer, JavaEEContainers. **Introduction to Java Servlets:** TheNeedforDynamicContent, JavaServletTechnology, WhyServlets? WhatcanServletsdo? **Servlet API and Lifecycle:** JavaServletAPI, TheServletSkeleton, TheServletLifeCycle, ASimpleWelcomeServlet **WorkingwithServlets:** GettingStarted, UsingAnnotationsInsteadofDeploymentDescriptor. **Working with Databases:** WhatIsJDBC? JDBCArchitecture, AccessingDatabase, TheServletGUI and DatabaseExample.	12	**1.** Java Complete Reference, **2.** Core Java Vol. II – Advanced Features, **3.** Java EE 6 Beginners,	PPT, Google meets.
USIT506 **ENTERPRISE JAVA** UNIT-2	**Request Dispatcher:** Resquestdispatcher Interface, Methods of Requestdispatcher, Requestdispatcher Application. **COOKIES:** KindsofCookies, WhereCookiesAreUsed? CreatingCookiesUsingServlet, DynamicallyChangingtheColorsofAPage **SESSION:** WhatAreSessions? LifecycleofHttpSession, SessionTrackingWithServletAPI, AServlet Session Example **Workingwith Files:** UploadingFiles, CreatinganUploadFileApplication, DownloadingFiles, CreatingaDownloadFileApplication. **Workingwith Non-Blocking I/O:** CreatingaNon-BlockingReadApplication, CreatingTheWeb Application, CreatingJavaClass, Creating Servlets, Retrieving The File, Creating index.jsp	12	**1.** Java Complete Reference, **2.** Core Java Vol. II – Advanced Features, **3.** Java EE 6 Beginners,	PPT, Google meets.

USIT506 **ENTERPRISE JAVA** UNIT-3	**Introduction To Java ServerPages:** WhyuseJava ServerPages? DisadvantagesOfJSP, JSPv\sServlets, LifeCycleofaJSPPage, HowdoesaJSPfunction? HowdoesJSPexecute? AboutJava ServerPages **Getting Started With Java ServerPages:** Comments, JSPDocument, JSPElements, JSPGUIExample. **Action Elements:** IncludingotherFiles, ForwardingJSPPagetoAnotherPage, PassingParametersforotherActions, LoadingaJavabean. **Implicit Objects, Scopeand ElExpressions:** ImplicitObjects, CharacterQuotingConventions, UnifiedExpressionLanguage[UnifiedEl], ExpressionLanguage. **Java Server Pages Standard Tag Libraries:** WhatiswronginusingJSPScriptletTags? HowJSTLFixesJSPScriptlet'sShortcomings? DisadvantagesOfJSTL, TagLibraries.	12	**1.** Java Complete Reference, **2.** Core Java Vol. II – Advanced Features, **3.** Java EE 6 Beginners,	Black Board, Projector, PPT
USIT506 **ENTERPRISE JAVA** UNIT-4	**Introduction To EnterpriseJavabeans:** EnterpriseBeanArchitecture, BenefitsofEnterpriseBean, TypesofEnterpriseBean, AccessingEnterpriseBeans, EnterpriseBeanApplication, PackagingEnterpriseBeans **Workingwith Session Beans:** WhentouseSessionBeans? TypesofSessionBeans, RemoteandLocalInterfaces, AccessingInterfaces, LifecycleofEnterpriseBeans, PackagingEnterpriseBeans, Exampleof StatefulSessionBean, Example ofStatelessSessionBean, Example of SingletonSessionBeans. **Working with Message DrivenBeans:** LifecycleofaMessageDrivenBean, UsesofMessageDrivenBeans, TheMessage DrivenBeansExample.	12	**1.** Java Complete Reference, **2.** Core Java Vol. II – Advanced Features, **3.** Java EE 6 Beginners,	PPT, Google meets.

	Interceptors: Request andInterceptor, Defining An Interceptor, AroundInvokeMethod, ApplyingInterceptor, Adding An Interceptor To An Enterprise Bean, Build and Run the Web Application. **Java Naming and Directory Interface**: What is Naming Service? What is Directory Service? What is Java Naming and Directory interface? Basic Lookup, JNDI Namespace in Java EE, Resources and JNDI, Datasource Resource Definition in Java EE.			
USIT506 **ENTERPRISE JAVA** UNIT-5	**Persistence, Object/Relational Mapping And JPA:** WhatisPersistence? PersistenceinJava, CurrentPersistenceStandardsinJava, WhyanotherPersistenceStandards? Object/RelationalMapping, **Introduction to JavaPersistence API:** TheJavaPersistenceAPI, JPA,ORM,DatabaseandtheApplication, ArchitectureofJPA, HowJPAWorks? JPA Specifications. **Writing JPA Application:** ApplicationRequirementSpecifications, SoftwareRequirements, TheApplicationDevelopmentApproach, CreatingDatabaseandTablesinMysql, creatingaWebApplication, AddingtheRequiredLibraryFiles, creatingaJavabeanClass, CreatingPersistenceUnit[Persistence.Xml], CreatingJSPS, TheJPAApplicationStructure, RunningtheJPAApplication. **Introduction to Hibernate:** WhatisHibernate? WhyHibernate? Hibernate,DatabaseandTheApplication, ComponentsofHibernate, ArchitectureofHibernate, HowHibernateWorks? **WritingHibernateApplication:** ApplicationRequirementSpecifications, SoftwareRequirements, TheApplicationDevelopmentApproach, CreatingDatabaseandTablesinMysql, creatingaWebApplication, AddingtheRequiredLibraryFiles, creatingaJavabeanClass, CreatingHibernateConfigurationFile, AddingaMappingClass,	12	**1.** Java Complete Reference, **2.** Core Java Vol. II – Advanced Features, **3.** Java EE 6 Beginners,	PPT, Google meets.

	CreatingJSPS, RunningTheHibernateApplication.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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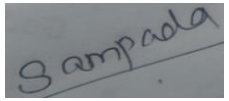

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MRS. KSHITIJA. P. MANE (PALAV)** _____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**T.Y.B SC(IT)-C**_____ SEMESTER: ____**V**_____ MONTH: _____ _____**JULY-OCTOBER** _____ ACADEMIC YEAR: _____**2021-2022**_____

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand the background of Red Hat Linux administration as an operating system.**
- **How to work with various commands and their implementation in Linux bash shell system.**
- **To understand basic management tasks, administrative tasks and managing different services with RPM.**
- **Helps to make you configure and install the software, working with the networks and creation of users, groups and permissions in system.**
- **To make you understand the security concept of the system and cryptographic services.**
- **It also make you understand how to configure and to install different servers(FTP, Mail services, DHCP, Samba etc.) and to enable its services and to provide client server architecture working.**
- **Helps to create clusters and provide better understanding of shell scripting.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-04 (USIT505) **Linux System**	**Introduction to Red Hat Enterprise Linux:** Linux, Open Source and Red Hat, Origins of Linux, Distributions, Duties of Linux System Administrator.	02	Red Hat Enterprise Linux 6 Administration By	Online Google Meet PPTs

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Administration **Unit No -01**	**Command Line:** Working with the Bash Shell, Getting the Best of Bash, Useful Bash Key Sequences, Working with Bash History, Performing Basic File System Management Tasks, Working with Directories, Piping and Redirection, Finding Files	04	Sander van Vugt , John Wiley and Sons	Online Google Meet PPTs
	System Administration Tasks: Performing Job Management Tasks, System and Process Monitoring and Management, Managing Processes with ps, Sending Signals to Processes with the kill Command, Using top to Show Current System Activity, Managing Process Niceness, Scheduling Jobs, Mounting Devices, Working with Links, Creating Backups, Managing Printers, Setting Up System Logging, Setting Up Rsyslog, Common Log Files, Setting Up Logrotate	04		Online Google Meet PPTs
	Managing Software: Understanding RPM, Understanding Meta Package Handlers, Creating Your Own Repositories, Managing Repositories, Installing Software with Yum, Querying Software, Extracting Files from RPM Packages	02		Online Google Meet PPTs
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -02	**Configuring and Managing Storage:** Understanding Partitions and Logical Volumes, Creating Partitions, Creating File Systems, File Systems Overview, Creating File Systems, Changing File System Properties, Checking the File System Integrity, Mounting File Systems Automatically Through fstab, Working with Logical Volumes, Creating Logical Volumes, Resizing Logical Volumes, Working with Snapshots, Replacing Failing Storage Devices, Creating Swap Space, Working with Encrypted	04	Red Hat Enterprise Linux 6 Administration By Sander van Vugt , John Wiley and	Online Google Meet PPTs

	Volumes .		Sons	
	Connecting to the Network: Understanding NetworkManager, Working with Services and Runlevels, Configuring the Network with NetworkManager, Working with system-config-network, NetworkManager Configuration Files, Network Service Scripts, Networking from the Command Line, Troubleshooting Networking, Setting Up IPv6, Configuring SSH, Enabling the SSH Server, Using the SSH Client, Using PuTTY on Windows Machines, Configuring Key-Based SSH Authentication, Using Graphical Applications with SSH, Using SSH Port Forwarding, Configuring VNC Server Access	04		Online Google Meet PPTs
	Working with Users, Groups, and Permissions: Managing Users and Groups, Commands for User Management, Managing Passwords, Modifying and Deleting User Accounts, Configuration Files, Creating Groups, Using Graphical Tools for User, and Group Management, Using External Authentication Sources, the Authentication Process, sssd, nsswitch, Pluggable Authentication Modules, Managing Permissions, the Role of Ownership, Basic Permissions: Read, Write, and Execute, Advanced Permissions, Working with Access Control Lists, Setting Default Permissions with umask, Working with Attributes	04		Online Google Meet PPTs
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -03	**Securing Server with iptables:** Understanding Firewalls, Setting Up a Firewall with system-config-firewall, Allowing Services, Trusted Interfaces, Masquerading, Configuration Files,	04	Red Hat Enterprise Linux	Online Google Meet PPTs

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	Setting Up a Firewall with iptables, Tables, Chains, and Rules, Composition of Rule, Configuration Example, Advanced iptables Configuration, Configuring Logging, The Limit Module, Configuring NAT		6 Administration By Sander van Vugt , John Wiley and Sons	
	Setting Up Cryptographic Services: Introducing SSL, Proof of Authenticity: the Certificate Authority, Managing Certificates with openssl, Creating a Signing Request, Working with GNU Privacy Guard, Creating GPG Keys, Key Transfer, Managing GPG Keys, Encrypting Files with GPG, GPG Signing, Signing RPM Files	04		Online Google Meet PPTs
	Configuring Server for File Sharing: What is NFS? Advantages and Disadvantages of NFS, Configuring NFS4, Setting Up NFSv4, Mounting an NFS Share, Making NFS Mounts Persistent, Configuring Automount, Configuring Samba, Setting Up a Samba File Server, Samba Advanced Authentication Options, Accessing Samba Shares, Offering FTP Services.	04		Online Google Meet PPTs
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	**Configuring DNS and DHCP:** Introduction to DNS, The DNS Hierarchy, DNS Server Types, The DNS Lookup Process, DNS Zone Types, Setting Up a DNS Server, Setting Up a Cache-Only Name Server, Setting Up a Primary Name Server, Setting Up a Secondary Name Server, Understanding DHCP, Setting Up a DHCP Server	04	Red Hat Enterprise Linux 6 Administration By Sander van Vugt , John Wiley and Sons	Online Google Meet PPTs
	Setting Up a Mail Server: Using the Message Transfer Agent, the Mail Delivery Agent, the Mail User Agent, Setting Up	03		Online Google Meet PPTs

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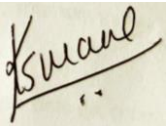
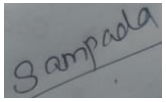
	Postfix as an SMTP Server, Working with Mutt, Basic Configuration, Internet Configuration, Configuring Dovecot for POP and IMAP			
	Configuring Apache on Red Hat Enterprise Linux: Configuring the Apache Web Server, Creating a Basic Website, Understanding the Apache Configuration Files, Apache Log Files, Working with Virtual Hosts, Securing the Web Server with TLS Certificates, Configuring Authentication, Setting Up Authentication with .htpasswd, Configuring LDAP Authentication, Setting Up MySQL	05		Online Google Meet PPTs
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	**Introducing Bash Shell Scripting:** Introduction, Elements of a Good Shell Script, Executing the Script, Working with Variables and Input, Understanding Variables, Variables, Subshells, and Sourcing, Working with Script Arguments, Asking for Input, Using Command Substitution, Substitution Operators, Changing Variable Content with Pattern Matching, Performing Calculations, Using Control Structures, Using if...then...else, Using case, Using while, Using until, Using for, Configuring booting with GRUB.	03	Red Hat Enterprise Linux 6 Administration By Sander van Vugt , John Wiley and Sons	Online Google Meet PPTs Jamboard
	High-Availability Clustering: High-Availability Clustering, The Workings of High Availability, High-Availability Requirements, Red Hat High-Availability Add-on Software, Components, Configuring Cluster-Based Services, Setting Up Bonding, Setting Up Shared Storage, Installing the Red Hat High Availability Add-On, Building the Initial State of the Cluster, Configuring Additional Cluster Properties, Configuring a	05		Online Google Meet PPTs

	Quorum Disk, Setting Up Fencing, Creating Resources and Services, Troubleshooting a Nonoperational Cluster, Configuring GFS2 File Systems			
	Setting Up an Installation Server: Configuring a Network Server as an Installation Server, Setting Up a TFTP and DHCP Server for PXE Boot, Installing the TFTP Server, Configuring DHCP for PXE Boot, Creating the TFTP PXE Server Content, Creating a Kickstart File, Using a Kickstart File to Perform an Automated, Installation, Modifying the Kickstart File with, system-config-kickstart, Making Manual Modifications to the Kickstart File	04		Online Google Meet PPTs

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:T.Y.BSC(I.T) DIV-C SEMESTER: **V** MONTH:JULY-OCT ACADEMIC YEAR: 2021-2022

SUBJECT:SOFTWARE PROJECT MANAGEMENT

LEARNING OBJECTIVE/S:
The learners will be able to : Apply project management concepts and techniques to an IT project. Identify issues that could lead to IT project success or failure. Explain project management in terms of the software development process. Describe the responsibilities of IT project managers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Software Project Management USIT501 Unit-1	**Introduction to Software Project Management:**Introduction, Why is Software Project Management Important? What is a Project? Software Projects versus Other Types of Project, Contract Management and Technical Project Management, Activities Covered by Software Project Management, Plans, Methods and Methodologies, Some Ways of Categorizing Software Projects, Project Charter, Stakeholders, Setting Objectives, The Business Case, Project Success and Failure, What is Management? Management Control, Project Management Life Cycle , Traditional versus Modern Project Management Practices.	5	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation,Slido,Google Forms

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	Project Evaluation and Programme Management: Introduction, Business Case, Project PortfolioManagement, Evaluation of Individual Projects, Cost–benefit Evaluation Techniques, Risk Evaluation, Programme Management, Managing the Allocation of Resources within Programmes, Strategic Programme Management, Creating a Programme, Aids to Programme Management, Some Reservations about Programme Management, Benefits Management.	5		
	An Overview of Project Planning: Introduction to Step Wise Project Planning, Step 0: Select Project, Step 1: Identify Project Scope and Objectives, Step 2: Identify Project Infrastructure, Step 3: Analyse Project Characteristics, Step 4: Identify Project Products and Activities, Step 5: Estimate Effort for Each Activity, Step 6: Identify Activity Risks, Step 7: Allocate Resources, Step 8: Review/Publicize Plan, Steps 9 and 10: Execute Plan/Lower Levels of Planning	5		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		

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Software Project Management USIT501 Unit-2	**Selection of an Appropriate Project Approach:**Introduction, Build or Buy? Choosing Methodologies and Technologies, Software Processes and Process Models, Choice of Process Models, Structure versus Speed of Delivery, The Waterfall Model, The Spiral Model, Software Prototyping, Other Ways of Categorizing Prototypes, Incremental Delivery, Atern/Dynamic Systems Development Method, Rapid Application Development, Agile Methods, Extreme Programming (XP), Scrum, Lean Software Development, Managing Iterative Processes, Selecting the Most Appropriate Process Model.	5	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation,Slido,Google Forms
	Software Effort Estimation: Introduction, Where are the Estimates Done? Problems with Over- and Under-Estimates, The Basis for Software Estimating, Software Effort Estimation Techniques, Bottomup Estimating, The Top-down Approach and Parametric Models, Expert Judgement, Estimating by Analogy, Albrecht Function Point Analysis, Function Points Mark II, COSMIC Full Function Points, COCOMO II: A Parametric Productivity Model, Cost Estimation, Staffing Pattern, Effect of Schedule Compression, Capers Jones Estimating Rules of Thumb.	5		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	10		
Software Project Management USIT501 Unit-3	**Activity Planning:** Introduction, Objectives of Activity Planning, When to Plan, Project Schedules, Projects and Activities, Sequencing and Scheduling Activities, Network Planning Models, Formulating a Network Model, Adding the Time Dimension, The Forward Pass, Backward Pass, Identifying the Critical Path, Activity Float, Shortening the Project Duration, Identifying Critical Activities, Activity-on-Arrow Networks.	4	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation,Slido,Google Forms

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	Risk Management: Introduction, Risk, Categories of Risk, Risk Management Approaches, A Framework for Dealing with Risk, Risk Identification, Risk Assessment, Risk Planning, Risk Management, Evaluating Risks to the Schedule, Boehm‟s Top 10 Risks and Countermeasures, Applying the PERT Technique, Monte Carlo Simulation, Critical Chain Concepts.	4		
	Resource Allocation: Introduction, Nature of Resources, Identifying Resource Requirements, Scheduling Resources, Creating Critical Paths, Counting the Cost, Being Specific, Publishing the Resource Schedule, Cost Schedules, Scheduling Sequence.	3		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	11		
Software Project Management USIT501 Unit-4	**Monitoring and Control**: Introduction, Creating the Framework, Collecting the Data, Review, Visualizing Progress, Cost Monitoring, Earned Value Analysis, Prioritizing Monitoring, Getting the Project Back to Target, Change Control, Software Configuration Management (SCM).	3	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation,Slido,Google Forms
	Managing Contracts: Introduction, Types of Contract, Stages in Contract Placement, Typical Terms of a Contract, Contract Management, Acceptance	2		
	Managing People in Software Environments: Introduction, Understanding Behaviour, Organizational Behaviour: A Background, Selecting the Right Person for the Job, Instruction in the Best Methods, Motivation, The Oldham–Hackman Job Characteristics Model, Stress, Stress Management, Health and Safety, Some Ethical and Professional Concerns	4		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE	9		

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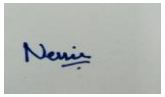
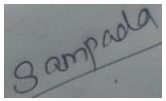
	UNIT:			
Software Project Management USIT501 Unit-5	**Working in Teams:** Introduction, Becoming a Team, Decision Making, Organization and Team Structures, Coordination Dependencies, Dispersed and Virtual Teams, Communication Genres,Communication Plans, Leadership.	3	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation,Slido,Google Forms
	Software Quality : Introduction, The Place of Software Quality in Project Planning, Importance of Software Quality, Defining Software Quality, Software Quality Models, ISO 9126, Product and Process Metrics, Product versus Process Quality Management, Quality Management Systems, Process Capability Models, Techniques to Help Enhance Software Quality, Testing, Software Reliability, Quality Plans.	5		
	Project Closeout: Introduction, Reasons for Project Closure, Project Closure Process, Performing a Financial Closure, Project Closeout Report.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**10**		





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: T.Y. BSc (IT) DIV-C SEMESTER:SEM -5 MONTH: JUL-OCT ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand what is a The Internet of Things and its applications .
- Introduction of Prototyping the Physical Design and online design.
- Understand different techniques of Prototyping.
- Learn the concept of automation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT502 Internet Of Things UNIT 1	**The Internet of Things:** An Overview: The Flavour of the Internet of Things, The "Internet" of "Things", The Technology of the Internet of Things, Enchanted Objects, Who is Making the Internet of Things?	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally WILEY First 2014	Laptop, power point, jamboard
	Design Principles for Connected Devices: Calm and Ambient Technology, Magic as Metaphor, Privacy, Keeping Secrets, Whose Data Is It Anyway? Web Thinking for Connected Devices, Small Pieces, Loosely Joined, First-Class Citizens on The Internet, Graceful Degradation, Affordances.	4		
	Internet Principles: Internet Communications: An Overview, IP, TCP, The IP Protocol Suite (TCP/IP), UDP, IP Addresses,	4		

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	DNS, Static IP Address Assignment, Dynamic IP Address Assignment, IPv6, MAC Addresses, TCP and UDP Ports, An Example: HTTP Ports, Other Common Ports, Application Layer Protocols, HTTP, HTTPS: Encrypted HTTP, Other Application Layer Protocols.			
USIT502 Internet Of Things UNIT 2	**Thinking About Prototyping**: Sketching, Familiarity, Costs versus Ease of Prototyping, Prototypes and Production, Changing Embedded Platform, Physical Prototypes and Mass Personalisation	4	1.Designing the Internetof Things Adrian McEwen, Hakim Cassimally WILEY First 2014 , 2.Internet of Things – Architecture and Design Raj Kamal McGraw Hill First 201	Laptop, power point, jamboard
	Climbing into the Cloud Open Source versus Closed Source, Why Closed? Why Open? Mixing Open and Closed Source, Closed Source for Mass Market Projects, Tapping into the Community	4		
	Prototyping Embedded Devices: Electronics, Sensors, Actuators, Scaling Up the Electronics, Embedded Computing Basics, Microcontrollers, System-on-Chips, Choosing Your Platform, Arduino, developing on the Arduino, Some Notes on the Hardware, Openness, Raspberry Pi, Cases and Extension Boards, Developing on the Raspberry Pi, Some Notes on the Hardware, Openness	4		
USIT502 Internet Of Things	**Prototyping the Physical Design:** Preparation, Sketch, Iterate, and Explore, Nondigital Methods, Laser Cutting, Choosing a Laser Cutter, Software, Hinges and Joints, 3D Printing, Types of 3D Printing, Software, CNC Milling, Repurposing/Recycling.	5	Designing the Internet of Things Adrian McEwen, Hakim Cassimally WILEY First 2014	

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UNIT 3	**Prototyping Online Components**: Getting Started with an API, Mashing Up APIs, Scraping, Legalities, writing a New API, Clockodillo, Security, implementing the API, Using Curl to Test, Going Further	3		Laptop, power point, jamboard
	Real-Time Reactions, Polling, Comet, Other Protocols, MQ Telemetry Transport, Extensible Messaging and Presence Protocol, Constrained Application Protocol.	4		
USIT502 Internet Of Things UNIT 4	**Techniques for Writing Embedded Code:** Memory Management,Types of Memory, Making the Most of Your RAM, Performance and Battery Life, Libraries,Debugging.	5	Designing the Internet of Things Adrian McEwen, Hakim Cassimally WILEY First 2014	Laptop, power point, jamboard
	Business Models: A Short History of Business Models, Space and Time, From Craft to Mass Production, The Long Tail of the Internet, Learning from History, The Business Model Canvas, Who Is the Business Model For? Models	3		
	Make Thing, Sell Thing, Subscriptions, Customisation, be a Key Resource, Provide Infrastructure: Sensor Networks, take a Percentage, Funding an Internet of Things Startup, Hobby Projects and Open Source, Venture Capital, Government Funding, Crowdfunding, Lean Startups.	4		
USIT502	**Moving to Manufacture:** What Are You Producing? Designing Kits, Designing Printed circuit boards, Software Choices, The Design	5	1.DesigningtheInternetof Things Adrian McEwen, Hakim Cassimally WILEY First 2014 ,	

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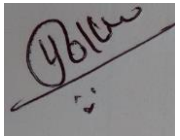
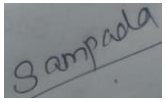
Internet Of Things UNIT 5	Process, Manufacturing Printed Circuit Boards, Etching Boards, Milling Boards. Assembly, Testing, Mass-Producing the Case and Other Fixtures.		2.Getting Started with Raspberry Pi Matt Richardson and Shawn Wallace SPD Third 2016	Laptop, power point, jamboard
	Certification, Costs, Scaling Up Software, Deployment, Correctness and Maintainability, Security, Performance, User Community.	3		
	Ethics: Characterizing the Internet of Things, Privacy, Control, Disrupting Control, Crowdsourcing, Environment, Physical Thing, Electronics, Internet Service, Solutions, The Internet of Things as Part of the Solution, Cautious Optimism, The Open Internet of Things Definition	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics CLASS: FYIT SEMESTER: II

MONTH: Feb to April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Gauss Jordan ,Gauss seidal,RK method ,Euler and modified Euler Taylor,Trapezoidal ,Simpson rule

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM(FYIT) Unit. III	1) Solution of simultaneous algebric equation using iterative methods --Gauss Jordan ,Gauss Seidal method 2) Numerical differentiation and integration. --Numerical differtiation using Trapezoidal Rule,Simpson's 1/3 rd and 3/8th Rule. 3) Numerical Solution of 1st and 2nd order differential equations --Taylor series,Euler Method,ModifieEuler Method ,Runge kutta method for 2nd and 4th order..	2+4+6=12	Higher Engineering of mathematics Balguru swami Tech max NSM by Sheth publication	Blackboard ,chalk,calculator

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12__

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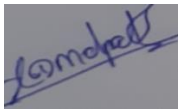

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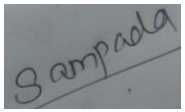

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Archana Malpathak DEPARTMENT: Mathematics CLASS: FYIT SEMESTER: II ....

MONTH: Febr to April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : _Fit of straight line parabola by least square,Multiple equation ___Regression equation ,Regression coefficient,feasible solution Optimal solution,plotting a graph.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit. IV Least Squares Regression	1) Least Square Regression. : LinearRegression,polynomial Regression ,Multiple Linear Regression,Non linear Regression. 2) Linear Programming : Linear Optimization problem,Formulation and Graphical Solution, Basic solution and feasible solution.	6+6=12	Higher Engineering of Matematics Satistics by Gupta Mannan publication Tech Max	Black board ,chalk ,calculator ,

The Number OF LECTURES ALLOCATED TO THE UNIT: 12

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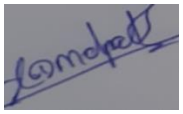

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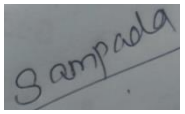

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYIT-A SEMESTER: SEM-2 MONTH: FEB-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

- To gain an understanding why the green computing is instrumental for the environment.
- Identify key issues relevant to green computing and evaluate different approaches to these problems.
- Study of designing, engineering, manufacturing, using and disposing of computing devices in a way that reduces their environmental impact.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
5 GREEN COMPUTING UNIT 2	Minimizing Power Usage: Power Problems, Monitoring Power Usage, Servers, Low-Cost Options, Reducing Power Use, Data De-Duplication, Virtualization, Management, Bigger Drives, Involving the Utility Company,	3	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	BLACK BOARD AND CHALK
	Low Power Computers, PCs, Linux, Components, Servers, Computer Settings, Storage, Monitors, Power Supplies, Wireless Devices, Software.	3		
	Cooling: Cooling Costs, Power Cost, Causes of Cost, Calculating Cooling Needs, Reducing Cooling Costs, Economizers, On-Demand Cooling, HP's Solution, Optimizing Airflow, Hot Aisle/Cold Aisle, Raised Floors, Cable Management, Vapour Seal,	3		

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	Prevent Recirculation of Equipment Exhaust, Supply Air Directly to Heat Sources, Fans, Humidity, Adding Cooling, Fluid Considerations, System Design, Datacentre Design, Centralized Control, Design for Your Needs, Put Everything Together.	3		
UNIT 3	**Changing the Way of Work:** Old Behaviours, starting at the Top, Process Reengineering with Greening Mind, Analysing the Global Impact of Local Actions,	3	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	BLACK BOARD AND CHALK
	Steps: Water, Recycling, Energy, Pollutants, Teleworkers and Outsourcing, Telecommuting, Outsourcing, how to Outsource.	3		
	Going Paperless: Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Billing, Handheld Computers vs. the Clipboard,	3		
	Unified Communications, Intranets, What to Include, Building an Intranet, Microsoft Office SharePoint Server 2007, Electronic Data Interchange (EDI), Nuts and Bolts, Value Added Networks, Advantages, Obstacles.	3		
UNIT 5	**Greening Your Information Systems:** Initial Improvement Calculations, Selecting Metrics, Tracking Progress, Change Business Processes, Customer Interaction, Paper Reduction,	3	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	BLACK BOARD AND CHALK
	Green Supply Chain, Improve Technology Infrastructure, Reduce PCs and Servers, Shared Services, Hardware Costs,	3		

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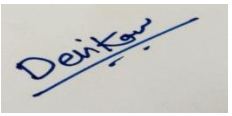
	Cooling.			
	Staying Green: Organizational Check-ups, Chief Green Officer, Evolution, Sell the CEO, SMART Goals, Equipment Check-ups, Gather Data, Tracking the data,	3		
	Baseline Data, Benchmarking, Analyse Data, Conduct Audits, Certifications, Benefits, Realities, Helpful Organizations.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36



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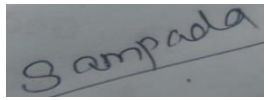

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT: CS

CLASS: FYIT-A SEMESTER: SEM-2 MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- To gain an understanding why the green computing is instrumental for the environment.
- Identify key issues relevant to green computing and evaluate different approaches to these problems.
- Study of designing, engineering, manufacturing, using and disposing of computing devices in a way that reduces their environmental impact.

PAPER, TITLE, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5,GREEN COMPUTING, UNIT 1	**Overview and Issues:** Problems: Toxins, Power Consumption, Equipment Disposal, Company's Carbon Footprint: Measuring, Details, reasons to bother, Plan for the Future, Cost Savings: Hardware, Power.	4	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	PPT AND PDF
	Initiatives and Standards: Global Initiatives: United Nations, Basel Action Network, Basel Convention	4		
	North America: The United States, Canada, Australia, Europe, WEEE Directive, RoHS, National Adoption, Asia:	4		

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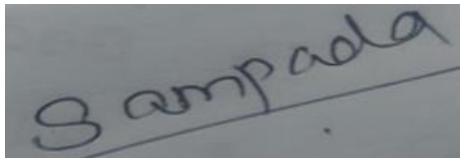
	Japan, China, Korea.			
UNIT 4	**Recycling:** Problems, China, Africa, Materials, Means of Disposal, Recycling, Refurbishing, Make the Decision, Life Cycle, from beginning to end, Life, Cost, Green Design, Recycling Companies, Finding the Best One, Checklist, Certifications	3	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	PPT AND PDF
	Hard Drive Recycling, Consequences, cleaning a Hard Drive, Pros and cons of each method, CDs and DVDs, good and bad about CD and DVDs disposal, Change the mind-set, David vs. America Online	3		
	Hardware Considerations: Certification Programs, EPEAT, RoHS, Energy Star, Computers, Monitors, Printers, Scanners, All-in-Ones, Thin Clients, Servers, Blade Servers, Consolidation, Products,	3		
	Hardware Considerations, Planned Obsolescence, Packaging, Toxins, Other Factors, Remote Desktop, Using Remote Desktop, Establishing a Connection, In Practice	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.IT - A SEMESTER: II MONTH: FEBRUARY-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand and realize the Interfacing of memory & various I/O devices with 8085 microprocessors.
- Understand and classify the instruction set of 8085 microprocessor and distinguish the use of different instructions and apply it in assembly language programming.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT-III	**Programming Techniques With Additional Instructions:** Programming Techniques: Looping, Counting and Indexing, Additional Data Transfer and 16-Bit Arithmetic Instructions, Arithmetic Instruction Related to Memory, Logic Operations: Rotate, Logics Operations: Compare, Dynamic Debugging.	5	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Blackboard, Chalk
	Counters and Time Delays: Counters and Time Delays, Illustrative Program: Hexadecimal Counter, Illustrative Program: zero-to-nine (Modulo Ten) Counter, Generating Pulse Waveforms, Debugging Counter and Time-Delay Programs.	4		Blackboard, Chalk
	Stacks and Sub-Routines: Stack, Subroutine, Restart, Conditional Call, Return Instructions, Advanced Subroutine concepts.	3		Blackboard, Chalk

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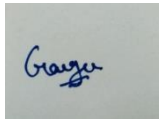
UNIT-IV	**Code Conversion, BCD Arithmetic, and 16-Bit Data Operations:** BCD-to-Binary Conversion, Binary-to-BCD Conversion, BCD-toSeven-Segment-LED Code Conversion, Binary-to-ASCII and ASCIIto-Binary Code Conversion, BCD Addition, BCD Subtraction, Introduction To Advanced Instructions and Applications, Multiplication, Subtraction With Carry.	5	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Blackboard, Chalk
	Software Development System and Assemblers: Microprocessors-Based Software Development system, Operating System and Programming Tools, Assemblers and Cross-Assemblers, Writing Program Using Cross Assemblers.	4		Blackboard, Chalk
	Interrupts: The 8085 Interrupt, 8085 Vectored Interrupts, Restart as S/W Instructions, Additional I/O Concepts and processes.	3		Blackboard, Chalk
UNIT-V	**The Pentium and Pentium Pro microprocessors:** Introduction, Special Pentium registers, Memory management, Pentium instructions, Pentium Pro microprocessor, Special Pentium Pro features.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Blackboard, Chalk
	Core 2 and later Microprocessors: Introduction, Pentium II software changes, Pentium IV and Core 2, i3, i5 and i7.	4		Blackboard, Chalk
	SUN SPARC Microprocessor: Architecture, Register file, data types and instruction format	4		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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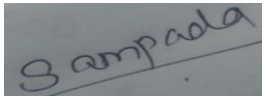

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. (Mrs.) Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: FYIT SEMESTER: II MONTH: FEB to APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

To become familiar with the architecture and the instruction set of an Intel microprocessor

To study the Assembly language programming as well as the design of various types of digital and analog interfaces

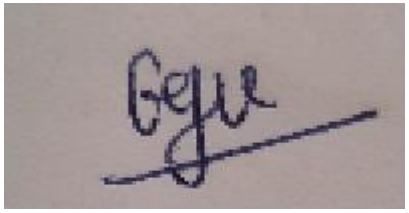
To understand the architecture of 8085 and 8051

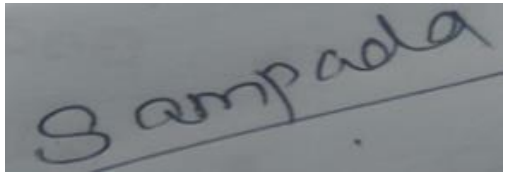
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 MPA Unit 1	**Microprocessor, microcomputers, and Assembly Language:** Microprocessor, Microprocessor Instruction Set and Computer Languages, From Large Computers to Single-Chip Microcontrollers, Applications.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
	Microprocessor Architecture and Microcomputer System: Microprocessor Architecture and its operation's, Memory, I/O Devices, Microcomputer System, Logic Devices and Interfacing, Microprocessor-Based System Application.	4	Microprocessors Architecture, Programming and Applications with the 8085.	Black board & Chalk

			Ramesh Gaonkar PENRAM Fifth 2012	
	8085 Microprocessor Architecture and Memory Interface: Introduction, 8085 Microprocessor unit, 8085-Based Microcomputer, Memory Interfacing, Interfacing the 8155 Memory Segment, Illustrative Example: Designing Memory for the MCTS Project, Testing and Troubleshooting Memory Interfacing Circuit, 8085-Based Single-Board microcomputer.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
Paper-02 MPA Unit 2	**Interfacing of I/O Devices** : Basic Interfacing concepts, Interfacing Output Displays, Interfacing Input Devices, Memory Mapped I/O, Testing and Troubleshooting I/O Interfacing Circuits.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
	Introduction to 8085 Assembly Language Programming: The 8085 Programming Model, Instruction Classification, Instruction, Data and Storage, Writing assembling and Execution of a simple program, Overview of 8085 Instruction Set, Writing and Assembling Program.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
	Introduction to 8085 Instructions:	4	Microprocessors Architecture,	Black board & Chalk

	Data Transfer Operations, Arithmetic Operations, Logic Operation, Branch Operation, Writing Assembly Languages Programs, Debugging a Program		Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. **OBJECT ORIENTED PROGRAMMING** DEPARTMENT: Information Technology.

CLASS: F.Y.B.Sc. SEMESTER: II MONTH: Dec To March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- Object-oriented programming aims to implement real-world entities like inheritance, hiding, polymorphism, etc in programming. The main aim of OOP is to bind together the data and the functions that operate on them so that no other part of the code can access this data except that function.

The learners will be able to :

- To understand difference between object oriented and procedural oriented language.
- To understand advantages benefits and applications of object oriented language.
- To understand characteristics of object oriented language.
- To gain how to implement classes, methods and objects.
- To understand constant variables, data types, operators of C++ language.
- To understand use of constructor and destructor and using its implementation.
- To enable use of arrays, pointers and objects.
- To understand polymorphism and its types.
- To understand virtual function and pure virtual function / abstract function.
- To understand inheritance and its types with constructor.
- To understand run time error handling using try, catch and throw key words and benefits of it.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT201 Object Oriented Programming UNIT-I	**Object Oriented Methodology:** Introduction, Advantages and Disadvantages of Procedure Oriented Languages, what is Object Oriented? What is Object Oriented Development? Object Oriented Themes, Benefits and Application of OOPS. **Principles of OOPS:** OOPS Paradigm, Basic Concepts of OOPS: Objects, Classes, Data Abstraction and Data Encapsulation, Inheritance, Polymorphism, Dynamic Binding, Message Passing	12	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.
USIT201 Object Oriented Programming UNIT-II	**Classes and Objects:** Simple classes (Class specification, class members accessing), Defining member functions, passing object as an argument, Returning object from functions, friend classes, Pointer to object, Array of pointer to object. **Constructors and Destructors:** Introduction, Default Constructor, Parameterized Constructor and examples, Destructors	12	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.
USIT201 Object Oriented Programming UNIT-III	**Polymorphism:** Concept of function overloading, overloaded operators, overloading unary and binary operators, overloading comparison operator, overloading arithmetic assignment operator, Data Conversion between objects and basic types, **Virtual Functions:** Introduction and need, Pure Virtual Functions, Static Functions, this Pointer, abstract classes, virtual destructors.	12	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.
USIT201 Object Oriented Programming UNIT-IV	**Exception Handling:** Introduction, Exception Handling Mechanism, Concept of throw & catch with example	12	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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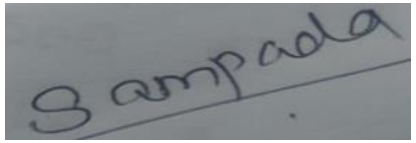

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHA TUSHAR VAZE DEPARTMENT: IT CLASS: FYIT-DIV A

SEMESTER: SEM-2 MONTH: FEB-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

- Perform object oriented programming to develop solution to problems demonstrating usage of control structures, modularity, I/O and other standard language constructs.
- Demonstrate adeptness of object oriented programming to develop solution to problem demonstration usage of data abstraction, encapsulation, and inheritance.

PAPER, TITLE,UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5	**Templates:** Introduction, Function Template and examples,	3	Object Oriented Programming with C++ by E.Balagurusamy	BLACK BOARD AND CHALK
	Class Template and examples.	3		
	Working with Files: Introduction, File Operations, Various File Modes,	4		
	File Pointer and their Manipulation	2		

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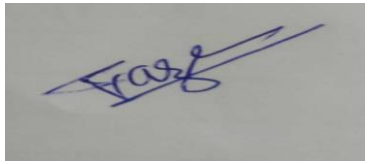
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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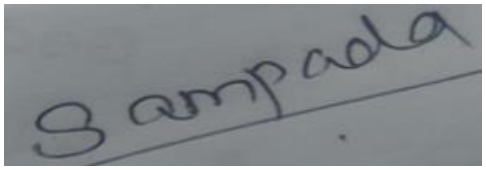

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE **DEPARTMENT**: ____IT____

CLASS: FYIT_A DIV **SEMESTER**: 2 **MONTH**: FEB-APRIL **ACADEMIC YEAR:** 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand HTML**
- **Understand JavaScript**
- **Understand how server-side programming works on the web.**
- **PHP Basic syntax for variable types and calculations.**
- **Creating conditional structures**
- **Storing data in arrays**
- **Using PHP built-in functions and creating custom functions**
- **Understanding POST and GET in form submission.**
- **How to receive and process form submission data.**
- **Reading and writing cookies.**
- **Security tips (i.e. SQL Injection)**
- **Create a database in phpMyAdmin.**
- **Read and process data in a MySQL database. Students will learn JavaScript's role in websites and web apps.**
- **Students will be introduced to basic CS concepts**
- **Students will learn basic programming structures such as: variables, functions arrays etc.**
- **Students will learn how JavaScript works with HTML and CSS.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT203 Web Programming Unit I	**Internet and the World Wide Web:** What is Internet? Introduction to internet and its applications, E-mail, telnet, FTP, e-commerce, video conferencing, e-business. Internet service providers, domain name server, internet address, World Wide Web (WWW): World Wide Web and its evolution, uniform resource locator (URL), browsers – internet explorer, Netscape navigator, opera, Firefox, chrome, Mozilla. search engine, web saver – apache, IIS, proxy server, HTTP protocol	6	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	GOOGLE MEET AND GOOGLE CLASSROOM, BLACKBOARD AND CHALK
	HTML5: Introduction, Why HTML5? Formatting text by using tags, using lists and backgrounds, Creating hyperlinks and anchors. Style sheets, CSS formatting text using style sheets, formatting paragraphs using style sheets.	6		

Unit II	**HTML5 Page layout and navigation:** Creating navigational aids: planning site organization, creating text based navigation bar, creating graphics based navigation bar, creating graphical navigation bar, creating image map, redirecting to anotherURL, creating division based layouts: HTML5 semantic tags, creating divisions, creating HTML5 semantic layout, positioning and formatting divisions	6	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	GOOGLE MEET AND GOOGLE CLASSROOM, BLACKBOARD AND CHALK
	HTML5 Tables, Forms and Media: Creating tables: creating simple table, specifying the size of the table, specifying the width of the column, merging table cells, using tables for page layout, formatting tables: applying table borders, applying background and foreground fills, changing cell padding, spacing and alignment, creating user forms: creating basic form, using check boxes and option buttons, creating lists, additional input types in HTML5, Incorporating sound and video: audio and video in HTML5, HTML multimedia basics, embedding video clips, incorporating audio on web page	6		

UNIT III	Java Script: Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security,	2	JavaScript 2.0: The Complete Reference BY Thomas Powell and Fritz Schneider	BLACKBOARD AND CHALK
	Operators: Assignment Operators, Comparison Operators, Arithmetic Operators, % (Modulus), ++(Increment), --(Decrement), -(Unary Negation), Logical Operators, Short-Circuit Evaluation, String Operators, Special Operators, ?: (Conditional operator), , (Comma operator), delete, new, this, void	3		
	Statements: Break, comment, continue, delete, do...while, export, for, for...in, function, if...else, import, labelled, return, switch, var, while, with	2		
	.Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, regExp Document and its associated objects: document, Link, Area, Anchor, Image, Applet, Layer	2		
	Events and Event Handlers : General Information about Events, Defining Event Handlers, event, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp	3		

UNIT IV	PHP: Why PHP and MySQL? Server-side scripting, PHP syntax and variables, comments, types,	3	PHP Project for Beginners BY SharanamShah, Vaishali	BLACKBOARD AND CHALK
	control structures, branching, looping, termination, functions, passing information with PHP, GET, POST,	3		
	formatting form variables, superglobal arrays, strings and string functions	3		
	regular expressions, arrays, number handling, basic PHP errors/problems	3		
UNIT V	Advanced PHP and MySQL : PHP/MySQL Functions, Integrating web forms and databases,	3	PHP Project for Beginners BY SharanamShah, Vaishaliz	BLACKBOARD AND CHALK
	Displaying queries in tables, Building Forms from queries,	3		
	String and Regular Expressions, Sessions,	3		
	Cookies and HTTP, E-Mail	3		

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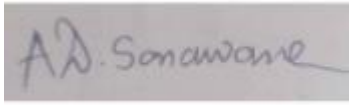
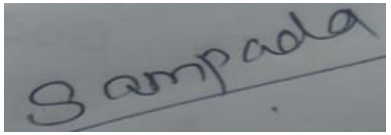
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE **DEPARTMENT**: ____IT____

CLASS: FYIT_B DIV **SEMESTER**: 2 **MONTH**: Jan to March **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand Green Computing**
- **Understand Problems of green Computing**
- **Understand how to solve problem properly**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT205 Green Computing Unit 1	Overview and Issues**:** Problems: Toxins, Power Consumption, Equipment Disposal, Company's Carbon Footprint: Measuring, Details, reasons to bother, Plan for the Future, Cost Savings: Hardware, Power.	6	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter	Google Meet And Google Classroom

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	Initiatives and Standards: Global Initiatives: United Nations, Basel Action Network, Basel Convention, North America: The United States, Canada, Australia, Europe, WEEE Directive, RoHS, National Adoption, Asia: Japan, China, Korea	6		
Unit 2	Minimizing Power Usage: Power Problems, Monitoring Power Usage, Servers, Low-Cost Options, Reducing Power Use, Data De-Duplication, Virtualization, Management, Bigger Drives, Involving the Utility Company, LowPower Computers, PCs, Linux, Components, Servers, Computer Settings, Storage, Monitors, Power Supplies, Wireless Devices, Software.	6	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter	Google Meet And Google Classroom
	Cooling: Cooling Costs, Power Cost, Causes of Cost, Calculating Cooling Needs, Reducing Cooling Costs, Economizers, On-Demand Cooling, HP's Solution, Optimizing Airflow, Hot Aisle/Cold Aisle, Raised	6		

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	Floors, Cable Management, Vapour Seal, Prevent Recirculation of Equipment Exhaust, Supply Air Directly to Heat Sources, Fans, Humidity, Adding Cooling, Fluid Considerations, System Design, Datacentre Design, Centralized Control, Design for Your Needs, Put Everything Together.			
	Going Paperless: Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Billing, Handheld Computers vs. the Clipboard, Unified Communications, Intranets, What to Include, Building an Intranet, Microsoft Office SharePoint Server 2007, Electronic Data Interchange (EDI), Nuts and Bolts, Value Added Networks, Advantages, Obstacles.	6		
Unit 5	Greening Your Information Systems: Initial Improvement Calculations, Selecting Metrics, Tracking	6	Green IT Toby Velte, Anthony Velte,	Google Meet And Google Classroom

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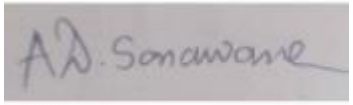
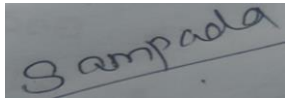
	Progress, Change Business Processes, Customer Interaction, Paper Reduction, Green Supply Chain, Improve Technology Infrastructure, Reduce PCs and Servers, Shared Services, Hardware Costs, Cooling.		Robert Elsenpeter	
	Staying Green: Organizational Check-ups, Chief Green Officer, Evolution, Sell the CEO, SMART Goals, Equipment Check-ups, Gather Data, Tracking the data, Baseline Data, Benchmarking, Analyse Data, Conduct Audits, Certifications, Benefits, Realities, Helpful Organizations.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 42





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BRIJESH JOSHI DEPARTMENT: IT CLASS: FYIT-B

SEMESTER: SEM-2 MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- To gain an understanding why the green computing is instrumental for the environment.
- Identify key issues relevant to green computing and evaluate different approaches to these problems.
- Study of designing, engineering, manufacturing, using and disposing of computing devices in a way that reduces their environmental impact.

PAPER, TITLE, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5,GREEN COMPUTING, UNIT 3	**Changing the Way of Work:** Old Behaviours, starting at the Top, Process Reengineering with Greening Mind, Analysing the Global Impact of Local Actions,	3	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	BLACK BOARD AND CHALK
	Steps: Water, Recycling, Energy, Pollutants, Teleworkers and Outsourcing, Telecommuting, Outsourcing, how to Outsource.	3		
	Going Paperless: Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Billing, Handheld Computers vs. the Clipboard,	3		

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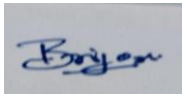
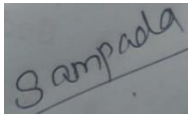
UNIT 4	Unified Communications, Intranets, What to Include, Building an Intranet, Microsoft Office SharePoint Server 2007, Electronic Data Interchange (EDI), Nuts and Bolts, Value Added Networks, Advantages, Obstacles.	3		
	Hard Drive Recycling, Consequences, cleaning a Hard Drive, Pros and cons of each method, CDs and DVDs, good and bad about CD and DVDs disposal, Change the mind-set, David vs. America Online	3		
	Hardware Considerations: Certification Programs, EPEAT, RoHS, Energy Star, Computers, Monitors, Printers, Scanners, All-in-Ones, Thin Clients, Servers, Blade Servers, Consolidation, Products,	3		
	Hardware Considerations, Planned Obsolescence, Packaging, Toxins, Other Factors, Remote Desktop, Using Remote Desktop, Establishing a Connection, In Practice	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHA TUSHAR VAZE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.IT - B SEMESTER: II MONTH: FEBRUARY-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand and realize the Interfacing of memory & various I/O devices with 8085 microprocessors.
- Understand and classify the instruction set of 8085 microprocessor and distinguish the use of different instructions and apply it in assembly language programming.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 MPA Unit 1	**Microprocessor, microcomputers, and Assembly Language:** Microprocessor, Microprocessor Instruction Set and Computer Languages, From Large Computers to Single-Chip Microcontrollers, Applications.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk

	Microprocessor Architecture and Microcomputer System: Microprocessor Architecture and its operation's, Memory, I/O Devices, Microcomputer System, Logic Devices and Interfacing, Microprocessor-Based System Application.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
	8085 Microprocessor Architecture and Memory Interface: Introduction, 8085 Microprocessor unit, 8085-Based Microcomputer, Memory Interfacing, Interfacing the 8155 Memory Segment, Illustrative Example: Designing Memory for the MCTS Project, Testing and Troubleshooting Memory Interfacing Circuit, 8085-Based Single-Board microcomputer.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
Paper-02 MPA	**Interfacing of I/O Devices** : Basic Interfacing concepts, Interfacing Output Displays, Interfacing Input Devices, Memory Mapped I/O, Testing and Troubleshooting I/O Interfacing Circuits.	4	Microprocessors Architecture, Programming and Applications with the 8085.	Black board & Chalk

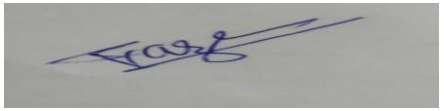
Unit 2			Ramesh Gaonkar PENRAM Fifth 2012	
	Introduction to 8085 Assembly Language Programming: The 8085 Programming Model, Instruction Classification, Instruction, Data and Storage, Writing assembling and Execution of a simple program, Overview of 8085 Instruction Set, Writing and Assembling Program.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
	Introduction to 8085 Instructions: Data Transfer Operations, Arithmetic Operations, Logic Operation, Branch Operation, Writing Assembly Languages Programs, Debugging a Program	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk

PAPER-02 MPA UNIT-3	**Programming Techniques With Additional Instructions:** Programming Techniques: Looping, Counting and Indexing, Additional Data Transfer and 16-Bit Arithmetic Instructions,	5	Microprocessors Architecture, Programming and	Blackboard, Chalk

	Arithmetic Instruction Related to Memory, Logic Operations: Rotate, Logics Operations: Compare, Dynamic Debugging.		Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	
	Counters and Time Delays: Counters and Time Delays, Illustrative Program: Hexadecimal Counter, Illustrative Program: zero-to-nine (Modulo Ten) Counter, Generating Pulse Waveforms, Debugging Counter and Time-Delay Programs.	4		Blackboard, Chalk
	Stacks and Sub-Routines: Stack, Subroutine, Restart, Conditional Call, Return Instructions, Advanced Subroutine concepts.	3		Blackboard, Chalk
Paper 02 MPA UNIT-4	**Code Conversion, BCD Arithmetic, and 16-Bit Data Operations:** BCD-to-Binary Conversion, Binary-to-BCD Conversion, BCD-toSeven-Segment-LED Code Conversion, Binary-to-ASCII and ASCIIto-Binary Code Conversion, BCD Addition, BCD Subtraction, Introduction To Advanced Instructions and Applications, Multiplication, Subtraction With Carry.	5	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Blackboard, Chalk
	Software Development System and Assemblers: Microprocessors-Based Software Development system, Operating System and Programming Tools, Assemblers and Cross-Assemblers, Writing Program Using Cross Assemblers.	4		Blackboard, Chalk
	Interrupts: The 8085 Interrupt, 8085 Vectored Interrupts, Restart as S/W Instructions, Additional I/O Concepts and processes.	3		Blackboard, Chalk
Paper-02 MPA UNIT-5	**The Pentium and Pentium Pro microprocessors:** Introduction, Special Pentium registers, Memory management, Pentium instructions, Pentium Pro microprocessor, Special Pentium Pro features.	4	Microprocessors Architecture, Programming and	Blackboard, Chalk

	Core 2 and later Microprocessors: Introduction, Pentium II software changes, Pentium IV and Core 2, i3, i5 and i7.	4	Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Blackboard, Chalk
	SUN SPARC Microprocessor: Architecture, Register file, data types and instruction format	4		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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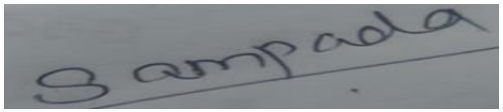

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT: CS

CLASS: FYIT-DIV B SEMESTER: SEM-2 MONTH: FEB-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

- Perform object oriented programming to develop solution to problems demonstrating usage of control structures, modularity, I/O and other standard language constructs.
- Demonstrate adeptness of object oriented programming to develop solution to problem demonstration usage of data abstraction, encapsulation, and inheritance.

PAPER, TITLE,UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1,Object oriented programming ,UNIT 2	**Classes and Objects:** Simple classes (Class specification, class members accessing), Defining member functions, passing object as an argument	4	Object Oriented Programming with C++ by E.Balagurusamy	BLACK BOARD AND CHALK
	Returning object from functions, friend classes, Pointer to object, Array of pointer to object.	4		
	Constructors and Destructors: Introduction, Default Constructor, Parameterized Constructor and examples, Destructor	4		

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UNIT 5	**Templates:** Introduction, Function Template and examples,	3	Object Oriented Programming with C++ by E.Balagurusamy	BLACK BOARD AND CHALK
	Class Template and examples.	3		
	Working with Files: Introduction, File Operations, Various File Modes,	4		
	File Pointer and their Manipulation	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHLESHA DATTARAM GURAV DEPARTMENT:IT

CLASS: FY BSc IT DIV B (WEB) SEMESTER:SEM -2 MONTH: FEB-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand basics of the Internet and its applications.
- Learn basics of HTML 5, creating hyperlinks and adding background.
- Learn CSS and formatting using CSS.
- Understand how server-side programming works on the web.
- PHP Basic syntax for variable types and calculations.
- Create conditional structures, storing data in arrays
- Use PHP built-in functions and creating custom functions
- Understand POST and GET in form submission.
- Learn how to receive and process form submission data.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3 WEB PROGRAMMING UNIT 1	Internet and the World Wide Web: What is Internet? Introduction to internet and its applications, E-mail, telnet, FTP, e-commerce, video conferencing, e-business. Internet service providers, domain name server, internet address, World Wide Web (WWW): World Wide Web and its evolution, uniform resource locator (URL), browsers – internet explorer, Netscape navigator, opera, Firefox, chrome, Mozilla. search engine, web saver – apache, IIS, proxy server, HTTP protocol.	4 .	1. Web Design The Complete Reference By Thomas Powell- Tata McGraw Hill	BLACK BOARD AND CHALK

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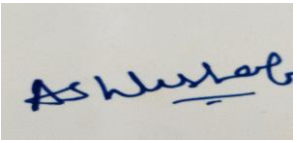
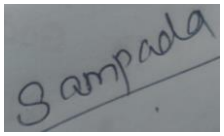
	HTML5: Introduction, Why HTML5? Formatting text by using tags, using lists and backgrounds, Creating hyperlinks and anchors. Style sheets, CSS formatting text using style sheets, formatting paragraphs using style sheets.	8	2. HTML5 Step by Step By Faithe Wempen - Microsoft Press	
UNIT 4	**PHP:** Why PHP and MySQL? Server-side scripting, PHP syntax and variables, comments, types,	3	PHP Project for Beginners BY SharanamShah, Vaishali	BLACK BOARD AND CHALK
	control structures, branching, looping, termination, functions, passing information with PHP, GET, POST,	3		
	formatting form variables, superglobal arrays, strings and string functions,	3		
	regular expressions, arrays, number handling, basic PHP errors/problems	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.IT - B SEMESTER: II MONTH: FEBRUARY-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- design dynamic websites that meet specified needs and interests.
- write well-structured, easily maintained, standards-compliant, accessible HTML code.
- use JavaScript to add dynamic content to pages.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III UNIT-II	**HTML5 Page layout and navigation:** Creating navigational aids: planning site organization, creating text based navigation bar, creating graphics based navigation bar, creating graphical navigation bar, creating image map, redirecting to another URL,	3	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	Blackboard, Chalk
	creating division based layouts: HTML5 semantic tags, creating divisions, creating HTML5 semantic layout, positioning and formatting divisions.	2		Blackboard, Chalk
	HTML5 Tables, Forms and Media: Creating tables: creating simple table, specifying the size of the table, specifying the width of the column, merging table cells, using tables for page layout,	2		Blackboard, Chalk
	formatting tables: applying table borders, applying background and foreground fills, changing cell padding, spacing and alignment,	2		Blackboard, Chalk

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	creating user forms: creating basic form, using check boxes and option buttons, creating lists, additional input types in HTML5, Incorporating sound and video: audio and video in HTML5, HTML multimedia basics, embedding video clips, incorporating audio on web page	3		Blackboard, Chalk
UNIT-III	**Java Script:** Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security,	1	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	Blackboard, Chalk
	Operators: Assignment Operators, Comparison Operators, Arithmetic Operators, % (Modulus), ++(Increment), --(Decrement), -(Unary Negation), Logical Operators, Short-Circuit Evaluation, String Operators, Special Operators, ?: (Conditional operator), , (Comma operator), delete, new, this, void	2		Blackboard, Chalk
	Statements: Break, comment, continue, delete, do...while, export, for, for...in, function, if...else, import, labelled, return, switch, var, while, with	2		Blackboard, Chalk
	Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, regExp	2		Blackboard, Chalk
	Document and its associated objects: document, Link, Area, Anchor, Image, Applet, Layer	2		Blackboard, Chalk
	Events and Event Handlers : General Information about Events, Defining Event Handlers, event, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp, onMove, onReset, onResize, onSelect, onSubmit, onUnload	3		Blackboard, Chalk
UNIT-V	**Advanced PHP and MySQL :** PHP/MySQL Functions, Integrating web forms and databases,	5		Blackboard, Chalk

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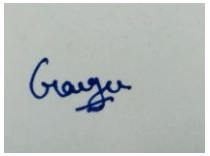
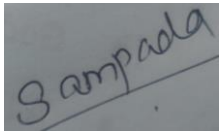
	Displaying queries in tables, Building Forms from queries, String and	3	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	Blackboard, Chalk
	Regular Expressions, Sessions, Cookies and HTTP, E-Mail	4		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS:FY BSc IT DIV-B(OOP) SEMESTER: SEM-2 MONTH:JAN-MAR ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- The learners will be able to :
- To understand how C++ improves C with object-oriented features.
- To learn how to write inline functions for efficiency and performance.
- To learn the syntax and semantics of the C++ programming language.
- To learn how to design C++ classes for code reuse.
- To learn how to implement copy constructors and class member functions.
- To understand the concept of data abstraction and encapsulation.
- To learn how to overload functions and operators in C++.
- To learn how containment and inheritance promote code reuse in C++.
- To learn how inheritance and virtual functions implement dynamic binding with polymorphism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER1 OOP UNIT 1	**Object Oriented Methodology**: Introduction, Advantages and Disadvantages of Procedure Oriented Languages,	3	Object Oriented Programming with C++ BY E. Balagurusamy	BLACK BOARD AND CHALK
	what is Object Oriented? What is Object Oriented Development? Object Oriented Themes, Benefits and Application of OOPS.	3		
	Principles of OOPS: OOPS Paradigm, Basic Concepts of OOPS: Objects, Classes, Data Abstraction and Data Encapsulation,	3		
	Inheritance, Polymorphism, Dynamic Binding	3		

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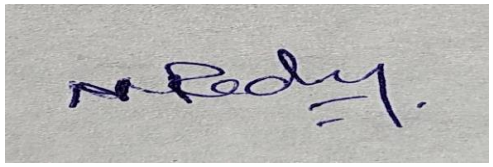
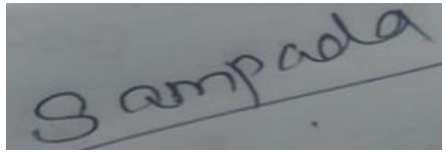
UNIT 3	**Polymorphism:** Concept of function overloading, overloaded operators,	3	Object Oriented Programming with C++ BY E. Balagurusamy	BLACK BOARD AND CHALK
	overloading unary and binary operators, overloading comparison operator, overloading arithmetic assignment operator, Data Conversion between objects and basic types,	3		
	Virtual Functions: Introduction and need, Pure Virtual Functions,	3		
	Static Functions, this Pointer, abstract classes, virtual	3		
UNIT 4	**Program development using Inheritance:** Introduction, understanding inheritance, Advantages provided by inheritance,	3	Object Oriented Programming with C++ BY E. Balagurusamy	BLACK BOARD AND CHALK
	choosing the access specifier, Derived class declaration, derived class constructors, class hierarchies,	3		
	multiple inheritance, multilevel inheritance, containership, hybrid inheritance.	3		
	Exception Handling: Introduction, Exception Handling Mechanism	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.IT - C SEMESTER: II MONTH: FEBRUARY-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- Identify IT Infrastructure Management and Green Data Centre Metrics for software development
- Illustrate various green IT services and its roles.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-V Unit-II	**Minimizing Power Usage:** Power Problems, Monitoring Power Usage, Servers, Low-Cost Options, Reducing Power Use, Data De-Duplication, Virtualization, Management, Bigger Drives, Involving the Utility Company, LowPower Computers, PCs, Linux, Components, Servers, Computer Settings, Storage, Monitors, Power Supplies, Wireless Devices, Software.	5	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter McGraw Hill 2008	Blackboard, Chalk
	Cooling: Cooling Costs, Power Cost, Causes of Cost, Calculating Cooling Needs, Reducing Cooling Costs, Economizers, On-Demand Cooling, HP's Solution, Optimizing Airflow, Hot Aisle/Cold Aisle, Raised Floors, Cable Management,	3		Blackboard, Chalk
	Vapour Seal, Prevent Recirculation of Equipment Exhaust, Supply Air Directly to Heat Sources, Fans, Humidity, Adding Cooling, Fluid Considerations, System Design, Datacentre Design, Centralized Control, Design for Your Needs, Put Everything Together.	4		Blackboard, Chalk

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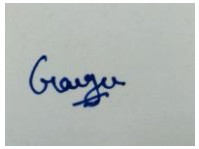
Unit-IV	**Recycling:** Problems, China, Africa, Materials, Means of Disposal, Recycling, Refurbishing, Make the Decision, Life Cycle, from beginning to end, Life, Cost, Green Design,	3	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter McGraw Hill 2008	Blackboard, Chalk
	Recycling Companies, Finding the Best One, Checklist, Certifications, Hard Drive Recycling, Consequences, cleaning a Hard Drive, Pros and cons of each method, CDs and DVDs, good and bad about CD and DVDs disposal, Change the mind-set, David vs. America Online	3		Blackboard, Chalk
	Hardware Considerations: Certification Programs, EPEAT, RoHS, Energy Star, Computers, Monitors, Printers, Scanners, All-in-Ones, Thin Clients, Servers, Blade Servers, Consolidation, Products, Hardware Considerations, Planned Obsolescence, Packaging, Toxins, Other Factors, Remote Desktop, Using Remote Desktop, Establishing a Connection, In Practice	6		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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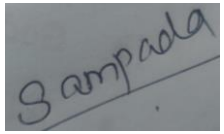

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI_ DEPARTMENT: _____BSC-IT___ CLASS: __FYIT___ SEMESTER: II

MONTH: ____December to March_____ ACADEMIC YEAR: ____20121-22__

LEARNING OBJECTIVE/S:
The learners will be able to:

Get knowledge that how to disposed e-wastages and to recycle the product and save our environment. To be capable of managing complex IT projects with consideration of the human, financial and environmental factors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Green Computing USIT205 Unit 1	**Introduction**: Overview and Issues: Problems: Toxins, Power Consumption, Equipment . Disposal Company's Carbon Footprint: Measuring, Details, reasons to bother, Plan for the Future, Cost Savings: Hardware, Power. Initiatives and Standards: Global Initiatives: United Nations, Basel Action Network, Basel Convention, North America: The United States, Canada, Australia, Europe, WEEE Directive, RoHS, National Adoption, Asia: Japan.	3 3 3 3	Toby Velte, Anthony Velte, Robert Elsenpeter	Chalk, Blackboard

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Green Computing USIT205 Unit 3	**Changing the Way of Work: Old** Behaviours, starting at the Top, Process Reengineering with Green in Mind, Analysing the Global Impact of Local Actions, Steps: Water, Recycling, Energy, Pollutants, Teleworkers and Outsourcing, Telecommuting, Outsourcing, how to Outsource. Going Paperless: Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Include, Building an Intranet, Microsoft Office Interchange (EDI), Nuts and Bolts.	4 2 3 3	Toby Velte, Anthony Velte, Robert Elsenpeter	Chalk, Blackboard
Green Computing USIT205 Unit 5	**Greening Your Information Systems**: Initial Improvement Calculations, Selecting Metrics, Customer Interaction, Paper Reduction, Green Supply Chain, Improve Technology Infrastructure, Reduce PCs and Servers, Shared Services, Hardware Costs, Cooling. Staying Green: Organizational Check-ups. Chief Green Officer, Evolution, Sell the CEO, SMART Goals, Equipment Check-ups, Gather Data, Tracking the data, Baseline Data, Benchmarking, Analyse Data, Conduct Audits, Certifications, Benefits, Realities, Helpful Organizations	3 4 3 2	Toby Velte, Anthony Velte, Robert Elsenpeter	Chalk, Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __36_____

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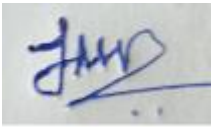

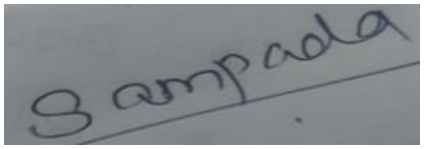

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHLESHA DATTARAM GURAV. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.IT - C(MPA) SEMESTER: II MONTH: FEBRUARY-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand and realize the Interfacing of memory & various I/O devices with 8085 microprocessors.
- Understand and classify the instruction set of 8085 microprocessor and distinguish the use of different instructions and apply it in assembly language programming.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 MPA Unit 1	**Microprocessor, microcomputers, and Assembly Language:** Microprocessor, Microprocessor Instruction Set and Computer Languages, From Large Computers to Single-Chip Microcontrollers, Applications.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
	Microprocessor Architecture and Microcomputer System: Microprocessor Architecture and its operation's, Memory, I/O Devices, Microcomputer System, Logic Devices and Interfacing, Microprocessor-Based System Application.	4	Microprocessors Architecture, Programming and Applications with the 8085.	Black board & Chalk

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			Ramesh Gaonkar PENRAM Fifth 2012	
	8085 Microprocessor Architecture and Memory Interface: Introduction, 8085 Microprocessor unit, 8085-Based Microcomputer, Memory Interfacing, Interfacing the 8155 Memory Segment, Illustrative Example: Designing Memory for the MCTS Project, Testing and Troubleshooting Memory Interfacing Circuit, 8085-Based Single-Board microcomputer.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
Paper-02 MPA Unit 2	**Interfacing of I/O Devices** : Basic Interfacing concepts, Interfacing Output Displays, Interfacing Input Devices, Memory Mapped I/O, Testing and Troubleshooting I/O Interfacing Circuits.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
	Introduction to 8085 Assembly Language Programming: The 8085 Programming Model, Instruction Classification, Instruction, Data and Storage, Writing assembling and Execution of a simple program, Overview of 8085 Instruction Set, Writing and Assembling Program.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
	Introduction to 8085 Instructions:	4	Microprocessors Architecture,	Black board & Chalk

	Data Transfer Operations, Arithmetic Operations, Logic Operation, Branch Operation, Writing Assembly Languages Programs, Debugging a Program		Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	

PAPER-02 MPA UNIT-3	**Programming Techniques With Additional Instructions:** Programming Techniques: Looping, Counting and Indexing, Additional Data Transfer and 16-Bit Arithmetic Instructions, Arithmetic Instruction Related to Memory, Logic Operations: Rotate, Logics Operations: Compare, Dynamic Debugging.	5	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Blackboard, Chalk
	Counters and Time Delays: Counters and Time Delays, Illustrative Program: Hexadecimal Counter, Illustrative Program: zero-to-nine (Modulo Ten) Counter, Generating Pulse Waveforms, Debugging Counter and Time-Delay Programs.	4		Blackboard, Chalk
	Stacks and Sub-Routines: Stack, Subroutine, Restart, Conditional Call, Return Instructions, Advanced Subroutine concepts.	3		Blackboard, Chalk
Paper 02 MPA UNIT-4	**Code Conversion, BCD Arithmetic, and 16-Bit Data Operations:** BCD-to-Binary Conversion, Binary-to-BCD Conversion, BCD-toSeven-Segment-LED Code Conversion, Binary-to-ASCII and ASCIIto-Binary Code Conversion, BCD Addition, BCD Subtraction, Introduction To Advanced Instructions and Applications, Multiplication, Subtraction With Carry.	5	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Blackboard, Chalk
	Software Development System and Assemblers: Microprocessors-Based Software Development system,	4		Blackboard, Chalk

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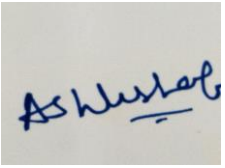
	Operating System and Programming Tools, Assemblers and Cross-Assemblers, Writing Program Using Cross Assemblers.			
	Interrupts: The 8085 Interrupt, 8085 Vectored Interrupts, Restart as S/W Instructions, Additional I/O Concepts and processes.	3		Blackboard, Chalk
Paper-02 MPA UNIT-5	**The Pentium and Pentium Pro microprocessors:** Introduction, Special Pentium registers, Memory management, Pentium instructions, Pentium Pro microprocessor, Special Pentium Pro features.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Blackboard, Chalk
	Core 2 and later Microprocessors: Introduction, Pentium II software changes, Pentium IV and Core 2, i3, i5 and i7.	4		Blackboard, Chalk
	SUN SPARC Microprocessor: Architecture, Register file, data types and instruction format	4		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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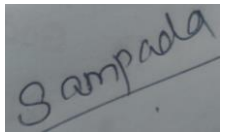

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYIT-C SEMESTER: SEM-2 MONTH: FEB-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

- Perform object oriented programming to develop solution to problems demonstrating usage of control structures, modularity, I/O and other standard language constructs.
- Demonstrate adeptness of object oriented programming to develop solution to problem demonstration usage of data abstraction, encapsulation, and inheritance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1 OBJECT ORIENTED PROGRAMMING UNIT 4	**Program development using Inheritance:** Introduction, understanding inheritance, Advantages provided by inheritance, choosing the access specifier, Derived class declaration,	3	Object Oriented Programming with C++ by E.Balagurusamy	BLACK BOARD AND CHALK
	derived class constructors, class hierarchies, multiple inheritance,	3		
	Multilevel inheritance, Containership, hybrid inheritance. Exception Handling: Introduction,	3		
	Exception Handling Mechanism, Concept of throw & catch with example	3		

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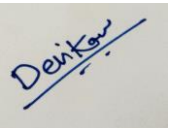
UNIT 5	**Templates:** Introduction, Function Template and examples,	3	Object Oriented Programming with C++ by E.Balagurusamy	BLACK BOARD AND CHALK
	Class Template and examples.	3		
	Working with Files: Introduction, File Operations, Various File Modes,	4		
	File Pointer and their Manipulation	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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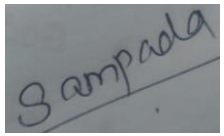

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: CS

CLASS:FYIT-DIV C SEMESTER: SEM-II MONTH: FEB-APR ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: To apply fundamental programming constructs. To illustrate the concept of classes and objects, Data Abstraction and Data Encapsulation. To implement the concept of Pointer, friend function , Virtual Functions, Constructor& Destructors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-1, OOPS, UNIT 1	**Object Oriented Methodology:** Introduction, Advantages and Disadvantages of Procedure Oriented Languages, what is Object Oriented? What is Object Oriented Development? Object Oriented Themes, Benefits and Application of OOPS.	4	Object Oriented Programming with C++ -by E. Balagurusamy	PPT, GoogleMeet, ,Slido.
	Principles of OOPS: OOPS Paradigm, Basic Concepts of OOPS: Objects, Classes, Data Abstraction and Data Encapsulation	3		
	Inheritance, Polymorphism, Dynamic Binding, Message Passing	5		
UNIT 2	**Classes and Objects:** Simple classes (Class specification, class members accessing), Defining member functions	4	Object Oriented Programming with C++ -by E. Balagurusamy	PPT, Projector, Blackboard & Chalk

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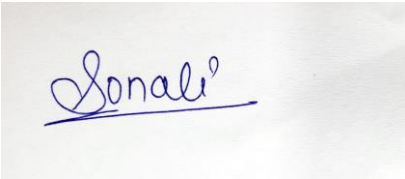
	passing object as an argument, Returning object from functions, friend classes, Pointer to object, Array of pointer to object.	4		
	Constructors and Destructors: Introduction, Default Constructor, Parameterized Constructor and examples, Destructors.	2		
UNIT 3	**Polymorphism:** Concept of function overloading, overloaded operators, overloading unary and binary operators	4	Object Oriented Programming with C++ -by E. Balagurusamy	PPT, Projector, Blackboard & Chalk
	overloading comparison operator, overloading arithmetic assignment operator, Data Conversion between objects and basic types.	5		
	Virtual Functions: Introduction and need, Pure Virtual Functions, Static Functions, this Pointer, abstract classes, virtual destructors.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36



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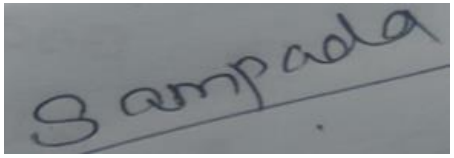

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE **DEPARTMENT**: ____IT____

CLASS: FYIT_C DIV **SEMESTER**: 2 **MONTH**: FEB TO APRIL **ACADEMIC YEAR:** 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand HTML**
- **Students will learn how t works with HTML and CSS**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT203 Web Programming	**Internet and the World Wide Web:** What is Internet? Introduction to internet and its applications, E-mail, telnet, FTP, e-commerce, video conferencing, e-business. Internet service providers, domain name server, internet address, World Wide Web (WWW): World Wide Web and its evolution, uniform resource locator (URL), browsers – internet explorer, Netscape navigator, opera, Firefox, chrome, Mozilla. search engine, web saver – apache, IIS, proxy server, HTTP protocol	6	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	GOOGLE MEET AND GOOGLE CLASSROOM, BLACKBOARD AND CHALK

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Unit I	**HTML5:** Introduction, Why HTML5? Formatting text by using tags, using lists and backgrounds, Creating hyperlinks and anchors. Style sheets, CSS formatting text using style sheets, formatting paragraphs using style sheets.	6		
Unit II	**HTML5 Page layout and navigation:** Creating navigational aids: planning site organization, creating text based navigation bar, creating graphics based navigation bar, creating graphical navigation bar, creating image map, redirecting to anotherURL, creating division based layouts: HTML5 semantic tags, creating divisions, creating HTML5 semantic layout, positioning and formatting divisions	6	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	GOOGLE MEET AND GOOGLE CLASSROOM, BLACKBOARD AND CHALK
	HTML5 Tables, Forms and Media: Creating tables: creating simple table, specifying the size of the table, specifying the width of the column, merging table cells, using tables for page layout, formatting tables: applying table borders, applying	6		

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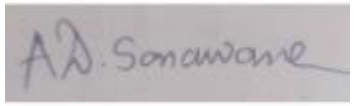
	background and foreground fills, changing cell padding, spacing and alignment, creating user forms: creating basic form, using check boxes and option buttons, creating lists, additional input types in HTML5, Incorporating sound and video: audio and video in HTML5, HTML multimedia basics, embedding video clips, incorporating audio on web page			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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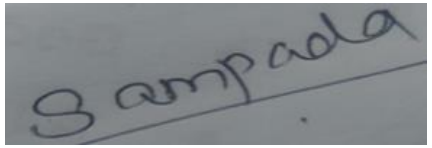

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT:CS

CLASS: FY BSc IT DIV C(WEB) SEMESTER:SEM -2 MONTH: DEC-MAR ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand how server-side programming works on the web.
- PHP Basic syntax for variable types and calculations.
- Creating conditional structures
- Storing data in arrays
- Using PHP built-in functions and creating custom functions
- Understanding POST and GET in form submission.
- How to receive and process form submission data.
- Reading and writing cookies.
- Security tips (i.e. SQL Injection)
- Create a database in phpMyAdmin.
- Read and process data in a MySQL database. Students will learn JavaScript's role in websites and web apps.
- Students will be introduced to basic CS concepts
- Students will learn basic programming structures such as: variables, functions arrays etc.
- Students will learn how JavaScript works with HTML and CSS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3	**Java Script:** Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security,	2	JavaScript 2.0: The Complete	BLACK BOARD AND CHALK

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WEB PROGRAMMING UNIT 3	**Operators**: Assignment Operators, Comparison Operators, Arithmetic Operators, % (Modulus), ++(Increment), --(Decrement), -(Unary Negation), Logical Operators, Short-Circuit Evaluation, String Operators, Special Operators, ?: (Conditional operator), , (Comma operator), delete, new, this, void	3	Reference BY Thomas Powell and Fritz Schneider	
	Statements: Break, comment, continue, delete, do...while, export, for, for...in, function, if...else, import, labelled, return, switch, var, while, with,	2		
	Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, regExp **Document and its associated objects:** document, Link, Area, Anchor, Image, Applet, Layer	2		
	Events and Event Handlers : General Information about Events, Defining Event Handlers, event, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp,	3		
UNIT 4	**PHP:** Why PHP and MySQL? Server-side scripting, PHP syntax and variables, comments, types,	3	PHP Project for Beginners BY SharanamShah, Vaishali	BLACK BOARD AND CHALK
	control structures, branching, looping, termination, functions, passing information with PHP, GET, POST,	3		
	formatting form variables, superglobal arrays, strings and string functions,	3		

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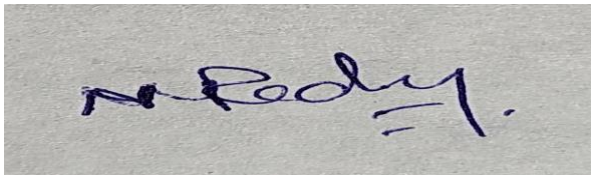
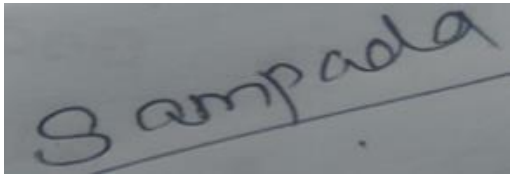
	regular expressions, arrays, number handling, basic PHP errors/problems	3		
UNIT 5	**Advanced PHP and MySQL :** PHP/MySQL Functions, Integrating web forms and databases,	3	PHP Project for Beginners BY SharanamShah, Vaishali	BLACK BOARD AND CHALK
	Displaying queries in tables, Building Forms from queries,	3		
	String and Regular Expressions, Sessions,	3		
	Cookies and HTTP, E-Mail	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____Archana Malpathak_____ DEPARTMENT: _____Mathematics_____ CLASS: _____SYIT_____ SEMESTER: _____ III_____ MONTH: June to October _____ ACADEMIC YEAR: __2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II Unit-I Matrices and Complex Number	Matrices : Inverse,properties,Rank by Normal and Echelon form,Linearequations,Linear dependent and independent Linear transformation,ch roots and ch vectors Caley Hamiltonian theroem,Similarity of matrix,Digonal matrix Complex number - complex number equality of complex numberArgand digram,polar form and exponential of complex numberHyperbolic and Logarithmic function of complex number	12	Applied Maths by G.V.Kumbojkar Higher Engineering of mathematics TechMax	Black board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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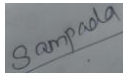

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT SEMESTER: IV MONTH: December to March
ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -I The Mean, Median, Mode, and Other Measures of Central Tendency	The Mean, Median, Mode, and Other Measures of Central Tendency: Index, or Subscript, Notation, Summation Notation, Averages, or Measures of Central Tendency ,The Arithmetic Mean , The Weighted Arithmetic Mean ,Properties of the Arithmetic Mean ,The Arithmetic Mean Computed from Grouped Data ,The Median ,The Mode, The Empirical Relation Between the Mean, Median, and Mode, The Geometric Mean G, The Harmonic Mean H ,The Relation Between the Arithmetic, Geometric, and Harmonic Means, The Root Mean Square, Quartiles, Deciles, and Percentiles, Software and Measures of Central Tendency. The Standard Deviation and Other Measures of Dispersion: Dispersion, or Variation, The Range, The Mean Deviation, The Semi-Interquartile Range, The 10–90 Percentile Range, The Standard Deviation, The Variance, Short Methods for Computing the Standard Deviation, Properties of the Standard Deviation, Charlie's Check, Sheppard's Correction for Variance, Empirical Relations Between Measures of Dispersion, Absolute and Relative Dispersion; Coefficient of Variation, Standardized Variable; Standard	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Scores, Software and Measures of Dispersion. Introduction to R: Basic syntax, data types, variables, operators, control statements, R-functions, R – Vectors, R – lists, R Arrays..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT SEMESTER: IV MONTH: December to March
ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -III Statistical Estimation Theory, Statistical Decision Theory,	Statistical Estimation Theory: Estimation of Parameters, Unbiased Estimates, Efficient Estimates, Point Estimates and Interval Estimates; Their Reliability, Confidence-Interval Estimates of Population Parameters, Probable Error. Statistical Decision Theory: Statistical Decisions, Statistical Hypotheses, Tests of Hypotheses	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	and Significance, or Decision Rules, Type I and Type II Errors, Level of Significance, Tests Involving Normal Distributions, Two-Tailed and One-Tailed Tests, Special Tests, Operating-Characteristic Curves; the Power of a Test, p-Values for Hypotheses Tests, Control Charts, Tests Involving Sample Differences, Tests Involving Binomial Distributions. Statistics in R: mean, median, mode, Normal Distribution , Binomial Distribution, Frequency Distribution in R.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics CLASS: SYIT
SEMESTER: IV MONTH: December to March ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -IV Small Sampling Theory, The Chi-Square Test:	Small Sampling Theory: Small Samples, Student's t Distribution, Confidence Intervals, Tests of Hypotheses and Significance, The Chi-Square Distribution, Confidence Intervals for Sigma , Degrees of Freedom, The F Distribution. The Chi-Square Test: Observed and Theoretical Frequencies, Definition of chi-square,	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE(GOOGLE CLASS

	Significance Tests, The Chi-Square Test for Goodness of Fit, Contingency Tables, Yates' Correction for Continuity, Simple Formulas for Computing chi-square, Coefficient of Contingency, Correlation of Attributes, Additive Property of chi-square.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

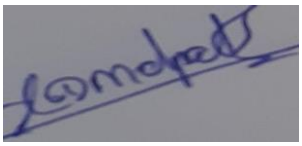
TEACHING PLAN (UNIT PLAN)

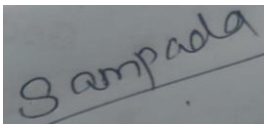
NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics CLASS: SYIT
SEMESTER: IV MONTH: December to March ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -V Curve Fitting and the Method of Least Squares: Correlation Theory:,	Curve Fitting and the Method of Least Squares: Relationship Between Variables, Curve Fitting, Equations of Approximating Curves, Freehand Method of Curve Fitting, The Straight Line, The Method of Least Squares, The Least-Squares Line, Nonlinear Relationships, The Least-Squares Parabola, Regression, Applications to Time Series, Problems Involving More Than Two Variables. Correlation Theory: Correlation and Regression, Linear Correlation, Measures of Correlation, The Least-Squares Regression Lines, Standard Error of Estimate, Explained and Unexplained Variation, Coefficient of Correlation, Remarks Concerning the Correlation Coefficient, Product-Moment Formula for the Linear Correlation Coefficient, Short Computational Formulas,	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Regression Lines and the Linear Correlation Coefficient, Correlation of Time Series, Correlation of Attributes, Sampling Theory of Correlation, Sampling Theory of Regression..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT:CS

CLASS:SYIT-DIV A SEMESTER: SEM-4 MONTH: NOV-MAR ACADEMIC YEAR: 2021-2022

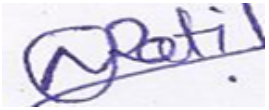
LEARNING OBJECTIVE/S:
Have a knowledge and understanding of geometrical transformations and 3D viewing.
Have a knowledge and understanding of techniques for representing 3D geometrical objects
Explain different Image enhancement techniques
Understand and review image transforms

PAPER,TITLE , UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5,Computer graphics and animation, UNIT 3	**Viewing in 3D:Stages in 3D viewing, Canonical View Volume (CVV), Specifying an Arbitrary 3D View, Examples of 3D Viewing, The Mathematics of Planar Geometric Projections, Combined transformation matrices for projections and viewing, Coordinate Systems and matrices, camera model and viewing pyramid.**	7	Computer graphics by Rajesh mourya Image processing by Dhananjay	GOOGLE MEET,GOOGLE SHEET,PPT
	Light:Radiometry,Transport,Equation,Photometry	4		

	Color:Colorimetry,ColorSpaces,ChromaticAdaptation,Color Appearance	4		
UNIT 4	**Visible-Surface Determination:Techniques for efficient Visible-Surface Algorithms, Categories of algorithms, Back face removal, The z-Buffer Algorithm, Scan-line method, Painter's algorithms (depth sorting), Area sub-division method, BSP trees, Visible-Surface Ray Tracing, comparison of the methods.**	7	Computer graphics by Rajesh mourya Image processing by Dhananjay	GOOGLE MEET,GOOGLE SHEET,PPT
	Plane Curves and Surfaces:Curve Representation, Nonparametric Curves, Parametric Curves,Parametric Representation of a Circle, Parametric Representation of an Ellipse, Parametric Representation of a Parabola, Parametric Representation of a Hyperbola	3		
	Representation of Space Curves,Cubic Splines, , Bezier Curves, B-spline Curves, B-spline Curve Fit,B-spline Curve Subdivision, Parametric Cubic Curves, Quadric Surfaces. Bezier Surfaces	6		
Unit 5	**Computer Animation:Principles of Animation, Key framing, Deformations, Character Animation, Physics-Based Animation, Procedural Techniques, Groups of Objects.**	6	Computer graphics by Rajesh mourya Image processing by Dhananjay	GOOGLE MEET,GOOGLE SHEET,PPT

	Image Manipulation and Storage: What is an Image? Digital image file formats, Image compression standard – JPEG,	4		
	Image Processing - Digital image enhancement,contrast stretching, Histogram Equalization, smoothing and median Filtering.	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 46



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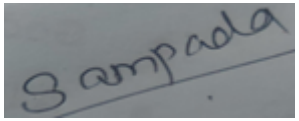

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT

CLASS:SYIT-DIV A SEMESTER: SEM-IV MONTH: NOV-MAR ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the basic concepts of Computer Graphics. Demonstrate various algorithms for scan conversion and filling of basic objects and their comparative analysis. Apply geometric transformations, viewing and clipping on graphical objects.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-5, CGA, UNIT-1	**Introduction to Computer Graphics:**Overview of Computer Graphics, Computer Graphics Application and Software, Description of some graphics devices, Input Devices for Operator Interaction, Active and Passive Graphics Devices, Display Technologies, Storage Tube Graphics Displays, Calligraphic Refresh Graphics Displays	2	Computer Graphics by Hearn, Baker	PPT, GoogleMeet, Jamboard ,Slido.
	Raster Refresh (Raster-Scan) Graphics Displays, Cathode Ray Tube Basics, Color CRT Raster Scan Basics, Video Basics, The Video Controller, Random-Scan Display Processor, LCD displays.	2		
	Scan conversion – Digital Differential Analyzer (DDA) algorithm, Bresenhams' Line drawing algorithm.Bresenhams' method of Circle drawing, Midpoint Circle Algorithm, Midpoint Ellipse Algorithm	3		

	Mid-point criteria, Problems of Aliasing, end-point ordering and clipping lines, Scan Converting Circles, Clipping Lines algorithms– Cyrus-Beck, Cohen-Sutherland and Liang-Barsky, Clipping Polygons, problem with multiple components.	4		
UNIT-2	**Two-Dimensional Transformations:**Transformations and Matrices, Transformation Conventions, 2D Transformations, Homogeneous Coordinates and Matrix Representation of 2D Transformations, Translations and Homogeneous Coordinates	2	Computer Graphics by Hearn, Baker	PPT, GoogleMeet, Jamboard ,Slido.
	Rotation, Reflection, Scaling, Combined Transformation, Transformation of Points, Transformation of The Unit Square, Solid Body Transformations, Rotation About an Arbitrary Point.	2		
	Reflection through an Arbitrary Line ,A Geometric Interpretation of Homogeneous Coordinates, The Window-to Viewport Transformations.	2		
	Three-Dimensional Transformations: Three-Dimensional Scaling, Three-Dimensional Shearing, Three Dimensional Rotation, Three-Dimensional Reflection, Three Dimensional Translation, Multiple Transformation, Rotation about an Arbitrary Axis in Space, Reflection through an Arbitrary Plane.	3		
	Matrix Representation of 3D Transformations, Composition of 3D Transformations, Affine and Perspective Geometry, Perspective Transformations, Techniques for Generating Perspective Views, Vanishing Points	2		

	the Perspective Geometry and camera models, Orthographic Projections, Axonometric Projections, Oblique Projections, View volumes for projections.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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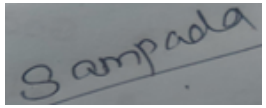

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Miss Shilpa James Rodrigues

DEPARTMENT: IT

CLASS: S.Y.I.T.-A (Core Java)

SEMESTER: IV

MONTH: January - March

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S :
The learners will be able to :

-Understand basics of Java programming language .

-Learn to control the flow of execution of the program.

-Understand of to create java classes and objects and using them to make java application

-Learn the concepts of multi threading and exception handling.

-Learn to use streams for reading and writing data to and from files.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401 , Unit 1, Core Java .	**Introduction:** History, architecture and its components, Java Class File, Java Runtime Environment, The Java Virtual Machine, JVM Components, The Java API, java platform, java development kit, Lambda Expressions, Methods References, Type Annotations, Method Parameter Reflection, setting the path environment variable, Java Compiler And Interpreter, java	08	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Power point, google meet.

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	programs, java applications, main(), public, static, void, string[] args, statements, white space, case sensitivity, identifiers, keywords, comments, braces and code blocks, variables, variable name			
	Data types: primitive data types, Object Reference Types, Strings, Auto boxing, operators and properties of operators, Arithmetic operators, assignment operators, increment and decrement operator, relational operator, logical operator, bitwise operator, conditional operator.	04	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Power point, google meet.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401 , Unit 2, Core Java .	**Control Flow Statements:** The If…Else If…Else Statement, The Switch…Case Statement	02	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Power point, google meet.
	Iterations: The While Loop, The Do … While Loop, The For Loop, The Foreach Loop, Labeled Statements, The Break And Continue Statements, The Return Statement	04	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Power point, google meet.
	Classes: Types of Classes, Scope Rules, Access Modifier, Instantiating Objects From A Class, Initializing The Class Object And Its Attributes, Class Methods, Accessing A Method, Method Returning A Value, Method's Arguments, Method Overloading, Variable Arguments [Varargs], Constructors, this Instance, super Instance, Characteristics Of Members Of A Class, constants, this instance, static fields of a class, static methods of a class, garbage collection.	06	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Power point, google meet.

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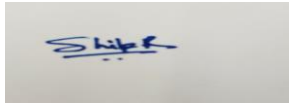
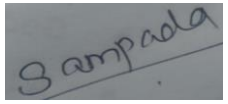
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401 , Unit 4, Core Java .	**Enumerations, Arrays:** Two Dimensional Arrays, Multi-Dimensional Arrays, Vectors, Adding Elements To A Vector, Accessing Vector Elements, Searching For Elements In A Vector, Working With The Size of The Vector.	03	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Power point, google meet.
	Multithreading: the thread control methods, thread life cycle, the main thread, creating a thread, extending the thread class.	03	Core Java 8 for Beginners -Vaishali Shah, Sharnam Sha	Power point, google meet.
	Exceptions: Catching Java Exceptions, Catching Run-Time Exceptions, Handling Multiple Exceptions, The finally Clause, The throws Clause	03	Core Java 8 for Beginners -Vaishali Shah, Sharnam Sha	Power point, google meet.
	Byte streams: reading console input, writing console output, reading file, writing file, writing binary data, reading binary data, getting started with character streams, writing file, reading file	03	Core Java 8 for Beginners -Vaishali Shah, Sharnam Sha	Power point, google meet.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)-CORE JAVA

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: SYIT (A)

SEMESTER: IV MONTH: JAN-MARCH ACADEMIC YEAR: 2021-22

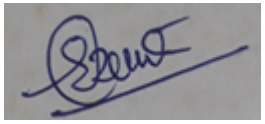
LEARNING OBJECTIVE/S:
The learners will be able to:

- Acquire knowledge of programming language java.
- Understand data types, control flow statements, iterations and classes.
- Gain proficiency in inheritance and packages.
- Understand enumeration, arrays, exceptions and byte stream.
- Acquire knowledge of event handling and layouts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401, Core Java, Unit III	**Inheritance:** Derived Class Objects, Inheritance and Access Control, Default Base Class Constructors, this and super keywords.	04	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Abstract Classes And Interfaces, Abstract Classes, Abstract Methods, Interfaces, What Is An Interface? How Is An Interface Different From An Abstract Class?, Multiple Inheritance, Default Implementation, Adding New Functionality, Method Implementation, Classes V/s Interfaces, Defining An Interface, Implementing Interfaces.	05	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

	Packages: Creating Packages, Default Package, Importing Packages, Using A Package.	03	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
USIT401, Core Java, Unit V	**Event Handling:** Delegation Event Model, Events, Event classes, Event listener interfaces, Using delegation event model, adapter classes and inner classes.	03	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Abstract Window Toolkit: Window Fundamentals, Component, Container, Panel, Window, Frame, Canvas. Components – Labels, Buttons, Check Boxes, Radio Buttons, Choice Menus, Text Fields, Text, Scrolling List, Scrollbars, Panels, Frames	07	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Layouts: Flow Layout, Grid Layout, Border Layout, Card Layout.	02	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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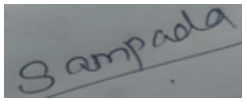

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SURBHI SHAH DEPARTMENT: IT-CS CLASS:SYIT-DIV A

SEMESTER: SEM-4 MONTH: JANUARY-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to The learners will be able to: to think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems to apply their knowledge and skills to be employed and excel in IT professional careers and/or to continue their education in IT and/or related post graduate programmes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:-II TITLE:- Introduction to Embedded Systems UNIT 1	**Introduction:** Embedded Systems and general purpose computer systems, history, classifications, applications and purpose of embedded systems	3	Introduction to embedded systems By Shibu K V	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE
	Core of embedded systems: microprocessors and microcontrollers, RISC and CISC controllers, Big endian and Little endian processors, Application specific ICs, Programmable logic devices, COTS, sensors and actuators, communication interface, embedded firmware, other system components.	6		
	Characteristics and quality attributes of embedded systems: Characteristics, operational and non-operational quality attributes.	3		
UNIT 4	**Designing Embedded System with 8051 Microcontroller:** Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	3	Programming Embedded Systems in C and C++	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE

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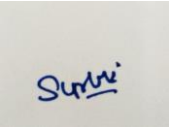
	Programming embedded systems: structure of embedded program, infinite loop, compiling, linking and debugging.	4	by Michael Barr	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 19



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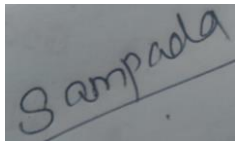

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____BSC-IT___ CLASS: __SYIT___ SEMESTER: ___IV

MONTH: ____December to March_____ ACADEMIC YEAR: ____2021-22__

LEARNING OBJECTIVE/S:
The learners will be able to:

To adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct. To be capable of managing complex IT projects with consideration of the human, financial and environmental factors. To work effectively as a part of a team to achieve a common stated goal.

Software Engineering USIT404 Unit - 3	**Architectural Design:** Architectural Design Decisions, System Organisation, Modular Decomposition Styles, Control Styles, Reference Architectures. User Interface Design: Need of UI design, Design issues, The UI design Process, User analysis, User Interface Prototyping, Interface Evaluation. Project Management Software Project Management, Management activities, Project Planning, Project Scheduling, Risk Management. Quality Management: Process and Product Quality, Quality assurance and Standards, Quality Planning, Quality Control, Software Measurement and Metrics.	2 3 2 2 3	Ian Somerville Roger Pressman	Chalk, Blackboard

Software Engineering USIT404 Unit - 4	**Verification and Validation:** Planning Verification and Validation, Software Inspections, Automated Static Analysis, Verification and Formal Methods. Software Testing: System Testing, Component Testing, Test Case Design, Test Automation. Software Measurement: Size-Oriented Metrics, Function-Oriented Metrics, Extended Function Point Metrics **Software Cost Estimation:** Software Productivity, Estimation Techniques, Algorithmic Cost Modelling, Project Duration and Staffing.	3 3 3 3	Ian Somerville Roger Pressman	Chalk, Blackboard
Software Engineering USIT404 Unit - 5	**Process Improvement:** Process and product quality, Process Classification, Process Measurement, Process Analysis and Modeling, Process Change. The CMMI Process Improvement Framework. Service Oriented Software Engineering: Services as reusable components, Service Engineering. Software Development with Services. Software reuse: The reuse landscape, Application frameworks, Software product lines, COTS product reuse. Distributed software engineering: Distributed systems issues, Client–server computing, Architectural patterns for distributed systems, Software as a service.	3 3 3 3	Ian Somerville Roger Pressman	Chalk, Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __36_____

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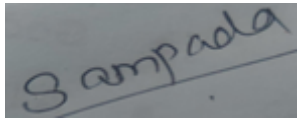

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAYATREE KARNIK DEPARTMENT: IT CLASS:SYIT Div: A SEMESTER:IV

MONTH:December to March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

To adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct. To be capable of managing complex IT projects with consideration of the human, financial and environmental factors. To work effectively as a part of a team to achieve a common stated goal.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Software Engineering USIT404 Unit - 1	**Introduction**: What is software engineering? Software Development Life Cycle, Requirements Analysis, Software Design, Coding, Testing, Maintenance etc. Software Requirements: Functional and Non-functional requirements, User Requirements, System Requirements, Interface Specification, Documentation of the software requirements. Software Processes: Process and Project, Component Software Processes. Software Development Process Models. Waterfall Model. Prototyping. Iterative	3 4 3	Ian Somerville Roger Pressman	Computer, Power point

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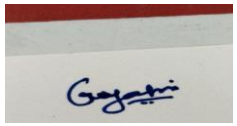
	Development. Rational Unified Process. The RAD Model Time boxing Model. Agile software development: Agile methods. Plan-driven and agile development, Extreme programming, Agile project management methods.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____



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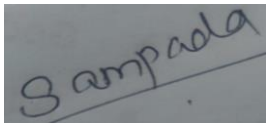

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. (Mrs.) Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: SYIT SEMESTER: **IV** MONTH: NOV to MARCH ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

To provide experience to integrate hardware and software for microcontroller applications systems.

To acquire knowledge about microcontrollers embedded processors and their applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 Embedded System Unit 2	**Embedded Systems – Application and Domain Specific:** Application specific – washing machine, domain specific - automotive.	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Embedded Hardware: Memory map, i/o map, interrupt map, processor family, external peripherals, memory – RAM , ROM, types of RAM and ROM, memory testing, CRC ,Flash memory.	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012	Projector, Laptop, Black board & Chalk

			And Embedded Systems Rajkamal Tata Mcgraw-Hill	
	Peripherals: Control and Status Registers, Device Driver, Timer Driver - Watchdog Timers.	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
Paper-02 Embedded System Unit 3	**The 8051 Microcontrollers:** Microcontrollers and Embedded processors, Overview of 8051 family.8051 Microcontroller hardware, Input/output pins, Ports, and Circuits, External Memory.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	8051 Programming in C: Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs.	6	Introduction to embedded systems Shibu K V	Projector, Laptop, Black board & Chalk

			Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	
Paper-02 Embedded System Unit 5	**Real Time Operating System (RTOS):** Operating system basics, types of operating systems, Real-Time Characteristics, Selection Process of an RTOS	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Design and Development: Embedded system development Environment – IDE, types of file generated on cross compilation, disassembler/ de-compiler, simulator, emulator and debugging, embedded product development life-cycle, trends in embedded industry.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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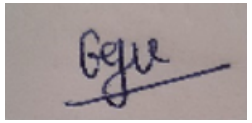

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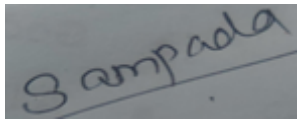

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TEACHING PLAN (UNIT PLAN)

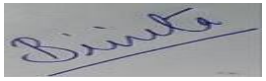
NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: S. Y. B. Sc. I. T –B SEMESTER: IV MONTH: November-March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :
a. Work with various transformations
b. Create various objects and applications using graphics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-V Computer Graphics and Applications Unit -II	**Two-Dimensional Transformations:** Transformations and Matrices, Homogeneous Coordinates and Matrix Representation of-Translations, Rotation, Reflection, Scaling, Combined Transformation, Transformation of Points, Unit Square, Solid Body Transformations, Rotation About an Arbitrary Point, Reflection through an Arbitrary Line, The Window-to-Viewport Transformations.	7	Computer Graphics by Rajesh Maurya	PowerPoint presentation through Google Meet
	Three-Dimensional Transformations: 3D- Scaling, Shearing, Rotation, Reflection, Translation, Multiple Transformation, Rotation about an Arbitrary Axis in Space, Reflection through an Arbitrary Plane, Composition of 3D Transformations, Affine and Perspective Geometry, Perspective Transformations, Vanishing Points, the Perspective Geometry, Orthographic Projections, Axonometric Projections, Oblique Projections, View volumes for projections.	5		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: S. Y. B. Sc. I. T –B SEMESTER: IV MONTH: November-March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various transformations

b. Create various objects and applications using graphics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-V Computer Graphics and Applications Unit -V	**Computer Animation:** Principles of Animation, Key framing, Deformations, Character Animation, Physics-Based Animation, Procedural Techniques, Groups of Objects.	3	Computer Graphics by Rajesh Maurya	PowerPoint presentation through Google Meet
	Image Manipulation and Storage: What is an Image? Digital image file formats, Image compression standard – JPEG, Image Processing - Digital image enhancement, contrast stretching, Histogram Equalization, smoothing and median Filtering.	9	Image Processing by Dhananjay	PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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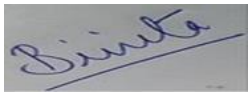

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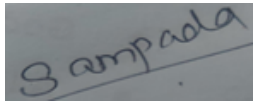

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:S.Y.BSC(I.T) Div-B SEMESTER: **IV** MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : To list the basic concepts used in computer graphics

To implement various algorithms to scan, convert the basic geometrical primitives, transformations, Area filling, clipping.

To describe the importance of viewing and projections.

To define the fundamentals of animation, virtual reality and its related technologies.

To understand a typical graphics pipeline

To design an application with the principles of virtual reality

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Computer Graphics and Animation USIT405 Unit-1	**Introduction to Computer Graphics:** Overview of Computer Graphics, Computer Graphics Application andSoftware, Description of some graphics devices, Input Devices forOperator Interaction, Active and Passive Graphics Devices, DisplayTechnologies, Storage Tube Graphics Displays, Calligraphic Refresh Graphics Displays, Raster Refresh (Raster-Scan) Graphics Displays,Cathode Ray Tube Basics, Color CRT Raster Scan Basics, VideoBasics, The Video Controller, Random-Scan Display Processor, LCD displays.	5	Computer Graphics -Hearn, Baker Computer Graphics-Rajesh.k.Mourya	Powerpoint presentation, Google meet

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	Scan conversion – Digital Differential Analyzer (DDA) algorithm,Bresenhams' Line drawing algorithm.Bresenhams' method of Circle drawing	3		
	Midpoint Circle Algorithm, Midpoint Ellipse Algorithm,Mid-point criteria	3		
	Problems of Aliasing, end-point ordering andclipping lines, Scan Converting Circles	2		
	Clipping Lines algorithms–Cyrus-Beck, Cohen-Sutherland and Liang-Barsky, Clipping Polygons,problem with multiple components.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		
Computer Graphics and Animation USIT405 Unit-3	**Viewing in 3D** Stages in 3D viewing, Canonical View Volume (CVV), Specifying an Arbitrary 3D View, Examples of 3D Viewing, The Mathematics of Planar Geometric Projections, Combined transformation matrices for projections and viewing, Coordinate Systems and matrices, camera model and viewing pyramid.	5	Computer Graphics -Hearn, Baker Computer Graphics-Rajesh.k.Mourya Computer Graphics - Principles and Practice- J. D. Foley, A. Van	Powerpoint presentation, Google meet
	Light: Radiometry,Transport,Equation,Photometry	3		
	Color: Colorimetry,ColorSpaces,ChromaticAdaptation, Color Appearance	3		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	11		

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			Dam, S. K. Feiner and J. F. Hughes	
Computer Graphics and Animation USIT405 Unit-4	**Visible-Surface Determination:** Techniques for efficient Visible-Surface Algorithms, Categories of algorithms, Back face removal, The z-Buffer Algorithm, Scan-line method, Painter's algorithms (depth sorting), Area subdivision method, BSP trees, Visible-Surface Ray Tracing, comparison of the methods.	5	Computer Graphics -Hearn, Baker Computer Graphics- Rajesh.k.Mourya Computer Graphics - Principles and Practice- J. D. Foley, A. Van	Powerpoint presentation, Google meet
	Plane Curves and Surfaces: Curve Representation, Nonparametric Curves, Parametric Curves, Parametric Representation of a Circle, Parametric Representation of an Ellipse, Parametric Representation of a Parabola, Parametric Representation of a Hyperbola, Representation of Space Curves, Cubic Splines, , Bezier Curves, B-spline Curves, B-spline Curve Fit, B-spline Curve Subdivision, Parametric Cubic Curves, QuadricSurfaces. Bezier Surfaces.	5		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	10		

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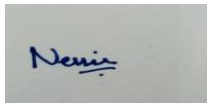

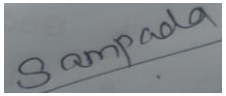

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT/CS

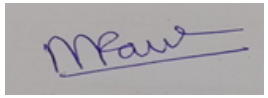
CLASS: SYIT DIV: B SEMESTER: IV MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to explore Java technologies for designing and developing dynamic, interactive and responsive applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Core Java (USIT401) Unit I	Introduction: History, architecture and its components, Java Class File, Java Runtime Environment, The Java Virtual Machine, JVM Components, The Java API, java platform, java development kit, Lambda Expressions, Methods References, Type Annotations, Method Parameter Reflection, setting the path environment variable, Java Compiler and Interpreter, java programs, java applications, main (), public, static, void, string [] args, statements, white space, case sensitivity, identifiers, keywords, comments, braces and code blocks, variables, variable name	05	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th Edition	Google Jam board, Slides, Docs
	Data types: primitive data types, Object Reference Types, Strings, Auto boxing, operators and properties of operators, Arithmetic operators, assignment operators, increment and decrement operator, relational operator, logical operator, bitwise operator, conditional operator	03		
	Event Handling: Delegation Event Model, Events, Event classes,	02		

Core Java (USIT401) Unit V	Event listener interfaces, Using delegation event model, adapter classes and inner classes.		Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th Edition	Google Jam board, Slides, Docs
	Abstract Window Toolkit: Window Fundamentals, Component, Container, Panel, Window, Frame, Canvas. Components – Labels, Buttons, Check Boxes, Radio Buttons, Choice Menus, Text Fields, Text, Scrolling List, Scrollbars, Panels, Frames	03		
	Layouts: Flow Layout, Grid Layout, Border Layout, Card Layout.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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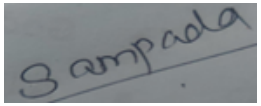

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYBSc(IT) DIV:B SEMESTER: IV MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Understand programming language and tools to develop computer programs and systems that are effective solutions to problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper:USIT401, unit:2, Title:Core Java	**Control Flow Statements:** The If…Else If…Else Statement, The Switch…Case Statement	3	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
	Iterations: The While Loop, The Do … While Loop, The For Loop, The Foreach Loop, Labeled Statements, The Break And Continue Statements, The Return Statement	4	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.

	Classes: Types of Classes, Scope Rules, Access Modifier, Instantiating Objects From A Class, Initializing The Class Object And Its Attributes, Class Methods, Accessing A Method, Method Returning A Value, Method's Arguments, Method Overloading, Variable Arguments [Varargs], Constructors, this Instance, super Instance, Characteristics Of Members Of A Class, constants, this instance, static fields of a class, static methods of a class, garbage collection.	5	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
Paper:USIT401, unit:3, Title:Core Java	**Inheritance:** Derived Class Objects, Inheritance and Access Control, Default Base Class Constructors, this and super keywords. Abstract Classes And Interfaces, Abstract Classes, Abstract Methods, Interfaces,	4	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
	What Is An Interface? How Is An Interface Different From An Abstract Class?, Multiple Inheritance, Default Implementation, Adding New Functionality, Method Implementation, Classes V/s Interfaces, Defining An Interface, Implementing Interfaces.	4	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
	Packages: Creating Packages, Default Package, Importing Packages, Using A Package.	4	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12

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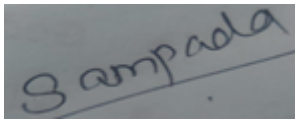

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Gauri Gaurav Vartak DEPARTMENT: Information Technology CLASS: SYIT SEMESTER: IV MONTH: NOV to MARCH ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

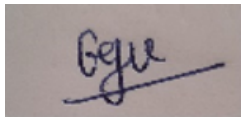
To provide experience to integrate hardware and software for microcontroller applications systems.

To acquire knowledge about microcontrollers embedded processors and their applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 Embedded System Unit 3	Microcontrollers and Embedded processors, Overview of 8051 family.8051 Microcontroller hardware Input/output pins, Ports, and Circuits, External Memory.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012	Projector, Laptop, Black board & Chalk

			And Embedded Systems Rajkamal Tata Mcgraw-Hill	
Paper-02 Embedded System Unit 5	Operating system basics, types of operating systems, Real-Time Characteristics, Selection Process of an RTOS.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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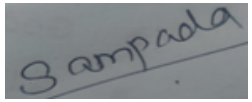

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pranali Dayanand Thakare DEPARTMENT: Information Technology

CLASS: SYIT SEMESTER: IV MONTH: NOV to MARCH ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

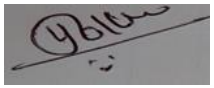
To provide experience to integrate hardware and software for microcontroller applications systems.

To acquire knowledge about microcontrollers embedded processors and their applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 Embedded System Unit 2	**Application specific** – washing machine, domain specific - automotive. Memory map, i/o map, interrupt map, processor family, external peripherals **Memory** – RAM , ROM, types of RAM and ROM, memory testing, CRC ,Flash memory .	8	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Control and Status Registers, Device Driver, Timer Driver - Watchdog Timers.	4	Introduction to embedded systems Shibu K V	Projector, Laptop, Black board & Chalk

			Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	
Paper-02 Embedded System Unit 5	Embedded system development Environment – IDE, types of file generated on cross compilation, disassembler/ de-compiler, simulator, emulator and debugging, embedded product development life-cycle, trends in embedded industry.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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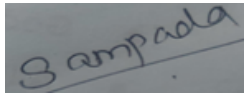

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SURBHI SHAH DEPARTMENT: IT-CS CLASS:SYIT-DIV A

SEMESTER: SEM-4 MONTH: JANUARY-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to The learners will be able to: to think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems to apply their knowledge and skills to be employed and excel in IT professional careers and/or to continue their education in IT and/or related post graduate programmes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:-II TITLE:- Introduction to Embedded Systems UNIT 1	**Introduction:** Embedded Systems and general purpose computer systems, history, classifications, applications and purpose of embedded systems	3	Introduction to embedded systems By Shibu K V	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE
	Core of embedded systems: microprocessors and microcontrollers, RISC and CISC controllers, Big endian and Little endian processors, Application specific ICs, Programmable logic devices, COTS, sensors and actuators, communication interface, embedded firmware, other system components.	6		
	Characteristics and quality attributes of embedded systems: Characteristics, operational and non-operational quality attributes.	3		
UNIT 4	**Designing Embedded System with 8051 Microcontroller:** Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	3	Programming Embedded Systems in C and C++	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE

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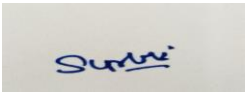
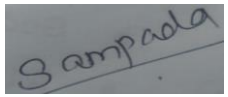
	Programming embedded systems: structure of embedded program, infinite loop, compiling, linking and debugging.	4	by Michael Barr	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 19





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____BSC-IT___ CLASS: __SYIT___ SEMESTER: ___IV

MONTH: ____December to March_____ ACADEMIC YEAR: ____2021-22__

LEARNING OBJECTIVE/S:
The learners will be able to:

To adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct. To be capable of managing complex IT projects with consideration of the human, financial and environmental factors. To work effectively as a part of a team to achieve a common stated goal.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Software Engineering USIT404 Unit - 1	**Introduction**: What is software engineering? Software Development Life Cycle, Requirements Analysis, Software Design, Coding, Testing, Maintenance etc. Software Requirements: Functional and Non-functional requirements, User Requirements, System Requirements, Interface Specification, Documentation of the software requirements. Software Processes: Process and Project, Component Software Processes. Software Development Process Models. Waterfall Model. Prototyping. Iterative	3 4 3	Ian Somerville Roger Pressman	Chalk, Blackboard

	Development. Rational Unified Process. The RAD Model Time boxing Model. Agile software development: Agile methods. Plan-driven and agile development, Extreme programming, Agile project management methods.	2		
Software Engineering USIT404 Unit - 2	**Socio-technical system:** Essential characteristics of socio technical systems, Emergent System Properties, Systems Engineering. Components of system such as organization, people and computers, Dealing Legacy Systems. Critical system: Types of critical system. A simple safety critical system, Dependability of a system, Availability and Reliability, Safety and Security of Software systems. Requirements Engineering Processes: Feasibility study, Requirements elicitation and analysis, Requirements Validations, Requirements Management	3 3 3 3	Ian Somerville Roger Pressman	Chalk, Blackboard
Software Engineering USIT404 Unit - 3	**Architectural Design:** Architectural Design Decisions, System Organisation, Modular Decomposition Styles, Control Styles, Reference Architectures. User Interface Design: Need of UI design, Design issues, The UI design Process, User analysis, User Interface Prototyping, Interface Evaluation. Project Management	2 3 2	Ian Somerville Roger Pressman	Chalk, Blackboard

	Software Project Management, Management activities, Project Planning, Project Scheduling, Risk Management. Quality Management: Process and Product Quality, Quality assurance and Standards, Quality Planning, Quality Control, Software Measurement and Metrics.	2 3		
Software Engineering USIT404 Unit - 4	**Verification and Validation:** Planning Verification and Validation, Software Inspections, Automated Static Analysis, Verification and Formal Methods. Software Testing: System Testing, Component Testing, Test Case Design, Test Automation. Software Measurement: Size-Oriented Metrics, Function-Oriented Metrics, Extended Function Point Metrics **Software Cost Estimation:** Software Productivity, Estimation Techniques, Algorithmic Cost Modelling, Project Duration and Staffing.	3 3 3 3	Ian Somerville Roger Pressman	Chalk, Blackboard
Software Engineering USIT404 Unit - 5	**Process Improvement:** Process and product quality, Process Classification, Process Measurement, Process Analysis and Modeling, Process Change. The CMMI Process Improvement Framework. Service Oriented Software Engineering: Services as reusable components, Service Engineering. Software Development with Services. Software reuse: The reuse landscape, Application frameworks, Software product lines, COTS product reuse. Distributed software engineering: Distributed systems issues, Client–server computing, Architectural patterns for distributed systems, Software as a service.	3 3 3 3	Ian Somerville Roger Pressman	Chalk, Blackboard

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __60_____

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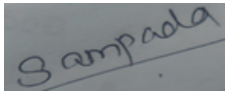

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**SY.B S C(IT)-C**_____ SEMESTER: ____**IV**_____ MONTH: _____**NOVEMBER-MARCH**_____ ACADEMIC YEAR: _____**2021-2022**_____

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the concept of transformations and its types in 2D and 3D in computer graphics and how those can be implemented in variation of applications including Animation. Understanding the representation of matrices, projection in CG and its usage. To implement concepts, creation and how it works with different types of animation. To make understand what is image , how it is created and how it is used in varieties of processing, To make understand the concept of image enhancement, compression, filtering and histogram of image to study subjective improvisation of image in applications to reduce the noise

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-05 (USIT405) **Computer Graphics and Animation** **Unit No -02**	**Two-Dimensional Transformations:** Transformations and Matrices, Transformation Conventions, 2D Transformations, Homogeneous Coordinates and Matrix Representation of 2D Transformations, Translations and Homogeneous Coordinates, Rotation, Reflection, Scaling, Combined Transformation, Transformation of Points, Transformation of The Unit Square, Solid Body Transformations, Rotation About an Arbitrary Point, Reflection through an	06	Computer Graphics by R.K Maurya	Online Google Meet PPTs

	Arbitrary Line, A Geometric Interpretation of Homogeneous Coordinates, The Window-to-Viewport Transformations.			
	Three-Dimensional Transformations: Three-Dimensional Scaling, Three-Dimensional Shearing, Three-Dimensional Rotation, Three-Dimensional Reflection, Three-Dimensional Translation, Multiple Transformation, Rotation about an Arbitrary Axis in Space, Reflection through an Arbitrary Plane, Matrix Representation of 3D Transformations, Composition of 3D Transformations,. Affine and Perspective Geometry, Perspective Transformations, Techniques for Generating Perspective Views, Vanishing Points, the Perspective Geometry and camera models, Orthographic Projections, Axonometric Projections, Oblique Projections, View volumes for projections.	06	Computer Graphics by R.K Maurya	Online Google Meet PPTs
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	**Computer Animation:** Principles of Animation, Key framing, Deformations, Character Animation, Physics-Based Animation, Procedural Techniques, Groups of Objects.	06	Computer Graphics by R.K Maurya.	Online Google Meet PPTs
	Image Manipulation and Storage: What is an Image? Digital image file formats, Image compression standard – JPEG, Image Processing - Digital image enhancement, contrast stretching, Histogram Equalization, smoothing and median Filtering.	06	Digital Image Processing by Dhananjay.	Online Google Meet PPTs

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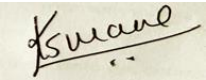
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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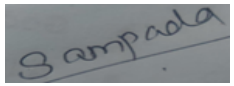

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:S.Y.BSC(I.T) Div-C SEMESTER: **IV** MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : To list the basic concepts used in computer graphics

To implement various algorithms to scan, convert the basic geometrical primitives, transformations, Area filling, clipping.

To describe the importance of viewing and projections.

To define the fundamentals of animation, virtual reality and its related technologies.

To understand a typical graphics pipeline

To design an application with the principles of virtual reality

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Computer Graphics and Animation USIT405 Unit-1	**Introduction to Computer Graphics:** Overview of Computer Graphics, Computer Graphics Application andSoftware, Description of some graphics devices, Input Devices forOperator Interaction, Active and Passive Graphics Devices, DisplayTechnologies, Storage Tube Graphics Displays, Calligraphic Refresh Graphics Displays, Raster Refresh (Raster-Scan) Graphics Displays,Cathode Ray Tube Basics, Color CRT Raster Scan Basics, VideoBasics, The Video Controller, Random-Scan Display Processor, LCD displays.	5	Computer Graphics -Hearn, Baker Computer Graphics-Rajesh.k.Mourya	Powerpoint presentation, Google meet

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	Scan conversion – Digital Differential Analyzer (DDA) algorithm,Bresenhams' Line drawing algorithm.Bresenhams' method of Circle drawing	3		
	Midpoint Circle Algorithm, Midpoint Ellipse Algorithm,Mid-point criteria	3		
	Problems of Aliasing, end-point ordering andclipping lines, Scan Converting Circles	2		
	Clipping Lines algorithms–Cyrus-Beck, Cohen-Sutherland and Liang-Barsky, Clipping Polygons,problem with multiple components.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		
Computer Graphics and Animation USIT405 Unit-3	**Viewing in 3D** Stages in 3D viewing, Canonical View Volume (CVV), Specifying an Arbitrary 3D View, Examples of 3D Viewing, The Mathematics of Planar Geometric Projections, Combined transformation matrices for projections and viewing, Coordinate Systems and matrices, camera model and viewing pyramid.	5	Computer Graphics -Hearn, Baker Computer Graphics-Rajesh.k.Mourya Computer Graphics - Principles and Practice- J. D. Foley, A. Van	Powerpoint presentation, Google meet
	Light: Radiometry,Transport,Equation,Photometry	3		
	Color: Colorimetry,ColorSpaces,ChromaticAdaptation, Color Appearance	3		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	11		

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			Dam, S. K. Feiner and J. F. Hughes	
Computer Graphics and Animation USIT405 Unit-4	**Visible-Surface Determination:** Techniques for efficient Visible-Surface Algorithms, Categories of algorithms, Back face removal, The z-Buffer Algorithm, Scan-line method, Painter's algorithms (depth sorting), Area subdivision method, BSP trees, Visible-Surface Ray Tracing, comparison of the methods.	5	Computer Graphics -Hearn, Baker Computer Graphics- Rajesh.k.Mourya Computer Graphics - Principles and Practice- J. D. Foley, A. Van	Powerpoint presentation, Google meet
	Plane Curves and Surfaces: Curve Representation, Nonparametric Curves, Parametric Curves, Parametric Representation of a Circle, Parametric Representation of an Ellipse, Parametric Representation of a Parabola, Parametric Representation of a Hyperbola, Representation of Space Curves, Cubic Splines, , Bezier Curves, B-spline Curves, B-spline Curve Fit, B-spline Curve Subdivision, Parametric Cubic Curves, QuadricSurfaces. Bezier Surfaces.	5		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	10		

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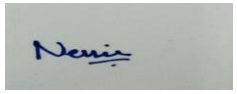

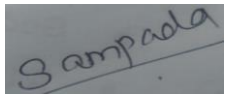

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS: SYBSc(IT) DIV:C SEMESTER: IV MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Understand programming language and tools to develop computer programs and systems that are effective solutions to problems.

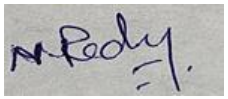
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Core Java (USIT401) Unit I	Introduction: History, architecture and its components, Java Class File, Java Runtime Environment, The Java Virtual Machine, JVM Components, The Java API, java platform, java development kit, Lambda Expressions, Methods References, Type Annotations, Method Parameter Reflection, setting the path environment variable, Java Compiler and Interpreter, java programs, java applications, main (), public, static, void, string [] args, statements, white space, case sensitivity, identifiers, keywords, comments, braces and code blocks, variables, variable name	05	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th Edition	Google Jam board, Slides, Docs
	Data types: primitive data types, Object Reference Types, Strings, Auto boxing, operators and properties of operators, Arithmetic operators, assignment operators, increment and decrement operator, relational operator, logical operator, bitwise operator, conditional operator	03		

Paper:USIT401, unit:2, Title:Core Java	**Control Flow Statements:** The If…Else If…Else Statement, The Switch…Case Statement	3	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
	Iterations: The While Loop, The Do … While Loop, The For Loop, The Foreach Loop, Labeled Statements, The Break And Continue Statements, The Return Statement	4	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
	Classes: Types of Classes, Scope Rules, Access Modifier, Instantiating Objects From A Class, Initializing The Class Object And Its Attributes, Class Methods, Accessing A Method, Method Returning A Value, Method's Arguments, Method Overloading, Variable Arguments [Varargs], Constructors, this Instance, super Instance, Characteristics Of Members Of A Class, constants, this instance, static fields of a class, static methods of a class, garbage collection.	5	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
Paper:USIT401, unit:3, Title:Core Java	**Inheritance:** Derived Class Objects, Inheritance and Access Control, Default Base Class Constructors, this and super keywords. Abstract Classes And Interfaces, Abstract Classes, Abstract Methods, Interfaces,	4	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.

	What Is An Interface? How Is An Interface Different From An Abstract Class?, Multiple Inheritance, Default Implementation, Adding New Functionality, Method Implementation, Classes V/s Interfaces, Defining An Interface, Implementing Interfaces.	4	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
	Packages: Creating Packages, Default Package, Importing Packages, Using A Package.	4	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
Paper:USIT401, unit:4, Title:Core Java	Enumerations,Arrays: Two Dimensional Arrays, Multi-Dimensional Arrays, Vectors, Adding Elements To A Vector, Accessing Vector Elements, Searching For Elements In A Vector, Working With The Size of The Vector.		Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th Edition	Online mode Google meet Google slides.
	Multithreading: the thread control methods, thread life cycle, the main thread, creating a thread, extending the thread class.			
	Exceptions: Catching Java Exceptions, Catching Run-Time Exceptions, Handling Multiple Exceptions, The finally Clause, The throws Clause			
	Byte streams: reading console input, writing console output, reading file, writing file, writing binary data, reading binary data, getting started with character streams, writing file, reading file			

Paper:USIT401, unit:5, Title:Core Java	Event Handling: Delegation Event Model, Events, Event classes, Event listener interfaces, Using delegation event model, adapter classes and inner classes.	02	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th Edition	Online mode Google meet Google slides.
	Abstract Window Toolkit: Window Fundamentals, Component, Container, Panel, Window, Frame, Canvas. Components – Labels, Buttons, Check Boxes, Radio Buttons, Choice Menus, Text Fields, Text, Scrolling List, Scrollbars, Panels, Frames	03		
	Layouts: Flow Layout, Grid Layout, Border Layout, Card Layout	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12



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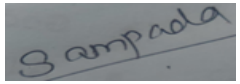

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SURBHI SHAH DEPARTMENT: IT-CS CLASS:SYIT-DIV A

SEMESTER: SEM-4 MONTH: JANUARY-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to The learners will be able to: to think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems to apply their knowledge and skills to be employed and excel in IT professional careers and/or to continue their education in IT and/or related post graduate programmes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:-II TITLE:- Introduction to Embedded Systems UNIT 1	**Introduction:** Embedded Systems and general purpose computer systems, history, classifications, applications and purpose of embedded systems	3	Introduction to embedded systems By Shibu K V	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE
	Core of embedded systems: microprocessors and microcontrollers, RISC and CISC controllers, Big endian and Little endian processors, Application specific ICs, Programmable logic devices, COTS, sensors and actuators, communication interface, embedded firmware, other system components.	6		
	Characteristics and quality attributes of embedded systems: Characteristics, operational and non-operational quality attributes.	3		
UNIT 4	**Designing Embedded System with 8051 Microcontroller:** Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	3	Programming Embedded Systems in C and C++	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE

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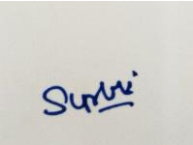
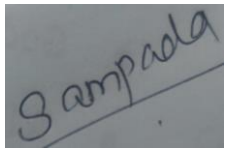
	Programming embedded systems: structure of embedded program, infinite loop, compiling, linking and debugging.	4	by Michael Barr	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 19





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYIT SEMESTER: IV MONTH: NOV-MARCH ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: To provide an understanding of software engineering, its basic concepts and functioning. Develop and master understanding of various models used by software industries for various purposes. Also conceptual learning of various aspects of it such as cost estimation techniques, project management, quality assurance etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT404, Software Engineering Unit-I	Introduction: What is software engineering? Software Development Life Cycle, Requirements Analysis, Software Design, Coding, Testing, Maintenance etc. Agile software development: Agile methods, Plan-driven and agile development, Extreme programming, Agile project management, Scaling agile methods.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Online Mode, Google Meet with Google Slides.
	Software Requirements: Functional and Non-functional requirements, User Requirements, System Requirements, Interface Specification, Documentation of the software requirements.	02		Online Mode, Google Meet with Google Slides.
	Software Processes: Process and Project, Component Software Processes. Software Development Process Models. • Waterfall Model. • Prototyping. • Iterative Development. • Rational Unified Process. • The RAD Model • Time boxing Model.	04		Online Mode, Google Meet with Google Slides.
	Agile software development: Agile methods, Plan-driven and agile development, Extreme programming, Agile project management, Scaling agile methods.	03		Online Mode, Google Meet with Google Slides.

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USIT404, Software Engineering Unit-II	Socio-technical system:Essential characteristics of socio technical systems, Emergent System Properties, Systems Engineering, Components of system such as organization, people and computers, Dealing Legacy Systems.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Online Mode, Google Meet with Google Slides.
	Critical system: Types of critical system, A simple safety critical system, Dependability of a system, Availability and Reliability, Safety and Security of Software systems.	03		Online Mode, Google Meet with Google Slides.
	Requirements Engineering Processes: Feasibility study, Requirementselicitation and analysis, Requirements Validations, Requirements Management.	03		Online Mode, Google Meet with Google Slides.
	System Models: Models and its types, Context Models, Behavioural Models, Data Models, Object Models, Structured Methods	03		Online Mode, Google Meet with Google Slides.
USIT404, Software Engineering Unit-III	Architectural Design: Architectural Design Decisions, System Organisation, Modular Decomposition Styles, Control Styles, Reference Architectures.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata	Online Mode, Google Meet with Google Slides.
	User Interface Design: Need of UI design, Design issues, The UI design Process, User analysis, User Interface Prototyping, Interface Evaluation	03		Online Mode, Google Meet with Google Slides.
	Project Management Software Project Management, Management activities, Project Planning, Project Scheduling, Risk Management.	03		Online Mode, Google Meet with Google Slides.
	Quality Management: Process and Product Quality, Quality assurance and Standards, Quality Planning, Quality Control, Software Measurement and Metrics	03		Online Mode, Google Meet with Google Slides.

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			Mcgraw-hill Seventh edition	
USIT404, Software Engineering Unit-IV	Verification and Validation: Planning Verification and Validation, Software Inspections, Automated Static Analysis, Verification and Formal Methods.	04	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Online Mode, Google Meet with Google Slides.
	Software Testing: System Testing, Component Testing, Test Case Design, Test Automation. Software Measurement: Size-Oriented Metrics, Function-Oriented Metrics, Extended Function Point Metrics	04		Online Mode, Google Meet with Google Slides.
	Software Cost Estimation:Software Productivity, Estimation Techniques, Algorithmic Cost Modelling, Project Duration and Staffing	04		Online Mode, Google Meet with Google Slides.
USIT404, Software Engineering Unit-V	Process Improvement: Process and product quality, Process Classification, Process Measurement, Process Analysis and Modeling, Process Change, The CMMI Process Improvement Framework.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication ,	Online Mode, Google Meet with Google Slides.
	Service Oriented Software Engineering: Services as reusable components, Service Engineering, Software Development with Services.	03		Online Mode, Google Meet with Google Slides.
	Software reuse: The reuse landscape, Application frameworks, Software product lines, COTS product reuse.	03		Online Mode, Google Meet with Google Slides.

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	Distributed software engineering: Distributed systems issues, Client–server computing, Architectural patterns for distributed systems, Software as a service	03	Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Online Mode, Google Meet with Google Slides.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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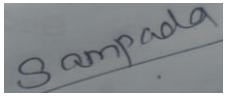

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: SY BSc IT-SEM-IV-EMBEDDED SYSTEM MONTH: NOV-MAR ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to :

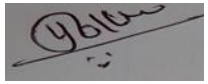
1. Understand what is a microcontroller, microcomputer, embedded system.
2. Understand different components of a micro-controller and their interactions.
3. Become familiar with programming environment used to develop embedded systems .
4. Understand key concepts of embedded systems like IO, timers, interrupts, interaction with peripheral devices .
5. Learn debugging techniques for an embedded system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 ES UNIT 1	Embedded Systems and general purpose computer systems, history, classifications, applications and purpose of embedded systems	4	Introduction to embedded systems by Shibu K V	POWER POINT PRESENTATION
	Microprocessors and microcontrollers ,RISC and CISC controllers, Big endian and Little endian processors, Application specific ICs, Programmable logic devices, COTS.	3		
	Sensors and actuators, communication interface, embedded firmware, other system components.	3		

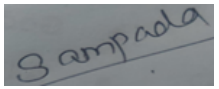
	Characteristics, operational and non-operational quality attributes.	2		
UNIT 2	Application specific – washing machine, domain specific - automotive.	3	Introduction to embedded systems by Shibu K V	POWER POINT PRESENTATION
	Memory map, i/o map, interrupt map, processor family, external peripherals	3		
	memory – RAM , ROM, types of RAM and ROM, memory testing, CRC ,Flash memory .	3		
	Control and Status Registers, Device Driver, Timer Driver - Watchdog Timers.	3		
UNIT 3	Microcontrollers and Embedded processors, Overview of 8051 family.8051 Microcontroller hardware	4	Programming Embedded Systems in C C++ by Michael Barr	POWER POINT PRESENTATION
	Input/output pins, Ports, and Circuits, External Memory.	4		
	Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs.	4		
UNIT 4	Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	4	Introduction to embedded systems by Shibu K V	POWER POINT PRESENTATION
	structure of embedded program, infinite loop	4		

	compiling, linking and debugging	4		
UNIT 5	Operating system basics, types of operating systems, Real-Time Characteristics, Selection Process of an RTOS.	4	https://www.tutorialspoint.com/embedded_systems.	POWER POINT PRESENTATION
	Embedded system development Environment – IDE, types of file generated on cross compilation, disassembler/ de-compiler,	4		
	simulator, emulator and debugging, embedded product development life-cycle, trends in embedded industry.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande DEPARTMENT: Computer Science

CLASS: T.Y.I.T SEMESTER: VI

MONTH: Dec - March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

Student will able to understand the importance of software quality.
Aspects that the related to software quality.
Stakeholders and their relationship.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCSIT601 Software Quality Assurance UNIT - I	**Introduction to Quality:** Historical Perspective of Quality, What is Quality? (Is it a fact or perception?), Definitions of Quality, Core Components of Quality, Quality View, Financial Aspect of Quality, Customers, Suppliers and Processes, Total Quality Management (TQM), Quality Principles of Total Quality Management, Quality Management Through Statistical Process Control, Quality Management Through Cultural Changes, Continual (Continuous) Improvement Cycle, Quality in Different Areas, Benchmarking and Metrics, Problem Solving Techniques, Problem Solving Software Tools.	6	Software Testing and Continuous Quality Improvement Software Testing: Principles, Techniques and Tools	PPT
	Software Quality: Introduction, Constraints of Software Product Quality Assessment, Customer is a King, Quality and Productivity Relationship, Requirements of a Product, Organisation Culture,	6		PPT

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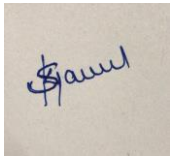
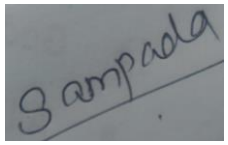
	Characteristics of Software, Software Development Process, Types of Products, Schemes of Criticality Definitions, Problematic Areas of Software Development Life Cycle, Software Quality Management, Why Software Has Defects? Processes Related to Software Quality, Quality Management System Structure, Pillars of Quality Management System, Important Aspects of Quality Management.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **TYBSCIT** SEMESTER:**VI**

MONTH: **NOV-MARCH** ACADEMIC YEAR:**2021-22**

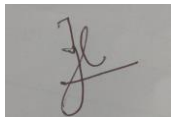
LEARNING OBJECTIVE/S:

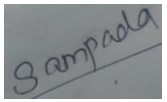
The learners will be able to :

Understanding the customers priority for **quality assurance** while developing ...
that **will** be created by the organization, The scope of **Software** Testing applies to ... improvements of the processes through **learning** & innovation
Understand Manual and automated testing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT601 Software Quality Assurance UNIT-3	**Unit Testing: Boundary Value Testing:** Normal Boundary ValueTesting, Robust Boundary Value Testing, Worst-Case Boundary ValueTesting, Special Value Testing, Examples, Random Testing, Guidelines for Boundary Value Testing, **Equivalence Class Testing:** Equivalence Classes, Traditional Equivalence Class Testing, Improved Equivalence Class Testing, Edge Testing, Guidelines and Observations.	07	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
	Decision Table–Based Testing: Decision Tables, Decision Table Techniques, Cause-and-Effect Graphing, Guidelines and Observations, **Path Testing:** Program Graphs, DD-Paths, Test Coverage Metrics, Basis Path Testing, Guidelines and Observations,**Data Flow Testing:** Define/Use Testing, Slice-Based Testing,Program Slicing Tools.	05	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF 

SIGNATURE OF THE H.O.D. 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande DEPARTMENT: Computer Science

CLASS: T.Y.I.T SEMESTER: VI

MONTH: Dec - March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

Student will able to understand the importance of software quality.
Aspects that the related to software quality.
Stakeholders and their relationship.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCSIT601 Software Quality Assurance UNIT - I	**Introduction to Quality:** Historical Perspective of Quality, What is Quality? (Is it a fact or perception?), Definitions of Quality, Core Components of Quality, Quality View, Financial Aspect of Quality, Customers, Suppliers and Processes, Total Quality Management (TQM), Quality Principles of Total Quality Management, Quality Management Through Statistical Process Control, Quality Management Through Cultural Changes, Continual (Continuous) Improvement Cycle, Quality in Different Areas, Benchmarking and Metrics, Problem Solving Techniques, Problem Solving Software Tools.	6	Software Testing and Continuous Quality Improvement Software Testing: Principles, Techniques and Tools	PPT
	Software Quality: Introduction, Constraints of Software Product Quality Assessment, Customer is a King, Quality and Productivity Relationship, Requirements of a Product, Organisation Culture,	6		PPT

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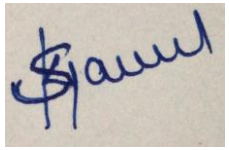
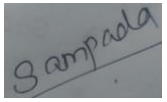
	Characteristics of Software, Software Development Process, Types of Products, Schemes of Criticality Definitions, Problematic Areas of Software Development Life Cycle, Software Quality Management, Why Software Has Defects? Processes Related to Software Quality, Quality Management System Structure, Pillars of Quality Management System, Important Aspects of Quality Management.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **BRIJESH JOSHI** DEPARTMENT: **B.Sc.I.T** CLASS: **TYIT A** SEMESTER: **VI** MONTH: **Nov-March** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVES:
The learners will be able to :

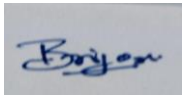
- Understand the role of Business Intelligence system and Decision support system in improvising the business.
- Understand different algorithms used in BI systems.
- Understand the use of AI and Knowledge management system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
III,1, Business Intelligence	Business intelligence: Effective and timely decisions, Data, information and knowledge, The role of mathematical models, Business intelligence architectures, Ethics and business intelligence	5	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster
	Decision support systems: Definition of system, Representation of the decision-making process, Evolution of information systems, Definition of decision support system, Development of a decision support system	5	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster
	Mathematical models for decision making: Structure of mathematical models	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster

III,2, Business Intelligence	Development of a model, Classes of models Data mining: Definition of data mining,	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster
	Representation of input data , Data mining process, Analysis methodologies Data preparation: Data validation, Data transformation, Data reduction	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster
III,3, Business Intelligence	Classification: Classification problems, Evaluation of classification models, Bayesian methods, Logistic regression, Neural networks, Support vector machines	5	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster
	Clustering: Clustering methods, Partition methods, Hierarchical methods, Evaluation of clustering models	5	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster
III,4, Business Intelligence	Business intelligence applications: Marketing models: Relational marketing, Sales force management	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First	Meet, PPT, Chalk and Duster
	Logistic and production models: Supply chain optimization, Optimization models for logistics planning, Revenue management systems.	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster
	Data envelopment analysis: Efficiency measures, Efficient frontier, The CCR model, Identification of good operating practices	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster
III,5, Business	Knowledge Management: Introduction to Knowledge Management, Organizational Learning and Transformation, Knowledge Management Activities, Approaches to Knowledge Management, Information Technology (IT) In Knowledge Management, Knowledge Management	5	Decision support and Business Intelligence Systems Efraim Turban, Ramesh Sharda, Dursun Delen Pearson Ninth 2011	Meet, PPT, Chalk and Duster

Intelligence	Systems Implementation, Roles of People in Knowledge Management			
	Artificial Intelligence and Expert Systems: Concepts and Definitions of Artificial Intelligence, Artificial Intelligence Versus Natural Intelligence, Basic Concepts of Expert Systems, Applications of Expert Systems, Structure of Expert Systems, Knowledge Engineering, Development of Expert Systems	5	Decision support and Business Intelligence Systems Efraim Turban, Ramesh Sharda, Dursun Delen Pearson Ninth 2011	Meet, PPT, Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 54



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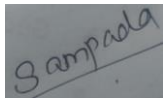

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Gayatree Karnik DEPARTMENT: Information technology CLASS: TYIT (A)

SEMESTER: VI MONTH: November to March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand Legal aspects of Information technology
- Conceptual arrangements of Laws and amendments
- Pass on the legal information about how one should use technology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Unit 2	Contracts in the Infotech World: Contracts in the Infotech World, Click-Wrap and Shrink-Wrap Contract: Status under the Indian Contract Act, 1872, Contract Formation Under the Indian Contract Act, 1872, Contract Formation on the Internet, Terms and Conditions of Contracts. Jurisdiction in the Cyber World: Questioning the Jurisdiction and Validity of the Present Law of Jurisdiction, Civil Law of Jurisdiction in India, Cause of Action, Jurisdiction and the Information Technology Act,2000, Foreign Judgements in India, Place of Cause of Action in Contractual and IPR Disputes, Exclusion Clauses in	12	Cyber Law Simplified – Vivek Sood	Computer and Powerpoint,Chalk & Board

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	Contracts, Abuse of Exclusion Clauses, Objection of Lack of Jurisdiction, Misuse of the Law of Jurisdiction, Legal Principles on Jurisdiction in the United State of America, Jurisdiction Disputes w.r.t. the Internet in the United State of America.			
UNIT 3 Unit 4	Battling Cyber Squatters and Copyright Protection in the Cyber World: Concept of Domain Name and Reply to Cyber Squatters, Meta- Tagging, Legislative and Other Innovative Moves Against Cyber Squatting, The Battle Between Freedom and Control on the Internet, Works in Which Copyright Subsists and meaning of Copyright, Copyright Ownership and Assignment, License of Copyright, Copyright Terms and Respect for Foreign works, Copyright Infringement, Remedies and Offences, Copyright Protection of Content on the Internet; Copyright Notice, Disclaimer and Acknowledgement, Downloading for Viewing Content on the Internet, Hyper-Linking and Framing, Liability of ISPs for Copyright Violation in the Cyber World: Legal Developments in the US, Napster and its Cousins: A Revolution on the Internet but a Crisis for Copyright Owners, Computer Software Piracy.	12	Cyber Law Simplified – Vivek Sood	Chalk & Board
	E-Commerce Taxation: Real Problems in the Virtual World: A Tug of War on the Concept of 'Permanent Establishment', Finding the PE in Cross Border E-Commerce, The United Nations Model Tax Treaty, The	12	Cyber Law Simplified – Vivek Sood	Chalk & Board

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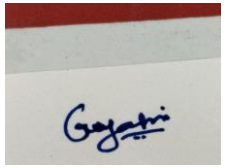
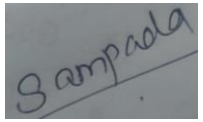
Unit 5	Law of Double Taxation Avoidance Agreements and Taxable Jurisdiction Over Non-Residents, Under the Income Tax Act, 1961, Tax Agents of Non-Residents under the Income Tax Act,1961 and the Relevance to E-Commerce, Source versus Residence and Classification between Business Income and Royalty, The Impact of the Internet on Customer Duties, Taxation Policies in India: At a Glance. Digital Signature, Certifying Authorities and E-Governance: Digital Signatures, Digital Signature Certificate, Certifying Authorities and Liability in the Event of Digital Signature Compromise, E- Governance in India: A Warning to Babudom!			
	The Indian Evidence Act of 1872 v. Information Technology Act, 2000: Status of Electronic Records as Evidence, Proof and Management of Electronic Records; Relevancy, Admissibility and Probative Value of E-Evidence, Proving Digital Signatures, Proof of Electronic Agreements, Proving Electronic Messages, Other Amendments in the Indian Evidence Act by the IT Act, Amendments to the Bankers Books Evidence Act, 1891 and Reserve Bank of India Act, 1934. Protection of Cyber Consumers in India: Are Cyber Consumers 12 Covered Under the Consumer Protection Act? Goods and Services, Consumer Complaint, Defect in Goods and Deficiency in Services, Restrictive and Unfair Trade Practices, Instances of Unfair Trade Practices, Reliefs Under CPA, Beware Consumers, Consumer Foras, Jurisdiction and Implications on cyber Consumers in India, Applicability of CPA to Manufacturers, Distributors, Retailers and Service Providers Based in Foreign Lands Whose Goods are Sold or Services	12	Cyber Law Simplified – Vivek Sood	Chalk & Board

	Provided to a Consumer in India. Amendments in Indian IT Act 2000			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)** _____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**T.Y.B.SC (IT)-A**_____ SEMESTER: ____**VI**_____ MONTH: _____ _____**NOVEMBER-MARCH** _____ ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the Geographical Information System for processing standard geographic data.
- Make you understand where GIS system can be applied. Learning about different applications (example: GPS).
- How geographic data are capture, updated, profiled, stored and represented in the system.
- Enable to understand software and hardware trends, DBMS and varieties of Models.
- To understand how geographic data can be display with help of Maps and to understand the making of Maps.
- Studying about spatial referencing and positioning of data in system.
- To understand different operations and functions on data and to analyze and explore information in the system.
- To provide better visualization of data both in vector and raster manner.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-04 (USIT604) **Principles of**	**A Gentle Introduction to GIS** **The nature of GIS:** Some fundamental observations, Defining GIS, GISystems, GIScience and GIApplications, Spatial data and Geoinformation.	04	Principles of Geographic Information Systems- An	Online Google Meet. PPTs. Blackboard, Chalk and Duster. Website.

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Geographic Information Systems **Unit No -01**	**The real world and representations of it:** Models and modelling, Maps, Databases, Spatial databases and spatial analysis		Introductory Text Book By Editors: Otto Huisman and Rolf A. , The International Institute of Geoinformation Science and Earth Observation Introduction to Geographic Information Systems Chang Kang-tsung McGrawHill	
	Geographic Information and Spatial Database **Models and Representations of the real world** **Geographic Phenomena:** Defining geographic phenomena, types of geographic phenomena, Geographic fields, Geographic objects, Boundaries	03		
	Computer Representations of Geographic Information: Regular tessellations, irregular tessellations, Vector representations, Topology and Spatial relationships, Scale and Resolution, Representation of Geographic fields, Representation of Geographic objects	03		
	Organizing and Managing Spatial Data **The Temporal Dimension**	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -02	**Data Management and Processing Systems** **Hardware and Software Trends** **Geographic Information Systems:** GIS Software, GIS Architecture and functionality, Spatial Data Infrastructure (SDI)	04	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto	Online Google Meet. PPTs. Blackboard, Chalk and Duster. Website.
	Stages of Spatial Data handling: Spatial data handling and preparation, Spatial Data Storage and maintenance, Spatial Query and Analysis, Spatial Data Presentation.	03		

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	Database management Systems: Reasons for using a DBMS, Alternatives for data management, The relational data model, Querying the relational database.	03	Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	
	GIS and Spatial Databases: Linking GIS and DBMS, Spatial database functionality.	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -03	**Spatial Referencing and Positioning** **Spatial Referencing:** Reference surfaces for mapping, Coordinate Systems, Map Projections, Coordinate Transformations	03	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Online Google Meet. PPTs. Blackboard, Chalk and Duster. Website.
	Satellite-based Positioning: Absolute positioning, Errors in absolute positioning, Relative positioning, Network positioning, code versus phase measurements, Positioning technology	03		
	Data Entry and Preparation **Spatial Data Input:** Direct spatial data capture, Indirect spatial data captiure, Obtaining spatial data elsewhere	02		
	Data Quality: Accuracy and Positioning, Positional accuracy, Attribute accuracy, Temporal accuracy, Lineage, Completeness, Logical consistency	02		
	Data Preparation: Data checks and repairs, Combining data from multiple sources	01		
	Point Data Transformation: Interpolating discrete data, Interpolating continuous data	01		

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	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -04	**Spatial Data Analysis** **Classification of analytical GIS Capabilities** **Retrieval, classification and measurement:** Measurement, Spatial selection queries, Classification	03	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Online Google Meet. PPTs. Blackboard, Chalk and Duster. Website.
	Overlay functions: Vector overlay operators,Raster overlay operators	01		
	Neighbourhood functions: Proximity computations, Computation of diffusion, Flow computation, Raster based surface analysis	03		
	Analysis: Network analysis, interpolation, terrain modelling	01		
	GIS and Application models: GPS, Open GIS Standards, GIS Applications and Advances	02		
	Error Propagation in spatial data processing: How Errors propagate, Quantifying error propagation	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -05	**Data Visualization** **GIS and Maps, The Visualization Process** **Visualization Strategies: Present or explore?**	04	Principles of Geographic Information	Online Google Meet. PPTs. Blackboard, Chalk and Duster.

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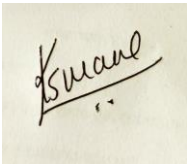
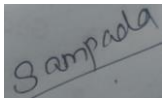
	The cartographic toolbox: What kind of data do I have?, How can I map my data?	03	Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Website.
	How to map?: How to map qualitative data, How to map quantitative data, How to map the terrain elevation, How to map time series	03		
	Map Cosmetics, Map Dissemination	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Sampada Deshmukh DEPARTMENT: Information Technology

CLASS: T. Y. B. Sc. I. T –A SEMESTER: VI MONTH: January-March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

Learn authentication and authorization

Understand security concept and different encryption techniques

Understand the concept of database security and storage security with its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -II	**Authentication and Authorization**: Authentication, Authorization	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	Google Meet with PPT
	Encryption: A Brief History of Encryption, Symmetric-Key Cryptography, Public Key Cryptography, Public Key Infrastructure.	5		Google Meet with PPT
	Storage Security: Storage Security Evolution, Modern Storage Security, Risk Remediation, Best Practices.	2		Google Meet with PPT
	Database Security: General Database Security Concepts, Understanding Database Security Layers, Understanding Database-Level Security, Using Application Security, Database Backup and Recovery, Keeping Your Servers Up to Date, Database Auditing and Monitoring.	2		Google Meet with PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Sampada Deshmukh DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –A SEMESTER: VI MONTH: January-March ACADEMIC YEAR: 2020-2021

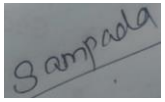
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -III	**Secure Network Design**: Introduction to Secure Network Design, Performance, Availability, Security.	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	Google Meet with PPT
	Network Device Security: Switch and Router Basics, Network Hardening.	3		Google Meet with PPT
	Firewalls: Overview, The Evolution of Firewalls, Core Firewall Functions, Additional Firewall Capabilities, Firewall Design.	3		Google Meet with PPT
	Wireless Network Security: Radio Frequency Security Basics, Data-Link Layer Wireless Security Features, Flaws, and Threats, Wireless Vulnerabilities and Mitigations, Wireless Network Hardening Practices and Recommendations, Wireless Intrusion Detection and Prevention, Wireless Network Positioning and Secure Gateways.	3		Google Meet with PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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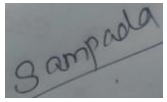

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. **Security In Computing** DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc. SEMESTER: VI MONTH: Dec to March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: To provide security against users, software, devices, operating systems, networks, cloud and data.

The learners will be able to :

- To understand the concept of Information Security.
- To know how to use Security Methodology, Strategy and Tactics.
- To analyze Risk by identifying possible Threat, Types of Attacks.
- To learn about Secure Design Principles like the CIA Triad and Other Models, Defense Models.
- To know Intrusion Detection and Prevention Systems.
- To learn Voice over IP (VoIP) and PBX Security, TEM (Telecom Expense Management).
- To understand Operating System Security Models, International Standards for Operating System Security.
- To have information related to Virtual Machines and Cloud Computing.
- To study Secure Application Design in Web Application Security, Client Application Security, Remote Administration Security.
- To know how to implement Physical Security by Choosing Site Location for Security, Securing Assets - Locks and Entry Controls, Physical Intrusion Detection.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT602 **Security In Computing**	**Information Security Overview**: The Importance of Information Protection, The Evolution of Information Security, Justifying Security Investment, Security Methodology, How to Build a Security	12	1. The Complete Reference: Information Security 2. Essential	Black Board, Projector, Google Meet PPT

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UNIT-1	Program, The Impossible Job, The Weakest Link, Strategy and Tactics, Business Processes vs. Technical Controls. **Risk Analysis**: Threat Definition, Types of Attacks, Risk Analysis. **Secure Design Principles**: The CIA Triad and Other Models, Defense Models, Zones of Trust, Best Practices for Network Defense.		Cybersecurity Science 3. Principles of Computer Security: CompTIA Security+ and Beyond	
USIT603 **Security In Computing** UNIT-4	**Intrusion Detection and Prevention Systems**: IDS Concepts, IDS Types and Detection Models, IDS Features, IDS Deployment Considerations, Security Information and Event Management (SIEM). **Voice over IP (VoIP) and PBX Security**: Background, VoIP Components,VoIP Vulnerabilities and Countermeasures, PBX, TEM: Telecom Expense Management. **Operating System Security Models**: Operating System Models, Classic Security Models, Reference Monitor, Trustworthy Computing, International Standards for Operating System Security.	12	1. The Complete Reference: Information Security 2. Essential Cybersecurity Science 3. Principles of Computer Security: CompTIA Security+ and Beyond	Black Board, Projector, Google Meet PPT
USIT603 **Security In Computing** UNIT-5	**Virtual Machines and Cloud Computing**: Virtual Machines, Cloud Computing. **Secure Application Design**: Secure Development Lifecycle, Application Security Practices, Web Application Security, Client Application Security, Remote Administration Security. **Physical Security**: Classification of Assets, Physical Vulnerability	12	1. The Complete Reference: Information Security 2. Essential Cybersecurity Science 3. Principles of Computer	Black Board, Projector, Google Meet PPT

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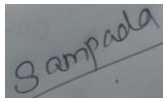
	Assessment, Choosing Site Location for Security, Securing Assets: Locks and Entry Controls, Physical Intrusion Detection.		Security: CompTIA Security+ and Beyond	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: TYBSc(IT) DIV:A SEMESTER: VI MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Understand fundamentals of testing, Level of testing software, verification and validation models and other special tests which helps to enhance knowledge and keep the software uptodate.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper:USIT601, unit:2, Title:SQA	**Fundamentals of testing:** Introduction, Necessity of testing, What is testing? Fundamental test process, The psychology of testing, Historical Perspective of Testing, Definitions of Testing, Approaches to Testing, Testing During Development Life Cycle, Requirement Traceability Matrix, Essentials of Software Testing, Workbench, Important Features of Testing Process, Misconceptions About Testing,	3	Software Testing: Principles, Techniques and Tools	Online mode Google meet Google slides.
	Principles of Software Testing, Salient Features of Good Testing, Test Policy, Test Strategy or Test Approach, Test Planning, Testing Process and Number of Defects Found in Testing, Test Team Efficiency, Mutation Testing, Challenges in Testing, Test Team Approach, Process Problems Faced by Testing, Cost Aspect of Testing, Establishing Testing Policy, Methods, Structured Approach to Testing, Categories of Defect, Defect, Error, or Mistake in Software, Developing Test Strategy,	4	Software Testing: Principles, Techniques and Tools	Online mode Google meet Google slides.

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	Developing Testing Methodologies (Test Plan), Testing Process, Attitude Towards Testing (Common People Issues), Test Methodologies/Approaches, People Challenges in Software Testing, Raising Management Awareness for Testing, Skills Required by Tester, Testing throughout the software life cycle, Software development models, Test levels, Test types, the targets of testing, Maintenance testing.	5	Software Testing: Principles, Techniques and Tools	Online mode Google meet Google slides.
Paper:USIT601, unit:4, Title:SQA	**Software Verification and Validation:**Introduction, Verification, Verification Workbench, Methods of Verification, Types of reviews on the basis od Stage Phase, Entities involved in verification, Reviews in testing lifecycle, Coverage in Verification, Concerns of Verification, Validation, Validation Workbench, Levels of Validation, Coverage in Validation, Acceptance Testing, Management of Verification and Validation, Software development verification and validation activities	6	Software Testing: Principles, Techniques and Tools	Projector Google slides
	V-test Model: Introduction, V-model for software, testing during Proposal stage, Testing during requirement stage, Testing during test planning phase, Testing during design phase, Testing during coding, VV Model, Critical Roles and Responsibilities.	6	Software Testing: Principles, Techniques and Tools	Projector Google slides
Paper:USIT601, unit:5, Title:SQA	**Levels of Testing:** Introduction, Proposal Testing, Requirement Testing, Design Testing, Code Review, Unit Testing, Module Testing, Integration Testing, Big-Bang Testing, Sandwich Testing, Critical Path First, Sub System Testing, System Testing, Testing Stages.	3	Software Testing: Principles, Techniques and Tools	Online mode Google meet Google slides.

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	Special Tests: Introduction, GUI testing, Compatibility Testing, Security Testing, Performance Testing, Volume Testing, Stress Testing, Recovery Testing, Installation Testing, Requirement Testing, Regression Testing, Error Handling Testing, Manual Support Testing, 12 36 Intersystem Testing, Control Testing, Smoke Testing, Adhoc Testing, Parallel Testing, Execution Testing, Operations Testing, Compliance Testing, Usability Testing, Decision Table Testing, Documentation Testing, Training testing, Rapid Testing, Control flow graph, Generating tests on the basis of Combinatorial Designs, State Graph,	5	Software Testing: Principles, Techniques and Tools	Online mode Google meet Google slides.
	Risk Associated with New Technologies, Process maturity level of Technology, Testing Adequacy of Control in New technology usage, Object Oriented Application Testing, Testing of Internal Controls, COTS Testing, Client Server Testing, Web Application Testing, Mobile Application Testing, eBusiness eCommerce Testing, Agile Development Testing, Data Warehousing Testing.	4	Software Testing: Principles, Techniques and Tools	Online mode Google meet Google slides.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:T.Y.BSC(I.T) DIV-B SEMESTER: **VI** MONTH:NOVEMBER-MARCH ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : To create more awareness about cyber legal issues and challenges.

To provide advice, inputs as also guidance to students on their day-to-day legal issues concerning the use of cyberspace.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cyber Laws Elective I USIT607 Unit-1	**Power of Arrest Without Warrant Under the IT Act, 2000:** A Critique, Crimes of this Millennium, Section 80 of the IT Act, 2000 – A Weapon or a Farce?	1	Cyber Law Simplified - Vivek Sood	Powerpoint Presentation, Blackboard,projector
	Forgetting the Line Between Cognizable and Non-Cognizable Offences.	2		
	Necessity of Arrest without Warrant from Any Place, Public or Otherwise.	2		
	Check and Balances Against Arbitrary Arrests,Arrest for "About to Commit" an Offence Under the IT Act: A Tribute to Draco, Arrest, But NO Punishment!	2		
	Cyber Crime and Criminal Justice: Penalties, Adjudication and Appeals Under the IT Act,2000: Concept of "Cyber Crime " and the IT Act , 2000, Hacking.	2		

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	Teenage Web Vandals, Cyber Fraud and Cyber Cheating, Virus on the Internet,Defamation, Harassment and Email Abuse, Cyber Pornography, Other IT Act Offences	2		
	. Monetary Penalties, Adjudication and Appeals Under IT Act , 2000, Network Service Providers, Jurisdiction and Cyber Crime.	2		
	Nature of Cyber Criminality, Strategies to Tackle Cyber Crime and Trends, Criminal Justice in India and Implications on Cyber Crime.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		
Cyber Laws Elective I USIT607 Unit-2	**Contracts in the Infotech World:** Contracts in the Infotech World, Click-Wrap and Shrink-Wrap Contract: Status under the Indian Contract Act, 1872.	2	Cyber Law Simplified - Vivek Sood	Powerpoint Presentation, Blackboard,projector
	Contract Formation Under the Indian Contract Act, 1872, Contract Formation on the Internet.	2		
	Terms and Conditions of Contracts.	1		
	Jurisdiction in the Cyber World: Questioning the Jurisdiction and Validity of the Present Law of Jurisdiction,Civil Law of Jurisdiction in India.	2		
	Cause of Action, Jurisdiction and the Information Technology Act,2000.	2		

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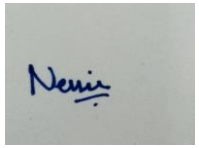
	Foreign Judgements in India, Place of Cause of Action in Contractual and IPR Disputes.	2		
	Exclusion Clauses in Contracts, Abuse of Exclusion Clauses, Objection of Lack of Jurisdiction, Misuse of the Law of Jurisdiction.	2		
	Legal Principles on Jurisdiction in the United State of America, Jurisdiction Disputes w.r.t. the Internet in the United State of America.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		



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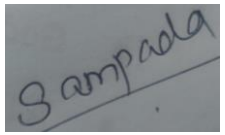

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. (Mrs.) Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: TYIT SEMESTER: VI MONTH: NOV to MARCH ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

To develop the understanding of relationship between commerce and cyberspace

To enable learner to understand, explore, and acquire a critical understanding Cyber Law.

To give learners in depth knowledge of Information Technology Act and legal frame work of Right to Privacy, Data Security and Data Protection

To make learner conversant with the social and intellectual property issues emerging from 'Cyberspace

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-07 Cyber Law Unit 3	**Battling Cyber Squatters and Copyright Protection in the Cyber World:** Concept of Domain Name and Reply to Cyber Squatters, Meta-Tagging, Legislative and Other Innovative Moves Against Cyber Squatting, The Battle Between Freedom and Control on the Internet, Works in Which Copyright Subsists and meaning of Copyright, Copyright Ownership and Assignment, License of Copyright, Copyright Terms and Respect for Foreign Works, Copyright Infringement, Remedies and Offences, Copyright Protection of Content on the Internet; Copyright Notice, Disclaimer and Acknowledgement, Downloading for Viewing Content on the Internet, Hyper-Linking and Framing, Liability of ISPs for Copyright Violation in the Cyber World: Legal Developments in the US, Napster and its Cousins: A Revolution on the Internet but a Crisis for Copyright Owners, Computer Software Piracy.	12	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
Paper-07 Cyber Law Unit 4	**E-Commerce Taxation:** Real Problems in the Virtual World: A Tug of War on the Concept of „Permanent Establishment", Finding the PE in Cross Border E-Commerce, The United Nations Model Tax Treaty, The Law of Double Taxation Avoidance Agreements and Taxable Jurisdiction Over Non-Residents, Under the Income Tax Act, 1961, Tax Agents of Non-Residents under the Income Tax Act,1961 and the Relevance to E-Commerce, Source versus Residence and Classification between Business Income and Royalty, The Impact of the Internet on Customer Duties, Taxation Policies in India: At a Glance.	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk

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	Digital Signature, Certifying Authorities and E-Governance: Digital Signatures, Digital Signature Certificate, Certifying Authorities and Liability in the Event of Digital Signature Compromise, E-Governance in India: A Warning to Babudom!	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
Paper-07 Cyber Law Unit 5	**The Indian Evidence Act of 1872 v. Information Technology Act, 2000:** Status of Electronic Records as Evidence, Proof and Management of Electronic Records; Relevancy, Admissibility and Probative Value of E-Evidence, Proving Digital Signatures, Proof of Electronic Agreements, Proving Electronic Messages, Other Amendments in the Indian Evidence Act by the IT Act, Amendments to the Bankers Books Evidence Act, 1891 and Reserve Bank of India Act, 1934.	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
	Protection of Cyber Consumers in India: Are Cyber Consumers Covered Under the Consumer Protection Act? Goods and Services, Consumer Complaint, Defect in Goods and Deficiency in Services, Restrictive and Unfair Trade Practices, Instances of Unfair Trade Practices, Reliefs Under CPA, Beware Consumers, Consumer Foras, Jurisdiction and Implications on cyber Consumers in India, Applicability of CPA to Manufacturers, Distributors, Retailers and Service Providers Based in Foreign Lands Whose Goods are Sold or Services Provided to a Consumer in India. Amendments in Indian IT Act 2000	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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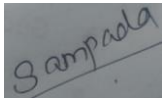

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pranali Dayanand Thakare

DEPARTMENT: IT

CLASS: T.Y.I.T.-B (Principles of Geographic Information Systems)

SEMESTER: VI

MONTH: Nov - March

ACADEMIC YEAR: 2021 -2022

LEARNING OBJECTIVE/S :
The learners will be able to :

- Understand the basics of geographic information system.
- Learn GIS Models.
- Understand different types of GIS Data.
- Analyze data, explore issues, problem solve, and evaluate situations in a geographic and spatial context.
- Explore mapped data
- Relate GIS with remote sensing technologies
- Create maps ans images to communicate spatial data in a meaningful way to others.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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USIT604, Unit 1, Principles of Geographic Information Systems.	**A Gentle Introduction to GIS** **The nature of GIS:** Some fundamental observations, Defining GIS, GISystems, GIScience and GIApplications, Spatial data and Geoinformation. **The real world and representations of it:** Models and modelling, Maps, Databases, Spatial databases and spatial analysis.	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet, Quizze.
	Models and Representations of the real world Geographic Phenomena: Defining geographic phenomena, types of geographic phenomena, Geographic fields, Geographic objects, Boundaries	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Computer Representations of Geographic Information: Regular tessellations, irregular tessellations, Vector representations, Topology and Spatial relationships, Scale and Resolution, Representation of Geographic fields, Representation of Geographic objects , Organizing and Managing Spatial Data ,The Temporal Dimension	06	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 2, Principles of Geographic Information Systems.	**Data Management and Processing Systems** **Hardware and Software Trends** **Geographic Information Systems:** GIS Software, GIS Architecture and functionality, Spatial Data Infrastructure (SDI)	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Stages of Spatial Data handling: Spatial data handling and Preparation, Spatial Data Storage and maintenance, Spatial Query and Analysis, Spatial Data Presentation.	05	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Database management Systems: Reasons for using a DBMS, Alternatives for data management, The relational data model, Querying the relational database. **GIS and Spatial Databases:** Linking GIS and DBMS, Spatial database functionality.	04	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 3, Principles of Geographic Information Systems.	**Spatial Referencing and Positioning** **Spatial Referencing:** Reference surfaces for mapping, Coordinate Systems, Map Projections, Coordinate Transformations .	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Satellite-based Positioning: Absolute positioning, Errors in absolute positioning, Relative positioning, Network positioning, code versus phase measurements, Positioning technology	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Data Entry and Preparation **Spatial Data Input:** Direct spatial data capture, Indirect spatial data captiure, Obtaining spatial data elsewhere **Data Quality:** Accuracy and Positioning, Positional accuracy, Attribute accuracy, Temporal accuracy, Lineage, Completeness, Logical consistency	03	Principles of Geographic Information Systems An Introductory Text Book	Power Point , Google meet.

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			- Otto Huisman and Rolf A.	
	Data Preparation: Data checks and repairs, Combining data from multiple sources ,**Point Data Transformation:** Interpolating discrete data, Interpolating continuous data.	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 4, Principles of Geographic Information Systems.	. **Spatial Data Analysis** **Classification of analytical GIS Capabilities** **Retrieval, classification and measurement:** Measurement, Spatial selection queries, Classification	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Overlay functions: Vector overlay operators,Raster overlay operators **Neighbourhood functions:** Proximity computations, Computation of diffusion, Flow computation, Raster based surface analysis **Analysis:** Network analysis, interpolation, terrain modeling	06	Principles of Geographic Information Systems An Introductory Text Book	Power Point , Google meet.

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			- Otto Huisman and Rolf A.	
	GIS and Application models:GPS, Open GIS Standards, GIS Applications and Advances **Error Propagation in spatial data processing:** How Errors propagate, Quantifying error propagation.	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 5, Principles of Geographic Information Systems.	**Data Visualization** **GIS and Maps, The Visualization Process** **Visualization Strategies: Present or explore?**	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	The cartographic toolbox: What kind of data do I have?, How can I map my data?	06	Principles of Geographic	Power Point , Google meet,YouTube video.

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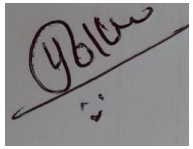
	How to map?: How to map qualitative data, How to map quantitative data, How to map the terrain elevation, How to map time series		Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	
	Map Cosmetics, Map Dissemination	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet,YouTube video.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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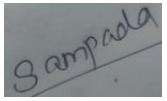

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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2021-2022

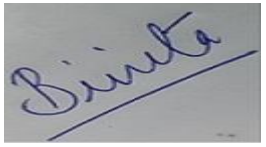
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -I	**Information Security Overview** : The Importance of Information Protection, The Evolution of Information Security, Justifying Security Investment, Security Methodology, How to Build a Security Program, The Impossible Job, The Weakest Link, Strategy and Tactics, Business Processes vs. Technical Controls.	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation through Google Meet
	Risk Analysis: Threat Definition, Types of Attacks, Risk Analysis.	4		PowerPoint presentation through Google Meet
	Secure Design Principles: The CIA Triad and Other Models, Defense Models, Zones of Trust, Best Practices for Network Defense.	4		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

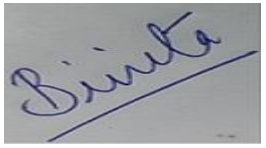
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -II	**Authentication and Authorization**: Authentication, Authorization	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation
	Encryption: A Brief History of Encryption, Symmetric-Key Cryptography, Public Key Cryptography, Public Key Infrastructure.	5		PowerPoint presentation
	Storage Security: Storage Security Evolution, Modern Storage Security, Risk Remediation, Best Practices.	2		PowerPoint presentation
	Database Security: General Database Security Concepts, Understanding Database Security Layers, Understanding Database-Level Security, Using Application Security, Database Backup and Recovery, Keeping Your Servers Up to Date, Database Auditing and Monitoring.	2		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2021-2022

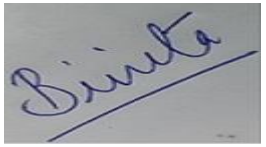
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -III	**Secure Network Design**: Introduction to Secure Network Design, Performance, Availability, Security.	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation
	Network Device Security: Switch and Router Basics, Network Hardening.	3		PowerPoint presentation
	Firewalls: Overview, The Evolution of Firewalls, Core Firewall Functions, Additional Firewall Capabilities, Firewall Design.	3		PowerPoint presentation
	Wireless Network Security: Radio Frequency Security Basics, Data-Link Layer Wireless Security Features, Flaws, and Threats, Wireless Vulnerabilities and Mitigations, Wireless Network Hardening Practices and Recommendations, Wireless Intrusion Detection and Prevention, Wireless Network Positioning and Secure Gateways.	3		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2021-2022

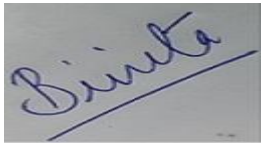
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -IV	**Intrusion Detection and Prevention Systems**: IDS Concepts, IDS Types and Detection Models, IDS Features, IDS Deployment Considerations, Security Information and Event Management (SIEM).	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation
	Voice over IP (VoIP) and PBX Security: Background, VoIP Components, VoIP Vulnerabilities and Countermeasures, PBX, TEM: Telecom Expense Management.	4		PowerPoint presentation
	Operating System Security Models: Operating System Models, Classic Security Models, Reference Monitor, Trustworthy Computing, International Standards for Operating System Security.	4		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

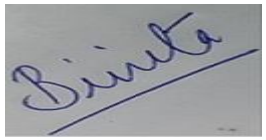
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -V	**Virtual Machines and Cloud Computing**: Virtual Machines, Cloud Computing.	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation
	Secure Application Design: Secure Development Lifecycle, Application Security Practices, Web Application Security, Client Application Security, Remote Administration Security.	4		PowerPoint presentation
	Physical Security: Classification of Assets, Physical Vulnerability Assessment, Choosing Site Location for Security, Securing Assets: Locks and Entry Controls, Physical Intrusion Detection.	4		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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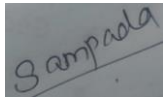

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.I.T**

CLASS: **TYIT B** SEMESTER: **VI** MONTH: **Nov-March** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVES:
The learners will be able to :

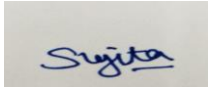
- Understand the role of Business Intelligence system and Decision support system in improvising the business.
- Understand different algorithms used in BI systems.
- Understand the use of AI and Knowledge management system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
III,1, Business Intelligence	Business intelligence: Effective and timely decisions, Data, information and knowledge, The role of mathematical models, Business intelligence architectures, Ethics and business intelligence	5	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster
	Decision support systems: Definition of system, Representation of the decision-making process, Evolution of information systems, Definition of decision support system, Development of a decision support system	5	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster
	Mathematical models for decision making: Structure of mathematical models	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster

III,2, Business Intelligence	Development of a model, Classes of models Data mining: Definition of data mining,	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster
	Representation of input data , Data mining process, Analysis methodologies Data preparation: Data validation, Data transformation, Data reduction	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster
III,3, Business Intelligence	Classification: Classification problems, Evaluation of classification models, Bayesian methods, Logistic regression, Neural networks, Support vector machines	5	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster
	Clustering: Clustering methods, Partition methods, Hierarchical methods, Evaluation of clustering models	5	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster
III,4, Business Intelligence	Business intelligence applications: Marketing models: Relational marketing, Sales force management	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First	Meet, PPT, Chalk and Duster
	Logistic and production models: Supply chain optimization, Optimization models for logistics planning, Revenue management systems.	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster
	Data envelopment analysis: Efficiency measures, Efficient frontier, The CCR model, Identification of good operating practices	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT, Chalk and Duster
	Knowledge Management: Introduction to Knowledge Management, Organizational Learning and Transformation, Knowledge Management Activities, Approaches to Knowledge Management, Information	5	Decision support and Business Intelligence Systems Efraim Turban, Ramesh Sharda, Dursun Delen Pearson Ninth 2011	Meet, PPT, Chalk and Duster

III,5, Business Intelligence	Technology (IT) In Knowledge Management, Knowledge Management Systems Implementation, Roles of People in Knowledge Management			
	Artificial Intelligence and Expert Systems: Concepts and Definitions of Artificial Intelligence, Artificial Intelligence Versus Natural Intelligence, Basic Concepts of Expert Systems, Applications of Expert Systems, Structure of Expert Systems, Knowledge Engineering, Development of Expert Systems	5	Decision support and Business Intelligence Systems Efraim Turban, Ramesh Sharda, Dursun Delen Pearson Ninth 2011	Meet, PPT, Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 54



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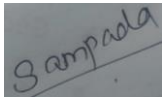

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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **TYBSCIT** SEMESTER:**VI**

MONTH: **NOV-MARCH** ACADEMIC YEAR:**2021-22**

LEARNING OBJECTIVE/S:

The learners will be able to :

Understanding the customers priority for **quality assurance** while developing ...
that **will** be created by the organization, The scope of **Software** Testing applies to ... improvements of the processes through **learning** & innovation
Understand Manual and automated testing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT601 Software Quality Assurance UNIT-1	**Introduction to Quality:** Historical Perspective of Quality, What is Quality? (Is it a fact or perception?), Definitions of Quality, Core Components of Quality, Quality View, Financial Aspect of Quality, Customers, Suppliers and Processes, Total Quality Management (TQM), Quality Principles of Total Quality Management, Quality Management Through Statistical Process Control, Quality Management Through Cultural Changes, Continual (Continuous) Improvement Cycle, Quality in Different Areas, Benchmarking and Metrics, Problem Solving Techniques, Problem Solving Software Tools.	07	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
	Software Quality: Introduction, Constraints of Software Product Quality Assessment, Customer is a King, Quality and Productivity Relationship, Requirements of a Product, Organisation Culture, Characteristics of Software, Software Development Process, Types of Products, Schemes of Criticality Definitions, Problematic Areas of Software Development Life	05	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet

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	Cycle, Software Quality Management, Why Software Has Defects?Processes Related to Software Quality, Quality Management System Structure, Pillars of Quality Management System, Important Aspects of Quality Management..			
USIT601 Software Quality Assurance UNIT-2	**Fundamentals of testing:** Introduction, Necessity of testing, What is testing? Fundamental test process, The psychology of testing,Historical Perspective of Testing, Definitions of Testing, Approaches to Testing, Testing During Development Life Cycle, Requirement Traceability Matrix, Essentials of Software Testing, Workbench,Important Features of Testing Process, Misconceptions About Testing,Principles of Software Testing, Salient Features of Good Testing, Test Policy, Test Strategy or Test Approach, Test Planning, Testing Process and Number of Defects Found in Testing, Test Team Efficiency, Mutation Testing, Challenges in Testing, Test Team Approach, Process Problems Faced by Testing, Cost Aspect of Testing, Establishing Testing Policy, Methods	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
	Structured Approach to Testing, Categories of Defect, Defect, Error, or Mistake in Software, Developing Test Strategy, Developing Testing Methodologies (Test Plan), Testing Process, Attitude Towards Testing (Common People Issues), Test Methodologies/Approaches, People Challenges in Software Testing, Raising Management Awareness for Testing, Skills Required by Tester, Testing throughout the software life cycle, Software development models, Test levels, Test types, the targets of testing, Maintenance testing	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
USIT601	**Unit Testing: Boundary Value Testing:** Normal Boundary ValueTesting, Robust Boundary Value Testing, Worst-Case Boundary ValueTesting, Special Value Testing, Examples,	05	Software Testing:	power point,google meet

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Software Quality Assurance UNIT-3	Random Testing, Guidelines for Boundary Value Testing, **Equivalence Class Testing:** Equivalence Classes, Traditional Equivalence Class Testing, Improved Equivalence Class Testing, Edge Testing, Guidelines and Observations.		Principles, Techniques and Tools M. G. Limaye	
	Decision Table–Based Testing: Decision Tables, Decision Table Techniques, Cause-and-Effect Graphing, Guidelines and Observations, **Path Testing:** Program Graphs, DD-Paths, Test Coverage Metrics, Basis Path Testing, Guidelines and Observations,**Data Flow Testing:** Define/Use Testing, Slice-Based Testing,Program Slicing Tools.	07	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
USIT601 Software Quality Assurance UNIT-4	**Software Verification and Validation:**Introduction, Verification, Verification Workbench, Methods of Verification, Types of reviews on the basis od Stage Phase, Entities involved in verification, Reviews in testing lifecycle, Coverage in Verification, Concerns of Verification, Validation, Validation Workbench, Levels of Validation,Coverage in Validation, Acceptance Testing, Management of Verification and Validation, Software development verification and validation activities	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point
	V-test Model: Introduction, V-model for software, Testing during Proposal stage, Testing during requirement stage, Testing during test planning phase, Testing during design phase, Testing during coding,VV Model, Critical Roles and Responsibilities.	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point
USIT601 Software Quality Assurance	**Levels of Testing:** Introduction, Proposal Testing, Requirement Testing, Design Testing, Code Review, Unit Testing, Module Testing, Integration Testing, Big-Bang Testing, Sandwich	04	Software Testing: Principles, Techniques	power point

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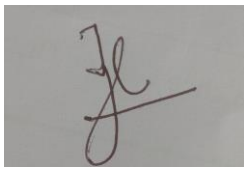
UNIT-5	Testing, Critical Path First, Sub System Testing, System Testing, Testing Stages.		and Tools M. G. Limaye	
	Special Tests: Introduction, GUI testing, Compatibility Testing, Security Testing, Performance Testing, Volume Testing, Stress Testing, Recovery Testing, Installation Testing, Requirement Testing,Regression Testing, Error Handling Testing, Manual Support Testing,Intersystem Testing, Control Testing, Smoke Testing, Adhoc Testing,Parallel Testing, Execution Testing, Operations Testing, Compliance Testing, Usability Testing, Decision Table Testing, Documentation Testing, Training testing, Rapid Testing, Control flow graph, Generating tests on the basis of Combinatorial Designs, State Graph,Risk Associated with New Technologies, Process maturity level of Technology, Testing Adequacy of Control in New technology usage,Object Oriented Application Testing, Testing of Internal Controls COTS Testing, Client Server Testing, Web Application Testing,Mobile Application Testing, eBusiness eCommerce Testing, Agile Development Testing, Data Warehousing Testing.	08	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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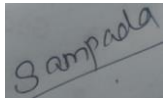

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande DEPARTMENT: Computer Science

CLASS: T.Y.I.T SEMESTER: VI

MONTH: Dec - March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

Student will able to understand the importance of software quality.
Aspects that the related to software quality.
Stakeholders and their relationship.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCSIT601 Software Quality Assurance UNIT - I	**Introduction to Quality:** Historical Perspective of Quality, What is Quality? (Is it a fact or perception?), Definitions of Quality, Core Components of Quality, Quality View, Financial Aspect of Quality, Customers, Suppliers and Processes, Total Quality Management (TQM), Quality Principles of Total Quality Management, Quality Management Through Statistical Process Control, Quality Management Through Cultural Changes, Continual (Continuous) Improvement Cycle, Quality in Different Areas, Benchmarking and Metrics, Problem Solving Techniques, Problem Solving Software Tools.	6	Software Testing and Continuous Quality Improvement Software Testing: Principles, Techniques and Tools	PPT
	Software Quality: Introduction, Constraints of Software Product Quality Assessment, Customer is a King, Quality and Productivity Relationship, Requirements of a Product, Organisation Culture,	6		PPT

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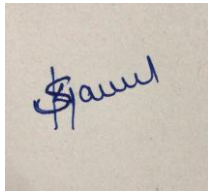
	Characteristics of Software, Software Development Process, Types of Products, Schemes of Criticality Definitions, Problematic Areas of Software Development Life Cycle, Software Quality Management, Why Software Has Defects? Processes Related to Software Quality, Quality Management System Structure, Pillars of Quality Management System, Important Aspects of Quality Management.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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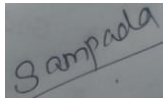

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TEACHING PLAN (UNIT PLAN)- BUSINESS INTELLIGENCE

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: TYIT (C)

SEMESTER: VI MONTH: DEC-MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the use of business intelligence in real life.
- Describe the different mathematical models to develop decision making systems.
- Get the difference between supervised learning and unsupervised learning techniques.
- Understand the use of mathematical models in relational marketing, support chain optimization, CCR model.
- Familiar with knowledge management and Artificial intelligence and expert systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT603, Business Intelligence Unit I	**Business intelligence:** Effective and timely decisions, Data, information and knowledge, The role of mathematical models, Business intelligence architectures, Ethics and business intelligence	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, Powerpoint
	Decision support systems: Definition of system, Representation of the decision-making process, Evolution of information systems, Definition of decision support system, Development of a decision support system	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint

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USIT603, Business Intelligence Unit II	**Mathematical models for decision making:** Structure of mathematical models, Development of a model, Classes of models	05	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Data mining: Definition of data mining, Representation of input data , Data mining process, Analysis methodologies	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Data preparation: Data validation, Data transformation, Data reduction	03	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
USIT603, Business Intelligence Unit III	**Classification**: Classification problems, Evaluation of classification models, Bayesian methods, Logistic regression, Neural networks, Support vector machines	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Clustering: Clustering methods, Partition methods, Hierarchical methods, Evaluation of clustering models	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
USIT603, Business Intelligence Unit IV	**Marketing models**: Relational marketing, Sales force management,	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Logistic and production models: Supply chain optimization, Optimization models for logistics planning, Revenue management systems.	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Data envelopment analysis: Efficiency measures, Efficient frontier, The CCR model, Identification of good operating practices	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint

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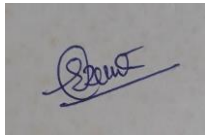
USIT603, Business Intelligence Unit V	**Knowledge Management:** Introduction to Knowledge Management, Organizational Learning and Transformation, Knowledge Management Activities, Approaches to Knowledge Management, Information Technology (IT) In Knowledge Management, Knowledge Management Systems Implementation, Roles of People in Knowledge Management	06	Decision support and Business Intelligence Systems by Efraim Turban, Ramesh Sharda, Dursun Delen , Pearson,Ninth,2011	Black Board and chalk, PowerPoint
	Artificial Intelligence and Expert Systems: Concepts and Definitions of Artificial Intelligence, Artificial Intelligence Versus Natural Intelligence, Basic Concepts of Expert Systems, Applications of Expert Systems, Structure of Expert Systems, Knowledge Engineering, Development of Expert Systems	06	Decision support and Business Intelligence Systems by Efraim Turban, Ramesh Sharda, Dursun Delen , Pearson,Ninth,2011	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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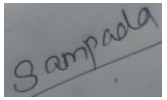

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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:T.Y.BSC(I.T) DIV-C SEMESTER: **VI** MONTH:NOVEMBER-MARCH ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : To create more awareness about cyber legal issues and challenges.

To provide advice, inputs as also guidance to students on their day-to-day legal issues concerning the use of cyberspace.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cyber Laws Elective I USIT607 Unit-1	**Power of Arrest Without Warrant Under the IT Act, 2000:** A Critique, Crimes of this Millennium, Section 80 of the IT Act, 2000 – A Weapon or a Farce?	1	Cyber Law Simplified - Vivek Sood	Powerpoint Presentation, Blackboard,projector
	Forgetting the Line Between Cognizable and Non-Cognizable Offences.	2		
	Necessity of Arrest without Warrant from Any Place, Public or Otherwise.	2		
	Check and Balances Against Arbitrary Arrests,Arrest for "About to Commit" an Offence Under the IT Act: A Tribute to Draco, Arrest, But NO Punishment!	2		
	Cyber Crime and Criminal Justice: Penalties, Adjudication and Appeals Under the IT Act,2000: Concept of "Cyber Crime " and the IT Act , 2000, Hacking.	2		

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	Teenage Web Vandals, Cyber Fraud and Cyber Cheating, Virus on the Internet,Defamation, Harassment and Email Abuse, Cyber Pornography, Other IT Act Offences	2		
	. Monetary Penalties, Adjudication and Appeals Under IT Act , 2000, Network Service Providers, Jurisdiction and Cyber Crime.	2		
	Nature of Cyber Criminality, Strategies to Tackle Cyber Crime and Trends, Criminal Justice in India and Implications on Cyber Crime.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		
Cyber Laws Elective I USIT607 Unit-2	**Contracts in the Infotech World:** Contracts in the Infotech World, Click-Wrap and Shrink-Wrap Contract: Status under the Indian Contract Act, 1872.	2	Cyber Law Simplified - Vivek Sood	Powerpoint Presentation, Blackboard,projector
	Contract Formation Under the Indian Contract Act, 1872, Contract Formation on the Internet.	2		
	Terms and Conditions of Contracts.	1		
	Jurisdiction in the Cyber World: Questioning the Jurisdiction and Validity of the Present Law of Jurisdiction,Civil Law of Jurisdiction in India.	2		
	Cause of Action, Jurisdiction and the Information Technology Act,2000.	2		

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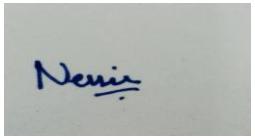
	Foreign Judgements in India, Place of Cause of Action in Contractual and IPR Disputes.	2		
	Exclusion Clauses in Contracts, Abuse of Exclusion Clauses, Objection of Lack of Jurisdiction, Misuse of the Law of Jurisdiction.	2		
	Legal Principles on Jurisdiction in the United State of America, Jurisdiction Disputes w.r.t. the Internet in the United State of America.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		



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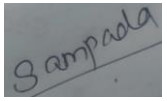

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. SHILPA RODRIGUES** _____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**T.Y.B.SC (IT)-C**_____ SEMESTER: ____**VI**_____ MONTH: _____ _____**NOVEMBER-MARCH** _____ ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the Geographical Information System for processing standard geographic data.
- Make you understand where GIS system can be applied. Learning about different applications (example: GPS).
- How geographic data are capture, updated, profiled, stored and represented in the system.
- Enable to understand software and hardware trends, DBMS and varieties of Models.
- To understand how geographic data can be display with help of Maps and to understand the making of Maps.
- Studying about spatial referencing and positioning of data in system.
- To understand different operations and functions on data and to analyze and explore information in the system.
- To provide better visualization of data both in vector and raster manner.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-04 (USIT604) **Principles of**	**A Gentle Introduction to GIS** **The nature of GIS:** Some fundamental observations, Defining GIS, GISystems, GIScience and GIApplications, Spatial data and Geoinformation.	04	Principles of Geographic Information Systems- An	Online Google Meet. PPTs. Blackboard, Chalk and Duster. Website.

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Geographic Information Systems **Unit No -01**	**The real world and representations of it:** Models and modelling, Maps, Databases, Spatial databases and spatial analysis		Introductory Text Book By Editors: Otto Huisman and Rolf A. , The International Institute of Geoinformation Science and Earth Observation Introduction to Geographic Information Systems Chang Kang-tsung McGrawHill	
	Geographic Information and Spatial Database **Models and Representations of the real world** **Geographic Phenomena:** Defining geographic phenomena, types of geographic phenomena, Geographic fields, Geographic objects, Boundaries	03		
	Computer Representations of Geographic Information: Regular tessellations, irregular tessellations, Vector representations, Topology and Spatial relationships, Scale and Resolution, Representation of Geographic fields, Representation of Geographic objects	03		
	Organizing and Managing Spatial Data **The Temporal Dimension**	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -02	**Data Management and Processing Systems** **Hardware and Software Trends** **Geographic Information Systems:** GIS Software, GIS Architecture and functionality, Spatial Data Infrastructure (SDI)	04	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto	Online Google Meet. PPTs. Blackboard, Chalk and Duster. Website.
	Stages of Spatial Data handling: Spatial data handling and preparation, Spatial Data Storage and maintenance, Spatial Query and Analysis, Spatial Data Presentation.	03		

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	Database management Systems: Reasons for using a DBMS, Alternatives for data management, The relational data model, Querying the relational database.	03	Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	
	GIS and Spatial Databases: Linking GIS and DBMS, Spatial database functionality.	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -03	**Spatial Referencing and Positioning** **Spatial Referencing:** Reference surfaces for mapping, Coordinate Systems, Map Projections, Coordinate Transformations	03	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Online Google Meet. PPTs. Blackboard, Chalk and Duster. Website.
	Satellite-based Positioning: Absolute positioning, Errors in absolute positioning, Relative positioning, Network positioning, code versus phase measurements, Positioning technology	03		
	Data Entry and Preparation **Spatial Data Input:** Direct spatial data capture, Indirect spatial data captiure, Obtaining spatial data elsewhere	02		
	Data Quality: Accuracy and Positioning, Positional accuracy, Attribute accuracy, Temporal accuracy, Lineage, Completeness, Logical consistency	02		
	Data Preparation: Data checks and repairs, Combining data from multiple sources	01		
	Point Data Transformation: Interpolating discrete data, Interpolating continuous data	01		

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	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -04	**Spatial Data Analysis** **Classification of analytical GIS Capabilities** **Retrieval, classification and measurement:** Measurement, Spatial selection queries, Classification	03	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Online Google Meet. PPTs. Blackboard, Chalk and Duster. Website.
	Overlay functions: Vector overlay operators,Raster overlay operators	01		
	Neighbourhood functions: Proximity computations, Computation of diffusion, Flow computation, Raster based surface analysis	03		
	Analysis: Network analysis, interpolation, terrain modelling	01		
	GIS and Application models: GPS, Open GIS Standards, GIS Applications and Advances	02		
	Error Propagation in spatial data processing: How Errors propagate, Quantifying error propagation	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -05	**Data Visualization** **GIS and Maps, The Visualization Process** **Visualization Strategies: Present or explore?**	04	Principles of Geographic Information	Online Google Meet. PPTs. Blackboard, Chalk and Duster.

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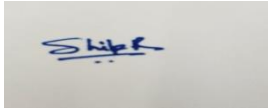
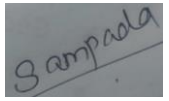
	The cartographic toolbox: What kind of data do I have?, How can I map my data?	03	Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Website.
	How to map?: How to map qualitative data, How to map quantitative data, How to map the terrain elevation, How to map time series	03		
	Map Cosmetics, Map Dissemination	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. (Mrs.) Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: TYIT SEMESTER: VI MONTH: NOV to MARCH ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

To develop the understanding of relationship between commerce and cyberspace

To enable learner to understand, explore, and acquire a critical understanding Cyber Law.

To give learners in depth knowledge of Information Technology Act and legal frame work of Right to Privacy, Data Security and Data Protection

To make learner conversant with the social and intellectual property issues emerging from 'Cyberspace

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-07 Cyber Law Unit 3	**Battling Cyber Squatters and Copyright Protection in the Cyber World:** Concept of Domain Name and Reply to Cyber Squatters, Meta-Tagging, Legislative and Other Innovative Moves Against Cyber Squatting, The Battle Between Freedom and Control on the Internet, Works in Which Copyright Subsists and meaning of Copyright, Copyright Ownership and Assignment, License of Copyright, Copyright Terms and Respect for Foreign Works, Copyright Infringement, Remedies and Offences, Copyright Protection of Content on the Internet; Copyright Notice, Disclaimer and Acknowledgement, Downloading for Viewing Content on the Internet, Hyper-Linking and Framing, Liability of ISPs for Copyright Violation in the Cyber World: Legal Developments in the US, Napster and its Cousins: A Revolution on the Internet but a Crisis for Copyright Owners, Computer Software Piracy.	12	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
Paper-07 Cyber Law Unit 4	**E-Commerce Taxation:** Real Problems in the Virtual World: A Tug of War on the Concept of „Permanent Establishment", Finding the PE in Cross Border E-Commerce, The United Nations Model Tax Treaty, The Law of Double Taxation Avoidance Agreements and Taxable Jurisdiction Over Non-Residents, Under the Income Tax Act, 1961, Tax Agents of Non-Residents under the Income Tax Act,1961 and the Relevance to E-Commerce, Source versus Residence and Classification between Business Income and Royalty, The Impact of the Internet on Customer Duties, Taxation Policies in India: At a Glance.	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk

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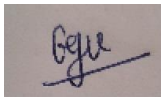
	Digital Signature, Certifying Authorities and E-Governance: Digital Signatures, Digital Signature Certificate, Certifying Authorities and Liability in the Event of Digital Signature Compromise, E-Governance in India: A Warning to Babudom!	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
Paper-07 Cyber Law Unit 5	**The Indian Evidence Act of 1872 v. Information Technology Act, 2000:** Status of Electronic Records as Evidence, Proof and Management of Electronic Records; Relevancy, Admissibility and Probative Value of E-Evidence, Proving Digital Signatures, Proof of Electronic Agreements, Proving Electronic Messages, Other Amendments in the Indian Evidence Act by the IT Act, Amendments to the Bankers Books Evidence Act, 1891 and Reserve Bank of India Act, 1934.	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
	Protection of Cyber Consumers in India: Are Cyber Consumers Covered Under the Consumer Protection Act? Goods and Services, Consumer Complaint, Defect in Goods and Deficiency in Services, Restrictive and Unfair Trade Practices, Instances of Unfair Trade Practices, Reliefs Under CPA, Beware Consumers, Consumer Foras, Jurisdiction and Implications on cyber Consumers in India, Applicability of CPA to Manufacturers, Distributors, Retailers and Service Providers Based in Foreign Lands Whose Goods are Sold or Services Provided to a Consumer in India. Amendments in Indian IT Act 2000	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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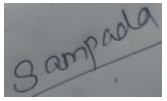

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Prajkata Hatkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2021-2022

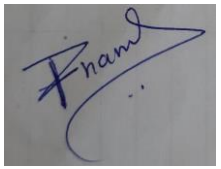
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -I	**Information Security Overview** : The Importance of Information Protection, The Evolution of Information Security, Justifying Security Investment, Security Methodology, How to Build a Security Program, The Impossible Job, The Weakest Link, Strategy and Tactics, Business Processes vs. Technical Controls.	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation through Google Meet
	Risk Analysis: Threat Definition, Types of Attacks, Risk Analysis.	4		PowerPoint presentation through Google Meet
	Secure Design Principles: The CIA Triad and Other Models, Defense Models, Zones of Trust, Best Practices for Network Defense.	4		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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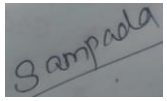

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

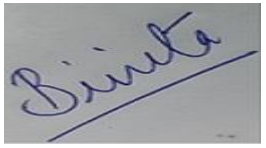
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -II	**Authentication and Authorization**: Authentication, Authorization	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation
	Encryption: A Brief History of Encryption, Symmetric-Key Cryptography, Public Key Cryptography, Public Key Infrastructure.	5		PowerPoint presentation
	Storage Security: Storage Security Evolution, Modern Storage Security, Risk Remediation, Best Practices.	2		PowerPoint presentation
	Database Security: General Database Security Concepts, Understanding Database Security Layers, Understanding Database-Level Security, Using Application Security, Database Backup and Recovery, Keeping Your Servers Up to Date, Database Auditing and Monitoring.	2		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2021-2022

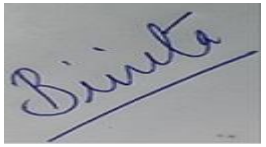
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -III	**Secure Network Design**: Introduction to Secure Network Design, Performance, Availability, Security.	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation
	Network Device Security: Switch and Router Basics, Network Hardening.	3		PowerPoint presentation
	Firewalls: Overview, The Evolution of Firewalls, Core Firewall Functions, Additional Firewall Capabilities, Firewall Design.	3		PowerPoint presentation
	Wireless Network Security: Radio Frequency Security Basics, Data-Link Layer Wireless Security Features, Flaws, and Threats, Wireless Vulnerabilities and Mitigations, Wireless Network Hardening Practices and Recommendations, Wireless Intrusion Detection and Prevention, Wireless Network Positioning and Secure Gateways.	3		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2021-2022

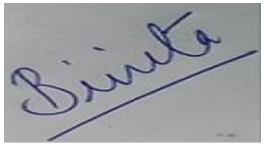
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -IV	**Intrusion Detection and Prevention Systems**: IDS Concepts, IDS Types and Detection Models, IDS Features, IDS Deployment Considerations, Security Information and Event Management (SIEM).	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation
	Voice over IP (VoIP) and PBX Security: Background, VoIP Components, VoIP Vulnerabilities and Countermeasures, PBX, TEM: Telecom Expense Management.	4		PowerPoint presentation
	Operating System Security Models: Operating System Models, Classic Security Models, Reference Monitor, Trustworthy Computing, International Standards for Operating System Security.	4		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

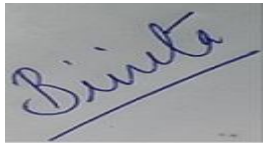
The learners will be able to :

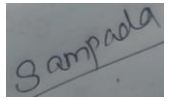
a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -V	**Virtual Machines and Cloud Computing**: Virtual Machines, Cloud Computing.	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation
	Secure Application Design: Secure Development Lifecycle, Application Security Practices, Web Application Security, Client Application Security, Remote Administration Security.	4		PowerPoint presentation
	Physical Security: Classification of Assets, Physical Vulnerability Assessment, Choosing Site Location for Security, Securing Assets: Locks and Entry Controls, Physical Intrusion Detection.	4		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: TYBSc(IT) DIV:C SEMESTER: VI MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Understand fundamentals of testing, Level of testing software, verification and validation models and other special tests which helps to enhance knowledge and keep the software uptodate.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper:USIT601, unit:2, Title:SQA	**Fundamentals of testing:** Introduction, Necessity of testing, What is testing? Fundamental test process, The psychology of testing, Historical Perspective of Testing, Definitions of Testing, Approaches to Testing, Testing During Development Life Cycle, Requirement Traceability Matrix, Essentials of Software Testing, Workbench, Important Features of Testing Process, Misconceptions About Testing,	3	Software Testing: Principles, Techniques and Tools	Online mode Google meet Google slides.
	Principles of Software Testing, Salient Features of Good Testing, Test Policy, Test Strategy or Test Approach, Test Planning, Testing Process and Number of Defects Found in Testing, Test Team Efficiency, Mutation Testing, Challenges in Testing, Test Team Approach, Process Problems Faced by Testing, Cost Aspect of Testing, Establishing Testing Policy, Methods, Structured Approach to Testing, Categories of Defect, Defect, Error, or Mistake in Software, Developing Test Strategy,	4	Software Testing: Principles, Techniques and Tools	Online mode Google meet Google slides.

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	Developing Testing Methodologies (Test Plan), Testing Process, Attitude Towards Testing (Common People Issues), Test Methodologies/Approaches, People Challenges in Software Testing, Raising Management Awareness for Testing, Skills Required by Tester, Testing throughout the software life cycle, Software development models, Test levels, Test types, the targets of testing, Maintenance testing.	5	Software Testing: Principles, Techniques and Tools	Online mode Google meet Google slides.
Paper:USIT601, unit:3, Title:SQA	**Unit Testing**: Boundary Value Testing: Normal Boundary Value Testing, Robust Boundary Value Testing, Worst-Case Boundary ValueTesting, Special Value Testing, Examples, Random Testing, Guidelines for Boundary Value Testing,	4	Software Testing: Principles, Techniques and Tools	Projector Google slides.
	Equivalence Class Testing: Equivalence Classes, Traditional Equivalence Class Testing, Improved Equivalence Class Testing, Edge Testing, Guidelines and Observations.	3	Software Testing: Principles, Techniques and Tools	Projector Google slides
	Decision Table–Based Testing: Decision Tables, Decision Table Techniques, Cause-and-Effect Graphing, Guidelines and Observations, **Path Testing**: Program Graphs, DD-Paths, Test Coverage Metrics, Basis Path Testing, Guidelines and Observations, **Data Flow Testing:** Define/Use Testing, Slice-Based Testing, Program Slicing Tools.	5	Software Testing: Principles, Techniques and Tools	Projector Google slides
Paper:USIT601, unit:4, Title:SQA	**Software Verification and Validation:**Introduction, Verification, Verification Workbench, Methods of Verification, Types of reviews on the basis od Stage Phase, Entities involved in verification, Reviews in testing lifecycle, Coverage in Verification, Concerns of Verification, Validation, Validation Workbench, Levels of Validation, Coverage in Validation, Acceptance Testing, Management of Verification and Validation, Software development verification and validation activities	6	Software Testing: Principles, Techniques and Tools	Projector Google slides

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	V-test Model: Introduction, V-model for software, testing during Proposal stage, Testing during requirement stage, Testing during test planning phase, Testing during design phase, Testing during coding, VV Model, Critical Roles and Responsibilities.	6	Software Testing: Principles, Techniques and Tools	Projector Google slides
Paper:USIT601, unit:5, Title:SQA	**Levels of Testing:** Introduction, Proposal Testing, Requirement Testing, Design Testing, Code Review, Unit Testing, Module Testing, Integration Testing, Big-Bang Testing, Sandwich Testing, Critical Path First, Sub System Testing, System Testing, Testing Stages.	3	Software Testing: Principles, Techniques and Tools	Online mode Google meet Google slides.
	Special Tests: Introduction, GUI testing, Compatibility Testing, Security Testing, Performance Testing, Volume Testing, Stress Testing, Recovery Testing, Installation Testing, Requirement Testing, Regression Testing, Error Handling Testing, Manual Support Testing, 12 36 Intersystem Testing, Control Testing, Smoke Testing, Adhoc Testing, Parallel Testing, Execution Testing, Operations Testing, Compliance Testing, Usability Testing, Decision Table Testing, Documentation Testing, Training testing, Rapid Testing, Control flow graph, Generating tests on the basis of Combinatorial Designs, State Graph,	5	Software Testing: Principles, Techniques and Tools	Online mode Google meet Google slides.
	Risk Associated with New Technologies, Process maturity level of Technology, Testing Adequacy of Control in New technology usage, Object Oriented Application Testing, Testing of Internal Controls, COTS Testing, Client Server Testing, Web Application Testing, Mobile Application Testing, eBusiness eCommerce Testing, Agile Development Testing, Data Warehousing Testing.	4	Software Testing: Principles, Techniques and Tools	Online mode Google meet Google slides.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shilpa Rodrigues **DEPARTMENT**: Information Technology **CLASS**: MSc.IT(Part II)

SEMESTER: **III** **MONTH**: Sep - Dec **ACADEMIC YEAR**: 2021-22

LEARNING OBJECTIVES:
The learners will be able to:

- To make the students aware about the automation today in the industry.
- To make the students aware about the tools used for automation.
- To help the students automate a complete process

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT304a , Unit 2 , Robotic Process Automation.	**Sequence, Flowchart, and Control Flow:** Sequencing the workflow, Activities, Control flow, various types of loops, and decision making, Step-by-step example using Sequence and Flowchart, Step-by-step example using Sequence and Control flow	06	Learning Robotic Process Automation, Alok Mani Tripathi	Power Point Presentation, Google meet
	Data Manipulation: Variables and scope, Collections, Arguments – Purpose and use, Data table usage with examples, Clipboard management, File operation with step-by-step	06	Learning Robotic Process	Power Point Presentation, Google meet

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	example, CSV/Excel to data table and vice versa (with a step-by-step example)		Automation, Alok Mani TripathiA. Hanneman, Mark Riddle	
PSIT304a , Unit 4 , Robotic Process Automation.	**Handling User Events and Assistant Bots:** What are assistant bots?, Monitoring system event triggers, Hotkey trigger, Mouse trigger, System trigger ,Monitoring image and element triggers, An example of monitoring email, Example of monitoring a copying event and blocking it, Launching an assistant bot on a keyboard event	07	Learning Robotic Process Automation, Alok Mani Tripathi	Power Point Presentation, Google meet
	Exception Handling, Debugging, and Logging: Exception handling, Common exceptions and ways to handle them, Logging and taking screenshots, Debugging techniques, Collecting crash dumps, Error reporting	05	Learning Robotic Process Automation, Alok Mani Tripathi	Power Point Presentation, Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **IT** CLASS: **M.Sc. (IT)**

SEMESTER: **I** MONTH: **September- December** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able:

- Soft computing concepts like fuzzy logic, neural networks and genetic algorithm, where Artificial Intelligence is mother branch of all.
- All these techniques will be more effective to solve the problem efficiently

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT104 **Paper IV** **Soft Computing Techniques** **UNIT I**	Introduction of soft computing, soft computing vs. hard computing, various types of soft computing techniques, Fuzzy Computing, Neural Computing, Genetic Algorithms, Associative Memory, Adaptive Resonance Theory, Classification, Clustering, Bayesian Networks, Probabilistic reasoning, applications of soft computing.	12	Artificial Intelligence and Soft Computing, Anandita Battacharya Principles of Soft computing S.N.Sivanandam S.N.Deepa	Google Meet Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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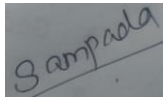
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT104 **Paper IV** **Soft Computing Techniques** **UNIT II**	Artificial Neural Network: Fundamental concept, Evolution of Neural Networks, Basic Models, McCulloh-Pitts Neuron, Linear Separability, Hebb Network. Supervised Learning Network: Perceptron Networks, Adaptive Linear Neuron, Multiple Adaptive Linear Neurons, Backpropagation Network, Radial Basis Function, Time Delay Network, Functional Link Networks, Tree Neural Network. Associative Memory Networks: Training algorithm for pattern Association, Autoassociative memory network, hetroassociative memory network, bi-directional associative memory, Hopfield networks, iterative autoassociative memory networks, temporal associative memory networks.	12	Artificial Intelligence and Soft Computing, Anandita Battacharya Principles of Soft computing S.N.Sivanandam S.N.Deepa	Google Meet Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **IT** CLASS: **M.Sc. (IT)**

SEMESTER: **III** MONTH: **September- December** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able:

- Understand the key issues in Machine Learning and its associated applications in intelligent business and scientific computing.
- Acquire the knowledge about classification and regression techniques where a learner will be able to explore his skill to generate data base knowledge using the prescribed techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT3P3a **Paper III** **Machine Learning** **UNIT I**	**Introduction:** Machine learning, Examples of Machine Learning Problems, Structure of Learning, learning versus Designing, Training versus Testing, Characteristics of Machine learning tasks, Predictive and descriptive tasks, Machine learning Models: Geometric Models, Logical Models, Probabilistic Models. Features: Feature types, Feature Construction and Transformation, Feature Selection.	12	Machine Learning: The Art and Science of Algorithms that Make Sense of Data Peter Flach	Google Meet Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PSIT3P3a **Paper III** **Machine Learning** **UNIT II**	**Classification and Regression: Classification:** Binary Classification- Assessing Classification performance, Class probability Estimation Assessing class probability Estimates, Multiclass Classification. **Regression**: Assessing performance of Regression- Error measures, Overfitting- Catalysts for Overfitting, Case study of Polynomial Regression. **Theory of Generalization:** Effective number of hypothesis, Bounding the Growth function, VC Dimensions, Regularization theory.	12	Machine Learning: The Art and Science of Algorithms that Make Sense of Data Peter Flach	Google Meet Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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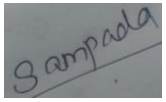

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: M.Sc.(IT) Part -1 SEMESTER:SEM -1 MONTH: SEP-DEC ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- To learn how to use Cloud Services.
- To implement Virtualization.
- To implement Task Scheduling algorithms.
- Apply Map-Reduce concept to applications.
- To build Private Cloud.
- Broadly educate to know the impact of engineering on legal and societal issues involved.

PSIT103 Cloud Computing ● UNIT 1	**Introduction to Cloud Computing**: Introduction, Historical developments, Building Cloud Computing Environments,	3	Mastering Cloud Computing Foundations and Applications Programming Rajkumar Buyya, Christian Vecchiola, S. Thamarai Selvi Elsevier – 2013	Laptop, power point, jamboard
	Principles of Parallel and Distributed Computing: Eras of Computing, Parallel v/s distributed computing, Elements of Parallel Computing, Elements of distributed computing, Technologies for distributed computing. Data Is It Anyway? Web Thinking for Connected Devices, Small Pieces, Loosely Joined, First-Class Citizens on The Internet, Graceful Degradation, Affordances.	5		
	Virtualization: Introduction, Characteristics of virtualized environments, Taxonomy of virtualization techniques, Virtualization and cloud computing, Pros	4		

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	and cons of virtualization, Technology examples. Logical Network Perimeter, Virtual Server, Cloud Storage Device, Cloud usage monitor, Resource replication, Ready-made environment.			
PSIT103 Cloud Computing UNIT 2	**Cloud Computing Architecture:** Introduction, Fundamental concepts and models, Roles and boundaries, Cloud Characteristics, Cloud Delivery models, Cloud Deployment models, Economics of the cloud, Open challenges.	4	Mastering Cloud Computing Foundations and Applications Programming Rajkumar Buyya, Christian Vecchiola, S. Thamarai Selvi Elsevier – 2013	Laptop, power point, jamboard
	Fundamental Cloud Security: Basics, Threat agents, Cloud security threats, additional considerations	4		
	Platforms and New Developments: Amazon Web Services, Google App Engine, Microsoft Azure	4		
PSIT103 Cloud Computing UNIT 3	**Specialized Cloud Mechanisms:** Automated Scaling listener, Load Balancer, SLA monitor, Pay-per-use monitor, Audit monitor, fail over system, Hypervisor, Resource Centre, Multidevice broker, State Management Database.	5	Mastering Cloud Computing Foundati and Applications Programming Rajku Buyya, Christian Vecchiola, S. Thama Selvi Elsevier –2013	Laptop, power point, jamboard
	Cloud Management Mechanisms: Remote administration system, Resource Management System, SLA Management System, Billing Management System	3		
	Cloud Security Mechanisms: Encryption, Hashing, Digital Signature, Public Key Infrastructure (PKI), Identity and Access Management (IAM), Single 12 11 Sign-On (SSO), Cloud-Based Security Groups, Hardened Virtual	4		

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	Server Images			
PSIT103 Cloud Computing UNIT 4	**Fundamental Cloud Architectures:** Workload Distribution Architecture, Resource Pooling Architecture, Dynamic Scalability Architecture, Elastic Resource Capacity Architecture, Service Load Balancing Architecture, Cloud Bursting Architecture, Elastic Disk Provisioning Architecture, Redundant Storage Architecture	6	Mastering Cloud Computing Foundati and Applications Programming Rajku Buyya, Christian Vecchiola, S. Thama Selvi Elsevier –2013	Laptop, power point, jamboard
	Advanced Cloud Architectures: Hypervisor Clustering Architecture, Load Balanced Virtual Server Instances Architecture, Non-Disruptive Service Relocation Architecture, Zero Downtime Architecture, Cloud Balancing Architecture, Resource Reservation Architecture, Dynamic Failure Detection and Recovery Architecture, Bare-Metal Provisioning Architecture, Rapid Provisioning Architecture, Storage Workload Management Architecture	6		
PSIT103 Cloud Computing UNIT 5	**Cloud Delivery Model Considerations:** Cloud Delivery Models: The Cloud Provider Perspective, Cloud Delivery Models: The Cloud Consumer Perspective	5	Mastering Cloud Computing Foundati and Applications Programming Rajku Buyya, Christian Vecchiola, S. Thama Selvi Elsevier –2013	Laptop, power point, jamboard
	Cost Metrics and Pricing Models: Business Cost Metrics, Cloud Usage Cost Metrics, Cost Management Considerations,.	4		
	Service Quality Metrics and SLAs: Service Quality Metrics, SLA Guidelines	3		

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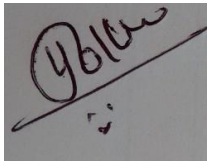

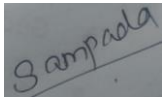

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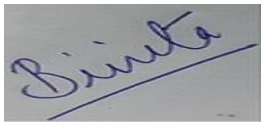
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT
CLASS: M. Sc. I. T SEMESTER: III MONTH: September-December ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S:
The learners will be able to:

a. To get the insight of the security loopholes in every aspect of computing.
b. To understand the threats and different types of attacks that can be launched on computing systems.
c. To know the countermeasures that can be taken to prevent attacks on computing systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Security Breaches and Countermeasures Unit -I	**Introduction to Security Breaching**: Overview of Information Security, Threats and Attack vectors, Concepts of Hacking – Ethical and Unethical, Information Security Controls, Concepts of penetration Testing, Information Security Laws and Standards.	3	CEHv10, Certified Ethical Hacker Study Guide by Ric Messier	PowerPoint presentation through Google Meet
	Evaluation Security of IT Organisation: Concepts, Methodology, Tools, Countermeasures, Penetration Testing.	3		PowerPoint presentation through Google Meet
	Network Scanning: Concepts, Scanning beyond IDS and firewalls, Tools, Banner Grabbing, Scanning Techniques, Network Diagrams, penetration testing.	3		PowerPoint presentation through Google Meet
	Enumeration: Concepts, Different types of enumeration: Netbios, SNMP, LDAP, NTP, SMTP, DNS, other enumeration techniques, Countermeasures, Penetration Testing	3		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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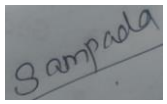

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

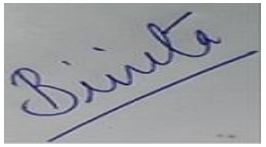
CLASS: M. Sc. I. T SEMESTER: III MONTH: September-December ACADEMIC YEAR: 2021-2022

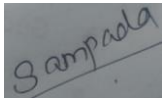
LEARNING OBJECTIVE/S:
The learners will be able to:

d. To get the insight of the security loopholes in every aspect of computing.
e. To understand the threats and different types of attacks that can be launched on computing systems.
f. To know the countermeasures that can be taken to prevent attacks on computing systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Security Breaches and Countermeasures Unit -II	**Analysis of Vulnerability:** Concepts, Assessment Solutions, Scoring Systems, Assessment Tools, Assessment Reports.	3	CEHv10, Certified Ethical Hacker Study Guide by Ric Messier	PowerPoint presentation through Google Meet
	Breaching System Security: Concepts, Cracking passwords, Escalating privileges, Executing Applications, Hiding files, covering tracks, penetration testing.	3		PowerPoint presentation through Google Meet
	Threats due to malware: Concepts, Malware Analysis, Trojan concepts, countermeasures, Virus and worm concepts, anti-malware software, penetration testing.	3		PowerPoint presentation through Google Meet
	Network Sniffing: Concepts, countermeasures, sniffing techniques, detection techniques, tools, penetration testing.	3		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

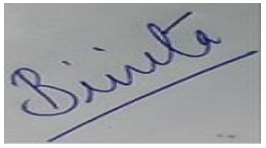
CLASS: M. Sc. I. T SEMESTER: III MONTH: September-December ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

a. To get the insight of the security loopholes in every aspect of computing.
b. To understand the threats and different types of attacks that can be launched on computing systems.
c. To know the countermeasures that can be taken to prevent attacks on computing systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Security Breaches and Countermeasures Unit -III	**Social Engineering:** Concepts, Impersonation on networking sites, Techniques, Identity theft, Insider threats, countermeasures, Pen testing.	3	CEHv10, Certified Ethical Hacker Study Guide by Ric Messier	PowerPoint presentation through Google Meet
	Denial of Service and Distributed Denial of service: Concepts, techniques, botnets, attack tools, countermeasures, protection tools, penetration testing.	3		PowerPoint presentation through Google Meet
	Hijacking an active session: Concepts, tools, application level session hijacking, countermeasures, network level session hijacking, penetration testing.	3		PowerPoint presentation through Google Meet
	Evasion of IDS, Firewalls and Honeypots: Introduction and concepts, detecting honeypots, evading IDS, IDS and Firewall evasion countermeasures, evading firewalls, penetration testing.	3		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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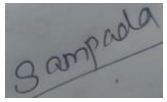

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartrak DEPARTMENT: Information Technology

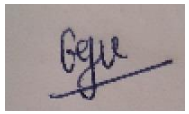
CLASS: MScIT SEMESTER: III MONTH: SEPT to DEC ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- To be able to conduct business research with an understanding of all the latest theories.
- To develop the ability to explore research techniques used for solving any real world or innovate problem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-01 Research in Computing, Unit-1	**Introduction:** Role of Business Research, Information Systems and Knowledge Management, Theory Building, Organization ethics and Issues	12	Business Research Methods--William G.Zikmund, B.J Babin, J.C. Carr,	Laptop, PPT, Google Meet
Paper-01 Research in Computing, Unit-2	**Beginning Stages of Research Process:** Problem definition, Qualitative research tools, Secondary data research	12	Business Research Methods--William G.Zikmund, B.J Babin, J.C. Carr,	Laptop, PPT, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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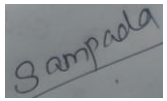

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartrak DEPARTMENT: Information Technology

CLASS: MScIT SEMESTER: III MONTH: SEP to DEC ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- This course aims to provide conceptual understanding of developing strong foundation in general writing, including research proposal and reports.
- It covers the technological developing skills for writing Article, Blog, E-Book, Commercial web Page design, Business Listing Press Release, E-Listing and Product Description.
- This course aims to provide conceptual understanding of innovation and entrepreneurship development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-01 **Technical Writing and Entrepreneurship Development**, Unit-3	**Creating Graphics:** The Functions of Graphics, The Characteristics of an Effective Graphic, Understanding the Process of Creating Graphics, Using Color Effectively, Choosing the Appropriate Kind of Graphic, Creating Effective Graphics for Multicultural Readers.	3	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet
	Researching Your Subject: Understanding the Differences Between Academic and Workplace Research, Understanding the Research Process, Conducting Secondary Research, Conducting Primary Research,	3	Technical Communication - Mike Markel	Laptop, PPT, Google Meet

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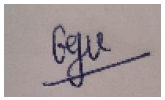
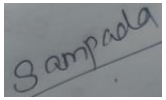
			Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	
	Research and Documentation: Literature Reviews, Interviewing for Information, Documenting Sources, Copyright, Paraphrasing, Questionnaires.	3	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet
	Report Components: Abstracts, Introductions, Tables of Contents, Executive Summaries, Feasibility Reports, Investigative Reports, Laboratory Reports, Test Reports, Trip Reports, Trouble Reports	3	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet
	Managing innovation within firms: Organisations and innovation, The dilemma of innovation management, Innovation dilemma in low technology sectors, Dynamic	2	Technical Communication - Mike Markel	Laptop, PPT, Google Meet

Paper-01 **Technical Writing and Entrepreneurship Development**, Unit-5	capabilities, Managing uncertainty, Managing innovation projects		Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	
	Operations and process innovation: Operations management, The nature of design and innovation in the context of operations, Process design, Process design and innovation	3	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet
	Managing intellectual property: Intellectual property, Trade secrets, An introduction to patents, Trademarks, Brand names, Copyright	2	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet
	Management of research and development: What is research and development?, R&D management and the industrial context, R&D investment and company success, Classifying R&D, R&D management and its link with	3	Technical Communication - Mike Markel	Laptop, PPT, Google Meet

	business strategy, Strategic pressures on R&D, Which business to support and how?, Allocation of funds to R&D, Level of R&D expenditure		Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	
	Managing R&D projects: Successful technology management, The changing nature of R&D management, The acquisition of external technology, Effective R&D management, The link with the product innovation process, Evaluating R&D projects.	2	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.IT

SEMESTER: I MONTH: SEPTEMBER TO DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

- Apply principles of Data Science to the analysis of business problems.
- Use data mining software to solve real-world problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT102 Data Science **UNIT 2**	Three Management Layers: Operational Management Layer,Processing-Stream Definition and Management, Audit, Balance, and Control Layer, Balance, Control, Yoke Solution, Cause-and-Effect, Analysis System, Functional Layer, Data Science Process Retrieve Superstep : Data Lakes, Data Swamps, Training the Trainer Model, Understanding the Business Dynamics of the Data Lake, Actionable Business Knowledge from Data Lakes, Engineering a Practical Retrieve Superstep, Connecting to Other Data Sources,	12	1.Practical Data Science Andreas François Vermeulen APress 2018 2. Principles of Data Science Sinan Ozdemir PACKT 2016 3. Data Science from Scratch Joel Grus O'Reilly 2015	Powerpoint

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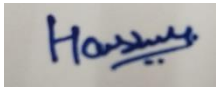
PSIT102 **Data Science** **UNIT 3**	Assess Superstep: Assess Superstep, Errors, Analysis of Data, Practical Actions, Engineering a Practical Assess Superstep,	12	1. Practical Data Science Andreas François Vermeulen APress 2018 2. Principles of Data Science Sinan Ozdemir PACKT 2016 3. Data Science from Scratch Joel Grus O'Reilly 2015	Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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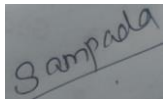

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.IT

SEMESTER: III MONTH: SEPTEMBER TO DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

- To make the students aware about the automation today in the industry.
- To make the students aware about the tools used for automation.
- To help the students automate a complete process

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT304a Robotic Process Automation **UNIT 1**	Robotic Process Automation: Scope and techniques of automation, About UiPath Record and Play: UiPath stack, Downloading and installing UiPath Studio, Learning UiPath Studio, Task recorder, Step-by-step examples using the recorder.	12	Learning Robotic Process Automation Alok Mani Tripathi Packt 1st 2018	Powerpoint

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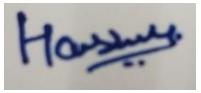
PSIT304a Robotic Process Automation **UNIT 3**	Taking Control of the Controls : Finding and attaching windows, Finding the control, Techniques for waiting for a control, Act on controls – mouse and keyboard activities, Working with UiExplorer, Handling events, Revisit recorder, Screen Scraping, When to use OCR, Types of OCR available, How to use OCR, Avoiding typical failure points Tame that Application with Plugins and Extensions: Terminal plugin, SAP automation, Java plugin, Citrix automation, Mail plugin, PDF plugin, Web integration, Excel and Word plugins, Credential management, Extensions – Java, Chrome, Firefox, and Silverlight	12	Learning Robotic Process Automation Alok Mani Tripathi Packt 1st 2018	Powerpoint
PSIT304a Robotic Process Automation **UNIT 5**	Managing and Maintaining the Code: Project organization, Nesting workflows, Reusability of workflows, Commenting techniques, State Machine, When to use Flowcharts, State Machines, or Sequences, Using config files and examples of a config file, Integrating a TFS server Deploying and Maintaining the Bot: Publishing using publish utility, Overview of Orchestration Server, Using Orchestration Server to control bots, Using Orchestration Server to deploy bots, License management, Publishing and managing updates	12	Learning Robotic Process Automation Alok Mani Tripathi Packt 1st 2018	Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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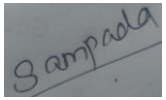

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.).Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. SEMESTER: I MONTH: September-January ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Understand the key technologies in data science and business analytics: data mining, machine learning, visualization techniques, predictive modeling, and statistics.
b. Practice problem analysis and decision-making.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Data Science Unit –I	**Data Science Technology Stack:** Rapid Information Factory Ecosystem, Data Science Storage Tools, Data Lake, Data Vault, DataWarehouse Bus Matrix, Data Science Processing Tools ,Spark, Mesos,Akka , Cassandra, Kafka, Elastic Search, R ,Scala, Python, MQTT, The Future	4	Practical Data Science Andreas François Vermeulen	Powerpoint presentation through Google Meet
	Layered Framework: Definition of Data Science Framework, Cross-Industry Standard Process for Data Mining (CRISP-DM), Homogeneous Ontology for Recursive Uniform Schema, The TopLayers of a Layered Framework, Layered Framework for High-LevelData Science and Engineering	4		Powerpoint presentation through Google Meet
	Business Layer: Business Layer, Engineering a Practical BusinessLayer	2		Powerpoint presentation through Google Meet
	Utility Layer: Basic Utility Design, Engineering a Practical Utility Layer	2		Powerpoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.) Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: I MONTH: September-January ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

a. understand the key technologies in data science and business analytics: data mining, machine learning, visualization techniques, predictive modeling, and statistics.
.b. Practice problem analysis and decision-making.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Data Science Unit –II	**Three Management Layers:** Operational Management Layer, Processing-Stream Definition and Management, Audit, Balance, andControl Layer, Balance, Control, Yoke Solution, Cause-and-Effect, Analysis System, Functional Layer, Data Science Process	6	Practical Data Science Andreas François Vermeulen	Powerpoint presentation through Google Meet
	Retrieve Superstep : Data Lakes, Data Swamps, Training the Trainer Model, Understanding the Business Dynamics of the Data Lake, Actionable Business Knowledge from Data Lakes, Engineering a Practical Retrieve Superstep, Connecting to Other Data Sources,	6		Powerpoint presentation through Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.) Sampada Deshmukh DEPARTMENT: IT

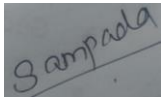
CLASS: Msc. I. T SEMESTER: I MONTH: September-January ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

a. understand the key technologies in data science and business analytics: data mining, machine learning, visualization techniques, predictive modeling, and statistics.
.b. Practice problem analysis and decision-making.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Data Science Unit –V	**Transform Superstep:** Univariate Analysis, Bivariate Analysis, Multivariate Analysis, Linear Regression, Logistic Regression, Clustering Techniques, ANOVA, Principal Component Analysis (PCA), Decision Trees, Support Vector Machines, Networks, Clusters, and Grids, Data Mining, Pattern Recognition, Machine Learning, Bagging Data,Random Forests, Computer Vision (CV) , Natural Language Processing (NLP), Neural Networks, TensorFlow.	9	Practical Data Science Andreas François Vermeulen	Powerpoint presentation through Google Meet
	Organize and Report Supersteps : Organize Superstep, Report Superstep, Graphics, Pictures, Showing the Difference	3		Powerpoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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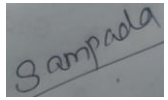

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**MSC(IT)**_____ SEMESTER: ____**I**_____ MONTH: _ **SEPTEMBER-DECEMBER**_____ ACADEMIC YEAR: _____**2021-2022**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

- **Understand Soft computing concepts like fuzzy logic, neural networks and genetic algorithm, where Artificial Intelligence is mother branch of all.**
- **All these techniques will be more effective to solve the problem efficiently. Identify and describe soft computing techniques and their roles in building intelligent machines.**
- **Recognize the feasibility of applying a soft computing methodology or a particular problem**
- **Apply fuzzy logic and reasoning to handle uncertainty and solve engineering problems**
- **Apply genetic algorithms to combinatorial optimization problems**
- **Apply neural networks for classification and regression problems**
- **Effectively use existing software tools to solve real problems using a soft computing approach**
- **Evaluate and compare solutions by various soft computing approaches for a given problem.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT104 Soft Computing Techniques **Unit No -03**	UnSupervised Learning Networks: Fixed weight competitive nets, Kohonen self-organizing feature maps, learning vectors quantization, counter propogation networks, adaptive resonance theory networks. Special Networks: Simulated annealing, Boltzman machine, Gaussian Machine, Cauchy Machine, Probabilistic neural net, cascade correlation network, cognition network, neo-cognition network, cellular neural network, optical neural network**.** Third Generation Neural Networks: Spiking Neural networks, convolutional neural networks, deep learning neural networks, extreme learning machine model.	05 05 02	Principles of Soft computing S.N.Sivanandam S.N.Deepa Wiley 3Rd 2019	Online Google Meet PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	Introduction to Fuzzy Logic, Classical Sets and Fuzzy sets: Classical sets, Fuzzy sets. Classical Relations and Fuzzy Relations: Cartesian Product of relation, classical relation, fuzzy relations, tolerance and equivalence relations, non-iterative fuzzy sets. Membership Function: features of the membership functions, fuzzification, methods of membership value assignments. Defuzzification: Lambda-cuts for fuzzy sets, Lambda-cuts for fuzzy relations, Defuzzification methods.	02 03 02 02	Principles of Soft computing S.N.Sivanandam S.N.Deepa Wiley 3Rd 2019	Online Google Meet PPts.

	Fuzzy Arithmetic and Fuzzy measures: fuzzy arithmetic, fuzzy measures, measures of fuzziness, fuzzy integrals.	03		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	Fuzzy Rule base and Approximate reasoning: Fuzzy proportion, formation of rules, decomposition of rules, aggregation of fuzzy rules, fuzzy reasoning, fuzzy inference systems,Fuzzy logic control systems, control system design, architecture and operation of FLC system, FLC system models and applications of FLC System.	03	Principles of Soft computing S.N.Sivanandam S.N.Deepa Wiley 3Rd 2019	Online Google Meet PPts.
	Genetic Algorithm: Biological Background, Traditional optimization and search techniques, genetic algorithm and search space, genetic algorithm vs. traditional algorithms, basic terminologies, simple genetic algorithm, general genetic algorithm, operators in genetic algorithm, stopping condition for genetic algorithm flow, constraints in genetic algorithm, problem solving using genetic algorithm, the schema theorem, classification of genetic algorithm, Holland classifier systems, genetic programming, advantages and limitations and applications of genetic algorithm.	06		
	Differential Evolution Algorithm, Hybrid soft computing techniques – neuro – fuzzy hybrid, genetic neuro-hybrid systems, genetic fuzzy hybrid and fuzzy genetic hybrid systems.	03		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			

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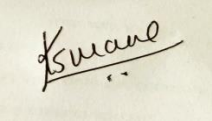

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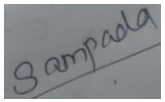

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**MSC(IT)**_____ SEMESTER: ____**III**_____ MONTH: _____ **SEPTEMBER-DECEMBER** _____ ACADEMIC YEAR: _____**2021-2022**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

- Understanding Human learning aspects.
- Understanding primitives in learning process by computer.
- Understanding nature of problems solved with Machine Learning
- Understand the key issues in Machine Learning and its associated applications inintelligent business and scientific computing.
- Acquire the knowledge about classification and regression techniques where a learnerwill be able to explore his skill to generate data base knowledge using the prescribed techniques.
- Understand and implement the techniques for extracting the knowledge using machinelearning methods.
- Achieve adequate perspectives of big data analytics in various applications likerecommender systems, social media applications etc.
- Understand the statistical approach related to machine learning. He will also Apply the algorithms to a real-world problem, optimize the models learned and report on the expected accuracy that can be achieved by applying the models.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Elective 2 PSIT303a Machine Learning **Unit No -03**	**Linear Models:** Least Squares method, Multivariate Linear Regression, Regularized Regression, Using Least Square regression for Classification. Perceptron, Support Vector Machines, Soft Margin SVM, Obtaining probabilities from Linear classifiers, Kernel methods for non-Linearity.	12	Machine Learning: The Art and Science of Algorithms that Make Sense of Data Peter Flach Cambridge UniversityPress 2012	Online Google Meet PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	**Logic Based and Algebraic Model: Distance Based Models:** Neighbours and Examples, Nearest Neighbours Classification, Distance based clustering-K means Algorithm, Hierarchical clustering, **Rule Based Models:** Rule learning for subgroup discovery, Association rulemining. **Tree Based Models:** Decision Trees, Ranking and Probability estimation Trees, Regression trees, Clustering Trees.	06 03 03	Machine Learning: The Art and Science of Algorithms that Make Sense of Data Peter Flach Cambridge UniversityPress 2012	Online Google Meet PPts.

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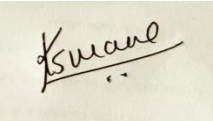
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	Probabilistic Model: Normal Distribution and Its Geometric Interpretations, Naïve Bayes Classifier, Discriminative learning with Maximum likelihood, Probabilistic Models with Hidden variables: Estimation-Maximization Methods, Gaussian Mixtures, and Compression based Models. **Trends In Machine Learning :** Model and Symbols- Bagging and Boosting, Multitask learning, Online learning and Sequence Prediction, Data Streams and Active Learning, Deep Learning, Reinforcement Learning.	07 05	Machine Learning: The Art and Science of Algorithms that Make Sense of Data Peter Flach Cambridge UniversityPress 2012	Online Google Meet PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			



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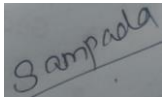

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. I.T. SEMESTER: III MONTH: September - December ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
This course aims to provide conceptual understanding of developing strong foundation in general writing, including research proposal and reports.
It covers the technological developing skills for writing Article, Blog, E-Book, Commercial web Page design, Business Listing Press Release, E-Listing and Product Description.
This course aims to provide conceptual understanding of innovation and entrepreneurship development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 PSIT301 Technical Writing and Entrepreneurship Development Unit 1	Introduction to Technical Communication: What Is Technical Communication? The Challenges of Producing Technical Communication, Characteristics of a Technical Document, Measures of Excellence in Technical Documents, Skills and Qualities Shared by Successful Workplace Communicators, How Communication Skills and Qualities Affect Your Career? Understanding Ethical and Legal Considerations: A Brief Introduction to Ethics, Your Ethical Obligations, Your Legal Obligations, The Role of Corporate Culture in Ethical and Legal Conduct, Understanding Ethical and Legal Issues Related to Social Media, Communicating Ethically Across Cultures, Principles for Ethical Communication Writing Technical Documents: Planning, Drafting, Revising, Editing, Proofreading Writing Collaboratively: Advantages and Disadvantages	12	Technical Communication Mike Markel	Power point presentation through google meet

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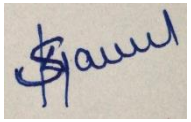
	of Collaboration, Managing Projects, Conducting Meetings, Using Social Media and Other Electronic Tools in Collaboration, Importance of Word Press Website, Gender and Collaboration, Culture and Collaboration.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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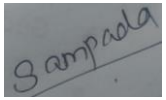

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.).Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. SEMESTER: III MONTH: September-December ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

a. understad the developing strong foundation in general writing, including research proposal and reports.
b. prepare technological developing skills for writing Article, Blog, E-Book, Commercial web Page design, Business Listing Press Release, E-Listing and Product Description.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Technical Writing And Entrepreneurship Development Unit –II	**Introduction to Content Writing:** Types of Content (Article, Blog, E-Books, Press Release, Newsletters Etc), Exploring Content Publication Channels. Distribution of your content across various channels.	4	Handbook of Technical Writing Gerald J. Alred , Charles T. Brusaw , Walter E. Oliu	Google Meet with Powerpoint Presentation
	Blog Creation: Understand the psychology behind your web traffic, Creating killing landing pages which attract users, Using Landing Page Creators, Setting up Accelerated Mobile Pages, Identifying UI UX Experience of your website or blog.	4		Google Meet with Powerpoint Presentation
	Organizing Your Information: Understanding Three Principles for Organizing Technical Information, Understanding Conventional Organizational Patterns	2		Google Meet with Powerpoint Presentation
	Emphasizing Important Information: Writing Clear, Informative Titles, Writing Clear, Informative Headings, Writing	2		Google Meet with Powerpoint Presentation

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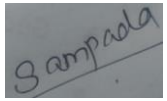
	Clear Informative Lists, Writing Clear Informative Paragraphs.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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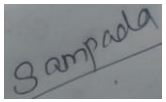

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.) Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: III MONTH:September -December ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

a. understad the developing strong foundation in general writing, including research proposal and reports.

b. prepare technological developing skills for writing Article, Blog, E-Book, Commercial web Page design, Business Listing Press Release, E-Listing and Product Description.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Technical Writing And Entrepreneurship Development Unit –IV	**Writing Proposals:** Understanding the Process of Writing Proposals, The Logistics of Proposals, The "Deliverables" of Proposals, Persuasion and Proposals, Writing a Proposal, The Structure of the Proposal.	4	Handbook of Technical Writing Gerald J. Alred , Charles T. Brusaw , Walter E. Oliu	Google Meet with Powerpoint Presentation
	Writing Informational Reports: Understanding the Process of Writing Informational Reports, Writing Directives, Writing Field Reports, Writing Progress and Status Reports, Writing Incident Reports, Writing Meeting Minutes. **Writing Recommendation Reports:** Understanding the Role of Recommendation Reports, Using a Problem-Solving Model for Preparing Recommendation Reports, Writing Recommendation Reports.	4		Google Meet with Powerpoint Presentation
	Reviewing, Evaluating, and Testing Documents and Websites: Understanding Reviewing, Evaluating, and Testing, Reviewing Documents and Websites, Conducting Usability Evaluations, Conducting Usability Tests, Using Internet tools to	4		Google Meet with Powerpoint Presentation

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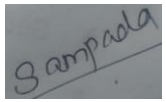
	check writing Quality, Duplicate Content Detector, What is Plagiarism?, How to avoid writing plagiarism content? **Innovation management: an introduction:** The importance of innovation, Models of innovation, Innovation as a management process. **Market adoption and technology diffusion:** Time lag between innovation and useable product, Innovation and the market , Innovation and market vision ,Analysing internet search data to help			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

ACHING PLAN (UNIT PLAN)



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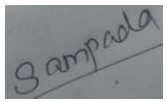

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. **Security Breach Countermeasures** DEPARTMENT: Information Technology.

CLASS: M.Sc. IT SEMESTER: III MONTH: September To December ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

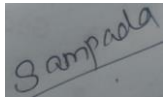
- To get the insight of the security loopholes in every aspect of computing.
- To understand the threats and different types of attacks that can be launched on computing systems.
- To know the countermeasures that can be taken to prevent attacks on computing systems.
- To test the software against the attacks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT302d Security Breach Countermeasures Unit-4	**Compromising Web Servers:** Concepts, attacks, attack methodology, attack tools, countermeasures, patch management, web server security tools, penetration testing. **Compromising Web Applications:** Concepts, threats, methods, tools, countermeasures, testing tools, penetration testing. **Performing SQL Injection:** Concepts, types, methodology, tools, techniques, countermeasures. **Compromising Wireless Networks:** Concepts, wireless encryption, threats, methodology, tools, compromising Bluetooth, countermeasures, wireless security tools, penetration testing.	**12**	1. CEHv10, Certified Ethical Hacker Study Guide 2. All in One, Certified Ethical Hacker	**Google Meet** **PPT**
PSIT302d Security Breach Countermeasures Unit-5	**Compromising Mobile Platforms:** Attack vectors, Compromising Android OS, Compromising iOS, Mobile spyware, Mobile Device Management, Mobile security, penetration testing. **Compromising IoT:** Concepts, attacks, compromising methodology, tools, countermeasures, penetration testing. **Cloud Security:** Concepts, Security, threats, attacks, tools,	**12**	1. CEHv10, Certified Ethical Hacker Study Guide 2. All in One, Certified Ethical	**Google Meet** **PPT**

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	penetration testing. **Cryptography:** Concepts, email encryption, algorithms, disk encryption, tools, cryptanalysis, Public key infrastructure, countermeasures.		Hacker	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. I.T. SEMESTER: IV MONTH: February-April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- To provide conceptual understanding of the function of Blockchain as a method of securing distributed ledgers, how consensus on their contents is achieved, and the new applications that they enable.
- To cover the technological underpinnings of blockchain operations as distributed data structures and decision-making systems, their functionality and different architecture types.
- To provide a critical evaluation of existing "smart contract" capabilities and platforms, and examine their future directions, opportunities, risks and challenges.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 PSIT401 Blockchain Unit 5	Blockchain Application Development: Decentralized Applications, Blockchain Application Development, Interacting with the Bitcoin Blockchain, Interacting Programmatically with Ethereum—Sending Transactions, Creating a Smart Contract, Executing Smart Contract Functions, Public vs. Private Blockchains, Decentralized Application Architecture, Building an Ethereum DApp: The DApp, Setting Up a Private Ethereum Network, Creating the Smart Contract, Deploying the Smart Contract, Client Application, DApp deployment: Seven Ways to Think About Smart Contracts, Dapp Contract Data Models, EVM back-end and front-end communication, JSON-RPC, Web 3, JavaScript API, Using Meteor with the EVM, Executing Contracts in the Console, Recommendations for Prototyping, Third-Party Deployment Libraries, Creating Private Chains.	12	Blockchain Enabled Applications Vikram Dhillon David Metcalf Max Hooper	Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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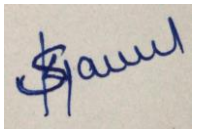

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**MSC(IT)**_____ SEMESTER: ____**IV**_____ MONTH: _____ **FEBRUARY-APRIL** _____ ACADEMIC YEAR: _____**2021-2022**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

- To present the mathematical, statistical and computational challenges of building neural networks
- To study the concepts of deep learning
- To enable the students to know deep learning techniques to support real-time applications
- Describes basics of mathematical foundation that will help the learner to understand the concepts of Deep Learning.
- Understand and describe model of deep learning
- Design and implement various deep supervised learning architectures for text & image data.
- Design and implement various deep learning models and architectures.
- Apply various deep learning techniques to design efficient algorithms for real-world applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Elective 2 **PSIT403a** **Deep Learning** **Unit No -01**	**Applied Math and Machine Learning Basics:** Linear Algebra: Scalars, Vectors, Matrices and Tensors , Multiplying Matrices and Vectors , Identity and Inverse Matrices, Linear Dependence and Span , norms, special matrices and vectors, eigen decompositions.	07	Deep Learning Ian Goodfellow, Yoshua Bengio, Aaron Courvile	Blackboard, Chalk and Duster. PPts.

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	Numerical Computation: Overflow and under flow, poor conditioning, Gradient Based Optimization, Constraint optimization.	05	An MIT Press book 1st, 2016. Fundamentals of Deep Learning Nikhil Buduma O'Reilly 1st, 2017.	
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	Deep Learning Research: Linear Factor Models, Autoencoders, representation learning	12	Deep Learning Ian Goodfellow, Yoshua Bengio, Aaron Courvile An MIT Press book 1st, 2016. Fundamentals of Deep Learning Nikhil Buduma O'Reilly 1st, 2017.	Blackboard, Chalk and Duster. PPts.

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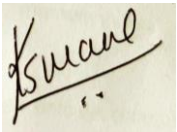
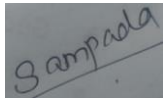
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. (Mrs.) Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: MScIT SEMESTER: IV MONTH: JAN to MAY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- To provide conceptual understanding of the function of Blockchain as a method of securing distributed ledgers, how consensus on their contents is achieved, and the new applications that they enable.
- To cover the technological underpinnings of blockchain operations as distributed data structures and decision-making systems, their functionality and different architecture types.
- To provide a critical evaluation of existing "smart contract" capabilities and platforms, and examine their future directions, opportunities, risks and challenges.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-01 **Block Chain**, Unit-3	**Hyperledger:** Overview, Fabric, composer, installing hyperledger fabric and composer, deploying, running the network, error troubleshooting.	6	Beginning Blockchain A Beginner's Guide to Building Blockchain Solutions-- Bikramaditya Singhal, Gautam Dhameja, Priyansu Sekhar Panda	Laptop, PPT, Google Meet
	Smart Contracts and Tokens: EVM as Back End, Assets Backed by Anything, Cryptocurrency Is a Measure of Time, Function of Collectibles in Human Systems, Platforms for High-Value Digital Collectibles, Tokens as Category of Smart Contract, Creating a Token, Deploying the Contract, Playing with Contracts.	6	Beginning Blockchain A Beginner's Guide to Building Blockchain Solutions-- Bikramaditya Singhal, Gautam Dhameja, Priyansu Sekhar	Laptop, PPT, Google Meet

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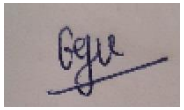
			Panda	
Paper-01 **Block Chain**, Unit-4	**Mining Ether:** Why? Ether's Source, Defining Mining, Difficulty, Self-Regulation, and the Race for Profit, How Proof of Work Helps Regulate Block Time, DAG and Nonce, Faster Blocks, Stale Blocks, Difficulties, Ancestry of Blocks and Transactions, Ethereum and Bitcoin, Forking, Mining, Geth on Windows, Executing Commands in the EVM via the Geth Console, Launching Geth with Flags, Mining on the Testnet, GPU Mining Rigs, Mining on a Pool with Multiple GPUs.	6	Beginning Blockchain A Beginner's Guide to Building Blockchain Solutions-- Bikramaditya Singhal, Gautam Dhameja, Priyansu Sekhar Panda	Laptop, PPT, Google Meet
	Cryptoecnomics: Introduction, Usefulness of cryptoeconomics, Speed of blocks, Ether Issuance scheme, Common Attack Scenarios.	6	Beginning Blockchain A Beginner's Guide to Building Blockchain Solutions-- Bikramaditya Singhal, Gautam Dhameja, Priyansu Sekhar Panda	Laptop, PPT, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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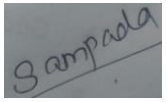

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **IT** CLASS: **M.Sc. (IT)**

SEMESTER: **IV** MONTH: **February - April** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able:

- To present the mathematical, statistical and computational challenges of building neural networks.
- To study the concepts of deep learning.
- To enable the students to know deep learning techniques to support real-time applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT403a **Paper 3** **Deep Learning** **UNIT III**	Convolutional Networks, Sequence Modelling, Applications	12	Deep Learning Ian Goodfellow, Yoshua Bengio, Aaron Courvile Fundamentals of Deep Learning Nikhil Buduma	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT403a **Paper 3** **Deep Learning** **UNIT IV**	Deep Learning Research: Linear Factor Models, Autoencoders, representation learning	12	Deep Learning Ian Goodfellow, Yoshua Bengio, Aaron Courvile Fundamentals of Deep Learning Nikhil Buduma	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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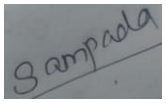
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT403a **Paper 3** **Deep Learning** **UNIT V**	Approximate Inference, Deep Generative Models	12	Deep Learning Ian Goodfellow, Yoshua Bengio, Aaron Courvile Fundamentals of Deep Learning Nikhil Buduma	Google Meet Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **IT** CLASS: **M.Sc. (IT)**

SEMESTER: **II** MONTH: **February-April** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able:

- To provide an overview of an exciting growing field of big data analytics.
- To introduce the tools required to manage and analyze big data like Hadoop, NoSql MapReduce.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT201 **Paper I** **Big Data Analytics** **UNIT I**	Introduction to Big Data, Characteristics of Data, and Big Data Evolution of Big Data, Definition of Big Data, Challenges with big data, Why Big data? Data Warehouse environment, Traditional Business Intelligence versus Big Data. State of Practice in Analytics, Key roles for New Big Data Ecosystems, Examples of big Data Analytics. Big Data Analytics, Introduction to big data analytics, Classification of Analytics, Challenges of Big Data, Importance of Big Data, Big Data Technologies, Data Science, Responsibilities, Soft state eventual consistency. Data Analytics Life Cycle	12	Big Data and Analytics Subhashini Chellappan Seema Acharya Wiley	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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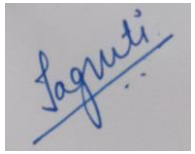
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT201 **Paper I** **Big Data Analytics** **UNIT II**	Analytical Theory and Methods: Clustering and Associated Algorithms, Association Rules, Apriori Algorithm, Candidate Rules, Applications of Association Rules, Validation and Testing, Diagnostics, Regression, Linear Regression, Logistic Regression, Additional Regression Models. Analytical Theory and Methods: Classification, Decision Trees, Naïve Bayes, Diagnostics of Classifiers, Additional Classification Methods, Time Series Analysis	12	Big Data and Analytics Subhashini Chellappan Seema Acharya Wiley	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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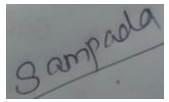

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: **M.Sc. IT (Human Computer Interaction)** SEMESTER:IV MONTH: FEB-APR ACADEMICYEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the important aspects of implementation of human-computer interfaces.
- Identify the various tools and techniques for interface analysis, design, and evaluation.
- Identify the impact of usable interfaces in the acceptance and performance utilization of information systems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Human Computer Interaction	**The Interaction**: Models of interaction, Design Focus, Frameworks and HCI, Ergonomics, Interaction styles, **Elements of the WIMP interface,Interactivity** **Paradigms**: Introduction, Paradigms for interaction **Interaction design basics**: What is design?, The process of design, User focus, Cultural probes, Navigation design, the big button trap, Modes, Screen design and layout, Alignment and layout matters, Checking screen colors, Iteration and prototyping **HCI in the software process**: The software life cycle, Usability engineering , Iterative design and prototyping, Prototyping in practice, Design rationale	12	1.Human Computer Interaction-Alan Dix, Janet Finlay, Gregory Abowd, Russell Beale Pearson Education 3rd 2. Designing the User Interface -Shneiderman B., Plaisant C., Cohen M., Jacobs S. Pearson 5th 2013	POWER POINT PRESENTATION

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UNIT 2 Human Computer Interaction	**Design**: Principles to support usability, Standards, Guidelines, Golden rules and heuristics, HCI patterns **Implementation support**: Elements of windowing systems, Programming the application, Going with the grain, Using toolkits, User interface management **Systems Evaluation techniques:** What is evaluation?, Goals of evaluation, Evaluation through expert analysis,Evaluation through user participation, Choosing an evaluation method	12	1.Human Computer Interaction-Alan Dix, Janet Finlay, Gregory Abowd, Russell Beale Pearson Education 3rd 2. Designing the User Interface -Shneiderman B., Plaisant C., Cohen M., Jacobs S. Pearson 5th 2013	POWER POINT PRESENTATION
UNIT 3 Human Computer Interaction	**Design**: Principles to support usability, Standards, Guidelines, Golden rules and heuristics **HCI patterns Implementation support**: Elements of windowing systems, Programming the application, Going with the grain, Using toolkits, User interface management systems **Evaluation techniques**: What is evaluation?, Goals of evaluation, Evaluation through expert analysis, Evaluation through user participation, Choosing an evaluation method	12	1.Human Computer Interaction-Alan Dix, Janet Finlay, Gregory Abowd, Russell Beale Pearson Education 3rd 2. Designing the User Interface -Shneiderman B., Plaisant C., Cohen M., Jacobs S. Pearson 5th 2013	POWER POINT PRESENTATION

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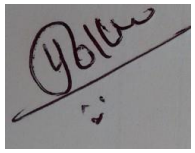
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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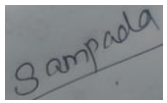

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

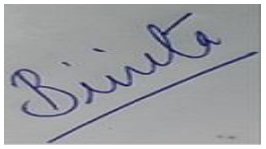
CLASS: M. Sc. I. T SEMESTER: II MONTH: February-April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

a. To understand the state-of-the-art in network protocols, architectures and applications.
b. Analyze existing network protocols and networks.
c. Develop new protocols in networking

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Modern Networking Unit -I	Elements of Modern Networking- The Networking Ecosystem ,Example Network Architectures, Ethernet, Wi-Fi, 4G/5G Cellular, Cloud Computing, Internet of Things, Network Convergence Unified Communications	6	Foundations of Modern Networking: SDN, NFV, QoE, IoT, and Cloud by William Stallings	PowerPoint presentation
	Requirements and Technology- Types of Network and Internet Traffic, Demand: Big Data, Cloud Computing, and Mobile Traffic, Requirements: QoS and QoE, Routing, Congestion Control , SDN and NFV	6		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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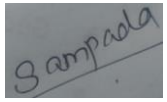

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

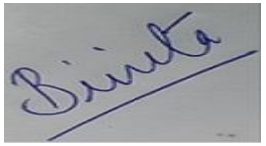
CLASS: M. Sc. I. T SEMESTER: II MONTH: February-April ACADEMIC YEAR: : 2021-2022

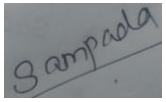
LEARNING OBJECTIVE/S:
The learners will be able to:

a. To understand the state-of-the-art in network protocols, architectures and applications.
b. Analyze existing network protocols and networks.
c. Develop new protocols in networking

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Modern Networking Unit -IV	Defining and Supporting User Needs, Quality of Service, Integrated Services Architecture, Queuing Discipline, Differentiated Services, Forwarding PHB, Service Level Agreements, IP Performance Metrics	4	Foundations of Modern Networking: SDN, NFV, QoE, IoT, and Cloud by William Stallings	PowerPoint presentation
	QoE: User Quality of Experience, QoE Considerations The QoE/QoS Layered Model, Measurements of QoE, Summarizing the QoE, Measurement Methods, Applications of QoE	4		PowerPoint presentation
	Network Design Implications of QoS and QoE Classification of QoE/ QoS Mapping Models, Black-Box Media-Based QoS/QoE Mapping Models, Glass- Box Parameter-Based QoS/QoE Mapping Models,Gray-Box QoS/QoE Mapping Models	4		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

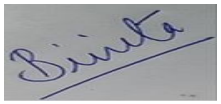
CLASS: M. Sc. I. T SEMESTER: II MONTH: February-April ACADEMIC YEAR: : 2021-2022

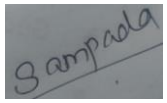
LEARNING OBJECTIVE/S:
The learners will be able to:

a. To understand the state-of-the-art in network protocols, architectures and applications.
b. Analyze existing network protocols and networks.
c. Develop new protocols in networking

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Modern Networking Unit -V	Modern Network Architecture: Clouds and Fog, Cloud Computing, Cloud, Deployment Models, Cloud Architecture	4	Foundations of Modern Networking: SDN, NFV, QoE, IoT, and Cloud by William Stallings	PowerPoint presentation
	The Internet of Things: Components The IoT Era Begins, Components of IoT-Enabled Things, The Internet of Things: Architecture and Implementation, IoT Architecture	4		PowerPoint presentation
	Security Requirements, SDN Security Threats to SDN, NFV Security, Cloud Security, IoT Security	4		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. I.T. SEMESTER: II MONTH: February-April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
To understand the state-of-the-art in network protocols, architectures and applications.
· Analyze existing network protocols and networks.
· Develop new protocols in networking
· To understand how networking research is done
· To investigate novel ideas in the area of Networking via term-long research projects.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 PSIT202 Modern Networking Unit 2	Software-Defined Networks SDN: Background and Motivation, Evolving Network Requirements Demand Is Increasing,Supply Is IncreasingTraffic Patterns Are More ComplexTraditional Network Architectures are Inadequate, The SDN Approach Requirements SDN Architecture Characteristics of SoftwareDefined Networking, SDN- and NFV-Related Standards StandardsDeveloping Organizations Industry Consortia Open Development Initiatives, SDN Data Plane and OpenFlow SDN Data Plane, Data Plane Functions Data Plane Protocols OpenFlow Logical Network Device Flow Table Structure Flow Table Pipeline, The Use of Multiple Tables Group Table OpenFlow Protocol, SDN Control Plane SDN Control Plane Architecture Control Plane Functions, Southbound Interface Northbound InterfaceRouting, ITU-T Model, OpenDaylight OpenDaylight Architecture OpenDaylight Helium, REST REST Constraints Example REST API, Cooperation and Coordination Among Controllers, Centralized Versus Distributed Controllers, HighAvailability Clusters Federated SDN Networks, Border Gateway Protocol Routing	12	SDN and NFV Simplified A Visual Guide to Understanding Software Defined Networks and Network Function Virtualization Jim Doherty	Power point presentation

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	and QoS Between Domains, Using BGP for QoS Management IETF SDNi OpenDaylight SNDi SDN Application Plane SDN Application Plane Architecture Northbound Interface Network Services Abstraction Layer Network Applications, User Interface, Network Services Abstraction Layer Abstractions in SDN, Frenetic Traffic Engineering PolicyCop Measurement and Monitoring Security OpenDaylight DDoS Application Data Center Networking, Big Data over SDN Cloud Networking over SDN Mobility and Wireless Information-Centric Networking CCNx, Use of an Abstraction Layer			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. I.T. SEMESTER: II MONTH: February-April ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

To understand the state-of-the-art in network protocols, architectures and applications.
· Analyze existing network protocols and networks.
· Develop new protocols in networking
· To understand how networking research is done
· To investigate novel ideas in the area of Networking via term-long research projects.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 PSIT202 Modern Networking Unit 3	Virtualization, Network Functions Virtualization: Concepts and Architecture, Background and Motivation for NFV, Virtual Machines The Virtual Machine Monitor, Architectural Approaches Container Virtualization, NFV Concepts Simple Example of the Use of NFV, NFV Principles High-Level NFV Framework, NFV Benefits and Requirements NFV Benefits, NFV Requirements, NFV Reference Architecture NFV Management and Orchestration, Reference Points Implementation, NFV Functionality, NFV Infrastructure,Container Interface,Deployment of NFVI Containers,Logical Structure of NFVI Domains,ComputeDomain, Hypervisor Domain,Infrastructure Network Domain, Virtualized Network Functions, VNF Interfaces,VNFC to VNFC Communication,VNF Scaling, NFV Management and Orchestration, Virtualized Infrastructure Manager,Virtual Network Function	12	Network Functions Virtualization (NFV) with a Touch of SDN	Power point presentation

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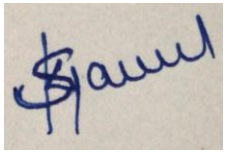
	Manager,NFV Orchestrator, Repositories, Element Management, OSS/BSS, NFV Use Cases Architectural Use Cases, Service-Oriented Use Cases, SDN and NFV Network Virtualization, Virtual LANs ,The Use of Virtual LANs,Defining VLANs, Communicating VLAN Membership,IEEE 802.1Q VLAN Standard, Nested VLANs, OpenFlow VLAN Support, Virtual Private Networks, IPsec VPNs,MPLS VPNs, Network Virtualization, Simplified Example, Network Virtualization Architecture, Benefits of Network Virtualization, OpenDaylight's Virtual Tenant Network, Software-Defined Infrastructure,SoftwareDefined Storage, SDI Architecture			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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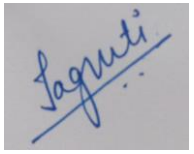

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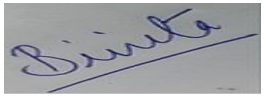
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT
CLASS: M. Sc. I. T SEMESTER: IV MONTH: February-April ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Investigate the cyber forensics with standard operating procedures.
b. Recover the data from the hard disk with legal procedure.
c. To recover and analyse the data using forensics tool

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Cyber Forensics Unit -I	Computer Forensics: The present Scenario: Introduction to computer forensics, History of computer forensics, Computer forensics flaws and risks, Cybercrime, Role of computer forensics, Reason for cyber-attacks, Modes of attacks, Cyber war	3	EC-Council CHFIv10 Study Guide by EC-Council And The official CHFI Exam 312-49 study Guide by Dave Kleiman	PowerPoint presentation
	The Investigation Process : Investigating methodology, Evaluating the case, Investigation plan, Importance of data-recovery workstations and software, Implementing an investigation, Collecting the evidence, Closing the case, Case evaluation	3		PowerPoint presentation
	Computers – Searching and Seizing, Electronic Evidence: Identifying Digital Evidence, Preparing for a Search, Seizing Digital Evidence at the Scene, Storing Digital Evidence, Reviewing a Case	3		PowerPoint presentation
	Procedures to be followed by the first responder: What is an incident?, Incident response team, How to report an incident?, CSIRT categorization, Need for CSIRT, What does CSIRT do?	3		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
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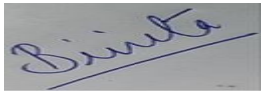
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT
CLASS: M. Sc. I. T SEMESTER: IV MONTH: February-April ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Investigate the cyber forensics with standard operating procedures.
b. Recover the data from the hard disk with legal procedure.
c. To recover and analyse the data using forensics tool

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Cyber Forensics Unit -II	Setting up a lab for Computer Forensics: Budget allocation for a forensic lab, Physical location, General configuration , Equipment needs, Basic workstation requirements, Ambience, Physical security recommendations, Auditing, Forensics lab licensing requisite, Forensics lab staff responsibilities	3	EC-Council CHFIv10 Study Guide by EC-Council And The official CHFI Exam 312-49 study Guide by Dave Kleiman	PowerPoint presentation
	Hard Disks and File Systems: Understanding file systems, examining MS-DOS, Windows, Linux, NTFS, Understanding Disk Partitions	3		PowerPoint presentation
	Forensics on Windows Machine: Locating evidence on Windows systems, Gathering volatile evidence, Investigating Windows file slack, Examining file systems, Checking Registry, Importance of Memory dump, System state backup, Investigating Internet traces	3		PowerPoint presentation
	Acquire and Duplicate Data: Determining the best data acquisition methods, Understanding data recovery contingencies, Data preservation commands, The need for data duplication, Data duplication tools	3		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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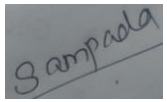

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT
CLASS: M. Sc. I. T SEMESTER: IV MONTH: February-April ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Investigate the cyber forensics with standard operating procedures.
b. Recover the data from the hard disk with legal procedure.
c. To recover and analyse the data using forensics tool

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Cyber Forensics Unit -III	Recovery of deleted files and partitions: Introduction to recovering image files, Digital evidence, Securing and recovering deleted files, Zero Assumption Digital Image Recovery, Data recovery in Linux, Data recovery tools	3	EC-Council CHFIv10 Study Guide by EC-Council And The official CHFI Exam 312-49 study Guide by Dave Kleiman	PowerPoint presentation
	Using Access Data FTK and Encase for forensics Investigation: Evaluating Computer Forensics Tool Needs, Computer Forensics Software Tools, Computer Forensics Hardware Tools, Validating and Testing Forensics Software	3		PowerPoint presentation
	Forensic analysis of Steganography and Image files : Recognize image files, data compression, Locate and recover image files, Analyze image file headers, Reconstructing file fragments, steganography in image files, Tools for viewing images	3		PowerPoint presentation
	Cracking Application passwords: Password- terminology, What is a password cracker?, Various cracking methods, Classification of cracking softwares, System software password cracking, Application software password cracking	3		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT
CLASS: M. Sc. I. T SEMESTER: IV MONTH: February-April ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Investigate the cyber forensics with standard operating procedures.
b. Recover the data from the hard disk with legal procedure.
c. To recover and analyse the data using forensics tool

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Cyber Forensics Unit -IV	Capturing logs and correlating to the events: Examining intrusion and security events, Event gathering, End-to-end forensic investigation, Correlating logfiles, IDS loganalysis	3	EC-Council CHFIv10 Study Guide by EC-Council And The official CHFI Exam 312-49 study Guide by Dave Kleiman	PowerPoint presentation
	Network Forensics – Investigating logs and Network traffic: Sources of evidence on a network, Evidence collection and documentation on a network, Gathering evidence on a network, Documenting the gathered evidence on a network, Evidence reconstruction for investigation, Tools	3		PowerPoint presentation
	Investigating Wireless and Web Attacks: Types of web attacks, Indications of a web attack, Responding to a web attack, Overview of web logs, Investigating static and dynamic IP address, Tools	3		PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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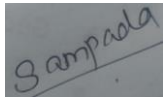

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.IT

SEMESTER: II MONTH: FEB TO APRIL ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

- Apply principles of Data Science to the analysis of business problems.
- Use data mining software to solve real-world problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT201 BigData Analytics **UNIT IV**	Data Product, Building Data Products at Scale with Hadoop, Data Science Pipeline and Hadoop Ecosystem, Operating System for Big Data, Concepts, Hadoop Architecture, Working with Distributed file system, Working with Distributed Computation, Framework for Python and Hadoop Streaming, Hadoop Streaming, MapReduce with Python, Advanced MapReduce. In-Memory Computing with Spark, Spark Basics, Interactive Spark with PySpark, Writing Spark Applications,	12	Data Analytics with Hadoop An Introduction for Data Scientists Benjamin Bengfort and Jenny Kim O'Reilly 2016	Powerpoint

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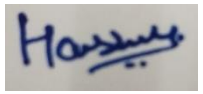
PSIT201 BigData Analytics **UNIT V**	Distributed Analysis and Patterns, Computing with Keys, Design Patterns, Last-Mile Analytics, Data Mining and Warehousing, Structured Data Queries with Hive, HBase, Data Ingestion, Importing Relational data with Sqoop, Injesting stream data with flume. Analytics with higher level APIs, Pig, Spark's higher level APIs.	12	Data Analytics with Hadoop An Introduction for Data Scientists Benjamin Bengfort and Jenny Kim O'Reilly 2016	Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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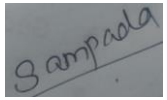

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.IT

SEMESTER: IV MONTH: FEB TO MAY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the important aspects of implementation of human-computer interfaces.
- Identify the various tools and techniques for interface analysis, design, and evaluation.
- Identify the impact of usable interfaces in the acceptance and performance utilization of information systems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT404a Human Computer Interaction **UNIT IV**	Socio-organizational issues and stakeholder requirements: Organizational issues, Capturing requirements Communication and collaboration models: Face-toface communication, Conversation, Text-based communication, Group working Task analysis: Differences between task analysis and other techniques, Task decomposition, Knowledgebased analysis, Entity–relationship-based techniques, Sources of information and data collection, Uses of task analysis	12	1. Human Computer Interaction Alan Dix, Janet Finlay, Gregory Abowd, Russell Beale Pearson Education 3 rd 2. Designing the User Interface Shneiderman B., Plaisant C., Cohen M., Jacobs S. Pearson 5th 2013	Powerpoint

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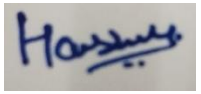
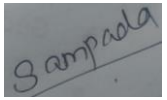
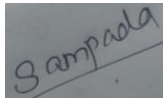
PSIT404a Human Computer Interaction **UNIT V**	Dialog notations and design: What is dialog?, Dialog design notations, Diagrammatic notations, Textual dialog notations, Dialog semantics, Dialog analysis and design Models of the system: Standard formalisms, Interaction models, Continuous behavior Modeling rich interaction: Status–event analysis, Rich contexts, Low intention and sensor-based interaction	12	1. Human Computer Interaction Alan Dix, Janet Finlay, Gregory Abowd, Russell Beale Pearson Education 3 rd 2. Designing the User Interface Shneiderman B., Plaisant C., Cohen M., Jacobs S. Pearson 5th 2013	Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12







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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS:MScIT

SEMESTER: II MONTH:FEB to MAY ACADEMIC YEAR:2021-2022

LEARNING OBJECTIVE/S:

- Gain a thorough understanding of the philosophy and architecture of
- Web applications using ASP.NET Core MVC;
- Gain a practical understanding of.NET Core;
- Acquire a working knowledge of Web application development using ASP.NET Core MVC 6 and Visual Studio
- Persist data with XML Serialization and ADO.NET with SQL Server
- Create HTTP services using ASP.NET Core Web API;
- Deploy ASP.NET Core MVC applications to the Windows Azurecloud.
-

Unit Details Lectures

PAPER, UNIT, TITLE	SUBTOPICSS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT203 **Unit-1** **Microservice Architecture**	**Microservices:** Understanding Microservices, Adopting Microservices, The Microservices Way. **Microservices Valueproposition:** Deriving Business Value, defining a Goal-Oriented, Layered Approach, Applying the Goal-Oriented, Layered Approach. **Designing Microservice Systems:** The Systems Approach to Microservices, A Microservices Design Process, **Establishing a Foundation:** Goals and Principles, Platforms, Culture.	12	Microservice Architecture: Aligning Principles, Practices, and Culture	Laptop, PPT, Chalk &Black Board
PSIT203	**Service Design:** Microservice Boundaries, API design for	12	Microservice Architecture:	Laptop, PPT, Chalk

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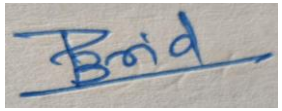
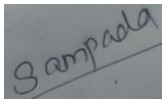
Unit-2 **Microservice Architecture**	Microservices, Data and Microservices, Distributed Transactions andsagas, Asynchronous Message-Passing and Microservices, dealingwith Dependencies, **System Design and Operations:** Independent Deployability, More Servers, Docker and Microservices, Role ofService Discovery, Need for an API Gateway, Monitoring and Alerting. **Adopting Microservices in Practice:** Solution Architecture Guidance,Organizational Guidance, Culture Guidance, Tools and Process Guidance, Services Guidance.		Aligning Principles, Practices, and Culture	&Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**MSC(IT)**_____ SEMESTER: ____**II**_____ MONTH: _____ **FEBRUARY-APRIL** _____ ACADEMIC YEAR: _____**2021-2022**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

- **Review the fundamental concepts of a digital image processing system.**
- **Analyze images in the frequency domain using various transforms.**
- **Evaluate the techniques for image enhancement and image restoration.**
- **Categorize various compression techniques.**
- **Interpret Image compression standards.**
- **Interpret image segmentation and representation techniques.**
- **Understand the relevant aspects of digital image representation and their practical implications.**
- **Have the ability to design pointwise intensity transformations to meet stated specifications and understand 2-D convolution, the 2-D DFT, and have the abitilty to design systems using these concepts.**
- **Have a command of basic image restoration techniques. Understand the role of alternative color spaces, and the design requirements leading to choices of color space.**
- **Appreciate the utility of wavelet decompositions and their role in image processing systems. Have an understanding of the underlying mechanisms of image compression, and the ability to design systems using standard algorithms to meet design specifications.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT204 Image Processing **Unit No -01**	Introduction: Digital Image Processing, Origins of Digital Image Processing, Applications and Examples of Digital Image Processing, Fundamental Steps in Digital Image Processing, Components of an Image Processing System,	04	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentic e Hall, 2018.	Blackboard, Chalk and Duster. PPts.
	Digital Image Fundamentals: Elements of Visual Perception, Light and the Electromagnetic Spectrum, Image Sensing and Acquisition, Image Sampling and Quantization, Basic Relationships Between Pixels, Basic Mathematical Tools Used in Digital Image Processing,	04	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentic e Hall, 2018.	Blackboard, Chalk and Duster. PPts
	Intensity Transformations and Spatial Filtering: Basics, Basic Intensity Transformation Functions, Basic Intensity Transformation Functions, Histogram Processing, Fundamentals of Spatial Filtering, Smoothing (Lowpass) Spatial Filters, Sharpening (Highpass) Spatial Filters, Highpass, Bandreject, and Bandpass Filters from Lowpass Filters, Combining Spatial Enhancement Methods, Using Fuzzy Techniques for Intensity Transformations and Spatial Filtering	04	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentic e Hall, 2018.	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			

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Unit No -02	Filtering in the Frequency Domain: Background, Preliminary Concepts, Sampling and the Fourier Transform of Sampled Functions, The Discrete Fourier Transform of One Variable, Extensions to Functions of Two Variables, Properties of the 2-D DFT and IDFT, Basics of Filtering in the Frequency Domain, Image Smoothing Using Lowpass Frequency Domain Filters, Image Sharpening Using Highpass Filters, Selective Filtering, Fast Fourier Transform.	06	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Blackboard, Chalk and Duster. PPts.
	Image Restoration and Reconstruction: A Model of the Image Degradation/Restoration Process, Noise Models, Restoration in the Presence of Noise Only-----Spatial Filtering, Periodic Noise Reduction Using Frequency Domain Filtering, Linear, Position-Invariant Degradations, Estimating the Degradation Function, Inverse Filtering, Minimum Mean Square Error (Wiener) Filtering, Constrained Least Squares Filtering, Geometric Mean Filter, Image Reconstruction from Projections	06	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -03	Wavelet and Other Image Transforms: Preliminaries, Matrix-based Transforms, Correlation, Basis Functions in the Time-Frequency Plane, Basis images, Fourier-Related Transforms, Walsh-Hadamard Transforms, Slant Transform, Haar Transform, Wavelet Transforms	04	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Blackboard, Chalk and Duster. PPts.
	Color Image Processing: Color Fundamentals, Color Models, Pseudocolor Image Processing, Full-Color Image Processing,	04	Digital Image Processing	Blackboard, Chalk and Duster.

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	Color Transformations, Color Image Smoothing and Sharpening, Using Color in Image Segmentation, Noise in Color Images, Color Image Compression.		Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	PPts.
	Image Compression and Watermarking: Fundamentals, Huffman Coding, Golomb Coding, Arithmetic Coding, LZW Coding, Run-length Coding, Symbol-based Coding, 8 Bit-plane Coding, Block Transform Coding, Predictive Coding, Wavelet Coding, Digital Image Watermarking,	04	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	Morphological Image Processing: Preliminaries, Erosion and Dilation, Opening and Closing, The Hit-or-Miss Transform, Morphological Algorithms, Morphological Reconstruction, Morphological Operations on Binary Images, Grayscale Morphology	06	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Blackboard, Chalk and Duster. PPts.
	Image Segmentation I: Edge Detection, Thresholding, and Region Detection: Fundamentals, Thresholding, Segmentation by Region Growing and by Region Splitting and Merging, Region Segmentation Using Clustering and Superpixels, Region Segmentation Using Graph Cuts, Segmentation Using Morphological Watersheds, Use of Motion in Segmentation	06	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice	Blackboard, Chalk and Duster. PPts.

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			Hall, 2018.	
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	Image Segmentation II: Active Contours: Snakes and Level Sets: Background, Image Segmentation Using Snakes, Segmentation Using Level Sets.	06	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Blackboard, Chalk and Duster. PPts.
	Feature Extraction: Background, Boundary Preprocessing, Boundary Feature Descriptors, Region Feature Descriptors, Principal Components as Feature Descriptors, Whole-Image Features, Scale-Invariant Feature Transform (SIFT)	06	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Information Technology.

CLASS: M.Sc. SEMESTER: II MONTH: February To April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- Gain a thorough understanding of the philosophy and architecture of Web applications using ASP.NET Core MVC.
- Gain a practical understanding of.NET Core.
- Acquire a working knowledge of Web application development using ASP.NET Core MVC 6 and Visual Studio
- Persist data with XML Serialization and ADO.NET with SQL Server
- Create HTTP services using ASP.NET Core Web API.
- Deploy ASP.NET Core MVC applications to the Windows Azure cloud.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT203 Microservices Architecture Unit-3	**Building Microservices with ASP.NET Core:** Introduction, Installing .NET Core, Building a Console App, Building ASP.NET Core App. **Delivering Continuously:** Introduction to Docker, Continuous integration with Wercker, Continuous Integration with Circle CI, Deploying to Dicker Hub. **Building Microservice with ASP.NET Core:** Microservice, Team Service, API First Development, Test First Controller, Creating a CI pipeline, Integration Testing, Running the team service Docker Image. **Backing Services:** Microservices Ecosystems, Building the location Service, Enhancing Team Service.			

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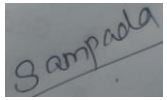
PSIT203 Microservices Architecture Unit-3	**Creating Data Service:** Choosing a Data Store**,** Building a Postgres Repository, Databases are Backing Services, Integration Testing Real Repositories, Exercise the Data Service. **Event Sourcing and CQRS:** Event Sourcing, CQRS pattern, Event Sourcing and CQRS, Running the samples. **Building an ASP.NET Core Web Application:** ASP.NET Core Basics, Building Cloud-Native Web Applications. **Service Discovery:** Cloud Native Factors, Netflix Eureka, Discovering and Advertising ASP.NET Core Services. DNS and Platform Supported Discovery.			
PSIT203 Microservices Architecture Unit-3	**Configuring Microservice Ecosystems:** Using Environment Variables with Docker, Using Spring Cloud Config Server, Configuring Microservices with etcd, **Securing Applications and Microservices:** Security in the Cloud, Securing ASP.NET Core Web Apps, Securing ASP.NET Core Microservices. **Building Real-Time Apps and Services:** Real-Time Applications Defined, Websockets in the Cloud, Using a Cloud Messaging Provider, Building the Proximity Monitor. **Putting It All Together:** Identifying and Fixing Anti-Patterns, Continuing the Debate over Composite Microservices, The Future.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. **Cyber Forensics** DEPARTMENT: Information Technology.

CLASS: M.Sc. SEMESTER: IV MONTH: September To December ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- Explain laws relevant to computer forensics
- Seize digital evidence from pc systems
- Recover data to be used as evidence
- Analyse data and reconstruct events
- Explain how data may be concealed or hidden

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT402d Cyber Forensics Unit-5	**Compromising Web Servers:** Concepts, attacks, attack methodology, attack tools, countermeasures, patch management, web server security tools, penetration testing. **Compromising Web Applications:** Concepts, threats, methods, tools, countermeasures, testing tools, penetration testing. **Performing SQL Injection:** Concepts, types, methodology, tools, techniques, countermeasures. **Compromising Wireless Networks:** Concepts, wireless encryption, threats, methodology, tools, compromising Bluetooth, countermeasures, wireless security tools, penetration testing.	**12**	1.EC-Council CHFIv10 Study Guide 2.The official CHFI Exam 312-49 study Guide	**Google Meet** **PPT**

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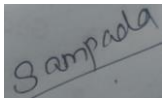
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: II MONTH: JANUARY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of limit, continuity and derivative of a function.
- Check the continuity of the function at the given point.
- Find the derivatives of functions of various functions
- Use derivatives in various applications like concavity, maxima/minima, increasing/decreasing functions etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CALCULUS Unit 1 Derivatives & its applications	➢ Limit, continuity and derivative of a function ➢ Asymptotes, increasing/decreasing functions, concavity. ➢ Absolute and relative maxima and minima ➢ Graphing of polynomials and Newton's method	3 3 3 3	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTURE METHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Powerpoint presentation, laptop, pentab

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: II MONTH: FEBRUARY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of limits, continuity and derivatives of functions of two or more variables.
- Find the first and second order partial derivatives of functions of two variables.
- Find the linearization of the given function at the given point.
- Understand the concept of gradients and directional derivatives.
- Find the derivative of a function of two variable using chain rule.
- Find the relative extrema and saddle point of the given function of two variables using partial derivatives.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CALCULUS Unit 3 Partial Derivatives & its applications	➢ Limit, continuity and partial derivatives of functions of two or more variables ➢ Linearization and chain rule ➢ Directional derivatives and gradients ➢ Tangent planes and normal lines ➢ Maxima and minima of functions of two variables	2 2 2 2 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: II MONTH: MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- Evaluate indefinite integral using different methods like substitution, integration by parts etc.
- Evaluate definite integral using the properties of definite integration and by Simpson's rule
- Find the area bounded between curves and length of plane curve using integration.
- Solve the given differential equation using different methods

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CALCULUS Unit 2 Integration & its applications	➢ Indefinite and definite integration ➢ Area between two curves ➢ Length of plane curve ➢ Simpson's rule ➢ Solving differential equations	2 2 2 2 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYCS SEMESTER: SEM-1 MONTH: SEP-DEC ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

- Develop their soft skills and develop their personality together with their technical skills.
- Understand various issues in personal and Profession communication and learn to overcome them.
- Know about various aspects of soft skills and learn ways to develop personality
- Understand the importance and type of communication in personal and professional environment.
- Learn about Leadership, team building, decision making and stress management

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
7 SOFT SKILLS DEVELOPMENT UNIT 1	**Introduction to Soft Skills** **Soft Skills: An Introduction –** Definition and Significance of Soft Skills; Process, Importance and Measurement of Soft Skill Development.	2	**Soft Skills: an Integrated Approach to Maximise Personality** by Gajendra S. Chauhan, Sangeeta Sharma, Wiley India	GOOGLE MEET AND PPT
	Personality Development: Knowing Yourself, Positive Thinking, Johari's Window, Physical Fitness	2		
	Emotional Intelligence: Meaning and Definition, Need for Emotional Intelligence, Intelligence Quotient versus Emotional Intelligence Quotient, Components of Emotional Intelligence, Competencies of Emotional Intelligence, Skills to Develop Emotional Intelligence	3		

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	Positivity and Motivation: Developing Positive Thinking and Attitude; Driving out Negativity; Meaning and Theories of Motivation; Enhancing Motivation Levels	2		
	Etiquette and Mannerism: Introduction, Professional Etiquette, Technology Etiquette	2		
	Ethical Values: Ethics and Society, Theories of Ethics, Correlation between Values and Behavior, Nurturing Ethics, Importance of Work Ethics, Problems in the Absence of Work Ethics	3		
UNIT 2	**Basic Skills in Communication:** **Components of effective communication:** Communication process and handling them, Composing effective messages, Non – Verbal Communication: its importance and nuances: Facial Expression, Posture, Gesture, Eye contact, appearance (dress code).	3	**Soft Skills: an Integrated Approach to Maximise Personality** by Gajendra S. Chauhan, Sangeeta Sharma, Wiley India	GOOGLE MEET AND PPT
	Communication Skills: Spoken English, Phonetics, Accent, Intonation	2		
	Employment Communication: Introduction, Resume, Curriculum Vitae, Scannable Resume, Developing an Impressive Resume, Formats of Resume, Job Application or Cover Letter	3		
	Job Interviews: Introduction, Importance of Resume, Definition of Interview, Background Information, Types of Interviews, Preparatory Steps for Job Interviews, Interview Skill Tips, Changes in the Interview Process, FAQ During Interviews	3		
	Group Discussion: Introduction, Ambience/Seating Arrangement for Group Discussion, Importance of Group Discussions, Difference between Group Discussion, Panel Discussion and Debate, Traits,	3		

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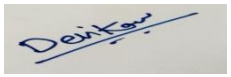
	Types of Group Discussions, topic based and Case based Group Discussion, Individual Traits			
UNIT 3	**Academic and Professional Skills:** **Professional Presentation:** Nature of Oral Presentation, planning a Presentation, Preparing the Presentation, Delivering the Presentation	3	**Soft Skills: an Integrated Approach to Maximise Personality** by Gajendra S. Chauhan, Sangeeta Sharma, Wiley India	GOOGLE MEET AND PPT
	Creativity at Workplace: Introduction, Current Workplaces, Creativity, Motivation, Nurturing Hobbies at Work, The Six Thinking Hat Method.	3		
	Capacity Building: Learn, Unlearn and Relearn*:* Capacity Building, Elements of Capacity Building, Zones of Learning, Ideas for Learning, Strategies for Capacity Building	3		
	Leadership and Team Building*:* Leader and Leadership, Leadership Traits, Culture and Leadership, Leadership Styles and Trends, Team Building, Types of Teams,	3		
	Decision Making and Negotiation: Introduction to Decision Making, Steps for Decision Making, Decision Making Techniques, Negotiation Fundamentals, Negotiation Styles, Major Negotiation Concepts	3		
	Stress and Time Management*:* Stress, Sources of Stress, Ways to Cope with Stress	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: I MONTH: SEPTEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define a function, its domain, co domain, range and bijective functions, composite and inverse functions
- Check whether a given relation is equivalence or partial order relation.
- Represent the given relation using diagraph, adjacency matrix and arrow diagram.
- Solve a recurrence relation using various methods like back tracking , generating function method etc.
- Explain and solve the tower of Hanoi puzzle.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DISCRETE MATHEMATICS Unit 1 Recurrence relations	➢ Functions, its domain, co domain and range ➢ Bijective, composite and inverse functions ➢ Relations: definition, examples and properties ➢ Equivalence & partial order relation, Hasse diagram ➢ Recurrence relation: definition, formulation & solving ➢ Tower of Hanoi puzzle	2 2 2 2 2 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Powerpoint presentation, laptop, pentab

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: I MONTH: October-November ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of fundamental principle of counting, permutations and combinations.
- State and prove binomial theorem, Pascal's identity, Vandermonde's identity.
- Find the number of ways of doing a task using permutations and combinations.
- State and use Pigeonhole principle to solve the problems.
- Understand the concept of finite state automata and finite state machine.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DISCRETE MATHEMATICS (Unit 2) Counting principles, Languages and Finite state machines	➢ FPC , permutations, combinations ➢ Binomial theorem, Pascal's & Vandermonde's identity ➢ Sum & product rule, pigeonhole principle ➢ Inclusion exclusion principle ➢ Languages, regular expression and regular grammar ➢ FSM, FSA, Godel numbers, turing machines	2 2 2 2 2 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Powerpoint presentation, laptop, pentab

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: I MONTH: November-December ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define graph and its types, adjacency and incidence matrix.
- Draw adjacency and incidence matrix of the given graph and vice versa.
- Find out the shortest path of weighted graph using Warshall's algorithm.
- Traverse a tree using inorder, preorder and postorder algorithm.
- Draw a tree for algebraic expressions and vice versa.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DISCRETE MATHEMATICS **(Unit 3)** Graphs & Trees	➢ Definition of Graphs and its types ➢ Diagraph, incidence and adjacency matrix ➢ Warshall's algorithm, BFS, DFS ➢ Trees : definition, types and properties ➢ Traversing binary trees ➢ Algorithms for searching, inserting and deleting in a binary tree	2 2 2 2 2 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Powerpoint presentation, laptop, pentab

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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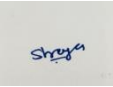

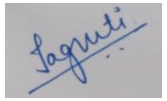

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.CS SEMESTER: I MONTH: SEPTEMBER-DECEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

- To have an understanding of Digital systems and operation of a digital computer.
- Understand the theory and different architecture, processor organization and control unit.
- To understand how data is transferred between the processor and I/O devices.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Unit I Digital Systems & Architecture	**Fundamentals of Digital Logic:** Boolean algebra, Logic Gates	1	M. Mano, Computer System Architecture 3rd edition, Pearson Carl Hamacher et al., Computer Organization and Embedded Systems, 6 ed., McGraw-Hill 2012	Google Meet, PPT
	Simplification of Logic Circuits: Algebraic Simplification, Karnaugh Maps.	3		Google Meet, PPT
	Combinational Circuits: Adders, Mux, De-Mux	1		Google Meet, PPT
	Sequential Circuits: FlipFlops (SR, JK & D), Counters: synchronous and asynchronous Counter	3		Google Meet, PPT
	Computer System: Comparison of Computer Organization & Architecture	2		Google Meet, PPT
	Computer Components and Functions, Interconnection Structures.	2		Google Meet, PPT
	Bus Interconnections, Input / Output: I/O Module	1		Google Meet, PPT

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	Programmed I/O, Interrupt Driven I/O, Direct Memory Access	2		Google Meet, PPT
Paper-I Unit II Digital Systems & Architecture	**Memory System Organization:** Classification and design parameters, Memory Hierarchy, Internal Memory: RAM, SRAM and DRAM, Interleaved and Associative Memory.	2	M. Mano, Computer System Architecture 3rd edition, Pearson Carl Hamacher et al., Computer Organization and Embedded Systems, 6 ed., McGraw-Hill 2012	Google Meet, PPT
	Cache Memory: Design Principles, Memory mappings, Replacement Algorithms, Cache performance, Cache Coherence. Virtual Memory	3		Google Meet, PPT
	External Memory: Magnetic Discs, Optical Memory, Flash Memories, RAID Levels	3		Google Meet, PPT
	Processor Organization: Instruction Formats, Instruction Sets, Addressing Modes, Addressing Modes Examples with Assembly Language [8085/8086 CPU], Processor Organization, Structure and Function.	3		Google Meet, PPT
	Register Organization, Basic Microprocessor operations: Data Transfer (Register / Memory) Operations, Arithmetic & Logical Operations, Instruction Cycle, Instruction Pipelining.	2		Google Meet, PPT
	Introduction to RISC and CISC Architecture, Instruction Level Parallelism and Superscalar Processors: Design Issues	2		Google Meet, PPT
Paper-I Unit III Digital Systems & Architecture	**Control Unit:** Micro-Operations, Functional Requirements, Processor Control	3	M. Mano, Computer System Architecture 3rd edition, Pearson Carl Hamacher et al., Computer Organization and Embedded Systems, 6 ed.,	Google Meet, PPT
	Hardwired Implementation, Micro-programmed Control.	2		
	Fundamentals of Advanced Computer Architecture: Parallel Architecture: Classification of Parallel Systems, Flynn's Taxonomy	2		Google Meet, PPT
	Array Processors, Clusters, and NUMA Computers.	3		Google Meet, PPT
	Multiprocessor Systems: Structure & Interconnection Networks,	3		Google Meet, PPT

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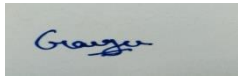
	Multi-Core Computers: Introduction, Organization and Performance.	2	McGraw-Hill 2012	Google Meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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Teaching plan for FYCS sem 1 2021-22

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: Computer Science

CLASS: Fybsc(CS)

SEMESTER: 1

MONTH: September to December

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners would be able to

- Organize, manage and present data.
- Analyse statistical data using measures of central tendency and dispersion.
- Apply basics concepts of moments.
- Use various techniques to calculate Skewness and Kurtosis.
- Analyse the correlation and extent of correlation between variables.
- Use the techniques of Regression analysis.
- Analyse Statistical data using basics techniques of R

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	Reference /s	Teaching method Ict tool used
Paper:	**a) Data types and Data Presentation**: ● Data types: ➢ Attribute and variable ➢ discrete and continuous variable ➢ Different types	**5**	**(Gupta & Kapoor: Chp 2: 2.1 - 2.2 and Schaum Series: Chp 1 & 2)**	

	of Scale: Nominal, Ordinal , Interval and Ratio ➢ Univariate and Bivariate Distribution ➢ Types of Classification			

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Descriptive statistics **<u>Unit 1</u>**	● Data presentation: frequency distribution,histogram, O give curves,			
	b) Introduction to R: ● Data input, Arithmetic operators, vector operations, Matrix operations, Data frames, Built-in Functions (e. g : seq(), round(), rep(), sort(), cut() , etc.) ● Frequency Distribution, Grouped frequency Distribution, Diagrams and Graphs, Summary Statistics for raw data and grouped frequency distribution.	**5**	(Statistics Using R by Purohit,S.G. , GoreS.D., Deshmukh S. R. (2008), Narosa Publishing House, New Delhi)	Power Point Presentation

	Measures of Central Tendency: ● Concept of Average /Central tendency ● Characteristics of good measure of central tendency ● Arithmetic mean , Median , Mode – Definition and example for ungrouped and grouped data, effect of shift of origin and change of scale, Merits and Demerits, Combined Arithmetic mean ● Partition values : Quartiles , Deciles and Percentiles – examples for ungrouped and grouped data	**5**	Gupta & Kapoor: Chp 2 and Schaum Series: Chp 3)	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

	b) Moments: ● Concept of Moments, ● Raw moments, Central moments, ● Relation between raw and central moments.	3	Gupta, S.C. and kapoor V.k.(1987): fundamental of mathematical statistics	Power Point Presentation

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	c) Measures of Skewness and Kurtosis: • Concept of Skewness and Kurtosis, • Measures based on moments, quartiles.	5	Gupta & Kapoor: Chp 3 and Schaum Series: Chp 5)	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

Unit 3	**Correlation:** • Concept of correlation, Types and interpretation, • **Measure of Correlation:** ➢ Scatter diagram and interpretation; ➢ Karl Pearson's coefficient of correlation (r): Definition, examples for ungrouped and grouped data, effect of shift of origin and change of scale, properties; ➢ Spearman's rank correlation coefficient: Definition, examples of with and without repetition. ➢ Concept of Multiple correlation.	8	Gupta & Kapoor: Chp 10 and Schaum Series: Chp 14 & 15	Power Point Presentation

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	b) Regression: ● Concept of dependent (response) and independent (predictor) variables, ● Concept of regression, Types and prediction, ● Difference between correlation and regression, Relation between correlation and regression. ● Linear Regression - Definition, examples using least square method and regression coefficient, coefficient of determination, properties. ● Concept of Multiple regression and Logistic regression.	7	Gupta & Kapoor: Chp 10 and Schaum Series: Chp 14 & 15)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lecture

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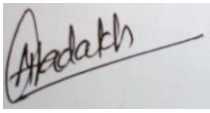

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE DEPARTMENT: ____IT____

CLASS: _FYCS SEMESTER: 1 MONTH: Sep. To Dec. ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

Open Source has acquired a prominent place in software industry. Having knowledge of Open Source and its related technologies is an essential for Computer Science student. This course introduces Open Source methodologies and ecosystem to students.

Expected Learning Outcome:

1) Upon completion of this course, students should have a good working knowledge of Open Source ecosystem, its use, impact and importance.

2) This course shall help student to learn Open Source methodologies, case studies with real life examples

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS103 Open Source Technologies	Introduction to Open-Source: Open Source, Need and Principles of OSS, Open-Source Standards, Requirements for Software, OSS success, Free Software, Examples, Licensing, Free Vs. Proprietary Software, Free Software Vs. Open-Source Software, Public Domain. History of free software, Proprietary Vs Open-Source Licensing Model, use of Opensource Software, FOSS does not mean no cost. History: BSD, The Free Software Foundation and the GNU Project.	5	The Linux Documentation Project: http://www.tldp.org/ 2. Docker Project Home: http://www.docker.com 3. Linux kernel Home: http://kernel.org 4. Open Source Initiative: https://opensource.org/ 5. Linux Documentation Project: http://www.tldp.org/ 6. Wikipedia: https://en.wikipedia.org/ 7. https://en.wikipedia.org/wiki/Wikipedia:Contributing_to_Wikipedia 8. Github: https://help.github.com/ 9. The Linux Foundation: http://www.linuxfoundation.org/	GOOGLE MEET AND PPPT
	Open-Source Principles and Methodology: Open-Source History, OpenSource Initiatives, Open Standards Principles, Methodologies, Philosophy, Software freedom, Open-Source Software Development, Licenses, Copyright vs. Copy left, Patents, Zero marginal cost, Income-generation Opportunities, Internationalization.	5		

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Unit I	Licensing: What Is A License, How to create your own Licenses, Important FOSS Licenses (Apache, BSD, PL, LGPL), copyrights and copy lefts, Patent.	5		
Unit II	Open-Source projects: Starting and maintaining own Open-Source Project, Open-Source Hardware, Open-Source Design, Open-source Teaching, Open-source media.	5	The Linux Documentation Project: http://www.tldp.org/ 2. Docker Project Home: http://www.docker.com 3. Linux kernel Home: http://kernel.org 4. Open Source Initiative: https://opensource.org/ 5. Linux Documentation Project: http://www.tldp.org/ 6. Wikipedia: https://en.wikipedia.org/ 7. https://en.wikipedia.org/wiki/Wikipedia:Contributing_to_Wikipedia 8. Github: https://help.github.com/	GOOGLE MEET AND PPPT

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	Collaboration: Community and Communication, Contributing to Opensource Projects Introduction to GitHub, interacting with the community on GitHub, Communication and etiquette, testing open-source code, reporting issues, contributing code. Introduction to Wikipedia, contributing to Wikipedia or contributing to any prominent open-source project of student's choice.	5	9. The Linux Foundation: http://www.linuxfoundation.org/	
	Open-Source Ethics and Social Impact: Open source vs. closed source, Open-source Government, Ethics of Open-source, Social and Financial impacts of open-source technology, Shared software, Shared source, Open Source as a Business Strategy	5		

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UNIT III	Understanding Open-Source Ecosystem: Open-Source Operating Systems: GNU/Linux, Android, Free BSD, Open Solaris. Open-Source Hardware, Virtualization Technologies, Containerization Technologies: Docker, Development tools, IDEs, Debuggers, Programming languages, LAMP, Open-Source Database technologies	5	The Linux Documentation Project: http://www.tldp.org/ 2. Docker Project Home: http://www.docker.com 3. Linux kernel Home: http://kernel.org 4. Open Source Initiative: https://opensource.org/ 5. Linux Documentation Project: http://www.tldp.org/ 6. Wikipedia: https://en.wikipedia.org/ 7. https://en.wikipedia.org/wiki/Wikipedia:Contributing_to_Wikipedia 8. Github: https://help.github.com/ 9. The Linux Foundation: http://www.linuxfoundation.org/	GOOGLE MEET AND PPPT	
	Case Studies: Example Projects: Apache Web server, BSD, GNU/Linux, Android, Mozilla (Firefox), Wikipedia, Drupal, WordPress, Git, GCC, GDB, GitHub, Open Office, LibreOffice	5			

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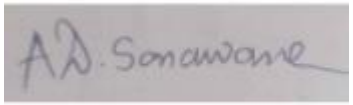
	Study: Understanding the developmental models, licensing, mode of funding, commercial/non-commercial use	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: COMPUTER SCIENCE CLASS: FYCS

SEMESTER: I MONTH: SEPTEMBER- DECEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concepts of programming before actually starting to write programs.
- Develop logic for Problem Solving.
- Be familiar about the basic constructs of programming such as data, operations, conditions, loops, functions etc.
- Apply the problem solving skills using syntactically simple language i.e. Python (version: 3.X or higher)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS102, Unit 1, **Introduction to Programming with Python**	**Overview of Python:** History & Versions, Features of Python, Execution of a Python Program, Flavours of Python, Innards of Python, Python Interpreter, Memory Management in Python, Garbage Collection in Python, Comparison of Python with C and Java, Installing Python, Writing and Executing First Python Program, Getting Help, IDLE	03	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation
	Data Types, Variables and Other Basic Elements: Comments, Docstrings, Data types- Numeric Data type, Compound Data Type, Boolean Data type, Dictionary, Sets, Mapping, Basic Elements of Python, Variables	04	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation
	.	02	Paul Gries, Programming:	Power Point Presentation

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	Input and Output Operations: Input Function, Output Statements, The print() function, The print("string") function, The print(variables list) function, , The print(object) function, The print(formatted string) function, Command Line Arguments		An Introduction to Computer Science Using Python 3	
	Control Statements: The if statement, The if … else Statement, The 'if … elif … else' Statement, Loop Statement- while loop, for loop, Infinite loop, Nested loop,	03	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation
	The else suite, break statement, continue statement, pass statement, assert statement, return statement	03	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation
USCS102, Unit 2, **Introduction to Programming with Python**	**Operators:** Arithmetic operators, Assignment operators, Unary minus operator, Relational operators, Logical operators, Bitwise operators, Membership operators, Identity operators, Precedence of Operators, Associativity of Operators	03	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation
	Arrays: Creating Arrays, Indexing and Slicing of Arrays, Basic Array Operations, Arrays Processing, Mathematical Operations on Array, Aliasing Arrays, Slicing and Indexing in NumPy Arrays, Basic slicing, Advanced Indexing, Dimensions of Arrays, Attributes of an Array, The ndim Attribute, The shape Attribute, The size Attribute, The itemsize Attribute	04	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation

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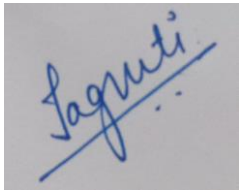
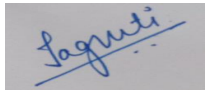
	Functions: Function definition and call, Returning Results, Returning Multiple Values from a Function, Built-in Functions, Difference between a Function and a Method, Pass Value by Object Reference, Parameters and Arguments, Formal and Actual Arguments, Positional Arguments, Keyword Arguments, Default Arguments, Arbitrary Arguments, Recursive Functions, Anonymous or Lambda Functions, Using Lambda with the filter() Function, Using Lambda with the map() Function, Using Lambda with the reduce() Function	04	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation
	Modules:Introduction to Modules in Python	04	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation
USCS102, Unit 3, **Introduction to Programming with Python**	**Strings:** Creating Strings, Functions of Strings, Working with Strings, Length of a String, Indexing and Slicing, Repeating and Concatenating Strings, Checking Membership, Comparing Strings, Removing Spaces, Finding Substrings, Counting Substrings, Immutability, Splitting and Joining Strings, Changing Case, Checking Starting and Ending of a String, Sorting Strings, Searching in the Strings, Testing Methods, Formatting Strings, Finding the Number of Characters and Words, Inserting Substrings into a String	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation
	List and Tuples: Lists, List Functions and Methods, List Operations, List Slices, Nested Lists, Tuples, Functions in Tuple	05	Paul Gries, Programming: An Introduction to Computer	Power Point Presentation

			Science Using Python 3	
	Dictionaries: Creating a Dictionary, Operators in Dictionary, Dictionary Methods, Using for Loop with Dictionaries, Operations on Dictionaries, Converting Lists into Dictionary, Converting Strings into Dictionary, Passing Dictionaries to Functions, Sorting the Elements of a Dictionary using Lambda, Ordered Dictionaries	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: FYCS SEMESTER: I MONTH: SEPTEMBER-DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: The learners will be able to : Students will learn basic skills and increase their sustainable interest in the Linux Operating System. It will also assist you build a Linux solution for real world problems and increase the knowledge required to comprehend the Linux operating system and its practical application.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS103, LINUX Operating System, UNIT-I	**Linux operating system and Basics**: History, GNU Info and Utilities, Various Linux Distributions, The Unix/Linux architecture, Features of Unix/Linux, Starting the shell, Shell prompt, Command structure, File Systems and Directory Structure, man pages, more documentation pages	04	"Linux Command line and Shell Scripting Bible", Richard Blum, Wiley India. "Unix: Concepts and Applications", Sumitabha Das, 4th Edition, McGraw Hill.	Meet, PPT
	Basic Bash shell commands: General purpose utility Commands, basic commands, Various file types, attributes and File handling Commands, Handling Ordinary Files. More file attributes	03		Meet, PPT
	Advanced Bash shell commands: Simple Filters, Filters using regular expressions.	04		Meet, PPT
	The Linux environment variable: Setting, Locating and removing environment variables like PATH etc, Default shell environment variables, Using command aliases.	04		Meet, PPT
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**15**		Meet, PPT
	Understanding Linux file permission: Linux security, Using Linux groups, Decoding file permissions, Changing security setting, Sharing files.	04	"Linux Command line and Shell	Meet, PPT

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USCS103, LINUX Operating System, UNIT-II	**Linux Security:** Understanding Linux Security, uses of root, sudo command, working with passwords, Understanding ssh.	04	Scripting Bible", Richard Blum, Wiley India. "Unix: Concepts and Applications", Sumitabha Das, 4th Edition, McGraw Hill.	Meet, PPT
	Networking: TCP/IP Basics, TCP/IP Model, Resolving IP addresses, Applications, ping, telnet, ftp, DNS	04		Meet, PPT
	Working withEditors: awk, sed and Introduction to vi	03		Meet, PPT
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**15**		Meet, PPT Meet, PPT
USCS103, LINUX Operating System, UNIT-III	**Basic script building:** Using multiple commands, Creating script files, Displaying messages, Using variables, Redirecting Input and Output, Pipes performing math, Exiting the script.	05	"Linux Command line and Shell Scripting Bible", Richard Blum, Wiley India. "Unix: Concepts and Applications", Sumitabha Das, 4th Edition, McGraw Hill. "Official Ubuntu Book", Matthew Helmke& Elizabeth K. Joseph with Jose	Meet, PPT
	Using structured commands: Working with if-then, if-then-else and nested if statements, test command, Compound condition testing, while command, until command, case command.	04		Meet, PPT
	Script and Process control: Handling signals, Running scripts in background mode, Running scripts without a console, Job control, Job scheduling commands: ps, nice, renice, at, batch, cron table, Running the script at boot	06		Meet, PPT
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**15**		Meet, PPT

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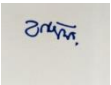
			Antonio Rey and Philips Ballew, 8th Ed.	



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Teaching plan sycs sem 3 2021-22

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: Computer Science

CLASS: Sybsc (CS)

SEMESTER: 3

MONTH: July to October

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

- To give the learner a broad exposure of combinatorial Mathematics through applications especially the Computer Science applications.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper:	**Introduction to Combinatorics:** • Enumeration, Combinatorics and Graph Theory/ Number Theory/Geometry and Optimization, Sudoku Puzzles.	5	Applied Combinatorics, Mitchel T. Keller and William T. Trotter, 2016,	Power point presentation

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Combinatorics and Graph Theory **<u>Unit 1:</u> Introduction to Combinatorics :**	• Strings, Sets, and Binomial Coefficients: Strings- A First Look, Combinations, Combinatorial, The Ubiquitous Nature of Binomial Coefficients, The Binomial, Multinomial Coefficients.			
	● Induction: Introduction, The Positive Integers are Well Ordered, The Meaning of Statements, Binomial Coefficients Revisited , Solving Combinatorial Problems Recursively,	6	Applied Combinatorics, M itchel T. Keller and William T. Trotter, 2016,	Power point presentation
	• Mathematical Induction, and Inductive Definitions Pro ofs by Induction. Strong Induction	4	Applied Combinatorics, M itchel T. Keller and William T. Trotter, 2016,	Power point presentation
<u>Unit 2</u> **<u>Graph Theory</u>**	**Graph Theory:** Basic Notation and Terminology, **Multigraphs**: Loops and Multiple Edges, Eulerian and Hamiltonian Graphs,	6	Applied Combinatorics, M itchel T. Keller and William T. Trotter, 2016,	Power point presentation
	• Graph Coloring, Planar Counting, Labeled Trees, A Digression	5	Applied Combinatorics, M itchel T. Keller	Power point presentation

	into Complexity Theory. Applying Probability to Combinatorics			

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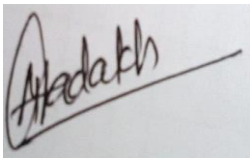
			and William T. Trotter, 2016,	
	• Small Ramsey Numbers, Estimating Ramsey Numbers, Applying Probability to Ramsey Theory, Ramsey's Theorem The Probabilistic Method	4	Applied Combinatorics, Mitchel T. Keller and William T. Trotter, 2016,	Power point presentation
Unit 3 **Network Flow**	• **Network Flows:** Basic Notation and Terminology, Flows and Cuts, • Augmenting Paths, The Ford-Fulkerson Labeling Algorithm,	6	Applied Combinatorics, Mitchel T. Keller and William T. Trotter, 2016,	Power point presentation
	• A Concrete Example, Integer Solutions of Linear Programming Problems. • Combinatorial Applications of Network Flows: Introduction, Matching in Bipartite Graphs, Chain partitioning	6	Applied Combinatorics, Mitchel T. Keller and William T. Trotter, 2016,	Power point presentation

	• Pólya's Enumeration Theorem: Coloring the Vertices of a Square.	3	Applied Combinatorics, Mitchel T. Keller and William T. Trotter, 2016,	Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. HARSHALI SHAILESH MANKAR DEPARTMENT: CS CLASS: SYCS

SEMESTER: III MONTH: JULY- OCTOBER ACADEMIC YEAR: 202

LEARNING OBJECTIVE/S:
The learners will be able to:

- Write, compile and execute Java programs
- Build robust applications using Java's object-oriented features
- Create robust applications using Java class libraries
- Develop platform-independent GUIs
- Read and write data using Java streams

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS302, Core Java Unit 1	The Java Language: Features of Java, Java programming format, Java Tokens, Java Statements, Java Data Types, Typecasting, Arrays .	05	1) Herbert Schildt, Java The Complete Reference, Ninth Edition, McGraw-Hill Education, 2014 2) E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014 3) https://docs.oracle.com/javase/tutorial/	Black Board and chalk, Powerpoint

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	OOPS: Introduction, Class, Object, Static Keywords, Constructors, this Key Word, Inheritance, super Key Word, Polymorphism (overloading and overriding), Abstraction, Encapsulation, Abstract Classes, Interfaces	05	1. E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
	String Manipulations: String, String Buffer, String Tokenizer	01	https://docs.oracle.com/javase/tutorial/	Black Board and chalk, PowerPoint
	Packages: Introduction to predefined packages (java.lang, java.util,java.io,Java.sql, java.swing),User Defined Packages, Access specifiers	04	1. E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
USCS302, Core Java Unit 2	Exception Handling: Introduction, Pre-Defined Exceptions, Try-Catch-Finally, Throws, throw, User Defined Exception examples.	05	1. Herbert Schildt, Java The Complete Reference, Ninth Edition, McGraw-Hill Education, 2014	Black Board and chalk, PowerPoint
	Multithreading: Thread Creations, Thread Life Cycle, Life Cycle Methods, Synchronization, Wait() notify() notify all() methods I/O	04	1. Herbert Schildt, Java The Complete Reference, Ninth Edition, McGraw-Hill Education, 2014	Black Board and chalk, PowerPoint
	Streams: Introduction, Byte-oriented streams, Character-oriented streams, File, Random access File, Serialization	03	1.Herbert Schildt, Java The Complete Reference, Ninth Edition, McGraw-Hill Education, 2014	PowerPoint

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	Networking: Introduction, Socket, Server socket, Client – Server Communication	03	https://www.tutorialspoint.com/java/java_networking.html	PowerPoint
USCS302, Core Java Unit 3	Wrapper Classes: Introduction, Byte, Short, Integer, Long, Float, Double, Character, Boolean classes	02	1.E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
	Collection Framework: Introduction, util Package interfaces, List, Set, Map, List interface & its classes, Set interface & its classes, Map interface & its classes	04	1.E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
	Inner Classes: Introduction, Member inner class, Static inner class, Local inner class, Anonymous inner class	04	1.E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
	AWT: Introduction, Components, Event-Delegation-Model, Listeners, Layouts, Individual components Label, Button, CheckBox, Radio Button, Choice, List, Menu, Text Field, Text Area	05	1. E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT-CS

CLASS:SYCS SEMESTER: SEM-III MONTH: JULY-OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: Master concepts of stored procedure and triggers and its use. Learn about using PL/SQL for data management and understand concepts and implementations of transaction management and crash recovery.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-4 DBMS, UNIT-1	**Stored Procedures:** Types and benefits of stored procedures, creating stored procedures, executing stored procedures, altering stored procedures, viewing stored procedures.	4	SQL,PL/SQL - The Programming language of Oracle by Ivan Bayross , Database Management Systems by Ramakrishnam, Gehrke.	PPT, GoogleMeet, Jamboard , slido, SQL command line ,Google form.
	Triggers: Concept of triggers, Implementing triggers – creating triggers, Insert, delete, and update triggers, nested triggers, viewing, deleting and modifying triggers, and enforcing data integrity through triggers.	4		
	Sequences: creating sequences, referencing, altering and dropping a sequence.	2		
	File Organization and Indexing: Cluster, Primary and secondary indexing, Index data structure: hash and Tree based indexing	3		

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	Comparison of file organization: cost model, Heap files, sorted files, clustered files. Creating, dropping and maintaining indexes.	2		
UNIT-2	**Fundamentals of PL/SQL:** Defining variables and constants, PL/SQL expressions and comparisons: Logical Operators, Boolean Expressions, CASE Expressions Handling.	3	SQL,PL/SQL - The Programming language of Oracle by Ivan Bayross	PPT, GoogleMeet, Jamboard , slido, SQL command line , Google form..
	Null Values in Comparisons and Conditional Statements, PL/SQL Datatypes: Number Types, Character Types, Boolean Type, Datetime and Interval Types.	3		
	Overview of PL/SQL Control Structures: Conditional Control: IF and CASE Statements, IF-THEN Statement, IF-THEN-ELSE Statement,	5		
	CASE Statement, Iterative Control: LOOP and EXIT Statements, WHILE-LOOP, FOR-LOOP, Sequential Control: GOTO and NULL Statements	4		
UNIT 3	**Transaction Management:** ACID Properties, Serializability, Two-phase Commit Protocol, Concurrency Control, Lock Management	3	SQL,PL/SQL - The Programming language of Oracle by Ivan Bayross, Database Management Systems by	PPT, GoogleMeet,
	Lost Update Problem, Inconsistent Read Problem , Read-Write Locks, Deadlocks Handling, Two Phase Locking protocol	4		
	DCL Statements: Defining a transaction, Making Changes Permanent with COMMIT, Undoing Changes with ROLLBACK, Undoing Partial Changes with SAVEPOINT and ROLLBACK.	2		

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	Crash Recovery: ARIES algorithm. The log based recovery, recovery related structures like transaction and dirty page table	4	Ramakrishnam, Gehrke	Jamboard , slido, SQL command line ,Google form.
	Write-ahead log protocol, check points, recovery from a system crash, Redo and Undo phases.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT:CS

CLASS:SYCS SEMESTER: SEM-3 MONTH: JUL-OCT ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
physical interfaces and electronics of Raspberry Pi and program them using practical's
Learn how to make consumer grade IoT safe and secure with proper use of protocols.

PAPER, TITLE,UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper6,Physical computing and IOT programming, UNIT 1	**SoC and Raspberry Pi System on Chip**: What is System on chip? Structure of System on Chip. **SoC products:** FPGA, GPU, APU, Compute Units.	4	Physical computing IOT programming by Himalaya publication	GOOGLE SIDES, GOOGLE MEET,PPT
	ARM 8 Architecture: SoC on ARM 8. ARM 8 Architecture Introduction	4		
	Introduction to Raspberry Pi: Introduction to Raspberry Pi, Raspberry Pi Hardware, Preparing your raspberry Pi.	4		
	Raspberry Pi Boot: Learn how this small SoC boots without BIOS. Configuring boot sequences and hardware	3		
	Programming Raspberry Pi	3		

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UNIT 2	**Raspberry Pi and Linux**: About Raspbian, Linux Commands, Configuring Raspberry Pi with Linux Commands		Physical computing IOT programming by Himalaya publication	GOOGLE SIDES, GOOGLE MEET,PPT
	Programing interfaces: Introduction to Node.js, Python.	4		
	Raspberry Pi Interfaces: UART, GPIO, I2C, SPI	4		
	Useful Implementations: Cross Compilation, Pulse Width Modulation, SPI for Camera.	4		
Unit 3	. **Introduction to IoT**: What is IoT? IoT examples, Simple IoT LED Program.	3	Physical computing IOT programming by Himalaya publication	GOOGLE SIDES, GOOGLE MEET,PPT
	IoT and Protocols **IoT Security**: HTTP, UPnp, CoAP, MQTT, XMPP.	4		
	IoT Security and Interoperability: Risks, Modes of Attacks, Tools forSecurity and Interoperability.	3		

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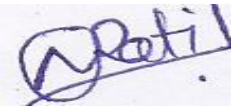
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 41



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAYATREE KARNIK DEPARTMENT:IT SUBJECT:OS CLASS: SYCS SEM:III

MONTH:JUNE-SEPT ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to :

1. To provide a understanding of operating system, its structures and functioning
2. Develop and master understanding of algorithms used by operating systems for various purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
303 UNIT I	**Introduction and Operating-Systems Structures**: Definition of Operating system, Operating System's role, **Operating-System Operations**, Functions of Operating System, Computing Environments Operating-System Structures: Operating-System Services, User and Operating-System Interface, System Calls, Types of System Calls, Operating-System Structure **Processes:** Process Concept, Process Scheduling, Operations on Processes, Interprocess Communication **Threads**: Overview, Multicore Programming, Multithreading Models	18	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Computer, Power point

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303 UNIT II	**Process Synchronization**: General structure of a typical process, race condition, The Critical-Section Problem, Peterson's Solution, Synchronization Hardware, Mutex Locks, Semaphores, Classic Problems of Synchronization, Monitors **CPU Scheduling**: Basic Concepts, Scheduling Criteria, Scheduling Algorithms (FCFS, SJF, SRTF, Priority, RR, Multilevel Queue Scheduling, Multilevel Feedback Queue Scheduling), Thread Scheduling **Deadlocks:** System Model, Deadlock Characterization, Methods for Handling Deadlocks, Deadlock Prevention, Deadlock Avoidance, Deadlock Detection, Recovery from Deadlock	15	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Computer, Power point
303 UNIT III	**Main Memory**: Background, Logical address space, Physical address space, MMU, Swapping, Contiguous Memory Allocation, Segmentation, Paging, Structure of the Page Table **Virtual Memory:** Background, Demand Paging, Copy-on-Write, Page Replacement, Allocation of Frames, Thrashing **Mass-Storage Structure**: Overview, Disk Structure, Disk Scheduling, Disk Management **File-System Interface**: File Concept, Access Methods, Directory and Disk Structure, File-System Mounting, File Sharing **File-System Implementation**: File-System Structure, File-System Implementation, Directory Implementation, Allocation Methods, Free-Space Management	15	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Computer, Power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **S.Y.B.Sc.(CS)**

SEMESTER: **III** MONTH: **July - October** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able:

1. Understand Grammar and Languages.
2. Learn about Automata theory and its application in Language Design.
3. Learn about Turing Machines and Pushdown Automata.
4. Understand Linear Bound Automata and its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS301 Paper I **Theory of Computation** **UNIT I**	**Automata Theory:** Defining Automaton, Finite Automaton, Transitions and Its properties, Acceptability by Finite Automaton	4	Theory of Computer Science, K. L. P Mishra, Chandrasekharan, PHI,3rd Edition. Introduction to Computer Theory, Daniel Cohen, Wiley,2nd Edition.	Microsoft Power Point
	Nondeterministic Finite State Machines, DFA and NDFA equivalence, Mealy and Moore Machines, Minimizing Automata.	4		
	Formal Languages: Defining Grammar, Derivations, Languges generated by Grammar	3		
	Chomsky Classification of Grammar and Languages, Recursive Enumerable Sets, Operations on Languages, Languages and Automata	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS301 Paper I **Theory of Computation** **UNIT II**	**Regular Sets and Regular Grammar:** Regular Grammar, Regular Expressions, Finite automata and Regular Expressions	4	Theory of Computer Science, K. L. P Mishra, Chandrasekharan, PHI,3rd Edition. Introduction to Computer Theory, Daniel Cohen, Wiley,2nd Edition.	Microsoft Power Point
	Pumping Lemma and its Applications, Closure Properties, Regular Sets and Regular Grammar	4		
	Context Free Languages: Context-free Languages, Derivation Tree, Ambiguity of Grammar, CFG simplification, Normal Forms, Pumping Lemma for CFG	4		
	Pushdown Automata: Definitions, Acceptance by PDA, PDA and CFG	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS301 Paper I **Theory of Computation** **UNIT III**	**Linear Bound Automata:** The Linear Bound Automata Model, Linear Bound Automata and Languages.	4	Theory of Computer Science, K. L. P Mishra, Chandrasekharan, PHI,3rd Edition. Introduction to Computer Theory, Daniel Cohen, Wiley,2nd Edition.	Microsoft Power Point
	Turing Machines: Turing Machine Definition, Representations, Acceptability by Turing Machines.	4		
	Designing and Description of Turing Machines, Turing Machine Construction, Variants of Turing Machine,	3		
	Undecidability: The Church-Turing thesis, Universal Turing Machine, Halting Problem, Introduction to Unsolvable Problems	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT/CS

CLASS: SYCS SEMESTER: III MONTH: JULY TO OCTOBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to design and develop state of - the art web applications using client-side scripting, server-side scripting, and database connectivity

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
SKILL ENHANCEMENT: WEB PROGRAMMING (USCS307) Unit I	**HTML5:** Fundamental Elements of HTML, Formatting Text in HTML, Organizing Text in HTML, Links and URLs in HTML, Tables in HTML, Images on a Web Page, Image Formats, Image Maps, Colours, FORMs in HTML, Interactive Elements, Working with Multimedia - Audio and Video File Formats, HTML elements for inserting Audio / Video on a web page	8	HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP and jQuery, 2ed, Dreamtech Press	PPT, Notepad, Paint, browser
	CSS: Understanding the Syntax of CSS, CSS Selectors, Inserting CSS in an HTML Document, CSS properties to work with background of a Page, CSS properties to work with Fonts and Text Styles, CSS properties for positioning an element	7		
SKILL ENHANCEMENT: WEB PROGRAMMING (USCS307)	**JavaScript:** Using JavaScript in an HTML Document, Programming Fundamentals of JavaScript – Variables, Operators, Control Flow Statements, Popup Boxes, Functions – Defining and Invoking a Function, Defining Function arguments, Defining a Return Statement, Calling Functions with Timer	6	HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP and	PPT, Jam board, Notepad, browser

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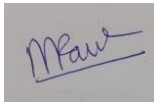
Unit II	**JavaScript Objects** - String, RegExp, Math, Date, Browser Objects - Window, Navigator, History, Location, Document, Cookies, Document Object Model, Form Validation using JavaScript	2	jQuery, 2ed, Dreamtech Press	PPT, Notepad, browser
	XML: Comparing XML with HTML, Advantages and Disadvantages of XML, Structure of an XML Document, XML Entity References, DTD, XSLT: XSLT Elements and Attributes - xsl:template, xsl:apply-templates, xsl:import, xsl:call-template, xsl:include, xsl:element, xsl:attribute, xsl:attribute-set, xsl:value-of	7		PPT, Notepad, browser
SKILL ENHANCEMENT: WEB PROGRAMMING (USCS307) Unit III	**AJAX**: AJAX Web Application Model, How AJAX Works, XMLHttpRequest Object – Properties and Methods, Handling asynchronous requests using AJAX	4	HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP and jQuery, 2ed, Dreamtech Press, PHP: A Beginners Guide, Vikram Vaswani, TMH	PPT, Notepad, browser
	PHP: Variables and Operators, Program Flow, Arrays, Working with Files and Directories, Working with Databases, Working with Cookies, Sessions and Headers	7		PPT, Jam board, Notepad, Wamp server
	Introduction to jQuery: Fundamentals, Selectors, methods to access HTML attributes, methods for traversing, manipulators, events, effects	4		PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **T.Y.B.Sc.(CS)**

SEMESTER: **V** MONTH: **July - October** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able:

- To get a clear understanding of AI and different search algorithms used for solving problems.
- To get acquainted with different learning algorithms and models used in machine learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 **Paper I** **Artificial Intelligence** **UNIT I**	**What Is AI:** Foundations, History and State of the Art of AI.	4	Artificial Intelligence: A Modern Approach, Stuart Russell and Peter Norvig,3rd Edition.	Google Meet and Microsoft PowerPoint Presentation
	Intelligent Agents: Agents and Environments, Nature of Environments, Structure of Agents.	3		
	Problem Solving by searching: Problem-Solving Agents, Example Problems, Searching for Solutions, Uninformed Search Strategies.	4		
	Informed (Heuristic) Search Strategies, Heuristic Functions.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 **Paper I** **Artificial Intelligence** **UNIT II**	**Learning from Examples:** Forms of Learning, Supervised Learning, Learning Decision Trees	3	Artificial Intelligence: A Modern Approach, Stuart Russell and Peter Norvig,3rd Edition.	Google Meet and Microsoft PowerPoint Presentation
	Evaluating and Choosing the Best Hypothesis, Theory of Learning	3		
	Regression and Classification with Linear Models ,Artificial Neural Networks	4		
	Nonparametric Models, Support Vector Machines, Ensemble Learning, Practical Machine Learning	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 **Paper I** **Artificial Intelligence** **UNIT III**	**Learning probabilistic models:** Statistical Learning, Learning with Complete Data.	4	Artificial Intelligence: A Modern Approach, Stuart Russell and Peter Norvig,3rd Edition.	Google Meet and Microsoft PowerPoint Presentation
	Learning with Hidden Variables: The EM Algorithm	3		
	Reinforcement learning: Passive Reinforcement Learning, Active Reinforcement Learning,	4		
	Generalization in Reinforcement Learning, Policy Search, Applications of Reinforcement Learning.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **TYBSCCS** SEMESTER:**V**

MONTH: **July-OCT** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:

The learners will be able to :

understand computer Graphics programming using Directx or Opengl. Along with the VR and AR they should also aware of GPU, newer technologies and programming using most important API for windows.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS507 **Game Programming** Unit-1	**Cartesian Coordinate system:** The Cartesian XY-plane, Function Graphs, Geometric Shapes, Polygonal Shapes, Areas of Shapes, Theorem of Pythagoras in 2D, Coordinates, Theorem of Pythagoras in 3D, 3D Polygons, Euler's Rule	04	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Laptop,power point
	Vectors: Vector Manipulation, multiplying a Vector by a Scalar, Vector Addition and Subtraction, Position Vectors, Unit Vectors, Cartesian Vectors, Vector Multiplication, Scalar Product, Example of the Dot Product, The Dot Product in Lighting Calculations, The Dot Product in Back-Face Detection, The Vector Product, The Right-Hand Rule, deriving a Unit	03	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Laptop,power point

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	Normal Vector for a Triangle Areas, Calculating 2D Areas			
	Transformations: 2D Transformations, Matrices, Homogeneous Coordinates, 3D Transformations, Change of Axes, Direction Cosines, rotating a Point about an Arbitrary Axis, Transforming Vectors, Determinants, Perspective Projection, Interpolation	06	Computer Graphics, C Version, Donald Hern and Pauline Baker, Pearson Education, 2nd Edition, 1997	Laptop,power point jamboard
	DirectX: Understanding GPU and GPU architectures. How they are different from CPU Architectures? Understanding how to solve by GPU?	02	Introduction To 3D Game Programming With Directx® 11	Laptop,power point
USCS507 **Game Programming** Unit-2	**Introduction To DirectX 11:** COM, Textures and Resources Formats, The swap chain and Page flipping, Depth Buffering, Texture Resource Views, Multisampling Theory and MS in Direct3D, Feature Levels	03	Introduction To 3D Game Programming With Directx® 11	Laptop,power point
	Direct3D 11 Rendering Pipeline: Overview, Input Assembler Stage (IA), Vertex Shader Stage (VS), The Tessellation Stage (TS), Geometry Shader Stage (GS), Pixel Shader Stage (PS), Output merger Stage (OM) Understanding Meshes or Objects, Texturing, Lighting, Blending.	03	Introduction To 3D Game Programming With Directx® 11	Laptop,power point
	Trigonometry: The Trigonometric Ratios, Inverse Trigonometric Ratios, Trigonometric	03	Introduction To 3D Game Programming With Directx® 11	Laptop,power point

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	Relationships, The Sine Rule, The Cosine Rule, Compound Angles, Perimeter Relationships			
	Interpolation: Linear Interpolant, Non-Linear Interpolation, Trigonometric Interpolation, Cubic Interpolation, Interpolating Vectors, Interpolating Quaternions	03	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Laptop,power point
	Curves: Circle, Bezier, B-Splines **Analytic Geometry:** Review of Geometry, 2D Analytic Geometry, Intersection Points, Point in Triangle, and Intersection of circle with straight line.	03	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Black Board and chalk,power point
USCS507 **Game Programming** Unit-3	**Introduction to Rendering Engines:** Understanding the current market Rendering Engines. Understanding AR, VR and MR.Depth Mappers, Mobile Phones, Smart Glasses, HMD's **Unity Engine: Multi-platform publishing, VR + AR:** Introduction and working in Unity, 2D, Graphics, Physics, Scripting, Animation, Timeline, Multiplayer and Networking, UI, Navigation and Pathfinding, XR, Publishing.	10	https://docs.unity3d.com/Manual/index.html	Laptop,power point
	Scripting: Scripting Overview, Scripting Tools and Event Overview **XR:** VR, AR, MR, Conceptual Differences. SDK, Devices	05	https://docs.unity3d.com/Manual/index.html	Laptop,power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande

DEPARTMENT: Computer Science

CLASS: T.Y.C.S.

SEMESTER: V

MONTH: June - October

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand various software testing methods and strategies. Understand a variety of software metrics, and identify defects and managing those defects for improvement in quality for given software. Design SQA activities, SQA strategy, formal technical review report for software quality control and assurance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 Software Testing and Quality Assurance UNIT : 01	**Software Testing and Introduction to quality :** Introduction, Nature of errors, an example for Testing, Definition of Quality , QA, QC, QM and SQA , Software Development Life Cycle, Software Quality Factors	05	Software Engineering for Students, A Programming Approach, Douglas Bell, 4th Edition,, Pearson Education, 2005	PPT
	Verification and Validation : Definition of V &V , Different types of V & V Mechanisms, Concepts of Software Reviews, Inspection and Walkthrough	05		PPT

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	Software Testing Techniques : Testing Fundamentals, Test Case Design, White Box Testing and its types, Black Box Testing and its types	05		PPT
USCS501 Software Testing and Quality Assurance UNIT : 02	**Software Testing Strategies :** Strategic Approach to Software Testing, Unit Testing, Integration Testing, Validation Testing, System Testing	05	Software Engineering – A Practitioners Approach, Roger S. Pressman, 5th Edition, Tata McGraw Hill, 2001	PPT
	Software Metrics : Concept and Developing Metrics, Different types of Metrics, Complexity metrics	05		PPT
	Defect Management: Definition of Defects, Defect Management Process, Defect Reporting, Metrics Related to Defects, Using Defects for Process Improvement.	05		PPT
USCS501 Software Testing and Quality Assurance UNIT : 03	**Software Quality Assurance :** Quality Concepts, Quality Movement, Background Issues, SQA activities, Software Reviews, Formal Technical Reviews, Formal approaches to SQA, Statistical Quality Assurance, Software Reliability, The ISO 9000 Quality Standards, , SQA Plan , Six sigma, Informal Reviews	07	Quality Management, Donna C. S. Summers, 5th Edition, Prentice-Hall, 2010. Total Quality Management, Dale H. Besterfield, 3rd Edition, Prentice Hall, 2003.	PPT
	Quality Improvement : Introduction, Pareto Diagrams, Cause-effect Diagrams, Scatter Diagrams, Run charts	03		PPT
	Quality Costs : Defining Quality Costs, Types of Quality Costs, Quality Cost Measurement, Utilizing Quality Costs for Decision-Making **Textbook**(s	05		PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

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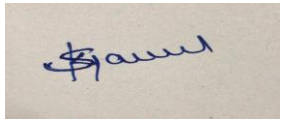

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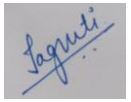

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS: TYCS

SEMESTER: V MONTH: July-Oct ACADEMIC YEAR:2021-2022

LEARNING OBJECTIVE/S:

•To understand the details of web services technologies like SOAP, WSDL, and UDDI. To learn how to implement and deploy web service client and server.

•To understand the design principles and application of SOAP and REST based web services (JAX-Ws and JAX-RS).

•To understand WCF service. To design secure web services and QoS of Web Services

The learners will be able to:

•Emphasis on SOAP based web services and associated standards such as WSDL. Design SOAP based / RESTful / WCF services Deal with Security and QoS issues of Web Services

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Web Services Elective-II USCS506 Unit 1	**Web services basics:** What Are Web Services? Types of Web Services Distributed computing infrastructure, overview of XML, SOAP, Building Web Services with JAX-WS, Registering and Discovering Web Services, Service Oriented Architecture, Web Services Development Life Cycle, Developing and consuming simple Web Services across platform	15	Web Services: Principles and Technology,Michael P. Papazoglou, Pearson Education Limited, 2008	Laptop

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Web Services Elective-II USCS506 Unit 2	**The REST Architectural style:** Introducing HTTP, The core architectural elements of a RESTful system, Description and discovery of RESTful web services, Java tools and frameworks for building RESTful web services, JSON message format and tools and frameworks around JSON, Build RESTful web services with JAX-RS APIs, The Description and Discovery of RESTful Web Services, Design guidelines for building RESTful web services, Secure RESTful web services.	15	RESTful Java Web Services, Jobinesh Purushothaman, PACKT Publishing,2 nd Edition, 2015	Laptop
Web Services Elective-II USCS506 Unit 3	**Developing Service-Oriented Applications with WCF :** What Is Windows Communication Foundation, Fundamental Windows Communication Foundation Concepts, Windows Communication Foundation Architecture, WCF and .NET Framework Client Profile, Basic WCF Programming, WCF Feature Details. Web Service QoS	15	Developing Service-Oriented Applications with WCF, Microsoft, 2017 https://docs.microsoft.com/en-us/dotnet/framework/wcf/index	Laptop

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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YashvantKeshavPatil College of Commerce
VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: II MONTH: JANUARY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of limit, continuity and derivative of a function.
- Check the continuity of the function at the given point.
- Find the derivatives of functions of various functions
- Use derivatives in various applications like concavity, maxima/minima, increasing/decreasing functions etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CALCULUS Unit 1 Derivatives & its applications	➢ Limit, continuity and derivative of a function ➢ Asymptotes, increasing/decreasing functions, concavity. ➢ Absolute and relative maxima and minima ➢ Graphing of polynomials and Newton's method	3 3 3 3	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTURE METHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Powerpoint presentation, laptop, pentab

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: II MONTH: FEBRUARY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of limits, continuity and derivatives of functions of two or more variables.
- Find the first and second order partial derivatives of functions of two variables.
- Find the linearization of the given function at the given point.
- Understand the concept of gradients and directional derivatives.
- Find the derivative of a function of two variable using chain rule.
- Find the relative extrema and saddle point of the given function of two variables using partial derivatives.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CALCULUS Unit 3 Partial Derivatives & its applications	➢ Limit, continuity and partial derivatives of functions of two or more variables ➢ Linearization and chain rule ➢ Directional derivatives and gradients ➢ Tangent planes and normal lines ➢ Maxima and minima of functions of two variables	2 2 2 2 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: II MONTH: MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- Evaluate indefinite integral using different methods like substitution, integration by parts etc.
- Evaluate definite integral using the properties of definite integration and by Simpson's rule
- Find the area bounded between curves and length of plane curve using integration.
- Solve the given differential equation using different methods

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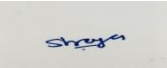
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CALCULUS Unit 2 Integration & its applications	➢ Indefinite and definite integration ➢ Area between two curves ➢ Length of plane curve ➢ Simpson's rule ➢ Solving differential equations	2 2 2 2 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT/CS

CLASS: FYCS SEMESTER: II MONTH: FEBRUARY TO APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- Students should be able to understand and evaluate efficiency of the programs that they write based on performance of the algorithms used.
- Students should be able to appreciate the use of various data structures as per need.
- To select, decide and apply appropriate design principle by understanding the requirements of any real-life problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Design & Analysis of Algorithms (USCS201) Unit I	**Introduction to algorithms** - What is algorithm, analysis of algorithm, Types of complexity, Running time analysis, How to Compare Algorithms, Rate of Growth, Types of Analysis, Asymptotic Notation, Big-O Notation, Omega-Ω Notation, Theta-Θ Notation, Asymptotic Analysis, Performance characteristics of algorithms, Estimating running time / number of steps of executions on paper, Idea of Computability	08	Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Google Jam board, Slides, Docs
	Introduction to Data Structures - What is data structure, types, Introduction to Array(1-d & 2-d), Stack and List data structures, operations on these data structures, advantages disadvantages and applications of these data structures like solving linear equations, Polynomial Representation, Infix-to-Postfix conversion	07		

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Design & Analysis of Algorithms (USCS201) Unit II	**Recursion** - What is recursion, Recursion vs Iteration, recursion applications like Factorial of a number, Fibonacci series & their comparative analysis with respect to iterative version, Tower of Hanoi problem	04	"Data Structures and Algorithms Made Easy", NarasimhaKarumanchi, CareerMonk Publications, 2016	Chalk and black board
	Basic Sorting Techniques - Bubble, Selection and Insertion Sort & their comparative analysis Searching Techniques - Linear Search and its types, Binary Search and their comparative analysis	04		
	Selection Techniques - Selection by Sorting, Partition-based Selection Algorithm, Finding the Kth Smallest Elements in Sorted Order & their comparative analysis	04		
	String Algorithms - Pattern matching in strings, Brute Force Method & their comparative analysis	03		
Design & Analysis of Algorithms (USCS201) Unit III	**Algorithm Design Techniques** - Introduction to various types of classifications/design criteria and design techniques	03	"Data Structures and Algorithms Made Easy", NarasimhaKarumanchi, CareerMonk Publications, 2016	Chalk and black board
	Greedy Technique - Concept, Advantages & Disadvantages, Applications, Implementation using problems like - file merging problem	04		

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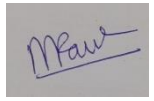
	Divide-n-Conquer - Concept, Advantages & Disadvantages, Applications, Implementation using problems like - merge sort, Strassen's Matrix Multiplication	04		
	Dynamic Programming - Concept, Advantages & Disadvantages, Applications, Implementation using problems like - Fibonacci series, Factorial of a number, Longest Common subsequence Backtracking Programming - Concept, Advantages & Disadvantages, Applications, Implementation using problems like N-Queen Problem	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: FYCS SEMESTER: I MONTH: FEB-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- To make students aware fundamentals of database system.
- To give idea how ERD components helpful in database design and implementation.
- To experience the students working with database using MySQL.
- To familiarize the student with normalization, database protection and different DCL Statements.
- To make students aware about importance of protecting data from unauthorized users.
- To make students aware of granting and revoking rights of data manipulation.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS204, Database Systems, UNIT-I	**Introduction to DBMS** – Database, DBMS – Definition, Overview of DBMS, Advantages of DBMS, Levels of abstraction, Data independence, DBMS Architecture	03	Ramez Elmasri & ShamkantB.Navathe, Fundamentals of Database Systems, Pearson Education, Sixth Edition, 2010. 2. Joel Murach, Murach's MySQL, Murach, 2012.	Online Mode, Google Meet with Google Slides.
	Data models - Client/Server Architecture, Object Based Logical Model, Record Based Logical Model (relational, hierarchical, network)	02		Online Mode, Google Meet with Google Slides.
	Entity Relationship Model - Entities, attributes, entity sets, relations, relationship sets, Additional constraints (key constraints, participation constraints, weak entities, aggregation / generalization, Conceptual Design using ER (entities VS attributes, Entity Vs relationship, binary Vs ternary,	03		Online Mode, Google Meet with Google Slides.

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	constraints beyond ER)			
	ER to Table- Entity to Table, Relationship to tables with and without key constraints.	01		Online Mode, Google Meet with Google Slides.
	DDL Statements - Creating Databases, Using Databases, datatypes, Creating Tables (with integrity constraints – primary key, default, check, not null), Altering Tables, Renaming Tables, Dropping Tables, Truncating Tables	03		Online Mode, Google Meet with Google Slides.
	DML Statements – Viewing the structure of a table insert, update, delete, Select all columns, specific columns, unique records, conditional select, in clause, between clause, limit, aggregate functions (count, min, max, avg, sum), group by clause, having clause	03		Online Mode, Google Meet with Google Slides.
USCS204, Database Systems, UNIT-II	**Relational data model–** Domains, attributes, Tuples and Relations, Relational Model Notation, Characteristics of Relations, Relational Constraints - primary key, referential integrity, unique constraint, Null constraint, Check constraint	03	1.Ramez Elmasri & ShamkantB.Navathe, Fundamentals of Database Systems, Pearson Education, Sixth Edition, 2010. 2. Joel Murach, Murach's MySQL, Murach, 2012	Online Mode, Google Meet with Google Slides.
	Relational Algebra operations (selection, projection, set operations union, intersection, difference, cross product, Joins –conditional, equi join and natural joins, division)	03		Online Mode, Google Meet with Google Slides.
	Functions – String Functions (concat, instr, left, right, mid, length, lcase/lower, ucase/upper, replace, strcmp, trim, ltrim, rtrim), Math Functions (abs, ceil, floor, mod, pow, sqrt, round, truncate) Date Functions (adddate, datediff, day, month, year, hour, min, sec, now, reverse)	03		Online Mode, Google Meet with Google Slides.
	Joining Tables – inner join, outer join (left outer, right outer, full outer)	03		Online Mode, Google Meet with Google Slides.
	Subqueries – subqueries with IN, EXISTS, subqueries restrictions, Nested subqueries, ANY/ALL clause, correlated subqueries	03		Blackboard, Chalk

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USCS204, Database Systems, UNIT-III	**Schema refinement and Normal forms:** Functional dependencies, first, second, third, and BCNF normal forms based on primary keys, lossless join decomposition.	03	Joel Murach, Murach's MySQL, Murach, 2012	Blackboard, Chalk
	Database Protection: Security Issues, Threats to Databases, Security Mechanisms, Role of DBA, Discretionary Access Control, Backing Up and Restoring databases	03		Blackboard, Chalk
	Views (creating, altering dropping, renaming and manipulating views)	03		Blackboard, Chalk
	DCL Statements (creating/dropping users, privileges introduction, granting/revoking privileges, viewing privileges), Transaction control commands – Commit, Rollback	03		Blackboard, Chalk
	Index Structures of Files: Introduction, Primary index, Clustering Index, Multilevel indexes	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYCS SEMESTER: SEM-2 MONTH: FEB-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the core concepts of E-Commerce.
- Understand the various online payment techniques
- Understand the core concepts of digital marketing and the role of digital marketing in business.
- Apply digital marketing strategies to increase sales and growth of business
- Apply digital marketing through different channels and platforms
- Understand the significance of Web Analytics and Google Analytics and apply the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
7 E-COMMERCE & DIGITAL MARKETING UNIT 1	**Introduction to E-Commerce and E- Business:** Definition and competing in the digital economy, Impact of E-Commerce on Business Models, FactorsDriving e-commerce and e-Business Models, Economics and social impact of e-Business, opportunities and Challenges,	4	E-Commerce Strategy, Technologies and Applications, Whitley, David, Tata McGraw Hill, 2017 Digital Marketing, Seema Gupta, McGraw Hill Education, 2nd Edition	BLACK BOARD AND CHALK
	e-Commerce vs mCommerce, Different e-Commerce Models (B2B, B2C, C2B, C2C, B2E), e-Commerce Applications: e-Trading, e-Learning, e-Shopping, Virtual Reality & Consumer Experience, Legal and Ethical issues in e-Commerce	3		
	Overview of Electronic Payment systems: Types of Electronic payment schemes (Credit cards, Debit cards, Smartcards, Internet banking), Echecks, E-Cash Concepts and applications of EDI and	4		

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	Limitation			
	Introduction & origin of Digital Marketing: Traditional v/s Digital Marketing. Digital Marketing Strategy, The P-O-E-M Framework, Segmenting & Customizing Messages, The Digital landscape, Digital Advertising Market in India. Skills required in Digital Marketing. Digital Marketing Plan.	4		
UNIT 2	**Social Media Marketing**: Meaning, Purpose, types of social media websites, Social Media Engagement, Target audience, Facebook Marketing: Business through Facebook Marketing, Creating Advertising Campaigns, Adverts, Facebook Marketing Tools, LinkedIn Marketing: Importance of LinkedIn Marketing, Framing LinkedIn Strategy, Lead Generation through LinkedIn, Content Strategy, Analytics and Targeting, Twitter Marketing: Framing content strategy, Twitter Advertising Campaigns, YouTube Marketing: Video optimization, Promoting on YouTube, Monetization, YouTube Analytics	4	E-Commerce Strategy, Technologies and Applications, Whitley, David, Tata McGraw Hill, 2017 Digital Marketing, Seema Gupta, McGraw Hill Education, 2nd Edition	BLACK BOARD AND CHALK
	Email Marketing: Types of Emails, Mailing List, Email Marketing tools, Email Deliverability & Email Marketing automation	3		
	Mobile Marketing: Introduction, Mobile Usage, Mobile Advertising, Mobile Marketing Types, Mobile Marketing Features, Mobile Campaign Development, Mobile Advertising Analytics	4		
	Content Marketing: Introduction, Content marketing statistics, Types of Content, Types of Blog posts, Content Creation, Content optimization, Content Management & Distribution, Content Marketing Strategy, Content creation tools and apps, Challenges of Content Marketing.	4		

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UNIT 3	Search Engine Optimization: Meaning, Common SEO techniques, Understanding Search Engines, basics of Keyword search, Google rankings, Link Building, Steps to optimize website, On-page and off-page optimization	4	. E-Commerce Strategy, Technologies and Applications, Whitley, David, Tata McGraw Hill, 2017 Digital Marketing, Seema Gupta, McGraw Hill Education, 2nd Edition	BLACK BOARD AND CHALK
	Search Engine Marketing: Introduction to SEM, Introduction to Ad Words - Google Ad Words, Ad Words fundamentals, Ad Placement, Ad Ranks, Creating Ad Campaigns, Campaign Report Generation, Display marketing, Buying Models: Cost per Click (CPC), Cost per Milli (CPM), Cost per Lead (CPL), Cost per Acquisition (CPA).	4		
	Web Analytics: Purpose, History, Goals & objectives, Web Analytic tools & Methods. Web Analytics Mistakes and Pitfalls.	3		
	Google Analytics: Basics of Google Analytics, Installing Google Analytics in website, Parameters of Google Analytics, Reporting and Analysis	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: CS

CLASS:FYCS SEMESTER: SEM-II MONTH: FEB-APR ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The course aims to introduce a new programming paradigm called Object Oriented Programming. This will be covered using C++ programming language. C++ is a versatile programming language, which supports a variety of programming styles, including procedural, object-oriented, and functional programming. This makes C++ powerful as well as flexible. It can be used to develop software such as operating systems, databases, and compilers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3 Introduction to OOPs using C++, UNIT 1	**Introduction to Programming Concepts**: Object oriented programming paradigm, basic concepts of object oriented programming, benefits of object oriented programming, object oriented languages, applications of object oriented programming.	2	Object Oriented Programming with C++, Balagurusamy	PPT, GoogleMeet, Jamboard ,Slido.
	Tokens-keywords, identifiers, constants-integer, real, character and string constants, backslash constants, features of C++ and its basic structure, simple C++ program without class, compiling and running C++ program..	1		

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	Data Types, Data Input Output and Operators: Basic data types, variables, rules for naming variables, programming constants, the type cast operator, implicit and explicit type casting, cout and cin statements ,operators, precedence of operators.	2		
	Decision Making, Loops, Arrays and Strings: Conditional statements-if, if...else, switch loops- while, do...while, for, types of arrays and string and string manipulations.	5		
	Unified Modeling Language (UML): Introduction to UML & class diagrams.	2		
	Classes, Abstraction & Encapsulation: Classes and objects, Dot Operator, data members, member functions, passing data to functions, scope and visibility of variables in function.	3		
UNIT-2	**Constructors and Destructors:** Default constructor, parameterized , constructor, copy constructor, private constructor, destructors.	3	Object Oriented Programming with C++, Balagurusamy , UML & C++:	PPT , Projector, Blackboard & Chalk,
	Working with objects: Accessor - mutator methods, static data and static function, access specifiers, array of objects**.**	4		
	Polymorphism - Binding-static binding & overloading, constructor overloading function overloading, operator overloading, overloading unary and binary operators.	5		
	Modelling Relationships in Class Diagrams: Association, Aggregation- Composition and examples covering these principles.	3		

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UNIT 3	**Inheritance:** Defining base class and its derived class, access specifiers, types of inheritance-single, multiple, hierarchical, multilevel, hybrid inheritance, friend function and friend class, constructors in derived classes**.**	4	Object Oriented Programming with C++, Balagurusamy, UML & C++	PPT, Projector, Blackboard & Chalk.
	Modelling Relationships: Generalization-Specialization and examples covering these principles.	2		
	Run time Polymorphism - Dynamic Binding, Function overriding, virtual function, pure virtual function, virtual base class, abstract class.	2		
	Pointers: Introduction to pointers, * and & operators, assigning addresses to pointer variables, accessing values using pointers, pointers to objects &this pointer, pointers to derived classes	3		
	File Handling: File Stream classes, opening and closing file-file opening modes, text file handling, binary file handling.	2		
	Applying OOP to solve real life applications: To cover case studies like library management, order management etc. to design classes covering all relationships.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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Teaching plan for FYCS sem 1 2021-22

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: Computer Science

CLASS: Fybsc(CS)

SEMESTER: 2

MONTH: February to April

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners would be able to

- Calculate probability, conditional probability and independence.
- Apply the given discrete and continuous distributions whenever necessary.
- Define null hypothesis, alternative hypothesis, level of significance, test statistic and pvalue.
- Perform Test of Hypothesis as well as calculate confidence interval for a population parameter for single sample and two sample cases.
- Apply non-parametric test whenever necessary.
- Conduct and interpret one-way and two-way ANOVA.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	Reference /s	Teaching method Ict tool used
Paper: Statistical Methods <u>**Unit 1**</u>	**Probability:** ➢ Random experiment, sample space, events types and ➢ operations of events, Probability definition: classical, axiomatic, ➢ Elementary Theorems of probability (without proof). ➢ Conditional probability, „Bayes" theorem,	**8**	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics,	Power Point Presentation

	independence, Examples on Probability.		S. Chand and Sons, New Delhi	

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	Random Variables: ➢ Concept and definition of a discrete random variable and continuous random variable. ➢ Probability mass function, Probability density function and cumulative distribution function of discrete and continuous random variable, ➢ Properties of cumulative distribution function**.**	7	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New Delhi	Power Point Presentation

<u>Unit 2</u>	**Mathematical Expectation and Variance:** ➢ Expectation of a function,Variance and S.D of a random variable, ➢ properties.	6	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New Delhi	Black Board, Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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	Standard Probability distributions: ➢ Introduction,properties, ➢ Examples and applications of each of the following distributions: Binomial distribution,Normal distribution,Chi-square distribution, t distribution, F distribution	9	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New Delhi	Black Board, Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

Unit 3	**Hypothesis testing:** ➢ One sided,Two sided hypothesis, critical region, p-value, ➢ tests based on t, Normal and F, confidence intervals**.**	4	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New Delhi	Black Board, Chalk and Duster

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	Analysis of Variance: One-way, two-way analysis of variance. .	4	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New Delhi	Black Board, Chalk and Duste
	Non-parametric tests: ➢ Need of non-parametric tests, ➢ Sign test,Wilicoxon's signed rank test, run test, Kruskal-Walistests, Chisquare test	7	Gupta, S.C. and Kapoor, V.K. (1987): Fundamentals of Mathematical Statistics, S. Chand and Sons, New Delhi	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lecture

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS: SYCS SEMESTER: IV

MONTH: December to March ACADEMIC YEAR:2021-2022

LEARNING OBJECTIVE/S:

- Explore advanced topic of Java programming for solving problems.

The learners will be able to:

- Understand the concepts related to Java Technology
- Explore and understand use of Java Server Programming

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Advanced Java USCS402 Unit 1	Swing: Need for swing components, Difference between AWT and swing, Components hierarchy, Panes, Swing components: Jlabel, JTextField and JPasswordField, JTextAres, JButton, JCheckBox, JRadioButton, JComboBox and JList	9	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th Edition AND Internet	Projector, Laptop, Black board& Chalk
	JDBC: Introduction, JDBC Architecture, Types of Drivers, Statement, ResultSet, Read Only ResultSet, Updatable ResultSet, Forward Only ResultSet, Scrollable ResultSet, PreparedStatement, Connection Modes, SavePoint, Batch Updations, CallableStatement, BLOB & CLOB	6	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th EditionAND Internet	Projector, Laptop, Black board& Chalk

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Advanced Java USCS402 Unit 2	**Servlets:** Introduction, Web application Architecture, Http Protocol & Http Methods, Web Server & Web Container, Servlet Interface, GenericServlet, HttpServlet, Servlet Life Cycle, ServletConfig, ServletContext, Servlet Communication, Session Tracking Mechanisms	7	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th EditionAND Internet		
	JSP: Introduction, JSP LifeCycle, JSP Implicit Objects & Scopes, JSP Directives, JSP Scripting Elements, JSP Actions: Standard actions and customized actions,	8	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th EditionAND Internet	Projector, Laptop, Black board& Chalk	
Advanced Java USCS402 Unit 3	**Java Beans:** Introduction, JavaBeans Properties, Examples	4	Joe Wigglesworth and Paula McMillan, Java Programming: Advanced Topics, Thomson Course Technology (SPD) ,3rd EditionAND INTERNET	Projector, Laptop, Black board& Chalk	
	Struts 2: Basic MVC Architecture, Struts 2 framework features, Struts 2 MVC pattern, Request life cycle, Examples, Configuration Files, Actions, Interceptors, Results & Result Types, Value Stack/OGNL	6	Joe Wigglesworth and Paula McMillan, Java Programming: Advanced Topics, Thomson Course Technology (SPD) ,3rd EditionAND INTERNET	Projector, Laptop, Black board& Chalk	
	JSON: Overview, Syntax, DataTypes, Objects, Schema, Comparison with XML, JSON with Java	5	Joe Wigglesworth and Paula McMillan, Java Programming: Advanced Topics, Thomson Course Technology (SPD) ,3rd Edition AND INTERNET	Projector, Laptop, Black board& Chalk	

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **SYBSCCS** SEMESTER:I**V**

MONTH: **NOV-MARCH** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:

The learners will be able to :

understand basic principles of algorithm design and why algorithm analysis is important
understand how to implement algorithms in Python
understand how to transform new problems into algorithmic problems with efficient solutions
understand algorithm design techniques for solving different problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS401 **Fundamentals of Algorithms** UNIT-1	Introduction to algorithm, Why to analysis algorithm, Running time analysis, How to Compare Algorithms, Rate of Growth, Commonly Used Rates of Growth, Types of Analysis, Asymptotic Notation, Big-O Notation, Omega-Ω Notation, Theta-Θ Notation, Asymptotic Analysis, Properties of Notations,	07	Introduction to Algorithm, Thomas H Cormen, PHI	power point,google meet
	Commonly used Logarithms and Summations, Performance characteristics of algorithms, Master Theorem for Divide and Conquer, Divide and Conquer Master Theorem: Problems & Solutions, Master Theorem for Subtract and Conquer Recurrences, Method of Guessing and Confirming	08	Introduction to Algorithm,	power point,google meet

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			Thomas H Cormen, PHI	
USCS401 **Fundamentals of Algorithms** UNIT-2	Tree algorithms: What is a Tree? Glossary, Binary Trees, Types of Binary Trees, Properties of Binary Trees, Binary Tree Traversals, Generic Trees (N-ary Trees), Threaded Binary Tree Traversals, Expression Trees, Binary Search Trees (BSTs), Balanced Binary Search Trees, AVL (Adelson-Velskii and Landis) Trees	06	Introduction to Algorithm, Thomas H Cormen, PHI	power point,google meet
	Graph Algorithms: Introduction, Glossary, Applications of Graphs, Graph Representation, Graph Traversals, Topological Sort, Shortest Path Algorithms, Minimal Spanning Tree Selection Algorithms: What are Selection Algorithms? Selection by Sorting, Partition-based Selection Algorithm, Linear Selection Algorithm - Median of Medians Algorithm, Finding the K Smallest Elements in Sorted Order	09	Introduction to Algorithm, Thomas H Cormen, PHI	power point,google meet
USCS401 **Fundamentals of Algorithms** UNIT-3	Algorithms Design Techniques: Introduction, Classification, Classification by Implementation Method, Classification by Design Method Greedy Algorithms: Introduction, Greedy Strategy, Elements of Greedy Algorithms, Advantages and Disadvantages of Greedy Method, Greedy Applications, Understanding Greedy Technique Divide and Conquer Algorithms: Introduction, What is Divide and Conquer Strategy? Divide and Conquer Visualization, Understanding Divide and Conquer, Advantages of Divide and Conquer, Disadvantages of Divide and Conquer, Master Theorem, Divide and Conquer Applications	07	Introduction to Algorithm, Thomas H Cormen, PHI	power point,google meet

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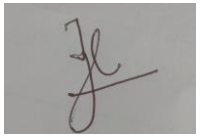
	Dynamic Programming: Introduction, What is Dynamic Programming Strategy? Properties of Dynamic Programming Strategy, Problems which can be solved using Dynamic Programming, Dynamic Programming Approaches, Examples of Dynamic Programming Algorithms, Understanding Dynamic Programming, Longest Common Subsequence	09	Introduction to Algorithm, Thomas H Cormen, PHI	power point,google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.C.S**

CLASS: **SYCS** SEMESTER: **IV** MONTH: **Nov-March** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVES:
The learners will be able to :

- Understand the requirements of Mobile programming environment.
- Learn about basic methods, tools and techniques for developing Apps
- Explore and practice App development on Android Platform
- Develop working prototypes of working systems for various uses in daily lives.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
VII,1, Skill Enhancement: Android Developer Fundamentals	What is Android? Obtaining the required tools, creating first android app, understanding the components of screen, adapting display orientation, action bar, Activities and Intents	3	"Beginning Android 4 Application Development", Wei-Meng Lee, March 2012, WROX	Meet, PPT
	Activity Lifecycle and Saving State, Basic Views: TextView, Button, ImageButton, EditText, CheckBox, ToggleButton, RadioButton, and RadioGroup Views,	3	https://developers.google.com /training/courses/android-fundamentals	Meet, PPT
	ProgressBar View, AutoCompleteTextView, TimePicker View, DatePicker View, ListView View, Spinner View	3	https://developers.google.com /training/courses/android-fundamentals	Meet, PPT
VII,2, Skill Enhancement: Android Developer	User Input Controls, Menus, Screen Navigation, RecyclerView, Drawables, Themes and Styles, Material design	3	https://developers.google.com /training/courses/android-fundamentals	Meet, PPT
	Providing resources for adaptive layouts, AsyncTask and AsyncTaskLoader,	3	https://developers.google.com /training/courses/android-	Meet, PPT

Fundamentals			fundamentals	
	Connecting to the Internet, Broadcast receivers, Services, Notifications, Alarm managers, Transferring data efficiently	3	https://developers.google.com /training/courses/android-fundamentals	Meet, PPT
VII,3, Skill Enhancement: Android Developer Fundamentals	Data - saving, retrieving, and loading: Overview to storing data, Shared preferences, SQLite primer	3	https://developers.google.com /training/courses/android-fundamentals	Meet, PPT
	store data using SQLite database, ContentProviders, loaders to load and display data,	3	https://developers.google.com /training/courses/android-fundamentals	Meet, PPT
	Permissions, performance and security, Firebase and AdMob, Publish your app	3	https://developers.google.com /training/courses/android-fundamentals	Meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

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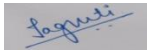

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande

DEPARTMENT: Computer Science

CLASS: S.Y.C.S.

SEMESTER: IV

MONTH: Dec - March

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

Learner will able to understand the concept of networking.
Useful to proceed with industrial requirement and international vendor certification

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS403 Computer Networks UNIT - 1	Introduction to data communication, Components, Data Representation, Data Flow, Networks, Network Criteria, Physical Structures, Network types, Local Area Network, Wide Area Network, Switching, The Internet, Accessing the Internet, standards and administration Internet Standards.	02	Data Communication and Networking , Behrouz Forouzan	PPT
	Network Models, Protocol layering, Scenarios, Principles of Protocol Layering, Logical Connections, TCP/IP Protocol Suite, Layered Architecture, Layers in the TCP/IP Protocol Suite, Encapsulation and Decapsulation, Addressing, Multiplexing and Demultiplexing. Detailed introduction to Physical Layer, Detailed	08		PPT

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	introduction to Data-Link Layer, Detailed introduction to Network Layer, Detailed introduction to Transport Layer, Detailed introduction to Application Layer.			
	Data and Signals, Analog and Digital Data, Analog and Digital Signals, Sine Wave Phase, Wavelength, Time and Frequency Domains, Composite Signals, Bandwidth, Digital Signal, Bit Rate, Bit Length, Transmission of Digital Signals, Transmission Impairments, Attenuation, Distortion, Noise, Data Rate Limits, Performance, Bandwidth, Throughput, Latency (Delay)	05		PPT
USCS403 Computer Networks UNIT - 2	Digital Transmission digital-to-digital conversion, Line Coding, Line Coding Schemes, analog-to-digital conversion, Pulse Code Modulation (PCM), Transmission Modes, Parallel Transmission, Serial Transmission. Analog Transmission, digital-to-analog Conversion, Aspects of Digital-to-Analog Conversion, Amplitude Shift Keying, Frequency Shift Keying, Phase Shift Keying, analog-to-analog Conversion, Amplitude Modulation (AM), Frequency Modulation (FM), Phase Modulation (PM), Multiplexing, Frequency-Division Multiplexing, Wavelength-Division Multiplexing, Time-Division Multiplexing. Transmission Media, Guided Media, Twisted-Pair Cable, Coaxial Cable, Fiber-Optic Cable. Switching, Three Methods of Switching , Circuit Switched Networks, Packet Switching,	09	Data Communication and Networking , Behrouz Forouzan	PPT
	Introduction to Data-Link Layer, Nodes and Links, Services, Two Sub-layers, Three Types of addresses, Address Resolution Protocol (ARP). Error Detection and Correction, introduction, Types of Errors, Redundancy, Detection versus Correction,	06		PPT

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USCS403 Computer Networks UNIT - 3	Media Access Control (MAC), random access, CSMA, CSMA/CD, CSMA/CA, controlled access, Reservation, Polling, Token Passing, channelization, FDMA, TDMA, CDMA.	02	Data Communication and Networking , Behrouz Forouzan	PPT
	Connecting Devices and Virtual LANs, connecting devices, Hubs, Link-Layer	02		
	Introduction to Network Layer, network layer services, Packetizing, Routing and Forwarding, Other Services, IPv4 addresses, Address Space, Classful Addressing.	03		
	Unicast Routing, General Idea, Least-Cost Routing, Routing Algorithms, Distance-Vector Routing, Link-State Routing, Path-Vector Routing, Introduction to Transport Layer, Transport-Layer Services, Connectionless and Connection-Oriented Protocols.	03		
	Transport-Layer Protocols, Service, Port Numbers, User Datagram Protocol, User Datagram, UDP Services, UDP Applications, Transmission Control Protocol, TCP Services, TCP Features, Segment.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYBSc(CS) SEMESTER: IV MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : To explore .NET technologies for designing and developing dynamic, interactive and responsive web applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper:USCS406 unit:1, Title: .Net Technologies	**The .NET Framework:**.NET Languages, Common Language Runtime, .NET Class Library	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	C# Language Basics: Comments, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods, Classes, Value Types and Reference Types, Namespaces and Assemblies, Inheritance, Static Members, Casting Objects, Partial Classes	3	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	ASP.NET: Creating Websites, Anatomy of a Web Form - Page Directive, Doctype, Writing Code - Code-Behind Class, Adding Event Handlers, Anatomy of an ASP.NET Application - ASP.NET File Types, ASP.NET Web Folders,	5	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.

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	HTML Server Controls - View State, HTML Control Classes, HTML Control Events, HtmlControl Base Class, HtmlContainerControl Class, HtmlInputControl Class, Page Class, global.asax File, web.config File	5	Beginning ASP.NET 4.5 in C#	
Paper:USCS406 unit:2, Title: .Net Technologies	**Web Controls:** Web Control Classes, WebControl Base Class, List Controls, Table Controls, Web Control Events and AutoPostBack, Page Life Cycle	3	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	State Management: ViewState, Cross-Page Posting, Query String, Cookies, Session State, Configuring Session State, Application State	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	Validation: Validation Controls, Server-Side Validation, Client-Side Validation, HTML5 Validation, Manual Validation, Validation with Regular Expressions	3	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	Rich Controls: Calendar Control, AdRotator Control, MultiView Control	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	Themes and Master Pages: How Themes Work, Applying a Simple Theme, Handling Theme Conflicts, Simple Master Page and Content Page, Connecting Master pages and Content Pages, Master Page with Multiple Content Regions, Master Pages and Relative Paths	3	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.

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	Website Navigation: Site Maps, URL Mapping and Routing, SiteMapPath Control, TreeView Control, Menu Control	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
Paper:USCS406 unit:3, Title: .Net Technologies	**ADO.NET:** Data Provider Model, Direct Data Access - Creating a Connection, Select Command, DataReader, Disconnected Data Access	3	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	Data Binding: Introduction, Single-Value Data Binding, Repeated-Value Data Binding, Data Source Controls – SqlDataSource	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	Data Controls: GridView, DetailsView, FormView	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	Working with XML: XML Classes – XMLTextWriter, XMLTextReader	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	Caching: When to Use Caching, Output Caching, Data Caching	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	LINQ: Understanding LINQ, LINQ Basics,	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.

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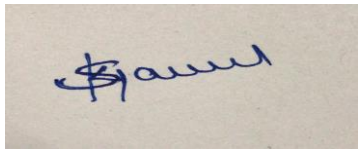
	ASP.NET AJAX: ScriptManager, Partial Refreshes, Progress Notification, Timed Refreshes	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 15



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Teaching plan sycs sem 4 2017-18

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: computer science

CLASS: S.Y.B.Sc.(CS)

SEMESTER: 4

MONTH: November to March

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to :

- Appreciate the relevance of linear algebra in the field of computer science.
- Understand the concepts through program implementation
- Instill a computational thinking while learning linear algebra.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS405 **Linear Algebra using python** **<u>Unit 1</u>**	Field: • Introduction to complex number,numbers in python,Abstracting over field • playing with GF(2),	4		Black board, chalk and duster
	Vector Space:	3		Black board, chalk and duster

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	• Vectors are functions, • Vector addition and scalar multiplication • Combining vector addition and scalar multiplication • Geometry of sets of vectors			
	• Dictionary based representation of vectors • Dot product	2		Black board, chalk and duster
	Linear system : • Homogeneous and non homogeneous equation • Solving triangular system of linear equations	3		Black board, chalk and duster
	• Linear combination and linear span	3		Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS405 **Linear Algebra using python** **<u>Unit 2</u>**	Matrix: • Matrices as vectors, transpose • Matrix -vector and vector-matrix multiplication in terms of linear combination • Matrix -vector and vector-matrix multiplication in terms of dot-product	3		Black board,chalk and duster
	• Null space, computing Sparse matrix, vector product	3		Black board,chalk and duster

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	● Linear function ● Inner product and outer product ● From function inverse to matrix inverse			
	Basis: ● Coordinate system,Two greedy algorithm for finding set of generators ● Minimum spanning forest and GF(2) ● Linear dependence and independence	3		Black board,chalk and duster
	Basis: ● Basis, unique representation,change of basis ● Computational problems involving finding a basis	3		Black board,chalk and duster
	Dimensions: ● Dimension and rank, ● Direct sum ● Dimension and linear function ● The annihilator	3		Black board,chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS405	Gaussian elimination: ● Row echelon form, Gaussian elimination over GF(2)	4		Black board, chalk and duster

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Linear Algebra using python **<u>Unit 3</u>**	• Solving matrix - vector equation using Gaussian distribution • Finding basis for null space • Factoring integers			
	Inner product: • The inner product for vectors over field • Orthogonality	2		Black board, chalk and duster
	Orthogonalisation: • Projection orthogonal to multiple vectors • Projecting orthogonal to mutually orthogonal vectors • Finding an orthogonal set of generators • Orthogonal complement	4		Black board, chalk and duster
	Eigen vectors: • Modeling discrete dynamic processes • Diagonalization of the Fibonacci matrix • Finding Eigen values and Eigen vectors • Coordinate representation in terms of Eigen vectors	3		Black board, chalk and duster
	• The internet worm • Markow chains • Modeling a web surfer-page rank	2		Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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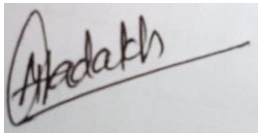

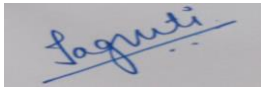

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: COMPUTER SCIENCE

CLASS: S.Y.B.Sc.CS_ SEMESTER: IV MONTH: FEBRUARY-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- Capable of team and organizational leadership in computing settings.
- Acquire Skill and knowledge to advance their career, including continually upgrading professional, communication, analytic, and technical skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Unit II	**System Design:** System/Software Design, Architectural Design, Low-Level Design Coupling and Cohesion,	2	A Concise Introduction to Software Engineering, Pankaj Jalote, Springer	Google Meet and PPT
	Functional-Oriented Versus The Object-Oriented Approach, Design Specifications, Verification for Design, Monitoring and Control for Design Software	3	Software Engineering, Ian Sommerville, Pearson Education	Google Meet and PPT
	Measurement and Metrics: Product Metrics – Measures, Metrics, and Indicators, Function-Based Metrics, Metrics for Object-Oriented Design, Operation-Oriented Metrics, User Interface Design Metrics, Metrics for Source Code, Halstead Metrics Applied to Testing, Metrics for Maintenance,	4	Software Engineering, Ian Sommerville, Pearson Education	Google Meet and PPT

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	Cyclomatic Complexity, Software Measurement - Size-Oriented, Function-Oriented Metrics, Metrics for Software Quality			
	Software Project Management: Estimation in Project Planning Process –Software Scope And Feasibility, Resource Estimation, Empirical Estimation Models – COCOMO II, Estimation for Agile Development, The Make/Buy Decision,	3	Software Engineering, Ian Sommerville, Pearson Education	Google Meet and PPT
	Project Scheduling - Basic Principles, Relationship Between People and Effort, Effort Distribution, Time-Line Charts	3	Software Engineering, Ian Sommerville, Pearson Education	Google Meet and PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **S.Y.B.Sc.(CS)**

SEMESTER: **IV** MONTH: **December - March** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able:1. Understand flow of software modeling process.

2. Understand software metrics, agile development and change management as a part of industrial requirements.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS404 Paper 4 **Software Engineering** **UNIT I**	**Introduction:** The Nature of Software, Software Engineering, The Software Process, Generic Process Model, The Waterfall Model, Incremental Process Models, Evolutionary Process Models, Concurrent Models	4	Software Engineering, A Practitioner's Approach, Roger S, Pressman. (2014) Software Engineering, Ian Sommerville, Pearson Education	Google Meet Microsoft PowerPoint Presentation
	Component-Based Development, The Unified Process Phases, Agile Development- Agility, Agile Process, Extreme Programming	4		
	Requirement Analysis and System Modeling: Requirements Engineering, Eliciting Requirements, SRS Validation, Components of SRS, Characteristics of SRS	3		
	Object-oriented design using the UML - Class diagram, Object diagram, Use case diagram, Sequence diagram, Collaboration diagram, State chart diagram, Activity diagram, Component diagram, Deployment diagram	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS404 Paper 4 **Software Engineering** **UNIT III**	**Risk Management** - Software Risks, Risk Identification, Risk Projection and Risk Refinement, RMMM Plan	4	Software Engineering, A Practitioner's Approach, Roger S, Pressman. (2014) Software Engineering, Ian Sommerville, Pearson Education	Google Meet Microsoft PowerPoint Presentation
	Software Quality Assurance: Elements of SQA, SQA Tasks, Goals, and Metrics, Formal Approaches to SQA, Six Sigma, Software Reliability, The ISO 9000 Quality Standards, Capability Maturity Model	4		
	Software Testing: Verification and Validation, Introduction to Testing, Testing Principles, Testing Objectives, Test Oracles,	3		
	Levels of Testing, White-Box Testing/Structural Testing, Functional/Black-Box Testing, Test Plan, Test-Case Design	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **T.Y.B.Sc. (CS)**

SEMESTER: **VI** MONTH: **December - March** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able:

- To get a clear understanding of AI and different search algorithms used for solving problems.
- To get acquainted with different learning algorithms and models used in machine learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS606 **Paper 4** **Data Science** **UNIT I**	**Introduction to Data Science:** What is Data? Different kinds of data	3	Doing Data Science, Rachel Schutt and Cathy O'Neil, O'Reilly,2013 Mastering Machine Learning with R, Cory Lesmeister, PACKT Publication,2015	Google Meet Microsoft PowerPoint Presentation R Tool
	Introduction to high level programming language + Integrated Development Environment (IDE)	4		
	Exploratory Data Analysis (EDA) + Data Visualization, Different types of data sources	4		
	Data Management: Data Collection, Data cleaning/extraction, Data analysis &Modeling	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS606 **Paper 4** **Data Science** **UNIT II**	**Data Curation:** Query languages and Operations to specify and transform data, Structured/schema based systems as users and acquirers of data	4	Doing Data Science, Rachel Schutt and Cathy O'Neil, O'Reilly,2013 Mastering Machine Learning with R, Cory Lesmeister, PACKT Publication,2015	Microsoft PowerPoint Presentation
	Semi-structured systems as users and acquirers of data, Unstructured systems in the acquisition and structuring of data,	3		
	Security and ethical considerations in relation to authenticating and authorizing access to data on remote systems,	4		
	Software development tools, Large scale data systems, Amazon Web Services (AWS)	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS606 **Paper 4** **Data Science** **UNIT III**	**Statistical Modelling and Machine Learning:** Introduction to model selection: Regularization, bias/variance tradeoff e.g. parsimony, AIC, BIC, Cross validation, Ridge regressions and penalized regression e.g. LASSO	5	Doing Data Science, Rachel Schutt and Cathy O'Neil, O'Reilly,2013 Mastering Machine Learning with R, Cory Lesmeister, PACKT Publication,2015	Microsoft PowerPoint Presentation R Tool
	Data transformations: Dimension reduction, Feature extraction, Smoothing and aggregating	2		
	Supervised Learning: Regression, linear models, Regression trees, Time-series Analysis, Forecasting, Classification: classification trees, Logistic regression, separating hyperplanes, k-NN	4		
	Unsupervised Learning: Principal Components Analysis (PCA), k-means clustering, Hierarchical clustering, Ensemble methods	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS: TYCS SEMESTER: V

MONTH: December to March ACADEMIC YEAR:2021-2022

LEARNING OBJECTIVE/S:

- To understand the ethics, legality, methodologies and techniques of hacking.

The learners will be able to:

- Learner will know to identify security vulnerabilities and weaknesses in the target applications.
- They will also know to test and exploit systems using various tools and understand the impact of hacking in real time machines.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Ethical Hacking Elective-II USCS506 Unit 1	**Information Security : Attacks and Vulnerabilities** **Introduction to information security :** Asset, Access Control, CIA, Authentication, Authorization, Risk, Threat, Vulnerability, Attack, Attack Surface, Malware, Security-Functionality-Ease of Use Triangle	4	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND Internet	Projector, Laptop, Black board& Chalk
	Types of malware : Worms, viruses, Trojans, Spyware, Rootkits	2	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND	Projector, Laptop, Black board& Chalk

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			Internet	
	Types of vulnerabilities : OWASP Top 10 : cross-site scripting (XSS), cross site request forgery (CSRF/XSRF), SQL injection, input parameter manipulation, broken authentication, sensitive information disclosure, XML External Entities, Broken access control, Security Misconfiguration, Using components with known vulnerabilities, Insufficient Logging and monitoring, OWASP Mobile Top 10, CVE Database	4	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND Internet	Projector, Laptop, Black board& Chalk
	Types of attacks and their common prevention mechanisms : Keystroke Logging, Denial of Service (DoS /DDoS), Waterhole attack, brute force, phishing and fake WAP, Eavesdropping, Man-in-the-middle, Session Hijacking, Clickjacking, Cookie Theft, URL Obfuscation, buffer overflow, DNS poisoning, ARP poisoning, Identity Theft, IoT Attacks, BOTs and BOTNETs	4	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND Internet	Projector, Laptop, Black board& Chalk
	Case-studies : Recent attacks – Yahoo, Adult Friend Finder, eBay, Equifax, WannaCry, Target Stores, Uber, JP Morgan Chase, Bad Rabbit	1	Internet	Projector, Laptop, Black board& Chalk
Ethical Hacking Elective-II USCS506 Unit 2	**Ethical Hacking – I (Introduction and pre-attack) Introduction:** Black Hat vs. Gray Hat vs. White Hat (Ethical) hacking, Why is Ethical hacking needed?, How is Ethical hacking different from security auditing and digital forensics?, Signing NDA, Compliance and Regulatory 15L concerns, Black box vs. White box vs. Black box, Vulnerability assessment and Penetration Testing.	5	CEH official Certified Ethical Hacking Review Guide, Wiley India Edition, 2007 AND Internet	Projector, Laptop, Black board& Chalk

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	Approach : Planning - Threat Modeling, set up security verification standards, Set up security testing plan – When, which systems/apps, understanding functionality, black/gray/white, authenticated vs. unauthenticated, internal vs. external PT, Information gathering, Perform Manual and automated (Tools: WebInspect/Qualys, Nessus, Proxies, Metasploit) VA and PT, How WebInspect/Qualys tools work: Crawling/Spidering, requests forging, pattern matching to known vulnerability database and Analyzing results, Preparing report, Fixing security gaps following the report	5	CEH official Certified Ethical Hacking Review Guide, Wiley India Edition, 2007 AND INTERNET	Projector, Laptop, Black board& Chalk
	Enterprise strategy : Repeated PT, approval by security testing team, Continuous Application Security Testing,	3	CEH official Certified Ethical Hacking Review Guide, Wiley India Edition, 2007 AND INTERNET	Projector, Laptop, Black board& Chalk
	Phases: Reconnaissance/foot-printing/Enumeration, Scanning, Sniffing	2	CEH official Certified Ethical Hacking Review Guide, Wiley India Edition, 2007 AND INTERNET	Projector, Laptop, Black board& Chalk
Ethical Hacking Elective-II	**Ethical Hacking :**Enterprise Security Phases : Gaining and Maintaining Access : Systems hacking – Windows and Linux – Metasploit and Kali Linux, Keylogging, Buffer Overflows, Privilege Escalation, Network hacking - ARP Poisoning, Password Cracking, WEP Vulnerabilities, MAC Spoofing, MAC Flooding, IPSpoofing, SYN Flooding, Smurf attack,	5	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	Projector, Laptop, Black board& Chalk
	Applications hacking : SMTP/Email-based attacks, VOIP vulnerabilities, Directory traversal, Input Manipulation, Brute force	5	Certified Ethical Hacker Study Guide v9, Sean-Philip	Projector, Laptop, Black board& Chalk

USCS506 Unit 3	attack, Unsecured login mechanisms, SQL injection, XSS, Mobile apps security,		Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	
	Malware analysis : Netcat Trojan, wrapping definition, reverse engineering	1	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	Projector, Laptop, Black board& Chalk
	Phases : Covering your tracks : Steganography, Event Logs alteration	1	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	Projector, Laptop, Black board& Chalk
	Additional Security Mechanisms : IDS/IPS, Honeypots and evasion techniques, Secure Code Reviews (Fortify tool, OWASP Secure Coding Guidelines)	3	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	Projector, Laptop, Black board& Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAYATREE KARNIK DEPARTMENT:IT SUBJECT:IR CLASS: TYCS SEM:VI

MONTH: November to March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to :

1. To provide a understanding of operating system, its structures and functioning
2. Develop and master understanding of algorithms used by operating systems for various purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
604 UNIT I	**Introduction to Information Retrieval:** Introduction, History of IR, Components of IR, and Issues related to IR, Boolean retrieval, Dictionaries and tolerant retrieval.	15	1) Introduction to Information Retrieval, C. Manning, P. Raghavan, and H. Schütze, Cambridge University Press, 2008 2) Modern Information Retrieval: The Concepts and Technology behind Search, Ricardo Baeza - Yates and Berthier Ribeiro – Neto, 2 nd Edition, ACM Press Books 2011.	Computer, Power point

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604 UNIT II	**Link Analysis and Specialized Search:** Link Analysis, hubs and authorities, Page Rank and HITS algorithms, Similarity, Hadoop & Map Reduce, Evaluation, Personalized search, Collaborative filtering and content-based recommendation of documents and products, handling "invisible" Web, Snippet generation, Summarization, Question and Answering, Cross-Lingual Retrieval	15	1) Introduction to Information Retrieval, C. Manning, P. Raghavan, and H. Schütze, Cambridge University Press, 2008 2) Modern Information Retrieval: The Concepts and Technology behind Search, Ricardo Baeza - Yates and Berthier Ribeiro – Neto, 2 nd Edition, ACM Press Books 2011.	Computer, Power point, Chalk and Black board
604 UNIT III	**Web Search Engine:** Web search overview, web structure, the user, paid placement, search engine optimization/spam, Web size measurement, search engine optimization/spam, Web Search Architectures. **XML retrieval:** Basic XML concepts, Challenges in XML retrieval, A vector space model for XML retrieval, Evaluation of XML retrieval, Text-centric versus data-centric XML retrieval.	15	1) Introduction to Information Retrieval, C. Manning, P. Raghavan, and H. Schütze, Cambridge University Press, 2008 2) Modern Information Retrieval: The Concepts and Technology behind Search, Ricardo Baeza - Yates and Berthier Ribeiro – Neto, 2 nd Edition, ACM Press Books 2011.	Computer, Power point, Chalk and Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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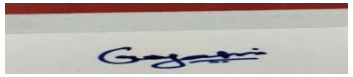

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande

DEPARTMENT: Computer Science

CLASS: T.Y.C.S.

SEMESTER: VI

MONTH: Dec - March

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

After completion of this course, learner should be able to list various applications of wireless sensor networks, describe the concepts, protocols, design, implementation and use of wireless sensor networks. Also implement and evaluate new ideas for solving wireless sensor network design issues.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS601 **Wireless Sensor Networks and Mobile Communication** UNIT : 01	**Introduction:** Introduction to Sensor Networks, unique constraints and challenges. Advantage of Sensor Networks, Applications of Sensor Networks, Mobile Adhoc NETworks (MANETs) and Wireless Sensor Networks, Enabling technologies for Wireless Sensor Networks.	07	Protocols and Architectures for Wireless Sensor Network, Holger Kerl, Andreas Willig, John Wiley and Sons, 2005	PPT
	Sensor Node Hardware and Network Architecture: Single-node architecture, Hardware components & design constraints, Operating systems and execution environments, introduction to TinyOS and nesC. Network architecture, Optimization goals and figures of merit, Design principles for WSNs, Service interfaces of WSNs, Gateway concepts.	08		PPT

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USCS601 **Wireless Sensor Networks and Mobile Communication** UNIT : 02	**Medium Access Control Protocols:** Fundamentals of MAC Protocols, MAC Protocols for WSNs, Sensor-MAC Case Study.	05	Wireless Sensor Networks Technology, Protocols, and Applications ,Kazem Sohraby, Daniel Minoli and TaiebZnati, John Wiley & Sons, 2007	PPT
	Routing Protocols : Data Dissemination and Gathering, Routing Challenges and Design Issues in Wireless Sensor Networks, Routing Strategies in Wireless Sensor Networks.	05		PPT
	Transport Control Protocols : Traditional Transport Control Protocols, Transport Protocol Design Issues, Examples of Existing Transport Control Protocols, Performance of Transport Control Protocols.	05		PPT
USCS601 **Wireless Sensor Networks and Mobile Communication** UNIT : 03	**Introduction, Wireless Transmission and Medium Access Control:** Applications, A short history of wireless communication.	02	Mobile communications, Jochen Schiller,2nd Edition, Addison wisely , Pearson Education,2012	PPT
	Wireless Transmission: Frequency for radio transmission, Signals, Antennas, Signal propagation, Multiplexing, Modulation, Spread spectrum, Cellular systems.	05		PPT
	Telecommunication, Satellite and Broadcast Systems: GSM: Mobile services, System architecture, Radio interface, Protocols, Localization And Calling, Handover, security, New data services; DECT: System architecture, Protocol architecture; ETRA, UMTS and IMT- 2000. Satellite Systems: History, Applications, Basics: GEO, LEO, MEO; Routing, Localization, Handover.	08		PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **M.Sc. (CS)**

SEMESTER: **I** MONTH: **September - December** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able:

- To cover advanced topics of databases to become more proficient.
- To provide students with theoretical knowledge and practical skills in advanced topics in database systems, big data and modern data-intensive systems.
- To expand students, view and introduce advanced topics and Business Intelligence.

PAPER, UNIT,	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT

Late Shri. Vishnu Waman Thakur Charitable Trust
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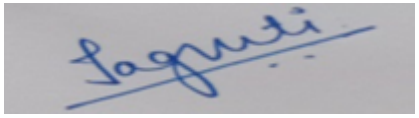
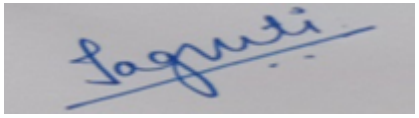
TITLE		ALLOTED		TOOLS USED
PSCS104 **Paper IV** **Advanced Database Techniques** **UNIT II**	**Unit II: Cooperative Transaction Model** Parallel and Distributed Databases: Architecture of parallel databases, Parallel query evaluation, Parallelizing individual operations, Sorting Joins Distributed Databases: Concepts, Data fragmentation, Replication and allocation techniques for distributed database design, Query processing, Concurrency control and recovery in distributed databases, Architecture and Design: Centralised versus non centralized Databases, Homogeneous and Heterogeneous DDBMS, Functions and Architecture, Distributed database design, query processing in DDBMS, Distributed concurrency management, deadlock management, Distributed Commit Protocols: 2 PC and 3 PC, Concepts of replication servers. Mobile Database: Overview, Features, Advantages and Disadvantages, Mobile databases in Android System	15	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Google Meet Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: CS

CLASS:M.Sc(CS) Part-2 SEMESTER: SEM-3 MONTH: SEP-DEC ACADEMIC YEAR: 2021-22

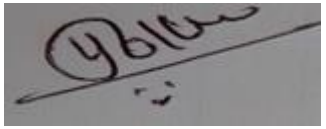
LEARNING OBJECTIVE/S:

- Design and develop location based messaging app
- Design and develop chat messaging app which is a location-based
- Design and develop app demonstrating Simple Downstream Messaging
- Design and develop app demonstrating Send Upstream Messages
- Implementing GCM Network Manager
- Demonstrate use of OpenGTS (Open Source GPS Tracking System)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS301 Ubiquitous Computing UNIT 1	**Basics of Ubiquitous Computing :**Examples of Ubiquitous Computing Applications, Holistic Framework for UbiCom: Smart DEI, Modeling the Key Ubiquitous Computing Properties, Ubiquitous System Environment Interaction, Architectural Design for UbiCom Systems: Smart DEI Model, Smart Devices and Services, Service Architecture Models, Service Provision Life Cycle.	15	Ubiquitous Computing Smart Devices, Environments and Interactions, Stefan Poslad, Wiley, 2009.	Laptop,PPT

PSCS301 Ubiquitous Computing UNIT 2	**Smart Environments Tagging, Sensing and Controlling**, Tagging the Physical World, Sensors and Sensor Networks, Micro Actuation and Sensing: MEMS, Embedded Systems and Real Time Systems, Control Systems.	15	Ubiquitous Computing Smart Devices, Environments and Interactions, Stefan Poslad, Wiley, 2009.	Laptop,PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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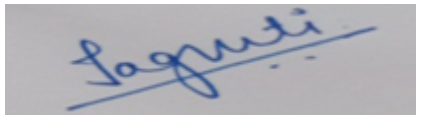

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

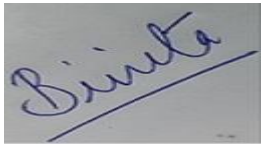
CLASS: M. Sc. C.S SEMESTER: I MONTH: September-December ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

a. Analyse and implement theories and practical related to Network management and Virtualization.
b. Apply knowledge of Software Defined Networking as per industry standards.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Software Defined Networking Unit -IV	Understand and implement Layer 2/3 switching techniques (VLAN/TRUNKING/ Managing Spanning Tree), Implementation of OSPF V2 and V3, Implementation BGP	5	Behrouz A Forouzan ―TCPIP Protocol Suite‖ Fourth Edition 2010	PowerPoint presentation through Google Meet
	Implementation Multicast Routing, Implementation of MPLS, Implementation of Traffic Filtering by using Standard and Extended Access Control List	5		PowerPoint presentation through Google Meet
	Implementation of Routing redistribution, Implementation of Policy Based Routing/ Load Balancing /QOS/Natting /VRF	5		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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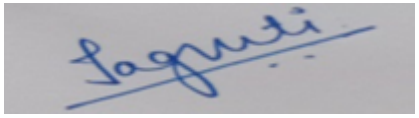

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.CS

SEMESTER: III MONTH: SEPTEMBER TO DECEMBER ACADEMIC YEAR: 2021-22

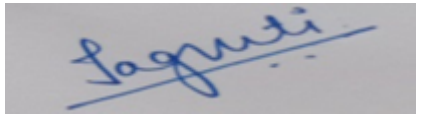
LEARNING OBJECTIVE/S:
The learners will be able to:

- Able to understand the application areas of Ubiquitous Computing ·
- Able to realize the revolution of Internet in Mobile Devices, Cloud & Sensor Networks ·
- Able to understand building blocks of Ubiquitous computing and characteristics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS301 Ubiquitous Computing **UNIT 2**	Smart Mobiles, Cards and Device Networks Smart Mobile Devices, Users Resources and Code Operating Systems for Mobile Computers and Communicator Devices Smart Card Devices Device Networks. Human–Computer Interaction (HCI): Explicit HCI, Implicit HCI User Interfaces and Interaction for Devices Hidden UI Via Basic Smart Devices, Hidden UI Via Wearable Implanted Devices, Human Centered Design (HCD)	10	Ubiquitous Computing Smart Devices, Environments and Interactions, Stefan Poslad, Wiley, 2009.	Powerpoint

PSCS301, Ubiquitous Computing **UNIT 4**	Ubiquitous Communication Audio Networks, Data Networks, Wireless Data Networks, Universal and Transparent Audio, Video and Alphanumeric Data Network Access, Ubiquitous Networks, Network Design Issues.	10	Ubiquitous Computing Smart Devices, Environments and Interactions, Stefan Poslad, Wiley, 2009	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: COMPUTER SCIENCE CLASS: MSc.Cs(Part I)

SEMESTER: I MONTH: SEPTEMBER-DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVES:

- Learners will be able to explore XML, and Mobile databases.
- Learners will be able to deal with methods used for dealing with spatial and Temporal Databases.
- Learner will have a solid grasp on business intelligence tools and XML.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS401 Unit 1, **Advanced Database Techniques**	**Enhanced Database Models** Object–Oriented Databases: Need of Object-oriented databases, Complex Data Types, Structured Types and Inheritance, Object-Identity and Reference, ODL and OQL, Implementing O-R Features, Persistent Programming Languages, Object-Oriented versus Object-Relational, Example of Object oriented and object relational database implementation, comparison of RDBMS, OODBMS, ORDBMS XML Databases: Structured Semi structure and unstructured data, XML hierarchical tree data model, Documents DTD and XML schema, XML Documents & Database, XML query and transformation, Storage of XML data, Xpath. XQuery, Join and Nesting Queries, XML database applications	07	Database Management Systems by Raghu Ramakrishnan and Johannes Gehrke, McGraw Hill, 3rd Edition, 2014	Power Point Presentation
	Spatial Databases: Types of spatial data, Geographical Information Systems (GIS), Conceptual Data Models for spatial databases, Logical data models for spatial databases: Raster and vector model. Physical data models for spatial databases: Clustering methods (space filling curves), Storage methods (R-tree). Query processing. Temporal Databases: Time ontology,	08	Database Management Systems by Raghu Ramakrishnan and Johannes	Power Point Presentation

	structure, and granularity, Temporal data models, Temporal relational algebra.		Gehrke, McGraw Hill, 3rd Edition, 2014	
PSCS401 Unit 3, **Advanced Database Techniques**	**Learning the NoSQL Basics** Introduction to NoSQL: Characteristics of NoSQL, NoSQL Storage types, Advantages and Drawbacks, NoSQL Products Interfacing and interacting with NoSQL: Storing Data In and Accessing Data from MongoDB, Redis, HBase and Apache Cassandra, Language Bindings for NoSQL Data Stores	07	Getting Started with NoSQL, Gaurav Vaish, Packt Publishing Ltd, 2013	Power Point Presentation
	Understanding the storage architecture: Working with Column-Oriented Databases, HBase Distributed Storage Architecture, Document Store Internals, Understanding Key/Value Stores in Memcached and Redis, Eventually Consistent Non-relational Databases Performing CRUD operations: Creating Records, Accessing Data, Updating and Deleting Data	08	Getting Started with NoSQL, Gaurav Vaish, Packt Publishing Ltd, 2013	Power Point Presentation
PSCS401 Unit 4, **Advanced Database Techniques**	**Gaining Proficiency With NoSQL** Querying NoSQL Stores: Similarities Between SQL and MongoDB Query Features, Accessing Data from Column-Oriented Databases Like HBase, Querying Redis Data Stores Indexing And Ordering Data Sets: Essential Concepts Behind a Database Index, Indexing and Ordering in MongoDB, ouchDB and Apache Cassandra	07	Getting Started with NoSQL, Gaurav Vaish, Packt Publishing Ltd, 2013	Power Point Presentation
	Managing Transactions And Data Integrity: RDBMS and ACID, Distributed ACID Systems, Upholding CAP, Consistency Implementations Using NoSQL in The Cloud: Google App Engine Data Store, Amazon SimpleDB	08	Getting Started with NoSQL, Gaurav Vaish, Packt Publishing Ltd, 2013	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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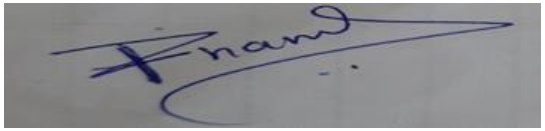

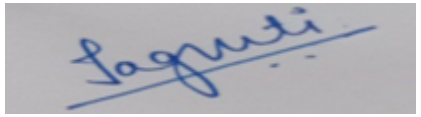

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **M.Sc. (CS)**

SEMESTER: **III** MONTH: **September - December** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able:

- Understand the key issues in big data management and its associated applications in intelligent business and scientific computing.
- Achieve adequate perspectives of big data analytics in various applications like recommender systems, social media applications.
- Explain data mining, neural networks, text analytics, text mining, sentiment analysis, web mining, web analytics, social analytics, social network analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS3033 **Paper IV** **Business Intelligence and Big Data Analytics –II (Mining Massive Data sets)** **UNIT III**	**Unit III: SHINGLING OF DOCUMENTS** Finding Similar Items, Applications of Near-Neighbor Search, Jaccard similarity of sets, Similarity of documents, Collaborative filtering as a similar-sets problem, Documents, k-Shingles, Choosing the Shingle Size, Hashing Shingles, Shingles built from Words. Similarity-Preserving Summaries of Sets, Locality-Sensitive hashing for documents. The Theory of Locality-Sensitive functions. Methods for high degrees of similarity.	15	Mining of Massive Datasets, Anand Rajaraman and Jeffrey David Ullman, Cambridge University Press, 2012.	Google Meet Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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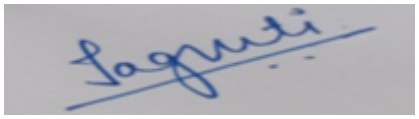
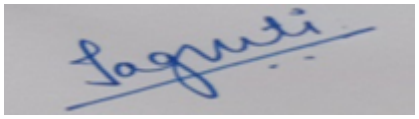
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS3033 **Paper IV** **Business Intelligence and Big Data Analytics –II (Mining Massive Data sets)** **UNIT III**	**Unit IV: MINING DATA STREAMS** Introduction to streams concepts – Stream data model and architecture, Stream computing, Sampling data in a stream, Filtering streams, Counting distinct elements in a stream, Estimating moments, Counting oneness in a Window, Decaying window, Real time analytics Platform(RTAP).	15	Mining of Massive Datasets, Anand Rajaraman and Jeffrey David Ullman, Cambridge University Press, 2012.	Google Meet Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr(.Mrs.)Sampada Deshmukh DEPARTMENT: CS

CLASS: M. Sc. SEMESTER: I MONTH: September- December ACADEMIC YEAR: 2022-2023

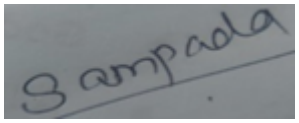
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Understand the concept of implementing optimization techniques to the existing algorithm.

b.To work in areas of Machine Learning and Data Science Algorithm.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I PSCS101 Algorithm for Optimization Unit -II	First-Order Methods, Gradient Descent, Conjugate Gradient,	5	Algorithms for Optimization Mykel J. Kochenderfer, Tim A. Wheeler, The MIT Press 2019.	Powerpoint presentation through Google meet
	Adagrad, RMSProp, Adadelta, Adam, Hypergradient Descent.	5		Powerpoint presentation through Google meet
	Second-Order Methods, Newton's Method, Secant Method, QuasiNewton Methods.	5		Powerpoint presentation through Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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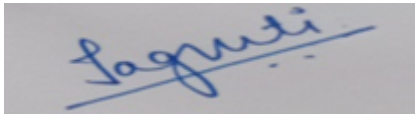

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TEACHING PLAN (UNIT PLAN)

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs).Sampada Deshmukh DEPARTMENT:Computer Science

CLASS:M.Sc.(C.S) SEMESTER: III MONTH: August- December ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- Learn basics of computer forensics fundamental, collection of evidences.
- Study different computer forensics methods and tools.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Cyber and Information Security Unit 1	**Computer Forensic Fundamentals:** Introduction to Computer Forensics and objective, the Computer Forensics Specialist, Use of Computer Forensic in Law Enforcement, Users of Computer Forensic Evidence, Case Studies, InformationSecurity Investigations. Types of Computer Forensics Technology: Types of Military Computer Forensic Technology	5	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using Google Meet
	Types of Law Enforcement Computer Forensic Technology, Types of Business Computer Forensic Technology, Specialized Forensics Techniques, Hidden Data, Spyware and Adware, Encryption Methods andVulnerabilities, Protecting Data from Being Compromised	5	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using Google Meet
	Internet Tracing Methods,Security and Wireless Technologies. Types of Computer Forensics Systems:	5	Computer Forensics Computer Crime Scene	Power Point Presentation using Google Meet

	Studydifferent Security System: Internet, Intrusion Detection, Firewall, Storage Area, Network Disaster Recovery, Public Key Infrastructure, Wireless Network, Satellite Encryption,Instant Messaging (IM), Net Privacy, Identity Management, Biometric, Identity Theft.		Investigation, John R. Vacca, Second Edition, 2005.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.) Sampada Deshmukh DEPARTMENT:Computer Science

CLASS:M.Sc. SEMESTER:III MONTH: August-December ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- Learn different data recovery method.
- Learn security techniques for forensic purpose.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Cyber and Information Security Unit 2	**Data Recovery:** Data Recovery and Backup, Role of Data Recovery, Hiding and Recovering Hidden Data. Evidence Collection: Need to Collect the Evidence, Types of Evidences, The Rules of Evidence, Collection Steps. Computer Image Verification and Authentication	6	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using Google Meet

	Special Needs of Evidence Authentication. Identification of Data: Timekeeping, Forensic Identification and Analysis of Technical Surveillance Devices,	5	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using Google Meet
	Reconstructing Past Events: How to Become a Digital Detective, Useable File Formats, Unusable File Formats, Converting Files.	4	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using Google Meet

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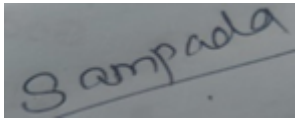

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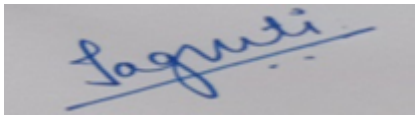

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **MSCCS** SEMESTER:I

MONTH: **SEPT-DEC** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:

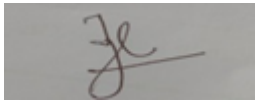
- You will be able to effectively implement optimization techniques to the Existing algorithm to improve its performance.
- You will be able to work in the areas of Machine Learning and Data Sciences Algorithms

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS101Algorithm for Optimization **Unit I: Introduction to Optimization Process**	Basic Optimization Problem, Constraints, Critical Points, Conditions for Local Minima, Contour Plots. Unimodality, Fibonacci Search, Golden Section Search, Quadratic Fit Search.	15	Algorithms for Optimization Mykel J. Kochenderfer, Tim A. Wheeler, The MIT Press 2019. Introduction to Algorithms, By Thomas H.	power point

			Cormen, Charles E. Leiserson, Ronald L. Rivest and Clifford Stein 3Ed. (International Edition) (MIT Press) 2009	
PSCS101Algorithm for Optimization **Unit III: Sampling and Surrogate Models**	Sampling Plans, Full Factorial, Random Sampling, Uniform Projection Plans, Stratified Sampling, Space-Filling Metrics. Surrogate Models, Fitting Surrogate Models, Linear Models, Basis Functions, Fitting Noisy Objective Functions, Model Selection, Probabilistic Surrogate Models, Gaussian Distribution, Gaussian Processes, Prediction	15	Algorithms for Optimization Mykel J. Kochenderfer, Tim A. Wheeler, The MIT Press 2019. Introduction to Algorithms, By Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest and Clifford Stein 3Ed. (International Edition) (MIT Press) 2009	power point
	Optimization under Uncertainty, Uncertainty, Set-Based Uncertainty, Probabilistic Uncertainty. Uncertainty Propagation, Sampling	15	Algorithms for Optimization Mykel J. Kochenderfer,	power point

PSCS101Algorithm for Optimization **Unit IV: Optimization and Uncertainty**	Methods, Taylor Approximation, Polynomial Chaos, Bayesian Monte Carlo. Dynamic Programming, Ant Colony Optimization. Expression Optimization, Grammars, Genetic Programming, Grammatical Evolution, Probabilistic Grammars, Probabilistic Prototype Trees		Tim A. Wheeler, The MIT Press 2019. Introduction to Algorithms, By Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest and Clifford Stein 3Ed. (International Edition) (MIT Press) 2009	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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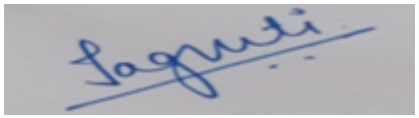

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MRS. ARCHANA SANTOSH RAUT** _____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**MSC(CS)**_____ SEMESTER: ____**I**_____ MONTH: ____**SEPT-DEC**__ ACADEMIC YEAR: _____**2021-2022**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

Understand the concept of Image Processing, its elements and application.

To make understand the concept of image enhancement techniques, filtering, colour processing, compression techniques, segmentation, morphology, representation and description of image and image recognition.

To make understand what is image, how it is created and how it is used in varieties of processing.

To study subjective improvisation of image in applications to reduce the noise.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS103 Applied Signal and Image Processing	Definition, Application of Image Processing, Image Processing Pipeline, Tools and Libraries for Image Processing, Image types and files formats.	03	Digital Image Processing Gonzalez and Woods 4TH Edition 2018 Understanding Digital Image Processing, Vipin Tyagi, CRC Press, 2018	Desktop and Laptop, Digital Cameras, Microphone, Mobile, Powerpoint Presentations
	Intensity Transformations- Log Transform, Power-law Transform, Contrast Stretching, Thresholding	03	Digital Image Processing Gonzalez and Woods 4TH Edition	Desktop and Laptop, Digital Cameras, Microphone, Mobile, Powerpoint Presentations

Unit II Image Processing fundamentals and Pixel-Transformation			2018 Understanding Digital Image Processing, Vipin Tyagi, CRC Press, 2018	
	Histogram Processing- Histogram Equalization and Histogram Matching;	03	Digital Image Processing Gonzalez and Woods 4TH Edition 2018 Understanding Digital Image Processing, Vipin Tyagi, CRC Press, 2018	Desktop and Laptop, Digital Cameras, Microphone, Mobile, Powerpoint Presentations
	Linear and Non-linear smoothing of Images, Sharpening of images	03	Digital Image Processing Gonzalez and Woods 4TH Edition 2018 Understanding Digital Image Processing, Vipin Tyagi, CRC Press, 2018	Desktop and Laptop, Digital Cameras, Microphone, Mobile, Powerpoint Presentations
	Image Derivative: Derivatives and gradients, Laplacian, the effect of noise on gradient computation	03	Digital Image Processing Gonzalez and Woods 4TH Edition 2018 Understanding Digital Image Processing, Vipin Tyagi, CRC Press, 2018	Desktop and Laptop, Digital Cameras, Microphone, Mobile, Powerpoint Presentations
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15			

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. C.S. SEMESTER: I MONTH: September - December ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

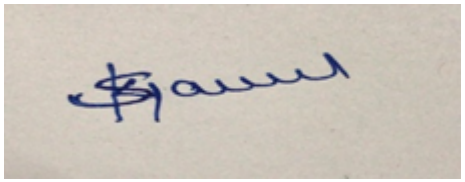
Learners will be able to understand basic concepts of Software Defined Networking and network virtualization.
Learners will be able to explore OpenFlow specifications to build Software defined networks.
Learners will be able to analyse and implement theories and practical related to Network management and Virtualization. Learners will be able to apply knowledge of Software Defined Networking as per industry standards.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 PSCS102 Software Defined Networking Unit 1	Basic Concepts and Definitions: LAN, MAN, WAN, AD-Hoc, Wireless Network, Understanding the layered architecture of OSI/RM and TCP-IP Model, Concepts and implementation of IPV4 and IPV6, Study of various network Routing protocols, Introduction to Transport layer and Application layer protocols.	15 L	Behrouz A Forouzan ―TCPIP Protocol Suite‖ Fourth Edition 2010 William Stallings, ―Foundations of Modern Networking‖, Pearson Ltd.,2016	Power point presentation through google meet

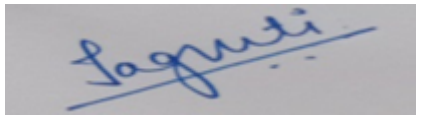
Paper 2 PSCS102 Software Defined Networking Unit 2	Elements of Modern Networking, Requirements and Technology, SDN: Background and Motivation, SDN Data Plane and OpenFlow, SDN Control Plane, SDN Application Plane	15 L	Software Defined Networks: A Comprehensive Approach by Paul Goransson and Chuck Black, Morgan Kaufmann Publications, 2014 SDN - Software Defined Networks by Thomas D. Nadeau & Ken Gray, O'Reilly, 2013	Power point presentation through google meet
Paper 2 PSCS102 Software Defined Networking Unit 3	Concepts and Architecture, NFV Functionality, Network Virtualization Quality of Service, MODERN NETWORK ARCHITECTURE: CLOUDS AND FOG, Cloud Computing, The Internet of Things: Components	15 L	Software Defined Networks: A Comprehensive Approach by Paul Goransson and Chuck Black, Morgan Kaufmann Publications, 2014	Power point presentation through google meet

			SDN - Software Defined Networks by Thomas D. Nadeau & Ken Gray, O'Reilly, 2013	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:



SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil Applied Signal and Image Processing DEPARTMENT: Computer Science

CLASS: M.Sc. SEMESTER: **I** MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Introduce the concepts of signal processing terms and relate them to image processing**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS103 Applied Signal and Image Processing Unit-1	Fundamentals of Digital Signals Processing Periodic signals, Spectral decomposition, Signals, Reading and writing Waves, Spectrums, Wave objects, Signal objects Noise: Uncorrelated noise, Integrated spectrum, Brownian noise, Pink Noise, Gaussian noise; Autocorrelation: Correlation, Serial correlation, Autocorrelation, Autocorrelation of periodic signals, Correlation as a dot product Frequency domain Operations: Representing Image as Signals, Sampling and Fourier Transforms, Discrete Fourier Transform, Convolution and Frequency Domain Filtering, Smoothing using low-pass filters, Sharpening using high-pass filters. Fast Fourier Transforms.	**15**	**1. Digital Image Processing 2. Think DSP: Digital Signal Processing in Python**	**Google Meet PPT**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil Applied Signal and Image Processing DEPARTMENT: Computer Science

CLASS: M.Sc. SEMESTER: **I** MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Introduce the concepts of signal processing terms and relate them to image processing**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS103 Applied Signal and Image Processing Unit-1	Fundamentals of Digital Signals Processing Periodic signals, Spectral decomposition, Signals, Reading and writing Waves, Spectrums, Wave objects, Signal objects Noise: Uncorrelated noise, Integrated spectrum, Brownian noise, Pink Noise, Gaussian noise; Autocorrelation: Correlation, Serial correlation, Autocorrelation, Autocorrelation of periodic signals, Correlation as a dot product Frequency domain Operations: Representing Image as Signals, Sampling and Fourier Transforms, Discrete Fourier Transform, Convolution and Frequency Domain Filtering, Smoothing using low-pass filters, Sharpening using high-pass filters. Fast Fourier Transforms.	**15**	**1. Digital Image Processing 2. Think DSP: Digital Signal Processing in Python**	**Google Meet PPT**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. **Social Network Analysis** DEPARTMENT: Computer Science.

CLASS: M.Sc. CS SEMESTER: III MONTH: September To December ACADEMIC YEAR: 2021-2022

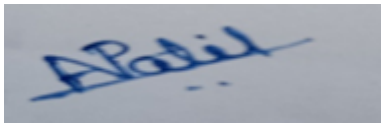
LEARNING OBJECTIVE/S:

- To understand social network and analyze the communication and predict the relationship between those actors.
- To understand Graph theory and network centrality and page rank for accessing webpages.
- To understand network structures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS302 Social Network Analysis Unit-1	**Introduction to social network analysis (SNA)** Introduction to networks and relations- analyzing relationships to understand people and groups, binary and valued relationships, symmetric and asymmetric relationships, multimode relationships, Using graph theory for social networks analysis- adjacency matrices, edge-lists, adjacency lists, graph traversals and distances, depth-first traversal, breadth-first traversal paths and walks, Dijkstra's algorithm, graph distance and graph diameter, social networks vs. link analysis, ego-centric and socio-centric density.	12	1. Social Network Analysis for Startups- Finding connections on the social web 2. Social Network Analysis- 3rd edition	Blackboard Projector, PPT.
PSCS302 Social Network Analysis	**Networks, Centrality and centralization in SNA** Understanding networks- density, reachability, connectivity, reciprocity, group-external and group-internal ties in networks, ego networks, extracting and	12	1. Social Network Analysis for Startups- Finding connections on the social web	Blackboard Projector,

Unit-2	visualizing ego networks, structural holes, Centrality- degree of centrality, closeness and betweenness centrality, local and global centrality, centralization and graph centers, notion of importance within network, Google pagerank algorithm, Analyzing network structure- bottom-up approaches using cliques, N-cliques, N-clans, K-plexes, K-cores, F-groups and top-down.		2. Social Network Analysis- 3rd edition	PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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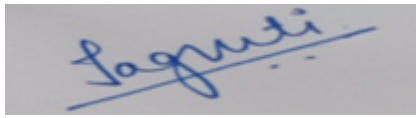

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)** DEPARTMENT: **INFORMATION TECHNOLOGY**

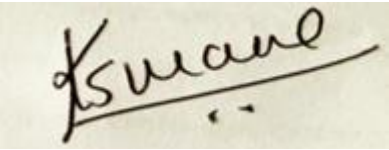
CLASS: ____**MSC (CS)** ___ SEMESTER: ____**I**_____ MONTH: **SEPTEMBER-DECEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Review the fundamental concepts of a digital image processing system.**
- **Analyze images in the frequency domain using various transforms.**
- **Interpret image segmentation and representation techniques.**
- **Understand the relevant aspects of digital image representation and their practical implications.**
- **Have the ability to design pointwise intensity transformations to meet stated specifications and understand 2-D convolution, the 2-D DFT, and have the ability to design systems using these concepts.**
- **Knowledge of Perform frequency domain operations on images.**
- **Ability to apply image segmentation and extract image features.**
- **Apply image processing algorithms in practical applications.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS103 Applied Signal and Image Processing	**Structural and Morphological Operations:** Edge Detection: Sobel, Canny Prewitt, Robert edge detection techniques, LoG and DoG filters, Image Pyramids: Gaussian Pyramid, Laplacian Pyramid Morphological Image Processing: Erosion, Dilation, Opening and closing, Hit-or-Miss Transformation, Skeletonizing, Computing	07 08	Digital Image Processing by Rafael Gonzalez & Richard Woods, Pearson; 4th edition, 2018	Online Google Meet. PPTs.

Unit No -03	the 15L 15 convex hull, removing small objects, White and black top-hats, Extracting the boundary, Grayscale operations			
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15			
PSCS103 Applied Signal and Image Processing **Unit No -04**	**Advanced Image Processing Operations** Extracting Image Features and Descriptors: Feature detector versus descriptors, Boundary Processing and feature descriptor, Principal Components, Harris Corner Detector, Blob detector, Histogram of Oriented Gradients, Scale-invariant feature transforms, Haar-like features Image Segmentation: Hough Transform for detecting lines and circles, Thresholding and Otsu's segmentation, Edge-based/regionbased segmentation Region growing, Region splitting and Merging, Watershed algorithm, Active Contours, morphological snakes, and GrabCut algorithms	07 04 04	Digital Image Processing by Rafael Gonzalez & Richard Woods, Pearson; 4th edition, 2018	Online Google Meet. PPTs.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15			



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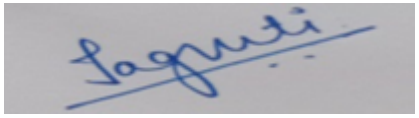

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.CS

SEMESTER: IV MONTH: Feb to April ACADEMIC YEAR: 2021-22

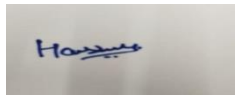
LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand basics of Cryptography and Network Security.
- To be able to secure a message over insecure channel by various means.
- To learn about how to maintain the Confidentiality, Integrity and Availability of a data.
- To understand various protocols for network security to protect against the threats in the networks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS4022 Cyber and Information Security (Cryptography and Crypt Analysis) **UNIT 1**	: Introduction to Number Theory Topics in Elementary Number Theory: O and notations, time estimates for doing arithmetic-divisibility and the Euclidean algorithm, Congruence: Definitions and properties, linear congruence, residue classes, Euler's phi function, Fermat's Little Theorem, Chinese Reminder Theorem, Applications to factoring, finite fields, quadratic residues and reciprocity: Quadratic residues, Legendre symbol, Jacobi Symbol. (proofs of the theorems are not expected to cover).	10	Discrete Mathematics and Its Applications, Kenneth H. Rosen, 7 th Edition, McGraw Hill, 2012. Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005	Powerpoint,Black Board and chalk

PSCS4022 Cyber and Information Security (Cryptography and Crypt Analysis) **UNIT 3**	RSA Cryptosystem The RSA Algorithm, Primarily Testing, Legendre and Jacobi Symbols, The SolovayStrassen Algorithm, The Miller-Rabin Algorithm, Factoring Algorithm: The pollard p-1 Algorithm, Dixon's Random Squares Algorithm, Attacks on RSA, The Rabin Cryptosystem. Public Key Cryptosystems: The idea of public key Cryptography, The Diffie-Hellman Key Agreement, ElGamal Cryptosystem, The Pollard Rho Discrete Logarithm Algorithm, Elliptic Curves, Knapsack problem.	10	Discrete Mathematics and Its Applications, Kenneth H. Rosen, 7 th Edition, McGraw Hill, 2012. Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005. Network Security and Cryptography, Atul Kahate, McGraw Hill, 2003. Cryptography and Network Security: Principles and Practices, William Stalling, Fourth Edition, Prentice Hall, 2013.	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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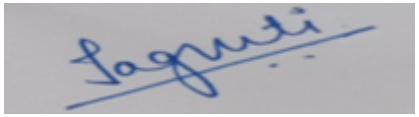

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.CS

SEMESTER: IV MONTH: Feb to April ACADEMIC YEAR: 2021-22

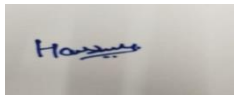
LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand basics of Cryptography and Network Security.
- To be able to secure a message over insecure channel by various means.
- To learn about how to maintain the Confidentiality, Integrity and Availability of a data.
- To understand various protocols for network security to protect against the threats in the networks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS4022 Cyber and Information Security (Cryptography and Crypt Analysis) **UNIT 1**	: Introduction to Number Theory Topics in Elementary Number Theory: O and notations, time estimates for doing arithmetic-divisibility and the Euclidean algorithm, Congruence: Definitions and properties, linear congruence, residue classes, Euler's phi function, Fermat's Little Theorem, Chinese Reminder Theorem, Applications to factoring, finite fields, quadratic residues and reciprocity: Quadratic residues, Legendre symbol, Jacobi Symbol. (proofs of the theorems are not expected to cover).	10	Discrete Mathematics and Its Applications, Kenneth H. Rosen, 7 th Edition, McGraw Hill, 2012. Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005	Powerpoint,Black Board and chalk

PSCS4022 Cyber and Information Security (Cryptography and Crypt Analysis) **UNIT 3**	RSA Cryptosystem The RSA Algorithm, Primarily Testing, Legendre and Jacobi Symbols, The SolovayStrassen Algorithm, The Miller-Rabin Algorithm, Factoring Algorithm: The pollard p-1 Algorithm, Dixon's Random Squares Algorithm, Attacks on RSA, The Rabin Cryptosystem. Public Key Cryptosystems: The idea of public key Cryptography, The Diffie-Hellman Key Agreement, ElGamal Cryptosystem, The Pollard Rho Discrete Logarithm Algorithm, Elliptic Curves, Knapsack problem.	10	Discrete Mathematics and Its Applications, Kenneth H. Rosen, 7 th Edition, McGraw Hill, 2012. Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005. Network Security and Cryptography, Atul Kahate, McGraw Hill, 2003. Cryptography and Network Security: Principles and Practices, William Stalling, Fourth Edition, Prentice Hall, 2013.	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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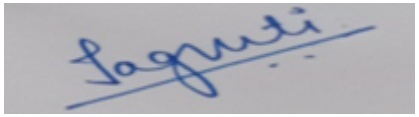

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: CS CLASS: M.Sc.CS

SEMESTER: II MONTH: Feb to April ACADEMIC YEAR: 2021-22

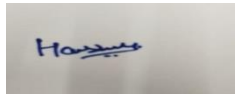
LEARNING OBJECTIVE/S:
The learners will be able to:

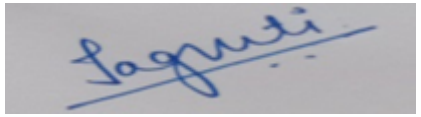
- To Understand the difference between Web Mining and Data mining.
- To Understand the Basics and Needs of Web Mining.
- To Understand Web-based Data.
- To Understand Opinion Mining and Sentiment classification.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS203 Web Mining UNIT 2	Opinion Mining and Web Usage Mining Web Information Retrieval, Sentiment Classification, Feature based Opinion Mining and Summarization, Comparative Sentence and Relation Mining, Opinion Search and Opinion Spam. Web Usage Mining.	15	Web Data Mining: Exploring Hyperlinks, Contents, and Usage Data by Bing Liu (Springer Publications) 2017 publication	Powerpoint,Black Board and chalk

PSCS203 Web Mining UNIT 3	Social Network & Link Analysis Link Analysis, Scrapy using python (without pipelining), Social Network Analysis, Co-Citation and Bibliographic Coupling, PageRank, HITS, Community Discovery	15	Web Data Mining: Exploring Hyperlinks, Contents, and Usage Data by Bing Liu (Springer Publications) 2017 publication	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: CS CLASS: M.Sc.CS

SEMESTER: II MONTH: Feb to April ACADEMIC YEAR: 2021-22

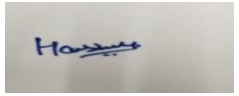
LEARNING OBJECTIVE/S:
The learners will be able to:

- To Understand the difference between Web Mining and Data mining.
- To Understand the Basics and Needs of Web Mining.
- To Understand Web-based Data.
- To Understand Opinion Mining and Sentiment classification.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS203 Web Mining UNIT 2	Opinion Mining and Web Usage Mining Web Information Retrieval, Sentiment Classification, Feature based Opinion Mining and Summarization, Comparative Sentence and Relation Mining, Opinion Search and Opinion Spam. Web Usage Mining.	15	Web Data Mining: Exploring Hyperlinks, Contents, and Usage Data by Bing Liu (Springer Publications) 2017 publication	Powerpoint,Black Board and chalk

PSCS203 **Web Mining** **UNIT 3**	Social Network & Link Analysis Link Analysis, Scrapy using python (without pipelining), Social Network Analysis, Co-Citation and Bibliographic Coupling, PageRank, HITS, Community Discovery	15	Web Data Mining: Exploring Hyperlinks, Contents, and Usage Data by Bing Liu (Springer Publications) 2017 publication	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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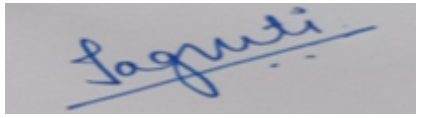

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **M.Sc. (CS)**

SEMESTER: **II** MONTH: **February - April** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able:

- Understand core concepts of ML through implementations in python.
- Working with diverse toolkits and packages useful for developing projects in ML
- Implement and understand deep learning and ANNs useful for industry today.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS201 **Paper I** **Applied Machine and Deep Learning** **UNIT III**	**UNIT 3: Support Vector Machines** Linear SVM Classification, Soft Margin Classification, Nonlinear SVM Classification, Polynomial Kernel, Gaussian RBF Kernel, SVM Regression, Decision Trees, Training and Visualizing a Decision Tree, Making Predictions, The CART Training Algorithm, Gini Impurity vs Entropy, Regularization Hyperparameters.	15	Hands-on Machine Learning with Scikit-Learn, Keras, and TensorFlow Concepts, Tools, and Techniques to Build Intelligent Systems by AurélienGéron, Second Edition, O'reilly 2019	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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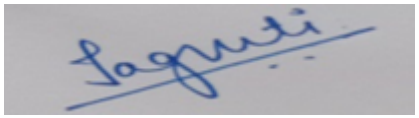
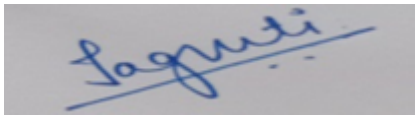
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS201 **Paper I** **Applied Machine and Deep Learning** **UNIT IV**	**UNIT 4: (Skill Enhancement)** **Fundamentals of Deep Learning** What is Deep Learning? Need Deep Learning? Introduction to Artificial Neural Network (ANN), Core components of neural networks, Multi-Layer Perceptron (MLP), Activation functions, Sigmoid, Rectified Linear Unit (ReLU), Introduction to Tensors and Operations, Tensorflow framework.	15	Deep Learning with Python by François Chollet Published by Manning 2018	Microsoft PowerPoint Presentation



SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **MSCCS** SEMESTER:II

MONTH: **FEB-APRIL** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:

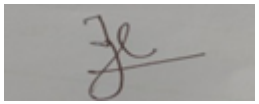
The learners will be able to :

- Understand core concepts of ML through implementations in python.
- Working with diverse toolkits and packages useful for developing projects In ML
- Implement and understand deep learning and ANNs useful for industry today.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS201 Applied Machine and Deep Learning	What is Machine Learning? Why use Machine Learning? Types of Machine Learning, Supervised Learning, Unsupervised Learning & Reinforcement Learning. Challenges of Machine Learning, Testing and Validation A First Application: Classification, MNIST Dataset, Performance	15	Hands-on Machine Learning with Scikit-Learn, Keras, and TensorFlow Concepts, Tools, and Techniques to Build Intelligent Systems by	power point

UNIT 1: (Ability Enhancement) **The Fundamentals of Machine Learning**	Measures, Confusion Matrix, Precision and Recall, Precision/Recall Tradeoff, The ROC Curve, Multiclass Classification, Error Analysis.		AurélienGéron, Second Edition, O'reilly 2019	
PSCS201 Applied Machine and Deep Learning **UNIT 2: Training Models**	Linear Regression, Gradient Descent, Batch Gradient Descent, Stochastic Gradient Descent, Mini-batch Gradient Descent, Polynomial Regression, Learning Curves, The Bias/Variance Tradeoff, Ridge Regression, Lasso Regression, Early Stopping, Logistic Regression, Decision Boundaries, Softmax Regression, Cross Entropy.	15	Hands-on Machine Learning with Scikit-Learn, Keras, and TensorFlow Concepts, Tools, and Techniques to Build Intelligent Systems by AurélienGéron, Second Edition, O'reilly 2019	power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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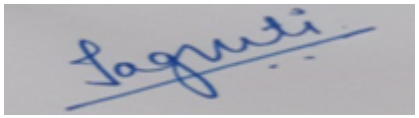

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: Computer Science.

CLASS: M.Sc.CS-SEM-II (Embedded and IOT Technology) MONTH: FEB To APR ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- Understand basic components and functionalities of Embedded System including its hardware.
- Effectively achieve collaboration of various technologies in IoT and enable the same using software programming like Python, Embedded C etc.
- Understand case studies in IoT and replicate the same for more detailed
- Introducing IOT Security issues.
- Designing and developing practical IOT based applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS204 Embedded and IOT Technology UNIT-I	**UNIT 1: Embedded System Basics** Introduction to Embedded Systems, Design of Embedded Systems, Memory Architecture, Input/Output. Basic electronics: Semiconductors, Transistors, BJT, Flip Flops, Resistors, Capacitors, CMOS, MOSFET, FPGA, Relays. Microcontrollers, UART Communications, SPI-peripherals interface, I2C communication, Wireless Sensor Network (WSN)	15	1.Introduction to Embedded Systems – Cyber physical systems Approach Edward Ashford Lee &SanjitArunkumarSeshia Second Edition 2. Enabling the Internet of Things Fundamentals, Design and Applications by	Blackboard, Projector, PPT.

			Muhammad Azhar Iqbal, Sajjad Hussain, Huanlai Xing, Muhammad Ali Imran Wiley Pub.1stEdition 2021	
PSCS204 Embedded and IOT Technology UNIT-IV	**UNIT 4: (Skill Enhancement)** Security, Communication and Data analytics in IOT IoT Security: Security constraints in IoT systems, security requirements of IoT systems, IoT attacks, security threats at each layer of IoT architecture, design secure IoT system for specific application Social IoT: Nature of social relationships among IoT Devices, functionality of different components of social IoT architecture, social aspects of smart devices in IoT applications Packet Tracer and IoT: Basics of Packet Tracer and Blockly programming language, design simple IoT projects in Packet Tracer.	15	1.Introduction to Embedded Systems – Cyber physical systems Approach Edward Ashford Lee &SanjitArunkumarSeshia 2. Enabling the Internet of Things Fundamentals, Design and Applications by Muhammad Azhar Iqbal, Sajjad Hussain, Huanlai Xing, Muhammad Ali	Blackboard, Projector, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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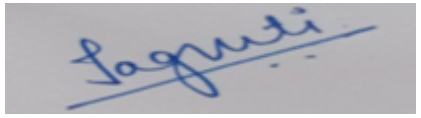

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. **Natural Language Processing** DEPARTMENT: Computer Science.

CLASS: M.Sc. SEMESTER: II MONTH: February To April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- Understanding the importance and concepts of Natural Language Processing (NLP)
- Applying algorithms available for the processing of linguistic information and computational properties of natural languages.
- Knowledge on various morphological, syntactic, and semantic NLP tasks.
- Introducing various NLP software libraries and data sets publicly available.
- Designing and developing practical NLP based applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS202 Natural Language Processing UNIT-I	Introduction to Natural Language Processing (NLP) and Language Modelling Introduction to NLP: Introduction and applications, NLP phases, Difficulty of NLP including ambiguity; Spelling error and Noisy Channel Model; Concepts of Parts-of speech and Formal Grammar of English. Language Modelling: N-gram and Neural Language Models Language Modelling with N-gram, Simple N-gram models, smoothing (basic techniques), Evaluating language models; Neural Network basics, Training; Neural Language Model, Case study: application of neural language model in NLP system development Python Libraries for NLP: Using Python libraries/packages such as NaturalLanguage Toolkit (NLTK), spaCy, genism	15	1. —Speech and Language Processing 2. —Natural Language Processing with Python	Blackboard, Projector, PPT.

PSCS202 Natural Language Processing UNIT-II	Morphology & Parsing in NLP Computational morphology & Parts-of-speech Tagging: basic concepts; Tagset; Lemmatization, Early approaches: Rule-based and TBL; POS tagging using HMM, Introduction to POS Tagging using Neural Model. Parsing Basic concepts: top-down and bottom-up parsing, treebank; Syntactic parsing: CKY parsing; Statistical Parsing basics: Probabilistic Context-Free Grammar (PCFG); Probabilistic CKY Parsing of PCFGs.	15	1. —Speech and Language Processing 2. —Natural Language Processing with Python	Blackboard, Projector, PPT.
PSCS202 Natural Language Processing UNIT-III	Semantics and Word Embedding Semantics Vector Semantics: Words and Vector; Measuring Similarity; Semantics with dense vectors; SVD and Latent Semantic Analysis Embeddings from prediction: Skip-gram and Continuous Bag of words; Concept of Word Sense; Introduction to WordNet	15	1. —Speech and Language Processing 2. —Natural Language Processing with Python	Blackboard, Projector, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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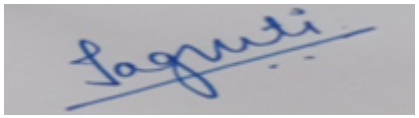

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Santosh Raut **Natural Language Processing** DEPARTMENT: Computer Science.

CLASS: M.Sc. SEMESTER: II MONTH: February To April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- Understanding the importance and concepts of Natural Language Processing (NLP)
- Applying algorithms available for the processing of linguistic information and computational properties of natural languages.
- Knowledge on various morphological, syntactic, and semantic NLP tasks.
- Introducing various NLP software libraries and data sets publicly available.
- Designing and developing practical NLP based applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS202 Natural Language Processing UNIT-IV	(Skill Enhancement) NLP Applications and Case Studies Intelligent Work Processors: Machine Translation; User Interfaces; man-machine Interfaces: Natural language Querying Tutoring and Authoring Systems. Speech Recognition Commercial use of NLP: NLP in customer Service, Sentiment Analysis, Emotion Mining, Handling Frauds and SMS, Bots, LSTM & BERT models, Conversations	15	1. —Speech and Language Processing 2. —Natural Language Processing with Python	Blackboard, Projector, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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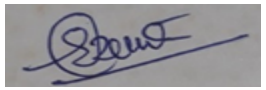

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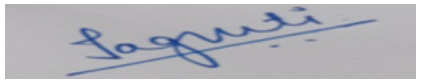

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS:MScCS

SEMESTER: II MONTH:JANT to MAY ACADEMIC YEAR:2021-2022

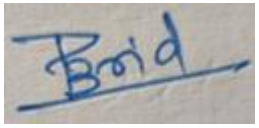
LEARNING OBJECTIVE/S:

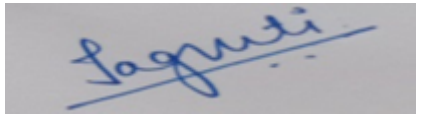
- The course is designed to enable students, to understand and implement IoT in industry.
- Design and executive projects in IoT with Automatic Identification and Data Capture.
- Understand basic components and functionalities of Embedded System including its hardware.
- Effectively achieve collaboration of various technologies in IoT and enable the same using software programming like Python, Embedded C etc.
- Understand case studies in IoT and replicate the same for more detailed analysis of the IoT development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS204 Embedded and IoT Technology Unit-II	**UNIT 2: Basics of IOTethics and Issue** **Introduction IoT**:Evolution of the IoT concept, vision and definition of IoT, basic characteristics of IoT, distinguish the IoT from other related technologies, IoT enablers, IoT architectures, pros and cons of IoT, IoT architecture concepts for specific IoT applications. **IoT Building Blocks -Hardware and Software:**The basic IoT building blocks, smart thing components and capabilities, basics of Packet Tracer with reference to IoT, basics of IoT gateway, Cloud, and analytics **Sensing Principles and Wireless Sensor Network:**Sensor fundamentals and classification of sensors, physical principles of some common sensors, basics of WSNs, WSN architecture and types, layer-level functionality of WSN protocol stack.	15L	Enabling the Internet of Things Fundamentals, Design and Applications by Muhammad Azhar Iqbal, Sajjad Hussain, Huanlai Xing, Muhammad Ali Imran Wiley Pub.1stEdition 2021	Laptop, PPT

PSCS204 Embedded and IoT Technology Unit-III	**UNIT 3: Advanced IOT Technologies** **IoT Gateway:**IoT architecture domains, IoT gateway architecture, IoT gateway functionalities, IoT gateway selection criteria, IoT gateway and edge computing, edge computing-based solution for specific IoT applications **IoT Protocol Stack**:Mapping of IoT protocols to layered IoT architecture, functionality of infrastructure, service discovery, and application layer protocols of IoT protocol stack **IoT Cloud and Fog Computing:**Components of IoT Cloud architecture, usage of application domains of IoT Cloud platforms, layered architecture of Fog computing, distinguish Fog computing from other related terms I**oT Applications:**Main applications of IoT, Implementation details of various IoT application domains	15L	Enabling the Internet of Things Fundamentals, Design and Applications by Muhammad Azhar Iqbal, Sajjad Hussain, Huanlai Xing, Muhammad Ali Imran Wiley Pub.1stEdition 2021	Laptop, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Surbhi Shah DEPARTMENT: IT

CLASS: FYDS SEMESTER: I MONTH: SEPTEMBER TO DECEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

• Introducing the basic concepts of Internet and web design to learners.
• Providing brief knowledge about HTML5 concepts.
• Giving insight of the Page layout and navigation with HTML5.
• Making students aware about use of Tables, Forms and Media with HTML5.
• Providing knowledge of web page design using CSS. • Teaching data validation using Java Script

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Web Technology (USDS103) Unit III	**Introduction to Style Sheets** : Understanding Styles, Constructing Style Rules, Creating Styles for Nested Tags, Creating Classes and IDs for Applying Styles, Applying Styles to Hyperlinks, Creating and Linking to External Style Sheets **Formatting Text by Using Style Sheets**: Specifying a Font Family, Specifying a Font Size and Color, Applying Bold and Italics, Applying Strikethrough and Underlining, Creating Inline Spans , Adjusting Spacing Between Letters	04	HTML5 Step by Step Faith Wempen Microsoft Press 2011 Web Design The Complete Reference Thomas Powell TMH 2009	Black board and chalk

	Formatting Paragraphs by Using Style Sheets: Indenting Paragraphs, Applying a Border to a Paragraph, Specifying a Border Style, Setting Border Padding, Specifying Border Width and Color, Formatting Border Sides Individually, Setting All Border Attributes at Once, Specifying the Horizontal Alignment of a Paragraph, Specifying Vertical Space within a Paragraph	04		
	Displaying Graphics: Selecting a Graphics Format, Preparing Graphics for Web Use, Inserting Graphics, Arranging Elements on the Page, Controlling Image Size and Padding, Hyperlinking from Graphics, Using Thumbnail Graphics, Including Alternate Text for Graphics, Adding Figure Captions	04		
Web Technology (USDS103)	**Java Script:** Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, regExp **Document and its associated objects**: document, document object methods, Link, Area, Anchor, Image, Layer	06	JavaScript 2.0: The Complete Reference Thomas Powelland FritzSchneider TMH 2 nd 2004	Black board and chalk
Unit IV	**Events and Event** Handlers : General Information about Events, Defining Event Handlers, event, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp, onMove, onReset, onResize, onSelect, onSubmit, onUnload	06	JavaScript 2.0: The Complete Reference Thomas Powelland FritzSchneider TMH 2 nd 2004	Black board and chalk
Web Technology (USDS103)	JSON: Introduction, JSON Grammar, JSON Values, JSON Tokens,Syntax, JSON vs XML, Data Types, Objects, Arrays, Creating JSON, JSON Object, Parsing JSON, PersistingJSON,DataInterchange,JSONHTML,JSONP	12	Beginning JSON Ben Smith Apress 1 st 2015	Black board and chalk

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Surbhi Shah DEPARTMENT: IT

CLASS: FYDS SEMESTER: I MONTH: SEPTEMBER TO DECEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

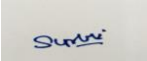
• Introducing the basic concepts of Internet and web design to learners.
• Providing brief knowledge about HTML5 concepts.
• Giving insight of the Page layout and navigation with HTML5.
• Making students aware about use of Tables, Forms and Media with HTML5.
• Providing knowledge of web page design using CSS. • Teaching data validation using Java Script

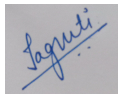
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Web Technology (USDS103) Unit III	**Introduction to Style Sheets** : Understanding Styles, Constructing Style Rules, Creating Styles for Nested Tags, Creating Classes and IDs for Applying Styles, Applying Styles to Hyperlinks, Creating and Linking to External Style Sheets **Formatting Text by Using Style Sheets**: Specifying a Font Family, Specifying a Font Size and Color, Applying Bold and Italics, Applying Strikethrough and Underlining, Creating Inline Spans , Adjusting Spacing Between Letters	04	HTML5 Step by Step Faith Wempen Microsoft Press 2011 Web Design The Complete Reference Thomas Powell TMH 2009	Black board and chalk

	Formatting Paragraphs by Using Style Sheets: Indenting Paragraphs, Applying a Border to a Paragraph, Specifying a Border Style, Setting Border Padding, Specifying Border Width and Color, Formatting Border Sides Individually, Setting All Border Attributes at Once, Specifying the Horizontal Alignment of a Paragraph, Specifying Vertical Space within a Paragraph	04		
	Displaying Graphics: Selecting a Graphics Format, Preparing Graphics for Web Use, Inserting Graphics, Arranging Elements on the Page, Controlling Image Size and Padding, Hyperlinking from Graphics, Using Thumbnail Graphics, Including Alternate Text for Graphics, Adding Figure Captions	04		
Web Technology (USDS103)	**Java Script:** Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, regExp **Document and its associated objects**: document, document object methods, Link, Area, Anchor, Image, Layer	06	JavaScript 2.0: The Complete Reference Thomas Powelland FritzSchneider TMH 2 nd 2004	Black board and chalk
Unit IV	**Events and Event** Handlers : General Information about Events, Defining Event Handlers, event, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp, onMove, onReset, onResize, onSelect, onSubmit, onUnload	06	JavaScript 2.0: The Complete Reference Thomas Powelland FritzSchneider TMH 2 nd 2004	Black board and chalk
Web Technology (USDS103)	JSON: Introduction, JSON Grammar, JSON Values, JSON Tokens,Syntax, JSON vs XML, Data Types, Objects, Arrays, Creating JSON, JSON Object, Parsing JSON, PersistingJSON,DataInterchange,JSONHTML,JSONP	12	Beginning JSON Ben Smith Apress 1 st 2015	Black board and chalk

Unit V				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:36





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Namita Nitin Rode DEPARTMENT: DATA SCIENCE

CLASS: F.Y.B.Sc.DS SEMESTER: I MONTH: SEPTEMBER-DECEMBER ACADEMIC YEAR: 2021-2022

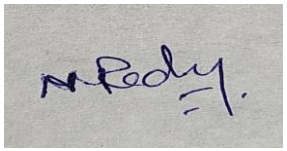
LEARNING OBJECTIVE/S:
The learners will be able to :

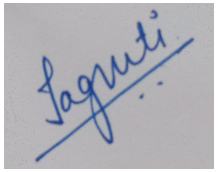
- To discuss various components of communication, explain how non-verbal communication techniques enhance communication and explain the barriers to communication.
- To explain the use of agenda and minutes for effective functioning of any organization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Unit-III Unit-IV	**Report Writing:** **Effective writing, Types of business reports, Structure of reports,** **Gathering Information.**.	12	Business Communication A. C."Buddy" Krizan, Patricia Merrier, Joyce Logan, Karen	Google Meet and PPT

			Williams	
	Report Writing: **Organisation of material, writing abstracts and summaries, Writing** **definitions, Visual aids, User Instruction Manual.**	12	Business Communication A. C."Buddy" Krizan, Patricia Merrier, Joyce Logan, Karen Williams	Google Meet and PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Surbhi Shah DEPARTMENT: IT

CLASS: FYDS SEMESTER: I MONTH: SEPTEMBER TO DECEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

• Introducing the basic concepts of Internet and web design to learners.
• Providing brief knowledge about HTML5 concepts.
• Giving insight of the Page layout and navigation with HTML5.
• Making students aware about use of Tables, Forms and Media with HTML5.
• Providing knowledge of web page design using CSS. • Teaching data validation using Java Script

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Web Technology (USDS103) Unit III	**Introduction to Style Sheets** : Understanding Styles, Constructing Style Rules, Creating Styles for Nested Tags, Creating Classes and IDs for Applying Styles, Applying Styles to Hyperlinks, Creating and Linking to External Style Sheets **Formatting Text by Using Style Sheets**: Specifying a Font Family, Specifying a Font Size and Color, Applying Bold and Italics, Applying Strikethrough and Underlining, Creating Inline Spans , Adjusting Spacing Between Letters	04	HTML5 Step by Step Faith Wempen Microsoft Press 2011 Web Design The Complete Reference Thomas Powell TMH 2009	Black board and chalk
	Formatting Paragraphs by Using Style Sheets: Indenting Paragraphs, Applying a Border to a Paragraph, Specifying a Border Style, Setting Border Padding, Specifying Border Width and Color, Formatting Border	04		

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	Sides Individually, Setting All Border Attributes at Once, Specifying the Horizontal Alignment of a Paragraph, Specifying Vertical Space within a Paragraph			
	Displaying Graphics: Selecting a Graphics Format, Preparing Graphics for Web Use, Inserting Graphics, Arranging Elements on the Page, Controlling Image Size and Padding, Hyperlinking from Graphics, Using Thumbnail Graphics, Including Alternate Text for Graphics, Adding Figure Captions	04		
Web Technology (USDS103) Unit IV	**Java Script:** Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, regExp **Document and its associated objects**: document, document object methods, Link, Area, Anchor, Image, Layer	06	JavaScript 2.0: The Complete Reference Thomas Powelland FritzSchneider TMH 2 nd 2004	Black board and chalk
	Events and Event Handlers : General Information about Events, Defining Event Handlers, event, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp, onMove, onReset, onResize, onSelect, onSubmit, onUnload	06	JavaScript 2.0: The Complete Reference Thomas Powelland FritzSchneider TMH 2 nd 2004	Black board and chalk
Web Technology (USDS103) Unit V	JSON: Introduction, JSON Grammar, JSON Values, JSON Tokens,Syntax, JSON vs XML, Data Types, Objects, Arrays, Creating JSON, JSON Object, Parsing JSON, PersistingJSON,DataInterchange,JSONHTML,JSONP	12	Beginning JSON Ben Smith Apress 1 st 2015	Black board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:36

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Namita Nitin Rode DEPARTMENT: DATA SCIENCE

CLASS: F.Y.B.Sc.DS SEMESTER: I MONTH: SEPTEMBER-DECEMBER ACADEMIC YEAR: 2021-2022

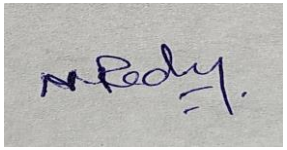
LEARNING OBJECTIVE/S:
The learners will be able to :

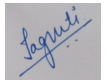
- To discuss various components of communication, explain how non-verbal communication techniques enhance communication and explain the barriers to communication.
- To explain the use of agenda and minutes for effective functioning of any organization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Unit-III Unit-IV	**Report Writing:** **Effective writing, Types of business reports, Structure of reports,** **Gathering Information..**	12	Business Communication A. C."Buddy" Krizan, Patricia Merrier, Joyce Logan, Karen Williams	Google Meet and PPT
	Report Writing: **Organisation of material, writing abstracts and summaries, Writing** **definitions, Visual aids, User Instruction Manual.**	12	Business Communication A. C."Buddy" Krizan, Patricia Merrier, Joyce	Google Meet and PPT

			Logan, Karen Williams	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande

DEPARTMENT: Computer Science

CLASS: F.Y.D.S.

SEMESTER: I

MONTH: October-December

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
To discuss various components of communication, explain how non-verbal communication techniques enhance communication and explain the barriers to communication.
To discuss various business activities which are essential at workplace. To explain business communication covering the structure and layout of a letter, planning of a letter and use of language.
To explain the use of agenda and minutes for effective functioning of any organisation.
To direct the learners' attention to the significance of effective writing and the importance and structure of reports.
To explain to interpret information ethics (IE) as the branch of the philosophy of information that investigates, in a broad sense, the ethical impact of Information and Communication Technologies (ICTs) on human life and society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USDS104 Business Communication and Information Ethics	Business communication at workplace Letter components and layout, Planning a letter, Process of letter writing.	06	Professional Communication, Aruna Koneru	PPT

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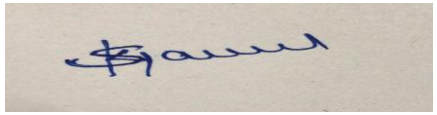
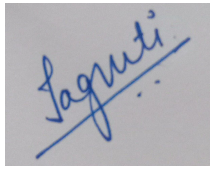
Unit 1				
USDS104 Business Communication and Information Ethics Unit 2	**Business communication at workplace** **Email communication, Memos and memo reports, Employment communication. Notice, Agenda and minutes of meeting, Brochures.**	12	Professional Communication, Aruna Koneru	PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 Lectures





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **Data Science**

CLASS: **FYDS** SEMESTER: **I** MONTH: SEPTEMBER-DECEMBER ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVES:
The learners will be able to :

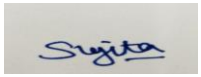
- Learn Programming fundamentals using Python
- Understand the concepts and usage data types, variables and other basic elements
- Learn about using operators and control statements in Python
- Learn about using arrays and strings in Python.
- Learn about using IPython architecture for Python.
- Introduce data Science Tools and plot data using appropriate Python visualization libraries.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II, 3, Introduction to Programming	Lists and Tuples: Lists, List Functions and Methods, List Operations, Tuples	3	Let Us Python by Y. Kanetkar	Meet, PPT
	Dictionaries: Creating a Dictionary, Operators in Dictionary, Dictionary Methods, Using for Loop with Dictionaries, Operations on Dictionaries, Ordered Dictionaries	3	Let Us Python by Y. Kanetkar	Meet, PPT

	Regular Expressions: What is a Regular Expression? Sequence Characters in Regular Expressions, Quantifiers in Regular Expressions, Special Characters in Regular Expressions, Using Regular Expression on Files, Retrieving Information from an HTML File.	3	Let Us Python by Y. Kanetkar	Meet, PPT
	Date and Time in Python: Date and Time, Date and Time Now, Combining Date and Time, Formatting Dates and Times, Finding Durations using "timedelta", Comparing Two Dates, Sorting Dates, Stopping Execution Temporarily, Knowing the Time taken by a Program, Working with Calendar Module.	3	Let Us Python by Y. Kanetkar	Meet, PPT
II, 3, Introduction to Programming	IPython: Beyond Normal Python, Help and Documentation in IPython, Keyboard Shortcuts in the IPython Shell, IPython Magic Commands, Input and Output History, IPython and Shell Commands, Errors and Debugging, Profiling and Timing Code	6	Python Data Science Handbook by Jake VanderPlas	Meet, PPT
	Introduction to NumPy: Understanding Data Types in Python, The Basics of NumPy Arrays, Computation on NumPy Arrays: Universal Functions, Aggregations: Min, Max, and Everything In Between, Computation on Arrays: Broadcasting, Comparisons, Masks, and Boolean Logic, Fancy Indexing, Sorting Arrays, Structured Data: NumPy's Structured Arrays	6	Python Data Science Handbook by Jake VanderPlas	Meet, PPT

II, 3, Introduction to Programming	Data Manipulation with Pandas: Introducing Pandas Objects, Data Indexing and Selection, Operating on Data in Pandas, Handling Missing Data, Hierarchical Indexing, Combining Datasets: Concat and Append, Combining Datasets: Merge and Join, Aggregation and Grouping, Pivot Tables, Vectorized String Operations, Working with Time Series. High-Performance Pandas: eval( ) and query( )	6	Python Data Science Handbook by Jake VanderPlas	Meet, PPT
	Visualization with Matplotlib: Simple Line Plots, Simple Scatter Plots, Visualizing Errors, Density and Contour Plots, Histograms, Binnings, and Density, Customizing Plot Legends, Customizing Colorbars, Multiple Subplots, Text and Annotation, Customizing Ticks, Customizing Matplotlib: Configurations and Stylesheets, Three-Dimensional Plotting in Matplotlib, Geographic Data with Basemap, Visualization with Seaborn.	6	Python Data Science Handbook by Jake VanderPlas	Meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36



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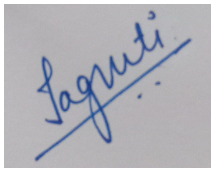

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Teaching plan for FYCS sem 1 2021-22

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: Data Science

CLASS: Fybsc(DS)

SEMESTER: 1

MONTH: September to December

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners would be able to

- Calculate probability, conditional probability and independence.
- Apply the given discrete and continuous distributions whenever necessary.
- Define null hypothesis, alternative hypothesis, level of significance, test statistic and pvalue.
- Perform Test of Hypothesis as well as calculate confidence interval for a population parameter for single sample and two sample cases.
- Apply non-parametric test whenever necessary.
- Conduct and interpret one-way and two-way ANOVA.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	Reference /s	Teaching method Ict tool used
Paper: Statistical Methods **<u>Unit 1</u>**	**Introduction to Statistics and Use in Business:** ➢ Meaning of Statistics as a Science, Importance of Statistics, ➢ Scope of Statistics : In the field of Industry, Biological Sciences,Medical Sciences, Economics Sciences, Social, Sciences,Management	**5**	Statistical Methods and introductory text, Medhi J.,New Age International ltd, Second edition	Power Point Presentation

	Sciences, Agriculture, Insurance, InformationTechnology, Education and Psychology. ➢ Statistical organizations in India and their functions: CSO, ISI,NSS, IIPS (Devnar, Mumbai), Bureau of Economics andstatistics. ➢ Case Study.			

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	Types of Data and Data Condensation: ➢ Method of sampling: Concept of population and sample. Finite Infinite population ,Notion ofSRS,SRSWOR and SRSWR ➢ Types of Characteristics, Different types of scales: nominal,ordinal, interval and ratio scale. Linear and circular scale. ➢ Types of Data: Primary data, Secondary data, Collection of data and concept of questionnaire and a schedule, Cross-sectional data,time series data, failure data, industrial data, and directional data. ➢ Tabulation. ➢ Dichotomous classification- for two and three attributes,	4	Statistical Methods and introductory text, Medhi J.,New Age International ltd, Second edition	Power Point Presentation

	Verification for consistency. ➢ Association of attributes: Yule's coefficient of association Q. ➢ Yule's coefficient of Colligation, ➢ Notion of a statistical population: Finite population infinite ➢ population,homogeneous population and heterogeneous population. Notion of sample, random sample and non-random sample.			
	Presentation of Data ➢ Univariate frequency distribution of discrete and continuous variables. ➢ Cumulative frequency distribution and relative frequencydistribution. ➢ Graphical representation of frequency distribution by Histogram,frequency polygon, Cumulative frequency curve. Stem and leafdiagram ➢ Check sheet, Parato diagram	3	Statistical Methods and introductory text, Medhi J.,New Age International ltd, Second edition	Power Point Presentation

<u>Unit 2</u>	**Measures of central tendencies** ➢ Concept of central tendency of data. Requirements of good measure ➢ Locational averages: Median, Mode, and Partition Values: Quartiles,Deciles, and	6	Statistical Methods, An n itroductory Text,Medhi J. New Age Internation alLtd. Second Edition	Power Point Presentation

	Percentiles, Box Plot, Percentile ranks ➢ Mathematical averages Arithmetic mean (Simple, weighted mean, combinedmean), Geometricmean, Harmonic mean ➢ Empirical relation between mean, median and mode ➢ Merits and demerits of using different measures &their applicability ➢ Partition Values : Quartiles, Deciles and Percentiles, Box Plot, ➢ Percentile ranks			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

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	Measures of Dispersion, Skewness & Kurtosis ➢ **Concept of dispersion. Requirements of good measure.** ➢ **Absolute and Relative measures of dispersion: Range, Quartile Deviation, Mean absolute deviation, Standard deviation.** ➢ **Variance and Combined variance, raw moments and central moments and relations between them. Their properties**	6	Statistical Methods and introductory text, Medhi J.,New Age International ltd, Second edition	Power Point Presentation

	➢ **Concept of Skewness and Kurtosis: Measures of Skewness: KarlPearson's, Bowley's and Coefficient of skewness based on moments. Measure of Kurtosis**			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

<u>Unit 3</u>	**Mean square deviation:** ➢ **Definition, minimality property of mean square deviation (with proof),** ➢ **Variance and standard deviation: Definition, merits and demerits, effect of change of origin and scale, combined variance (derivation for 2 groups), combined standard deviation, generalization for n groups.**	7	Statistical Methods And itroductoryText,Medhi J. New Age InternationalLtd. Second Edition	Power Point Presentation

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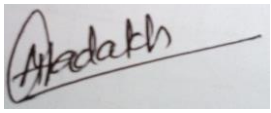
	➢ **Measures of dispersion for comparison: coefficient of range, coefficient of quartile deviation and coefficient of mean deviation,coefficient of variation (C.V.).**	5	Statistical Methods, And itroductoryText,Medhi J. New Age International Ltd. Second Edition	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lecture



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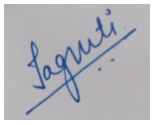

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE **DEPARTMENT**: ____IT____

CLASS: FYDS **SEMESTER**: 1 **MONTH**: Sep-Dec **ACADEMIC YEAR:** 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand HTML**
- **Understand JavaScript**
- **Understand how server-side programming works on the web.**
- **PHP Basic syntax for variable types and calculations.**
- **Creating conditional structures**
- **Storing data in arrays**
- **Using PHP built-in functions and creating custom functions**
- **Understanding POST and GET in form submission.**
- **How to receive and process form submission data.**
- **Reading and writing cookies.**
- **Security tips (i.e. SQL Injection)**
- **Create a database in phpMyAdmin.**
- **Read and process data in a MySQL database. Students will learn JavaScript's role in websites and web apps.**
- **Students will be introduced to basic CS concepts**
- **Students will learn basic programming structures such as: variables, functions arrays etc.**
- **Students will learn how JavaScript works with HTML and CSS.**

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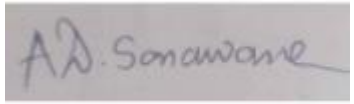
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USDS103 Web Technology Unit I	**Internet and the World Wide Web:** What is Internet? Introduction to internet and its applications, E-mail, telnet, FTP, e-commerce, video conferencing, e-business. Internet service providers, domain name server, internet address, World Wide Web (WWW): World Wide Web and its evolution, uniform resource locator (URL), browsers – internet explorer, Netscape navigator, opera, Firefox, chrome, Mozilla. search engine, web saver – apache, IIS, proxy server, HTTP protocol	3	HTML5 Step by Step Faithe Wempen Microsoft Press 2011	GOOGLE MEET AND PPT
Unit II	HTML5 Page layout and navigation: Creating navigational aids: planning site organization, creating text based navigation bar, creating graphics based navigation bar, creating graphical navigation bar, creating image map, redirecting to another URL, creating division based layouts: HTML5 semantic tags,	6	HTML5 Step by Step Faithe Wempen Microsoft Press 2011	GOOGLE MEET AND PPT

	creating divisions, creating HTML5 semantic layout, positioning and formatting divisions			
	HTML5 Tables, Forms and Media: Creating tables: creating simple table, specifying the size of the table, specifying the width of the column, merging table cells, using tables for page layout, formatting tables: applying table borders, applying background and foreground fills, changing cell padding, spacing and alignment, creating user forms: 12 creating basic form, using check boxes and option buttons, creating lists, additional input types in HTML5, Incorporating sound and video: audio and video in HTML5, HTML multimedia basics, embedding video clips, incorporating audio on web page.	6		
Unit III	Introduction to Style Sheets : Understanding Styles, Constructing Style Rules, Creating Styles for Nested Tags, Creating Classes and IDs for Applying Styles, Applying Styles to Hyperlinks, Creating and Linking to External Style Sheets Formatting Text by Using Style Sheets: Specifying a Font Family, Specifying a Font Size and Color, Applying Bold and Italics, Applying Strikethrough and Underlining, Creating Inline Spans , Adjusting Spacing Between Letters	6	HTML5 Step by Step Faithe Wempen Microsoft Press 2011	GOOGLE MEET AND PPT
	Formatting Paragraphs by Using Style Sheets: Indenting Paragraphs, Applying a Border to a Paragraph, Specifying a Border Style, Setting Border Padding,	6		

	Specifying Border Width and Color, Formatting Border Sides Individually, Setting All Border Attributes at Once, Specifying the Horizontal Alignment of a Paragraph, Specifying Vertical Space within a Paragraph Displaying Graphics: Selecting a Graphics Format, Preparing Graphics for Web Use, Inserting Graphics, Arranging Elements on the Page, Controlling Image Size and Padding, Hyperlinking from Graphics, Using Thumbnail Graphics, Including Alternate Text for Graphics, Adding Figure Captions			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27



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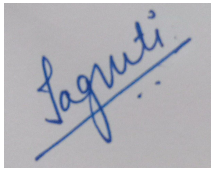

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: FYDS SEMESTER: II MONTH: FEB-APRIL ACADEMIC YEAR: 2021-2022

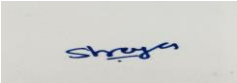
LEARNING OBJECTIVE/S:

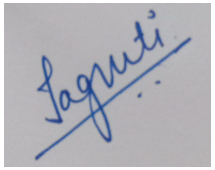
The course concentrates on the concept of the DBMS with respect to principles, design and implementation of DBMS. It aims to specify the functional and data requirements for a typical database application and to understand creation, manipulation and querying of data in databases. To understand SQL to retrieve data and to get through the concept of redundancy. To specify the functional and data requirements for a typical database.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS201, Introduction to Database Management Systems, UNIT-I	**Introduction & DBMS Architecture:** Why Databases? Data versus Information, Introducing the Database, Role and Advantages of the DBMS, Types of Databases, Why Database Design Is Important, Evolution of File System Data Processing, Problems with File System Data Processing, Database Systems	03	1. Ramez Elmasri & ShamkantB.Navathe, Fundamentals of Database Systems, Pearson Education, Sixth Edition, 2010. 2. Database System Concepts by Silberschatz, Korth, Sudarshan, McGraw Hill, 5 Edition, 2006.	Online Mode, Google Meet with Google Slides.
	Data Models – Data Modeling and Data Models, The Importance of Data Models, Data Model Basic Building Blocks, Business Rules, The Evolution of Data Models, Degrees of Data Abstraction	03		Online Mode, Google Meet with Google Slides.
	Entity Relationship Model: Entities, attributes, Relationships, Connectivity and Cardinality, Existence Dependence, Relationship Strength, Weak Entities, Relationship Participation, Relationship Degree, Recursive Relationships, Associative (Composite) Entities, Developing an ER Diagram, Database Design Challenges: Conflicting Goals.	06		Online Mode, Google Meet with Google Slides.

USCS201, Introduction to Database Management Systems, UNIT-II	**Advanced Data Modeling:** The Extended Entity Relationship Model, Entity Clustering, Entity Integrity: Selecting Primary Keys, Design Cases: Learning Flexible Database Design	06	1. Ramez Elmasri & ShamkantB.Navathe, Fundamentals of Database Systems, Pearson Education, Sixth Edition, 2010. 2. Database System Concepts by Silberschatz, Korth, Sudarshan, McGraw Hill, 5 Edition, 2006.	Online Mode, Google Meet with Google Slides.
	Normalization of Database Tables: Database Tables and Normalization, The Need for Normalization, The Normalization: Process, Improving the Design, Surrogate Key Considerations, Higher-Level Normal Forms, Normalization and Database Design, Denormalization, Data-Modeling Checklist	06		Online Mode, Google Meet with Google Slides.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT:DS

CLASS:FYDS SEMESTER: SEM-II MONTH: FEB-APR ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
This course concentrates the concept of the DBMS with respect to principles, design and implementation of DBMS. It aims to specify the functional and data requirements for a typical database application and to understand creation, manipulation and querying of data in databases.

To understand SQL to retrieve data and concept of redundancy .To specify the functional and data requirements for a typical database application . To understand creation, manipulation and querying of data in databases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-2, DBMS UNIT-IV	**Advanced SQL:** Data Definition Commands, Creating Table Structures, Altering Table Structures, Data Manipulation Commands, Virtual Tables: Creating a View, Sequences, Procedural SQL, Embedded SQL	6	Database Management Systems, Ramakrishnam, Gehrke	PPT, Projector, Blackboard & Chalk. .
	Database Design: The Information System, The Systems Development Life Cycle, The Database Life Cycle, Conceptual Design, DBMS Software Selection, Logical Design, Physical Design, Database Design Strategies, Centralized versus Decentralized Design	6		

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PAPER-2, DBMS UNIT-IV	**Transaction Management and Concurrency Control:** What Is a Transaction? Concurrency Control with Locking Methods, Concurrency Control with Time Stamping Methods, Concurrency Control with Optimistic Methods, ANSI Levels of Transaction Isolation, Database Recovery Management.	2 2	Database Management Systems, Ramakrishnam Gehrke	PPT, Projector, Blackboard & Chalk.
	Database Performance Tuning and Query Optimization: Database Performance-Tuning Concepts, Query Processing, Indexes and Query Optimization, Optimizer Choices, SQL Performance Tuning, Query Formulation, DBMS Performance Tuning, Query Optimization Examples.	4		
	Database Administration and Security: Data as a Corporate Asset, The Need for a Database and Its Role in an Organization, Introduction of a Database: Special Considerations, The Evolution of Database Administration, The Database Environment's Human Component, Security, Database Administration Tools, Developing a Data Administration Strategy, The DBA's Role in the Cloud, The DBA at Work: Using Oracle for Database Administration	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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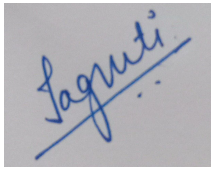

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE **DEPARTMENT**:IT

CLASS: FYDS

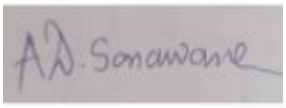
SEMESTER: 1 **MONTH**: Sep-Dec **ACADEMIC YEAR:** 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
USDS204 Unit I	Natural Resources Forest Resources, Dams, Water Resources, Food Resources Energy Resources, Land Resources	3	Environmental Studies Benny Joseph McGraw-Hill 3 rd. 2017	BLACKBOARD AND CHALK
Unit IV	Social Issues and the Environment From Unsustainable to Sustainable Development, Urban Problems Related to Energy, Water Conservation, Watershed Management, Resettlement and Rehabilitation, Environmental Ethics, Acid Rain, Ozone Layer Depletion, Greenhouse Effect, Global Warming and Climate Change, Pollution Control Boards and Control Pollution Acts in India, Nuclear Hazards and Accidents, Environmental Impact Assessment, Risk Management, Precautionary Principle, Polluter-Pays Principle, The Beneficiary-Pays Principle, Role of Non-Government Organizations, ISO 14000 Series of Environmental Management	12	Environmental Studies Benny Joseph McGraw-Hill 3 rd. 2017	BLACKBOARD AND CHALK

	Standards, Economy and Environment			
Unit V	Environmental Management Environmental Impact Assessment, Methodology, Waste as a Resource, Environmental Laws, Requirements of a Contract, Environmental Legislations, Powers and Functions of Pollution Control Boards, Case Studies, Environmental Management Plan, Environmental Audit, Policies for Quality Improvement, Problems, Policy Sustainable Development Ethics, Laws of Nature, Progress, Environmental Stress, Sustainability, Self-purification and Regeneration, Action Plan, Computerization and Information Technology	12	Environmental Studies Benny Joseph McGraw-Hill 3 rd. 2017	BLACKBOARD AND CHALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27



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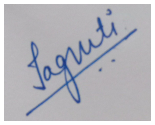

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHA TUSHAR VAZE DEPARTMENT: DS

CLASS: FYDS SEMESTER: II MONTH: FEBRUARY TO APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- Students should be able to understand the components of environments and the need to conserve it
- Students should be able to know the relationship between each and every organism and identify the problem which the world is facing.
- To select, the appropriate life style to save the life on earth

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1	Introduc**tion to Environmental Studies** Importance of Environmental Education, Environmental Literacy, Environmental Engineering, Environmentalism, Components of Environment and their Interactions, Man and the Biosphere, Impacts of Development on Environment	**6**	**Environmental Studies by Benny Joseph**	**Blackboard and chalk PPT , Projector**
Unit 2	**Ecology** Ecosystem, Ecosystem-Anthroposystem Comparison, Biome and Ecosystem, Energy Flow through the Ecosystem, Ecological Succession, Food Chains and Webs, Ecological Pyramids, Biological Magnification or Biomagnification, Human versus Natural Food Chains, Biogeochemical Cycles, The Water Cycle (Hydrologic Cycle), Carbon Cycle, Oxygen Cycle, , Nitrogen	**6**	**Environmental Studies by Benny Joseph**	**Blackboard and chalk PPT , Projector**

	Cycle, Forest Ecosystems, , Grassland Ecosystems, Aquatic Ecosystems			
	Biodiversity Genetic Diversity, Species Diversity, Ecosystem Diversity, Value of Biodiversity, Value of Genes, Biopiracy, Biogeographical Classification of India, India as a Mega Diverse Nation, Endemic Species of India, Threats to Biodiversity, Hotspots of Biodiversity, Endangered Species, Conservation of Biodiversity, Genetic Engineering and Biodiversity	**6**	**Environmental Studies by Benny Joseph**	**Blackboard and chalk PPT , Projector**
Unit 3	**Environmental Pollution** Air Pollution, Water Pollution, Soil Pollution, Marine Pollution, Noise Pollution, Thermal Pollution, Solid Waste Management, Hazardous Waste Management, Pollution Prevention, Disaster Management	**6**	**Environmental Studies by Benny Joseph**	**Blackboard and chalk PPT , Projector**
	Human Population and the Environment Population Growth, Human Rights, Value Education, HIV/AIDS, Environment and Human Health, Family Welfare Programmes, Women and Child Welfare, Role of Information Technology in Environment and Human Health	**6**	**Environmental Studies by Benny Joseph**	**Blackboard and chalk PPT , Projector**

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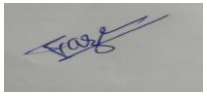
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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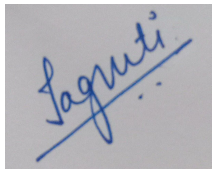

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHLESHA DATTARAM GURAV DEPARTMENT:IT

CLASS: FYDS (R PROGRAMMING) SEMESTER:SEM -2 MONTH: FEB-APRIL ACADEMIC YEAR: 2021-2022

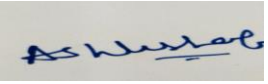
LEARNING OBJECTIVE/S:
The learners will be able to :

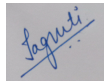
- Create functions.
- Understand conditional statements and loops in R.
- Learn basic and advance graphic plots.
- Understand how to import data and create tibles.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3 R PROGRAMMING UNIT II	Introduction to programming and writing Functions in R: Why do we want to write functions?, Conditional statements (if, ifelse, switch),Repetitive execution: For and While loops, The Apply Functions, Exercise, Functions for parsing text, Programming in R: More advanced, Viewing Code of functions from R packages, Exercise-Parsing Real Data - World Population Data from Wikipedia, Writing functions: more technical discussion -Scoping, Options for Running memory or CPU intensive jobs in R, Efficient R coding	6 .	Introduction to Programming and Statistical Modelling in R by Aedin Culhane-HARVARD SCHOOL	BLACK BOARD AND CHALK

	Introduction to graphics in R: The R function plot(), Exercise, Customize plot with low-level plotting commands, Default parameters – par, Interacting with graphics, Saving plots, Useful Graphics Resources	6		
UNIT III	Advanced Graphics: Advanced plotting using Trellis; ggplots2, Lattice, Examples that Present Panels of Scatterplots using xyplot(), Simple use of xyplot	5	R Data Science Quick Reference By Thomas Mailund- Apress	BLACK BOARD AND CHALK
	Importing Data- readr: Functions for Reading Data, File Headers, Column Types, String-based Column Type Specification, Function- based Column Type Specification Parsing Time and Dates, Space-separated Columns, Functions for Writing Data	4		
	Representing Tables – tibble: Creating Tibbles, Indexing Tibbles	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: DS

CLASS: FYDS SEMESTER: II MONTH: FEBRUARY TO APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

- Students should be able to understand and evaluate efficiency of the programs that they write based on performance of the algorithms used.
- Students should be able to appreciate the use of various data structures as per need.
- To select, decide and apply appropriate design principle by understanding the requirements of any real-life problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
R Programming (USDS203) Unit I	Getting started with R: R Software: Obtaining R and RStudio, First R Encounter, Getting started: R as a big calculator, Assignment, Basic operators, Help with functions and features, Quiz, A few important points on R, Working with R	04	Introduction to Programming and Statistical Modelling in R by Aedin Culhane	Google Jam board, Slides, Docs
	R Interfaces - Using R and RStudio: R Software, Obtaining R and RStudio, The default R interface, RStudio Interface, Example Datasets in R, R Packages, Installing new R libraries, Customizing R Start-up	04		
	Objects in R: Using ls and rm to managing R Objects, Types of R objects, Attributes of R Objects, Creating and accessing objects, Modifying elements, Quick recap, Exercise	04		
	Reading and writing data to and from R: Importing and reading text files data into RStudio, Importing data using R command read.table(), Exercise, Importing text files Using scan(), Parsing each line – Readlines, Writing Data table from	03		

	R, Exercise, Importaing Data from other Software, Reading data from Excel into R, Import/Export from other statistical software, From a Database Connection, Sampling and Creating simulated data, Exercise			
R Programming (USDS203) Unit IV	Reformatting Tables – tidyr: Tidy Data, Gather and Spread, Complex Column Encodings, Expanding, Crossing, and Completing, Missing Values, Nesting Data	04	R Data Science Quick Reference by Thomas Mailund	Chalk and black board
	Pipelines – magrittr : The Problem with Pipelines, Pipeline Notation, Pipelines and Function Arguments, Function Composition, Other Pipe Operations	04		
	Working with Strings – stringr: Counting String Patterns, Splitting Strings, Capitalizing Strings, Wrapping, Padding, and Trimming, Detecting Substrings, Extracting Substrings, Transforming Strings	04		
	Working with Factors – forcats: Creating Factors, Concatenation, Projection, Adding Levels, Reorder Levels	03		
R Programming (USDS203) Unit V	Manipulating Data Frames – dplyr: Selecting Columns, Filter, Sorting, Modifying Data Frames, Grouping and Summarizing, Joining Tables, Income in Fictional Countries	08	R Data Science Quick Reference by Thomas Mailund	Chalk and black board
	Working with Dates – lubridate: Time Points, Time Zones, Time Intervals	07		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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Teaching plan for FYCS sem 1 2021-22

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: Data Science

CLASS: Fybsc(DS)

SEMESTER: 2

MONTH: February to April

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners would be able to

- To explore about random variables and implement various distribution functions
- To familiarize with concepts of probability and learn implementation of different types of probabilities.
- Learn and implement the concept of expectation, related theorems and generating functions
- To know the concept and implementation of discrete distributions including Bernoulli, Binomial and power series distributions
- To get acquainted with theory and practical implementation of concepts of continuous distributions

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	Reference/s	Teaching method Ict tool used
Paper: Probability and distribution **<u>Unit 1</u>**	➢ **Theory of Probability:** Introduction, history, different terms, ➢ mathematical tools, Axiomatic approach to probability, Mathematical notation,	7	Fundamentals of Mathematical statistics, S. C, Gupta and V. K. Kapoor, S. Chand and Sons,Tenth Edition, 2002	Power Point Presentation

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	➢ Multiplication Law and conditional probability, Bayes theorem, ➢ Geometric probability.	5	Fundamentals of Mathematical statistics, S. C, Gupta and V. K. Kapoor, S. Chand and Sons,Tenth Edition, 2002	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

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Unit 2	➢ Random Variables and Distribution Functions: Random Variable, Distribution function, discrete random variable, continuous random variable, ➢ joint probability law, transformation of one-dimensional random variable, ➢ transformation of two-dimensional random variable	12	Fundamentals of Mathematical statistics, S. C, Gupta and V. K. Kapoor, S. Chand and Sons,Tenth Edition, 2002	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures
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Unit 3	**Mathematical Expectation and Generating Functions:** ➢ Mathematical expectation, Expectation of a Function of a Random Variable, ➢ Addition Theorem of Expectation, Multiplication Theorem of Expectation, Expectation of a Linear Combination of Random Variables, ➢ Covariance, Variance of a Linear Combination of RandomVariables,	7	Fundamentals of Mathematical statistics, S. C, Gupta and V. K. Kapoor, S. Chand and Sons,Tenth Edition, 2002	Power Point Presentation

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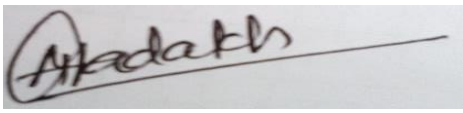
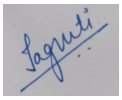
	➢ Moments of Bivariate Probability Distributions, ConditionalExpectation and Conditional Variance, ➢ Moment Generating Function, Cumulants, Characteristic Function, ➢ Chebychev's Inequality, ➢ Convergence in- Probability,	5	Fundamentals of Mathematical statistics, S. C, Gupta and V. K. Kapoor, S. Chand and Sons,Tenth Edition, 2002	Power Point Presentation

	➢ Weak Law of Large Numbers, Borel Canteli Lemma, Probability Generating Function			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lecture





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: INFORMATION TECHNOLOGY CLASS: TYIT-C

SEMESTER: VI MONTH: JANUARY-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the concepts of information security, Risk Analysis.
- Understand various security areas such as storage, database, Physical, application, operating system.
- Be familiar about the basic designing of secure network.
- Detect intrusion and how to prevent it, introduction to virtual machines and cloud computing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT602, Unit 1, Security in Computing	Information Security Overview: The Importance of Information Protection, The Evolution of Information Security, Justifying Security Investment, Security Methodology, How to Build a Security Program, The Impossible Job, The Weakest Link, Strategy and Tactics, Business Processes vs. Technical Controls.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Risk Analysis: Threat Definition, Types of Attacks, Risk Analysis	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Secure Design Principles: The CIA Triad and Other Models, Defense Models, Zones of Trust, Best Practices for Network Defense.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation

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USIT602, Unit 2, Security in Computing	Authentication and Authorization: Authentication, Authorization	03	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Encryption: A Brief History of Encryption, Symmetric-Key Cryptography, Public Key Cryptography, Public Key Infrastructure.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Storage Security: Storage Security Evolution, Modern Storage Security, Risk Remediation, Best Practices.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Database Security: General Database Security Concepts, Understanding Database Security Layers, Understanding DatabaseLevel Security, Using Application Security, Database Backup and Recovery, Keeping Your Servers Up to Date, Database Auditing and Monitoring.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
USIT602, Unit 3, Security in Computing	Secure Network Design: Introduction to Secure Network Design, Performance, Availability, Security.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Network Device Security: Switch and Router Basics, Network Hardening.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation

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	Firewalls: Overview, The Evolution of Firewalls, Core Firewall 12 38 Functions, Additional Firewall Capabilities, Firewall Design.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Wireless Network Security: Radio Frequency Security Basics, DataLink Layer Wireless Security Features, Flaws, and Threats, Wireless Vulnerabilities and Mitigations, Wireless Network Hardening Practices and Recommendations, Wireless Intrusion Detection and Prevention, Wireless Network Positioning and Secure Gateways	03	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
USIT602, Unit 4, Security in Computing	Intrusion Detection and Prevention Systems: IDS Concepts, IDS Types and Detection Models, IDS Features, IDS Deployment Considerations, Security Information and Event Management (SIEM).	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Voice over IP (VoIP) and PBX Security: Background, VoIP Components,VoIP Vulnerabilities and Countermeasures, PBX, TEM: Telecom Expense Management	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Operating System Security Models: Operating System Models, Classic Security Models, Reference Monitor, Trustworthy Computing, International Standards for Operating System Security.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
USIT602, Unit 5, Security in Computing	Virtual Machines and Cloud Computing: Virtual Machines, Cloud Computing.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation

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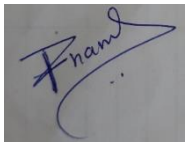
	Secure Application Design: Secure Development Lifecycle, Application Security Practices, Web Application Security, Client Application Security, Remote Administration Security	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation
	Physical Security: Classification of Assets, Physical Vulnerability Assessment, Choosing Site Location for Security, Securing Assets: Locks and Entry Controls, Physical Intrusion Detection.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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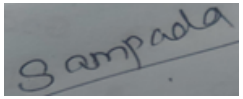

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: TYIT

SEMESTER: VI MONTH: JAN-MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the use of business intelligence in real life.
- Describe the different mathematical models to develop decision making systems.
- Get the difference between supervised learning and unsupervised learning techniques.
- Understand the use of mathematical models in relational marketing, support chain optimization, CCR model.
- Familiar with knowledge management and Artificial intelligence and expert systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT603, Business Intelligence Unit I	**Business intelligence:** Effective and timely decisions, Data, information and knowledge, The role of mathematical models, Business intelligence architectures, Ethics and business intelligence	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Decision support systems: Definition of system, Representation of the decision-making process, Evolution of information systems, Definition of decision support system, Development of a decision support system	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

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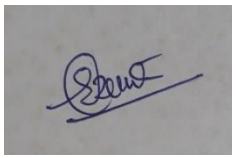
USIT603, Business Intelligence Unit II	**Mathematical models for decision making:** Structure of mathematical models, Development of a model, Classes of models	05	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Data mining: Definition of data mining, Representation of input data , Data mining process, Analysis methodologies	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Data preparation: Data validation, Data transformation, Data reduction	03	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
USIT603, Business Intelligence Unit III	**Classification**: Classification problems, Evaluation of classification models, Bayesian methods, Logistic regression, Neural networks, Support vector machines	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Clustering: Clustering methods, Partition methods, Hierarchical methods, Evaluation of clustering models	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
USIT603, Business Intelligence Unit IV	**Marketing models**: Relational marketing, Sales force management,	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Logistic and production models: Supply chain optimization, Optimization models for logistics planning, Revenue management systems.	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Data envelopment analysis: Efficiency measures, Efficient frontier, The CCR model, Identification of good operating practices	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo	Desktop and Laptop,Digital cameras,Microphone,Mobile,P

			Vercellis, Wiley, First, 2009	owerpoint
USIT603, Business Intelligence Unit V	**Knowledge Management:** Introduction to Knowledge Management, Organizational Learning and Transformation, Knowledge Management Activities, Approaches to Knowledge Management, Information Technology (IT) In Knowledge Management, Knowledge Management Systems Implementation, Roles of People in Knowledge Management	06	Decision support and Business Intelligence Systems by Efraim Turban, Ramesh Sharda, Dursun Delen , Pearson,Ninth,2011	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Artificial Intelligence and Expert Systems: Concepts and Definitions of Artificial Intelligence, Artificial Intelligence Versus Natural Intelligence, Basic Concepts of Expert Systems, Applications of Expert Systems, Structure of Expert Systems, Knowledge Engineering, Development of Expert Systems	06	Decision support and Business Intelligence Systems by Efraim Turban, Ramesh Sharda, Dursun Delen , Pearson,Ninth,2011	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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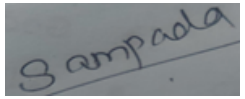

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Vidhya Dayanand Patil College of Arts
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ARPITA BANERJEE DEPARTMENT: IT-CS

CLASS: TYIT-DIV A SEMESTER: VI MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

- The learners will be able to: know fundamentals of Testing, the idea of Test Policy, Test Strategy & Test Planning. Also they will learn different methods of Unit Testing, Verification, Validation, Acceptance Testing, how to use various Special Tests and understand different Risk Associated with New Technologies and how to overcome. Eventually learners will be able to use the knowledge in their future project.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT601 Software Quality Assurance III	**Unit Testing: Boundary Value Testing:** Normal Boundary Value Testing, Robust Boundary Value Testing, Worst-Case Boundary Value Testing, Special Value Testing, Examples, Random Testing, Guidelines for Boundary Value Testing.	3	Software Testing: A Craftsman's Approach By Paul C. Jorgenson	Google Meet and PowerPoint Presentation
	Equivalence Class Testing: Equivalence Classes, Traditional Equivalence Class Testing, Improved Equivalence Class Testing, Edge Testing, Guidelines and Observations.	3		
	Decision Table–Based Testing: Decision Tables, Decision Table Techniques, Cause-and-Effect Graphing, Guidelines and Observations.	2		
	Path Testing: Program Graphs, DD-Paths, Test Coverage Metrics, Basis Path Testing, Guidelines and Observations, **Data Flow Testing:** Define/Use Testing, Slice-Based Testing, Program Slicing Tools.	4		

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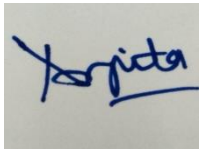
V	**Levels of Testing:** Introduction, Proposal Testing, Requirement Testing, Design Testing, Code Review, Unit Testing, Module Testing, Integration Testing, Big-Bang Testing, Sandwich Testing, Critical Path First, Sub System Testing, System Testing, Testing Stages.	4	Software Testing: Principles, Techniques and Tools By M. G. Limaye	Google Meet and PowerPoint Presentation
	Special Tests: Introduction, GUI testing, Compatibility Testing, Security Testing, Performance Testing, Volume Testing, Stress Testing, Recovery Testing, Installation Testing, Requirement Testing, Regression Testing, Error Handling Testing, Manual Support Testing, Intersystem Testing, Control Testing, Smoke Testing, Adhoc Testing, Parallel Testing, Execution Testing, Operations Testing, Compliance Testing, Usability Testing, Decision Table Testing, Documentation Testing, Training testing, Rapid Testing, Control flow graph, Generating tests on the basis of Combinatorial Designs, State Graph,	4		
	Risk Associated with New Technologies, Process maturity level of Technology, Testing Adequacy of Control in New technology usage, Object Oriented Application Testing, Testing of Internal Controls, COTS Testing, Client Server Testing, Web Application Testing, Mobile Application Testing, eBusiness/eCommerce Testing, Agile Development Testing, Data Warehousing Testing.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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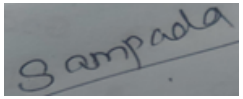

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: TYIT DIV-C

SEMESTER: VI MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Make Learner Conversant With The Social And Intellectual Property Issues Emerging From 'Cyberspace.
- Explore The Legal And Policy Developments In Various Countries To Regulate Cyberspace;
- Develop The Understanding Of Relationship Between Commerce And Cyberspace
- Give Learners In Depth Knowledge Of Information Technology Act And Legal Frame Work Of Right To Privacy, Data Security And Data Protection.
- Make Study On Various Case Studies On Real Time Crimes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT607, Cyber Laws Unit 1	Power of Arrest Without Warrant Under the IT Act, 2000: A Critique, Crimes of this Millennium, Section 80 of the IT Act, 2000 – A Weapon or a Farce? Forgetting the Line Between Cognizable and Non-Cognizable Offences, Necessity of Arrest without Warrant from Any Place, Public or Otherwise, Check and Balances Against Arbitrary Arrests,Arrest for "About to Commit" an Offence Under the IT Act: A Tribute to Draco, Arrest, But NO Punishment!	05	1. Cyber Law Simplified VivekSood TMH Education 2001 2. Cybersecurity Law Jeff Kosseff Wiley 2017	Powerpoint
	Cyber Crime and Criminal Justice: Penalties, Adjudication and Appeals Under the IT Act,2000: Concept of "Cyber Crime " and the IT Act , 2000, Hacking, Teenage Web Vandals, Cyber Fraud and Cyber Cheating, Virus on the Internet, Defamation, Harassment and Email Abuse, Cyber Pornography, Other IT Act Offences, Monetary Penalties, Adjudication and Appeals Under IT Act , 2000, Network Service Providers, Jurisdiction and Cyber Crime,	05	Cyber Law Simplified VivekSood TMH Education 2001 Cybersecurity Law Jeff Kosseff Wiley	PowerPoint

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	Nature of Cyber Criminality, Strategies to Tackle Cyber Crime and Trends, Criminal Justice in India and Implications on Cyber Crime.		2017	
USIT607, Cyber Laws Unit 2	Contracts in the Infotech World: Contracts in the Infotech World, Click-Wrap and Shrink-Wrap Contract: Status under the Indian 12 Contract Act, 1872, Contract Formation Under the Indian Contract Act, 1872, Contract Formation on the Internet, Terms and Conditions of Contracts. Jurisdiction in the Cyber World: Questioning the Jurisdiction and Validity of the Present Law of Jurisdiction, Civil Law of Jurisdiction in India, Cause of Action, Jurisdiction and the Information Technology Act,2000, Foreign Judgements in India, Place of Cause of Action in Contractual and IPR Disputes, Exclusion Clauses in Contracts, Abuse of Exclusion Clauses, Objection of Lack of Jurisdiction, Misuse of the Law of Jurisdiction, Legal Principles on Jurisdiction in the United State of America, Jurisdiction Disputes w.r.t. the Internet in the United State of America.	10	Cyber Law Simplified VivekSood TMH Education 2001 Cybersecurity Law Jeff Kosseff Wiley 2017	Powerpoint
USIT607, Cyber Laws Unit 3	Battling Cyber Squatters and Copyright Protection in the Cyber World: Concept of Domain Name and Reply to Cyber Squatters, Meta-Tagging, Legislative and Other Innovative Moves Against Cyber Squatting, The Battle Between Freedom and Control on the Internet, Works in Which Copyright Subsists and meaning of Copyright, Copyright Ownership and Assignment, License of Copyright, Copyright Terms and Respect for Foreign Works, Copyright Infringement, Remedies and Offences, Copyright Protection of Content on the Internet; Copyright Notice, Disclaimer and Acknowledgement, Downloading for Viewing Content on the Internet, Hyper-Linking and Framing, Liability of ISPs for Copyright Violation in the Cyber World: Legal Developments in the US, Napster and its Cousins: A Revolution on the Internet but a Crisis for Copyright Owners, Computer Software Piracy	10	Cyber Law Simplified VivekSood TMH Education 2001 Cybersecurity Law Jeff Kosseff Wiley 2017	Powerpoint
USIT607, Cyber Laws Unit 4	E-Commerce Taxation: Real Problems in the Virtual World: A Tug of War on the Concept of „Permanent Establishment", Finding the PE in Cross Border E-Commerce, The United Nations Model Tax Treaty, The Law of Double Taxation Avoidance Agreements and Taxable Jurisdiction Over Non-Residents, Under the Income Tax Act, 1961, Tax Agents of Non-Residents	10	Cyber Law Simplified VivekSood TMH Education 2001 Cybersecurity Law	Powerpoint

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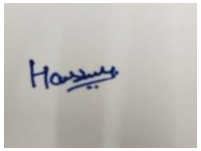
	under the Income Tax Act,1961 and the Relevance to E-Commerce, Source versus Residence and Classification between Business Income and Royalty, The Impact of the Internet on Customer Duties, Taxation Policies in India: At a Glance. Digital Signature, Certifying Authorities and E-Governance: Digital Signatures, Digital Signature Certificate, Certifying Authorities and Liability in the Event of Digital Signature Compromise, E-Governance in India: A Warning to Babudom!		Jeff Kosseff Wiley 2017	
USIT607, Cyber Laws Unit 5	The Indian Evidence Act of 1872 v. Information Technology Act, 2000: Status of Electronic Records as Evidence, Proof and Management of Electronic Records; Relevancy, Admissibility and Probative Value of E-Evidence, Proving Digital Signatures, Proof of Electronic Agreements, Proving Electronic Messages, Other Amendments in the Indian Evidence Act by the IT Act, Amendments to the Bankers Books Evidence Act, 1891 and Reserve Bank of India 12 Act, 1934. Protection of Cyber Consumers in India: Are Cyber Consumers Covered Under the Consumer Protection Act? Goods and Services, Consumer Complaint, Defect in Goods and Deficiency in Services, Restrictive and Unfair Trade Practices, Instances of Unfair Trade Practices, Reliefs Under CPA, Beware Consumers, Consumer Foras, Jurisdiction and Implications on cyber Consumers in India, Applicability of CPA to Manufacturers, Distributors, Retailers and Service Providers Based in Foreign Lands Whose Goods are Sold or Services Provided to a Consumer in India. Amendments in Indian IT Act 2000	10	Cyber Law Simplified VivekSood TMH Education 2001 Cybersecurity Law Jeff Kosseff Wiley 2017	Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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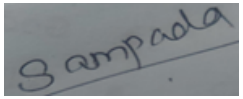

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Miss Shilpa James Rodrigues

DEPARTMENT: IT

CLASS: T.Y.I.T.-C (Principles of Geographic Information Systems)

SEMESTER: VI

MONTH: January - March

ACADEMIC YEAR: 2020 -2021

LEARNING OBJECTIVE/S :
The learners will be able to :

- Understand the basics of geographic information system.
- Learn GIS Models.
- Understand different types of GIS Data.
- Analyze data, explore issues, problem solve, and evaluate situations in a geographic and spatial context.
- Explore mapped data
- Relate GIS with remote sensing technologies
- Analyze spatial data, using GIS analysis tools
- Develop and manage geodatabases
- Create maps ans images to communicate spatial data in a meaningful way to others.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 1, Principles of Geographic Information Systems.	**A Gentle Introduction to GIS** **The nature of GIS:** Some fundamental observations, Defining GIS, GISystems, GIScience and GIApplications, Spatial data and Geoinformation. **The real world and representations of it:** Models and modelling, Maps, Databases, Spatial databases and spatial analysis.	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet, Quizze.
	Models and Representations of the real world Geographic Phenomena: Defining geographic phenomena, types of geographic phenomena, Geographic fields, Geographic objects, Boundaries	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Computer Representations of Geographic Information: Regular tessellations, irregular tessellations, Vector representations, Topology and Spatial relationships, Scale and Resolution, Representation of Geographic fields, Representation of Geographic objects , Organizing and Managing Spatial Data ,The Temporal Dimension	06	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 2, Principles of Geographic Information Systems.	**Data Management and Processing Systems** **Hardware and Software Trends** **Geographic Information Systems:** GIS Software, GIS Architecture and functionality, Spatial Data Infrastructure (SDI)	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Stages of Spatial Data handling: Spatial data handling and Preparation, Spatial Data Storage and maintenance, Spatial Query and Analysis, Spatial Data Presentation.	05	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Database management Systems: Reasons for using a DBMS, Alternatives for data management, The relational data model, Querying the relational database. **GIS and Spatial Databases:** Linking GIS and DBMS, Spatial database functionality.	04	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman	Power Point , Google meet.

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			and Rolf A.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 3, Principles of Geographic Information Systems.	**Spatial Referencing and Positioning** **Spatial Referencing:** Reference surfaces for mapping, Coordinate Systems, Map Projections, Coordinate Transformations .	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Satellite-based Positioning: Absolute positioning, Errors in absolute positioning, Relative positioning, Network positioning, code versus phase measurements, Positioning technology	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Data Entry and Preparation **Spatial Data Input:** Direct spatial data capture, Indirect spatial data captiure, Obtaining spatial data elsewhere **Data Quality:** Accuracy and Positioning, Positional accuracy, Attribute accuracy, Temporal accuracy, Lineage, Completeness, Logical	03	Principles of Geographic Information Systems An Introductory	Power Point , Google meet.

	consistency		Text Book - Otto Huisman and Rolf A.	
	Data Preparation: Data checks and repairs, Combining data from multiple sources ,**Point Data Transformation:** Interpolating discrete data, Interpolating continuous data.	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 4, Principles of Geographic Information Systems.	. **Spatial Data Analysis** **Classification of analytical GIS Capabilities** **Retrieval, classification and measurement:** Measurement, Spatial selection queries, Classification	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Overlay functions: Vector overlay operators,Raster overlay operators **Neighbourhood functions:** Proximity computations, Computation of diffusion, Flow computation, Raster based surface analysis **Analysis:** Network analysis, interpolation,	06	Principles of Geographic Information Systems An Introductory	Power Point , Google meet.

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	terrain modeling		Text Book - Otto Huisman and Rolf A.	
	GIS and Application models:GPS, Open GIS Standards, GIS Applications and Advances **Error Propagation in spatial data processing:** How Errors propagate, Quantifying error propagation.	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 5, Principles of Geographic Information Systems.	**Data Visualization** **GIS and Maps, The Visualization Process** **Visualization Strategies: Present or explore?**	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.

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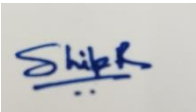
	The cartographic toolbox: What kind of data do I have?, How can I map my data? **How to map?:** How to map qualitative data, How to map quantitative data, How to map the terrain elevation, How to map time series	06	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet,YouTube video.
	Map Cosmetics, Map Dissemination	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet,YouTube video.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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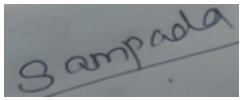

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande DEPARTMENT: Computer Science

CLASS: T.Y.I.T SEMESTER: VI

MONTH: JAN - MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Student will able to understand the importance of software quality.
Aspects that the related to software quality.
Stakeholders and their relationship.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCSIT601 Software Quality Assurance UNIT - I	**Introduction to Quality:** Historical Perspective of Quality, What is Quality? (Is it a fact or perception?), Definitions of Quality, Core Components of Quality, Quality View, Financial Aspect of Quality, Customers, Suppliers and Processes, Total Quality Management (TQM), Quality Principles of Total Quality Management, Quality Management Through Statistical Process Control, Quality Management Through Cultural Changes, Continual (Continuous) Improvement Cycle, Quality in Different Areas, Benchmarking and Metrics, Problem Solving Techniques, Problem Solving Software Tools.	6	Software Testing and Continuous Quality Improvement Software Testing: Principles, Techniques and Tools	Google Mett PPT
	Software Quality: Introduction, Constraints of Software Product Quality Assessment, Customer is a King, Quality and Productivity Relationship, Requirements of a Product, Organisation Culture,	6		Google Mett PPT

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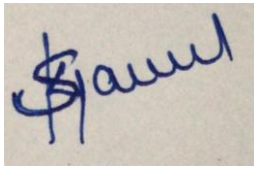
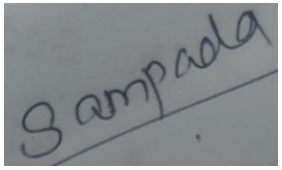
	Characteristics of Software, Software Development Process, Types of Products, Schemes of Criticality Definitions, Problematic Areas of Software Development Life Cycle, Software Quality Management, Why Software Has Defects? Processes Related to Software Quality, Quality Management System Structure, Pillars of Quality Management System, Important Aspects of Quality Management.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT SEMESTER: II MONTH: December to March ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -II Solutions of Algebraic and Transcendental Equations: Interpolation:	Solutions of Algebraic and Transcendental Equations: The Bisection Method, The Newton-Raphson Method, The Regula-falsi method, The Secant Method. Interpolation: Forward Difference, Backward Difference, Newton's Forward Difference Interpolation, Newton's Backward Difference Interpolation, Lagrange's Interpolation.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	ONLINE (GOOGLE CLASSROOM)

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT
SEMESTER: II MONTH: December to March ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -III Solution of simultaneous algebraic equations (linear) using iterative methods: Numerical differentiation and Integration:	Solution of simultaneous algebraic equations (linear) using iterative methods: Gauss-Jordan Method, Gauss-Seidel Method. Numerical differentiation and Integration: Numberical differentiation, Numerical integration using Trapezoidal Rule, Simpson's 1/3rd and 3/8th rules. Numerical solution of 1st and 2nd order differential equations: Taylor series, Euler's Method, Modified Euler's Method, Runge-Kutta Method for 1st and 2 nd Order Differential Equations.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	ONLINE (GOOGLE CLASSROOM)

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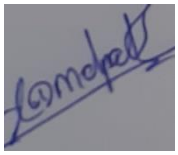
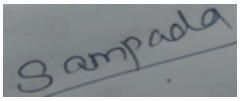
NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT SEMESTER: II MONTH: December to March
ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -IV Least-Squares Regression: Linear Programming:	Least-Squares Regression: Linear Regression, Polynomial Regression, Multiple Linear Regression, General Linear Least Squares, Nonlinear Regression Linear Programming: Linear optimization problem, Formulation and Graphical solution, Basic solution and Feasible solution.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	ONLINE (GOOGLE CLASSROOM)





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Anuja Patil DEPARTMENT: IT-CS CLASS:FYIT-DIV A

SEMESTER: SEM-II MONTH: JAN-MAR ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: To apply fundamental programming constructs. To illustrate the concept of classes and objects, Data Abstraction and Data Encapsulation. To implement the concept of Pointer, friend function , Virtual Functions, Constructor& Destructors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-1, OOPS, UNIT 1	**Object Oriented Methodology:** Introduction, Advantages and Disadvantages of Procedure Oriented Languages, what is Object Oriented? What is Object Oriented Development? Object Oriented Themes, Benefits and Application of OOPS.	4	Object Oriented Programming with C++ -by E. Balagurusamy	PPT, GoogleMeet, Jamboard ,Slido.
	Principles of OOPS: OOPS Paradigm, Basic Concepts of OOPS: Objects, Classes, Data Abstraction and Data Encapsulation	3		
	Inheritance, Polymorphism, Dynamic Binding, Message Passing	5		
	Classes and Objects: Simple classes (Class specification, class members accessing), Defining member functions	4	Object Oriented Programming with C++ -by	PPT, GoogleMeet,

UNIT 2			E. Balagurusamy	Jamboard ,Slido.
	passing object as an argument, Returning object from functions, friend classes, Pointer to object, Array of pointer to object.	4		
	Constructors and Destructors: Introduction, Default Constructor, Parameterized Constructor and examples, Destructors.	2		
UNIT 3	**Polymorphism:** Concept of function overloading, overloaded operators, overloading unary and binary operators	4	Object Oriented Programming with C++ -by E. Balagurusamy	PPT, GoogleMeet, Jamboard ,Slido.
	overloading comparison operator, overloading arithmetic assignment operator, Data Conversion between objects and basic types.	5		
	Virtual Functions: Introduction and need, Pure Virtual Functions, Static Functions, this Pointer, abstract classes, virtual destructors.	4		
UNIT 4	**Program development using Inheritance:** Introduction, understanding inheritance, Advantages provided by inheritance, choosing the access specifier, *Derived class declaration,*	3	Object Oriented Programming with C++ by E.Balagurusamy	GOOGLE MEET AND PPT
	Multilevel inheritance, Containership, hybrid inheritance. Exception Handling: Introduction,	3		

	Exception Handling Mechanism, Concept of throw & catch with example	3		
	File Pointer and their Manipulation	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36

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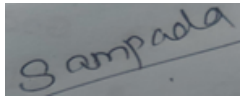

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYIT-A SEMESTER: SEM-2 MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- To gain an understanding why the green computing is instrumental for the environment.
- Identify key issues relevant to green computing and evaluate different approaches to these problems.
- Study of designing, engineering, manufacturing, using and disposing of computing devices in a way that reduces their environmental impact.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
5 GREEN COMPUTING UNIT 2	Minimizing Power Usage: Power Problems, Monitoring Power Usage, Servers, Low-Cost Options, Reducing Power Use, Data De-Duplication, Virtualization, Management, Bigger Drives, Involving the Utility Company,	3	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	GOOGLE MEET AND PPT
	Low Power Computers, PCs, Linux, Components, Servers, Computer Settings, Storage, Monitors, Power Supplies, Wireless Devices, Software.	3		
	Cooling: Cooling Costs, Power Cost, Causes of Cost, Calculating Cooling Needs, Reducing Cooling Costs, Economizers, On-Demand Cooling, HP's Solution, Optimizing Airflow, Hot Aisle/Cold Aisle, Raised Floors, Cable Management, Vapour Seal,	3		

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	Prevent Recirculation of Equipment Exhaust, Supply Air Directly to Heat Sources, Fans, Humidity, Adding Cooling, Fluid Considerations, System Design, Datacentre Design, Centralized Control, Design for Your Needs, Put Everything Together.	3		
UNIT 3	**Changing the Way of Work:** Old Behaviours, starting at the Top, Process Reengineering with Greening Mind, Analysing the Global Impact of Local Actions,	3	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	GOOGLE MEET AND PPT
	Steps: Water, Recycling, Energy, Pollutants, Teleworkers and Outsourcing, Telecommuting, Outsourcing, how to Outsource.	3		
	Going Paperless: Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Billing, Handheld Computers vs. the Clipboard,	3		
	Unified Communications, Intranets, What to Include, Building an Intranet, Microsoft Office SharePoint Server 2007, Electronic Data Interchange (EDI), Nuts and Bolts, Value Added Networks, Advantages, Obstacles.	3		
UNIT 5	**Greening Your Information Systems:** Initial Improvement Calculations, Selecting Metrics, Tracking Progress, Change Business Processes, Customer Interaction, Paper Reduction,	3	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	GOOGLE MEET AND PPT
	Green Supply Chain, Improve Technology Infrastructure, Reduce PCs and Servers, Shared Services, Hardware Costs,	3		

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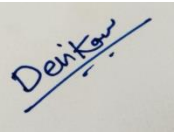
	Cooling.			
	Staying Green: Organizational Check-ups, Chief Green Officer, Evolution, Sell the CEO, SMART Goals, Equipment Check-ups, Gather Data, Tracking the data,	3		
	Baseline Data, Benchmarking, Analyse Data, Conduct Audits, Certifications, Benefits, Realities, Helpful Organizations.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36



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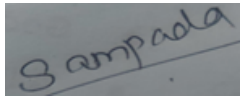

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT: CS

CLASS: FYIT-A SEMESTER: SEM-2 MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- To gain an understanding why the green computing is instrumental for the environment.
- Identify key issues relevant to green computing and evaluate different approaches to these problems.
- Study of designing, engineering, manufacturing, using and disposing of computing devices in a way that reduces their environmental impact.

PAPER, TITLE, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5,GREEN COMPUTING, UNIT 1	**Overview and Issues:** Problems: Toxins, Power Consumption, Equipment Disposal, Company's Carbon Footprint: Measuring, Details, reasons to bother, Plan for the Future, Cost Savings: Hardware, Power.	4	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	PPT AND PDF
	Initiatives and Standards: Global Initiatives: United Nations, Basel Action Network, Basel Convention	4		
	North America: The United States, Canada, Australia, Europe, WEEE Directive, RoHS, National Adoption, Asia: Japan,	4		

	China, Korea.			
UNIT 4	**Recycling:** Problems, China, Africa, Materials, Means of Disposal, Recycling, Refurbishing, Make the Decision, Life Cycle, from beginning to end, Life, Cost, Green Design, Recycling Companies, Finding the Best One, Checklist, Certifications	3	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	PPT AND PDF
	Hard Drive Recycling, Consequences, cleaning a Hard Drive, Pros and cons of each method, CDs and DVDs, good and bad about CD and DVDs disposal, Change the mind-set, David vs. America Online	3		
	Hardware Considerations: Certification Programs, EPEAT, RoHS, Energy Star, Computers, Monitors, Printers, Scanners, All-in-Ones, Thin Clients, Servers, Blade Servers, Consolidation, Products,	3		
	Hardware Considerations, Planned Obsolescence, Packaging, Toxins, Other Factors, Remote Desktop, Using Remote Desktop, Establishing a Connection, In Practice	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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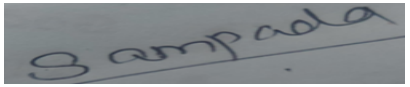

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: FYIT SEMESTER: II MONTH: DECE to MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

To become familiar with the architecture and the instruction set of an Intel microprocessor

To study the Assembly language programming as well as the design of various types of digital and analog interfaces

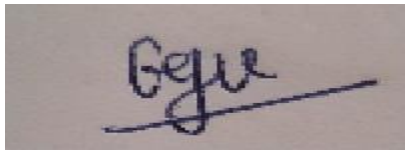
To understand the architecture of 8085 and 8051

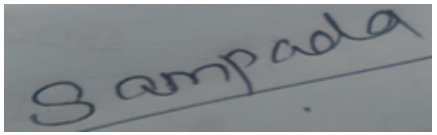
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 MPA Unit 1	**Microprocessor, microcomputers, and Assembly Language:** Microprocessor, Microprocessor Instruction Set and Computer Languages, From Large Computers to Single-Chip Microcontrollers, Applications.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
	Microprocessor Architecture and Microcomputer System: Microprocessor Architecture and its operation's, Memory, I/O Devices, Microcomputer System, Logic Devices and Interfacing, Microprocessor-Based System Application.	4	Microprocessors Architecture, Programming and Applications with the 8085.	Black board & Chalk

			Ramesh Gaonkar PENRAM Fifth 2012	
	8085 Microprocessor Architecture and Memory Interface: Introduction, 8085 Microprocessor unit, 8085-Based Microcomputer, Memory Interfacing, Interfacing the 8155 Memory Segment, Illustrative Example: Designing Memory for the MCTS Project, Testing and Troubleshooting Memory Interfacing Circuit, 8085-Based Single-Board microcomputer.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
Paper-02 MPA Unit 2	**Interfacing of I/O Devices** : Basic Interfacing concepts, Interfacing Output Displays, Interfacing Input Devices, Memory Mapped I/O, Testing and Troubleshooting I/O Interfacing Circuits.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
	Introduction to 8085 Assembly Language Programming: The 8085 Programming Model, Instruction Classification, Instruction, Data and Storage, Writing assembling and Execution of a simple program, Overview of 8085 Instruction Set, Writing and Assembling Program.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
	Introduction to 8085 Instructions:	4	Microprocessors Architecture,	Black board & Chalk

	Data Transfer Operations, Arithmetic Operations, Logic Operation, Branch Operation, Writing Assembly Languages Programs, Debugging a Program		Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.IT SEMESTER: II MONTH: JANUARY-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand and realize the Interfacing of memory & various I/O devices with 8085 microprocessors.
- Understand and classify the instruction set of 8085 microprocessor and distinguish the use of different instructions and apply it in assembly language programming.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-III Microprocessor Architecture	**Programming Techniques With Additional Instructions:** Programming Techniques: Looping, Counting and Indexing, Additional Data Transfer and 16-Bit Arithmetic Instructions, Arithmetic Instruction Related to Memory, Logic Operations: Rotate, Logics Operations: Compare, Dynamic Debugging.	5	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Google Meet, ppt
	Counters and Time Delays: Counters and Time Delays, Illustrative Program: Hexadecimal Counter, Illustrative Program: zero-to-nine (Modulo Ten) Counter, Generating Pulse Waveforms, Debugging Counter and Time-Delay Programs.	4		Google Meet, ppt
	Stacks and Sub-Routines: Stack, Subroutine, Restart, Conditional Call, Return Instructions, Advanced Subroutine concepts.	3		Google Meet, ppt

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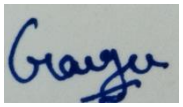
Paper-II UNIT-IV Microprocessor Architecture	**Code Conversion, BCD Arithmetic, and 16-Bit Data Operations:** BCD-to-Binary Conversion, Binary-to-BCD Conversion, BCD-toSeven-Segment-LED Code Conversion, Binary-to-ASCII and ASCIIto-Binary Code Conversion, BCD Addition, BCD Subtraction, Introduction To Advanced Instructions and Applications, Multiplication, Subtraction With Carry.	5	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Google Meet, ppt
	Software Development System and Assemblers: Microprocessors-Based Software Development system, Operating System and Programming Tools, Assemblers and Cross-Assemblers, Writing Program Using Cross Assemblers.	4		Google Meet, ppt
	Interrupts: The 8085 Interrupt, 8085 Vectored Interrupts, Restart as S/W Instructions, Additional I/O Concepts and processes.	3		Google Meet, ppt
Paper-II UNIT-V Microprocessor Architecture	**The Pentium and Pentium Pro microprocessors:** Introduction, Special Pentium registers, Memory management, Pentium instructions, Pentium Pro microprocessor, Special Pentium Pro features.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Google Meet, ppt
	Core 2 and later Microprocessors: Introduction, Pentium II software changes, Pentium IV and Core 2, i3, i5 and i7.	4		Google Meet, ppt
	SUN SPARC Microprocessor: Architecture, Register file, data types and instruction format	4		Google Meet, ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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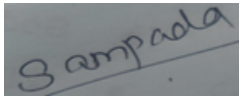

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE **DEPARTMENT**: ____IT____

CLASS: FYIT_A DIV **SEMESTER**: 2 **MONTH**: Jan to March **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand HTML**
- **Understand JavaScript**
- **Understand how server-side programming works on the web.**
- **PHP Basic syntax for variable types and calculations.**
- **Creating conditional structures**
- **Storing data in arrays**
- **Using PHP built-in functions and creating custom functions**
- **Understanding POST and GET in form submission.**
- **How to receive and process form submission data.**
- **Reading and writing cookies.**
- **Security tips (i.e. SQL Injection)**
- **Create a database in phpMyAdmin.**
- **Read and process data in a MySQL database. Students will learn JavaScript's role in websites and web apps.**
- **Students will be introduced to basic CS concepts**
- **Students will learn basic programming structures such as: variables, functions arrays etc.**
- **Students will learn how JavaScript works with HTML and CSS.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT203 Web Programming	**Internet and the World Wide Web:** What is Internet? Introduction to internet and its applications, E-mail, telnet, FTP, e-commerce, video conferencing, e-business. Internet service providers, domain name server, internet address, World Wide Web (WWW): World Wide Web and its evolution, uniform resource locator (URL), browsers – internet explorer, Netscape navigator, opera, Firefox, chrome, Mozilla. search engine, web saver – apache, IIS, proxy server, HTTP protocol	6	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	GOOGLE MEET AND GOOGLE CLASSROOM

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Unit I	**HTML5:** Introduction, Why HTML5? Formatting text by using tags, using lists and backgrounds, Creating hyperlinks and anchors. Style sheets, CSS formatting text using style sheets, formatting paragraphs using style sheets.	6		
Unit II	**HTML5 Page layout and navigation:** Creating navigational aids: planning site organization, creating text based navigation bar, creating graphics based navigation bar, creating graphical navigation bar, creating image map, redirecting to anotherURL, creating division based layouts: HTML5 semantic tags, creating divisions, creating HTML5 semantic layout, positioning and formatting divisions	6	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	GOOGLE MEET AND GOOGLE CLASSROOM
	HTML5 Tables, Forms and Media: Creating tables: creating simple table, specifying the size of the table, specifying the width of the column, merging table cells, using tables for page layout, formatting tables: applying table borders, applying background and foreground fills, changing cell padding,	6		

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	spacing and alignment, creating user forms: creating basic form, using check boxes and option buttons, creating lists, additional input types in HTML5, Incorporating sound and video: audio and video in HTML5, HTML multimedia basics, embedding video clips, incorporating audio on web page			
UNIT III	Java Script: Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security,	2	JavaScript 2.0: The Complete Reference BY Thomas Powell and Fritz Schneider	GOOGLE MEET AND GOOGLE CLASSROOM
	Operators: Assignment Operators, Comparison Operators, Arithmetic Operators, % (Modulus), ++(Increment), --(Decrement), -(Unary Negation), Logical Operators, Short-Circuit Evaluation, String Operators, Special Operators, ?: (Conditional operator), , (Comma operator), delete, new, this, void	3		
	Statements: Break, comment, continue, delete, do...while, export, for, for...in, function, if...else, import, labelled, return, switch, var, while, with	2		
	.Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, regExp Document and its associated objects: document, Link, Area, Anchor, Image, Applet, Layer	2		

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	Events and Event Handlers : General Information about Events, Defining Event Handlers, event, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp	3		
UNIT IV	PHP: Why PHP and MySQL? Server-side scripting, PHP syntax and variables, comments, types,	3	PHP Project for Beginners BY SharanamShah, Vaishali	GOOGLE MEET AND GOOGLE CLASSROOM
	control structures, branching, looping, termination, functions, passing information with PHP, GET, POST,	3		
	formatting form variables, superglobal arrays, strings and string functions	3		
	regular expressions, arrays, number handling, basic PHP errors/problems	3		

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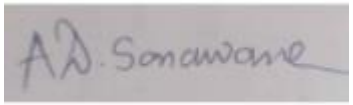
UNIT V	Advanced PHP and MySQL : PHP/MySQL Functions, Integrating web forms and databases,	3	PHP Project for Beginners BY SharanamShah, Vaishaliz	GOOGLE MEET AND GOOGLE CLASSROOM
	Displaying queries in tables, Building Forms from queries,	3		
	String and Regular Expressions, Sessions,	3		
	Cookies and HTTP, E-Mail	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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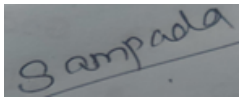

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS;FY BSc IT DIV-A(OOP) SEMESTER: SEM-2 MONTH:JAN-MAR ACADEMIC YEAR:2020-2021

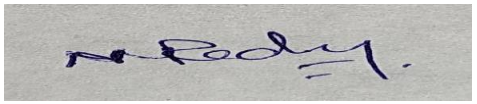
LEARNING OBJECTIVE/S:

The learners will be able to :

- To learn how inheritance and virtual functions implement dynamic binding with polymorphism.
- To learn how to design and implement generic classes with C++ templates.
- To learn how to use exception handling in C++ programs

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 1 OOP UNIT 5	**Templates:** Introduction, Function Template and examples,	2	Object Oriented Programming with C++ BY E. Balagurusamy	PPT
	Class Template and examples.	2		
	Working with Files: Introduction, File Operations,	2		
	Various File Modes,	2		
	File Pointer and their Manipulation	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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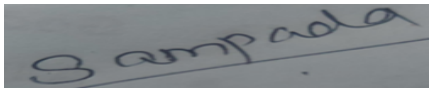

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BRIJESH YATINDRA JOSHI **DEPARTMENT**: I.T

CLASS:FYIT **DIV** :B **SEMESTER**: II **MONTH**: Jan to March **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : How to change the way of work , going paperless, Recycling and hardware consideration

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	**Changing the Way of Work:** Old Behaviours, starting at the Top, Process Reengineering with Green in Mind, Analysing the Global Impact of Local Actions, Steps: Water, Recycling, Energy, Pollutants, Teleworkers and Outsourcing, Telecommuting, Outsourcing, how to Outsource.	6	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter	Google Meet And Google Classroom
	Going Paperless: Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Billing, Handheld Computers vs. the Clipboard, Unified Communications, Intranets, What to Include, Building an Intranet, Microsoft Office SharePoint Server 2007, Electronic Data Interchange (EDI), Nuts and Bolts, Value Added Networks, Advantages, Obstacles.	6		
UNIT 4	**Recycling:** Problems, China, Africa, Materials, Means of Disposal, Recycling, Refurbishing, Make the Decision, Life Cycle, from beginning to end, Life, Cost, Green Design, Recycling Companies, Finding the Best One, Checklist, Certifications, Hard Drive Recycling, Consequences, cleaning a Hard Drive, Pros and cons of each method, CDs and DVDs, good and bad about CD and DVDs disposal, Change the mind-set, David vs. America Online	6	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter	Google Meet And Google Classroom

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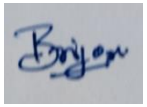
	Hardware Considerations: Certification Programs, EPEAT, RoHS, Energy Star, Computers, Monitors, Printers, Scanners, All-in-Ones, Thin Clients, Servers, Blade Servers, Consolidation, Products, Hardware Considerations, Planned Obsolescence, Packaging, Toxins, Other Factors, Remote Desktop, Using Remote Desktop, Establishing a Connection, In Practice	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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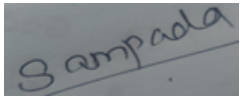

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS:FY BSc IT DIV-B(OOPS) SEMESTER: SEM-2 MONTH:JAN-MAR ACADEMIC YEAR: 2020-2021

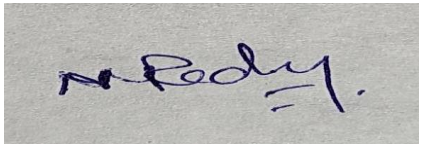
LEARNING OBJECTIVE/S:

- The learners will be able to :
- To understand how C++ improves C with object-oriented features.
- To learn how to write inline functions for efficiency and performance.
- To learn the syntax and semantics of the C++ programming language.
- To learn how to design C++ classes for code reuse.
- To learn how to implement copy constructors and class member functions.
- To understand the concept of data abstraction and encapsulation.
- To learn how to overload functions and operators in C++.
- To learn how containment and inheritance promote code reuse in C++.
- To learn how inheritance and virtual functions implement dynamic binding with polymorphism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER1 OOP UNIT 1	**Object Oriented Methodology**: Introduction, Advantages and Disadvantages of Procedure Oriented Languages,	3	Object Oriented Programming with C++ BY E. Balagurusamy	PPT
	what is Object Oriented? What is Object Oriented Development? Object Oriented Themes, Benefits and Application of OOPS.	3		
	Principles of OOPS: OOPS Paradigm, Basic Concepts of OOPS: Objects, Classes, Data Abstraction and Data Encapsulation,	3		
	Inheritance, Polymorphism, Dynamic Binding	3		

UNIT 3	**Polymorphism:** Concept of function overloading, overloaded operators,	3	Object Oriented Programming with C++ BY E. Balagurusamy	PPT
	overloading unary and binary operators, overloading comparison operator, overloading arithmetic assignment operator, Data Conversion between objects and basic types,	3		
	Virtual Functions: Introduction and need, Pure Virtual Functions,	3		
	Static Functions, this Pointer, abstract classes, virtual	3		
UNIT 4	**Program development using Inheritance:** Introduction, understanding inheritance, Advantages provided by inheritance,	3	Object Oriented Programming with C++ BY E. Balagurusamy	PPT
	choosing the access specifier, Derived class declaration, derived class constructors, class hierarchies,	3		
	multiple inheritance, multilevel inheritance, containership, hybrid inheritance.	3		
	Exception Handling: Introduction, Exception Handling Mechanism	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36



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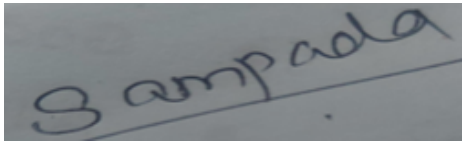

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE **DEPARTMENT**: ____IT____

CLASS: FYIT_B DIV **SEMESTER**: 2 **MONTH**: Jan to March **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand Green Computing**
- **Understand Problems of green Computing**
- **Understand how to solve problem properly**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT205 Green Computing Unit 1	Overview and Issues: Problems: Toxins, Power Consumption, Equipment Disposal, Company's Carbon Footprint: Measuring, Details, reasons to bother, Plan for the Future, Cost Savings: Hardware, Power.	6	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter	Google Meet And Google Classroom

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	Initiatives and Standards: Global Initiatives: United Nations, Basel Action Network, Basel Convention, North America: The United States, Canada, Australia, Europe, WEEE Directive, RoHS, National Adoption, Asia: Japan, China, Korea	6		
Unit 2	Minimizing Power Usage: Power Problems, Monitoring Power Usage, Servers, Low-Cost Options, Reducing Power Use, Data De-Duplication, Virtualization, Management, Bigger Drives, Involving the Utility Company, LowPower Computers, PCs, Linux, Components, Servers, Computer Settings, Storage, Monitors, Power Supplies, Wireless Devices, Software.	6	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter	Google Meet And Google Classroom
	Cooling: Cooling Costs, Power Cost, Causes of Cost, Calculating Cooling Needs, Reducing Cooling Costs, Economizers, On-Demand Cooling,	6		

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	HP's Solution, Optimizing Airflow, Hot Aisle/Cold Aisle, Raised Floors, Cable Management, Vapour Seal, Prevent Recirculation of Equipment Exhaust, Supply Air Directly to Heat Sources, Fans, Humidity, Adding Cooling, Fluid Considerations, System Design, Datacentre Design, Centralized Control, Design for Your Needs, Put Everything Together.			
	Going Paperless: Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Billing, Handheld Computers vs. the Clipboard, Unified Communications, Intranets, What to Include, Building an Intranet, Microsoft Office SharePoint Server 2007, Electronic Data Interchange (EDI), Nuts and Bolts, Value Added Networks, Advantages, Obstacles.	6		
Unit 5	Greening Your Information Systems: Initial Improvement Calculations, Selecting Metrics,	6	Green IT	Google Meet And Google Classroom

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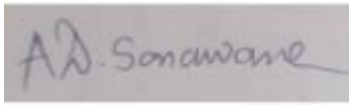
	Tracking Progress, Change Business Processes, Customer Interaction, Paper Reduction, Green Supply Chain, Improve Technology Infrastructure, Reduce PCs and Servers, Shared Services, Hardware Costs, Cooling.		Toby Velte, Anthony Velte, Robert Elsenpeter	
	Staying Green: Organizational Check-ups, Chief Green Officer, Evolution, Sell the CEO, SMART Goals, Equipment Check-ups, Gather Data, Tracking the data, Baseline Data, Benchmarking, Analyse Data, Conduct Audits, Certifications, Benefits, Realities, Helpful Organizations.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 42



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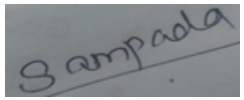

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: IT

CLASS: FY BSc IT SEMESTER:II MONTH: JAN-MAR ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to:

1. To learn about how computer systems work and underlying principles.
2. To understand the basics of digital electronics needed for computers.
3. To understand the basics of instruction set architecture for reduced and complex instruction sets.
4. To understand the basics of processor structure and operation.
5. To understand how data is transferred between the processor and I/O devices.

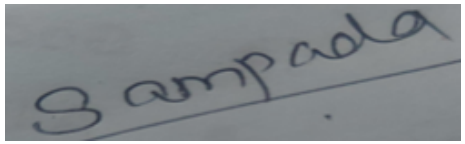
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Microprocessor, microcomputers, and Assembly Language: Microprocessor, Microprocessor Instruction Set and Computer Languages, From Large Computers to Single-Chip Microcontrollers, Applications.	3	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	POWER POINT PRESENTATION
	Microprocessor Architecture and Microcomputer System: Microprocessor Architecture and its operation's, Memory, I/O Devices, Microcomputer System, Logic Devices and Interfacing, Microprocessor-Based System Application.	5		

	8085 Microprocessor Architecture and Memory Interface: Introduction, 8085 Microprocessor unit, 8085-Based Microcomputer, Memory Interfacing, Interfacing the 8155 Memory Segment, Illustrative Example: Designing Memory for the MCTS Project, Testing and Troubleshooting Memory Interfacing Circuit, 8085-Based Single-Board microcomputer.	4		
UNIT 2	Basic Interfacing concepts, Interfacing Output Displays, Interfacing Input Devices, Memory Mapped I/O, Testing and Troubleshooting I/O Interfacing Circuits.	3	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	POWER POINT PRESENTATION
	The 8085 Programming Model, Instruction Classification, Instruction, Data and Storage, Writing assembling and Execution of a simple Program.	3		
	Overview of 8085 Instruction Set, Writing and Assembling Program, Data Transfer Operations.	2		
	Arithmetic Operations, Logic Operation, Branch Operation, Writing Assembly Languages Programs, Debugging a Program.	4		
UNIT 3	Programming Techniques: Looping, Counting and Indexing, Additional Data Transfer and 16-Bit Arithmetic Instructions, Arithmetic Instruction Related to Memory.	3	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	POWER POINT PRESENTATION

	Logic Operations: Rotate, Logics Operations: Compare, Dynamic Debugging, Counters and Time Delays.	3		
	Illustrative Program: Hexadecimal Counter, zero-to-nine (Modulo Ten) Counter, Generating Pulse Waveforms, Debugging Counter and Time-Delay Programs.	3		
	Stack Subroutine, Restart, Conditional Call, Return Instructions, Advanced Subroutine concepts.	3		
UNIT 4	BCD-to-Binary Conversion, Binary-to-BCD Conversion, BCD-to-Seven-Segment-LED Code Conversion, Binary-to-ASCII and ASCII-to-Binary Code Conversion,	4	Microprocessors Architecture, Programming and Applications with t 8085 by Ramesh Gaonkar	POWER POINT PRESENTATION
	BCD Addition, BCD Subtraction, Introduction To Advanced Instructions and Applications, Multiplication, Subtraction With Carry.	2		
	Microprocessors-Based Software Development system, OS and Programming Tools, Assemblers and Cross-Assemblers, Writing Program Using Cross Assemblers.	3		
	The 8085 Interrupt, 8085 Vectored Interrupts, Restart as S/W Instructions, Additional I/O Concepts and processes.	3		
UNIT 5	Introduction, Special Pentium registers, Memory management, Pentium instructions, Pentium Pro microprocessor.	3	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	POWER POINT PRESENTATION
	Special Pentium Pro features, Introduction, Pentium II software changes.	3		
	Pentium IV and Core 2, i3, i5 and i7.	3		

	Architecture, Register file, data types and instruction format	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT: CS

CLASS: FYIT-DIV B SEMESTER: SEM-2 MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- Perform object oriented programming to develop solution to problems demonstrating usage of control structures, modularity, I/O and other standard language constructs.
- Demonstrate adeptness of object oriented programming to develop solution to problem demonstration usage of data abstraction, encapsulation, and inheritance.

PAPER, TITLE,UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1,Object oriented programming ,UNIT 2	**Classes and Objects:** Simple classes (Class specification, class members accessing), Defining member functions, passing object as an argument	4	Object Oriented Programming with C++ by E.Balagurusamy	PPT AND PDF
	Returning object from functions, friend classes, Pointer to object, Array of pointer to object.	4		
	Constructors and Destructors: Introduction, Default Constructor, Parameterized Constructor and examples, Destructor	4		

UNIT 5	**Templates:** Introduction, Function Template and examples,	3	Object Oriented Programming with C++ by E.Balagurusamy	PPT AND PDF
	Class Template and examples.	3		
	Working with Files: Introduction, File Operations, Various File Modes,	4		
	File Pointer and their Manipulation	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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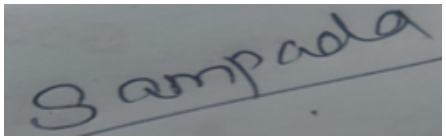

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.IT SEMESTER: II MONTH: JANUARY-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- design dynamic websites that meet specified needs and interests.
- write well-structured, easily maintained, standards-compliant, accessible HTML code.
- use JavaScript to add dynamic content to pages.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III UNIT-II WEB PROGRAMMING	**HTML5 Page layout and navigation:** Creating navigational aids: planning site organization, creating text based navigation bar, creating graphics based navigation bar, creating graphical navigation bar, creating image map, redirecting to another URL,	3	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	Google Meet, ppt
	creating division based layouts: HTML5 semantic tags, creating divisions, creating HTML5 semantic layout, positioning and formatting divisions.	2		Google Meet, ppt
	HTML5 Tables, Forms and Media: Creating tables: creating simple table, specifying the size of the table, specifying the width of the column, merging table cells, using tables for page layout,	2		Google Meet, ppt

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	formatting tables: applying table borders, applying background and foreground fills, changing cell padding, spacing and alignment,	2		Google Meet, ppt
	creating user forms: creating basic form, using check boxes and option buttons, creating lists, additional input types in HTML5, Incorporating sound and video: audio and video in HTML5, HTML multimedia basics, embedding video clips, incorporating audio on web page	3		Google Meet, ppt
PAPER-III UNIT-III WEB PROGRAMMING	**Java Script:** Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security,	1	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	Google Meet, ppt
	Operators: Assignment Operators, Comparison Operators, Arithmetic Operators, % (Modulus), ++(Increment), --(Decrement), -(Unary Negation), Logical Operators, Short-Circuit Evaluation, String Operators, Special Operators, ?: (Conditional operator), , (Comma operator), delete, new, this, void	2		Google Meet, ppt
	Statements: Break, comment, continue, delete, do...while, export, for, for...in, function, if...else, import, labelled, return, switch, var, while, with	2		Google Meet, ppt
	Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, regExp	2		Google Meet, ppt
	Document and its associated objects: document, Link, Area, Anchor, Image, Applet, Layer	2		Google Meet, ppt
	Events and Event Handlers : General Information about Events, Defining Event Handlers, event, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad,	3		Google Meet, ppt

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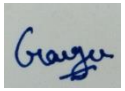
	onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp, onMove, onReset, onResize, onSelect, onSubmit, onUnload			
PAPER-III UNIT-V WEB PROGRAMMING	**Advanced PHP and MySQL :** PHP/MySQL Functions, Integrating web forms and databases,	5	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	Google Meet, ppt
	Displaying queries in tables, Building Forms from queries, String and	3		Google Meet, ppt
	Regular Expressions, Sessions, Cookies and HTTP, E-Mail	4		Google Meet, ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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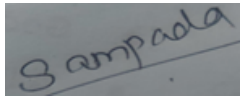

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SURBHI SHAH DEPARTMENT: IT-CS

CLASS:FYIT-DIV B SEMESTER: SEM-II MONTH: JANUARY -MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: learn advanced html programming with its basic concepts and to create database with the help of php and mysql.and to be capable of managing complex IT projects with consideration of the human, financial and environmental factors. to work effectively as a part of a team to achieve a common stated goal.to adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:-III TITLE:- Web Programming UNIT 1	**Internet and the World Wide Web:** What is Internet? Introduction to internet and its applications, E-mail, telnet, FTP, e-commerce, video conferencing, e-business.	2	Web Design The Complete Reference By Thomas Powell And HTML5 Step by Step by Faithe Wempen	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR-PHONE
	Internet service providers, domain name server, internet address, World Wide Web (WWW): World Wide Web and its evolution, uniform resource locator (URL), browsers – internet explorer, Netscape navigator, opera, Firefox,	2		
	chrome, Mozilla. search engine, web saver – apache, IIS, proxy server, HTTP protocol	2		
	HTML5: Introduction, Why HTML5? Formatting text by using tags,	3		
	using lists and backgrounds, Creating hyperlinks and anchors. Style sheets, CSS formatting text using style sheets, formatting paragraphs using style sheets.	3		

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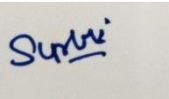
UNIT 4	**PHP:** Why PHP and MySQL? Server-side scripting, PHP syntax and variables, comments,	3	PHP 5.1 for Beginners By Ivan Bayross Sharanam Shah,	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD, ,MOBILE ,EAR-PHONE
	types, control structures, branching, looping, termination, functions,	3		
	passing information with PHP, GET, POST, formatting form variables, superglobal arrays,	3		
	strings and string functions, regular expressions, arrays, number handling, basic PHP errors/problems	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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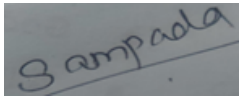

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.IT SEMESTER: II MONTH: JANUARY-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- Identify IT Infrastructure Management and Green Data Centre Metrics for software development
- Illustrate various green IT services and its roles.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-V Unit-II Green Computing	**Minimizing Power Usage:** Power Problems, Monitoring Power Usage, Servers, Low-Cost Options, Reducing Power Use, Data De-Duplication, Virtualization, Management, Bigger Drives, Involving the Utility Company, LowPower Computers, PCs, Linux, Components, Servers, Computer Settings, Storage, Monitors, Power Supplies, Wireless Devices, Software.	5	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter McGraw Hill 2008	Google Meet, ppt
	Cooling: Cooling Costs, Power Cost, Causes of Cost, Calculating Cooling Needs, Reducing Cooling Costs, Economizers, On-Demand Cooling, HP's Solution, Optimizing Airflow, Hot Aisle/Cold Aisle, Raised Floors, Cable Management,	3		Google Meet, ppt
	Vapour Seal, Prevent Recirculation of Equipment Exhaust, Supply Air Directly to Heat Sources, Fans, Humidity, Adding Cooling, Fluid Considerations, System Design, Datacentre Design, Centralized Control, Design for Your Needs, Put Everything Together.	4		Google Meet, ppt

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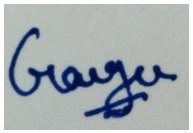
Paper-V Unit-IV Green Computing	**Recycling:** Problems, China, Africa, Materials, Means of Disposal, Recycling, Refurbishing, Make the Decision, Life Cycle, from beginning to end, Life, Cost, Green Design,	3	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter McGraw Hill 2008	Google Meet, ppt
	Recycling Companies, Finding the Best One, Checklist, Certifications, Hard Drive Recycling, Consequences, cleaning a Hard Drive, Pros and cons of each method, CDs and DVDs, good and bad about CD and DVDs disposal, Change the mind-set, David vs. America Online	3		Google Meet, ppt
	Hardware Considerations: Certification Programs, EPEAT, RoHS, Energy Star, Computers, Monitors, Printers, Scanners, All-in-Ones, Thin Clients, Servers, Blade Servers, Consolidation, Products, Hardware Considerations, Planned Obsolescence, Packaging, Toxins, Other Factors, Remote Desktop, Using Remote Desktop, Establishing a Connection, In Practice	6		Google Meet, ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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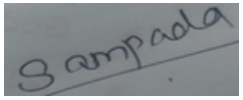

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SURBHI SHAH DEPARTMENT: IT-CS CLASS:FYIT-DIV C

SEMESTER: SEM-II MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: to think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems to apply their knowledge and skills to be employed and excel in IT professional careers and/or to continue their education in IT and/or related post graduate programmes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER NO:II TITLE OF PAPER:- **Microprocessor Architecture** UNIT 1	**Microprocessor, microcomputers, and Assembly Language:** Microprocessor, Microprocessor Instruction Set and Computer Languages, From Large Computers to Single-Chip Microcontrollers, Applications.	3	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE
	Microprocessor Architecture and Microcomputer System: Microprocessor Architecture and its operation's, Memory, I/O Devices, Microcomputer System, Logic Devices and Interfacing, Microprocessor-Based System Application.	4		
	8085 Microprocessor Architecture and Memory Interface: Introduction, 8085 Microprocessor unit, 8085-Based Microcomputer, Memory Interfacing, Interfacing the 8155 Memory Segment, Illustrative Example: Designing Memory for the MCTS Project, Testing and Troubleshooting Memory Interfacing Circuit, 8085-Based Single-Board microcomputer	5		

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UNIT 2	**Interfacing of I/O Devices** Basic Interfacing concepts, Interfacing Output Displays, Interfacing Input Devices, Memory Mapped I/O, Testing and Troubleshooting I/O Interfacing Circuits.	3	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE
	Introduction to 8085 Assembly Language Programming: The 8085 Programming Model, Instruction Classification, Instruction, Data and Storage, Writing assembling and Execution of a simple program, Overview of 8085 Instruction Set, Writing and Assembling Program.	5		
	Introduction to 8085 Instructions: Data Transfer Operations, Arithmetic Operations, Logic Operation, Branch Operation, Writing Assembly Languages Programs, Debugging a Program.	4		
UNIT 3	**Programming Techniques With Additional Instructions:** Programming Techniques: Looping, Counting and Indexing, Additional Data Transfer and 16-Bit Arithmetic Instructions, Arithmetic Instruction Related to Memory, Logic Operations: Rotate, Logics Operations: Compare, Dynamic Debugging.	4	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE
	Counters and Time Delays: Counters and Time Delays, Illustrative Program: Hexadecimal Counter, Illustrative Program: zero-to-nine (Modulo Ten) Counter, Generating Pulse Waveforms, Debugging Counter and Time-Delay Programs.	4		
	Stacks and Sub-Routines: Stack, Subroutine, Restart, Conditional Call, Return Instructions, Advanced Subroutine concepts.	4		

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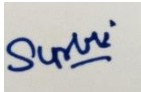
UNIT 4	**Code Conversion, BCD Arithmetic, and 16-Bit Data Operations:** BCD-to-Binary Conversion, Binary-to-BCD Conversion, BCD-to-Seven-Segment-LED Code Conversion, Binary-to-ASCII and ASCII-to-Binary Code Conversion, BCD Addition, BCD Subtraction, Introduction To Advanced Instructions and Applications, Multiplication, Subtraction With Carry.	4	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE
	Software Development System and Assemblers: Microprocessors-Based Software Development system, Operating System and Programming Tools, Assemblers and Cross-Assemblers, Writing Program Using Cross Assemblers.	4		
	Interrupts:-The 8085 Interrupt, 8085 Vectored Interrupts, Restart as S/W Instructions, Additional I/O Concepts and processes.	4		
UNIT 5	**The Pentium and Pentium Pro microprocessors:** Introduction, Special Pentium registers, Memory management, Pentium instructions, Pentium Pro microprocessor, Special Pentium Pro features.	5	Structured Computer Organization By Andrew C. Tanenbaum And internet.	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE
	Core 2 and later Microprocessors: Introduction, Pentium II software changes, Pentium IV and Core 2, i3, i5 and i7.	3		
	SUN SPARC Microprocessor: Architecture, Register file, data types and instruction format	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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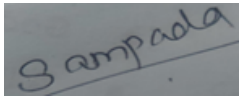

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYIT-C SEMESTER: SEM-2 MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- Perform object oriented programming to develop solution to problems demonstrating usage of control structures, modularity, I/O and other standard language constructs.
- Demonstrate adeptness of object oriented programming to develop solution to problem demonstration usage of data abstraction, encapsulation, and inheritance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1 OBJECT ORIENTED PROGRAMMING UNIT 4	**Program development using Inheritance:** Introduction, understanding inheritance, Advantages provided by inheritance, choosing the access specifier, *Derived class declaration,*	3	Object Oriented Programming with C++ by E.Balagurusamy	GOOGLE MEET AND PPT
	derived class constructors, class hierarchies, multiple inheritance,	3		
	Multilevel inheritance, Containership, hybrid inheritance. Exception Handling: Introduction,	3		
	Exception Handling Mechanism, Concept of throw & catch with example	3		

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UNIT 5	**Templates:** Introduction, Function Template and examples,	3	Object Oriented Programming with C++ by E.Balagurusamy	GOOGLE MEET AND PPT
	Class Template and examples.	3		
	Working with Files: Introduction, File Operations, Various File Modes,	4		
	File Pointer and their Manipulation	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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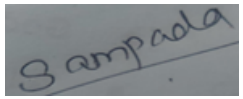

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____BSC-IT___ CLASS: __FYIT___ SEMESTER: II

MONTH: ___January_to March_____ ACADEMIC YEAR: ____2020-21__

LEARNING OBJECTIVE/S:
The learners will be able to:

Get knowledge that how to disposed e-wastages and to recycle the product and save our environment. To be capable of managing complex IT projects with consideration of the human, financial and environmental factors.

TITLE, PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Green Computing USIT205 Unit 1	**Introduction**: Overview and Issues: Problems: Toxins, Power Consumption, Equipment . Disposal Company's Carbon Footprint: Measuring, Details, reasons to bother, Plan for the Future, Cost Savings: Hardware, Power. Initiatives and Standards: Global Initiatives: United Nations, Basel Action Network, Basel Convention, North America: The United States, Canada, Australia, Europe, WEEE Directive, RoHS, National Adoption, Asia: Japan.	3 3 3 3	Toby Velte, Anthony Velte, Robert Elsenpeter	Google Meet and Power Point Presentation

Green Computing USIT205 Unit 3	**Changing the Way of Work: Old** Behaviours, starting at the Top, Process Reengineering with Green in Mind, Analysing the Global Impact of Local Actions, Steps: Water, Recycling, Energy, Pollutants, Teleworkers and Outsourcing, Telecommuting, Outsourcing, how to Outsource. Going Paperless: Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Include, Building an Intranet, Microsoft Office Interchange (EDI), Nuts and Bolts.	4 2 3 3	Toby Velte, Anthony Velte, Robert Elsenpeter	Google Meet and Power Point Presentation
Green Computing USIT205 Unit 5	**Greening Your Information Systems**: Initial Improvement Calculations, Selecting Metrics, Customer Interaction, Paper Reduction, Green Supply Chain, Improve Technology Infrastructure, Reduce PCs and Servers, Shared Services, Hardware Costs, Cooling. Staying Green: Organizational Check-ups. Chief Green Officer, Evolution, Sell the CEO, SMART Goals, Equipment Check-ups, Gather Data, Tracking the data, Baseline Data, Benchmarking, Analyse Data, Conduct Audits, Certifications, Benefits, Realities, Helpful Organizations	3 4 3 2	Toby Velte, Anthony Velte, Robert Elsenpeter	Google Meet and Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __36_____

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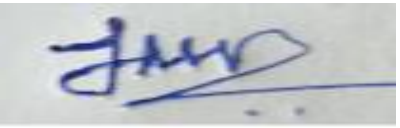

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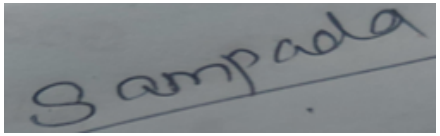

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE **DEPARTMENT**: ____IT____

CLASS: FYIT_C DIV **SEMESTER**: 2 **MONTH**: Jan to March **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand HTML**
- **Students will learn how t works with HTML and CSS**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT203 Web Programming	**Internet and the World Wide Web:** What is Internet? Introduction to internet and its applications, E-mail, telnet, FTP, e-commerce, video conferencing, e-business. Internet service providers, domain name server, internet address, World Wide Web (WWW): World Wide Web and its evolution, uniform resource locator (URL), browsers – internet explorer, Netscape navigator, opera, Firefox, chrome, Mozilla. search engine, web saver – apache, IIS, proxy server, HTTP protocol	6	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	GOOGLE MEET AND GOOGLE CLASSROOM

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Unit I	**HTML5:** Introduction, Why HTML5? Formatting text by using tags, using lists and backgrounds, Creating hyperlinks and anchors. Style sheets, CSS formatting text using style sheets, formatting paragraphs using style sheets.	6		
Unit II	**HTML5 Page layout and navigation:** Creating navigational aids: planning site organization, creating text based navigation bar, creating graphics based navigation bar, creating graphical navigation bar, creating image map, redirecting to anotherURL, creating division based layouts: HTML5 semantic tags, creating divisions, creating HTML5 semantic layout, positioning and formatting divisions	6	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	GOOGLE MEET AND GOOGLE CLASSROOM
	HTML5 Tables, Forms and Media: Creating tables: creating simple table, specifying the size of the table, specifying the width of the column, merging table cells, using tables for page layout, formatting tables: applying table borders, applying	6		

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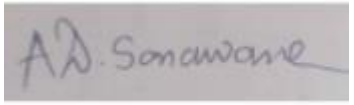
	background and foreground fills, changing cell padding, spacing and alignment, creating user forms: creating basic form, using check boxes and option buttons, creating lists, additional input types in HTML5, Incorporating sound and video: audio and video in HTML5, HTML multimedia basics, embedding video clips, incorporating audio on web page			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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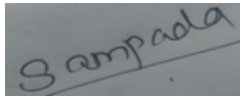

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT-CS

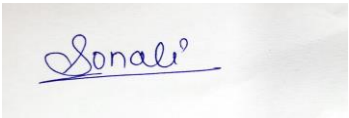
CLASS:FYIT-DIV C SEMESTER: SEM-II MONTH: JAN-MAR ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: To apply fundamental programming constructs. To illustrate the concept of classes and objects, Data Abstraction and Data Encapsulation. To implement the concept of Pointer, friend function , Virtual Functions, Constructor& Destructors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-1, OOPS, UNIT 1	**Object Oriented Methodology:** Introduction, Advantages and Disadvantages of Procedure Oriented Languages, what is Object Oriented? What is Object Oriented Development? Object Oriented Themes, Benefits and Application of OOPS.	4	Object Oriented Programming with C++ -by E. Balagurusamy	PPT, GoogleMeet, Jamboard ,Slido.
	Principles of OOPS: OOPS Paradigm, Basic Concepts of OOPS: Objects, Classes, Data Abstraction and Data Encapsulation	3		
	Inheritance, Polymorphism, Dynamic Binding, Message Passing	5		
UNIT 2	**Classes and Objects:** Simple classes (Class specification, class members accessing), Defining member functions	4	Object Oriented Programming with C++ -by E. Balagurusamy	PPT, GoogleMeet, Jamboard ,Slido.

	passing object as an argument, Returning object from functions, friend classes, Pointer to object, Array of pointer to object.	4		
	Constructors and Destructors: Introduction, Default Constructor, Parameterized Constructor and examples, Destructors.	2		
UNIT 3	**Polymorphism:** Concept of function overloading, overloaded operators, overloading unary and binary operators	4	Object Oriented Programming with C++ -by E. Balagurusamy	PPT, GoogleMeet, Jamboard ,Slido.
	overloading comparison operator, overloading arithmetic assignment operator, Data Conversion between objects and basic types.	5		
	Virtual Functions: Introduction and need, Pure Virtual Functions, Static Functions, this Pointer, abstract classes, virtual destructors.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36



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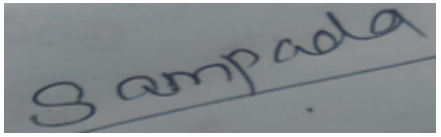

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT:CS

CLASS: FY BSc IT DIV C(WEB) SEMESTER:SEM -2 MONTH: JAN-MAR ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

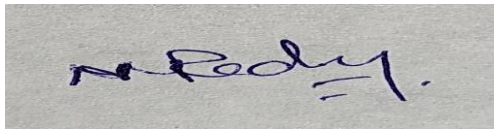
- Understand how server-side programming works on the web.
- PHP Basic syntax for variable types and calculations.
- Creating conditional structures
- Storing data in arrays
- Using PHP built-in functions and creating custom functions
- Understanding POST and GET in form submission.
- How to receive and process form submission data.
- Reading and writing cookies.
- Security tips (i.e. SQL Injection)
- Create a database in phpMyAdmin.
- Read and process data in a MySQL database. Students will learn JavaScript's role in websites and web apps.
- Students will be introduced to basic CS concepts
- Students will learn basic programming structures such as: variables, functions arrays etc.
- Students will learn how JavaScript works with HTML and CSS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3	**Java Script:** Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security,	2	JavaScript 2.0: The Complete	PPT

WEB PROGRAMMING UNIT 3	**Operators**: Assignment Operators, Comparison Operators, Arithmetic Operators, % (Modulus), ++(Increment), --(Decrement), -(Unary Negation), Logical Operators, Short-Circuit Evaluation, String Operators, Special Operators, ?: (Conditional operator), , (Comma operator), delete, new, this, void	3	Reference BY Thomas Powell and Fritz Schneider	
	Statements: Break, comment, continue, delete, do...while, export, for, for...in, function, if...else, import, labelled, return, switch, var, while, with,	2		
	Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, regExp **Document and its associated objects:** document, Link, Area, Anchor, Image, Applet, Layer	2		
	Events and Event Handlers : General Information about Events, Defining Event Handlers, event, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp,	3		
UNIT 4	**PHP:** Why PHP and MySQL? Server-side scripting, PHP syntax and variables, comments, types,	3	PHP Project for Beginners BY SharanamShah, Vaishali	PPT
	control structures, branching, looping, termination, functions, passing information with PHP, GET, POST,	3		
	formatting form variables, superglobal arrays, strings and string functions,	3		

	regular expressions, arrays, number handling, basic PHP errors/problems	3		
UNIT 5	**Advanced PHP and MySQL :** PHP/MySQL Functions, Integrating web forms and databases,	3	PHP Project for Beginners BY SharanamShah, Vaishali	PPT
	Displaying queries in tables, Building Forms from queries,	3		
	String and Regular Expressions, Sessions,	3		
	Cookies and HTTP, E-Mail	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36



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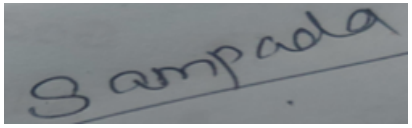

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SURBHI SHAH DEPARTMENT: IT-CS CLASS:SYIT-DIV A

SEMESTER: SEM-4 MONTH: JANUARY-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to The learners will be able to: to think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems to apply their knowledge and skills to be employed and excel in IT professional careers and/or to continue their education in IT and/or related post graduate programmes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:-II TITLE:- Introduction to Embedded Systems UNIT 1	**Introduction:** Embedded Systems and general purpose computer systems, history, classifications, applications and purpose of embedded systems	3	Introduction to embedded systems By Shibu K V	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE
	Core of embedded systems: microprocessors and microcontrollers, RISC and CISC controllers, Big endian and Little endian processors, Application specific ICs, Programmable logic devices, COTS, sensors and actuators, communication interface, embedded firmware, other system components.	6		
	Characteristics and quality attributes of embedded systems: Characteristics, operational and non-operational quality attributes.	3		
UNIT 4	**Designing Embedded System with 8051 Microcontroller:** Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	3	Programming Embedded Systems in C and C++	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE

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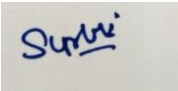
	Programming embedded systems: structure of embedded program, infinite loop, compiling, linking and debugging.	4	by Michael Barr	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 19



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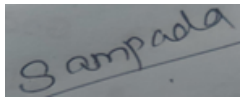

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SURBHI SHAH DEPARTMENT: IT-CS CLASS:SYIT-DIV A

SEMESTER: SEM-4 MONTH: JANUARY-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to The learners will be able to: to think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems to apply their knowledge and skills to be employed and excel in IT professional careers and/or to continue their education in IT and/or related post graduate programmes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:-II TITLE:- Introduction to Embedded Systems UNIT 1	**Introduction:** Embedded Systems and general purpose computer systems, history, classifications, applications and purpose of embedded systems	3	Introduction to embedded systems By Shibu K V	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE
	Core of embedded systems: microprocessors and microcontrollers, RISC and CISC controllers, Big endian and Little endian processors, Application specific ICs, Programmable logic devices, COTS, sensors and actuators, communication interface, embedded firmware, other system components.	6		
	Characteristics and quality attributes of embedded systems: Characteristics, operational and non-operational quality attributes.	3		
UNIT 4	**Designing Embedded System with 8051 Microcontroller:** Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	3	Programming Embedded Systems in C and C++	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE

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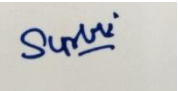
	Programming embedded systems: structure of embedded program, infinite loop, compiling, linking and debugging.	4	by Michael Barr	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 19



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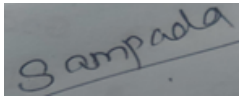

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT SEMESTER: IV MONTH: December to March
ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -I The Mean, Median, Mode, and Other Measures of Central Tendency	The Mean, Median, Mode, and Other Measures of Central Tendency: Index, or Subscript, Notation, Summation Notation, Averages, or Measures of Central Tendency ,The Arithmetic Mean , The Weighted Arithmetic Mean ,Properties of the Arithmetic Mean ,The Arithmetic Mean Computed from Grouped Data ,The Median ,The Mode, The Empirical Relation Between the Mean, Median, and Mode, The Geometric Mean G, The Harmonic Mean H ,The Relation Between the Arithmetic, Geometric, and Harmonic Means, The Root Mean Square, Quartiles, Deciles, and Percentiles, Software and Measures of Central Tendency. The Standard Deviation and Other Measures of Dispersion: Dispersion, or Variation, The Range, The Mean Deviation, The Semi-Interquartile Range, The 10–90 Percentile Range, The Standard Deviation, The Variance, Short Methods for Computing the Standard Deviation, Properties of the Standard Deviation, Charlie's Check, Sheppard's Correction for Variance, Empirical Relations Between Measures of Dispersion, Absolute and Relative Dispersion; Coefficient of Variation, Standardized Variable; Standard	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Scores, Software and Measures of Dispersion. Introduction to R: Basic syntax, data types, variables, operators, control statements, R-functions, R – Vectors, R – lists, R Arrays..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT SEMESTER: IV MONTH: December to March
ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -III Statistical Estimation Theory, Statistical Decision Theory,	Statistical Estimation Theory: Estimation of Parameters, Unbiased Estimates, Efficient Estimates, Point Estimates and Interval Estimates; Their Reliability, Confidence-Interval Estimates of Population Parameters, Probable Error. Statistical Decision Theory: Statistical Decisions, Statistical Hypotheses, Tests of Hypotheses and Significance, or Decision	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Rules, Type I and Type II Errors, Level of Significance, Tests Involving Normal Distributions, Two-Tailed and One-Tailed Tests, Special Tests, Operating-Characteristic Curves; the Power of a Test, p-Values for Hypotheses Tests, Control Charts, Tests Involving Sample Differences, Tests Involving Binomial Distributions. Statistics in R: mean, median, mode, Normal Distribution , Binomial Distribution, Frequency Distribution in R.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics CLASS: SYIT
SEMESTER: IV MONTH: December to March ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -IV Small Sampling Theory, The Chi-Square Test:	Small Sampling Theory: Small Samples, Student's t Distribution, Confidence Intervals, Tests of Hypotheses and Significance, The Chi-Square Distribution, Confidence Intervals for Sigma , Degrees of Freedom, The F Distribution. The Chi-Square Test: Observed and Theoretical Frequencies, Definition of chi-square, Significance Tests, The Chi-	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Square Test for Goodness of Fit, Contingency Tables, Yates' Correction for Continuity, Simple Formulas for Computing chi-square, Coefficient of Contingency, Correlation of Attributes, Additive Property of chi-square.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

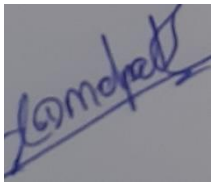
TEACHING PLAN (UNIT PLAN)

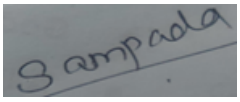
NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT
SEMESTER: IV MONTH: December to March ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -V Curve Fitting and the Method of Least Squares: Correlation Theory:,	Curve Fitting and the Method of Least Squares: Relationship Between Variables, Curve Fitting, Equations of Approximating Curves, Freehand Method of Curve Fitting, The Straight Line, The Method of Least Squares, The Least-Squares Line, Nonlinear Relationships, The Least-Squares Parabola, Regression, Applications to Time Series, Problems Involving More Than Two Variables. Correlation Theory: Correlation and Regression, Linear Correlation, Measures of Correlation, The Least-Squares Regression Lines, Standard Error of Estimate, Explained and Unexplained Variation, Coefficient of Correlation, Remarks Concerning the Correlation Coefficient, Product-Moment Formula for the Linear Correlation Coefficient, Short Computational Formulas, Regression Lines and the Linear	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Correlation Coefficient, Correlation of Time Series, Correlation of Attributes, Sampling Theory of Correlation, Sampling Theory of Regression..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT-CS

CLASS:SYIT-DIV A SEMESTER: SEM-IV MONTH: JAN-MAR ACADEMIC YEAR: 2020-2021

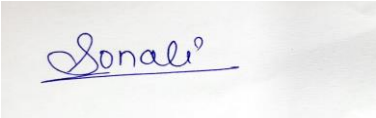
LEARNING OBJECTIVE/S:
The learners will be able to: Understand the basic concepts of Computer Graphics. Demonstrate various algorithms for scan conversion and filling of basic objects and their comparative analysis. Apply geometric transformations, viewing and clipping on graphical objects.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-5, CGA, UNIT-1	**Introduction to Computer Graphics:**Overview of Computer Graphics, Computer Graphics Application and Software, Description of some graphics devices, Input Devices for Operator Interaction, Active and Passive Graphics Devices, Display Technologies, Storage Tube Graphics Displays, Calligraphic Refresh Graphics Displays	2	Computer Graphics by Hearn, Baker	PPT, GoogleMeet, Jamboard ,Slido.
	Raster Refresh (Raster-Scan) Graphics Displays, Cathode Ray Tube Basics, Color CRT Raster Scan Basics, Video Basics, The Video Controller, Random-Scan Display Processor, LCD displays.	2		
	Scan conversion – Digital Differential Analyzer (DDA) algorithm, Bresenhams' Line drawing algorithm.Bresenhams' method of Circle drawing, Midpoint Circle Algorithm, Midpoint Ellipse Algorithm	3		

	Mid-point criteria, Problems of Aliasing, end-point ordering and clipping lines, Scan Converting Circles, Clipping Lines algorithms– Cyrus-Beck, Cohen-Sutherland and Liang-Barsky, Clipping Polygons, problem with multiple components.	4		
UNIT-2	**Two-Dimensional Transformations:**Transformations and Matrices, Transformation Conventions, 2D Transformations, Homogeneous Coordinates and Matrix Representation of 2D Transformations, Translations and Homogeneous Coordinates	2	Computer Graphics by Hearn, Baker	PPT, GoogleMeet, Jamboard ,Slido.
	Rotation, Reflection, Scaling, Combined Transformation, Transformation of Points, Transformation of The Unit Square, Solid Body Transformations, Rotation About an Arbitrary Point.	2		
	Reflection through an Arbitrary Line ,A Geometric Interpretation of Homogeneous Coordinates, The Window-to Viewport Transformations.	2		
	Three-Dimensional Transformations: Three-Dimensional Scaling, Three-Dimensional Shearing, Three Dimensional Rotation, Three-Dimensional Reflection, Three Dimensional Translation, Multiple Transformation, Rotation about an Arbitrary Axis in Space, Reflection through an Arbitrary Plane.	3		
	Matrix Representation of 3D Transformations, Composition of 3D Transformations, Affine and Perspective Geometry, Perspective Transformations, Techniques for Generating Perspective Views, Vanishing Points	2		

	the Perspective Geometry and camera models, Orthographic Projections, Axonometric Projections, Oblique Projections, View volumes for projections.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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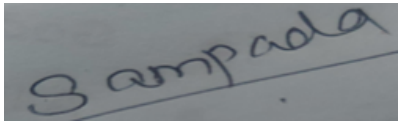

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT:CS

CLASS:SYIT-DIV A SEMESTER: SEM-4 MONTH: JAN-MAR ACADEMIC YEAR: 2020-2021

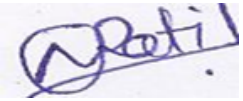
LEARNING OBJECTIVE/S:
Have a knowledge and understanding of geometrical transformations and 3D viewing.
Have a knowledge and understanding of techniques for representing 3D geometrical objects
Explain different Image enhancement techniques
Understand and review image transforms

PAPER,TITLE , UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5,Computer graphics and animation, UNIT 3	Viewing in 3D:Stages in 3D viewing, Canonical View Volume (CVV), Specifying an Arbitrary 3D View, Examples of 3D Viewing, The Mathematics of Planar Geometric Projections, Combined transformation matrices for projections and viewing, Coordinate Systems and matrices, camera model and viewing pyramid.	7	Computer graphics by Rajesh mourya Image processing by Dhananjay	PPT AND PDF
	Light:Radiometry,Transport,Equation,Photometry	4		

	Color:Colorimetry,ColorSpaces,ChromaticAdaptation,Color Appearance	4		
UNIT 4	Visible-Surface Determination:Techniques for efficient Visible-Surface Algorithms, Categories of algorithms, Back face removal, The z-Buffer Algorithm, Scan-line method, Painter's algorithms (depth sorting), Area sub-division method, BSP trees, Visible-Surface Ray Tracing, comparison of the methods.	7	Computer graphics by Rajesh mourya Image processing by Dhananjay	PPT AND PDF
	Plane Curves and Surfaces:Curve Representation, Nonparametric Curves, Parametric Curves,Parametric Representation of a Circle, Parametric Representation of an Ellipse, Parametric Representation of a Parabola, Parametric Representation of a Hyperbola	3		
	Representation of Space Curves,Cubic Splines, , Bezier Curves, B-spline Curves, B-spline Curve Fit,B-spline Curve Subdivision, Parametric Cubic Curves, Quadric Surfaces. Bezier Surfaces	6		
Unit 5	Computer Animation:Principles of Animation, Key framing, Deformations, Character Animation, Physics-Based Animation, Procedural Techniques, Groups of Objects.	6	Computer graphics by Rajesh mourya Image processing by Dhananjay	PPT AND PDF
	Image Manipulation and Storage: What is an Image? Digital image file formats, Image compression standard – JPEG,	4		

	Image Processing - Digital image enhancement,contrast stretching, Histogram Equalization, smoothing and median Filtering.	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 46



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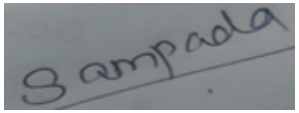

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: SYIT

SEMESTER: IV MONTH: JAN-MARCH ACADEMIC YEAR: 2020-21

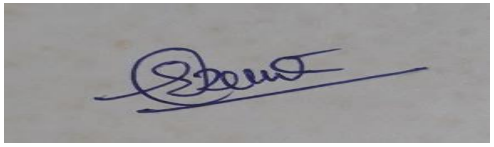
LEARNING OBJECTIVE/S:
The learners will be able to:

- Acquire knowledge of programming language java.
- Understand data types, control flow statements, iterations and classes.
- Gain proficiency in inheritance and packages.
- Understand enumeration, arrays, exceptions and byte stream.
- Acquire knowledge of event handling and layouts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401, Core Java, Unit III	**Inheritance:** Derived Class Objects, Inheritance and Access Control, Default Base Class Constructors, this and super keywords.	04	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Abstract Classes And Interfaces, Abstract Classes, Abstract Methods, Interfaces, What Is An Interface? How Is An Interface Different From An Abstract Class?, Multiple Inheritance, Default Implementation, Adding New Functionality, Method Implementation, Classes V/s Interfaces, Defining An Interface, Implementing Interfaces.	05	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

	Packages: Creating Packages, Default Package, Importing Packages, Using A Package.	03	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
USIT401, Core Java, Unit V	**Event Handling:** Delegation Event Model, Events, Event classes, Event listener interfaces, Using delegation event model, adapter classes and inner classes.	03	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Abstract Window Toolkit: Window Fundamentals, Component, Container, Panel, Window, Frame, Canvas. Components – Labels, Buttons, Check Boxes, Radio Buttons, Choice Menus, Text Fields, Text, Scrolling List, Scrollbars, Panels, Frames	07	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Layouts: Flow Layout, Grid Layout, Border Layout, Card Layout.	02	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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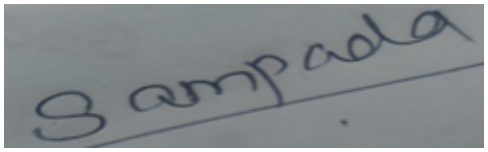

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Miss Shilpa James Rodrigues

DEPARTMENT: IT

CLASS: S.Y.I.T.-A (Core Java)

SEMESTER: IV

MONTH: January - March

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S :
The learners will be able to :

-Understand basics of Java programming language .

-Learn to control the flow of execution of the program.

-Understand of to create java classes and objects and using them to make java application

-Learn the concepts of multi threading and exception handling.

-Learn to use streams for reading and writing data to and from files.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401 , Unit 1, Core Java .	**Introduction:** History, architecture and its components, Java Class File, Java Runtime Environment, The Java Virtual Machine, JVM Components, The Java API, java platform, java development kit, Lambda Expressions, Methods References, Type Annotations, Method Parameter Reflection, setting the path environment variable, Java Compiler And Interpreter, java	08	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Power point, google meet.

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	programs, java applications, main(), public, static, void, string[] args, statements, white space, case sensitivity, identifiers, keywords, comments, braces and code blocks, variables, variable name			
	Data types: primitive data types, Object Reference Types, Strings, Auto boxing, operators and properties of operators, Arithmetic operators, assignment operators, increment and decrement operator, relational operator, logical operator, bitwise operator, conditional operator.	04	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Power point, google meet.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401 , Unit 2, Core Java .	**Control Flow Statements:** The If…Else If…Else Statement, The Switch…Case Statement	02	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Power point, google meet.
	Iterations: The While Loop, The Do … While Loop, The For Loop, The Foreach Loop, Labeled Statements, The Break And Continue Statements, The Return Statement	04	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Power point, google meet.
	Classes: Types of Classes, Scope Rules, Access Modifier, Instantiating Objects From A Class, Initializing The Class Object And Its Attributes, Class Methods, Accessing A Method, Method Returning A Value, Method's Arguments, Method Overloading, Variable Arguments [Varargs], Constructors, this Instance, super Instance, Characteristics Of Members Of A Class, constants, this instance, static fields of a class, static methods of a class, garbage collection.	06	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Power point, google meet.

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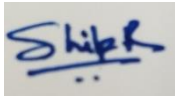
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401 , Unit 4, Core Java .	**Enumerations, Arrays:** Two Dimensional Arrays, Multi-Dimensional Arrays, Vectors, Adding Elements To A Vector, Accessing Vector Elements, Searching For Elements In A Vector, Working With The Size of The Vector.	03	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Power point, google meet.
	Multithreading: the thread control methods, thread life cycle, the main thread, creating a thread, extending the thread class.	03	Core Java 8 for Beginners -Vaishali Shah, Sharnam Sha	Power point, google meet.
	Exceptions: Catching Java Exceptions, Catching Run-Time Exceptions, Handling Multiple Exceptions, The finally Clause, The throws Clause	03	Core Java 8 for Beginners -Vaishali Shah, Sharnam Sha	Power point, google meet.
	Byte streams: reading console input, writing console output, reading file, writing file, writing binary data, reading binary data, getting started with character streams, writing file, reading file	03	Core Java 8 for Beginners -Vaishali Shah, Sharnam Sha	Power point, google meet.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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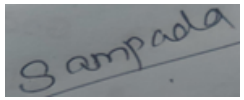

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: SYIT SEMESTER: IV MONTH: DEC to MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

To provide experience to integrate hardware and software for microcontroller applications systems.

To acquire knowledge about microcontrollers embedded processors and their applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 Embedded System Unit 2	**Embedded Systems – Application and Domain Specific:** Application specific – washing machine, domain specific - automotive.	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Embedded Hardware: Memory map, i/o map, interrupt map, processor family, external peripherals, memory – RAM , ROM, types of RAM and ROM, memory testing, CRC ,Flash memory.	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012	Projector, Laptop, Black board & Chalk

			And Embedded Systems Rajkamal Tata Mcgraw-Hill	
	Peripherals: Control and Status Registers, Device Driver, Timer Driver - Watchdog Timers.	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
Paper-02 Embedded System Unit 3	**The 8051 Microcontrollers:** Microcontrollers and Embedded processors, Overview of 8051 family.8051 Microcontroller hardware, Input/output pins, Ports, and Circuits, External Memory.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	8051 Programming in C: Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs.	6	Introduction to embedded systems Shibu K V	Projector, Laptop, Black board & Chalk

			Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	
Paper-02 Embedded System Unit 5	**Real Time Operating System (RTOS):** Operating system basics, types of operating systems, Real-Time Characteristics, Selection Process of an RTOS	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Design and Development: Embedded system development Environment – IDE, types of file generated on cross compilation, disassembler/ de-compiler, simulator, emulator and debugging, embedded product development life-cycle, trends in embedded industry.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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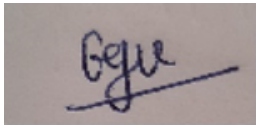

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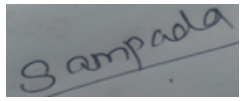

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gayatree P Karnik DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYIT -A SEMESTER: IV MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To provide a understanding of software engineering, its basic concepts and functioning. Develop and master understanding of various models used by software industries for various purposes. Also conceptual learning of various aspects of it such as cost estimation techniques, project management, quality assurance etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT404, Software Engineering Unit-I	Introduction: What is software engineering? Software Development Life Cycle, Requirements Analysis, Software Design, Coding, Testing, Maintenance etc. Agile software development: Agile methods, Plan-driven and agile development, Extreme programming, Agile project management, Scaling agile methods.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Blackboard, Chalk
	Software Requirements: Functional and Non-functional requirements, User Requirements, System Requirements, Interface Specification, Documentation of the software requirements.	02		Blackboard, Chalk
	Software Processes: Process and Project, Component Software Processes. Software Development Process Models. • Waterfall Model. • Prototyping. • Iterative Development. • Rational Unified Process. • The RAD Model • Time boxing Model.	04		Blackboard, Chalk
	Agile software development: Agile methods, Plan-driven and agile development, Extreme programming, Agile project management, Scaling agile methods.	03		Blackboard, Chalk

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USIT404, Software Engineering Unit-II	Socio-technical system:Essential characteristics of socio technical systems, Emergent System Properties, Systems Engineering, Components of system such as organization, people and computers, Dealing Legacy Systems.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Blackboard, Chalk
	Critical system: Types of critical system, A simple safety critical system, Dependability of a system, Availability and Reliability, Safety and Security of Software systems.	03		Blackboard, Chalk
	Requirements Engineering Processes: Feasibility study, Requirementselicitation and analysis, Requirements Validations, Requirements Management.	03		Blackboard, Chalk
	System Models: Models and its types, Context Models, Behavioural Models, Data Models, Object Models, Structured Methods	03		Blackboard, Chalk
USIT404, Software Engineering Unit-III	Architectural Design: Architectural Design Decisions, System Organisation, Modular Decomposition Styles, Control Styles, Reference Architectures.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh	Blackboard, Chalk
	User Interface Design: Need of UI design, Design issues, The UI design Process, User analysis, User Interface Prototyping, Interface Evaluation	03		Blackboard, Chalk
	Project Management Software Project Management, Management activities, Project Planning, Project Scheduling, Risk Management.	03		Blackboard, Chalk
	Quality Management: Process and Product Quality, Quality assurance and Standards, Quality Planning, Quality Control, Software Measurement and Metrics	03		Blackboard, Chalk

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			edition	
USIT404, Software Engineering Unit-IV	Verification and Validation: Planning Verification and Validation, Software Inspections, Automated Static Analysis, Verification and Formal Methods.	04	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Blackboard, Chalk
	Software Testing: System Testing, Component Testing, Test Case Design, Test Automation. Software Measurement: Size-Oriented Metrics, Function-Oriented Metrics, Extended Function Point Metrics	04		Blackboard, Chalk
	Software Cost Estimation:Software Productivity, Estimation Techniques, Algorithmic Cost Modelling, Project Duration and Staffing	04		Blackboard, Chalk
USIT404, Software Engineering Unit-V	Process Improvement: Process and product quality, Process Classification, Process Measurement, Process Analysis and Modeling, Process Change, The CMMI Process Improvement Framework.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's	Blackboard, Chalk
	Service Oriented Software Engineering: Services as reusable components, Service Engineering, Software Development with Services.	03		Blackboard, Chalk
	Software reuse: The reuse landscape, Application frameworks, Software product lines, COTS product reuse.	03		Blackboard, Chalk
	Distributed software engineering: Distributed systems issues, Client–server computing, Architectural patterns for distributed	03		Blackboard, Chalk

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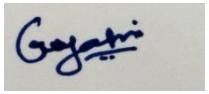
	systems, Software as a service		approach Roger Pressman Tata Mcgraw-hill Seventh edition	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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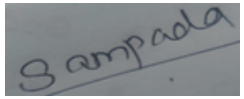

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:S.Y.BSC(I.T) Div-B & C SEMESTER: **IV** MONTH:JANUARY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : To list the basic concepts used in computer graphics

To implement various algorithms to scan, convert the basic geometrical primitives, transformations, Area filling, clipping.

To describe the importance of viewing and projections.

To define the fundamentals of animation, virtual reality and its related technologies.

To understand a typical graphics pipeline

To design an application with the principles of virtual reality

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Computer Graphics and Animation USIT405 Unit-1	**Introduction to Computer Graphics:** Overview of Computer Graphics, Computer Graphics Application andSoftware, Description of some graphics devices, Input Devices forOperator Interaction, Active and Passive Graphics Devices, DisplayTechnologies, Storage Tube Graphics Displays, Calligraphic Refresh Graphics Displays, Raster Refresh (Raster-Scan) Graphics Displays,Cathode Ray Tube Basics, Color CRT Raster Scan Basics, VideoBasics, The Video Controller, Random-Scan Display Processor, LCD displays.	5	Computer Graphics -Hearn, Baker Computer Graphics-Rajesh.k.Mourya	Powerpoint Presentation, Google classroom, Google Meet

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	Scan conversion – Digital Differential Analyzer (DDA) algorithm,Bresenhams' Line drawing algorithm.Bresenhams' method of Circle drawing	3		
	Midpoint Circle Algorithm, Midpoint Ellipse Algorithm,Mid-point criteria	3		
	Problems of Aliasing, end-point ordering andclipping lines, Scan Converting Circles	2		
	Clipping Lines algorithms–Cyrus-Beck, Cohen-Sutherland and Liang-Barsky, Clipping Polygons,problem with multiple components.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		
Computer Graphics and Animation USIT405 Unit-3	**Viewing in 3D** Stages in 3D viewing, Canonical View Volume (CVV), Specifying an Arbitrary 3D View, Examples of 3D Viewing, The Mathematics of Planar Geometric Projections, Combined transformation matrices for projections and viewing, Coordinate Systems and matrices, camera model and viewing pyramid.	5	Computer Graphics -Hearn, Baker Computer Graphics-Rajesh.k.Mourya Computer Graphics - Principles and Practice- J. D. Foley, A. Van Dam, S. K.	Powerpoint Presentation, Google classroom, Google Meet
	Light: Radiometry,Transport,Equation,Photometry	3		
	Color: Colorimetry,ColorSpaces,ChromaticAdaptation, Color Appearance	3		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	11		

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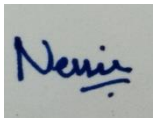
			Feiner and J. F. Hughes	
Computer Graphics and Animation USIT405 Unit-4	**Visible-Surface Determination:** Techniques for efficient Visible-Surface Algorithms, Categories of algorithms, Back face removal, The z-Buffer Algorithm, Scan-line method, Painter's algorithms (depth sorting), Area subdivision method, BSP trees, Visible-Surface Ray Tracing, comparison of the methods.	5	Computer Graphics -Hearn, Baker Computer Graphics- Rajesh.k.Mourya Computer Graphics - Principles and Practice- J. D. Foley, A. Van	Powerpoint Presentation, Google classroom, Google Meet
	Plane Curves and Surfaces: Curve Representation, Nonparametric Curves, Parametric Curves, Parametric Representation of a Circle, Parametric Representation of an Ellipse, Parametric Representation of a Parabola, Parametric Representation of a Hyperbola, Representation of Space Curves, Cubic Splines, , Bezier Curves, B-spline Curves, B-spline Curve Fit, B-spline Curve Subdivision, Parametric Cubic Curves, QuadricSurfaces. Bezier Surfaces.	5		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	10		



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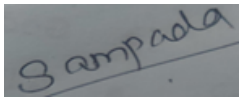

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____Information Technology___ CLASS: __SYIT_(B)

SEMESTER - IV MONTH: ____January_ ACADEMIC YEAR: ____2020-21__

LEARNING OBJECTIVE/S:
To adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct. To be capable of managing complex IT projects with consideration of the human, financial and environmental factors. To work effectively as a part of a team to achieve a common stated goal.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Software Engineering USIT404 Unit - 1	**Introduction**: What is software engineering? Software Development Life Cycle, Requirements Analysis, Software Design, Coding, Testing, Maintenance etc.	3	Ian Somerville Roger Pressman	Google Meet and Power Point Presentation
	Software Requirements: Functional and Non-functional requirements, User Requirements, System Requirements, Interface Specification, Documentation of the software requirements. Software Processes: Process and Project, Component Software Processes.	4	Ian Somerville Roger Pressman	Google Meet and Power Point Presentation

	Software Development Process Models. Waterfall Model. Prototyping. Iterative Development. Rational Unified Process. The RAD Model Time boxing Model. Agile software. development: Agile methods. Plan-driven and agile development, Extreme programming, Agile project mgmt. methods.	5	Ian Somerville Roger Pressman	Google Meet and Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI_ DEPARTMENT: _____Information Technology___ CLASS: __SYIT_(B)

SEMESTER - IV MONTH: _February_ ACADEMIC YEAR: ____2020-21__

LEARNING OBJECTIVE/S: Socio-technical System and Critical system.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Software Engineering USIT404	**Socio-technical system:** Essential characteristics of socio technical systems, Emergent System Properties, Systems Engineering.	3	Ian Somerville Roger Pressman	Google Meet and Power Point Presentation
Unit - 2	Components of system such as organization, people and computers, Dealing Legacy Systems. Critical system: Types of critical system.	3	Ian Somerville Roger Pressman	Google Meet and Power Point Presentation

	A simple safety critical system, Dependability of a system, Availability and Reliability, Safety and Security of Software systems.	3	Ian Somerville Roger Pressman	Google Meet and Power Point Presentation
	Requirements Engineering Processes: Feasibility study, Requirements elicitation and analysis, Requirements Validations, Requirements Management	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

NAME OF THE STAFF: ____ HEMANT WANI_ DEPARTMENT: _____Information Technology___ CLASS: __SYIT_(B)

SEMESTER - IV MONTH: ____February_ ACADEMIC YEAR: ____2020-21__

LEARNING OBJECTIVE/S: System Design, UML and it's type, Project mgmt.. activities.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Software Engineering USIT404	**Architectural Design:** Architectural Design Decisions, System Organisation, Modular Decomposition Styles, Control Styles, Reference Architectures. User Interface Design: Need of UI design, Design issues,	5	Ian Somerville Roger Pressman	Google Meet and Power Point Presentation

Unit - 3	The UI design Process, User analysis, User Interface Prototyping, Interface Evaluation. Project Management Software Project Management, Management activities,	3	Ian Somerville Roger Pressman	Google Meet and Power Point Presentation
	Project Planning, Project Scheduling, Risk Management. Quality Management: Process and Product Quality, Quality assurance and Standards, Quality Planning,	4	Ian Somerville Roger Pressman	Google Meet and Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

NAME OF THE STAFF: ____ HEMANT WANI_ DEPARTMENT: _____Information Technology___ CLASS: __SYIT_(B)

SEMESTER - IV MONTH:_February and_March_ ACADEMIC YEAR: ____2020-21__

LEARNING OBJECTIVE/S: Verification and Validation.

Software Engineering USIT404 Unit - 4	**Verification and Validation:** Planning Verification and Validation, Software Inspections, Automated Static Analysis, Verification and Formal Methods.	3	Ian Somerville Roger Pres Ian	Google Meet and Power Point Presentation
	Software Testing: System Testing, Component Testing, Test Case Design, Test Automation. Software	3		
	Measurement: Size-Oriented Metrics, Function-Oriented Metrics, Extended Function Point Metrics	3		
		3		

	Software Cost Estimation: Software Productivity, Estimation Techniques, Algorithmic Cost Modelling, Project Duration and Staffing.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____Information Technology___ CLASS: __SYIT_(B)

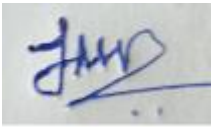
SEMESTER - IV MONTH: ____March_ ACADEMIC YEAR: ____2020-21__

LEARNING OBJECTIVE/S: Process Improvement CMMI Model.

Software Engineering USIT404 Unit - 5	**Process Improvement:** Process and product quality, Process Classification, Process Measurement, Process Analysis and Modelling, Process Change.	3	Ian Somerville Roger Pressman	Google Meet and Power Point Presentation
	The CMMI Process Improvement Framework. Service Oriented Software Engineering: Services as reusable components, Service Engineering.	3		
		3		

	Software Development with Services. Software reuse: The reuse landscape, Application frameworks, Software product lines, COTS product reuse. Distributed software engineering: Distributed systems issues, Client–server computing, Architectural patterns for distributed systems, Software as a service.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____



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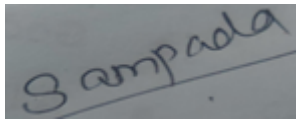

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT/CS

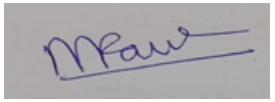
CLASS: SYIT DIV: B SEMESTER: IV MONTH: JANUARY TO MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to explore Java technologies for designing and developing dynamic, interactive and responsive applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Core Java (USIT401) Unit I	Introduction: History, architecture and its components, Java Class File, Java Runtime Environment, The Java Virtual Machine, JVM Components, The Java API, java platform, java development kit, Lambda Expressions, Methods References, Type Annotations, Method Parameter Reflection, setting the path environment variable, Java Compiler and Interpreter, java programs, java applications, main (), public, static, void, string [] args, statements, white space, case sensitivity, identifiers, keywords, comments, braces and code blocks, variables, variable name	05	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th Edition	Google Jam board, Slides, Docs
	Data types: primitive data types, Object Reference Types, Strings, Auto boxing, operators and properties of operators, Arithmetic operators, assignment operators, increment and decrement operator, relational operator, logical operator, bitwise operator, conditional operator	03		
	Event Handling: Delegation Event Model, Events, Event classes,	02		

Core Java (USIT401) Unit V	Event listener interfaces, Using delegation event model, adapter classes and inner classes.		Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th Edition	Google Jam board, Slides, Docs
	Abstract Window Toolkit: Window Fundamentals, Component, Container, Panel, Window, Frame, Canvas. Components – Labels, Buttons, Check Boxes, Radio Buttons, Choice Menus, Text Fields, Text, Scrolling List, Scrollbars, Panels, Frames	02		
	Layouts: Flow Layout, Grid Layout, Border Layout, Card Layout.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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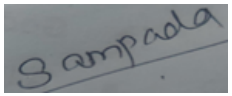

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYBSc(IT) DIV:B SEMESTER: IV MONTH: JANUARY-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Understand programming language and tools to develop computer programs and systems that are effective solutions to problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper:USIT401 , unit:2, Title:Core Java	**Control Flow Statements:** The If…Else If…Else Statement, The Switch…Case Statement	3	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
	Iterations: The While Loop, The Do … While Loop, The For Loop, The Foreach Loop, Labeled Statements, The Break And Continue Statements, The Return Statement	4	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
	Classes: Types of Classes, Scope Rules, Access Modifier, Instantiating Objects From A Class, Initializing The Class Object And Its Attributes, Class Methods, Accessing A Method, Method Returning A Value, Method's Arguments, Method Overloading, Variable Arguments [Varargs], Constructors, this Instance, super Instance, Characteristics Of Members Of A Class, constants, this	5	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.

	instance, static fields of a class, static methods of a class, garbage collection.			
Paper:USIT401 , unit:3, Title:Core Java	**Inheritance:** Derived Class Objects, Inheritance and Access Control, Default Base Class Constructors, this and super keywords. Abstract Classes And Interfaces, Abstract Classes, Abstract Methods, Interfaces,	4	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
	What Is An Interface? How Is An Interface Different From An Abstract Class?, Multiple Inheritance, Default Implementation, Adding New Functionality, Method Implementation, Classes V/s Interfaces, Defining An Interface, Implementing Interfaces.	4	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
	Packages: Creating Packages, Default Package, Importing Packages, Using A Package.	4	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
Paper:USIT401 , unit:4, Title:Core Java	**Enumerations,Arrays:** Two Dimensional Arrays, Multi-Dimensional Arrays, Vectors, Adding Elements To A Vector, Accessing Vector Elements, Searching For Elements In A Vector, Working With The Size of The Vector.	3	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.

	Multithreading: the thread control methods, thread life cycle, the main thread, creating a thread, extending the thread class.	3	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
	Exceptions: Catching Java Exceptions, Catching Run-Time Exceptions, Handling Multiple Exceptions, The finally Clause, The throws Clause	3	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.
	Byte streams: reading console input, writing console output, reading file, writing file, writing binary data, reading binary data, getting started with character streams, writing file, reading file	3	Core Java 8 for Beginners , Java: The Complete Reference	Online mode Google meet Google slides.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12

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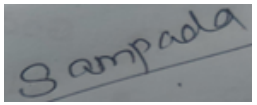

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: IT

CLASS: SY BSc IT SEMESTER:IV MONTH: JAN-MAR ACADEMICYEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to :

1. Understand what is a microcontroller, microcomputer, embedded system.
2. Understand different components of a micro-controller and their interactions.
3. Become familiar with programming environment used to develop embedded systems .
4. Understand key concepts of embedded systems like IO, timers, interrupts, interaction with peripheral devices .
5. Learn debugging techniques for an embedded system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 ES UNIT 1	Embedded Systems and general purpose computer systems, history, classifications, applications and purpose of embedded systems	4	Introduction to embedded systems by Shibu K V	POWER POINT PRESENTATION
	Microprocessors and microcontrollers ,RISC and CISC controllers, Big endian and Little endian processors, Application specific ICs, Programmable logic devices, COTS.	3		
	Sensors and actuators, communication interface, embedded firmware, other system components.	3		

	Characteristics, operational and non-operational quality attributes.	2		
UNIT 2	Application specific – washing machine, domain specific - automotive.	3	Introduction to embedded systems by Shibu K V	POWER POINT PRESENTATION
	Memory map, i/o map, interrupt map, processor family, external peripherals	3		
	memory – RAM , ROM, types of RAM and ROM, memory testing, CRC ,Flash memory .	3		
	Control and Status Registers, Device Driver, Timer Driver - Watchdog Timers.	3		
UNIT 3	Microcontrollers and Embedded processors, Overview of 8051 family.8051 Microcontroller hardware	4	Programming Embedded Systems in C C++ by Michael Barr	POWER POINT PRESENTATION
	Input/output pins, Ports, and Circuits, External Memory.	4		
	Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs.	4		
UNIT 4	Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	4	https://www.tutorialspoint.com/embedded_systems Introduction to embedded systems by Shibu K V	POWER POINT PRESENTATION
	structure of embedded program, infinite loop	4		

	compiling, linking and debugging	4		
UNIT 5	Operating system basics, types of operating systems, Real-Time Characteristics, Selection Process of an RTOS.	4	https://www.tutorialspoint.com/embedded_systems.	POWER POINT PRESENTATION
	Embedded system development Environment – IDE, types of file generated on cross compilation, disassembler/ de-compiler,	4		
	simulator, emulator and debugging, embedded product development life-cycle, trends in embedded industry.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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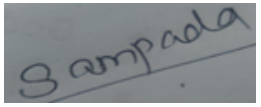

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: S. Y. B. Sc. I. T –B SEMESTER: IV MONTH: January-March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :
a. Work with various transformations
b. Create various objects and applications using graphics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-V Computer Graphics and Applications Unit -II	**Two-Dimensional Transformations:** Transformations and Matrices, Homogeneous Coordinates and Matrix Representation of-Translations, Rotation, Reflection, Scaling, Combined Transformation, Transformation of Points, Unit Square, Solid Body Transformations, Rotation About an Arbitrary Point, Reflection through an Arbitrary Line, The Window-to-Viewport Transformations.	7	Computer Graphics by Rajesh Maurya	PowerPoint presentation through Google Meet
	Three-Dimensional Transformations: 3D- Scaling, Shearing, Rotation, Reflection, Translation, Multiple Transformation, Rotation about an Arbitrary Axis in Space, Reflection through an Arbitrary Plane, Composition of 3D Transformations, Affine and Perspective Geometry, Perspective Transformations, Vanishing Points, the Perspective Geometry, Orthographic Projections, Axonometric Projections, Oblique Projections, View volumes for projections.	5		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: S. Y. B. Sc. I. T –B SEMESTER: IV MONTH: January-March ACADEMIC YEAR: 2020-2021

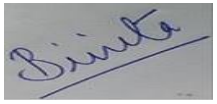
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various transformations

b. Create various objects and applications using graphics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-V Computer Graphics and Applications Unit -V	**Computer Animation:** Principles of Animation, Key framing, Deformations, Character Animation, Physics-Based Animation, Procedural Techniques, Groups of Objects.	3	Computer Graphics by Rajesh Maurya	PowerPoint presentation through Google Meet
	Image Manipulation and Storage: What is an Image? Digital image file formats, Image compression standard – JPEG, Image Processing - Digital image enhancement, contrast stretching, Histogram Equalization, smoothing and median Filtering.	9	Image Processing by Dhananjay	PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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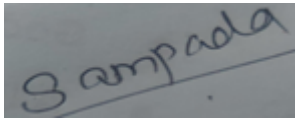

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**SY.B S C(IT)**_____ SEMESTER: ____**IV**_____ MONTH: _____**DECEMBER-MARCH**_____ ACADEMIC YEAR: _____**2020-2021**_____

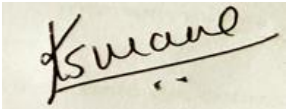
LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the concept of transformations and its types in 2D and 3D in computer graphics and how those can be implemented in variation of applications including Animation. Understanding the representation of matrices, projection in CG and its usage. To implement concepts, creation and how it works with different types of animation. To make understand what is image , how it is created and how it is used in varieties of processing, To make understand the concept of image enhancement, compression, filtering and histogram of image to study subjective improvisation of image in applications to reduce the noise

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-05 (USIT405) **Computer Graphics and Animation** **Unit No -02**	**Two-Dimensional Transformations:** Transformations and Matrices, Transformation Conventions, 2D Transformations, Homogeneous Coordinates and Matrix Representation of 2D Transformations, Translations and Homogeneous Coordinates, Rotation, Reflection, Scaling, Combined Transformation, Transformation of Points, Transformation of The Unit Square, Solid Body Transformations, Rotation About an Arbitrary Point, Reflection through an	06	Computer Graphics by R.K Maurya	Online Google Meet PPTs

	Arbitrary Line, A Geometric Interpretation of Homogeneous Coordinates, The Window-to-Viewport Transformations.			
	Three-Dimensional Transformations: Three-Dimensional Scaling, Three-Dimensional Shearing, Three-Dimensional Rotation, Three-Dimensional Reflection, Three-Dimensional Translation, Multiple Transformation, Rotation about an Arbitrary Axis in Space, Reflection through an Arbitrary Plane, Matrix Representation of 3D Transformations, Composition of 3D Transformations,. Affine and Perspective Geometry, Perspective Transformations, Techniques for Generating Perspective Views, Vanishing Points, the Perspective Geometry and camera models, Orthographic Projections, Axonometric Projections, Oblique Projections, View volumes for projections.	06	Computer Graphics by R.K Maurya	Online Google Meet PPTs
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	**Computer Animation:** Principles of Animation, Key framing, Deformations, Character Animation, Physics-Based Animation, Procedural Techniques, Groups of Objects.	06	Computer Graphics by R.K Maurya.	Online Google Meet PPTs
	Image Manipulation and Storage: What is an Image? Digital image file formats, Image compression standard – JPEG, Image Processing - Digital image enhancement, contrast stretching, Histogram Equalization, smoothing and median Filtering.	06	Digital Image Processing by Dhananjay.	Online Google Meet PPTs

	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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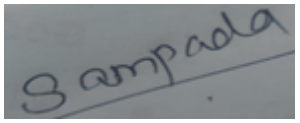

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: SY BSc IT SEMESTER:IV MONTH: JAN-MAR ACADEMICYEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to :

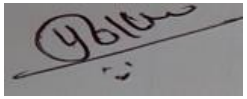
1. Understand what is a microcontroller, microcomputer, embedded system.
2. Understand different components of a micro-controller and their interactions.
3. Become familiar with programming environment used to develop embedded systems .
4. Understand key concepts of embedded systems like IO, timers, interrupts, interaction with peripheral devices .
5. Learn debugging techniques for an embedded system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 ES UNIT 1	Embedded Systems and general purpose computer systems, history, classifications, applications and purpose of embedded systems	4	Introduction to embedded systems by Shibu K V	POWER POINT PRESENTATION
	Microprocessors and microcontrollers ,RISC and CISC controllers, Big endian and Little endian processors, Application specific ICs, Programmable logic devices, COTS.	3		
	Sensors and actuators, communication interface, embedded firmware, other system components.	3		

	Characteristics, operational and non-operational quality attributes.	2		
UNIT 2	Application specific – washing machine, domain specific - automotive.	3	Introduction to embedded systems by Shibu K V	POWER POINT PRESENTATION
	Memory map, i/o map, interrupt map, processor family, external peripherals	3		
	memory – RAM , ROM, types of RAM and ROM, memory testing, CRC ,Flash memory .	3		
	Control and Status Registers, Device Driver, Timer Driver - Watchdog Timers.	3		
UNIT 3	Microcontrollers and Embedded processors, Overview of 8051 family.8051 Microcontroller hardware	4	Programming Embedded Systems in C C++ by Michael Barr	POWER POINT PRESENTATION
	Input/output pins, Ports, and Circuits, External Memory.	4		
	Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs.	4		
UNIT 4	Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	4	Introduction to embedded systems by	POWER POINT PRESENTATION

			Shibu K V	
	structure of embedded program, infinite loop	4		
	compiling, linking and debugging	4		
UNIT 5	Operating system basics, types of operating systems, Real-Time Characteristics, Selection Process of an RTOS.	4	https://www.tutorialspoint.com/embedded_systems.	POWER POINT PRESENTATION
	Embedded system development Environment – IDE, types of file generated on cross compilation, disassembler/ de-compiler,	4		
	simulator, emulator and debugging, embedded product development life-cycle, trends in embedded industry.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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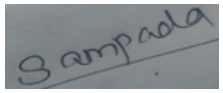

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ARPITA BANERJEE DEPARTMENT: IT-CS

CLASS: SYIT-DIV C SEMESTER: IV MONTH: JAN - MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Develop logics to write programs, build application using Core Java. This will also help them to understand some basic concepts of object-oriented programming like class, inheritance, polymorphism, message passing. Also they will get to know the idea of multithreading, package, exception-handling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401 Core Java II	**Control Flow Statements:** The If…Else If…Else Statement, The Switch…Case Statement	3	Core Java 8 for Beginners By Vaishali Shah, Sharnam Shah	Google Meet and PowerPoint Presentation
	Iterations: The While Loop, The Do … While Loop, The For Loop, The Foreach Loop, Labeled Statements, The Break And Continue Statements, The Return Statement	3		
	Classes: Types of Classes, Scope Rules, Access Modifier, Instantiating Objects From A Class, Initializing The Class Object And Its Attributes, Class Methods, Accessing A Method, Method Returning A Value, Method's Arguments, Method Overloading	3		
	Variable Arguments [Varargs], Constructors, this Instance, super Instance, Characteristics Of Members Of A Class, constants, this instance, static fields of a class, static methods of a class, garbage collection.	3		
	Inheritance: Derived Class Objects, Inheritance and Access Control, Default Base Class Constructors, this and super keywords.	3	Core Java 8 for	Google Meet and PowerPoint Presentation

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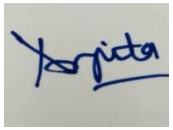
III	Abstract Classes And Interfaces, Abstract Classes, Abstract Methods, Interfaces, What Is An Interface? How Is An Interface Different From An Abstract Class?	3	Beginners By Vaishali Shah, Sharnam Shah	
	Multiple Inheritance, Default Implementation, Adding New Functionality, Method Implementation, Classes V/s Interfaces, Defining An Interface, Implementing Interfaces.	4		
	Packages: Creating Packages, Default Package, Importing Packages, Using A Package.	2		
IV	**Enumerations, Arrays:** Two Dimensional Arrays, Multi-Dimensional Arrays, Vectors, Adding Elements To A Vector, Accessing Vector Elements, Searching For Elements In A Vector, Working With The Size of The Vector.	3	Core Java 8 for Beginners By Vaishali Shah, Sharnam Shah	Google Meet and PowerPoint Presentation
	Multithreading: the thread control methods, thread life cycle, the main thread, creating a thread, extending the thread class.	3		
	Exceptions: Catching Java Exceptions, Catching Run-Time Exceptions, Handling Multiple Exceptions, The finally Clause, The throws Clause	3		
	Byte streams: reading console input, writing console output, reading file, writing file, writing binary data, reading binary data, getting started with character streams, writing file, reading file	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36



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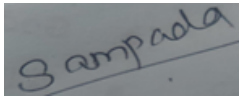

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT:CS

CLASS: SY BSc IT DIV-C(CJ) SEMESTER:SEM-4 MONTH:JAN-MAR ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

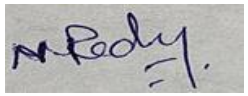
The learners will be able to :

- To learn why Java is useful for the design of desktop and web applications.
- To learn how to implement object-oriented designs with Java.
- To identify Java language components and how they work together in applications.
- To design and program stand-alone Java applications.
- To learn how to design a graphical user interface (GUI) .
- To understand how to use Java APIs for program development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CORE JAVA PAPER-1 Unit 1	**Introduction:**History, architecture and its components,Java Class File, Java Runtime Environment, The Java Virtual Machine, JVM Components, The Java API, java platform, java development kit,	2	Core Java 8 for Beginners BY Vaishali Shah, Sharnam Shah	PPT
	Lambda Expressions, Methods References, Type Annotations, Method Parameter Reflection, setting the path environment variable, Java Compiler And Interpreter, java programs, java applications,	2		
	main(), public, static, void, string[] args, statements, white space, case sensitivity, identifiers, keywords, comments, braces and code blocks, variables, variable name	2		
	Data types: primitive data types, Object Reference Types, Strings, Auto boxing, operators and properties of operator	4		

Unit 5	Arithmetic operators, assignment operators, increment and decrement operator, relational operator, logical operator,		Core Java 8 for Beginners BY Vaishali Shah, Sharnam Shah	PPT
	bitwise operator, conditional operator.	2		
	Event Handling: Delegation Event Model, Events, Event classes, Event listener interfaces, Using delegation event model, adapter classes and inner classes.	3		
	Abstract Window Toolkit: Window Fundamentals, Component, Container, Panel, Window, Frame, Canvas	3		
	.Components – Labels, Buttons, Check Boxes, Radio Buttons, Choice Menus, Text Fields, Text, Scrolling List, Scrollbars, Panels, Frames	3		
	Layouts: Flow Layout, Grid Layout, Border Layout, Card Layout.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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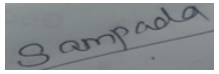

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYIT SEMESTER: IV MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To provide a understanding of software engineering, its basic concepts and functioning. Develop and master understanding of various models used by software industries for various purposes. Also conceptual learning of various aspects of it such as cost estimation techniques, project management, quality assurance etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT404, Software Engineering Unit-I	Introduction: What is software engineering? Software Development Life Cycle, Requirements Analysis, Software Design, Coding, Testing, Maintenance etc. Agile software development: Agile methods, Plan-driven and agile development, Extreme programming, Agile project management, Scaling agile methods.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Blackboard, Chalk
	Software Requirements: Functional and Non-functional requirements, User Requirements, System Requirements, Interface Specification, Documentation of the software requirements.	02		Blackboard, Chalk
	Software Processes: Process and Project, Component Software Processes. Software Development Process Models. • Waterfall Model. • Prototyping. • Iterative Development. • Rational Unified Process. • The RAD Model • Time boxing Model.	04		Blackboard, Chalk
	Agile software development: Agile methods, Plan-driven and agile development, Extreme programming, Agile project management, Scaling agile methods.	03		Blackboard, Chalk

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USIT404, Software Engineering Unit-II	Socio-technical system:Essential characteristics of socio technical systems, Emergent System Properties, Systems Engineering, Components of system such as organization, people and computers, Dealing Legacy Systems.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Blackboard, Chalk
	Critical system: Types of critical system, A simple safety critical system, Dependability of a system, Availability and Reliability, Safety and Security of Software systems.	03		Blackboard, Chalk
	Requirements Engineering Processes: Feasibility study, Requirementselicitation and analysis, Requirements Validations, Requirements Management.	03		Blackboard, Chalk
	System Models: Models and its types, Context Models, Behavioural Models, Data Models, Object Models, Structured Methods	03		Blackboard, Chalk
USIT404, Software Engineering Unit-III	Architectural Design: Architectural Design Decisions, System Organisation, Modular Decomposition Styles, Control Styles, Reference Architectures.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh	Blackboard, Chalk
	User Interface Design: Need of UI design, Design issues, The UI design Process, User analysis, User Interface Prototyping, Interface Evaluation	03		Blackboard, Chalk
	Project Management Software Project Management, Management activities, Project Planning, Project Scheduling, Risk Management.	03		Blackboard, Chalk
	Quality Management: Process and Product Quality, Quality assurance and Standards, Quality Planning, Quality Control, Software Measurement and Metrics	03		Blackboard, Chalk

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			edition	
USIT404, Software Engineering Unit-IV	Verification and Validation: Planning Verification and Validation, Software Inspections, Automated Static Analysis, Verification and Formal Methods.	04	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Blackboard, Chalk
	Software Testing: System Testing, Component Testing, Test Case Design, Test Automation. Software Measurement: Size-Oriented Metrics, Function-Oriented Metrics, Extended Function Point Metrics	04		Blackboard, Chalk
	Software Cost Estimation:Software Productivity, Estimation Techniques, Algorithmic Cost Modelling, Project Duration and Staffing	04		Blackboard, Chalk
USIT404, Software Engineering Unit-V	Process Improvement: Process and product quality, Process Classification, Process Measurement, Process Analysis and Modeling, Process Change, The CMMI Process Improvement Framework.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's	Blackboard, Chalk
	Service Oriented Software Engineering: Services as reusable components, Service Engineering, Software Development with Services.	03		Blackboard, Chalk
	Software reuse: The reuse landscape, Application frameworks, Software product lines, COTS product reuse.	03		Blackboard, Chalk
	Distributed software engineering: Distributed systems issues, Client–server computing, Architectural patterns for distributed	03		Blackboard, Chalk

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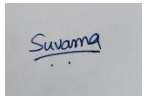
	systems, Software as a service		approach Roger Pressman Tata Mcgraw-hill Seventh edition	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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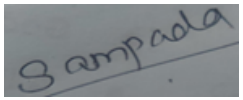

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Anuja Patil DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –A SEMESTER: VI MONTH: January-March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -I	**Information Security Overview** : The Importance of Information Protection, The Evolution of Information Security, Justifying Security Investment, Security Methodology, How to Build a Security Program, The Impossible Job, The Weakest Link, Strategy and Tactics, Business Processes vs. Technical Controls.	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation through Google Meet
	Risk Analysis: Threat Definition, Types of Attacks, Risk Analysis.	4		PowerPoint presentation through Google Meet
	Secure Design Principles: The CIA Triad and Other Models, Defense Models, Zones of Trust, Best Practices for Network Defense.	4		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Anuja Patil DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –A SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -IV	**Intrusion Detection and Prevention Systems**: IDS Concepts, IDS Types and Detection Models, IDS Features, IDS Deployment Considerations, Security Information and Event Management (SIEM).	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation through Google Meet
	Voice over IP (VoIP) and PBX Security: Background, VoIP Components, VoIP Vulnerabilities and Countermeasures, PBX, TEM: Telecom Expense Management.	4		PowerPoint presentation through Google Meet
	Operating System Security Models: Operating System Models, Classic Security Models, Reference Monitor, Trustworthy Computing, International Standards for Operating System Security.	4		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Anuja Patil DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –A SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -V	**Virtual Machines and Cloud Computing**: Virtual Machines, Cloud Computing.	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation through Google Meet
	Secure Application Design: Secure Development Lifecycle, Application Security Practices, Web Application Security, Client Application Security, Remote Administration Security.	4		PowerPoint presentation through Google Meet
	Physical Security: Classification of Assets, Physical Vulnerability Assessment, Choosing Site Location for Security, Securing Assets: Locks and Entry Controls, Physical Intrusion Detection.	4		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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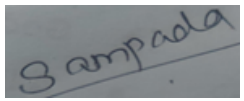

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ARPITA BANERJEE DEPARTMENT: IT-CS

CLASS: TYIT-DIV C SEMESTER: VI MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

- The learners will be able to: know fundamentals of Testing, the idea of Test Policy, Test Strategy & Test Planning. Also they will learn different methods of Unit Testing, Verification, Validation, Acceptance Testing, how to use various Special Tests and understand different Risk Associated with New Technologies and how to overcome. Eventually learners will be able to use the knowledge in their future project.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT601 Software Quality Assurance II	**Fundamentals of testing:** Introduction, Necessity of testing, What is testing? Fundamental test process, The psychology of testing, Historical Perspective of Testing, Definitions of Testing, Approaches to Testing, Testing During Development Life Cycle, Requirement Traceability Matrix, Essentials of Software Testing, Workbench, Important Features of Testing Process, Misconceptions About Testing.	3	Software Testing: Principles, Techniques and Tools By M. G. Limaye	Google Meet and PowerPoint Presentation
	Principles of Software Testing, Salient Features of Good Testing, Test Policy, Test Strategy or Test Approach, Test Planning, Testing Process and Number of Defects Found in Testing, Test Team Efficiency, Mutation Testing, Challenges in Testing, Test Team Approach, Process Problems Faced by Testing, Cost Aspect of Testing, Establishing Testing Policy, Methods, Structured Approach to Testing,	3		
	Categories of Defect, Defect, Error, or Mistake in Software, Developing Test Strategy, Developing Testing Methodologies	3		

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	(Test Plan), Testing Process, Attitude Towards Testing(Common People Issues), Test Methodologies/ Approaches.			
	People Challenges in Software Testing, Raising Management Awareness for Testing, Skills Required by Tester, Testing throughout the software life cycle, Software development models, Test levels, Test types, the targets of testing, Maintenance testing.	3		
III	**Unit Testing: Boundary Value Testing:** Normal Boundary Value Testing, Robust Boundary Value Testing, Worst-Case Boundary Value Testing, Special Value Testing, Examples, Random Testing, Guidelines for Boundary Value Testing.	3	Software Testing: A Craftsman's Approach By Paul C. Jorgenson	Google Meet and PowerPoint Presentation
	Equivalence Class Testing: Equivalence Classes, Traditional Equivalence Class Testing, Improved Equivalence Class Testing, Edge Testing, Guidelines and Observations.	3		
	Decision Table–Based Testing: Decision Tables, Decision Table Techniques, Cause-and-Effect Graphing, Guidelines and Observations.	2		
	Path Testing: Program Graphs, DD-Paths, Test Coverage Metrics, Basis Path Testing, Guidelines and Observations, **Data Flow Testing:** Define/Use Testing, Slice-Based Testing, Program Slicing Tools.	4		
IV	**Software Verification and Validation:** Introduction, Verification, Verification Workbench, Methods of Verification, Types of reviews on the basis of Stage Phase, Entities involved in verification, Reviews in testing lifecycle, Coverage in Verification, Concerns of Verification.	4	Software Testing: Principles, Techniques and Tools	Google Meet and PowerPoint Presentation
	Validation, Validation Workbench, Levels of Validation, Coverage in Validation, Acceptance Testing, Management of Verification and Validation, Software development verification and validation activities.	4		

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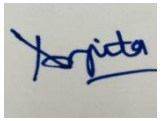
	V-test Model: Introduction, V-model for software, Testing during Proposal stage, Testing during requirement stage, Testing during test planning phase, Testing during design phase, Testing during coding, VV Model, Critical Roles and Responsibilities.	4	By M. G. Limaye	
V	**Levels of Testing:** Introduction, Proposal Testing, Requirement Testing, Design Testing, Code Review, Unit Testing, Module Testing, Integration Testing, Big-Bang Testing, Sandwich Testing, Critical Path First, Sub System Testing, System Testing, Testing Stages.	4	Software Testing: Principles, Techniques and Tools By M. G. Limaye	Google Meet and PowerPoint Presentation
	Special Tests: Introduction, GUI testing, Compatibility Testing, Security Testing, Performance Testing, Volume Testing, Stress Testing, Recovery Testing, Installation Testing, Requirement Testing, Regression Testing, Error Handling Testing, Manual Support Testing, Intersystem Testing, Control Testing, Smoke Testing, Adhoc Testing, Parallel Testing, Execution Testing, Operations Testing, Compliance Testing, Usability Testing, Decision Table Testing, Documentation Testing, Training testing, Rapid Testing, Control flow graph, Generating tests on the basis of Combinatorial Designs, State Graph,	4		
	Risk Associated with New Technologies, Process maturity level of Technology, Testing Adequacy of Control in New technology usage, Object Oriented Application Testing, Testing of Internal Controls, COTS Testing, Client Server Testing, Web Application Testing, Mobile Application Testing, eBusiness/eCommerce Testing, Agile Development Testing, Data Warehousing Testing.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 48



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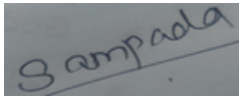

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. BRIJESH Y. JOSHI DEPARTMENT: IT CLASS: TYIT

SEMESTER: VI MONTH: JAN-MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the use of business intelligence in real life.
- Describe the different mathematical models to develop decision making systems.
- Get the difference between supervised learning and unsupervised learning techniques.
- Understand the use of mathematical models in relational marketing, support chain optimization, CCR model.
- Familiar with knowledge management and Artificial intelligence and expert systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT603, Business Intelligence Unit I	**Business intelligence:** Effective and timely decisions, Data, information and knowledge, The role of mathematical models, Business intelligence architectures, Ethics and business intelligence	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Decision support systems: Definition of system, Representation of the decision-making process, Evolution of information systems, Definition of decision support system, Development of a decision support system	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

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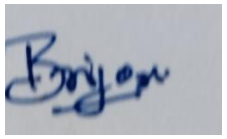
USIT603, Business Intelligence Unit II	**Mathematical models for decision making:** Structure of mathematical models, Development of a model, Classes of models	05	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Data mining: Definition of data mining, Representation of input data , Data mining process, Analysis methodologies	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Data preparation: Data validation, Data transformation, Data reduction	03	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
USIT603, Business Intelligence Unit III	**Classification**: Classification problems, Evaluation of classification models, Bayesian methods, Logistic regression, Neural networks, Support vector machines	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Clustering: Clustering methods, Partition methods, Hierarchical methods, Evaluation of clustering models	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
USIT603, Business Intelligence Unit IV	**Marketing models**: Relational marketing, Sales force management,	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Logistic and production models: Supply chain optimization, Optimization models for logistics planning, Revenue management systems.	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Data envelopment analysis: Efficiency measures, Efficient frontier, The CCR model, Identification of good operating practices	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo	Desktop and Laptop,Digital cameras,Microphone,Mobile,P

			Vercellis, Wiley, First, 2009	owerpoint
USIT603, Business Intelligence Unit V	**Knowledge Management:** Introduction to Knowledge Management, Organizational Learning and Transformation, Knowledge Management Activities, Approaches to Knowledge Management, Information Technology (IT) In Knowledge Management, Knowledge Management Systems Implementation, Roles of People in Knowledge Management	06	Decision support and Business Intelligence Systems by Efraim Turban, Ramesh Sharda, Dursun Delen , Pearson,Ninth,2011	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Artificial Intelligence and Expert Systems: Concepts and Definitions of Artificial Intelligence, Artificial Intelligence Versus Natural Intelligence, Basic Concepts of Expert Systems, Applications of Expert Systems, Structure of Expert Systems, Knowledge Engineering, Development of Expert Systems	06	Decision support and Business Intelligence Systems by Efraim Turban, Ramesh Sharda, Dursun Delen , Pearson,Ninth,2011	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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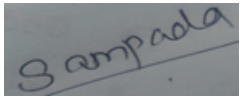

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. Gayatree P Karnik DEPARTMENT: IT CLASS: TYIT DIV-A

SEMESTER: VI MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Make Learner Conversant With The Social And Intellectual Property Issues Emerging From 'Cyberspace.
- Explore The Legal And Policy Developments In Various Countries To Regulate Cyberspace;
- Develop The Understanding Of Relationship Between Commerce And Cyberspace
- Give Learners In Depth Knowledge Of Information Technology Act And Legal Frame Work Of Right To Privacy, Data Security And Data Protection.
- Make Study On Various Case Studies On Real Time Crimes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT607, Cyber Laws Unit 1	Power of Arrest Without Warrant Under the IT Act, 2000: A Critique, Crimes of this Millennium, Section 80 of the IT Act, 2000 – A Weapon or a Farce? Forgetting the Line Between Cognizable and Non-Cognizable Offences, Necessity of Arrest without Warrant from Any Place, Public or Otherwise, Check and Balances Against Arbitrary Arrests,Arrest for "About to Commit" an Offence Under the IT Act: A Tribute to Draco, Arrest, But NO Punishment!	05	1. Cyber Law Simplified VivekSood TMH Education 2001 2. Cybersecurity Law Jeff Kosseff Wiley 2017	Powerpoint
	Cyber Crime and Criminal Justice: Penalties, Adjudication and Appeals Under the IT Act,2000: Concept of "Cyber Crime " and the IT Act , 2000, Hacking, Teenage Web Vandals, Cyber Fraud and Cyber Cheating, Virus on the Internet, Defamation, Harassment and Email Abuse, Cyber Pornography, Other IT Act Offences, Monetary Penalties, Adjudication and Appeals Under IT Act , 2000, Network Service Providers, Jurisdiction and Cyber Crime,	05	Cyber Law Simplified VivekSood TMH Education 2001 Cybersecurity Law Jeff Kosseff Wiley	PowerPoint

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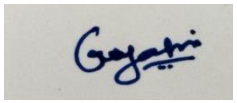
	Nature of Cyber Criminality, Strategies to Tackle Cyber Crime and Trends, Criminal Justice in India and Implications on Cyber Crime.		2017	
USIT607, Cyber Laws Unit 2	Contracts in the Infotech World: Contracts in the Infotech World, Click-Wrap and Shrink-Wrap Contract: Status under the Indian 12 Contract Act, 1872, Contract Formation Under the Indian Contract Act, 1872, Contract Formation on the Internet, Terms and Conditions of Contracts. Jurisdiction in the Cyber World: Questioning the Jurisdiction and Validity of the Present Law of Jurisdiction, Civil Law of Jurisdiction in India, Cause of Action, Jurisdiction and the Information Technology Act,2000, Foreign Judgements in India, Place of Cause of Action in Contractual and IPR Disputes, Exclusion Clauses in Contracts, Abuse of Exclusion Clauses, Objection of Lack of Jurisdiction, Misuse of the Law of Jurisdiction, Legal Principles on Jurisdiction in the United State of America, Jurisdiction Disputes w.r.t. the Internet in the United State of America.	10	Cyber Law Simplified VivekSood TMH Education 2001 Cybersecurity Law Jeff Kosseff Wiley 2017	Powerpoint
USIT607, Cyber Laws Unit 3	Battling Cyber Squatters and Copyright Protection in the Cyber World: Concept of Domain Name and Reply to Cyber Squatters, Meta-Tagging, Legislative and Other Innovative Moves Against Cyber Squatting, The Battle Between Freedom and Control on the Internet, Works in Which Copyright Subsists and meaning of Copyright, Copyright Ownership and Assignment, License of Copyright, Copyright Terms and Respect for Foreign Works, Copyright Infringement, Remedies and Offences, Copyright Protection of Content on the Internet; Copyright Notice, Disclaimer and Acknowledgement, Downloading for Viewing Content on the Internet, Hyper-Linking and Framing, Liability of ISPs for Copyright Violation in the Cyber World: Legal Developments in the US, Napster and its Cousins: A Revolution on the Internet but a Crisis for Copyright Owners, Computer Software Piracy	10	Cyber Law Simplified VivekSood TMH Education 2001 Cybersecurity Law Jeff Kosseff Wiley 2017	Powerpoint
USIT607, Cyber Laws Unit 4	E-Commerce Taxation: Real Problems in the Virtual World: A Tug of War on the Concept of „Permanent Establishment", Finding the PE in Cross Border E-Commerce, The United Nations Model Tax Treaty, The Law of Double Taxation Avoidance Agreements and Taxable Jurisdiction Over Non-Residents, Under the Income Tax Act, 1961, Tax Agents of Non-Residents	10	Cyber Law Simplified VivekSood TMH Education 2001 Cybersecurity Law	Powerpoint

	under the Income Tax Act,1961 and the Relevance to E-Commerce, Source versus Residence and Classification between Business Income and Royalty, The Impact of the Internet on Customer Duties, Taxation Policies in India: At a Glance. Digital Signature, Certifying Authorities and E-Governance: Digital Signatures, Digital Signature Certificate, Certifying Authorities and Liability in the Event of Digital Signature Compromise, E-Governance in India: A Warning to Babudom!		Jeff Kosseff Wiley 2017	
USIT607, Cyber Laws Unit 5	The Indian Evidence Act of 1872 v. Information Technology Act, 2000: Status of Electronic Records as Evidence, Proof and Management of Electronic Records; Relevancy, Admissibility and Probative Value of E-Evidence, Proving Digital Signatures, Proof of Electronic Agreements, Proving Electronic Messages, Other Amendments in the Indian Evidence Act by the IT Act, Amendments to the Bankers Books Evidence Act, 1891 and Reserve Bank of India 12 Act, 1934. Protection of Cyber Consumers in India: Are Cyber Consumers Covered Under the Consumer Protection Act? Goods and Services, Consumer Complaint, Defect in Goods and Deficiency in Services, Restrictive and Unfair Trade Practices, Instances of Unfair Trade Practices, Reliefs Under CPA, Beware Consumers, Consumer Foras, Jurisdiction and Implications on cyber Consumers in India, Applicability of CPA to Manufacturers, Distributors, Retailers and Service Providers Based in Foreign Lands Whose Goods are Sold or Services Provided to a Consumer in India. Amendments in Indian IT Act 2000	10	Cyber Law Simplified VivekSood TMH Education 2001 Cybersecurity Law Jeff Kosseff Wiley 2017	Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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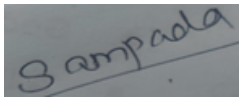

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **TYBSCIT** SEMESTER:**VI**

MONTH: **JAN-MARCH** ACADEMIC YEAR:**2020-21**

LEARNING OBJECTIVE/S:

The learners will be able to :

Understanding the customers priority for **quality assurance** while developing ...
that **will** be created by the organization, The scope of **Software** Testing applies to ... improvements of the processes through **learning** & innovation
Understand Manual and automated testing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT601 Software Quality Assurance UNIT-2	**Fundamentals of testing:** Introduction, Necessity of testing, What is testing? Fundamental test process, The psychology of testing,Historical Perspective of Testing, Definitions of Testing, Approaches to Testing, Testing During Development Life Cycle, Requirement Traceability Matrix, Essentials of Software Testing, Workbench,Important Features of Testing Process, Misconceptions About Testing,Principles of Software Testing, Salient Features of Good Testing, Test Policy, Test Strategy or Test Approach, Test Planning, Testing Process and Number of Defects Found in Testing, Test Team Efficiency, Mutation Testing, Challenges in Testing, Test Team Approach, Process Problems Faced by Testing, Cost Aspect of Testing, Establishing Testing Policy, Methods	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
	Structured Approach to Testing, Categories of Defect, Defect, Error, or Mistake in Software, Developing Test Strategy, Developing Testing Methodologies (Test Plan), Testing Process,	06	Software Testing: Principles,	power point,google meet

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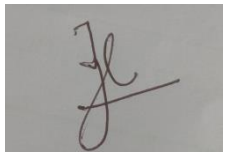
	Attitude Towards Testing (Common People Issues), Test Methodologies/Approaches, People Challenges in Software Testing, Raising Management Awareness for Testing, Skills Required by Tester, Testing throughout the software life cycle, Software development models, Test levels, Test types, the targets of testing, Maintenance testing		Techniques and Tools M. G. Limaye	
USIT601 Software Quality Assurance UNIT-4	**Software Verification and Validation:**Introduction, Verification, Verification Workbench, Methods of Verification, Types of reviews on the basis od Stage Phase, Entities involved in verification, Reviews in testing lifecycle, Coverage in Verification, Concerns of Verification, Validation, Validation Workbench, Levels of Validation,Coverage in Validation, Acceptance Testing, Management of Verification and Validation, Software development verification and validation activities	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
	V-test Model: Introduction, V-model for software, Testing during Proposal stage, Testing during requirement stage, Testing during test planning phase, Testing during design phase, Testing during coding,VV Model, Critical Roles and Responsibilities.	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6



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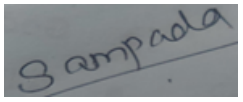

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)** _____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**T.Y.B.SC(IT)-A**_____ SEMESTER: ____**VI**_____ MONTH: _____ _____**DECEMBER-MARCH** _____ ACADEMIC YEAR: _____**2020-2021**_____

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the Geographical Information System for processing standard geographic data.
- Make you understand where GIS system can be applied. Learning about different applications (example: GPS).
- How geographic data are capture, updated, profiled, stored and represented in the system.
- Enable to understand software and hardware trends, DBMS and varieties of Models.
- To understand how geographic data can be display with help of Maps and to understand the making of Maps.
- Studying about spatial referencing and positioning of data in system.
- To understand different operations and functions on data and to analyze and explore information in the system.
- To provide better visualization of data both in vector and raster manner.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-04 (USIT604) **Principles of**	**A Gentle Introduction to GIS** **The nature of GIS:** Some fundamental observations, Defining GIS, GISystems, GIScience and GIApplications, Spatial data and Geoinformation.	04	Principles of Geographic Information Systems- An	Online Google Meet PPTs.

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Geographic Information Systems **Unit No -01**	**The real world and representations of it:** Models and modelling, Maps, Databases, Spatial databases and spatial analysis		Introductory Text Book By Editors: Otto Huisman and Rolf A. , The International Institute of Geoinformation Science and Earth Observation Introduction to Geographic Information Systems Chang Kang-tsung McGrawHill	
	Geographic Information and Spatial Database **Models and Representations of the real world** **Geographic Phenomena:** Defining geographic phenomena, types of geographic phenomena, Geographic fields, Geographic objects, Boundaries	03		
	Computer Representations of Geographic Information: Regular tessellations, irregular tessellations, Vector representations, Topology and Spatial relationships, Scale and Resolution, Representation of Geographic fields, Representation of Geographic objects	03		
	Organizing and Managing Spatial Data **The Temporal Dimension**	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -02	**Data Management and Processing Systems** **Hardware and Software Trends** **Geographic Information Systems:** GIS Software, GIS Architecture and functionality, Spatial Data Infrastructure (SDI)	04	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto	Online Google Meet PPTs.
	Stages of Spatial Data handling: Spatial data handling and preparation, Spatial Data Storage and maintenance, Spatial Query and Analysis, Spatial Data Presentation.	03		

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	Database management Systems: Reasons for using a DBMS, Alternatives for data management, The relational data model, Querying the relational database.	03	Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	
	GIS and Spatial Databases: Linking GIS and DBMS, Spatial database functionality.	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -03	**Spatial Referencing and Positioning** **Spatial Referencing:** Reference surfaces for mapping, Coordinate Systems, Map Projections, Coordinate Transformations	03	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Online Google Meet PPTs.
	Satellite-based Positioning: Absolute positioning, Errors in absolute positioning, Relative positioning, Network positioning, code versus phase measurements, Positioning technology	03		
	Data Entry and Preparation **Spatial Data Input:** Direct spatial data capture, Indirect spatial data captiure, Obtaining spatial data elsewhere	02		
	Data Quality: Accuracy and Positioning, Positional accuracy, Attribute accuracy, Temporal accuracy, Lineage, Completeness, Logical consistency	02		
	Data Preparation: Data checks and repairs, Combining data from multiple sources	01		
	Point Data Transformation: Interpolating discrete data, Interpolating continuous data	01		

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	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -04	**Spatial Data Analysis** **Classification of analytical GIS Capabilities** **Retrieval, classification and measurement:** Measurement, Spatial selection queries, Classification	03	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Online Google Meet PPTs.
	Overlay functions: Vector overlay operators,Raster overlay operators	01		
	Neighbourhood functions: Proximity computations, Computation of diffusion, Flow computation, Raster based surface analysis	03		
	Analysis: Network analysis, interpolation, terrain modelling	01		
	GIS and Application models: GPS, Open GIS Standards, GIS Applications and Advances	02		
	Error Propagation in spatial data processing: How Errors propagate, Quantifying error propagation	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -05	**Data Visualization** **GIS and Maps, The Visualization Process** **Visualization Strategies: Present or explore?**	04	Principles of Geographic Information	Online Google Meet PPTs.

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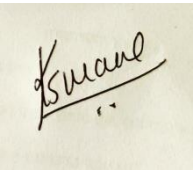
	The cartographic toolbox: What kind of data do I have?, How can I map my data?	03	Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	
	How to map?: How to map qualitative data, How to map quantitative data, How to map the terrain elevation, How to map time series	03		
	Map Cosmetics, Map Dissemination	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			



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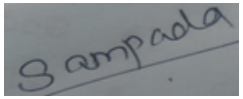

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Sampada Deshmukh DEPARTMENT: Information Technology

CLASS: T. Y. B. Sc. I. T –A SEMESTER: VI MONTH: January-March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

Learn authentication and authorization

Understand security concept and different encryption techniques

Understand the concept of database security and storage security with its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -II	**Authentication and Authorization**: Authentication, Authorization	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	Google Meet with PPT
	Encryption: A Brief History of Encryption, Symmetric-Key Cryptography, Public Key Cryptography, Public Key Infrastructure.	5		Google Meet with PPT
	Storage Security: Storage Security Evolution, Modern Storage Security, Risk Remediation, Best Practices.	2		Google Meet with PPT
	Database Security: General Database Security Concepts, Understanding Database Security Layers, Understanding Database-Level Security, Using Application Security, Database Backup and Recovery, Keeping Your Servers Up to Date, Database Auditing and Monitoring.	2		Google Meet with PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Sampada Deshmukh DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –A SEMESTER: VI MONTH: January-March ACADEMIC YEAR: 2020-2021

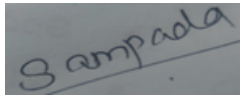
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -III	**Secure Network Design**: Introduction to Secure Network Design, Performance, Availability, Security.	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	Google Meet with PPT
	Network Device Security: Switch and Router Basics, Network Hardening.	3		Google Meet with PPT
	Firewalls: Overview, The Evolution of Firewalls, Core Firewall Functions, Additional Firewall Capabilities, Firewall Design.	3		Google Meet with PPT
	Wireless Network Security: Radio Frequency Security Basics, Data-Link Layer Wireless Security Features, Flaws, and Threats, Wireless Vulnerabilities and Mitigations, Wireless Network Hardening Practices and Recommendations, Wireless Intrusion Detection and Prevention, Wireless Network Positioning and Secure Gateways.	3		Google Meet with PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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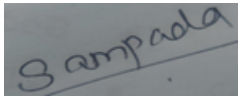

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande DEPARTMENT: Computer Science

CLASS: T.Y.I.T SEMESTER: VI

MONTH: JAN - MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Student will able to understand the importance of software quality.
Aspects that the related to software quality.
Stakeholders and their relationship.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCSIT601 Software Quality Assurance UNIT - I	**Introduction to Quality:** Historical Perspective of Quality, What is Quality? (Is it a fact or perception?), Definitions of Quality, Core Components of Quality, Quality View, Financial Aspect of Quality, Customers, Suppliers and Processes, Total Quality Management (TQM), Quality Principles of Total Quality Management, Quality Management Through Statistical Process Control, Quality Management Through Cultural Changes, Continual (Continuous) Improvement Cycle, Quality in Different Areas, Benchmarking and Metrics, Problem Solving Techniques, Problem Solving Software Tools.	6	Software Testing and Continuous Quality Improvement Software Testing: Principles, Techniques and Tools	Google Mett PPT
	Software Quality: Introduction, Constraints of Software Product Quality Assessment, Customer is a King, Quality and Productivity Relationship, Requirements of a Product, Organisation Culture,	6		Google Mett PPT

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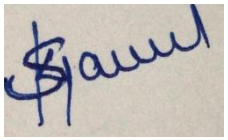
	Characteristics of Software, Software Development Process, Types of Products, Schemes of Criticality Definitions, Problematic Areas of Software Development Life Cycle, Software Quality Management, Why Software Has Defects? Processes Related to Software Quality, Quality Management System Structure, Pillars of Quality Management System, Important Aspects of Quality Management.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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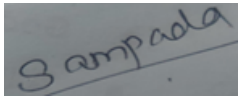

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pranali Dayanand Thakare **DEPARTMENT**: IT

CLASS: T.Y.I.T.-B (Principles of Geographic Information Systems) **SEMESTER**: VI

MONTH: January - March **ACADEMIC YEAR**: 2020 -2021

LEARNING OBJECTIVE/S :
The learners will be able to :

- Understand the basics of geographic information system.
- Learn GIS Models.
- Understand different types of GIS Data.
- Analyze data, explore issues, problem solve, and evaluate situations in a geographic and spatial context.
- Explore mapped data
- Relate GIS with remote sensing technologies
- Create maps ans images to communicate spatial data in a meaningful way to others.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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USIT604, Unit 1, Principles of Geographic Information Systems.	**A Gentle Introduction to GIS** **The nature of GIS:** Some fundamental observations, Defining GIS, GISystems, GIScience and GIApplications, Spatial data and Geoinformation. **The real world and representations of it:** Models and modelling, Maps, Databases, Spatial databases and spatial analysis.	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet, Quizze.
	Models and Representations of the real world Geographic Phenomena: Defining geographic phenomena, types of geographic phenomena, Geographic fields, Geographic objects, Boundaries	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Computer Representations of Geographic Information: Regular tessellations, irregular tessellations, Vector representations, Topology and Spatial relationships, Scale and Resolution, Representation of Geographic fields, Representation of Geographic objects , Organizing and Managing Spatial Data ,The Temporal Dimension	06	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 2, Principles of Geographic Information Systems.	**Data Management and Processing Systems** **Hardware and Software Trends** **Geographic Information Systems:** GIS Software, GIS Architecture and functionality, Spatial Data Infrastructure (SDI)	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Stages of Spatial Data handling: Spatial data handling and Preparation, Spatial Data Storage and maintenance, Spatial Query and Analysis, Spatial Data Presentation.	05	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Database management Systems: Reasons for using a DBMS, Alternatives for data management, The relational data model, Querying the relational database. **GIS and Spatial Databases:** Linking GIS and DBMS, Spatial database functionality.	04	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.

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Bhaskar Waman Thakur College of Science
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Vidhya Dayanand Patil College of Arts
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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 3, Principles of Geographic Information Systems.	**Spatial Referencing and Positioning** **Spatial Referencing:** Reference surfaces for mapping, Coordinate Systems, Map Projections, Coordinate Transformations .	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Satellite-based Positioning: Absolute positioning, Errors in absolute positioning, Relative positioning, Network positioning, code versus phase measurements, Positioning technology	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Data Entry and Preparation **Spatial Data Input:** Direct spatial data capture, Indirect spatial data captiure, Obtaining spatial data elsewhere **Data Quality:** Accuracy and Positioning, Positional accuracy, Attribute accuracy, Temporal accuracy, Lineage, Completeness, Logical consistency	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman	Power Point , Google meet.

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			and Rolf A.	
	Data Preparation: Data checks and repairs, Combining data from multiple sources ,**Point Data Transformation:** Interpolating discrete data, Interpolating continuous data.	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 4, Principles of Geographic Information Systems.	. **Spatial Data Analysis** **Classification of analytical GIS Capabilities** **Retrieval, classification and measurement:** Measurement, Spatial selection queries, Classification	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	Overlay functions: Vector overlay operators,Raster overlay operators **Neighbourhood functions:** Proximity computations, Computation of diffusion, Flow computation, Raster based surface analysis **Analysis:** Network analysis, interpolation, terrain modeling	06	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman	Power Point , Google meet.

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			and Rolf A.	
	GIS and Application models:GPS, Open GIS Standards, GIS Applications and Advances **Error Propagation in spatial data processing:** How Errors propagate, Quantifying error propagation.	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 5, Principles of Geographic Information Systems.	**Data Visualization** **GIS and Maps, The Visualization Process** **Visualization Strategies: Present or explore?**	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet.
	The cartographic toolbox: What kind of data do I have?, How can I map my data? **How to map?:** How to map qualitative data, How to map	06	Principles of Geographic Information	Power Point , Google meet,YouTube video.

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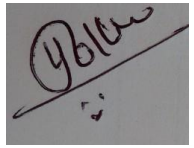
	quantitative data, How to map the terrain elevation, How to map time series		Systems An Introductory Text Book - Otto Huisman and Rolf A.	
	Map Cosmetics, Map Dissemination	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Power Point , Google meet,YouTube video.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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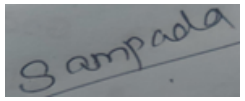

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: January-March ACADEMIC YEAR: 2020-2021

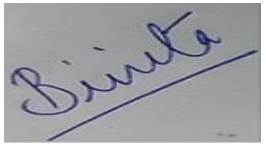
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -I	**Information Security Overview** : The Importance of Information Protection, The Evolution of Information Security, Justifying Security Investment, Security Methodology, How to Build a Security Program, The Impossible Job, The Weakest Link, Strategy and Tactics, Business Processes vs. Technical Controls.	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation through Google Meet
	Risk Analysis: Threat Definition, Types of Attacks, Risk Analysis.	4		PowerPoint presentation through Google Meet
	Secure Design Principles: The CIA Triad and Other Models, Defense Models, Zones of Trust, Best Practices for Network Defense.	4		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: January-March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

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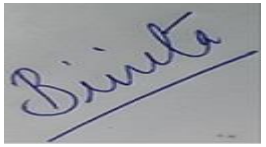
b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -II	**Authentication and Authorization**: Authentication, Authorization	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation through Google Meet
	Encryption: A Brief History of Encryption, Symmetric-Key Cryptography, Public Key Cryptography, Public Key Infrastructure.	5		PowerPoint presentation through Google Meet
	Storage Security: Storage Security Evolution, Modern Storage Security, Risk Remediation, Best Practices.	2		PowerPoint presentation through Google Meet
	Database Security: General Database Security Concepts, Understanding Database Security Layers, Understanding Database-Level Security, Using Application Security, Database Backup and Recovery, Keeping Your Servers Up to Date, Database Auditing and Monitoring.	2		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: January-March ACADEMIC YEAR: 2020-2021

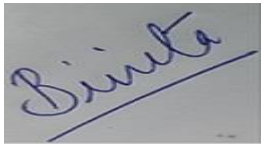
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -III	**Secure Network Design**: Introduction to Secure Network Design, Performance, Availability, Security.	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation through Google Meet
	Network Device Security: Switch and Router Basics, Network Hardening.	3		PowerPoint presentation through Google Meet
	Firewalls: Overview, The Evolution of Firewalls, Core Firewall Functions, Additional Firewall Capabilities, Firewall Design.	3		PowerPoint presentation through Google Meet
	Wireless Network Security: Radio Frequency Security Basics, Data-Link Layer Wireless Security Features, Flaws, and Threats, Wireless Vulnerabilities and Mitigations, Wireless Network Hardening Practices and Recommendations, Wireless Intrusion Detection and Prevention, Wireless Network Positioning and Secure Gateways.	3		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2020-2021

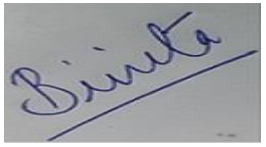
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -IV	**Intrusion Detection and Prevention Systems**: IDS Concepts, IDS Types and Detection Models, IDS Features, IDS Deployment Considerations, Security Information and Event Management (SIEM).	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation through Google Meet
	Voice over IP (VoIP) and PBX Security: Background, VoIP Components, VoIP Vulnerabilities and Countermeasures, PBX, TEM: Telecom Expense Management.	4		PowerPoint presentation through Google Meet
	Operating System Security Models: Operating System Models, Classic Security Models, Reference Monitor, Trustworthy Computing, International Standards for Operating System Security.	4		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

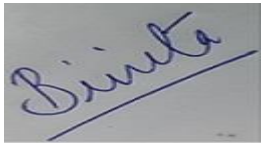
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -V	**Virtual Machines and Cloud Computing**: Virtual Machines, Cloud Computing.	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	PowerPoint presentation through Google Meet
	Secure Application Design: Secure Development Lifecycle, Application Security Practices, Web Application Security, Client Application Security, Remote Administration Security.	4		PowerPoint presentation through Google Meet
	Physical Security: Classification of Assets, Physical Vulnerability Assessment, Choosing Site Location for Security, Securing Assets: Locks and Entry Controls, Physical Intrusion Detection.	4		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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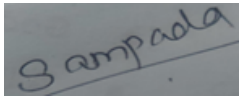

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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: TYIT SEMESTER: VI MONTH: DECE to MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

To develop the understanding of relationship between commerce and cyberspace

To enable learner to understand, explore, and acquire a critical understanding Cyber Law.

To give learners in depth knowledge of Information Technology Act and legal frame work of Right to Privacy, Data Security and Data Protection

To make learner conversant with the social and intellectual property issues emerging from 'Cyberspace

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-07 Cyber Law Unit 3	**Battling Cyber Squatters and Copyright Protection in the Cyber World:** Concept of Domain Name and Reply to Cyber Squatters, Meta-Tagging, Legislative and Other Innovative Moves Against Cyber Squatting, The Battle Between Freedom and Control on the Internet, Works in Which Copyright Subsists and meaning of Copyright, Copyright Ownership and Assignment, License of Copyright, Copyright Terms and Respect for Foreign Works, Copyright Infringement, Remedies and Offences, Copyright Protection of Content on the Internet; Copyright Notice, Disclaimer and Acknowledgement, Downloading for Viewing Content on the Internet, Hyper-Linking and Framing, Liability of ISPs for Copyright Violation in the Cyber World: Legal Developments in the US, Napster and its Cousins: A Revolution on the Internet but a Crisis for Copyright Owners, Computer Software Piracy.	12	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
Paper-07 Cyber Law Unit 4	**E-Commerce Taxation:** Real Problems in the Virtual World: A Tug of War on the Concept of „Permanent Establishment", Finding the PE in Cross Border E-Commerce, The United Nations Model Tax Treaty, The Law of Double Taxation Avoidance Agreements and Taxable Jurisdiction Over Non-Residents, Under the Income Tax Act, 1961, Tax Agents of Non-Residents under the Income Tax Act,1961 and the Relevance to E-Commerce, Source versus Residence and Classification between Business Income and Royalty, The Impact of the Internet on Customer Duties, Taxation Policies in India: At a Glance.	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk

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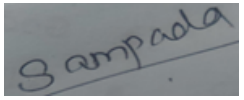
	Digital Signature, Certifying Authorities and E-Governance: Digital Signatures, Digital Signature Certificate, Certifying Authorities and Liability in the Event of Digital Signature Compromise, E-Governance in India: A Warning to Babudom!	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
Paper-07 Cyber Law Unit 5	**The Indian Evidence Act of 1872 v. Information Technology Act, 2000:** Status of Electronic Records as Evidence, Proof and Management of Electronic Records; Relevancy, Admissibility and Probative Value of E-Evidence, Proving Digital Signatures, Proof of Electronic Agreements, Proving Electronic Messages, Other Amendments in the Indian Evidence Act by the IT Act, Amendments to the Bankers Books Evidence Act, 1891 and Reserve Bank of India Act, 1934.	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
	Protection of Cyber Consumers in India: Are Cyber Consumers Covered Under the Consumer Protection Act? Goods and Services, Consumer Complaint, Defect in Goods and Deficiency in Services, Restrictive and Unfair Trade Practices, Instances of Unfair Trade Practices, Reliefs Under CPA, Beware Consumers, Consumer Foras, Jurisdiction and Implications on cyber Consumers in India, Applicability of CPA to Manufacturers, Distributors, Retailers and Service Providers Based in Foreign Lands Whose Goods are Sold or Services Provided to a Consumer in India. Amendments in Indian IT Act 2000	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **TYBSCIT** SEMESTER:**VI**

MONTH: **JAN-MARCH** ACADEMIC YEAR:**2020-21**

LEARNING OBJECTIVE/S:

The learners will be able to :

Understanding the customers priority for **quality assurance** while developing ...
that **will** be created by the organization, The scope of **Software** Testing applies to ... improvements of the processes through **learning** & innovation
Understand Manual and automated testing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT601 Software Quality Assurance UNIT-1	**Introduction to Quality:** Historical Perspective of Quality, What isQuality? (Is it a fact or perception?), Definitions of Quality, Core Components of Quality, Quality View, Financial Aspect of Quality, Customers, Suppliers and Processes, Total Quality Management (TQM), Quality Principles of Total Quality Management, Quality Management Through Statistical Process Control, Quality Management Through Cultural Changes, Continual (Continuous) Improvement Cycle, Quality in Different Areas, Benchmarking and Metrics, Problem Solving Techniques, Problem Solving Software Tools.	07	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
	Software Quality: Introduction, Constraints of Software Product Quality Assessment, Customer is a King, Quality and Productivity Relationship, Requirements of a Product, Organisation Culture, Characteristics of Software, Software Development Process, Types of Products, Schemes of Criticality Definitions, Problematic Areas of Software Development Life	05	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet

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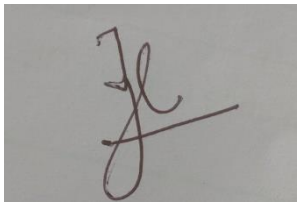
	Cycle, Software Quality Management, Why Software Has Defects?Processes Related to Software Quality, Quality Management System Structure, Pillars of Quality Management System, Important Aspects of Quality Management..			
USIT601 Software Quality Assurance UNIT-2	**Fundamentals of testing:** Introduction, Necessity of testing, What is testing? Fundamental test process, The psychology of testing,Historical Perspective of Testing, Definitions of Testing, Approaches to Testing, Testing During Development Life Cycle, Requirement Traceability Matrix, Essentials of Software Testing, Workbench,Important Features of Testing Process, Misconceptions About Testing,Principles of Software Testing, Salient Features of Good Testing, Test Policy, Test Strategy or Test Approach, Test Planning, Testing Process and Number of Defects Found in Testing, Test Team Efficiency, Mutation Testing, Challenges in Testing, Test Team Approach, Process Problems Faced by Testing, Cost Aspect of Testing, Establishing Testing Policy, Methods	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
	Structured Approach to Testing, Categories of Defect, Defect, Error, or Mistake in Software, Developing Test Strategy, Developing Testing Methodologies (Test Plan), Testing Process, Attitude Towards Testing (Common People Issues), Test Methodologies/Approaches, People Challenges in Software Testing, Raising Management Awareness for Testing, Skills Required by Tester, Testing throughout the software life cycle, Software development models, Test levels, Test types, the targets of testing, Maintenance testing	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
USIT601 Software Quality	**Unit Testing: Boundary Value Testing:** Normal Boundary ValueTesting, Robust Boundary Value Testing, Worst-Case Boundary ValueTesting, Special Value Testing, Examples,	05	Software Testing: Principles,	power point,google meet

Assurance UNIT-3	Random Testing, Guidelines for Boundary Value Testing, **Equivalence Class Testing:** Equivalence Classes, Traditional Equivalence Class Testing, Improved Equivalence Class Testing, Edge Testing, Guidelines and Observations.		Techniques and Tools M. G. Limaye	
	Decision Table–Based Testing: Decision Tables, Decision Table Techniques, Cause-and-Effect Graphing, Guidelines and Observations, **Path Testing:** Program Graphs, DD-Paths, Test Coverage Metrics, Basis Path Testing, Guidelines and Observations,**Data Flow Testing:** Define/Use Testing, Slice-Based Testing,Program Slicing Tools.	07	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
USIT601 Software Quality Assurance UNIT-4	**Software Verification and Validation:**Introduction, Verification, Verification Workbench, Methods of Verification, Types of reviews on the basis od Stage Phase, Entities involved in verification, Reviews in testing lifecycle, Coverage in Verification, Concerns of Verification, Validation, Validation Workbench, Levels of Validation,Coverage in Validation, Acceptance Testing, Management of Verification and Validation, Software development verification and validation activities	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
	V-test Model: Introduction, V-model for software, Testing during Proposal stage, Testing during requirement stage, Testing during test planning phase, Testing during design phase, Testing during coding,VV Model, Critical Roles and Responsibilities.	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet
USIT601 Software Quality Assurance	**Levels of Testing:** Introduction, Proposal Testing, Requirement Testing, Design Testing, Code Review, Unit Testing, Module Testing, Integration Testing, Big-Bang Testing, Sandwich Testing, Critical Path First, Sub System Testing, System Testing,	04	Software Testing: Principles, Techniques	power point,google meet

UNIT-5	Testing Stages.		and Tools M. G. Limaye	
	Special Tests: Introduction, GUI testing, Compatibility Testing, Security Testing, Performance Testing, Volume Testing, Stress Testing, Recovery Testing, Installation Testing, Requirement Testing,Regression Testing, Error Handling Testing, Manual Support Testing,Intersystem Testing, Control Testing, Smoke Testing, Adhoc Testing,Parallel Testing, Execution Testing, Operations Testing, Compliance Testing, Usability Testing, Decision Table Testing, Documentation Testing, Training testing, Rapid Testing, Control flow graph, Generating tests on the basis of Combinatorial Designs, State Graph,Risk Associated with New Technologies, Process maturity level of Technology, Testing Adequacy of Control in New technology usage,Object Oriented Application Testing, Testing of Internal Controls COTS Testing, Client Server Testing, Web Application Testing,Mobile Application Testing, eBusiness eCommerce Testing, Agile Development Testing, Data Warehousing Testing.	08	Software Testing: Principles, Techniques and Tools M. G. Limaye	power point,google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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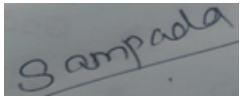

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:T.Y.BSC(I.T) DIV-B SEMESTER: **VI** MONTH: JANUARY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : To create more awareness about cyber legal issues and challenges.

To provide advice, inputs as also guidance to students on their day-to-day legal issues concerning the use of cyberspace.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cyber Laws Elective I USIT607 Unit-1	**Power of Arrest Without Warrant Under the IT Act, 2000:** A Critique, Crimes of this Millennium, Section 80 of the IT Act, 2000 – A Weapon or a Farce?	1	Cyber Law Simplified - Vivek Sood	Powerpoint Presentation, Google classroom, Google Meet
	Forgetting the Line Between Cognizable and Non-Cognizable Offences.	2		
	Necessity of Arrest without Warrant from Any Place, Public or Otherwise.	2		
	Check and Balances Against Arbitrary Arrests,Arrest for "About to Commit" an Offence Under the IT Act: A Tribute to Draco, Arrest, But NO Punishment!	2		
	Cyber Crime and Criminal Justice: Penalties, Adjudication and Appeals Under the IT Act,2000: Concept of "Cyber Crime " and the IT Act , 2000, Hacking.	2		

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	Teenage Web Vandals, Cyber Fraud and Cyber Cheating, Virus on the Internet,Defamation, Harassment and Email Abuse, Cyber Pornography, Other IT Act Offences	2		
	. Monetary Penalties, Adjudication and Appeals Under IT Act , 2000, Network Service Providers, Jurisdiction and Cyber Crime.	2		
	Nature of Cyber Criminality, Strategies to Tackle Cyber Crime and Trends, Criminal Justice in India and Implications on Cyber Crime.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		
Cyber Laws Elective I USIT607 Unit-2	**Contracts in the Infotech World:** Contracts in the Infotech World, Click-Wrap and Shrink-Wrap Contract: Status under the Indian Contract Act, 1872.	2	Cyber Law Simplified - Vivek Sood	Powerpoint Presentation, Google classroom, Google Meet
	Contract Formation Under the Indian Contract Act, 1872, Contract Formation on the Internet.	2		
	Terms and Conditions of Contracts.	1		
	Jurisdiction in the Cyber World: Questioning the Jurisdiction and Validity of the Present Law of Jurisdiction, Civil Law of Jurisdiction in India.	2		
	Cause of Action, Jurisdiction and the Information Technology Act,2000.	2		
	Foreign Judgements in India, Place of Cause of Action in	2		

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	Contractual and IPR Disputes.			
	Exclusion Clauses in Contracts, Abuse of Exclusion Clauses, Objection of Lack of Jurisdiction, Misuse of the Law of Jurisdiction.	2		
	Legal Principles on Jurisdiction in the United State of America, Jurisdiction Disputes w.r.t. the Internet in the United State of America.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.I.T**

CLASS: **TYIT B** SEMESTER: **VI** MONTH: **Jan-March** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVES:
The learners will be able to :

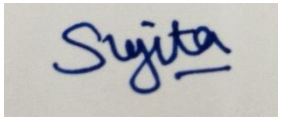
- Understand the role of Business Intelligence system and Decision support system in improvising the business.
- Understand different algorithms used in BI systems.
- Understand the use of AI and Knowledge management system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
III,1, Business Intelligence	Business intelligence: Effective and timely decisions, Data, information and knowledge, The role of mathematical models, Business intelligence architectures, Ethics and business intelligence	3	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT
	Decision support systems: Definition of system, Representation of the decision-making process, Evolution of information systems, Definition of decision support system, Development of a decision support system	3	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT
	Mathematical models for decision making: Structure of	3	Business Intelligence: Data Mining and Optimization for Decision	Meet, PPT

	mathematical models		Making Carlo Vercellis Wiley First 2009	
III,2, Business Intelligence	Development of a model, Classes of models Data mining: Definition of data mining,	3	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT
	Representation of input data , Data mining process, Analysis methodologies Data preparation: Data validation, Data transformation, Data reduction	3	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT
III,3, Business Intelligence	Classification: Classification problems, Evaluation of classification models, Bayesian methods, Logistic regression, Neural networks, Support vector machines	3	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT
	Clustering: Clustering methods, Partition methods, Hierarchical methods, Evaluation of clustering models	3	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT
	Business intelligence applications: Marketing models: Relational marketing, Sales force management	3	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First	Meet, PPT
III,4, Business	Logistic and production models: Supply chain optimization, Optimization models for logistics planning, Revenue management systems.	3	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT

Intelligence	Data envelopment analysis: Efficiency measures, Efficient frontier, The CCR model, Identification of good operating practices	3	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Meet, PPT
III,5, Business Intelligence	Knowledge Management: Introduction to Knowledge Management, Organizational Learning and Transformation, Knowledge Management Activities, Approaches to Knowledge Management, Information Technology (IT) In Knowledge Management, Knowledge Management Systems Implementation, Roles of People in Knowledge Management	3	Decision support and Business Intelligence Systems Efraim Turban, Ramesh Sharda, Dursun Delen Pearson Ninth 2011	Meet, PPT
	Artificial Intelligence and Expert Systems: Concepts and Definitions of Artificial Intelligence, Artificial Intelligence Versus Natural Intelligence, Basic Concepts of Expert Systems, Applications of Expert Systems, Structure of Expert Systems, Knowledge Engineering, Development of Expert Systems	3	Decision support and Business Intelligence Systems Efraim Turban, Ramesh Sharda, Dursun Delen Pearson Ninth 2011	Meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36



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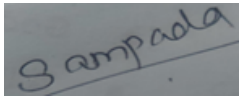

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: T.Y. BSc (IT) DIV-C SEMESTER:SEM -5 MONTH: JUN-SEPT ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to :

- Understand what is a The Internet of Things and its applications .
- Introduction of Prototyping the Physical Design and online design.
- Understand different techniques of Prototyping.
- Learn the concept of automation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT502 Internet Of Things UNIT 1	**The Internet of Things:** An Overview: The Flavour of the Internet of Things, The "Internet" of "Things", The Technology of the Internet of Things, Enchanted Objects, Who is Making the Internet of Things?	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally WILEY First 2014	Laptop, power point, jamboard
	Design Principles for Connected Devices: Calm and Ambient Technology, Magic as Metaphor, Privacy, Keeping Secrets, Whose Data Is It Anyway? Web Thinking for Connected Devices, Small Pieces, Loosely Joined, First-Class Citizens on The Internet, Graceful Degradation, Affordances.	4		
	Internet Principles: Internet Communications: An Overview, IP, TCP, The IP Protocol Suite (TCP/IP), UDP, IP Addresses,	4		

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	DNS, Static IP Address Assignment, Dynamic IP Address Assignment, IPv6, MAC Addresses, TCP and UDP Ports, An Example: HTTP Ports, Other Common Ports, Application Layer Protocols, HTTP, HTTPS: Encrypted HTTP, Other Application Layer Protocols.			
USIT502 Internet Of Things UNIT 2	**Thinking About Prototyping**: Sketching, Familiarity, Costs versus Ease of Prototyping, Prototypes and Production, Changing Embedded Platform, Physical Prototypes and Mass Personalisation	4	1.Designing the Internetof Things Adrian McEwen, Hakim Cassimally WILEY First 2014 , 2.Internet of Things – Architecture and Design Raj Kamal McGraw Hill First 201	Laptop, power point, jamboard
	Climbing into the Cloud Open Source versus Closed Source, Why Closed? Why Open? Mixing Open and Closed Source, Closed Source for Mass Market Projects, Tapping into the Community	4		
	Prototyping Embedded Devices: Electronics, Sensors, Actuators, Scaling Up the Electronics, Embedded Computing Basics, Microcontrollers, System-on-Chips, Choosing Your Platform, Arduino, developing on the Arduino, Some Notes on the Hardware, Openness, Raspberry Pi, Cases and Extension Boards, Developing on the Raspberry Pi, Some Notes on the Hardware, Openness	4		
USIT502 Internet Of Things	**Prototyping the Physical Design:** Preparation, Sketch, Iterate, and Explore, Nondigital Methods, Laser Cutting, Choosing a Laser Cutter, Software, Hinges and Joints, 3D Printing, Types of 3D Printing, Software, CNC Milling, Repurposing/Recycling.	5	Designing the Internet of Things Adrian McEwen, Hakim Cassimally WILEY First 2014	

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UNIT 3	**Prototyping Online Components**: Getting Started with an API, Mashing Up APIs, Scraping, Legalities, writing a New API, Clockodillo, Security, implementing the API, Using Curl to Test, Going Further	3		Laptop, power point, jamboard
	Real-Time Reactions, Polling, Comet, Other Protocols, MQ Telemetry Transport, Extensible Messaging and Presence Protocol, Constrained Application Protocol.	4		
USIT502 Internet Of Things UNIT 4	**Techniques for Writing Embedded Code:** Memory Management,Types of Memory, Making the Most of Your RAM, Performance and Battery Life, Libraries,Debugging.	5	Designing the Internet of Things Adrian McEwen, Hakim Cassimally WILEY First 2014	Laptop, power point, jamboard
	Business Models: A Short History of Business Models, Space and Time, From Craft to Mass Production, The Long Tail of the Internet, Learning from History, The Business Model Canvas, Who Is the Business Model For? Models	3		
	Make Thing, Sell Thing, Subscriptions, Customisation, be a Key Resource, Provide Infrastructure: Sensor Networks, take a Percentage, Funding an Internet of Things Startup, Hobby Projects and Open Source, Venture Capital, Government Funding, Crowdfunding, Lean Startups.	4		
USIT502	**Moving to Manufacture:** What Are You Producing? Designing Kits, Designing Printed circuit boards, Software Choices, The Design	5	1.DesigningtheInternetof Things Adrian McEwen, Hakim Cassimally WILEY First 2014 ,	

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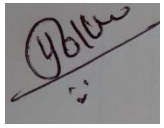
Internet Of Things UNIT 5	Process, Manufacturing Printed Circuit Boards, Etching Boards, Milling Boards. Assembly, Testing, Mass-Producing the Case and Other Fixtures.		2.Getting Started with Raspberry Pi Matt Richardson and Shawn Wallace SPD Third 2016	Laptop, power point, jamboard
	Certification, Costs, Scaling Up Software, Deployment, Correctness and Maintainability, Security, Performance, User Community.	3		
	Ethics: Characterizing the Internet of Things, Privacy, Control, Disrupting Control, Crowdsourcing, Environment, Physical Thing, Electronics, Internet Service, Solutions, The Internet of Things as Part of the Solution, Cautious Optimism, The Open Internet of Things Definition	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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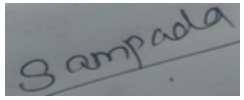

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics CLASS: FYIT SEMESTER: I

MONTH: Jully to Octomber ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : _Set,types of sets ,operation of sets, Russell's paradox,Logic ,Valid invalid statements,Converse,inverse,contrapositive statement,Truth

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT) Unit -I Set theory and Logic	Variables,The Language of sets ,The Language of relation and function.	02		
	Set Theory - Defination and the element method of proof,properties of sets Disproof,Algebric proofs, Boolean Algebra,Russells paradox and Halting problem	05	DM by kolman, DM by Techmax, DM by Kenneth Roshen	Black board and chalk
	The Logic of compound Statements - Logical form and logical equivalance ,Conditional Statements,Va	05		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: FYIT

SEMESTER: I MONTH: Jully to Octomber ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : ___Quantified, predicator, method of proof ,Euclidian Theroem,Quotient Reminder Theroem Rational Number,Indirect proof ,classical Theroem, floor and ceiling function.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT) Unit II Quantified Statement and method of proof	1) Quantified Statements: Predicates and quantified statements ,statement with multiple quantifiers,Arguments with quantified statements 2)Elementary Number Theory and Method of proof : Introductiontodirectproof,Rationalnumbers,Divisiblity,Division into cases and Quotient Reminder Theroem,Floor and ceiling Indirect 3) Argument : Contradiction and contrapositive ,Two Classical Theroem,Application in Algorithms	4+4+4=12	DM by kolman DM by Techmax DM by Roshen	Blackboard,chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12__

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TEACHING PLAN (UNIT PLAN)

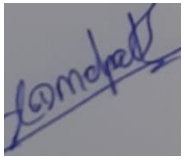
NAME OF THE STAFF: _Archana Malpathak DEPARTMENT: Mathematics CLASS: FYIT SEMESTER: I MONTH: Jully to Octomber

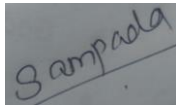
ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : _Reletion its properties,Equivalance relation graphs,Trees.different types of graphs

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT Sem -I) Unit -IV Relation, Graph and Trees	1) Relation on sets - Inverse of Relation,Directed graph of a Relation,Reflexivity, Symmetry, Transitivity : Definations ,closure propertise of relation R,Matrix of a Relation,Digraph of a relation 2)Equivalance Relation,partial order relation Hasse Diagram, 3) Graphs and Trees :Definations and basic properties Trail,path,Circuits,Euler Circutis,Isomorphism of Graphs,Trees ,rooted Trees,Spanning trees,weighted graphs and weighted trees ,Minimum spanning Trees	4+4+4=12	DM by kolman DM by Roshen DM by Techmax	Blackboard and chalk

The Number of lecture allotated to unit =12

SIGNATURE OF THE STAFF 

SIGNATURE OF THE H.O.D. 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SURBHI SHAH DEPARTMENT: IT-CS CLASS:FYIT-DIV B SEMESTER: SEM-1

MONTH: SEPTEMBER-DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: The learners will be able to learn and understand the basic concepts of digital electronics with its applications and various laws to be implemented in area of electronics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper no :2 Title of paper: - Digital Electronics UNIT 1	**Number System:** Analog System, digital system, numbering system, binary number system, octal number system, hexadecimal number system, conversion from one number system to another, floating point numbers	4	Digital Electronics and Logic Design By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,
	weighted codes binary coded decimal, non-weighted codes Excess – 3 code, Gray code, Alphanumeric codes – ASCII Code, EBCDIC, ISCII Code, Hollerith Code, Morse Code, Teletypewriter (TTY)	3		
	Error detection and correction, Universal Product Code, Code conversion.	1		
	Binary Arithmetic Binary addition, Binary subtraction, Negative number representation, Subtraction using 1's complement and 2's complement	2		
	Binary multiplication and division, Arithmetic in octal number system, Arithmetic in hexadecimal number system BCD and Excess – 3 arithmetic	2		
UNIT 2	**Boolean Algebra and Logic Gates:-**Introduction, Logic (AND OR NOT), Boolean theorems, Boolean Laws, De Morgan's Theorem,	3	Digital Electronics and Logic Design	POWERPOINT PRESENTATION,

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	Perfect Induction, Reduction of Logic expression using BooleanAlgebra,		By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	GOOGLE MEET,LAPTOP OR PC, JAMBOARD,
	Deriving Boolean expression from given circuit, exclusive OR and Exclusive NOR gates, Universal Logic gates,	2		
	Implementation of other gates using universal gates, Input bubbled logic, Assertion level	1		
	Minterm, Maxterm and Karnaugh Maps: Introduction, minterms and sum of minterm form, maxterm and Product of maxterm form, Reduction technique using Karnaugh maps – 2/3/4/5/6 variable K-maps Grouping of variables in K-maps, K-maps for product of sum form, minimize Boolean expression using K-map and obtain K-map from Boolean expression, Quine Mc Cluskey Method.	6		
UNIT 3	**Combinational Logic Circuits:** Introduction, Multi-input, multi-output Combinational circuits, Code converters design and implementations	4	Digital Electronics: Principles, Devices and Applications by Anil K. Maini	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,
	Arithmetic Circuits: Introduction, Adder, BCD Adder, Excess – 3 Adder, Binary Subtractors, BCD Subtractor, Multiplier, Comparator.	4		
Unit 4	**Multiplexer, Demultiplexer, ALU, Encoder and Decoder:** Introduction, Multiplexer, Demultiplexer, Decoder, ALU, Encoders.	4	Modern Digital Electronics - R. P. Jain	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,
	Sequential Circuits: Flip-Flop: Introduction, Terminologies used, S-R flip-flop, D flip-fop, JK flip-flop, Race-around condition, Master – slave JK flip-flop, T flip-flop	4		
	conversion from one type of flip-flop to another, Application of flip-flops	3		

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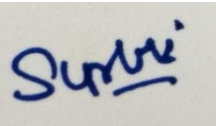
Unit 5	**Counters:** Introduction, Asynchronous counter, Terms related to counters, IC 7493 (4-bit binary counter), Synchronous counter,	3	Modern Digital Electronics - R. P. Jain	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,
	Bushing, Type T Design, Type JK Design, Presettable counter, IC 7490, IC 7492, Synchronous counter ICs, Analysis of counter circuits	4		
	Shift Register: Introduction, parallel and shift registers, serial shifting, serial–in serial–out, serial–in parallel–out , parallel–in parallel–out,	3		
	Ring counter, Johnson counter, Applications of shift registers,	1		
	Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 51



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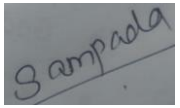

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.I.T**

CLASS: **FYIT C** SEMESTER: **I** MONTH: **Sep-Dec** ACADEMIC YEAR: **2020-2021**

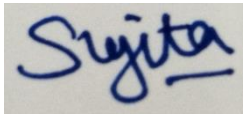
LEARNING OBJECTIVES:
The learners will be able to :

- Understand the basics concept of Digital circuit which includes MUX, DEMUX, Flip flops, counters etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II,4, Digital Electronics	Multiplexer, Demultiplexer, ALU, Encoder and Decoder: Introduction, Multiplexer, Demultiplexer, Decoder, ALU, Encoders	4	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT
	Sequential Circuits: Flip-Flop: Introduction, Terminologies used, S-R flip-flop, D flip-fop	4	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT
	JK flipflop, Race-around condition, Master – slave JK flip-flop, T flip-flop, conversion from one type of flip-flop to another, Application of flipflops.	4	Digital Principles and Applications Malvino and Leach Tata McGraw Hill	Meet, PPT
II,5, Digital Electronics	Counters: Introduction, Asynchronous counter, Terms related to counters, IC7493	3	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT

	(4-bit binary counter),			
	Synchronous counter, Bushing, Type T Design, Type JK Design, Presettable counter, IC 7490, IC 7492, Synchronous counter ICs, Analysis of counter circuits.	3	Digital Principles and Applications Malvino and Leach Tata McGraw Hill	Meet, PPT
	Shift Register: Introduction, parallel and shift registers, serial shifting, serial–in serial–out, serial–in parallel–out , parallel–in parallel–out,	2	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT
	Ring counter, Johnson counter, Applications of shift registers, Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters.	2	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT
	Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters.	2	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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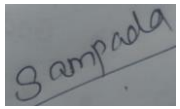

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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI_ DEPARTMENT: _____BSC-IT___ CLASS: __FYIT (C)__ SEMESTER: ___I_____

MONTH: ____October_____ ACADEMIC YEAR: ____2020-21__

LEARNING OBJECTIVE/S: The learners will be able to: Think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems. To apply their knowledge and skills to be employed and excel in IT professional careers and/or to continue their education in IT and/or related post graduate programs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Imperative Programming USIT101 Unit 1	**Introduction**: Types of Programming languages, History, features and application. Simple program logic, program development cycle, pseudocode statements and flowchart symbols sentinel value to end a program, evolution of programming models., desirable program characteristics. **Fundamentals**: Structure of a program. Compilation and Execution of a Program, Character Set, identifiers and keywords. Data types, constants, variables and arrays, declarations, expressions, statements, Variable definition, symbolic constants	3 3 3 3	Yashwant Kanetkar 'Let us C'	Google Meet and Power point

Imperative Programming USIT101 Unit 2	**Operators and Expressions:** Arithmetic operators, unary operators, relational and logical operators, assignment operators, assignment operators, the conditional operator, library functions. **Data Input and output:** Single character input and output, entering input data, scanf function, printf function, gets and puts functions, interactive programming.	4 4 2 2	Yashwant Kanetkar 'Let us C'	Google Meet and Power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

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NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____BSC-IT___ CLASS: __FYIT_(C)__

SEMESTER: ___I__ MONTH: ____November_____ ACADEMIC YEAR: ____2020-21__

Imperative Programming USIT101 Unit 3	**Conditional Statements and Loops:** Decision Making Within a Program, Conditions, Relational Operators, Logical Connectives, If Statement, If-Else Statement, Loops: While Loop, Do While, For Loop. Nested Loops, Infinite Loops, Switch statement **Functions:** Overview, defining a function, accessing a function, passing arguments to a function, specifying argument data types, function prototypes Recursion, modular programming and functions, standard library of c functions, prototype of a function: foo1lal parameter list, return type, function call, block structure, passing arguments to a function: call by reference, call by value.	4 3 2 3	Yashwant Kanetkar 'Let us C'	Google Meet and Power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

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NAME OF THE STAFF: ____ HEMANT WANI_ DEPARTMENT: _____BSC-IT___ CLASS: __FYIT_(C)__
SEMESTER: ___I___ MONTH: ____November_____ ACADEMIC YEAR: ____2020-21__

Imperative Programming USIT101 Unit 4	**Program structure:** Storage classes, automatic variables, external variables, static variables, multifile program Library functions, Preprocessor: Features, #define and #include, Directives and Macros **Arrays:**Definition, processing, passing arrays to functions, multidimensional arrays, arrays and strings.	3 3 2 4	Yashwant Kanetkar 'Let us C'	Google Meet and Power point

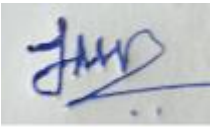
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

NAME OF THE STAFF: ____ HEMANT WANI_ DEPARTMENT: _____BSC-IT___ CLASS: __FYIT___
SEMESTER: ___I___ MONTH: ____December_____ ACADEMIC YEAR: ____2020-21__

Imperative Programming USIT101 Unit 5	**Pointers:** Fundamentals, declarations, Pointers Address Operators, Pointer Type Declaration, Pointer Assignment, Pointer Initialization Arithmetic, Functions and Pointers, Arrays And Pointers, Pointer Arrays, passing functions to other functions	3 3 2 4	Yashwant Kanetkar 'Let us C'	Google Meet and Power Point

	Structures and Unions: Structure Variables, Initialization, Structure Assignment, Nested Structure, Structures and Functions, Structures and Arrays: Arrays of Structures, Structures Containing Arrays, Unions, Structures and pointers.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____



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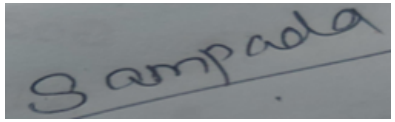

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ARPITA BANERJEE DEPARTMENT: IT-CS

CLASS: FYIT-DIV A SEMESTER: I MONTH: OCT-DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Develop basic understanding of Operating System, the concept of Memory management, File System, I/O System, Deadlock. Also they will be able to know new concepts like virtualization and cloud computing. Finally through case studies they can have practical knowledge on different types of OS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT103 Operating Systems I	**Introduction:** What is an operating system? History of operating system, computer hardware .	3	Modern Operating Systems by Andrew S. Tanenbaum	GoogleMeet & PowerPoint Presentation
	Different operating systems, operating system concepts, system calls, operating system structure.	3		
	Processes and Threads: Processes, Threads, Interprocess-communication.	3		
	Scheduling, IPC problems.	3		
II	**Memory Management**: No memory abstraction, memory abstraction: address spaces, virtual memory.	3	Modern Operating Systems by Andrew S. Tanenbaum	GoogleMeet & PowerPoint Presentation
	Page Replacement Algorithms, design issues for paging systems, implementation issues and segmentation.	3		
	File Systems: Files, directories, file system implementation, file-system management and optimization.	3		

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	MS-DOS file system, UNIX V7 file system, CD ROM file system.	3		
III	**Input-Output:** Principles of I/O hardware, Principles of I/O software, I/O software layers.	3	Modern Operating Systems by Andrew S. Tanenbaum	GoogleMeet & PowerPoint Presentation
	disks, clocks, user interfaces: keyboard, mouse, monitor, thin clients, power management Resources.	3		
	Deadlocks: Introduction to deadlocks, the ostrich algorithm, deadlock detection and recovery.	3		
	Deadlock avoidance, deadlock prevention, issues.	3		
IV	**Virtualization and cloud**: History, requirements for virtualization, type 1 and 2 hypervisors, techniques for efficient virtualization.	2	Modern Operating Systems by Andrew S. Tanenbaum	GoogleMeet & PowerPoint Presentation
	Hypervisor microkernels, memory virtualization, I/O virtualization, Virtual appliances.	3		
	Virtual machines on multicore CPUs, Clouds.	2		
	Multiple Processor System: Multiprocessors, multicomputer, distributed systems.	5		
V	**Case Study on LINUX and ANDROID:** History of Unix and Linux, Linux Overview, Processes in Linux, Memory management in Linux, I/O in Linux, Linux file system, security in Linux.	4	Modern Operating Systems by Andrew S. Tanenbaum	GoogleMeet & PowerPoint Presentation
	Android	2		
	Case Study on Windows: History of windows through Windows 10, programming windows, system structure, processes and threads in windows.	3		

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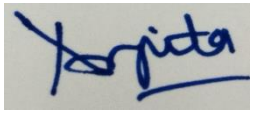
	Memory management, caching in windows, I/O in windows, Windows NT file system, Windows power management, Security in windows.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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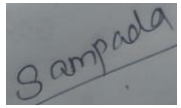

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: FYIT SEMESTER: I MONTH: SEPT to DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

To understand the structure and operation of modern processors and their instruction sets.

To understand the basic of digital electronics needed for computers

To understand the basics of instruction set architecture for reduced and complex instruction sets.

To understand how data is transferred between the processor and I/O devices.

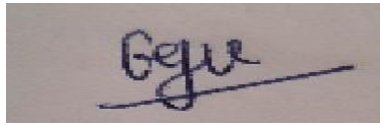
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 Digital Electronics Unit 1	**Number System:** Analog System, digital system, numbering system, binary number system, octal number system, hexadecimal number system, conversion from one number system to another floating point numbers, weighted codes binary coded decimal, non-weighted codes Excess – 3 code, Gray code, Alphanumeric codes – ASCII Code EBCDIC, ISCII Code, Hollerith Code, Morse Code, Teletypewriter (TTY), Error detection and correction, Universal Product Code, Code conversion	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Laptop, PPT, Google Meet
	Binary Arithmetic: Binary addition, Binary subtraction, Negative number	6	Digital Electronics and	Laptop, PPT, Google Meet

	representation, Subtraction using 1's complement and 2's complement, Binary multiplication and division, Arithmetic in octal number system, Arithmetic in hexadecimal number system, BCD and Excess – 3 arithmetic		Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	
Paper-02 Digital Electronics Unit 2	**Boolean Algebra and Logic Gates:** Introduction, Logic (AND OR NOT), Boolean theorems, Boolean Laws, De Morgan's Theorem, Perfect Induction, Reduction of Logic expression using Boolean Algebra, Deriving Boolean expression from given circuit, exclusive OR and Exclusive NOR gates, Universal Logic gates, Implementation of other gates using universal gates, Input bubbled logic, Assertion level.	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Laptop, PPT, Google Meet
	Minterm, Maxterm and Karnaugh Maps: Introduction, minterms and sum of minterm form, maxterm and Product of maxterm form, Reduction technique using Karnaugh maps – 2/3/4/5/6 variable K-maps, Grouping of variables in K-maps, K-maps for product of sum form, minimize Boolean expression using K-map and obtain K-map from Boolean expression, Quine Mc Cluskey Method	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Laptop, PPT, Google Meet

Paper-02 Digital Electronics Unit 3	**Combinational Logic Circuits:** Introduction, Multi-input, multi-output Combinational circuits, Code converters design and implementations **Arithmetic Circuits:** Introduction, Adder, BCD Adder, Excess – 3 Adder, Binary Subtractors, BCD Subtractor, Multiplier, Comparator	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Laptop, PPT, Google Meet
Paper-02 Digital Electronics Unit 4	**Multiplexer, Demultiplexer, ALU, Encoder and Decoder:** Introduction, Multiplexer, Demultiplexer, Decoder, ALU, Encoders.	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Laptop, PPT, Google Meet
	Sequential Circuits: Flip-Flop: Introduction, Terminologies used, S-R flip-flop, D flip-fop, JK flipflop, Race-around condition, Master – slave JK flip-flop, T flip-flop, conversion from one type of flip-flop to another, Application of flipflops.	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain	Laptop, PPT, Google Meet

			Tata McGraw Hill	
Paper-02 Digital Electronics Unit 5	**Counters:** Introduction, Asynchronous counter, Terms related to counters, IC 7493 (4-bit binary counter), Synchronous counter, Bushing, Type T Design, Type JK Design, Preset table counter, IC 7490, IC 7492, Synchronous counter ICs, Analysis of counter circuits.	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Laptop, PPT, Google Meet
	Shift Register: Introduction, parallel and shift registers, serial shifting, serial–in serial– out, serial–in parallel–out , parallel–in parallel–out, Ring counter, Johnson counter, Applications of shift registers, Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Laptop, PPT, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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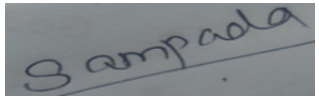

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT:IT

CLASS:FYIT-DIV A SEMESTER: SEM-1 MONTH: SEP-DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: develop logics which will help them to create programs, applications in C. Also by learning the basic programming constructs they can easily switch over to any other language in future.

PAPER, TITLE, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1,Imperative programming, UNIT 1	**Introduction**: Types of Programming languages, History, features and application. Simple program logic, program development cycle	3	Let us c-by Yashwant Kanetkar	GOOGLE SLIDE, GOOGLE MEET,PPT
	pseudocode statements and flowchart symbols, sentinel value to end a program, programming and user environments, evolution of programming models., desirable program characteristics	3		
	Fundamentals: Structure of a program. Compilation and Execution of a Program,Character Set, identifiers and keywords, data types	3		

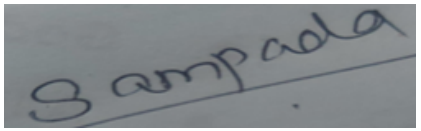
	constants, variables and arrays, declarations, expressions, statements, Variable definition, symbolic constants	4		
UNIT 2	**Operators and Expressions:** Arithmetic operators, unary operators, relational and logical operators	3	Let us c-by Yashwant Kanetkar	GOOGLE SLIDE, GOOGLE MEET,PPT
	assignment operators, assignment operators, the conditional operator, library functions.	3		
	Data Input and output: Single character input and output, entering input data	3		
	scanf function, printf function, gets and puts functions, interactive programming	3		
Unit 3	**Conditional Statements and Loops:** Decision Making Within AProgram,Conditions, Relational Operators, Logical Connectives, If Statement, If-Else Statement.	3	Let us c-by Yashwant kanetkar	GOOGLE SLIDE, GOOGLE MEET,PPT
	Loops: While Loop, Do While, For Loop. Nested Loops, Infinite Loops,Switch Statement	4		

	Functions: Overview, defining a function, accessing a function, passing arguments to a function, specifying argument data types, function prototypes,recursion, modular programming and functions, standard library of c functions	3		
	prototype of a function: foo1lal parameter list, return type,function call, block structure, passing arguments to a function: call by reference,call by value	3		
UNIT 4	**Program structure:** Storage classes, automatic variables, external variables, static variables,multifile programs	3	Let us c-by Yashwant Kanetkar	GOOGLE SLIDE, GOOGLE MEET,PPT
	more library functions,Preprocessor: Features, #define and #include, Directives and Macros	3		
	Arrays: Definition, processing, passing arrays to functions, multidimensional arrays, arrays and strings.	4		
Unit 5	**Pointers:** Fundamentals, declarations, Pointers Address Operators, Pointer Type	3	Let us c-by Yashwant kanetkar	GOOGLE SLIDE, GOOGLE MEET,PPT

	Declaration, Pointer Assignment, Pointer Initialization.			
	Pointer Arithmetic, Functions and Pointers, Arrays And Pointers, Pointer Arrays, passing functions to other functions	3		
	Structures and Unions: Structure Variables, Initialization, Structure Assignment, Nested Structure, Structures and Functions,	3		
	Structures and Arrays: Arrays of Structures, Structures Containing Arrays, Unions, Structures and pointer	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.I.T**

CLASS: **FYIT A** SEMESTER: **I** MONTH: **Sep-Dec** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVES:
The learners will be able to :

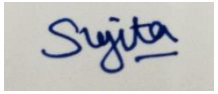
- Understand the Business Communication strategies and its importance.
- Also the paper acts like a personality development course for the student.
- Also the students gets confidence in facing the problems faced during interviews.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
V,1, Communication Skills	The Seven Cs of Effective Communication: Completeness, Conciseness, Consideration, Concreteness, Clarity, Courtesy, Correctness	4	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Meet, PPT
	Understanding Business Communication: Nature and Scope of Communication, Non-verbal Communication,	4	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Meet, PPT
	Cross-cultural communication, Technology-enabled Business Communication	4	Business Communication Edited by Meenakshi Raman and	Meet, PPT

V,2, Communication Skills	Writing Business Messages and Documents: Business writing, Business Correspondence, Instructions Business Reports and Proposals,	5	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Meet, PPT
	Career building and Resume writing, Developing Oral Communication Skills for Business: Effective Listening, Business Presentations and Public Speaking,	5	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Meet, PPT
	Conversations, Interviews	2	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Meet, PPT
V,3, Communication Skills	Developing Oral Communication Skills for Business: Meetings and Conferences,	5	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Meet, PPT
	Group Discussions and Team Presentations, Team Briefing,	5	Business Communication Edited by Meenakshi Raman and Prakash Singh	Meet, PPT
	Understanding Specific Communication Needs: Communication across Functional Areas	2	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Meet, PPT
	Understanding Specific Communication Needs:	6	Business Communication Edited	Meet, PPT

V,4, Communication Skills	Corporate Communication, Persuasive Strategies in Business Communication		by Meenakshi Raman and Prakash Singh Oxford University Press Second	
	Ethics in Business Communication, Business Communication Aids	4	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Meet, PPT
V,5, Communication Skills	Presentation Process: Planning the resentations, executing the presentations, Impressing the audience by performing,	4	Strategies for improving your business communication Prof. M. S. Rao Shroff publishers and distributors	Meet, PPT
	Planning stage: Brainstorming, mind maps / concept maps, executing stage: chunking theory, creating outlines, Use of templates. Adding graphics to your presentation: Visual communication, Impress stage: use of font, colour, layout, Importance of practice and performance.	4	Strategies for improving your business communication Prof. M. S. Rao Shroff publishers and distributors	Meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 54



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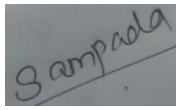

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE DEPARTMENT: ____IT____

CLASS: _FYIT_B DIV SEMESTER: 1_ MONTH: Sep to Dep ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand communication**
- **Enhance communication**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT105 Communication Skills	The Seven Cs of Effective Communication: Completeness, Conciseness, Consideration, Concreteness, Clarity, Courtesy, Correctness	6	Professional Communication Aruna Koneru Tata McGraw Hill	GOOGLE MEET AND PPPT

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Unit I	Understanding Business Communication: Nature and Scope of Communication, Non-verbal Communication, Cross-cultural communication, Technology-enabled Business Communication	6		
Unit II	Writing Business Messages and Documents: Business writing, Business Correspondence, Instructions Business Reports and Proposals, Career building and Resume writing.	6	Professional Communication Aruna Koneru Tata McGraw Hill	GOOGLE MEET AND PPPT
	Developing Oral Communication Skills for Business: Effective Listening, Business Presentations and Public Speaking, Conversations, Interviews	6		
UNIT III	Developing Oral Communication Skills for Business: Meetings and Conferences, Group Discussions and Team Presentations, Team Briefing,	6	Professional Communication Aruna Koneru Tata McGraw Hill	GOOGLE MEET AND PPPT
	Understanding Specific Communication Needs: Communication across Functional Areas	6		
UNIT IV	Understanding Specific Communication Needs: Corporate Communication, Persuasive Strategies in Business Communication, Ethics in Business Communication,	12	Professional Communication Aruna Koneru Tata McGraw	GOOGLE MEET AND PPPT

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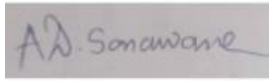
	Business Communication Aids		Hill	
UNIT V	Presentation Process: Planning the presentations, executing the presentations, Impressing the audience by performing, Planning stage: Brainstorming, mind maps / concept maps, executing stage: chunking theory, creating outlines, Use of templates. Adding graphics to your presentation: Visual communication, Impress stage: use of font, colour, layout, Importance of practice and performance.	12	Professional Communication Aruna Koneru Tata McGraw Hill	GOOGLE MEET AND PPPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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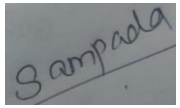

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS:FYIT-DIV B SEMESTER: SEM-1 MONTH: SEP-DEC ACADEMIC YEAR: 2020-2021

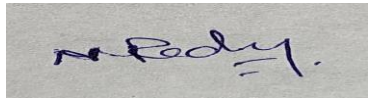
LEARNING OBJECTIVE/S:
The learners will be able to: develop logics which will help them to create programs, applications in C. Also by learning the basic programming constructs they can easily switch over to any other language in future.

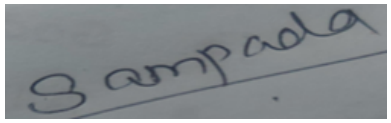
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1 IP UNIT 1	**Introduction**: Types of Programming languages, History, features and application. Simple program logic, program development cycle	3	Let us c-by Yashwant Kanetkar	PPT ,GOOGLE MEET
	pseudocode statements and flowchart symbols, sentinel value to end a program, programming and user environments, evolution of programming models., desirable program characteristics	3		
	Fundamentals: Structure of a program. Compilation and Execution of a Program,Character Set, identifiers and keywords, data types	3		
	constants, variables and arrays, declarations, expressions, statements, Variable definition,	3		

	symbolic constants			
UNIT 2	**Operators and Expressions:** Arithmetic operators, unary operators, relational and logical operators	3	Let us c-by Yashwant Kanetkar	PPT ,GOOGLE MEET
	assignment operators, assignment operators, the conditional operator, library functions.	3		
	Data Input and output: Single character input and output, entering input data	2		
	scanf function, printf function, gets and puts functions, interactive programming	3		
UNIT 4	**Program structure:** Storage classes, automatic variables, external variables, static variables,multifile programs	3	Let us c-by Yashwant Kanetkar	PPT ,GOOGLE MEET
	more library functions,Preprocessor: Features, #define and #include, Directives and Macros	3		

	Arrays: Definition, processing, passing arrays to functions, multidimensional arrays, arrays and strings.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 33





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.I.T**

CLASS: **FYIT B** SEMESTER: **I** MONTH: **Sep-Dec** ACADEMIC YEAR: **2020-2021**

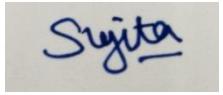
LEARNING OBJECTIVES:
The learners will be able to :

- Understand the basics of Object Oriented Programming.
- Since C being the basics for other learning high level language the student get the chance to understand the programming from its scratch.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I,3, Imperative Programming	Decision Making Within A Program, Conditions, Relational Operators, Logical Connectives, If Statement,	3	Let us C Yashwant P. Kanetkar, BPB publication	Meet, PPT
	If-Else Statement, Loops: While Loop, Do While, For Loop. Nested Loops, Infinite Loops, Switch Statement	3	C for beginners Madhusudan Mothe X-Team Series 1st 2008	Meet, PPT
	Functions: Overview, defining a function, accessing a function, passing arguments to a function, specifying argument data types, function prototypes,	3	Let us C Yashwant P. Kanetkar, BPB publication	Meet, PPT
	recursion, modular programming and functions, standard library of c functions, prototype of a function: foo1lal parameter list, return type,	3	Let us C Yashwant P. Kanetkar, BPB publication	Meet, PPT
I,5, Imperative Programming	Pointers: Fundamentals, declarations, Pointers Address Operators, Pointer Type Declaration	3	C for beginners Madhusudan Mothe X-Team Series 1st 2008	Meet, PPT

	Pointer Assignment, Pointer Initialization, Pointer Arithmetic, Functions and Pointers, Arrays And Pointers, Pointer Arrays, passing functions to other functions	3	Let us C Yashwant P. Kanetkar, BPB publication	Meet, PPT
	Structures and Unions: Structure Variables, Initialization, Structure Assignment, Nested Structure,	3	Let us C Yashwant P. Kanetkar, BPB publication	Meet, PPT
	Structures and Functions, Structures and Arrays: Arrays of Structures, Structures Containing Arrays, Unions, Structures and pointers	3	Let us C Yashwant P. Kanetkar, BPB publication	Meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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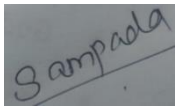

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT-CS

CLASS:FYIT-DIV B SEMESTER: SEM-I MONTH: SEP-DEC ACADEMIC YEAR: 2020-2021

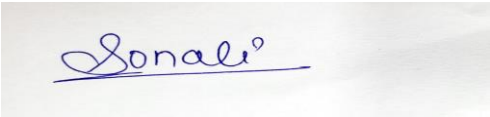
LEARNING OBJECTIVE/S:
The learners will be able to: Understand role of Operating System in terms of process, memory, file and I/O management. Apply and analysis the concept of a process, thread, mutual exclusion and deadlock. Evaluate performance of process scheduling algorithms and IPC. Apply and analysis the concepts of memory management techniques. Apply and analyze different techniques of file and I/O management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3, OS, UNIT-1	**Introduction:** What is an operating system? History of operating system, computer hardware, different operating systems, operating system concepts, system calls, operating system structure.	4	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	PPT, GoogleMeet, Jamboard ,slido.
	Processes and Threads: Processes, threads	4		
	Interprocess communication, scheduling, IPC problems.	4		
UNIT-2	**Memory Management**: No memory abstraction, memory abstraction: address spaces, virtual memory	3	Modern Operating Systems-by Andrew S.	PPT, GoogleMeet,
	page replacement algorithms, design issues for paging systems, implementation issues, segmentation.	3		

	File Systems: Files, directories, file system implementation, file-system management and optimization	4	Tanenbaum, Herbert Bos	Jamboard , Slido.
	MS-DOS file system, UNIX V7 file system, CD ROM file system.	2		
UNIT-3	**Input-Output:** Principles of I/O hardware, Principles of I/O software	4	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	PPT, GoogleMeet, Jamboard , Google form.
	I/O software layers, disks, clocks, user interfaces: keyboard, mouse, monitor, thin clients, power management	3		
	Deadlocks: Resources, introduction to deadlocks, the ostrich algorithm,	2		
	deadlock detection and recovery, deadlock avoidance, deadlock prevention, issues.	3		
UNIT-4	**Virtualization and Cloud**: History, requirements for virtualization, type 1 and 2 hypervisors, techniques for efficient virtualization, hypervisor microkernels	2	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	PPT, GoogleMeet, Jamboard .
	memory virtualization, I/O virtualization, Virtual appliances, virtual machines on multicore CPUs, Clouds.	2		
	Multiple Processor Systems : Multiprocessors	3		
	Multicomputers, Distributed systems.	5		

UNIT 5	**Case Study on LINUX and ANDROID:** History of Unix and Linux, Linux Overview, Processes in Linux	3	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	PPT, GoogleMeet, Jamboard .
	Memory management in Linux, I/O in Linux, Linux file system, security in Linux. Android.	3		
	Case Study on Windows: History of windows through Windows 10, programming windows, system structure, processes and threads in windows	3		
	memory management, caching in windows, I/O in windows, Windows NT file system, Windows power management, Security in windows.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:60



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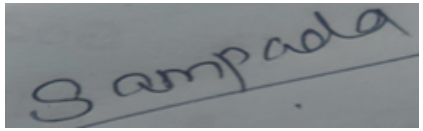

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYIT-C SEMESTER: SEM-1 MONTH: SEP-DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the process of communication and its effect on giving and receiving information.
- Learn about historical and theoretical developments in the field of communication.
- Apply effective communication skills in a variety of public and interpersonal settings.
- Develop analytical, research, and organizational skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
5 COMMUNICATION SKILLS UNIT 1	**The Seven Cs of Effective Communication:** Completeness, Conciseness, Consideration, Concreteness, Clarity, Courtesy, Correctness	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	GOOGLE MEET AND PPT
	Understanding Business Communication: Nature and Scope of Communication,	4		
	Non-verbal Communication, Cross-cultural communication,	3		
	Technology-enabled Business Communication	2		

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5 COMMUNICATION SKILLS UNIT 2	**Writing Business Messages and Documents:** Business writing, Business Correspondence,	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	GOOGLE MEET AND PPT
	Instructions Business Reports and Proposals, Career building and	4		
	Resume writing. **Developing Oral Communication Skills for Business:** Effective Listening, Business Presentations and	3		
	Public Speaking ,Conversations, Interviews	3		
UNIT 3	**Developing Oral Communication Skills for Business:** Meetings and Conferences,	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	BLACK BOARD AND CHALK
	Group Discussions *and*	2		
	Team Presentations, Team Briefing,	3		
	Understanding Specific Communication Needs: Communication across Functional Areas	3		
UNIT 4	**Understanding Specific Communication Needs:** Corporate Communication,	2	Business Communication Edited by Meenakshi Raman and	GOOGLE MEET AND PPT
	Persuasive Strategies in Business Communication,	3		

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	Ethics in Business Communication, Business Communication Aids	3	Prakash Singh	
UNIT 5	**Presentation Process:** Planning the presentations, executing the presentations, Impressing the audience by performing,	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	GOOGLE MEET AND PPT
	Planning stage: Brainstorming, mind maps / concept maps,	3		
	executing stage: chunking theory, creating outlines, Use of templates	3		
	Adding graphics to your presentation: Visual communication, Impress stage: use of font, colour, layout, Importance of practice and performance.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 55

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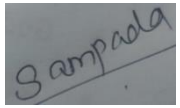

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS:FYIT-DIV C SEMESTER: SEM-1 MONTH: SEP-DEC ACADEMIC YEAR: 2020-2021

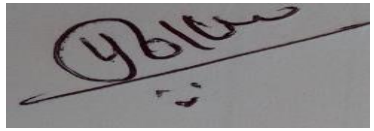
LEARNING OBJECTIVE/S:

- To able to learn and understand the basic concepts of digital electronics with its applications and various laws to be implemented in area of electronics.
- To think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT102 Digital Electronics UNIT 1	**Number System:** Analog System, digital system, numbering system, binary number system, octal number system, hexadecimal number system, conversion from one number system to another, floating point numbers	4	Digital Electronics and Logic Design By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	Laptop, power point, jamboard
	weighted codes binary coded decimal, non-weighted codes Excess – 3 code, Gray code, Alphanumeric codes – ASCII Code, EBCDIC, ISCII Code, Hollerith Code, Morse Code, Teletypewriter (TTY) Error detection and correction, Universal Product Code, Code conversion	4		
	Binary Arithmetic Binary addition, Binary subtraction, Negative number representation, Subtraction using 1's complement and 2's complement	2		
	Binary multiplication and division, Arithmetic in octal number system, Arithmetic in hexadecimal number system BCD and Excess – 3 arithmetic	2		
USIT102	**Boolean Algebra and Logic Gates:-**Introduction, Logic (AND OR NOT), Boolean theorems, Boolean Laws, De Morgan's Theorem,	3	Digital Electronics and Logic Design	

Digital Electronics UNIT 2	Perfect Induction, Reduction of Logic expression using Boolean Algebra,		By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	Laptop, power point, jamboard
	Deriving Boolean expression from given circuit, exclusive OR and Exclusive NOR gates, Universal Logic gates, Implementation of other gates using universal gates, Input bubbled logic, Assertion level, Implementation of other gates using universal gates, Input bubbled logic, Assertion level	3		
	Minterm, Maxterm and Karnaugh Maps: Introduction, minterms and sum of minterm form, maxterm and Product of maxterm form, Reduction technique using Karnaugh maps – 2/3/4/5/6 variable K-maps Grouping of variables in K-maps, K-maps for product of sum form, minimize Boolean expression using K-map and obtain K-map from Boolean expression, Quine Mc Cluskey Method.	6		
USIT102 Digital Electronics UNIT 3	**Combinational Logic Circuits:** Introduction, Multi-input, multi-output Combinational circuits, Code converters design and implementations	6	Digital Electronics: Principles, Devices and Applications by Anil K. Maini	Laptop, power point, jamboard
	Arithmetic Circuits: Introduction, Adder, BCD Adder, Excess – 3 Adder, Binary Subtractors, BCD Subtractor, Multiplier, Comparator.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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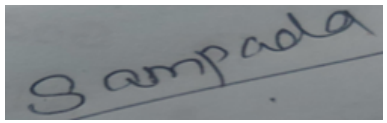

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.I.T**

CLASS: **FYIT C** SEMESTER: **I** MONTH: **Sep-Dec** ACADEMIC YEAR: **2020-2021**

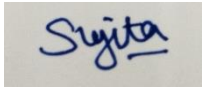
LEARNING OBJECTIVES:
The learners will be able to :

- Understand the basics concept of Digital circuit which includes MUX, DEMUX, Flip flops, counters etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II,4, Digital Electronics	Multiplexer, Demultiplexer, ALU, Encoder and Decoder: Introduction, Multiplexer, Demultiplexer, Decoder, ALU, Encoders	4	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT
	Sequential Circuits: Flip-Flop: Introduction, Terminologies used, S-R flip-flop, D flip-fop	4	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT
	JK flipflop, Race-around condition, Master – slave JK flip-flop, T flip-flop, conversion from one type of flip-flop to another, Application of flipflops.	4	Digital Principles and Applications Malvino and Leach Tata McGraw Hill	Meet, PPT
II,5, Digital Electronics	Counters: Introduction, Asynchronous counter, Terms related to counters, IC7493	3	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT

	(4-bit binary counter),			
	Synchronous counter, Bushing, Type T Design, Type JK Design, Presettable counter, IC 7490, IC 7492, Synchronous counter ICs, Analysis of counter circuits.	3	Digital Principles and Applications Malvino and Leach Tata McGraw Hill	Meet, PPT
	Shift Register: Introduction, parallel and shift registers, serial shifting, serial–in serial–out, serial–in parallel–out , parallel–in parallel–out,	2	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT
	Ring counter, Johnson counter, Applications of shift registers, Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters.	2	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT
	Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters.	2	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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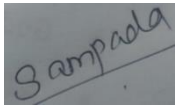

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: F. Y. B. Sc. I. T –C SEMESTER: I MONTH: October-December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with Linux OS and Windows OS

b. Create various applications on different OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Operating Systems Unit -II	**Memory Management:** No memory abstraction, memory abstraction: address spaces, virtual memory	3	Modern Operating Systems by Andrew Tanenbaum	Lecture through Google Slides on Google Meet
	Page replacement algorithms, design issues for paging systems, implementation issues, segmentation.	4		Lecture through Google Slides on Google Meet
	File Systems: Files, directories, file system implementation, file-system management and optimization, MS-DOS file system, UNIX V7 file system, CD ROM file system.	5		Lecture through Google Slides on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: F. Y. B. Sc. I. T –C SEMESTER: I MONTH: October-December ACADEMIC YEAR: 2020-2021

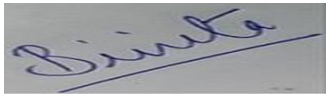
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with Linux OS and Windows OS

b. Create various applications on different OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Operating Systems Unit -III	**Input-Output:** Principles of I/O hardware, Principles of I/O software, I/O software layers	3	Modern Operating Systems by Andrew Tanenbaum	Lecture through Google Slides on Google Meet
	disks, clocks, user interfaces: keyboard, mouse, monitor, thin clients, power management	3		Lecture through Google Slides on Google Meet
	Deadlocks: Resources, introduction to deadlocks, the ostrich algorithm, deadlock detection and recovery	3		Lecture through Google Slides on Google Meet
	Deadlock avoidance, deadlock prevention, issues.	3		Lecture through Google Slides on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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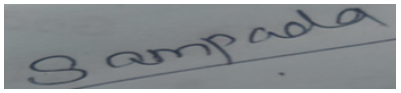

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: IT

CLASS: FY BSC IT SEMESTER: I MONTH: SEP-DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to:

1. Learners must understand proper working of operating system.
2. To provide a sound understanding of Computer operating system, its structures, functioning and algorithms.
3. To provide a understanding of operating system, its structures and functioning.
4. Develop and master understanding of algorithms used by operating systems for various purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3 OS UNIT 1	What is an operating system? History of operating system, computer hardware, different operating systems	2	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	Power Point Presentation
	Operating system concepts, system calls, operating system structure	3		
	Processes, threads	4		
	Interprocess communication, scheduling, IPC problem	4		

UNIT 4	History, requirements for virtualization, type 1 and 2 hypervisors, techniques for efficient virtualization.	3	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	PowerPoint Presentation
	Hypervisor microkernels, memory virtualization, I/O virtualization, Virtual appliances.	3		
	Virtual machines on multicore CPUs, Clouds.	2		
	Multiprocessors, multicomputer, distributed systems.	4		
UNIT 5	History of Unix and Linux, Linux Overview, Processes in Linux, Memory management in Linux, I/O in Linux.	3	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	PowerPoint Presentation
	Linux file system, security in Linux. Android, History of windows through Windows 10, programming windows.	3		
	System structure, processes and threads in windows, Memory management, caching in windows, I/O in windows.	3		
	Windows NT file system, Windows power management, Security in windows.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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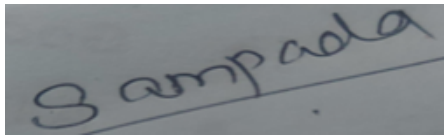

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SYIT SEM-III SUB-APPLIED MATHS-II DIV A

PROF –ARCHANA MALPATHAK

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT:Mathematics CLASS: SYIT
SEMESTER: III MONTH: Aug to Nov ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II Unit-I Matrices and Complex Number	Matrices : Inverse,properties,Rank by Normal and Echelon form,Linearequations,Linear dependent and independent Linear transformation,ch roots and ch vectors Caley Hamiltonian theroem,Similarity of matrix,Digonal matrix Complex number - complex number equality of complex numberArgand digram,polar form and exponential of complex numberHyperbolic and Logarithmic function of complex number	12	Applied Maths by G.V.Kumbojkar Higher Engineering of mathematics TechMax	Black board and chalk online teaching method

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: SYIT
SEMESTER: II MONTH: Aug to November ACADEMIC YEAR: 2020-2021.
LEARNING OBJECTIVE/S:
The learners will be able to : ___Variable separable,subtitutionmethod,Homogenous,Non homogeneous, Exavt differential equation,Non exact fifgerential equation, Integrating factor ,bernoullis differential,higher order differential equation solvable for Y,P,X .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths -II UNIT -II Differential equations	1) Equation of the first order and first degree :Sepratation of variables,Equation homogenous in x and y ,Non homogenous,Exactdifferential, 2)Integrating factor,Bernouils Equation ,Subtitution method general method,other methods 3)Diff equ of higher degree - Solvable for p, for X ,for YClairauts form of equationMethod of sepration, 4)Linear differential with constant coefficients - Differential operator,f(D)=0.f(D)=x ,1/f(D),1/f(D) X	3+3+3+3 =12	G.v.kumbojkar Higher Engineering of mathematics Balguru swami TechMax R.M.Baphna	Blackboard ,chalk online teaching method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics. CLASS: SYIT.
SEMESTER: III MONTH: July To Nov ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Double integration ,Types of double ,Triple Integration,Types oftriple, Area volume for double and triple integration_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Mathematics UNIT -IV Multiple integral	1) Multiple Intigration Double Integral,Change of. the order of the integration,Double integral in polar co - ordinates 2) Triple integral. 3) Application of integration :Areas,Volumes of. solids	4+4+4 =12	Higher Engineering of Mathematics TechMax R .M.Baphna	Black board ,chalk online teaching method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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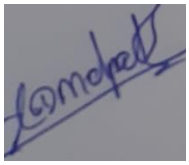
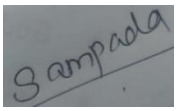
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -ARCHANA MALPATHAK Malpathak
DEPARTMENT: Mathematics CLASS: -SYIT SEMESTER: III
MONTH: -JULLY TO_ NOVEMBER ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II (SYIT) UNIT-V Beta Gamma Function	1) Beta Gamma function -Defination,properties and problems,Duplication Formula 2) Differentiation Under Integral Sign 3)Error functions	5+4+3=12	Tech max Higher Engineering of mathematics Applied Maths II Nirali publication	Blackboard,chalk





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(I.T.) SEMESTER: III MONTH: AUG-SEPT ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- What is Data Communication?
- What are different network model?
- How data communication is done with the help of Signals?

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 1	**Introduction:** Data communications, networks, network types, Internet history, standards and administration.	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Network Models: Protocol layering, TCP/IP protocol suite, The OSI model.	3	Data Communication and Networking Behrouz A. Forouzan Tata	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

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			McGraw Hill Fifth Edition 2013	
	Introduction to Physical layer:Data and signals, periodic analog signals, digital signals, transmission impairment, data rate limits, performance	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Digital and Analog transmission: Digital-to-digital conversion, analog-to-digital conversion, transmission modes, digital-to-analog conversion, analog-to-analog conversion	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(I.T.) SEMESTER: III MONTH: SEPT ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Different kinds of Transmission media
- How maximum bandwidth of Signal can be utilized
- Different kind of Switches in a network
- Functions in a data link layer

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 2	**Bandwidth Utilization**: Multiplexing and SpectrumSpreading: Multiplexing, Spread Spectrum	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Transmission media:Guided Media, Unguided Media	2	Data Communication and Networking Behrouz A. Forouzan Tata	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

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			McGraw Hill Fifth Edition 2013	
	Switching: Introduction, circuit switched networks, packet switching, structure of a switch.	5	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Introduction to the Data Link Layer: Link layer addressing, Data Link Layer Design Issues, Error detection and correction, block coding, cyclic codes, checksum, forward error correction, error correcting codes, error detecting codes.	5	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(I.T.) SEMESTER: III MONTH: SEPT-OCT ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Different types of Wireless LAN Technologies
- Various real life connecting devices used to connect virtual LAN's

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 3	**Data Link Control:** DLC services, data link layer protocols, HDLC, Point-to-point protocol.	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Media Access Control: Random access, controlled access, channelization, Wired LANs – Ethernet Protocol, standard ethernet, fast ethernet, gigabit ethernet, 10 gigabit ethernet,	3	Data Communication and Networking	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

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			Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	
	Wireless LANs: Introduction, IEEE 802.11 project, Bluetooth, WiMAX, Cellular telephony, Satellite networks.	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(I.T.) SEMESTER: III MONTH: NOV ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- New generation IPV6
- How transition is done from IPV4 to IPV6
- Protocols and functions in Network layer

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 4	**Introduction to the Network Layer**: Network layer services, packet switching, network layer performance, IPv4 addressing, forwarding of IP packets, Internet Protocol, ICMPv4, Mobile IP	4	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Unicast Routing: Introduction, routing algorithms, unicast routing protocols,	4	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

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			2013	
	Next generation IP: IPv6 addressing, IPv6 protocol, ICMPv6 protocol, transition from IPv4 to IPv6.	4	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

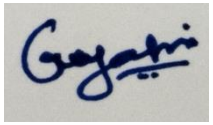
CLASS: S.YB.Sc.(I.T.) SEMESTER: III MONTH: NOV-DEC ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Functions and Protocols of the Transport layer
- Various Client-Server protocols like WWW,HTTP

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 5	**Introduction to the Transport Layer:** Introduction, Transport layer protocols (Simple protocol, Stop-and-wait protocol, Go-Back-n protocol, Selective repeat protocol, Bidirectional protocols), Transport 12 9 layer services, User datagram protocol, Transmission control protocol,	6	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Standard Client0Server Protocols :World wide-web and HTTP, FTP, Electronic mail, Telnet, Secured Shell, Domain name system.	6	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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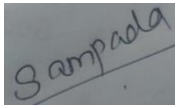

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ARPITA BANERJEE DEPARTMENT: IT-CS

CLASS: SYIT-DIV A SEMESTER: III MONTH: SEPT-DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Develop understanding of the concepts like Transaction, concurrency control , serializability, deadlock and recovery management system. They will be able to learn PL/SQL to write code. They will be introduced with the concepts like Cursor, Trigger, Exception Handling etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT304 Database Management Systems IV	**Transaction management and Concurrency:** Control Transaction management: ACID properties.	3	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet & PowerPoint Presentation
	Serializability and concurrency control, Lock based concurrency control (2PL, Deadlocks).	4		
	Time stamping methods, Optimistic methods.	3		
	Database Recovery management.	2		
V	PL/SQL: Beginning with PL / SQL, Identifiers and Keywords, Operators, Expressions, Sequences, Control Structures	2	SQL,PL/SQL By Ivan Bayross	Google Meet & PowerPoint Presentation
	Cursors and Transaction, Collections and composite data types, Procedures and Functions	4		
	Exceptions Handling, Packages	3		
	With Clause and Hierarchical Retrieval, Triggers.	3		

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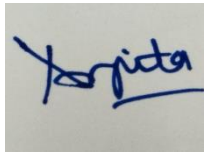

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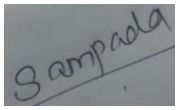

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____Information Technology___ CLASS: __SYIT_(A)

SEMESTER - III MONTH: ____September_ ACADEMIC YEAR: ____2020-21__

LEARNING OBJECTIVE/S:
The learners will be able to: Develop understanding of the concept of Transaction.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Database Management Systems USIT304 Unit 1	**Introduction to Databases and Transactions-** What is database system, purpose of database system. View of data, relational databases, Database architecture and transaction management.	5	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation
	Data Models , ER-Diagram and UML	3	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation
	Database design and ER-Model: overview, ER_model Constraints, ERD Issues, Codd's Ruls.	4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____Information Technology___ CLASS: __SYIT_(A)

SEMESTER - III MONTH: ____October_ ACADEMIC YEAR: ____2020-21__

LEARNING OBJECTIVE/S:

The learners will be able to: Relational Algebra and also learning the Constraints.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Database Management Systems USIT304 Unit 2	Relational Database model: Logical views of data, keys, integrity rules, Relational Database design. Normalization.	5	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation
	Relational algebra**:** introduction, Selection and projection set operations, renaming, Joins, Division, syntax, semantics. Operators, grouping and ungrouping.	4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation
	Calculus: Tuple relational calculus, Domain relational calculus, calculus vs algebra	3	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

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NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____Information Technology___ CLASS: __SYIT_(A)

SEMESTER - III MONTH: ____November_ ACADEMIC YEAR: ____2020-21__

LEARNING OBJECTIVE/S: Views and SQL, Constraints

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Database Management Systems USIT304 Unit 3	Constraints, types of constraints, integrity constraints. Views: Introduction to views, data independence, security.	5	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation
	Updates on views, comparison on tables and views.	3	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation
	SQL: Data definition, aggregate function, Null values, nested queries, join relations. Triggers.	4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Google Meet and Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____

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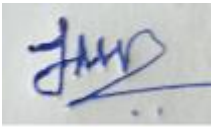

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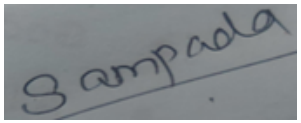

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT/CS

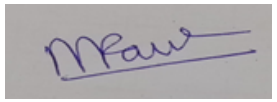
CLASS: SYIT-A SEMESTER: III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to learn different structures of data, their operations and algorithms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DATA STRUCTURES (USIT302) Unit II	**Linked List:** Introduction to Subject, Syllabus, Linked List, One-way Linked List, Traversal of Linked List, Searching, Memory Allocation and De-allocation, Insertion in Linked List, Deletion from Linked List, Copying a List into Other List, Merging Two Linked Lists, Splitting a List into Two Lists, Reversing One way linked List, Circular Linked List, Applications of Circular Linked List	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	PPT
	Two way Linked List, Traversing a Two way Linked List, Searching in a Two way linked List, Insertion of an element in Two way Linked List, Deleting a node from Two way Linked List, Header Linked List, Applications of the Linked list, Representation of Polynomials, Storage of Sparse Arrays, Implementing other Data Structures	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	PPT
DATA STRUCTURES (USIT302) Unit IV	**Sorting and Searching Techniques:** Bubble, Selection, Insertion, Merge Sort. Searching: Sequential, Binary, Indexed Sequential Searches, Binary Search.	3	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	PPT
	Tree: Tree, Binary Tree, Properties of Binary Tree, Memory Representation of Binary Tree, Operations Performed on Binary	6		PPT

	Tree, Reconstruction of Binary Tree from its Traversals, Huffman Algorithm, Binary Search Tree, Operations on Binary Search Tree, Heap, Memory Representation of Heap, Operation on Heap, Heap Sort			
	Advanced Tree Structures: Red Black Tree, Operations Performed on Red Black Tree, AVL Tree, and Operations performed on AVL Tree, 23 Tree, B-Tree.	3		PPT
DATA STRUCTURES (USIT302) Unit V	**Hashing Techniques** Hash function, Address calculation techniques, Common hashing functions Collision resolution, Linear probing, Quadratic, Double hashing, Bucket hashing, Deletion and rehashing	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	PPT, Table-Top
	Graph: Introduction, Graph, Graph Terminology, Memory Representation of Graph, Adjacency Matrix Representation of Graph, Adjacency List or Linked Representation of Graph, Operations Performed on Graph, Graph Traversal, Applications of the Graph, Reachability, Shortest Path Problems, Spanning Trees	6		PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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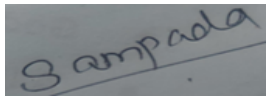

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: SYIT

SEMESTER: III MONTH: SEPT-DEC ACADEMIC YEAR: 2020-21

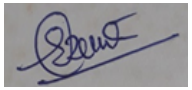
LEARNING OBJECTIVE/S:
The learners will be able to:

- Get deep knowledge about different types of data structures and also the importance of algorithm and its complexity.
- Understand the use of array and different types of linked list.
- Learn about stack, stack operations, queue and different types of it.
- Understand the use of different sorting and searching techniques.
- Learn about graph theory and different types of hashing techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT302, Data Structures, Unit I	**Introduction:** Data and Information, Data Structure, Classification of Data Structures, Primitive Data Types, Abstract Data Types, Data structure vs. File Organization, Operations on Data Structure, Algorithm, Importance of Algorithm Analysis, Complexity of an Algorithm, Asymptotic Analysis and Notations, Big O Notation, Big Omega Notation, Big Theta Notation, Rate of Growth and Big O Notation	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Array: Introduction, One Dimensional Array, Memory Representation of One Dimensional Array, Traversing, Insertion, Deletion, Searching, Sorting, Merging of Arrays, Multidimensional Arrays, Memory Representation of Two Dimensional Arrays, General MultiDimensional Arrays, Sparse Arrays, Sparse Matrix, Memory Representation of Special kind of Matrices, Advantages and Limitations of Arrays.	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint

USIT302, Data Structures, Unit III	**Stack**: Introduction, Operations on the Stack Memory Representation of Stack, Array Representation of Stack, Applications of Stack, Evaluation of Arithmetic Expression, Matching Parenthesis, infix and postfix operations, Recursion**.**	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Queue: Introduction, Queue, Operations on the Queue, Memory Representation of Queue, Array representation of queue, Linked List Representation of Queue, Circular Queue, Some special kinds of queues, Deque, Priority Queue, Application of Priority Queue, Applications of Queues.	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
USIT302, Data Structures, Unit V	**Sorting and Searching Techniques** Bubble, Selection, Insertion, Merge Sort. Searching: Sequential, Binary, Indexed Sequential Searches, Binary Search.	04	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Tree: Tree, Binary Tree, Properties of Binary Tree, Memory Representation of Binary Tree, Operations Performed on Binary Tree, Reconstruction of Binary Tree from its Traversals, Huffman Algorithm, Binary Search Tree, Operations on Binary Search Tree, Heap, Memory Representation of Heap, Operation on Heap, Heap Sort.	05	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Advanced Tree Structures: Red Black Tree, Operations Performed on Red Black Tree, AVL Tree, Operations performed on AVL Tree, 23 Tree, B-Tree	03	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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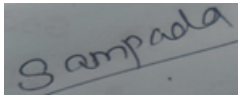

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHARVARI PATIL DEPARTMENT: IT CLASS: S.Y.I.T SEMESTER: III

MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the importance of python programming.
- Gain knowledge about function declaration and function call.
- Learn about various data structures used in python.
- Understand the use of regular expressions.
- Learn GUI development using python programming.

Paper No.,Paper Title, Unit No.	**Sub Topics:**	**No.of Lectures**	**References**	**Teaching Method/ICT tools used**
USIT301 Python Programming Unit 1	Introduction:The Python Programming Language, History, features, Installing Python, Running Python program, Debugging : Syntax Errors, Runtime Errors, Semantic Errors, Experimental Debugging, Formal and Natural Languages, The Difference Between Brackets, Braces, and Parentheses	4	Reference book: "Think Python"	Google Meet, Google Classroom, Google Slides
	Variables and Expressions:Values and Types, Variables, Variable Names and Keywords, Type conversion, Operators and Operands, Expressions, Interactive Mode and Script Mode	3		

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	Conditional Statements:if, if-else, nested if –else	2		
	Looping:for, while, nested loops	1		
	Control statements: Terminating loops, skipping specific conditions	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT301 Python Programming	Functions: Function Calls, Type Conversion Functions, Math Functions, Composition, Adding New Functions, Definitions and Uses, Flow of Execution, Parameters and Arguments, Variables and Parameters Are Local, Stack Diagrams, Fruitful Functions and Void Functions, Why Functions? Importing with from, Return Values, Incremental Development, Composition, Boolean Functions, More Recursion, Leap of Faith, Checking Types	4 4	Reference book: "Think Python"	Google Meet, Google Classroom, Google Slides
Unit 2	Strings: A String Is a Sequence, Traversal with a for Loop, String Slices, Strings Are Immutable, Searching, Looping and Counting, String Methods, The in Operator, String Comparison, String Operations.	2 2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT301	Lists: Values and Accessing Elements, Lists are mutable, traversing a List, Deleting elements from List, Built-in List Operators, Concatenation, Repetition, In Operator, Built-in List functions and methods	3		

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Python Programming Unit 3	Tuples and Dictionaries: Tuples, Accessing values in Tuples, Tuple Assignment, Tuples as return values, Variable-length argument tuples, Basic tuples operations, Concatenation, Repetition, in Operator, Iteration, Built-in Tuple Functions	3	Reference book: "Think Python"	Google Meet, Google Classroom, Google Slides
	Creating a Dictionary, Accessing Values in a dictionary, Updating Dictionary, Deleting Elements from Dictionary, Properties of Dictionary keys, Operations in Dictionary, Built-In Dictionary Functions, Built-in	3		
	Dictionary Methods Files: Text Files, The File Object Attributes, Directories	1		
	Exceptions: Built-in Exceptions, Handling Exceptions, Exception with Arguments, User-defined Exceptions	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT301 Python Programming Unit 4	Regular Expressions – Concept of regular expression, various types of regular expressions, using match function.	4	Reference book: "Think Python"	Google Meet, Google Classroom, Google Slides
	Classes and Objects: Overview of OOP (Object Oriented Programming), Class Definition, Creating Objects, Instances as Arguments, Instances as return values, Built-in Class Attributes, Inheritance, Method Overriding, Data Encapsulation, Data Hiding	4		
	Multithreaded Programming: Thread Module, creating a thread, synchronizing threads, multithreaded priority queue	4		

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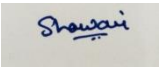
	Modules: Importing module, Creating and exploring modules, Math module, Random module, Time module	4		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT301 Python Programming Unit 5	Creating the GUI Form and Adding Widgets: Widgets: Button, Canvas, Checkbutton, Entry, Frame, Label, Listbox, Menubutton, Menu, Message, Radiobutton, Scale, Scrollbar, text, Toplevel, Spinbox, PanedWindow, LabelFrame, tkMessagebox. Handling Standard attributes and Properties of Widgets.	4	Reference book: "Think Python"	Google Meet, Google Classroom, Google Slides
	Layout Management: Designing GUI applications with proper Layout Management features.	2		
	Look and Feel Customization: Enhancing Look and Feel of GUI using different appearances of widgets.	2		
	Storing Data in Our MySQL Database via Our GUI : Connecting to a MySQL database from Python, Configuring the MySQL connection, Designing the Python GUI database, Using the INSERT command, Using the UPDATE command, Using the DELETE command, Storing and retrieving data from MySQL database	4		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		



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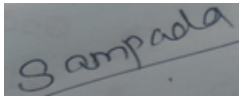

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SYIT SEM-III SUB-APPLIED MATHS-II DIV A

PROF –ARCHANA MALPATHAK

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT:Mathematics CLASS: SYIT
SEMESTER: III MONTH: Aug to Nov ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II Unit-I Matrices and Complex Number	Matrices : Inverse,properties,Rank by Normal and Echelon form,Linearequations,Linear dependent and independent Linear transformation,ch roots and ch vectors Caley Hamiltonian theroem,Similarity of matrix,Digonal matrix Complex number - complex number equality of complex numberArgand digram,polar form and exponential of complex numberHyperbolic and Logarithmic function of complex number	12	Applied Maths by G.V.Kumbojkar Higher Engineering of mathematics TechMax	Black board and chalk online teaching method

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: SYIT
SEMESTER: II MONTH: Aug to November ACADEMIC YEAR: 2020-2021.
LEARNING OBJECTIVE/S:
The learners will be able to : ___Variable separable,subtitutionmethod,Homogenous,Non homogeneous, Exavt differential equation,Non exact fifgerential equation, Integrating factor ,bernoullis differential,higher order differential equation solvable for Y,P,X .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths -II UNIT -II Differential equations	1) Equation of the first order and first degree :Sepratation of variables,Equation homogenous in x and y ,Non homogenous,Exactdifferential, 2)Integrating factor,Bernouils Equation ,Subtitution method general method,other methods 3)Diff equ of higher degree - Solvable for p, for X ,for YClairauts form of equationMethod of sepration, 4)Linear differential with constant coefficients - Differential operator,f(D)=0.f(D)=x ,1/f(D),1/f(D) X	3+3+3+3 =12	G.v.kumbojkar Higher Engineering of mathematics Balguru swami TechMax R.M.Baphna	Blackboard ,chalk online teaching method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics. CLASS: SYIT.
SEMESTER: III MONTH: July To Nov ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Double integration ,Types of double ,Triple Integration,Types oftriple, Area volume for double and triple integration_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Mathematics UNIT -IV Multiple integral	1) Multiple Intigration Double Integral,Change of. the order of the integration,Double integral in polar co - ordinates 2) Triple integral. 3) Application of integration :Areas,Volumes of. solids	4+4+4 =12	Higher Engineering of Mathematics TechMax R .M.Baphna	Black board ,chalk online teaching method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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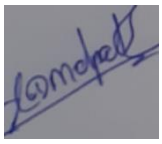
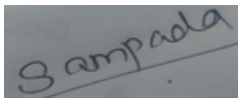
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -ARCHANA MALPATHAK Malpathak
DEPARTMENT: Mathematics CLASS: -SYIT SEMESTER: III
MONTH: -JULLY TO_ NOVEMBER ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II (SYIT) UNIT-V Beta Gamma Function	1) Beta Gamma function -Defination,properties and problems,Duplication Formula 2) Differentiation Under Integral Sign 3)Error functions	5+4+3=12	Tech max Higher Engineering of mathematics Applied Maths II Nirali publication	Blackboard,chalk





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:S.Y.BSC(I.T) DIV-B SEMESTER: **III** MONTH:AUG-DEC ACADEMIC YEAR: 2020-2021

SUBJECT:COMPUTER NETWORKS

LEARNING OBJECTIVE/S:
The learners will be able to : The **course objectives** include **learning** about **computer network** organization and implementation, obtaining a theoretical understanding of data communication and **computer networks**, and gaining practical experience in installation, monitoring, and troubleshooting of current LAN systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMPUTER NETWORKS USIT303 Unit-2	**Bandwidth Utilization:** Multiplexing and SpectrumSpreading: Multiplexing, Spread Spectrum	5	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill	PowerPoint Presentation, google classroom, google meet
	Transmission media: Guided Media, Unguided Media	4		
	Switching: Introduction, circuit switched networks, packet switching, structure of a switch.	5		

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	Introduction to the Data Link Layer:Link layer addressing, Data Link Layer Design Issues, Error detection and correction, block coding, cyclic codes, checksum, forward error correction, error correcting codes, error detecting codes.	5	Fifth Edition 2013	
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**19**		
COMPUTER NETWORKS USIT303 Unit-3	**Data Link Control:**DLC services, data link layer protocols, HDLC, Point-to-point protocol.	5	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition	PowerPoint Presentation, google classroom, google meet
	Media Access Control: Random access, controlled access, channelization, Wired LANs – Ethernet Protocol, standard ethernet, fast ethernet, gigabit ethernet, 10 gigabit ethernet,	5		
	Wireless LANs: Introduction, IEEE 802.11 project, Bluetooth, WiMAX, Cellular telephony, Satellite networks.	3		
	Connecting devices and Virtual LANs.	3		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**16**		
COMPUTER NETWORKS USIT303 Unit-4	**Introduction to the Network Layer:** Network layer services, packet switching, network layer performance, IPv4 addressing, forwarding of IP packets, Internet Protocol, ICMPv4, Mobile IP	5	Data Communication and Networking	

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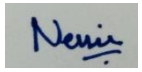
	Unicast Routing:Introduction, routing algorithms, unicast routing protocols.	4	Behrouz A. Forouzan Tata McGraw Hill Fifth Edition	
	Next generation IP: IPv6 addressing, IPv6 protocol, ICMPv6 protocol, transition from IPv4 to IPv6.	4		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**13**		



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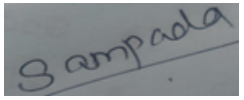

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Sampada Deshmukh DEPARTMENT: Information Technology

CLASS:S.Y.B.Sc.(I.T) SEMESTER: III MONTH:AUGUST-DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the basics of Data Communication and concept of networking
- Understand the concept of Analog and Digital Signal.
- Understand the Network Model and their working for data transmission.
- Learn conversion of digital to analog and vice-versa.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 1	**Introduction**: Data communications, networks, network types, Internet history,standards and administration.	4	Data Communication and Networking By Behrouz A. Forouzan	PPT , Google Meet
	Network Models:Protocol layering, TCP/IP protocol suite, The OSI model.	2	Data Communication and Networking By Behrouz A. Forouzan	PPT , Google Meet
	Introduction to Physical layer:Data and signals, periodic analog signals, digital signals, transmission impairment, data rate limits, performance.	3	Data Communication and Networking By Behrouz A. Forouzan	PPT , Google Meet

	Digital and Analog transmission: Digital-to-digital conversion, analog-to-digital conversion, transmission modes, digital-to-analog conversion, analog-to-analog conversion.	3	Data Communication and Networking By Behrouz A. Forouzan	PPT , Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Sampada Deshmukh DEPARTMENT:Information Technology

CLASS:S.Y.B.Sc.(I.T) SEMESTER: III MONTH: AUGUST-DECEMBER ACADEMIC YEAR:2020-2021

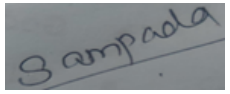
LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand different transmission level protocol.
- Learn Client server Protocol and their application

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 5	**Introduction to the Transport Layer:** Introduction, Transport layer protocols (Simple protocol, Stop-and-wait protocol, Go-Back-n protocol, Selective repeat protocol, Bidirectional protocols), Transport layer services, User datagram protocol, Transmission control protocol	8	TCP/IP Protocol Suite By Behrouz A. Forouzan	PPT , Google Meet

	Standard Client Server Protocols: World-wide-web and HTTP, FTP, Electronic mail, Telnet, Secured Shell, Domain name system.	4	TCP/IP Protocol Suite By Behrouz A. Forouzan	PPT , Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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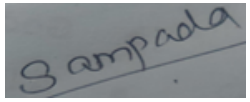

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS: SY BSc IT DIV-B(DBMS) SEMESTER:SEM 3 MONTH: AUG-DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

- The learners will be able to : have a broad understanding of database concepts and database management system software
- have a high-level understanding of major DBMS components and their function
- be able to model an application's data requirements using conceptual modeling tools like ER diagrams and design database schemas based on the conceptual model.
- be able to write SQL commands to create tables and indexes, insert/update/delete data, and query data in a relational DBMS.
- be able to program a data-intensive application using DBMS APIs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 DBMS UNIT 1	Introduction to Databases and Transactions What is database system, purpose of database system, view of data, relationaldatabases, database architecture, transaction management	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	PPT ,GOOGLE MEET
	Data Models The importance of data models, Basic building blocks, Business rules, The evolutionof data models, Degrees of data abstraction.	4		
	Database Design,ER Diagram and Unified Modeling Language Database design and ER Model:overview, ERModel, Constraints, ERDiagrams, ERDIssues, weak entity sets, Codd's rules, Relational Schemas, Introduction to UML	4		
	Relational database model: Logical view of data, keys, integrity rules,	3		PPT ,GOOGLE MEET

UNIT 2	Relational Database design: features of good relational database design, atomic domain and Normalization (1NF, 2NF, 3NF, BCNF).	3	DATABASE SYSTEM AND CONCEPTS BY H KORTH	
	Relational Algebra and Calculus Relational algebra: introduction, Selection and projection, set operations, renaming,Joins, Division, syntax, semantics	3		
	. Operators, grouping and ungrouping,relationalcomparison	2		
	Calculus: Tuple relational calculus, Domain relational Calculus, calculus vsalgebra,computational capabilities	4		
UNIT 3	Constraints, Views and SQL Constraints, types of constrains, Integrity constraints,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	PPT ,GOOGLE MEET
	Views: Introduction to views, data independence, security, updates on views,comparison between tables and views	4		
	SQL: data definition, aggregate function, Null Values, nested sub queries, Joined relations. Triggers	4		
UNIT 4	Transaction management and Concurrency Control Transaction management: ACID properties, serializability and concurrency control,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	PPT ,GOOGLE MEET
	Lock based concurrency control (2PL, Deadlocks),Time stamping methods,	4		
	optimistic methods, database recovery management.	4		
UNIT 5	PL-SQL: Beginning with PL / SQL,Identifiers and Keywords, Operators, Expressions, Sequences	4	PROGRAMMING WITH PL/SQL FOR BEGINNERS BY H. DAND,R. PATIL	PPT ,GOOGLE MEET
	,Control Structures, Cursors and Transaction,	4		
	Collections and composite data types, Procedures and Functions, Exceptions Handling ,Packages,With Clause and Hierarchical Retrieval,Triggers.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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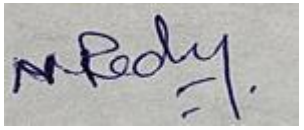

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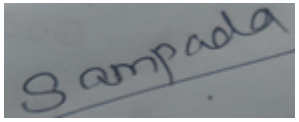

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Miss Shilpa James Rodrigues

DEPARTMENT: IT

CLASS: S.Y.I.T.-B (Python)

SEMESTER: III

MONTH: Aug - Dec

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S :
The learners will be able to :

- Understand why Python is a useful scripting language for developers.
- Learn how to design and program Python applications.
- Learn how to use lists, tuples, and dictionaries in Python programs.
- Write functions and pass arguments in Python also to read and write files in Python.
- Learn how to design object-oriented programs with Python classes.
- Use exception handling in Python applications for error handling
- Understand the basics of python GUI component and be able to create GUI based application.
- Create Python application that will manage user data with the knowledge of DBMS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT301 , Unit 1, Python .	**Introduction:** The Python Programming Language, History, features, Installing Python, Running Python program, Debugging , Experimental Debugging, Formal and Natural Languages, The Difference Between Brackets, Braces, and Parentheses,	04	Think Python - Allen Downey	Laptop, Google Meet, Power point presentation

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	Variables and Expressions Values and Types, Variables, Variable Names and Keywords, Type conversion, Operators and Operands, Expressions, Interactive Mode and Script Mode.	03	Think Python - Allen Downey	Laptop, Google Meet, Power point presentation
	Conditional Statements: if, if-else, nested if –else	02	Think Python - Allen Downey	Laptop, Google Meet, Power point presentation
	Looping: for, while, nested loops **Control statements:** Terminating loops, skipping specific conditions	03	Think Python - Allen Downey	Laptop, Google Meet, Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT301 , Unit 2, Python .	**Functions:** Function Calls, Type Conversion Functions, Math Functions, Composition, Adding New Functions, Flow of Execution, Parameters and Arguments, Variables and Parameters Are Local, Stack Diagrams, Fruitful Functions and Void Functions, Why Functions? Importing with from, Return Values, Incremental Development, Boolean Functions, More Recursion, Leap of Faith, Checking Types.	05	Think Python - Allen Downey	Laptop, Google Meet, Power point presentation
	Strings: A String Is a Sequence, Traversal with a for Loop, String Slices, Strings Are Immutable, Searching, Looping and Counting, String Methods, The in Operator, String Comparison, String Operations.	07	Think Python - Allen Downey	Laptop, Google Meet, Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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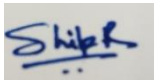
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT301 , Unit 3, Python .	**Lists:** traversing a List, Deleting elements from List, Built-in List Operators, Built-in List functions and methods	03	Think Python - Allen Downey	Laptop, Google Meet, Power point presentation
	Tuples and Dictionaries: Accessing values in Tuples, Tuple Assignment,Basic tuples operations, Built-in Tuple Functions Creating a Dictionary, Accessing Values in a dictionary, Updating Dictionary, Deleting Elements from Dictionary, Operations in Dictionary, Built-In Dictionary Functions and Methods.	04	Think Python - Allen Downey	Laptop, Google Meet, Power point presentation
	Files: Text Files, The File Object Attributes, Directories	02	Think Python - Allen Downey	Laptop, Google Meet, Power point presentation
	Exceptions: Built-in Exceptions, Handling Exceptions, Exception with Arguments, User-defined Exceptions	03	Think Python - Allen Downey	Laptop, Google Meet, Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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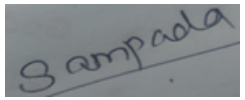

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHARVARI PATIL DEPARTMENT: IT CLASS: S.Y.I.T (B) SEMESTER: III

MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the use of regular expressions.
- Learn GUI development using python programming.

Paper No.,Paper Title, Unit No.	**Sub Topics:**	**No.of Lectures**	**References**	**Teaching Method/ICT tools used**
USIT301 Python Programming Unit 4	Regular Expressions – Concept of regular expression, various types of regular expressions, using match function.	4	Reference book: "Think Python"	Google Meet, Google Classroom, Google Slides
	Classes and Objects: Overview of OOP (Object Oriented Programming), Class Definition, Creating Objects, Instances as Arguments, Instances as return values, Built-in Class Attributes, Inheritance, Method Overriding, Data Encapsulation, Data Hiding	4		
	Multithreaded Programming: Thread Module, creating a thread, synchronizing threads, multithreaded priority queue	4		
	Modules: Importing module, Creating and exploring modules, Math module, Random module, Time module	4		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		

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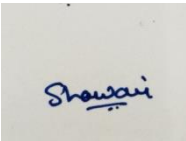
USIT301	Creating the GUI Form and Adding Widgets: Widgets: Button, Canvas, Checkbutton, Entry, Frame, Label, Listbox, Menubutton, Menu, Message, Radiobutton, Scale, Scrollbar, text, Toplevel, Spinbox, PanedWindow, LabelFrame, tkMessagebox. Handling Standard attributes and Properties of Widgets.	4	Reference book: "Think Python"	Google Meet, Google Classroom, Google Slides
Python Programming	Layout Management: Designing GUI applications with proper Layout Management features.	2		
Unit 5	Look and Feel Customization: Enhancing Look and Feel of GUI using different appearances of widgets.	2		
	Storing Data in Our MySQL Database via Our GUI : Connecting to a MySQL database from Python, Configuring the MySQL connection, Designing the Python GUI database, Using the INSERT command, Using the UPDATE command, Using the DELETE command, Storing and retrieving data from MySQL database	4		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		



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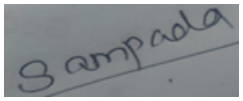

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SYIT SEM-III SUB-APPLIED MATHS-II DIV A

PROF –ARCHANA MALPATHAK

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT:Mathematics CLASS: SYIT
SEMESTER: III MONTH: Aug to Nov ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II Unit-I Matrices and Complex Number	Matrices : Inverse,properties,Rank by Normal and Echelon form,Linearequations,Linear dependent and independent Linear transformation,ch roots and ch vectors Caley Hamiltonian theroem,Similarity of matrix,Digonal matrix Complex number - complex number equality of complex numberArgand digram,polar form and exponential of complex numberHyperbolic and Logarithmic function of complex number	12	Applied Maths by G.V.Kumbojkar Higher Engineering of mathematics TechMax	Black board and chalk online teaching method

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: SYIT
SEMESTER: II MONTH: Aug to November ACADEMIC YEAR: 2020-2021.
LEARNING OBJECTIVE/S:
The learners will be able to : ___Variable separable,subtitutionmethod,Homogenous,Non homogeneous, Exavt differential equation,Non exact fifgerential equation, Integrating factor ,bernoullis differential,higher order differential equation solvable for Y,P,X .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths -II UNIT -II Differential equations	1) Equation of the first order and first degree :Sepratation of variables,Equation homogenous in x and y ,Non homogenous,Exactdifferential, 2)Integrating factor,Bernouils Equation ,Subtitution method general method,other methods 3)Diff equ of higher degree - Solvable for p, for X ,for YClairauts form of equationMethod of sepration, 4)Linear differential with constant coefficients - Differential operator,f(D)=0.f(D)=x ,1/f(D),1/f(D) X	3+3+3+3 =12	G.v.kumbojkar Higher Engineering of mathematics Balguru swami TechMax R.M.Baphna	Blackboard ,chalk online teaching method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics. CLASS: SYIT.
SEMESTER: III MONTH: July To Nov ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Double integration ,Types of double ,Triple Integration,Types oftriple, Area volume for double and triple integration_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Mathematics UNIT -IV Multiple integral	1) Multiple Intigration Double Integral,Change of. the order of the integration,Double integral in polar co - ordinates 2) Triple integral. 3) Application of integration :Areas,Volumes of. solids	4+4+4 =12	Higher Engineering of Mathematics TechMax R .M.Baphna	Black board ,chalk online teaching method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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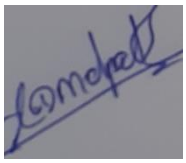
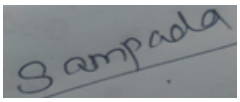
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -ARCHANA MALPATHAK Malpathak
DEPARTMENT: Mathematics CLASS: -SYIT SEMESTER: III
MONTH: -JULLY TO_ NOVEMBER ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II (SYIT) UNIT-V Beta Gamma Function	1) Beta Gamma function -Defination,properties and problems,Duplication Formula 2) Differentiation Under Integral Sign 3)Error functions	5+4+3=12	Tech max Higher Engineering of mathematics Applied Maths II Nirali publication	Blackboard,chalk





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SURBHI SHAH DEPARTMENT: IT-CS CLASS:SYIT-DIV C SEMESTER: SEM-III

MONTH: AUGUST – NOVEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: to be capable of managing complex IT projects with consideration of the human, financial and environmental factors. to work effectively as a part of a team to achieve a common stated goal.to adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:-III TITLE:-Computer Networks UNIT 1	**Introduction:** Data communications, networks, network types, Internet history, standards and administration.	3	Data Communication and Networking By Behrouz A. Forouzan	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC.
	Network Models: Protocol layering, TCP/IP protocol suite, The OSI model.	3		
	Introduction to Physical layer: Data and signals, periodic analog signals, digital signals, transmission impairment, data rate limits, performance.	3		
	Digital and Analog transmission: Digital-to-digital conversion, analog-to-digital conversion, transmission modes, digital-to-analog conversion, analog-to-analog conversion.	3		
UNIT 2	**Bandwidth Utilization: Multiplexing and Spectrum Spreading:** Multiplexing, Spread Spectrum	3	Data Communication and Networking By Behrouz A.	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC.
	Transmission media: Guided Media**,** Unguided Media	4		
	Switching: Introduction, circuit switched networks, packet switching, structure of a switch.	3		

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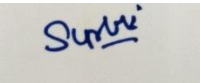
	Introduction to the Data Link Layer: Link layer addressing, Data Link Layer Design Issues, Error detection and correction, block coding, cyclic codes, checksum, forward error correction, error correcting codes, error detecting codes.	2/3	Forouzan	
UNIT 3	**Data Link Control:** DLC services, data link layer protocols, HDLC, Point-to-point protocol.	3	Data Communication and Networking By Behrouz A. Forouzan	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC.
	Media Access Control: Random access, controlled access, channelization, Wired LANs – Ethernet Protocol, standard ethernet, fast ethernet, gigabit ethernet, 10 gigabit ethernet,	3		
	Wireless LANs: Introduction, IEEE 802.11 project, Bluetooth, WiMAX, Cellular telephony, Satellite networks.	3		
	Connecting devices and Virtual LANs.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36



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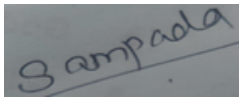

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYIT SEMESTER: III MONTH: AUGUST-DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to : List various applications of computer networks, describe the concepts, protocols, design, implementation and use of computer networks. Also implement and evaluate new ideas for solving computer network design issues..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT303, Computer Networks, UNIT-IV	Introduction to the Network Layer: Network layer services, packet switching, network layer performance, IPv4 addressing, forwarding of IP packets, Internet Protocol, ICMPv4, Mobile IP	05	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2, Computer Networks Andrew Tanenbaum Pearson Fifth 2013, TCP/IP Protocol Suite Behrouz A. Forouzan Tata McGraw Hill Fourth Edition 2010	Meet, PPT
	Unicast Routing:Introduction, routing algorithms, unicast routing protocols.	02		Meet, PPT
	Next generation IP: IPv6 addressing, IPv6 protocol, ICMPv6 protocol, transition from IPv4 to IPv6	05		Meet, PPT
USIT303, Computer Networks,	Introduction to the Transport Layer: Introduction, Transport layer protocols (Simple protocol, Stop-and-wait protocol, Go-Back-n protocol, Selective repeat protocol, Bidirectional	07	Data Communication and Networking Behrouz	Meet, PPT

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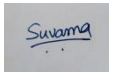
UNIT-V	protocols), Transport 12 8 layer services, User datagram protocol, Transmission control protocol,		A. Forouzan Tata McGraw Hill Fifth Edition 2, Computer Networks Andrew Tanenbaum Pearson Fifth 2013, TCP/IP Protocol Suite Behrouz A. Forouzan Tata McGraw Hill Fourth Edition 2010	
	Standard Client0Server Protocols:World wide-web and HTTP, FTP, Electronic mail, Telnet, Secured Shell, Domain name system.	05		Meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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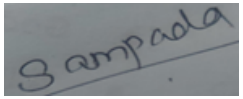

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: IT CLASS:SYIT SYSEMESTER: 3 MONTH: Aug-Dec

ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S:

- To understand the different data structure techniques .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Data Strucures Paper 2 Code: USIT302 Unit 2	**Linked List:** Linked List, One-way Linked List, Traversal of Linked List, Searching, Memory Allocation and De-allocation, Insertion in Linked List, Deletion from Linked List, Copying a List into Other List, Merging Two Linked Lists, Splitting a List into Two Lists, Reversing One way linked List, Circular Linked List, Applications of Circular Linked List, Two way Linked List, Traversing a Two way Linked List, Searching in a Two way linked List, Insertion of an element in Two way Linked List, Deleting a node from Two way Linked List, Header Linked List, Applications of the Linked list, Representation of Polynomials, Storage of Sparse Arrays, Implementing other Data Structures	12	An Introduction to Data Structure with Applications Jean – Paul Tremblay and Paul Sorenson Tata MacGraw Hill	Laptop
	Hashing Techniques : Hash function, Address calculation techniques, Common hashing functions Collision resolution, Linear probing, Quadratic,Double hashing, Buckethashing Deletion and rehashingCloud,	6	An Introduction to Data Structure with Applications Jean – Paul Tremblay and Paul Sorenson	Laptop

Data Strucures Paper 2 Code: USIT302 Unit 5			Tata MacGraw HillMcEwen, Hakim Cassimally	
	Graph: Introduction, Graph, Graph Terminology, Memory Representation of Graph, Adjacency Matrix Representation of Graph, Adjacency List or Linked Representation of Graph, Operations Performed on Graph, GraphTraversal, Applications of the Graph, Reachability, Shortest Path Problems, Spanning Trees.	6	An Introduction to Data Structure with Applications Jean – Paul Tremblay and Paul Sorenson Tata MacGraw Hill	Laptop

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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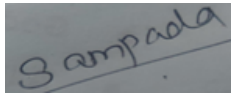

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: IT

CLASS: SY BSc IT SEMESTER: SEM 3 MONTH: AUG-DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

1. To have a broad understanding of database concepts and database management system software
2. To have a high-level understanding of major DBMS components and their function
3. To be able to model an application's data requirements using conceptual modeling tools like ER diagrams and design database schemas based on the conceptual model.
4. To be able to write SQL commands to create tables and indexes, insert/update/delete data, and query data in a relational DBMS.
5. To be able to program a data-intensive application using DBMS APIs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 DBMS UNIT 1	Introduction to Databases and Transactions What is database system, purpose of database system, view of data, relational databases, database architecture, transaction management.	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Power Point Presentation
	Data Models The importance of data models, Basic building blocks, Business rules, The evolution of data models, Degrees of data abstraction.	4		
	Database Design, ER Diagram and Unified Modelling Language Database design and ER Model: overview, ER Model, Constraints, ER Diagrams, ERD Issues, weak entity sets, Codd's rules, Relational Schemas, Introduction to UML	4		
	Relational database model: Logical view of data, keys, integrity rules,	2		Power Point Presentation

UNIT 2	Relational Database design: features of good relational database design, atomic domain and Normalization (1NF, 2NF, 3NF, BCNF).	3	DATABASE SYSTEM AND CONCEPTS BY H KORTH	
	Relational Algebra and Calculus Relational algebra: introduction, Selection and projection, set operations, renaming, Joins, Division, syntax, semantics	3		
	Operators, grouping and ungrouping, relational comparison	2		
	Calculus: Tuple relational calculus, Domain relational Calculus, calculus vs algebra, computational capabilities	2		
UNIT 3	Constraints, Views and SQL Constraints, types of constrains, Integrity constraints,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Power Point Presentation
	Views: Introduction to views, data independence, security, updates on views, comparison between tables and views	4		
	SQL: data definition, aggregate function, Null Values, nested sub queries, Joined relations. Triggers	4		
UNIT 4	Transaction management and Concurrency Control Transaction management: ACID properties, serializability and concurrency control,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Power Point Presentation
	Lock based concurrency control (2PL, Deadlocks),Time stamping methods,	4		
	Optimistic methods, database recovery management.	4		
UNIT 5	PL-SQL: Beginning with PL / SQL, Identifiers and Keywords, Operators, Expressions, Sequences	4	PROGRAMMING WITH PL/SQL FOR BEGINNERS BY H. DAND,R. PATIL	Power Point Presentation
	,Control Structures, Cursors and Transaction,	4		
	Collections and composite data types, Procedures and Functions, Exceptions Handling, Packages with Clause and Hierarchical Retrieval, Triggers.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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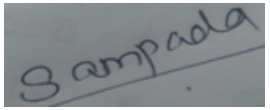

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**SY.B SC(IT)**_____ SEMESTER: ____**III**_____ MONTH: _____ **SEPTEMBER -DECEMBER** _____ ACADEMIC YEAR: _____**2020-2021**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

Understand the concept of data structure and how it is stored. The varieties of symbols used to store data, analysis on data, algorithms used to reduced the complexity regarding time, space and programs. Understanding the concept of Arrays and operations on array, Stack and Queue and variation of operation on them. To make understand applications where it is used , advantages and disadvantages of operation. To enable to practically generate code for it and implement it for data storage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 (USIT302) Data Structures **Unit No -01**	**Introduction:** Data and Information, Data Structure, Classification of Data Structures, Primitive Data Types, Abstract Data Types, Data structure vs. File Organization, Operations on Data Structure, Algorithm, Importance of Algorithm Analysis, Complexity of an Algorithm, Asymptotic Analysis and Notations, Big O Notation, Big Omega Notation, Big Theta Notation, Rate of Growth and Big O Notation.	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Online Google Meet PPTs

Unit No -03	**Array**: Introduction, One Dimensional Array, Memory Representation of One Dimensional Array, Traversing, Insertion, Deletion, Searching, Sorting, Merging of Arrays, Multidimensional Arrays, Memory Representation of Two Dimensional Arrays, General Multi-Dimensional Arrays, Sparse Arrays, SparseMatrix, Memory Representation of Special kind of Matrices, Advantages and Limitations of Arrays.	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Online Google Meet PPTs Jamboard
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
	Stack: Introduction, Operations on the Stack Memory Representation of Stack, Array Representation of Stack, Applications of Stack, Evaluation of Arithmetic Expression, Matching Parenthesis, infix and postfix operations, Recursion**.**	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Online Google Meet PPTs Jamboard
	Queue: Introduction, Queue, Operations on the Queue, Memory Representation of Queue, Array representation of queue, Linked List Representation of Queue, Circular Queue, Some special kinds of queues, Deque, Priority Queue, Application of Priority Queue, Applications of Queues.	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Online Google Meet PPTs Jamboard

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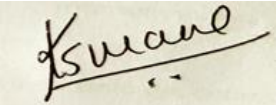
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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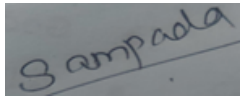

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: S.Y.B.Sc.IT SEMESTER: III MONTH: SEPTEMBER-DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- Students should be able to understand the concepts of programming before actually starting to write programs.
- Students should be able to develop logic for Problem Solving.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Unit I Python Programming	**Introduction:** The Python Programming Language, History, features, Installing Python, Running Python program,	3	Think Python Allen Downey O'Reilly 1st2012	Google Meet, PPT
	Debugging : Syntax Errors, Runtime Errors, Semantic Errors, Experimental Debugging, Formal and Natural Languages, The Difference Between Brackets, Braces, and Parentheses,	3		Google Meet, PPT
	Variables and Expressions Values and Types, Variables, Variable Names and Keywords, Type conversion, Operators and Operands, Expressions, Interactive Mode and Script Mode, Order of Operations.	3		Google Meet, PPT
	Conditional Statements: if, if-else, nested if –else	1		Google Meet, PPT
	Looping: for, while, nested loops Control	1		Google Meet, PPT
	statements: Terminating loops, skipping specific conditions	1		Google Meet, PPT
Paper-I	**Functions:** Function Calls, Type Conversion Functions, Math Functions, Composition, Adding New Functions,	2	Think Python Allen Downey	Google Meet, PPT

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Unit II Python Programming	Definitions and Uses, Flow of Execution, Parameters and Arguments, Variables and Parameters Are Local, Stack Diagrams, Fruitful Functions and Void Functions, Why Functions?	3	O'Reilly 1st2012	Google Meet, PPT
	Importing with from, Return Values, Incremental Development, Composition, Boolean Functions, More Recursion, Leap of Faith, Checking Types	3		Google Meet, PPT
	Strings: A String Is a Sequence, Traversal with a for Loop, String Slices, Strings Are Immutable, Searching, Looping and Counting, String Methods, The in Operator, String Comparison, String Operations	4		Google Meet, PPT
Paper-I Unit III Python Programming	**Lists:** Values and Accessing Elements, Lists are mutable, traversing a List, Deleting elements from List, Built-in List Operators, Concatenation, Repetition, In Operator, Built-in List functions and methods	4	Think Python Allen Downey O'Reilly 1st2012	Google Meet, PPT
	Tuples and Dictionaries: Tuples, Accessing values in Tuples, Tuple Assignment, Tuples as return values, Variable-length argument tuples, Basic tuples operations, Concatenation, Repetition, in Operator, Iteration, Built-in Tuple Functions Creating a Dictionary, Accessing Values in a dictionary, Updating Dictionary, Deleting Elements from Dictionary, Properties of Dictionary keys, Operations in Dictionary, Built-In Dictionary Functions, Built-in Dictionary Methods	4		Google Meet, PPT
	Files: Text Files, The File Object Attributes, Directories	2		Google Meet, PPT
	Exceptions: Built-in Exceptions, Handling Exceptions, Exception with Arguments, User-defined Exceptions	2		Google Meet, PPT
Paper-I Unit IV Python	**Regular Expressions –** Concept of regular expression, various types of regular expressions, using match function.	2	Think Python Allen Downey O'Reilly 1st2012	Google Meet, PPT
	Classes and Objects: Overview of OOP (Object Oriented Programming), Class Definition, Creating Objects, Instances as Arguments, Instances as return values, Built-in Class Attributes, Inheritance, Method Overriding, Data Encapsulation, Data Hiding	4		Google Meet, PPT

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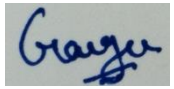
Programming	**Multithreaded Programming:** Thread Module, creating a thread, synchronizing threads, multithreaded priority queue	3		Blackboard, Chalk
	Modules: Importing module, Creating and exploring modules, Math module, Random module, Time module	3		Blackboard, Chalk
Paper-I Unit V Python Programming	**Creating the GUI Form and Adding Widgets:** **Widgets:** Button, Canvas, Checkbutton, Entry, Frame, Label, Listbox, Menubutton, Menu, Message, Radiobutton, Scale, Scrollbar, text, Toplevel, Spinbox, PanedWindow, LabelFrame, tkMessagebox. Handling Standard attributes and Properties of Widgets.	4	Think Python Allen Downey O'Reilly 1st2012	Blackboard, Chalk
	Layout Management: Designing GUI applications with proper Layout Management features.	2		Blackboard, Chalk
	Look and Feel Customization: Enhancing Look and Feel of GUI using different appearances of widgets.	2		Blackboard, Chalk
	Storing Data in Our MySQL Database via Our GUI : Connecting to a MySQL database from Python, Configuring the MySQL connection, Designing the Python GUI database, Using the INSERT command, Using the UPDATE command, Using the DELETE command, Storing and retrieving data from MySQL database.	4		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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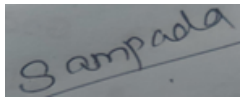

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYBSc(IT) DIV:B SEMESTER: III MONTH: AUGUST-DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the different types of data structures and develop programs to search and sort for elements.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: USIT302 unit:1, Title: Data Structures	**Introduction:** Data and Information, Data Structure, Classification of Data Structures, Primitive Data Types, Abstract Data Types, Data structure vs. File Organization, Operations on Data Structure, Algorithm, Importance of Algorithm Analysis, Complexity of an Algorithm, Asymptotic Analysis and Notations, Big O Notation, Big Omega Notation, Big Theta Notation, Rate of Growth and Big O Notation.	5	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
	Array:Introduction, One Dimensional Array, Memory Representation of One Dimensional Array, Traversing, Insertion, Deletion, Searching, Sorting, Merging of Arrays, Multidimensional Arrays, Memory Representation of Two Dimensional Arrays, General Multi-Dimensional Arrays, Sparse Arrays, SparseMatrix, Memory Representation of Special kind of Matrices, Advantages and Limitations of Arrays.	7	A Simplified Approach to Data Structures	Online mode Google meet Google slides.

Paper: USIT302 unit:2, Title: Data Structures	**Linked List:** Linked List, One-way Linked List, Traversal of Linked List, Searching, Memory Allocation and De-allocation, Insertion in Linked List, Deletion from Linked List, Copying a List into Other List, Merging Two Linked Lists, Splitting a List into Two Lists, Reversing One way linked List, Circular Linked List, Applications of Circular Linked List,	6	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
	Two way Linked List, Traversing a Two way Linked List, Searching in a Two way linked List, Insertion of an element in Two way Linked List, Deleting a node from Two way Linked List, Header Linked List, Applications of the Linked list, Representation of Polynomials, Storage of Sparse Arrays, Implementing other Data Structures.	6	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
Paper: USIT302 unit:3, Title: Data Structures	**Stack**: Introduction, Operations on the Stack Memory Representation of Stack, Array Representation of Stack, Applications of Stack, Evaluation of Arithmetic Expression, Matching Parenthesis, infix and postfix operations, Recursion**.**	5	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
	Queue: Introduction, Queue, Operations on the Queue, Memory Representation of Queue, Array representation of queue, Linked List Representation of Queue, Circular Queue,Some special kinds of queues, Deque,Priority Queue, Application of Priority Queue, Applications of Queues.	7	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
Paper: USIT302 unit:4, Title:	**Sorting and Searching Techniques** Bubble, Selection, Insertion, Merge Sort. Searching: Sequential, Binary, Indexed Sequential Searches, Binary Search.	4	A Simplified Approach to Data Structures	Online mode Google meet Google slides.

Data Structures	**Tree:**Tree,Binary Tree, Properties of Binary Tree, Memory Representation of Binary Tree, Operations Performed on Binary Tree,Reconstruction of Binary Tree from its Traversals, Huffman Algorithm, Binary Search Tree, Operations on Binary Search Tree, Heap, Memory Representation of Heap, Operation on Heap, Heap Sort.	4	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
	Advanced Tree Structures: Red Black Tree, Operations Performed on Red Black Tree, AVL Tree, Operations performed on AVL Tree, 2-3 Tree, B-Tree.	4	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
Paper: USIT302 unit:5, Title: Data Structures	**Hashing Techniques** Hash function, Address calculation techniques, Common hashing functions Collision resolution, Linear probing, Quadratic,Double hashing, Buckethashing, Deletion and rehashing	6	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
	Graph: Introduction, Graph, Graph Terminology, Memory Representation of Graph, Adjacency Matrix Representation of Graph, Adjacency List or Linked Representation of Graph, Operations Performed on Graph, GraphTraversal, Applications of the Graph, Reachability, Shortest Path Problems, Spanning Trees.	6	A Simplified Approach to Data Structures	Online mode Google meet Google slides.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12

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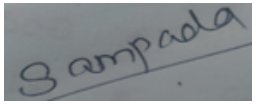

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: TYBSc(IT) Div:A SEMESTER: V MONTH: AUGUST-DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the importance of software project management, project evaluation and programme management was easy,to provide knowledge of step wise planning and monitoring, understand the importance of becoming a team and decision making and project closeout.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: USIT501 unit:1, Title: Software Project Management	**Introduction to Software Project Management**:Introduction, Why is Software Project Management Important? What is a Project? Software Projects versus Other Types of Project, Contract Management and Technical Project Management, Activities Covered by Software Project Management, Plans, Methods and Methodologies, Some Ways of Categorizing Software Projects, Project Charter, Stakeholders, Setting Objectives, The Business Case, Project Success and Failure, What is Management? Management Control, Project Management Life Cycle, Traditional versus Modern Project Management Practices.	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Online mode Google meet Google slides.
	Project Evaluation and Programme Management: Introduction,	4	Software Project Management	Online mode Google meet

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	Business Case, Project Portfolio Management, Evaluation of Individual Projects, Cost–benefit Evaluation Techniques, Risk Evaluation, Programme Management, Managing the Allocation of Resources within Programmes, Strategic Programme Management, Creating a Programme, Aids to Programme Management, Some Reservations about Programme Management, Benefits Management.		Bob Hughes, Mike Cotterell, Rajib Mall	Google slides.
	An Overview of Project Planning:Introduction to Step Wise Project Planning, Step 0: Select Project, Step 1: Identify Project Scope and Objectives, Step 2: Identify Project Infrastructure, Step 3: Analyse Project Characteristics, Step 4: Identify Project Products and Activities, Step 5: Estimate Effort for Each Activity, Step 6: Identify Activity Risks, Step 7: Allocate Resources, Step 8: Review/Publicize Plan, Steps 9 and 10: Execute Plan/Lower Levels of Planning	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Online mode Google meet Google slides.
Paper: USIT501 unit:4 Title: Software Project Management	**Monitoring and Control**: Introduction, Creating the Framework, Collecting the Data, Review, Visualizing Progress, Cost Monitoring, Earned Value Analysis, Prioritizing Monitoring, Getting the Project Back to Target, Change Control, Software Configuration Management (SCM).	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Online mode Google meet Google slides.

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	Managing Contracts: Introduction, Types of Contract, Stages in Contract Placement, Typical Terms of a Contract, Contract Management, Acceptance.	3	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Online mode Google meet Google slides.
	Managing People in Software Environments: Introduction, Understanding Behaviour, Organizational Behaviour: A Background, Selecting the Right Person for the Job, Instruction in the Best Methods, Motivation, The Oldham–Hackman Job Characteristics Model, Stress, Stress Management, Health and Safety, Some Ethical and Professional Concerns.	5	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Online mode Google meet Google slides.
Paper: USIT501 unit:5, Title: Software Project Management	**Working in Teams:** Introduction, becoming a Team, Decision Making, Organization and Team Structures, Coordination Dependencies, Dispersed and Virtual Teams, Communication Genres, Communication Plans, Leadership.	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Online mode Google meet Google slides.
	Software Quality: Introduction, The Place of Software Quality in Project Planning, Importance of Software Quality, Defining Software Quality, Software Quality Models, ISO 9126, Product and Process Metrics, Product versus Process Quality Management, Quality Management Systems, Process Capability Models, Techniques to Help Enhance Software Quality, Testing, Software Reliability, Quality Plans.	5	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Online mode Google meet Google slides.

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	Project Closeout: Introduction, Reasons for Project Closure, Project Closure Process, Performing a Financial Closure, Project Closeout Report.	3	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Online mode Google meet Google slides.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: August to December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To learn the fundamental aspects of the JavaScript programming language and how to program using document object model application programming

The learners will be able to :

- To understand .Net framework and its run time environment.
- To gain basic knowledge of C# language with its object oriented concept.
- To gain the knowledge of namespaces and assemblies.
- To understand fundamentals of web application development.
- To make use of different server controls like validation, navigation and rich server control.
- To understand back hand connectivity with SQL using ADO .Net Frame.
- To use data binding with data controls like grid view, details view and form view.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT503 Advance Web Programming UNIT-I	**Introducing .NET**: The .NET Framework, C#, VB, and the .NET Languages, The Common Language Runtime, The .NET Class Library.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning	PPT, Google meets.
	The C# Language: C# Language Basics, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods.	4		PPT, Google meets.
	Types, Objects, and Namespaces: The Basics About Classes, Building a Basic Class, Value Types and Reference Types,	4		PPT, Google meets.

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	Understanding Namespaces and Assemblies, Advanced Class Programming.		Visual C# 2010	
USIT503 Advance Web Programming UNIT-II	**Web Form Fundamentals**: Writing Code, Using the Code-Behind Class, Adding Event Handlers, Understanding the Anatomy of an ASP.NET Application, Introducing Server Controls, Using the Page Class, Using Application Events, Configuring an ASP.NET Application.	6	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	PPT, Google meets.
	Form Controls: Stepping Up to Web Controls, Web Control Classes, List Controls, Table Controls, Web Control Events and AutoPostBack, Validation, Understanding Validation, Using the Validation Controls, Rich Controls, The Calendar, The AdRotator, Pages with Multiple Views, User Controls and Graphics, User Controls, Dynamic Graphics, The Chart Control, Website Navigation: Site Maps, URL Mapping and Routing, The SiteMapPath Control, The TreeView Control, The Menu Control.	6		
USIT503 Advance Web Programming UNIT-IV	**ADO.NET Fundamentals**: Understanding Databases, Configuring Your Database, Understanding SQL Basics, Understanding the Data Provider Model, Using Direct Data Access, Using Disconnected Data Access.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	PPT, Google meets.
	Data Binding: Introducing Data Binding, Using Single-Value Data Binding, Using Repeated-Value Data Binding, Working with Data Source Controls,	4		
	The Data Controls: The GridView, Formatting the GridView, selecting a GridView Row, Editing with the GridView, Sorting and Paging the GridView, Using GridView Templates, The DetailsView and FormView	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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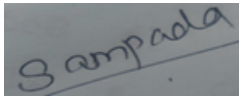
SIGNATURE OF THE H.O.D. 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: TYIT

SEMESTER: V MONTH: AUG-DEC ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the Java EE Architecture, Server and Containers.
- Describe the different servlet API and lifecycle of servlet.
- Get the difference between cookies, session and request dispatcher.
- Understand the use of tag library, naming directory, interceptors.
- Familiar with java beans, JPA, hibernate and JSP.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506, Enterprise Java Unit I	**Understanding Java EE:** What is an Enterprise Application? What is java enterprise edition? Java EE Technologies, Java EE evolution, Glassfish server	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Java EE Architecture, Server and Containers: Types of System Architecture, Java EE Server, Java EE Containers.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Introduction to Java Servlets: The Need for Dynamic Content, Java Servlet Technology, Why Servlets? What can Servlets do?	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint

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			Shah, SPD, First, 2012	
	Servlet API and Lifecycle: Java Servlet API, The Servlet Skeleton, The Servlet Life Cycle, A Simple Welcome Servlet	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Working With Servlets: Getting Started, Using Annotations Instead of Deployment Descriptor.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Working with Databases: What Is JDBC? JDBC Architecture, Accessing Database, The Servlet GUI and Database Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
USIT506, Enterprise Java Unit II	**Request Dispatcher:** Resquestdispatcher Interface, Methods of Requestdispatcher, Requestdispatcher Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	COOKIES: Kinds Of Cookies, Where Cookies Are Used? Creating Cookies Using Servlet, Dynamically Changing The Colors Of A Page	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	SESSION: What Are Sessions? Lifecycle Of Http Session, Session Tracking With Servlet API, A Servlet Session Example	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Working With Files: Uploading Files, Creating an Upload File Application, Downloading Files, Creating a Download File Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint

	Working With Non-Blocking I/O: Creating a Non-Blocking Read Application, Creating The Web Application, Creating Java Class, Creating Servlets, Retrieving The File, Creating index.jsp	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
USIT506, Enterprise Java Unit III	**Introduction To Java Server Pages:** Why use Java Server Pages? Disadvantages Of JSP, JSP v\s Servlets, Life Cycle of a JSP Page, How does a JSP function? How does JSP execute? About Java Server Pages	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Getting Started With Java Server Pages: Comments, JSP Document, JSP Elements, JSP GUI Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Action Elements: Including other Files, Forwarding JSP Page to Another Page, Passing Parameters for other Actions, Loading a Javabean.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Implicit Objects, Scope And El Expressions: Implicit Objects, Character Quoting Conventions, Unified Expression Language [Unified El], Expression Language.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Java Server Pages Standard Tag Libraries: What is wrong in using JSP Scriptlet Tags? How JSTL Fixes JSP Scriptlet's Shortcomings? Disadvantages Of JSTL, Tag Libraries.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
USIT506, Enterprise Java Unit IV	**Introduction To Enterprise Javabeans:** Enterprise Bean Architecture, Benefits of Enterprise Bean, Types of Enterprise Bean, Accessing Enterprise Beans, Enterprise Bean Application, Packaging Enterprise Beans	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Working With Session Beans: When to use Session Beans? Types of Session Beans, Remote and Local Interfaces, Accessing	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali	Desktop and Laptop,Digital cameras,Microphone,Mobile

	Interfaces, Lifecycle of Enterprise Beans, Packaging Enterprise Beans, Example of Stateful Session Bean, Example of Stateless Session Bean, Example of Singleton Session Beans.		Shah, SPD, First, 2012	,Powerpoint
	Working with Message Driven Beans: Lifecycle of a Message Driven Bean, Uses of Message Driven Beans, The Message Driven Beans Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Interceptors: Request And Interceptor, Defining An Interceptor, AroundInvoke Method, Applying Interceptor, Adding An Interceptor To An Enterprise Bean, Build and Run the Web Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Java Naming and Directory Interface: What is Naming Service? What is Directory Service? What is Java Naming and Directory interface? Basic Lookup, JNDI Namespace in Java EE, Resources and JNDI, Datasource Resource Definition in Java EE.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
USIT506, Enterprise Java Unit V	**Persistence, Object/Relational Mapping And JPA:** What is Persistence? Persistence in Java, Current Persistence Standards in Java, Why another Persistence Standards? Object/Relational Mapping,	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Introduction to Java Persistence API: The Java Persistence API, JPA, ORM, Database and the Application, Architecture of JPA, How JPA Works? JPA Specifications.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Writing JPA Application: Application Requirement Specifications, Software Requirements, The Application Development Approach, Creating Database And Tables in Mysql, Creating a Web Application, Adding the Required Library Files, Creating a Javabean Class, Creating Persistence Unit [Persistence.Xml], Creating JSPS, The JPA Application Structure, Running The JPA Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint

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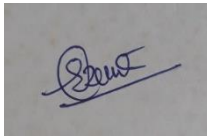
	Introduction to Hibernate: What is Hibernate? Why Hibernate? Hibernate, Database and The Application, Components of Hibernate, Architecture of Hibernate, How Hibernate Works?	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint
	Writing Hibernate Application: Application Requirement Specifications, Software Requirements, The Application Development Approach, Creating Database and Tables in Mysql, Creating a Web Application, Adding The Required Library Files, Creating a Javabean Class, Creating Hibernate Configuration File, Adding a Mapping Class, Creating JSPS, Running The Hibernate Application.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Desktop and Laptop,Digital cameras,Microphone,Mobile ,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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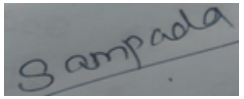

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: TYIT SEMESTER: V MONTH: AUG to DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

To determine the market perspective of IoT

To compare and contrast the use of devices, gateways and Data management in IoT

To illustrate the applications of IoT in Industrial Automation and identify Real world design constraints.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 Internet Of Things Unit 3	**Prototyping the Physical Design:** Preparation, Sketch, Iterate, and Explore, Nondigital Methods, Laser Cutting, Choosing a Laser Cutter, Software, Hinges and Joints, 3D Printing, Types of 3D Printing, Software, CNC Milling, Repurposing/Recycling. Prototyping and Presence Protocol, Constrained Application Protocol.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet
	Online Components: Getting Started with an API, Mashing Up APIs, Scraping, Legalities, writing a New API, Clockodillo, Security, implementing the API, Using Curl to Test, Going Further, Real-Time Reactions, Polling, Comet, Other Protocols, MQ Telemetry Transport, Extensible Messaging	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet
	Techniques for Writing Embedded Code: Memory	4	Designing the Internet of	Laptop, PPT, Google Meet

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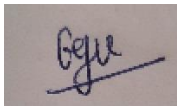
Paper-02 Internet Of Things Unit 4	Management, 12 8 Types of Memory, Making the Most of Your RAM, Performance and Battery Life, Libraries, Debugging.		Things Adrian McEwen, Hakim Cassimally	
	Business Models: A Short History of Business Models, Space and Time, From Craft to Mass Production, The Long Tail of the Internet, Learning from History, The Business Model Canvas, Who Is the Business Model For? Models, Make Thing, Sell Thing, Subscriptions, Customisation, be a Key Resource, Provide Infrastructure: Sensor Networks, take a Percentage, Funding an Internet of Things Startup, Hobby Projects and Open Source, Venture Capital, Government Funding, Crowdfunding, Lean Startups.	8	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet
Paper-02 Internet Of Things Unit 5	**Moving to Manufacture:** What Are You Producing? Designing Kits, Designing Printed circuit boards, Software Choices, The Design Process, Manufacturing Printed Circuit Boards, Etching Boards, Milling Boards. Assembly, Testing, Mass-Producing the Case and Other Fixtures, Certification, Costs, Scaling Up Software, Deployment, Correctness and Maintainability, Security, Performance, User Community.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet
	Ethics: Characterizing the Internet of Things, Privacy, Control, Disrupting Control,Crowdsourcing, Environment, Physical Thing, Electronics, Internet Service, Solutions, The Internet of Things as Part of the Solution, Cautious Optimism, The Open Internet of Things Definition.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop, PPT, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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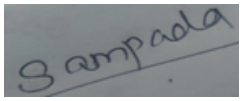

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: INFORMATION TECHNOLOGY CLASS: TYIT-A

SEMESTER: V MONTH: AUGUST-DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the concepts of open source operating system Linux, command line working, managing soft wares on Linux .
- Develop logic for connecting to network, giving permissions to users.
- Be familiar about the basic file sharing, setting iptables in linux .
- Apply the problem solving skills on high availability of cluster, installation of servers, bash shell scripting.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT505, Unit 1, Linux System Administration	Introduction to Red Hat Enterprise Linux: Linux, Open Source and Red Hat, Origins of Linux, Distributions, Duties of Linux System Administrator.	02	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
	Command Line: Working with the Bash Shell, Getting the Best of Bash, Useful Bash Key Sequences, Working with Bash History, Performing Basic File System Management Tasks, Working with Directories, Piping and Redirection, Finding Files.	03	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
	System Administration Tasks: Performing Job Management Tasks, System and Process Monitoring and Management,	04	Red Hat Enterprise Linux6	Power Point Presentation

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	Managing Processes with ps, Sending Signals to Processes with the kill Command, using top to Show Current System Activity, Managing Process Niceness, Scheduling Jobs, Mounting Devices, Working with Links, Creating Backups, Managing Printers, Setting Up System Logging, Setting Up Rsyslog, Common Log Files, Setting Up Logrotate		Administration by Sander van Vugt	
	Managing Software: Understanding RPM, Understanding Meta Package Handlers, Creating Your Own Repositories, Managing Repositories,Installing Software with Yum, Querying Software, Extracting Files from RPM Packages	03	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
USIT505, Unit 2, Linux System Administration	Configuring and Managing Storage: Understanding Partitions and Logical Volumes, Creating Partitions, Creating File Systems, File Systems Overview, Creating File Systems, Changing File System Properties, Checking the File System Integrity, Mounting File Systems Automatically Through fstab, Working with Logical Volumes, Creating Logical Volumes, Resizing Logical Volumes, Working with Snapshots, Replacing Failing Storage Devices, Creating Swap Space, Working with Encrypted Volumes	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
	Connecting to the Network: Understanding NetworkManager, Working with Services and Runlevels, Configuring the Network with NetworkManager, Working with system-config-network, NetworkManager Configuration Files, Network Service Scripts, Networking from the Command Line, Troubleshooting Networking, Setting Up IPv6, Configuring SSH, Enabling the SSH Server, Using the SSH Client, Using PuTTY on Windows Machines, Configuring Key-Based SSH Authentication, Using Graphical Applications with SSH, Using SSH Port Forwarding, Configuring VNC Server Access	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation

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	Working with Users, Groups, and Permissions: Managing Users and Groups, Commands for User Management, Managing Passwords, Modifying and Deleting User Accounts, Configuration Files, Creating Groups, Using Graphical Tools for User, and Group Management, Using External Authentication Sources, the Authentication Process, sssd, nsswitch, Pluggable Authentication Modules, Managing Permissions, the Role of Ownership, Basic Permissions: Read, Write, and Execute, Advanced Permissions, Working with Access Control Lists, Setting Default Permissions with umask, Working with Attributes.	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
USIT505, Unit 3, Linux System Administration	Securing Server with iptables: Understanding Firewalls, Setting Up a Firewall with system-config-firewall, Allowing Services, Trusted Interfaces, Masquerading, Configuration Files, Setting Up a Firewall with iptables, Tables, Chains, and Rules, Composition of Rule, Configuration Example, Advanced iptables Configuration, Configuring Logging, The Limit Module, Configuring NAT	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
	Setting Up Cryptographic Services: Introducing SSL, Proof of Authenticity: The Certificate Authority, Managing Certificates with openssl, Creating a Signing Request, Working with GNU Privacy Guard, Creating GPG Keys, Key Transfer, Managing GPG Keys, Encrypting Files with GPG, GPG Signing, Signing RPM Files	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
	Configuring Server for File Sharing: What is NFS? Advantages and Disadvantages of NFS, Configuring NFS4, Setting Up NFSv4, Mounting an NFS Share, Making NFS Mounts Persistent, Configuring Automount, Configuring Samba, Setting Up a Samba File Server, Samba Advanced Authentication Options, Accessing Samba Shares, Offering FTP Services	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation

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USIT505, Unit 4, Linux System Administration	Configuring DNS and DHCP:Introduction to DNS, The DNS Hierarchy, DNS Server Types, The DNS Lookup Process, DNS Zone Types, Setting Up a DNS Server, Setting Up a Cache-Only Name Server, Setting Up a Primary Name Server, Setting Up a Secondary Name Server, Understanding DHCP, Setting Up a DHCP Server	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
	Setting Up a Mail Server: Using the Message Transfer Agent, the Mail Delivery Agent, the Mail User Agent, Setting Up Postfix as an SMTP Server, Working with Mutt, Basic Configuration, Internet Configuration, Configuring Dovecot for POP and IMAP	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
	Configuring Apache on Red Hat Enterprise Linux: Configuring the Apache Web Server, creating a Basic Website, Understanding the Apache Configuration Files, Apache Log Files, Working with Virtual Hosts, Securing the Web Server with TLS Certificates, Configuring Authentication, Setting Up Authentication with .htpasswd, Configuring LDAP Authentication, Setting Up MySQL	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
USIT505, Unit 5, Linux System Administration	Introducing Bash Shell Scripting: Introduction, Elements of a Good Shell Script, Executing the Script, Working with Variables and Input, Understanding Variables, Variables, Subshells, and Sourcing, Working with Script Arguments, Asking for Input, Using Command Substitution, Substitution Operators, Changing Variable Content with Pattern Matching, Performing Calculations, Using Control Structures, Using if...then...else, Using case, Using while, Using until, Using for, Configuring booting with GRUB.	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation
	High-Availability Clustering: High-Availability Clustering, The Workings of High Availability, High-Availability Requirements, Red Hat High-Availability Add-on Software, Components,	04	Red Hat Enterprise Linux6	Power Point Presentation

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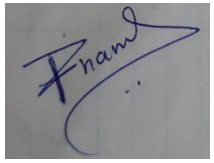
	Configuring Cluster-Based Services, Setting Up Bonding, Setting Up Shared Storage, Installing the Red Hat High Availability Add-On, Building the Initial State of the Cluster, Configuring Additional Cluster Properties, Configuring a Quorum Disk, Setting Up Fencing, Creating Resources and Services, Troubleshooting a Nonoperational Cluster, Configuring GFS2 File Systems		Administration by Sander van Vugt	
	Setting Up an Installation Server: Configuring a Network Server as an Installation Server, Setting Up a TFTP and DHCP Server for PXE Boot, Installing the TFTP Server, Configuring DHCP for PXE Boot, Creating the TFTP PXE Server Content, creating a Kickstart File, Using a Kickstart File to Perform an Automated, Installation, Modifying the Kickstart File with, system-config-kickstart, Making Manual Modifications to the Kickstart File	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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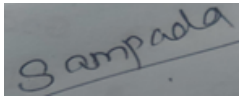

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: IT CLASS:TYIT SYSEMESTER: 5 MONTH: Aug -SEPT

ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S:

- To determine the market perspective of IoT
- To compare and contrast the use of devices, gateways and Data management in IoT
- To illustrate the applications of IoT in Industrial Automation and identify Real world design constraints.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Internet Of Things Paper 2 Code: USIT502 Unit 1	**The Internet of Things: An Overview**: The Flavour of the Internet of Things, The "Internet" of "Things", The Technology of the Internet of Things, Enchanted Objects, Who is Making the Internet of Things?	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop
	Design Principles for Connected Devices: Calm and Ambient Technology, Magic as Metaphor, Privacy, Keeping Secrets, Whose Data Is It Anyway? Web Thinking for Connected Devices, Small Pieces, Loosely Joined, First-Class Citizens on The Internet, Graceful Degradation, Affordances.	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop
	Internet Principles: Internet Communications: An Overview, IP, TCP, The IP Protocol Suite (TCP/IP), UDP, IP Addresses, DNS, Static IP Address Assignment, Dynamic IP Address Assignment,	4	Designing the	Laptop

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	IPv6, MAC Addresses, TCP and UDP Ports, An Example: HTTP Ports, Other Common Ports,Application Layer Protocols, HTTP,HTTPS: Encrypted HTTP, Other Application Layer Protocols		Internet of Things Adrian McEwen, Hakim Cassimally	
Internet Of Things Paper 2 Code: USIT502 Unit 2	**Thinking About Prototyping:** Sketching, Familiarity, Costs versus Ease of Prototyping, Prototypes and Production, Changing Embedded Platform, Physical Prototypes and Mass Personalisation, climbing into the Cloud, Open Source versus Closed Source, Why Closed? Why Open? Mixing Open and Closed Source, Closed Source for Mass Market Projects, Tapping into the Community.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop
	Prototyping Embedded Devices: Electronics, Sensors, Actuators, Scaling Up the Electronics, Embedded Computing Basics, Microcontrollers, System-on-Chips, Choosing Your Platform, Arduino, developing on the Arduino, Some Notes on the Hardware, Openness, Raspberry Pi, Cases and Extension Boards, Developing on the Raspberry Pi, Some Notes on the Hardware, Openness.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Laptop

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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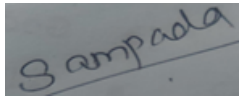

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHARVARI PATIL DEPARTMENT: IT CLASS: T.Y.I.T SEMESTER: V

MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concept of error handling and session management.
- Learn web designing using AJAX
- Gain knowledge about various security fundamentals.

Paper No.,Paper Title, Unit No.	**Sub Topics:**	**No.of Lectures**	**References**	**Teaching Method/ICT tools used**
USIT503 Advance Web Programming Unit 3	Error Handling, Logging, and Tracing : Avoiding Common Errors, Understanding Exception Handling, Handling Exceptions, Throwing Your Own Exceptions,	6	Reference book: Beginning ASP.NET 4.5 in C#"	Google Meet, Google Classroom, Google Slides
	Using Page Tracing State Management : Understanding the Problem of State, Using View State, Transferring Information Between Pages, Using Cookies, Managing Session State, Configuring Session State, Using Application State, Comparing State Management Options	4		
	Styles, Themes, and Master Pages : Styles, Themes, Master Page Basics, Advanced Master Pages,	1 4		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**15**		

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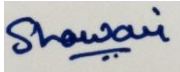
USIT503 Advance Web Programming Unit 5	XML: XML Explained, The XML Classes, XML Validation, XML Display and Transforms.	6	Reference book: Beginning ASP.NET 4.5 in C#""	Google Meet, Google Classroom, Google Slides
	Security Fundamentals: Understanding Security Requirements, Authentication and Authorization, Forms Authentication, Windows Authentication.	6		
	ASP.NET AJAX: Understanding Ajax, Using Partial Refreshes, Using Progress Notification, Implementing Timed Refreshes, Working with the ASP.NET AJAX Control Toolkit.	6		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**18**		



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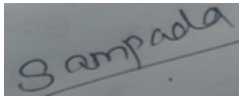

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUVARNA S KANNAV DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:T.Y.BSC(I.T) DIV-C SEMESTER: **V** MONTH:AUG-DEC ACADEMIC YEAR: 2020-2021

SUBJECT:SOFTWARE PROJECT MANAGEMENT

LEARNING OBJECTIVE/S:
The learners will be able to : Apply project management concepts and techniques to an IT project. Identify issues that could lead to IT project success or failure. Explain project management in terms of the software development process. Describe the responsibilities of IT project managers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Software Project Management USIT501 Unit-2	**Selection of an Appropriate Project Approach:**Introduction, Build or Buy? Choosing Methodologies and Technologies, Software Processes and Process Models, Choice of Process Models, Structure versus Speed of Delivery, The Waterfall Model, The Spiral Model, Software Prototyping, Other Ways of Categorizing Prototypes, Incremental Delivery, Atern/Dynamic Systems Development Method, Rapid Application Development, Agile Methods, Extreme Programming (XP), Scrum, Lean Software Development, Managing Iterative Processes, Selecting the Most Appropriate Process Model.	5	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation, google classroom, google meet
	Software Effort Estimation: Introduction, Where are the Estimates Done? Problems with Over- and Under-Estimates, The	5		

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	Basis for Software Estimating, Software Effort Estimation Techniques, Bottomup Estimating, The Top-down Approach and Parametric Models, Expert Judgement, Estimating by Analogy, Albrecht Function Point Analysis, Function Points Mark II, COSMIC Full Function Points, COCOMO II: A Parametric Productivity Model, Cost Estimation, Staffing Pattern, Effect of Schedule Compression, Capers Jones Estimating Rules of Thumb.			
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	10		
Software Project Management USIT501 Unit-3	**Activity Planning:** Introduction, Objectives of Activity Planning, When to Plan, Project Schedules, Projects and Activities, Sequencing and Scheduling Activities, Network Planning Models, Formulating a Network Model, Adding the Time Dimension, The Forward Pass, Backward Pass, Identifying the Critical Path, Activity Float, Shortening the Project Duration, Identifying Critical Activities, Activity-on-Arrow Networks.	4	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation, google classroom, google meet
	Risk Management: Introduction, Risk, Categories of Risk, Risk Management Approaches, A Framework for Dealing with Risk, Risk Identification, Risk Assessment, Risk Planning, Risk Management, Evaluating Risks to the Schedule, Boehm"s Top 10 Risks and Countermeasures, Applying the PERT Technique, Monte Carlo Simulation, Critical Chain Concepts.	4		
	Resource Allocation: Introduction, Nature of Resources, Identifying Resource Requirements, Scheduling Resources, Creating Critical Paths, Counting the Cost, Being Specific, Publishing the Resource Schedule, Cost Schedules, Scheduling Sequence.	3		

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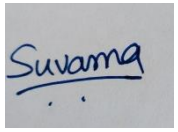
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	11		



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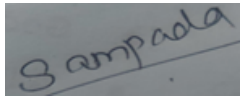

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: TYIT DIV-B

SEMESTER: V MONTH AUGUST-DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Able to understand the application areas of IOT ·
- Able to realize the revolution of Internet in Mobile Devices, Cloud & Sensor Networks ·
- Able to understand building blocks of Internet of Things and characteristics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT502, Internet of Things Unit 1	The Internet of Things: An Overview: The Flavour of the Internet of Things, The "Internet" of "Things", The Technology of the Internet of Things, Enchanted Objects, Who is Making the Internet of Things?	03	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, Powerpoint
	Design Principles for Connected Devices: Calm and Ambient Technology, Magic as Metaphor, Privacy, Keeping Secrets, Whose Data Is It Anyway? Web Thinking for Connected Devices, Small Pieces, Loosely Joined, First-Class Citizens on The Internet, Graceful Degradation, Affordances.	04	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Internet Principles: Internet Communications: An Overview, IP, TCP, The IP Protocol Suite (TCP/IP), UDP, IP Addresses, DNS, Static IP Address Assignment, Dynamic IP Address Assignment, IPv6, MAC Addresses, TCP and UDP Ports, An Example: HTTP Ports, Other	03	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint

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	Common Ports, Application Layer Protocols, HTTP, HTTPS: Encrypted HTTP, Other Application Layer Protocols			
USIT502, Internet of Things **Unit 2**	Thinking About Prototyping: Sketching, Familiarity, Costs versus Ease of Prototyping, Prototypes and Production, Changing Embedded Platform, Physical Prototypes and Mass Personalisation, climbing into the Cloud, Open Source versus Closed Source, Why Closed? Why Open? Mixing Open and Closed Source, Closed Source for Mass Market Projects, Tapping into the Community	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Prototyping Embedded Devices: Electronics, Sensors, Actuators, Scaling Up the Electronics, Embedded Computing Basics, Microcontrollers, System-on-Chips, Choosing Your Platform, Arduino, developing on the Arduino, Some Notes on the Hardware, Openness, Raspberry Pi, Cases and Extension Boards, Developing on the Raspberry Pi, Some Notes on the Hardware, Openness.	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
USIT502, Internet of Things **Unit 3**	Prototyping the Physical Design: Preparation, Sketch, Iterate, and Explore, Nondigital Methods, Laser Cutting, Choosing a Laser Cutter, Software, Hinges and Joints, 3D Printing, Types of 3D Printing, Software, CNC Milling, Repurposing/Recycling	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Prototyping Online Components: Getting Started with an API, Mashing Up APIs, Scraping, Legalities, writing a New API, Clockodillo, Security, implementing the API, Using Curl to Test, Going Further, Real-Time Reactions, Polling, Comet, Other Protocols, MQ Telemetry Transport, Extensible Messaging and Presence Protocol, Constrained Application Protocol.	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint

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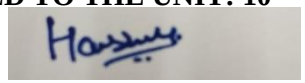
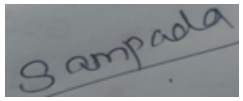
USIT502, Internet of Things **Unit 4**	Techniques for Writing Embedded Code: Memory Management, 12 8 Types of Memory, Making the Most of Your RAM, Performance and Battery Life, Libraries,Debugging.	04	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Business Models: A Short History of Business Models, Space and Time, From Craft to Mass Production, The Long Tail of the Internet, Learning from History, The Business Model Canvas, Who Is the Business Model For? Models, Make Thing, Sell Thing, Subscriptions, Customisation, be a Key Resource, Provide Infrastructure: Sensor Networks, take a Percentage, Funding an Internet of Things Startup, Hobby Projects and Open Source, Venture Capital, Government Funding, Crowdfunding, Lean Startups.	06	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
USIT502, Internet of Things **Unit 5**	Moving to Manufacture: What Are You Producing? Designing Kits, Designing Printed circuit boards, Software Choices, The Design Process, Manufacturing Printed Circuit Boards, Etching Boards, Milling Boards. Assembly, Testing, Mass-Producing the Case and Other Fixtures, Certification, Costs, Scaling Up Software, Deployment, Correctness and Maintainability, Security, Performance, User Community.	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Ethics: Characterizing the Internet of Things, Privacy, Control, Disrupting Control,Crowdsourcing, Environment, Physical Thing, Electronics, Internet Service, Solutions, The Internet of Things as Part of the Solution, Cautious Optimism, The Open Internet of Things Definition	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF 

SIGNATURE OF THE H.O.D. 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: August-December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various Linux OS commands

b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -I	**Introduction to Red Hat Enterprise Linux:** Linux, Open Source and Red Hat, Origins of Linux, Distributions, Duties of Linux System Administrator.	2	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Lecture through Google Slides o Google Meet
	Command Line: Working with the Bash Shell, Getting the Best of Bash, Useful Bash Key Sequences, Working with Bash History, Performing Basic File System Management Tasks, Working with Directories, Piping and Redirection, Finding Files	4		Lecture through Google Slides o Google Meet
	System Administration Tasks: Job Tasks, Process Monitoring and Management, Mounting Devices, Links, Backups, Printers, Logging, Rsyslog, Common Log Files, Setting Up Logrotate	4		Lecture through Google Slides o Google Meet
	Managing Software: Understanding RPM, Understanding Meta Package Handlers, Creating Your Own Repositories, Managing Repositories, Installing Software with Yum, Querying Software, Extracting Files from RPM Packages	2		Lecture through Google Slides o Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: August-December ACADEMIC YEAR: 2020-2021

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -II	**Configuring and Managing Storage:** Partitions, File systems, logical volumes, Snapshots, Replacing Failing Storage Devices, Swap Space, Encrypted Volumes	4	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Lecture through Google Slides on Google Meet
	Connecting to the Network: Configuring the Network with NetworkManager and command line, Services and Runlevels, system-config-network, Network Service Scripts, Troubleshooting, IPv6, Configuring SSH Server and Client, Key-Based SSH Authentication, SSH Port Forwarding, VNC Server Access	4		Lecture through Google Slides on Google Meet
	Working with Users, Groups, and Permissions: Creating, deleting and modifying Users, Groups, user accounts with Commands and GUI , Passwords, Using External Authentication Sources, sssd, nsswitch, Pluggable Authentication Modules, Managing Permissions, the Role of Ownership, Basic Permissions: Read, Write, and Execute, Advanced Permissions, ACL, umask, Attributes	4		Lecture through Google Slides on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: August-December ACADEMIC YEAR: 2020-2021

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -III	**Securing Server with iptables:** Understanding Firewalls, Setting Up a Firewall with system-config-firewall, Allowing Services, Trusted Interfaces, Masquerading, Configuration Files, Setting Up a Firewall with iptables, Tables, Chains, and Rules, Composition of Rule, Configuration Example, Advanced iptables Configuration, Configuring Logging, The Limit Module, Configuring NAT	4	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Lecture through Google Slides on Google Meet
	Setting Up Cryptographic Services: Introducing SSL, Proof of Authenticity: the Certificate Authority, Managing Certificates with openssl, Creating a Signing Request, Working with GNU Privacy Guard, Creating GPG Keys, Key Transfer, Managing GPG Keys, Encrypting Files with GPG, GPG Signing, Signing RPM Files	4		Lecture through Google Slides on Google Meet
	Configuring Server for File Sharing: What is NFS? Advantages and Disadvantages of NFS, Configuring NFS4, Setting Up NFSv4, Mounting an NFS Share, Making NFS Mounts Persistent, Configuring Automount, Configuring Samba, Setting Up a Samba File Server, Samba Advanced Authentication Options, Accessing Samba Shares, Offering FTP Services.	4		Lecture through Google Slides on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: August-December ACADEMIC YEAR: 2020-2021

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -IV	**Configuring DNS and DHCP:** Introduction to DNS, The DNS Hierarchy, DNS Server Types, The DNS Lookup Process, DNS Zone Types, Setting Up a DNS Server, Setting Up a Cache-Only Name Server, Setting Up a Primary Name Server, Setting Up a Secondary Name Server, Understanding DHCP, Setting Up a DHCP Server	4	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Lecture through Google Slides on Google Meet
	Setting Up a Mail Server: Using the Message Transfer Agent, the Mail Delivery Agent, the Mail User Agent, Setting Up Postfix as an SMTP Server, Working with Mutt, Basic Configuration, Internet Configuration, Configuring Dovecot for POP and IMAP	4		Lecture through Google Slides on Google Meet
	Configuring Apache on Red Hat Enterprise Linux: Configuring the Apache Web Server, Creating a Basic Website, Understanding the Apache Configuration Files, Apache Log Files, Working with Virtual Hosts, Securing the Web Server with TLS Certificates, Configuring Authentication, Setting Up Authentication with .htpasswd, Configuring LDAP Authentication, Setting Up MySQL	4		Lecture through Google Slides on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: August-December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various Linux OS commands

b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -V	**Introducing Bash Shell Scripting:** Introduction, Elements of a Good Shell Script, Executing the Script, Variables and Input, Subshells, Script Arguments, Asking for Input, Command Substitution, Substitution Operators, Pattern Matching, Performing Calculations, Using Control Structures- if...then...else, case, while, until, for, Configuring booting with GRUB.	6	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Lecture through Google Slides on Google Meet
	High-Availability Clustering: Workings of High Availability-Requirements, Add-on Software, Components, Cluster-Based Services, Bonding, Shared Storage, Installing the Red Hat High Availability Add-On, Building the Initial State of the Cluster, Additional Cluster Properties, Quorum Disk, Fencing, Resources and Services, Troubleshooting a Nonoperational Cluster, Configuring GFS2 File Systems	3		Lecture through Google Slides on Google Meet
	Setting Up an Installation Server: Network Server as an Installation Server, Installing the TFTP Server, Configuring DHCP for PXE Boot, Kickstart File, system-config-kickstart, Manual Modifications to the Kickstart File	3		Lecture through Google Slides on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: TYBSCIT SEMESTER:V

MONTH: **AUG-DEC** ACADEMIC YEAR:**20-21**

LEARNING OBJECTIVE/S:

The learners will be able to :

Understand fundanentals of project

Be familiar with diff methods and tools used for project management

Do the project planning,scheduling,costing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT501 Software Project Management UNIT-1	**Introduction to Software Project Management**:Introduction, Whyis Software Project Management Important? What is a Project?Software Projects versus Other Types of Project, Contract Management and Technical Project Management, Activities Covered by Software Project Management, Plans, Methods and Methodologies,Some Ways of Categorizing Software Projects, Project Charter, Stakeholders, Setting Objectives, The Business Case, Project Successand Failure, What is Management? Management Control, Project Management Life Cycle, Traditional versus Modern Project Management Practices.	05	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
	Project Evaluation and Programme Management: Introduction, Business Case, Project Portfolio Management, Evaluation of Individual Projects, Cost–benefit Evaluation Techniques, Risk Evaluation, Programme Management,	04	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point

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	Managing the Allocation of Resources within Programmes, Strategic Programme Management, Creating a Programme, Aids to Programme Management, Some Reservations about Programme Management, Benefits Management.			
	An Overview of Project Planning :Introduction to Step Wise Project Planning, Step 0: Select Project, Step 1: Identify Project Scope and Objectives, Step 2: Identify Project Infrastructure, Step 3: Analyse Project Characteristics, Step 4: Identify Project Products and Activities, Step 5: Estimate Effort for Each Activity, Step 6: Identify Activity Risks, Step 7: Allocate Resources, Step 8: Review/Publicize Plan, Steps 9 and 10: Execute Plan/Lower Levels of Planning	03	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
USIT501 Software Project Management UNIT-2	**Selection of an Appropriate Project Approach:**Introduction, Build or Buy? Choosing Methodologies and Technologies, Software Processes and Process Models, Choice of Process Models, Structure versus Speed of Delivery, The Waterfall Model, The Spiral Model, Software Prototyping, Other Ways of Categorizing Prototypes, Incremental Delivery, Atern/Dynamic Systems Development Method, Rapid Application Development, Agile Methods, Extreme Programming (XP), Scrum, Lean Software Development, Managing Iterative Processes, Selecting the Most Appropriate Process Model.	06	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
	Software Effort Estimation: Introduction, Where are the Estimates Done? Problems with Over- and Under-Estimates, The Basis for Software Estimating, Software Effort Estimation Techniques, Bottomup Estimating, The Top-down Approach and Parametric Models,Expert Judgement, Estimating by Analogy, Albrecht Function Point Analysis, Function Points Mark II, COSMIC Full Function Points,COCOMO II: A Parametric Productivity Model, Cost Estimation, Staffing Pattern, Effect of Schedule Compression, Capers Jones Estimating Rules of	06	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point

	Thumb.			
USIT501 Software Project Management UNIT-3	**Activity Planning:** Introduction, Objectives of Activity Planning,When to Plan, Project Schedules, Projects and Activities, Sequencing and Scheduling Activities, Network Planning Models, Formulating aNetwork Model, Adding the Time Dimension, The Forward Pass,Backward Pass, Identifying the Critical Path, Activity Float,Shortening the Project Duration, Identifying Critical Activities,Activity-on-Arrow Networks.	04	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
	Risk Management: Introduction, Risk, Categories of Risk, Risk Management Approaches, A Framework for Dealing with Risk, RiskIdentification, Risk Assessment, Risk Planning, Risk Management,Evaluating Risks to the Schedule, Boehm"s Top 10 Risks and Counter Measures, Applying the PERT Technique, Monte Carlo Simulation,Critical Chain Concepts	04	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
	Resource Allocation: Introduction, Nature of Resources, Identifying Resource Requirements, Scheduling Resources, Creating Critical Paths, Counting the Cost, Being Specific, Publishing the Resource Schedule, Cost Schedules, Scheduling Sequence	04	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
USIT501 Software Project Management UNIT-4	**Monitoring and Control**: Introduction, Creating the Framework, Collecting the Data, Review, Visualizing Progress, Cost Monitoring, Earned Value Analysis, Prioritizing Monitoring, Getting the Project Back to Target, Change Control, Software Configuration Management (SCM).	05	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
	Managing Contracts: Introduction, Types of Contract, Stages in Contract Placement, Typical Terms of a Contract, Contract Management, Acceptance.	04	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point

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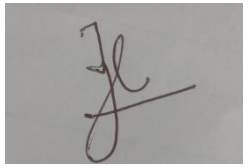
	Managing People in Software Environments: Introduction, Understanding Behaviour, Organizational Behaviour: A Background, Selecting the Right Person for the Job, Instruction in the Best Methods, Motivation, The Oldham–Hackman Job Characteristics Model, Stress, Stress Management, Health and Safety, Some Ethical and Professional Concerns.	03	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
USIT501 Software Project Management UNIT-5	**Working in Teams:** Introduction, Becoming a Team, Decision Making, Organization and Team Structures, Coordination Dependencies, Dispersed and Virtual Teams, Communication Genres, Communication Plans, Leadership	05	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
	Software Quality : Introduction, The Place of Software Quality in Project Planning, Importance of Software Quality, Defining Software Quality, Software Quality Models, ISO 9126, Product and Process Metrics, Product versus Process Quality Management, Quality Management Systems, Process Capability Models, Techniques to Help Enhance Software Quality, Testing, Software Reliability,Quality Plans.	05	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point
	Project Closeout: Introduction, Reasons for Project Closure, Project Closure Process, Performing a Financial Closure, Project CloseoutReport	02	Bob Hughes, Mike Cotterell, Rajib Mall	Laptop,power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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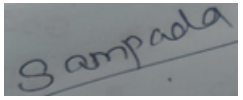

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Miss Shilpa James Rodrigues **DEPARTMENT**: IT

CLASS: T.Y.I.T.-B (Enterprise Java) **SEMESTER**: V

MONTH: Aug - Dec **ACADEMIC YEAR**: 2020-21

LEARNING OBJECTIVE/S :
The learners will be able to :

- Learn advance technology of java programming.
- Develop web based java program.
- Create dynamic content providing java web application using servlets.
- Describe and explain various multi-tier software architecture framework using Java EE including the roles and responsibilities of each relevant tier
- Develop enterprise software applications using the Java EE framework.
- Understand and implements new technologies like JSP, Session, Cookies, JSTL, Hibernate etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 , Unit 1, Enterprise Java.	**Understanding Java EE:** What is an Enterprise Application? What is java enterprise edition? Java EE Technologies, Java EE evolution, Glass fish server **JavaEE Architecture,Serverand Containers:** Types of System Architecture, Java EE Server, Java EE Containers.	04	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation

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	Introduction to Java Servlets: The Need for Dynamic Content, Java Servlet Technology, Why Servlets? What can Servlets do? **Servlet API and Lifecycle:** Java Servlet API, The Servlet Skeleton, The Servlet LifeCycle, A Simple WelcomeS ervlet.	04	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	WorkingWithServlets: Getting Started, Using Annotations, Insteadof, Deployment Descriptor. **Working with Databases:** What Is JDBC? JDBC Architecture, Accessing Database, The Servlet GUI and Database Example.	04	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 , Unit 2, Enterprise Java.	**Request Dispatcher:** Resquest dispatcher Interface, Methods of Request dispatcher, Request dispatcher Application.	02	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	COOKIES: Kinds Of Cookies, Where Cookies Are Used? Creating Cookies.	02	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	SESSION: What Are Sessions? Lifecycle Of HttpSession, Session Tracking With Servlet API, AServlet Session Example	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	WorkingWith Files: Uploading Files, Creatingan Upload File Application, Downloading Files, Creatinga Download File Application.	02	Java EE 7 For Beginners -Sharanam Shah,	Laptop, Google Meet, Power point presentation

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			Vaishali Shah	
	Working With Non-Blocking I/O: Creatinga Non Blocking Read Application, Creating The Web Application, Creating Java Class, Creating Servlets, Retrieving The File, Creating index.jsp	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 , Unit 3 , Enterprise Java.	**Introduction To Java ServerPages:** Why use Java Server Pages? Disadvantages Of JSP, JSP v\s Servlets, Life Cycle of a JSP Page, How does a JSP function? How does JSP execute? About Java Server Pages **Getting Started With Java ServerPages:** Comments, JSP Document, JSP Elements, JSP GUI Example.	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	Action Elements: Including other Files, Forwarding JSP Page to Another Page, Passing Parameters for other Actions, Loadinga Javabean.	02	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	Implicit Objects, ScopeAnd ElExpressions: Implicit Objects, Character Quoting Conventions, Unified Expression Language[UnifiedEl], Expression Language.	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation

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	Java Server Pages Standard Tag Libraries: What is wrong in using JSP Scriptlet Tags? How JSTL Fixes JSP Scriptlet's Short comings? Disadvantages Of JSTL, TagLibraries.	04	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 , Unit 4, Enterprise Java.	**Introduction To EnterpriseJavabeans:** Enterprise Bean Architecture, Benefits of Enterprise Bean, Types of EnterpriseBean, Accessing Enterprise Beans, Enterprise Bean Application, Packaging Enterprise Beans .	02	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	Working With Session Beans: When to use SessionBeans? Types of SessionBeans, Remote and Local Interfaces, Accessing Interfaces, Lifecycle of EnterpriseBeans, Packaging EnterpriseBeans, Example of Stateful SessionBean, Example of Stateless SessionBean, Example of Singleton SessionBeans.	04	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	Working with Message DrivenBeans: Lifecycle of a MessageDrivenBean, Uses of MessageDrivenBeans, The Message DrivenBeansExample.	01	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation

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	Interceptors: Request And Interceptor, Defining An Interceptor, Around Invoke Method, Applying Interceptor, Adding An Interceptor To An Enterprise Bean, Build and Run the Web Application. JNDI, Datasource Resource Definition in Java EE.	02	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	Java Naming and Directory Interface: What is Naming Service? What is Directory Service? What is Java Naming and Directory interface? Basic Lookup, JNDI Namespace in Java EE, Resources and JNDI, Datasource Resource Definition in Java EE.	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 , Unit 5, Enterprise Java.	**Persistence, Object/Relational Mapping And JPA:** What is Persistence? Persistence in Java, Current Persistence Standards in Java,Object/RelationalMapping, **Introduction to JavaPersistence API:** The Java Persistence API, JPA,ORM, Architecture of JPA, JPA Specifications.	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation
	Writing JPA Application: Software Requirements, Creating Database And Tables in Mysql, Creating a WebApplication, Adding the Required Library Files, Creating aJavabean Class, Creating Persistence Unit[Persistence.Xml], Creating JSPS, The	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation

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	JPA Application Structure, Running The JPA Application.			
	Introduction to Hibernate: What is Hibernate? Why Hibernate? , Database and The Application, Components of Hibernate, Architecture of Hibernate, How HibernateWorks? **WritingHibernateApplication:** Requirements, TheApplication Development Approach, Creating Database and Tables in Mysql, Creating aWeb Application, Adding The Required Library Files, Creatinga JavabeanClass, Creating Hibernate Configuration File, Addinga Mapping Class, Creating JSPS, Running The Hibernate Application.	06	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Laptop, Google Meet, Power point presentation

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande. DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc.I.T. SEMESTER: V MONTH: August-December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To learn the fundamental aspects of the JavaScript programming language and how to program using document object model application programming

The learners will be able to :

- To understand .Net framework and its run time environment.
- To gain basic knowledge of C# language with its object oriented concept.
- To gain the knowledge of namespaces and assemblies.
- To understand fundamentals of web application development.
- To make use of different server controls like validation, navigation and rich server control.
- To understand back hand connectivity with SQL using ADO .Net Frame.
- To use data binding with data controls like grid view, details view and form view.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT503 Advance Web Programming UNIT-I	**Introducing .NET**: The .NET Framework, C#, VB, and the .NET Languages, The Common Language Runtime, The .NET Class Library.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning	Google Mett & PPT
	The C# Language: C# Language Basics, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods.	4		Google Mett & PPT
	Types, Objects, and Namespaces: The Basics About Classes, Building a Basic Class, Value Types and Reference Types,	4		Google Mett & PPT

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	Understanding Namespaces and Assemblies, Advanced Class Programming.		Visual C# 2010	
USIT503 Advance Web Programming UNIT-II	**Web Form Fundamentals**: Writing Code, Using the Code-Behind Class, Adding Event Handlers, Understanding the Anatomy of an ASP.NET Application, Introducing Server Controls, Using the Page Class, Using Application Events, Configuring an ASP.NET Application.	6	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	Google Mett & PPT
	Form Controls: Stepping Up to Web Controls, Web Control Classes, List Controls, Table Controls, Web Control Events and AutoPostBack, Validation, Understanding Validation, Using the Validation Controls, Rich Controls, The Calendar, The AdRotator, Pages with Multiple Views, User Controls and Graphics, User Controls, Dynamic Graphics, The Chart Control, Website Navigation: Site Maps, URL Mapping and Routing, The SiteMapPath Control, The TreeView Control, The Menu Control.	6		
USIT503 Advance Web Programming UNIT- III	**Error Handling, Logging, and Tracing** : Avoiding Common Errors, Understanding Exception Handling, Handling Exceptions, Throwing Your Own Exceptions, Using Page Tracing	5	C# 2015 Murach"s ASP.NET 4.6 Web Programming in C#2015 Beginning Visual C# 2010	Google Mett & PPT
	State Management : Understanding the Problem of State, Using View State, Transferring Information Between Pages, Using Cookies, Managing Session State, Configuring Session State, Using Application State, Comparing State Management Options	4		Google Mett & PPT
	Styles, Themes, and Master Pages : Styles, Themes, Master Page Basics, Advanced Master Pages,	3		Google Mett & PPT

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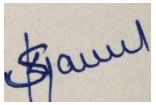
USIT503 Advance Web Programming UNIT-IV	**ADO.NET Fundamentals**: Understanding Databases, Configuring Your Database, Understanding SQL Basics, Understanding the Data Provider Model, Using Direct Data Access, Using Disconnected Data Access.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	Google Mett & PPT
	Data Binding: Introducing Data Binding, Using Single-Value Data Binding, Using Repeated-Value Data Binding, Working with Data Source Controls,	4		
	The Data Controls: The GridView, Formatting the GridView, selecting a GridView Row, Editing with the GridView, Sorting and Paging the GridView, Using GridView Templates, The DetailsView and FormView	4		
USIT503 Advance Web Programming UNIT - V	**XML**: XML Explained, The XML Classes, XML Validation, XML Display and Transforms. .	3	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	Google Mett & PPT
	Security Fundamentals: Understanding Security Requirements, Authentication and Authorization, Forms Authentication, Windows Authentication.	4		Google Mett & PPT
	ASP.NET AJAX: Understanding Ajax, Using Partial Refreshes, Using Progress Notification, Implementing Timed Refreshes, Working with the ASP.NET AJAX Control Toolkit	5		Google Mett & PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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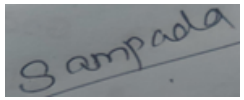

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: August to December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

- To support for many industry standards and continues simplification of enterprise ready APIs.

The learners will be able to :

- To understand Java Enterprise edition with its different technologies.
- To understand Java EE architectural server and contains.
- To understand server side technology like Java Servlets with its API and life cycle.
- To make data base connectivity using JDBC.
- To navigate using request dispatcher interface.
- To understand state management using cookies and session.
- To understand how to upload and download the file.
- To be able to work with non-blocking I/O resources.
- To understand server side technology like Java Server Pages.
- To make use of action elements, implicit objects, expression language and JSTL.
- To understand enterprise bill, architectural and its bill.
- To be able to working with session beans and message driven beans.
- To understand interceptors and JNDI.
- To make use of ORM and JPA with its API.
- To understand writing JPA application.
- To be able to understand hibernate architectural and components.
- To understand writing hibernate application.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 Enterprise Java UNIT-I	**Understanding Java EE:** WhatisanEnterpriseApplication? Whatisjavaenterpriseedition? JavaEETechnologies, JavaEEevolution,Glassfishserver.	2	1. Java EE 7 For Beginners 2. Java EE 8 Cookbook: Build reliable applications with the most robust and mature technology for enterprise development 3. Advanced Java Programming	PPT, Google meets.
	JavaEE Architecture,Serverand Containers: TypesofSystemArchitecture, JavaEEServer, JavaEEContainers.	2		PPT, Google meets.
	Introduction to Java Servlets: TheNeedforDynamicContent, JavaServletTechnology, WhyServlets? WhatcanServletsdo?	2		PPT, Google meets.
	Servlet API and Lifecycle: JavaServletAPI, TheServletSkeleton, TheServletLifeCycle, ASimpleWelcomeServlet	2		
	WorkingwithServlets: GettingStarted, UsingAnnotationsInsteadofDeploymentDescriptor.	2		
	Working with Databases: WhatIsJDBC? JDBCArchitecture, AccessingDatabase, TheServletGUI and DatabaseExample.	2		
USIT506 Enterprise Java UNIT-II	**Request Dispatcher:** Resquestdispatcher Interface, Methods of Requestdispatcher, Requestdispatcher Application	2	1. Java EE 7 For Beginners 2. Java EE 8 Cookbook: Build reliable applications with	PPT, Google meets.
	COOKIES: KindsofCookies, WhereCookiesAreUsed? CreatingCookiesUsingServlet, DynamicallyChangingtheColorsofAPage	3		

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	SESSION: WhatAreSessions? LifecycleofHttpSession, SessionTrackingWithServletAPI, AServlet Session Example	2	the most robust and mature technology for enterprise development 3. Advanced Java Programming	
	Workingwith Files: UploadingFiles, CreatinganUploadFileApplication, DownloadingFiles, CreatingaDownloadFileApplication.	2		
	Workingwith Non-Blocking I/O: CreatingaNon-BlockingReadApplication, CreatingTheWeb Application, CreatingJavaClass, Creating Servlets, Retrieving The File, Creating index.jsp	3		
USIT506 Enterprise Java UNIT-III	**Introduction To Java ServerPages:** WhyuseJava ServerPages? DisadvantagesOfJSP, JSPv\sServlets, LifeCycleofaJSPPage, HowdoesaJSPfunction? HowdoesJSPexecute? AboutJava ServerPages	3	1. Java EE 7 For Beginners 2. Java EE 8 Cookbook: Build reliable applications with the most robust and mature technology for enterprise development 3. Advanced Java Programming	PPT, Google meets.
	Getting Started With Java ServerPages: Comments, JSPDocument,JSPElements, JSPGUIExample	2		
	Action Elements: IncludingotherFiles, ForwardingJSPPagetoAnotherPage, PassingParametersforotherActions, LoadingaJavabean.	2		
	Implicit Objects, Scopeand ElExpressions: ImplicitObjects, CharacterQuotingConventions, UnifiedExpressionLanguage[UnifiedEl], ExpressionLanguage.	3		
	Java Server Pages Standard Tag Libraries: WhatiswronginusingJSPScriptletTags? HowJSTLFixesJSPScriptlet'sShortcomings? DisadvantagesOfJSTL, TagLibraries.	2		

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USIT506 Enterprise Java UNIT-IV	**Introduction To EnterpriseJavabeans:** EnterpriseBeanArchitecture, BenefitsofEnterpriseBean, TypesofEnterpriseBean, AccessingEnterpriseBeans, EnterpriseBeanApplication, PackagingEnterpriseBeans	2	1. Java EE 7 For Beginners 2. Java EE 8 Cookbook: Build reliable applications with the most robust and mature technology for enterprise development 3. Advanced Java Programming	PPT, Google meets.
	Workingwith Session Beans: WhentouseSessionBeans? TypesofSessionBeans, RemoteandLocalInterfaces, AccessingInterfaces, LifecycleofEnterpriseBeans, PackagingEnterpriseBeans, Exampleof StatefulSessionBean, Example ofStatelessSessionBean, Example of SingletonSessionBeans.	3		
	Working with Message DrivenBeans: LifecycleofaMessageDrivenBean, UsesofMessageDrivenBeans, TheMessage DrivenBeansExample.	2		
	Interceptors: Request andInterceptor, Defining An Interceptor, AroundInvokeMethod, ApplyingInterceptor, Adding An Interceptor To An Enterprise Bean, Build and Run the Web Application.	2		
	Java Naming and Directory Interface: What is Naming Service? What is Directory Service? What is Java Naming and Directory interface? Basic Lookup, JNDI Namespace in Java EE, Resources and JNDI, Datasource Resource Definition in Java EE.	3		
USIT506 Enterprise Java UNIT-V	**Persistence, Object/Relational Mapping And JPA:** WhatisPersistence? PersistenceinJava,Current Persistence Standards in Java, Why an other Persistence Standards? Object/RelationalMapping,	2	1. Java EE 7 For Beginners 2. Java EE 8 Cookbook: Build reliable applications with the most robust and mature technology for	PPT, Google meets.
	Introduction to JavaPersistence API: TheJavaPersistenceAPI, JPA,ORM,DatabaseandtheApplication, ArchitectureofJPA, HowJPAWorks? JPA Specifications.	2		
	Writing JPA Application: ApplicationRequirementSpecifications, SoftwareRequirements, TheApplicationDevelopmentApproach,	3		

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	CreatingDatabaseandTablesinMysql, creatingaWebApplication, AddingtheRequiredLibraryFiles, creatingaJavabeanClass, CreatingPersistenceUnit[Persistence.Xml], CreatingJSPS, TheJPAApplicationStructure, RunningtheJPAApplication.		enterprise development 3. Advanced Java Programming	
	Introduction to Hibernate: WhatisHibernate? WhyHibernate? Hibernate,DatabaseandTheApplication, ComponentsofHibernate, ArchitectureofHibernate, HowHibernateWorks?	2		
	WritingHibernateApplication: ApplicationRequirementSpecifications, SoftwareRequirements, TheApplicationDevelopmentApproach, CreatingDatabaseandTablesinMysql, creatingaWebApplication, AddingtheRequiredLibraryFiles, creatingaJavabeanClass, CreatingHibernateConfigurationFile, AddingaMappingClass, CreatingJSPS, RunningTheHibernateApplication.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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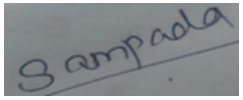

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Brijesh Y. Joshi DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc.I.T. SEMESTER: V MONTH: August-December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To learn the fundamental aspects of the JavaScript programming language and how to program using document object model application programming

The learners will be able to :

- To understand .Net framework and its run time environment.
- To gain basic knowledge of C# language with its object oriented concept.
- To gain the knowledge of namespaces and assemblies.
- To understand fundamentals of web application development.
- To make use of different server controls like validation, navigation and rich server control.
- To understand back hand connectivity with SQL using ADO .Net Frame.
- To use data binding with data controls like grid view, details view and form view.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT503 Advance Web Programming UNIT-I	**Introducing .NET**: The .NET Framework, C#, VB, and the .NET Languages, The Common Language Runtime, The .NET Class Library.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning	Google Meet & PPT
	The C# Language: C# Language Basics, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods.	4		Google Meet & PPT
	Types, Objects, and Namespaces: The Basics About Classes, Building a Basic Class, Value Types and Reference Types,	4		Google Meet & PPT

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	Understanding Namespaces and Assemblies, Advanced Class Programming.		Visual C# 2010	
USIT503 Advance Web Programming UNIT-II	**Web Form Fundamentals**: Writing Code, Using the Code-Behind Class, Adding Event Handlers, Understanding the Anatomy of an ASP.NET Application, Introducing Server Controls, Using the Page Class, Using Application Events, Configuring an ASP.NET Application.	6	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	Google Meet & PPT Visual Studio.NET
	Form Controls: Stepping Up to Web Controls, Web Control Classes, List Controls, Table Controls, Web Control Events and AutoPostBack, Validation, Understanding Validation, Using the Validation Controls, Rich Controls, The Calendar, The AdRotator, Pages with Multiple Views, User Controls and Graphics, User Controls, Dynamic Graphics, The Chart Control, Website Navigation: Site Maps, URL Mapping and Routing, The SiteMapPath Control, The TreeView Control, The Menu Control.	6		
USIT503 Advance Web Programming UNIT- III	**Error Handling, Logging, and Tracing** : Avoiding Common Errors, Understanding Exception Handling, Handling Exceptions, Throwing Your Own Exceptions, Using Page Tracing	5	C# 2015 Murach"s ASP.NET 4.6 Web Programming in C#2015 Beginning Visual C# 2010	Google Meet & PPT Visual Studio.NET
	State Management : Understanding the Problem of State, Using View State, Transferring Information Between Pages, Using Cookies, Managing Session State, Configuring Session State, Using Application State, Comparing State Management Options	4		Google Meet & PPT Visual Studio.NET
	Styles, Themes, and Master Pages : Styles, Themes, Master Page Basics, Advanced Master Pages,	3		Google Meet & PPT Visual Studio.NET

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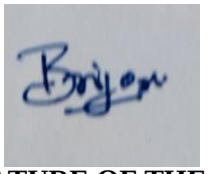
USIT503 Advance Web Programming UNIT-IV	**ADO.NET Fundamentals**: Understanding Databases, Configuring Your Database, Understanding SQL Basics, Understanding the Data Provider Model, Using Direct Data Access, Using Disconnected Data Access.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	Google Meet & PPT Visual Studio.NET
	Data Binding: Introducing Data Binding, Using Single-Value Data Binding, Using Repeated-Value Data Binding, Working with Data Source Controls,	4		
	The Data Controls: The GridView, Formatting the GridView, selecting a GridView Row, Editing with the GridView, Sorting and Paging the GridView, Using GridView Templates, The DetailsView and FormView	4		
USIT503 Advance Web Programming UNIT - V	**XML**: XML Explained, The XML Classes, XML Validation, XML Display and Transforms. .	3	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	Google Meet & PPT Visual Studio.NET
	Security Fundamentals: Understanding Security Requirements, Authentication and Authorization, Forms Authentication, Windows Authentication.	4		Google Meet & PPT Visual Studio.NET
	ASP.NET AJAX: Understanding Ajax, Using Partial Refreshes, Using Progress Notification, Implementing Timed Refreshes, Working with the ASP.NET AJAX Control Toolkit	5		Google Meet & PPT Visual Studio.NET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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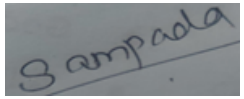

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**T.Y.B SC(IT)**_____ SEMESTER: ____**V**_____ MONTH: _____ _____**AUGUST-DECEMBER** _____ ACADEMIC YEAR: _____**2020-2021**_____

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand the background of Red Hat Linux administration as an operating system.**
- **How to work with various commands and their implementation in Linux bash shell system.**
- **To understand basic management tasks, administrative tasks and managing different services with RPM.**
- **Helps to make you configure and install the software, working with the networks and creation of users, groups and permissions in system.**
- **To make you understand the security concept of the system and cryptographic services.**
- **It also make you understand how to configure and to install different servers(FTP, Mail services, DHCP, Samba etc.) and to enable its services and to provide client server architecture working.**
- **Helps to create clusters and provide better understanding of shell scripting.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-04 (USIT505) **Linux System**	**Introduction to Red Hat Enterprise Linux:** Linux, Open Source and Red Hat, Origins of Linux, Distributions, Duties of Linux System Administrator.	02	Red Hat Enterprise Linux 6 Administration By	Online Google Meet PPTs

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Administration **Unit No -01**	**Command Line:** Working with the Bash Shell, Getting the Best of Bash, Useful Bash Key Sequences, Working with Bash History, Performing Basic File System Management Tasks, Working with Directories, Piping and Redirection, Finding Files	04	Sander van Vugt , John Wiley and Sons	Online Google Meet PPTs
	System Administration Tasks: Performing Job Management Tasks, System and Process Monitoring and Management, Managing Processes with ps, Sending Signals to Processes with the kill Command, Using top to Show Current System Activity, Managing Process Niceness, Scheduling Jobs, Mounting Devices, Working with Links, Creating Backups, Managing Printers, Setting Up System Logging, Setting Up Rsyslog, Common Log Files, Setting Up Logrotate	04		Online Google Meet PPTs
	Managing Software: Understanding RPM, Understanding Meta Package Handlers, Creating Your Own Repositories, Managing Repositories, Installing Software with Yum, Querying Software, Extracting Files from RPM Packages	02		Online Google Meet PPTs
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -02	**Configuring and Managing Storage:** Understanding Partitions and Logical Volumes, Creating Partitions, Creating File Systems, File Systems Overview, Creating File Systems, Changing File System Properties, Checking the File System Integrity, Mounting File Systems Automatically Through fstab, Working with Logical Volumes, Creating Logical Volumes, Resizing Logical Volumes, Working with Snapshots, Replacing Failing Storage Devices, Creating Swap Space, Working with Encrypted	04	Red Hat Enterprise Linux 6 Administration By Sander van Vugt , John Wiley and	Online Google Meet PPTs

	Volumes .		Sons	
	Connecting to the Network: Understanding NetworkManager, Working with Services and Runlevels, Configuring the Network with NetworkManager, Working with system-config-network, NetworkManager Configuration Files, Network Service Scripts, Networking from the Command Line, Troubleshooting Networking, Setting Up IPv6, Configuring SSH, Enabling the SSH Server, Using the SSH Client, Using PuTTY on Windows Machines, Configuring Key-Based SSH Authentication, Using Graphical Applications with SSH, Using SSH Port Forwarding, Configuring VNC Server Access	04		Online Google Meet PPTs
	Working with Users, Groups, and Permissions: Managing Users and Groups, Commands for User Management, Managing Passwords, Modifying and Deleting User Accounts, Configuration Files, Creating Groups, Using Graphical Tools for User, and Group Management, Using External Authentication Sources, the Authentication Process, sssd, nsswitch, Pluggable Authentication Modules, Managing Permissions, the Role of Ownership, Basic Permissions: Read, Write, and Execute, Advanced Permissions, Working with Access Control Lists, Setting Default Permissions with umask, Working with Attributes	04		Online Google Meet PPTs
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -03	**Securing Server with iptables:** Understanding Firewalls, Setting Up a Firewall with system-config-firewall, Allowing Services, Trusted Interfaces, Masquerading, Configuration Files,	04	Red Hat Enterprise Linux	Online Google Meet PPTs

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	Setting Up a Firewall with iptables, Tables, Chains, and Rules, Composition of Rule, Configuration Example, Advanced iptables Configuration, Configuring Logging, The Limit Module, Configuring NAT		6 Administration By Sander van Vugt , John Wiley and Sons	
	Setting Up Cryptographic Services: Introducing SSL, Proof of Authenticity: the Certificate Authority, Managing Certificates with openssl, Creating a Signing Request, Working with GNU Privacy Guard, Creating GPG Keys, Key Transfer, Managing GPG Keys, Encrypting Files with GPG, GPG Signing, Signing RPM Files	04		Online Google Meet PPTs
	Configuring Server for File Sharing: What is NFS? Advantages and Disadvantages of NFS, Configuring NFS4, Setting Up NFSv4, Mounting an NFS Share, Making NFS Mounts Persistent, Configuring Automount, Configuring Samba, Setting Up a Samba File Server, Samba Advanced Authentication Options, Accessing Samba Shares, Offering FTP Services.	04		Online Google Meet PPTs
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	**Configuring DNS and DHCP:** Introduction to DNS, The DNS Hierarchy, DNS Server Types, The DNS Lookup Process, DNS Zone Types, Setting Up a DNS Server, Setting Up a Cache-Only Name Server, Setting Up a Primary Name Server, Setting Up a Secondary Name Server, Understanding DHCP, Setting Up a DHCP Server	04	Red Hat Enterprise Linux 6 Administration By Sander van Vugt , John Wiley and Sons	Online Google Meet PPTs
	Setting Up a Mail Server: Using the Message Transfer Agent, the Mail Delivery Agent, the Mail User Agent, Setting Up	03		Online Google Meet PPTs

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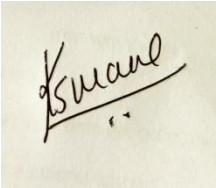
	Postfix as an SMTP Server, Working with Mutt, Basic Configuration, Internet Configuration, Configuring Dovecot for POP and IMAP			
	Configuring Apache on Red Hat Enterprise Linux: Configuring the Apache Web Server, Creating a Basic Website, Understanding the Apache Configuration Files, Apache Log Files, Working with Virtual Hosts, Securing the Web Server with TLS Certificates, Configuring Authentication, Setting Up Authentication with .htpasswd, Configuring LDAP Authentication, Setting Up MySQL	05		Online Google Meet PPTs
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	**Introducing Bash Shell Scripting:** Introduction, Elements of a Good Shell Script, Executing the Script, Working with Variables and Input, Understanding Variables, Variables, Subshells, and Sourcing, Working with Script Arguments, Asking for Input, Using Command Substitution, Substitution Operators, Changing Variable Content with Pattern Matching, Performing Calculations, Using Control Structures, Using if...then...else, Using case, Using while, Using until, Using for, Configuring booting with GRUB.	03	Red Hat Enterprise Linux 6 Administration By Sander van Vugt , John Wiley and Sons	Online Google Meet PPTs Jamboard
	High-Availability Clustering: High-Availability Clustering, The Workings of High Availability, High-Availability Requirements, Red Hat High-Availability Add-on Software, Components, Configuring Cluster-Based Services, Setting Up Bonding, Setting Up Shared Storage, Installing the Red Hat High Availability Add-On, Building the Initial State of the Cluster, Configuring Additional Cluster Properties, Configuring a	05		Online Google Meet PPTs

	Quorum Disk, Setting Up Fencing, Creating Resources and Services, Troubleshooting a Nonoperational Cluster, Configuring GFS2 File Systems			
	Setting Up an Installation Server: Configuring a Network Server as an Installation Server, Setting Up a TFTP and DHCP Server for PXE Boot, Installing the TFTP Server, Configuring DHCP for PXE Boot, Creating the TFTP PXE Server Content, Creating a Kickstart File, Using a Kickstart File to Perform an Automated, Installation, Modifying the Kickstart File with, system-config-kickstart, Making Manual Modifications to the Kickstart File	04		Online Google Meet PPTs

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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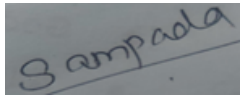

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:T.Y.BSC(I.T) DIV-C SEMESTER: **V** MONTH:AUG-DEC ACADEMIC YEAR: 2020-2021

SUBJECT:SOFTWARE PROJECT MANAGEMENT

LEARNING OBJECTIVE/S:
The learners will be able to : Apply project management concepts and techniques to an IT project. Identify issues that could lead to IT project success or failure. Explain project management in terms of the software development process. Describe the responsibilities of IT project managers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Software Project Management USIT501 Unit-1	**Introduction to Software Project Management:**Introduction, Why is Software Project Management Important? What is a Project? Software Projects versus Other Types of Project, Contract Management and Technical Project Management, Activities Covered by Software Project Management, Plans, Methods and Methodologies, Some Ways of Categorizing Software Projects, Project Charter, Stakeholders, Setting Objectives, The Business Case, Project Success and Failure, What is Management? Management Control, Project Management Life Cycle , Traditional versus Modern Project Management Practices.	5	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation, google classroom, google meet

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	Project Evaluation and Programme Management: Introduction, Business Case, Project PortfolioManagement, Evaluation of Individual Projects, Cost–benefit Evaluation Techniques, Risk Evaluation, Programme Management, Managing the Allocation of Resources within Programmes, Strategic Programme Management, Creating a Programme, Aids to Programme Management, Some Reservations about Programme Management, Benefits Management.	5		
	An Overview of Project Planning: Introduction to Step Wise Project Planning, Step 0: Select Project, Step 1: Identify Project Scope and Objectives, Step 2: Identify Project Infrastructure, Step 3: Analyse Project Characteristics, Step 4: Identify Project Products and Activities, Step 5: Estimate Effort for Each Activity, Step 6: Identify Activity Risks, Step 7: Allocate Resources, Step 8: Review/Publicize Plan, Steps 9 and 10: Execute Plan/Lower Levels of Planning	5		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		

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Software Project Management USIT501 Unit-2	**Selection of an Appropriate Project Approach:** Introduction, Build or Buy? Choosing Methodologies and Technologies, Software Processes and Process Models, Choice of Process Models, Structure versus Speed of Delivery, The Waterfall Model, The Spiral Model, Software Prototyping, Other Ways of Categorizing Prototypes, Incremental Delivery, Atern/Dynamic Systems Development Method, Rapid Application Development, Agile Methods, Extreme Programming (XP), Scrum, Lean Software Development, Managing Iterative Processes, Selecting the Most Appropriate Process Model.	5	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation, google classroom, google meet
	Software Effort Estimation: Introduction, Where are the Estimates Done? Problems with Over- and Under-Estimates, The Basis for Software Estimating, Software Effort Estimation Techniques, Bottomup Estimating, The Top-down Approach and Parametric Models, Expert Judgement, Estimating by Analogy, Albrecht Function Point Analysis, Function Points Mark II, COSMIC Full Function Points, COCOMO II: A Parametric Productivity Model, Cost Estimation, Staffing Pattern, Effect of Schedule Compression, Capers Jones Estimating Rules of Thumb.	5		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	10		
Software Project Management USIT501 Unit-3	**Activity Planning:** Introduction, Objectives of Activity Planning, When to Plan, Project Schedules, Projects and Activities, Sequencing and Scheduling Activities, Network Planning Models, Formulating a Network Model, Adding the Time Dimension, The Forward Pass, Backward Pass, Identifying the Critical Path, Activity Float, Shortening the Project Duration, Identifying Critical Activities, Activity-on-Arrow Networks.	4	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation, google classroom, google meet

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	Risk Management: Introduction, Risk, Categories of Risk, Risk Management Approaches, A Framework for Dealing with Risk, Risk Identification, Risk Assessment, Risk Planning, Risk Management, Evaluating Risks to the Schedule, Boehm‟s Top 10 Risks and Countermeasures, Applying the PERT Technique, Monte Carlo Simulation, Critical Chain Concepts.	4		
	Resource Allocation: Introduction, Nature of Resources, Identifying Resource Requirements, Scheduling Resources, Creating Critical Paths, Counting the Cost, Being Specific, Publishing the Resource Schedule, Cost Schedules, Scheduling Sequence.	3		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	11		
Software Project Management USIT501 Unit-4	**Monitoring and Control**: Introduction, Creating the Framework, Collecting the Data, Review, Visualizing Progress, Cost Monitoring, Earned Value Analysis, Prioritizing Monitoring, Getting the Project Back to Target, Change Control, Software Configuration Management (SCM).	3	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation, google classroom, google meet
	Managing Contracts: Introduction, Types of Contract, Stages in Contract Placement, Typical Terms of a Contract, Contract Management, Acceptance	2		
	Managing People in Software Environments: Introduction, Understanding Behaviour, Organizational Behaviour: A Background, Selecting the Right Person for the Job, Instruction in the Best Methods, Motivation, The Oldham–Hackman Job Characteristics Model, Stress, Stress Management, Health and Safety, Some Ethical and Professional Concerns	4		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE	9		

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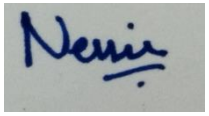
	UNIT:			
Software Project Management USIT501 Unit-5	**Working in Teams:** Introduction, Becoming a Team, Decision Making, Organization and Team Structures, Coordination Dependencies, Dispersed and Virtual Teams, Communication Genres,Communication Plans, Leadership.	3	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation, google classroom, google meet
	Software Quality : Introduction, The Place of Software Quality in Project Planning, Importance of Software Quality, Defining Software Quality, Software Quality Models, ISO 9126, Product and Process Metrics, Product versus Process Quality Management, Quality Management Systems, Process Capability Models, Techniques to Help Enhance Software Quality, Testing, Software Reliability, Quality Plans.	5		
	Project Closeout: Introduction, Reasons for Project Closure, Project Closure Process, Performing a Financial Closure, Project Closeout Report.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**10**		



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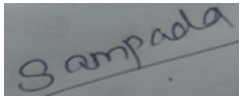

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Information Technology.

CLASS: M.Sc. SEMESTER: III MONTH: August To December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

- To get the insight of the security loopholes in every aspect of computing.
- To understand the threats and different types of attacks that can be launched on computing systems.
- To know the countermeasures that can be taken to prevent attacks on computing systems.
- To test the software against the attacks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT302d: Security Breaches and Countermeasures UNIT-IV	**Compromising Web Servers:** Concepts, attacks, attack methodology, attack tools, countermeasures, patch management, web server security tools, penetration testing. **Compromising Web Applications:** Concepts, threats, methods, tools, countermeasures, testing tools, penetration testing.	6	1. CEHv10, Certified Ethical Hacker Study Guide 2. All in One, Certified Ethical Hacker	Projector, PPT.
	Performing SQL Injection: Concepts, types, methodology, tools, techniques, countermeasures. **Compromising Wireless Networks:** Concepts, wireless encryption, threats, methodology, tools, compromising Bluetooth, countermeasures, wireless security tools, penetration testing.	6		Projector, PPT.

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PSIT302d: Security Breaches and Countermeasures UNIT-V	**Compromising Mobile Platforms:** Attack vectors, Compromising Android OS, Compromising iOS, Mobile spyware, Mobile Device Management, Mobile security, penetration testing. **Compromising IoT:** Concepts, attacks, compromising methodology, tools, countermeasures, penetration testing.	6	1. CEHv10, Certified Ethical Hacker Study Guide 2. All in One, Certified Ethical Hacker	Projector, PPT.
	Cloud Security: Concepts, Security, threats, attacks, tools, penetration testing. **Cryptography:** Concepts, email encryption, algorithms, disk encryption, tools, cryptanalysis, Public key infrastructure, countermeasures.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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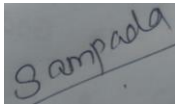

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartrak DEPARTMENT: Information Technology

CLASS: MScIT SEMESTER: III MONTH: AUG to DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

- This course aims to provide conceptual understanding of developing strong foundation in general writing, including research proposal and reports.
- It covers the technological developing skills for writing Article, Blog, E-Book, Commercial web Page design, Business Listing Press Release, E-Listing and Product Description.
- This course aims to provide conceptual understanding of innovation and entrepreneurship development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-01 **Technical Writing and Entrepreneurship Development**, Unit-3	**Creating Graphics:** The Functions of Graphics, The Characteristics of an Effective Graphic, Understanding the Process of Creating Graphics, Using Color Effectively, Choosing the Appropriate Kind of Graphic, Creating Effective Graphics for Multicultural Readers.	3	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet
	Researching Your Subject: Understanding the Differences Between Academic and Workplace Research, Understanding the Research Process, Conducting Secondary Research, Conducting Primary Research,	3	Technical Communication - Mike Markel	Laptop, PPT, Google Meet

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			Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	
	Research and Documentation: Literature Reviews, Interviewing for Information, Documenting Sources, Copyright, Paraphrasing, Questionnaires.	3	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet
	Report Components: Abstracts, Introductions, Tables of Contents, Executive Summaries, Feasibility Reports, Investigative Reports, Laboratory Reports, Test Reports, Trip Reports, Trouble Reports	3	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet
	Managing innovation within firms: Organisations and innovation, The dilemma of innovation management, Innovation dilemma in low technology sectors, Dynamic	2	Technical Communication - Mike Markel	Laptop, PPT, Google Meet

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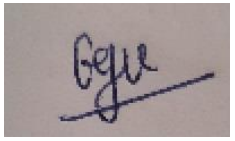
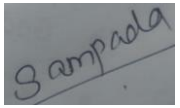
Paper-01 **Technical Writing and Entrepreneurship Development**, Unit-5	capabilities, Managing uncertainty, Managing innovation projects		Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	
	Operations and process innovation: Operations management, The nature of design and innovation in the context of operations, Process design, Process design and innovation	3	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet
	Managing intellectual property: Intellectual property, Trade secrets, An introduction to patents, Trademarks, Brand names, Copyright	2	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet
	Management of research and development: What is research and development?, R&D management and the industrial context, R&D investment and company success, Classifying R&D, R&D management and its link with	3	Technical Communication - Mike Markel	Laptop, PPT, Google Meet

	business strategy, Strategic pressures on R&D, Which business to support and how?, Allocation of funds to R&D, Level of R&D expenditure		Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	
	Managing R&D projects: Successful technology management, The changing nature of R&D management, The acquisition of external technology, Effective R&D management, The link with the product innovation process, Evaluating R&D projects.	2	Technical Communication - Mike Markel Technical Writing 101: A Real-World Guide to Planning and Writing Technical Content- Alan S. Pringle and Sarah S. O'Keefe	Laptop, PPT, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.).Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. SEMESTER: III MONTH: August-December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. understad the developing strong foundation in general writing, including research proposal and reports.
b. prepare technological developing skills for writing Article, Blog, E-Book, Commercial web Page design, Business Listing Press Release, E-Listing and Product Description.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Technical Writing And Entrepreneurship Development Unit –II	**Introduction to Content Writing:** Types of Content (Article, Blog, E-Books, Press Release, Newsletters Etc), Exploring Content Publication Channels. Distribution of your content across various channels.	4	Handbook of Technical Writing Gerald J. Alred , Charles T. Brusaw , Walter E. Oliu	Google Meet with Powerpoint Presentation
	Blog Creation: Understand the psychology behind your web traffic, Creating killing landing pages which attract users, Using Landing Page Creators, Setting up Accelerated Mobile Pages, Identifying UI UX Experience of your website or blog.	4		Google Meet with Powerpoint Presentation
	Organizing Your Information: Understanding Three Principles for Organizing Technical Information, Understanding Conventional Organizational Patterns	2		Google Meet with Powerpoint Presentation
	Emphasizing Important Information: Writing Clear, Informative Titles, Writing Clear, Informative Headings, Writing	2		Google Meet with Powerpoint Presentation

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	Clear Informative Lists, Writing Clear Informative Paragraphs.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.) Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: III MONTH: August-December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. understad the developing strong foundation in general writing, including research proposal and reports.

b. prepare technological developing skills for writing Article, Blog, E-Book, Commercial web Page design, Business Listing Press Release, E-Listing and Product Description.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Technical Writing And Entrepreneurship Development Unit –IV	**Writing Proposals:** Understanding the Process of Writing Proposals, The Logistics of Proposals, The "Deliverables" of Proposals, Persuasion and Proposals, Writing a Proposal, The Structure of the Proposal.	4	Handbook of Technical Writing Gerald J. Alred , Charles T. Brusaw , Walter E. Oliu	Google Meet with Powerpoint Presentation
	Writing Informational Reports: Understanding the Process of Writing Informational Reports, Writing Directives, Writing Field Reports, Writing Progress and Status Reports, Writing Incident Reports, Writing Meeting Minutes. **Writing Recommendation Reports:** Understanding the Role of Recommendation Reports, Using a Problem-Solving Model for Preparing Recommendation Reports, Writing Recommendation Reports.	4		Google Meet with Powerpoint Presentation
	Reviewing, Evaluating, and Testing Documents and Websites: Understanding Reviewing, Evaluating, and Testing, Reviewing Documents and Websites, Conducting Usability Evaluations, Conducting Usability Tests, Using Internet tools to	4		Google Meet with Powerpoint Presentation

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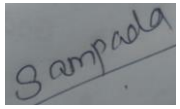
	check writing Quality, Duplicate Content Detector, What is Plagiarism?, How to avoid writing plagiarism content? **Innovation management: an introduction:** The importance of innovation, Models of innovation, Innovation as a management process. **Market adoption and technology diffusion:** Time lag between innovation and useable product, Innovation and the market , Innovation and market vision ,Analysing internet search data to help			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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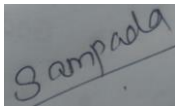

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. I.T. SEMESTER: III MONTH: August - December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
This course aims to provide conceptual understanding of developing strong foundation in general writing, including research proposal and reports.
It covers the technological developing skills for writing Article, Blog, E-Book, Commercial web Page design, Business Listing Press Release, E-Listing and Product Description.
This course aims to provide conceptual understanding of innovation and entrepreneurship development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 PSIT301 Technical Writing and Entrepreneurship Development Unit 1	Introduction to Technical Communication: What Is Technical Communication? The Challenges of Producing Technical Communication, Characteristics of a Technical Document, Measures of Excellence in Technical Documents, Skills and Qualities Shared by Successful Workplace Communicators, How Communication Skills and Qualities Affect Your Career? Understanding Ethical and Legal Considerations: A Brief Introduction to Ethics, Your Ethical Obligations, Your Legal Obligations, The Role of Corporate Culture in Ethical and Legal Conduct, Understanding Ethical and Legal Issues Related to Social Media, Communicating Ethically Across Cultures, Principles for Ethical Communication Writing Technical Documents: Planning, Drafting, Revising, Editing, Proofreading Writing Collaboratively: Advantages and Disadvantages	12	Technical Communication Mike Markel	Power point presentation through google meet

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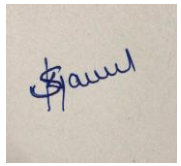
	of Collaboration, Managing Projects, Conducting Meetings, Using Social Media and Other Electronic Tools in Collaboration, Importance of Word Press Website, Gender and Collaboration, Culture and Collaboration.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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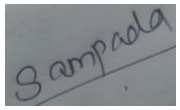

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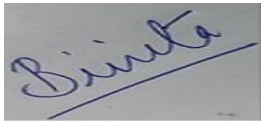
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT
CLASS: M. Sc. I. T SEMESTER: III MONTH: July-November ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to:

a. To get the insight of the security loopholes in every aspect of computing.
b. To understand the threats and different types of attacks that can be launched on computing systems.
c. To know the countermeasures that can be taken to prevent attacks on computing systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Security Breaches and Countermeasures Unit -I	**Introduction to Security Breaching**: Overview of Information Security, Threats and Attack vectors, Concepts of Hacking – Ethical and Unethical, Information Security Controls, Concepts of penetration Testing, Information Security Laws and Standards.	3	CEHv10, Certified Ethical Hacker Study Guide by Ric Messier	PowerPoint presentation through Google Meet
	Evaluation Security of IT Organisation: Concepts, Methodology, Tools, Countermeasures, Penetration Testing.	3		PowerPoint presentation through Google Meet
	Network Scanning: Concepts, Scanning beyond IDS and firewalls, Tools, Banner Grabbing, Scanning Techniques, Network Diagrams, penetration testing.	3		PowerPoint presentation through Google Meet
	Enumeration: Concepts, Different types of enumeration: Netbios, SNMP, LDAP, NTP, SMTP, DNS, other enumeration techniques, Countermeasures, Penetration Testing	3		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

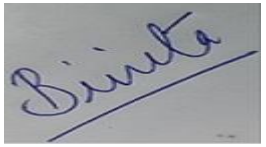
CLASS: M. Sc. I. T SEMESTER: III MONTH: July-November ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

d. To get the insight of the security loopholes in every aspect of computing.
e. To understand the threats and different types of attacks that can be launched on computing systems.
f. To know the countermeasures that can be taken to prevent attacks on computing systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Security Breaches and Countermeasures Unit -II	**Analysis of Vulnerability:** Concepts, Assessment Solutions, Scoring Systems, Assessment Tools, Assessment Reports.	3	CEHv10, Certified Ethical Hacker Study Guide by Ric Messier	PowerPoint presentation through Google Meet
	Breaching System Security: Concepts, Cracking passwords, Escalating privileges, Executing Applications, Hiding files, covering tracks, penetration testing.	3		PowerPoint presentation through Google Meet
	Threats due to malware: Concepts, Malware Analysis, Trojan concepts, countermeasures, Virus and worm concepts, anti-malware software, penetration testing.	3		PowerPoint presentation through Google Meet
	Network Sniffing: Concepts, countermeasures, sniffing techniques, detection techniques, tools, penetration testing.	3		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

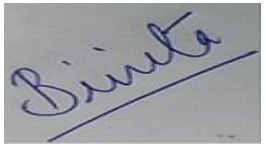
CLASS: M. Sc. I. T SEMESTER: III MONTH: July-November ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

a. To get the insight of the security loopholes in every aspect of computing.
b. To understand the threats and different types of attacks that can be launched on computing systems.
c. To know the countermeasures that can be taken to prevent attacks on computing systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Security Breaches and Countermeasures Unit -III	**Social Engineering:** Concepts, Impersonation on networking sites, Techniques, Identity theft, Insider threats, countermeasures, Pen testing.	3	CEHv10, Certified Ethical Hacker Study Guide by Ric Messier	PowerPoint presentation through Google Meet
	Denial of Service and Distributed Denial of service: Concepts, techniques, botnets, attack tools, countermeasures, protection tools, penetration testing.	3		PowerPoint presentation through Google Meet
	Hijacking an active session: Concepts, tools, application level session hijacking, countermeasures, network level session hijacking, penetration testing.	3		PowerPoint presentation through Google Meet
	Evasion of IDS, Firewalls and Honeypots: Introduction and concepts, detecting honeypots, evading IDS, IDS and Firewall evasion countermeasures, evading firewalls, penetration testing.	3		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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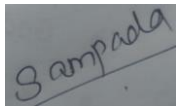

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.IT

SEMESTER: I MONTH: OCTOBER TO JANUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Apply principles of Data Science to the analysis of business problems.
- Use data mining software to solve real-world problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT102 Data Science **UNIT 2**	Three Management Layers: Operational Management Layer,Processing-Stream Definition and Management, Audit, Balance, and Control Layer, Balance, Control, Yoke Solution, Cause-and-Effect, Analysis System, Functional Layer, Data Science Process Retrieve Superstep : Data Lakes, Data Swamps, Training the Trainer Model, Understanding the Business Dynamics of the Data Lake, Actionable Business Knowledge from Data Lakes, Engineering a Practical Retrieve Superstep, Connecting to Other Data Sources,	12	1.Practical Data Science Andreas François Vermeulen APress 2018 2. Principles of Data Science Sinan Ozdemir PACKT 2016 3. Data Science from Scratch Joel Grus O'Reilly 2015	Powerpoint

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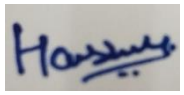
PSIT102 **Data Science** **UNIT 3**	Assess Superstep: Assess Superstep, Errors, Analysis of Data, Practical Actions, Engineering a Practical Assess Superstep,	12	1. Practical Data Science Andreas François Vermeulen APress 2018 2. Principles of Data Science Sinan Ozdemir PACKT 2016 3. Data Science from Scratch Joel Grus O'Reilly 2015	Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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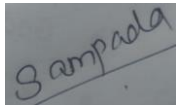

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Late Shri. Vishnu Waman Thakur Charitable Trust
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Vidhya Dayanand Patil College of Arts
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.IT

SEMESTER: III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- To make the students aware about the automation today in the industry.
- To make the students aware about the tools used for automation.
- To help the students automate a complete process

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT304a Robotic Process Automation **UNIT 1**	Robotic Process Automation: Scope and techniques of automation, About UiPath Record and Play: UiPath stack, Downloading and installing UiPath Studio, Learning UiPath Studio, Task recorder, Step-by-step examples using the recorder.	12	Learning Robotic Process Automation Alok Mani Tripathi Packt 1st 2018	Powerpoint

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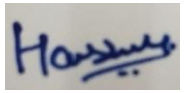
PSIT304a Robotic Process Automation **UNIT 3**	Taking Control of the Controls : Finding and attaching windows, Finding the control, Techniques for waiting for a control, Act on controls – mouse and keyboard activities, Working with UiExplorer, Handling events, Revisit recorder, Screen Scraping, When to use OCR, Types of OCR available, How to use OCR, Avoiding typical failure points Tame that Application with Plugins and Extensions: Terminal plugin, SAP automation, Java plugin, Citrix automation, Mail plugin, PDF plugin, Web integration, Excel and Word plugins, Credential management, Extensions – Java, Chrome, Firefox, and Silverlight	12	Learning Robotic Process Automation Alok Mani Tripathi Packt 1st 2018	Powerpoint
PSIT304a Robotic Process Automation **UNIT 5**	Managing and Maintaining the Code: Project organization, Nesting workflows, Reusability of workflows, Commenting techniques, State Machine, When to use Flowcharts, State Machines, or Sequences, Using config files and examples of a config file, Integrating a TFS server Deploying and Maintaining the Bot: Publishing using publish utility, Overview of Orchestration Server, Using Orchestration Server to control bots, Using Orchestration Server to deploy bots, License management, Publishing and managing updates	12	Learning Robotic Process Automation Alok Mani Tripathi Packt 1st 2018	Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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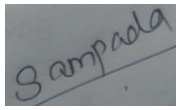

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: M.Sc.(IT) Part -1 SEMESTER:SEM -1 MONTH: OCT-JAN ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- To learn how to use Cloud Services.
- To implement Virtualization.
- To implement Task Scheduling algorithms.
- Apply Map-Reduce concept to applications.
- To build Private Cloud.
- Broadly educate to know the impact of engineering on legal and societal issues involved.

PSIT103 Cloud Computing ● UNIT 1	**Introduction to Cloud Computing**: Introduction, Historical developments, Building Cloud Computing Environments,	3	Mastering Cloud Computing Foundations and Applications Programming Rajkumar Buyya, Christian Vecchiola, S. Thamarai Selvi Elsevier – 2013	Laptop, power point, jamboard
	Principles of Parallel and Distributed Computing: Eras of Computing, Parallel v/s distributed computing, Elements of Parallel Computing, Elements of distributed computing, Technologies for distributed computing. Data Is It Anyway? Web Thinking for Connected Devices, Small Pieces, Loosely Joined, First-Class Citizens on The Internet, Graceful Degradation, Affordances.	5		
	Virtualization: Introduction, Characteristics of virtualized environments, Taxonomy of virtualization techniques, Virtualization and cloud computing, Pros	4		

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	and cons of virtualization, Technology examples. Logical Network Perimeter, Virtual Server, Cloud Storage Device, Cloud usage monitor, Resource replication, Ready-made environment.			
PSIT103 Cloud Computing UNIT 2	**Cloud Computing Architecture:** Introduction, Fundamental concepts and models, Roles and boundaries, Cloud Characteristics, Cloud Delivery models, Cloud Deployment models, Economics of the cloud, Open challenges.	4	Mastering Cloud Computing Foundations and Applications Programming Rajkumar Buyya, Christian Vecchiola, S. Thamarai Selvi Elsevier – 2013	Laptop, power point, jamboard
	Fundamental Cloud Security: Basics, Threat agents, Cloud security threats, additional considerations	4		
	Platforms and New Developments: Amazon Web Services, Google App Engine, Microsoft Azure	4		
PSIT103 Cloud Computing UNIT 3	**Specialized Cloud Mechanisms:** Automated Scaling listener, Load Balancer, SLA monitor, Pay-per-use monitor, Audit monitor, fail over system, Hypervisor, Resource Centre, Multidevice broker, State Management Database.	5	Mastering Cloud Computing Foundati and Applications Programming Rajku Buyya, Christian Vecchiola, S. Thama Selvi Elsevier –2013	Laptop, power point, jamboard
	Cloud Management Mechanisms: Remote administration system, Resource Management System, SLA Management System, Billing Management System	3		
	Cloud Security Mechanisms: Encryption, Hashing, Digital Signature, Public Key Infrastructure (PKI), Identity and Access Management (IAM), Single 12 11 Sign-On (SSO), Cloud-Based Security Groups, Hardened Virtual	4		

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	Server Images			
PSIT103 Cloud Computing UNIT 4	**Fundamental Cloud Architectures:** Workload Distribution Architecture, Resource Pooling Architecture, Dynamic Scalability Architecture, Elastic Resource Capacity Architecture, Service Load Balancing Architecture, Cloud Bursting Architecture, Elastic Disk Provisioning Architecture, Redundant Storage Architecture	6	Mastering Cloud Computing Foundati and Applications Programming Rajku Buyya, Christian Vecchiola, S. Thama Selvi Elsevier –2013	Laptop, power point, jamboard
	Advanced Cloud Architectures: Hypervisor Clustering Architecture, Load Balanced Virtual Server Instances Architecture, Non-Disruptive Service Relocation Architecture, Zero Downtime Architecture, Cloud Balancing Architecture, Resource Reservation Architecture, Dynamic Failure Detection and Recovery Architecture, Bare-Metal Provisioning Architecture, Rapid Provisioning Architecture, Storage Workload Management Architecture	6		
PSIT103 Cloud Computing UNIT 5	**Cloud Delivery Model Considerations:** Cloud Delivery Models: The Cloud Provider Perspective, Cloud Delivery Models: The Cloud Consumer Perspective	5	Mastering Cloud Computing Foundati and Applications Programming Rajku Buyya, Christian Vecchiola, S. Thama Selvi Elsevier –2013	Laptop, power point, jamboard
	Cost Metrics and Pricing Models: Business Cost Metrics, Cloud Usage Cost Metrics, Cost Management Considerations,.	4		
	Service Quality Metrics and SLAs: Service Quality Metrics, SLA Guidelines	3		

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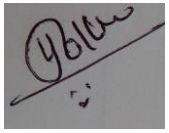
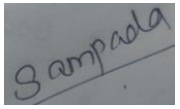
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shilpa Rodrigues **DEPARTMENT**: Information Technology **CLASS**: MSc.IT(Part II)

SEMESTER: **III** **MONTH**: Aug - Dec **ACADEMIC YEAR**: 2020-21

LEARNING OBJECTIVES:
The learners will be able to:

- To make the students aware about the automation today in the industry.
- To make the students aware about the tools used for automation.
- To help the students automate a complete process

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT304a , Unit 2 , Robotic Process Automation.	**Sequence, Flowchart, and Control Flow:** Sequencing the workflow, Activities, Control flow, various types of loops, and decision making, Step-by-step example using Sequence and Flowchart, Step-by-step example using Sequence and Control flow	06	Learning Robotic Process Automation, Alok Mani Tripathi	Power Point Presentation, Google meet
	Data Manipulation: Variables and scope, Collections, Arguments – Purpose and use, Data table usage with examples, Clipboard management, File operation with step-by-step example, CSV/Excel to data table and vice versa (with a step-	06	Learning Robotic Process Automation,	Power Point Presentation, Google meet

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	by-step example)		Alok Mani TripathiA. Hanneman, Mark Riddle	
PSIT304a , Unit 4 , Robotic Process Automation.	**Handling User Events and Assistant Bots:** What are assistant bots?, Monitoring system event triggers, Hotkey trigger, Mouse trigger, System trigger ,Monitoring image and element triggers, An example of monitoring email, Example of monitoring a copying event and blocking it, Launching an assistant bot on a keyboard event	07	Learning Robotic Process Automation, Alok Mani Tripathi	Power Point Presentation, Google meet
	Exception Handling, Debugging, and Logging: Exception handling, Common exceptions and ways to handle them, Logging and taking screenshots, Debugging techniques, Collecting crash dumps, Error reporting	05	Learning Robotic Process Automation, Alok Mani Tripathi	Power Point Presentation, Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **IT** CLASS: **M.Sc. (IT)**

SEMESTER: **I** MONTH: **October-January** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able:

- Soft computing concepts like fuzzy logic, neural networks and genetic algorithm, where Artificial Intelligence is mother branch of all.
- All these techniques will be more effective to solve the problem efficiently

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT104 **Paper IV** **Soft Computing Techniques** **UNIT I**	Introduction of soft computing, soft computing vs. hard computing, various types of soft computing techniques, Fuzzy Computing, Neural Computing, Genetic Algorithms, Associative Memory, Adaptive Resonance Theory, Classification, Clustering, Bayesian Networks, Probabilistic reasoning, applications of soft computing.	12	Artificial Intelligence and Soft Computing, Anandita Battacharya Principles of Soft computing S.N.Sivanandam S.N.Deepa	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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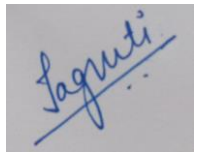
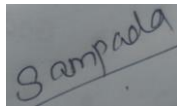
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT104 **Paper IV** **Soft Computing Techniques** **UNIT II**	Artificial Neural Network: Fundamental concept, Evolution of Neural Networks, Basic Models, McCulloh-Pitts Neuron, Linear Separability, Hebb Network. Supervised Learning Network: Perceptron Networks, Adaptive Linear Neuron, Multiple Adaptive Linear Neurons, Backpropagation Network, Radial Basis Function, Time Delay Network, Functional Link Networks, Tree Neural Network. Associative Memory Networks: Training algorithm for pattern Association, Autoassociative memory network, hetroassociative memory network, bi-directional associative memory, Hopfield networks, iterative autoassociative memory networks, temporal associative memory networks.	12	Artificial Intelligence and Soft Computing, Anandita Battacharya Principles of Soft computing S.N.Sivanandam S.N.Deepa	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **IT** CLASS: **M.Sc. (IT)**

SEMESTER: **III** MONTH: **August - December** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able:

- Understand the key issues in Machine Learning and its associated applications in intelligent business and scientific computing.
- Acquire the knowledge about classification and regression techniques where a learner will be able to explore his skill to generate data base knowledge using the prescribed techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT3P3a **Paper III** **Machine Learning** **UNIT I**	**Introduction:** Machine learning, Examples of Machine Learning Problems, Structure of Learning, learning versus Designing, Training versus Testing, Characteristics of Machine learning tasks, Predictive and descriptive tasks, Machine learning Models: Geometric Models, Logical Models, Probabilistic Models. Features: Feature types, Feature Construction and Transformation, Feature Selection.	12	Machine Learning: The Art and Science of Algorithms that Make Sense of Data Peter Flach	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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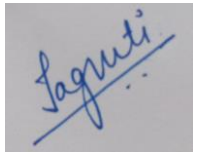
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT3P3a **Paper III** **Machine Learning** **UNIT II**	**Classification and Regression: Classification:** Binary Classification- Assessing Classification performance, Class probability Estimation Assessing class probability Estimates, Multiclass Classification. **Regression**: Assessing performance of Regression- Error measures, Overfitting- Catalysts for Overfitting, Case study of Polynomial Regression. **Theory of Generalization:** Effective number of hypothesis, Bounding the Growth function, VC Dimensions, Regularization theory.	12	Machine Learning: The Art and Science of Algorithms that Make Sense of Data Peter Flach	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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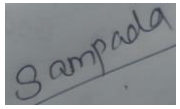

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**MSC(IT)**_____ SEMESTER: ____**I**_____ MONTH: _____ **OCTOBER-JANUARY** _____ ACADEMIC YEAR: _____**2020-2021**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

- **Understand Soft computing concepts like fuzzy logic, neural networks and genetic algorithm, where Artificial Intelligence is mother branch of all.**
- **All these techniques will be more effective to solve the problem efficiently. Identify and describe soft computing techniques and their roles in building intelligent machines.**
- **Recognize the feasibility of applying a soft computing methodology or a particular problem**
- **Apply fuzzy logic and reasoning to handle uncertainty and solve engineering problems**
- **Apply genetic algorithms to combinatorial optimization problems**
- **Apply neural networks for classification and regression problems**
- **Effectively use existing software tools to solve real problems using a soft computing approach**
- **Evaluate and compare solutions by various soft computing approaches for a given problem.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT104 Soft Computing Techniques **Unit No -03**	UnSupervised Learning Networks: Fixed weight competitive nets, Kohonen self-organizing feature maps, learning vectors quantization, counter propogation networks, adaptive resonance theory networks. Special Networks: Simulated annealing, Boltzman machine, Gaussian Machine, Cauchy Machine, Probabilistic neural net, cascade correlation network, cognition network, neo-cognition network, cellular neural network, optical neural network**.** Third Generation Neural Networks: Spiking Neural networks, convolutional neural networks, deep learning neural networks, extreme learning machine model.	05 05 02	Principles of Soft computing S.N.Sivanandam S.N.Deepa Wiley 3Rd 2019	Online Google Meet PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	Introduction to Fuzzy Logic, Classical Sets and Fuzzy sets: Classical sets, Fuzzy sets. Classical Relations and Fuzzy Relations: Cartesian Product of relation, classical relation, fuzzy relations, tolerance and equivalence relations, non-iterative fuzzy sets. Membership Function: features of the membership functions, fuzzification, methods of membership value assignments. Defuzzification: Lambda-cuts for fuzzy sets, Lambda-cuts for fuzzy relations, Defuzzification methods.	02 03 02 02	Principles of Soft computing S.N.Sivanandam S.N.Deepa Wiley 3Rd 2019	Online Google Meet PPts.

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	Fuzzy Arithmetic and Fuzzy measures: fuzzy arithmetic, fuzzy measures, measures of fuzziness, fuzzy integrals.	03		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	Fuzzy Rule base and Approximate reasoning: Fuzzy proportion, formation of rules, decomposition of rules, aggregation of fuzzy rules, fuzzy reasoning, fuzzy inference systems,Fuzzy logic control systems, control system design, architecture and operation of FLC system, FLC system models and applications of FLC System.	03	Principles of Soft computing S.N.Sivanandam S.N.Deepa Wiley 3Rd 2019	Online Google Meet PPts.
	Genetic Algorithm: Biological Background, Traditional optimization and search techniques, genetic algorithm and search space, genetic algorithm vs. traditional algorithms, basic terminologies, simple genetic algorithm, general genetic algorithm, operators in genetic algorithm, stopping condition for genetic algorithm flow, constraints in genetic algorithm, problem solving using genetic algorithm, the schema theorem, classification of genetic algorithm, Holland classifier systems, genetic programming, advantages and limitations and applications of genetic algorithm.	06		
	Differential Evolution Algorithm, Hybrid soft computing techniques – neuro – fuzzy hybrid, genetic neuro-hybrid systems, genetic fuzzy hybrid and fuzzy genetic hybrid systems.	03		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.).Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. SEMESTER: I MONTH: September-January ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Understand the key technologies in data science and business analytics: data mining, machine learning, visualization techniques, predictive modeling, and statistics.
b. Practice problem analysis and decision-making.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Data Science Unit –I	**Data Science Technology Stack:** Rapid Information Factory Ecosystem, Data Science Storage Tools, Data Lake, Data Vault, DataWarehouse Bus Matrix, Data Science Processing Tools ,Spark, Mesos,Akka , Cassandra, Kafka, Elastic Search, R ,Scala, Python, MQTT, The Future	4	Practical Data Science Andreas François Vermeulen	Powerpoint presentation through Google Meet
	Layered Framework: Definition of Data Science Framework, Cross-Industry Standard Process for Data Mining (CRISP-DM), Homogeneous Ontology for Recursive Uniform Schema, The TopLayers of a Layered Framework, Layered Framework for High-LevelData Science and Engineering	4		Powerpoint presentation through Google Meet
	Business Layer: Business Layer, Engineering a Practical BusinessLayer	2		Powerpoint presentation through Google Meet
	Utility Layer: Basic Utility Design, Engineering a Practical Utility Layer	2		Powerpoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.) Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: I MONTH: September-January ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. understand the key technologies in data science and business analytics: data mining, machine learning, visualization techniques, predictive modeling, and statistics.
.b. Practice problem analysis and decision-making.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Data Science Unit –II	**Three Management Layers:** Operational Management Layer, Processing-Stream Definition and Management, Audit, Balance, andControl Layer, Balance, Control, Yoke Solution, Cause-and-Effect, Analysis System, Functional Layer, Data Science Process	6	Practical Data Science Andreas François Vermeulen	Powerpoint presentation through Google Meet
	Retrieve Superstep : Data Lakes, Data Swamps, Training the Trainer Model, Understanding the Business Dynamics of the Data Lake, Actionable Business Knowledge from Data Lakes, Engineering a Practical Retrieve Superstep, Connecting to Other Data Sources,	6		Powerpoint presentation through Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.) Sampada Deshmukh DEPARTMENT: IT

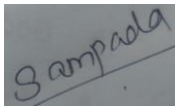
CLASS: Msc. I. T SEMESTER: I MONTH: September-January ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. understand the key technologies in data science and business analytics: data mining, machine learning, visualization techniques, predictive modeling, and statistics.
.b. Practice problem analysis and decision-making.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Data Science Unit –V	**Transform Superstep:** Univariate Analysis, Bivariate Analysis, Multivariate Analysis, Linear Regression, Logistic Regression, Clustering Techniques, ANOVA, Principal Component Analysis (PCA), Decision Trees, Support Vector Machines, Networks, Clusters, and Grids, Data Mining, Pattern Recognition, Machine Learning, Bagging Data,Random Forests, Computer Vision (CV) , Natural Language Processing (NLP), Neural Networks, TensorFlow.	9	Practical Data Science Andreas François Vermeulen	Powerpoint presentation through Google Meet
	Organize and Report Supersteps : Organize Superstep, Report Superstep, Graphics, Pictures, Showing the Difference	3		Powerpoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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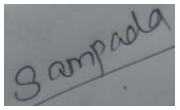

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartrak DEPARTMENT: Information Technology

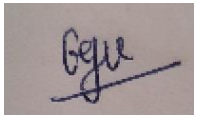
CLASS: MScIT SEMESTER: III MONTH: SEPT to DEC ACADEMIC YEAR: 2020-2021

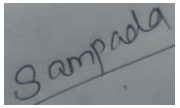
LEARNING OBJECTIVE/S:

- To be able to conduct business research with an understanding of all the latest theories.
- To develop the ability to explore research techniques used for solving any real world or innovate problem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-01 Research in Computing, Unit-1	**Introduction:** Role of Business Research, Information Systems and Knowledge Management, Theory Building, Organization ethics and Issues	12	Business Research Methods-- William G.Zikmund, B.J Babin, J.C. Carr,	Laptop, PPT, Google Meet
Paper-01 Research in Computing, Unit-2	**Beginning Stages of Research Process:** Problem definition, Qualitative research tools, Secondary data research	12	Business Research Methods-- William G.Zikmund, B.J Babin, J.C. Carr,	Laptop, PPT, Google Meet
Paper-01 Research in Computing, Unit-3	**Research Methods and Data Collection:** Survey research, communicating with respondents, Observation methods, Experimental research	12	Business Research Methods-- William G.Zikmund, B.J Babin, J.C. Carr,	Laptop, PPT, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF 

SIGNATURE OF THE H.O.D. 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. BRIJESH Y JOSHI DEPARTMENT: Information Technology

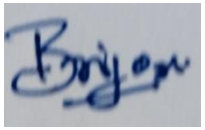
CLASS: M.Sc.IT SEMESTER: I MONTH: SEPT to DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

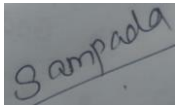
- To be able to conduct business research with an understanding of all the latest theories.
- To develop the ability to explore research techniques used for solving any real world or innovate problem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-01 Research in Computing, Unit-4	Measurement Concepts, Sampling and Field work: Levels of Scale measurement, attitude measurement, questionnaire design, sampling designs and procedures, determination of sample size	12	Business Research Methods-- William G.Zikmund, B.J Babin, J.C. Carr,	Laptop, PPT, Google Meet
Paper-01 Research in Computing, Unit-5	Data Analysis and Presentation: Editing and Coding, Basic Data Analysis, Univariate Statistical Analysis and Bivariate Statistical analysis and differences between two variables. Multivariate Statistical Analysis.	12	Business Research Methods-- William G.Zikmund, B.J Babin, J.C. Carr,	Laptop, PPT, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



SIGNATURE OF THE STAFF



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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**MSC(IT)**_____ SEMESTER: ____**III**_____ MONTH: _____ **AUGUST-DECEMBER** _____ ACADEMIC YEAR: _____**2020-2021**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

- Understanding Human learning aspects.
- Understanding primitives in learning process by computer.
- Understanding nature of problems solved with Machine Learning
- Understand the key issues in Machine Learning and its associated applications in intelligent business and scientific computing.
- Acquire the knowledge about classification and regression techniques where a learner will be able to explore his skill to generate data base knowledge using the prescribed techniques.
- Understand and implement the techniques for extracting the knowledge using machine learning methods.
- Achieve adequate perspectives of big data analytics in various applications like recommender systems, social media applications etc.
- Understand the statistical approach related to machine learning. He will also Apply the algorithms to a real-world problem, optimize the models learned and report on the expected accuracy that can be achieved by applying the models.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Elective 2 PSIT303a Machine Learning **Unit No -03**	**Linear Models:** Least Squares method, Multivariate Linear Regression, Regularized Regression, Using Least Square regression for Classification. Perceptron, Support Vector Machines, Soft Margin SVM, Obtaining probabilities from Linear classifiers, Kernel methods for non-Linearity.	12	Machine Learning: The Art and Science of Algorithms that Make Sense of Data Peter Flach Cambridge University Press 2012	Online Google Meet PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	**Logic Based and Algebraic Model: Distance Based Models:** Neighbours and Examples, Nearest Neighbours Classification, Distance based clustering-K means Algorithm, Hierarchical clustering, **Rule Based Models:** Rule learning for subgroup discovery, Association rule mining. **Tree Based Models:** Decision Trees, Ranking and Probability estimation Trees, Regression trees, Clustering Trees.	06 03 03	Machine Learning: The Art and Science of Algorithms that Make Sense of Data Peter Flach Cambridge University Press 2012	Online Google Meet PPts.

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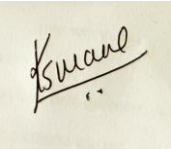
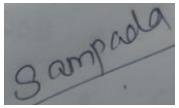
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	Probabilistic Model: Normal Distribution and Its Geometric Interpretations, Naïve Bayes Classifier, Discriminative learning with Maximum likelihood, Probabilistic Models with Hidden variables: Estimation-Maximization Methods, Gaussian Mixtures, and Compression based Models. **Trends In Machine Learning :** Model and Symbols- Bagging and Boosting, Multitask learning, Online learning and Sequence Prediction, Data Streams and Active Learning, Deep Learning, Reinforcement Learning.	07 05	Machine Learning: The Art and Science of Algorithms that Make Sense of Data Peter Flach Cambridge University Press 2012	Online Google Meet PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: MScIT SEMESTER: IV MONTH: JAN to APR ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

- To provide conceptual understanding of the function of Blockchain as a method of securing distributed ledgers, how consensus on their contents is achieved, and the new applications that they enable.
- To cover the technological underpinnings of blockchain operations as distributed data structures and decision-making systems, their functionality and different architecture types.
- To provide a critical evaluation of existing "smart contract" capabilities and platforms, and examine their future directions, opportunities, risks and challenges.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-01 **Block Chain**, Unit-3	**Hyperledger:** Overview, Fabric, composer, installing hyperledger fabric and composer, deploying, running the network, error troubleshooting.	6	Beginning Blockchain A Beginner's Guide to Building Blockchain Solutions-- Bikramaditya Singhal, Gautam Dhameja, Priyansu Sekhar Panda	Laptop, PPT, Google Meet
	Smart Contracts and Tokens: EVM as Back End, Assets Backed by Anything, Cryptocurrency Is a Measure of Time, Function of Collectibles in Human Systems, Platforms for High-Value Digital Collectibles, Tokens as Category of Smart Contract, Creating a Token, Deploying the Contract, Playing with Contracts.	6	Beginning Blockchain A Beginner's Guide to Building Blockchain Solutions-- Bikramaditya Singhal, Gautam Dhameja, Priyansu Sekhar	Laptop, PPT, Google Meet

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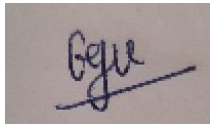
			Panda	
Paper-01 **Block Chain**, Unit-4	**Mining Ether:** Why? Ether's Source, Defining Mining, Difficulty, Self-Regulation, and the Race for Profit, How Proof of Work Helps Regulate Block Time, DAG and Nonce, Faster Blocks, Stale Blocks, Difficulties, Ancestry of Blocks and Transactions, Ethereum and Bitcoin, Forking, Mining, Geth on Windows, Executing Commands in the EVM via the Geth Console, Launching Geth with Flags, Mining on the Testnet, GPU Mining Rigs, Mining on a Pool with Multiple GPUs.	6	Beginning Blockchain A Beginner's Guide to Building Blockchain Solutions-- Bikramaditya Singhal, Gautam Dhameja, Priyansu Sekhar Panda	Laptop, PPT, Google Meet
	Cryptoecnomics: Introduction, Usefulness of cryptoeconomics, Speed of blocks, Ether Issuance scheme, Common Attack Scenarios.	6	Beginning Blockchain A Beginner's Guide to Building Blockchain Solutions-- Bikramaditya Singhal, Gautam Dhameja, Priyansu Sekhar Panda	Laptop, PPT, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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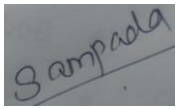

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.).Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. SEMESTER: IV MONTH: February-May ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. understand of the function of Blockchain as a method of securing distributed ledgers, how consensus on their contents is achieved, and the new applications that they enable.
b. To cover the technological underpinnings of blockchain operations as distributed data structuresand decision-making systems, their functionality and different architecture types. C.To provide a critical evaluation of existing "smart contract" capabilities and platforms, and examine their future directions, opportunities, risks and challenges.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Blockchain Unit –I	Blockchain: Introduction, History, Centralised versus Decentralised systems, Layers of blockchain, Importance of blockchain, Blockchain uses and use cases.	4	Beginning BlockchainA Beginner's Guide to Building Blockchain Solutions Bikramaditya Singhal, Gautam Dhameja,Priyansu Sekhar Panda	Powerpoint presentation through Google Meet
	Working of Blockchain: Blockchain foundation, Cryptography, Game Theory, Computer Science Engineering, Properties of blockchain solutions, blockchain transactions, distributed consensus mechanisms, Blockchain mechanisms, Scaling blockchain	4		Powerpoint presentation through Google Meet
	Working of Bitcoin: Money, Bitcoin, Bitcoin blockchain, bitcoin network, bitcoin scripts, Full Nodes and SVPs, Bitcoin wallets.	4		Powerpoint presentation through Google Meet
				Powerpoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.) Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: IV MONTH: February-May ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. understand of the function of Blockchain as a method of securing distributed ledgers, how consensus on their contents is achieved, and the new applications that they enable.
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Blockchain Unit –II	Ethereum:three parts of blockchain, Ether as currency and commodity, Building trustlesssystems, Smart contracts, Ethereum Virtual Machine, The Mist browser, Wallets as a Computing Metaphor, The Bank Teller Metaphor, Breaking with Banking History, How Encryption Leads to Trust, System Requirements, Using Parity with Geth, Anonymity in Cryptocurrency, Central Bank Network, Virtual Machines, EVM Applications, State Machines, Guts of the EVM, Blocks, Mining's Place in the State Transition Function, Renting Time on the EVM, Gas, Working with Gas, Accounts, Transactions, and Messages, Transactionsand Messages, Estimating Gas Fees for Operations, Opcodes in the EVM.	6	Beginning BlockchainA Beginner's Guide to Building Blockchain Solutions Bikramaditya Singhal, Gautam Dhameja,Priyansu Sekhar Panda	Powerpoint presentation through Google Meet
	Solidity Programming: Introduction,Global Banking Made Real, Complementary Currency, Programming the EVM, Design Rationale, Importance of Formal Proofs, Automated Proofs, Testing, Formatting Solidity Files, Reading Code, Statements and Expressions in Solidity,	6		Powerpoint presentation through Google meet

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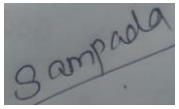
	Value Types, Global Special Variables, Units, and Functions,			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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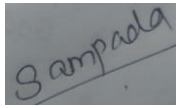

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. I.T. SEMESTER: IV MONTH: February-April ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

- To provide conceptual understanding of the function of Blockchain as a method of securing distributed ledgers, how consensus on their contents is achieved, and the new applications that they enable.
- To cover the technological underpinnings of blockchain operations as distributed data structures and decision-making systems, their functionality and different architecture types.
- To provide a critical evaluation of existing "smart contract" capabilities and platforms, and examine their future directions, opportunities, risks and challenges.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 PSIT401 Blockchain Unit 5	Blockchain Application Development: Decentralized Applications, Blockchain Application Development, Interacting with the Bitcoin Blockchain, Interacting Programmatically with Ethereum—Sending Transactions, Creating a Smart Contract, Executing Smart Contract Functions, Public vs. Private Blockchains, Decentralized Application Architecture, Building an Ethereum DApp: The DApp, Setting Up a Private Ethereum Network, Creating the Smart Contract, Deploying the Smart Contract, Client Application, DApp deployment: Seven Ways to Think About Smart Contracts, Dapp Contract Data Models, EVM back-end and front-end communication, JSON-RPC, Web 3, JavaScript API, Using Meteor with the EVM, Executing Contracts in the Console, Recommendations for Prototyping, Third-Party Deployment Libraries, Creating Private Chains.	12	Blockchain Enabled Applications Vikram Dhillon David Metcalf Max Hooper	Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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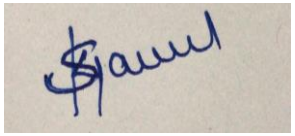

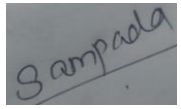

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. I.T. SEMESTER: II MONTH: February-April ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
To understand the state-of-the-art in network protocols, architectures and applications.
· Analyze existing network protocols and networks.
· Develop new protocols in networking
· To understand how networking research is done
· To investigate novel ideas in the area of Networking via term-long research projects.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 PSIT202 Modern Networking Unit 2	Software-Defined Networks SDN: Background and Motivation, Evolving Network Requirements Demand Is Increasing,Supply Is IncreasingTraffic Patterns Are More ComplexTraditional Network Architectures are Inadequate, The SDN Approach Requirements SDN Architecture Characteristics of SoftwareDefined Networking, SDN- and NFV-Related Standards StandardsDeveloping Organizations Industry Consortia Open Development Initiatives, SDN Data Plane and OpenFlow SDN Data Plane, Data Plane Functions Data Plane Protocols OpenFlow Logical Network Device Flow Table Structure Flow Table Pipeline, The Use of Multiple Tables Group Table OpenFlow Protocol, SDN Control Plane SDN Control Plane Architecture Control Plane Functions, Southbound Interface Northbound InterfaceRouting, ITU-T Model, OpenDaylight OpenDaylight Architecture OpenDaylight Helium, REST REST Constraints Example REST API, Cooperation and Coordination Among Controllers, Centralized Versus Distributed Controllers, HighAvailability Clusters Federated SDN Networks, Border Gateway Protocol Routing	12	SDN and NFV Simplified A Visual Guide to Understanding Software Defined Networks and Network Function Virtualization Jim Doherty	Power point presentation

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	and QoS Between Domains, Using BGP for QoS Management IETF SDNi OpenDaylight SNDi SDN Application Plane SDN Application Plane Architecture Northbound Interface Network Services Abstraction Layer Network Applications, User Interface, Network Services Abstraction Layer Abstractions in SDN, Frenetic Traffic Engineering PolicyCop Measurement and Monitoring Security OpenDaylight DDoS Application Data Center Networking, Big Data over SDN Cloud Networking over SDN Mobility and Wireless Information-Centric Networking CCNx, Use of an Abstraction Layer			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. I.T. SEMESTER: II MONTH: February-April ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

To understand the state-of-the-art in network protocols, architectures and applications.
· Analyze existing network protocols and networks.
· Develop new protocols in networking
· To understand how networking research is done
· To investigate novel ideas in the area of Networking via term-long research projects.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 2 PSIT202 Modern Networking Unit 3	Virtualization, Network Functions Virtualization: Concepts and Architecture, Background and Motivation for NFV, Virtual Machines The Virtual Machine Monitor, Architectural Approaches Container Virtualization, NFV Concepts Simple Example of the Use of NFV, NFV Principles High-Level NFV Framework, NFV Benefits and Requirements NFV Benefits, NFV Requirements, NFV Reference Architecture NFV Management and Orchestration, Reference Points Implementation, NFV Functionality, NFV Infrastructure,Container Interface,Deployment of NFVI Containers,Logical Structure of NFVI Domains,ComputeDomain, Hypervisor Domain,Infrastructure Network Domain, Virtualized Network Functions, VNF Interfaces,VNFC to VNFC Communication,VNF Scaling, NFV Management and Orchestration, Virtualized Infrastructure Manager,Virtual Network Function	12	Network Functions Virtualization (NFV) with a Touch of SDN	Power point presentation

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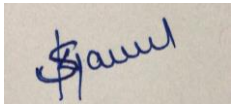
	Manager,NFV Orchestrator, Repositories, Element Management, OSS/BSS, NFV Use Cases Architectural Use Cases, Service-Oriented Use Cases, SDN and NFV Network Virtualization, Virtual LANs ,The Use of Virtual LANs,Defining VLANs, Communicating VLAN Membership,IEEE 802.1Q VLAN Standard, Nested VLANs, OpenFlow VLAN Support, Virtual Private Networks, IPsec VPNs,MPLS VPNs, Network Virtualization, Simplified Example, Network Virtualization Architecture, Benefits of Network Virtualization, OpenDaylight's Virtual Tenant Network, Software-Defined Infrastructure,SoftwareDefined Storage, SDI Architecture			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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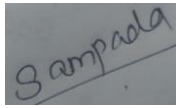

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.).Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. SEMESTER: IV MONTH: February-May ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. understand of the function of Blockchain as a method of securing distributed ledgers, how consensus on their contents is achieved, and the new applications that they enable.
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Blockchain Unit –I	Blockchain: Introduction, History, Centralised versus Decentralised systems, Layers of blockchain, Importance of blockchain, Blockchain uses and use cases.	4	Beginning BlockchainA Beginner's Guide to Building Blockchain Solutions Bikramaditya Singhal, Gautam Dhameja,Priyansu Sekhar Panda	Powerpoint presentation through Google Meet
	Working of Blockchain: Blockchain foundation, Cryptography, Game Theory, Computer Science Engineering, Properties of blockchain solutions, blockchain transactions, distributed consensus mechanisms, Blockchain mechanisms, Scaling blockchain	4		Powerpoint presentation through Google Meet
	Working of Bitcoin: Money, Bitcoin, Bitcoin blockchain, bitcoin network, bitcoin scripts, Full Nodes and SVPs, Bitcoin wallets.	4		Powerpoint presentation through Google Meet
				Powerpoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.) Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: IV MONTH: February-May ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. understand of the function of Blockchain as a method of securing distributed ledgers, how consensus on their contents is achieved, and the new applications that they enable.
b. To cover the technological underpinnings of blockchain operations as distributed data structuresand decision-making systems, their functionality and different architecture types. C.To provide a critical evaluation of existing "smart contract" capabilities and platforms, and examine their future directions, opportunities, risks and challenges.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Blockchain Unit –II	Ethereum:three parts of blockchain, Ether as currency and commodity, Building trustlesssystems, Smart contracts, Ethereum Virtual Machine, The Mist browser, Wallets as a Computing Metaphor, The Bank Teller Metaphor, Breaking with Banking History, How Encryption Leads to Trust, System Requirements, Using Parity with Geth, Anonymity in Cryptocurrency, Central Bank Network, Virtual Machines, EVM Applications, State Machines, Guts of the EVM, Blocks, Mining's Place in the State Transition Function, Renting Time on the EVM, Gas, Working with Gas, Accounts, Transactions, and Messages, Transactionsand Messages, Estimating Gas Fees for Operations, Opcodes in the EVM.	6	Beginning BlockchainA Beginner's Guide to Building Blockchain Solutions Bikramaditya Singhal, Gautam Dhameja,Priyansu Sekhar Panda	Powerpoint presentation through Google Meet
	Solidity Programming: Introduction,Global Banking Made Real, Complementary Currency, Programming the EVM, Design Rationale, Importance of Formal Proofs, Automated Proofs, Testing, Formatting Solidity Files, Reading Code, Statements and Expressions in Solidity,	6		Powerpoint presentation through Google meet

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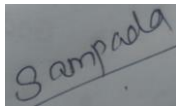
	Value Types, Global Special Variables, Units, and Functions,			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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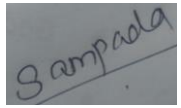

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. I.T. SEMESTER: IV MONTH: February-April ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

- To provide conceptual understanding of the function of Blockchain as a method of securing distributed ledgers, how consensus on their contents is achieved, and the new applications that they enable.
- To cover the technological underpinnings of blockchain operations as distributed data structures and decision-making systems, their functionality and different architecture types.
- To provide a critical evaluation of existing "smart contract" capabilities and platforms, and examine their future directions, opportunities, risks and challenges.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1 PSIT401 Blockchain Unit 5	Blockchain Application Development: Decentralized Applications, Blockchain Application Development, Interacting with the Bitcoin Blockchain, Interacting Programmatically with Ethereum—Sending Transactions, Creating a Smart Contract, Executing Smart Contract Functions, Public vs. Private Blockchains, Decentralized Application Architecture, Building an Ethereum DApp: The DApp, Setting Up a Private Ethereum Network, Creating the Smart Contract, Deploying the Smart Contract, Client Application, DApp deployment: Seven Ways to Think About Smart Contracts, Dapp Contract Data Models, EVM back-end and front-end communication, JSON-RPC, Web 3, JavaScript API, Using Meteor with the EVM, Executing Contracts in the Console, Recommendations for Prototyping, Third-Party Deployment Libraries, Creating Private Chains.	12	Blockchain Enabled Applications Vikram Dhillon David Metcalf Max Hooper	Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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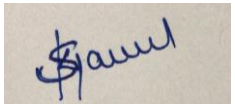

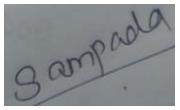

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS:MScIT

SEMESTER: II MONTH:FEB to MAY ACADEMIC YEAR:2020-2021

LEARNING OBJECTIVE/S:

- Gain a thorough understanding of the philosophy and architecture of
- Web applications using ASP.NET Core MVC;
- Gain a practical understanding of.NET Core;
- Acquire a working knowledge of Web application development using ASP.NET Core MVC 6 and Visual Studio
- Persist data with XML Serialization and ADO.NET with SQL Server
- Create HTTP services using ASP.NET Core Web API;
- Deploy ASP.NET Core MVC applications to the Windows Azurecloud.
-

Unit Details Lectures

PAPER, UNIT, TITLE	SUBTOPICSS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT203 **Unit-1** **Microservice Architecture**	**Microservices:** Understanding Microservices, Adopting Microservices, The Microservices Way. **Microservices Valueproposition:** Deriving Business Value, defining a Goal-Oriented, Layered Approach, Applying the Goal-Oriented, Layered Approach. **Designing Microservice Systems:** The Systems Approach to Microservices, A Microservices Design Process, **Establishing a Foundation:** Goals and Principles, Platforms, Culture.	12	Microservice Architecture: Aligning Principles, Practices, and Culture	Laptop, PPT
PSIT203	**Service Design:** Microservice Boundaries, API design for	12	Microservice Architecture:	Laptop, PPT

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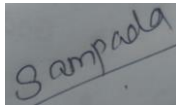
Unit-2 **Microservice Architecture**	Microservices, Data and Microservices, Distributed Transactions andsagas, Asynchronous Message-Passing and Microservices, dealingwith Dependencies, **System Design and Operations:** Independent Deployability, More Servers, Docker and Microservices, Role ofService Discovery, Need for an API Gateway, Monitoring and Alerting. **Adopting Microservices in Practice:** Solution Architecture Guidance,Organizational Guidance, Culture Guidance, Tools and Process Guidance, Services Guidance.		Aligning Principles, Practices, and Culture	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: M.Sc. IT (Human Computer Interaction) SEMESTER:IV MONTH: FEB-APR ACADEMICYEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the important aspects of implementation of human-computer interfaces.
- Identify the various tools and techniques for interface analysis, design, and evaluation.
- Identify the impact of usable interfaces in the acceptance and performance utilization of information systems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Human Computer Interaction	**The Interaction**: Models of interaction, Design Focus, Frameworks and HCI, Ergonomics, Interaction styles, **Elements of the WIMP interface,Interactivity** **Paradigms**: Introduction, Paradigms for interaction **Interaction design basics**: What is design?, The process of design, User focus, Cultural probes, Navigation design, the big button trap, Modes, Screen design and layout, Alignment and layout matters, Checking screen colors, Iteration and prototyping **HCI in the software process**: The software life cycle, Usability engineering , Iterative design and prototyping, Prototyping in practice, Design rationale	12	1.Human Computer Interaction-Alan Dix, Janet Finlay, Gregory Abowd, Russell Beale Pearson Education 3rd 2. Designing the User Interface -Shneiderman B., Plaisant C., Cohen M., Jacobs S. Pearson 5th 2013	POWER POINT PRESENTATION

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UNIT 2 Human Computer Interaction	**Design**: Principles to support usability, Standards, Guidelines, Golden rules and heuristics, HCI patterns **Implementation support**: Elements of windowing systems, Programming the application, Going with the grain, Using toolkits, User interface management **Systems Evaluation techniques:** What is evaluation?, Goals of evaluation, Evaluation through expert analysis,Evaluation through user participation, Choosing an evaluation method	12	1.Human Computer Interaction-Alan Dix, Janet Finlay, Gregory Abowd, Russell Beale Pearson Education 3rd 2. Designing the User Interface -Shneiderman B., Plaisant C., Cohen M., Jacobs S. Pearson 5th 2013	POWER POINT PRESENTATION
UNIT 3 Human Computer Interaction	**Design**: Principles to support usability, Standards, Guidelines, Golden rules and heuristics **HCI patterns Implementation support**: Elements of windowing systems, Programming the application, Going with the grain, Using toolkits, User interface management systems **Evaluation techniques**: What is evaluation?, Goals of evaluation, Evaluation through expert analysis, Evaluation through user participation, Choosing an evaluation method	12	1.Human Computer Interaction-Alan Dix, Janet Finlay, Gregory Abowd, Russell Beale Pearson Education 3rd 2. Designing the User Interface -Shneiderman B., Plaisant C., Cohen M., Jacobs S. Pearson 5th 2013	POWER POINT PRESENTATION

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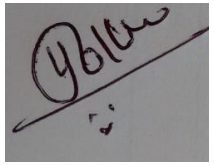
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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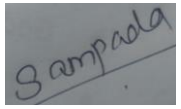

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Anuja Patil DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: II MONTH: February-April ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

a. Persist data with XML Serialization and ADO.NET with SQL Server
b. Create HTTP services using ASP.NET Core Web API;
c. Deploy ASP.NET Core MVC applications to the Windows Azure cloud.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Microservices Architecture Unit -III	**Building Microservices with ASP.NET Core:** Introduction, Installing .NET Core, Building a Console App, Building ASP.NET Core App.	3	Building Microservices with ASP.NET Core by Kevin Hoffman Microservice Architecture: *Aligning Principles, Practices, and Culture* by Irakli Nadareishvili, Ronnie Mitra, Matt McLarty, and Mike Amundsen	PowerPoint presentation through Google Meet
	Delivering Continuously: Introduction to Docker, Continuous integration with Wercker, Continuous Integration with Circle CI, Deploying to Dicker Hub.	3		PowerPoint presentation through Google Meet
	Building Microservice with ASP.NET Core: Microservice, Team Service, API First Development, Test First Controller, Creating a CI pipeline, Integration Testing, Running the team service Docker Image.	3		PowerPoint presentation through Google Meet
	Backing Services: Microservices Ecosystems, Building the location Service, Enhancing Team Service.	3		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Anuja Patil DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: II MONTH: February-April ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

d. Persist data with XML Serialization and ADO.NET with SQL Server
e. Create HTTP services using ASP.NET Core Web API;
f. Deploy ASP.NET Core MVC applications to the Windows Azure cloud.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Microservices Architecture Unit -IV	**Creating Data Service:** Choosing a Data Store**,** Building a Postgres Repository, Databases are Backing Services, Integration Testing Real Repositories, Exercise the Data Service	3	Building Microservices with ASP.NET Core by Kevin Hoffman Microservice Architecture: *Aligning Principles, Practices, and Culture* by Irakli Nadareishvili, Ronnie Mitra, Matt McLarty, and Mike Amundsen	PowerPoint presentation through Google Meet
	Event Sourcing and CQRS: Event Sourcing, CQRS pattern, Event Sourcing and CQRS, Running the samples.	3		PowerPoint presentation through Google Meet
	Building an ASP.NET Core Web Application: ASP.NET Core Basics, Building Cloud-Native Web Applications.	3		PowerPoint presentation through Google Meet
	Service Discovery: Cloud Native Factors, Netflix Eureka, Discovering and Advertising ASP.NET Core Services. DNS and Platform Supported Discovery.	3		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Anuja Patil DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: II MONTH: February-April ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

a. Persist data with XML Serialization and ADO.NET with SQL Server
b. Create HTTP services using ASP.NET Core Web API;
c. Deploy ASP.NET Core MVC applications to the Windows Azure cloud.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Microservices Architecture Unit -V	**Configuring Microservice Ecosystems:** Using Environment Variables with Docker, Using Spring Cloud Config Server, Configuring Microservices with etcd,	3	Building Microservices with ASP.NET Core by Kevin Hoffman Microservice Architecture: *Aligning Principles, Practices, and Culture* by Irakli Nadareishvili, Ronnie Mitra, Matt McLarty, and Mike Amundsen	PowerPoint presentation through Google Meet
	Securing Applications and Microservices: Security in the Cloud, Securing ASP.NET Core Web Apps, Securing ASP.NET Core Microservices.	3		PowerPoint presentation through Google Meet
	Building Real-Time Apps and Services: Real-Time Applications Defined, Websockets in the Cloud,Using a Cloud Messaging Provider, Building the Proximity Monitor.	3		PowerPoint presentation through Google Meet
	Putting It All Together: Identifying and Fixing Anti-Patterns, Continuing the Debate over Composite Microservices, The Future.	3		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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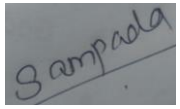
SIGNATURE OF THE H.O.D. 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

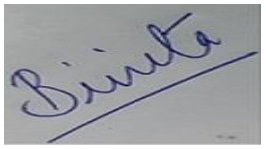
CLASS: M. Sc. I. T SEMESTER: II MONTH: February-April ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

a. To understand the state-of-the-art in network protocols, architectures and applications.
b. Analyze existing network protocols and networks.
c. Develop new protocols in networking

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Modern Networking Unit -I	Elements of Modern Networking- The Networking Ecosystem ,Example Network Architectures, Ethernet, Wi-Fi, 4G/5G Cellular, Cloud Computing, Internet of Things, Network Convergence Unified Communications	6	Foundations of Modern Networking: SDN, NFV, QoE, IoT, and Cloud by William Stallings	PowerPoint presentation through Google Meet
	Requirements and Technology- Types of Network and Internet Traffic, Demand: Big Data, Cloud Computing, and Mobile Traffic, Requirements: QoS and QoE, Routing, Congestion Control , SDN and NFV	6		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

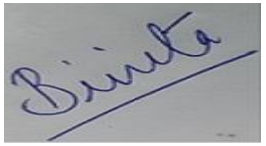
CLASS: M. Sc. I. T SEMESTER: II MONTH: February-April ACADEMIC YEAR: : 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

a. To understand the state-of-the-art in network protocols, architectures and applications.
b. Analyze existing network protocols and networks.
c. Develop new protocols in networking

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Modern Networking Unit -IV	Defining and Supporting User Needs, Quality of Service, Integrated Services Architecture, Queuing Discipline, Differentiated Services, Forwarding PHB, Service Level Agreements, IP Performance Metrics	4	Foundations of Modern Networking: SDN, NFV, QoE, IoT, and Cloud by William Stallings	PowerPoint presentation through Google Meet
	QoE: User Quality of Experience, QoE Considerations The QoE/QoS Layered Model, Measurements of QoE, Summarizing the QoE, Measurement Methods, Applications of QoE	4		PowerPoint presentation through Google Meet
	Network Design Implications of QoS and QoE Classification of QoE/ QoS Mapping Models, Black-Box Media-Based QoS/QoE Mapping Models, Glass- Box Parameter-Based QoS/QoE Mapping Models,Gray-Box QoS/QoE Mapping Models	4		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

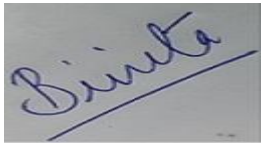
CLASS: M. Sc. I. T SEMESTER: II MONTH: February-April ACADEMIC YEAR: : 2020-2021

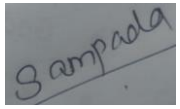
LEARNING OBJECTIVE/S:
The learners will be able to:

a. To understand the state-of-the-art in network protocols, architectures and applications.
b. Analyze existing network protocols and networks.
c. Develop new protocols in networking

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Modern Networking Unit -V	Modern Network Architecture: Clouds and Fog, Cloud Computing, Cloud, Deployment Models, Cloud Architecture	4	Foundations of Modern Networking: SDN, NFV, QoE, IoT, and Cloud by William Stallings	PowerPoint presentation through Google Meet
	The Internet of Things: Components The IoT Era Begins, Components of IoT-Enabled Things, The Internet of Things: Architecture and Implementation, IoT Architecture	4		PowerPoint presentation through Google Meet
	Security Requirements, SDN Security Threats to SDN, NFV Security, Cloud Security, IoT Security	4		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Anuja Patil DEPARTMENT: IT
CLASS: M. Sc. I. T SEMESTER: IV MONTH: February-April ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Investigate the cyber forensics with standard operating procedures.
b. Recover the data from the hard disk with legal procedure.
c. To recover and analyse the data using forensics tool

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Cyber Forensics Unit -V	Email Tracking and Email Crime investigation- Understanding Internet fundamentals, Exploring the roles of client and server in e-mail, Investigating e-mail crimes and violations, Sending fakemail, Examining e-mail message, Examining e-mail headers, Tracing an e-mail message, Using network logs related to e-mail, Tracing back, Searching e-mail addresses, Handling Spam, Protecting e-mail address from Spam	3	EC-Council CHFIv10 Study Guide by EC-Council And The official CHFI Exam 312-49 study Guide by Dave Kleiman	PowerPoint presentation through Google Meet
	Mobile Forensics- Latest Mobile phone Access technologies, Evidence in Mobile phones, Mobile phone Forensic Examination Methodology, Introduction to Personal Digital Assistants (PDAs), PDA Forensics, Investigation Tools	3		PowerPoint presentation through Google Meet
	Reports of Investigation- Need of an investigative report, Report specifications, Report classification report, Report and opinion, Layout of an investigative report, Writing report, Use of supporting material, Importance of consistency, Salient features of good, Investigative report format, Before writing the report, Writing report using FTK	3		PowerPoint presentation through Google Meet
	Become an expert witness- Before writing the report, Writing report using FTK, Expert witness – an introduction, Role of an expert witness, Preparing for testimony, Testifying in court, Voir Dire, Testifying in general, Testifying during direct examination, Testifying during cross-examination, Deposition	3		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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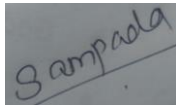
SIGNATURE OF THE H.O.D. 

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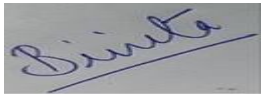
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT
CLASS: M. Sc. I. T SEMESTER: IV MONTH: February-April ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Investigate the cyber forensics with standard operating procedures.
b. Recover the data from the hard disk with legal procedure.
c. To recover and analyse the data using forensics tool

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Cyber Forensics Unit -I	Computer Forensics: The present Scenario: Introduction to computer forensics, History of computer forensics, Computer forensics flaws and risks, Cybercrime, Role of computer forensics, Reason for cyber-attacks, Modes of attacks, Cyber war	3	EC-Council CHFIv10 Study Guide by EC-Council And The official CHFI Exam 312-49 study Guide by Dave Kleiman	PowerPoint presentation through Google Meet
	The Investigation Process : Investigating methodology, Evaluating the case, Investigation plan, Importance of data-recovery workstations and software, Implementing an investigation, Collecting the evidence, Closing the case, Case evaluation	3		PowerPoint presentation through Google Meet
	Computers – Searching and Seizing, Electronic Evidence: Identifying Digital Evidence, Preparing for a Search, Seizing Digital Evidence at the Scene, Storing Digital Evidence, Reviewing a Case	3		PowerPoint presentation through Google Meet
	Procedures to be followed by the first responder: What is an incident?, Incident response team, How to report an incident?, CSIRT categorization, Need for CSIRT, What does CSIRT do?	3		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT
CLASS: M. Sc. I. T SEMESTER: IV MONTH: February-April ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Investigate the cyber forensics with standard operating procedures.
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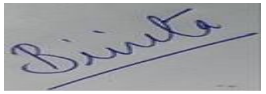
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Cyber Forensics Unit -II	Setting up a lab for Computer Forensics: Budget allocation for a forensic lab, Physical location, General configuration , Equipment needs, Basic workstation requirements, Ambience, Physical security recommendations, Auditing, Forensics lab licensing requisite, Forensics lab staff responsibilities	3	EC-Council CHFIv10 Study Guide by EC-Council And The official CHFI Exam 312-49 study Guide by Dave Kleiman	PowerPoint presentation through Google Meet
	Hard Disks and File Systems: Understanding file systems, examining MS-DOS, Windows, Linux, NTFS, Understanding Disk Partitions	3		PowerPoint presentation through Google Meet
	Forensics on Windows Machine: Locating evidence on Windows systems, Gathering volatile evidence, Investigating Windows file slack, Examining file systems, Checking Registry, Importance of Memory dump, System state backup, Investigating Internet traces	3		PowerPoint presentation through Google Meet
	Acquire and Duplicate Data: Determining the best data acquisition methods, Understanding data recovery contingencies, Data preservation commands, The need for data duplication, Data duplication tools	3		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT
CLASS: M. Sc. I. T SEMESTER: IV MONTH: February-April ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Investigate the cyber forensics with standard operating procedures.
b. Recover the data from the hard disk with legal procedure.
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Cyber Forensics Unit -III	Recovery of deleted files and partitions: Introduction to recovering image files, Digital evidence, Securing and recovering deleted files, Zero Assumption Digital Image Recovery, Data recovery in Linux, Data recovery tools	3	EC-Council CHFIv10 Study Guide by EC-Council And The official CHFI Exam 312-49 study Guide by Dave Kleiman	PowerPoint presentation through Google Meet
	Using Access Data FTK and Encase for forensics Investigation: Evaluating Computer Forensics Tool Needs, Computer Forensics Software Tools, Computer Forensics Hardware Tools, Validating and Testing Forensics Software	3		PowerPoint presentation through Google Meet
	Forensic analysis of Steganography and Image files : Recognize image files, data compression, Locate and recover image files, Analyze image file headers, Reconstructing file fragments, steganography in image files, Tools for viewing images	3		PowerPoint presentation through Google Meet
	Cracking Application passwords: Password- terminology, What is a password cracker?, Various cracking methods, Classification of cracking softwares, System software password cracking, Application software password cracking	3		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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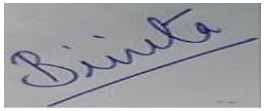
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT
CLASS: M. Sc. I. T SEMESTER: IV MONTH: February-April ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Investigate the cyber forensics with standard operating procedures.
b. Recover the data from the hard disk with legal procedure.
c. To recover and analyse the data using forensics tool

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Cyber Forensics Unit -IV	Capturing logs and correlating to the events: Examining intrusion and security events, Event gathering, End-to-end forensic investigation, Correlating logfiles, IDS loganalysis	3	EC-Council CHFIv10 Study Guide by EC-Council And The official CHFI Exam 312-49 study Guide by Dave Kleiman	PowerPoint presentation through Google Meet
	Network Forensics – Investigating logs and Network traffic: Sources of evidence on a network, Evidence collection and documentation on a network, Gathering evidence on a network, Documenting the gathered evidence on a network, Evidence reconstruction for investigation, Tools	3		PowerPoint presentation through Google Meet
	Investigating Wireless and Web Attacks: Types of web attacks, Indications of a web attack, Responding to a web attack, Overview of web logs, Investigating static and dynamic IP address, Tools	3		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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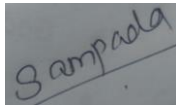

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.IT

SEMESTER: II MONTH: FEB TO MAY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to:

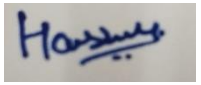
- Understand the key issues in big data management and its associated applications in intelligent business and scientific computing.
- Acquire fundamental enabling techniques and scalable algorithms like Hadoop, Map Reduce and NO SQL in big data analytics.
- Interpret business models and scientific computing paradigms, and apply software tools for big data analytics.
- Achieve adequate perspectives of big data analytics in various applications like recommender systems, social media applications etc..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

PSIT201 BigData Analytics **UNIT IV**	Data Product, Building Data Products at Scale with Hadoop, Data Science Pipeline and Hadoop Ecosystem, Operating System for Big Data, Concepts, Hadoop Architecture, Working with Distributed file system, Working with Distributed Computation, Framework for Python and Hadoop Streaming, Hadoop Streaming, MapReduce with Python, Advanced MapReduce. In-Memory Computing with Spark, Spark Basics, Interactive Spark with PySpark, Writing Spark Applications,	12	Data Analytics with Hadoop An Introduction for Data Scientists Benjamin Bengfort and Jenny Kim O'Reilly 2016	Powerpoint
PSIT201 BigData Analytics **UNIT V**	Distributed Analysis and Patterns, Computing with Keys, Design Patterns, Last-Mile Analytics, Data Mining and Warehousing, Structured Data Queries with Hive, HBase, Data Ingestion, Importing Relational data with Sqoop, Injesting stream data with flume. Analytics with higher level APIs, Pig, Spark's higher level APIs.	12	Data Analytics with Hadoop An Introduction for Data Scientists Benjamin Bengfort and Jenny Kim O'Reilly 2016	Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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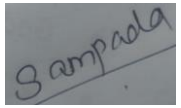

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.IT

SEMESTER: IV MONTH: FEB TO MAY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

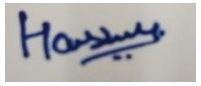
- Understand the important aspects of implementation of human-computer interfaces.
- Identify the various tools and techniques for interface analysis, design, and evaluation.
- Identify the impact of usable interfaces in the acceptance and performance utilization of information systems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT404a Human Computer Interaction **UNIT IV**	Socio-organizational issues and stakeholder requirements: Organizational issues, Capturing requirements Communication and collaboration models: Face-toface communication, Conversation, Text-based communication, Group working Task analysis: Differences between task analysis and other techniques, Task decomposition, Knowledgebased analysis, Entity–relationship-based techniques, Sources of information and data collection, Uses of task analysis	12	1. Human Computer Interaction Alan Dix, Janet Finlay, Gregory Abowd, Russell Beale Pearson Education 3 rd 2. Designing the User Interface Shneiderman B., Plaisant C., Cohen M., Jacobs S. Pearson 5th 2013	Powerpoint

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

PSIT404a Human Computer Interaction **UNIT V**	Dialog notations and design: What is dialog?, Dialog design notations, Diagrammatic notations, Textual dialog notations, Dialog semantics, Dialog analysis and design Models of the system: Standard formalisms, Interaction models, Continuous behavior Modeling rich interaction: Status–event analysis, Rich contexts, Low intention and sensor-based interaction	12	1. Human Computer Interaction Alan Dix, Janet Finlay, Gregory Abowd, Russell Beale Pearson Education 3 rd 2. Designing the User Interface Shneiderman B., Plaisant C., Cohen M., Jacobs S. Pearson 5th 2013	Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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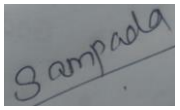

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **IT** CLASS: **M.Sc. (IT)**

SEMESTER: **II** MONTH: **February-May** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able:

- To provide an overview of an exciting growing field of big data analytics.
- To introduce the tools required to manage and analyze big data like Hadoop, NoSql MapReduce.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT201 **Paper I** **Big Data Analytics** **UNIT I**	Introduction to Big Data, Characteristics of Data, and Big Data Evolution of Big Data, Definition of Big Data, Challenges with big data, Why Big data? Data Warehouse environment, Traditional Business Intelligence versus Big Data. State of Practice in Analytics, Key roles for New Big Data Ecosystems, Examples of big Data Analytics. Big Data Analytics, Introduction to big data analytics, Classification of Analytics, Challenges of Big Data, Importance of Big Data, Big Data Technologies, Data Science, Responsibilities, Soft state eventual consistency. Data Analytics Life Cycle	12	Big Data and Analytics Subhashini Chellappan Seema Acharya Wiley	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT201 **Paper I** **Big Data Analytics** **UNIT II**	Analytical Theory and Methods: Clustering and Associated Algorithms, Association Rules, Apriori Algorithm, Candidate Rules, Applications of Association Rules, Validation and Testing, Diagnostics, Regression, Linear Regression, Logistic Regression, Additional Regression Models. Analytical Theory and Methods: Classification, Decision Trees, Naïve Bayes, Diagnostics of Classifiers, Additional Classification Methods, Time Series Analysis	12	Big Data and Analytics Subhashini Chellappan Seema Acharya Wiley	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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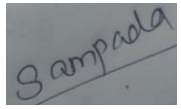

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **IT** CLASS: **M.Sc. (IT)**

SEMESTER: **IV** MONTH: **February - April** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able:

- To present the mathematical, statistical and computational challenges of building neural networks.
- To study the concepts of deep learning.
- To enable the students to know deep learning techniques to support real-time applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT403a **Paper 3** **Deep Learning** **UNIT III**	Convolutional Networks, Sequence Modelling, Applications	12	Deep Learning Ian Goodfellow, Yoshua Bengio, Aaron Courvile Fundamentals of Deep Learning Nikhil Buduma	Google Meet Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PSIT403a **Paper 3** **Deep Learning** **UNIT IV**	Deep Learning Research: Linear Factor Models, Autoencoders, representation learning	12	Deep Learning Ian Goodfellow, Yoshua Bengio, Aaron Courvile Fundamentals of Deep Learning Nikhil Buduma	Google Meet Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PSIT403a **Paper 3** **Deep Learning** **UNIT V**	Approximate Inference, Deep Generative Models	12	Deep Learning Ian Goodfellow, Yoshua Bengio, Aaron Courvile Fundamentals of Deep Learning Nikhil Buduma	Google Meet Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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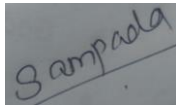

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**MSC(IT)**_____ SEMESTER: ____**II**_____ MONTH: _____ **FEBRUARY-MAY** _____ ACADEMIC YEAR: _____**2020-2021**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

- **Review the fundamental concepts of a digital image processing system.**
- **Analyze images in the frequency domain using various transforms.**
- **Evaluate the techniques for image enhancement and image restoration.**
- **Categorize various compression techniques.**
- **Interpret Image compression standards.**
- **Interpret image segmentation and representation techniques.**
- **Understand the relevant aspects of digital image representation and their practical implications.**
- **Have the ability to design pointwise intensity transformations to meet stated specifications and understand 2-D convolution, the 2-D DFT, and have the abitilty to design systems using these concepts.**
- **Have a command of basic image restoration techniques. Understand the role of alternative color spaces, and the design requirements leading to choices of color space.**
- **Appreciate the utility of wavelet decompositions and their role in image processing systems. Have an understanding of the underlying mechanisms of image compression, and the ability to design systems using standard algorithms to meet design specifications.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT204 Image Processing **Unit No -01**	Introduction: Digital Image Processing, Origins of Digital Image Processing, Applications and Examples of Digital Image Processing, Fundamental Steps in Digital Image Processing, Components of an Image Processing System,	04	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentic e Hall, 2018.	Online Google Meet PPts.
	Digital Image Fundamentals: Elements of Visual Perception, Light and the Electromagnetic Spectrum, Image Sensing and Acquisition, Image Sampling and Quantization, Basic Relationships Between Pixels, Basic Mathematical Tools Used in Digital Image Processing,	04	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentic e Hall, 2018.	Online Google Meet PPts.
	Intensity Transformations and Spatial Filtering: Basics, Basic Intensity Transformation Functions, Basic Intensity Transformation Functions, Histogram Processing, Fundamentals of Spatial Filtering, Smoothing (Lowpass) Spatial Filters, Sharpening (Highpass) Spatial Filters, Highpass, Bandreject, and Bandpass Filters from Lowpass Filters, Combining Spatial Enhancement Methods, Using Fuzzy Techniques for Intensity Transformations and Spatial Filtering	04	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentic e Hall, 2018.	Online Google Meet PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			

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Unit No -02	Filtering in the Frequency Domain: Background, Preliminary Concepts, Sampling and the Fourier Transform of Sampled Functions, The Discrete Fourier Transform of One Variable, Extensions to Functions of Two Variables, Properties of the 2-D DFT and IDFT, Basics of Filtering in the Frequency Domain, Image Smoothing Using Lowpass Frequency Domain Filters, Image Sharpening Using Highpass Filters, Selective Filtering, Fast Fourier Transform.	06	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Online Google Meet PPts.
	Image Restoration and Reconstruction: A Model of the Image Degradation/Restoration Process, Noise Models, Restoration in the Presence of Noise Only-----Spatial Filtering, Periodic Noise Reduction Using Frequency Domain Filtering, Linear, Position-Invariant Degradations, Estimating the Degradation Function, Inverse Filtering, Minimum Mean Square Error (Wiener) Filtering, Constrained Least Squares Filtering, Geometric Mean Filter, Image Reconstruction from Projections	06	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Online Google Meet PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -03	Wavelet and Other Image Transforms: Preliminaries, Matrix-based Transforms, Correlation, Basis Functions in the Time-Frequency Plane, Basis images, Fourier-Related Transforms, Walsh-Hadamard Transforms, Slant Transform, Haar Transform, Wavelet Transforms	04	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Online Google Meet PPts.
	Color Image Processing: Color Fundamentals, Color Models, Pseudocolor Image Processing, Full-Color Image Processing,	04	Digital Image Processing	Online Google Meet PPts.

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	Color Transformations, Color Image Smoothing and Sharpening, Using Color in Image Segmentation, Noise in Color Images, Color Image Compression.		Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	
	Image Compression and Watermarking: Fundamentals, Huffman Coding, Golomb Coding, Arithmetic Coding, LZW Coding, Run-length Coding, Symbol-based Coding, 8 Bit-plane Coding, Block Transform Coding, Predictive Coding, Wavelet Coding, Digital Image Watermarking,	04	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Online Google Meet PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	Morphological Image Processing: Preliminaries, Erosion and Dilation, Opening and Closing, The Hit-or-Miss Transform, Morphological Algorithms, Morphological Reconstruction, Morphological Operations on Binary Images, Grayscale Morphology	06	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Online Google Meet PPts.
	Image Segmentation I: Edge Detection, Thresholding, and Region Detection: Fundamentals, Thresholding, Segmentation by Region Growing and by Region Splitting and Merging, Region Segmentation Using Clustering and Superpixels, Region Segmentation Using Graph Cuts, Segmentation Using Morphological Watersheds, Use of Motion in Segmentation	06	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice	Online Google Meet PPts.

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			Hall, 2018.	
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	Image Segmentation II: Active Contours: Snakes and Level Sets: Background, Image Segmentation Using Snakes, Segmentation Using Level Sets.	06	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Online Google Meet PPts.
	Feature Extraction: Background, Boundary Preprocessing, Boundary Feature Descriptors, Region Feature Descriptors, Principal Components as Feature Descriptors, Whole-Image Features, Scale-Invariant Feature Transform (SIFT)	06	Digital Image Processing Gonzalez and Woods 4 rd Edition Pearson/Prentice Hall, 2018.	Online Google Meet PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS:MScIT

SEMESTER: III MONTH:FEB to MAY ACADEMIC YEAR:2020-2021

LEARNING OBJECTIVE/S:

- Gain a thorough understanding of the philosophy and architecture of
- Web applications using ASP.NET Core MVC;
- Gain a practical understanding of.NET Core;
- Acquire a working knowledge of Web application development using ASP.NET Core MVC 6 and Visual Studio
- Persist data with XML Serialization and ADO.NET with SQL Server
- Create HTTP services using ASP.NET Core Web API;
- Deploy ASP.NET Core MVC applications to the Windows Azurecloud.
-

Unit Details Lectures

PAPER, UNIT, TITLE	SUBTOPICSS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT203 **Unit-1** **Microservice Architecture**	**Microservices:** Understanding Microservices, Adopting Microservices, The Microservices Way. **Microservices Valueproposition:** Deriving Business Value, defining a Goal-Oriented, Layered Approach, Applying the Goal-Oriented, Layered Approach. **Designing Microservice Systems:** The Systems Approach to Microservices, A Microservices Design Process, **Establishing a Foundation:** Goals and Principles, Platforms, Culture.	12	Microservice Architecture: Aligning Principles, Practices, and Culture	Laptop, PPT
PSIT203	**Service Design:** Microservice Boundaries, API design for	12	Microservice Architecture:	Laptop, PPT

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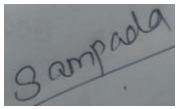
Unit-2 **Microservice Architecture**	Microservices, Data and Microservices, Distributed Transactions andsagas, Asynchronous Message-Passing and Microservices, dealingwith Dependencies, **System Design and Operations:** Independent Deployability, More Servers, Docker and Microservices, Role ofService Discovery, Need for an API Gateway, Monitoring and Alerting. **Adopting Microservices in Practice:** Solution Architecture Guidance,Organizational Guidance, Culture Guidance, Tools and Process Guidance, Services Guidance.		Aligning Principles, Practices, and Culture	
PSIT203 **Unit-3** **Microservice Architecture**	**Building Microservices with ASP.NET Core:** Introduction, Installing .NET Core, Building a Console App, Building ASP.NET Core App. **Delivering Continuously:** Introduction to Docker, Continuous integration with Wercker, Continuous Integration with Circle CI, Deploying to Dicker Hub. **Building Microservice with ASP.NET Core:** Microservice, Team Service, API First Development, Test First Controller, Creating a CI pipeline, Integration Testing, Running the team service Docker Image. 1224 Microservices Ecosystems, Building the location **Backing Services:** Service, Enhancing Team Service	12	Microservice Architecture: Aligning Principles, Practices, and Culture	Laptop, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**MSC(IT)**_____ SEMESTER: ____**IV**_____ MONTH: _____ **FEBRUARY-MAY** _____ ACADEMIC YEAR: _____**2020-2021**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

- To present the mathematical, statistical and computational challenges of building neural networks
- To study the concepts of deep learning
- To enable the students to know deep learning techniques to support real-time applications
- Describes basics of mathematical foundation that will help the learner to understand the concepts of Deep Learning.
- Understand and describe model of deep learning
- Design and implement various deep supervised learning architectures for text & image data.
- Design and implement various deep learning models and architectures.
- Apply various deep learning techniques to design efficient algorithms for real-world applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Elective 2 PSIT403a Deep Learning **Unit No -01**	**Applied Math and Machine Learning Basics:** Linear Algebra: Scalars, Vectors, Matrices and Tensors , Multiplying Matrices and Vectors , Identity and Inverse Matrices, Linear Dependence and Span , norms, special matrices and vectors, eigen decompositions. **Numerical Computation:** Overflow and under flow, poor	07	Deep Learning Ian Goodfellow, Yoshua Bengio, Aaron Courvile	Online Google Meet PPts.

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	conditioning, Gradient Based Optimization, Constraint optimization.	05	An MIT Press book 1st, 2016. Fundamentals of Deep Learning Nikhil Buduma O'Reilly 1st, 2017.	
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -02	**Deep Networks:** Deep feedforward network , regularization for deep learning , Optimization for Training deep models.	12	Deep Learning Ian Goodfellow, Yoshua Bengio, Aaron Courvile An MIT Press book 1st, 2016. Fundamentals of Deep Learning Nikhil Buduma O'Reilly 1st, 2017.	Online Google Meet PPts.

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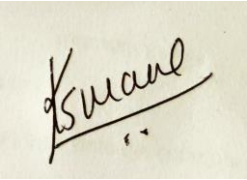
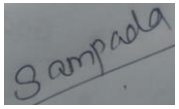
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: I MONTH: OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define a function, its domain, co domain, range and bijective functions, composite and inverse functions
- Check whether a given relation is equivalence or partial order relation.
- Represent the given relation using diagraph, adjacency matrix and arrow diagram.
- Solve a recurrence relation using various methods like back tracking , generating function method etc.
- Explain and solve the tower of Hanoi puzzle.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DISCRETE MATHEMATICS Unit 1 Recurrence relations	➢ Functions, its domain, co domain and range ➢ Bijective, composite and inverse functions ➢ Relations: definition, examples and properties ➢ Equivalence & partial order relation, Hasse diagram ➢ Recurrence relation: definition, formulation & solving ➢ Tower of Hanoi puzzle	1 1 2 2 2 1	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9

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TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: I MONTH: NOVEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of fundamental principle of counting, permutations and combinations.
- State and prove binomial theorem, Pascal's identity, Vandermonde's identity.
- Find the number of ways of doing a task using permutations and combinations.
- State and use Pigeonhole principle to solve the problems.
- Understand the concept of finite state automata and finite state machine.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DISCRETE MATHEMATICS (Unit 2) Counting principles, Languages and Finite state machines	➢ FPC , permutations, combinations ➢ Binomial theorem, Pascal's & Vandermonde's identity ➢ Sum & product rule, pigeonhole principle ➢ Inclusion exclusion principle ➢ Languages, regular expression and regular grammar ➢ FSM, FSA, Godel numbers, turing machines	2 2 2 2 2 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: I MONTH: DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define graph and its types, adjacency and incidence matrix.
- Draw adjacency and incidence matrix of the given graph and vice versa.
- Find out the shortest path of weighted graph using Warshall's algorithm.
- Traverse a tree using inorder, preorder and postorder algorithm.
- Draw a tree for algebraic expressions and vice versa.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DISCRETE MATHEMATICS **(Unit 3)** Graphs & Trees	➢ Definition of Graphs and its types ➢ Diagraph, incidence and adjacency matrix ➢ Warshall's algorithm, BFS, DFS ➢ Trees : definition, types and properties ➢ Traversing binary trees ➢ Algorithms for searching, inserting and deleting in a binary tree	1 1 2 2 1 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE DEPARTMENT: ____IT____

CLASS: _FYCS SEMESTER: 1 MONTH: Sep.To Dec. ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

Open Source has acquired a prominent place in software industry. Having knowledge of Open Source and its related technologies is an essential for Computer Science student. This course introduces Open Source methodologies and ecosystem to students.

Expected Learning Outcome:

1) Upon completion of this course, students should have a good working knowledge of Open Source ecosystem, its use, impact and importance.

2) This course shall help student to learn Open Source methodologies, case studies with real life examples

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS103 Free and Open-source Software Unit I	Introduction Introduction: Open Source, Free Software, Free Software vs. Open Source software, Public Domain Software, FOSS does not mean no cost. History: BSD, The Free Software Foundation and the GNU Project.	5	The Linux Documentation Project: http://www.tldp.org/ 2. Docker Project Home: http://www.docker.com 3. Linux kernel Home: http://kernel.org 4. Open Source Initiative: https://opensource.org/ 5. Linux Documentation Project: http://www.tldp.org/ 6. Wikipedia: https://en.wikipedia.org/ 7. https://en.wikipedia.org/wiki/Wikipedia:Contributing_to_Wikipedia 8. Github: https://help.github.com/ 9. The Linux Foundation: http://www.linuxfoundation.org/	GOOGLE MEET AND PPPT
	Methodologies Open Source History, Initiatives, Principle and methodologies. Philosophy : Software Freedom, Open Source Development Model Licenses and Patents: What Is A License, Important FOSS Licenses (Apache,BSD,GPL, LGPL), copyrights and copy lefts, Patents Economics of FOSS : Zero Marginal Cost, Income-generation	5		

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	opportunities, Problems with traditional commercial software, Internationalization			
	Social Impact Open source vs. closed source, Open source government, Open source ethics. Social and Financial impacts of open source technology, Shared software, Shared source, Open Source in Government.	5		

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Unit II	Case Studies Example Projects: Apache web server, GNU/Linux, Android, Mozilla (Firefox), Wikipedia, Drupal, wordpress, GCC, GDB, github, Open Office	5	The Linux Documentation Project: http://www.tldp.org/ 2. Docker Project Home: http://www.docker.com 3. Linux kernel Home: http://kernel.org 4. Open Source Initiative: https://opensource.org/ 5. Linux Documentation Project: http://www.tldp.org/ 6. Wikipedia: https://en.wikipedia.org/ 7. https://en.wikipedia.org/wiki/Wikipedia:Contributing_to_Wikipedia 8. Github: https://help.github.com/ 9. The Linux Foundation: http://www.linuxfoundation.org/	GOOGLE MEET AND PPPT
	. Study: Understanding the developmental models, licensings, mode of funding,commercial/non-commercial use. Open Source Hardware, Open Source Design, Open source Teaching. Open source media. Collaboration, Community and Communication Contributing to Open Source Projects	5		

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	Introduction to github, interacting with the community on github, Communication and etiquette, testing open source code, reporting issues, contributing code.	5		
UNIT III		5	The Linux Documentation Project: http://www.tldp.org/ 2. Docker Project Home: http://www.docker.com 3. Linux kernel Home: http://kernel.org 4. Open Source Initiative: https://opensource.org/ 5. Linux Documentation Project: http://www.tldp.org/ 6. Wikipedia: https://en.wikipedia.org/ 7. https://en.wikipedia.org/wiki/Wikipedia:Contributing_to_Wikipedia 8. Github: https://help.github.com/ 9. The Linux Foundation: http://www.linuxfoundation.org/	GOOGLE MEET AND PPPT

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	Introduction to wikipedia, contributing to Wikipedia Or contributing to any prominent open source project of student's choice. Starting and Maintaining own Open Source Project.	Understanding Open Source Ecosystem Open Source Operating Systems: GNU/Linux, Android, Free BSD, Open Solaris. Open Source Hardware, Virtualization Technologies,	5			
	Containerization Technologies: Docker, Development tools, IDEs, debuggers, Programming languages, LAMP, Open Source database technologies	5				

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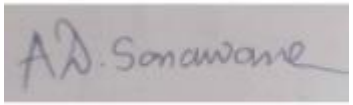
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYCS SEMESTER: SEM-1 MONTH: SEP-DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- Develop their soft skills and develop their personality together with their technical skills.
- Understand various issues in personal and Profession communication and learn to overcome them.
- Know about various aspects of soft skills and learn ways to develop personality
- Understand the importance and type of communication in personal and professional environment.
- Learn about Leadership, team building, decision making and stress management

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
7 SOFT SKILLS DEVELOPMENT UNIT 1	**Introduction to Soft Skills and Hard Skills** **Personality Development:** Knowing Yourself, Positive Thinking, Johari's Window, Communication Skills, Non-verbal Communication, Physical Fitness	3	**Soft Skills: an Integrated Approach to Maximise Personality** by Gajendra S. Chauhan, Sangeeta Sharma, Wiley India	GOOGLE MEET AND PPT
	Emotional Intelligence: Meaning and Definition, Need for Emotional Intelligence, Intelligence Quotient versus Emotional Intelligence Quotient, Components of Emotional Intelligence, Competencies of Emotional Intelligence, Skills to Develop Emotional Intelligence	4		

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	Etiquette and Mannerism: Introduction, Professional Etiquette, Technology Etiquette	3		
	Communication Today: Significance of Communication, GSC's 3M Model of Communication, Vitality of the Communication Process, Virtues of Listening, Fundamentals of Good Listening, Nature of Non-Verbal Communication, Need for Intercultural Communication, Communicating Digital World	4		
UNIT 2	**Academic Skills** **Employment Communication:** Introduction, Resume, Curriculum Vitae, Scannable Resume, Developing an Impressive Resume, Formats of Resume, Job Application or Cover Letteru	3	**Soft Skills: an Integrated Approach to Maximise Personality** by Gajendra S. Chauhan, Sangeeta Sharma, Wiley India	GOOGLE MEET AND PPT
	Professional Presentation: Nature of Oral Presentation, Planning a Presentation, Preparing the Presentation, Delivering the Presentation	3		
	Job Interviews: Introduction, Importance of Resume, Definition of Interview, Background Information, Types of Interviews, Preparatory Steps for Job Interviews, Interview Skill Tips, Changes in the Interview Process, FAQ During Interviews	4		
	Group Discussion: Introduction, Ambience/Seating Arrangement for Group Discussion, Importance of Group Discussions, Difference between Group Discussion, Panel Discussion and Debate, Traits, Types of Group Discussions, topic based and Case based Group Discussion, Individual Traits	4		

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UNIT 3	**Professional Skills** **Creativity at Workplace:** Introduction, Current Workplaces, Creativity, Motivation, Nurturing Hobbies at Work, The Six Thinking Hat Method	3	**Soft Skills: an Integrated Approach to Maximise Personality** by Gajendra S. Chauhan, Sangeeta Sharma, Wiley India	GOOGLE MEET AND PPT
	Ethical Values: Ethics and Society, Theories of Ethics, Correlation between Values and Behaviour, Nurturing Ethics, Importance of Work Ethics, Problems in the Absence of Work Ethics	3		
	Capacity Building: Learn, Unlearn and Relearn*:* Capacity Building, Elements of Capacity Building, Zones of Learning, Ideas for Learning, Strategies for Capacity Building	3		
	Leadership and Team Building*:* Leader and Leadership, Leadership Traits, Culture and Leadership, Leadership Styles and Trends, Team Building, Types of Teams,	3		
	Decision Making and Negotiation: Introduction to Decision Making, Steps for Decision Making, Decision Making Techniques, Negotiation Fundamentals, Negotiation Styles, Major Negotiation Concepts	3		
	Stress and Time Management*:* Stress, Sources of Stress*,* Ways to Cope with Stress	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.CS SEMESTER: I MONTH: SEPTEMBER-DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the digital representation of data in a computer system.
- Understand the theory and architecture of central processing unit.
- Learn the concepts of parallel processing, pipelining and interprocessor communication.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Unit I Computer Organization and Design	**Computer Abstractions and Technology:** Basic structure and operation of a computer, functional units and their interaction.	1	Carl Hamacher et al., Computer Organization and Embedded Systems, 6 ed., McGraw-Hill 2012	Google Meet, PPT
	Representation of numbers and characters.	3		Google Meet, PPT
	Logic circuits and functions: Combinational circuits and functions: Basic logic gates and functions, truth tables; logic circuits and functions.	1		Google Meet, PPT
	Minimization with Karnaugh maps.	3		Google Meet, PPT
	Synthesis of logic functions with and-or-not gates, nand gates, nor gates. Fan-in and fan-out requirements; tristate buffers.	2		Google Meet, PPT
	Half adder, full adder, ripple carry adder. (Flip flops) Gated S-R and D latches, edge-triggered D latch.	2		Google Meet, PPT

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	Shift registers and registers. Decoders, multiplexers.	1		Google Meet, PPT
	Sequential circuits and functions: State diagram and state table; finite state machines and their synthesis.	2		Google Meet, PPT
Paper-I Unit II Computer Organization and Design	**Instruction set architectures:** Memory organization, addressing and operations; word size, big-endian and little-endian arrangements.	2	Carl Hamacher et al., Computer Organization and Embedded Systems, 6 ed., McGraw-Hill 2012	Google Meet, PPT
	Instructions, sequencing. Instruction sets for RISC and CISC (examples Altera NIOS II and Freescale ColdFire).	3		Google Meet, PPT
	Operand addressing modes; pointers; indexing for arrays	3		Google Meet, PPT
	Machine language, assembly language, assembler directives. Function calls, processor runtime stack, stack frame.	3		Google Meet, PPT
	Types of machine instructions: arithmetic, logic, shift, etc.	2		Google Meet, PPT
	Instruction sets, RISC and CISC examples.	2		Google Meet, PPT
Paper-I Unit III Computer Organization and Design	**Basic Processor Unit:** Main components of a processor: registers and register files, ALU, control unit, instruction fetch unit, interfaces to instruction and data memories.	4	Carl Hamacher et al., Computer Organization and Embedded Systems, 6 ed., McGraw-Hill 2012	Google Meet, PPT
	Datapath. Instruction fetch and execute; executing arithmetic/logic, memory access and	3		Google Meet, PPT
	branch instructions; hardwired and microprogrammed control for RISC and CISC.	3		Google Meet, PPT
	Basic I/O: Accessing I/O devices, data transfers between processor and I/O devices.	3		Google Meet, PPT
	Interrupts and exceptions: interrupt requests and processing.	2		Google Meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: COMPUTER SCIENCE CLASS: FYCS

SEMESTER: I MONTH: SEPTEMBER- DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concepts of programming before actually starting to write programs.
- Develop logic for Problem Solving.
- Be familiar about the basic constructs of programming such as data, operations, conditions, loops, functions etc.
- Apply the problem solving skills using syntactically simple language i.e. Python (version: 3.X or higher)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS102, Unit 1, Programming with Python- I	Reasons for Python as the learner's first programming language. Introduction to the IDLE interpreter (shell) and its documentation. Expression evaluation: similarities and differences compared to a calculator; expressions and operators of types int, float, boolean. Built-in function type. Operator precedence.	03	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation
	Enumeration of simple and compound statements. The expression statement. The assert statement, whose operand is a boolean expression (values true or false). The assignment statement, dynamic binding of names to values, automatic and implicit declaration of variable names with the assignment statement; assigning the valueNone to a name.	04	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation
	The del (delete) statement. Input/output with print and input functions. A statement list as a single interpreter command.	02	Paul Gries, Programming:	Power Point Presentation

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			An Introduction to Computer Science Using Python 3	
	The import statement for already-defined functions and constants. The augmented assignment statement. The built-in help() function. Interactive and script modes of IDLE, running a script, restarting the shell. The compound statement def to define functions; the role of indentation for delimiting the body of a compound statement; calling a previously defined function. Compound data types str, tuple and list	03	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation
	Indexing individual elements within these types. Strings and tuples are immutable, lists are mutable. Built-in functions min, max, sum. Interactive solution of model problems, by repeatedly executing the body of a loop.	03	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation
USCS102, Unit 2, Programming with Python- I	Advantages of functions, function parameters, formal parameters, actual parameters, global and local variables..	03	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation
	The range function, the iterative for statement. The conditional statements if, if-else, if-elif-else. The iterative statements while, while-else, for-else	04	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation

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	The continue statement to skip over one iteration of a loop, the break statement to exit the loop. Nested compound statements.	04	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation
	Dictionaries: concept of key-value pairs, techniques to create, update and delete dictionary items. Problem-solving using compound types and statements	04	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation
USCS102, Unit 3, Programming with Python-I	Anonymous functions. List comprehensions.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation
	Gentle introduction to object-oriented programming; using the built-in dir() function, enumerate the methods of strings, tuples, lists, dictionaries	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation
	Using these methods for problem-solving with compound types.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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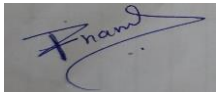

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: Computer Science

CLASS: Fybsc(CS)

SEMESTER: 1

MONTH: September to December

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

- The learners will be able to know descriptive statistical concepts
- The learner will able to study probability concepts required for computer learners.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: Descriptive statistics and introduction to probability **<u>Unit 1</u>**	**Data Presentation**: ● Data types: attribute, variable , discrete and continuous variable ● Data presentation: frequency distribution, histogram, O give curves, stem and leaf display	5	Gupta, S.C. and kapoor V.k.(1987): fundamental of mathematical statistics	Power point presentation, Laptop
	Data Aggregation: ● Measures of central tendency: mean , median, mode for raw data, discrete, grouped frequency distribution	5	Gupta, S.C. and kapoor V.k.(1987): fundamental of mathematical statistics	Power point presentation, Laptop

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	Measures of dispersion: ● Variance, standard deviation, coefficient of variation for raw data,discrete, grouped frequency distribution, quartiles, quantiles real life example	5	Gupta, S.C. and kapoor V.k.(1987): fundamental of mathematical statistics	Power point presentation, Laptop
Unit 2	**Moments**: ● Raw moments, Central moments,relation between raw and central moment	3	Gupta, S.C. and kapoor V.k.(1987): fundamental of mathematical statistics	Power point presentation, Laptop
	Measures of Skewness and kurtosis: ● Based on moments and quartiles ● Relation between mean , median and mode for symmetric and asymmetric frequency curve	3	Gupta, S.C. and kapoor V.k.(1987): fundamental of mathematical statistics	Power point presentation, Laptop
	Correlation and regression: ● Bivariate data, scatter plot, correlation,nonscence correlation, karl-pearson's coefficient of correlation, independence	5	Gupta, S.C. and kapoor V.k.(1987): fundamental of mathematical statistics	Power point presentation, Laptop
	Linear regression:	4	Gupta, S.C. and kapoor V.k.(1987): fundamental of	Power point presentation, Laptop

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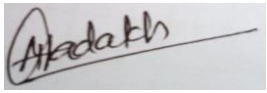
	● Fitting of linear regression using least square method, coefficient of determination, properties of linear regression (only statement)		mathematical statistics	
Unit 3	**Probability:** ● Random experiment,sample space,events, types and operations of events ● Probability definition:classical, axiomatic ● Theorem of probability (without proof) -O<P(A)<1 - P(AUB)=P(A)+P(B)-P(AΔB) - P(A')=1-P(A) - P(A)<P(B) if A is subset of B	8	Gupta, S.C. and kapoor V.k.(1987): fundamental of mathematical statistics	Power point presentation, Laptop
	Conditional probability,Baye's theorem, independence, examples of probability	7	Gupta, S.C. and kapoor V.k.(1987): fundamental of mathematical statistics	Power point presentation, Laptop

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: FYCS SEMESTER: I MONTH: SEPTEMBER-DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to : Students should be able to evaluate business information problem and find the requirements of a problem in terms of data. Students should be able to design the database schema with the use of appropriate data types for storage of data in database. Students should be able to create, manipulate, query and back up the databases.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS201, Introduction to Database Management Systems, UNIT-I	**Introduction of DBMS** Database, DBMS – Definition, Overview of DBMS, Advantages of DBMS, Levels of abstraction, Data independence, DBMS Architecture	03	Ramez Elmasri & ShamkantB.Navathe, Fundamentals of Database Systems, Pearson Education, Sixth Edition, 2010.	Meet, PPT
	Data models – Client-Server Architecture,Object Based Logical Model, Record Based Logical Model (relational, hierarchical, network)	02		Meet, PPT
	Entity Relationship Model - Entities, attributes, entity sets, relations, relationship sets , Additional constraints (key constraints, participation constraints, weak entities, aggregation / generalization, Conceptual Design using ER (entities VS attributes, Entity Vs relationship, binary Vs ternary, constraints beyond ER)	04		Meet, PPT

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	Relational data model– Domains, attributes, Tuples and Relations, Relational Model Notation, Characteristics of Relations, Relational Constraints - primary key, referential integrity, unique constraint, Null constraint, Check constraint	04		Meet, PPT
	Entity to Table, Relationship to tables with and without key constraints.	02		Meet, PPT
USCS201, Introduction to Database Management Systems, UNIT-II	**ER to The Relational Model** Schema Refinement and normal forms :Functional Dependencies and 1NF, 2NF, 3NF and BCNF normal forms based on primary keys, lossless join decomposition.	03	1.Ramez Elmasri & ShamkantB.Navathe, Fundamentals of Database Systems, Pearson Education, Sixth Edition, 2010. 2. Joel Murach, Murach's MySQL, Murach, 2012	Meet, PPT
	Relational Algebra operations (selection, projection, set operations union, intersection, difference, cross product, Joins –conditional, equi join and natural joins, division)	03		Meet, PPT
	DDL Statements - Creating Databases, Using Databases, datatypes, Creating Tables (with integrity constraints – primary key, default, check, not null), Altering Tables, Renaming Tables, Dropping Tables, Truncating Tables, Backing Up and Restoring databases	02		Meet, PPT
	DML Statements – Viewing the structure of a table insert, update, delete, Select – all columns, specific columns, unique records, conditional select, in clause, between clause, limit, aggregate functions (count, min, max, avg, sum), group by clause, having clause	03		Meet, PPT
	Functions – String Functions (concat, instr, left, right, mid, length, lcase/lower, ucase/upper, replace, strcmp, trim, ltrim, rtrim), Math Functions (abs, ceil, floor, mod, pow, sqrt, round, truncate) Date Functions (adddate, datediff, day, month, year, hour, min, sec, now, reverse)	02		Meet, PPT

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	Joining Tables – inner join, outer join (left outer, right outer, full outer)	02		Meet, PPT
USCS201, Introduction to Database Management Systems, UNIT-III	**Sub queries** Sub queries – sub queries with IN, EXISTS, sub queries restrictions, Nested sub queries, ANY/ALL clause, correlated sub queries	03	Joel Murach, Murach's MySQL, Murach, 2012	Meet, PPT
	Database Protection: Security Issues, Threats to Databases, Security Mechanisms, Role of DBA, Discretionary Access Control	03		Meet, PPT
	Views (creating, altering dropping, renaming and manipulating views)	03		Meet, PPT
	DCL Statements (creating/dropping users, privileges introduction, granting/revoking privileges, viewing privileges)	03		Meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. HARSHALI SHAILESH MANKAR DEPARTMENT: CS CLASS: SYCS

SEMESTER: III MONTH: AUGUST- DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Write, compile and execute Java programs
- Build robust applications using Java's object-oriented features
- Create robust applications using Java class libraries
- Develop platform-independent GUIs
- Read and write data using Java streams

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS302, Core Java Unit 1	The Java Language: Features of Java, Java programming format, Java Tokens, Java Statements, Java Data Types, Typecasting, Arrays .	05	1) Herbert Schildt, Java The Complete Reference, Ninth Edition, McGraw-Hill Education, 2014 2) E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014 3) https://docs.oracle.com/javase/tutorial/	Black Board and chalk, Powerpoint

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	OOPS: Introduction, Class, Object, Static Keywords, Constructors, this Key Word, Inheritance, super Key Word, Polymorphism (overloading and overriding), Abstraction, Encapsulation, Abstract Classes, Interfaces	05	1. E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
	String Manipulations: String, String Buffer, String Tokenizer	01	https://docs.oracle.com/javase/tutorial/	Black Board and chalk, PowerPoint
	Packages: Introduction to predefined packages (java.lang, java.util,java.io, java.sql, java.swing), User Defined Packages, Access specifiers	04	1. E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
USCS302, Core Java Unit 2	Exception Handling: Introduction, Pre-Defined Exceptions, Try-Catch-Finally, Throws, throw, User Defined Exception examples.	05	1. Herbert Schildt, Java The Complete Reference, Ninth Edition, McGraw-Hill Education, 2014	Black Board and chalk, PowerPoint
	Multithreading: Thread Creations, Thread Life Cycle, Life Cycle Methods, Synchronization, Wait() notify() notify all() methods I/O	04	1. Herbert Schildt, Java The Complete Reference, Ninth Edition, McGraw-Hill Education, 2014	Black Board and chalk, PowerPoint
	Streams: Introduction, Byte-oriented streams, Character-oriented streams, File, Random access File, Serialization	03	1.Herbert Schildt, Java The Complete Reference, Ninth Edition, McGraw-Hill Education, 2014	PowerPoint

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	Networking: Introduction, Socket, Server socket, Client – Server Communication	03	https://www.tutorialspoint.com/java/java_networking.html	PowerPoint
USCS302, Core Java Unit 3	Wrapper Classes: Introduction, Byte, Short, Integer, Long, Float, Double, Character, Boolean classes	02	1.E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
	Collection Framework: Introduction, util Package interfaces, List, Set, Map, List interface & its classes, Set interface & its classes, Map interface & its classes	04	1.E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
	Inner Classes: Introduction, Member inner class, Static inner class, Local inner class, Anonymous inner class	04	1.E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
	AWT: Introduction, Components, Event-Delegation-Model, Listeners, Layouts, Individual components Label, Button, CheckBox, Radio Button, Choice, List, Menu, Text Field, Text Area	05	1. E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT/CS

CLASS: SYCS SEMESTER: III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to design and develop state of - the art web applications using client-side scripting, server-side scripting, and database connectivity

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
SKILL ENHANCEMENT: WEB PROGRAMMING (USCS307) Unit I	**HTML5:** Fundamental Elements of HTML, Formatting Text in HTML, Organizing Text in HTML, Links and URLs in HTML, Tables in HTML, Images on a Web Page, Image Formats, Image Maps, Colours, FORMs in HTML, Interactive Elements, Working with Multimedia - Audio and Video File Formats, HTML elements for inserting Audio / Video on a web page	8	HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP and jQuery, 2ed, Dreamtech Press	PPT
	CSS: Understanding the Syntax of CSS, CSS Selectors, Inserting CSS in an HTML Document, CSS properties to work with background of a Page, CSS properties to work with Fonts and Text Styles, CSS properties for positioning an element	7		
SKILL ENHANCEMENT: WEB PROGRAMMING (USCS307)	**JavaScript:** Using JavaScript in an HTML Document, Programming Fundamentals of JavaScript – Variables, Operators, Control Flow Statements, Popup Boxes, Functions – Defining and Invoking a Function, Defining Function arguments, Defining a Return Statement, Calling Functions with Timer	6	HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP and	PPT

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Unit II	**JavaScript Objects** - String, RegExp, Math, Date, Browser Objects - Window, Navigator, History, Location, Document, Cookies, Document Object Model, Form Validation using JavaScript	2	jQuery, 2ed, Dreamtech Press	PPT
	XML: Comparing XML with HTML, Advantages and Disadvantages of XML, Structure of an XML Document, XML Entity References, DTD, XSLT: XSLT Elements and Attributes - xsl:template, xsl:apply-templates, xsl:import, xsl:call-template, xsl:include, xsl:element, xsl:attribute, xsl:attribute-set, xsl:value-of	7		PPT
SKILL ENHANCEMENT: WEB PROGRAMMING (USCS307) Unit III	**AJAX**: AJAX Web Application Model, How AJAX Works, XMLHttpRequest Object – Properties and Methods, Handling asynchronous requests using AJAX	4	HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP and jQuery, 2ed, Dreamtech Press, PHP: A Beginners Guide, Vikram Vaswani, TMH	PPT
	PHP: Variables and Operators, Program Flow, Arrays, Working with Files and Directories, Working with Databases, Working with Cookies, Sessions and Headers	7		PPT
	Introduction to jQuery: Fundamentals, Selectors, methods to access HTML attributes, methods for traversing, manipulators, events, effects	4		PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT-CS

CLASS:SYCS SEMESTER: SEM-III MONTH: AUG-DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Master concepts of stored procedure and triggers and its use. Learn about using PL/SQL for data management and understand concepts and implementations of transaction management and crash recovery.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-4 DBMS, UNIT-1	**Stored Procedures:** Types and benefits of stored procedures, creating stored procedures, executing stored procedures, altering stored procedures, viewing stored procedures.	5	SQL,PL/SQL - The Programming language of Oracle by Ivan Bayross , Database Management Systems by Ramakrishnam, Gehrke.	PPT, GoogleMeet, Jamboard ,Slido.
	Triggers: Concept of triggers, Implementing triggers – creating triggers, Insert, delete, and update triggers, nested triggers, viewing, deleting and modifying triggers, and enforcing data integrity through triggers.	4		
	Sequences: creating sequences, referencing, altering and dropping a sequence.	2		
	File Organization and Indexing: Cluster, Primary and secondary indexing, Index data structure: hash and Tree based indexing	2		

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	Comparison of file organization: cost model, Heap files, sorted files, clustered files. Creating, dropping and maintaining indexes.	2		
UNIT-2	**Fundamentals of PL/SQL:** Defining variables and constants, PL/SQL expressions and comparisons: Logical Operators, Boolean Expressions, CASE Expressions Handling.	3	SQL,PL/SQL - The Programming language of Oracle by Ivan Bayross	PPT, GoogleMeet, Jamboard ,Slido
	Null Values in Comparisons and Conditional Statements, PL/SQL Datatypes: Number Types, Character Types, Boolean Type, Datetime and Interval Types.	3		
	Overview of PL/SQL Control Structures: Conditional Control: IF and CASE Statements, IF-THEN Statement, IF-THEN-ELSE Statement,	5		
	CASE Statement, Iterative Control: LOOP and EXIT Statements, WHILE-LOOP, FOR-LOOP, Sequential Control: GOTO and NULL Statements	4		
UNIT 3	**Transaction Management:** ACID Properties, Serializability, Two-phase Commit Protocol, Concurrency Control, Lock Management	3	SQL,PL/SQL - The Programming language of Oracle by Ivan Bayross, Database Management Systems by	PPT, GoogleMeet, Jamboard , Slido.
	Lost Update Problem, Inconsistent Read Problem , Read-Write Locks, Deadlocks Handling, Two Phase Locking protocol	3		
	DCL Statements: Defining a transaction, Making Changes Permanent with COMMIT, Undoing Changes with ROLLBACK, Undoing Partial Changes with SAVEPOINT and ROLLBACK.	3		

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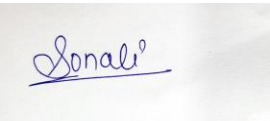
	Crash Recovery: ARIES algorithm. The log based recovery, recovery related structures like transaction and dirty page table	3	Ramakrishnam, Gehrke	
	Write-ahead log protocol, check points, recovery from a system crash, Redo and Undo phases.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT:CS

CLASS:SYCS SEMESTER: SEM-3 MONTH: AUG-DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
physical interfaces and electronics of Raspberry Pi and program them using practical's
Learn how to make consumer grade IoT safe and secure with proper use of protocols.

PAPER, TITLE,UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper6,Physical computing and IOT programming, UNIT 1	**SoC and Raspberry Pi System on Chip**: What is System on chip? Structure of System on Chip. **SoC products:** FPGA, GPU, APU, Compute Units.	4	Physical computing IOT programming by Himalaya publication	GOOGLE SIDES, GOOGLE MEET,PPT
	ARM 8 Architecture: SoC on ARM 8. ARM 8 Architecture Introduction	4		
	Introduction to Raspberry Pi: Introduction to Raspberry Pi, Raspberry Pi Hardware, Preparing your raspberry Pi.	4		
	Raspberry Pi Boot: Learn how this small SoC boots without BIOS. Configuring boot sequences and hardware	3		
	Programming Raspberry Pi	3		

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UNIT 2	**Raspberry Pi and Linux**: About Raspbian, Linux Commands, Configuring Raspberry Pi with Linux Commands		Physical computing IOT programming by Himalaya publication	GOOGLE SIDES, GOOGLE MEET,PPT
	Programing interfaces: Introduction to Node.js, Python.	4		
	Raspberry Pi Interfaces: UART, GPIO, I2C, SPI	4		
	Useful Implementations: Cross Compilation, Pulse Width Modulation, SPI for Camera.	4		
Unit 3	. **Introduction to IoT**: What is IoT? IoT examples, Simple IoT LED Program.	3	Physical computing IOT programming by Himalaya publication	GOOGLE SIDES, GOOGLE MEET,PPT
	IoT and Protocols **IoT Security**: HTTP, UPnp, CoAP, MQTT, XMPP.	4		
	IoT Security and Interoperability: Risks, Modes of Attacks, Tools forSecurity and Interoperability.	3		

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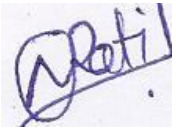
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 41



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: Computer Science

CLASS: Sybsc(CS)

SEMESTER: 3

MONTH:August to December

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

- To give the learner a broad exposure of combinatorial Mathematics through applications especially the Computer Science applications.
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: Combinatorics and Graph Theory **<u>Unit 1:</u>**	**Introduction to Combinatorics:** ● Enumeration, Combinatorics and Graph Theory/ Number Theory/Geometry and Optimization, Sudoku Puzzles. ● Strings, Sets, and Binomial Coefficients: Strings- A First Look, Combinations, Combinatorial, The Ubiquitous Nature of Binomial Coefficients, The Binomial, Multinomial Coefficients.	5	Applied Combinatorics, Mitchel T. Keller and William T. Trotter, 2016,	Power point presentation, Laptop

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Introduction to Combinatorics:	• Induction: Introduction, The Positive Integers are Well Ordered, The Meaning of Statements, Binomial Coefficients Revisited, Solving Combinatorial Problems Recursively,	6	Applied Combinatorics, Mitchel T. Keller and William T. Trotter, 2016,	Power point presentation, Laptop
	• Mathematical Induction, and Inductive Definitions Proofs by Induction. Strong Induction	4	Applied Combinatorics, Mitchel T. Keller and William T. Trotter, 2016,	Power point presentation, Laptop
Unit 2 **Graph Theory**	• **Graph Theory:** Basic Notation and Terminology, Multigraphs: Loops and Multiple Edges, Eulerian and Hamiltonian Graphs,	6	Applied Combinatorics, Mitchel T. Keller and William T. Trotter, 2016,	Power point presentation, Laptop
	• Graph Coloring, Planar Counting, Labeled Trees, A Digression into Complexity Theory. Applying Probability to Combinatorics	5	Applied Combinatorics, Mitchel T. Keller and William T. Trotter, 2016,	Power point presentation, Laptop
	• Small Ramsey Numbers, Estimating Ramsey Numbers, Applying Probability to Ramsey Theory, Ramsey's Theorem The Probabilistic Method	4	Applied Combinatorics, Mitchel T. Keller and William T. Trotter, 2016,	Power point presentation, Laptop

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Unit 3 **Network Flow**	• **Network Flows:** Basic Notation and Terminology, Flows and Cuts, • Augmenting Paths, The Ford-Fulkerson Labeling Algorithm,	6	Applied Combinatorics, Mitchel T. Keller and William T. Trotter, 2016,	Power point presentation, Laptop
	• A Concrete Example, Integer Solutions of Linear Programming Problems. • Combinatorial Applications of Network Flows: Introduction, Matching in Bipartite Graphs, Chain partitioning	6	Applied Combinatorics, Mitchel T. Keller and William T. Trotter, 2016,	Power point presentation, Laptop
	• Pólya's Enumeration Theorem: Coloring the Vertices of a Square.	3	Applied Combinatorics, Mitchel T. Keller and William T. Trotter, 2016,	Power point presentation, Laptop

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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Yashvant Keshav Patil College of Commerce
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(C.S.) SEMESTER: III MONTH: AUG-SEPT ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- To learn the role and functions of Operating System
- To Learn Operating System interfaces and structure of Operating System
- To learn how inter process communication takes place
- To learn how multiple threads can run simultaneously

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Operating Systems Unit 1	**Introduction and Operating-Systems Structures**: Definition of Operating system, Operating System's role, Operating-System Operations, Functions of Operating System, Computing Environments	4	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

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	Operating-System Structures: Operating-System Services, User and Operating-System Interface, System Calls, Types of System Calls, Operating-System Structure	4	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Processes: Process Concept, Process Scheduling, Operations on Processes, Interprocess Communication	4	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Threads: Overview, Multicore Programming, Multithreading Models	3	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(I.T.) SEMESTER: III MONTH: SEPT ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- To learn how process synchronization is done ie multiple process run simultaneously
- To learn how process scheduling is done in the operating system
- To learn how deadlocks occur and how they prevented and handled

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Operating Systems Unit 2	**Process Synchronization**: General structure of a typical process, race condition, The Critical-Section Problem, Peterson's Solution, Synchronization Hardware, Mutex Locks, Semaphores, Classic Problems of Synchronization, Monitors Spectrum	5	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	CPU Scheduling: Basic Concepts, Scheduling Criteria, Scheduling Algorithms (FCFS, SJF, SRTF, Priority, RR, Multilevel Queue Scheduling, Multilevel Feedback Queue Scheduling), Thread Scheduling	5	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

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			Concepts, Wiley,8th Edition Forouzan Tata McGraw Hill Fifth Edition 2013	
	Deadlocks: System Model, Deadlock Characterization, Methods for Handling Deadlocks, Deadlock Prevention, Deadlock Avoidance, Deadlock Detection, Recovery from Deadlock	5	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(C.S.) SEMESTER: III MONTH: SEPT-OCT ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- To learn physical memory of OS
- To learn virtual memory of OS
- To learn the mapping of physical memory to virtual memory

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 3	**Main Memory:** Background, Logical address space, Physical address space, MMU, Swapping, Contiguous Memory Allocation, Segmentation, Paging, Structure of the Page Table	8	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Virtual Memory: Background, Demand Paging, Copy-on-Write, Page Replacement, Allocation of Frames, Thrashing	7	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

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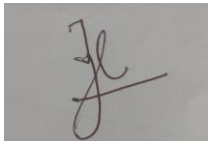
			Concepts, Wiley,8th Edition Forouzan Tata McGraw Hill Fifth Edition 2013	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **S.Y.B.Sc.(CS)**

SEMESTER: **III** MONTH: **June - September** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able:

1. Understand Grammar and Languages.
2. Learn about Automata theory and its application in Language Design.
3. Learn about Turing Machines and Pushdown Automata.
4. Understand Linear Bound Automata and its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS301 Paper I **Theory of Computation** **UNIT I**	**Automata Theory:** Defining Automaton, Finite Automaton, Transitions and Its properties, Acceptability by Finite Automaton	4	Theory of Computer Science, K. L. P Mishra, Chandrasekharan, PHI,3rd Edition. Introduction to Computer Theory, Daniel Cohen, Wiley,2nd Edition.	Chalk and Board
	Nondeterministic Finite State Machines, DFA and NDFA equivalence, Mealy and Moore Machines, Minimizing Automata.	4		
	Formal Languages: Defining Grammar, Derivations, Languges generated by Grammar	3		
	Chomsky Classification of Grammar and Languages, Recursive Enumerable Sets, Operations on Languages, Languages and Automata	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS301 Paper I **Theory of Computation** **UNIT II**	**Regular Sets and Regular Grammar:** Regular Grammar, Regular Expressions, Finite automata and Regular Expressions	4	Theory of Computer Science, K. L. P Mishra, Chandrasekharan, PHI,3rd Edition. Introduction to Computer Theory, Daniel Cohen, Wiley,2nd Edition.	Chalk and Board
	Pumping Lemma and its Applications, Closure Properties, Regular Sets and Regular Grammar	4		
	Context Free Languages: Context-free Languages, Derivation Tree, Ambiguity of Grammar, CFG simplification, Normal Forms, Pumping Lemma for CFG	4		
	Pushdown Automata: Definitions, Acceptance by PDA, PDA and CFG	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS301 Paper I **Theory of Computation** **UNIT III**	**Linear Bound Automata:** The Linear Bound Automata Model, Linear Bound Automata and Languages.	4	Theory of Computer Science, K. L. P Mishra, Chandrasekharan, PHI,3rd Edition. Introduction to Computer Theory, Daniel Cohen, Wiley,2nd Edition.	Chalk and Board
	Turing Machines: Turing Machine Definition, Representations, Acceptability by Turing Machines.	4		
	Designing and Description of Turing Machines, Turing Machine Construction, Variants of Turing Machine,	3		
	Undecidability: The Church-Turing thesis, Universal Turing Machine, Halting Problem, Introduction to Unsolvable Problems	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **T.Y.B.Sc.(CS)**

SEMESTER: **V** MONTH: **August - December** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able:

- To get a clear understanding of AI and different search algorithms used for solving problems.
- To get acquainted with different learning algorithms and models used in machine learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 **Paper I** **Artificial Intelligence** **UNIT I**	**What Is AI:** Foundations, History and State of the Art of AI.	4	Artificial Intelligence: A Modern Approach, Stuart Russell and Peter Norvig,3rd Edition.	Google Meet and Microsoft PowerPoint Presentation
	Intelligent Agents: Agents and Environments, Nature of Environments, Structure of Agents.	3		
	Problem Solving by searching: Problem-Solving Agents, Example Problems, Searching for Solutions, Uninformed Search Strategies.	4		
	Informed (Heuristic) Search Strategies, Heuristic Functions.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 **Paper I** **Artificial Intelligence** **UNIT II**	**Learning from Examples:** Forms of Learning, Supervised Learning, Learning Decision Trees	3	Artificial Intelligence: A Modern Approach, Stuart Russell and Peter Norvig,3rd Edition.	Google Meet and Microsoft PowerPoint Presentation
	Evaluating and Choosing the Best Hypothesis, Theory of Learning	3		
	Regression and Classification with Linear Models ,Artificial Neural Networks	4		
	Nonparametric Models, Support Vector Machines, Ensemble Learning, Practical Machine Learning	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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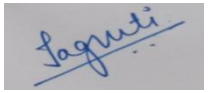
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 **Paper I** **Artificial Intelligence** **UNIT III**	**Learning probabilistic models:** Statistical Learning, Learning with Complete Data.	4	Artificial Intelligence: A Modern Approach, Stuart Russell and Peter Norvig,3rd Edition.	Google Meet and Microsoft PowerPoint Presentation
	Learning with Hidden Variables: The EM Algorithm	3		
	Reinforcement learning: Passive Reinforcement Learning, Active Reinforcement Learning,	4		
	Generalization in Reinforcement Learning, Policy Search, Applications of Reinforcement Learning.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR.SAMPADA DESHMUKH DEPARTMENT: INFORMATION TECHNOLOGY CLASS: T.Y.C.S.

SEMESTER: V MONTH: AUGUST -DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concepts of basic computer security, Network Security and Cryptography.
- Understand different techniques of cryptography.
- Learn security threats and vulnerabilities and identify security problems.
- Identify threats of Network Security and apply protocol for the network.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS504 Unit 1, **Information and Network Security**	Security Trends, The OSI Security Architecture, Security Attacks, Security Services, Security Mechanisms	03	Cryptography and Network Security: Principles and Practice 5th Edition, William	PPT and Google Meet
	Classical Encryption Techniques: Symmetric Cipher Model, Substitution Techniques . Transposition Techniques, Steganography, Block Cipher Principles, The Data Encryption Standard, The Strength of DES	04	Cryptography and Network Security, Atul Kahate, Tata McGraw-Hill, 2013.	PPT and Google Meet
	Multiple encryption Triple DES	02	Cryptography and Network Security, Atul Kahate, Tata McGraw-Hill, 2013.	PPT and Google Meet

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	Advanced Encryption Algorithm			
	Principles of public key cryptosystem concept and working Modes of operation Block cipher	03	Cryptography and Network Security: Principles and Practice 5th Edition, William	PPT and Google Meet
	Stream cipher RSA Algorithm concept RSA algorithm problem solving	03	Cryptography and Network Security, Atul Kahate, Tata McGraw-Hill, 2013.	PPT and Google Meet
USCS504, Unit 2, **Information and Network Security**	**Key Management:** Public-Key Cryptosystems Key Management Diffie-Hellman Key Exchange	03	Cryptography and Network Security: Principles and Practice 5th Edition, William	PPT and Google Meet
	Message Authentication and Hash Functions: Authentication Requirements, Authentication Functions, Message Authentication Codes Hash Functions, Security of Hash Functions and Macs,	04	Cryptography and Network Security, Atul Kahate, Tata McGraw-Hill, 2013.	PPT and Google Meet
	HMAC Secure Hash Algorithm **Digital Signatures and Authentication:** Digital Signatures, Authentication Protocols	04	Cryptography and Network Security: Principles and Practice 5th Edition, William	PPT and Google Meet
	Digital Signature Standard **Authentication Applications:** Kerberos, X.509 Authentication, Public-Key Infrastructure	04	Cryptography and Network Security: Principles and Practice 5th Edition, William	PPT and Google Meet

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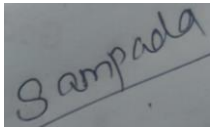
USCS504, Unit 3, **Information and Network Security**	**Electronic Mail Security:** Pretty Good Privacy, S/MIME **IP Security:** Overview, Architecture, Authentication Header, Encapsulating Security Payload, Combining Security Associations, Key Management	05	Cryptography and Network Security: Principles and Practice 5th Edition, William	PPT and Google Meet
	Web Security: Web Security Considerations, Secure Socket Layer and Transport Layer Security, Secure Electronic Transaction **Intrusion:** Intruders, Intrusion Techniques, Intrusion Detection	05	Cryptography and Network Security: Principles and Practice 5th Edition, William	PPT and Google Meet
	Malicious Software: Viruses and Related Threats, Virus Countermeasures, DDOS **Firewalls:** Firewall Design Principles, Types of Firewalls	05	Cryptography and Network Security: Principles and Practice 5th Edition, William	PPT and Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande

DEPARTMENT: Computer Science

CLASS: T.Y.C.S.

SEMESTER: V

MONTH: August-December

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand various software testing methods and strategies. Understand a variety of software metrics, and identify defects and managing those defects for improvement in quality for given software. Design SQA activities, SQA strategy, formal technical review report for software quality control and assurance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 Software Testing and Quality Assurance UNIT : 01	**Software Testing and Introduction to quality :** Introduction, Nature of errors, an example for Testing, Definition of Quality , QA, QC, QM and SQA , Software Development Life Cycle, Software Quality Factors	05	Software Engineering for Students, A Programming Approach, Douglas Bell, 4th Edition,, Pearson Education, 2005	Google Mett & PPT
	Verification and Validation : Definition of V &V , Different types of V & V Mechanisms, Concepts of Software Reviews, Inspection and Walkthrough	05		Google Mett & PPT
	Software Testing Techniques : Testing Fundamentals, Test Case Design, White Box Testing and its types, Black Box Testing and its	05		Google Mett & PPT

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	types			
USCS501 Software Testing and Quality Assurance UNIT : 02	**Software Testing Strategies :** Strategic Approach to Software Testing, Unit Testing, Integration Testing, Validation Testing, System Testing	05	Software Engineering – A Practitioners Approach, Roger S. Pressman, 5th Edition, Tata McGraw Hill, 2001	Google Mett & PPT
	Software Metrics : Concept and Developing Metrics, Different types of Metrics, Complexity metrics	05		Google Mett & PPT
	Defect Management: Definition of Defects, Defect Management Process, Defect Reporting, Metrics Related to Defects, Using Defects for Process Improvement.	05		Google Mett & PPT
USCS501 Software Testing and Quality Assurance UNIT : 03	**Software Quality Assurance :** Quality Concepts, Quality Movement, Background Issues, SQA activities, Software Reviews, Formal Technical Reviews, Formal approaches to SQA, Statistical Quality Assurance, Software Reliability, The ISO 9000 Quality Standards, , SQA Plan , Six sigma, Informal Reviews	07	Quality Management, Donna C. S. Summers, 5th Edition, Prentice-Hall, 2010. Total Quality Management, Dale H. Besterfield, 3rd Edition, Prentice Hall, 2003.	Google Mett & PPT
	Quality Improvement : Introduction, Pareto Diagrams, Cause-effect Diagrams, Scatter Diagrams, Run charts	03		Google Mett & PPT
	Quality Costs : Defining Quality Costs, Types of Quality Costs, Quality Cost Measurement, Utilizing Quality Costs for Decision-Making **Textbook**(s	05		Google Mett & PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **TYBSCCS** SEMESTER:**V**

MONTH: **AUGUST-DEC** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:

The learners will be able to :

understand computer Graphics programming using Directx or Opengl. Along with the VR and AR they should also aware of GPU, newer technologies and programming using most important API for windows.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS507 **Game Programming** Unit-1	**Cartesian Coordinate system:** The Cartesian XY-plane, Function Graphs, Geometric Shapes, Polygonal Shapes, Areas of Shapes, Theorem of Pythagoras in 2D, Coordinates, Theorem of Pythagoras in 3D, 3D Polygons, Euler's Rule	04	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Laptop,power point
	Vectors: Vector Manipulation, multiplying a Vector by a Scalar, Vector Addition and Subtraction, Position Vectors, Unit Vectors, Cartesian Vectors, Vector Multiplication, Scalar Product, Example of the Dot Product, The Dot Product in Lighting Calculations, The Dot Product in Back-Face Detection, The Vector Product, The Right-Hand Rule, deriving a Unit Normal Vector for a Triangle Areas,	03	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Laptop,power point

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	Calculating 2D Areas			
	Transformations: 2D Transformations, Matrices, Homogeneous Coordinates, 3D Transformations, Change of Axes, Direction Cosines, rotating a Point about an Arbitrary Axis, Transforming Vectors, Determinants, Perspective Projection, Interpolation	06	Computer Graphics, C Version, Donald Hern and Pauline Baker, Pearson Education, 2nd Edition, 1997	Laptop,power point jamboard
	DirectX: Understanding GPU and GPU architectures. How they are different from CPU Architectures? Understanding how to solve by GPU?	02	Introduction To 3D Game Programming With Directx® 11	Laptop,power point
USCS507 **Game Programming** Unit-2	**Introduction To DirectX 11:** COM, Textures and Resources Formats, The swap chain and Page flipping, Depth Buffering, Texture Resource Views, Multisampling Theory and MS in Direct3D, Feature Levels	03	Introduction To 3D Game Programming With Directx® 11	Laptop,power point
	Direct3D 11 Rendering Pipeline: Overview, Input Assembler Stage (IA), Vertex Shader Stage (VS), The Tessellation Stage (TS), Geometry Shader Stage (GS), Pixel Shader Stage (PS), Output merger Stage (OM) Understanding Meshes or Objects, Texturing, Lighting, Blending.	03	Introduction To 3D Game Programming With Directx® 11	Laptop,power point
	Trigonometry: The Trigonometric Ratios, Inverse Trigonometric Ratios, Trigonometric Relationships, The Sine Rule, The Cosine Rule, Compound Angles, Perimeter Relationships	03	Introduction To 3D Game Programming With Directx® 11	Laptop,power point

	Interpolation: Linear Interpolant, Non-Linear Interpolation, Trigonometric Interpolation, Cubic Interpolation, Interpolating Vectors, Interpolating Quaternions	03	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Laptop,power point
	Curves: Circle, Bezier, B-Splines **Analytic Geometry:** Review of Geometry, 2D Analytic Geometry, Intersection Points, Point in Triangle, and Intersection of circle with straight line.	03	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Black Board and chalk,power point
USCS507 **Game Programming** Unit-3	**Introduction to Rendering Engines:** Understanding the current market Rendering Engines. Understanding AR, VR and MR.Depth Mappers, Mobile Phones, Smart Glasses, HMD's **Unity Engine: Multi-platform publishing, VR + AR:** Introduction and working in Unity, 2D, Graphics, Physics, Scripting, Animation, Timeline, Multiplayer and Networking, UI, Navigation and Pathfinding, XR, Publishing.	10	https://docs.unity3d.com/Manual/index.html	Laptop,power point
	Scripting: Scripting Overview, Scripting Tools and Event Overview **XR:** VR, AR, MR, Conceptual Differences. SDK, Devices	05	https://docs.unity3d.com/Manual/index.html	Laptop,power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS: TYCS

SEMESTER: V MONTH: Aug to Sept ACADEMIC YEAR:2020-2021

LEARNING OBJECTIVE/S:

•To understand the details of web services technologies like SOAP, WSDL, and UDDI. To learn how to implement and deploy web service client and server.

•To understand the design principles and application of SOAP and REST based web services (JAX-Ws and JAX-RS).

•To understand WCF service. To design secure web services and QoS of Web Services

The learners will be able to:

•Emphasis on SOAP based web services and associated standards such as WSDL. Design SOAP based / RESTful / WCF services Deal with Security and QoS issues of Web Services

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Web Services Elective-II USCS506 Unit 1	**Web services basics:** What Are Web Services? Types of Web Services Distributed computing infrastructure, overview of XML, SOAP, Building Web Services with JAX-WS, Registering and Discovering Web Services, Service Oriented Architecture, Web Services Development Life Cycle, Developing and consuming simple Web Services across platform	15	Web Services: Principles and Technology,Michael P. Papazoglou, Pearson Education Limited, 2008	Laptop

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Web Services Elective-II USCS506 Unit 2	**The REST Architectural style:** Introducing HTTP, The core architectural elements of a RESTful system, Description and discovery of RESTful web services, Java tools and frameworks for building RESTful web services, JSON message format and tools and frameworks around JSON, Build RESTful web services with JAX-RS APIs, The Description and Discovery of RESTful Web Services, Design guidelines for building RESTful web services, Secure RESTful web services.	15	RESTful Java Web Services, Jobinesh Purushothaman, PACKT Publishing,2 nd Edition, 2015	Laptop
Web Services Elective-II USCS506 Unit 3	**Developing Service-Oriented Applications with WCF :** What Is Windows Communication Foundation, Fundamental Windows Communication Foundation Concepts, Windows Communication Foundation Architecture, WCF and .NET Framework Client Profile, Basic WCF Programming, WCF Feature Details. Web Service QoS	15	Developing Service-Oriented Applications with WCF, Microsoft, 2017 https://docs.microsoft.com/en-us/dotnet/framework/wcf/index	Laptop

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: Computer Science

CLASS: Fybsc(CS)

SEMESTER: 2

MONTH: January to March

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

- The learners will be able to know descriptive statistical concepts
- The learner will able to study probability concepts required for computer learners.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Statistical methods and testing of hypothesis **<u>Unit 1</u>**	Standard distribution: • Random variable, discrete random variable, continuous random variable, • Expectation and variance of discrete and continuous random variable	4	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Powerpoint Presentation
	• Pmf and Cdf for discrete random variable	2	Gupta ,S.C.and Kapoor,V.K.	Powerpoint Presentation

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			(2002): Fundamentals of Mathematical statistics	
	• PDF and Cdf for continuous random variable • Reliability	3	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Powerpoint Presentation
	Introduction and properties without proof for following distribution: • Binomial distribution • Normal distribution	3	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Powerpoint Presentation
	Introduction and properties without proof for following distribution: • Chi-square distribution • T- distribution • F- distribution	3	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Powerpoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Statistical methods	Hypothesis testing: • One sided and two sided hypothesis	3	Gupta ,S.C.and Kapoor,V.K.	Powerpoint Presentation

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and testing of hypothesis **<u>Unit 2</u>**	• Critical region • P- value		(2002): Fundamentals of Mathematical statistics	
	• Test based on t distribution • Test based on normal distribution • Test based on f distribution	5	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Powerpoint Presentation
	• Confidence interval	1	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Powerpoint Presentation
	Analysis of Variance: • One -way ANOVA	3	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Powerpoint Presentation
	Analysis of Variance: • Two- way ANOVA	3	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Powerpoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Statistical methods and testing of hypothesis **<u>Unit 3</u>**	Non parametric tests ● Need of non- parametric tests	1	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Powerpoint Presentation
	Non parametric tests: ● Sign test ● Willcoxon's signed rank test ● Willcoxon's rank sum test	5	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Powerpoint Presentation
	Non parametric tests: ● Run test ● Kruskal-wali's test	4	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Powerpoint Presentation
	Post hoc analysis of one way ANOVA: ● Ducann's tets	2	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Powerpoint Presentation
	● Chi-square test of association	3	Gupta ,S.C.and Kapoor,V.K.	Powerpoint Presentation

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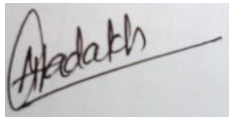
			(2002): Fundamentals of Mathematical statistics	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT-CS

CLASS:FYCS SEMESTER: SEM-II MONTH: JAN-MAR ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Develop logic which will help them to write, compile and debug programs in C language, able to use different data types in a computer program.Also by learning the design programs involving decision structures, loops and functions. It use different data structures and create/update basic data files.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-1 PROGRAMMING WITH C, UNIT 1	**Structure of C program:** Header and body, Use of comments. Interpreters vs compilers, Python vs C. Compilation of a program. Formatted I/O: printf(), scanf().	1	Programming in ANSI C : E Balagurusamy	PPT, GoogleMeet, Jamboard ,Slido.
	Data: Variables, Constants, data types like: int, float char, double and void, short and long size qualifiers, signed and unsigned qualifiers. Compare with datatypes in Python. Compare static typing in C vs dynamic typing in Python .	2		
	Variables: Declaring variables, scope of the variables according to block, hierarchy of data types. Compare explicit declarations in C with implicit declarations in Python.	2		

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	Types of operators: Arithmetic, relational, logical, compound assignment, increment and decrement, conditional or ternary, bitwise and comma operators. Precedence and order of evaluation, statements and Expressions. Automatic and explicit type conversion.	5		
	Iterations: Control statements for decision making: (i) Branching: if statement, else.. if statement, (does the writer mean if-else or nested ifs)switch statement. (ii) Looping: while loop, do.. while, for loop. (iii) Jump statements: break, continue and goto.	5		
UNIT-2	**Arrays**: (One and two dimensional), declaring array variables, initialization of arrays, accessing array elements. Compare array types of C with list and tuple types of Python.	5	Programming in ANSI C : E Balagurusamy	PPT, GoogleMeet, Jamboard ,Slido.
	Data Input and Output functions: Character I/O format: getch(), getche(), getchar(), getc(), gets(), putchar(), putc(), puts().	3		
	Manipulating Strings: Declaring and initializing String variables, Character and string handling functions. Compare with Python strings.	3		

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	Functions: Function declaration, function definition, Global and local variables, return statement, Calling a function by passing values.	3		
	Recursion: Definition, Recursive functions.	1		
UNIT 3	**Pointer**: Fundamentals, Pointer variables, Referencing and de-referencing, Pointer Arithmetic, Using Pointers with Arrays, Using Pointers with Strings, Array of Pointers, Pointers as function arguments, Functions returning pointers.	5	Programming in ANSI C : E Balagurusamy	PPT, GoogleMeet, Jamboard ,Slido.
	Dynamic Memory Allocation: malloc(), calloc(), realloc(), free() and sizeof operator. Compare with automatic garbage collection in Python.	2		
	Structure: Declaration of structure, reading and assignment of structure variables, Array of structures, arrays within structures, structures within structures. Compare C structures with Python tuples.	4		
	Unions: Defining and working with unions.	1		

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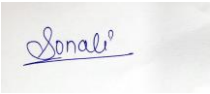
	File handling: Different types of files like text and binary, Different types of functions: fopen(), fclose(), fgetc(), fputc(), fgets(), fputs(), fscanf(), fprintf(), getw(), putw(), fread(), fwrite(), fseek().	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: COMPUTER SCIENCE CLASS: FYCS

SEMESTER: II MONTH: JANUARY-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand how to read/write to files using python.
- Catch their own errors that happen during execution of programs.
- Get introductions to the concept of pattern matching.
- Be familiar with the concepts of GUI controls and designing GUI applications.
- Connect to the database to move the data to/from the application.
- Know how to connect to computers, read from URL and send email.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS202, Unit 1, Programming with Python- II	Python File Input-Output: Opening and closing files, various types of file modes, reading and writing to files, manipulating directories. Iterables, iterators and their problem solving applications.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	PowerPoint Presentation
	Exception handling: What is an exception, various keywords to handle exceptions such try, catch, except, else, finally, raise.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	PowerPoint Presentation

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	Regular Expressions: Concept of regular expression, various types of regular expressions, using match function.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	PowerPoint Presentation
USCS202, Unit 2, Programming with Python- II	GUI Programming in Python (using Tkinter/wxPython/Qt) What is GUI, Advantages of GUI	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	PowerPoint Presentation
	Introduction to GUI library. Layout management, events and bindings, fonts, colours, drawing on canvas (line, oval, rectangle, etc.)	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	PowerPoint Presentation
	Widgets such as : frame, label, button, checkbutton, entry, listbox, message, radiobutton, text, spinbox etc	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	PowerPoint Presentation
USCS202, Unit 3, Programming with Python-II	Database connectivity in Python: Installing mysql connector, accessing connector module module, using connect, cursor, execute & close functions.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	PowerPoint Presentation

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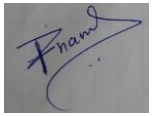
	Reading single & multiple results of query execution, executing different types of statements, executing transactions, understanding exceptions in database connectivity	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	PowerPoint Presentation
	Network connectivity: Socket module, creating server-client programs, sending email, reading from URL	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT/CS

CLASS: FYCS SEMESTER: II MONTH: JANUARY TO MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
To explore and understand the concepts of Data Structures and its significance in programming. Provide and holistic approach to design, use and implement abstract data types. Understand the commonly used data structures and various forms of its implementation for different applications using Python.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Data Structures (USCS204) Unit I	Abstract Data Types: Introduction, The Date Abstract Data Type, Bags, Iterators. Application	02	Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Google Jam board, Slides, Docs
	Arrays: Array Structure, Python List, Two Dimensional Arrays, Matrix Abstract Data Type, Application	02		
	Sets and Maps: Sets-Set ADT, Selecting Data Structure, List based Implementation, Maps-Map ADT, List Based Implementation, Multi-Dimensional Arrays-Multi-Array ADT, Implementing Multiarray, Application	02		
	Algorithm Analysis: Complexity Analysis-Big-O Notation, Evaluating Python Code, Evaluating Python List, Amortized Cost, Evaluating Set ADT, Application	02		
	Searching and Sorting: Searching-Linear Search, Binary Search, Sorting-Bubble, Selection and Insertion Sort, Working with Sorted Lists-Maintaining Sorted List, Maintaining sorted Lists.	02		

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Data Structures (USCS204) Unit II	Linked Structures: Introduction, Singly Linked List-Traversing, Searching, Prepending and Removing Nodes, Bag ADT-Linked List Implementation. Comparing Implementations, Linked List Iterators, More Ways to Build Kinked Lists, Applications-Polynomials	02	Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Google Jam board, Slides, Docs
	Stacks: Stack ADT, Implementing Stacks-Using Python List, Using Linked List, Stack Applications-Balanced Delimiters, Evaluating Postfix Expressions	02		
	Queues: Queue ADT, Implementing Queue-Using Python List, Circular Array, Using List, Priority Queues- Priority Queue ADT, Bounded and unbounded Priority Queues	02		
	Advanced Linked List: Doubly Linked Lists-Organization and Operation, Circular Linked List-Organization and Operation, Multi Lists	02		
Data Structures (USCS204) Unit III	Recursion: Recursive Functions, Properties of Recursion, Its working, Recursive Applications	02	Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Google Jam board, Slides, Docs
	Hash Table: Introduction, Hashing-Linear Probing, Clustering, Rehashing, Separate Chaining, Hash Functions	02		
	Advanced Sorting: Merge Sort, Quick Sort, Radix Sort, Sorting Linked List	02		
	Binary Trees: Tree Structure, Binary Tree-Properties, Implementation and Traversals, Expression Trees, Heaps and Heapsort, Search Trees	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYCS SEMESTER: SEM-2 MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- Familiarize with the concept of Green Computing and Green IT infrastructure for making computing and information system environment sustainable.
- Learn about green IT can be achieved in and by hardware, software, network communication and data center operations.
- Understand the strategies, frameworks, processes and management of green IT.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
7 GREEN TECHNOLOGY UNIT 1	**Green IT Overview:** Introduction , Environmental Concerns and Sustainable Development, Environmental Impacts of IT, Green I , Holistic Approach to Greening IT, Greening IT, Applying IT for Enhancing Environmental Sustainability, Green IT Standards and Eco-Labelling of IT , Enterprise Green IT Strategy, Green Washing, Green IT: Burden or Opportunity?	4	Harnessing Green IT: Principles and Practices by San Murugesan, G. R. Ganadharan, Wiley & IEEE.	GOOGLE MEET AND PPT
	Green Devices and Hardware: Introduction , Life Cycle of a Device or Hardware, Reuse, Recycle and Dispose	3		
	Green Software: Introduction , Processor Power States , Energy-Saving Software Techniques, Evaluating and Measuring Software Impact to Platform Power	4		

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	Sustainable Software Development: Introduction, Current Practices, Sustainable Software, Software Sustainability Attributes, Software Sustainability Metrics, Sustainable Software Methodology, Defining Actions	4		
UNIT 2	**Green Data Centres:** Data Centres and Associated Energy Challenges, Data Centre IT Infrastructure, Data Centre Facility Infrastructure: Implications for Energy Efficiency, IT Infrastructure Management, Green Data Centre Metrics	4	Harnessing Green IT: Principles and Practices by San Murugesan, G. R. Ganadharan, Wiley & IEEE.	GOOGLE MEET AND PPT
	Green Data Storage: Introduction , Storage Media Power Characteristics, Energy Management Techniques for Hard Disks, System-Level Energy Management	4		
	Green Networks and Communications: Introduction, Objectives of Green Network Protocols, Green Network Protocols and Standards	3		
	Enterprise Green IT Strategy: Introduction, Approaching Green IT Strategies, Business Drivers of Green IT Strategy, Business Dimensions for Green IT Transformation, Organizational Considerations in a Green IT Strategy, Steps in Developing a Green IT Strategy, Metrics and Measurements in Green Strategies.	4		
UNIT 3	**Sustainable Information Systems and Green Metrics:** Introduction, Multilevel Sustainable Information, Sustainability Hierarchy Models, Product Level Information, Individual Level Information, Functional Level Information, Organizational Level Information, Measuring the Maturity of Sustainable ICT	4	Harnessing Green IT: Principles and Practices by San Murugesan, G. R. Ganadharan, Wiley & IEEE.	GOOGLE MEET AND PPT

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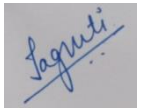
	Enterprise Green IT Readiness: Introduction, Readiness and Capability, Development of the G-Readiness Framework, Measuring an Organization's G-Readiness	3		
	Sustainable IT Services: Creating a Framework for Service Innovation: Introduction, Factors Driving the Development of Sustainable IT, Sustainable IT Services (SITS), SITS Strategic Framework	4		
	Green Enterprises and the Role of IT: Introduction, Organizational and Enterprise Greening, Information Systems in Greening Enterprises, Greening the Enterprise: IT Usage and Hardware, Inter-organizational Enterprise Activities and Green Issues	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: FYCS SEMESTER: II MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: Students should have a good working knowledge of Linux, from both a graphical and command line perspective, allowing them to easily use any Linux distribution.This course shall help student to learn advanced subjects in computer science practically. Student shall be able to progress as a Developer or Linux System Administrator using the acquired skill set.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS203 Linux Unit I	Introduction History of Linux, Philosophy, Community, Terminology, Distributions, Linux kernel vs distribution. Why learn Linux? Importance of Linux in software ecosystem: web servers, supercomputers, mobile, servers.	05	Unix Concepts and Applications by Sumitabha Das., Official Ubuntu Book, 8th Edition, by Matthew Helmke & Elizabeth K. Joseph with Jose Antonio Rey and Philips Ballew, Prentice Hall	Blackboard, Chalk
	Installation Installation methods, Hands on Installation using CD/DVD or USB drive.	03		Blackboard, Chalk
	Linux Structure Linux Architecture, Filesystem basics, The boot process, init scripts, runlevels,shutdown process, Very basic introductions to Linux processes, Packaging methods:rpm/deb, Graphical Vs Command line.	07		Blackboard, Chalk
USCS203 Linux	Graphical Desktop: Session Management, Basic Desktop Operations, Network	07	Unix Concepts and Applications	Blackboard, Chalk

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Unit II	Management, Installing and Updating Software, Text editors: gedit, vi, vim, emacs, Graphics editors,Multimedia applications.		by Sumitabha Das., Official Ubuntu Book, 8th Edition, by Matthew Helmke & Elizabeth K. Joseph with Jose Antonio Rey and Philips Ballew, Prentice Hall	
	Command Line Command line mode options, Shells, Basic Commands, General Purpose Utilities,Installing Software, User management, Environment variables, Command aliases.	03		Blackboard, Chalk
	Linux Documentation: man pages, GNU info, help command, More documentation sources	02		Blackboard, Chalk
	File Operations Filesystem, Filesystem architecture, File types, File attributes, Working with files, Backup, compression	03		Blackboard, Chalk
USCS203 Linux UnitIII	Security Understanding Linux Security, Uses of root, sudo command, working with passwords, Bypassing user authentication, Understanding ssh	05	Unix Concepts and Applications by Sumitabha Das., Official Ubuntu Book, 8th Edition, by Matthew Helmke & Elizabeth K. Joseph with Jose Antonio Rey and Philips Ballew, Prentice Hall	Blackboard, Chalk
	Networking: Basic introduction to Networking, Network protocols: http, ftp etc., IP address, DNS,Browsers, Transferring files.ssh, telnet, ping, traceroute, route, hostname, networking GUI.	04		Blackboard, Chalk
	Basic Shell Scripting Features and capabilities, Syntax, Constructs, Modifying files, Sed, awk command,File manipulation utilities, Dealing with large files and Text, String manipulation,Boolean expressions, File tests, Case, Debugging, Regular expressions	06		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: II MONTH: FEBRUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of limit, continuity and derivative of a function.
- Check the continuity of the function at the given point.
- Find the derivatives of functions of various functions
- Use derivatives in various applications like concavity, maxima/minima, increasing/decreasing functions etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CALCULUS Unit 1 Derivatives & its applications	➢ Limit, continuity and derivative of a function ➢ Asymptotes, increasing/decreasing functions, concavity. ➢ Absolute and relative maxima and minima ➢ Graphing of polynomials and Newton's method	2 2 2 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: II MONTH: MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of limits, continuity and derivatives of functions of two or more variables.
- Find the first and second order partial derivatives of functions of two variables.
- Find the linearization of the given function at the given point.
- Understand the concept of gradients and directional derivatives.
- Find the derivative of a function of two variable using chain rule.
- Find the relative extrema and saddle point of the given function of two variables using partial derivatives.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CALCULUS Unit 3 Partial Derivatives & its applications	➢ Limit, continuity and partial derivatives of functions of two or more variables ➢ Linearization and chain rule ➢ Directional derivatives and gradients ➢ Tangent planes and normal lines ➢ Maxima and minima of functions of two variables	2 1 1 2 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: II MONTH: APRIL ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Evaluate indefinite integral using different methods like substitution, integration by parts etc.
- Evaluate definite integral using the properties of definite integration and by Simpson's rule
- Find the area bounded between curves and length of plane curve using integration.
- Solve the given differential equation using different methods

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CALCULUS Unit 2 Integration & its applications	➢ Indefinite and definite integration ➢ Area between two curves ➢ Length of plane curve ➢ Simpson's rule ➢ Solving differential equations	2 2 1 1 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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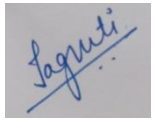

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Yashvant Keshav Patil College of Commerce
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Teaching plan sycs sem 4 2020-21

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: computer science

CLASS: S.Y.B.Sc.(CS)

SEMESTER: 4

MONTH: December to March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to :

- Appreciate the relevance of linear algebra in the field of computer science.
- Understand the concepts through program implementation
- Instill a computational thinking while learning linear algebra.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS405 **Linear Algebra using python** **<u>Unit 1</u>**	Field: • Introduction to complex number,numbers in python,Abstracting over field • playing with GF(2),	4		Black board, chalk and duster
	Vector Space: • Vectors are functions, • Vector addition and scalar multiplication	3		Black board, chalk and duster

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	• Combining vector addition and scalar multiplication • Geometry of sets of vectors			
	• Dictionary based representation of vectors • Dot product	2		Black board, chalk and duster
	Linear system : • Homogeneous and non homogeneous equation • Solving triangular system of linear equations	3		Black board, chalk and duster
	• Linear combination and linear span	3		Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS405 **Linear Algebra using python** **<u>Unit 2</u>**	Matrix: • Matrices as vectors, transpose • Matrix -vector and vector-matrix multiplication in terms of linear combination • Matrix -vector and vector-matrix multiplication in terms of dot-product	3		Black board,chalk and duster
	• Null space, computing Sparse matrix, vector product • Linear function • Inner product and outer product	3		Black board,chalk and duster

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	• From function inverse to matrix inverse			
	Basis: • Coordinate system,Two greedy algorithm for finding set of generators • Minimum spanning forest and GF(2) • Linear dependence and independence	3		Black board,chalk and duster
	Basis: • Basis, unique representation,change of basis • Computational problems involving finding a basis	3		Black board,chalk and duster
	Dimensions: • Dimension and rank, • Direct sum • Dimension and linear function • The annihilator	3		Black board,chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS405	Gaussian elimination: • Row echelon form, Gaussian elimination over GF(2)	4		Black board, chalk and duster

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Linear Algebra using python **<u>Unit 3</u>**	• Solving matrix - vector equation using Gaussian distribution • Finding basis for null space • Factoring integers			
	Inner product: • The inner product for vectors over field • Orthogonality	2		Black board, chalk and duster
	Orthogonalisation: • Projection orthogonal to multiple vectors • Projecting orthogonal to mutually orthogonal vectors • Finding an orthogonal set of generators • Orthogonal complement	4		Black board, chalk and duster
	Eigen vectors: • Modeling discrete dynamic processes • Diagonalization of the Fibonacci matrix • Finding Eigen values and Eigen vectors • Coordinate representation in terms of Eigen vectors	3		Black board, chalk and duster
	• The internet worm • Markow chains • Modeling a web surfer-page rank	2		Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT-CS

CLASS:SYCS SEMESTER: SEM-IV MONTH:JAN-MAR ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concepts related to Java Technology . Explore and understand use of Java Server Programming .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3 ADVANCED JAVA, UNIT-3	**Java Beans:** Introduction, JavaBeans Properties, Examples.	5	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th Edition	PPT, GoogleMeet, Jamboard ,Slido.
	Struts 2: Basic MVC Architecture, Struts 2 framework features, Struts 2 MVC pattern, Request life cycle, Examples, Configuration Files, Actions, Interceptors, Results & Result Types, Value Stack/OGNL.	6		
	JSON: Overview, Syntax, DataTypes, Objects, Schema, Comparison with XML, JSON with Java.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande

DEPARTMENT: Computer Science

CLASS: S.Y.C.S.

SEMESTER: IV

MONTH: Jan - March

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Learner will able to understand the concept of networking.
Useful to proceed with industrial requirement and international vendor certification

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS403 Computer Networks UNIT - 1	Introduction to data communication, Components, Data Representation, Data Flow, Networks, Network Criteria, Physical Structures, Network types, Local Area Network, Wide Area Network, Switching, The Internet, Accessing the Internet, standards and administration Internet Standards.	02	Data Communication and Networking , Behrouz Forouzan	Google Mett PPT
	Network Models, Protocol layering, Scenarios, Principles of Protocol Layering, Logical Connections, TCP/IP Protocol Suite, Layered Architecture, Layers in the TCP/IP Protocol Suite, Encapsulation and Decapsulation, Addressing, Multiplexing and Demultiplexing. Detailed introduction to Physical Layer, Detailed	08		Google Mett PPT

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	introduction to Data-Link Layer, Detailed introduction to Network Layer, Detailed introduction to Transport Layer, Detailed introduction to Application Layer.			
	Data and Signals, Analog and Digital Data, Analog and Digital Signals, Sine Wave Phase, Wavelength, Time and Frequency Domains, Composite Signals, Bandwidth, Digital Signal, Bit Rate, Bit Length, Transmission of Digital Signals, Transmission Impairments, Attenuation, Distortion, Noise, Data Rate Limits, Performance, Bandwidth, Throughput, Latency (Delay)	05		Google Mett PPT
USCS403 Computer Networks UNIT - 2	Digital Transmission digital-to-digital conversion, Line Coding, Line Coding Schemes, analog-to-digital conversion, Pulse Code Modulation (PCM), Transmission Modes, Parallel Transmission, Serial Transmission. Analog Transmission, digital-to-analog Conversion, Aspects of Digital-to-Analog Conversion, Amplitude Shift Keying, Frequency Shift Keying, Phase Shift Keying, analog-to-analog Conversion, Amplitude Modulation (AM), Frequency Modulation (FM), Phase Modulation (PM), Multiplexing, Frequency-Division Multiplexing, Wavelength-Division Multiplexing, Time-Division Multiplexing. Transmission Media, Guided Media, Twisted-Pair Cable, Coaxial Cable, Fiber-Optic Cable. Switching, Three Methods of Switching , Circuit Switched Networks, Packet Switching,	09	Data Communication and Networking , Behrouz Forouzan	Google Mett PPT
	Introduction to Data-Link Layer, Nodes and Links, Services, Two Sub-layers, Three Types of addresses, Address Resolution Protocol (ARP). Error Detection and Correction, introduction, Types of Errors, Redundancy, Detection versus Correction,	06		Google Mett PPT

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USCS403 Computer Networks UNIT - 3	Media Access Control (MAC), random access, CSMA, CSMA/CD, CSMA/CA, controlled access, Reservation, Polling, Token Passing, channelization, FDMA, TDMA, CDMA.	02	Data Communication and Networking , Behrouz Forouzan	Google Mett PPT
	Connecting Devices and Virtual LANs, connecting devices, Hubs, Link-Layer	02		
	Introduction to Network Layer, network layer services, Packetizing, Routing and Forwarding, Other Services, IPv4 addresses, Address Space, Classful Addressing.	03		
	Unicast Routing, General Idea, Least-Cost Routing, Routing Algorithms, Distance-Vector Routing, Link-State Routing, Path-Vector Routing, Introduction to Transport Layer, Transport-Layer Services, Connectionless and Connection-Oriented Protocols.	03		
	Transport-Layer Protocols, Service, Port Numbers, User Datagram Protocol, User Datagram, UDP Services, UDP Applications, Transmission Control Protocol, TCP Services, TCP Features, Segment.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **S.Y.B.Sc.(CS)**

SEMESTER: **IV** MONTH: **January - March** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able:1. Understand flow of software modeling process.

2. Understand software metrics, agile development and change management as a part of industrial requirements.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS404 Paper 4 **Software Engineering** **UNIT I**	**Introduction:** The Nature of Software, Software Engineering, The Software Process, Generic Process Model, The Waterfall Model, Incremental Process Models, Evolutionary Process Models, Concurrent Models	4	Software Engineering, A Practitioner's Approach, Roger S, Pressman. (2014) Software Engineering, Ian Sommerville, Pearson Education	Google Meet Microsoft PowerPoint Presentation
	Component-Based Development, The Unified Process Phases, Agile Development- Agility, Agile Process, Extreme Programming	4		
	Requirement Analysis and System Modeling: Requirements Engineering, Eliciting Requirements, SRS Validation, Components of SRS, Characteristics of SRS	3		
	Object-oriented design using the UML - Class diagram, Object diagram, Use case diagram, Sequence diagram, Collaboration diagram, State chart diagram, Activity diagram, Component diagram, Deployment diagram	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS404 Paper 4 **Software Engineering** **UNIT III**	**Risk Management** - Software Risks, Risk Identification, Risk Projection and Risk Refinement, RMMM Plan	4	Software Engineering, A Practitioner's Approach, Roger S, Pressman. (2014) Software Engineering, Ian Sommerville, Pearson Education	Google Meet Microsoft PowerPoint Presentation
	Software Quality Assurance: Elements of SQA, SQA Tasks, Goals, and Metrics, Formal Approaches to SQA, Six Sigma, Software Reliability, The ISO 9000 Quality Standards, Capability Maturity Model	4		
	Software Testing: Verification and Validation, Introduction to Testing, Testing Principles, Testing Objectives, Test Oracles,	3		
	Levels of Testing, White-Box Testing/Structural Testing, Functional/Black-Box Testing, Test Plan, Test-Case Design	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: CS

CLASS: SY BSC CS SEMESTER: IV MONTH: JAN-MAR ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to:

- Explore advanced topic of Java programming for solving problems.
- Understand the concepts related to Java Technology
- Explore and understand use of Java Server Programming

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 AJ UNIT 1	Swing: Need for swing components, Difference between AWT and swing, Components hierarchy, Panes	3	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th Edition	POWER POINT PRESENTATION
	Swing components: Jlabel, JTextField and JPasswordField , JTextAres, JButton, JCheckBox, JRadioButton, JComboBox and JList	4		
	JDBC: Introduction, JDBC Architecture, Types of Drivers, Statement, Result Set, Read Only ResultSet, Updatable ResultSet, Forward Only ResultSet	4		

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	Scrollable ResultSet, PreparedStatement, Connection Modes, SavePoint, Batch Updations, CallableStatement, BLOB & CLOB	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

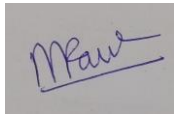
NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT/CS

CLASS: SYCS SEMESTER: IV MONTH: JANUARY TO MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
Explore advanced topic of Java programming for solving problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Advanced Java (USCS402) Unit II	Servlets: Introduction, Web application Architecture, Http Protocol & Http Methods, Web Server & Web Container, Servlet Interface, GenericServlet, HttpServlet, Servlet Life Cycle, ServletConfig, ServletContext, Servlet Communication, Session Tracking Mechanisms	07	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th Edition	Google Jam board, Slides, Docs
	JSP: Introduction, JSP LifeCycle, JSP Implicit Objects & Scopes, JSP Directives, JSP Scripting Elements, JSP Actions: Standard actions and customized actions	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYBSc(CS) SEMESTER: IV MONTH: JANUARY-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : To explore .NET technologies for designing and developing dynamic, interactive and responsive web applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper:USCS406 unit:1, Title: .Net Technologies	**The .NET Framework:**.NET Languages, Common Language Runtime, .NET Class Library	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	C# Language Basics: Comments, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods, Classes, Value Types and Reference Types, Namespaces and Assemblies, Inheritance, Static Members, Casting Objects, Partial Classes	3	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	ASP.NET: Creating Websites, Anatomy of a Web Form - Page Directive, Doctype, Writing Code - Code-Behind Class, Adding Event Handlers, Anatomy of an ASP.NET Application - ASP.NET File Types, ASP.NET Web Folders,	5	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	HTML Server Controls - View State, HTML Control Classes, HTML Control Events, HtmlControl Base Class,	5		

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	HtmlContainerControl Class, HtmlInputControl Class, Page Class, global.asax File, web.config File		Beginning ASP.NET 4.5 in C#	
Paper:USCS406 unit:2, Title: .Net Technologies	**Web Controls:** Web Control Classes, WebControl Base Class, List Controls, Table Controls, Web Control Events and AutoPostBack, Page Life Cycle	3	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	State Management: ViewState, Cross-Page Posting, Query String, Cookies, Session State, Configuring Session State, Application State	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	Validation: Validation Controls, Server-Side Validation, Client-Side Validation, HTML5 Validation, Manual Validation, Validation with Regular Expressions	3	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	Rich Controls: Calendar Control, AdRotator Control, MultiView Control	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	Themes and Master Pages: How Themes Work, Applying a Simple Theme, Handling Theme Conflicts, Simple Master Page and Content Page, Connecting Master pages and Content Pages, Master Page with Multiple Content Regions, Master Pages and Relative Paths	3	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	Website Navigation: Site Maps, URL Mapping and Routing, SiteMapPath Control, TreeView Control, Menu Control	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.

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Paper:USCS406 unit:3, Title: .Net Technologies	**ADO.NET:** Data Provider Model, Direct Data Access - Creating a Connection, Select Command, DataReader, Disconnected Data Access	3	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	Data Binding: Introduction, Single-Value Data Binding, Repeated-Value Data Binding, Data Source Controls – SqlDataSource	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	Data Controls: GridView, DetailsView, FormView	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	Working with XML: XML Classes – XMLTextWriter, XMLTextReader	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	Caching: When to Use Caching, Output Caching, Data Caching	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	LINQ: Understanding LINQ, LINQ Basics,	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.
	ASP.NET AJAX: ScriptManager, Partial Refreshes, Progress Notification, Timed Refreshes	2	Beginning ASP.NET 4.5 in C#	Online mode Google meet Google slides.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: S.Y.B.Sc.CS_ SEMESTER: IV MONTH: JANUARY-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

- Capable of team and organizational leadership in computing settings.
- Acquire Skill and knowledge to advance their career, including continually upgrading professional, communication, analytic, and technical skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Unit II Software Engineering	**System Design:** System/Software Design, Architectural Design, Low-Level Design Coupling and Cohesion,	2	A Concise Introduction to Software Engineering, Pankaj Jalote, Springer	Google Meet, ppt
	Functional-Oriented Versus The Object-Oriented Approach, Design Specifications, Verification for Design, Monitoring and Control for Design Software	3	Software Engineering, Ian Sommerville, Pearson Education	Google Meet, ppt
	Measurement and Metrics: Product Metrics – Measures, Metrics, and Indicators, Function-Based Metrics, Metrics for Object-Oriented Design, Operation-Oriented Metrics, User Interface Design Metrics, Metrics for Source Code, Halstead Metrics Applied to Testing, Metrics for Maintenance,	4	Software Engineering, Ian Sommerville, Pearson Education	Google Meet, ppt

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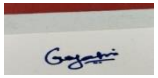
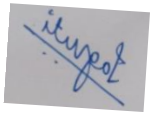
	Cyclomatic Complexity, Software Measurement - Size-Oriented, Function-Oriented Metrics, Metrics for Software Quality			
	Software Project Management: Estimation in Project Planning Process –Software Scope And Feasibility, Resource Estimation, Empirical Estimation Models – COCOMO II, Estimation for Agile Development, The Make/Buy Decision,	3	Software Engineering, Ian Sommerville, Pearson Education	Google Meet, ppt
	Project Scheduling - Basic Principles, Relationship Between People and Effort, Effort Distribution, Time-Line Charts	3	Software Engineering, Ian Sommerville, Pearson Education	Google Meet, ppt

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.C.S**

CLASS: **SYCS** SEMESTER: **IV** MONTH: **Jan-March** ACADEMIC YEAR: **2020-2021**

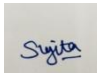
LEARNING OBJECTIVES:
The learners will be able to :

- Understand the requirements of Mobile programming environment.
- Learn about basic methods, tools and techniques for developing Apps
- Explore and practice App development on Android Platform
- Develop working prototypes of working systems for various uses in daily lives.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
VII,1, Skill Enhancement: Android Developer Fundamentals 2 unit1	What is Android? Obtaining the required tools, creating first android app, understanding the components of screen, adapting display orientation, action bar, Activities and Intents	3	"Beginning Android 4 Application Development", Wei-Meng Lee, March 2012, WROX	Meet, PPT
	Activity Lifecycle and Saving State, Basic Views: TextView, Button, ImageButton, EditText, CheckBox, ToggleButton, RadioButton, and RadioGroup Views,	3	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector
	ProgressBar View, AutoCompleteTextView, TimePicker View, DatePicker View, ListView View, Spinner View	3	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector
VII,2, Skill Enhancement: Android Developer	User Input Controls, Menus, Screen Navigation, RecyclerView, Drawables, Themes and Styles, Material design	3	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector
	Providing resources for adaptive layouts, AsyncTask and AsyncTaskLoader,	3	https://developers.google.com /training/courses/android-	Chalk and Duster, Projector

Fundamentals 2 unit 2			fundamentals	
	Connecting to the Internet, Broadcast receivers, Services, Notifications, Alarm managers, Transferring data efficiently	3	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector
VII,3, Skill Enhancement: Android Developer Fundamentals 2 unit 3	Data - saving, retrieving, and loading: Overview to storing data, Shared preferences, SQLite primer	3	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector
	store data using SQLite database, ContentProviders, loaders to load and display data,	3	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector
	Permissions, performance and security, Firebase and AdMob, Publish your app	3	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27



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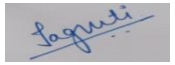

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **SYBSCCS** SEMESTER:I**V**

MONTH: **JAN-MARCH** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:

The learners will be able to :

understand basic principles of algorithm design and why algorithm analysis is important
understand how to implement algorithms in Python
understand how to transform new problems into algorithmic problems with efficient solutions
understand algorithm design techniques for solving different problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS401 **Fundamentals of Algorithms** UNIT-1	Introduction to algorithm, Why to analysis algorithm, Running time analysis, How to Compare Algorithms, Rate of Growth, Commonly Used Rates of Growth, Types of Analysis, Asymptotic Notation, Big-O Notation, Omega-Ω Notation, Theta-Θ Notation, Asymptotic Analysis, Properties of Notations,	07	Introduction to Algorithm, Thomas H Cormen, PHI	power point,google meet
	Commonly used Logarithms and Summations, Performance characteristics of algorithms, Master Theorem for Divide and Conquer, Divide and Conquer Master Theorem: Problems & Solutions, Master Theorem for Subtract and Conquer Recurrences, Method of Guessing and Confirming	08	Introduction to Algorithm,	power point,google meet

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			Thomas H Cormen, PHI	
USCS401 **Fundamentals of Algorithms** UNIT-2	Tree algorithms: What is a Tree? Glossary, Binary Trees, Types of Binary Trees, Properties of Binary Trees, Binary Tree Traversals, Generic Trees (N-ary Trees), Threaded Binary Tree Traversals, Expression Trees, Binary Search Trees (BSTs), Balanced Binary Search Trees, AVL (Adelson-Velskii and Landis) Trees	06	Introduction to Algorithm, Thomas H Cormen, PHI	power point,google meet
	Graph Algorithms: Introduction, Glossary, Applications of Graphs, Graph Representation, Graph Traversals, Topological Sort, Shortest Path Algorithms, Minimal Spanning Tree Selection Algorithms: What are Selection Algorithms? Selection by Sorting, Partition-based Selection Algorithm, Linear Selection Algorithm - Median of Medians Algorithm, Finding the K Smallest Elements in Sorted Order	09	Introduction to Algorithm, Thomas H Cormen, PHI	power point,google meet
USCS401 **Fundamentals of Algorithms** UNIT-3	Algorithms Design Techniques: Introduction, Classification, Classification by Implementation Method, Classification by Design Method Greedy Algorithms: Introduction, Greedy Strategy, Elements of Greedy Algorithms, Advantages and Disadvantages of Greedy Method, Greedy Applications, Understanding Greedy Technique Divide and Conquer Algorithms: Introduction, What is Divide and Conquer Strategy? Divide and Conquer Visualization, Understanding Divide and Conquer, Advantages of Divide and Conquer, Disadvantages of Divide and Conquer, Master Theorem, Divide and Conquer Applications	07	Introduction to Algorithm, Thomas H Cormen, PHI	power point,google meet

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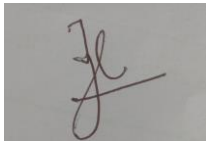
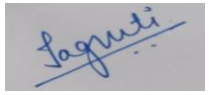
	Dynamic Programming: Introduction, What is Dynamic Programming Strategy? Properties of Dynamic Programming Strategy, Problems which can be solved using Dynamic Programming, Dynamic Programming Approaches, Examples of Dynamic Programming Algorithms, Understanding Dynamic Programming, Longest Common Subsequence	09	Introduction to Algorithm, Thomas H Cormen, PHI	power point,google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. HARSHALI SHAILESH MANKAR DEPARTMENT: CS CLASS: TYCS

SEMESTER: VI MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Ability to use knowledge of data structures and indexing methods in information retrieval Systems·
- Understand the underlined problems related to IR
- Acquire the necessary experience to design, and implement real applications using Information Retrieval systems.

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS604, Information Retrieval Unit 1	Introduction to Information Retrieval: Introduction, History of IR, Components of IR, and Issues related to IR, Boolean retrieval, Dictionaries and tolerant retrieval.	07	1. Introduction to Information Retrieval, C. Manning, P. Raghavan, and H. Schütze, Cambridge University Press, 2008 2. Modern Information Retrieval: The Concepts and Technology behind Search, Ricardo Baeza - Yates and Berthier Ribeiro – Neto, 2 nd Edition, ACM Press Books 2011.	Jamboard,Bamboo Paper PowerPoint
USCS604, Information Retrieval	Link Analysis and Specialized Search: Link Analysis, hubs and authorities, Page Rank and HITS algorithms, Similarity, Hadoop & Map	12	1. Introduction to Information Retrieval, C. Manning, P. Raghavan, and	Jamboard ,Bamboo Paper PowerPoint

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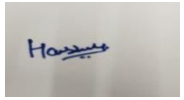
Unit 2	Reduce, Evaluation, Personalized search, Collaborative filtering and content-based recommendation of documents and products, handling ―invisible‖ Web, Snippet generation, Summarization, Question Answering, Cross-Lingual Retrieval.		H. Schütze, Cambridge University Press, 2008	
USCS604, Information Retrieval Unit 3	Web Search Engine: Web search overview, web structure, the user, paid placement, search engine optimization/spam, Web size measurement, search engine optimization/spam, Web Search Architectures.	06	1. Introduction to Information Retrieval, C. Manning, P. Raghavan, and H. Schütze, Cambridge University Press, 2008	Jamboard ,Bamboo Paper PowerPoint
	XML retrieval: Basic XML concepts, Challenges in XML retrieval, A vector space model for XML retrieval, Evaluation of XML retrieval, Text-centric versus data-centric XML retrieval.	06	1. Introduction to Information Retrieval, C. Manning, P. Raghavan, and H. Schütze, Cambridge University Press, 2008	Jamboard ,Bamboo Paper, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **T.Y.B.Sc.(CS)**

SEMESTER: **VI** MONTH: **January- March** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able:

- To get a clear understanding of AI and different search algorithms used for solving problems.
- To get acquainted with different learning algorithms and models used in machine learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS606 **Paper 4** **Data Science** **UNIT I**	**Introduction to Data Science:** What is Data? Different kinds of data	3	Doing Data Science, Rachel Schutt and Cathy O'Neil, O'Reilly,2013 Mastering Machine Learning with R, Cory Lesmeister, PACKT Publication,2015	Google Meet Microsoft PowerPoint Presentation R Tool
	Introduction to high level programming language + Integrated Development Environment (IDE)	4		
	Exploratory Data Analysis (EDA) + Data Visualization, Different types of data sources	4		
	Data Management: Data Collection, Data cleaning/extraction, Data analysis &Modeling	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS606 **Paper 4** **Data Science** **UNIT II**	**Data Curation:** Query languages and Operations to specify and transform data, Structured/schema based systems as users and acquirers of data	4	Doing Data Science, Rachel Schutt and Cathy O'Neil, O'Reilly,2013 Mastering Machine Learning with R, Cory Lesmeister, PACKT Publication,2015	Google Meet Microsoft PowerPoint Presentation
	Semi-structured systems as users and acquirers of data, Unstructured systems in the acquisition and structuring of data,	3		
	Security and ethical considerations in relation to authenticating and authorizing access to data on remote systems,	4		
	Software development tools, Large scale data systems, Amazon Web Services (AWS)	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS606 **Paper 4** **Data Science** **UNIT III**	**Statistical Modelling and Machine Learning:** Introduction to model selection: Regularization, bias/variance tradeoff e.g. parsimony, AIC, BIC, Cross validation, Ridge regressions and penalized regression e.g. LASSO	5	Doing Data Science, Rachel Schutt and Cathy O'Neil, O'Reilly,2013 Mastering Machine Learning with R, Cory Lesmeister, PACKT Publication,2015	Google Meet Microsoft PowerPoint Presentation R Tool
	Data transformations: Dimension reduction, Feature extraction, Smoothing and aggregating	2		
	Supervised Learning: Regression, linear models, Regression trees, Time-series Analysis, Forecasting, Classification: classification trees, Logistic regression, separating hyperplanes, k-NN	4		
	Unsupervised Learning: Principal Components Analysis (PCA), k-means clustering, Hierarchical clustering, Ensemble methods	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande

DEPARTMENT: Computer Science

CLASS: T.Y.C.S.

SEMESTER: VI

MONTH: Jan - March

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

After completion of this course, learner should be able to list various applications of wireless sensor networks, describe the concepts, protocols, design, implementation and use of wireless sensor networks. Also implement and evaluate new ideas for solving wireless sensor network design issues.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS601 **Wireless Sensor Networks and Mobile Communication** UNIT : 01	**Introduction:** Introduction to Sensor Networks, unique constraints and challenges. Advantage of Sensor Networks, Applications of Sensor Networks, Mobile Adhoc NETworks (MANETs) and Wireless Sensor Networks, Enabling technologies for Wireless Sensor Networks.	07	Protocols and Architectures for Wireless Sensor Network, Holger Kerl, Andreas Willig, John Wiley and Sons, 2005	Google Mett PPT
	Sensor Node Hardware and Network Architecture: Single-node architecture, Hardware components & design constraints, Operating systems and execution environments, introduction to TinyOS and nesC. Network architecture, Optimization goals and figures of merit, Design principles for WSNs, Service interfaces of WSNs, Gateway concepts.	08		Google Mett PPT

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USCS601 **Wireless Sensor Networks and Mobile Communication** UNIT : 02	**Medium Access Control Protocols:** Fundamentals of MAC Protocols, MAC Protocols for WSNs, Sensor-MAC Case Study.	05	Wireless Sensor Networks Technology, Protocols, and Applications ,Kazem Sohraby, Daniel Minoli and TaiebZnati, John Wiley & Sons, 2007	Google Mett PPT
	Routing Protocols : Data Dissemination and Gathering, Routing Challenges and Design Issues in Wireless Sensor Networks, Routing Strategies in Wireless Sensor Networks.	05		Google Mett PPT
	Transport Control Protocols : Traditional Transport Control Protocols, Transport Protocol Design Issues, Examples of Existing Transport Control Protocols, Performance of Transport Control Protocols.	05		Google Mett PPT
USCS601 **Wireless Sensor Networks and Mobile Communication** UNIT : 03	**Introduction, Wireless Transmission and Medium Access Control:** Applications, A short history of wireless communication.	02	Mobile communications, Jochen Schiller,2nd Edition, Addison wisely , Pearson Education,2012	Google Mett PPT
	Wireless Transmission: Frequency for radio transmission, Signals, Antennas, Signal propagation, Multiplexing, Modulation, Spread spectrum, Cellular systems.	05		Google Mett PPT
	Telecommunication, Satellite and Broadcast Systems: GSM: Mobile services, System architecture, Radio interface, Protocols, Localization And Calling, Handover, security, New data services; DECT: System architecture, Protocol architecture; ETRA, UMTS and IMT- 2000. Satellite Systems: History, Applications, Basics: GEO, LEO, MEO; Routing, Localization, Handover.	08		Google Mett PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

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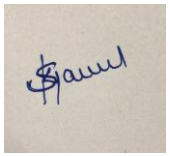

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAMPADA DESHMUKH DEPARTMENT: INFORMATION TECHNOLOGY CLASS: T.Y.C.S.

SEMESTER: VI MONTH: JAN - MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the procedures for identification, preservation, and extraction of electronic evidence
- Understand auditing and investigation of network and host system intrusions
- Learn analysis of documentation of information gathered
- Investigate various media to collect evidence, report them in a way that would be acceptable in the court of law
- Plan and prepare for all stages of an investigation - detection, initial response and management interaction

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS603 Unit 1, **Cyber Forensics**	Introduction to Computer Forensics and standard procedure, Incident Verification and System Identification ,	03	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Google Meet with PPT
	Recovery of Erased and damaged data, Disk Imaging and Preservation, Data Encryption and Compression, Automated Search Techniques, Forensics Software	04	Guide to computer forensics and investigations, Bill Nelson, Amelia	Google Meet with PPT

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			Philips and Christopher Steuart, course technology,5th Edition,2015	
	Introduction to Network Forensics and tracking network traffic, Reviewing Network Logs	02	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Google Meet with PPT
	Network Forensics Tools, Performing Live Acquisitions, Order of Volatility, Standard Procedure	03	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Google Meet with PPT
	Cell Phone and Mobile Device Forensics: Overview, Acquisition Procedures for Cell Phones and Mobile Devices	03	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Google Meet with PPT
USCS603, Unit 2, **Cyber Forensics**	Introduction to Internet Forensics, World Wide Web Threats, Hacking and Illegal access Obscene and Incident transmission	03	Guide to computer forensics and investigations, Bill Nelson, Amelia	Google Meet with PPT

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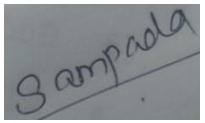
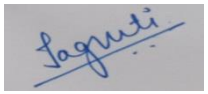
			Philips and Christopher Steuart, course technology,5th Edition,2015	
	Domain Name Ownership Investigation, Reconstructing past internet activities and events e-mail analysis, e-mail headers and spoofing, Laws against	04	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Google Meet with PPT
	Yahoo Messenger Social Media Forensics Social Media Investigations Browser Forensics	04	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Google Meet with PPT
	Cookie Storage and Analysis, Analyzing Cache and temporary internet files, Web browsing activity reconstruction	04	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Google Meet with PPT
USCS603, Unit 3, **Cyber Forensics**	Investigation, Evidence presentation and Legal aspects of Digital Forensics Authorization to collect the evidence Acquisition of Evidence, Authentication of the	05	Guide to computer forensics and investigations, Bill Nelson, Amelia	Google Meet with PPT

	evidence		Philips and Christopher Steuart, course technology,5th Edition,2015	
	Analysis of the evidence, Reporting on the findings, Testimony Introduction to Legal aspects of Digital Forensics	05	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Google Meet with PPT
	Laws & regulations, Information Technology Act, Giving Evidence in court, Case Study – Cyber Crime cases, Case Study – Cyber Crime cases	05	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Google Meet with PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: TYCS SEMESTER: VI MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: Learner will know to identify security vulnerabilities and weaknesses in the target applications. They will also know to test and exploit systems using various tools and understand the impact of hacking in real time machines..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS607 Ethical Hacking Unit III	Information Security : Attacks and Vulnerabilities Introduction to information security : Asset, Access Control, CIA, Authentication, Authorization, Risk, Threat, Vulnerability, Attack, Attack Surface, Malware, Security-Functionality-Ease of Use Triangle Types of malware :Worms, viruses, Trojans, Spyware, Rootkits	05	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 2) CEH official Certified Ethical Hacking Review Guide, Wiley	Meet, PPT
	Types of vulnerabilities : OWASP Top 10 : cross-site scripting (XSS), cross site request forgery (CSRF/XSRF), SQL injection, input parameter manipulation, broken authentication, sensitive information disclosure, XML External Entities, Broken access control, Security Misconfiguration, Using components with known vulnerabilities, Insufficient Logging and monitoring, OWASP Mobile Top 10, CVE Database	04		Meet, PPT
	Types of attacks and their common prevention mechanisms : Keystroke Logging, Denial of Service (DoS /DDoS), Waterhole attack, brute force, phishing and fake WAP, Eavesdropping, Man-in-the-middle, Session Hijacking, Clickjacking, Cookie Theft, URL Obfuscation, buffer overflow, DNS poisoning, ARP poisoning, Identity Theft, IoT Attacks, BOTs and BOTNETs Case-studies : Recent attacks – Yahoo, Adult Friend Finder, eBay, Equifax, WannaCry, Target Stores, Uber, JP Morgan Chase, Bad Rabbit	06		Meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: TYCS SEMESTER: VI MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: Learner will know to identify security vulnerabilities and weaknesses in the target applications. They will also know to test and exploit systems using various tools and understand the impact of hacking in real time machines..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS607 Ethical Hacking Unit III	Ethical Hacking :Enterprise Security Phases : Gaining and Maintaining Access : Systems hacking – Windows and Linux – Metasploit and Kali Linux, Keylogging, Buffer Overflows, Privilege Escalation, Network hacking - ARP Poisoning, Password Cracking, WEP Vulnerabilities, MAC Spoofing, MAC Flooding, IPSpoofing, SYN Flooding,Smurf attack	05	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 2) CEH official Certified Ethical Hacking Review Guide, Wiley	Blackboard, Chalk
	Applications hacking : SMTP/Email-based attacks, VOIP vulnerabilities, Directory traversal, Input Manipulation, Brute force attack, Unsecured login mechanisms, SQL injection, XSS, Mobile apps security, Malware analysis : Netcat Trojan, wrapping definition, reverse engineering	04		Blackboard, Chalk
	Phases : Covering your tracks : Steganography, Event Logs alteration Additional Security Mechanisms : IDS/IPS, Honeypots and evasion	06		Blackboard, Chalk

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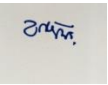
	techniques, Secure Code Reviews (Fortify tool, OWASP Secure Coding Guidelines)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: COMPUTER SCIENCE CLASS: MSc.CS(Part 1)

SEMESTER: I MONTH: SEPTEMBER -JANUARY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:
The learners will be able to:

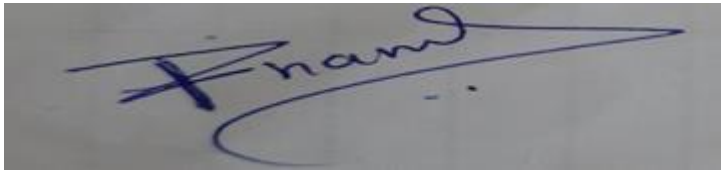
- Understand the concepts of Robotics and Artificial Intelligence.
- Develop logic for developing Robot.
- Be familiar about the basic concepts of Artificial Intelligence.
- Apply the problem solving skills on Artificial Intelligence Algorithms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS104, Unit 1, Robotics and Artificial Intelligence.	What is a Robot? Definition, History of Robots: Control Theory, Cybernetics, Grey Walter Tortoise, Analog Electronic Circuit, Reactive Theory, Braitenberg's Vehicle, Artificial Intelligence, Vision Based Navigation, Types of Robot Control.	05	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation
	Robot Components: Embodiment, Sensors, States, Action, Brains and Brawn, Autonomy, Arms, Legs, Wheels, Tracks, and What really drives them effectors and actuators: Effector, Actuator, Passive and Active Actuation, Types of Actuator, Motors, Degree of freedom Locomotion: Stability, Moving and Gaits, Wheels and Steering, Staying on the path.	05	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation

	Manipulators: Endeffectors, Teleoperation, Why is manipulation hard? Sensors: Types of Sensors, Levels of Processing, Passive and Active sensors, Switches, Light sensors, Resistive position sensor.	05	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation
PSCS104, Unit 2, Robotics and Artificial Intelligence.	Ultrasonic and Sonar sensing, Specular Reflection, Laser Sensing, Visual Sensing, Cameras, Edge Detection, Motion Vision, Stereo Vision, Biological Vision, Vision for Robots	07	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation
	Feedback or Closed Loop Control: Example of Feedback Control Robot, Types of feedback control, Feed forward or Open loop control.	08	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation
PSCS104, Unit 3, Robotics and Artificial Intelligence.	Algorithm, Architecture, The many ways to make a map, What is planning, Cost of planning, Reactive systems, Action selection, Subsumption architecture.	07	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation
	How to sequence behavior through world, hybrid control, Behavior based control and Behavior Coordination, Behavior Arbitration, Distributed mapping, Navigation and Path planning.	08	The Robotics Primer by Maja J Matarić, MIT press Cambridge,	Power Point Presentation

			Massachusetts, London, England (2007).	
PSCS104, Unit 4, Robotics and Artificial Intelligence.	Introduction, State space search: Generate and test, Simple search, Depth First Search (DFS), Breadth First Search (DFS), Comparison and quality of solutions.	07	Artificial Intelligence: A Modern Approach, 3e, Stuart Jonathan Russell, Peter Norvig, Prentice Hall Publications (2010)	Power Point Presentation
	Heuristic Search: Heuristic functions, Best First Search (BFS), Hill Climbing, Local Maxima, Beam search, Tabu search. Finding Optimum paths: Brute force, branch & bound, refine search, Dijkstra's algorithm, A* algorithm. Admissibility of A* algorithm.	08	Artificial Intelligence: A Modern Approach, 3e, Stuart Jonathan Russell, Peter Norvig, Prentice Hall Publications (2010)	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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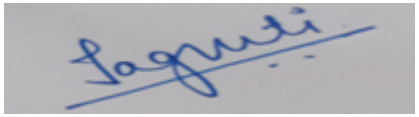

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **M.Sc. (CS)**

SEMESTER: **I** MONTH: **October-January** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able:

- To acquire knowledge about how to execute queries on these fragments that will demonstrate distributed databases environment.
- To learn how to create temporal database
- To learn how to create XML database
- To understand multimedia database systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS103 **Paper III** **Advanced Database Systems** **UNIT I**	**Unit I: Distributed Database Concepts** Definition of Distributed databases and Distributed Database Management System (DDBMS), Distributed transparent system. DDBMS Architecture: DBMS standardization, Global, Local, External, and Internal Schemas, Architectural models for DDBMS. Distributed database design: Design problem of distributed systems, Design, strategies (top-down, bottom-up), Fragmentation, Allocation and replication of fragments. Query Processing Overview, Query Optimization.	15	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS103 **Paper III** **Advanced Database Systems** **UNIT II**	**Unit II: Transaction Processing in Distributed databases and Parallel databases** Transaction Management: Definition and examples, formalization of a transaction, ACID properties, classification of transaction. Concurrency Control: definition, execution schedules, examples, locking based algorithms, timestamp ordering algorithms, deadlock management. DBMS reliability: Definitions and Basic Concepts, Local Recovery Management, In-place update, out-of-place update, Distributed Reliability Protocols, Two phase commit protocol, Three phases commit protocol. Parallel Database System: Definition of Parallel Database Systems. Parallel query evaluation: Speed up and scale up, Query Parallelism: I/O Parallelism (Data Partitioning) Intra-query Parallelism, Inter –Query Parallelism, Intra Operation Parallelism, Inter Operation Parallelism.	15	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS103 **Paper III** **Advanced Database Systems** **UNIT III**	**Unit III: Object Oriented, Temporal and Spatial Databases:** Object Oriented Database: Object Identity, Object structure, Type Constructors, Encapsulation of Operations, Methods, Persistence, Type and Class Hierarchies, Inheritance, Complex Objects, Object-oriented DBMS, Languages and Design: ODMG Model, Object Definition Languages (ODL), Object Query Languages (OQL). Temporal and Spatial Database: Introduction to Temporal Database: Time ontology, structure, and granularity, Temporal data models, Temporal relational algebras. Introduction to Spatial Database: Definition, Types of spatial data, Geographical Information Systems (GIS), Conceptual Data Models for spatial databases, Logical data models for spatial databases: rastor and vector model. Physical data models for spatial databases: Clustering methods (space filling curves), Storage methods (R-tree). Query processing.	15	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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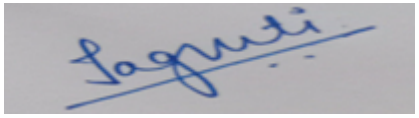
PSCS103 **Paper III** **Advanced Database Systems** **UNIT IV**	**Unit IV: Deductive, Active, Multimedia and XML Databases** Deductive Database: Introduction to recursive queries, Datalog Notation, Clause Form and Horn Clauses, Interpretation of model: Least Model semantics, The fixed point operator, safe Datalog program, recursive query with negation. Active Database: Languages for rule specification: Events, Conditions, Actions. XML and Database: Structure of XML Data, XML Document Schema, Querying and Transformation, Storage of XML Data. Introduction to multimedia database systems.	15	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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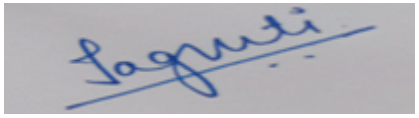

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **MSCCS** SEMESTER:I

MONTH: **OCT-JAN** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:

The learners will be able to :

understand basic principles of algorithm design and why algorithm analysis is important
understand how to implement algorithms in JAVA
understand how to transform new problems into algorithmic problems with efficient solutions
understand algorithm design techniques for solving different problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS101 Analysis of Algorithms and Researching Computing **Unit I: Design strategies**	The Role of Algorithms in Computing: Algorithms as a technology. Getting Started: Insertion sort, Analyzing algorithms, Designing algorithms. Growth of Functions: Asymptotic notation, Standard notations and common functions. Divide-and-Conquer: The maximum-subarray problem, Strassen's algorithm for matrix multiplication, The substitution method for solving recurrences. Probabilistic Analysis and Randomized Algorithms: The hiring problem, Indicator random variables, Randomized algorithms.	15	Introduction to Algorithm, Thomas H Cormen, PHI	power point

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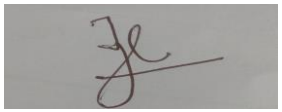
PSCS101 **Unit II: Advanced Design and Analysis Techniques**	Dynamic Programming: Rod cutting, Elements of dynamic programming, longest common subsequence. Greedy Algorithms: An activity-selection problem, Elements of the greedy strategy, Huffman codes. Elementary Graph Algorithms: Representations of graphs, Breadth-first search, Depth-first search. Minimum Spanning Trees: Growing a minimum spanning tree, Algorithms of Kruskal and Prim. Single-Source Shortest Paths: The Bellman-Ford algorithm, Single-source shortest paths in directed acyclic graphs, Dijkstra's algorithm.	15	Introduction to Algorithm, Thomas H Cormen, PHI	power point
PSCS101 **Unit III: Number-Theoretic Algorithms and NP – Completeness**	Elementary number-theoretic notions, Greatest common divisor, Modular arithmetic, Solving modular linear equations, The Chinese remainder theorem, Powers of an element, The RSA public-key cryptosystem NP-Completeness: Polynomial time, Polynomial-time verification, NP-completeness and reducibility, NP-complete problems. Approximation Algorithms: The vertex-cover problem, The traveling-salesman problem, The set-covering problem, subset-sum problem.	15	Introduction to Algorithm, Thomas H Cormen, PHI	power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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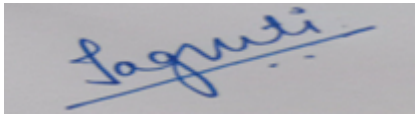

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. C.S SEMESTER: I MONTH: September-January ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:
a. learn different networking protocols, virtualization technique, wireless sensor network.
b. working of wireless sensor network

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II PSCS102 Advanced Networking Concepts Unit 1	Networking Internet and Intranet, Protocol layer and their services, Network Applications like Web, HTTP, FTP and Electronic Mail in the Internet, Domain Name System, Transport-Layer Services, Multiplexing and Demultiplexing, UDP, TCP, TCP Congestion Control, Network Layer, Virtual Circuit and Datagram Networks, Need of Router, The Internet Protocol (IP), Routing Algorithms, Routing in the Internet.	15	Computer Networking: A Top-Down Approach 6th edition, James F. Kurose, Keith W. Ross, Pearson (2012).	PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

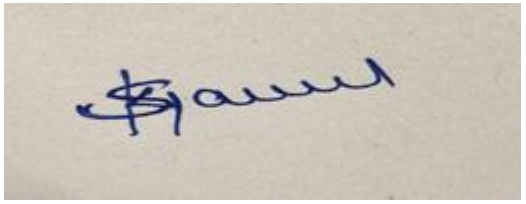
CLASS: M. Sc. C.S SEMESTER: I MONTH: September-January ACADEMIC YEAR: 2020-2021

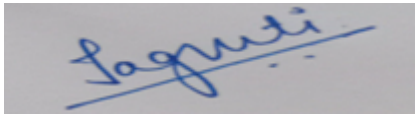
LEARNING OBJECTIVE/S:
The learners will be able to:
a. learn different networking protocols, virtualization technique, wireless sensor network.
b. working of wireless sensor network

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II PSCS102 Advanced Networking Concepts Unit 2	Network Virtualization Need for Virtualization, The Virtual Enterprise, Transport Virtualization-VNs, Central Services Access: Virtual Network Perimeter, A Virtualization Technologies primer: theory, Network Device Virtualization, Data-Path Virtualization, Control-Plane Virtualization, Routing Protocols.	15	Network Virtualization, Victor Moreno, Kumar Reddy, Cisco Press (2006).	PowerPoint presentation
Paper II PSCS102 Advanced Networking Concepts Unit 3	Adhoc Networking Introduction, application of MANET, challenges, Routing in Ad hoc networks, topology & position based approaches, Routing protocols: topology based, position based, Broadcasting, Multicasting, & Geocasting, Wireless LAN, Transmission techniques, MAC protocol issues, Wireless PANs, The Bluetooth technology.	15	Ad Hoc and Sensor Networks: Theory and Applications 2nd edition; Carlos de Morais Cordeiro, Dharma Prakash Agrawal, World Scientific Publishing Company; 2 edition (2011)	PowerPoint presentation

Paper II PSCS102 Advanced Networking Concepts Unit 4	Wireless Sensor networks: Need and application of sensor networks, sensor networks design considerations, empirical energy consumption, sensing and communication range, design issues, localization scheme, clustering of SNs, Routing layer, Sensor networks in controlled environment and actuators, regularly placed sensors, network issues, RFID as passive sensors.	15	Ad Hoc and Sensor Networks: Theory and Applications 2nd edition; Carlos de Morais Cordeiro, Dharma Prakash Agrawal, World Scientific Publishing Company; 2 edition (2011)	PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. BRIJESH Y JOSHI DEPARTMENT: Computer Science

CLASS: M.Sc.C.S. SEMESTER: I MONTH: SEPT to DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

- To be able to understand the purpose and products of research
- To understand the overview of research process.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-01 Analysis of Algorithms and Researching Computing, Unit-4	Researching Computing Introduction, purpose and products of research, overview of research process, internet research, participants and research ethics, reviewing literature, design and creation, experiments, Quantitative data analysis, presentation of research	12	Research Methodology, Methods and Techniques, Kothari, C.R.,1985, third edition, New Age International (2014) . Basic of Qualitative Research (3rd Edition), Juliet Corbin & Anselm Strauss:, Sage Publications (2008).	Laptop, PPT, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **MSCCS** SEMESTER:II

MONTH: **FEB-APRIL** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:

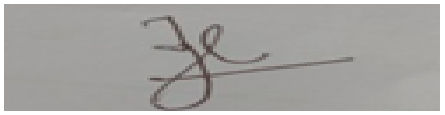
The learners will be able to :

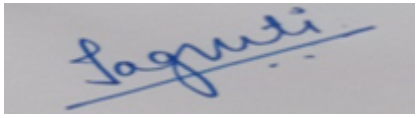
understand basic concepts of security in cloud
understand basic concepts of security in mobile.
Understand services of mobile

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS2032 Cyber and Information Security **Unit III: Cloud Security ign strategies**	How concepts of Security apply in the cloud, User authentication in the cloud; How the cloud provider can provide this- Virtualization System Security Issues: e.g. ESX and ESXi Security, ESX file system security- storage considerations, backup and recovery- Virtualization System Vulnerabilities, security management standards- SaaS, PaaS, IaaS availability management- access control- Data security and storage in cloud.	15	Cloud Security: A Comprehensive Guide to Secure Cloud Computing, Ronald L. Krutz, Russell Dean Vines, Wiley	power point

PSCS2032 **Cyber and Information Security** **Unit IV: Mobile Security:**	Mobile system architectures, Overview of mobile cellular systems, GSM and UMTS Security & Attacks, Vulnerabilities in Cellular Services, Cellular Jamming Attacks & Mitigation, Security in Cellular VoIP Services, Mobile application security. Securing Wireless Networks: Overview of Wireless Networks, Scanning and Enumerating 802.11 Networks, Attacking 802.11 Networks, Bluetooth Scanning and Reconnaissance, Bluetooth Eavesdropping, Attacking & Exploiting Bluetooth, Zigbee Security & Attacks	15	Mobile and Wireless Security and Privacy, Kia Makki, Peter Reiher, Springer	power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. C.S SEMESTER: II MONTH: February-May ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:
Learn different computer attacks and different security techniques

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 PSCS2032 Cyber and Information Security (Network Security) Unit 1	Computer Security Principles of Security, Different Attacks: malicious and non-malicious program, Types of Computer Criminals. Operating System Security: Protected objects and methods of protection. Memory address protection: Fence, Relocation, Base/Bound Registers, Tagged Architecture, Segmentation, Paging, Directory, access control list. Database Security: Security requirements, Integrity, Confidentiality, Availability, Reliability of Database, Sensitive data, Multilevel database, Proposals for multilevel security. .	15	Security in Computing 4th edition, Charles P. Pfleeger, Charles P. Pfleeger, Shari Lawrence Pfleeger, Prentice Hall; 4th edition (2006)	PowerPoint presentation through google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

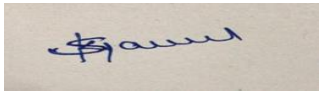
NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. C.S SEMESTER: II MONTH: February-May ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:
Learn different computer attacks and different security techniques

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 PSCS2032 Cyber and Information Security (Network Security) Unit 2	Network Security Different types of network layer attacks, Firewall (ACL, Packet Filtering, DMZ, Alerts and Audit Trials) – IDS,IPS and its types (Signature based, Anomaly based, Policy based, Honeypot based). Web Server Security: SSL/TLS Basic Protocol-computing the keys-client authentication-PKI as deployed by SSL Attacks fixed in v3-ExportabilityEncoding-Secure Electronic Transaction (SET), Kerberos.	15	Security in Computing 4th edition, Charles P. Pfleeger, Charles P. Pfleeger, Shari Lawrence Pfleeger, Prentice Hall; 4th edition (2006)	PowerPoint presentation through google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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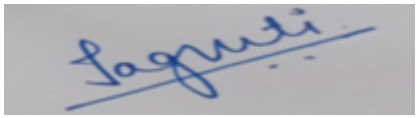

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. BRIJESH Y JOSHI DEPARTMENT: Computer Science

CLASS: M.Sc.C.S. SEMESTER: I MONTH: FEB TO APRIL ACADEMIC YEAR: 2020-2021

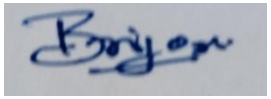
LEARNING OBJECTIVE/S:

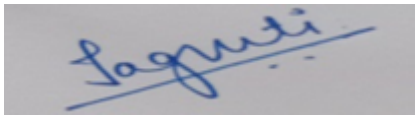
- To be able to understand Big data platform, statistical concepts
- To understand the overview of Big data processing i.e. MapReduce Processing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Elective II - Track C: Business Intelligence and Big Data Analytics (Business Intelligence	**Elective II - Track C: Business Intelligence and Big Data Analytics (Business Intelligence** Operational and Decision Support System, Data-Information-Knowledge-Decision making-Action cycle. Basic definitions-Business Intelligence; Data warehousing, Business Intelligence architecture, Use and benefits of Business Intelligence. Knowledge Discovery in Databases: KDD process model, Data Pre-processing: Cleaning: Missing Values; Noisy Values; Inconsistent values; redundant values. Outliers, Integration, transformation, reduction, Discretization: Equal Width Binning; Equal Depth Binning, Normalization, Smoothing.	12	Business Intelligence (2nd Edition), Efraim Turban, Ramesh Sharda, Dursun Delen, David King, Pearson (2013)	Google meet, Laptop, PPT

Elective II - Track C: Business Intelligence and Big Data Analytics (Business Intelligence	**Unit II: Introduction to Business Data Warehouse** Definition of Data warehouse, Logical architecture of Data Warehouse, Data Warehouse model- Enterprise warehouse; Data Marts; Virtual warehouse. Populating business Data Warehousing: data integration and extract, transform, load (ETL).	12	Business Intelligence (2nd Edition), Efraim Turban, Ramesh Sharda, Dursun Delen, David King, Pearson (2013)	Google meet, Laptop, PPT
Elective II - Track C: Business Intelligence and Big Data Analytics (Business Intelligence)	**Unit III: Designing Business Data Warehouse** OLTP and OLAP systems, Designing business information warehouse: Principles of dimensional modeling, Data cubes, Data cube operations, data cube schemas.	12	Business Intelligence (2nd Edition), Efraim Turban, Ramesh Sharda, Dursun Delen, David King, Pearson (2013)	Google meet, Laptop, PPT
Elective II - Track C: Business Intelligence and Big Data Analytics (Business Intelligence)	**Unit IV: Introduction to Data Mining** Data mining definitions and process: business and data understanding. Association Analysis: Definition of association rule, General issues: Support; Confidence; Lift; Conviction, Frequent Item sets: APriori Algorithm; Issues with APriori Algorithm, Data structures: Hash tree and FP tree	12	Data Mining: Introductory and Advanced Topics, Dunham, Margaret H, Prentice Hall (2006)	Google meet, Laptop, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr(.Mrs.)Sampada Deshmukh DEPARTMENT: CS

CLASS: M. Sc. SEMESTER: II MONTH: Feb- May ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Understand the concept of Operating System and kernel.

b.Understand the concept of process communication.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Advanced Operating System Unit -I	**Linux Operating Systems** Introduction to kernel, Types of kernel (monolithic, micro, exo)	5	Operating Systems: Design and Implementation, Third Edition, Andrew S. Tanenbaum, Albert S. Woodhull, Prentice Hall, 2006.	Powerpoint presentation through Google meet
	Operating system booting process GRUB-I, GRUB-II. Processes,	5		Powerpoint presentation through Google meet
	Interprocess Communication, Scheduling.	5		Powerpoint presentation through Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs). Sampada Deshmukh DEPARTMENT: CS

CLASS: M. Sc. SEMESTER: II MONTH: Feb-May ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Understand the concept of memory management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Advanced operating system Unit -II	Basic memory management, swapping, virtual memory, Page replacement algorithms,	8	Operating Systems: Design and Implementation, Third Edition, Andrew S. Tanenbaum, Albert S. Woodhull, Prentice Hall, 2006.	Powerpoint presentation through Google meet
	Design issues for paging systems, segmentation. Case Study: Linux memory management .	7		Powerpoint presentation through Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs).Sampada Deshmukh DEPARTMENT: CS

CLASS:M. Sc. SEMESTER: II MONTH: Feb-May ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Understand the concept of principle of hardware and software.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Advanced operating system Unit -III	Principles of I/O Hardware, Principles of I/O Software, Deadlocks, RAM Disks, Disks,	7	Operating Systems: Design and Implementation, Third Edition, Andrew S. Tanenbaum, Albert S. Woodhull, Prentice Hall, 2006.	Powerpoint presentation through Google meet
	Terminals. File Systems: Files, Directories, File System Implementation, Security, Protection mechanisms in different Linux versions	8		Powerpoint presentation through Google meet
				Powerpoint presentation through Google meet

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs). Sampada Deshmukh DEPARTMENT: CS

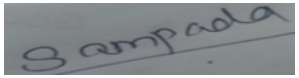
CLASS: M. Sc. SEMESTER: II MONTH: Feb-May ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. learn android operating system working.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Advanced operating system Unit -IV	The Android Software Stack, The Linux Kernel – its functions, essential hardware drivers. Libraries - Surface Manager, Media framework, SQLite, WebKit, OpenGL.	5	Operating Systems: Design and Implementation, Third Edition, Andrew S. Tanenbaum, Albert S. Woodhull, Prentice Hall, 2006.	Powerpoint presentation through Google meet
	Android Runtime - Dalvik Virtual Machine, Core Java Libraries. Application Framework - Activity Manager, Content Providers, Telephony Manager, Location Manager, Resource	5		Powerpoint presentation through Google meet
	Manager. Android Application – Activities and Activity Lifecycle, applications such as SMS client app, Dialer, Web browser, Contact manager	5		Powerpoint presentation through Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Computer Science.

CLASS: M.Sc. SEMESTER: II MONTH: February To May ACADEMIC YEAR: 2020-2021

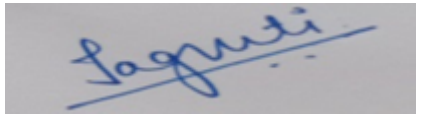
LEARNING OBJECTIVE/S:

- To understand structure of compiler.
- How to implement basic compiler.
- To understand Parser Implementation.
- To understand data flow analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS202 Design and implementation of Modern Compilers UNIT-I	**Introduction to Compilers** The structure of a compiler, A simple approach to the design of lexical analyzers, Regular expressions, Finite automata, From regular expressions to finite automata, Minimizing the number of states of a DFA.	6	1. Compilers: Principles, Techniques and Tools 2nd edition 2. Modern Compiler Implementation in Java, Second Edition	Projector, PPT.
	Context-free grammars, Derivations and Parse trees, Parsers, Shift-reduce parsing, Operator-precedence parsing, Top- down parsing, Predictive parsers.	6		Projector, PPT.

PSCS202 Design and implementation of Modern Compilers UNIT-II	**Automatic Construction of Efficient Parsers** LR parsers, The canonical collection of LR(0) items, Constructing SLR parsing tables, Constructing canonical LR parsing tables, Constructing LALR parsing tables, Using ambiguous grammars,	6	1. Compilers: Principles, Techniques and Tools 2nd edition 2. Modern Compiler Implementation in Java, Second Edition	Projector, PPT.
	An automatic parser generator, Implementation of LR parsing tables, Constructing LALR sets of items.	6		
PSCS202 Design and implementation of Modern Compilers UNIT-III	**Advanced syntax analysis and basic semantic analysis** Syntax-directed translation schemes, Implementation of syntax-directed translators, Initial introduction to the ongoing Tiger compiler, bindings for the Tiger compiler, type-checking expressions, type-checking declarations, activation records, stack frames, frames in the Tiger compiler, translation to intermediate code, intermediate representation trees, translation into trees, declarations, basic blocks and traces, taming conditional branches, liveness analysis, solution of dataflow equations, liveness in the Tiger compiler, interference graph construction.	12	1. Compilers: Principles, Techniques and Tools 2nd edition 2. Modern Compiler Implementation in Java, Second Edition	Projector, PPT.
PSCS202 Design and implementation of Modern Compilers UNIT-IV	**Dataflow analysis and loop optimization** The principle sources of optimization, Loop optimization: The DAG representation of basic blocks, Dominators, Reducible flow graphs, Depth-first search, Loop-invariant computations, Induction variable elimination, Some other loop optimizations. Dataflow Analysis: intermediate representation for flow analysis, various dataflow analyses, transformations using dataflow analysis, speeding up dataflow analysis, alias analysis.	12	1. Compilers: Principles, Techniques and Tools 2nd edition 2. Modern Compiler Implementation in Java, Second Edition	Projector, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.CS

SEMESTER: III MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2020-21

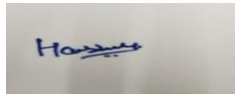
LEARNING OBJECTIVE/S:
The learners will be able to:

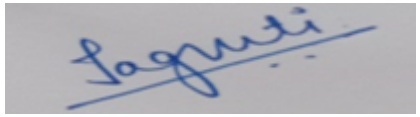
- Able to understand the application areas of Ubiquitous Computing ·
- Able to realize the revolution of Internet in Mobile Devices, Cloud & Sensor Networks ·
- Able to understand building blocks of Ubiquitous computing and characteristics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS301 Ubiquitous Computing **UNIT 2**	Smart Mobiles, Cards and Device Networks Smart Mobile Devices, Users Resources and Code Operating Systems for Mobile Computers and Communicator Devices Smart Card Devices Device Networks. Human–Computer Interaction (HCI): Explicit HCI, Implicit HCI User Interfaces and Interaction for Devices Hidden UI Via Basic Smart Devices, Hidden UI Via Wearable Implanted Devices, Human Centered Design (HCD)	10	Ubiquitous Computing Smart Devices, Environments and Interactions, Stefan Poslad, Wiley, 2009.	Powerpoint

PSCS301, Ubiquitous Computing **UNIT 4**	Ubiquitous Communication Audio Networks, Data Networks, Wireless Data Networks, Universal and Transparent Audio, Video and Alphanumeric Data Network Access, Ubiquitous Networks, Network Design Issues.	10	Ubiquitous Computing Smart Devices, Environments and Interactions, Stefan Poslad, Wiley, 2009	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. C.S SEMESTER: III MONTH: August-December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with various network forensics tools.
b. Work with analyzing evidence.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Cyber and Information Security-II Unit -III	Sources of Network Based Evidence, Principles of Internetworking, Internet Protocol Suite. Evidence Acquisition: Physical Interception, Traffic Acquisition Software, Active Acquisition.	4	Network Forensics, Sherri Davidoff, Jonathan HAM, Prentice Hall, 2012.	PowerPoint presentation through Google Meet
	Traffic Analysis: Protocol Analysis, Packet Analysis, Flow Analysis, Higher-Layer Traffic analysis. Statistical Flow Analysis: Sensors, Flow Record Export Protocols, Collection and Aggregation, Analysis.	4		PowerPoint presentation through Google Meet
	Wireless:the IEEE Layer 2 Protocol Series, Wireless Access Point, Wireless Traffic Capture and Analysis, Common Attacks, Locating Wireless Devices. Network Intrusion Detection and Analysis: NIDS/NIPS Functionality, Modes of Detection, Types of NIDS/NIPS, NIDS/NIPS Evidence Acquisition.	4		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

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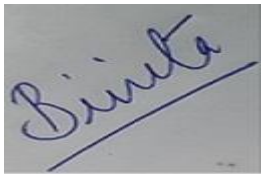
NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. C.S SEMESTER: III MONTH: August-December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with various network forensics tools.
b. Work with analyzing evidence.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Cyber and Information Security-II Unit -IV	Sources of Logs, Network Architecture, Collecting and Analyzing Evidence	4	Network Forensics, Sherri Davidoff, Jonathan HAM, Prentice Hall, 2012. Mobile Phone Security and Forensic: A Practical Approach, Second Edition, Iosif I. Androulidkis, Springer, 2012.	PowerPoint presentation through Google Meet
	switches, routers, firewalls, interfaces Web Proxies: Need to Investigate Web Proxies, Functionality, Evidence, Squid, Web Proxy Analysis, Encrypted Web Traffic.	4		PowerPoint presentation through Google Meet
	Mobile Phone Forensics: Crime and Mobile Phones, Voice, SMS and Identification of Data Interception in GSM, Mobile Phone Tricks, SMS Security, Mobile Forensic.	4		PowerPoint presentation through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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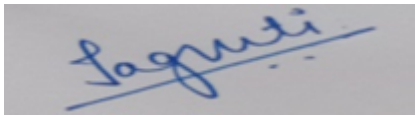

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shilpa Rodrigues **DEPARTMENT**: COMPUTER SCIENCE **CLASS**: MSc.CS(Part II)

SEMESTER: **III** **MONTH**: Aug - Dec **ACADEMIC YEAR**: 2020-21

LEARNING OBJECTIVES:
The learners will be able to:

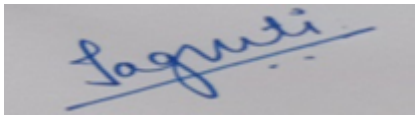
- Understand the social networks in real world.
- Represtation of social networks in graph theory.
- Identifying equivalence classes and analysis of equivalence classes.
- Understanding one mode and two mode netwroks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS302 , Unit 3 , Social Network Analysis.	Approaches to network positions and social roles- defining equivalence or similarity, structural equivalence, automorphic equivalence, finding equivalence sets, brute force and Tabu search, regular equivalence,	07	Introduction to Social Network Methods: Robert A. Hanneman, Mark Riddle	Power Point Presentation
	equivalence of distances: Maxsim, regular equivalence, Measuring similarity/dissimilarity- valued relations, Pearson correlations covariance and cross-products, Understanding clustering- agglomerative and divisive clusters, Euclidean, Manhattan, and squared distances, binary relations, matches: exact, Jaccard, Hamming,	08	Introduction to Social Network Methods: Robert A. Hanneman, Mark Riddle	Power Point Presentation

PSCS302 , Unit 4 , Social Network Analysis.	Understanding mode networks- Bi-partite data structures, visualizing two-mode data, quantitative analysis using two-mode Singular value decomposition (SVD) analysis.	07		Power Point Presentation
	two-mode factor analysis, two-mode correspondence analysis, qualitative analysis using two-mode core-periphery analysis, two-mode factions analysis, affiliation and attribute networks.	08		Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF



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VidhyaDayanandPatil College of Arts
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **M.Sc. (CS)**

SEMESTER: **III** MONTH: **August - December** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able:

- Understand the key issues in big data management and its associated applications in intelligent business and scientific computing.
- Achieve adequate perspectives of big data analytics in various applications like recommender systems, social media applications.
- Explain data mining, neural networks, text analytics, text mining, sentiment analysis, web mining, web analytics, social analytics, social network analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS3033 **Paper IV** **Business Intelligence and Big Data Analytics –II (Mining Massive Data sets)** **UNIT III**	**Unit III: SHINGLING OF DOCUMENTS** Finding Similar Items, Applications of Near-Neighbor Search, Jaccard similarity of sets, Similarity of documents, Collaborative filtering as a similar-sets problem, Documents, k-Shingles, Choosing the Shingle Size, Hashing Shingles, Shingles built from Words. Similarity-Preserving Summaries of Sets, Locality-Sensitive hashing for documents. The Theory of Locality-Sensitive functions. Methods for high degrees of similarity.	15	Mining of Massive Datasets, Anand Rajaraman and Jeffrey David Ullman, Cambridge University Press, 2012.	Google Meet Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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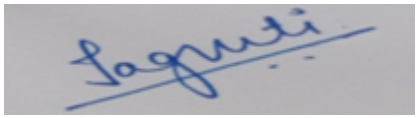
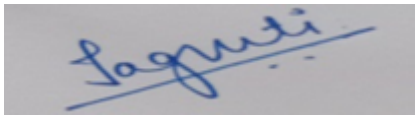
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS3033 **Paper IV** **Business Intelligence and Big Data Analytics –II (Mining Massive Data sets)** **UNIT III**	**Unit IV: MINING DATA STREAMS** Introduction to streams concepts – Stream data model and architecture, Stream computing, Sampling data in a stream, Filtering streams, Counting distinct elements in a stream, Estimating moments, Counting oneness in a Window, Decaying window, Real time analytics Platform(RTAP).	15	Mining of Massive Datasets, Anand Rajaraman and Jeffrey David Ullman, Cambridge University Press, 2012.	Google Meet Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: CS

CLASS:M.Sc(CS) Part-2 SEMESTER: SEM-3 MONTH:AUG-DEC ACADEMIC YEAR: 2020-21

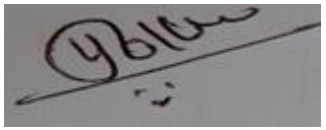
LEARNING OBJECTIVE/S:

- Design and develop location based messaging app
- Design and develop chat messaging app which is a location-based
- Design and develop app demonstrating Simple Downstream Messaging
- Design and develop app demonstrating Send Upstream Messages
- Implementing GCM Network Manager
- Demonstrate use of OpenGTS (Open Source GPS Tracking System)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS301 Ubiquitous Computing UNIT 1	**Basics of Ubiquitous Computing :**Examples of Ubiquitous Computing Applications, Holistic Framework for UbiCom: Smart DEI, Modelling the Key Ubiquitous Computing Properties, Ubiquitous System Environment Interaction, Architectural Design for UbiCom Systems: Smart DEI Model, Smart Devices and Services, Service Architecture Models, Service Provision Life Cycle.	15	Ubiquitous Computing Smart Devices, Environments and Interactions, Stefan Poslad, Wiley, 2009.	Laptop, PPT

PSCS301 Ubiquitous Computing UNIT 2	**Smart Environments Tagging, Sensing and Controlling**, Tagging the Physical World, Sensors and Sensor Networks, Micro Actuation and Sensing: MEMS, Embedded Systems and Real Time Systems, Control Systems.	15	Ubiquitous Computing Smart Devices, Environments and Interactions, Stefan Poslad, Wiley, 2009.	Laptop ,PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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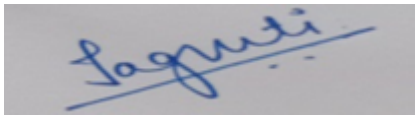

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. BRIJESH Y JOSHI DEPARTMENT: Computer Science

CLASS: M.Sc.C.S. SEMESTER: I MONTH: OCT to DEC ACADEMIC YEAR: 2020-2021

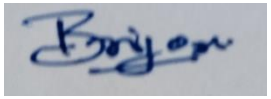
LEARNING OBJECTIVE/S:

- To be able to understand Big data platform, statistical concepts
- To understand the overview of Big data processing i.e. MapReduce Processing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Elective I- Track C Business Intelligence and Big Data Analytics –II (Mining Massive Data sets)Unit-I	**Big data:** Introduction to Big data Platform, Traits of big data, Challenges of conventional systems, Web data, Analytic processes and tools, Analysis vs Reporting, Modern data analytic tools, Statistical concepts: Sampling distributions, Re-sampling, Statistical Inference, Prediction error. **Data Analysis:** Regression modeling, Analysis of time Series: Linear systems analysis, Nonlinear dynamics, Rule induction, Neural networks: Learning and Generalization, Competitive Learning, Principal Component Analysis and Neural Networks, Fuzzy Logic: Extracting Fuzzy Models from Data, Fuzzy Decision Trees, Stochastic Search Methods.	12	Mining of Massive Datasets, Anand Rajaraman and Jeffrey David Ullman, Cambridge University Press, 2012.	Laptop, PPT
Elective I- Track C Business Intelligence and Big Data Analytics –II	**Introduction to Map Reduce:** The map tasks, Grouping by key, The reduce tasks, Combiners, Details of MapReduce Execution, Coping with node failures. Algorithms Using **MapReduce:** Matrix-Vector Multiplication, Computing Selections and Projections, Union, Intersection, and		Mining of Massive Datasets, Anand Rajaraman and Jeffrey David Ullman, Cambridge University Press, 2012.	

(Mining Massive Data sets)Unit-II	Difference, Natural Join. Extensions to MapReduce: Workflow Systems, Recursive extensions to MapReduce, Common map reduce algorithms			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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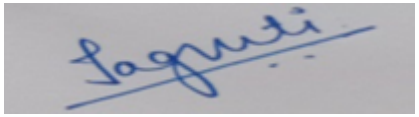

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs).Sampada Deshmukh DEPARTMENT:Computer Science

CLASS:M.Sc.(C.S) SEMESTER: III MONTH: August- December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Learn basics of computer forensics fundamental, collection of evidences.
- Study different computer forensics methods and tools.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Cyber and Information Security Unit 1	**Computer Forensic Fundamentals:** Introduction to Computer Forensics and objective, the Computer Forensics Specialist, Use of Computer Forensic in Law Enforcement, Users of Computer Forensic Evidence, Case Studies, InformationSecurity Investigations. Types of Computer Forensics Technology: Types of Military Computer Forensic Technology	5	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using Google Meet
	Types of Law Enforcement Computer Forensic Technology, Types of Business Computer Forensic Technology, Specialized Forensics Techniques, Hidden Data, Spyware and Adware, Encryption Methods andVulnerabilities, Protecting Data from Being Compromised	5	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using Google Meet
	Internet Tracing Methods,Security and Wireless Technologies. Types of Computer Forensics Systems:	5	Computer Forensics Computer Crime Scene	Power Point Presentation using Google Meet

	Studydifferent Security System: Internet, Intrusion Detection, Firewall, Storage Area, Network Disaster Recovery, Public Key Infrastructure, Wireless Network, Satellite Encryption,Instant Messaging (IM), Net Privacy, Identity Management, Biometric, Identity Theft.		Investigation, John R. Vacca, Second Edition, 2005.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs.) Sampada Deshmukh DEPARTMENT:Computer Science

CLASS:M.Sc. SEMESTER:III MONTH: August-December ACADEMIC YEAR: 2020-2021

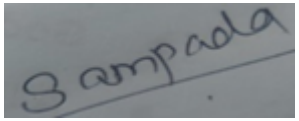
LEARNING OBJECTIVE/S:
The learners will be able to :

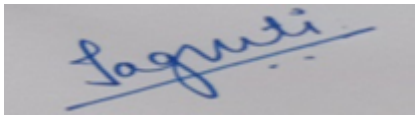
- Learn different data recovery method.
- Learn security techniques for forensic purpose.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Cyber and Information Security Unit 2	**Data Recovery:** Data Recovery and Backup, Role of Data Recovery, Hiding and Recovering Hidden Data. Evidence Collection: Need to Collect the Evidence, Types of Evidences, The Rules of Evidence, Collection Steps. Computer Image Verification and Authentication	6	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using Google Meet

	Special Needs of Evidence Authentication. Identification of Data: Timekeeping, Forensic Identification and Analysis of Technical Surveillance Devices,	5	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using Google Meet
	Reconstructing Past Events: How to Become a Digital Detective, Useable File Formats, Unusable File Formats, Converting Files.	4	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Computer Science.

CLASS: M.Sc. SEMESTER: III MONTH: August To December ACADEMIC YEAR: 2020-2021

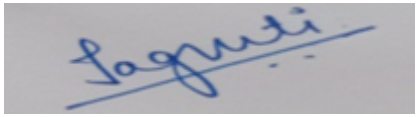
LEARNING OBJECTIVE/S:

- To understand social network and analyze the communication and predict the relationship between those actors.
- To understand Graph theory and network centrality and page rank for accessing webpages.
- To understand network structures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS302 Social Network Analysis UNIT-I	**Introduction to social network analysis (SNA)** Introduction to networks and relations- analyzing relationships to understand people and groups, binary and valued relationships, symmetric and asymmetric relationships, multimode relationships,	6	1. Social Network Analysis for Startups- Finding connections on the social web 2. Social Network Analysis- 3rd edition	Projector, PPT.
	Using graph theory for social networks analysis- adjacency matrices, edge-lists, adjacency lists, graph traversals and distances, depth-first traversal, breadth-first traversal paths and walks, Dijkstra's algorithm, graph distance and graph diameter, social networks vs. link analysis, ego-centric and socio-centric density.	6		Projector, PPT.
PSCS302 Social Network Analysis	**Networks, Centrality and centralization in SNA** Understanding networks- density, reachability, connectivity, reciprocity, group-external and group-internal ties in networks, ego	8	1. Social Network Analysis for	Projector, PPT.

UNIT-II	networks, extracting and visualizing ego networks, structural holes, Centrality- degree of centrality, closeness and betweenness centrality, local and global centrality, centralization and graph centers, notion of importance within network, Google pagerank algorithm,		Startups- Finding connections on the social web 2. Social Network Analysis- 3rd edition	
	Analyzing network structure- bottom-up approaches using cliques, N-cliques, N-clans, K-plexes, K-cores, F-groups and top-down approaches using components, blocks and cut-points, lambda sets and bridges, and factions.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.CS

SEMESTER: IV MONTH: FEB TO MAY ACADEMIC YEAR: 2020-21

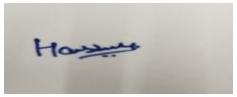
LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand basics of Cryptography and Network Security.
- To be able to secure a message over insecure channel by various means.
- To learn about how to maintain the Confidentiality, Integrity and Availability of a data.
- To understand various protocols for network security to protect against the threats in the networks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS4022 Cyber and Information Security (Cryptography and Crypt Analysis) **UNIT 1**	: Introduction to Number Theory Topics in Elementary Number Theory: O and notations, time estimates for doing arithmetic-divisibility and the Euclidean algorithm, Congruence: Definitions and properties, linear congruence, residue classes, Euler's phi function, Fermat's Little Theorem, Chinese Reminder Theorem, Applications to factoring, finite fields, quadratic residues and reciprocity: Quadratic residues, Legendre symbol, Jacobi Symbol. (proofs of the theorems are not expected to cover).	10	Discrete Mathematics and Its Applications, Kenneth H. Rosen, 7 th Edition, McGraw Hill, 2012. Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005	Powerpoint,Black Board and chalk

PSCS4022 Cyber and Information Security (Cryptography and Crypt Analysis) **UNIT 3**	RSA Cryptosystem The RSA Algorithm, Primarily Testing, Legendre and Jacobi Symbols, The SolovayStrassen Algorithm, The Miller-Rabin Algorithm, Factoring Algorithm: The pollard p-1 Algorithm, Dixon's Random Squares Algorithm, Attacks on RSA, The Rabin Cryptosystem. Public Key Cryptosystems: The idea of public key Cryptography, The Diffie-Hellman Key Agreement, ElGamal Cryptosystem, The Pollard Rho Discrete Logarithm Algorithm, Elliptic Curves, Knapsack problem.	10	Discrete Mathematics and Its Applications, Kenneth H. Rosen, 7 th Edition, McGraw Hill, 2012. Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005. Network Security and Cryptography, Atul Kahate, McGraw Hill, 2003. Cryptography and Network Security: Principles and Practices, William Stalling, Fourth Edition, Prentice Hall, 2013.	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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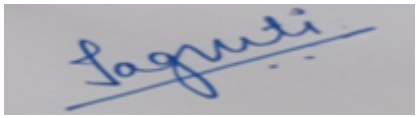

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: COMPUTER SCIENCE CLASS: MSc.CS(Part II)

SEMESTER: **IV** MONTH: FEBRUARY-MAY ACADEMIC YEAR: 2020-21

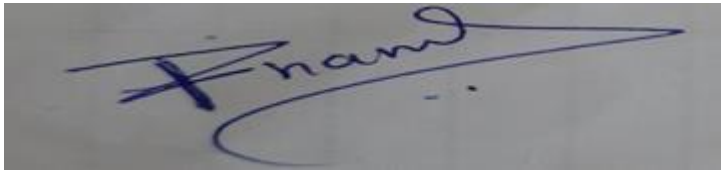
LEARNING OBJECTIVES:
The learners will be able to:

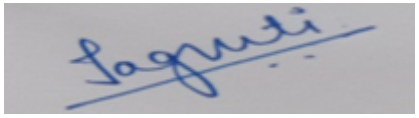
- Understand the concepts of Simulation and Modeling.
- Develop logic for developing Simulation Scenarios.
- Be familiar about the basic concepts of Agent Based Modeling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS401 Unit 1, Simulation and Modeling	Introduction to Simulation, Need of Simulation, Time to simulate, Inside simulation software: Modeling the progress of Time, Modeling Variability, Conceptual Modeling: Introduction to Conceptual modelling.	07	Simulation: The Practice of Model Development and Use by Stewart Robinson, John Wiley and Sons, Ltd, 2004.	Power Point Presentation
	Defining conceptual model, Requirements of the conceptual model, Communicating the conceptual model, Developing the Conceptual Model: Introduction, A framework for conceptual modeling, methods of model simplification.	08	Simulation: The Practice of Model Development and Use by Stewart Robinson, John	Power Point Presentation

			Wiley and Sons, Ltd, 2004.	
PSCS401 Unit 3, Simulation and Modeling.	Types of models, Analytical vs Simulation modeling, Application of simulation modeling, Level of abstraction, Simulation Modeling. Methods, System Dynamics, Discrete Event Modeling, Agent Based modeling: Introduction to Agent, Agent-based modeling, Time in agent based models, Space in agent based models, Discrete space, Continuous space movement in continuous space, Communication between agents, Dynamic creation and destruction of agents, Statics on agent population, Condition triggered events and transition in agents.	07	The Big Book of Simulation Modeling: Multi Method Modeling by Andrei Borshchev, 2013.	Power Point Presentation
	Building agents based models: The problem statement, Phases of modeling, Assumptions, 3 D animation. Dynamics Systems: Stock and flow diagrams, examples of stock and flow diagrams. Multi-method modeling: Architecture, Technical aspects of combining modeling methods, Examples.	08	The Big Book of Simulation Modeling: Multi Method Modeling by Andrei Borshchev, 2013.	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shilpa Rodrigues **DEPARTMENT**: COMPUTER SCIENCE **CLASS**: MSc.CS(Part II)

SEMESTER: IV **MONTH**: FEB-MAY **ACADEMIC YEAR**: 2020-21

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the concepts of Simulation and Modeling.
- Develop logic for developing Simulation Scenarios.
- Be familiar about the basic concepts of Agent Based Modeling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS401 Unit 2, Simulation and Modeling	Data Collection and Analysis: Introduction, Data requirements, Obtaining data, Representing unpredictable variability, Selecting statistical distributions. Obtaining Accurate Results: Introduction, The nature of simulation models and simulation output, Issues in obtaining accurate simulation results, example model, dealing with initialization bias: warm-up and initial conditions, Selecting the number of replications and run-length.	07	Simulation: The Practice of Model Development and Use by Stewart Robinson, John Wiley and Sons, Ltd, 2004.	Power Point Presentation
	Searching the Solution Space: Introduction, The nature of simulation experimentation, Analysis of results from a single scenario, Comparing alternatives, Search experimentation, and Sensitive analysis. Verification, Validation and Confidence: Introduction, Defining	08	Simulation: The Practice of Model Development and	Power Point Presentation

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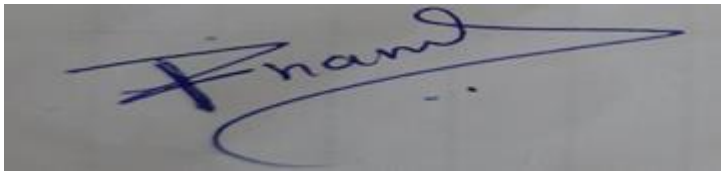
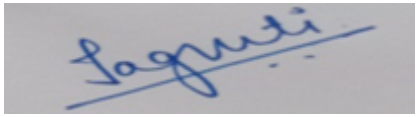
	Verification and Validation, The difficulties of verification and validation, Methods of verification and validation, Independent verification and validation.		Use by Stewart Robinson, John Wiley and Sons, Ltd, 2004.	
PSCS401 Unit 4, Simulation and Modeling.	Designing state-based behavior: Statecharts, State transitions, Viewing and debugging Statecharts at runtime, Statecharts for dynamic objects. Discrete events and Event model object: Discrete event, Event-the simplest low level model object, Dynamic events, and Exchanging data with external world. Presentation and animation: Working with shapes, groups and colors.	07	The Big Book of Simulation Modeling: Multi Method Modeling by Andrei Borshchev, 2013.	Power Point Presentation
	, Designing interactive models: using controls, Dynamic properties of controls, 3D Animation. Randomness in Models: Probability distributions, sources of randomness in the model, randomness in system dynamics model, random number generators, Model time, date and calendar: Virtual and real time: The model time, date and calendar, Virtual and real-time execution modes.	08	The Big Book of Simulation Modeling: Multi Method Modeling by Andrei Borshchev, 2013.	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs).Sampada Deshmukh DEPARTMENT: C .S.

CLASS: M. Sc. SEMESTER: IV MONTH: FEB-MAY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

a. study different secret key exchange method algorithm and patterns.
b. Learn different protocols

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Cyber and Information Security Unit –II	Shift Cipher, Substitution Cipher, Affine Cipher, Vigenère Cipher, Vermin Cipher, HillCipher, Permutation Cipher, Stream Cipher, Cryptanalysis of Affine Cipher, Substitution	6	Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005.	Powerpoint presentation with Google Meet
	Cipher, Vigenère Cipher and Hill Cipher, Block Ciphers, Algorithm Modes, DES, Double DES, Triple DES, Meet-in-Middle Attack, AES, IDEA algorithm. Cryptographic HashFunctions	6		Powerpoint presentation with Google Meet
	Hash Functions and Data Integrity, Security of Hash Functions, Secure HashAlgorithm, Message Authentication Code, Nested MACs, HMAC.	3		Powerpoint presentation with Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.(Mrs). Sampada Deshmukh DEPARTMENT: CS

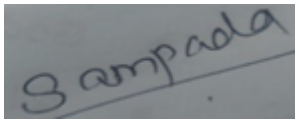
CLASS: M. Sc. SEMESTER: IV MONTH: August-December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

c. study different secret key exchange method algorithm and patterns.
d. Learn different protocols.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Cyber and Information Security Unit –IV	Diffie-Hellman Key distribution and Key agreement scheme, Key Distribution Patterns, Mitchell-Piper Key distribution pattern, Station-to-station protocol, MTI Key Agreement	8	Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005.	Powerpoint presentation with Google Meet
	Public-Key Infrastructure: What is PKI?, Secure Socket Layer, Certificates, Certificate Life cycle, Trust Models: Strict Hierarchy Model, Networked PKIs, The web browser Model, Pretty Good Privacy.	7		Powerpoint presentation with Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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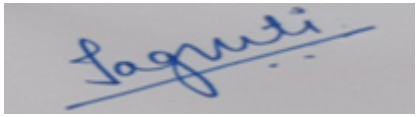

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.I.T**

CLASS: **FYIT C** SEMESTER: **I** MONTH: **July-Oct** ACADEMIC YEAR: **2019-2020**

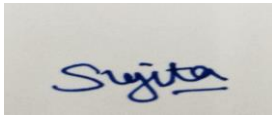
LEARNING OBJECTIVES:
The learners will be able to :

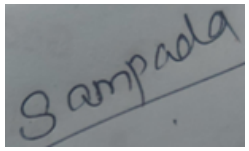
- Understand the basics concept of Digital circuit which includes MUX, DEMUX, Flip flops, counters etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II,4, Digital Electronics	Multiplexer, Demultiplexer, ALU, Encoder and Decoder: Introduction, Multiplexer, Demultiplexer, Decoder, ALU, Encoders	4	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Chalk and Duster
	Sequential Circuits: Flip-Flop: Introduction, Terminologies used, S-R flip-flop, D flip-fop	4	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Chalk and Duster
	JK flipflop, Race-around condition, Master – slave JK flip-flop, T flip-flop, conversion from one type of flip-flop to another, Application of flipflops.	4	Digital Principles and Applications Malvino and Leach Tata McGraw Hill	Chalk and Duster
II,5, Digital Electronics	Counters:	3	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Chalk and Duster

	Introduction, Asynchronous counter, Terms related to counters, IC7493 (4-bit binary counter),			
	Synchronous counter, Bushing, Type T Design, Type JK Design, Presettable counter, IC 7490, IC 7492, Synchronous counter ICs, Analysis of counter circuits.	3	Digital Principles and Applications Malvino and Leach Tata McGraw Hill	Chalk and Duster
	Shift Register: Introduction, parallel and shift registers, serial shifting, serial–in serial–out, serial–in parallel–out , parallel–in parallel–out,	2	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Chalk and Duster
	Ring counter, Johnson counter, Applications of shift registers, Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters.	2	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Chalk and Duster
	Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters.	2	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI_ DEPARTMENT: _____BSC-IT___ CLASS: __FYIT___ SEMESTER: ___I_____

MONTH: ____July to October_____ ACADEMIC YEAR: ____2019-20__

LEARNING OBJECTIVE/S:
The learners will be able to:

Think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems. To apply their knowledge and skills to be employed and excel in IT professional careers and/or to continue their education in IT and/or related post graduate programs.

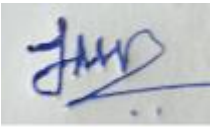
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Imperative Programming USIT101 Unit 1	**Introduction**: Types of Programming languages, History, features and application. Simple program logic, program development cycle, pseudocode statements and flowchart symbols sentinel value to end a program, evolution of programming models., desirable program characteristics. **Fundamentals**: Structure of a program. Compilation and Execution of a Program, Character Set, identifiers and keywords.	3 3 3 3	Yashwant Kanetkar 'Let us C'	Chalk, Blackboard

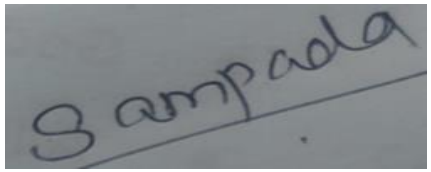
	Data types, constants, variables and arrays, declarations, expressions, statements, Variable definition, symbolic constants			
Imperative Programming USIT101 Unit 2	**Operators and Expressions:** Arithmetic operators, unary operators, relational and logical operators, assignment operators, assignment operators, the conditional operator, library functions. **Data Input and output:** Single character input and output, entering input data, scanf function, printf function, gets and puts functions, interactive programming.	4 4 2 2	Yashwant Kanetkar 'Let us C'	Chalk, Blackboard
Imperative Programming USIT101 Unit 3	**Conditional Statements and Loops:** Decision Making Within a Program, Conditions, Relational Operators, Logical Connectives, If Statement, If-Else Statement, Loops: While Loop, Do While, For Loop. Nested Loops, Infinite Loops, Switch statement **Functions:** Overview, defining a function, accessing a function, passing arguments to a function, specifying argument data types, function prototypes	4 3 2	Yashwant Kanetkar 'Let us C'	Chalk, Blackboard

	Recursion, modular programming and functions, standard library of c functions, prototype of a function: foo1lal parameter list, return type, function call, block structure, passing arguments to a function: call by reference, call by value.	3		
Imperative Programming USIT101 Unit 4	**Program structure:** Storage classes, automatic variables, external variables, static variables, multifile program Library functions, Preprocessor: Features, #define and #include, Directives and Macros **Arrays:** Definition, processing, passing arrays to functions, multidimensional arrays, arrays and strings.	3 3 2 4	Yashwant Kanetkar 'Let us C'	Chalk, Blackboard
Imperative Programming USIT101 Unit 5	**Pointers:** Fundamentals, declarations, Pointers Address Operators, Pointer Type Declaration, Pointer Assignment, Pointer Initialization Arithmetic, Functions and Pointers, Arrays And Pointers, Pointer Arrays, passing functions to other functions **Structures and Unions**: Structure Variables, Initialization, Structure Assignment, Nested	3 3 2 4	Yashwant Kanetkar 'Let us C'	Chalk, Blackboard

	Structure, Structures and Functions, Structures and Arrays: Arrays of Structures, Structures Containing Arrays, Unions, Structures and pointers.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __60_____





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: F. Y. B. Sc. I. T –C SEMESTER: I MONTH: July-October ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with Linux OS and Windows OS

b. Create various applications on different OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Operating Systems Unit -II	**Memory Management:** No memory abstraction, memory abstraction: address spaces, virtual memory	3	Modern Operating Systems by Andrew Tanenbaum	Blackboard
	Page replacement algorithms, design issues for paging systems, implementation issues, segmentation.	4		Powerpoint presentation through projector
	File Systems: Files, directories, file system implementation, file-system management and optimization, MS-DOS file system, UNIX V7 file system, CD ROM file system.	5		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: F. Y. B. Sc. I. T –C SEMESTER: I MONTH: July-October ACADEMIC YEAR: 2019-2020

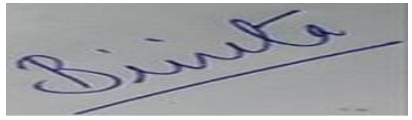
LEARNING OBJECTIVE/S:
The learners will be able to :

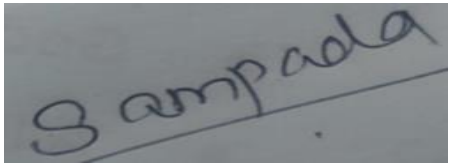
a. Work with Linux OS and Windows OS

b. Create various applications on different OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Operating Systems Unit -III	**Input-Output:** Principles of I/O hardware, Principles of I/O software, I/O software layers	3	Modern Operating Systems by Andrew Tanenbaum	Powerpoint presentation through projector
	disks, clocks, user interfaces: keyboard, mouse, monitor, thin clients, power management	3		Powerpoint presentation through projector
	Deadlocks: Resources, introduction to deadlocks, the ostrich algorithm, deadlock detection and recovery	3		Blackboard and Powerpoint presentation through projector
	Deadlock avoidance, deadlock prevention, issues.	3		Blackboard and Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: IT

CLASS: FY BSC IT SEMESTER: I MONTH: JUL-OCT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to:

1. Learners must understand proper working of operating system.
2. To provide a sound understanding of Computer operating system, its structures, functioning and algorithms.
3. To provide a understanding of operating system, its structures and functioning.
4. Develop and master understanding of algorithms used by operating systems for various purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3 OS UNIT 1	What is an operating system? History of operating system, computer hardware, different operating systems	2	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	Black board and chalk
	Operating system concepts, system calls, operating system structure	3		
	Processes, threads	4		
	Interprocess communication, scheduling, IPC problem	4		

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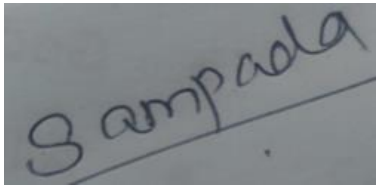
UNIT 4	History, requirements for virtualization, type 1 and 2 hypervisors, techniques for efficient virtualization.	3	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	Black board , chalk & PowerPoint Presentation
	Hypervisor microkernels, memory virtualization, I/O virtualization, Virtual appliances.	3		
	Virtual machines on multicore CPUs, Clouds.	2		
	Multiprocessors, multicomputer, distributed systems.	4		
UNIT 5	History of Unix and Linux, Linux Overview, Processes in Linux, Memory management in Linux, I/O in Linux.	3	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	Black board and chalk
	Linux file system, security in Linux. Android, History of windows through Windows 10, programming windows.	3		
	System structure, processes and threads in windows, Memory management, caching in windows, I/O in windows.	3		
	Windows NT file system, Windows power management, Security in windows.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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SYIT SEM-III SUB-APPLIED MATHS-II DIV A

PROF –ARCHANA MALPATHAK

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT:Mathematics CLASS: SYIT SEMESTER: III MONTH: Aug to Nov ACADEMIC YEAR: 2019-2020
LEARNING OBJECTIVE/S

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II Unit-I Matrices and Complex Number	Matrices : Inverse,properties,Rank by Normal and Echelon form,Linearequations,Linear dependent and independent Linear transformation,ch roots and ch vectors Caley Hamiltonian theroem,Similarity of matrix,Digonal matrix Complex number - complex number equality of complex numberArgand digram,polar form and exponential of complex numberHyperbolic and Logarithmic function of complex number	12	Applied Maths by G.V.Kumbojkar Higher Engineering of mathematics TechMax	Black board and chalk online teaching method

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: SYIT SEMESTER: II
MONTH: Aug to November ACADEMIC YEAR: 2020-2021.
LEARNING OBJECTIVE/S:
The learners will be able to : ___Variable separable,subtitutionmethod,Homogenous,Non homogeneous, Exavt differential equation,Non exact fifgerential equation, Integrating factor ,bernoullis differential,higher order differential equation solvable for Y,P,X .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths -II UNIT -II Differential equations	1) Equation of the first order and first degree :Sepratation of variables,Equation homogenous in x and y ,Non homogenous,Exactdifferential, 2)Integrating factor,Bernouils Equation ,Subtitution method general method,other methods 3)Diff equ of higher degree - Solvable for p, for X ,for YClairauts form of equationMethod of sepration, 4)Linear differential with constant coefficients - Differential operator,f(D)=0.f(D)=x ,1/f(D),1/f(D) X	3+3+3+3 =12	G.v.kumbojkar Higher Engineering of mathematics Balguru swami TechMax R.M.Baphna	Blackboard ,chalk online teaching method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics. CLASS: SYIT. SEMESTER: III MONTH: July To Nov ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to : Double integration ,Types of double ,Triple Integration,Types oftriple, Area volume for double and triple integration_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Mathematics UNIT -IV Multiple integral	1) Multiple Intigration Double Integral,Change of. the order of the integration,Double integral in polar co - ordinates 2) Triple integral. 3) Application of integration :Areas,Volumes of. solids	4+4+4 =12	Higher Engineering of Mathematics TechMax R .M.Baphna	Black board ,chalk online teaching method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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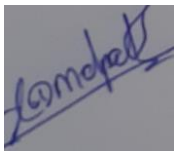
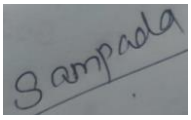
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -ARCHANA MALPATHAK Malpathak
DEPARTMENT: Mathematics CLASS: -SYIT SEMESTER: III MONTH: -JULLY TO_ NOVEMBER ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II (SYIT) UNIT-V Beta Gamma Function	1) Beta Gamma function -Defination,properties and problems,Duplication Formula 2) Differentiation Under Integral Sign 3)Error functions	5+4+3=12	Tech max Higher Engineering of mathematics Applied Maths II Nirali publication	Blackboard,chalk





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(I.T.) SEMESTER: III MONTH: JUL-AUG ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- What is Data Communication?
- What are different network model?
- How data communication is done with the help of Signals?

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 1	**Introduction:** Data communications, networks, network types, Internet history, standards and administration.	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Network Models: Protocol layering, TCP/IP protocol suite, The OSI model.	3	Data Communication and Networking Behrouz A. Forouzan Tata	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

			McGraw Hill Fifth Edition 2013	
	Introduction to Physical layer:Data and signals, periodic analog signals, digital signals, transmission impairment, data rate limits, performance	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Digital and Analog transmission: Digital-to-digital conversion, analog-to-digital conversion, transmission modes, digital-to-analog conversion, analog-to-analog conversion	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(I.T.) SEMESTER: III MONTH: AUG ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Different kinds of Transmission media
- How maximum bandwidth of Signal can be utilized
- Different kind of Switches in a network
- Functions in a data link layer

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 2	**Bandwidth Utilization**: Multiplexing and SpectrumSpreading: Multiplexing, Spread Spectrum	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Transmission media:Guided Media, Unguided Media	2	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

			Fifth Edition 2013	
	Switching: Introduction, circuit switched networks, packet switching, structure of a switch.	5	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Introduction to the Data Link Layer: Link layer addressing, Data Link Layer Design Issues, Error detection and correction, block coding, cyclic codes, checksum, forward error correction, error correcting codes, error detecting codes.	5	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(I.T.) SEMESTER: III MONTH: AUG- SEPT ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Different types of Wireless LAN Technologies
- Various real life connecting devices used to connect virtual LAN's

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 3	**Data Link Control:** DLC services, data link layer protocols, HDLC, Point-to-point protocol.	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Media Access Control: Random access, controlled access, channelization, Wired LANs – Ethernet Protocol, standard ethernet, fast ethernet, gigabit ethernet, 10 gigabit ethernet,	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

			Fifth Edition 2013	
	Wireless LANs: Introduction, IEEE 802.11 project, Bluetooth, WiMAX, Cellular telephony, Satellite networks.	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(I.T.) SEMESTER: III MONTH: SEPT ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- New generation IPV6
- How transition is done from IPV4 to IPV6
- Protocols and functions in Network layer

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 4	**Introduction to the Network Layer**: Network layer services, packet switching, network layer performance, IPv4 addressing, forwarding of IP packets, Internet Protocol, ICMPv4, Mobile IP	4	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Unicast Routing: Introduction, routing algorithms, unicast routing protocols,	4	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Next generation IP: IPv6 addressing, IPv6 protocol, ICMPv6 protocol, transition from IPv4 to IPv6.	4	Data Communication and Networking Behrouz A.	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

			Forouzan Tata McGraw Hill Fifth Edition 2013	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(I.T.) SEMESTER: III MONTH:SEPT ACADEMIC YEAR: 2019-20

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LEARNING OBJECTIVE/S:
The learners will be able to :

- Functions and Protocols of the Transport layer
- Various Client-Server protocols like WWW,HTTP

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 5	**Introduction to the Transport Layer:** Introduction, Transport layer protocols (Simple protocol, Stop-and-wait protocol, Go-Back-n protocol, Selective repeat protocol, Bidirectional protocols), Transport 12 9 layer services, User datagram protocol, Transmission control protocol,	6	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Standard Client0Server Protocols :World wide-web and HTTP, FTP, Electronic mail, Telnet, Secured Shell, Domain name system.	6	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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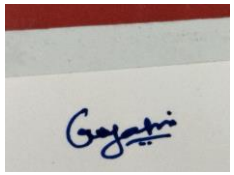

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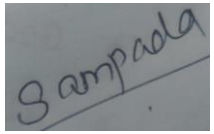

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ARPITA BANERJEE DEPARTMENT: IT-CS

CLASS: SYIT-DIV A SEMESTER: III MONTH: JUN-SEPT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: Develop understanding of the concept of Transaction, concurrency control and serializability. They will be able to learn PL/SQL to write code.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT304 Database Management Systems IV	**Transaction management and Concurrency:** Control Transaction management: ACID properties.	3	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Blackboard & chalk
	Serializability and concurrency control, Lock based concurrency control (2PL, Deadlocks).	4		
	Time stamping methods, Optimistic methods.	3		
	Database Recovery management.	2		
V	PL/SQL: Beginning with PL / SQL, Identifiers and Keywords, Operators, Expressions, Sequences, Control Structures	3	SQL,PL/SQL By Ivan Bayross	Blackboard & chalk
	Cursors and Transaction, Collections and composite data types, Procedures and Functions	3		
	Exceptions Handling, Packages	3		
	With Clause and Hierarchical Retrieval, Triggers.	3		

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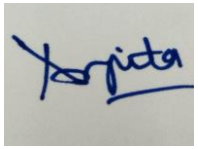
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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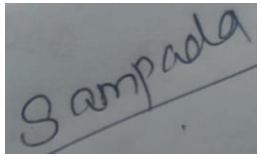

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____BSC-IT___ CLASS: __SYIT_____ SEMESTER: ___III_____

MONTH: ____June to September_____ ACADEMIC YEAR: ____2019-20__

LEARNING OBJECTIVE/S:
The learners will be able to: Develop understanding of the concept of Transaction, Relational Algebra and also learning the Constraints, views.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Database Management Systems USIT304 Unit 1	**Introduction to Databases and Transactions-** What is database system, purpose of database system. View of data, relational databases, Database architecture and transaction management.	4 3 5	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Chalk, Blackboard
Unit 2	**Relational algebra:** introduction, Selection and projection set operations, renaming, Joins, Division, syntax, semantics. Operators, grouping and	4 4 4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Chalk, Blackboard
Unit 3	**Constraint, Views and SQL:** Types of constraints, Views security updates on views Aggregate functions, join relations. Triggers.	4 3 5	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Chalk, Blackboard

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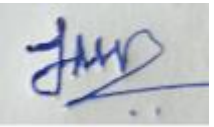
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __36_____



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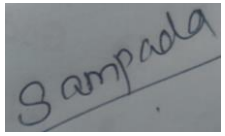

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)** _____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**SY.B SC (IT)-A**_____ SEMESTER: ____**III**_____ MONTH: _____**JUNE-SEPTEMBER**_____ ACADEMIC YEAR: _____**2019-2020**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

- **Understand the concept of data structure and how it is stored.**
- **The varieties of symbols used to store data, analysis on data, algorithms used to reduced the complexity regarding time, space and programs.**
- **Understanding the concept of Arrays and operations on array, Stack and Queue and variation of operation on them.**
- **To make understand applications where it is used , advantages and disadvantages of operation.**
- **To enable to practically generate code for it and implement it for data storage.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 (USIT302) Data Structures **Unit No -01**	**Introduction:** Data and Information, Data Structure, Classification of Data Structures, Primitive Data Types, Abstract Data Types, Data structure vs. File Organization, Operations on Data Structure, Algorithm, Importance of Algorithm Analysis, Complexity of an Algorithm, Asymptotic Analysis and Notations, Big O Notation, Big Omega Notation, Big Theta Notation, Rate of Growth and Big O Notation.	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Textbook, Chalk and Duster. Blackboard.

Unit No -03	**Array**: Introduction, One Dimensional Array, Memory Representation of One Dimensional Array, Traversing, Insertion, Deletion, Searching, Sorting, Merging of Arrays, Multidimensional Arrays, Memory Representation of Two Dimensional Arrays, General Multi-Dimensional Arrays, Sparse Arrays, SparseMatrix, Memory Representation of Special kind of Matrices, Advantages and Limitations of Arrays.	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Textbook, Laptop, Projector, Chalk and Duster. Blackboard.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
	Stack: Introduction, Operations on the Stack Memory Representation of Stack, Array Representation of Stack, Applications of Stack, Evaluation of Arithmetic Expression, Matching Parenthesis, infix and postfix operations, Recursion**.**	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Textbook, Laptop, Projector, Chalk and Duster, Blackboard.
	Queue: Introduction, Queue, Operations on the Queue, Memory Representation of Queue, Array representation of queue, Linked List Representation of Queue, Circular Queue, Some special kinds of queues, Deque, Priority Queue, Application of Priority Queue, Applications of Queues.	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Textbook, Laptop, Projector, Chalk and Duster, Blackboard.

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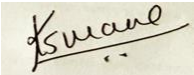
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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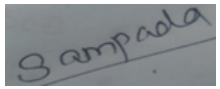

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT/CS

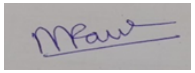
CLASS: SYIT-A SEMESTER: III MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to learn different structures of data, their operations and algorithms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DATA STRUCTURES (USIT302) Unit II	**Linked List:** Introduction to Subject, Syllabus, Linked List, One-way Linked List, Traversal of Linked List, Searching, Memory Allocation and De-allocation, Insertion in Linked List, Deletion from Linked List, Copying a List into Other List, Merging Two Linked Lists, Splitting a List into Two Lists, Reversing One way linked List, Circular Linked List, Applications of Circular Linked List	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	Black Board and Chalk
	Two way Linked List, Traversing a Two way Linked List, Searching in a Two way linked List, Insertion of an element in Two way Linked List, Deleting a node from Two way Linked List, Header Linked List, Applications of the Linked list, Representation of Polynomials, Storage of Sparse Arrays, Implementing other Data Structures	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	Black Board and Chalk
DATA STRUCTURES (USIT302) Unit IV	**Sorting and Searching Techniques:** Bubble, Selection, Insertion, Merge Sort. Searching: Sequential, Binary, Indexed Sequential Searches, Binary Search.	3	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	Black Board and Chalk
	Tree: Tree, Binary Tree, Properties of Binary Tree, Memory Representation of Binary Tree, Operations Performed on Binary	6		Black Board and Chalk

	Tree, Reconstruction of Binary Tree from its Traversals, Huffman Algorithm, Binary Search Tree, Operations on Binary Search Tree, Heap, Memory Representation of Heap, Operation on Heap, Heap Sort			
	Advanced Tree Structures: Red Black Tree, Operations Performed on Red Black Tree, AVL Tree, and Operations performed on AVL Tree, 23 Tree, B-Tree.	3		Black Board and Chalk
DATA STRUCTURES (USIT302) Unit V	**Hashing Techniques** Hash function, Address calculation techniques, Common hashing functions Collision resolution, Linear probing, Quadratic, Double hashing, Bucket hashing, Deletion and rehashing	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	Black Board and Chalk
	Graph: Introduction, Graph, Graph Terminology, Memory Representation of Graph, Adjacency Matrix Representation of Graph, Adjacency List or Linked Representation of Graph, Operations Performed on Graph, Graph Traversal, Applications of the Graph, Reachability, Shortest Path Problems, Spanning Trees	6		Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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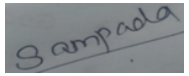

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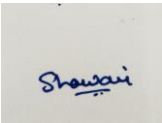
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHARVARI PATIL DEPARTMENT: IT CLASS: S.Y.I.T SEMESTER: III

MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the importance of python programming.
- Gain knowledge about function declaration and function call.
- Learn about various data structures used in python.
- Understand the use of regular expressions.
- Learn GUI development using python programming.



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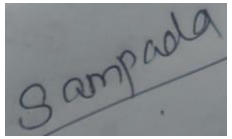

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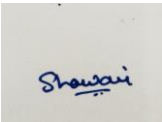
Paper No.,Paper Title, Unit No.	**Sub Topics:**	**No.of Lectures**	**References**	**Teaching Method/ICT tools used**
USIT301 Python Programming Unit 1	Introduction:The Python Programming Language, History, features, Installing Python, Running Python program, Debugging : Syntax Errors, Runtime Errors, Semantic Errors, Experimental Debugging, Formal and Natural Languages, The Difference Between Brackets, Braces, and Parentheses Variables and Expressions:Values and Types, Variables, Variable Names and Keywords, Type conversion, Operators and Operands, Expressions, Interactive Mode and Script Mode Conditional Statements:if, if-else, nested if –else Looping:for, while, nested loops	4 3 2 1 2	Reference book: "Think Python"	Chalk, Blackboard



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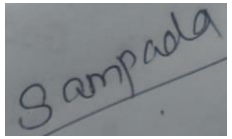

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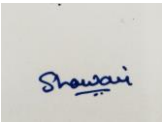
	Control statements: Terminating loops, skipping specific conditions			
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT301 Python Programming Unit 2	Functions: Function Calls, Type Conversion Functions, Math Functions, Composition, Adding New Functions, Definitions and Uses, Flow of Execution, Parameters and Arguments, Variables and Parameters Are Local, Stack Diagrams, Fruitful Functions and Void Functions, Why Functions? Importing with from, Return Values, Incremental Development, Composition, Boolean Functions, More Recursion, Leap of Faith, Checking Types Strings: A String Is a Sequence, Traversal with a for Loop, String Slices, Strings Are Immutable, Searching,	4 4 2	Reference book: "Think Python"	Chalk, Blackboard



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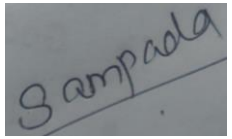

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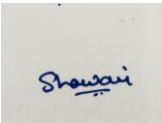
	Looping and Counting, String Methods, The in Operator, String Comparison, String Operations.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT301 Python Programming Unit 3	Lists: Values and Accessing Elements, Lists are mutable, traversing a List, Deleting elements from List, Built-in List Operators, Concatenation, Repetition, In Operator, Built-in List functions and methods Tuples and Dictionaries: Tuples, Accessing values in Tuples, Tuple Assignment, Tuples as return values, Variable-length argument tuples, Basic tuples operations, Concatenation, Repetition, in Operator, Iteration, Built-in Tuple Functions Creating a Dictionary, Accessing Values in a dictionary, Updating Dictionary, Deleting Elements from Dictionary,	3 3 3	Reference book: "Think Python"	Chalk, Blackboard



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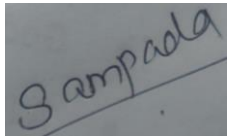

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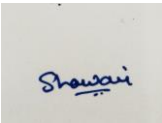
	Properties of Dictionary keys, Operations in Dictionary, Built-In Dictionary Functions, Built-in Dictionary Methods Files: Text Files, The File Object Attributes, Directories Exceptions: Built-in Exceptions, Handling Exceptions, Exception with Arguments, User-defined Exceptions	1 2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT301 Python Programming	Regular Expressions – Concept of regular expression, various types of regular expressions, using match function. Classes and Objects: Overview of OOP (Object Oriented Programming), Class Definition, Creating Objects, Instances as Arguments, Instances as return values, Built-in Class	4 4	Reference book: "Think Python"	Chalk, Blackboard



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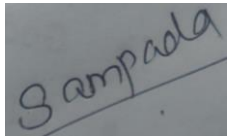

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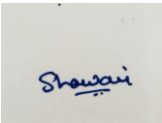
Unit 4	Attributes, Inheritance, Method Overriding, Data Encapsulation, Data Hiding Multithreaded Programming: Thread Module, creating a thread, synchronizing threads, multithreaded priority queue Modules: Importing module, Creating and exploring modules, Math module, Random module, Time module	4 4		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		



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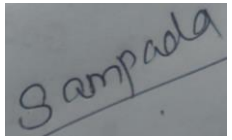

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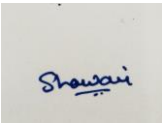
USIT301 Python Programming Unit 5	Creating the GUI Form and Adding Widgets: Widgets: Button, Canvas, Checkbutton, Entry, Frame, Label, Listbox, Menubutton, Menu, Message, Radiobutton, Scale, Scrollbar, text, Toplevel, Spinbox, PanedWindow, LabelFrame, tkMessagebox. Handling Standard attributes and Properties of Widgets. Layout Management: Designing GUI applications with proper Layout Management features. Look and Feel Customization: Enhancing Look and Feel of GUI using different appearances of widgets. Storing Data in Our MySQL Database via Our GUI : Connecting to a MySQL database from Python, Configuring the MySQL connection, Designing the Python GUI database, Using the INSERT command, Using the UPDATE command,	4 2 2	Reference book: "Think Python"	Chalk, Blackboard



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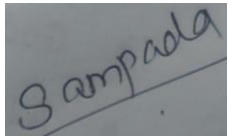

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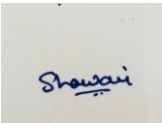
	Using the DELETE command, Storing and retrieving data from MySQL database	4		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		



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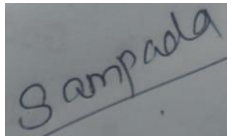

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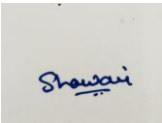

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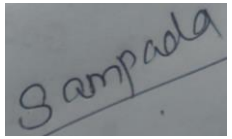

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SYIT SEM-III SUB-APPLIED MATHS-II DIV B

PROF –ARCHANA MALPATHAK

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT:Mathematics CLASS: SYIT SEMESTER: III MONTH: Aug to Nov ACADEMIC YEAR: 2019-2020
LEARNING OBJECTIVE/S

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II Unit-I Matrices and Complex Number	Matrices : Inverse,properties,Rank by Normal and Echelon form,Linearequations,Linear dependent and independent Linear transformation,ch roots and ch vectors Caley Hamiltonian theroem,Similarity of matrix,Digonal matrix Complex number - complex number equality of complex numberArgand digram,polar form and exponential of complex numberHyperbolic and Logarithmic function of complex number	12	Applied Maths by G.V.Kumbojkar Higher Engineering of mathematics TechMax	Black board and chalk online teaching method

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: SYIT SEMESTER: II
MONTH: Aug to November ACADEMIC YEAR: 2020-2021.
LEARNING OBJECTIVE/S:
The learners will be able to : ___Variable separable,subtitutionmethod,Homogenous,Non homogeneous, Exavt differential equation,Non exact fifgerential equation, Integrating factor ,bernoullis differential,higher order differential equation solvable for Y,P,X .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths -II UNIT -II Differential equations	1) Equation of the first order and first degree :Sepratation of variables,Equation homogenous in x and y ,Non homogenous,Exactdifferential, 2)Integrating factor,Bernouils Equation ,Subtitution method general method,other methods 3)Diff equ of higher degree - Solvable for p, for X ,for YClairauts form of equationMethod of sepration, 4)Linear differential with constant coefficients - Differential operator,f(D)=0.f(D)=x ,1/f(D),1/f(D) X	3+3+3+3 =12	G.v.kumbojkar Higher Engineering of mathematics Balguru swami TechMax R.M.Baphna	Blackboard ,chalk online teaching method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics. CLASS: SYIT. SEMESTER: III MONTH: July To Nov ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to : Double integration ,Types of double ,Triple Integration,Types oftriple, Area volume for double and triple integration_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Mathematics UNIT -IV Multiple integral	1) Multiple Intigration Double Integral,Change of. the order of the integration,Double integral in polar co - ordinates 2) Triple integral. 3) Application of integration :Areas,Volumes of. solids	4+4+4 =12	Higher Engineering of Mathematics TechMax R .M.Baphna	Black board ,chalk online teaching method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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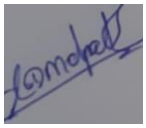
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -ARCHANA MALPATHAK Malpathak
DEPARTMENT: Mathematics CLASS: -SYIT SEMESTER: III MONTH: -JULLY TO_ NOVEMBER ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II (SYIT) UNIT-V Beta Gamma Function	1) Beta Gamma function -Defination,properties and problems,Duplication Formula 2) Differentiation Under Integral Sign 3)Error functions	5+4+3=12	Tech max Higher Engineering of mathematics Applied Maths II Nirali publication	Blackboard,chalk



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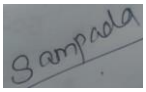

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sampada Deshmukh DEPARTMENT: Information Technology

CLASS:S.Y.B.Sc.(I.T) SEMESTER: III MONTH:JUNE-JULY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the basics of Data Communication and concept of networking
- Understand the concept of Analog and Digital Signal.
- Understand the Network Model and their working for data transmission.
- Learn conversion of digital to analog and vice-versa.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 1	**Introduction**: Data communications, networks, network types, Internet history,standards and administration.	4	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk, Projector
	Network Models:Protocol layering, TCP/IP protocol suite, The OSI model.	2	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk, Projector
	Introduction to Physical layer:Data and signals, periodic analog signals, digital signals, transmission impairment, data rate limits, performance.	3	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk, Projector

	Digital and Analog transmission: Digital-to-digital conversion, analog-to-digital conversion, transmission modes, digital-to-analog conversion, analog-to-analog conversion.	3	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sampada Deshmukh DEPARTMENT:Information Technology

CLASS:S.Y.B.Sc.(I.T) SEMESTER: III MONTH: AUGUST-SEPTEMBER ACADEMIC YEAR:2019-20

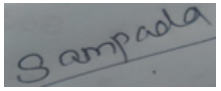
LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand different transmission level protocol.
- Learn Client server Protocol and their application

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 5	**Introduction to the Transport Layer:** Introduction, Transport layer protocols (Simple protocol, Stop-and-wait protocol, Go-Back-n protocol, Selective repeat protocol, Bidirectional protocols), Transport layer services, User datagram protocol, Transmission control protocol	8	TCP/IP Protocol Suite By Behrouz A. Forouzan	Black Board and Chalk, Projector

	Standard Client Server Protocols: World-wide-web and HTTP, FTP, Electronic mail, Telnet, Secured Shell, Domain name system.	4	TCP/IP Protocol Suite By Behrouz A. Forouzan	Black Board and Chalk, Projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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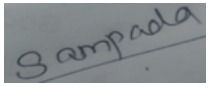

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sandesh Akre DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(I.T.) SEMESTER: III MONTH: JUL-AUG ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- What is Data Communication?
- What are different network model?
- How data communication is done with the help of Signals?

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 2	**Introduction to Physical layer**:Data and signals, periodic analog signals, digital signals, transmission impairment, data rate limits, performance	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Digital and Analog transmission: Digital-to-digital conversion, analog-to-digital conversion, transmission modes, digital-to-analog conversion, analog-to-analog conversion	3	Data Communication and Networking Behrouz A. Forouzan Tata	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

			McGraw Hill Fifth Edition 2013	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sandesh Akre DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(I.T.) SEMESTER: III MONTH: AUG ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Different kinds of Transmission media
- How maximum bandwidth of Signal can be utilized
- Different kind of Switches in a network
- Functions in a data link layer

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 2	**Bandwidth Utilization**: Multiplexing and SpectrumSpreading: Multiplexing, Spread Spectrum	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Transmission media:Guided Media, Unguided Media	2	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

			Fifth Edition 2013	
	Switching: Introduction, circuit switched networks, packet switching, structure of a switch.	5	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Introduction to the Data Link Layer: Link layer addressing, Data Link Layer Design Issues, Error detection and correction, block coding, cyclic codes, checksum, forward error correction, error correcting codes, error detecting codes.	5	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sandesh Akre DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(I.T.) SEMESTER: III MONTH: AUG- SEPT ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Different types of Wireless LAN Technologies
- Various real life connecting devices used to connect virtual LAN's

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 3	**Data Link Control:** DLC services, data link layer protocols, HDLC, Point-to-point protocol.	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Media Access Control: Random access, controlled access, channelization, Wired LANs – Ethernet Protocol, standard ethernet, fast ethernet, gigabit ethernet, 10 gigabit ethernet,	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

			Fifth Edition 2013	
	Wireless LANs: Introduction, IEEE 802.11 project, Bluetooth, WiMAX, Cellular telephony, Satellite networks.	3	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF:Sandesh Akre DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(I.T.) SEMESTER: III MONTH: SEPT ACADEMIC YEAR: 2019-20

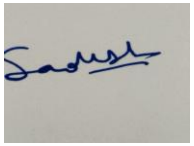
LEARNING OBJECTIVE/S:
The learners will be able to :

- New generation IPV6
- How transition is done from IPV4 to IPV6
- Protocols and functions in Network layer

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 4	**Introduction to the Network Layer**: Network layer services, packet switching, network layer performance, IPv4 addressing, forwarding of IP packets, Internet Protocol, ICMPv4, Mobile IP	4	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Unicast Routing: Introduction, routing algorithms, unicast routing protocols,	4	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2013	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint
	Next generation IP: IPv6 addressing, IPv6 protocol, ICMPv6 protocol, transition from IPv4 to IPv6.	4	Data Communication and Networking Behrouz A.	Desktop and Laptop,Digital cameras,Microphone,Mobile,Powerpoint

			Forouzan Tata McGraw Hill Fifth Edition 2013	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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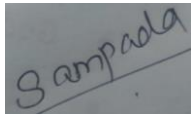

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYBSc(IT) DIV:B SEMESTER: III MONTH: AUGUST-DECEMBER ACADEMIC YEAR: 2019-2020

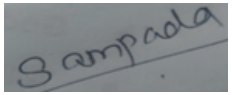
LEARNING OBJECTIVE/S:
The learners will be able to : Understand the different types of data structures and develop programs to search and sort for elements.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: USIT302 unit:1, Title: Data Structures	**Introduction:** Data and Information, Data Structure, Classification of Data Structures, Primitive Data Types, Abstract Data Types, Data structure vs. File Organization, Operations on Data Structure, Algorithm, Importance of Algorithm Analysis, Complexity of an Algorithm, Asymptotic Analysis and Notations, Big O Notation, Big Omega Notation, Big Theta Notation, Rate of Growth and Big O Notation.	5	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
	Array:Introduction, One Dimensional Array, Memory Representation of One Dimensional Array, Traversing, Insertion, Deletion, Searching, Sorting, Merging of Arrays, Multidimensional Arrays, Memory Representation of Two Dimensional Arrays, General Multi-Dimensional Arrays, Sparse Arrays, SparseMatrix, Memory Representation of Special kind of Matrices, Advantages and Limitations of Arrays.	7	A Simplified Approach to Data Structures	Online mode Google meet Google slides.

Paper: USIT302 unit:2, Title: Data Structures	**Linked List:** Linked List, One-way Linked List, Traversal of Linked List, Searching, Memory Allocation and De-allocation, Insertion in Linked List, Deletion from Linked List, Copying a List into Other List, Merging Two Linked Lists, Splitting a List into Two Lists, Reversing One way linked List, Circular Linked List, Applications of Circular Linked List,	6	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
	Two way Linked List, Traversing a Two way Linked List, Searching in a Two way linked List, Insertion of an element in Two way Linked List, Deleting a node from Two way Linked List, Header Linked List, Applications of the Linked list, Representation of Polynomials, Storage of Sparse Arrays, Implementing other Data Structures.	6	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
Paper: USIT302 unit:3, Title: Data Structures	**Stack**: Introduction, Operations on the Stack Memory Representation of Stack, Array Representation of Stack, Applications of Stack, Evaluation of Arithmetic Expression, Matching Parenthesis, infix and postfix operations, Recursion**.**	5	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
	Queue: Introduction, Queue, Operations on the Queue, Memory Representation of Queue, Array representation of queue, Linked List Representation of Queue, Circular Queue,Some special kinds of queues, Deque,Priority Queue, Application of Priority Queue, Applications of Queues.	7	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
Paper: USIT302 unit:4, Title:	**Sorting and Searching Techniques** Bubble, Selection, Insertion, Merge Sort. Searching: Sequential, Binary, Indexed Sequential Searches, Binary Search.	4	A Simplified Approach to Data Structures	Online mode Google meet Google slides.

Data Structures	**Tree:**Tree,Binary Tree, Properties of Binary Tree, Memory Representation of Binary Tree, Operations Performed on Binary Tree,Reconstruction of Binary Tree from its Traversals, Huffman Algorithm, Binary Search Tree, Operations on Binary Search Tree, Heap, Memory Representation of Heap, Operation on Heap, Heap Sort.	4	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
	Advanced Tree Structures: Red Black Tree, Operations Performed on Red Black Tree, AVL Tree, Operations performed on AVL Tree, 2-3 Tree, B-Tree.	4	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
Paper: USIT302 unit:5, Title: Data Structures	**Hashing Techniques** Hash function, Address calculation techniques, Common hashing functions Collision resolution, Linear probing, Quadratic,Double hashing, Buckethashing, Deletion and rehashing	6	A Simplified Approach to Data Structures	Online mode Google meet Google slides.
	Graph: Introduction, Graph, Graph Terminology, Memory Representation of Graph, Adjacency Matrix Representation of Graph, Adjacency List or Linked Representation of Graph, Operations Performed on Graph, GraphTraversal, Applications of the Graph, Reachability, Shortest Path Problems, Spanning Trees.	6	A Simplified Approach to Data Structures	Online mode Google meet Google slides.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS: SY BSc IT DIV-B(DBMS) SEMESTER:SEM 3 MONTH: JUN-SEP ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

- The learners will be able to : have a broad understanding of database concepts and database management system software
- have a high-level understanding of major DBMS components and their function
- be able to model an application's data requirements using conceptual modeling tools like ER diagrams and design database schemas based on the conceptual model.
- be able to write SQL commands to create tables and indexes, insert/update/delete data, and query data in a relational DBMS.
- be able to program a data-intensive application using DBMS APIs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 DBMS UNIT 1	Introduction to Databases and Transactions What is database system, purpose of database system, view of data, relationaldatabases, database architecture, transaction management	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Black board and chalk
	Data Models The importance of data models, Basic building blocks, Business rules, The evolutionof data models, Degrees of data abstraction.	4		
	Database Design,ER Diagram and Unified Modeling Language Database design and ER Model:overview, ERModel, Constraints, ERDiagrams, ERDIssues, weak entity sets, Codd's rules, Relational Schemas, Introduction to UML	4		
	Relational database model: Logical view of data, keys, integrity rules,	3		Black board and chalk

UNIT 2	Relational Database design: features of good relational database design, atomic domain and Normalization (1NF, 2NF, 3NF, BCNF).	3	DATABASE SYSTEM AND CONCEPTS BY H KORTH	
	Relational Algebra and Calculus Relational algebra: introduction, Selection and projection, set operations, renaming,Joins, Division, syntax, semantics	3		
	. Operators, grouping and ungrouping,relationalcomparison	2		
	Calculus: Tuple relational calculus, Domain relational Calculus, calculus vsalgebra,computational capabilities	4		
UNIT 3	Constraints, Views and SQL Constraints, types of constrains, Integrity constraints,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Black board and chalk
	Views: Introduction to views, data independence, security, updates on views,comparison between tables and views	4		
	SQL: data definition, aggregate function, Null Values, nested sub queries, Joined relations. Triggers	4		
UNIT 4	Transaction management and Concurrency Control Transaction management: ACID properties, serializability and concurrency control,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Black board and chalk
	Lock based concurrency control (2PL, Deadlocks),Time stamping methods,	4		
	optimistic methods, database recovery management.	4		
UNIT 5	PL-SQL: Beginning with PL / SQL,Identifiers and Keywords, Operators, Expressions, Sequences	4	PROGRAMMING WITH PL/SQL FOR BEGINNERS BY H. DAND,R. PATIL	Black board and chalk
	,Control Structures, Cursors and Transaction,	4		
	Collections and composite data types, Procedures and Functions, Exceptions Handling ,Packages,With Clause and Hierarchical Retrieval,Triggers.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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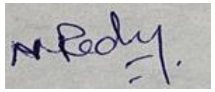

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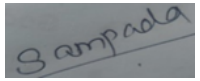

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHARVARI PATIL DEPARTMENT: IT CLASS: S.Y.I.T (B) SEMESTER: III

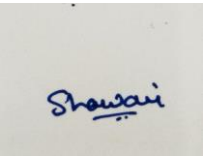
MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2019-20

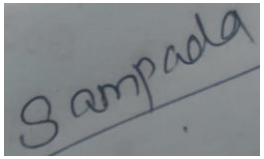
LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the use of regular expressions.
- Learn GUI development using python programming.

Paper No.,Paper Title, Unit No.	**Sub Topics:**	**No.of Lectures**	**References**	**Teaching Method/ICT tools used**
USIT301 Python Programming Unit 4	Regular Expressions – Concept of regular expression, various types of regular expressions, using match function. Classes and Objects: Overview of OOP (Object Oriented Programming), Class Definition, Creating Objects, Instances as Arguments, Instances as return values, Built-in Class Attributes, Inheritance, Method Overriding, Data Encapsulation, Data Hiding Multithreaded Programming: Thread Module, creating a thread, synchronizing threads, multithreaded priority queue Modules: Importing module, Creating and exploring modules, Math module, Random module, Time module	4 4 4 4	Reference book: "Think Python"	Chalk, Blackboard

	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT301 Python Programming Unit 5	Creating the GUI Form and Adding Widgets: Widgets: Button, Canvas, Checkbutton, Entry, Frame, Label, Listbox, Menubutton, Menu, Message, Radiobutton, Scale, Scrollbar, text, Toplevel, Spinbox, PanedWindow, LabelFrame, tkMessagebox. Handling Standard attributes and Properties of Widgets. Layout Management: Designing GUI applications with proper Layout Management features. Look and Feel Customization: Enhancing Look and Feel of GUI using different appearances of widgets. Storing Data in Our MySQL Database via Our GUI : Connecting to a MySQL database from Python, Configuring the MySQL connection, Designing the Python GUI database, Using the INSERT command, Using the UPDATE command, Using the DELETE command, Storing and retrieving data from MySQL database	4 2 2 4	Reference book: "Think Python"	Chalk, Blackboard
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		

SIGNATURE OF THE STAFF 

SIGNATURE OF THE H.O.D. 

SYIT SEM-III SUB-APPLIED MATHS-II DIV C

PROF –ARCHANA MALPATHAK

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT:Mathematics CLASS: SYIT SEMESTER: III MONTH: Aug to Nov ACADEMIC YEAR: 2019-2020
LEARNING OBJECTIVE/S

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II Unit-I Matrices and Complex Number	Matrices : Inverse,properties,Rank by Normal and Echelon form,Linearequations,Linear dependent and independent Linear transformation,ch roots and ch vectors Caley Hamiltonian theroem,Similarity of matrix,Digonal matrix Complex number - complex number equality of complex numberArgand digram,polar form and exponential of complex numberHyperbolic and Logarithmic function of complex number	12	Applied Maths by G.V.Kumbojkar Higher Engineering of mathematics TechMax	Black board and chalk online teaching method

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: SYIT SEMESTER: II
MONTH: Aug to November ACADEMIC YEAR: 2020-2021.
LEARNING OBJECTIVE/S:
The learners will be able to : ___Variable separable,subtitutionmethod,Homogenous,Non homogeneous, Exavt differential equation,Non exact fifgerential equation, Integrating factor ,bernoullis differential,higher order differential equation solvable for Y,P,X .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths -II UNIT -II Differential equations	1) Equation of the first order and first degree :Sepratation of variables,Equation homogenous in x and y ,Non homogenous,Exactdifferential, 2)Integrating factor,Bernouils Equation ,Subtitution method general method,other methods 3)Diff equ of higher degree - Solvable for p, for X ,for YClairauts form of equationMethod of sepration, 4)Linear differential with constant coefficients - Differential operator,f(D)=0.f(D)=x ,1/f(D),1/f(D) X	3+3+3+3 =12	G.v.kumbojkar Higher Engineering of mathematics Balguru swami TechMax R.M.Baphna	Blackboard ,chalk online teaching method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics. CLASS: SYIT. SEMESTER: III MONTH: July To Nov ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to : Double integration ,Types of double ,Triple Integration,Types oftriple, Area volume for double and triple integration_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Mathematics UNIT -IV Multiple integral	1) Multiple Intigration Double Integral,Change of. the order of the integration,Double integral in polar co - ordinates 2) Triple integral. 3) Application of integration :Areas,Volumes of. solids	4+4+4 =12	Higher Engineering of Mathematics TechMax R .M.Baphna	Black board ,chalk online teaching method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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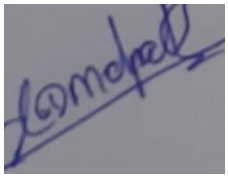
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -ARCHANA MALPATHAK Malpathak
DEPARTMENT: Mathematics CLASS: -SYIT SEMESTER: III MONTH: -JULLY TO_ NOVEMBER ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II (SYIT) UNIT-V Beta Gamma Function	1) Beta Gamma function -Defination,properties and problems,Duplication Formula 2) Differentiation Under Integral Sign 3)Error functions	5+4+3=12	Tech max Higher Engineering of mathematics Applied Maths II Nirali publication	Blackboard,chalk



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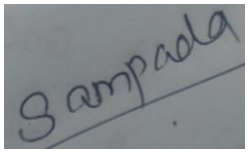

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SURBHI SHAH DEPARTMENT: IT-CS CLASS:SYIT-DIV C SEMESTER: SEM-III

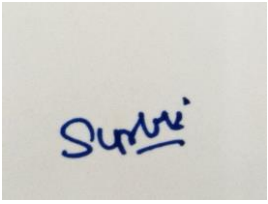
MONTH: AUGUST – NOVEMBER ACADEMIC YEAR: 2019-2020

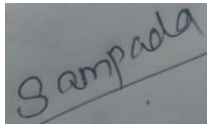
LEARNING OBJECTIVE/S:
The learners will be able to: to be capable of managing complex IT projects with consideration of the human, financial and environmental factors. to work effectively as a part of a team to achieve a common stated goal.to adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:-III TITLE:-Computer Networks UNIT 1	**Introduction:** Data communications, networks, network types, Internet history, standards and administration.	3	Data Communication and Networking By Behrouz A. Forouzan	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC.
	Network Models: Protocol layering, TCP/IP protocol suite, The OSI model.	3		
	Introduction to Physical layer: Data and signals, periodic analog signals, digital signals, transmission impairment, data rate limits, performance.	3		
	Digital and Analog transmission: Digital-to-digital conversion, analog-to-digital conversion, transmission modes, digital-to-analog conversion, analog-to-analog conversion.	3		
UNIT 2	**Bandwidth Utilization: Multiplexing and Spectrum Spreading:** Multiplexing, Spread Spectrum	3	Data Communication and Networking By	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC.
	Transmission media: Guided Media**,** Unguided Media	4		
	Switching: Introduction, circuit switched networks, packet switching, structure of a switch.	3		

	Introduction to the Data Link Layer: Link layer addressing, Data Link Layer Design Issues, Error detection and correction, block coding, cyclic codes, checksum, forward error correction, error correcting codes, error detecting codes.	2/3	Behrouz A. Forouzan	
UNIT 3	**Data Link Control:** DLC services, data link layer protocols, HDLC, Point-to-point protocol.	3	Data Communication and Networking By Behrouz A. Forouzan	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC.
	Media Access Control: Random access, controlled access, channelization, Wired LANs – Ethernet Protocol, standard ethernet, fast ethernet, gigabit ethernet, 10 gigabit ethernet,	3		
	Wireless LANs: Introduction, IEEE 802.11 project, Bluetooth, WiMAX, Cellular telephony, Satellite networks.	3		
	Connecting devices and Virtual LANs.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYIT SEMESTER: III MONTH: JUNE-SEPTEMBER ACADEMIC YEAR: 2019-2020

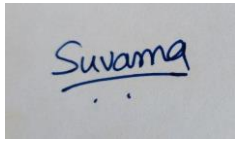
LEARNING OBJECTIVE/S:

The learners will be able to : List various applications of network, transport and application layer, describe the concepts, protocols, routing,design, implementation and use of computer networks. Also implement and evaluate new ideas for solving computer network design issues..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT303, Computer Networks, UNIT-IV	Introduction to the Network Layer: Network layer services, packet switching, network layer performance, IPv4 addressing, forwarding of IP packets, Internet Protocol, ICMPv4, Mobile IP	05	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2, Computer Networks Andrew Tanenbaum Pearson Fifth 2013, TCP/IP Protocol Suite Behrouz A. Forouzan Tata McGraw Hill Fourth Edition 2010	Blackboard, Chalk
	Unicast Routing:Introduction, routing algorithms, unicast routing protocols.	02		Blackboard, Chalk
	Next generation IP: IPv6 addressing, IPv6 protocol, ICMPv6 protocol, transition from IPv4 to IPv6	05		Blackboard, Chalk
USIT303, Computer Networks,	Introduction to the Transport Layer: Introduction, Transport layer protocols (Simple protocol, Stop-and-wait protocol, Go-Back-n protocol, Selective repeat protocol, Bidirectional	07	Data Communication and Networking Behrouz	Blackboard, Chalk

UNIT-V	protocols), Transport 12 8 layer services, User datagram protocol, Transmission control protocol,		A. Forouzan Tata McGraw Hill Fifth Edition 2, Computer Networks Andrew Tanenbaum Pearson Fifth 2013, TCP/IP Protocol Suite Behrouz A. Forouzan Tata McGraw Hill Fourth Edition 2010	
	Standard Client0Server Protocols:World wide-web and HTTP, FTP, Electronic mail, Telnet, Secured Shell, Domain name system.	05		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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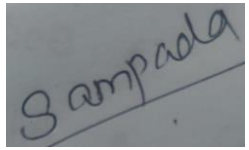

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: IT

CLASS: SY BSc IT SEMESTER: SEM 3 MONTH: JUN-SEP ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

1. To have a broad understanding of database concepts and database management system software
2. To have a high-level understanding of major DBMS components and their function
3. To be able to model an application's data requirements using conceptual modeling tools like ER diagrams and design database schemas based on the conceptual model.
4. To be able to write SQL commands to create tables and indexes, insert/update/delete data, and query data in a relational DBMS.
5. To be able to program a data-intensive application using DBMS APIs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 DBMS UNIT 1	Introduction to Databases and Transactions What is database system, purpose of database system, view of data, relational databases, database architecture, transaction management.	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Black board and chalk
	Data Models The importance of data models, Basic building blocks, Business rules, The evolution of data models, Degrees of data abstraction.	4		
	Database Design, ER Diagram and Unified Modelling Language Database design and ER Model: overview, ER Model, Constraints, ER Diagrams, ERD Issues, weak entity sets, Codd's rules, Relational Schemas, Introduction to UML	4		
	Relational database model: Logical view of data, keys, integrity rules,	2		Black board and chalk

UNIT 2	Relational Database design: features of good relational database design, atomic domain and Normalization (1NF, 2NF, 3NF, BCNF).	3	DATABASE SYSTEM AND CONCEPTS BY H KORTH	
	Relational Algebra and Calculus Relational algebra: introduction, Selection and projection, set operations, renaming, Joins, Division, syntax, semantics	3		
	Operators, grouping and ungrouping, relational comparison	2		
	Calculus: Tuple relational calculus, Domain relational Calculus, calculus vs algebra, computational capabilities	2		
UNIT 3	Constraints, Views and SQL Constraints, types of constrains, Integrity constraints,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Black board and chalk
	Views: Introduction to views, data independence, security, updates on views, comparison between tables and views	4		
	SQL: data definition, aggregate function, Null Values, nested sub queries, Joined relations. Triggers	4		
UNIT 4	Transaction management and Concurrency Control Transaction management: ACID properties, serializability and concurrency control,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Black board and chalk
	Lock based concurrency control (2PL, Deadlocks),Time stamping methods,	4		
	Optimistic methods, database recovery management.	4		
UNIT 5	PL-SQL: Beginning with PL / SQL, Identifiers and Keywords, Operators, Expressions, Sequences	4	PROGRAMMING WITH PL/SQL FOR BEGINNERS BY H. DAND,R. PATIL	Black board and chalk
	,Control Structures, Cursors and Transaction,	4		
	Collections and composite data types, Procedures and Functions, Exceptions Handling, Packages with Clause and Hierarchical Retrieval, Triggers.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: SYIT

SEMESTER: III MONTH: JUNE-SEPT ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Get deep knowledge about different types of data structures and also the importance of algorithm and its complexity.
- Understand the use of array and different types of linked list.
- Learn about stack, stack operations, queue and different types of it.
- Understand the use of different sorting and searching techniques.
- Learn about graph theory and different types of hashing techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT302, Data Structures, Unit I	**Introduction:** Data and Information, Data Structure, Classification of Data Structures, Primitive Data Types, Abstract Data Types, Data structure vs. File Organization, Operations on Data Structure, Algorithm, Importance of Algorithm Analysis, Complexity of an Algorithm, Asymptotic Analysis and Notations, Big O Notation, Big Omega Notation, Big Theta Notation, Rate of Growth and Big O Notation	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Black Board and chalk
	Array: Introduction, One Dimensional Array, Memory Representation of One Dimensional Array, Traversing, Insertion, Deletion, Searching, Sorting, Merging of Arrays, Multidimensional Arrays, Memory Representation of Two Dimensional Arrays, General MultiDimensional Arrays, Sparse Arrays, Sparse Matrix, Memory Representation of Special kind of Matrices, Advantages and Limitations of Arrays.	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Black Board and chalk

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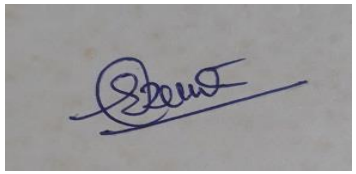
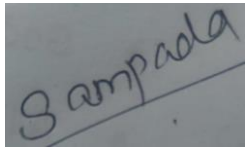
USIT302, Data Structures, Unit III	**Stack**: Introduction, Operations on the Stack Memory Representation of Stack, Array Representation of Stack, Applications of Stack, Evaluation of Arithmetic Expression, Matching Parenthesis, infix and postfix operations, Recursion**.**	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Black Board and chalk
	Queue: Introduction, Queue, Operations on the Queue, Memory Representation of Queue, Array representation of queue, Linked List Representation of Queue, Circular Queue, Some special kinds of queues, Deque, Priority Queue, Application of Priority Queue, Applications of Queues.	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Black Board and chalk
USIT302, Data Structures, Unit IV	**Sorting and Searching Techniques** Bubble, Selection, Insertion, Merge Sort. Searching: Sequential, Binary, Indexed Sequential Searches, Binary Search.	04	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Black Board and chalk
	Tree: Tree, Binary Tree, Properties of Binary Tree, Memory Representation of Binary Tree, Operations Performed on Binary Tree, Reconstruction of Binary Tree from its Traversals, Huffman Algorithm, Binary Search Tree, Operations on Binary Search Tree, Heap, Memory Representation of Heap, Operation on Heap, Heap Sort.	05	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Black Board and chalk
	Advanced Tree Structures: Red Black Tree, Operations Performed on Red Black Tree, AVL Tree, Operations performed on AVL Tree, 23 Tree, B-Tree	03	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Black Board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: IT CLASS:SYIT SYSEMESTER: 3 MONTH: DECE-MARCH

ACADEMIC YEAR:2019-20

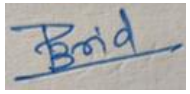
LEARNING OBJECTIVE/S:

- To understand the different data structure techniques .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Data Strucures Paper 2 Code: USIT302 Unit 2	**Linked List:** Linked List, One-way Linked List, Traversal of Linked List, Searching, Memory Allocation and De-allocation, Insertion in Linked List, Deletion from Linked List, Copying a List into Other List, Merging Two Linked Lists, Splitting a List into Two Lists, Reversing One way linked List, Circular Linked List, Applications of Circular Linked List, Two way Linked List, Traversing a Two way Linked List, Searching in a Two way linked List, Insertion of an element in Two way Linked List, Deleting a node from Two way Linked List, Header Linked List, Applications of the Linked list, Representation of Polynomials, Storage of Sparse Arrays, Implementing other Data Structures	12	An Introduction to Data Structure with Applications Jean – Paul Tremblay and Paul Sorenson Tata MacGraw Hill	Black board& Chalk
	Hashing Techniques : Hash function, Address calculation techniques, Common hashing functions Collision resolution, Linear probing, Quadratic,Double hashing, Buckethashing Deletion and rehashingCloud,	6	An Introduction to Data Structure with Applications Jean – Paul Tremblay and Paul Sorenson	Black board& Chalk

Data Strucures Paper 2 Code: USIT302 Unit 5			Tata MacGraw HillMcEwen, Hakim Cassimally	
	Graph: Introduction, Graph, Graph Terminology, Memory Representation of Graph, Adjacency Matrix Representation of Graph, Adjacency List or Linked Representation of Graph, Operations Performed on Graph, GraphTraversal, Applications of the Graph, Reachability, Shortest Path Problems, Spanning Trees.	6	An Introduction to Data Structure with Applications Jean – Paul Tremblay and Paul Sorenson Tata MacGraw Hill	Black board& Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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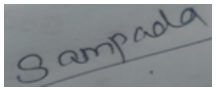

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TEACHING PLAN (UNIT PLAN)

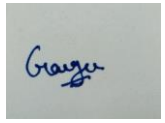
NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: S.Y.B.Sc.IT SEMESTER: III MONTH: JUNE-SEPTEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

- Students should be able to understand the concepts of programming before actually starting to write programs.
- Students should be able to develop logic for Problem Solving.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I	**Introduction:** The Python Programming Language, History, features, Installing Python, Running Python program,	3	Think Python Allen Downey	Blackboard, Chalk



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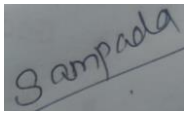

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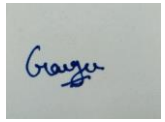
Unit I Python Programming	**Debugging :** Syntax Errors, Runtime Errors, Semantic Errors, Experimental Debugging, Formal and Natural Languages, The Difference Between Brackets, Braces, and Parentheses,	3	O'Reilly 1st2012	Blackboard, Chalk
	Variables and Expressions Values and Types, Variables, Variable Names and Keywords, Type conversion, Operators and Operands, Expressions, Interactive Mode and Script Mode, Order of Operations.	3		Blackboard, Chalk
	Conditional Statements: if, if-else, nested if –else	1		Blackboard, Chalk
	Looping: for, while, nested loops Control	1		Blackboard, Chalk
	statements: Terminating loops, skipping specific conditions	1		Blackboard, Chalk
Paper-I	**Functions:** Function Calls, Type Conversion Functions, Math Functions, Composition, Adding New Functions,	2	Think Python Allen Downey	Blackboard, Chalk



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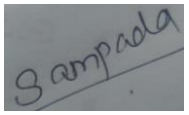

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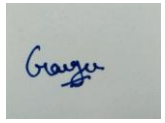
Unit II Python Programming	Definitions and Uses, Flow of Execution, Parameters and Arguments, Variables and Parameters Are Local, Stack Diagrams, Fruitful Functions and Void Functions, Why Functions?	3	O'Reilly 1st2012	Blackboard, Chalk
	Importing with from, Return Values, Incremental Development, Composition, Boolean Functions, More Recursion, Leap of Faith, Checking Types	3		Blackboard, Chalk
	Strings: A String Is a Sequence, Traversal with a for Loop, String Slices, Strings Are Immutable, Searching, Looping and Counting, String Methods, The in Operator, String Comparison, String Operations	4		Blackboard, Chalk
Paper-I Unit III Python Programming	**Lists:** Values and Accessing Elements, Lists are mutable, traversing a List, Deleting elements from List, Built-in List Operators, Concatenation, Repetition, In Operator, Built-in List functions and methods	4	Think Python Allen Downey O'Reilly 1st2012	Blackboard, Chalk
	Tuples and Dictionaries: Tuples, Accessing values in Tuples, Tuple Assignment, Tuples as return values, Variable-length argument tuples, Basic tuples operations, Concatenation, Repetition, in Operator, Iteration, Built-in Tuple Functions Creating a Dictionary,	4		Blackboard, Chalk



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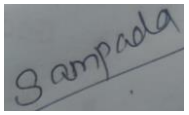

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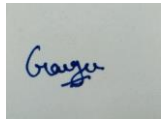
	Accessing Values in a dictionary, Updating Dictionary, Deleting Elements from Dictionary, Properties of Dictionary keys, Operations in Dictionary, Built-In Dictionary Functions, Built-in Dictionary Methods			
	Files: Text Files, The File Object Attributes, Directories	2		Blackboard, Chalk
	Exceptions: Built-in Exceptions, Handling Exceptions, Exception with Arguments, User-defined Exceptions	2		Blackboard, Chalk
Paper-I Unit IV Python Programming	**Regular Expressions –** Concept of regular expression, various types of regular expressions, using match function.	2	Think Python Allen Downey O'Reilly 1st2012	Blackboard, Chalk
	Classes and Objects: Overview of OOP (Object Oriented Programming), Class Definition, Creating Objects, Instances as Arguments, Instances as return values, Built-in Class Attributes, Inheritance, Method Overriding, Data Encapsulation, Data Hiding	4		Blackboard, Chalk
	Multithreaded Programming: Thread Module, creating a thread, synchronizing threads, multithreaded priority queue	3		Blackboard, Chalk
	Modules: Importing module, Creating and exploring modules, Math module, Random module, Time module	3		Blackboard, Chalk



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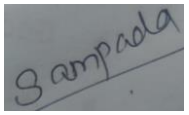

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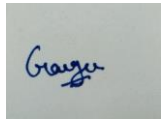
Paper-I Unit V Python Programming	**Creating the GUI Form and Adding Widgets:** **Widgets:** Button, Canvas, Checkbutton, Entry, Frame, Label, Listbox, Menubutton, Menu, Message, Radiobutton, Scale, Scrollbar, text, Toplevel, Spinbox, PanedWindow, LabelFrame, tkMessagebox. Handling Standard attributes and Properties of Widgets.	4	Think Python Allen Downey O'Reilly 1st2012	Blackboard, Chalk
	Layout Management: Designing GUI applications with proper Layout Management features.	2		Blackboard, Chalk
	Look and Feel Customization: Enhancing Look and Feel of GUI using different appearances of widgets.	2		Blackboard, Chalk
	Storing Data in Our MySQL Database via Our GUI : Connecting to a MySQL database from Python, Configuring the MySQL connection, Designing the Python GUI database, Using the INSERT command, Using the UPDATE command, Using the DELETE command, Storing and retrieving data from MySQL database.	4		Blackboard, Chalk



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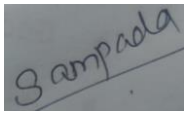

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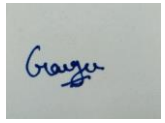
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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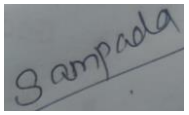

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: June to Sept ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To learn the fundamental aspects of the JavaScript programming language and how to program using document object model application programming

The learners will be able to :

- To understand .Net framework and its run time environment.
- To gain basic knowledge of C# language with its object oriented concept.
- To gain the knowledge of namespaces and assemblies.
- To understand fundamentals of web application development.
- To make use of different server controls like validation, navigation and rich server control.
- To understand back hand connectivity with SQL using ADO .Net Frame.
- To use data binding with data controls like grid view, details view and form view.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT503 Advance Web Programming UNIT-I	**Introducing .NET**: The .NET Framework, C#, VB, and the .NET Languages, The Common Language Runtime, The .NET Class Library.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in	Black Board, Projector, PPT.
	The C# Language: C# Language Basics, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods.	4		Black Board, Projector, PPT.

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	Types, Objects, and Namespaces: The Basics About Classes, Building a Basic Class, Value Types and Reference Types, Understanding Namespaces and Assemblies, Advanced Class Programming.	4	C#2015 4. Beginning Visual C# 2010	Black Board, Projector, PPT.
USIT503 Advance Web Programming UNIT-II	**Web Form Fundamentals**: Writing Code, Using the Code-Behind Class, Adding Event Handlers, Understanding the Anatomy of an ASP.NET Application, Introducing Server Controls, Using the Page Class, Using Application Events, Configuring an ASP.NET Application.	6	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	Black Board, Projector, PPT.
	Form Controls: Stepping Up to Web Controls, Web Control Classes, List Controls, Table Controls, Web Control Events and AutoPostBack, Validation, Understanding Validation, Using the Validation Controls, Rich Controls, The Calendar, The AdRotator, Pages with Multiple Views, User Controls and Graphics, User Controls, Dynamic Graphics, The Chart Control, Website Navigation: Site Maps, URL Mapping and Routing, The SiteMapPath Control, The TreeView Control, The Menu Control.	6		
USIT503 Advance Web Programming UNIT-IV	**ADO.NET Fundamentals**: Understanding Databases, Configuring Your Database, Understanding SQL Basics, Understanding the Data Provider Model, Using Direct Data Access, Using Disconnected Data Access.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in	Black Board, Projector, PPT.
	Data Binding: Introducing Data Binding, Using Single-Value Data Binding, Using Repeated-Value Data Binding, Working with Data Source Controls,	4		

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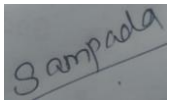
	The Data Controls: The GridView, Formatting the GridView, selecting a GridView Row, Editing with the GridView, Sorting and Paging the GridView, Using GridView Templates, The DetailsView and FormView	4	C#2015 4. Beginning Visual C# 2010	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHARVARI PATIL DEPARTMENT: IT CLASS: T.Y.I.T SEMESTER: V

MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concept of error handling and session management.
- Learn web designing using AJAX
- Gain knowledge about various security fundamentals.

Paper No.,Paper Title, Unit No.	**Sub Topics:**	**No.of Lectures**	**References**	**Teaching Method/ICT tools used**
USIT503 Advance Web Programming Unit 4	Error Handling, Logging, and Tracing : Avoiding Common Errors, Understanding Exception Handling, Handling Exceptions, Throwing Your Own Exceptions, Using Page Tracing State Management : Understanding the Problem of State, Using View State, Transferring Information Between Pages, Using Cookies, Managing Session State, Configuring Session State, Using Application State, Comparing State Management Options Styles,	5 4 1 2	Reference book: Beginning ASP.NET 4.5 in C#"	Chalk, Blackboard

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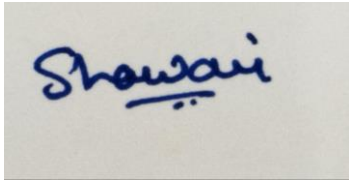
	Themes, and Master Pages : Styles, Themes, Master Page Basics, Advanced Master Pages,			
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT503 Advance Web Programming Unit 5	XML: XML Explained, The XML Classes, XML Validation, XML Display and Transforms. Security Fundamentals: Understanding Security Requirements, Authentication and Authorization, Forms Authentication, Windows Authentication. ASP.NET AJAX: Understanding Ajax, Using Partial Refreshes, Using Progress Notification, Implementing Timed Refreshes, Working with the ASP.NET AJAX Control Toolkit.	4 4 4	Reference book: Beginning ASP.NET 4.5 in C#""	Chalk, Blackboard
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		



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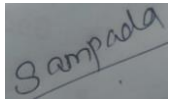

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: TYIT

SEMESTER: V MONTH: JUNE-SEPT ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the Java EE Architecture, Server and Containers.
- Describe the different servlet API and lifecycle of servlet.
- Get the difference between cookies, session and request dispatcher.
- Understand the use of tag library, naming directory, interceptors.
- Familiar with java beans, JPA, hibernate and JSP.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506, Enterprise Java Unit I	**Understanding Java EE:** What is an Enterprise Application? What is java enterprise edition? Java EE Technologies, Java EE evolution, Glassfish server	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, Powerpoint
	Java EE Architecture, Server and Containers: Types of System Architecture, Java EE Server, Java EE Containers.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint

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	Introduction to Java Servlets: The Need for Dynamic Content, Java Servlet Technology, Why Servlets? What can Servlets do?	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Servlet API and Lifecycle: Java Servlet API, The Servlet Skeleton, The Servlet Life Cycle, A Simple Welcome Servlet	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Working With Servlets: Getting Started, Using Annotations Instead of Deployment Descriptor.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Working with Databases: What Is JDBC? JDBC Architecture, Accessing Database, The Servlet GUI and Database Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
USIT506, Enterprise Java Unit II	**Request Dispatcher:** Resquestdispatcher Interface, Methods of Requestdispatcher, Requestdispatcher Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	COOKIES: Kinds Of Cookies, Where Cookies Are Used? Creating Cookies Using Servlet, Dynamically Changing The Colors Of A Page	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	SESSION: What Are Sessions? Lifecycle Of Http Session, Session Tracking With Servlet API, A Servlet Session Example	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint

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	Working With Files: Uploading Files, Creating an Upload File Application, Downloading Files, Creating a Download File Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Working With Non-Blocking I/O: Creating a Non-Blocking Read Application, Creating The Web Application, Creating Java Class, Creating Servlets, Retrieving The File, Creating index.jsp	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
USIT506, Enterprise Java Unit III	**Introduction To Java Server Pages:** Why use Java Server Pages? Disadvantages Of JSP, JSP v\s Servlets, Life Cycle of a JSP Page, How does a JSP function? How does JSP execute? About Java Server Pages	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Getting Started With Java Server Pages: Comments, JSP Document, JSP Elements, JSP GUI Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Action Elements: Including other Files, Forwarding JSP Page to Another Page, Passing Parameters for other Actions, Loading a Javabean.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Implicit Objects, Scope And El Expressions: Implicit Objects, Character Quoting Conventions, Unified Expression Language [Unified El], Expression Language.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Java Server Pages Standard Tag Libraries: What is wrong in using JSP Scriptlet Tags? How JSTL Fixes JSP Scriptlet's Shortcomings? Disadvantages Of JSTL, Tag Libraries.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint

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USIT506, Enterprise Java Unit IV	**Introduction To Enterprise Javabeans:** Enterprise Bean Architecture, Benefits of Enterprise Bean, Types of Enterprise Bean, Accessing Enterprise Beans, Enterprise Bean Application, Packaging Enterprise Beans	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Working With Session Beans: When to use Session Beans? Types of Session Beans, Remote and Local Interfaces, Accessing Interfaces, Lifecycle of Enterprise Beans, Packaging Enterprise Beans, Example of Stateful Session Bean, Example of Stateless Session Bean, Example of Singleton Session Beans.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Working with Message Driven Beans: Lifecycle of a Message Driven Bean, Uses of Message Driven Beans, The Message Driven Beans Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Interceptors: Request And Interceptor, Defining An Interceptor, AroundInvoke Method, Applying Interceptor, Adding An Interceptor To An Enterprise Bean, Build and Run the Web Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Java Naming and Directory Interface: What is Naming Service? What is Directory Service? What is Java Naming and Directory interface? Basic Lookup, JNDI Namespace in Java EE, Resources and JNDI, Datasource Resource Definition in Java EE.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
USIT506, Enterprise Java Unit V	**Persistence, Object/Relational Mapping And JPA:** What is Persistence? Persistence in Java, Current Persistence Standards in Java, Why another Persistence Standards? Object/Relational Mapping,	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Introduction to Java Persistence API: The Java Persistence API, JPA, ORM, Database and the Application, Architecture of JPA, How JPA Works? JPA Specifications.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint

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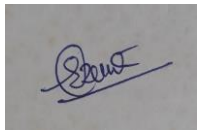
	Writing JPA Application: Application Requirement Specifications, Software Requirements, The Application Development Approach, Creating Database And Tables in Mysql, Creating a Web Application, Adding the Required Library Files, Creating a Javabean Class, Creating Persistence Unit [Persistence.Xml], Creating JSPS, The JPA Application Structure, Running The JPA Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Introduction to Hibernate: What is Hibernate? Why Hibernate? Hibernate, Database and The Application, Components of Hibernate, Architecture of Hibernate, How Hibernate Works?	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Writing Hibernate Application: Application Requirement Specifications, Software Requirements, The Application Development Approach, Creating Database and Tables in Mysql, Creating a Web Application, Adding The Required Library Files, Creating a Javabean Class, Creating Hibernate Configuration File, Adding a Mapping Class, Creating JSPS, Running The Hibernate Application.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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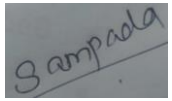

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: TYIT SEMESTER: V MONTH: JUNE to SEPT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

To determine the market perspective of IoT

To compare and contrast the use of devices, gateways and Data management in IoT

To illustrate the applications of IoT in Industrial Automation and identify Real world design constraints.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 Internet Of Things Unit 3	**Prototyping the Physical Design:** Preparation, Sketch, Iterate, and Explore, Nondigital Methods, Laser Cutting, Choosing a Laser Cutter, Software, Hinges and Joints, 3D Printing, Types of 3D Printing, Software, CNC Milling, Repurposing/Recycling. Prototyping and Presence Protocol, Constrained Application Protocol.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board & Chalk
	Online Components: Getting Started with an API, Mashing Up APIs, Scraping, Legalities, writing a New API, Clockodillo, Security, implementing the API, Using Curl to Test, Going Further, Real-Time Reactions, Polling, Comet, Other Protocols, MQ Telemetry Transport, Extensible Messaging	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board & Chalk

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Paper-02 Internet Of Things Unit 4	**Techniques for Writing Embedded Code:** Memory Management, 12 8 Types of Memory, Making the Most of Your RAM, Performance and Battery Life, Libraries, Debugging.	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board & Chalk
	Business Models: A Short History of Business Models, Space and Time, From Craft to Mass Production, The Long Tail of the Internet, Learning from History, The Business Model Canvas, Who Is the Business Model For? Models, Make Thing, Sell Thing, Subscriptions, Customisation, be a Key Resource, Provide Infrastructure: Sensor Networks, take a Percentage, Funding an Internet of Things Startup, Hobby Projects and Open Source, Venture Capital, Government Funding, Crowdfunding, Lean Startups.	8	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board & Chalk
Paper-02 Internet Of Things Unit 5	**Moving to Manufacture:** What Are You Producing? Designing Kits, Designing Printed circuit boards, Software Choices, The Design Process, Manufacturing Printed Circuit Boards, Etching Boards, Milling Boards. Assembly, Testing, Mass-Producing the Case and Other Fixtures, Certification, Costs, Scaling Up Software, Deployment, Correctness and Maintainability, Security, Performance, User Community.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board & Chalk
	Ethics: Characterizing the Internet of Things, Privacy, Control, Disrupting Control,Crowdsourcing, Environment, Physical Thing, Electronics, Internet Service, Solutions, The Internet of	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board & Chalk

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	Things as Part of the Solution, Cautious Optimism, The Open Internet of Things Definition.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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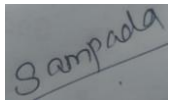

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: IT CLASS:TYIT SYSEMESTER: 5 MONTH: JUNE -SEPT

ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:

- To determine the market perspective of IoT
- To compare and contrast the use of devices, gateways and Data management in IoT
- To illustrate the applications of IoT in Industrial Automation and identify Real world design constraints.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Internet Of Things Paper 2 Code: USIT502 Unit 1	**The Internet of Things: An Overview**: The Flavour of the Internet of Things, The "Internet" of "Things", The Technology of the Internet of Things, Enchanted Objects, Who is Making the Internet of Things?	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board& Chalk
	Design Principles for Connected Devices: Calm and Ambient Technology, Magic as Metaphor, Privacy, Keeping Secrets, Whose Data Is It Anyway? Web Thinking for Connected Devices, Small Pieces, Loosely Joined, First-Class Citizens on The Internet, Graceful Degradation, Affordances.	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board& Chalk

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	Internet Principles: Internet Communications: An Overview, IP, TCP, The IP Protocol Suite (TCP/IP), UDP, IP Addresses, DNS, Static IP Address Assignment, Dynamic IP Address Assignment, IPv6, MAC Addresses, TCP and UDP Ports, An Example: HTTP Ports, Other Common Ports,Application Layer Protocols, HTTP,HTTPS: Encrypted HTTP, Other Application Layer Protocols	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board& Chalk
Internet Of Things Paper 2 Code: USIT502 Unit 2	**Thinking About Prototyping:** Sketching, Familiarity, Costs versus Ease of Prototyping, Prototypes and Production, Changing Embedded Platform, Physical Prototypes and Mass Personalisation, climbing into the Cloud, Open Source versus Closed Source, Why Closed? Why Open? Mixing Open and Closed Source, Closed Source for Mass Market Projects, Tapping into the Community.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board& Chalk
	Prototyping Embedded Devices: Electronics, Sensors, Actuators, Scaling Up the Electronics, Embedded Computing Basics, Microcontrollers, System-on-Chips, Choosing Your Platform, Arduino, developing on the Arduino, Some Notes on the Hardware, Openness, Raspberry Pi, Cases and Extension Boards, Developing	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board& Chalk

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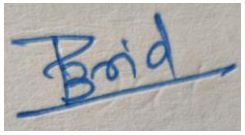
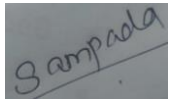
	on the Raspberry Pi, Some Notes on the Hardware, Openness.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: INFORMATION TECHNOLOGY CLASS: TYIT-A

SEMESTER: V MONTH: JUNE-SEPTEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the concepts of open source operating system Linux, command line working, managing soft wares on Linux .
- Develop logic for connecting to network, giving permissions to users.
- Be familiar about the basic file sharing, setting iptables in linux .
- Apply the problem solving skills on high availability of cluster, installation of servers, bash shell scripting.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT505, Unit 1, Linux System Administration	Introduction to Red Hat Enterprise Linux: Linux, Open Source and Red Hat, Origins of Linux, Distributions, Duties of Linux System Administrator.	02	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
	Command Line: Working with the Bash Shell, Getting the Best of Bash, Useful Bash Key Sequences, Working with Bash History, Performing Basic File System Management Tasks, Working with Directories, Piping and Redirection, Finding Files.	03	Red Hat Enterprise Linux6 Administration	Black Board and chalk, powerpoint

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			by Sander van Vugt	
	System Administration Tasks: Performing Job Management Tasks, System and Process Monitoring and Management, Managing Processes with ps, Sending Signals to Processes with the kill Command, using top to Show Current System Activity, Managing Process Niceness, Scheduling Jobs, Mounting Devices, Working with Links, Creating Backups, Managing Printers, Setting Up System Logging, Setting Up Rsyslog, Common Log Files, Setting Up Logrotate	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint t
	Managing Software: Understanding RPM, Understanding Meta Package Handlers, Creating Your Own Repositories, Managing Repositories,Installing Software with Yum, Querying Software, Extracting Files from RPM Packages	03	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
USIT505, Unit 2, Linux System Administration	Configuring and Managing Storage: Understanding Partitions and Logical Volumes, Creating Partitions, Creating File Systems, File Systems Overview, Creating File Systems, Changing File System Properties, Checking the File System Integrity, Mounting File Systems Automatically Through fstab, Working with Logical Volumes, Creating Logical Volumes, Resizing Logical Volumes, Working with Snapshots, Replacing Failing Storage Devices, Creating Swap Space, Working with Encrypted Volumes	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
	Connecting to the Network: Understanding NetworkManager, Working with Services and Runlevels, Configuring the Network with NetworkManager, Working with system-config-network,	04	Red Hat Enterprise Linux6	Black Board and chalk, PowerPoint

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	NetworkManager Configuration Files, Network Service Scripts, Networking from the Command Line, Troubleshooting Networking, Setting Up IPv6, Configuring SSH, Enabling the SSH Server, Using the SSH Client, Using PuTTY on Windows Machines, Configuring Key-Based SSH Authentication, Using Graphical Applications with SSH, Using SSH Port Forwarding, Configuring VNC Server Access		Administration by Sander van Vugt	
	Working with Users, Groups, and Permissions: Managing Users and Groups, Commands for User Management, Managing Passwords, Modifying and Deleting User Accounts, Configuration Files, Creating Groups, Using Graphical Tools for User, and Group Management, Using External Authentication Sources, the Authentication Process, sssd, nsswitch, Pluggable Authentication Modules, Managing Permissions, the Role of Ownership, Basic Permissions: Read, Write, and Execute, Advanced Permissions, Working with Access Control Lists, Setting Default Permissions with umask, Working with Attributes.	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
USIT505, Unit 3, Linux System Administration	Securing Server with iptables: Understanding Firewalls, Setting Up a Firewall with system-config-firewall, Allowing Services, Trusted Interfaces, Masquerading, Configuration Files, Setting Up a Firewall with iptables, Tables, Chains, and Rules, Composition of Rule, Configuration Example, Advanced iptables Configuration, Configuring Logging, The Limit Module, Configuring NAT	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
	Setting Up Cryptographic Services: Introducing SSL, Proof of Authenticity: The Certificate Authority, Managing Certificates	04	Red Hat Enterprise	Black Board and chalk, PowerPoint

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	with openssl, Creating a Signing Request, Working with GNU Privacy Guard, Creating GPG Keys, Key Transfer, Managing GPG Keys, Encrypting Files with GPG, GPG Signing, Signing RPM Files		Linux6 Administration by Sander van Vugt	
	Configuring Server for File Sharing: What is NFS? Advantages and Disadvantages of NFS, Configuring NFS4, Setting Up NFSv4, Mounting an NFS Share, Making NFS Mounts Persistent, Configuring Automount, Configuring Samba, Setting Up a Samba File Server, Samba Advanced Authentication Options, Accessing Samba Shares, Offering FTP Services	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
USIT505, Unit 4, Linux System Administration	Configuring DNS and DHCP:Introduction to DNS, The DNS Hierarchy, DNS Server Types, The DNS Lookup Process, DNS Zone Types, Setting Up a DNS Server, Setting Up a Cache-Only Name Server, Setting Up a Primary Name Server, Setting Up a Secondary Name Server, Understanding DHCP, Setting Up a DHCP Server	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
	Setting Up a Mail Server: Using the Message Transfer Agent, the Mail Delivery Agent, the Mail User Agent, Setting Up Postfix as an SMTP Server, Working with Mutt, Basic Configuration, Internet Configuration, Configuring Dovecot for POP and IMAP	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
	Configuring Apache on Red Hat Enterprise Linux: Configuring the Apache Web Server, creating a Basic Website, Understanding the Apache Configuration Files, Apache Log Files, Working with Virtual Hosts, Securing the Web Server with TLS Certificates, Configuring Authentication, Setting Up Authentication with	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint

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	.htpasswd, Configuring LDAP Authentication, Setting Up MySQL			
USIT505, Unit 5, Linux System Administration	Introducing Bash Shell Scripting: Introduction, Elements of a Good Shell Script, Executing the Script, Working with Variables and Input, Understanding Variables, Variables, Subshells, and Sourcing, Working with Script Arguments, Asking for Input, Using Command Substitution, Substitution Operators, Changing Variable Content with Pattern Matching, Performing Calculations, Using Control Structures, Using if...then...else, Using case, Using while, Using until, Using for, Configuring booting with GRUB.	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
	High-Availability Clustering: High-Availability Clustering, The Workings of High Availability, High-Availability Requirements, Red Hat High-Availability Add-on Software, Components, Configuring Cluster-Based Services, Setting Up Bonding, Setting Up Shared Storage, Installing the Red Hat High Availability Add-On, Building the Initial State of the Cluster, Configuring Additional Cluster Properties, Configuring a Quorum Disk, Setting Up Fencing, Creating Resources and Services, Troubleshooting a Nonoperational Cluster, Configuring GFS2 File Systems	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
	Setting Up an Installation Server: Configuring a Network Server as an Installation Server, Setting Up a TFTP and DHCP Server for PXE Boot, Installing the TFTP Server, Configuring DHCP for PXE Boot, Creating the TFTP PXE Server Content, creating a Kickstart File, Using a Kickstart File to Perform an Automated,	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint

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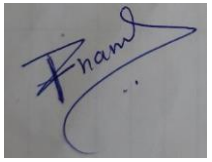
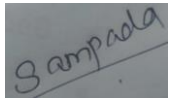
	Installation, Modifying the Kickstart File with, system-config-kickstart, Making Manual Modifications to the Kickstart File			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: TYIT SEMESTER: V MONTH: JUNE-SEPTEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: Understand various project management methods and strategies. Understand a variety of project approaches and software effort estimation techniques , its approaches. To understand Activity planning, Risk management and resource allocation basics and its techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT501, Software Project Management, Unit II	Selection of an Appropriate Project Approach:Introduction, Build or Buy? Choosing Methodologies and Technologies, Software Processes and Process Models, Choice of Process Models, Structure versus Speed of Delivery, The Waterfall Model, The Spiral Model, Software Prototyping, Other Ways of Categorizing Prototypes, Incremental Delivery, Atern/Dynamic Systems Development Method, Rapid Application Development, Agile Methods, Extreme Programming (XP), Scrum, Lean Software Development, Managing Iterative Processes, Selecting the Most Appropriate Process Model.	06	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018 2. Project Management and Tools & Technologies – An overview Shailesh Mehta SPD 1st 2017 3. Software Project Management Walker Royce Pearson 2005	Blackboard, Chalk and Projector
	Software Effort Estimation:Introduction, Where are the Estimates Done? Problems with Over- and Under-Estimates, The Basis for Software Estimating, Software Effort Estimation Techniques, Bottomup Estimating, The Top-down Approach and Parametric Models, Expert Judgement, Estimating by Analogy, Albrecht Function Point 12 5 Analysis, Function Points Mark II, COSMIC Full Function Points, COCOMO II: A Parametric Productivity Model, Cost Estimation, Staffing	06		Blackboard, Chalk and Projector

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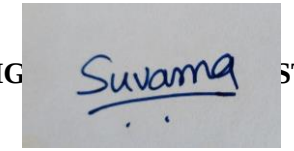
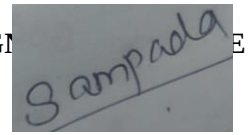
	Pattern, Effect of Schedule Compression, Capers Jones Estimating Rules of Thumb.			
USIT501, Software Project Management, Unit III	Activity Planning: Introduction, Objectives of Activity Planning, When to Plan, Project Schedules, Projects and Activities, Sequencing and Scheduling Activities, Network Planning Models, Formulating a Network Model, Adding the Time Dimension, The Forward Pass, Backward Pass, Identifying the Critical Path, Activity Float, Shortening the Project Duration, Identifying Critical Activities, Activity-on-Arrow Networks.	04	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018 2. Project Management and Tools & Technologies – An overview Shailesh Mehta SPD 1st 2017 3. Software Project Management Walker Royce Pearson 2005	Blackboard, Chalk and Projector
	Risk Management: Introduction, Risk, Categories of Risk, Risk Management Approaches, A Framework for Dealing with Risk, Risk Identification, Risk Assessment, Risk Planning, Risk Management, Evaluating Risks to the Schedule, Boehm‟s Top 10 Risks and Counter Measures, Applying the PERT Technique, Monte Carlo Simulation, Critical Chain Concepts.	04		Blackboard, Chalk and Projector
	Resource Allocation: Introduction, Nature of Resources, Identifying Resource Requirements, Scheduling Resources, Creating Critical Paths, Counting the Cost, Being Specific, Publishing the Resource Schedule, Cost Schedules, Scheduling Sequence.	04		Blackboard, Chalk and Projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIG  **STAFF**

SIGN  **E H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande. DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc.I.T. SEMESTER: V MONTH: June to Sept ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To learn the fundamental aspects of the JavaScript programming language and how to program using document object model application programming

The learners will be able to :

- To understand .Net framework and its run time environment.
- To gain basic knowledge of C# language with its object oriented concept.
- To gain the knowledge of namespaces and assemblies.
- To understand fundamentals of web application development.
- To make use of different server controls like validation, navigation and rich server control.
- To understand back hand connectivity with SQL using ADO .Net Frame.
- To use data binding with data controls like grid view, details view and form view.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT503 Advance Web Programming UNIT-I	**Introducing .NET**: The .NET Framework, C#, VB, and the .NET Languages, The Common Language Runtime, The .NET Class Library.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015	Black Board, Projector, PPT.
	The C# Language: C# Language Basics, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods.	4		Black Board, Projector, PPT.
	Types, Objects, and Namespaces: The Basics About Classes, Building a Basic Class, Value Types and Reference Types,	4		Black Board, Projector,

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	Understanding Namespaces and Assemblies, Advanced Class Programming.		4. Beginning Visual C# 2010	PPT.
USIT503 Advance Web Programming UNIT-II	**Web Form Fundamentals**: Writing Code, Using the Code-Behind Class, Adding Event Handlers, Understanding the Anatomy of an ASP.NET Application, Introducing Server Controls, Using the Page Class, Using Application Events, Configuring an ASP.NET Application.	6	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	Black Board, Projector, PPT.
	Form Controls: Stepping Up to Web Controls, Web Control Classes, List Controls, Table Controls, Web Control Events and AutoPostBack, Validation, Understanding Validation, Using the Validation Controls, Rich Controls, The Calendar, The AdRotator, Pages with Multiple Views, User Controls and Graphics, User Controls, Dynamic Graphics, The Chart Control, Website Navigation: Site Maps, URL Mapping and Routing, The SiteMapPath Control, The TreeView Control, The Menu Control.	6		
USIT503 Advance Web Programming UNIT- III	**Error Handling, Logging, and Tracing** : Avoiding Common Errors, Understanding Exception Handling, Handling Exceptions, Throwing Your Own Exceptions, Using Page Tracing	5	C# 2015 Murach"s ASP.NET 4.6 Web Programming in C#2015 Beginning Visual C# 2010	Black Board, Projector, PPT.
	State Management : Understanding the Problem of State, Using View State, Transferring Information Between Pages, Using Cookies, Managing Session State, Configuring Session State, Using Application State, Comparing State Management Options	4		Black Board, Projector, PPT.
	Styles, Themes, and Master Pages : Styles, Themes, Master Page Basics, Advanced Master Pages,	3		Black Board, Projector,

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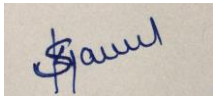
USIT503 Advance Web Programming UNIT-IV	**ADO.NET Fundamentals**: Understanding Databases, Configuring Your Database, Understanding SQL Basics, Understanding the Data Provider Model, Using Direct Data Access, Using Disconnected Data Access.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	Black Board, Projector, PPT.
	Data Binding: Introducing Data Binding, Using Single-Value Data Binding, Using Repeated-Value Data Binding, Working with Data Source Controls,	4		
	The Data Controls: The GridView, Formatting the GridView, selecting a GridView Row, Editing with the GridView, Sorting and Paging the GridView, Using GridView Templates, The DetailsView and FormView	4		
USIT503 Advance Web Programming UNIT - V	**XML**: XML Explained, The XML Classes, XML Validation, XML Display and Transforms. .	3	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	Black Board, Projector, PPT.
	Security Fundamentals: Understanding Security Requirements, Authentication and Authorization, Forms Authentication, Windows Authentication.	4		Black Board, Projector, PPT.
	ASP.NET AJAX: Understanding Ajax, Using Partial Refreshes, Using Progress Notification, Implementing Timed Refreshes, Working with the ASP.NET AJAX Control Toolkit	5		Black Board, Projector, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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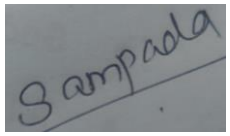

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: June-September ACADEMIC YEAR: 2019-2020

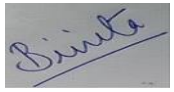
LEARNING OBJECTIVE/S:
The learners will be able to :

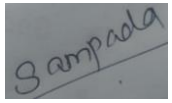
a. Work with various Linux OS commands

b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -I	**Introduction to Red Hat Enterprise Linux:** Linux, Open Source and Red Hat, Origins of Linux, Distributions, Duties of Linux System Administrator.	2	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Powerpoint presentation through projector
	Command Line: Working with the Bash Shell, Getting the Best of Bash, Useful Bash Key Sequences, Working with Bash History, Performing Basic File System Management Tasks, Working with Directories, Piping and Redirection, Finding Files	4		Blackboard
	System Administration Tasks: Job Tasks, Process Monitoring and Management, Mounting Devices, Links, Backups, Printers, Logging, Rsyslog, Common Log Files, Setting Up Logrotate	4		Powerpoint presentation through projector
	Managing Software: Understanding RPM, Understanding Meta Package Handlers, Creating Your Own Repositories, Managing Repositories, Installing Software with Yum, Querying Software, Extracting Files from RPM Packages	2		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF 

SIGNATURE OF THE H.O.D. 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: June-September ACADEMIC YEAR: 2019-2020

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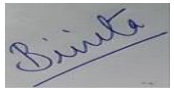
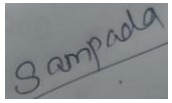
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -II	**Configuring and Managing Storage:** Partitions, File systems, logical volumes, Snapshots, Replacing Failing Storage Devices, Swap Space, Encrypted Volumes	4	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Powerpoint presentation through projector
	Connecting to the Network: Configuring the Network with NetworkManager and command line, Services and Runlevels, system-config-network, Network Service Scripts, Troubleshooting, IPv6, Configuring SSH Server and Client, Key-Based SSH Authentication, SSH Port Forwarding, VNC Server Access	4		Powerpoint presentation through projector
	Working with Users, Groups, and Permissions: Creating, deleting and modifying Users, Groups, user accounts with Commands and GUI , Passwords, Using External Authentication Sources, sssd, nsswitch, Pluggable Authentication Modules, Managing Permissions, the Role of Ownership, Basic Permissions: Read, Write, and Execute, Advanced Permissions, ACL, umask, Attributes	4		Blackboard and Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF 

SIGNATURE OF THE H.O.D. 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: June-September ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
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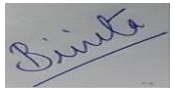
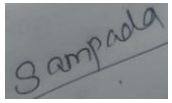
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -III	**Securing Server with iptables:** Understanding Firewalls, Setting Up a Firewall with system-config-firewall, Allowing Services, Trusted Interfaces, Masquerading, Configuration Files, Setting Up a Firewall with iptables, Tables, Chains, and Rules, Composition of Rule, Configuration Example, Advanced iptables Configuration, Configuring Logging, The Limit Module, Configuring NAT	4	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Powerpoint presentation through projector
	Setting Up Cryptographic Services: Introducing SSL, Proof of Authenticity: the Certificate Authority, Managing Certificates with openssl, Creating a Signing Request, Working with GNU Privacy Guard, Creating GPG Keys, Key Transfer, Managing GPG Keys, Encrypting Files with GPG, GPG Signing, Signing RPM Files	4		Powerpoint presentation through projector
	Configuring Server for File Sharing: What is NFS? Advantages and Disadvantages of NFS, Configuring NFS4, Setting Up NFSv4, Mounting an NFS Share, Making NFS Mounts Persistent, Configuring Automount, Configuring Samba, Setting Up a Samba File Server, Samba Advanced Authentication Options, Accessing Samba Shares, Offering FTP Services.	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF 

SIGNATURE OF THE H.O.D. 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: June-September ACADEMIC YEAR: 2019-2020

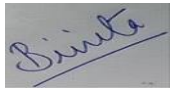
LEARNING OBJECTIVE/S:
The learners will be able to :

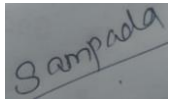
a. Work with various Linux OS commands

b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -IV	**Configuring DNS and DHCP:** Introduction to DNS, The DNS Hierarchy, DNS Server Types, The DNS Lookup Process, DNS Zone Types, Setting Up a DNS Server, Setting Up a Cache-Only Name Server, Setting Up a Primary Name Server, Setting Up a Secondary Name Server, Understanding DHCP, Setting Up a DHCP Server	4	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Powerpoint presentation through projector
	Setting Up a Mail Server: Using the Message Transfer Agent, the Mail Delivery Agent, the Mail User Agent, Setting Up Postfix as an SMTP Server, Working with Mutt, Basic Configuration, Internet Configuration, Configuring Dovecot for POP and IMAP	4		Powerpoint presentation through projector
	Configuring Apache on Red Hat Enterprise Linux: Configuring the Apache Web Server, Creating a Basic Website, Understanding the Apache Configuration Files, Apache Log Files, Working with Virtual Hosts, Securing the Web Server with TLS Certificates, Configuring Authentication, Setting Up Authentication with .htpasswd, Configuring LDAP Authentication, Setting Up MySQL	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF 

SIGNATURE OF THE H.O.D. 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: June-September ACADEMIC YEAR: 2019-2020

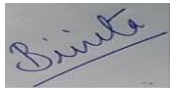
LEARNING OBJECTIVE/S:
The learners will be able to :

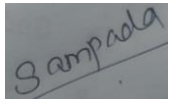
a. Work with various Linux OS commands

b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -V	**Introducing Bash Shell Scripting:** Introduction, Elements of a Good Shell Script, Executing the Script, Variables and Input, Subshells, Script Arguments, Asking for Input, Command Substitution, Substitution Operators, Pattern Matching, Performing Calculations, Using Control Structures- if...then...else, case, while, until, for, Configuring booting with GRUB.	6	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Blackboard
	High-Availability Clustering: Workings of High Availability-Requirements, Add-on Software, Components, Cluster-Based Services, Bonding, Shared Storage, Installing the Red Hat High Availability Add-On, Building the Initial State of the Cluster, Additional Cluster Properties, Quorum Disk, Fencing, Resources and Services, Troubleshooting a Nonoperational Cluster, Configuring GFS2 File Systems	3		Powerpoint presentation through projector
	Setting Up an Installation Server: Network Server as an Installation Server, Installing the TFTP Server, Configuring DHCP for PXE Boot, Kickstart File, system-config-kickstart, Manual Modifications to the Kickstart File	3		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF 

SIGNATURE OF THE H.O.D. 

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: TYBSCIT SEMESTER:V

MONTH: JUNE-SEPT ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:

The learners will be able to :

Understand fundanentals of project

Be familiar with diff methods and tools used for project management

Do the project planning,scheduling,costing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT501 Software Project Management UNIT-1	**Introduction to Software Project Management**:Introduction, Whyis Software Project Management Important? What is a Project?Software Projects versus Other Types of Project, Contract Management and Technical Project Management, Activities Covered by Software Project Management, Plans, Methods and Methodologies,Some Ways of Categorizing Software Projects, Project Charter, Stakeholders, Setting Objectives, The Business Case, Project Successand Failure, What is Management? Management Control, Project Management Life Cycle, Traditional versus Modern Project Management Practices.	05	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
	Project Evaluation and Programme Management: Introduction, Business Case, Project Portfolio Management, Evaluation of Individual Projects, Cost–benefit Evaluation	04	Bob Hughes, Mike	Black Board,and Chalk ,power point

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	Techniques, Risk Evaluation, Programme Management, Managing the Allocation of Resources within Programmes, Strategic Programme Management, Creating a Programme, Aids to Programme Management, Some Reservations about Programme Management, Benefits Management.		Cotterell, Rajib Mall	
	An Overview of Project Planning :Introduction to Step Wise Project Planning, Step 0: Select Project, Step 1: Identify Project Scope and Objectives, Step 2: Identify Project Infrastructure, Step 3: Analyse Project Characteristics, Step 4: Identify Project Products and Activities, Step 5: Estimate Effort for Each Activity, Step 6: Identify Activity Risks, Step 7: Allocate Resources, Step 8: Review/Publicize Plan, Steps 9 and 10: Execute Plan/Lower Levels of Planning	03	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
USIT501 Software Project Management UNIT-2	**Selection of an Appropriate Project Approach:**Introduction, Build or Buy? Choosing Methodologies and Technologies, Software Processes and Process Models, Choice of Process Models, Structure versus Speed of Delivery, The Waterfall Model, The Spiral Model, Software Prototyping, Other Ways of Categorizing Prototypes, Incremental Delivery, Atern/Dynamic Systems Development Method, Rapid Application Development, Agile Methods, Extreme Programming (XP), Scrum, Lean Software Development, Managing Iterative Processes, Selecting the Most Appropriate Process Model.	06	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
	Software Effort Estimation: Introduction, Where are the Estimates Done? Problems with Over- and Under-Estimates, The Basis for Software Estimating, Software Effort Estimation Techniques, Bottomup Estimating, The Top-down Approach and Parametric Models,Expert Judgement, Estimating by Analogy, Albrecht Function Point Analysis, Function Points Mark II,	06	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point

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	COSMIC Full Function Points,COCOMO II: A Parametric Productivity Model, Cost Estimation, Staffing Pattern, Effect of Schedule Compression, Capers Jones Estimating Rules of Thumb.			
USIT501 Software Project Management UNIT-3	**Activity Planning:** Introduction, Objectives of Activity Planning,When to Plan, Project Schedules, Projects and Activities, Sequencing and Scheduling Activities, Network Planning Models, Formulating aNetwork Model, Adding the Time Dimension, The Forward Pass,Backward Pass, Identifying the Critical Path, Activity Float,Shortening the Project Duration, Identifying Critical Activities,Activity-on-Arrow Networks.	04	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
	Risk Management: Introduction, Risk, Categories of Risk, Risk Management Approaches, A Framework for Dealing with Risk, RiskIdentification, Risk Assessment, Risk Planning, Risk Management,Evaluating Risks to the Schedule, Boehm"s Top 10 Risks and Counter Measures, Applying the PERT Technique, Monte Carlo Simulation,Critical Chain Concepts	04	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
	Resource Allocation: Introduction, Nature of Resources, Identifying Resource Requirements, Scheduling Resources, Creating Critical Paths, Counting the Cost, Being Specific, Publishing the Resource Schedule, Cost Schedules, Scheduling Sequence	04	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
USIT501 Software Project Management UNIT-4	**Monitoring and Control**: Introduction, Creating the Framework, Collecting the Data, Review, Visualizing Progress, Cost Monitoring, Earned Value Analysis, Prioritizing Monitoring, Getting the Project Back to Target, Change Control, Software Configuration Management (SCM).	05	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point

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	Managing Contracts: Introduction, Types of Contract, Stages in Contract Placement, Typical Terms of a Contract, Contract Management, Acceptance.	04	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
	Managing People in Software Environments: Introduction, Understanding Behaviour, Organizational Behaviour: A Background, Selecting the Right Person for the Job, Instruction in the Best Methods, Motivation, The Oldham–Hackman Job Characteristics Model, Stress, Stress Management, Health and Safety, Some Ethical and Professional Concerns.	03	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
USIT501 Software Project Management UNIT-5	**Working in Teams:** Introduction, Becoming a Team, Decision Making, Organization and Team Structures, Coordination Dependencies, Dispersed and Virtual Teams, Communication Genres, Communication Plans, Leadership	05	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
	Software Quality : Introduction, The Place of Software Quality in Project Planning, Importance of Software Quality, Defining Software Quality, Software Quality Models, ISO 9126, Product and Process Metrics, Product versus Process Quality Management, Quality Management Systems, Process Capability Models, Techniques to Help Enhance Software Quality, Testing, Software Reliability,Quality Plans.	05	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
	Project Closeout: Introduction, Reasons for Project Closure, Project Closure Process, Performing a Financial Closure, Project CloseoutReport	02	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BRIJESH YATINDRA JOSHI **DEPARTMENT: INFORMATION TECHNOLOGY**

CLASS: TYIT DIV - A SEMESTER: V MONTH: June to September ACADEMIC YEAR: 2019-2020

Learning Objectives

1. **Understand .NET Framework, Learn C # language , implementation of object oriented programming concepts using C# language**
2. **Understand the fundamentals of web form, learn to develop the .net application.**
3. **Understand various GUI controls and their use .**
4. **Understand the concept and implementation of error handling ,logging and tracing .**
5. **Understand the concept and implementation of state management , styles, themes and master pages**
6. **Understand the basics of ADO.Net and basics of Data binding and data controls**
7. **Understand various concepts in XML ,security fundamentals and ASP.NET AJAX**

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PAPER ,UNIT , TITLE	SUB TOPICS	NO OF LECTURES ALLOCATED	REFERENCE/S	TEACHING METHODS /ICT TOOLS USED
USIT503 Advanced Web Programming UNIT I	Introducing .NET: The .NET Framework, C#, VB, and the .NET Languages, The Common Language Runtime, The .NET Class Library. The C# Language: C# Language Basics, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods	6	C# 2015, Anne Bohem and Joel Murach, Murach ASP.NET 4.0 programming, J. Kanjilal ,Tata McGraw-Hill	BLACK BOARD AND CHALK, Power point presentation
	Types, Objects, and Namespaces: The Basics About Classes, Building a Basic Class, Value Types and Reference Types, Understanding Namespaces and Assemblies, Advanced Class Programming	6		
UNIT II	Web Form Fundamentals: Writing Code, Using the Code-Behind Class, Adding Event Handlers, Understanding the Anatomy of an ASP.NET Application, Introducing Server Controls, Using the Page Class, Using Application Events, Configuring an ASP.NET Application.	6	ASP.NET 4.0 programming, J. Kanjilal ,Tata McGraw-Hill	BLACK BOARD AND CHALK Power point presentation
	Form Controls: Stepping Up to Web Controls, Web Control Classes, List Controls, Table Controls, Web Control Events and AutoPostBack, Validation, Understanding Validation, Using the Validation Controls, Rich Controls, The Calendar, The	6		

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	AdRotator, Pages with Multiple Views, User Controls and Graphics, User Controls, Dynamic Graphics, The Chart Control, Website Navigation: Site Maps, URL Mapping and Routing, The SiteMapPath Control, The TreeView Control, The Menu Control.			
UNIT III	Error Handling, Logging, and Tracing : Avoiding Common Errors, Understanding Exception Handling, Handling Exceptions, Throwing Your Own Exceptions, Using Page Tracing	4	ASP.NET 4.0 programming, J. Kanjilal ,Tata McGraw-Hill	BLACK BOARD AND CHALK Power point presentation
	State Management : Understanding the Problem of State, Using View State, Transferring Information Between Pages, Using Cookies, Managing Session State, Configuring Session State, Using Application State, Comparing State Management Options Styles, Themes, and Master Pages : Styles, Themes, Master Page Basics, Advanced Master Pages,	8		
UNIT IV	ADO.NET Fundamentals: Understanding Databases, Configuring Your Database, Understanding SQL Basics, Understanding the Data Provider Model, Using Direct Data Access, Using Disconnected Data Access.	6	ASP.NET 4.0 programming, J. Kanjilal ,Tata McGraw-Hill	BLACK BOARD AND CHALK Power point presentation
	Data Binding: Introducing Data Binding, Using Single-Value Data Binding, Using Repeated-Value Data Binding, Working with Data Source Controls,	6		

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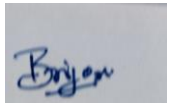
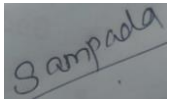
	The Data Controls: The GridView, Formatting the GridView, Selecting a GridView Row, Editing with the GridView, Sorting and Paging the GridView, Using GridView Templates, The DetailsView and FormView			
UNIT V	XML: XML Explained, The XML Classes, XML Validation, XML Display and Transforms. Security Fundamentals: Understanding Security Requirements, Authentication and Authorization, Forms Authentication, Windows Authentication.	6	ASP.NET 4.0 programming, J. Kanjilal ,Tata McGraw-Hill	BLACK BOARD AND CHALK Power point presentation
	ASP.NET AJAX: Understanding Ajax, Using Partial Refreshes, Using Progress Notification, Implementing Timed Refreshes, Working with the ASP.NET AJAX Control Toolkit.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: June To Sept ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

- To support for many industry standards and continues simplification of enterprise ready APIs.

The learners will be able to :

- To understand Java Enterprise edition with its different technologies.
- To understand Java EE architectural server and contains.
- To understand server side technology like Java Servlets with its API and life cycle.
- To make data base connectivity using JDBC.
- To navigate using request dispatcher interface.
- To understand state management using cookies and session.
- To understand how to upload and download the file.
- To be able to work with non-blocking I/O resources.
- To understand server side technology like Java Server Pages.
- To make use of action elements, implicit objects, expression language and JSTL.
- To understand enterprise bill, architectural and its bill.
- To be able to working with session beans and message driven beans.
- To understand interceptors and JNDI.
- To make use of ORM and JPA with its API.
- To understand writing JPA application.
- To be able to understand hibernate architectural and components.
- To understand writing hibernate application.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 Enterprise Java UNIT-I	**Understanding Java EE:** WhatisanEnterpriseApplication? Whatisjavaenterpriseedition? JavaEETechnologies, JavaEEevolution,Glassfishserver.	2	1. Java EE 7 For Beginners 2. Java EE 8 Cookbook: Build reliable applications with the most robust and mature technology for enterprise development 3. Advanced Java Programming	Black Board, Projector, PPT.
	JavaEE Architecture,Serverand Containers: TypesofSystemArchitecture, JavaEEServer, JavaEEContainers.	2		Black Board, Projector, PPT.
	Introduction to Java Servlets: TheNeedforDynamicContent, JavaServletTechnology, WhyServlets? WhatcanServletsdo?	2		Black Board, Projector, PPT.
	Servlet API and Lifecycle: JavaServletAPI, TheServletSkeleton, TheServletLifeCycle, ASimpleWelcomeServlet	2		
	WorkingwithServlets: GettingStarted, UsingAnnotationsInsteadofDeploymentDescriptor.	2		
	Working with Databases: WhatIsJDBC? JDBCArchitecture, AccessingDatabase, TheServletGUI and DatabaseExample.	2		
USIT506 Enterprise Java	**Request Dispatcher:** Resquestdispatcher Interface, Methods of Requestdispatcher, Requestdispatcher Application	2	1. Java EE 7 For Beginners	Black Board, Projector,

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UNIT-II	**COOKIES:** KindsofCookies, WhereCookiesAreUsed? CreatingCookiesUsingServlet, DynamicallyChangingtheColorsofAPage	3	2. Java EE 8 Cookbook: Build reliable applications with the most robust and mature technology for enterprise development 3. Advanced Java Programming	PPT.
	SESSION: WhatAreSessions? LifecycleofHttpSession, SessionTrackingWithServletAPI, AServlet Session Example	2		
	Workingwith Files: UploadingFiles, CreatinganUploadFileApplication, DownloadingFiles, CreatingaDownloadFileApplication.	2		
	Workingwith Non-Blocking I/O: CreatingaNon-BlockingReadApplication, CreatingTheWeb Application, CreatingJavaClass, Creating Servlets, Retrieving The File, Creating index.jsp	3		
USIT506 Enterprise Java UNIT-III	**Introduction To Java ServerPages:** WhyuseJava ServerPages? DisadvantagesOfJSP, JSPv\sServlets, LifeCycleofaJSPPage, HowdoesaJSPfunction? HowdoesJSPexecute? AboutJava ServerPages	3	1. Java EE 7 For Beginners 2. Java EE 8 Cookbook: Build reliable applications with the most robust and mature technology for enterprise development 3. Advanced Java Programming	Black Board, Projector, PPT.
	Getting Started With Java ServerPages: Comments, JSPDocument,JSPElements, JSPGUIExample	2		
	Action Elements: IncludingotherFiles, ForwardingJSPPagetoAnotherPage, PassingParametersforotherActions, LoadingaJavabean.	2		
	Implicit Objects, Scopeand ElExpressions: ImplicitObjects, CharacterQuotingConventions, UnifiedExpressionLanguage[UnifiedEl], ExpressionLanguage.	3		
	Java Server Pages Standard Tag Libraries: WhatiswronginusingJSPScriptletTags?	2		

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	HowJSTLFixesJSPScriptlet'sShortcomings? DisadvantagesOfJSTL, TagLibraries.			
USIT506 Enterprise Java UNIT-IV	**Introduction To EnterpriseJavabeans:** EnterpriseBeanArchitecture, BenefitsofEnterpriseBean, TypesofEnterpriseBean, AccessingEnterpriseBeans, EnterpriseBeanApplication, PackagingEnterpriseBeans	2	1. Java EE 7 For Beginners 2. Java EE 8 Cookbook: Build reliable applications with the most robust and mature technology for enterprise development 3. Advanced Java Programming	Black Board, Projector, PPT.
	Workingwith Session Beans: WhentouseSessionBeans? TypesofSessionBeans, RemoteandLocalInterfaces, AccessingInterfaces, LifecycleofEnterpriseBeans, PackagingEnterpriseBeans, Exampleof StatefulSessionBean, Example ofStatelessSessionBean, Example of SingletonSessionBeans.	3		
	Working with Message DrivenBeans: LifecycleofaMessageDrivenBean, UsesofMessageDrivenBeans, TheMessage DrivenBeansExample.	2		
	Interceptors: Request andInterceptor, Defining An Interceptor, AroundInvokeMethod, ApplyingInterceptor, Adding An Interceptor To An Enterprise Bean, Build and Run the Web Application.	2		
	Java Naming and Directory Interface: What is Naming Service? What is Directory Service? What is Java Naming and Directory interface? Basic Lookup, JNDI Namespace in Java EE, Resources and JNDI, Datasource Resource Definition in Java EE.	3		
USIT506 Enterprise Java UNIT-V	**Persistence, Object/Relational Mapping And JPA:** WhatisPersistence? PersistenceinJava,Current Persistence Standards in Java, Why an other Persistence Standards? Object/RelationalMapping,	2	1. Java EE 7 For Beginners 2. Java EE 8 Cookbook: Build reliable applications with the	Black Board, Projector, PPT.
	Introduction to JavaPersistence API: TheJavaPersistenceAPI, JPA,ORM,DatabaseandtheApplication, ArchitectureofJPA, HowJPAWorks? JPA Specifications.	2		

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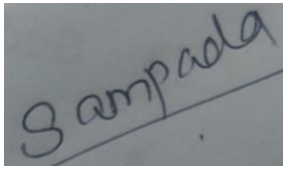
	Writing JPA Application: ApplicationRequirementSpecifications, SoftwareRequirements, TheApplicationDevelopmentApproach, CreatingDatabaseandTablesinMysql, creatingaWebApplication, AddingtheRequiredLibraryFiles, creatingaJavabeanClass, CreatingPersistenceUnit[Persistence.Xml], CreatingJSPS, TheJPAApplicationStructure, RunningtheJPAApplication.	3	most robust and mature technology for enterprise development 3. Advanced Java Programming	
	Introduction to Hibernate: WhatisHibernate? WhyHibernate? Hibernate,DatabaseandTheApplication, ComponentsofHibernate, ArchitectureofHibernate, HowHibernateWorks?	2		
	WritingHibernateApplication: ApplicationRequirementSpecifications, SoftwareRequirements, TheApplicationDevelopmentApproach, CreatingDatabaseandTablesinMysql, creatingaWebApplication, AddingtheRequiredLibraryFiles, creatingaJavabeanClass, CreatingHibernateConfigurationFile, AddingaMappingClass, CreatingJSPS, RunningTheHibernateApplication.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: T.Y. BSc (IT) DIV-C SEMESTER:SEM -5 MONTH: JUN-SEPT ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to :

- Understand what is a The Internet of Things and its applications .
- Introduction of Prototyping the Physical Design and online design.
- Understand different techniques of Prototyping.
- Learn the concept of automation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT502 Internet Of Things UNIT 1	**The Internet of Things:** An Overview: The Flavour of the Internet of Things, The "Internet" of "Things", The Technology of the Internet of Things, Enchanted Objects, Who is Making the Internet of Things?	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally WILEY First 2014	Black board and chalk , Projector
	Design Principles for Connected Devices: Calm and Ambient Technology, Magic as Metaphor, Privacy, Keeping Secrets, Whose Data Is It Anyway? Web Thinking for Connected Devices, Small Pieces, Loosely Joined, First-Class Citizens on The Internet, Graceful Degradation, Affordances.	4		
	Internet Principles: Internet Communications: An Overview, IP, TCP, The IP Protocol Suite (TCP/IP), UDP, IP Addresses,	4		

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	DNS, Static IP Address Assignment, Dynamic IP Address Assignment, IPv6, MAC Addresses, TCP and UDP Ports, An Example: HTTP Ports, Other Common Ports, Application Layer Protocols, HTTP, HTTPS: Encrypted HTTP, Other Application Layer Protocols.			
USIT502 Internet Of Things UNIT 2	**Thinking About Prototyping**: Sketching, Familiarity, Costs versus Ease of Prototyping, Prototypes and Production, Changing Embedded Platform, Physical Prototypes and Mass Personalisation	4	1.Designing the Internetof Things Adrian McEwen, Hakim Cassimally WILEY First 2014 , 2.Internet of Things – Architecture and Design Raj Kamal McGraw Hill First 201	Black board and chalk, Projector
	Climbing into the Cloud Open Source versus Closed Source, Why Closed? Why Open? Mixing Open and Closed Source, Closed Source for Mass Market Projects, Tapping into the Community	4		
	Prototyping Embedded Devices: Electronics, Sensors, Actuators, Scaling Up the Electronics, Embedded Computing Basics, Microcontrollers, System-on-Chips, Choosing Your Platform, Arduino, developing on the Arduino, Some Notes on the Hardware, Openness, Raspberry Pi, Cases and Extension Boards, Developing on the Raspberry Pi, Some Notes on the Hardware, Openness	4		
USIT502 Internet Of Things	**Prototyping the Physical Design:** Preparation, Sketch, Iterate, and Explore, Nondigital Methods, Laser Cutting, Choosing a Laser Cutter, Software, Hinges and Joints, 3D Printing, Types of 3D Printing, Software, CNC Milling, Repurposing/Recycling.	5	Designing the Internet of Things Adrian McEwen, Hakim Cassimally WILEY First 2014	Black board and chalk, Projector

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UNIT 3	**Prototyping Online Components**: Getting Started with an API, Mashing Up APIs, Scraping, Legalities, writing a New API, Clockodillo, Security, implementing the API, Using Curl to Test, Going Further	3		
	Real-Time Reactions, Polling, Comet, Other Protocols, MQ Telemetry Transport, Extensible Messaging and Presence Protocol, Constrained Application Protocol.	4		
USIT502 Internet Of Things UNIT 4	**Techniques for Writing Embedded Code:** Memory Management,Types of Memory, Making the Most of Your RAM, Performance and Battery Life, Libraries,Debugging.	5	Designing the Internet of Things Adrian McEwen, Hakim Cassimally WILEY First 2014 www.tutorialspoint.com	Black board and chalk, Projector
	Business Models: A Short History of Business Models, Space and Time, From Craft to Mass Production, The Long Tail of the Internet, Learning from History, The Business Model Canvas, Who Is the Business Model For? Models	3		
	Make Thing, Sell Thing, Subscriptions, Customisation, be a Key Resource, Provide Infrastructure: Sensor Networks, take a Percentage, Funding an Internet of Things Startup, Hobby Projects and Open Source, Venture Capital, Government Funding, Crowdfunding, Lean Startups.	4		
USIT502	**Moving to Manufacture:** What Are You Producing? Designing Kits, Designing Printed circuit boards, Software Choices, The Design	5	1.DesigningtheInternetof Things Adrian McEwen, Hakim Cassimally WILEY First 2014 ,	Black board and chalk, Projector

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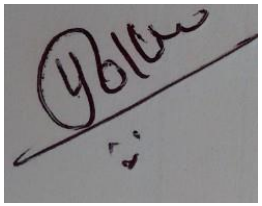
Internet Of Things	Process, Manufacturing Printed Circuit Boards, Etching Boards, Milling Boards. Assembly, Testing, Mass-Producing the Case and Other Fixtures.		2.Getting Started with Raspberry Pi Matt Richardson and Shawn Wallace SPD Third 2016	
UNIT 5	Certification, Costs, Scaling Up Software, Deployment, Correctness and Maintainability, Security, Performance, User Community.	3		
	Ethics: Characterizing the Internet of Things, Privacy, Control, Disrupting Control,Crowdsourcing, Environment, Physical Thing, Electronics, Internet Service, Solutions, The Internet of Things as Part of the Solution, Cautious Optimism, The Open Internet of Things Definition	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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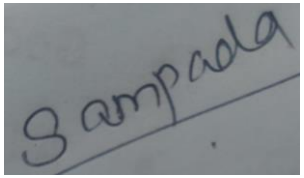

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**T.Y.B SC(IT)-C**_____ SEMESTER: ____**V**_____ MONTH: _____ _____**JUNE-SEPTEMBER** _____ ACADEMIC YEAR: _____**2019-2020**_____

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand the background of Red Hat Linux administration as an operating system.**
- **How to work with various commands and their implementation in Linux bash shell system.**
- **To understand basic management tasks, administrative tasks and managing different services with RPM.**
- **Helps to make you configure and install the software, working with the networks and creation of users, groups and permissions in system.**
- **To make you understand the security concept of the system and cryptographic services.**
- **It also make you understand how to configure and to install different servers(FTP, Mail services, DHCP, Samba etc.) and to enable its services and to provide client server architecture working.**
- **Helps to create clusters and provide better understanding of shell scripting.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-04 (USIT505)	**Introduction to Red Hat Enterprise Linux:** Linux, Open Source and Red Hat, Origins of Linux, Distributions, Duties of Linux System Administrator.	01	Red Hat Enterprise Linux 6 Administration By	Textbook, Blackboard, Chalk and Duster.

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Linux System Administration **Unit No -01**	**Command Line:** Working with the Bash Shell, Getting the Best of Bash, Useful Bash Key Sequences, Working with Bash History, Performing Basic File System Management Tasks, Working with Directories, Piping and Redirection, Finding Files	04	Sander van Vugt , John Wiley and Sons	Textbook, Blackboard, Chalk and Duster, Projector, Laptop, PPTs.
	System Administration Tasks: Performing Job Management Tasks, System and Process Monitoring and Management, Managing Processes with ps, Sending Signals to Processes with the kill Command, Using top to Show Current System Activity, Managing Process Niceness, Scheduling Jobs, Mounting Devices, Working with Links, Creating Backups, Managing Printers, Setting Up System Logging, Setting Up Rsyslog, Common Log Files, Setting Up Logrotate	04		Projector, Laptop, PPTs.
	Managing Software: Understanding RPM, Understanding Meta Package Handlers, Creating Your Own Repositories, Managing Repositories, Installing Software with Yum, Querying Software, Extracting Files from RPM Packages	03		Projector, Laptop, PPTs.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -02	**Configuring and Managing Storage:** Understanding Partitions and Logical Volumes, Creating Partitions, Creating File Systems, File Systems Overview, Creating File Systems, Changing File System Properties, Checking the File System Integrity, Mounting File Systems Automatically Through fstab, Working with Logical Volumes, Creating Logical Volumes, Resizing Logical Volumes, Working with Snapshots, Replacing Failing Storage	04	Red Hat Enterprise Linux 6 Administration By Sander van Vugt ,	Projector, Laptop, PPTs.

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	Devices, Creating Swap Space, Working with Encrypted Volumes .		John Wiley and Sons	
	Connecting to the Network: Understanding NetworkManager, Working with Services and Runlevels, Configuring the Network with NetworkManager, Working with system-config-network, NetworkManager Configuration Files, Network Service Scripts, Networking from the Command Line, Troubleshooting Networking, Setting Up IPv6, Configuring SSH, Enabling the SSH Server, Using the SSH Client, Using PuTTY on Windows Machines, Configuring Key-Based SSH Authentication, Using Graphical Applications with SSH, Using SSH Port Forwarding, Configuring VNC Server Access	04		Projector, Laptop, PPTs.
	Working with Users, Groups, and Permissions: Managing Users and Groups, Commands for User Management, Managing Passwords, Modifying and Deleting User Accounts, Configuration Files, Creating Groups, Using Graphical Tools for User, and Group Management, Using External Authentication Sources, the Authentication Process, sssd, nsswitch, Pluggable Authentication Modules, Managing Permissions, the Role of Ownership, Basic Permissions: Read, Write, and Execute, Advanced Permissions, Working with Access Control Lists, Setting Default Permissions with umask, Working with Attributes	04		Projector, Laptop, PPTs.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -03	**Securing Server with iptables:** Understanding Firewalls, Setting Up a Firewall with system-config-firewall, Allowing	04		Projector, Laptop,

	Services, Trusted Interfaces, Masquerading, Configuration Files, Setting Up a Firewall with iptables, Tables, Chains, and Rules, Composition of Rule, Configuration Example, Advanced iptables Configuration, Configuring Logging, The Limit Module, Configuring NAT		Red Hat Enterprise Linux 6 Administration By Sander van Vugt , John Wiley and Sons	PPTs.
	Setting Up Cryptographic Services: Introducing SSL, Proof of Authenticity: the Certificate Authority, Managing Certificates with openssl, Creating a Signing Request, Working with GNU Privacy Guard, Creating GPG Keys, Key Transfer, Managing GPG Keys, Encrypting Files with GPG, GPG Signing, Signing RPM Files	04		Projector, Laptop, PPTs.
	Configuring Server for File Sharing: What is NFS? Advantages and Disadvantages of NFS, Configuring NFS4, Setting Up NFSv4, Mounting an NFS Share, Making NFS Mounts Persistent, Configuring Automount, Configuring Samba, Setting Up a Samba File Server, Samba Advanced Authentication Options, Accessing Samba Shares, Offering FTP Services.	04		Projector, Laptop, PPTs.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	**Configuring DNS and DHCP:** Introduction to DNS, The DNS Hierarchy, DNS Server Types, The DNS Lookup Process, DNS Zone Types, Setting Up a DNS Server, Setting Up a Cache-Only Name Server, Setting Up a Primary Name Server, Setting Up a Secondary Name Server, Understanding DHCP, Setting Up a DHCP Server	04	Red Hat Enterprise Linux 6 Administration By Sander van Vugt ,	Projector, Laptop, PPTs.

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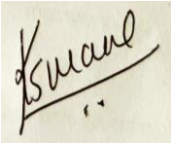
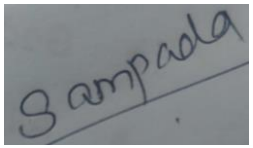
	Setting Up a Mail Server: Using the Message Transfer Agent, the Mail Delivery Agent, the Mail User Agent, Setting Up Postfix as an SMTP Server, Working with Mutt, Basic Configuration, Internet Configuration, Configuring Dovecot for POP and IMAP	03	John Wiley and Sons	Projector, Laptop, PPTs.
	Configuring Apache on Red Hat Enterprise Linux: Configuring the Apache Web Server, Creating a Basic Website, Understanding the Apache Configuration Files, Apache Log Files, Working with Virtual Hosts, Securing the Web Server with TLS Certificates, Configuring Authentication, Setting Up Authentication with .htpasswd, Configuring LDAP Authentication, Setting Up MySQL	05		Projector, Laptop, PPTs.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	**Introducing Bash Shell Scripting:** Introduction, Elements of a Good Shell Script, Executing the Script, Working with Variables and Input, Understanding Variables, Variables, Subshells, and Sourcing, Working with Script Arguments, Asking for Input, Using Command Substitution, Substitution Operators, Changing Variable Content with Pattern Matching, Performing Calculations, Using Control Structures, Using if...then...else, Using case, Using while, Using until, Using for, Configuring booting with GRUB.	03	Red Hat Enterprise Linux 6 Administration By Sander van Vugt , John Wiley and Sons	Textbook, Blackboard, Chalk and Duster, Projector, Laptop, PPTs.
	High-Availability Clustering: High-Availability Clustering, The Workings of High Availability, High-Availability Requirements, Red Hat High-Availability Add-on Software, Components, Configuring Cluster-Based Services, Setting Up Bonding, Setting Up Shared Storage, Installing the Red Hat High	05		Projector, Laptop, PPTs.

	Availability Add-On, Building the Initial State of the Cluster, Configuring Additional Cluster Properties, Configuring a Quorum Disk, Setting Up Fencing, Creating Resources and Services, Troubleshooting a Nonoperational Cluster, Configuring GFS2 File Systems			
	Setting Up an Installation Server: Configuring a Network Server as an Installation Server, Setting Up a TFTP and DHCP Server for PXE Boot, Installing the TFTP Server, Configuring DHCP for PXE Boot, Creating the TFTP PXE Server Content, Creating a Kickstart File, Using a Kickstart File to Perform an Automated, Installation, Modifying the Kickstart File with, system-config-kickstart, Making Manual Modifications to the Kickstart File	04		Projector, Laptop, PPTs.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Sandesh Akre DEPARTMENT: Information technology CLASS: TYIT

SEMESTER: V MONTH: July ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn Software Development Methodology
- Conceptual Software development Approaches
- Different development techniques

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT501 Software Project Management Unit 1	Introduction to Software Project Management: Introduction, Whyis Software Project Management Important? What is a Project? Software Projects versus Other Types of Project, Contract Management and Technical Project Management, Activities Covered by Software Project Management, Plans, Methods and Methodologies, Some Ways of Categorizing Software Projects, Project Charter, Stakeholders, Setting Objectives, The Business Case, Project Success and Failure, What is Management? Management Control,	12	Software Project Management Bob Hughes, MikeCotterell, Rajib Mall	Chalk and Board

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Unit 2	Project Management Life Cycle, Traditional versus Modern Project Management Practices. Project Evaluation and Programme Management: Introduction, Business Case, Project Portfolio Management, Evaluation of Individual Projects, Cost–benefit Evaluation Techniques, Programme Management, Managing the Allocation of Resources within Programmes, Strategic Programme Management, Creating a Programme, Aids to Programme Management, Some Reservations about Programme Management, Benefits Management. An Overview of Project Planning : Introduction to Step Wise Project Planning, Step 0: Select Project, Step 1: Identify Project Scope and Objectives, Step 2: Identify Project infrastructure, Step 3: Analyse Project Characteristics, Step 4: Identify Project Products and Activities, Step 5: Estimate Effort for Each Activity, Step 6: Identify activity Risks, Step 7: Allocate Resources, Step 8: Review/Publicize Plan, Steps 9 and 10: Execute Plan/Lower Levels of Planning			
	Selection of an Appropriate Project Approach: Introduction, Build or Buy? Choosing Methodologies and Technologies, Software Processes and Process Models, Choice of Process Models, Structure versus Speed of Delivery, The Waterfall Model, The Spiral Model, Software Prototyping, Other Ways of Categorizing Prototypes, Incremental Delivery,	12	Software Project Management Bob Hughes, MikeCotterell, Rajib Mall	Chalk and Board

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Unit 3	Atern/Dynamic Systems Development Method, Rapid Application Development, Agile Methods, Extreme Programming (XP), Scrum, Lean Software Development, Managing Iterative Processes, Selecting the Most Appropriate Process Model. Software Effort Estimation: Introduction, Where are the EstimatesDone? Problems with Over- and Under-Estimates, The Basis for Software Estimating, Software Effort Estimation Techniques, Bottom- up Estimating, The Top-down Approach and Parametric Models, Expert Judgement, Estimating by Analogy, Albrecht Function Point Analysis, Function Points Mark II, COSMIC Full Function Points, COCOMO II: A Parametric Productivity Model, Cost Estimation, Staffing Pattern, Effect of Schedule Compression, Capers Jones Estimating Rules of Thumb.			
	Activity Planning: Introduction, Objectives of Activity Planning, When to Plan, Project Schedules, Projects and Activities, Sequencing and Scheduling Activities, Network Planning Models, Formulating a Network Model, Adding the Time Dimension, The Forward Pass, Backward Pass, Identifying the Critical Path, Activity Float, Shortening the Project Duration, Identifying Critical Activities, Activity-on-Arrow Networks. Risk Management: Introduction, Risk, Categories of Risk, Risk Management Approaches, A Framework for	12	Software Project Management Bob Hughes, MikeCotterell, Rajib Mall	Chalk and Board

Unit 4	Dealing with Risk, Risk Identification, Risk Assessment, Risk Planning, Risk Management, Evaluating Risks to the Schedule, Boehm's Top 10 Risks and Counter Measures, Applying the PERT Technique, Monte Carlo Simulation, Critical Chain Concepts. Resource Allocation: Introduction, Nature of Resources, Identifying Resource Requirements, Scheduling Resources, Creating Critical Paths, Counting the Cost, Being Specific, Publishing the Resource Schedule, Cost Schedules, Scheduling Sequence.			
Unit 5	Monitoring and Control: Introduction, Collecting the Data, Review, Visualizing Progress, Cost Monitoring, Earned Value Analysis, Prioritizing Monitoring, Getting the Project Back to Target, Change Control, Software Configuration Management (SCM). Managing Contracts: Introduction, Types of Contract, Stages in Contract Placement, Typical Terms Management, Acceptance. Managing People in Software Environments: Introduction, Understanding Behaviour, Organizational Behaviour: A Background, Selecting the Right Person for the Job, Instruction in the Best Methods, Motivation, The Oldham–Hackman Job Characteristics Model, Stress, Stress Management, Health and Safety, Some Ethical and Professional Concerns.	12	Software Project Management Bob Hughes, MikeCotterell, Rajib Mall	Chalk and Board
	Working in Teams: Introduction, Becoming a Team, Decision Making, Organization and Team Structures, Coordination	12	Software Project Management	Chalk and Board

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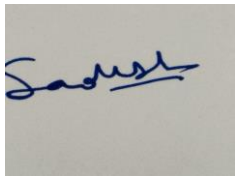
	Dependencies, Dispersed and Virtual Teams, Communication Genres, Communication Plans, Leadership. Software Quality : Introduction, The Place of Software Quality in Project Planning, Importance of Software Quality, Defining Software Quality, Software Quality Models, ISO 9126, Product and Process Metrics, Product versus Process Quality Management, Quality Management Systems, Process Capability Models, Techniques to Help Enhance Software Quality, Testing, Software Reliability, Quality Plans. Project Closeout: Introduction, Reasons for Project Closure, Project Closure Process, Performing a Financial Closure, Project Closeout Report.		Bob Hughes, MikeCotterell, Rajib Mall	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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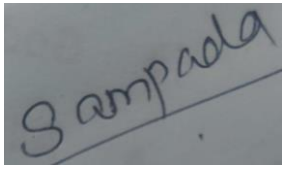

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: TYIT DIV-B

SEMESTER: V MONTH: JUNE- SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Able to understand the application areas of IOT ·
- Able to realize the revolution of Internet in Mobile Devices, Cloud & Sensor Networks ·
- Able to understand building blocks of Internet of Things and characteristics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT502, Internet of Things Unit 1	The Internet of Things: An Overview: The Flavour of the Internet of Things, The "Internet" of "Things", The Technology of the Internet of Things, Enchanted Objects, Who is Making the Internet of Things?	03	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, Powerpoint
	Design Principles for Connected Devices: Calm and Ambient Technology, Magic as Metaphor, Privacy, Keeping Secrets, Whose Data Is It Anyway? Web Thinking for Connected Devices, Small Pieces, Loosely Joined, First-Class Citizens on The Internet, Graceful Degradation, Affordances.	04	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Internet Principles: Internet Communications: An Overview, IP, TCP, The IP Protocol Suite (TCP/IP), UDP, IP Addresses, DNS, Static IP Address Assignment, Dynamic IP Address Assignment, IPv6, MAC Addresses, TCP and UDP Ports, An Example: HTTP Ports, Other	03	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint

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	Common Ports, Application Layer Protocols, HTTP, HTTPS: Encrypted HTTP, Other Application Layer Protocols			
USIT502, Internet of Things **Unit 2**	Thinking About Prototyping: Sketching, Familiarity, Costs versus Ease of Prototyping, Prototypes and Production, Changing Embedded Platform, Physical Prototypes and Mass Personalisation, climbing into the Cloud, Open Source versus Closed Source, Why Closed? Why Open? Mixing Open and Closed Source, Closed Source for Mass Market Projects, Tapping into the Community	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Prototyping Embedded Devices: Electronics, Sensors, Actuators, Scaling Up the Electronics, Embedded Computing Basics, Microcontrollers, System-on-Chips, Choosing Your Platform, Arduino, developing on the Arduino, Some Notes on the Hardware, Openness, Raspberry Pi, Cases and Extension Boards, Developing on the Raspberry Pi, Some Notes on the Hardware, Openness.	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
USIT502, Internet of Things **Unit 3**	Prototyping the Physical Design: Preparation, Sketch, Iterate, and Explore, Nondigital Methods, Laser Cutting, Choosing a Laser Cutter, Software, Hinges and Joints, 3D Printing, Types of 3D Printing, Software, CNC Milling, Repurposing/Recycling	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Prototyping Online Components: Getting Started with an API, Mashing Up APIs, Scraping, Legalities, writing a New API, Clockodillo, Security, implementing the API, Using Curl to Test, Going Further, Real-Time Reactions, Polling, Comet, Other Protocols, MQ Telemetry Transport, Extensible Messaging and Presence Protocol, Constrained Application Protocol.	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint

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USIT502, Internet of Things **Unit 4**	Techniques for Writing Embedded Code: Memory Management, 12 8 Types of Memory, Making the Most of Your RAM, Performance and Battery Life, Libraries,Debugging.	04	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Business Models: A Short History of Business Models, Space and Time, From Craft to Mass Production, The Long Tail of the Internet, Learning from History, The Business Model Canvas, Who Is the Business Model For? Models, Make Thing, Sell Thing, Subscriptions, Customisation, be a Key Resource, Provide Infrastructure: Sensor Networks, take a Percentage, Funding an Internet of Things Startup, Hobby Projects and Open Source, Venture Capital, Government Funding, Crowdfunding, Lean Startups.	06	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
USIT502, Internet of Things **Unit 5**	Moving to Manufacture: What Are You Producing? Designing Kits, Designing Printed circuit boards, Software Choices, The Design Process, Manufacturing Printed Circuit Boards, Etching Boards, Milling Boards. Assembly, Testing, Mass-Producing the Case and Other Fixtures, Certification, Costs, Scaling Up Software, Deployment, Correctness and Maintainability, Security, Performance, User Community.	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Ethics: Characterizing the Internet of Things, Privacy, Control, Disrupting Control,Crowdsourcing, Environment, Physical Thing, Electronics, Internet Service, Solutions, The Internet of Things as Part of the Solution, Cautious Optimism, The Open Internet of Things Definition	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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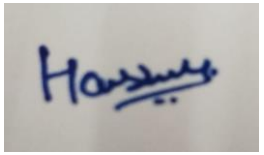

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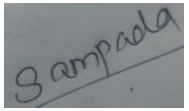

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: TYBSc(IT) Div:A SEMESTER: V MONTH: JUNE-SEPTEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the importance of software project management, project evaluation and programme management was easy,to provide knowledge of step wise planning and monitoring, understand the importance of becoming a team and decision making and project closeout.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: USIT501 unit:1, Title: Software Project Management	**Introduction to Software Project Management**:Introduction, Why is Software Project Management Important? What is a Project? Software Projects versus Other Types of Project, Contract Management and Technical Project Management, Activities Covered by Software Project Management, Plans, Methods and Methodologies, Some Ways of Categorizing Software Projects, Project Charter, Stakeholders, Setting Objectives, The Business Case, Project Success and Failure, What is Management? Management Control, Project Management Life Cycle, Traditional versus Modern Project Management Practices.	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Presentation, board, projector

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	Project Evaluation and Programme Management: Introduction, Business Case, Project Portfolio Management, Evaluation of Individual Projects, Cost–benefit Evaluation Techniques, Risk Evaluation, Programme Management, Managing the Allocation of Resources within Programmes, Strategic Programme Management, Creating a Programme, Aids to Programme Management, Some Reservations about Programme Management, Benefits Management.	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Presentation, board, projector
	An Overview of Project Planning:Introduction to Step Wise Project Planning, Step 0: Select Project, Step 1: Identify Project Scope and Objectives, Step 2: Identify Project Infrastructure, Step 3: Analyse Project Characteristics, Step 4: Identify Project Products and Activities, Step 5: Estimate Effort for Each Activity, Step 6: Identify Activity Risks, Step 7: Allocate Resources, Step 8: Review/Publicize Plan, Steps 9 and 10: Execute Plan/Lower Levels of Planning	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Presentation, board, projector
Paper: USIT501 unit:4 Title:	**Monitoring and Control**: Introduction, Creating the Framework, Collecting the Data, Review, Visualizing Progress, Cost Monitoring, Earned Value Analysis, Prioritizing Monitoring, Getting the Project	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Presentation, board, projector

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Software Project Management	Back to Target, Change Control, Software Configuration Management (SCM).			
	Managing Contracts: Introduction, Types of Contract, Stages in Contract Placement, Typical Terms of a Contract, Contract Management, Acceptance.	3	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Presentation, board, projector
	Managing People in Software Environments: Introduction, Understanding Behaviour, Organizational Behaviour: A Background, Selecting the Right Person for the Job, Instruction in the Best Methods, Motivation, The Oldham–Hackman Job Characteristics Model, Stress, Stress Management, Health and Safety, Some Ethical and Professional Concerns.	5	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Presentation, board, projector
Paper: USIT501 unit:5, Title: Software Project Management	**Working in Teams:** Introduction, becoming a Team, Decision Making, Organization and Team Structures, Coordination Dependencies, Dispersed and Virtual Teams, Communication Genres, Communication Plans, Leadership.	4	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Presentation, board, projector
	Software Quality: Introduction, The Place of Software Quality in Project Planning, Importance of Software Quality, Defining Software Quality, Software Quality Models, ISO 9126, Product and Process	5	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Presentation, board, projector

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	Metrics, Product versus Process Quality Management, Quality Management Systems, Process Capability Models, Techniques to Help Enhance Software Quality, Testing, Software Reliability, Quality Plans.			
	Project Closeout: Introduction, Reasons for Project Closure, Project Closure Process, Performing a Financial Closure, Project Closeout Report.	3	Software Project Management Bob Hughes, Mike Cotterell, Rajib Mall	Presentation, board, projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics CLASS: FYIT SEMESTER: I

MONTH: Jully to Octomber ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : _Set,types of sets ,operation of sets, Russell's paradox,Logic ,Valid invalid statements,Converse,inverse,contrapositive statement,Truth

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT) Unit -I Set theory and Logic	Variables,The Language of sets ,The Language of relation and function.	02		
	Set Theory - Defination and the element method of proof,properties of sets Disproof,Algebric proofs, Boolean Algebra,Russells paradox and Halting problem	05	DM by kolman, DM by Techmax, DM by Kenneth Roshen	Black board and chalk
	The Logic of compound Statements - Logical form and logical equivalance ,Conditional Statements,Va	05		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: FYIT

SEMESTER: I MONTH: Jully to Octomber ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : ___Quantified, predicator, method of proof ,Euclidian Theroem,Quotient Reminder Theroem Rational Number,Indirect proof ,classical Theroem, floor and ceiling function.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT) Unit II Quantified Statement and method of proof	1) Quantified Statements: Predicates and quantified statements ,statement with multiple quantifiers,Arguments with quantified statements 2)Elementary Number Theory and Method of proof : Introductiontodirectproof,Rationalnumbers,Divisiblity,Division into cases and Quotient Reminder Theroem,Floor and ceiling Indirect 3) Argument : Contradiction and contrapositive ,Two Classical Theroem,Application in Algorithms	4+4+4=12	DM by kolman DM by Techmax DM by Roshen	Blackboard,chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12__

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Archana Malpathak DEPARTMENT: Mathematics CLASS: FYIT SEMESTER: I MONTH: Jully to Octomber

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : _Reletion its properties,Equivalance relation graphs,Trees.different types of graphs

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT Sem -I) Unit -IV Relation, Graph and Trees	1) Relation on sets - Inverse of Relation,Directed graph of a Relation,Reflexivity, Symmetry, Transitivity : Definations ,closure propertise of relation R,Matrix of a Relation,Digraph of a relation 2)Equivalance Relation,partial order relation Hasse Diagram, 3) Graphs and Trees :Definations and basic properties Trail,path,Circuits,Euler Circutis,Isomorphism of Graphs,Trees ,rooted Trees,Spanning trees,weighted graphs and weighted trees ,Minimum spanning Trees	4+4+4=12	DM by kolman DM by Roshen DM by Techmax	Blackboard and chalk

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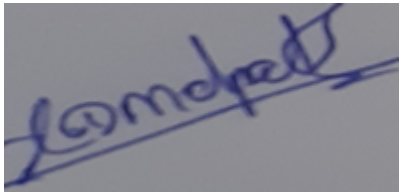
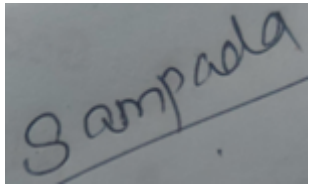
The Number of lecture allotated to unit =12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.I.T**

CLASS: **FYIT A** SEMESTER: **I** MONTH: **July-Oct** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVES:
The learners will be able to :

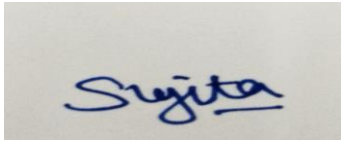
- Understand the Business Communication strategies and its importance.
- Also the paper acts like a personality development course for the student.
- Also the students gets confidence in facing the problems faced during interviews.

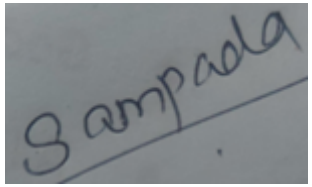
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
V,1, Communication Skills	The Seven Cs of Effective Communication: Completeness, Conciseness, Consideration, Concreteness, Clarity, Courtesy, Correctness	4	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster
	Understanding Business Communication: Nature and Scope of Communication, Non-verbal Communication,	4	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster
	Cross-cultural communication, Technology-enabled Business Communication	4	Business Communication Edited by Meenakshi Raman and	Chalk and Duster

V,2, Communication Skills	Writing Business Messages and Documents: Business writing, Business Correspondence, Instructions Business Reports and Proposals,	5	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster
	Career building and Resume writing, Developing Oral Communication Skills for Business: Effective Listening, Business Presentations and Public Speaking,	5	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster
	Conversations, Interviews	2	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster
V,3, Communication Skills	Developing Oral Communication Skills for Business: Meetings and Conferences,	5	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster
	Group Discussions and Team Presentations, Team Briefing,	5	Business Communication Edited by Meenakshi Raman and Prakash Singh	Chalk and Duster
	Understanding Specific Communication Needs: Communication across Functional Areas	2	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster

V,4, Communication Skills	Understanding Specific Communication Needs: Corporate Communication, Persuasive Strategies in Business Communication	6	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster
	Ethics in Business Communication, Business Communication Aids	4	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster
V,5, Communication Skills	Presentation Process: Planning the resentations, executing the presentations, Impressing the audience by performing,	4	Strategies for improving your business communication Prof. M. S. Rao Shroff publishers and distributors	Chalk and Duster
	Planning stage: Brainstorming, mind maps / concept maps, executing stage: chunking theory, creating outlines, Use of templates. Adding graphics to your presentation: Visual communication, Impress stage: use of font, colour, layout, Importance of practice and performance.	4	Strategies for improving your business communication Prof. M. S. Rao Shroff publishers and distributors	Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 54





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: FYIT SEMESTER: I MONTH: JUNE to SEPT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

To understand the structure and operation of modern processors and their instruction sets.

To understand the basic of digital electronics needed for computers

To understand the basics of instruction set architecture for reduced and complex instruction sets.

To understand how data is transferred between the processor and I/O devices.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 Digital Electronics Unit 1	**Number System:** Analog System, digital system, numbering system, binary number system, octal number system, hexadecimal number system, conversion from one number system to another floating point numbers, weighted codes binary coded decimal, non-weighted codes Excess – 3 code, Gray code, Alphanumeric codes – ASCII Code EBCDIC, ISCII Code, Hollerith Code, Morse Code, Teletypewriter (TTY), Error detection and correction, Universal Product Code, Code conversion	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Black board & Chalk
	Binary Arithmetic:	6	Digital Electronics and	Black board & Chalk

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	Binary addition, Binary subtraction, Negative number representation, Subtraction using 1's complement and 2's complement, Binary multiplication and division, Arithmetic in octal number system, Arithmetic in hexadecimal number system, BCD and Excess – 3 arithmetic		Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	
Paper-02 Digital Electronics Unit 2	**Boolean Algebra and Logic Gates:** Introduction, Logic (AND OR NOT), Boolean theorems, Boolean Laws, De Morgan's Theorem, Perfect Induction, Reduction of Logic expression using Boolean Algebra, Deriving Boolean expression from given circuit, exclusive OR and Exclusive NOR gates, Universal Logic gates, Implementation of other gates using universal gates, Input bubbled logic, Assertion level.	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Black board & Chalk
	Minterm, Maxterm and Karnaugh Maps: Introduction, minterms and sum of minterm form, maxterm and Product of maxterm form, Reduction technique using Karnaugh maps – 2/3/4/5/6 variable K-maps, Grouping of variables in K-maps, K-maps for product of sum form, minimize Boolean expression using K-map and obtain K-map from Boolean expression, Quine Mc Cluskey Method	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Black board & Chalk

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Paper-02 Digital Electronics Unit 3	**Combinational Logic Circuits:** Introduction, Multi-input, multi-output Combinational circuits, Code converters design and implementations **Arithmetic Circuits:** Introduction, Adder, BCD Adder, Excess – 3 Adder, Binary Subtractors, BCD Subtractor, Multiplier, Comparator	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Black board & Chalk
Paper-02 Digital Electronics Unit 4	**Multiplexer, Demultiplexer, ALU, Encoder and Decoder:** Introduction, Multiplexer, Demultiplexer, Decoder, ALU, Encoders.	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Black board & Chalk
	Sequential Circuits: Flip-Flop: Introduction, Terminologies used, S-R flip-flop, D flip-fop, JK flipflop, Race-around condition, Master – slave JK flip-flop, T flip-flop, conversion from one type of flip-flop to another, Application of flipflops.	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain	Black board & Chalk

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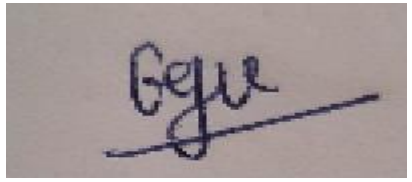
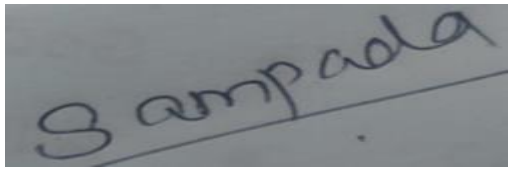
			Tata McGraw Hill	
Paper-02 Digital Electronics Unit 5	**Counters:** Introduction, Asynchronous counter, Terms related to counters, IC 7493 (4-bit binary counter), Synchronous counter, Bushing, Type T Design, Type JK Design, Preset table counter, IC 7490, IC 7492, Synchronous counter ICs, Analysis of counter circuits.	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Black board & Chalk
	Shift Register: Introduction, parallel and shift registers, serial shifting, serial–in serial– out, serial–in parallel–out , parallel–in parallel–out, Ring counter, Johnson counter, Applications of shift registers, Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters	6	Digital Electronics and Logic Design N.G. Palan Technova, and Modern Digital Electronics R.P.Jain Tata McGraw Hill	Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT:CS

CLASS:FYIT-DIV A SEMESTER: SEM-1 MONTH: JUL-OCT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: develop logics which will help them to create programs, applications in C. Also by learning the basic programming constructs they can easily switch over to any other language in future.

PAPER, TITLE, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1,Imperative programming, UNIT 1	**Introduction**: Types of Programming languages, History, features and application. Simple program logic, program development cycle	3	Let us c-by Yashwant Kanetkar	BLACK BOARD AND CHALK
	pseudocode statements and flowchart symbols, sentinel value to end a program, programming and user environments, evolution of programming models., desirable program characteristics	3		

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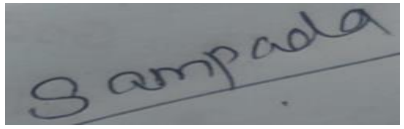

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	Fundamentals: Structure of a program. Compilation and Execution of a Program,Character Set, identifiers and keywords, data types	3		
	constants, variables and arrays, declarations, expressions, statements, Variable definition, symbolic constants	4		
UNIT 2	**Operators and Expressions:** Arithmetic operators, unary operators, relational and logical operators	3	Let us c-by Yashwant Kanetkar	BLACK BOARD AND CHALK
	assignment operators, assignment operators, the conditional operator, library functions.	3		
	Data Input and output: Single character input and output, entering input data	3		

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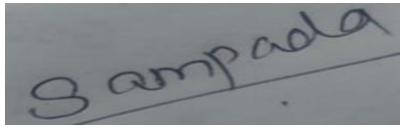

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	scanf function, printf function, gets and puts functions, interactive programming	3		
Unit 3	**Conditional Statements and Loops:** Decision Making Within AProgram,Conditions, Relational Operators, Logical Connectives, If Statement, If-Else Statement.	3	Let us c-by Yashwant kanetkar	BLACK BOARD AND CHALK
	Loops: While Loop, Do While, For Loop. Nested Loops, Infinite Loops,Switch Statement	4		
	Functions: Overview, defining a function, accessing a function, passing arguments to a function, specifying argument data types, function prototypes,recursion, modular programming and functions, standard library of c functions	3		
	prototype of a function: foo1lal parameter list, return type,function call, block structure, passing arguments to a function: call by reference,call by value	3		

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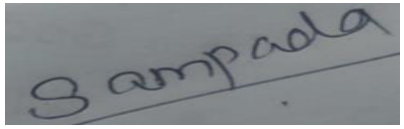

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UNIT 4	**Program structure:** Storage classes, automatic variables, external variables, static variables,multifile programs	3	Let us c-by Yashwant Kanetkar	BLACK BOARD AND CHALK
	more library functions,Preprocessor: Features, #define and #include, Directives and Macros	3		
	Arrays: Definition, processing, passing arrays to functions, multidimensional arrays, arrays and strings.	4		
Unit 5	**Pointers:** Fundamentals, declarations, Pointers Address Operators, Pointer Type Declaration, Pointer Assignment, Pointer Initialization.	3	Let us c-by Yashwant kanetkar	BLACK BOARD AND CHALK
	Pointer Arithmetic, Functions and Pointers, Arrays And Pointers, Pointer Arrays, passing functions to other functions	3		

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	Structures and Unions: Structure Variables, Initialization, Structure Assignment, Nested Structure, Structures and Functions,	3		
	Structures and Arrays: Arrays of Structures, Structures Containing Arrays, Unions, Structures and pointer	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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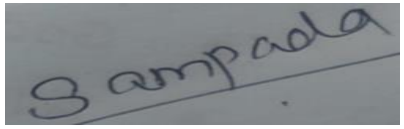

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ARPITA BANERJEE DEPARTMENT: IT-CS

CLASS: FYIT-DIV A SEMESTER: I MONTH: JULY-OCT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: Develop basic understanding of Operating System, the concept of Memory management, File System, I/O System, Deadlock. Also they will be able to know new concepts like virtualization and cloud computing. Finally through case studies they can have practical knowledge on present day OS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT103 Operating Systems I	**Introduction:** What is an operating system? History of operating system, computer hardware .	3	Modern Operating Systems by Andrew S. Tanenbaum	Blackboard & chalk
	Different operating systems, operating system concepts, system calls, operating system structure.	3		
	Processes and Threads: Processes, Threads, Interprocess-communication.	3		
	Scheduling, IPC problems.	3		
II	**Memory Management**: No memory abstraction, memory abstraction: address spaces, virtual memory.	3	Modern Operating Systems by Andrew S. Tanenbaum	Blackboard & chalk
	Page Replacement Algorithms, design issues for paging systems, implementation issues and segmentation.	3		
	File Systems: Files, directories, file system implementation, file-system management and optimization.	3		

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	MS-DOS file system, UNIX V7 file system, CD ROM file system.	3		
III	**Input-Output:** Principles of I/O hardware, Principles of I/O software, I/O software layers.	3	Modern Operating Systems by Andrew S. Tanenbaum	Blackboard & chalk
	disks, clocks, user interfaces: keyboard, mouse, monitor, thin clients, power management Resources.	3		
	Deadlocks: Introduction to deadlocks, the ostrich algorithm, deadlock detection and recovery.	3		
	Deadlock avoidance, deadlock prevention, issues.	3		
IV	**Virtualization and cloud**: History, requirements for virtualization, type 1 and 2 hypervisors, techniques for efficient virtualization.	3	Modern Operating Systems by Andrew S. Tanenbaum	Blackboard & chalk
	Hypervisor microkernels, memory virtualization, I/O virtualization, Virtual appliances.	3		
	Virtual machines on multicore CPUs, Clouds.	2		
	Multiple Processor System: Multiprocessors, multicomputer, distributed systems.	4		
V	**Case Study on LINUX and ANDROID:** History of Unix and Linux, Linux Overview, Processes in Linux, Memory management in Linux, I/O in Linux, Linux file system, security in Linux.	4	Modern Operating Systems by Andrew S. Tanenbaum	Blackboard & chalk, PowerPoint Presentation
	Android	2		
	Case Study on Windows: History of windows through Windows 10, programming windows, system structure, processes and threads in windows.	3		

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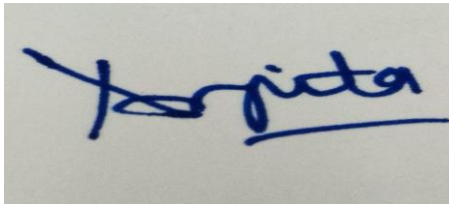
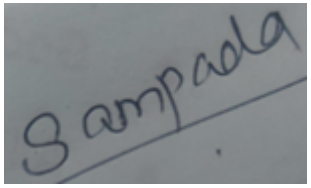
	Memory management, caching in windows, I/O in windows, Windows NT file system, Windows power management, Security in windows.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNANE DEPARTMENT: ____IT____

CLASS: _FYIT_B DIV SEMESTER: 1_ MONTH: July to Oct ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand communication**
- **Enhance communication**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT105 Communication Skills	The Seven Cs of Effective Communication: Completeness, Conciseness, Consideration, Concreteness, Clarity, Courtesy, Correctness	6	Professional Communication Aruna Koneru Tata McGraw Hill	BLACK BOARD AND CHALK

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Unit I	Understanding Business Communication: Nature and Scope of Communication, Non-verbal Communication, Cross-cultural communication, Technology-enabled Business Communication	6		
Unit II	Writing Business Messages and Documents: Business writing, Business Correspondence, Instructions Business Reports and Proposals, Career building and Resume writing.	6	Professional Communication Aruna Koneru Tata McGraw Hill	BLACK BOARD AND CHALK
	Developing Oral Communication Skills for Business: Effective Listening, Business Presentations and Public Speaking, Conversations, Interviews	6		
UNIT III	Developing Oral Communication Skills for Business: Meetings and Conferences, Group Discussions and Team Presentations, Team Briefing,	6	Professional Communication Aruna Koneru Tata McGraw Hill	BLACK BOARD AND CHALK
	Understanding Specific Communication Needs: Communication across Functional Areas	6		
UNIT IV	Understanding Specific Communication Needs: Corporate Communication, Persuasive Strategies in Business	12	Professional Communication Aruna Koneru Tata McGraw	BLACK BOARD AND CHALK

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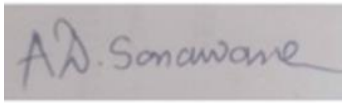
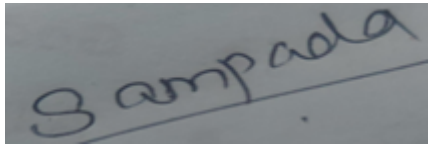
	Communication, Ethics in Business Communication, Business Communication Aids		Hill	
UNIT V	Presentation Process: Planning the presentations, executing the presentations, Impressing the audience by performing, Planning stage: Brainstorming, mind maps / concept maps, executing stage: chunking theory, creating outlines, Use of templates. Adding graphics to your presentation: Visual communication, Impress stage: use of font, colour, layout, Importance of practice and performance.	12	Professional Communication Aruna Koneru Tata McGraw Hill	BLACK BOARD AND CHALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SURBHI SHAH DEPARTMENT: IT-CS CLASS:FYIT-DIV B SEMESTER: SEM-1

MONTH: JUL-OCT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: The learners will be able to learn and understand the basic concepts of digital electronics with its applications and various laws to be implemented in area of electronics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper no :2 Title of paper: - Digital Electronics UNIT 1	**Number System:** Analog System, digital system, numbering system, binary number system, octal number system, hexadecimal number system, conversion from one number system to another, floating point numbers	4	Digital Electronics and Logic Design By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	BLACK BOARD AND CHALK
	weighted codes binary coded decimal, non-weighted codes Excess – 3 code, Gray code, Alphanumeric codes – ASCII Code, EBCDIC, ISCII Code, Hollerith Code, Morse Code, Teletypewriter (TTY)	3		
	Error detection and correction, Universal Product Code, Code conversion.	1		
	Binary Arithmetic Binary addition, Binary subtraction, Negative number representation, Subtraction using 1's complement and 2's complement	2		
	Binary multiplication and division, Arithmetic in octal number system, Arithmetic in hexadecimal number system BCD and Excess – 3 arithmetic	2		
UNIT 2	**Boolean Algebra and Logic Gates:-**Introduction, Logic (AND OR NOT), Boolean theorems, Boolean Laws, De Morgan's Theorem,	3	Digital Electronics and Logic Design	BLACK BOARD AND CHALK

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	Perfect Induction, Reduction of Logic expression using BooleanAlgebra,		By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	
	Deriving Boolean expression from given circuit, exclusive OR and Exclusive NOR gates, Universal Logic gates,	2		
	Implementation of other gates using universal gates, Input bubbled logic, Assertion level	1		
	Minterm, Maxterm and Karnaugh Maps: Introduction, minterms and sum of minterm form, maxterm and Product of maxterm form, Reduction technique using Karnaugh maps – 2/3/4/5/6 variable K-maps Grouping of variables in K-maps, K-maps for product of sum form, minimize Boolean expression using K-map and obtain K-map from Boolean expression, Quine Mc Cluskey Method.	6		
UNIT 3	**Combinational Logic Circuits:** Introduction, Multi-input, multi-output Combinational circuits, Code converters design and implementations	4	Digital Electronics: Principles, Devices and Applications by Anil K. Maini	BLACK BOARD AND CHALK
	Arithmetic Circuits: Introduction, Adder, BCD Adder, Excess – 3 Adder, Binary Subtractors, BCD Subtractor, Multiplier, Comparator.	4		
Unit 4	**Multiplexer, Demultiplexer, ALU, Encoder and Decoder:** Introduction, Multiplexer, Demultiplexer, Decoder, ALU, Encoders.	4	Modern Digital Electronics - R. P. Jain	BLACK BOARD AND CHALK
	Sequential Circuits: Flip-Flop: Introduction, Terminologies used, S-R flip-flop, D flip-fop, JK flip-flop, Race-around condition, Master – slave JK flip-flop, T flip-flop	4		
	conversion from one type of flip-flop to another, Application of flip-flops	3		

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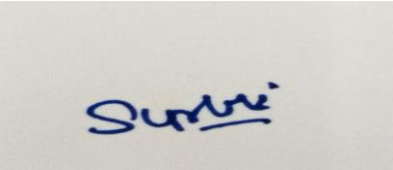
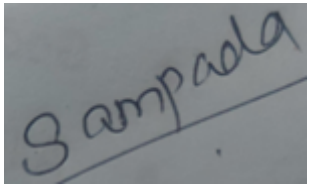
Unit 5	**Counters:** Introduction, Asynchronous counter, Terms related to counters, IC 7493 (4-bit binary counter), Synchronous counter,	3	Modern Digital Electronics - R. P. Jain	BLACK BOARD AND CHALK
	Bushing, Type T Design, Type JK Design, Presettable counter, IC 7490, IC 7492, Synchronous counter ICs, Analysis of counter circuits	4		
	Shift Register: Introduction, parallel and shift registers, serial shifting, serial–in serial–out, serial–in parallel–out , parallel–in parallel–out,	3		
	Ring counter, Johnson counter, Applications of shift registers,	1		
	Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 51





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics CLASS: FYIT SEMESTER: I

MONTH: Jully to Octomber ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : _Set,types of sets ,operation of sets, Russell's paradox,Logic ,Valid invalid statements,Converse,inverse,contrapositive statement,Truth

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT) Unit -I Set theory and Logic	Variables,The Language of sets ,The Language of relation and function.	02		
	Set Theory - Defination and the element method of proof,properties of sets Disproof,Algebric proofs, Boolean Algebra,Russells paradox and Halting problem	05	DM by kolman, DM by Techmax, DM by Kenneth Roshen	Black board and chalk
	The Logic of compound Statements - Logical form and logical equivalance ,Conditional Statements,Va	05		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: FYIT

SEMESTER: I MONTH: Jully to Octomber ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : ___Quantified, predicator, method of proof ,Euclidian Theroem,Quotient Reminder Theroem Rational Number,Indirect proof ,classical Theroem, floor and ceiling function.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT) Unit II Quantified Statement and method of proof	1) Quantified Statements: Predicates and quantified statements ,statement with multiple quantifiers,Arguments with quantified statements 2)Elementary Number Theory and Method of proof : Introductiontodirectproof,Rationalnumbers,Divisiblity,Division into cases and Quotient Reminder Theroem,Floor and ceiling Indirect 3) Argument : Contradiction and contrapositive ,Two Classical Theroem,Application in Algorithms	4+4+4=12	DM by kolman DM by Techmax DM by Roshen	Blackboard,chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Archana Malpathak DEPARTMENT: Mathematics CLASS: FYIT SEMESTER: I MONTH: Jully to Octomber

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : _Reletion its properties,Equivalance relation graphs,Trees.different types of graphs

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT Sem -I) Unit -IV Relation, Graph and Trees	1) Relation on sets - Inverse of Relation,Directed graph of a Relation,Reflexivity, Symmetry, Transitivity : Definations ,closure propertise of relation R,Matrix of a Relation,Digraph of a relation 2)Equivalance Relation,partial order relation Hasse Diagram, 3) Graphs and Trees :Definations and basic properties Trail,path,Circuits,Euler Circutis,Isomorphism of Graphs,Trees ,rooted Trees,Spanning trees,weighted graphs and weighted trees ,Minimum spanning Trees	4+4+4=12	DM by kolman DM by Roshen DM by Techmax	Blackboard and chalk

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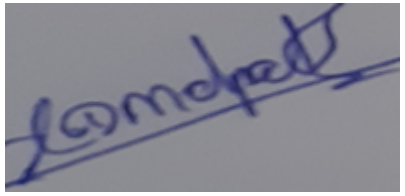
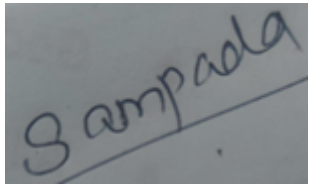
The Number of lecture allotated to unit =12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.I.T**

CLASS: **FYIT B** SEMESTER: **I** MONTH: **July-Oct** ACADEMIC YEAR: **2019-2020**

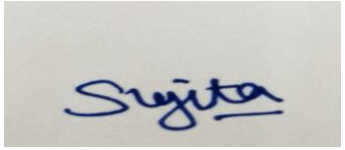
LEARNING OBJECTIVES:
The learners will be able to :

- Understand the basics of Object Oriented Programming.
- Since C being the basics for other learning high level language the student get the chance to understand the programming from its scratch.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I,3, Imperative Programming	Decision Making Within A Program, Conditions, Relational Operators, Logical Connectives, If Statement,	3	Let us C Yashwant P. Kanetkar, BPB publication	Chalk and Duster
	If-Else Statement, Loops: While Loop, Do While, For Loop. Nested Loops, Infinite Loops, Switch Statement	3	C for beginners Madhusudan Mothe X-Team Series 1st 2008	Chalk and Duster
	Functions: Overview, defining a function, accessing a function, passing arguments to a function, specifying argument data types, function prototypes,	3	Let us C Yashwant P. Kanetkar, BPB publication	Chalk and Duster
	recursion, modular programming and functions, standard library of c functions, prototype of a function: foo1lal parameter list, return type,	3	Let us C Yashwant P. Kanetkar, BPB publication	Chalk and Duster
I,5, Imperative Programming	Pointers: Fundamentals, declarations, Pointers Address Operators, Pointer Type Declaration	3	C for beginners Madhusudan Mothe X-Team Series 1st 2008	Chalk and Duster

	Pointer Assignment, Pointer Initialization, Pointer Arithmetic, Functions and Pointers, Arrays And Pointers, Pointer Arrays, passing functions to other functions	3	Let us C Yashwant P. Kanetkar, BPB publication	Chalk and Duster
	Structures and Unions: Structure Variables, Initialization, Structure Assignment, Nested Structure,	3	Let us C Yashwant P. Kanetkar, BPB publication	Chalk and Duster
	Structures and Functions, Structures and Arrays: Arrays of Structures, Structures Containing Arrays, Unions, Structures and pointers	3	Let us C Yashwant P. Kanetkar, BPB publication	Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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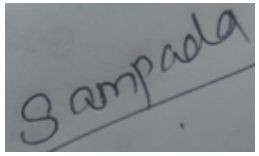

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS:FYIT-DIV B SEMESTER: SEM-1 MONTH: JUL-OCT ACADEMIC YEAR: 2019-2020

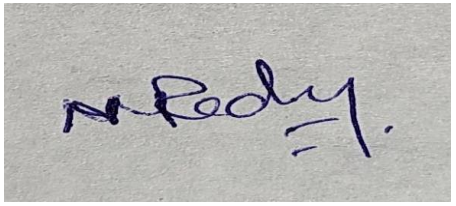
LEARNING OBJECTIVE/S:
The learners will be able to: develop logics which will help them to create programs, applications in C. Also by learning the basic programming constructs they can easily switch over to any other language in future.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1 IP UNIT 1	**Introduction**: Types of Programming languages, History, features and application. Simple program logic, program development cycle	3	Let us c-by Yashwant Kanetkar	BLACK BOARD AND CHALK
	pseudocode statements and flowchart symbols, sentinel value to end a program, programming and user environments, evolution of programming models., desirable program characteristics	3		
	Fundamentals: Structure of a program. Compilation and Execution of a Program,Character Set, identifiers and keywords, data types	3		
	constants, variables and arrays, declarations, expressions, statements, Variable definition,	3		

	symbolic constants			
UNIT 2	**Operators and Expressions:** Arithmetic operators, unary operators, relational and logical operators	3	Let us c-by Yashwant Kanetkar	BLACK BOARD AND CHALK
	assignment operators, assignment operators, the conditional operator, library functions.	3		
	Data Input and output: Single character input and output, entering input data	2		
	scanf function, printf function, gets and puts functions, interactive programming	3		
UNIT 4	**Program structure:** Storage classes, automatic variables, external variables, static variables,multifile programs	3	Let us c-by Yashwant Kanetkar	BLACK BOARD AND CHALK
	more library functions,Preprocessor: Features, #define and #include, Directives and Macros	3		

	Arrays: Definition, processing, passing arrays to functions, multidimensional arrays, arrays and strings.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 33



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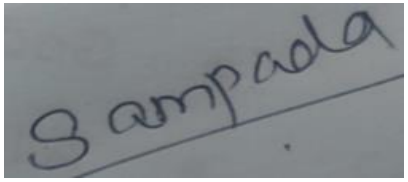

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT-CS

CLASS:FYIT-DIV B SEMESTER: SEM-I MONTH: JUL-SEP ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: Understand role of Operating System in terms of process, memory, file and I/O management. Apply and analysis the concept of a process, thread, mutual exclusion and deadlock. Evaluate performance of process scheduling algorithms and IPC. Apply and analysis the concepts of memory management techniques. Apply and analyze different techniques of file and I/O management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3, OS, UNIT-1	**Introduction:** What is an operating system? History of operating system, computer hardware, different operating systems, operating system concepts, system calls, operating system structure.	4	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	Blackboard & Chalk
	Processes and Threads: Processes, threads	4		
	Interprocess communication, scheduling, IPC problems.	4		
UNIT-2	**Memory Management**: No memory abstraction, memory abstraction: address spaces, virtual memory	3	Modern Operating Systems-by Andrew S.	Blackboard & Chalk
	page replacement algorithms, design issues for paging systems, implementation issues, segmentation.	3		

	File Systems: Files, directories, file system implementation, file-system management and optimization	4	Tanenbaum, Herbert Bos	
	MS-DOS file system, UNIX V7 file system, CD ROM file system.	2		
UNIT-3	**Input-Output:** Principles of I/O hardware, Principles of I/O software	4	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	Blackboard & Chalk
	I/O software layers, disks, clocks,user interfaces: keyboard, mouse, monitor, thin clients, power management	3		
	Deadlocks: Resources, introduction to deadlocks, the ostrich algorithm,	2		
	deadlock detection and recovery, deadlock avoidance, deadlock prevention, issues.	3		
UNIT-4	**Virtualization and Cloud**: History, requirements for virtualization, type 1 and 2 hypervisors, techniques for efficient virtualization, hypervisor microkernels	2	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	Blackboard & Chalk
	memory virtualization, I/O virtualization, Virtual appliances, virtual machines on multicore CPUs, Clouds.	2		
	Multiple Processor Systems : Multiprocessors	3		
	Multicomputers, Distributed systems.	5		

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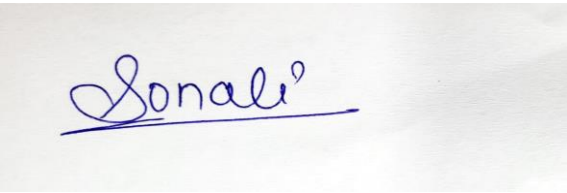
UNIT 5	**Case Study on LINUX and ANDROID:** History of Unix and Linux, Linux Overview, Processes in Linux	3	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	Blackboard & Chalk
	Memory management in Linux, I/O in Linux, Linux file system, security in Linux. Android.	3		
	Case Study on Windows: History of windows through Windows 10, programming windows, system structure, processes and threads in windows	3		
	memory management, caching in windows, I/O in windows, Windows NT file system, Windows power management, Security in windows.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:60



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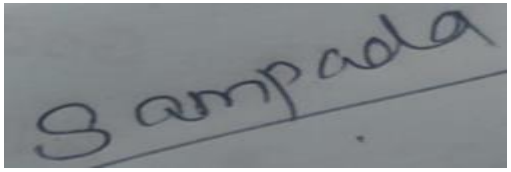

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics CLASS: FYIT SEMESTER: I

MONTH: Jully to Octomber ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : _Set,types of sets ,operation of sets, Russell's paradox,Logic ,Valid invalid statements,Converse,inverse,contrapositive statement,Truth

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT) Unit -I Set theory and Logic	Variables,The Language of sets ,The Language of relation and function.	02		
	Set Theory - Defination and the element method of proof,properties of sets Disproof,Algebric proofs, Boolean Algebra,Russells paradox and Halting problem	05	DM by kolman, DM by Techmax, DM by Kenneth Roshen	Black board and chalk
	The Logic of compound Statements - Logical form and logical equivalance ,Conditional Statements,Va	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: FYIT

SEMESTER: I MONTH: Jully to Octomber ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : ___Quantified, predicator, method of proof ,Euclidian Theroem,Quotient Reminder Theroem Rational Number,Indirect proof ,classical Theroem, floor and ceiling function.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT) Unit II Quantified Statement and method of proof	1) Quantified Statements: Predicates and quantified statements ,statement with multiple quantifiers,Arguments with quantified statements 2)Elementary Number Theory and Method of proof : Introductiontodirectproof,Rationalnumbers,Divisiblity,Division into cases and Quotient Reminder Theroem,Floor and ceiling Indirect 3) Argument : Contradiction and contrapositive ,Two Classical Theroem,Application in Algorithms	4+4+4=12	DM by kolman DM by Techmax DM by Roshen	Blackboard,chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12__

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: _Archana Malpathak DEPARTMENT: Mathematics CLASS: FYIT SEMESTER: I MONTH: Jully to Octomber

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : _Reletion its properties,Equivalance relation graphs,Trees.different types of graphs

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT Sem -I) Unit -IV Relation, Graph and Trees	1) Relation on sets - Inverse of Relation,Directed graph of a Relation,Reflexivity, Symmetry, Transitivity : Definations ,closure propertise of relation R,Matrix of a Relation,Digraph of a relation 2)Equivalance Relation,partial order relation Hasse Diagram, 3) Graphs and Trees :Definations and basic properties Trail,path,Circuits,Euler Circutis,Isomorphism of Graphs,Trees ,rooted Trees,Spanning trees,weighted graphs and weighted trees ,Minimum spanning Trees	4+4+4=12	DM by kolman DM by Roshen DM by Techmax	Blackboard and chalk

The Number of lecture allotated to unit =12

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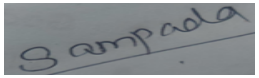

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYIT-C SEMESTER: SEM-1 MONTH: JULY-OCT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the process of communication and its effect on giving and receiving information.
- Learn about historical and theoretical developments in the field of communication.
- Apply effective communication skills in a variety of public and interpersonal settings.
- Develop analytical, research, and organizational skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
5 COMMUNICATION SKILLS UNIT 2	**Writing Business Messages and Documents:** Business writing, Business Correspondence,	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	BLACK BOARD AND CHALK
	Instructions Business Reports and Proposals, Career building and	4		
	Resume writing. **Developing Oral Communication Skills for Business:** Effective Listening, Business Presentations and	4		
	Public Speaking ,Conversations, Interviews	3		

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UNIT 3	**Developing Oral Communication Skills for Business:** Meetings and Conferences,	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	BLACK BOARD AND CHALK
	Group Discussions *and*	3		
	Team Presentations, Team Briefing,	3		
	Understanding Specific Communication Needs: Communication across Functional Areas	3		
UNIT 4	**Understanding Specific Communication Needs:** Corporate Communication,	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	BLACK BOARD AND CHALK
	Persuasive Strategies in Business Communication,	3		
	Ethics in Business Communication, Business Communication Aids	4		
UNIT 5	**Presentation Process:** Planning the presentations, executing the presentations, Impressing the audience by performing,	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	BLACK BOARD AND CHALK
	Planning stage: Brainstorming, mind maps / concept maps,	3		
	executing stage: chunking theory, creating outlines, Use of templates	3		

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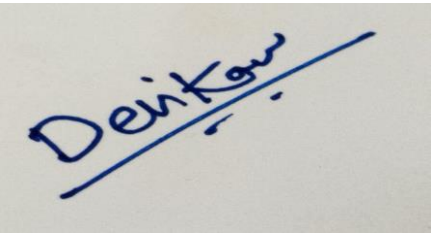
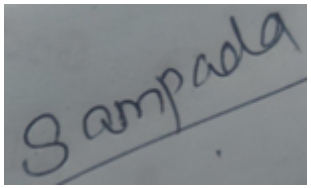
	Adding graphics to your presentation: Visual communication, Impress stage: use of font, colour, layout, Importance of practice and performance.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 48





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Sandesh Akre DEPARTMENT: Information Technology CLASS: FYIT

SEMESTER: I MONTH: July ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand seven C of communication.
- Courtesy in Communication
- You Attitude

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT105 Communication Skills UNIT - I	The Seven Cs of Effective Communication: Completeness, Conciseness, Consideration, Concreteness, Clarity, Courtesy, Correctness Understanding Business Communication: Nature and Scope of Communication, Non-verbal Communication, Cross-cultural communication, Technology-enabled Business	10	Business Communication, Edited by Meenakshi Raman and Prakash Singh	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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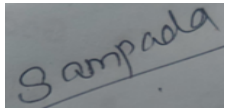

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS:FYIT-DIV C SEMESTER: SEM-1 MONTH: JUL-OCT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

- To able to learn and understand the basic concepts of digital electronics with its applications and various laws to be implemented in area of electronics.
- To think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT102 Digital Electronics UNIT 1	**Number System:** Analog System, digital system, numbering system, binary number system, octal number system, hexadecimal number system, conversion from one number system to another, floating point numbers	4	Digital Electronics and Logic Design By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	BLACK BOARD AND CHALK
	weighted codes binary coded decimal, non-weighted codes Excess – 3 code, Gray code, Alphanumeric codes – ASCII Code, EBCDIC, ISCII Code, Hollerith Code, Morse Code, Teletypewriter (TTY) Error detection and correction, Universal Product Code, Code conversion	4		
	Binary Arithmetic Binary addition, Binary subtraction, Negative number representation, Subtraction using 1's complement and 2's complement	2		
	Binary multiplication and division, Arithmetic in octal number system, Arithmetic in hexadecimal number system BCD and Excess – 3 arithmetic	2		
USIT102	**Boolean Algebra and Logic Gates:-**Introduction, Logic (AND OR NOT), Boolean theorems, Boolean Laws, De Morgan's Theorem,	3	Digital Electronics and Logic Design	BLACK BOARD AND CHALK

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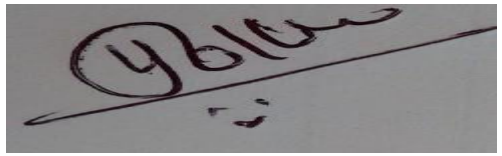
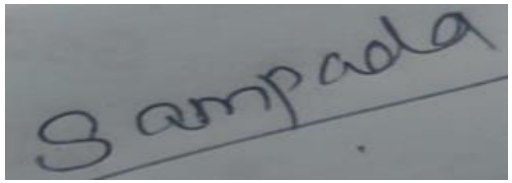
Digital Electronics UNIT 2	Perfect Induction, Reduction of Logic expression using Boolean Algebra,		By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	
	Deriving Boolean expression from given circuit, exclusive OR and Exclusive NOR gates, Universal Logic gates, Implementation of other gates using universal gates, Input bubbled logic, Assertion level, Implementation of other gates using universal gates, Input bubbled logic, Assertion level	3		
	Minterm, Maxterm and Karnaugh Maps: Introduction, minterms and sum of minterm form, maxterm and Product of maxterm form, Reduction technique using Karnaugh maps – 2/3/4/5/6 variable K-maps Grouping of variables in K-maps, K-maps for product of sum form, minimize Boolean expression using K-map and obtain K-map from Boolean expression, Quine Mc Cluskey Method.	6		
USIT102 Digital Electronics UNIT 3	**Combinational Logic Circuits:** Introduction, Multi-input, multi-output Combinational circuits, Code converters design and implementations	6	Digital Electronics: Principles, Devices and Applications by Anil K. Maini	BLACK BOARD AND CHALK
	Arithmetic Circuits: Introduction, Adder, BCD Adder, Excess – 3 Adder, Binary Subtractors, BCD Subtractor, Multiplier, Comparator.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYBSc(IT) DIV:B SEMESTER: IV MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Understand programming language and tools to develop computer programs and systems that are effective solutions to problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper:USIT401, unit:2, Title:Core Java	**Control Flow Statements:** The If…Else If…Else Statement, The Switch…Case Statement	3	Core Java 8 for Beginners , Java: The Complete Reference	Black Board
	Iterations: The While Loop, The Do … While Loop, The For Loop, The Foreach Loop, Labeled Statements, The Break And Continue Statements, The Return Statement	4	Core Java 8 for Beginners , Java: The Complete Reference	Black Board

	Classes: Types of Classes, Scope Rules, Access Modifier, Instantiating Objects From A Class, Initializing The Class Object And Its Attributes, Class Methods, Accessing A Method, Method Returning A Value, Method's Arguments, Method Overloading, Variable Arguments [Varargs], Constructors, this Instance, super Instance, Characteristics Of Members Of A Class, constants, this instance, static fields of a class, static methods of a class, garbage collection.	5	Core Java 8 for Beginners , Java: The Complete Reference	Black Board
Paper:USIT401, unit:3, Title:Core Java	**Inheritance:** Derived Class Objects, Inheritance and Access Control, Default Base Class Constructors, this and super keywords. Abstract Classes And Interfaces, Abstract Classes, Abstract Methods, Interfaces,	4	Core Java 8 for Beginners , Java: The Complete Reference	Black Board
	What Is An Interface? How Is An Interface Different From An Abstract Class?, Multiple Inheritance, Default Implementation, Adding New Functionality, Method Implementation, Classes V/s Interfaces, Defining An Interface, Implementing Interfaces.	4	Core Java 8 for Beginners , Java: The Complete Reference	Black Board
	Packages: Creating Packages, Default Package, Importing Packages, Using A Package.	4	Core Java 8 for Beginners , Java: The Complete Reference	Black Board

Paper:USIT401, unit:4, Title:Core Java	**Enumerations,Arrays:** Two Dimensional Arrays, Multi-Dimensional Arrays, Vectors, Adding Elements To A Vector, Accessing Vector Elements, Searching For Elements In A Vector, Working With The Size of The Vector.	3	Core Java 8 for Beginners , Java: The Complete Reference	Black Board
	Multithreading: the thread control methods, thread life cycle, the main thread, creating a thread, extending the thread class.	3	Core Java 8 for Beginners , Java: The Complete Reference	Black Board
	Exceptions: Catching Java Exceptions, Catching Run-Time Exceptions, Handling Multiple Exceptions, The finally Clause, The throws Clause	3	Core Java 8 for Beginners , Java: The Complete Reference	Black Board
	Byte streams: reading console input, writing console output, reading file, writing file, writing binary data, reading binary data, getting started with character streams, writing file, reading file	3	Core Java 8 for Beginners , Java: The Complete Reference	Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYIT-A SEMESTER: SEM-2 MONTH: DEC-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

- To gain an understanding why the green computing is instrumental for the environment.
- Identify key issues relevant to green computing and evaluate different approaches to these problems.
- Study of designing, engineering, manufacturing, using and disposing of computing devices in a way that reduces their environmental impact.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
5 GREEN COMPUTING UNIT 2	Minimizing Power Usage: Power Problems, Monitoring Power Usage, Servers, Low-Cost Options, Reducing Power Use, Data De-Duplication, Virtualization, Management, Bigger Drives, Involving the Utility Company,	3	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	BLACK BOARD AND CHALK
	Low Power Computers, PCs, Linux, Components, Servers, Computer Settings, Storage, Monitors, Power Supplies, Wireless Devices, Software.	3		
	Cooling: Cooling Costs, Power Cost, Causes of Cost, Calculating Cooling Needs, Reducing Cooling Costs, Economizers, On-Demand Cooling, HP's Solution, Optimizing Airflow, Hot Aisle/Cold Aisle, Raised Floors, Cable Management, Vapour Seal,	3		

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	Prevent Recirculation of Equipment Exhaust, Supply Air Directly to Heat Sources, Fans, Humidity, Adding Cooling, Fluid Considerations, System Design, Datacentre Design, Centralized Control, Design for Your Needs, Put Everything Together.	3		
UNIT 3	**Changing the Way of Work:** Old Behaviours, starting at the Top, Process Reengineering with Greening Mind, Analysing the Global Impact of Local Actions,	3	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	BLACK BOARD AND CHALK
	Steps: Water, Recycling, Energy, Pollutants, Teleworkers and Outsourcing, Telecommuting, Outsourcing, how to Outsource.	3		
	Going Paperless: Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Billing, Handheld Computers vs. the Clipboard,	3		
	Unified Communications, Intranets, What to Include, Building an Intranet, Microsoft Office SharePoint Server 2007, Electronic Data Interchange (EDI), Nuts and Bolts, Value Added Networks, Advantages, Obstacles.	3		
UNIT 5	**Greening Your Information Systems:** Initial Improvement Calculations, Selecting Metrics, Tracking Progress, Change Business Processes, Customer Interaction, Paper Reduction,	3	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	BLACK BOARD AND CHALK

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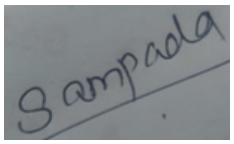
	Green Supply Chain, Improve Technology Infrastructure, Reduce PCs and Servers, Shared Services, Hardware Costs, Cooling.	3		
	Staying Green: Organizational Check-ups, Chief Green Officer, Evolution, Sell the CEO, SMART Goals, Equipment Check-ups, Gather Data, Tracking the data,	3		
	Baseline Data, Benchmarking, Analyse Data, Conduct Audits, Certifications, Benefits, Realities, Helpful Organizations.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT: CS

CLASS: FYIT-A SEMESTER: SEM-2 MONTH: DEC-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

- To gain an understanding why the green computing is instrumental for the environment.
- Identify key issues relevant to green computing and evaluate different approaches to these problems.
- Study of designing, engineering, manufacturing, using and disposing of computing devices in a way that reduces their environmental impact.

PAPER, TITLE, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5,GREEN COMPUTING, UNIT 1	**Overview and Issues:** Problems: Toxins, Power Consumption, Equipment Disposal, Company's Carbon Footprint: Measuring, Details, reasons to bother, Plan for the Future, Cost Savings: Hardware, Power.	4	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	BLACK BOARD AND CHALK
	Initiatives and Standards: Global Initiatives: United Nations, Basel Action Network, Basel Convention	4		
	North America: The United States, Canada, Australia, Europe, WEEE Directive, RoHS, National Adoption, Asia:	4		

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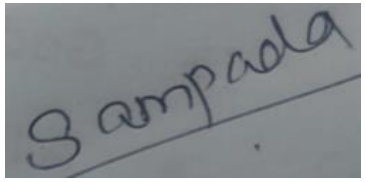
	Japan, China, Korea.			
UNIT 4	**Recycling:** Problems, China, Africa, Materials, Means of Disposal, Recycling, Refurbishing, Make the Decision, Life Cycle, from beginning to end, Life, Cost, Green Design, Recycling Companies, Finding the Best One, Checklist, Certifications	3	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	BLACK BOARD AND CHALK
	Hard Drive Recycling, Consequences, cleaning a Hard Drive, Pros and cons of each method, CDs and DVDs, good and bad about CD and DVDs disposal, Change the mind-set, David vs. America Online	3		
	Hardware Considerations: Certification Programs, EPEAT, RoHS, Energy Star, Computers, Monitors, Printers, Scanners, All-in-Ones, Thin Clients, Servers, Blade Servers, Consolidation, Products,	3		
	Hardware Considerations, Planned Obsolescence, Packaging, Toxins, Other Factors, Remote Desktop, Using Remote Desktop, Establishing a Connection, In Practice	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.IT SEMESTER: II MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand and realize the Interfacing of memory & various I/O devices with 8085 microprocessors.
- Understand and classify the instruction set of 8085 microprocessor and distinguish the use of different instructions and apply it in assembly language programming.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT-III	**Programming Techniques With Additional Instructions:** Programming Techniques: Looping, Counting and Indexing, Additional Data Transfer and 16-Bit Arithmetic Instructions, Arithmetic Instruction Related to Memory, Logic Operations: Rotate, Logics Operations: Compare, Dynamic Debugging.	5	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Blackboard, Chalk
	Counters and Time Delays: Counters and Time Delays, Illustrative Program: Hexadecimal Counter, Illustrative Program: zero-to-nine (Modulo Ten) Counter, Generating Pulse Waveforms, Debugging Counter and Time-Delay Programs.	4		Blackboard, Chalk
	Stacks and Sub-Routines: Stack, Subroutine, Restart, Conditional Call, Return Instructions, Advanced Subroutine concepts.	3		Blackboard, Chalk

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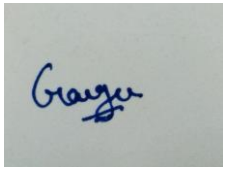
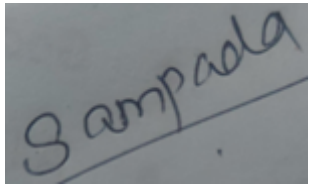
UNIT-IV	**Code Conversion, BCD Arithmetic, and 16-Bit Data Operations:** BCD-to-Binary Conversion, Binary-to-BCD Conversion, BCD-toSeven-Segment-LED Code Conversion, Binary-to-ASCII and ASCIIto-Binary Code Conversion, BCD Addition, BCD Subtraction, Introduction To Advanced Instructions and Applications, Multiplication, Subtraction With Carry.	5	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Blackboard, Chalk
	Software Development System and Assemblers: Microprocessors-Based Software Development system, Operating System and Programming Tools, Assemblers and Cross-Assemblers, Writing Program Using Cross Assemblers.	4		Blackboard, Chalk
	Interrupts: The 8085 Interrupt, 8085 Vectored Interrupts, Restart as S/W Instructions, Additional I/O Concepts and processes.	3		Blackboard, Chalk
UNIT-V	**The Pentium and Pentium Pro microprocessors:** Introduction, Special Pentium registers, Memory management, Pentium instructions, Pentium Pro microprocessor, Special Pentium Pro features.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Blackboard, Chalk
	Core 2 and later Microprocessors: Introduction, Pentium II software changes, Pentium IV and Core 2, i3, i5 and i7.	4		Blackboard, Chalk
	SUN SPARC Microprocessor: Architecture, Register file, data types and instruction format	4		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: FYIT SEMESTER: II MONTH: DECE to MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

To become familiar with the architecture and the instruction set of an Intel microprocessor

To study the Assembly language programming as well as the design of various types of digital and analog interfaces

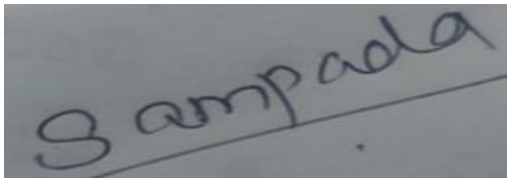
To understand the architecture of 8085 and 8051

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 MPA Unit 1	**Microprocessor, microcomputers, and Assembly Language:** Microprocessor, Microprocessor Instruction Set and Computer Languages, From Large Computers to Single-Chip Microcontrollers, Applications.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
	Microprocessor Architecture and Microcomputer System: Microprocessor Architecture and its operation's, Memory, I/O Devices, Microcomputer System, Logic Devices and Interfacing, Microprocessor-Based System Application.	4	Microprocessors Architecture, Programming and Applications with the 8085.	Black board & Chalk

			Ramesh Gaonkar PENRAM Fifth 2012	
	8085 Microprocessor Architecture and Memory Interface: Introduction, 8085 Microprocessor unit, 8085-Based Microcomputer, Memory Interfacing, Interfacing the 8155 Memory Segment, Illustrative Example: Designing Memory for the MCTS Project, Testing and Troubleshooting Memory Interfacing Circuit, 8085-Based Single-Board microcomputer.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
Paper-02 MPA Unit 2	**Interfacing of I/O Devices** : Basic Interfacing concepts, Interfacing Output Displays, Interfacing Input Devices, Memory Mapped I/O, Testing and Troubleshooting I/O Interfacing Circuits.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
	Introduction to 8085 Assembly Language Programming: The 8085 Programming Model, Instruction Classification, Instruction, Data and Storage, Writing assembling and Execution of a simple program, Overview of 8085 Instruction Set, Writing and Assembling Program.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
	Introduction to 8085 Instructions:	4	Microprocessors Architecture,	Black board & Chalk

	Data Transfer Operations, Arithmetic Operations, Logic Operation, Branch Operation, Writing Assembly Languages Programs, Debugging a Program		Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT SEMESTER: II MONTH: December to March ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -II Solutions of Algebraic and Transcendental Equations: Interpolation:	Solutions of Algebraic and Transcendental Equations: The Bisection Method, The Newton-Raphson Method, The Regula-falsi method, The Secant Method. Interpolation: Forward Difference, Backward Difference, Newton's Forward Difference Interpolation, Newton's Backward Difference Interpolation, Lagrange's Interpolation.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	ONLINE (GOOGLE CLASSROOM)

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT
SEMESTER: II MONTH: December to March ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -III Solution of simultaneous algebraic equations (linear) using iterative methods: Numerical differentiation and Integration:	Solution of simultaneous algebraic equations (linear) using iterative methods: Gauss-Jordan Method, Gauss-Seidel Method. Numerical differentiation and Integration: Numberical differentiation, Numerical integration using Trapezoidal Rule, Simpson's 1/3rd and 3/8th rules. Numerical solution of 1st and 2nd order differential equations: Taylor series, Euler's Method, Modified Euler's Method, Runge-Kutta Method for 1st and 2 nd Order Differential Equations.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	ONLINE (GOOGLE CLASSROOM)

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT SEMESTER: II MONTH: December to March
ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
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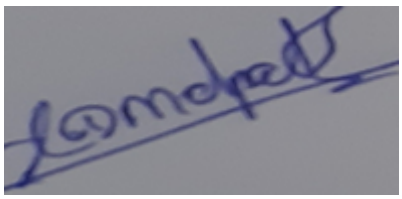
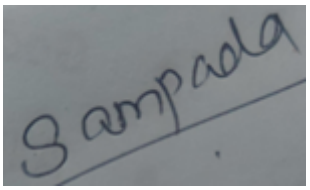
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -IV Least-Squares Regression: Linear Programming:	Least-Squares Regression: Linear Regression, Polynomial Regression, Multiple Linear Regression, General Linear Least Squares, Nonlinear Regression Linear Programming: Linear optimization problem, Formulation and Graphical solution, Basic solution and Feasible solution.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	ONLINE (GOOGLE CLASSROOM)





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Information Technology.

CLASS: F.Y.B.Sc. SEMESTER: II MONTH: Dec To March ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

- Object-oriented programming aims to implement real-world entities like inheritance, hiding, polymorphism, etc in programming. The main aim of OOP is to bind together the data and the functions that operate on them so that no other part of the code can access this data except that function.

The learners will be able to :

- To understand difference between object oriented and procedural oriented language.
- To understand advantages benefits and applications of object oriented language.
- To understand characteristics of object oriented language.
- To gain how to implement classes, methods and objects.
- To understand constant variables, data types, operators of C++ language.
- To understand use of constructor and destructor and using its implementation.
- To enable use of arrays, pointers and objects.
- To understand polymorphism and its types.
- To understand virtual function and pure virtual function / abstract function.
- To understand inheritance and its types with constructor.
- To understand run time error handling using try, catch and throw key words and benefits of it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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USIT201 Object Oriented Programming UNIT-I	**Object Oriented Methodology:** Introduction, Advantages and Disadvantages of Procedure Oriented Languages, what is Object Oriented? What is Object Oriented Development? Object Oriented Themes, Benefits and Application of OOPS.	6	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.
	Principles of OOPS: OOPS Paradigm, Basic Concepts of OOPS: Objects, Classes, Data Abstraction and Data Encapsulation, Inheritance, Polymorphism, Dynamic Binding, Message Passing	6		Black Board, Projector, PPT.
USIT201 Object Oriented Programming UNIT-II	**Classes and Objects:** Simple classes (Class specification, class members accessing), Defining member functions, passing object as an argument, Returning object from functions, friend classes, Pointer to object, Array of pointer to object.	8	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.
	Constructors and Destructors: Introduction, Default Constructor, Parameterized Constructor and examples, Destructors	4		
USIT201 Object Oriented Programming UNIT-III	**Polymorphism:** Concept of function overloading, overloaded operators, overloading unary and binary operators, overloading comparison operator, overloading arithmetic assignment operator, Data Conversion between objects and basic types,	7	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.
	Virtual Functions: Introduction and need, Pure Virtual Functions, Static Functions, this Pointer, abstract classes, virtual destructors.	5		
USIT201 Object Oriented Programming UNIT-IV	**Program development using Inheritance:** Introduction, understanding inheritance, Advantages provided by inheritance, choosing the access specifier, Derived class declaration, derived class constructors, class hierarchies, multiple inheritance, multilevel inheritance, containership, hybrid inheritance.	8	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.
	Exception Handling: Introduction, Exception Handling Mechanism, Concept of throw & catch with example	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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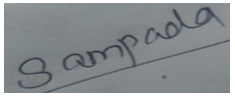

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS;FY BSc IT DIV-A(OOP) SEMESTER: SEM-2 MONTH:DEC-MAR ACADEMIC YEAR:2019-2020

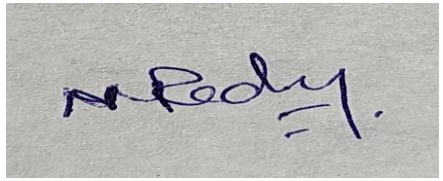
LEARNING OBJECTIVE/S:

The learners will be able to :

- To learn how inheritance and virtual functions implement dynamic binding with polymorphism.
- To learn how to design and implement generic classes with C++ templates.
- To learn how to use exception handling in C++ programs

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 1 OOP UNIT 5	**Templates:** Introduction, Function Template and examples,	2	Object Oriented Programming with C++ BY E. Balagurusamy	BLACK BOARD AND CHALK
	Class Template and examples.	2		
	Working with Files: Introduction, File Operations,	2		
	Various File Modes,	2		
	File Pointer and their Manipulation	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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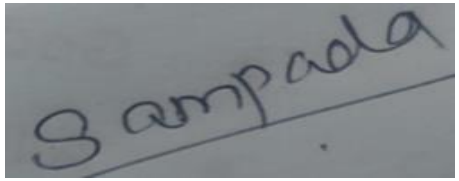

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE **DEPARTMENT**: ____IT____

CLASS: FYIT_A DIV **SEMESTER**: 2 **MONTH**: Dec to March **ACADEMIC YEAR:** 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand HTML**
- **Understand JavaScript**
- **Understand how server-side programming works on the web.**
- **PHP Basic syntax for variable types and calculations.**
- **Creating conditional structures**
- **Storing data in arrays**
- **Using PHP built-in functions and creating custom functions**
- **Understanding POST and GET in form submission.**
- **How to receive and process form submission data.**
- **Reading and writing cookies.**
- **Security tips (i.e. SQL Injection)**
- **Create a database in phpMyAdmin.**
- **Read and process data in a MySQL database. Students will learn JavaScript's role in websites and web apps.**
- **Students will be introduced to basic CS concepts**
- **Students will learn basic programming structures such as: variables, functions arrays etc.**
- **Students will learn how JavaScript works with HTML and CSS.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT203 Web Programming Unit I	**Internet and the World Wide Web:** What is Internet? Introduction to internet and its applications, E-mail, telnet, FTP, e-commerce, video conferencing, e-business. Internet service providers, domain name server, internet address, World Wide Web (WWW): World Wide Web and its evolution, uniform resource locator (URL), browsers – internet explorer, Netscape navigator, opera, Firefox, chrome, Mozilla. search engine, web saver – apache, IIS, proxy server, HTTP protocol	6	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	BLACK BOARD AND CHALK
	HTML5: Introduction, Why HTML5? Formatting text by using tags, using lists and backgrounds, Creating hyperlinks and anchors. Style sheets, CSS formatting text using style sheets, formatting paragraphs using style sheets.	6		

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Unit II	**HTML5 Page layout and navigation:** Creating navigational aids: planning site organization, creating text based navigation bar, creating graphics based navigation bar, creating graphical navigation bar, creating image map, redirecting to anotherURL, creating division based layouts: HTML5 semantic tags, creating divisions, creating HTML5 semantic layout, positioning and formatting divisions	6	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	BLACK BOARD AND CHALK
	HTML5 Tables, Forms and Media: Creating tables: creating simple table, specifying the size of the table, specifying the width of the column, merging table cells, using tables for page layout, formatting tables: applying table borders, applying background and foreground fills, changing cell padding, spacing and alignment, creating user forms: creating basic form, using check boxes and option buttons, creating lists, additional input types in HTML5, Incorporating sound and video: audio and video in HTML5, HTML multimedia basics, embedding video clips, incorporating audio on web page	6		

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UNIT III	Java Script: Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security,	2	JavaScript 2.0: The Complete Reference BY Thomas Powell and Fritz Schneider	BLACK BOARD AND CHALK
	Operators: Assignment Operators, Comparison Operators, Arithmetic Operators, % (Modulus), ++(Increment), --(Decrement), -(Unary Negation), Logical Operators, Short-Circuit Evaluation, String Operators, Special Operators, ?: (Conditional operator), , (Comma operator), delete, new, this, void	3		
	Statements: Break, comment, continue, delete, do...while, export, for, for...in, function, if...else, import, labelled, return, switch, var, while, with	2		
	.Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, regExp Document and its associated objects: document, Link, Area, Anchor, Image, Applet, Layer	2		
	Events and Event Handlers : General Information about Events, Defining Event Handlers, event, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp	3		

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UNIT IV	PHP: Why PHP and MySQL? Server-side scripting, PHP syntax and variables, comments, types,	3	PHP Project for Beginners BY SharanamShah, Vaishali	BLACK BOARD AND CHALK
	control structures, branching, looping, termination, functions, passing information with PHP, GET, POST,	3		
	formatting form variables, superglobal arrays, strings and string functions	3		
	regular expressions, arrays, number handling, basic PHP errors/problems	3		
UNIT V	Advanced PHP and MySQL : PHP/MySQL Functions, Integrating web forms and databases,	3	PHP Project for Beginners BY SharanamShah, Vaishaliz	BLACK BOARD AND CHALK
	Displaying queries in tables, Building Forms from queries,	3		
	String and Regular Expressions, Sessions,	3		
	Cookies and HTTP, E-Mail	3		

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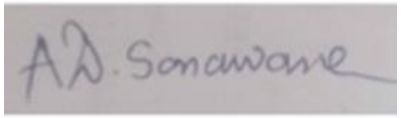
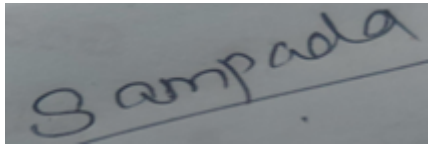
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE **DEPARTMENT**: ____IT____

CLASS: FYIT_B DIV **SEMESTER**: 2 **MONTH**: Dec to March **ACADEMIC YEAR:** 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand Green Computing**
- **Understand Problems of green Computing**
- **Understand how to solve problem properly**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT205 Green Computing Unit 1	Overview and Issues**:** Problems: Toxins, Power Consumption, Equipment Disposal, Company's Carbon Footprint: Measuring, Details, reasons to bother, Plan for the Future, Cost Savings: Hardware, Power.	6	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter	Blackboard and chalk

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	Initiatives and Standards: Global Initiatives: United Nations, Basel Action Network, Basel Convention, North America: The United States, Canada, Australia, Europe, WEEE Directive, RoHS, National Adoption, Asia: Japan, China, Korea	6		
Unit 2	Minimizing Power Usage: Power Problems, Monitoring Power Usage, Servers, Low-Cost Options, Reducing Power Use, Data De-Duplication, Virtualization, Management, Bigger Drives, Involving the Utility Company, LowPower Computers, PCs, Linux, Components, Servers, Computer Settings, Storage, Monitors, Power Supplies, Wireless Devices, Software.	6	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter	Blackboard and chalk
	Cooling: Cooling Costs, Power Cost, Causes of Cost, Calculating Cooling Needs, Reducing Cooling Costs, Economizers, On-Demand Cooling, HP's Solution, Optimizing Airflow, Hot Aisle/Cold Aisle, Raised	6		

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	Floors, Cable Management, Vapour Seal, Prevent Recirculation of Equipment Exhaust, Supply Air Directly to Heat Sources, Fans, Humidity, Adding Cooling, Fluid Considerations, System Design, Datacentre Design, Centralized Control, Design for Your Needs, Put Everything Together.			
UNIT 3	Changing the Way of Work: Old Behaviours, starting at the Top, Process Reengineering with Green in Mind, Analysing the Global Impact of Local Actions, Steps: Water, Recycling, Energy, Pollutants, Teleworkers and Outsourcing, Telecommuting, Outsourcing, how to Outsource.	6	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter	Blackboard and chalk
	Going Paperless: Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Billing, Handheld Computers vs. the Clipboard, Unified Communications, Intranets, What to Include,	6		

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	Building an Intranet, Microsoft Office SharePoint Server 2007, Electronic Data Interchange (EDI), Nuts and Bolts, Value Added Networks, Advantages, Obstacles.			
UNIT 4	Recycling: Problems, China, Africa, Materials, Means of Disposal, Recycling, Refurbishing, Make the Decision, Life Cycle, from beginning to end, Life, Cost, Green Design, Recycling Companies, Finding the Best One, Checklist, Certifications, Hard Drive Recycling, Consequences, cleaning a Hard Drive, Pros and cons of each method, CDs and DVDs, good and bad about CD and DVDs disposal, Change the mind-set, David vs. America Online	6	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter	Blackboard and chalk
	Hardware Considerations: Certification Programs, EPEAT, RoHS, Energy Star, Computers, Monitors, Printers, Scanners, All-in-Ones, Thin Clients, Servers, Blade Servers, Consolidation, Products, Hardware Considerations, Planned	6		

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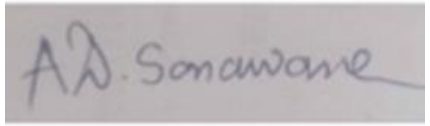
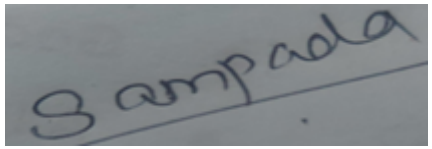
	Obsolescence, Packaging, Toxins, Other Factors, Remote Desktop, Using Remote Desktop, Establishing a Connection, In Practice			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 48





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BRIJESH YATINDRA JOSHI **DEPARTMENT: INFORMATION TECHNOLOGY**

CLASS: _FYIT DIV -A **SEMESTER: II** **MONTH: Dec to March** **ACADEMIC YEAR: 2019-2020**

Learning Objectives

1. Able to understand initial improvement calculations
2. Understand to select appropriate metrics
3. Understand the concept of change business process
4. Understand the concept of hardware cost
5. Understand the process of organizational check ups
6. Understanding Audit process

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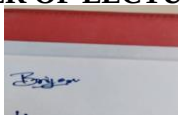
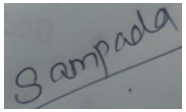
PAPER ,UNIT , TITLE	SUB TOPICS	NO OF LECTURES ALLOCATED	REFERENCE/S	TEACHING METHODS /ICT TOOLS USED
USIT205 **Green Computing** UNIT V	Greening Your Information Systems: Initial Improvement Calculations, Selecting Metrics, Tracking Progress, Change Business Processes, Customer Interaction, Paper Reduction, Green Supply Chain, Improve Technology Infrastructure, Reduce PCs and Servers, Shared Services, Hardware Costs, Cooling.	6	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter McGraw Hill	BLACK BOARD AND CHALK
	Staying Green: Organizational Check-ups, Chief Green Officer, Evolution, Sell the CEO, SMART Goals, Equipment Check-ups, Gather Data, Tracking the data, Baseline Data, Benchmarking, Analyse Data, Conduct Audits, Certifications, Benefits, Realities, Helpful Organizations.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: IT

CLASS: FY BSc IT SEMESTER:II MONTH: DEC-MAR ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to:

1. To learn about how computer systems work and underlying principles.
2. To understand the basics of digital electronics needed for computers.
3. To understand the basics of instruction set architecture for reduced and complex instruction sets.
4. To understand the basics of processor structure and operation.
5. To understand how data is transferred between the processor and I/O devices.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 MPA UNIT 2	Basic Interfacing concepts, Interfacing Output Displays, Interfacing Input Devices, Memory Mapped I/O, Testing and Troubleshooting I/O Interfacing Circuits.	3	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	Black board and chalk
	The 8085 Programming Model, Instruction Classification, Instruction, Data and Storage, Writing assembling and Execution of a simple Program.	3		
	Overview of 8085 Instruction Set, Writing and Assembling Program, Data Transfer Operations.	2		

	Arithmetic Operations, Logic Operation, Branch Operation, Writing Assembly Languages Programs, Debugging a Program.	4		
UNIT 3	Programming Techniques: Looping, Counting and Indexing, Additional Data Transfer and 16-Bit Arithmetic Instructions, Arithmetic Instruction Related to Memory.	3	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	Black board and chalk
	Logic Operations: Rotate, Logics Operations: Compare, Dynamic Debugging, Counters and Time Delays.	3		
	Illustrative Program: Hexadecimal Counter, zero-to-nine (Modulo Ten) Counter, Generating Pulse Waveforms, Debugging Counter and Time-Delay Programs.	3		
	Stack Subroutine, Restart, Conditional Call, Return Instructions, Advanced Subroutine concepts.	3		
UNIT 4	BCD-to-Binary Conversion, Binary-to-BCD Conversion, BCD-to-Seven-Segment-LED Code Conversion, Binary-to-ASCII and ASCII-to-Binary Code Conversion,	4	Microprocessors Architecture, Programming and Applications with t 8085 by Ramesh Gaonkar	Black board and chalk
	BCD Addition, BCD Subtraction, Introduction To Advanced Instructions and Applications, Multiplication, Subtraction With Carry.	2		
	Microprocessors-Based Software Development system, OS and Programming Tools, Assemblers and Cross-Assemblers, Writing Program Using Cross Assemblers.	3		

	The 8085 Interrupt, 8085 Vectored Interrupts, Restart as S/W Instructions, Additional I/O Concepts and processes.	3		
UNIT 5	Introduction, Special Pentium registers, Memory management, Pentium instructions, Pentium Pro microprocessor.	3	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	Black board and chalk
	Special Pentium Pro features, Introduction, Pentium II software changes.	3		
	Pentium IV and Core 2, i3, i5 and i7.	3		
	Architecture, Register file, data types and instruction format	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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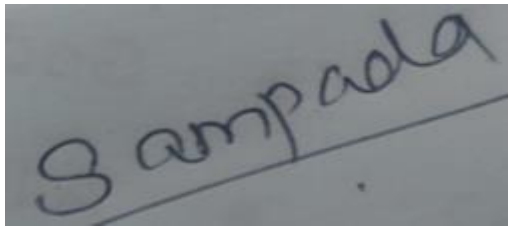

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: IT CLASS: FYIT MONTH: Dec-March

ACADEMIC YEAR:2019-20

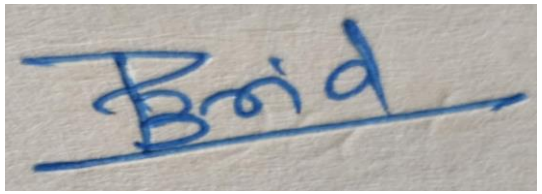
LEARNING OBJECTIVE/S:
The learners will be able to :

- The learners will be able to understand the Microprocessor architecture and its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Microprocessor Architecture Paper 2 Course Code: USIT202 Unit 1	**Microprocessor, microcomputers, and Assembly Language:** Microprocessor, Microprocessor Instruction Set and Computer Languages, From Large Computers to Single-Chip Microcontrollers, Applications.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonka	Black board & Chalk
	Microprocessor Architecture and Microcomputer System: Microprocessor Architecture and its operation's, Memory, I/O Devices, Microcomputer System, Logic Devices and Interfacing, Microprocessor-Based System Application.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonka	Black board & Chalk
	8085 Microprocessor Architecture and Memory Interface: Introduction, 8085 Microprocessor unit, 8085-Based Microcomputer, Memory Interfacing, Interfacing the 8155 Memory Segment, Illustrative Example: Designing Memory	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonka	Black board & Chalk

	for the MCTS Project, Testing and Troubleshooting Memory Interfacing Circuit, 8085-Based Single-Board microcomputer			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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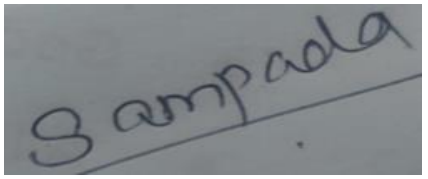

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT SEMESTER: II MONTH: December to March ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -II Solutions of Algebraic and Transcendental Equations: Interpolation:	Solutions of Algebraic and Transcendental Equations: The Bisection Method, The Newton-Raphson Method, The Regula-falsi method, The Secant Method. Interpolation: Forward Difference, Backward Difference, Newton's Forward Difference Interpolation, Newton's Backward Difference Interpolation, Lagrange's Interpolation.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	ONLINE (GOOGLE CLASSROOM)

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT
SEMESTER: II MONTH: December to March ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -III Solution of simultaneous algebraic equations (linear) using iterative methods: Numerical differentiation and Integration:	Solution of simultaneous algebraic equations (linear) using iterative methods: Gauss-Jordan Method, Gauss-Seidel Method. Numerical differentiation and Integration: Numberical differentiation, Numerical integration using Trapezoidal Rule, Simpson's 1/3rd and 3/8th rules. Numerical solution of 1st and 2nd order differential equations: Taylor series, Euler's Method, Modified Euler's Method, Runge-Kutta Method for 1st and 2 nd Order Differential Equations.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	ONLINE (GOOGLE CLASSROOM)

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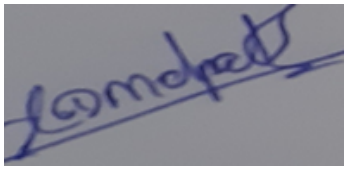
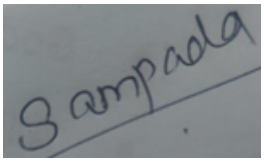
NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT SEMESTER: II MONTH: December to March
ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -IV Least-Squares Regression: Linear Programming:	Least-Squares Regression: Linear Regression, Polynomial Regression, Multiple Linear Regression, General Linear Least Squares, Nonlinear Regression Linear Programming: Linear optimization problem, Formulation and Graphical solution, Basic solution and Feasible solution.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	ONLINE (GOOGLE CLASSROOM)





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4

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS:FY BSc IT DIV-B(OOPS) SEMESTER: SEM-2 MONTH:DEC-MAR ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

- The learners will be able to :
- To understand how C++ improves C with object-oriented features.
- To learn how to write inline functions for efficiency and performance.
- To learn the syntax and semantics of the C++ programming language.
- To learn how to design C++ classes for code reuse.
- To learn how to implement copy constructors and class member functions.
- To understand the concept of data abstraction and encapsulation.
- To learn how to overload functions and operators in C++.
- To learn how containment and inheritance promote code reuse in C++.
- To learn how inheritance and virtual functions implement dynamic binding with polymorphism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER1 OOP UNIT 1	**Object Oriented Methodology**: Introduction, Advantages and Disadvantages of Procedure Oriented Languages,	3	Object Oriented Programming with C++ BY E. Balagurusamy	BLACK BOARD AND CHALK
	what is Object Oriented? What is Object Oriented Development? Object Oriented Themes, Benefits and Application of OOPS.	3		
	Principles of OOPS: OOPS Paradigm, Basic Concepts of OOPS: Objects, Classes, Data Abstraction and Data Encapsulation,	3		
	Inheritance, Polymorphism, Dynamic Binding	3		

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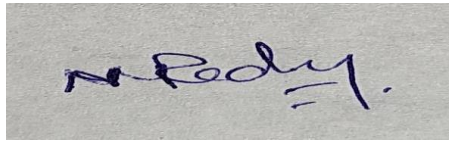
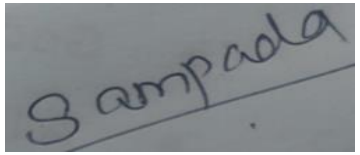
UNIT 3	**Polymorphism:** Concept of function overloading, overloaded operators,	3	Object Oriented Programming with C++ BY E. Balagurusamy	BLACK BOARD AND CHALK
	overloading unary and binary operators, overloading comparison operator, overloading arithmetic assignment operator, Data Conversion between objects and basic types,	3		
	Virtual Functions: Introduction and need, Pure Virtual Functions,	3		
	Static Functions, this Pointer, abstract classes, virtual	3		
UNIT 4	**Program development using Inheritance:** Introduction, understanding inheritance, Advantages provided by inheritance,	3	Object Oriented Programming with C++ BY E. Balagurusamy	BLACK BOARD AND CHALK
	choosing the access specifier, Derived class declaration, derived class constructors, class hierarchies,	3		
	multiple inheritance, multilevel inheritance, containership, hybrid inheritance.	3		
	Exception Handling: Introduction, Exception Handling Mechanism	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT: CS

CLASS: FYIT-DIV B SEMESTER: SEM-2 MONTH: DEC-MARCH ACADEMIC YEAR: 2019-2020

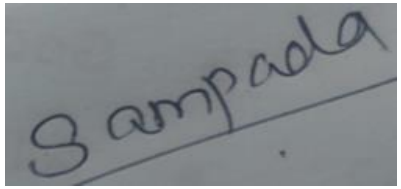
LEARNING OBJECTIVE/S:
The learners will be able to:

- Perform object oriented programming to develop solution to problems demonstrating usage of control structures, modularity, I/O and other standard language constructs.
- Demonstrate adeptness of object oriented programming to develop solution to problem demonstration usage of data abstraction, encapsulation, and inheritance.

PAPER, TITLE,UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1,Object oriented programming ,UNIT 2	**Classes and Objects:** Simple classes (Class specification, class members accessing), Defining member functions, passing object as an argument	4	Object Oriented Programming with C++ by E.Balagurusamy	BLACK BOARD AND CHALK
	Returning object from functions, friend classes, Pointer to object, Array of pointer to object.	4		
	Constructors and Destructors: Introduction, Default Constructor, Parameterized Constructor and examples, Destructor	4		

UNIT 5	**Templates:** Introduction, Function Template and examples,	3	Object Oriented Programming with C++ by E.Balagurusamy	BLACK BOARD AND CHALK
	Class Template and examples.	3		
	Working with Files: Introduction, File Operations, Various File Modes,	4		
	File Pointer and their Manipulation	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.IT SEMESTER: II MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

- design dynamic websites that meet specified needs and interests.
- write well-structured, easily maintained, standards-compliant, accessible HTML code.
- use JavaScript to add dynamic content to pages.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III UNIT-II	**HTML5 Page layout and navigation:** Creating navigational aids: planning site organization, creating text based navigation bar, creating graphics based navigation bar, creating graphical navigation bar, creating image map, redirecting to another URL,	3	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	Blackboard, Chalk
	creating division based layouts: HTML5 semantic tags, creating divisions, creating HTML5 semantic layout, positioning and formatting divisions.	2		Blackboard, Chalk
	HTML5 Tables, Forms and Media: Creating tables: creating simple table, specifying the size of the table, specifying the width of the column, merging table cells, using tables for page layout,	2		Blackboard, Chalk
	formatting tables: applying table borders, applying background and foreground fills, changing cell padding, spacing and alignment,	2		Blackboard, Chalk

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	creating user forms: creating basic form, using check boxes and option buttons, creating lists, additional input types in HTML5, Incorporating sound and video: audio and video in HTML5, HTML multimedia basics, embedding video clips, incorporating audio on web page	3		Blackboard, Chalk
UNIT-III	**Java Script:** Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security,	1	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	Blackboard, Chalk
	Operators: Assignment Operators, Comparison Operators, Arithmetic Operators, % (Modulus), ++(Increment), --(Decrement), -(Unary Negation), Logical Operators, Short-Circuit Evaluation, String Operators, Special Operators, ?: (Conditional operator), , (Comma operator), delete, new, this, void	2		Blackboard, Chalk
	Statements: Break, comment, continue, delete, do...while, export, for, for...in, function, if...else, import, labelled, return, switch, var, while, with	2		Blackboard, Chalk
	Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, regExp	2		Blackboard, Chalk
	Document and its associated objects: document, Link, Area, Anchor, Image, Applet, Layer	2		Blackboard, Chalk
	Events and Event Handlers : General Information about Events, Defining Event Handlers, event, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp, onMove, onReset, onResize, onSelect, onSubmit, onUnload	3		Blackboard, Chalk
UNIT-V	**Advanced PHP and MySQL :** PHP/MySQL Functions, Integrating web forms and databases,	5		Blackboard, Chalk

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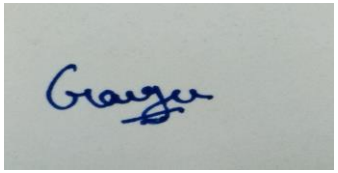
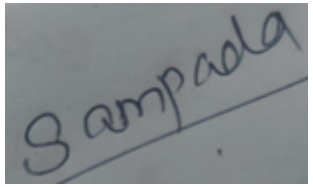
	Displaying queries in tables, Building Forms from queries, String and	3	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	Blackboard, Chalk
	Regular Expressions, Sessions, Cookies and HTTP, E-Mail	4		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SURBHI SHAH DEPARTMENT: IT-CS

CLASS:FYIT-DIV B SEMESTER: SEM-II MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: learn advanced html programming with its basic concepts and to create database with the help of php and mysql.and to be capable of managing complex IT projects with consideration of the human, financial and environmental factors. to work effectively as a part of a team to achieve a common stated goal.to adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:-III TITLE:- Web Programming UNIT 1	**Internet and the World Wide Web:** What is Internet? Introduction to internet and its applications, E-mail, telnet, FTP, e-commerce, video conferencing, e-business.	2	Web Design The Complete Reference By Thomas Powell And HTML5 Step by Step by Faithe Wempen	BLACK BOARD AND CHALK
	Internet service providers, domain name server, internet address, World Wide Web (WWW): World Wide Web and its evolution, uniform resource locator (URL), browsers – internet explorer, Netscape navigator, opera, Firefox,	2		
	chrome, Mozilla. search engine, web saver – apache, IIS, proxy server, HTTP protocol	2		
	HTML5: Introduction, Why HTML5? Formatting text by using tags,	3		
	using lists and backgrounds, Creating hyperlinks and anchors. Style sheets, CSS formatting text using style sheets, formatting paragraphs using style sheets.	3		

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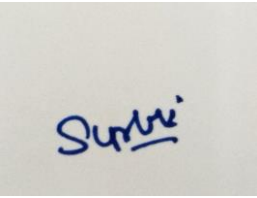
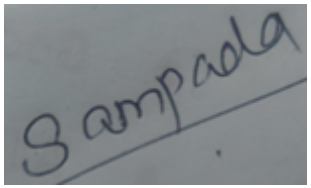
UNIT 4	**PHP:** Why PHP and MySQL? Server-side scripting, PHP syntax and variables, comments,	3	PHP 5.1 for Beginners By Ivan Bayross Sharanam Shah,	BLACK BOARD AND CHALK
	types, control structures, branching, looping, termination, functions,	3		
	passing information with PHP, GET, POST, formatting form variables, superglobal arrays,	3		
	strings and string functions, regular expressions, arrays, number handling, basic PHP errors/problems	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.IT SEMESTER: II MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

- Identify IT Infrastructure Management and Green Data Centre Metrics for software development
- Illustrate various green IT services and its roles.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-V Unit-II	**Minimizing Power Usage:** Power Problems, Monitoring Power Usage, Servers, Low-Cost Options, Reducing Power Use, Data De-Duplication, Virtualization, Management, Bigger Drives, Involving the Utility Company, LowPower Computers, PCs, Linux, Components, Servers, Computer Settings, Storage, Monitors, Power Supplies, Wireless Devices, Software.	5	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter McGraw Hill 2008	Blackboard, Chalk
	Cooling: Cooling Costs, Power Cost, Causes of Cost, Calculating Cooling Needs, Reducing Cooling Costs, Economizers, On-Demand Cooling, HP's Solution, Optimizing Airflow, Hot Aisle/Cold Aisle, Raised Floors, Cable Management,	3		Blackboard, Chalk
	Vapour Seal, Prevent Recirculation of Equipment Exhaust, Supply Air Directly to Heat Sources, Fans, Humidity, Adding Cooling, Fluid Considerations, System Design, Datacentre Design, Centralized Control, Design for Your Needs, Put Everything Together.	4		Blackboard, Chalk

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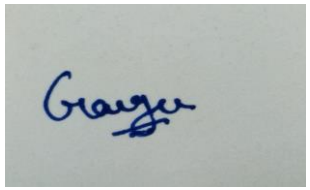
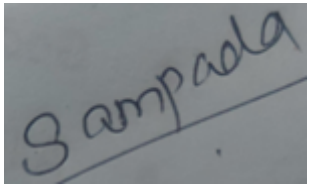
Unit-IV	**Recycling:** Problems, China, Africa, Materials, Means of Disposal, Recycling, Refurbishing, Make the Decision, Life Cycle, from beginning to end, Life, Cost, Green Design,	3	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter McGraw Hill 2008	Blackboard, Chalk
	Recycling Companies, Finding the Best One, Checklist, Certifications, Hard Drive Recycling, Consequences, cleaning a Hard Drive, Pros and cons of each method, CDs and DVDs, good and bad about CD and DVDs disposal, Change the mind-set, David vs. America Online	3		Blackboard, Chalk
	Hardware Considerations: Certification Programs, EPEAT, RoHS, Energy Star, Computers, Monitors, Printers, Scanners, All-in-Ones, Thin Clients, Servers, Blade Servers, Consolidation, Products, Hardware Considerations, Planned Obsolescence, Packaging, Toxins, Other Factors, Remote Desktop, Using Remote Desktop, Establishing a Connection, In Practice	6		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI_ DEPARTMENT: _____BSC-IT___ CLASS: __FYIT___ SEMESTER: II

MONTH: ____December to March_____ ACADEMIC YEAR: ____2019-20__

LEARNING OBJECTIVE/S:
The learners will be able to:

Get knowledge that how to disposed e-wastages and to recycle the product and save our environment. To be capable of managing complex IT projects with consideration of the human, financial and environmental factors.

TITLE, PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Green Computing USIT205 Unit 1	**Introduction**: Overview and Issues: Problems: Toxins, Power Consumption, Equipment .	3	Toby Velte, Anthony Velte, Robert Elsenpeter	Chalk, Blackboard
	Disposal Company's Carbon Footprint: Measuring, Details, reasons to bother, Plan for the Future,	3		
	Cost Savings: Hardware, Power. Initiatives and Standards:	3		
	Global Initiatives: United Nations, Basel Action Network, Basel Convention, North America: The United States, Canada, Australia, Europe, WEEE Directive, RoHS, National Adoption, Asia: Japan.	3		

Green Computing USIT205 Unit 3	**Changing the Way of Work: Old** Behaviours, starting at the Top, Process Reengineering with Green in Mind, Analysing the Global Impact of Local Actions, Steps: Water, Recycling, Energy, Pollutants, Teleworkers and Outsourcing, Telecommuting, Outsourcing, how to Outsource. Going Paperless: Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Include, Building an Intranet, Microsoft Office Interchange (EDI), Nuts and Bolts.	4 2 3 3	Toby Velte, Anthony Velte, Robert Elsenpeter	Chalk, Blackboard
Green Computing USIT205 Unit 5	**Greening Your Information Systems**: Initial Improvement Calculations, Selecting Metrics, Customer Interaction, Paper Reduction, Green Supply Chain, Improve Technology Infrastructure, Reduce PCs and Servers, Shared Services, Hardware Costs, Cooling. Staying Green: Organizational Check-ups. Chief Green Officer, Evolution, Sell the CEO, SMART Goals, Equipment Check-ups, Gather Data, Tracking the data, Baseline Data, Benchmarking, Analyse Data, Conduct Audits, Certifications, Benefits, Realities, Helpful Organizations	3 4 3 2	Toby Velte, Anthony Velte, Robert Elsenpeter	Chalk, Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __36_____

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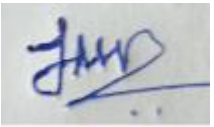

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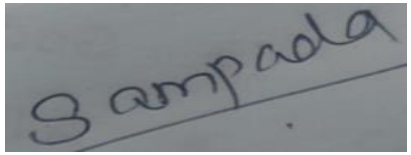

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SURBHI SHAH DEPARTMENT: IT-CS CLASS:FYIT-DIV C

SEMESTER: SEM-II MONTH: JAN-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: to think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems to apply their knowledge and skills to be employed and excel in IT professional careers and/or to continue their education in IT and/or related post graduate programmes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER NO:II TITLE OF PAPER:- **Microprocessor Architecture** UNIT 1	**Microprocessor, microcomputers, and Assembly Language:** Microprocessor, Microprocessor Instruction Set and Computer Languages, From Large Computers to Single-Chip Microcontrollers, Applications.	3	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE
	Microprocessor Architecture and Microcomputer System: Microprocessor Architecture and its operation's, Memory, I/O Devices, Microcomputer System, Logic Devices and Interfacing, Microprocessor-Based System Application.	4		
	8085 Microprocessor Architecture and Memory Interface: Introduction, 8085 Microprocessor unit, 8085-Based Microcomputer, Memory Interfacing, Interfacing the 8155 Memory Segment, Illustrative Example: Designing Memory for the MCTS Project, Testing and Troubleshooting Memory Interfacing Circuit, 8085-Based Single-Board microcomputer	5		

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UNIT 2	**Interfacing of I/O Devices** Basic Interfacing concepts, Interfacing Output Displays, Interfacing Input Devices, Memory Mapped I/O, Testing and Troubleshooting I/O Interfacing Circuits.	3	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE
	Introduction to 8085 Assembly Language Programming: The 8085 Programming Model, Instruction Classification, Instruction, Data and Storage, Writing assembling and Execution of a simple program, Overview of 8085 Instruction Set, Writing and Assembling Program.	5		
	Introduction to 8085 Instructions: Data Transfer Operations, Arithmetic Operations, Logic Operation, Branch Operation, Writing Assembly Languages Programs, Debugging a Program.	4		
UNIT 3	**Programming Techniques With Additional Instructions:** Programming Techniques: Looping, Counting and Indexing, Additional Data Transfer and 16-Bit Arithmetic Instructions, Arithmetic Instruction Related to Memory, Logic Operations: Rotate, Logics Operations: Compare, Dynamic Debugging.	4	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE
	Counters and Time Delays: Counters and Time Delays, Illustrative Program: Hexadecimal Counter, Illustrative Program: zero-to-nine (Modulo Ten) Counter, Generating Pulse Waveforms, Debugging Counter and Time-Delay Programs.	4		
	Stacks and Sub-Routines: Stack, Subroutine, Restart, Conditional Call, Return Instructions, Advanced Subroutine concepts.	4		

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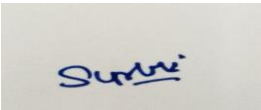
UNIT 4	**Code Conversion, BCD Arithmetic, and 16-Bit Data Operations:** BCD-to-Binary Conversion, Binary-to-BCD Conversion, BCD-to-Seven-Segment-LED Code Conversion, Binary-to-ASCII and ASCII-to-Binary Code Conversion, BCD Addition, BCD Subtraction, Introduction To Advanced Instructions and Applications, Multiplication, Subtraction With Carry.	4	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE
	Software Development System and Assemblers: Microprocessors-Based Software Development system, Operating System and Programming Tools, Assemblers and Cross-Assemblers, Writing Program Using Cross Assemblers.	4		
	Interrupts:-The 8085 Interrupt, 8085 Vectored Interrupts, Restart as S/W Instructions, Additional I/O Concepts and processes.	4		
UNIT 5	**The Pentium and Pentium Pro microprocessors:** Introduction, Special Pentium registers, Memory management, Pentium instructions, Pentium Pro microprocessor, Special Pentium Pro features.	5	Structured Computer Organization By Andrew C. Tanenbaum And internet.	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE
	Core 2 and later Microprocessors: Introduction, Pentium II software changes, Pentium IV and Core 2, i3, i5 and i7.	3		
	SUN SPARC Microprocessor: Architecture, Register file, data types and instruction format	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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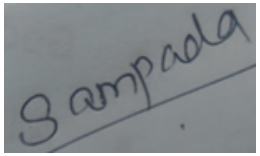

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT SEMESTER: II MONTH: December to March ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -II Solutions of Algebraic and Transcendental Equations: Interpolation:	Solutions of Algebraic and Transcendental Equations: The Bisection Method, The Newton-Raphson Method, The Regula-falsi method, The Secant Method. Interpolation: Forward Difference, Backward Difference, Newton's Forward Difference Interpolation, Newton's Backward Difference Interpolation, Lagrange's Interpolation.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	ONLINE (GOOGLE CLASSROOM)

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT
SEMESTER: II MONTH: December to March ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -III Solution of simultaneous algebraic equations (linear) using iterative methods: Numerical differentiation and Integration:	Solution of simultaneous algebraic equations (linear) using iterative methods: Gauss-Jordan Method, Gauss-Seidel Method. Numerical differentiation and Integration: Numberical differentiation, Numerical integration using Trapezoidal Rule, Simpson's 1/3rd and 3/8th rules. Numerical solution of 1st and 2nd order differential equations: Taylor series, Euler's Method, Modified Euler's Method, Runge-Kutta Method for 1st and 2 nd Order Differential Equations.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	ONLINE (GOOGLE CLASSROOM)

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT SEMESTER: II MONTH: December to March
ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
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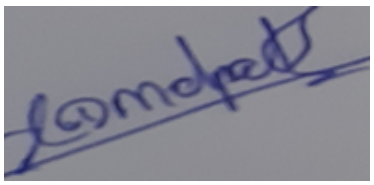
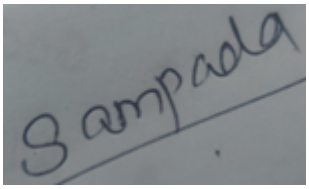
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -IV Least-Squares Regression: Linear Programming:	Least-Squares Regression: Linear Regression, Polynomial Regression, Multiple Linear Regression, General Linear Least Squares, Nonlinear Regression Linear Programming: Linear optimization problem, Formulation and Graphical solution, Basic solution and Feasible solution.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	ONLINE (GOOGLE CLASSROOM)





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYIT-C SEMESTER: SEM-2 MONTH: DEC-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

- Perform object oriented programming to develop solution to problems demonstrating usage of control structures, modularity, I/O and other standard language constructs.
- Demonstrate adeptness of object oriented programming to develop solution to problem demonstration usage of data abstraction, encapsulation, and inheritance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1 OBJECT ORIENTED PROGRAMMING UNIT 4	**Program development using Inheritance:** Introduction, understanding inheritance, Advantages provided by inheritance, choosing the access specifier, Derived class declaration,	3	Object Oriented Programming with C++ by E.Balagurusamy	BLACK BOARD AND CHALK
	derived class constructors, class hierarchies, multiple inheritance,	3		
	Multilevel inheritance, Containership, hybrid inheritance. Exception Handling: Introduction,	3		
	Exception Handling Mechanism, Concept of throw & catch with example	3		

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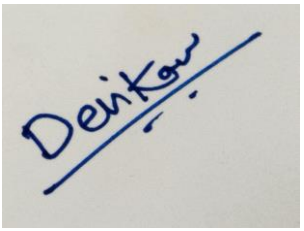
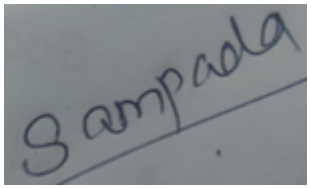
UNIT 5	**Templates:** Introduction, Function Template and examples,	3	Object Oriented Programming with C++ by E.Balagurusamy	BLACK BOARD AND CHALK
	Class Template and examples.	3		
	Working with Files: Introduction, File Operations, Various File Modes,	4		
	File Pointer and their Manipulation	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT-CS

CLASS:FYIT-DIV C SEMESTER: SEM-II MONTH: DEC-MAR ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: To apply fundamental programming constructs. To illustrate the concept of classes and objects, Data Abstraction and Data Encapsulation. To implement the concept of Pointer, friend function , Virtual Functions, Constructor& Destructors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-1, OOPS, UNIT 1	**Object Oriented Methodology:** Introduction, Advantages and Disadvantages of Procedure Oriented Languages, what is Object Oriented? What is Object Oriented Development? Object Oriented Themes, Benefits and Application of OOPS.	5	Object Oriented Programming with C++ -by E. Balagurusamy	Blackboard & Chalk
	Principles of OOPS: OOPS Paradigm, Basic Concepts of OOPS: Objects, Classes, Data Abstraction and Data Encapsulation	3		
	Inheritance, Polymorphism, Dynamic Binding, Message Passing	4		

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UNIT 2	**Classes and Objects:** Simple classes (Class specification, class members accessing), Defining member functions	4	Object Oriented Programming with C++ -by E. Balagurusamy	Blackboard & Chalk
	passing object as an argument, Returning object from functions, friend classes, Pointer to object, Array of pointer to object.	4		
	Constructors and Destructors: Introduction, Default Constructor, Parameterized Constructor and examples, Destructors.	4		
UNIT 3	**Polymorphism:** Concept of function overloading, overloaded operators, overloading unary and binary operators	4	Object Oriented Programming with C++ -by E. Balagurusamy	Blackboard & Chalk
	overloading comparison operator, overloading arithmetic assignment operator, Data Conversion between objects and basic types.	5		
	Virtual Functions: Introduction and need, Pure Virtual Functions, Static Functions, this Pointer, abstract classes, virtual destructors.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE **DEPARTMENT**: ____IT____

CLASS: FYIT_C DIV **SEMESTER**: 2 **MONTH**: Dec to March **ACADEMIC YEAR:** 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand HTML**
- **Students will learn how t works with HTML and CSS**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT203 Web Programming	**Internet and the World Wide Web:** What is Internet? Introduction to internet and its applications, E-mail, telnet, FTP, e-commerce, video conferencing, e-business. Internet service providers, domain name server, internet address, World Wide Web (WWW): World Wide Web and its evolution, uniform resource locator (URL), browsers – internet explorer, Netscape navigator, opera, Firefox, chrome, Mozilla. search engine, web saver – apache, IIS, proxy server, HTTP protocol	6	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	BLACK BOARD AND CHALK

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Unit I	**HTML5:** Introduction, Why HTML5? Formatting text by using tags, using lists and backgrounds, Creating hyperlinks and anchors. Style sheets, CSS formatting text using style sheets, formatting paragraphs using style sheets.	6		
Unit II	**HTML5 Page layout and navigation:** Creating navigational aids: planning site organization, creating text based navigation bar, creating graphics based navigation bar, creating graphical navigation bar, creating image map, redirecting to anotherURL, creating division based layouts: HTML5 semantic tags, creating divisions, creating HTML5 semantic layout, positioning and formatting divisions	6	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	BLACK BOARD AND CHALK
	HTML5 Tables, Forms and Media: Creating tables: creating simple table, specifying the size of the table, specifying the width of the column, merging table cells, using tables for page layout, formatting tables: applying table borders, applying	6		

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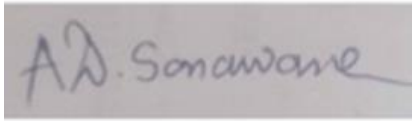
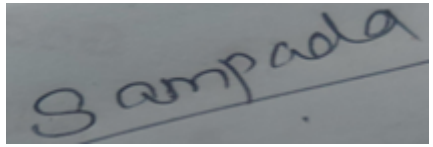
	background and foreground fills, changing cell padding, spacing and alignment, creating user forms: creating basic form, using check boxes and option buttons, creating lists, additional input types in HTML5, Incorporating sound and video: audio and video in HTML5, HTML multimedia basics, embedding video clips, incorporating audio on web page			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT:CS

CLASS: FY BSc IT DIV C(WEB) SEMESTER:SEM -2 MONTH: DEC-MAR ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

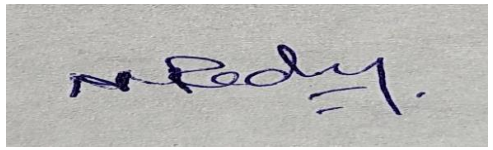
- Understand how server-side programming works on the web.
- PHP Basic syntax for variable types and calculations.
- Creating conditional structures
- Storing data in arrays
- Using PHP built-in functions and creating custom functions
- Understanding POST and GET in form submission.
- How to receive and process form submission data.
- Reading and writing cookies.
- Security tips (i.e. SQL Injection)
- Create a database in phpMyAdmin.
- Read and process data in a MySQL database. Students will learn JavaScript's role in websites and web apps.
- Students will be introduced to basic CS concepts
- Students will learn basic programming structures such as: variables, functions arrays etc.
- Students will learn how JavaScript works with HTML and CSS.

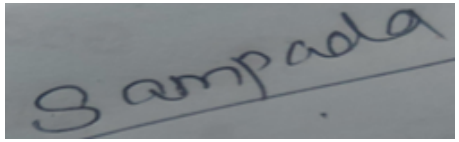
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3	**Java Script:** Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security,	2	JavaScript 2.0: The Complete	BLACK BOARD AND CHALK

WEB PROGRAMMING UNIT 3	**Operators**: Assignment Operators, Comparison Operators, Arithmetic Operators, % (Modulus), ++(Increment), --(Decrement), -(Unary Negation), Logical Operators, Short-Circuit Evaluation, String Operators, Special Operators, ?: (Conditional operator), , (Comma operator), delete, new, this, void	3	Reference BY Thomas Powell and Fritz Schneider	
	Statements: Break, comment, continue, delete, do...while, export, for, for...in, function, if...else, import, labelled, return, switch, var, while, with,	2		
	Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, regExp **Document and its associated objects:** document, Link, Area, Anchor, Image, Applet, Layer	2		
	Events and Event Handlers : General Information about Events, Defining Event Handlers, event, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp,	3		
UNIT 4	**PHP:** Why PHP and MySQL? Server-side scripting, PHP syntax and variables, comments, types,	3	PHP Project for Beginners BY SharanamShah, Vaishali	BLACK BOARD AND CHALK
	control structures, branching, looping, termination, functions, passing information with PHP, GET, POST,	3		
	formatting form variables, superglobal arrays, strings and string functions,	3		

	regular expressions, arrays, number handling, basic PHP errors/problems	3		
UNIT 5	**Advanced PHP and MySQL :** PHP/MySQL Functions, Integrating web forms and databases,	3	PHP Project for Beginners BY SharanamShah, Vaishali	BLACK BOARD AND CHALK
	Displaying queries in tables, Building Forms from queries,	3		
	String and Regular Expressions, Sessions,	3		
	Cookies and HTTP, E-Mail	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT:CS

CLASS:SYIT-DIV A SEMESTER: SEM-4 MONTH: DEC-MAR ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
Have a knowledge and understanding of geometrical transformations and 3D viewing.
Have a knowledge and understanding of techniques for representing 3D geometrical objects
Explain different Image enhancement techniques
Understand and review image transforms

PAPER,TITLE , UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5,Computer graphics and animation, UNIT 3	**Viewing in 3D:Stages in 3D viewing, Canonical View Volume (CVV), Specifying an Arbitrary 3D View, Examples of 3D Viewing, The Mathematics of Planar Geometric Projections, Combined transformation matrices for projections and viewing, Coordinate Systems and matrices, camera model and viewing pyramid.**	7	Computer graphics by Rajesh mourya Image processing by Dhananjay	BLACK BOARD AND CHALK
	Light:Radiometry,Transport,Equation,Photometry	4		

	Color:Colorimetry,ColorSpaces,ChromaticAdaptation,Color Appearance	4		
UNIT 4	**Visible-Surface Determination:Techniques for efficient Visible-Surface Algorithms, Categories of algorithms, Back face removal, The z-Buffer Algorithm, Scan-line method, Painter's algorithms (depth sorting), Area sub-division method, BSP trees, Visible-Surface Ray Tracing, comparison of the methods.**	7	Computer graphics by Rajesh mourya Image processing by Dhananjay	BLACK BOARD AND CHALK
	Plane Curves and Surfaces:Curve Representation, Nonparametric Curves, Parametric Curves,Parametric Representation of a Circle, Parametric Representation of an Ellipse, Parametric Representation of a Parabola, Parametric Representation of a Hyperbola	3		
	Representation of Space Curves,Cubic Splines, , Bezier Curves, B-spline Curves, B-spline Curve Fit,B-spline Curve Subdivision, Parametric Cubic Curves, Quadric Surfaces. Bezier Surfaces	6		
Unit 5	**Computer Animation:Principles of Animation, Key framing, Deformations, Character Animation, Physics-Based Animation, Procedural Techniques, Groups of Objects.**	6	Computer graphics by Rajesh mourya Image processing by Dhananjay	BLACK BOARD AND CHALK

	Image Manipulation and Storage: What is an Image? Digital image file formats, Image compression standard – JPEG,	4		
	Image Processing - Digital image enhancement,contrast stretching, Histogram Equalization, smoothing and median Filtering.	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 46

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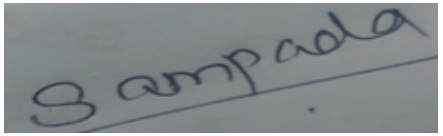

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT-CS

CLASS:SYIT-DIV A SEMESTER: SEM-IV MONTH: DEC-MAR ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the basic concepts of Computer Graphics. Demonstrate various algorithms for scan conversion and filling of basic objects and their comparative analysis. Apply geometric transformations, viewing and clipping on graphical objects.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-5, CGA, UNIT-1	**Introduction to Computer Graphics:**Overview of Computer Graphics, Computer Graphics Application and Software, Description of some graphics devices, Input Devices for Operator Interaction, Active and Passive Graphics Devices, Display Technologies, Storage Tube Graphics Displays, Calligraphic Refresh Graphics Displays	3	Computer Graphics by Hearn, Baker	Blackboard & Chalk
	Raster Refresh (Raster-Scan) Graphics Displays, Cathode Ray Tube Basics, Color CRT Raster Scan Basics, Video Basics, The Video Controller, Random-Scan Display Processor, LCD displays.	2		
	Scan conversion – Digital Differential Analyzer (DDA) algorithm, Bresenhams' Line drawing algorithm.Bresenhams' method of Circle drawing, Midpoint Circle Algorithm, Midpoint Ellipse Algorithm	3		

	Mid-point criteria, Problems of Aliasing, end-point ordering and clipping lines, Scan Converting Circles, Clipping Lines algorithms– Cyrus-Beck, Cohen-Sutherland and Liang-Barsky, Clipping Polygons, problem with multiple components.	3		
UNIT-2	**Two-Dimensional Transformations:**Transformations and Matrices, Transformation Conventions, 2D Transformations, Homogeneous Coordinates and Matrix Representation of 2D Transformations, Translations and Homogeneous Coordinates	2	Computer Graphics by Hearn, Baker	Blackboard & Chalk
	Rotation, Reflection, Scaling, Combined Transformation, Transformation of Points, Transformation of The Unit Square, Solid Body Transformations, Rotation About an Arbitrary Point.	2		
	Reflection through an Arbitrary Line ,A Geometric Interpretation of Homogeneous Coordinates, The Window-to Viewport Transformations.	2		
	Three-Dimensional Transformations: Three-Dimensional Scaling, Three-Dimensional Shearing, Three Dimensional Rotation, Three-Dimensional Reflection, Three Dimensional Translation, Multiple Transformation, Rotation about an Arbitrary Axis in Space, Reflection through an Arbitrary Plane.	3		
	Matrix Representation of 3D Transformations, Composition of 3D Transformations, Affine and Perspective Geometry, Perspective Transformations, Techniques for Generating Perspective Views, Vanishing Points	2		

	the Perspective Geometry and camera models, Orthographic Projections, Axonometric Projections, Oblique Projections, View volumes for projections.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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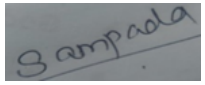

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: SYIT

SEMESTER: IV MONTH: DEC-MARCH ACADEMIC YEAR: 2019-20

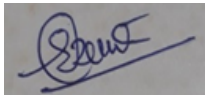
LEARNING OBJECTIVE/S:
The learners will be able to:

- Acquire knowledge of programming language java.
- Understand data types, control flow statements, iterations and classes.
- Gain proficiency in inheritance and packages.
- Understand enumeration, arrays, exceptions and byte stream.
- Acquire knowledge of event handling and layouts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401, Core Java, Unit III	**Inheritance:** Derived Class Objects, Inheritance and Access Control, Default Base Class Constructors, this and super keywords.	04	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Black Board and chalk
	Abstract Classes And Interfaces, Abstract Classes, Abstract Methods, Interfaces, What Is An Interface? How Is An Interface Different From An Abstract Class?, Multiple Inheritance, Default Implementation, Adding New Functionality, Method Implementation, Classes V/s Interfaces, Defining An Interface, Implementing Interfaces.	05	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Black Board and chalk
	Packages: Creating Packages, Default Package, Importing Packages, Using A Package.	03	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Black Board and chalk

USIT401, Core Java, Unit V	**Event Handling:** Delegation Event Model, Events, Event classes, Event listener interfaces, Using delegation event model, adapter classes and inner classes.	03	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Black Board and chalk
	Abstract Window Toolkit: Window Fundamentals, Component, Container, Panel, Window, Frame, Canvas. Components – Labels, Buttons, Check Boxes, Radio Buttons, Choice Menus, Text Fields, Text, Scrolling List, Scrollbars, Panels, Frames	07	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Black Board and chalk
	Layouts: Flow Layout, Grid Layout, Border Layout, Card Layout.	02	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Black Board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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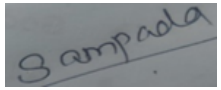

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Miss Shilpa James Rodrigues

DEPARTMENT: IT

CLASS: S.Y.I.T.-A (Core Java)

SEMESTER: IV

MONTH: December - March

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S :
The learners will be able to :

-Understand basics of Java programming language .

-Learn to control the flow of execution of the program.

-Understand of to create java classes and objects and using them to make java application

-Learn the concepts of multi threading and exception handling.

-Learn to use streams for reading and writing data to and from files.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401 , Unit 1, Core Java .	**Introduction:** History, architecture and its components, Java Class File, Java Runtime Environment, The Java Virtual Machine, JVM Components, The Java API, java platform, java development kit, Lambda Expressions, Methods References, Type Annotations, Method Parameter Reflection, setting the path environment variable, Java Compiler And Interpreter, java programs, java applications, main(), public, static, void, string[]	08	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Black Board and chalk.

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	args, statements, white space, case sensitivity, identifiers, keywords, comments, braces and code blocks, variables, variable name			
	Data types: primitive data types, Object Reference Types, Strings, Auto boxing, operators and properties of operators, Arithmetic operators, assignment operators, increment and decrement operator, relational operator, logical operator, bitwise operator, conditional operator.	04	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Black Board and chalk.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401 , Unit 2, Core Java .	**Control Flow Statements:** The If…Else If…Else Statement, The Switch…Case Statement	02	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Black Board and chalk.
	Iterations: The While Loop, The Do … While Loop, The For Loop, The Foreach Loop, Labeled Statements, The Break And Continue Statements, The Return Statement	04	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Black Board and chalk.
	Classes: Types of Classes, Scope Rules, Access Modifier, Instantiating Objects From A Class, Initializing The Class Object And Its Attributes, Class Methods, Accessing A Method, Method Returning A Value, Method's Arguments, Method Overloading, Variable Arguments [Varargs], Constructors, this Instance, super Instance, Characteristics Of Members Of A Class, constants, this instance, static fields of a class, static methods of a class, garbage collection.	06	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Black Board and chalk.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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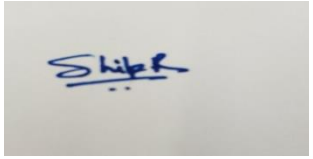
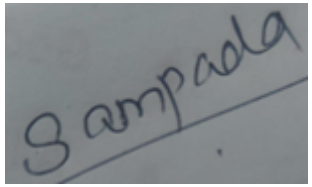
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401 , Unit 4, Core Java .	**Enumerations, Arrays:** Two Dimensional Arrays, Multi-Dimensional Arrays, Vectors, Adding Elements To A Vector, Accessing Vector Elements, Searching For Elements In A Vector, Working With The Size of The Vector.	03	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Black Board, chalk and Power point.
	Multithreading: the thread control methods, thread life cycle, the main thread, creating a thread, extending the thread class.	03	Core Java 8 for Beginners -Vaishali Shah, Sharnam Sha	Black Board, chalk and Power point.
	Exceptions: Catching Java Exceptions, Catching Run-Time Exceptions, Handling Multiple Exceptions, The finally Clause, The throws Clause	03	Core Java 8 for Beginners -Vaishali Shah, Sharnam Sha	Black Board, chalk and Power point.
	Byte streams: reading console input, writing console output, reading file, writing file, writing binary data, reading binary data, getting started with character streams, writing file, reading file	03	Core Java 8 for Beginners -Vaishali Shah, Sharnam Sha	Black Board, chalk and Power point.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT SEMESTER: IV MONTH: December to March
ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -I The Mean, Median, Mode, and Other Measures of Central Tendency	The Mean, Median, Mode, and Other Measures of Central Tendency: Index, or Subscript, Notation, Summation Notation, Averages, or Measures of Central Tendency ,The Arithmetic Mean , The Weighted Arithmetic Mean ,Properties of the Arithmetic Mean ,The Arithmetic Mean Computed from Grouped Data ,The Median ,The Mode, The Empirical Relation Between the Mean, Median, and Mode, The Geometric Mean G, The Harmonic Mean H ,The Relation Between the Arithmetic, Geometric, and Harmonic Means, The Root Mean Square, Quartiles, Deciles, and Percentiles, Software and Measures of Central Tendency. The Standard Deviation and Other Measures of Dispersion: Dispersion, or Variation, The Range, The Mean Deviation, The Semi-Interquartile Range, The 10–90 Percentile Range, The Standard Deviation, The Variance, Short Methods for Computing the Standard Deviation, Properties of the Standard Deviation, Charlie's Check, Sheppard's Correction for Variance, Empirical Relations Between Measures of Dispersion, Absolute and Relative Dispersion; Coefficient of Variation, Standardized Variable; Standard	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Scores, Software and Measures of Dispersion. Introduction to R: Basic syntax, data types, variables, operators, control statements, R-functions, R – Vectors, R – lists, R Arrays..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT SEMESTER: IV MONTH: December to March
ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -III Statistical Estimation Theory, Statistical Decision Theory,	Statistical Estimation Theory: Estimation of Parameters, Unbiased Estimates, Efficient Estimates, Point Estimates and Interval Estimates; Their Reliability, Confidence-Interval Estimates of Population Parameters, Probable Error. Statistical Decision Theory: Statistical Decisions, Statistical Hypotheses, Tests of Hypotheses and Significance, or Decision	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Rules, Type I and Type II Errors, Level of Significance, Tests Involving Normal Distributions, Two-Tailed and One-Tailed Tests, Special Tests, Operating-Characteristic Curves; the Power of a Test, p-Values for Hypotheses Tests, Control Charts, Tests Involving Sample Differences, Tests Involving Binomial Distributions. Statistics in R: mean, median, mode, Normal Distribution , Binomial Distribution, Frequency Distribution in R.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics CLASS: SYIT
SEMESTER: IV MONTH: December to March ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -IV Small Sampling Theory, The Chi-Square Test:	Small Sampling Theory: Small Samples, Student's t Distribution, Confidence Intervals, Tests of Hypotheses and Significance, The Chi-Square Distribution, Confidence Intervals for Sigma , Degrees of Freedom, The F Distribution. The Chi-Square Test: Observed and Theoretical Frequencies, Definition of chi-square, Significance Tests, The Chi-	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Square Test for Goodness of Fit, Contingency Tables, Yates' Correction for Continuity, Simple Formulas for Computing chi-square, Coefficient of Contingency, Correlation of Attributes, Additive Property of chi-square.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

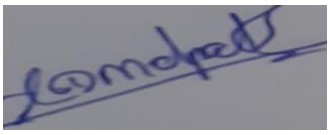
TEACHING PLAN (UNIT PLAN)

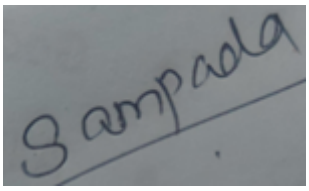
NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT
SEMESTER: IV MONTH: December to March ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -V Curve Fitting and the Method of Least Squares: Correlation Theory:,	Curve Fitting and the Method of Least Squares: Relationship Between Variables, Curve Fitting, Equations of Approximating Curves, Freehand Method of Curve Fitting, The Straight Line, The Method of Least Squares, The Least-Squares Line, Nonlinear Relationships, The Least-Squares Parabola, Regression, Applications to Time Series, Problems Involving More Than Two Variables. Correlation Theory: Correlation and Regression, Linear Correlation, Measures of Correlation, The Least-Squares Regression Lines, Standard Error of Estimate, Explained and Unexplained Variation, Coefficient of Correlation, Remarks Concerning the Correlation Coefficient, Product-Moment Formula for the Linear Correlation Coefficient, Short Computational Formulas, Regression Lines and the Linear	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Correlation Coefficient, Correlation of Time Series, Correlation of Attributes, Sampling Theory of Correlation, Sampling Theory of Regression..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: SYIT SEMESTER: IV MONTH: DEC to MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

To provide experience to integrate hardware and software for microcontroller applications systems.

To acquire knowledge about microcontrollers embedded processors and their applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 Embedded System Unit 2	**Embedded Systems – Application and Domain Specific:** Application specific – washing machine, domain specific - automotive.	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Embedded Hardware: Memory map, i/o map, interrupt map, processor family, external peripherals, memory – RAM , ROM, types of RAM and ROM, memory testing, CRC ,Flash memory.	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012	Projector, Laptop, Black board & Chalk

			And Embedded Systems Rajkamal Tata Mcgraw-Hill	
	Peripherals: Control and Status Registers, Device Driver, Timer Driver - Watchdog Timers.	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
Paper-02 Embedded System Unit 3	**The 8051 Microcontrollers:** Microcontrollers and Embedded processors, Overview of 8051 family.8051 Microcontroller hardware, Input/output pins, Ports, and Circuits, External Memory.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	8051 Programming in C: Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs.	6	Introduction to embedded systems Shibu K V	Projector, Laptop, Black board & Chalk

			Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	
Paper-02 Embedded System Unit 5	**Real Time Operating System (RTOS):** Operating system basics, types of operating systems, Real-Time Characteristics, Selection Process of an RTOS	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Design and Development: Embedded system development Environment – IDE, types of file generated on cross compilation, disassembler/ de-compiler, simulator, emulator and debugging, embedded product development life-cycle, trends in embedded industry.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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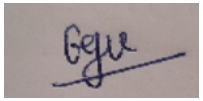

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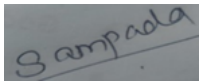

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SURBHI SHAH DEPARTMENT: IT-CS CLASS:SYIT-DIV A

SEMESTER: SEM-4 MONTH: JANUARY-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to The learners will be able to: to think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems to apply their knowledge and skills to be employed and excel in IT professional careers and/or to continue their education in IT and/or related post graduate programmes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:-II TITLE:- Introduction to Embedded Systems UNIT 1	**Introduction:** Embedded Systems and general purpose computer systems, history, classifications, applications and purpose of embedded systems	3	Introduction to embedded systems By Shibu K V	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE
	Core of embedded systems: microprocessors and microcontrollers, RISC and CISC controllers, Big endian and Little endian processors, Application specific ICs, Programmable logic devices, COTS, sensors and actuators, communication interface, embedded firmware, other system components.	6		
	Characteristics and quality attributes of embedded systems: Characteristics, operational and non-operational quality attributes.	3		
UNIT 4	**Designing Embedded System with 8051 Microcontroller:** Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	3	Programming Embedded Systems in C and C++	POWERPOINT PRESENTATION, GOOGLE MEET,LAPTOP OR PC, JAMBOARD,MOBILE EAR- PHONE

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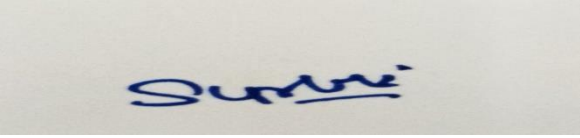
	Programming embedded systems: structure of embedded program, infinite loop, compiling, linking and debugging.	4	by Michael Barr	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 19



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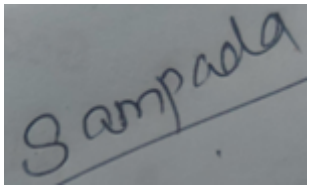

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.Y.B.Sc.(I.T) SEMESTER: IV MONTH: DEC-JAN ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The learners will be able to :

- Understand the Software Development Life Cycle and its Phases
- Understand the processes and models of Software
- Develop new software from the previous existing software.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Software Engineering Unit 1	**Introduction**: What is software engineering? Software Development Life Cycle, Requirements Analysis, Software Design, Coding, Testing, Maintenance etc. **Software Requirements:** Functional and Non-functional requirements, User Requirements, System Requirements, Interface Specification, Documentation of the software requirements.	4	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk
	Software Processes: Process and Project, Component Software Processes. **Software Development Process Models.** • Waterfall Model. • Prototyping. • Iterative Development.	5	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk

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	• Rational Unified Process. • The RAD Model • Time boxing Model			
	Agile software development: Agile methods, Plan-driven and agile development, Extreme programming, Agile project management, Scaling agile methods.	3	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(I.T.) SEMESTER:IV MONTH: JAN ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the difference between Socio-technical system and Critical system
- Different process of Requirement Engineering and its importance
- How to prepare various system models and its importance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Software Engineering Unit 2	**Socio-technical system** :Essential characteristics of socio technical systems, Emergent System Properties, Systems Engineering, Components of system such as organization, people and computers, Dealing Legacy Systems.	2	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk
	Critical system: Types of critical system, A simple safety critical system, Dependability of a system, Availability and Reliability, Safety and Security of Software systems.	4	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk
	Requirements Engineering Processes: Feasibility study, Requirement selicitation and analysis, Requirements Validations, Requirements Management.	4	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach	Black Board and Chalk

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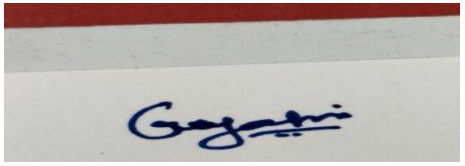
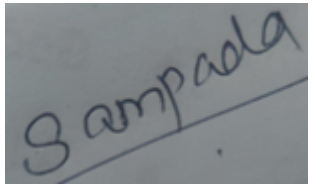
			By- Roger Pressman	
	System Models: Models and its types, Context Models, Behavioural Models, Data Models, Object Models, Structured Methods.	2	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.Y.B.Sc.(I.T) SEMESTER:IV MONTH: JAN-FEB ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Develop an interactive user interface and its importance
- Planning and Managing risk of a project
- Managing and measuring the quality of a software project.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Software Engineering Unit 3	**Architectural Design:** Architectural Design Decisions, System Organisation, Modular Decomposition Styles, Control Styles, Reference Architectures.	2	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk
	User Interface Design: Need of UI design, Design issues, The UI design Process, User analysis, User Interface Prototyping, Interface Evaluation. **Project Management** Software Project Management, Management activities, Project Planning, Project Scheduling, Risk Management.	4	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk
	Quality Management: Process and Product Quality,	6	Software Engineering, edition, By-Ian Somerville	Black Board and Chalk

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	Quality assurance and Standards, Quality Planning, Quality Control, Software Measurement and Metrics.		Software engineering, a practitioner's approach By- Roger Pressman	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.Y.B.Sc.(I.T) SEMESTER: IV MONTH: FEB ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Two main aspects of testing Verification and validation
- Different types of testing
- Different aspects of measuring the software
- Different techniques of estimating the cost of the software to the stakeholder.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Software Engineering Unit 4	**Verification and Validation:** Planning Verification and Validation, Software Inspections, Automated Static Analysis, Verification and Formal Methods. **Software Testing:** System Testing, Component Testing, Test Case Design, Test Automation.	7	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk
	Software Measurement: Size-Oriented Metrics, Function-Oriented Metrics, Extended Function Point Metrics. **Software Cost Estimation**: Software Productivity, Estimation Techniques, Algorithmic Cost Modelling, Project Duration and Staffing	5	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.Y.B.Sc.(I.T) SEMESTER: IV MONTH: FEB-MARCH ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- How to improve and measure the process with the help of CMMI Process Improvement Framework
- How the services and the components of the software can be reused.
- How a software can be developed and used as a service

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Software Engineering Unit 5	**Process Improvement:** Process and product quality, Process Classification, Process Measurement, Process Analysis and Modeling, Process Change, The CMMI Process Improvement Framework. **Service Oriented Software Engineering:** Services as reusable components,. Service Engineering, Software Development with Services.	8	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk
	Software reuse: The reuse landscape, Application frameworks, Software product lines, COTS product reuse. **Distributed software engineering:** Distributed systems issues, Client–server computing, Architectural patterns for distributed systems, Software as a service	4	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: S. Y. B. Sc. I. T –B SEMESTER: IV MONTH: December-March ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various transformations

b. Create various objects and applications using graphics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-V Computer Graphics and Applications Unit -II	**Two-Dimensional Transformations:** Transformations and Matrices, Homogeneous Coordinates and Matrix Representation of-Translations, Rotation, Reflection, Scaling, Combined Transformation, Transformation of Points, Unit Square, Solid Body Transformations, Rotation About an Arbitrary Point, Reflection through an Arbitrary Line, The Window-to-Viewport Transformations.	7	Computer Graphics by Rajesh Maurya	Blackboard
	Three-Dimensional Transformations: 3D- Scaling, Shearing, Rotation, Reflection, Translation, Multiple Transformation, Rotation about an Arbitrary Axis in Space, Reflection through an Arbitrary Plane, Composition of 3D Transformations, Affine and Perspective Geometry, Perspective Transformations, Vanishing Points, the Perspective Geometry, Orthographic Projections, Axonometric Projections, Oblique Projections, View volumes for projections.	5		Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: S. Y. B. Sc. I. T –B SEMESTER: IV MONTH: December-March ACADEMIC YEAR: 2019-2020

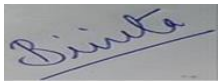
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various transformations

b. Create various objects and applications using graphics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-V Computer Graphics and Applications Unit -V	**Computer Animation:** Principles of Animation, Key framing, Deformations, Character Animation, Physics-Based Animation, Procedural Techniques, Groups of Objects.	3	Computer Graphics by Rajesh Maurya	Powerpoint Presentation through Projector
	Image Manipulation and Storage: What is an Image? Digital image file formats, Image compression standard – JPEG, Image Processing - Digital image enhancement, contrast stretching, Histogram Equalization, smoothing and median Filtering.	9	Image Processing by Dhananjay	Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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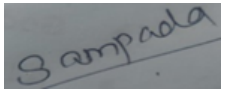

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:S.Y.BSC(I.T) Div-B & C SEMESTER: **IV** MONTH:DECEMBER-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : To list the basic concepts used in computer graphics

To implement various algorithms to scan, convert the basic geometrical primitives, transformations, Area filling, clipping.

To describe the importance of viewing and projections.

To define the fundamentals of animation, virtual reality and its related technologies.

To understand a typical graphics pipeline

To design an application with the principles of virtual reality

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Computer Graphics and Animation USIT405 Unit-1	**Introduction to Computer Graphics:** Overview of Computer Graphics, Computer Graphics Application andSoftware, Description of some graphics devices, Input Devices forOperator Interaction, Active and Passive Graphics Devices, DisplayTechnologies, Storage Tube Graphics Displays, Calligraphic Refresh Graphics Displays, Raster Refresh (Raster-Scan) Graphics Displays,Cathode Ray Tube Basics, Color CRT Raster Scan Basics, VideoBasics, The Video Controller, Random-Scan Display Processor, LCD displays.	5	Computer Graphics -Hearn, Baker Computer Graphics-Rajesh.k.Mourya	Powerpoint presentation,Projector,chalk blackboard

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	Scan conversion – Digital Differential Analyzer (DDA) algorithm,Bresenhams' Line drawing algorithm.Bresenhams' method of Circle drawing	3		
	Midpoint Circle Algorithm, Midpoint Ellipse Algorithm,Mid-point criteria	3		
	Problems of Aliasing, end-point ordering andclipping lines, Scan Converting Circles	2		
	Clipping Lines algorithms–Cyrus-Beck, Cohen-Sutherland and Liang-Barsky, Clipping Polygons,problem with multiple components.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		
Computer Graphics and Animation USIT405 Unit-3	**Viewing in 3D** Stages in 3D viewing, Canonical View Volume (CVV), Specifying an Arbitrary 3D View, Examples of 3D Viewing, The Mathematics of Planar Geometric Projections, Combined transformation matrices for projections and viewing, Coordinate Systems and matrices, camera model and viewing pyramid.	5	Computer Graphics -Hearn, Baker Computer Graphics-Rajesh.k.Mourya Computer Graphics - Principles and Practice- J. D. Foley, A. Van Dam, S. K.	Powerpoint presentation,Projector,chalk blackboard
	Light: Radiometry,Transport,Equation,Photometry	3		
	Color: Colorimetry,ColorSpaces,ChromaticAdaptation, Color Appearance	3		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	11		

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			Feiner and J. F. Hughes	
Computer Graphics and Animation USIT405 Unit-4	**Visible-Surface Determination:** Techniques for efficient Visible-Surface Algorithms, Categories of algorithms, Back face removal, The z-Buffer Algorithm, Scan-line method, Painter's algorithms (depth sorting), Area subdivision method, BSP trees, Visible-Surface Ray Tracing, comparison of the methods.	5	Computer Graphics -Hearn, Baker Computer Graphics-Rajesh.k.Mourya Computer Graphics - Principles and Practice- J. D. Foley, A. Van	Powerpoint presentation,Projector,chalk blackboard
	Plane Curves and Surfaces: Curve Representation, Nonparametric Curves, Parametric Curves, Parametric Representation of a Circle, Parametric Representation of an Ellipse, Parametric Representation of a Parabola, Parametric Representation of a Hyperbola, Representation of Space Curves, Cubic Splines, , Bezier Curves, B-spline Curves, B-spline Curve Fit, B-spline Curve Subdivision, Parametric Cubic Curves, QuadricSurfaces. Bezier Surfaces.	5		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	10		

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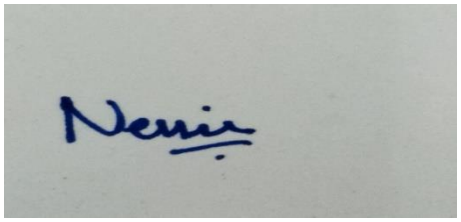

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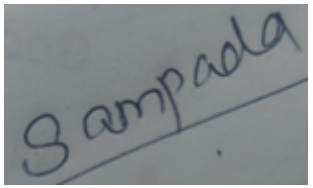

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHARVARI PATIL DEPARTMENT: IT CLASS: S.Y.I.T SEMESTER: IV

MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the Importance of Java Programming language.
- Learn the features and environment of java API.
- Understand the concept of data types.
- Gain knowledge about event handling and AWT.

Paper No.,Paper Title, Unit No.	Sub Topics:	No.of Lectures	References	Teaching Method/ICT tools used
USIT401 Core Java Unit 1	Introduction: History,architecture and its components,Java Class File, Java Runtime Environment, The Java Virtual Machine, JVM Components, The Java API, java platform, java development kit, Lambda Expressions, Methods References, Type Annotations, Method Parameter Reflection, setting the path environment variable, Java Compiler And Interpreter, java programs, java applications, main(), public, static, void, string[] args, statements, white space, case	8	Reference Book: Core Java 8 for Beginners	Chalk, Blackboard

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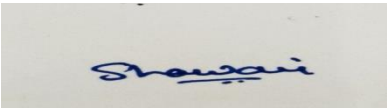
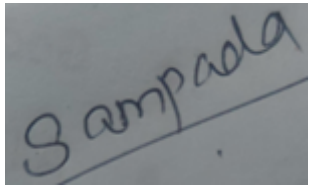
	sensitivity, identifiers, keywords, comments, braces and code blocks, variables, variable name Data types: primitive data types, Object Reference Types, Strings, Auto boxing, operators and properties of operators, Arithmetic operators, assignment operators, increment and decrement operator, relational operator, logical operator, Bitwise operator, conditional operator.	4		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT401 Core Java Unit 5	Event Handling: Delegation Event Model, Events, Event classes, Event listener interfaces, Using delegation event model, adapter classes and inner classes. Abstract Window Toolkit: Window Fundamentals, Component, Container, Panel, Window, Frame, CanvasComponents–Labels, Buttons, Check Boxes, Radio Buttons, Choice Menus, Text Fields, Text, Scrolling List, Scrollbars, Panels, Frames Layouts: Flow Layout, Grid Layout, Border Layout, Card Layout	8 4	Reference Book: Core Java 8 for Beginners	Chalk, Blackboard

	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		





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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT SEMESTER: IV MONTH: December to March
ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -I The Mean, Median, Mode, and Other Measures of Central Tendency	The Mean, Median, Mode, and Other Measures of Central Tendency: Index, or Subscript, Notation, Summation Notation, Averages, or Measures of Central Tendency ,The Arithmetic Mean , The Weighted Arithmetic Mean ,Properties of the Arithmetic Mean ,The Arithmetic Mean Computed from Grouped Data ,The Median ,The Mode, The Empirical Relation Between the Mean, Median, and Mode, The Geometric Mean G, The Harmonic Mean H ,The Relation Between the Arithmetic, Geometric, and Harmonic Means, The Root Mean Square, Quartiles, Deciles, and Percentiles, Software and Measures of Central Tendency. The Standard Deviation and Other Measures of Dispersion: Dispersion, or Variation, The Range, The Mean Deviation, The Semi-Interquartile Range, The 10–90 Percentile Range, The Standard Deviation, The Variance, Short Methods for Computing the Standard Deviation, Properties of the Standard Deviation, Charlie's Check, Sheppard's Correction for Variance, Empirical Relations Between Measures of Dispersion, Absolute and Relative Dispersion; Coefficient of Variation, Standardized Variable; Standard	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Scores, Software and Measures of Dispersion. Introduction to R: Basic syntax, data types, variables, operators, control statements, R-functions, R – Vectors, R – lists, R Arrays..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT SEMESTER: IV MONTH: December to March
ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -III Statistical Estimation Theory, Statistical Decision Theory,	Statistical Estimation Theory: Estimation of Parameters, Unbiased Estimates, Efficient Estimates, Point Estimates and Interval Estimates; Their Reliability, Confidence-Interval Estimates of Population Parameters, Probable Error. Statistical Decision Theory: Statistical Decisions, Statistical Hypotheses, Tests of Hypotheses and Significance, or Decision	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Rules, Type I and Type II Errors, Level of Significance, Tests Involving Normal Distributions, Two-Tailed and One-Tailed Tests, Special Tests, Operating-Characteristic Curves; the Power of a Test, p-Values for Hypotheses Tests, Control Charts, Tests Involving Sample Differences, Tests Involving Binomial Distributions. Statistics in R: mean, median, mode, Normal Distribution , Binomial Distribution, Frequency Distribution in R.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics CLASS: SYIT
SEMESTER: IV MONTH: December to March ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -IV Small Sampling Theory, The Chi-Square Test:	Small Sampling Theory: Small Samples, Student's t Distribution, Confidence Intervals, Tests of Hypotheses and Significance, The Chi-Square Distribution, Confidence Intervals for Sigma , Degrees of Freedom, The F Distribution. The Chi-Square Test: Observed and Theoretical Frequencies, Definition of chi-square, Significance Tests, The Chi-	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Square Test for Goodness of Fit, Contingency Tables, Yates' Correction for Continuity, Simple Formulas for Computing chi-square, Coefficient of Contingency, Correlation of Attributes, Additive Property of chi-square.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

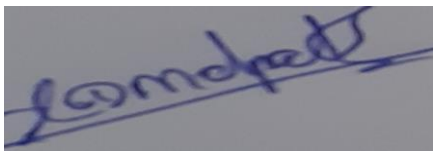
TEACHING PLAN (UNIT PLAN)

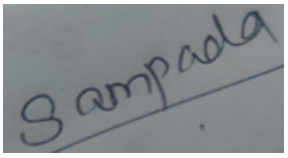
NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT
SEMESTER: IV MONTH: December to March ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -V Curve Fitting and the Method of Least Squares: Correlation Theory:,	Curve Fitting and the Method of Least Squares: Relationship Between Variables, Curve Fitting, Equations of Approximating Curves, Freehand Method of Curve Fitting, The Straight Line, The Method of Least Squares, The Least-Squares Line, Nonlinear Relationships, The Least-Squares Parabola, Regression, Applications to Time Series, Problems Involving More Than Two Variables. Correlation Theory: Correlation and Regression, Linear Correlation, Measures of Correlation, The Least-Squares Regression Lines, Standard Error of Estimate, Explained and Unexplained Variation, Coefficient of Correlation, Remarks Concerning the Correlation Coefficient, Product-Moment Formula for the Linear Correlation Coefficient, Short Computational Formulas, Regression Lines and the Linear	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Correlation Coefficient, Correlation of Time Series, Correlation of Attributes, Sampling Theory of Correlation, Sampling Theory of Regression..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: IT

CLASS: SY BSc IT SEMESTER:IV MONTH: NOV-MAR ACADEMICYEAR: 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to :

1. Understand what is a microcontroller, microcomputer, embedded system.
2. Understand different components of a micro-controller and their interactions.
3. Become familiar with programming environment used to develop embedded systems .
4. Understand key concepts of embedded systems like IO, timers, interrupts, interaction with peripheral devices .
5. Learn debugging techniques for an embedded system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 ES UNIT 1	Embedded Systems and general purpose computer systems, history, classifications, applications and purpose of embedded systems	4	Introduction to embedded systems by Shibu K V	Black board and chalk
	Microprocessors and microcontrollers ,RISC and CISC controllers, Big endian and Little endian processors, Application specific ICs, Programmable logic devices, COTS.	3		
	Sensors and actuators, communication interface, embedded firmware, other system components.	3		

	Characteristics, operational and non-operational quality attributes.	2		
UNIT 2	Application specific – washing machine, domain specific - automotive.	3	Introduction to embedded systems by Shibu K V	Black board and chalk
	Memory map, i/o map, interrupt map, processor family, external peripherals	3		
	memory – RAM , ROM, types of RAM and ROM, memory testing, CRC ,Flash memory .	3		
	Control and Status Registers, Device Driver, Timer Driver - Watchdog Timers.	3		
UNIT 3	Microcontrollers and Embedded processors, Overview of 8051 family.8051 Microcontroller hardware	4	Programming Embedded Systems in C C++ by Michael Barr	Black board and chalk
	Input/output pins, Ports, and Circuits, External Memory.	4		
	Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs.	4		
UNIT 4	Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	4	https://www.tutorialspoint.com/embedded_systems Introduction to embedded systems by Shibu K V	Black board and chalk
	structure of embedded program, infinite loop	4		

	compiling, linking and debugging	4		
UNIT 5	Operating system basics, types of operating systems, Real-Time Characteristics, Selection Process of an RTOS.	4	https://www.tutorialspoint.com/embedded_systems.	Black board and chalk
	Embedded system development Environment – IDE, types of file generated on cross compilation, disassembler/ de-compiler,	4		
	simulator, emulator and debugging, embedded product development life-cycle, trends in embedded industry.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____BSC-IT___ CLASS: __SYIT___ SEMESTER: ___IV

MONTH: ____December to March_____ ACADEMIC YEAR: ____2019-20__

LEARNING OBJECTIVE/S:
The learners will be able to:

To adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct. To be capable of managing complex IT projects with consideration of the human, financial and environmental factors. To work effectively as a part of a team to achieve a common stated goal.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Software Engineering USIT404 Unit - 1	**Introduction**: What is software engineering? Software Development Life Cycle, Requirements Analysis, Software Design, Coding, Testing, Maintenance etc. Software Requirements: Functional and Non-functional requirements, User Requirements, System Requirements, Interface Specification, Documentation of the software requirements. Software Processes: Process and Project, Component Software Processes. Software Development Process Models. • Waterfall Model. • Prototyping. • Iterative Development. • Rational Unified Process. • The RAD Model • Time boxing Model. Agile software	3 4 3	Ian Somerville Roger Pressman	Chalk, Blackboard

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	development: Agile methods. Plan-driven and agile development, Extreme programming, Agile project management methods.	2		
Software Engineering USIT404 Unit - 2	**Socio-technical system:** Essential characteristics of socio technical systems, Emergent System Properties, Systems Engineering. Components of system such as organization, people and computers, Dealing Legacy Systems. Critical system: Types of critical system. A simple safety critical system, Dependability of a system, Availability and Reliability, Safety and Security of Software systems. Requirements Engineering Processes: Feasibility study, Requirements elicitation and analysis, Requirements Validations, Requirements Management	3 3 3 3	Ian Somerville Roger Pressman	Chalk, Blackboard
Software Engineering USIT404 Unit - 3	**Architectural Design:** Architectural Design Decisions, System Organisation, Modular Decomposition Styles, Control Styles, Reference Architectures. User Interface Design: Need of UI design, Design issues, The UI design Process, User analysis, User Interface Prototyping, Interface Evaluation. Project Management Software Project Management, Management activities, Project Planning, Project Scheduling, Risk Management. Quality Management: Process and Product Quality, Quality assurance and Standards, Quality Planning,	2 3 2 2 3	Ian Somerville Roger Pressman	Chalk, Blackboard

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	Quality Control, Software Measurement and Metrics.			
Software Engineering USIT404 Unit - 4	**Verification and Validation:** Planning Verification and Validation, Software Inspections, Automated Static Analysis, Verification and Formal Methods. Software Testing: System Testing, Component Testing, Test Case Design, Test Automation. Software Measurement: Size-Oriented Metrics, Function-Oriented Metrics, Extended Function Point Metrics **Software Cost Estimation:** Software Productivity, Estimation Techniques, Algorithmic Cost Modelling, Project Duration and Staffing.	3 3 3 3	Ian Somerville Roger Pressman	Chalk, Blackboard
Software Engineering USIT404 Unit - 5	**Process Improvement:** Process and product quality, Process Classification, Process Measurement, Process Analysis and Modeling, Process Change. The CMMI Process Improvement Framework. Service Oriented Software Engineering: Services as reusable components, Service Engineering. Software Development with Services. Software reuse: The reuse landscape, Application frameworks, Software product lines, COTS product reuse. Distributed software engineering: Distributed systems issues, Client–server computing, Architectural patterns for distributed systems, Software as a service.	3 3 3 3	Ian Somerville Roger Pressman	Chalk, Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __60_____

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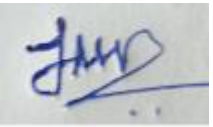

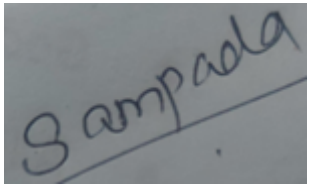

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**SY.B SC(IT)-C**_____ SEMESTER: ____**IV**_____MONTH: _____**DECEMBER-MARCH**_____ ACADEMIC YEAR: _____**2019-2020**_____

LEARNING OBJECTIVE/S:
The learners will be able to :

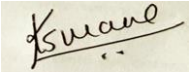
- **Understand the concept of transformations and its types in 2D and 3D in computer graphics and how those can be implemented in variation of applications including Animation.**
- **Understanding the representation of matrices, projection in CG and its usage.**
- **To implement concepts, creation and how it works with different types of animation.**
- **To make understand what is image ,how it is created and how it is used in varieties of processing.**
- **To make understand the concept of image enhancement, compression,filtering and histogram of image to study subjective improvisation of image in applications to reduce the noise**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-05 (USIT405) **Computer Graphics and Animation**	**Two-Dimensional Transformations:** Transformations and Matrices, Transformation Conventions, 2D Transformations, Homogeneous Coordinates and Matrix Representation of 2D Transformations, Translations and Homogeneous Coordinates, Rotation, Reflection, Scaling, Combined Transformation, Transformation of Points,	06	Computer Graphics by R.K Maurya	Textbook, Blackboard, Chalk and Duster.

Unit No -02	Transformation of The Unit Square, Solid Body Transformations, Rotation About an Arbitrary Point, Reflection through an Arbitrary Line, A Geometric Interpretation of Homogeneous Coordinates, The Window-to-Viewport Transformations.			
Computer Graphics and Animation	**Three-Dimensional Transformations:** Three-Dimensional Scaling, Three-Dimensional Shearing, Three-Dimensional Rotation, Three-Dimensional Reflection, Three-Dimensional Translation, Multiple Transformation, Rotation about an Arbitrary Axis in Space, Reflection through an Arbitrary Plane, Matrix Representation of 3D Transformations, Composition of 3D Transformations,. Affine and Perspective Geometry, Perspective Transformations, Techniques for Generating Perspective Views, Vanishing Points, the Perspective Geometry and camera models, Orthographic Projections, Axonometric Projections, Oblique Projections, View volumes for projections.	06	Computer Graphics by R.K Maurya	Textbook, Blackboard, Chalk and Duster. Projector, Laptop, PPTs.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	**Computer Animation:** Principles of Animation, Key framing, Deformations, Character Animation, Physics-Based Animation, Procedural Techniques, Groups of Objects.	06	Computer Graphics by R.K Maurya.	Projector, Laptop, PPTs.
	Image Manipulation and Storage: What is an Image? Digital image file formats, Image compression standard – JPEG, Image Processing - Digital image enhancement,	06	Digital Image Processing by Dhananjay.	Textbook, Blackboard, Chalk and Duster,

	contrast stretching, Histogram Equalization, smoothing and median Filtering.			Projector, Laptop, PPTs.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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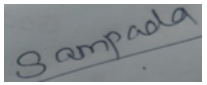

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:S.Y.BSC(I.T) Div-B & C SEMESTER: **IV** MONTH:DECEMBER-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : To list the basic concepts used in computer graphics

To implement various algorithms to scan, convert the basic geometrical primitives, transformations, Area filling, clipping.

To describe the importance of viewing and projections.

To define the fundamentals of animation, virtual reality and its related technologies.

To understand a typical graphics pipeline

To design an application with the principles of virtual reality

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Computer Graphics and Animation USIT405 Unit-1	**Introduction to Computer Graphics:** Overview of Computer Graphics, Computer Graphics Application andSoftware, Description of some graphics devices, Input Devices forOperator Interaction, Active and Passive Graphics Devices, DisplayTechnologies, Storage Tube Graphics Displays, Calligraphic Refresh Graphics Displays, Raster Refresh (Raster-Scan) Graphics Displays,Cathode Ray Tube Basics, Color CRT Raster Scan Basics, VideoBasics, The Video Controller, Random-Scan Display Processor, LCD displays.	5	Computer Graphics -Hearn, Baker Computer Graphics-Rajesh.k.Mourya	Powerpoint presentation,Projector,chalk blackboard

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	Scan conversion – Digital Differential Analyzer (DDA) algorithm,Bresenhams' Line drawing algorithm.Bresenhams' method of Circle drawing	3		
	Midpoint Circle Algorithm, Midpoint Ellipse Algorithm,Mid-point criteria	3		
	Problems of Aliasing, end-point ordering andclipping lines, Scan Converting Circles	2		
	Clipping Lines algorithms–Cyrus-Beck, Cohen-Sutherland and Liang-Barsky, Clipping Polygons,problem with multiple components.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		
Computer Graphics and Animation USIT405 Unit-3	**Viewing in 3D** Stages in 3D viewing, Canonical View Volume (CVV), Specifying an Arbitrary 3D View, Examples of 3D Viewing, The Mathematics of Planar Geometric Projections, Combined transformation matrices for projections and viewing, Coordinate Systems and matrices, camera model and viewing pyramid.	5	Computer Graphics -Hearn, Baker Computer Graphics-Rajesh.k.Mourya Computer Graphics - Principles and Practice- J. D. Foley, A. Van Dam, S. K.	Powerpoint presentation,Projector,chalk blackboard
	Light: Radiometry,Transport,Equation,Photometry	3		
	Color: Colorimetry,ColorSpaces,ChromaticAdaptation, Color Appearance	3		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	11		

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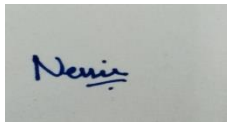
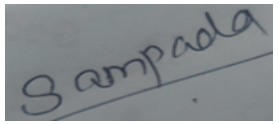
			Feiner and J. F. Hughes	
Computer Graphics and Animation USIT405 Unit-4	**Visible-Surface Determination:** Techniques for efficient Visible-Surface Algorithms, Categories of algorithms, Back face removal, The z-Buffer Algorithm, Scan-line method, Painter's algorithms (depth sorting), Area subdivision method, BSP trees, Visible-Surface Ray Tracing, comparison of the methods.	5	Computer Graphics -Hearn, Baker Computer Graphics-Rajesh.k.Mourya Computer Graphics - Principles and Practice-J. D. Foley, A. Van	Powerpoint presentation,Projector,chalk blackboard
	Plane Curves and Surfaces: Curve Representation, Nonparametric Curves, Parametric Curves, Parametric Representation of a Circle, Parametric Representation of an Ellipse, Parametric Representation of a Parabola, Parametric Representation of a Hyperbola, Representation of Space Curves, Cubic Splines, , Bezier Curves, B-spline Curves, B-spline Curve Fit, B-spline Curve Subdivision, Parametric Cubic Curves, QuadricSurfaces. Bezier Surfaces.	5		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	10		





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ARPITA BANERJEE DEPARTMENT: IT-CS

CLASS: SYIT-DIV C SEMESTER: IV MONTH: DEC - MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: Develop logics to write programs, build application using Core Java. This will also help them to understand some basic concepts of object-oriented programming like class, inheritance, polymorphism, message passing. Also they will get to know the idea of multithreading, package, exception-handling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401 Core Java II	**Control Flow Statements:** The If…Else If…Else Statement, The Switch…Case Statement	3	Core Java 8 for Beginners By Vaishali Shah, Sharnam Shah	Blackboard & chalk
	Iterations: The While Loop, The Do … While Loop, The For Loop, The Foreach Loop, Labeled Statements, The Break And Continue Statements, The Return Statement	3		
	Classes: Types of Classes, Scope Rules, Access Modifier, Instantiating Objects From A Class, Initializing The Class Object And Its Attributes, Class Methods, Accessing A Method, Method Returning A Value, Method's Arguments, Method Overloading	3		
	Variable Arguments [Varargs], Constructors, this Instance, super Instance, Characteristics Of Members Of A Class, constants, this instance, static fields of a class, static methods of a class, garbage collection.	3		
	Inheritance: Derived Class Objects, Inheritance and Access Control, Default Base Class Constructors, this and super keywords.	3	Core Java 8 for	

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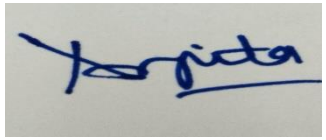
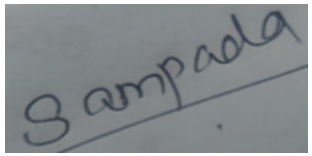
III	Abstract Classes And Interfaces, Abstract Classes, Abstract Methods, Interfaces, What Is An Interface? How Is An Interface Different From An Abstract Class?	3	Beginners By Vaishali Shah, Sharnam Shah	Blackboard & chalk
	Multiple Inheritance, Default Implementation, Adding New Functionality, Method Implementation, Classes V/s Interfaces, Defining An Interface, Implementing Interfaces.	4		
	Packages: Creating Packages, Default Package, Importing Packages, Using A Package.	2		
IV	**Enumerations, Arrays:** Two Dimensional Arrays, Multi-Dimensional Arrays, Vectors, Adding Elements To A Vector, Accessing Vector Elements, Searching For Elements In A Vector, Working With The Size of The Vector.	3	Core Java 8 for Beginners By Vaishali Shah, Sharnam Shah	Blackboard & chalk
	Multithreading: the thread control methods, thread life cycle, the main thread, creating a thread, extending the thread class.	3		
	Exceptions: Catching Java Exceptions, Catching Run-Time Exceptions, Handling Multiple Exceptions, The finally Clause, The throws Clause	3		
	Byte streams: reading console input, writing console output, reading file, writing file, writing binary data, reading binary data, getting started with character streams, writing file, reading file	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT:CS

CLASS: SY BSc IT DIV-C(CJ) SEMESTER:SEM-4 MONTH:DEC-MAR ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to :

- To learn why Java is useful for the design of desktop and web applications.
- To learn how to implement object-oriented designs with Java.
- To identify Java language components and how they work together in applications.
- To design and program stand-alone Java applications.
- To learn how to design a graphical user interface (GUI) .
- To understand how to use Java APIs for program development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CORE JAVA PAPER-1 Unit 1	**Introduction:**History, architecture and its components,Java Class File, Java Runtime Environment, The Java Virtual Machine, JVM Components, The Java API, java platform, java development kit,	2	Core Java 8 for Beginners BY Vaishali Shah, Sharnam Shah	BLACK BOARD AND CHALK
	Lambda Expressions, Methods References, Type Annotations, Method Parameter Reflection, setting the path environment variable, Java Compiler And Interpreter, java programs, java applications,	2		
	main(), public, static, void, string[] args, statements, white space, case sensitivity, identifiers, keywords, comments, braces and code blocks, variables, variable name	2		
	Data types: primitive data types, Object Reference Types, Strings, Auto boxing, operators and properties of operator	4		

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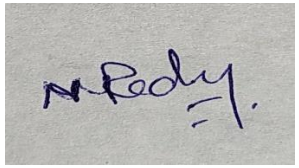
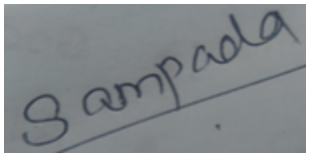
Unit 5	Arithmetic operators, assignment operators, increment and decrement operator, relational operator, logical operator,			
	bitwise operator, conditional operator.	2		
	Event Handling: Delegation Event Model, Events, Event classes, Event listener interfaces, Using delegation event model, adapter classes and inner classes.	3	Core Java 8 for Beginners BY Vaishali Shah, Sharnam Shah	BLACK BOARD AND CHALK
	Abstract Window Toolkit: Window Fundamentals, Component, Container, Panel, Window, Frame, Canvas	3		
	.Components − Labels, Buttons, Check Boxes, Radio Buttons, Choice Menus, Text Fields, Text, Scrolling List, Scrollbars, Panels, Frames	3		
	Layouts: Flow Layout, Grid Layout, Border Layout, Card Layout.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24





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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT SEMESTER: IV MONTH: December to March
ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -I The Mean, Median, Mode, and Other Measures of Central Tendency	The Mean, Median, Mode, and Other Measures of Central Tendency: Index, or Subscript, Notation, Summation Notation, Averages, or Measures of Central Tendency ,The Arithmetic Mean , The Weighted Arithmetic Mean ,Properties of the Arithmetic Mean ,The Arithmetic Mean Computed from Grouped Data ,The Median ,The Mode, The Empirical Relation Between the Mean, Median, and Mode, The Geometric Mean G, The Harmonic Mean H ,The Relation Between the Arithmetic, Geometric, and Harmonic Means, The Root Mean Square, Quartiles, Deciles, and Percentiles, Software and Measures of Central Tendency. The Standard Deviation and Other Measures of Dispersion: Dispersion, or Variation, The Range, The Mean Deviation, The Semi-Interquartile Range, The 10–90 Percentile Range, The Standard Deviation, The Variance, Short Methods for Computing the Standard Deviation, Properties of the Standard Deviation, Charlie's Check, Sheppard's Correction for Variance, Empirical Relations Between Measures of Dispersion, Absolute and Relative Dispersion; Coefficient of Variation, Standardized Variable; Standard	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Scores, Software and Measures of Dispersion. Introduction to R: Basic syntax, data types, variables, operators, control statements, R-functions, R – Vectors, R – lists, R Arrays..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT SEMESTER: IV MONTH: December to March
ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -III Statistical Estimation Theory, Statistical Decision Theory,	Statistical Estimation Theory: Estimation of Parameters, Unbiased Estimates, Efficient Estimates, Point Estimates and Interval Estimates; Their Reliability, Confidence-Interval Estimates of Population Parameters, Probable Error. Statistical Decision Theory: Statistical Decisions, Statistical Hypotheses, Tests of Hypotheses and Significance, or Decision	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Rules, Type I and Type II Errors, Level of Significance, Tests Involving Normal Distributions, Two-Tailed and One-Tailed Tests, Special Tests, Operating-Characteristic Curves; the Power of a Test, p-Values for Hypotheses Tests, Control Charts, Tests Involving Sample Differences, Tests Involving Binomial Distributions. Statistics in R: mean, median, mode, Normal Distribution , Binomial Distribution, Frequency Distribution in R.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics CLASS: SYIT
SEMESTER: IV MONTH: December to March ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -IV Small Sampling Theory, The Chi-Square Test:	Small Sampling Theory: Small Samples, Student's t Distribution, Confidence Intervals, Tests of Hypotheses and Significance, The Chi-Square Distribution, Confidence Intervals for Sigma , Degrees of Freedom, The F Distribution. The Chi-Square Test: Observed and Theoretical Frequencies, Definition of chi-square, Significance Tests, The Chi-	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Square Test for Goodness of Fit, Contingency Tables, Yates' Correction for Continuity, Simple Formulas for Computing chi-square, Coefficient of Contingency, Correlation of Attributes, Additive Property of chi-square.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

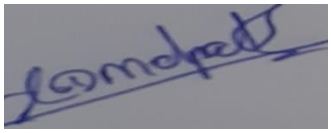
TEACHING PLAN (UNIT PLAN)

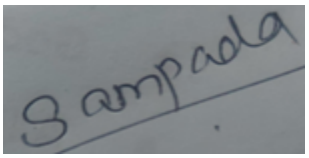
NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT
SEMESTER: IV MONTH: December to March ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -V Curve Fitting and the Method of Least Squares: Correlation Theory:,	Curve Fitting and the Method of Least Squares: Relationship Between Variables, Curve Fitting, Equations of Approximating Curves, Freehand Method of Curve Fitting, The Straight Line, The Method of Least Squares, The Least-Squares Line, Nonlinear Relationships, The Least-Squares Parabola, Regression, Applications to Time Series, Problems Involving More Than Two Variables. Correlation Theory: Correlation and Regression, Linear Correlation, Measures of Correlation, The Least-Squares Regression Lines, Standard Error of Estimate, Explained and Unexplained Variation, Coefficient of Correlation, Remarks Concerning the Correlation Coefficient, Product-Moment Formula for the Linear Correlation Coefficient, Short Computational Formulas, Regression Lines and the Linear	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	ONLINE (GOOGLE CLASSROOM)

	Correlation Coefficient, Correlation of Time Series, Correlation of Attributes, Sampling Theory of Correlation, Sampling Theory of Regression..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: S.Y. BSc (IT) DIV-C SEMESTER:SEM- 4 MONTH: DEC-MAR ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to :

1. Understand what is Embedded system and its uses.
2. Understand different components of a micro-controller and their interactions.
3. Become familiar with programming environment used to develop embedded systems .
4. Understand key concepts of embedded systems like IO, timers, interrupts, interaction with peripheral devices .
5. Learn debugging techniques for an embedded system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT402 Introduction to Embedded Systems UNIT 1	**Embedded Systems and general purpose** computer systems, history, classifications, applications and purpose of embedded systems	4	Introduction to embedded systems by Shibu K V	Black board and chalk
	Core of embedded systems: Microprocessors and microcontrollers ,RISC and CISC controllers, Big endian and Little endian processors, Application specific ICs, Programmable logic devices, COTS.	3		
	Sensors and actuators, communication interface, embedded firmware, other system components.	2		

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	Characteristics and quality attributes of embedded systems: Characteristics, operational and non-operational quality attributes.	3		
USIT402 Introduction to Embedded Systems UNIT 2	**Application specific** – washing machine, domain specific - automotive.	3	Introduction to embedded systems by Shibu K V	Black board and chalk
	Memory map, i/o map, interrupt map, processor family, external peripherals	3		
	Embedded Hardware: memo**ry** – RAM , ROM, types of RAM and ROM, memory testing, CRC ,Flash memory .	2		
	Peripherals: Control and Status Registers, Device Driver, Timer Driver - Watchdog Timers.	4		
USIT402 Introduction to Embedded Systems UNIT 3	**The 8051 Microcontrollers**:Microcontrollers and Embedded processors, Overview of 8051 family.8051 Microcontroller hardware	5	Programming Embedded Systems in C C++ by Michael Barr	Black board and chalk
	Input/output pins, Ports, and Circuits, External Memory.	3		
	8051 Programming in C:Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs.	4		
USIT402	**Designing Embedded System with 8051 Microcontroller:** Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	5	Programming Embedded Systems in C C++ by	Black board and chalk, Projector

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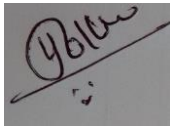
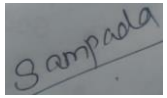
Introduction to Embedded Systems UNIT 4			Michael Barr www.tutorialspoint.com	
	Programming embedded systems: structure of embedded program, infinite loop	3		
	compiling, linking and debugging	4		
USIT402 Introduction to Embedded Systems UNIT 5	**Real Time Operating System (RTOS):** Operating system basics, types of operating systems, Real-Time Characteristics, Selection Process of an RTOS.	6	Introduction to embedded systems by Shibu K V , www.tutorialspoint.com	Black board and chalk
	Design and Development: Embedded system development Environment – IDE, types of file generated on cross compilation, disassembler/ de-compiler, simulator, emulator and debugging, embedded product development life-cycle, trends in embedded industry	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYIT SEMESTER: IV MONTH: DEC-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To provide a understanding of software engineering, its basic concepts and functioning. Develop and master understanding of various models used by software industries for various purposes. Also conceptual learning of various aspects of it such as cost estimation techniques, project management, quality assurance etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT404, Software Engineering Unit-I	Introduction: What is software engineering? Software Development Life Cycle, Requirements Analysis, Software Design, Coding, Testing, Maintenance etc. Agile software development: Agile methods, Plan-driven and agile development, Extreme programming, Agile project management, Scaling agile methods.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Blackboard, Chalk
	Software Requirements: Functional and Non-functional requirements, User Requirements, System Requirements, Interface Specification, Documentation of the software requirements.	02		Blackboard, Chalk
	Software Processes: Process and Project, Component Software Processes. Software Development Process Models. • Waterfall Model. • Prototyping. • Iterative Development. • Rational Unified Process. • The RAD Model • Time boxing Model.	04		Blackboard, Chalk
	Agile software development: Agile methods, Plan-driven and agile development, Extreme programming, Agile project management, Scaling agile methods.	03		Blackboard, Chalk

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USIT404, Software Engineering Unit-II	Socio-technical system:Essential characteristics of socio technical systems, Emergent System Properties, Systems Engineering, Components of system such as organization, people and computers, Dealing Legacy Systems.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Blackboard, Chalk
	Critical system: Types of critical system, A simple safety critical system, Dependability of a system, Availability and Reliability, Safety and Security of Software systems.	03		Blackboard, Chalk
	Requirements Engineering Processes: Feasibility study, Requirementselicitation and analysis, Requirements Validations, Requirements Management.	03		Blackboard, Chalk
	System Models: Models and its types, Context Models, Behavioural Models, Data Models, Object Models, Structured Methods	03		Blackboard, Chalk
USIT404, Software Engineering Unit-III	Architectural Design: Architectural Design Decisions, System Organisation, Modular Decomposition Styles, Control Styles, Reference Architectures.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh	Blackboard, Chalk
	User Interface Design: Need of UI design, Design issues, The UI design Process, User analysis, User Interface Prototyping, Interface Evaluation	03		Blackboard, Chalk
	Project Management Software Project Management, Management activities, Project Planning, Project Scheduling, Risk Management.	03		Blackboard, Chalk
	Quality Management: Process and Product Quality, Quality assurance and Standards, Quality Planning, Quality Control, Software Measurement and Metrics	03		Blackboard, Chalk

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			edition	
USIT404, Software Engineering Unit-IV	Verification and Validation: Planning Verification and Validation, Software Inspections, Automated Static Analysis, Verification and Formal Methods.	04	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Blackboard, Chalk
	Software Testing: System Testing, Component Testing, Test Case Design, Test Automation. Software Measurement: Size-Oriented Metrics, Function-Oriented Metrics, Extended Function Point Metrics	04		Blackboard, Chalk
	Software Cost Estimation:Software Productivity, Estimation Techniques, Algorithmic Cost Modelling, Project Duration and Staffing	04		Blackboard, Chalk
USIT404, Software Engineering Unit-V	Process Improvement: Process and product quality, Process Classification, Process Measurement, Process Analysis and Modeling, Process Change, The CMMI Process Improvement Framework.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's	Blackboard, Chalk
	Service Oriented Software Engineering: Services as reusable components, Service Engineering, Software Development with Services.	03		Blackboard, Chalk
	Software reuse: The reuse landscape, Application frameworks, Software product lines, COTS product reuse.	03		Blackboard, Chalk
	Distributed software engineering: Distributed systems issues, Client–server computing, Architectural patterns for distributed	03		Blackboard, Chalk

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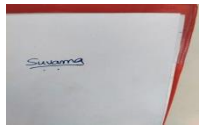
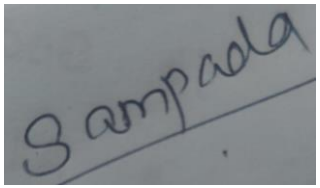
	systems, Software as a service		approach Roger Pressman Tata Mcgraw-hill Seventh edition	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BRIJESH YATINDRA JOSHI **DEPARTMENT: INFORMATION TECHNOLOGY**

CLASS: TYIT DIV - A SEMESTER: VI MONTH: Dec to March ACADEMIC YEAR: 2019-2020

Learning Objectives

1. Understand the concept of business intelligence and Decision support systems
2. Understand the concept of decision making and use of it in decision making
3. Understand the concept of Data mining and data preparation
4. Understand the concept and various algorithms of Classification and clustering
5. Understand the concept of Business intelligence applications such as marketing models logistics and production models
6. Understanding concept of Knowledge management ,AI and Expert systems

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PAPER ,UNIT , TITLE	SUB TOPICS	NO OF LECTURES ALLOCATED	REFERENCE/S	TEACHING METHODS /ICT TOOLS USED
USIT603 Business Intelligence UNIT I	Business intelligence: Effective and timely decisions, Data, information and knowledge, The role of mathematical models, Business intelligence architectures, Ethics and business intelligence	6	Business Intelligence: Data Mining and Optimization for Decision Making, Carlo Vercellis	BLACK BOARD AND CHALK
	Business intelligence: Effective and timely decisions, Data, information and knowledge, The role of mathematical models, Business intelligence architectures, Ethics and business intelligence	6		
UNIT II	Mathematical models for decision making: Structure of mathematical models, Development of a model, Classes of models Data mining: Definition of data mining, Representation of input data , Data mining process, Analysis methodologies Data preparation: Data validation, Data transformation, Data reduction	12	Business Intelligence: Data Mining and Optimization for Decision Making, Carlo Vercellis	BLACK BOARD AND CHALK
UNIT III	Classification: Classification problems, Evaluation of classification models, Bayesian methods, Logistic regression, Neural networks, Support vector machines	6	Business Intelligence: Data Mining	BLACK BOARD AND CHALK

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	Clustering: Clustering methods, Partition methods, Hierarchical methods, Evaluation of clustering models	6	and Optimization for Decision Making, Carlo Vercellis	
UNIT IV	Business intelligence applications: Marketing models: Relational marketing, Sales force management, Logistic and production models: Supply chain optimization, Optimization models for logistics planning, Revenue management systems.	6	Decision support and Business Intelligence Systems	BLACK BOARD AND CHALK
	Data envelopment analysis: Efficiency measures, Efficient frontier, The CCR model, Identification of good operating practices	6		
UNIT V	Knowledge Management: Introduction to Knowledge Management, Organizational Learning and Transformation, Knowledge Management Activities, Approaches to Knowledge Management, Information Technology (IT) In Knowledge Management, Knowledge Management Systems Implementation, Roles of People in Knowledge Management	6	Decision support and Business Intelligence Systems	BLACK BOARD AND CHALK
	Artificial Intelligence and Expert Systems: Concepts and Definitions of Artificial Intelligence, Artificial Intelligence Versus Natural Intelligence, Basic Concepts of Expert Systems, Applications of Expert	6		

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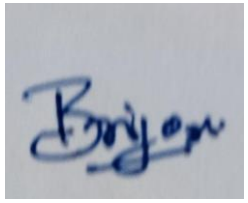
	Systems, Structure of Expert Systems, Knowledge Engineering, Development of Expert Systems			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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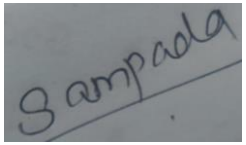

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Gayatree Karnik DEPARTMENT: Information technology CLASS: TYIT (A)

SEMESTER: V MONTH: July ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand Legal aspects of Information technology
- Conceptual arrangements of Laws and amendments
- Pass on the legal information about how one should use technology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Unit 2	Contracts in the Infotech World: Contracts in the Infotech World, Click-Wrap and Shrink-Wrap Contract: Status under the Indian Contract Act, 1872, Contract Formation Under the Indian Contract Act, 1872, Contract Formation on the Internet, Terms and Conditions of Contracts. Jurisdiction in the Cyber World: Questioning the Jurisdiction and Validity of the Present Law of Jurisdiction, Civil Law of Jurisdiction in India, Cause of Action, Jurisdiction and the Information Technology Act,2000, Foreign Judgements in India, Place of Cause of Action in Contractual and IPR Disputes, Exclusion	12	Cyber Law Simplified – Vivek Sood	Chalk & Board

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	Clauses in Contracts, Abuse of Exclusion Clauses, Objection of Lack of Jurisdiction, Misuse of the Law of Jurisdiction, Legal Principles on Jurisdiction in the United State of America, Jurisdiction Disputes w.r.t. the Internet in the United State of America.			
UNIT 3 Unit 4	Battling Cyber Squatters and Copyright Protection in the Cyber World: Concept of Domain Name and Reply to Cyber Squatters, Meta- Tagging, Legislative and Other Innovative Moves Against Cyber Squatting, The Battle Between Freedom and Control on the Internet, Works in Which Copyright Subsists and meaning of Copyright, Copyright Ownership and Assignment, License of Copyright, Copyright Terms and Respect for Foreign works, Copyright Infringement, Remedies and Offences, Copyright Protection of Content on the Internet; Copyright Notice, Disclaimer and Acknowledgement, Downloading for Viewing Content on the Internet, Hyper-Linking and Framing, Liability of ISPs for Copyright Violation in the Cyber World: Legal Developments in the US, Napster and its Cousins: A Revolution on the Internet but a Crisis for Copyright Owners, Computer Software Piracy.	12	Cyber Law Simplified – Vivek Sood	Chalk & Board
	E-Commerce Taxation: Real Problems in the Virtual World: A Tug of War on the Concept of 'Permanent Establishment', Finding the PE in Cross Border E-	12	Cyber Law Simplified – Vivek Sood	Chalk & Board

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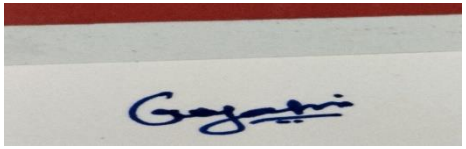
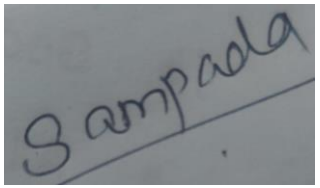
Unit 5	Commerce, The United Nations Model Tax Treaty, The Law of Double Taxation Avoidance Agreements and Taxable Jurisdiction Over Non-Residents, Under the Income Tax Act, 1961, Tax Agents of Non-Residents under the Income Tax Act,1961 and the Relevance to E-Commerce, Source versus Residence and Classification between Business Income and Royalty, The Impact of the Internet on Customer Duties, Taxation Policies in India: At a Glance. Digital Signature, Certifying Authorities and E-Governance: Digital Signatures, Digital Signature Certificate, Certifying Authorities and Liability in the Event of Digital Signature Compromise, E-Governance in India: A Warning to Babudom!			
	The Indian Evidence Act of 1872 v. Information Technology Act, 2000: Status of Electronic Records as Evidence, Proof and Management of Electronic Records; Relevancy, Admissibility and Probative Value of E-Evidence, Proving Digital Signatures, Proof of Electronic Agreements, Proving Electronic Messages, Other Amendments in the Indian Evidence Act by the IT Act, Amendments to the Bankers Books Evidence Act, 1891 and Reserve Bank of India Act, 1934. Protection of Cyber Consumers in India: Are Cyber Consumers 12 Covered Under the Consumer Protection Act? Goods and Services, Consumer Complaint, Defect in Goods and Deficiency in Services, Restrictive and Unfair Trade Practices, Instances of Unfair Trade Practices, Reliefs Under CPA, Beware Consumers, Consumer Foras, Jurisdiction and Implications on cyber Consumers in India, Applicability of CPA to Manufacturers, Distributors, Retailers and Service Providers Based in Foreign Lands Whose Goods are	12	Cyber Law Simplified – Vivek Sood	Chalk & Board

	Sold or Services Provided to a Consumer in India. Amendments in Indian IT Act 2000			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)** _____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**T.Y.B.SC(IT)-A**_____ SEMESTER: ____**VI**_____ MONTH: _____ _____**DECEMBER-MARCH** _____ ACADEMIC YEAR: _____**2019-2020**_____

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the Geographical Information System for processing standard geographic data.
- Make you understand where GIS system can be applied. Learning about different applications (example: GPS).
- How geographic data are capture, updated, profiled, stored and represented in the system.
- Enable to understand software and hardware trends, DBMS and varieties of Models.
- To understand how geographic data can be display with help of Maps and to understand the making of Maps.
- Studying about spatial referencing and positioning of data in system.
- To understand different operations and functions on data and to analyze and explore information in the system.
- To provide better visualization of data both in vector and raster manner.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-04 (USIT604) **Principles of**	**A Gentle Introduction to GIS** **The nature of GIS:** Some fundamental observations, Defining GIS, GISystems, GIScience and GIApplications, Spatial data and Geoinformation.	04	Principles of Geographic Information Systems- An	Textbook, Blackboard, Chalk and Duster, Projector,

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Geographic Information Systems **Unit No -01**	**The real world and representations of it:** Models and modelling, Maps, Databases, Spatial databases and spatial analysis		Introductory Text Book By Editors: Otto Huisman and Rolf A. , The International Institute of Geoinformation Science and Earth Observation Introduction to Geographic Information Systems Chang Kang-tsung McGrawHill	Laptop, PPTs.
	Geographic Information and Spatial Database **Models and Representations of the real world** **Geographic Phenomena:** Defining geographic phenomena, types of geographic phenomena, Geographic fields, Geographic objects, Boundaries	03		
	Computer Representations of Geographic Information: Regular tessellations, irregular tessellations, Vector representations, Topology and Spatial relationships, Scale and Resolution, Representation of Geographic fields, Representation of Geographic objects	03		
	Organizing and Managing Spatial Data **The Temporal Dimension**	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -02	**Data Management and Processing Systems** **Hardware and Software Trends** **Geographic Information Systems:** GIS Software, GIS Architecture and functionality, Spatial Data Infrastructure (SDI)	04	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto	Projector, Laptop, PPTs
	Stages of Spatial Data handling: Spatial data handling and preparation, Spatial Data Storage and maintenance, Spatial Query and Analysis, Spatial Data Presentation.	03		

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	Database management Systems: Reasons for using a DBMS, Alternatives for data management, The relational data model, Querying the relational database.	03	Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	
	GIS and Spatial Databases: Linking GIS and DBMS, Spatial database functionality.	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -03	**Spatial Referencing and Positioning** **Spatial Referencing:** Reference surfaces for mapping, Coordinate Systems, Map Projections, Coordinate Transformations	03	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Projector, Laptop, PPTs.
	Satellite-based Positioning: Absolute positioning, Errors in absolute positioning, Relative positioning, Network positioning, code versus phase measurements, Positioning technology	03		
	Data Entry and Preparation **Spatial Data Input:** Direct spatial data capture, Indirect spatial data captiure, Obtaining spatial data elsewhere	02		
	Data Quality: Accuracy and Positioning, Positional accuracy, Attribute accuracy, Temporal accuracy, Lineage, Completeness, Logical consistency	02		
	Data Preparation: Data checks and repairs, Combining data from multiple sources	01		
	Point Data Transformation: Interpolating discrete data, Interpolating continuous data	01		

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	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -04	**Spatial Data Analysis** **Classification of analytical GIS Capabilities** **Retrieval, classification and measurement:** Measurement, Spatial selection queries, Classification	03	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Textbook, Blackboard, Chalk and Duster, Projector, Laptop, PPTs
	Overlay functions: Vector overlay operators,Raster overlay operators	01		
	Neighbourhood functions: Proximity computations, Computation of diffusion, Flow computation, Raster based surface analysis	03		
	Analysis: Network analysis, interpolation, terrain modeling	01		
	GIS and Application models: GPS, Open GIS Standards, GIS Applications and Advances	02		
	Error Propagation in spatial data processing: How Errors propagate, Quantifying error propagation	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -05	**Data Visualization** **GIS and Maps, The Visualization Process** **Visualization Strategies: Present or explore?**	04	Principles of Geographic Information	Textbook, Blackboard, Chalk and Duster,

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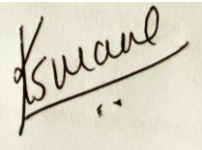
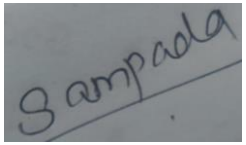
	The cartographic toolbox: What kind of data do I have?, How can I map my data?	03	Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Projector, Laptop, PPTs
	How to map?: How to map qualitative data, How to map quantitative data, How to map the terrain elevation, How to map time series	03		
	Map Cosmetics, Map Dissemination	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc. SEMESTER: VI MONTH: Dec to March ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To provide security against users, software, devices, operating systems, networks, cloud and data.

The learners will be able to :

- To understand the concept of Information Security.
- To know how to use Security Methodology, Strategy and Tactics.
- To analyze Risk by identifying possible Threat, Types of Attacks.
- To learn about Secure Design Principles like the CIA Triad and Other Models, Defense Models.
- To know Intrusion Detection and Prevention Systems.
- To learn Voice over IP (VoIP) and PBX Security, TEM (Telecom Expense Management).
- To understand Operating System Security Models, International Standards for Operating System Security.
- To have information related to Virtual Machines and Cloud Computing.
- To study Secure Application Design in Web Application Security, Client Application Security, Remote Administration Security.
- To know how to implement Physical Security by Choosing Site Location for Security, Securing Assets - Locks and Entry Controls, Physical Intrusion Detection.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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USIT602 Security in computing UNIT-I	**Information Security Overview**: The Importance of Information Protection, The Evolution of Information Security, Justifying Security Investment, Security Methodology, How to Build a Security Program, The Impossible Job, The Weakest Link, Strategy and Tactics, Business Processes vs. Technical Controls.	4	1. The Complete Reference: Information Security 2. Essential Cybersecurity Science 3. Principles of Computer Security: CompTIA Security+ and Beyond	Black Board, Projector, PPT.
	Risk Analysis: Threat Definition, Types of Attacks, Risk Analysis.	4		Black Board, Projector, PPT.
	Secure Design Principles: The CIA Triad and Other Models, Defense Models, Zones of Trust, Best Practices for Network Defense.	4		Black Board, Projector, PPT.
USIT602 Security in computing UNIT-IV	**Intrusion Detection and Prevention Systems**: IDS Concepts, IDS Types and Detection Models, IDS Features, IDS Deployment Considerations, Security Information and Event Management (SIEM).	5	1. The Complete Reference: Information Security 2. Essential Cybersecurity Science 3. Principles of Computer Security: CompTIA Security+ and Beyond	Black Board, Projector, PPT.
	Voice over IP (VoIP) and PBX Security: Background, VoIP Components, VoIP Vulnerabilities and Countermeasures, PBX, TEM: Telecom Expense Management.	5		
	Operating System Security Models: Operating System Models, Classic Security Models, Reference Monitor, Trustworthy Computing, International Standards for Operating System Security.	2		
USIT602 Security in computing	**Virtual Machines and Cloud Computing**: Virtual Machines, Cloud Computing.	4	1. The Complete Reference:	Black Board, Projector, PPT.

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UNIT-V	**Secure Application Design**: Secure Development Lifecycle, Application Security Practices, Web Application Security, Client Application Security, Remote Administration Security.	4	Information Security 2. Essential Cybersecurity Science 3. Principles of Computer Security: CompTIA Security+ and Beyond	
	Physical Security: Classification of Assets, Physical Vulnerability Assessment, Choosing Site Location for Security, Securing Assets : Locks and Entry Controls, Physical Intrusion Detection.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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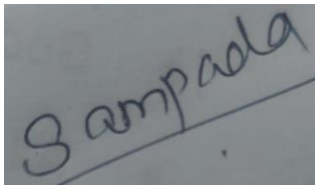

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sampada Deshmukh DEPARTMENT: Information Technology

CLASS: T. Y. B. Sc. I. T –A SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Learn authentication and authorization

Understand security concept and different encryption techniques

Understand the concept of database security and storage security with its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -II	**Authentication and Authorization**: Authentication, Authorization	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	Black board and projector
	Encryption: A Brief History of Encryption, Symmetric-Key Cryptography, Public Key Cryptography, Public Key Infrastructure.	5		Black board and projector
	Storage Security: Storage Security Evolution, Modern Storage Security, Risk Remediation, Best Practices.	2		Black board and projector
	Database Security: General Database Security Concepts, Understanding Database Security Layers, Understanding Database-Level Security, Using Application Security, Database Backup and Recovery, Keeping Your Servers Up to Date, Database Auditing and Monitoring.	2		Black board and projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -III	**Secure Network Design**: Introduction to Secure Network Design, Performance, Availability, Security.	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	Black board and projector
	Network Device Security: Switch and Router Basics, Network Hardening.	3		Black board and projector
	Firewalls: Overview, The Evolution of Firewalls, Core Firewall Functions, Additional Firewall Capabilities, Firewall Design.	3		Black board and projector
	Wireless Network Security: Radio Frequency Security Basics, Data-Link Layer Wireless Security Features, Flaws, and Threats, Wireless Vulnerabilities and Mitigations, Wireless Network Hardening Practices and Recommendations, Wireless Intrusion Detection and Prevention, Wireless Network Positioning and Secure Gateways.	3		Black board and projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -IV	**Intrusion Detection and Prevention Systems**: IDS Concepts, IDS Types and Detection Models, IDS Features, IDS Deployment Considerations, Security Information and Event Management (SIEM).	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	Powerpoint presentation through projector
	Voice over IP (VoIP) and PBX Security: Background, VoIP Components, VoIP Vulnerabilities and Countermeasures, PBX, TEM: Telecom Expense Management.	4		Powerpoint presentation through projector
	Operating System Security Models: Operating System Models, Classic Security Models, Reference Monitor, Trustworthy Computing, International Standards for Operating System Security.	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2019-2020

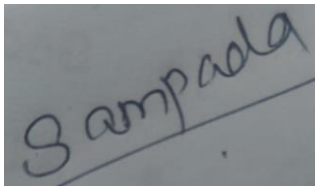
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -V	**Virtual Machines and Cloud Computing**: Virtual Machines, Cloud Computing.	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	Powerpoint presentation through projector
	Secure Application Design: Secure Development Lifecycle, Application Security Practices, Web Application Security, Client Application Security, Remote Administration Security.	4		Powerpoint presentation through projector
	Physical Security: Classification of Assets, Physical Vulnerability Assessment, Choosing Site Location for Security, Securing Assets: Locks and Entry Controls, Physical Intrusion Detection.	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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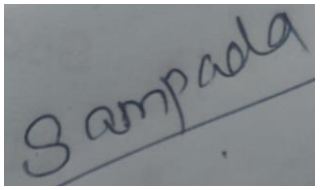

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHARVARI PATIL DEPARTMENT: IT CLASS: T.Y.I.T SEMESTER: VI

MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the definition of software Quality.
- Learn the fundamentals of Testing.
- Gain knowledge about different types of testing.
- Learn the various methods of verification and validation.
- Understand the importance of special tests.

Paper No.,Paper Title, Unit No.	**Sub Topics:**	**No. of Lectures**	**References**	**Teaching Method/ICT tools used**
USIT601 Software Quality Assurance	Introduction to Quality: Historical Perspective of Quality,What is Quality? (Is it a fact or perception?),Definitions of Quality,Core Components of Quality,Quality View, Financial Aspect of Quality, Customers, Suppliers and Processes, Total Quality Management (TQM) ,Quality Principles of Total Quality Management	6	Reference Book: Software Testing and Continuous	Chalk, Blackboard, ICT

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Unit 1	Quality Management Through Statistical Process Control,Quality Management Through Cultural Changes,Continual (Continuous) Improvement Cycle,Quality in Different Areas,Benchmarking and Metrics,Problem Solving Techniques,Problem Solving Software Tool Software Quality: Introduction, Constraints of Software ,Product Quality Assessment,Customer is a King,Quality and Productivity Relationship,Requirements of a Product ,Organisation Culture,Characteristics of Software, software Development Process,Types of Products, Schemes of Criticality Definitions, Problematic Areas of Software Development Life Cycle, Software Quality Management, Why Software Has Defects? Processes Related to Software Quality, Quality Management System Structure, Pillars of Quality Management System, Important Aspects of Quality Management	6	Quality Improvement William E. Lewis	
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT601 Software	Fundamentals of testing: Introduction, Necessity of testing, What is testing? Fundamental test process, The psychology of	6	Reference	Chalk,

Quality Assurance Unit 2	testing, Historical Perspective of Testing, Definitions of Testing, Approaches to Testing, Testing During DevelopmentLife Cycle, Requirement Traceability Matrix, Essentials of Software Testing, Workbench, Important Features of Testing Process, Misconceptions About Testing, Principles of Software Testing, Salient Features of Good Testing, Test Policy, Test Strategy or Test Approach, Test Planning, Testing Process and Number of Defects Found in Testing, Test Team Efficiency, Mutation Testing, Challenges in Testing, Test Team Approach, Process Problems Faced by Testing, Cost Aspect of Testing, Establishing Testing Policy,Methods, Structured Approach to Testing, Categories of Defect, Defect, Error, or Mistake in Software, Developing Test Strategy, Developing Testing Methodologies (Test Plan), Testing Process, Attitude Towards Testing (Common People Issues), Test Methodologies/Approaches, People Challenges in Software Testing, Raising Management Awareness for Testing, Skills Required by Tester,Testing throughout the software life cycle, Software development models, Test levels, Test types, the targets of testing, Maintenance testing	3 3	Book: Software Testing: Principles, Techniques and Tools M. G. Limaye	Blackboard

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	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT601 Software Quality Assurance Unit 3	Unit Testing: Boundary Value Testing: Normal Boundary Value Testing, Robust Boundary Value Testing, Worst-Case Boundary ValueTesting, Special Value Testing, Examples, Random Testing, Guidelines for Boundary Value Testing, Equivalence Class Testing: Equivalence Classes, Traditional Equivalence Class Testing, Improved Equivalence Class Testing, Edge Testing, Guidelines and Observations Decision Table–Based Testing: Decision Tables, Decision Table Techniques, Cause And Effect Graphing, Guidelines and Observations, Path Testing: Program Graphs, DD Paths, Test Coverage Metrics, Basis Path Testing, Guidelines and Observations, Data Flow Testing: Define/Use Testing, Slice-Based Testing, Program Slicing Tools .	3 3 2 2 2	Reference Book: Software Testing: A Craftsman's Approach Paul C. Jorgenson	Chalk, Blackboard, ICT

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	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT601 Software Quality Assurance Unit 4	Software Verification and Validation: Introduction, Verification, Verification Workbench, Methods of Verification, Types of reviews on the basis of Stage Phase, Entities involved in verification, Reviews in testing lifecycle, Coverage in Verification, Concerns of Verification, Validation, Validation Workbench, Levels of Validation, Coverage in Validation, Acceptance Testing, Management of Verification and Validation, Software development verification and validation activities. V-test Model: Introduction, V-model for software, Testing during Proposal stage, Testing during requirement stage, Testing during test planning phase, Testing during design phase, Testing during coding, VV Model, Critical Roles and Responsibilities.	6 6	Reference Book: Software Testing: Principles, Techniques and Tools M. G. Limaye, Foundations of Software Testing Dorothy Graham	Chalk, Blackboard
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		

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USIT601 Software Quality Assurance Unit 5	Levels of Testing: Introduction, Proposal Testing, Requirement Testing, Design Testing, Code Review, Unit Testing, Module Testing, Integration Testing, Big-Bang Testing, Sandwich Testing, Critical Path First, Sub System Testing, System Testing, Testing Stages. Special Tests: Introduction, GUI testing, Compatibility Testing, Security Testing, Performance Testing, Volume Testing, Stress Testing, Recovery Testing, Installation Testing, Requirement Testing, Regression Testing, Error Handling Testing, Manual Support Testing, Intersystem Testing, Control Testing, Smoke Testing, Adhoc Testing, Parallel Testing, Execution Testing, Operations Testing, Compliance Testing, Usability Testing,Decision Table Testing, Documentation Testing, Training testing, Rapid Testing, Control flow graph, Generating tests on the basis of Combinatorial Designs, State Graph, Risk Associated with New Technologies, Process maturity level of Technology, Testing Adequacy of Control in New technology usage, Object Oriented Application Testing, Testing of Internal Controls, COTS Testing, Client Server Testing, Web Application Testing, Mobile Application Testing, eBusiness eCommerce Testing, Agile Development Testing,Data Warehousing Testing.	2 10	Reference Book: Software Testing: Principles, Techniques and Tools M. G. Limaye	Chalk, Blackboard ICT

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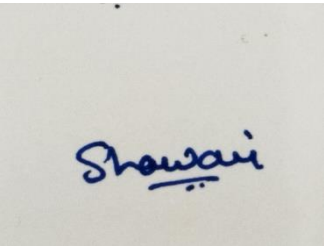
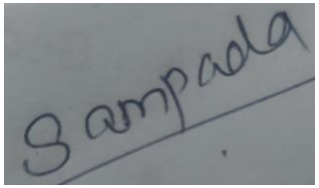
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		





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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.I.T**

CLASS: **TYIT B** SEMESTER: **VI** MONTH: **Dec-March** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVES:
The learners will be able to :

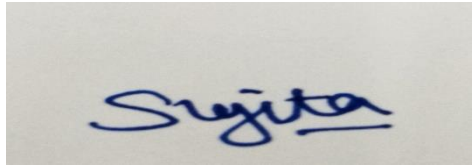
- Understand the role of Business Intelligence system and Decision support system in improvising the business.
- Understand different algorithms used in BI systems.
- Understand the use of AI and Knowledge management system.

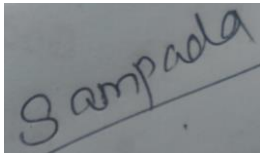
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
III,1, Business Intelligence	Business intelligence: Effective and timely decisions, Data, information and knowledge, The role of mathematical models, Business intelligence architectures, Ethics and business intelligence	5	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Chalk and Duster
	Decision support systems: Definition of system, Representation of the decision-making process, Evolution of information systems, Definition of decision support system, Development of a decision support system	5	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Chalk and Duster
	Mathematical models for decision making: Structure of mathematical models	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Chalk and Duster

III,2, Business Intelligence	Development of a model, Classes of models Data mining: Definition of data mining,	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Chalk and Duster
	Representation of input data , Data mining process, Analysis methodologies Data preparation: Data validation, Data transformation, Data reduction	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Chalk and Duster
III,3, Business Intelligence	Classification: Classification problems, Evaluation of classification models, Bayesian methods, Logistic regression, Neural networks, Support vector machines	5	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Chalk and Duster
	Clustering: Clustering methods, Partition methods, Hierarchical methods, Evaluation of clustering models	5	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Chalk and Duster
III,4, Business Intelligence	Business intelligence applications: Marketing models: Relational marketing, Sales force management	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First	Chalk and Duster
	Logistic and production models: Supply chain optimization, Optimization models for logistics planning, Revenue management systems.	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Chalk and Duster
	Data envelopment analysis: Efficiency measures, Efficient frontier, The CCR model, Identification of good operating practices	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	
III,5, Business	Knowledge Management: Introduction to Knowledge Management, Organizational Learning and Transformation, Knowledge Management Activities, Approaches to Knowledge Management, Information Technology (IT) In Knowledge Management, Knowledge Management	5	Decision support and Business Intelligence Systems Efraim Turban, Ramesh Sharda, Dursun Delen Pearson Ninth 2011	Chalk and Duster

Intelligence	Systems Implementation, Roles of People in Knowledge Management			
	Artificial Intelligence and Expert Systems: Concepts and Definitions of Artificial Intelligence, Artificial Intelligence Versus Natural Intelligence, Basic Concepts of Expert Systems, Applications of Expert Systems, Structure of Expert Systems, Knowledge Engineering, Development of Expert Systems	5	Decision support and Business Intelligence Systems Efraim Turban, Ramesh Sharda, Dursun Delen Pearson Ninth 2011	Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 54





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: TYIT SEMESTER: VI MONTH: DECE to MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

To develop the understanding of relationship between commerce and cyberspace

To enable learner to understand, explore, and acquire a critical understanding Cyber Law.

To give learners in depth knowledge of Information Technology Act and legal frame work of Right to Privacy, Data Security and Data Protection

To make learner conversant with the social and intellectual property issues emerging from 'Cyberspace

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-07 Cyber Law Unit 3	**Battling Cyber Squatters and Copyright Protection in the Cyber World:** Concept of Domain Name and Reply to Cyber Squatters, Meta-Tagging, Legislative and Other Innovative Moves Against Cyber Squatting, The Battle Between Freedom and Control on the Internet, Works in Which Copyright Subsists and meaning of Copyright, Copyright Ownership and Assignment, License of Copyright, Copyright Terms and Respect for Foreign Works, Copyright Infringement, Remedies and Offences, Copyright Protection of Content on the Internet; Copyright Notice, Disclaimer and Acknowledgement, Downloading for Viewing Content on the Internet, Hyper-Linking and Framing, Liability of ISPs for Copyright Violation in the Cyber World: Legal Developments in the US, Napster and its Cousins: A Revolution on the Internet but a Crisis for Copyright Owners, Computer Software Piracy.	12	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
Paper-07 Cyber Law Unit 4	**E-Commerce Taxation:** Real Problems in the Virtual World: A Tug of War on the Concept of „Permanent Establishment", Finding the PE in Cross Border E-Commerce, The United Nations Model Tax Treaty, The Law of Double Taxation Avoidance Agreements and Taxable Jurisdiction Over Non-Residents, Under the Income Tax Act, 1961, Tax Agents of Non-Residents under the Income Tax Act,1961 and the Relevance to E-Commerce, Source versus Residence and Classification between Business Income and Royalty, The Impact of the Internet on Customer Duties, Taxation Policies in India: At a Glance.	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk

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	Digital Signature, Certifying Authorities and E-Governance: Digital Signatures, Digital Signature Certificate, Certifying Authorities and Liability in the Event of Digital Signature Compromise, E-Governance in India: A Warning to Babudom!	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
Paper-07 Cyber Law Unit 5	**The Indian Evidence Act of 1872 v. Information Technology Act, 2000:** Status of Electronic Records as Evidence, Proof and Management of Electronic Records; Relevancy, Admissibility and Probative Value of E-Evidence, Proving Digital Signatures, Proof of Electronic Agreements, Proving Electronic Messages, Other Amendments in the Indian Evidence Act by the IT Act, Amendments to the Bankers Books Evidence Act, 1891 and Reserve Bank of India Act, 1934.	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
	Protection of Cyber Consumers in India: Are Cyber Consumers Covered Under the Consumer Protection Act? Goods and Services, Consumer Complaint, Defect in Goods and Deficiency in Services, Restrictive and Unfair Trade Practices, Instances of Unfair Trade Practices, Reliefs Under CPA, Beware Consumers, Consumer Foras, Jurisdiction and Implications on cyber Consumers in India, Applicability of CPA to Manufacturers, Distributors, Retailers and Service Providers Based in Foreign Lands Whose Goods are Sold or Services Provided to a Consumer in India. Amendments in Indian IT Act 2000	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:T.Y.BSC(I.T)DIV-B SEMESTER: **VI** MONTH:DECEMBER-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : To create more awareness about cyber legal issues and challenges.

To provide advice, inputs as also guidance to students on their day-to-day legal issues concerning the use of cyberspace.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cyber Laws Elective I USIT607 Unit-1	**Power of Arrest Without Warrant Under the IT Act, 2000:** A Critique, Crimes of this Millennium, Section 80 of the IT Act, 2000 – A Weapon or a Farce?	1	Cyber Law Simplified - Vivek Sood	Powerpoint Presentation, Blackboard,projector
	Forgetting the Line Between Cognizable and Non-Cognizable Offences.	2		
	Necessity of Arrest without Warrant from Any Place, Public or Otherwise.	2		
	Check and Balances Against Arbitrary Arrests,Arrest for "About to Commit" an Offence Under the IT Act: A Tribute to Draco, Arrest, But NO Punishment!	2		
	Cyber Crime and Criminal Justice: Penalties, Adjudication and Appeals Under the IT Act,2000: Concept of "Cyber Crime " and the IT Act , 2000, Hacking.	2		

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	Teenage Web Vandals, Cyber Fraud and Cyber Cheating, Virus on the Internet,Defamation, Harassment and Email Abuse, Cyber Pornography, Other IT Act Offences	2		
	. Monetary Penalties, Adjudication and Appeals Under IT Act , 2000, Network Service Providers, Jurisdiction and Cyber Crime.	2		
	Nature of Cyber Criminality, Strategies to Tackle Cyber Crime and Trends, Criminal Justice in India and Implications on Cyber Crime.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		
Cyber Laws Elective I USIT607 Unit-2	**Contracts in the Infotech World:** Contracts in the Infotech World, Click-Wrap and Shrink-Wrap Contract: Status under the Indian Contract Act, 1872.	2	Cyber Law Simplified - Vivek Sood	Powerpoint Presentation, Blackboard,projector
	Contract Formation Under the Indian Contract Act, 1872, Contract Formation on the Internet.	2		
	Terms and Conditions of Contracts.	1		
	Jurisdiction in the Cyber World: Questioning the Jurisdiction and Validity of the Present Law of Jurisdiction,Civil Law of Jurisdiction in India.	2		
	Cause of Action, Jurisdiction and the Information Technology Act,2000.	2		
	Foreign Judgements in India, Place of Cause of Action in	2		

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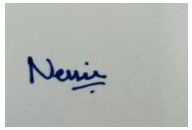
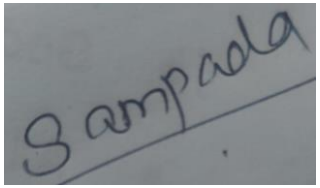
	Contractual and IPR Disputes.			
	Exclusion Clauses in Contracts, Abuse of Exclusion Clauses, Objection of Lack of Jurisdiction, Misuse of the Law of Jurisdiction.	2		
	Legal Principles on Jurisdiction in the United State of America, Jurisdiction Disputes w.r.t. the Internet in the United State of America.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: T.Y. BSc (IT) DIV-B SEMESTER:SEM -6 MONTH: DEC-MAR ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

- **GIS** helps visualizing important data about educational facilities and general statistics on local and national levels
- To display spatial data and to solve problems that involve spatial factors.
- To useful for relating, integrating, and analyzing information from these different themes (or layers) of spatial information.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604 Principles of Geographic Information Systems UNIT 1	A Gentle Introduction to GIS The nature of GIS: Some fundamental observations, Defining GIS, GIS Systems, GIS Science and GIS Applications, Spatial data and Geoinformation.	3	1. Principles of Geographic Information Systems An Introductory Text Book Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation Fourth edition 2009	Black board and chalk , Projector
	The real world and representations of it: Models and modelling, Maps, Databases, Spatial databases and spatial analysis	3		
	Geographic Information and Spatial Database Models and Representations of the real world Geographic Phenomena: Defining geographic phenomena, types of geographic phenomena, Geographic fields, Geographic objects, Boundaries Computer Representations of Geographic Information: Regular tessellations, irregular	6		

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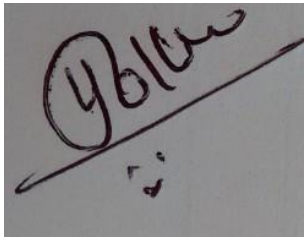
	tessellations, Vector representations, Topology and Spatial relationships, Scale and Resolution, Representation of Geographic fields, Representation of Geographic objects Organizing and Managing Spatial Data The Temporal Dimension			
USIT604 Principles of Geographic Information Systems UNIT 2	Data Management and Processing Systems Hardware and Software Trends Geographic Information Systems: GIS Software, GIS Architecture and functionality, Spatial Data Infrastructure (SDI).	3	Principles of Geographic Information Systems An Introductory Text Book Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation Fourth edition 2009	Black board and chalk,projector
	Stages of Spatial Data handling: Spatial data handling and preparation, Spatial Data Storage and maintenance, Spatial Query and Analysis, Spatial Data Presentation.	3		
	Database management Systems: Reasons for using a DBMS, Alternatives for data management, The relational data model, Querying the relational database.	3		
	GIS and Spatial Databases: Linking GIS and DBMS, Spatial database functionality.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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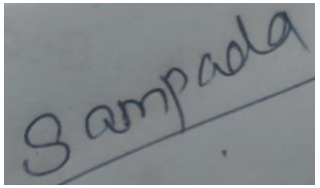

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Sandesh Akre DEPARTMENT: Information Technology CLASS:TYIT

SEMESTER: VI MONTH: December 2019 ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

- Acquaint Geographic Information System (GIS)
- Apply GIS logic to generate graphs
- Generate Spatial queries
- Research on Geospatial Information

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT6P4 Principles of Geographic Information Systems Unit 3	Spatial Referencing and Positioning Spatial Referencing: Reference surfaces for mapping, Coordinate Systems, Map Projections, Coordinate Transformations Satellite-based Positioning: Absolute positioning, Errors in absolute positioning, Relative positioning, Network positioning, code versus phase measurements, Positioning technology Data Entry and Preparation Spatial Data Input: Direct spatial data capture, Indirect spatial data captiure, Obtaining spatial data elsewhere Data Quality: Accuracy and Positioning, Positional accuracy, Attribute	12	Introduction to Geographic Information Systems (Karl), Chang Kang-tsung	Chalk and Board

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	accuracy, Temporal accuracy, Lineage, Completeness, Logical consistency Data Preparation: Data checks and repairs, Combining data from multiple sources Point Data Transformation: Interpolating discrete data, Interpolating continuous data			
Unit 4	Spatial Data Analysis Classification of analytical GIS Capabilities Retrieval, classification and measurement: Measurement, Spatial selection queries, Classification Overlay functions: Vector overlay operators, Raster overlay operators Neighbourhood functions: Proximity computations, Computation of diffusion, Flow computation, Raster based surface analysis Analysis: Network analysis, interpolation, terrain modelling GIS and Application models: GPS, Open GIS Standards, GIS Applications and Advances Error Propagation in spatial data processing: How Errors propagate, Quantifying error propagation	8	Introduction to Geographic Information Systems (Karl), Chang Kang-tsung	Chalk and Board
Unit 5	Data Visualization GIS and Maps, The Visualization Process Visualization Strategies: Present or explore? The cartographic toolbox: What kind of data do I have?, How can I map my data? How to map?: How to map qualitative data, How to map	8	Introduction to Geographic Information Systems (Karl), Chang Kang-tsung	Chalk and Board

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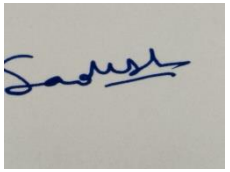
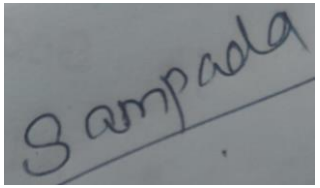
	quantitative data, How to map the terrain elevation, How to map time series Map Cosmetics, Map Dissemination			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -I	**Information Security Overview** : The Importance of Information Protection, The Evolution of Information Security, Justifying Security Investment, Security Methodology, How to Build a Security Program, The Impossible Job, The Weakest Link, Strategy and Tactics, Business Processes vs. Technical Controls.	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	Powerpoint presentation through projector
	Risk Analysis: Threat Definition, Types of Attacks, Risk Analysis.	4		Powerpoint presentation through projector
	Secure Design Principles: The CIA Triad and Other Models, Defense Models, Zones of Trust, Best Practices for Network Defense.	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -II	**Authentication and Authorization**: Authentication, Authorization	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	Powerpoint presentation through projector
	Encryption: A Brief History of Encryption, Symmetric-Key Cryptography, Public Key Cryptography, Public Key Infrastructure.	5		Blackboard
	Storage Security: Storage Security Evolution, Modern Storage Security, Risk Remediation, Best Practices.	2		Powerpoint presentation through projector
	Database Security: General Database Security Concepts, Understanding Database Security Layers, Understanding Database-Level Security, Using Application Security, Database Backup and Recovery, Keeping Your Servers Up to Date, Database Auditing and Monitoring.	2		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -III	**Secure Network Design**: Introduction to Secure Network Design, Performance, Availability, Security.	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	Powerpoint presentation through projector
	Network Device Security: Switch and Router Basics, Network Hardening.	3		Powerpoint presentation through projector
	Firewalls: Overview, The Evolution of Firewalls, Core Firewall Functions, Additional Firewall Capabilities, Firewall Design.	3		Powerpoint presentation through projector
	Wireless Network Security: Radio Frequency Security Basics, Data-Link Layer Wireless Security Features, Flaws, and Threats, Wireless Vulnerabilities and Mitigations, Wireless Network Hardening Practices and Recommendations, Wireless Intrusion Detection and Prevention, Wireless Network Positioning and Secure Gateways.	3		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -IV	**Intrusion Detection and Prevention Systems**: IDS Concepts, IDS Types and Detection Models, IDS Features, IDS Deployment Considerations, Security Information and Event Management (SIEM).	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	Powerpoint presentation through projector
	Voice over IP (VoIP) and PBX Security: Background, VoIP Components, VoIP Vulnerabilities and Countermeasures, PBX, TEM: Telecom Expense Management.	4		Powerpoint presentation through projector
	Operating System Security Models: Operating System Models, Classic Security Models, Reference Monitor, Trustworthy Computing, International Standards for Operating System Security.	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2019-2020

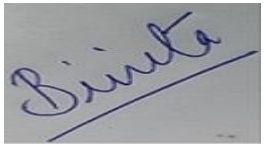
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

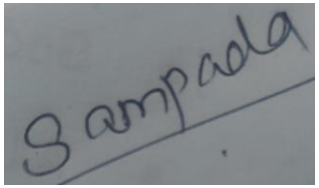
b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -V	**Virtual Machines and Cloud Computing**: Virtual Machines, Cloud Computing.	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	Powerpoint presentation through projector
	Secure Application Design: Secure Development Lifecycle, Application Security Practices, Web Application Security, Client Application Security, Remote Administration Security.	4		Powerpoint presentation through projector
	Physical Security: Classification of Assets, Physical Vulnerability Assessment, Choosing Site Location for Security, Securing Assets: Locks and Entry Controls, Physical Intrusion Detection.	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



SIGNATURE OF THE STAFF



SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **TYBSCIT** SEMESTER:**VI**

MONTH: **DEC-MARCH** ACADEMIC YEAR:**2019-20**

LEARNING OBJECTIVE/S:

The learners will be able to :

Understanding the customers priority for **quality assurance** while developing ...
that **will** be created by the organization, The scope of **Software** Testing applies to ... improvements of the processes through **learning** & innovation
Understand Manual and automated testing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT601 Software Quality Assurance UNIT-1	**Introduction to Quality:** Historical Perspective of Quality, What isQuality? (Is it a fact or perception?), Definitions of Quality, Core Components of Quality, Quality View, Financial Aspect of Quality, Customers, Suppliers and Processes, Total Quality Management (TQM), Quality Principles of Total Quality Management, Quality Management Through Statistical Process Control, Quality Management Through Cultural Changes, Continual (Continuous) Improvement Cycle, Quality in Different Areas, Benchmarking and Metrics, Problem Solving Techniques, Problem Solving Software Tools.	07	Software Testing: Principles, Techniques and Tools M. G. Limaye	Black board and chalk, power point
	Software Quality: Introduction, Constraints of Software Product Quality Assessment, Customer is a King, Quality and Productivity Relationship, Requirements of a Product, Organisation Culture, Characteristics of Software, Software Development Process, Types of Products, Schemes of Criticality Definitions, Problematic Areas of Software Development Life	05	Software Testing: Principles, Techniques and Tools M. G. Limaye	Black board and chalk, power point

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	Cycle, Software Quality Management, Why Software Has Defects?Processes Related to Software Quality, Quality Management System Structure, Pillars of Quality Management System, Important Aspects of Quality Management..			
USIT601 Software Quality Assurance UNIT-2	**Fundamentals of testing:** Introduction, Necessity of testing, What is testing? Fundamental test process, The psychology of testing,Historical Perspective of Testing, Definitions of Testing, Approaches to Testing, Testing During Development Life Cycle, Requirement Traceability Matrix, Essentials of Software Testing, Workbench,Important Features of Testing Process, Misconceptions About Testing,Principles of Software Testing, Salient Features of Good Testing, Test Policy, Test Strategy or Test Approach, Test Planning, Testing Process and Number of Defects Found in Testing, Test Team Efficiency, Mutation Testing, Challenges in Testing, Test Team Approach, Process Problems Faced by Testing, Cost Aspect of Testing, Establishing Testing Policy, Methods	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	Black board and chalk, power point
	Structured Approach to Testing, Categories of Defect, Defect, Error, or Mistake in Software, Developing Test Strategy, Developing Testing Methodologies (Test Plan), Testing Process, Attitude Towards Testing (Common People Issues), Test Methodologies/Approaches, People Challenges in Software Testing, Raising Management Awareness for Testing, Skills Required by Tester, Testing throughout the software life cycle, Software development models, Test levels, Test types, the targets of testing, Maintenance testing	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	Black board and chalk, power point
USIT601	**Unit Testing: Boundary Value Testing:** Normal Boundary ValueTesting, Robust Boundary Value Testing, Worst-Case Boundary ValueTesting, Special Value Testing, Examples,	05	Software Testing:	Black board and chalk, power point

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Software Quality Assurance UNIT-3	Random Testing, Guidelines for Boundary Value Testing, **Equivalence Class Testing:** Equivalence Classes, Traditional Equivalence Class Testing, Improved Equivalence Class Testing, Edge Testing, Guidelines and Observations.		Principles, Techniques and Tools M. G. Limaye	
	Decision Table–Based Testing: Decision Tables, Decision Table Techniques, Cause-and-Effect Graphing, Guidelines and Observations, **Path Testing:** Program Graphs, DD-Paths, Test Coverage Metrics, Basis Path Testing, Guidelines and Observations,**Data Flow Testing:** Define/Use Testing, Slice-Based Testing,Program Slicing Tools.	07	Software Testing: Principles, Techniques and Tools M. G. Limaye	Black board and chalk, power point
USIT601 Software Quality Assurance UNIT-4	**Software Verification and Validation:**Introduction, Verification, Verification Workbench, Methods of Verification, Types of reviews on the basis od Stage Phase, Entities involved in verification, Reviews in testing lifecycle, Coverage in Verification, Concerns of Verification, Validation, Validation Workbench, Levels of Validation,Coverage in Validation, Acceptance Testing, Management of Verification and Validation, Software development verification and validation activities	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	Black board and chalk, power point
	V-test Model: Introduction, V-model for software, Testing during Proposal stage, Testing during requirement stage, Testing during test planning phase, Testing during design phase, Testing during coding,VV Model, Critical Roles and Responsibilities.	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	Black board and chalk, power point
USIT601 Software Quality Assurance	**Levels of Testing:** Introduction, Proposal Testing, Requirement Testing, Design Testing, Code Review, Unit Testing, Module Testing, Integration Testing, Big-Bang Testing, Sandwich	04	Software Testing: Principles, Techniques	Black board and chalk, power point

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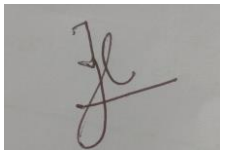
UNIT-5	Testing, Critical Path First, Sub System Testing, System Testing, Testing Stages.		and Tools M. G. Limaye	
	Special Tests: Introduction, GUI testing, Compatibility Testing, Security Testing, Performance Testing, Volume Testing, Stress Testing, Recovery Testing, Installation Testing, Requirement Testing,Regression Testing, Error Handling Testing, Manual Support Testing,Intersystem Testing, Control Testing, Smoke Testing, Adhoc Testing,Parallel Testing, Execution Testing, Operations Testing, Compliance Testing, Usability Testing, Decision Table Testing, Documentation Testing, Training testing, Rapid Testing, Control flow graph, Generating tests on the basis of Combinatorial Designs, State Graph,Risk Associated with New Technologies, Process maturity level of Technology, Testing Adequacy of Control in New technology usage,Object Oriented Application Testing, Testing of Internal Controls COTS Testing, Client Server Testing, Web Application Testing,Mobile Application Testing, eBusiness eCommerce Testing, Agile Development Testing, Data Warehousing Testing.	08	Software Testing: Principles, Techniques and Tools M. G. Limaye	Black board and chalk, power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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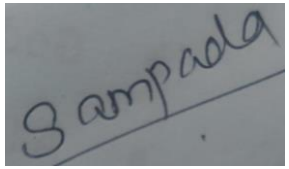

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: TYIT

SEMESTER: VI MONTH: DEC-MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the use of business intelligence in real life.
- Describe the different mathematical models to develop decision making systems.
- Get the difference between supervised learning and unsupervised learning techniques.
- Understand the use of mathematical models in relational marketing, support chain optimization, CCR model.
- Familiar with knowledge management and Artificial intelligence and expert systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT603, Business Intelligence Unit I	**Business intelligence:** Effective and timely decisions, Data, information and knowledge, The role of mathematical models, Business intelligence architectures, Ethics and business intelligence	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, Powerpoint
	Decision support systems: Definition of system, Representation of the decision-making process, Evolution of information systems, Definition of decision support system, Development of a decision support system	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint

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USIT603, Business Intelligence Unit II	**Mathematical models for decision making:** Structure of mathematical models, Development of a model, Classes of models	05	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Data mining: Definition of data mining, Representation of input data , Data mining process, Analysis methodologies	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Data preparation: Data validation, Data transformation, Data reduction	03	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
USIT603, Business Intelligence Unit III	**Classification**: Classification problems, Evaluation of classification models, Bayesian methods, Logistic regression, Neural networks, Support vector machines	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Clustering: Clustering methods, Partition methods, Hierarchical methods, Evaluation of clustering models	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
USIT603, Business Intelligence Unit IV	**Marketing models**: Relational marketing, Sales force management,	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Logistic and production models: Supply chain optimization, Optimization models for logistics planning, Revenue management systems.	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Data envelopment analysis: Efficiency measures, Efficient frontier, The CCR model, Identification of good operating practices	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint

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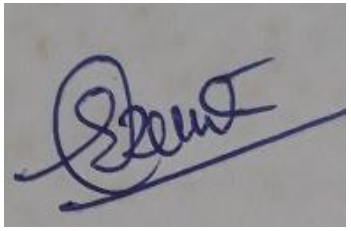
USIT603, Business Intelligence Unit V	**Knowledge Management:** Introduction to Knowledge Management, Organizational Learning and Transformation, Knowledge Management Activities, Approaches to Knowledge Management, Information Technology (IT) In Knowledge Management, Knowledge Management Systems Implementation, Roles of People in Knowledge Management	06	Decision support and Business Intelligence Systems by Efraim Turban, Ramesh Sharda, Dursun Delen , Pearson,Ninth,2011	Black Board and chalk, PowerPoint
	Artificial Intelligence and Expert Systems: Concepts and Definitions of Artificial Intelligence, Artificial Intelligence Versus Natural Intelligence, Basic Concepts of Expert Systems, Applications of Expert Systems, Structure of Expert Systems, Knowledge Engineering, Development of Expert Systems	06	Decision support and Business Intelligence Systems by Efraim Turban, Ramesh Sharda, Dursun Delen , Pearson,Ninth,2011	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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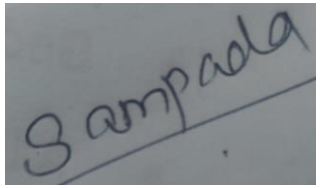

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Sandesh Akre DEPARTMENT: Information technology CLASS: TYIT

SEMESTER: V MONTH: July ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand Legal aspects of Information technology
- Conceptual arrangements of Laws and amendments
- Pass on the legal information about how one should use technology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT607, Cyber Laws Unit 1	Power of Arrest Without Warrant Under the IT Act, 2000: A Critique, Crimes of this Millennium, Section 80 of the IT Act, 2000 – A Weapon or a Farce? Forgetting the Line Between Cognizable and Non-Cognizable Offences, Necessity of Arrest without Warrant from Any Place, Public or Otherwise, Check and Balances Against Arbitrary Arrests, Arrest for "About to Commit" an Offence Under the IT Act: A Tribute to Draco, Arrest, But NO Punishment! Cyber Crime and Criminal Justice: Penalties, Adjudication and Appeals Under the IT Act, 2000:	12	Cyber Law Simplified – Vivek Sood	Chalk & Board

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	Concept of "Cyber Crime " and the IT Act , 2000, Hacking, Teenage Web Vandals, Cyber Cheating, Virus on the Internet, Defamation, Harassment and E-mail Abuse, Cyber Pornography, Other IT Act Offences, Monetary Penalties, Adjudication and Appeals Under IT Act , 2000, Network Service Providers, Jurisdiction and Cyber Crime, Nature of Cyber Criminality, Strategies to Tackle Cyber Crime and Trends, Criminal Justice in India and Implications on Cyber Crime.			
Unit 2 Unit 3	Contracts in the Infotech World: Contracts in the Infotech World, Click-Wrap and Shrink-Wrap Contract: Status under the Indian Contract Act, 1872, Contract Formation Under the Indian Contract Act, 1872, Contract Formation on the Internet, Terms and Conditions of Contracts. Jurisdiction in the Cyber World: Questioning the Jurisdiction and Validity of the Present Law of Jurisdiction, Civil Law of Jurisdiction in India, Cause of Action, Jurisdiction and the Information Technology Act,2000, Foreign Judgements in India, Place of Cause of Action in Contractual and IPR Disputes, Exclusion Clauses in Contracts, Abuse of Exclusion Clauses, Objection of Lack of Jurisdiction, Misuse of the Law of Jurisdiction, Legal Principles on Jurisdiction in the United State of America, Jurisdiction Disputes w.r.t. the Internet in the United State of America.	12	Cyber Law Simplified – Vivek Sood	Chalk & Board

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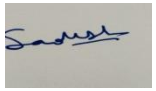
Unit 4	Battling Cyber Squatters and Copyright Protection in the Cyber World: Concept of Domain Name and Reply to Cyber Squatters, Meta- Tagging, Legislative and Other Innovative Moves Against Cyber Squatting, The Battle Between Freedom and Control on the Internet, Works in Which Copyright Subsists and meaning of Copyright, Copyright Ownership and Assignment, License of Copyright, Copyright Terms and Respect for Foreign works, Copyright Infringement, Remedies and Offences, Copyright Protection of Content on the Internet; Copyright Notice, Disclaimer and Acknowledgement, Downloading for Viewing Content on the Internet, Hyper-Linking and Framing, Liability of ISPs for Copyright Violation in the Cyber World: Legal Developments in the US, Napster and its Cousins: A Revolution on the Internet but a Crisis for Copyright Owners, Computer Software Piracy.	12	Cyber Law Simplified – Vivek Sood	Chalk & Board
	E-Commerce Taxation: Real Problems in the Virtual World: A Tug of War on the Concept of 'Permanent Establishment', Finding the PE in Cross Border E-Commerce, The United Nations Model Tax Treaty, The Law of Double Taxation Avoidance Agreements and Taxable Jurisdiction Over Non-Residents, Under the Income Tax Act, 1961, Tax Agents of Non-Residents under the Income Tax Act,1961 and the Relevance to E-Commerce, Source versus Residence and Classification	12	Cyber Law Simplified – Vivek Sood	Chalk & Board

Unit 5	between Business Income and Royalty, The Impact of the Internet on Customer Duties, Taxation Policies in India: At a Glance. Digital Signature, Certifying Authorities and E-Governance: Digital Signatures, Digital Signature Certificate, Certifying Authorities and Liability in the Event of Digital Signature Compromise, E-Governance in India: A Warning to Babudom!			
	The Indian Evidence Act of 1872 v. Information Technology Act, 2000: Status of Electronic Records as Evidence, Proof and Management of Electronic Records; Relevancy, Admissibility and Probative Value of E-Evidence, Proving Digital Signatures, Proof of Electronic Agreements, Proving Electronic Messages, Other Amendments in the Indian Evidence Act by the IT Act, Amendments to the Bankers Books Evidence Act, 1891 and Reserve Bank of India Act, 1934. Protection of Cyber Consumers in India: Are Cyber Consumers 12 Covered Under the Consumer Protection Act? Goods and Services, Consumer Complaint, Defect in Goods and Deficiency in Services, Restrictive and Unfair Trade Practices, Instances of Unfair Trade Practices, Reliefs Under CPA, Beware Consumers, Consumer Foras, Jurisdiction and Implications on cyber Consumers in India, Applicability of CPA to Manufacturers, Distributors, Retailers and Service Providers Based in Foreign Lands Whose Goods are Sold or Services Provided to a Consumer in India. Amendments in Indian IT Act 2000	12	Cyber Law Simplified – Vivek Sood	Chalk & Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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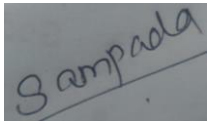

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Miss Shilpa James Rodrigues

DEPARTMENT: IT

CLASS: T.Y.I.T.-C (Principles of Geographic Information Systems)

SEMESTER: VI

MONTH: December - March

ACADEMIC YEAR: 2019 -20

LEARNING OBJECTIVE/S :
The learners will be able to :

- Understand the basics of geographic information system.
- Learn GIS Models.
- Understand different types of GIS Data.
- Analyze data, explore issues, problem solve, and evaluate situations in a geographic and spatial context.
- Explore mapped data
- Relate GIS with remote sensing technologies
- Analyze spatial data, using GIS analysis tools
- Develop and manage geodatabases
- Create maps ans images to communicate spatial data in a meaningful way to others.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 1, Principles of Geographic Information Systems.	**A Gentle Introduction to GIS** **The nature of GIS:** Some fundamental observations, Defining GIS, GISystems, GIScience and GIApplications, Spatial data and Geoinformation. **The real world and representations of it:** Models and modelling, Maps, Databases, Spatial databases and spatial analysis.	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.
	Models and Representations of the real world Geographic Phenomena: Defining geographic phenomena, types of geographic phenomena, Geographic fields, Geographic objects, Boundaries	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.
	Computer Representations of Geographic Information: Regular tessellations, irregular tessellations, Vector representations, Topology and Spatial relationships, Scale and Resolution, Representation of Geographic fields, Representation of Geographic objects , Organizing and Managing Spatial Data ,The Temporal Dimension	06	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 2, Principles of Geographic Information Systems.	**Data Management and Processing Systems** **Hardware and Software Trends** **Geographic Information Systems:** GIS Software, GIS Architecture and functionality, Spatial Data Infrastructure (SDI)	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.
	Stages of Spatial Data handling: Spatial data handling and Preparation, Spatial Data Storage and maintenance, Spatial Query and Analysis, Spatial Data Presentation.	05	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.
	Database management Systems: Reasons for using a DBMS, Alternatives for data management, The relational data model, Querying the relational database. **GIS and Spatial Databases:** Linking GIS and DBMS, Spatial database functionality.	04	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman	Black Board, chalk and Power Point.

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			and Rolf A.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 3, Principles of Geographic Information Systems.	**Spatial Referencing and Positioning** **Spatial Referencing:** Reference surfaces for mapping, Coordinate Systems, Map Projections, Coordinate Transformations .	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power point.
	Satellite-based Positioning: Absolute positioning, Errors in absolute positioning, Relative positioning, Network positioning, code versus phase measurements, Positioning technology	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power point.
	Data Entry and Preparation **Spatial Data Input:** Direct spatial data capture, Indirect spatial data captiure, Obtaining spatial data elsewhere **Data Quality:** Accuracy and Positioning, Positional accuracy, Attribute accuracy, Temporal accuracy, Lineage, Completeness, Logical	03	Principles of Geographic Information Systems An Introductory	Black Board, chalk and Power point.

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	consistency		Text Book - Otto Huisman and Rolf A.	
	Data Preparation: Data checks and repairs, Combining data from multiple sources ,**Point Data Transformation:** Interpolating discrete data, Interpolating continuous data.	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power point.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 4, Principles of Geographic Information Systems.	. **Spatial Data Analysis** **Classification of analytical GIS Capabilities** **Retrieval, classification and measurement:** Measurement, Spatial selection queries, Classification	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.
	Overlay functions: Vector overlay operators,Raster overlay operators **Neighbourhood functions:** Proximity computations, Computation of diffusion, Flow computation, Raster based surface analysis **Analysis:** Network analysis, interpolation,	06	Principles of Geographic Information Systems An Introductory	Black Board, chalk and Power Point.

	terrain modeling		Text Book - Otto Huisman and Rolf A.	
	GIS and Application models:GPS, Open GIS Standards, GIS Applications and Advances **Error Propagation in spatial data processing:** How Errors propagate, Quantifying error propagation.	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 5, Principles of Geographic Information Systems.	**Data Visualization** **GIS and Maps, The Visualization Process** **Visualization Strategies: Present or explore?**	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.

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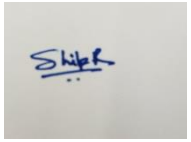
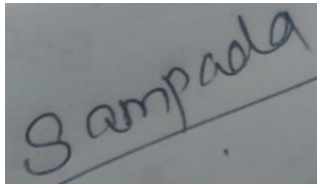
	The cartographic toolbox: What kind of data do I have?, How can I map my data? **How to map?:** How to map qualitative data, How to map quantitative data, How to map the terrain elevation, How to map time series	06	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point,YouTube video.
	Map Cosmetics, Map Dissemination	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point,YouTube video.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: INFORMATION TECHNOLOGY CLASS: TYIT-C

SEMESTER: VI MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the concepts of information security, Risk Analysis.
- Understand various security areas such as storage, database, Physical, application, operating system.
- Be familiar about the basic designing of secure network.
- Detect intrusion and how to prevent it, introduction to virtual machines and cloud computing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT602, Unit 1, Security in Computing	Information Security Overview: The Importance of Information Protection, The Evolution of Information Security, Justifying Security Investment, Security Methodology, How to Build a Security Program, The Impossible Job, The Weakest Link, Strategy and Tactics, Business Processes vs. Technical Controls.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Risk Analysis: Threat Definition, Types of Attacks, Risk Analysis	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, powerpoint
	Secure Design Principles: The CIA Triad and Other Models, Defense Models, Zones of Trust, Best Practices for Network Defense.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint t

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USIT602, Unit 2, Security in Computing	Authentication and Authorization: Authentication, Authorization	03	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Encryption: A Brief History of Encryption, Symmetric-Key Cryptography, Public Key Cryptography, Public Key Infrastructure.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Storage Security: Storage Security Evolution, Modern Storage Security, Risk Remediation, Best Practices.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Database Security: General Database Security Concepts, Understanding Database Security Layers, Understanding DatabaseLevel Security, Using Application Security, Database Backup and Recovery, Keeping Your Servers Up to Date, Database Auditing and Monitoring.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
USIT602, Unit 3, Security in Computing	Secure Network Design: Introduction to Secure Network Design, Performance, Availability, Security.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Network Device Security: Switch and Router Basics, Network Hardening.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint

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	Firewalls: Overview, The Evolution of Firewalls, Core Firewall 12 38 Functions, Additional Firewall Capabilities, Firewall Design.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Wireless Network Security: Radio Frequency Security Basics, DataLink Layer Wireless Security Features, Flaws, and Threats, Wireless Vulnerabilities and Mitigations, Wireless Network Hardening Practices and Recommendations, Wireless Intrusion Detection and Prevention, Wireless Network Positioning and Secure Gateways	03	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
USIT602, Unit 4, Security in Computing	Intrusion Detection and Prevention Systems: IDS Concepts, IDS Types and Detection Models, IDS Features, IDS Deployment Considerations, Security Information and Event Management (SIEM).	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Voice over IP (VoIP) and PBX Security: Background, VoIP Components,VoIP Vulnerabilities and Countermeasures, PBX, TEM: Telecom Expense Management	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Operating System Security Models: Operating System Models, Classic Security Models, Reference Monitor, Trustworthy Computing, International Standards for Operating System Security.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
USIT602, Unit 5, Security in Computing	Virtual Machines and Cloud Computing: Virtual Machines, Cloud Computing.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint

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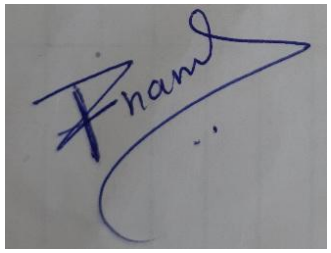
	Secure Application Design: Secure Development Lifecycle, Application Security Practices, Web Application Security, Client Application Security, Remote Administration Security	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Physical Security: Classification of Assets, Physical Vulnerability Assessment, Choosing Site Location for Security, Securing Assets: Locks and Entry Controls, Physical Intrusion Detection.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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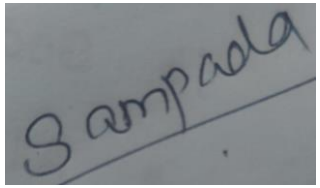

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ARPITA BANERJEE DEPARTMENT: IT-CS

CLASS: TYIT-DIV C SEMESTER: VI MONTH: DEC-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

- The learners will be able to: know fundamentals of Testing, the idea of Test Policy, Test Strategy & Test Planning. Also they will learn different methods of Unit Testing, Verification, Validation, Acceptance Testing, how to use various Special Tests and understand different Risk Associated with New Technologies and how to overcome. Eventually learners will be able to use the knowledge in their future project.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT601 Software Quality Assurance II	**Fundamentals of testing:** Introduction, Necessity of testing, What is testing? Fundamental test process, The psychology of testing, Historical Perspective of Testing, Definitions of Testing, Approaches to Testing, Testing During Development Life Cycle, Requirement Traceability Matrix, Essentials of Software Testing, Workbench, Important Features of Testing Process, Misconceptions About Testing.	3	Software Testing: Principles, Techniques and Tools By M. G. Limaye	Blackboard & chalk
	Principles of Software Testing, Salient Features of Good Testing, Test Policy, Test Strategy or Test Approach, Test Planning, Testing Process and Number of Defects Found in Testing, Test Team Efficiency, Mutation Testing, Challenges in Testing, Test Team Approach, Process Problems Faced by Testing, Cost Aspect of Testing, Establishing Testing Policy, Methods, Structured Approach to Testing,	3		
	Categories of Defect, Defect, Error, or Mistake in Software, Developing Test Strategy, Developing Testing Methodologies	3		

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	(Test Plan), Testing Process, Attitude Towards Testing(Common People Issues), Test Methodologies/ Approaches.			
	People Challenges in Software Testing, Raising Management Awareness for Testing, Skills Required by Tester, Testing throughout the software life cycle, Software development models, Test levels, Test types, the targets of testing, Maintenance testing.	3		
III	**Unit Testing: Boundary Value Testing:** Normal Boundary Value Testing, Robust Boundary Value Testing, Worst-Case Boundary Value Testing, Special Value Testing, Examples, Random Testing, Guidelines for Boundary Value Testing.	3	Software Testing: A Craftsman's Approach By Paul C. Jorgenson	Blackboard & chalk, PowerPoint Presentation
	Equivalence Class Testing: Equivalence Classes, Traditional Equivalence Class Testing, Improved Equivalence Class Testing, Edge Testing, Guidelines and Observations.	3		
	Decision Table–Based Testing: Decision Tables, Decision Table Techniques, Cause-and-Effect Graphing, Guidelines and Observations.	2		
	Path Testing: Program Graphs, DD-Paths, Test Coverage Metrics, Basis Path Testing, Guidelines and Observations, **Data Flow Testing:** Define/Use Testing, Slice-Based Testing, Program Slicing Tools.	4		
IV	**Software Verification and Validation:** Introduction, Verification, Verification Workbench, Methods of Verification, Types of reviews on the basis of Stage Phase, Entities involved in verification, Reviews in testing lifecycle, Coverage in Verification, Concerns of Verification.	4	Software Testing: Principles, Techniques and Tools	Blackboard & chalk
	Validation, Validation Workbench, Levels of Validation, Coverage in Validation, Acceptance Testing, Management of Verification and Validation, Software development verification and validation activities.	4		

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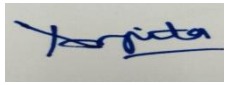
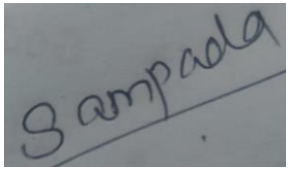
	V-test Model: Introduction, V-model for software, Testing during Proposal stage, Testing during requirement stage, Testing during test planning phase, Testing during design phase, Testing during coding, VV Model, Critical Roles and Responsibilities.	4	By M. G. Limaye	
V	**Levels of Testing:** Introduction, Proposal Testing, Requirement Testing, Design Testing, Code Review, Unit Testing, Module Testing, Integration Testing, Big-Bang Testing, Sandwich Testing, Critical Path First, Sub System Testing, System Testing, Testing Stages.	4	Software Testing: Principles, Techniques and Tools By M. G. Limaye	Blackboard & chalk, PowerPoint Presentation
	Special Tests: Introduction, GUI testing, Compatibility Testing, Security Testing, Performance Testing, Volume Testing, Stress Testing, Recovery Testing, Installation Testing, Requirement Testing, Regression Testing, Error Handling Testing, Manual Support Testing, Intersystem Testing, Control Testing, Smoke Testing, Adhoc Testing, Parallel Testing, Execution Testing, Operations Testing, Compliance Testing, Usability Testing, Decision Table Testing, Documentation Testing, Training testing, Rapid Testing, Control flow graph, Generating tests on the basis of Combinatorial Designs, State Graph,	4		
	Risk Associated with New Technologies, Process maturity level of Technology, Testing Adequacy of Control in New technology usage, Object Oriented Application Testing, Testing of Internal Controls, COTS Testing, Client Server Testing, Web Application Testing, Mobile Application Testing, eBusiness/eCommerce Testing, Agile Development Testing, Data Warehousing Testing.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 48





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande DEPARTMENT: Computer Science

CLASS: T.Y.I.T SEMESTER: VI

MONTH: Dec - March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

Student will able to understand the importance of software quality.
Aspects that the related to software quality.
Stakeholders and their relationship.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCSIT601 Software Quality Assurance UNIT - I	**Introduction to Quality:** Historical Perspective of Quality, What is Quality? (Is it a fact or perception?), Definitions of Quality, Core Components of Quality, Quality View, Financial Aspect of Quality, Customers, Suppliers and Processes, Total Quality Management (TQM), Quality Principles of Total Quality Management, Quality Management Through Statistical Process Control, Quality Management Through Cultural Changes, Continual (Continuous) Improvement Cycle, Quality in Different Areas, Benchmarking and Metrics, Problem Solving Techniques, Problem Solving Software Tools.	6	Software Testing and Continuous Quality Improvement Software Testing: Principles, Techniques and Tools	Blackboard PPT
	Software Quality: Introduction, Constraints of Software Product Quality Assessment, Customer is a King, Quality and Productivity Relationship, Requirements of a Product, Organisation Culture,	6		Blackboard PPT

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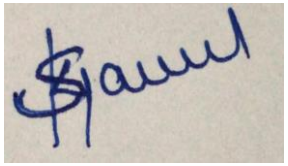
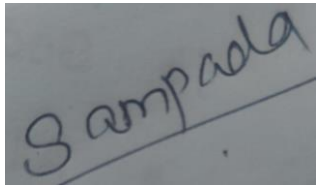
	Characteristics of Software, Software Development Process, Types of Products, Schemes of Criticality Definitions, Problematic Areas of Software Development Life Cycle, Software Quality Management, Why Software Has Defects? Processes Related to Software Quality, Quality Management System Structure, Pillars of Quality Management System, Important Aspects of Quality Management.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: TYIT DIV-A

SEMESTER: VI MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Make Learner Conversant With The Social And Intellectual Property Issues Emerging From 'Cyberspace.
- Explore The Legal And Policy Developments In Various Countries To Regulate Cyberspace;
- Develop The Understanding Of Relationship Between Commerce And Cyberspace
- Give Learners In Depth Knowledge Of Information Technology Act And Legal Frame Work Of Right To Privacy, Data Security And Data Protection.
- Make Study On Various Case Studies On Real Time Crimes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT607, Cyber Laws Unit 1	Power of Arrest Without Warrant Under the IT Act, 2000: A Critique, Crimes of this Millennium, Section 80 of the IT Act, 2000 – A Weapon or a Farce? Forgetting the Line Between Cognizable and Non-Cognizable Offences, Necessity of Arrest without Warrant from Any Place, Public or Otherwise, Check and Balances Against Arbitrary Arrests,Arrest for "About to Commit" an Offence Under the IT Act: A Tribute to Draco, Arrest, But NO Punishment!	05	1. Cyber Law Simplified VivekSood TMH Education 2001 2. Cybersecurity Law Jeff Kosseff Wiley 2017	Black Board and chalk, Powerpoint
	Cyber Crime and Criminal Justice: Penalties, Adjudication and Appeals Under the IT Act,2000: Concept of "Cyber Crime " and the IT Act , 2000, Hacking, Teenage Web Vandals, Cyber Fraud and Cyber Cheating, Virus on the Internet, Defamation, Harassment and Email Abuse, Cyber Pornography, Other IT Act Offences, Monetary Penalties, Adjudication and Appeals Under IT Act , 2000, Network Service Providers, Jurisdiction and Cyber Crime,	07	1. Cyber Law Simplified VivekSood TMH Education 2001 2. Cybersecurity Law Jeff Kosseff	Black Board and chalk, PowerPoint

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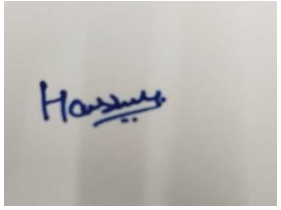
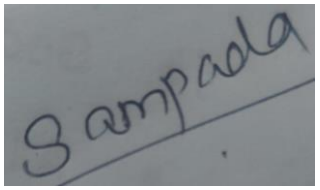
	Nature of Cyber Criminality, Strategies to Tackle Cyber Crime and Trends, Criminal Justice in India and Implications on Cyber Crime.		Wiley 2017	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **IT** CLASS: **M.Sc. (IT)**

SEMESTER: **IV** MONTH: **January - April** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able:

- To gain knowledge about Artificial Intelligence with Heuristic search.
- To acquire knowledge about AI representation using reasoning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT401 **Paper I** **Artificial Intelligence** **UNIT I**	Introduction : AI, Component of AI, History of AI, Salient Points, Knowledge and Knowledge Based systems, AI in Future, Applications. Logic and Computation: Classical Concepts, Computational Logic, FOL, Symbol Tablue, Resolution, Unification, Predicate Calculus, Model Logic, Temporal Logic. Heuristic Search: Search-based Problems, Informed Search, Water Jug Problem, TSP, Branch and Bound Method, TSP Algorithm	12	Artificial Intelligence, R.B.Mishra, PHI	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT401 **Paper I** **Artificial Intelligence** **UNIT II**	Game Playing : AND/OR Graph, Minimax Problem, Alpha-Beta Search, Puzzle solving Knowledge Representation : Structure of an RBS, Merit, Demerits and Applicability of RBS, Semantic Nets, Frames, Conceptual Graphs, Scripts Automated Reasoning : Default Logic, Problem for default reasoning, Predicate completion	12	Artificial Intelligence, R.B.Mishra, PHI	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT401 **Paper I** **Artificial Intelligence** **UNIT III**	Probabilistic Reasoning : Bayes Theorem, Bayesian Network, Confidence factor, Probabilistic Logic Knowledge Acquisition: Knowledge Acquisition Process, Automatic knowledge acquisition, Machine Learning, Induction, Inductive Learning	12	Artificial Intelligence, R.B.Mishra, PHI	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT401 **Paper I** **Artificial Intelligence** **UNIT IV**	Planning : Necessity of planning, Planning Agents, Non-hierarchical planning, Hierarchical Planning, Script-based planning, Algorithm for planning Constraint Satisfaction Problem : Constraints and Satisfiability, Basic search strategies for solving CSP, Representation of CSP problem	12	Artificial Intelligence, R.B.Mishra, PHI	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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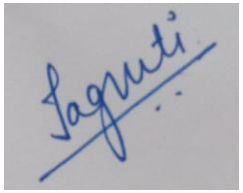
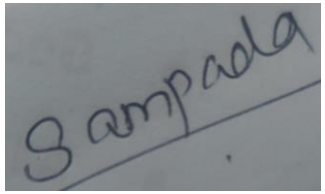
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT401 **Paper I** **Artificial Intelligence** **UNIT V**	Knowledge-Based System : Structure of an Expert System, Expert system in different Areas, Expert System shells, Web-based Expert system Prolog: Prolog programming features, syntax, syntax of rules, LIST structure. TURBO PROLOG	12	Artificial Intelligence, R.B.Mishra, PHI	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**MSC(IT)**_____ SEMESTER: ____**IV**_____ MONTH: _____ **JANUARY-APRIL** _____ ACADEMIC YEAR: _____**2019-2020**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

Understand the concept of Advanced Image Processing, its elements and application. To make understand the concept of image enhancement techniques in frequency domain, remote sensing and its applications. To make understand what are different platforms and sensors. To study subjective improvisation of medical image. To analyze the image and its applications in different areas. To under the different methods of feature representation and statistical measurements.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Elective 2 PSIT404b Advanced Image Processing **Unit No -01**	**Enhancement in Frequency domain** Introduction, 2-D Discrete Fourier Transform, Properties of Fourier transform, Basic filtering in the frequency domain, Smoothing and Sharpening filters, FFT algorithm. Discrete cosine transform (DCT), KL (PCT) transform, HAAR, Basics of wavelets.	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.
	Remote Sensing	06	Text Book of Remote Sensing	Blackboard, Chalk and Duster.

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	Introduction (Passive and Active sensing), Electromagnetic remote sensing process, Physics of radiant energy, Energy source and its characteristics, Atmospheric interactions with electromagnetic radiation, Energy interaction with Earth's surface materials.		and Geographical Information Systems M. Anji Reddy 4th Edition BS publication	PPts
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -02	**Microwave Remote Sensing** Introduction, The Radar principle, Factors affecting microwave measurements, Radar wavebands, Side looking airborne (SLAR) systems, Synthetic Aperture Radar (SAR), Polarimetric SAR (PolSAR), Interaction between microwaves and Earth's surface, Interpreting SAR images, Geometric characteristics.	06	Text Book of Remote Sensing and Geographical Information Systems M. Anji Reddy 4th Edition BS publication	Blackboard, Chalk and Duster. PPts.
	Remotes Sensing Platforms and Sensors Introduction, Satellite system parameters, Spatial Resolution, Spectral Resolution, Radiometric Resolution, Temporal resolution, Imaging sensor systems (thermal, multispectral and microwave imaging), Earth resources satellites, Meteorological satellites, Satellites carrying microwave sensors, OCEASAT-1, IKONOS, Latest trends in remote sensing platforms and sensors (weather, land observation and marine satellites).	06	Text Book of Remote Sensing and Geographical Information Systems M. Anji Reddy 4th Edition BS publication	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			

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Unit No -03	**Image Analysis** Introduction, Visual interpretation, Elements of visual interpretation, Digital processing, Pre-processing, Enhancement, Transformations, Classification, Integration, Classification accuracy assessment.	06	Digital Image Processing and Analysis Bhabatosh Chanda, Dwijesh Dutta Majumder 2nd Edition PHI	Blackboard, Chalk and Duster. PPts.
	Applications Introduction, Agriculture, Forestry, Geology, Hydrology, Sea Ice, Land cover, Mapping, Oceans and Costal.	06	Digital Image Processing and Analysis Bhabatosh Chanda, Dwijesh Dutta Majumder 2nd Edition PHI	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	**Medical Image Processing** Various modalities of medical imaging, Breast cancer imaging, Mammographic imaging, Ultrasound imaging, Magnetic resonance imaging (MRI), Breast thermograph imaging, Problems with medical images. Image enhancement, Spatial domain methods, Frequency domain methods, Other modalities of medical imaging, Radiography, Positron emission tomography (PET), Computed tomography angiography (CTA), Echocardiogram.	12	Medical Image Processing Concepts and Applications Sinha, G.R., Patel, Bhagwati Charan PHI	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			

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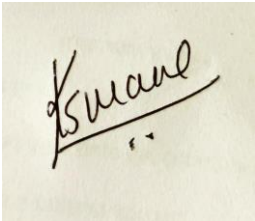
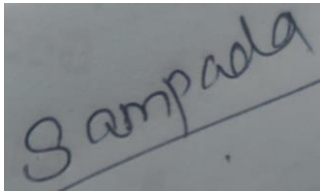
Unit No -05	**Feature Extraction and Statistical Measurement** Selection of features, Shape related features, Shape representation, Bounding box, Shape matrix, Moments of region and shape, Co-occurrence matrix, Principle feature analysis (PFA), Fourier descriptors, Snake boundary detection, Snake algorithm, Texture analysis, Texture features, Feature extraction using discrete Fourier transform, wavelet transform, Gabor filters for texture analysis, Breast tissue detection, Analysis of tissue structure.	12	Medical Image Processing Concepts and Applications Sinha, G.R., Patel, Bhagwati Charan PHI	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			





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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

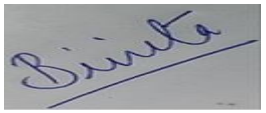
NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: IV MONTH: January-April ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with strategies for storing digital evidence.
b. Work with analyzing evidence with tools.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Computer Forensics Unit -I	Computer Forensics and Investigation Processes- Understanding Computer Forensics, Preparing for Computer Investigations, Maintaining Professional Conduct	3	Guide to Computer Forensics and Investigations by Bell Nelson, Amelia Phillips,Christopher Steuart, 4th edition	PowerPoint presentation through projector
	Understanding Computing Investigations- Preparing a Computer Investigation, Taking a Systematic Approach, Procedures for Corporate High-Tech Investigations, Understanding Data Recovery Workstations and Software, Conducting an Investigation	3		PowerPoint presentation through projector
	The Investigator's Office and Laboratory- Understanding Forensics Lab Certification Requirements, Determining the Physical Requirements for a Computer Forensics Lab, Selecting a Basic Forensic Workstation	3		PowerPoint presentation through projector
	Data Acquisitions- Understanding Storage Formats for Digital Evidence, Determining the Best Acquisition Method, Using Acquisition Tools, Validating Data Acquisitions, Performing RAID Data Acquisitions	3		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: IV MONTH: January-April ACADEMIC YEAR: 2019-2020

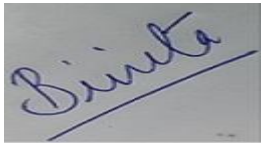
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with strategies for storing digital evidence.

b. Work with analyzing evidence with tools.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Computer Forensics Unit -II	Processing Crime and Incident Scenes- Identifying Digital Evidence, Preparing for a Search, Seizing Digital Evidence at the Scene, Storing Digital Evidence, Reviewing a Case	4	Guide to Computer Forensics and Investigations by Bell Nelson, Amelia Phillips,Christopher Steuart, 4th edition	PowerPoint presentation through projector
	Working with Windows and DOS Systems- Understanding File Systems, Exploring Microsoft File Structures, Examining NTFS Disks, Understanding Whole Disk Encryption, Understanding the Windows Registry, Understanding Virtual Machines	4		PowerPoint presentation through projector
	Current Computer Forensics Tools- Evaluating Computer Forensics Tool Needs, Computer Forensics Software Tools, Computer Forensics Hardware Tools, Validating and Testing Forensics Software	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: IV MONTH: January-April ACADEMIC YEAR: 2019-2020

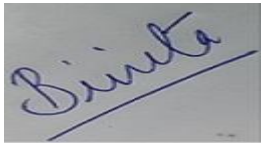
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with strategies for storing digital evidence.

b. Work with analyzing evidence with tools.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Computer Forensics Unit -III	Macintosh and Linux Boot Processes and File Systems- Understanding the Macintosh File Structure and Boot Process, Examining UNIX and Linux Disk Structures and Boot Processes, Understanding Other Disk Structures	4	Guide to Computer Forensics and Investigations by Bell Nelson, Amelia Phillips,Christopher Steuart, 4th edition	PowerPoint presentation through projector
	Computer Forensics Analysis- Determining What Data to Collect and Analyze, Validating Forensic Data, Addressing Data-Hiding Techniques, Performing Remote Acquisitions	4		PowerPoint presentation through projector
	Recovering Graphics Files- Recognizing a Graphics File, Understanding Data Compression, Locating and Recovering Graphics Files, Identifying Unknown File Formats, Understanding Copyright Issues with Graphics	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: IV MONTH: January-April ACADEMIC YEAR: 2019-2020

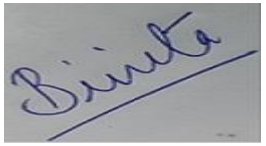
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with strategies for storing digital evidence.

b. Work with analyzing evidence with tools.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Computer Forensics Unit -IV	Virtual Machines, Network Forensics and Live Acquisitions- Virtual Machines Overview, Network Forensics Overview, Performing Live Acquisitions, Developing Standard Procedures for Network Forensics, Using Network Tools	4	Guide to Computer Forensics and Investigations by Bell Nelson, Amelia Phillips,Christopher Steuart, 4th edition	PowerPoint presentation through projector
	Email Investigations- Exploring the Role of E-mail in Investigations, Exploring the Roles of the Client and Server in E-mail, Investigating E-mail Crimes and Violations, Understanding E-mail Servers, Using Specialized E-mail Forensics Tools	4		PowerPoint presentation through projector
	Cell Phone and Mobile Device Forensics- Understanding Mobile Device Forensics, Understanding Acquisition Procedures for Cell Phones and Mobile Devices	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: IV MONTH: January-April ACADEMIC YEAR: 2019-2020

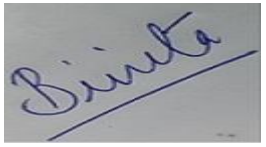
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with strategies for storing digital evidence.

b. Work with analyzing evidence with tools.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Computer Forensics Unit -V	Report Writing for High-Tech Investigations- Understanding the Importance of Reports, Guidelines for Writing Reports, Generating Report Findings with Forensics Software Tools	4	Guide to Computer Forensics and Investigations by Bell Nelson, Amelia Phillips,Christopher Steuart, 4th edition	PowerPoint presentation through projector
	Expert Testimony in High-Tech Investigations- Preparing for Testimony, Testifying in Court, Preparing for a Deposition or Hearing, Preparing Forensics Evidence for Testimony	4		PowerPoint presentation through projector
	Ethics and High-Tech Investigations- Applying Ethics and Codes to Expert Witnesses, Organizations with Codes of Ethics, Ethical Difficulties in Expert Testimony, An Ethics Exercise	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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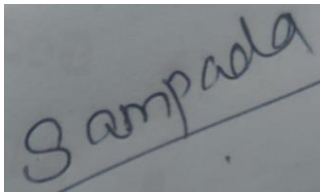

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. BRIJESH Y JOSHI DEPARTMENT: Information Technology

CLASS: M.Sc.IT SEMESTER: IV MONTH: JAN TO APRIL ACADEMIC YEAR: 2019 -2020

LEARNING OBJECTIVE/S:

- To be able to Understand the concept of **ITIL, Service Life Cycle, Service Strategy**
- **To be able to understand Service Design , Service Transition , Service Operation , Continual service Improvement**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
IT Infrastructure Management UNIT I	**Introduction:** The four perspectives (attributes) of IT service management, benefits of IT service management, business and IT alignment, What is ITIL?, What are services?, Service Management as a practice, The concept of Good Practice, Concept of a Service, Concept of Service Management, Functions and Processes, The process model and the characteristics of processes. **The Service Lifecycle:** Mapping the Concepts of ITIL to the Service Lifecycle, How does the Service Lifecycle work? **Service Strategy:** Objectives, Creating Service Value, Service Packages and Service Level Packages, Service Strategy Processes, Service Portfolio Management, Financial Management, Demand Management, Service Strategy Summary, Interfaces with the Service Design Phase, Interfaces with the Service Transition Phase, Interfaces with the Service Operation Phase, Interfaces with the Continual Service Improvement Phase, Service Strategy Service Scenario,	12	**ITIL V3 Foundation Complete Certification Kit**	Laptop, PPT

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	Overall Service Strategy, Service Portfolio Management Considerations, Financial Management Considerations			
UNIT II	**Service Design:** Objectives, Major Concepts, Five Major Aspects of Service Design, Service Design Packages, Service Design Processes, Service Level Management, Supplier Management, Service Catalogue Management, Capacity Management, Availability Management, IT Service Continuity Management, Information Security Management, Service Design Scenario, Service Level Management Considerations, Capacity Management Considerations, Availability Management Considerations, Information Security Management Considerations, Service Catalogue Management Considerations, ITSCM Considerations, Supplier Management Considerations	12	**ITIL V3 Foundation Complete Certification Kit**	Laptop, PPT
UNIT III	**Service Transition:** Objectives, Service Transition Processes, Knowledge Management, Service Asset and Configuration Management, Change Management, Release and Deployment Management, Service Validation and Testing, Service Transition Summary, Service Transition Scenario, Knowledge Management Considerations, Service Asset and Configuration Management Considerations, Change Management Considerations, Release and Deployment Management Considerations, Service Validation and Testing Considerations	12	**ITIL V3 Foundation Complete Certification Kit**	Laptop ,PPT
UNIT IV	**Service Operation:** Objectives, Major Concepts, Service Operation Functions, The Service Desk, Technical Management, IT Operations Management, Application Management, Service Operation Processes, Event Management, Incident Management, Problem Management, Request Fulfillment, Access Management, Service Operation Summary, Service Operation Scenario, Functions, Processes	12	**ITIL V3 Foundation Complete Certification Kit**	Laptop, PPT

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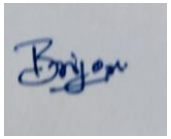
UNIT V	**Continual Service Improvement:** Objectives, Major Concepts Continual Service Improvement Processes, Service Level Management, Service Measurement and Reporting , CSI (7 Step) Improvement Process, Continual Service Improvement Summary, Continual Service Improvement Scenario, Service Level Management Service Measurement and Reporting, CSI Process	12	**ITIL V3 Foundation Complete Certification Kit**	Laptop ,PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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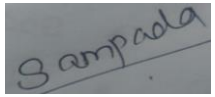

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: MScIT SEMESTER: III MONTH: JULY to DEC ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

To determine the market perspective of Embedded System

To compare and contrast the use of devices, hardware and software.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-01 Embedded System, Unit-1	**Introduction** What is an Embedded System, Embedded System Vs, General Computing System.	3	Introduction to embedded systems- Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board
	The Typical Embedded System Core of Embedded System, Memory, Sensors and Actuators, Communication Interface, Embedded Firmware.	3	Introduction to embedded systems- Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board
	Characteristic and quality attributes of Embedded System	3	Introduction to embedded systems- Shibu K. V	Laptop, PPT, Chalk &Black Board

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	Characteristics of an Embedded System, Quality Attributes of Embedded System. RAM, Performance and Battery Life, Libraries, Debugging.		& Embedded Systems Architecture, Programming and Design-- Raj Kamal	
	Embedded product development life cycle What is EDLC, Why EDLC? Objectives of EDLC, Different Phases of EDLC.	3	Introduction to embedded systems-Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board
Paper-01 Embedded System, Unit-2	**Hardware Software Co-design and Program Modelling** Fundamental Issues in Hardware Software Co-Design, Computational Models in Embedded Design, Introduction to Unified Modelling Language (UML), Hardware Software Trade-offs.	3	Introduction to embedded systems-Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board
	Embedded Hardware design and development Analog Electronic Components, Digital Electronic Components, Electronic design Automation (EDA) Tools, The PCB Layout design.	3	Introduction to embedded systems-Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board
	Embedded Firmware design and development Embedded Firmware Design Approaches, Embedded Firmware Development Languages	3	Introduction to embedded systems-Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board
	Real Time Operating System(RTOS) Operating System Basics, Types of Operating Systems, Device Drivers, How to choose an RTOS	3	Introduction to embedded systems-Shibu K. V &	Laptop, PPT, Chalk &Black Board

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			Embedded Systems Architecture, Programming and Design-- Raj Kamal	
Paper-01 Embedded System, Unit-3	**Memories and Memory Subsystem** Introduction, Classifying Memory, A general Memory Interface, ROM Overview, Static RAM Overview, Dynamic RAM Overview, Chip Organization, A SRAM Design, A DRAM Design, The DRAM Memory Interface, The Memory Map, Memory Subsystem Architecture, Basic Concepts of Caching, Design a cache system, Dynamic Memory Allocation, Testing Memories.	12	Introduction to embedded systems- Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board
Paper-01 Embedded System, Unit-4	**Programming Concept and Embedded Programming in C/C++ and Java** Software programming in Assembly Language (ALP) and in High-level Language 'C'., C program Elements: Header and Source Files and Pre-processor Directives, Program Elements: Macros and Functions, Program Elements: Types, Data Structures, Modifiers, Statements, Loops and Pointers, Object-Oriented Programming, Embedded Programming in C++, Embedded Programming in Java.	12	Introduction to embedded systems- Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board
Paper-01 Embedded System, Unit-5	**Trends in the Embedded Industry** Processor trends in Embedded System, Embedded OS Trends, Development Language Trends, Introduction of PIC Family of Microcontrollers, Introduction of ARM Family of Microcontrollers, Introduction of AVR Family of Microcontrollers.	12	Introduction to embedded systems- Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)** _____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**MSC(IT)**_____ SEMESTER: ____**III**_____ MONTH: _____ **JULY-NOVEMBER** _____ ACADEMIC YEAR: _____**2019-2020**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

Understand the concept of Image Processing, its elements and application. To make understand the concept of image enhancement techniques, filtering, colour processing, compression techniques, segmentation, morphology, representation and description of image and image recognition. To make understand what is image, how it is created and how it is used in varieties of processing. To study subjective improvisation of image in applications to reduce the noise.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Elective 2 PSIT304a Digital Image Processing **Unit No -01**	**Introduction to image processing**, Example of fields that uses image processing, Steps of image processing, Components, Applications, Image sensors and image formats	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.

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Unit No -02	**Visual Preliminaries** Brightness adaptation and contrast, Acuity and contour, Texture and pattern discrimination, Shape detection and recognition, perception of colour, Computational model of perceptual processing, Image sampling and quantization, Basic relationships between pixels	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
	Intensity transformations Introduction, Some basic intensity transformation functions, Histogram equalization, local histogram processing, Using histogram statistics for image enhancement	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.
	Spatial filtering Fundamentals of spatial filtering, Smoothing and Sharpening spatial filters, Combining spatial enhancement methods, Using fuzzy techniques for intensity transformations and spatial filtering	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			

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Unit No -03	**Colour image processing** Colour fundamentals, Colour models, Pseudocolour image processing, Basic of full-colour image processing, Colour transformations, Smoothing and Sharpening, Image segmentation bases on colour, Noise in colour images, Colour image compression	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.
	Image Compression Fundamentals, Some basic methods, Digital image watermarking, Full motion video compression	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	**Morphological Image Processing** Introduction, Erosion and Dilation, Opening and Closing, The Hit-or-Miss transformation, Some basic morphological algorithms, Gray scale morphology	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.
	Segmentation Fundamentals, Point, Line, and Edge detection, Thresholding, Region based segmentation, Segmentation using morphological watersheds, The use of motion in segmentation- Spatial techniques.	06	Digital Image Processing Gonzalez and Woods 3rd Edition	Blackboard, Chalk and Duster. PPts.

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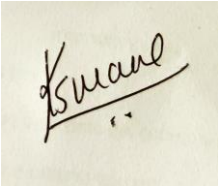
			Pearson Education	
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	**Representation and Description** Representation, Boundary Descriptors, Regional Descriptors, Use of Principal Components for Description, Relational Descriptors	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.
	Object Recognition Patterns and pattern classes, Recognition based on decision theoretic methods, Structural methods	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			



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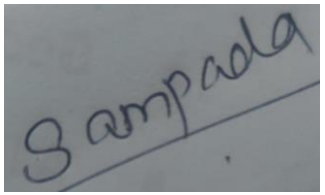

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BhaskarWaman Thakur College of Science
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr.Sandesh Pandurang Akre DEPARTMENT: IT

CLASS: M. Sc. I. T – SEMESTER: III MONTH:JULY-NOV ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

knowledge of security management and incident response. knowledge of security in software and operating systems. knowledge of data security and secure system development. knowledge of privacy and data protection

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Information security management Unit -I	**Introduction:** Security Risk Assessment and Management: Introduction to Security Risk Management. Reactive and proactive approaches to risk management.	4	IT Security and Risk Management (Main reference) Slay, J. and Koronios, A 2006 Wiley	Powerpoint presentation through projector
	Risk assessment, quantitative and qualitative approaches and asset classification	4		Powerpoint presentation through projector
	Security Assurance Approaches: Introduction to OCTAVE and COBIT approaches	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr.Sandesh Pandurang Akre DEPARTMENT: IT

CLASS: M. Sc. I. T – SEMESTER: III MONTH: August-December ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

knowledge of security management and incident response. knowledge of security in software and operating systems. knowledge of data security and secure system development. knowledge of privacy and data protection

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Information security management Unit -II	Security Management of IT Systems: Network security management. Firewalls, IDS and IPS configuration management. Web and wireless security management.	6	IT Security and Risk Management (Main reference) Slay, J. and Koronios, A 2006 Wiley	Powerpoint presentation through projector
	General server configuration guidelines and maintenance. Information Security Management Information classification. Access control models, role-based and lattice models. Mandatory and discretionary access controls. Linux and Windows case studies. Technical controls, for authentication and confidentiality. Password management and key management for users. Case study: Kerberos.	6		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr.Sandesh Pandurang Akre DEPARTMENT: IT

CLASS:M. Sc. I. T SEMESTER: III MONTH: August-December ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

knowledge of security management and incident response. knowledge of security in software and operating systems. knowledge of data security and secure system development. knowledge of privacy and data protection

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Information security management Unit -III	Key Management in Organizations: Public-key Infrastructure. PKI Applications, secure email case study(S/ MIME or PGP).	4	IT Security and Risk Management (Main reference) Slay, J. and Koronios, A 2006 Wiley	Powerpoint presentation through projector
	Issues in public-key certificate issue and lifecycle management - Management of IT Security Infrastructure;	4		Powerpoint presentation through projector
	Computer security log management, malware handling and vulnerability management programs. Specifying and enforcing security policies.	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF Mr.Sandesh Pandurang Akre DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: III MONTH: August-December ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

knowledge of security management and incident response. knowledge of security in software and operating systems. knowledge of data security and secure system development. knowledge of privacy and data protection

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Information security management Unit -IV	Auditing and Business continuity Planning: Introduction to information security audit and principles of audit. Business continuity planning and disaster recovery.	6	IT Security and Risk Management (Main reference) Slay, J. and Koronios, A 2006 Wiley	Powerpoint presentation through projector
	Case study: 9/11 tragedy. Backup and recovery techniques for applications and storage.	6		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr.Sandesh Pandurang Akre DEPARTMENT: IT

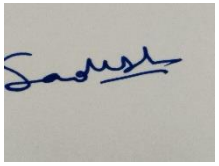
CLASS: M. Sc. I. T SEMESTER: III MONTH: August-December ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

knowledge of security management and incident response. knowledge of security in software and operating systems. knowledge of data security and secure system development. knowledge of privacy and data protection

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Information security management Unit -V	Computer forensics: techniques and tools. Audit Tools: NESSUS and NMAP	6	IT Security and Risk Management (Main reference) Slay, J. and Koronios, A 2006 Wiley	Powerpoint presentation through projector
	Information Security Standards and Compliance: Overview of ISO 17799 Standard. Legal and Ethical issues.	6		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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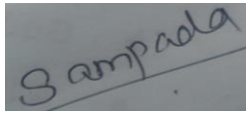

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: III MONTH: July-November ACADEMIC YEAR: 2019-2020

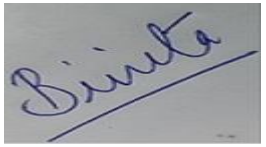
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with neural network models.

b. Work with algorithms and applications of neural networks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Artificial Neural Networks Unit -I	The Brain Metaphor- nature of computation, historical tour of brain science, classical AI and neural networks	4	Neural Networks, A Classroom Approach by Satish Kumar, 2nd Edition.	PowerPoint presentation through projector
	Lessons from Neuroscience- human brain, biological neurons, inner secrets of neuron	4		PowerPoint presentation through projector
	Artificial Neurons, Neural Networks and Architectures- neuron abstraction, neuron signal function, mathematical preliminaries, neural networks defined, architectures, properties	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: III MONTH: July-November ACADEMIC YEAR: 2019-2020

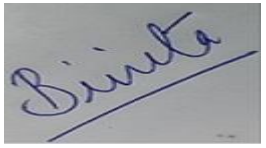
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with neural network models.

b. Work with algorithms and applications of neural networks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Artificial Neural Networks Unit -II	Geometry of Binary Threshold Neurons and their Networks-pattern recognition and classification, Boolean functions, non-linear separable problems, capacity of TLN, XOR problem, multilayer networks.	4	Neural Networks, A Classroom Approach by Satish Kumar, 2nd Edition.	PowerPoint presentation through projector
	Supervised Learning I: Perceptron and LMS- learning algorithms, error correction and gradient descent rules, objectives of TLN, perceptron learning algorithm, perceptron convergence theorem, LMS learning	4		PowerPoint presentation through projector
	Supervised Learning II: Backpropogation and Beyond- multilayer network architectures, backpropogation algorithm, universal fuction approximation, applications of feedforward network, reinforcement learning	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: III MONTH: July-November ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

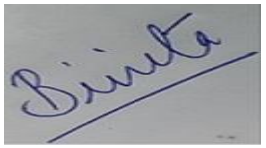
The learners will be able to:

a. Work with neural network models.

b. Work with algorithms and applications of neural networks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Artificial Neural Networks Unit -III	Neural Networks: A Statistical Pattern Recognition Perspective- baye's theorem, probabilistic interpretation of neuron discriminant function, mulilayerd networks, error functions, posterior probabilities.	4	Neural Networks, A Classroom Approach by Satish Kumar, 2nd Edition.	PowerPoint presentation through projector
	Statistical Learning Theory, Support Vector Machines and Radial Basis Functions Network- statistical learning theory, SVM, SVM applications, RBFN, RBFN applications.	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: III MONTH: July-November ACADEMIC YEAR: 2019-2020

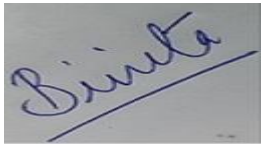
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with neural network models.

b. Work with algorithms and applications of neural networks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Artificial Neural Networks Unit -IV	Dynamical Systems Review- state, state vectors and dynamics, state equations, atttractors and stability, linear dynamical systems, lyapunov stability, neurodynamical systems.	4	Neural Networks, A Classroom Approach by Satish Kumar, 2nd Edition.	PowerPoint presentation through projector
	Attractor Neural Networks- associative learning, linear associative memory, Hopfield network, content addressable memory, spurious attractors	4		PowerPoint presentation through projector
	Adaptive Resonance Theory-noise-saturation dilemma, building blocks of adaptive resonance, substrate of resonance, ART1, applications	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: III MONTH: July-November ACADEMIC YEAR: 2019-2020

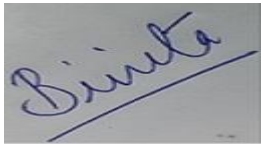
LEARNING OBJECTIVE/S:
The learners will be able to:

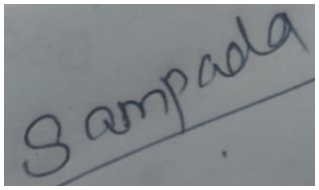
a. Work with neural network models.

b. Work with algorithms and applications of neural networks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III	Towards the Self-Organizing Feature Map- self organization, sanger's rule, generalized learning laws, vector quantization, mexican hat networks, Self-Organizing Feature Map, applications.	4	Neural Networks, A Classroom Approach by Satish Kumar, 2nd Edition.	PowerPoint presentation through projector
Artificial Neural Networks	Fuzzy Sets and Fuzzy Systems- fuzzy uncertainty and linguistic variables, fuzzy set, membership functions geometry of fuzzy sets, operations on fuzzy sets, rule composition and defuzzification, fuzzy engineering, applications.	4		PowerPoint presentation through projector
Unit -V	Evolutionary Algorithms- basic terminology, definition and streams, problem representation with strings, variation operators, genetic algorithms.	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE DEPARTMENT: ____IT____

CLASS: _FYCS SEMESTER: 1 MONTH: July to Oct ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Open Source has acquired a prominent place in software industry. Having knowledge of Open Source and its related technologies is an essential for Computer Science student. This course introduces Open Source methodologies and ecosystem to students.

Expected Learning Outcome:

1) Upon completion of this course, students should have a good working knowledge of Open Source ecosystem, its use, impact and importance.

2) This course shall help student to learn Open Source methodologies, case studies with real life examples

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS103 Free and Open-source Software Unit I	Introduction Introduction: Open Source, Free Software, Free Software vs. Open Source software, Public Domain Software, FOSS does not mean no cost. History: BSD, The Free Software Foundation and the GNU Project.	5	The Linux Documentation Project: http://www.tldp.org/ 2. Docker Project Home: http://www.docker.com 3. Linux kernel Home: http://kernel.org 4. Open Source Initiative: https://opensource.org/ 5. Linux Documentation Project: http://www.tldp.org/ 6. Wikipedia: https://en.wikipedia.org/ 7. https://en.wikipedia.org/wiki/Wikipedia:Contributing_to_Wikipedia 8. Github: https://help.github.com/ 9. The Linux Foundation: http://www.linuxfoundation.org/	BLACK BOARD AND CHALK
	Methodologies Open Source History, Initiatives, Principle and methodologies. Philosophy : Software Freedom, Open Source Development Model Licenses and Patents: What Is A License, Important FOSS Licenses (Apache,BSD,GPL, LGPL), copyrights and copy lefts, Patents Economics of FOSS : Zero Marginal Cost, Income-generation opportunities, Problems with traditional	5		

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	commercial software, Internationalization			
	Social Impact Open source vs. closed source, Open source government, Open source ethics. Social and Financial impacts of open source technology, Shared software, Shared source, Open Source in Government.	5		

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Unit II	Case Studies Example Projects: Apache web server, GNU/Linux, Android, Mozilla (Firefox), Wikipedia, Drupal, wordpress, GCC, GDB, github, Open Office	5	The Linux Documentation Project: http://www.tldp.org/ 2. Docker Project Home: http://www.docker.com 3. Linux kernel Home: http://kernel.org 4. Open Source Initiative: https://opensource.org/ 5. Linux Documentation Project: http://www.tldp.org/ 6. Wikipedia: https://en.wikipedia.org/ 7. https://en.wikipedia.org/wiki/Wikipedia:Contributing_to_Wikipedia 8. Github: https://help.github.com/ 9. The Linux Foundation: http://www.linuxfoundation.org/	BLACK BOARD AND CHALK
	. Study: Understanding the developmental models, licensings, mode of funding,commercial/non-commercial use. Open Source Hardware, Open Source Design, Open source Teaching. Open source media. Collaboration, Community and Communication Contributing to Open Source Projects	5		

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	Introduction to github, interacting with the community on github, Communication and etiquette, testing open source code, reporting issues, contributing code.	5		
UNIT III		5	The Linux Documentation Project: http://www.tldp.org/ 2. Docker Project Home: http://www.docker.com 3. Linux kernel Home: http://kernel.org 4. Open Source Initiative: https://opensource.org/ 5. Linux Documentation Project: http://www.tldp.org/ 6. Wikipedia: https://en.wikipedia.org/ 7. https://en.wikipedia.org/wiki/Wikipedia:Contributing_to_Wikipedia 8. Github: https://help.github.com/ 9. The Linux Foundation: http://www.linuxfoundation.org/	BLACK BOARD AND CHALK

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	Introduction to wikipedia, contributing to Wikipedia Or contributing to any prominent open source project of student's choice. Starting and Maintaining own Open Source Project.	Understanding Open Source Ecosystem Open Source Operating Systems: GNU/Linux, Android, Free BSD, Open Solaris. Open Source Hardware, Virtualization Technologies,	5			
	Containerization Technologies: Docker, Development tools, IDEs, debuggers, Programming languages, LAMP, Open Source database technologies	5				

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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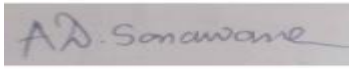
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.(CS) SEMESTER:I MONTH:JULY-OCTOBER ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the digital representation of data in a computer system.
- Understand the theory and architecture of central processing unit.
- Learn the concepts of parallel processing, pipelining and interprocessor communication.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Unit I Computer Organization and Design	**Computer Abstractions and Technology:** Basic structure and operation of a computer, functional units and their interaction.	1	Carl Hamacher et al., Computer Organization and Embedded Systems, 6 ed., McGraw-Hill 2012	Blackboard, Chalk
	Representation of numbers and characters.	3		Blackboard, Chalk
	Logic circuits and functions:Combinational circuits and functions: Basic logic gates and functions, truth tables; logic circuits and functions.	1		Blackboard, Chalk
	Minimization with Karnaugh maps.	3		Blackboard, Chalk
	Synthesis of logic functions with and-or-not gates, nand gates, nor gates. Fan-in and fan-out requirements; tristate buffers.	2		Blackboard, Chalk
	Half adder, full adder, ripple carry adder. (Flip flops) Gated S-R and D latches, edge-triggered D latch.	2		Blackboard, Chalk

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	Shift registers and registers. Decoders, multiplexers.	1		Blackboard, Chalk
	Sequential circuits and functions: State diagram and state table; finite state machines and their synthesis.	2		Blackboard, Chalk
Paper-I Unit II Computer Organization and Design	**Instruction set architectures:** Memory organization, addressing and operations; word size, big-endian and little-endian arrangements.	2	Carl Hamacher et al., Computer Organization and Embedded Systems, 6 ed., McGraw-Hill 2012	Blackboard, Chalk
	Instructions, sequencing. Instruction sets for RISC and CISC (examples Altera NIOS II and Freescale ColdFire).	3		Blackboard, Chalk
	Operand addressing modes; pointers; indexing for arrays	3		Blackboard, Chalk
	Machine language, assembly language, assembler directives. Function calls, processor runtime stack, stack frame.	3		Blackboard, Chalk
	Types of machine instructions: arithmetic, logic, shift, etc.	2		Blackboard, Chalk
	Instruction sets, RISC and CISC examples.	2		Blackboard, Chalk
Paper-I Unit III Computer Organization and Design	**Basic Processor Unit:**Main components of a processor: registers and register files, ALU, control unit, instruction fetch unit, interfaces to instruction and data memories.	4	Carl Hamacher et al., Computer Organization and Embedded Systems, 6 ed., McGraw-Hill 2012	Blackboard, Chalk
	Datapath. Instruction fetch and execute; executing arithmetic/logic, memory access and	3		Blackboard, Chalk
	branch instructions; hardwired and microprogrammed control for RISC and CISC.	3		Blackboard, Chalk
	Basic I/O:Accessing I/O devices, data transfers between processor and I/O devices.	3		Blackboard, Chalk
	Interrupts and exceptions: interrupt requests and processing.	2		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: COMPUTER SCIENCE CLASS: FYCS

SEMESTER: I MONTH: JULY-OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concepts of programming before actually starting to write programs.
- Develop logic for Problem Solving.
- Be familiar about the basic constructs of programming such as data, operations, conditions, loops, functions etc.
- Apply the problem solving skills using syntactically simple language i.e. Python (version: 3.X or higher)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS102, Unit 1, Programming with Python- I	Reasons for Python as the learner's first programming language. Introduction to the IDLE interpreter (shell) and its documentation. Expression evaluation: similarities and differences compared to a calculator; expressions and operators of types int, float, boolean. Built-in function type. Operator precedence.	03	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	Enumeration of simple and compound statements. The expression statement. The assert statement, whose operand is a boolean expression (values true or false). The assignment statement, dynamic binding of names to values, automatic and implicit declaration of variable names with the assignment statement; assigning the valueNone to a name.	04	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	The del (delete) statement. Input/output with print and input functions. A statement list as a single interpreter command.	02	Paul Gries, Programming:	Black Board and chalk

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			An Introduction to Computer Science Using Python 3	
	The import statement for already-defined functions and constants. The augmented assignment statement. The built-in help() function. Interactive and script modes of IDLE, running a script, restarting the shell. The compound statement def to define functions; the role of indentation for delimiting the body of a compound statement; calling a previously defined function. Compound data types str, tuple and list	03	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	Indexing individual elements within these types. Strings and tuples are immutable, lists are mutable. Built-in functions min, max, sum. Interactive solution of model problems, by repeatedly executing the body of a loop.	03	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
USCS102, Unit 2, Programming with Python- I	Advantages of functions, function parameters, formal parameters, actual parameters, global and local variables..	03	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	The range function, the iterative for statement. The conditional statements if, if-else, if-elif-else. The iterative statements while, while-else, for-else	04	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk

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	The continue statement to skip over one iteration of a loop, the break statement to exit the loop. Nested compound statements.	04	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	Dictionaries: concept of key-value pairs, techniques to create, update and delete dictionary items. Problem-solving using compound types and statements	04	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
USCS102, Unit 3, Programming with Python-I	Anonymous functions. List comprehensions.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	Gentle introduction to object-oriented programming; using the built-in dir() function, enumerate the methods of strings, tuples, lists, dictionaries	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	Using these methods for problem-solving with compound types.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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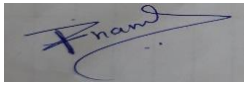

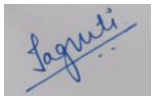

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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: I MONTH: JULY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define a function, its domain, co domain, range and bijective functions, composite and inverse functions
- Check whether a given relation is equivalence or partial order relation.
- Represent the given relation using diagraph, adjacency matrix and arrow diagram.
- Solve a recurrence relation using various methods like back tracking , generating function method etc.
- Explain and solve the tower of Hanoi puzzle.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DISCRETE MATHEMATICS Unit 1 Recurrence relations	➢ Functions, its domain, co domain and range ➢ Bijective, composite and inverse functions ➢ Relations: definition, examples and properties ➢ Equivalence & partial order relation, Hasse diagram ➢ Recurrence relation: definition, formulation & solving ➢ Tower of Hanoi puzzle	2 3 2 3 4 1	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: I MONTH: AUGUST-SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of fundamental principle of counting, permutations and combinations.
- State and prove binomial theorem, Pascal's identity, Vandermonde's identity.
- Find the number of ways of doing a task using permutations and combinations.
- State and use Pigeonhole principle to solve the problems.
- Understand the concept of finite state automata and finite state machine.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DISCRETE MATHEMATICS (Unit 2) Counting principles, Languages and Finite state machines	➢ FPC , permutations, combinations ➢ Binomial theorem, Pascal's & Vandermonde's identity ➢ Sum & product rule, pigeonhole principle ➢ Inclusion exclusion principle ➢ Languages, regular expression and regular grammar ➢ FSM, FSA, Godel numbers, turing machines	3 2 3 2 3 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: I MONTH: OCTOBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define graph and its types, adjacency and incidence matrix.
- Draw adjacency and incidence matrix of the given graph and vice versa.
- Find out the shortest path of weighted graph using Warshall's algorithm.
- Traverse a tree using inorder, preorder and postorder algorithm.
- Draw a tree for algebraic expressions and vice versa.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DISCRETE MATHEMATICS **(Unit 3)** Graphs & Trees	➢ Definition of Graphs and its types ➢ Diagraph, incidence and adjacency matrix ➢ Warshall's algorithm, BFS, DFS ➢ Trees : definition, types and properties ➢ Traversing binary trees ➢ Algorithms for searching, inserting and deleting in a binary tree	2 3 3 3 2 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Bijoya Sarma DEPARTMENT: Mathematics

CLASS: F.Y.B.Sc.(CS) SEMESTER: I MONTH: June to September ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

- The learners will be able to know descriptive statistical concepts
- The learner will able to study probability concepts required for computer learners.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: 6 Descriptive statistics and introduction to probability **<u>Unit 1</u>**	**Data Presentation**: ● Data types:attribute,variable , discrete and continuous variable ● Data presentation: frequency distribution,histogram, O give curves, stem and leaf display	5	Gupta, S.C. and kapoor V.k.(1987): fundamental of mathematical statistics	Chalk and duster
	Data Aggregation: ● Measures of central tendency: mean , median, mode for raw data, discrete, grouped frequency distribution	5	Gupta, S.C. and kapoor V.k.(1987): fundamental of mathematical statistics	
	Measures of dispersion: ● Variance, standard deviation, coefficient of variation for raw data,discrete, grouped frequency distribution, quartiles, quantiles real life example	5	Gupta, S.C. and kapoor V.k.(1987): fundamental of mathematical statistics	

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Unit 2	**Moments**: ● Raw moments, Central moments,relation between raw and central moment	3		
	Measures of Skewness and kurtosis: ● Based on moments and quartiles ● Relation between mean , median and mode for symmetric and asymmetric frequency curve	3		
	Correlation and regression: ● Bivariate data, scatter plot, correlation,nonscence correlation, karl-pearson's coefficient of correlation, independence	5		
	Linear regression: ● Fitting of linear regression using least square method, coefficient of determination, properties of linear regression (only statement)	4		
Unit 3	**Probability:** ● Random experiment,sample space,events, types and operations of events ● Probability definition:classical, axiomatic ● Theorem of probability (without proof) -O<P(A)<1	8		

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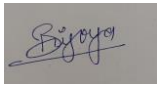
	- $P(A \cup B)=P(A)+P(B)-P(A \Delta B)$ - $P(A')=1-P(A)$ - $P(A)<P(B)$ if A is subset of B			
	Conditional probability,Baye's theorem, independence, examples of probability	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: FYCS SEMESTER: I MONTH:JULY-OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to : Students should be able to evaluate business information problem and find the requirements of a problem in terms of data. Students should be able to design the database schema with the use of appropriate data types for storage of data in database. Students should be able to create, manipulate, query and back up the databases.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS201, Introduction to Database Management Systems, UNIT-I	**Introduction of DBMS** Database, DBMS – Definition, Overview of DBMS, Advantages of DBMS, Levels of abstraction, Data independence, DBMS Architecture	03	Ramez Elmasri & Shamkant B.Navathe, Fundamentals of Database Systems, Pearson Education, Sixth Edition, 2010.	Blackboard, Chalk
	Data models – Client-Server Architecture,Object Based Logical Model, Record Based Logical Model (relational, hierarchical, network)	02		Blackboard, Chalk
	Entity Relationship Model - Entities, attributes, entity sets, relations, relationship sets , Additional constraints (key constraints, participation constraints, weak entities, aggregation / generalization, Conceptual Design using ER (entities VS attributes, Entity Vs relationship, binary Vs ternary, constraints beyond ER)	04		Blackboard, Chalk

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	Relational data model– Domains, attributes, Tuples and Relations, Relational Model Notation, Characteristics of Relations, Relational Constraints - primary key, referential integrity, unique constraint, Null constraint, Check constraint	04		Blackboard, Chalk
	Entity to Table, Relationship to tables with and without key constraints.	02		Blackboard, Chalk
USCS201, Introduction to Database Management Systems, UNIT-II	**ER to The Relational Model** Schema Refinement and normal forms :Functional Dependencies and 1NF, 2NF, 3NF and BCNF normal forms based on primary keys, lossless join decomposition.	03	1.RamezElmasri&ShamkantB.Navathe, Fundamentals of Database Systems, Pearson Education, Sixth Edition, 2010. 2. Joel Murach, Murach's MySQL, Murach, 2012	Blackboard, Chalk
	Relational Algebra operations (selection, projection, set operations union, intersection, difference, cross product, Joins –conditional, equi join and natural joins, division)	03		Blackboard, Chalk
	DDL Statements - Creating Databases, Using Databases, datatypes, Creating Tables (with integrity constraints – primary key, default, check, not null), Altering Tables, Renaming Tables, Dropping Tables, Truncating Tables, Backing Up and Restoring databases	02		Blackboard, Chalk
	DML Statements – Viewing the structure of a table insert, update, delete, Select – all columns, specific columns, unique records, conditional select, in clause, between clause, limit, aggregate functions (count, min, max, avg, sum), group by clause, having clause	03		Blackboard, Chalk

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	Functions – String Functions (concat, instr, left, right, mid, length, lcase/lower, ucase/upper, replace, strcmp, trim, ltrim, rtrim), Math Functions (abs, ceil, floor, mod, pow, sqrt, round, truncate) Date Functions (adddate, datediff, day, month, year, hour, min, sec, now, reverse)	02		Blackboard, Chalk
	Joining Tables – inner join, outer join (left outer, right outer, full outer)	02		Blackboard, Chalk
USCS201, Introduction to Database Management Systems, UNIT-III	**Sub queries** Sub queries – sub queries with IN, EXISTS, sub queries restrictions, Nested sub queries, ANY/ALL clause, correlated sub queries	03	Joel Murach, Murach's MySQL, Murach, 2012	Blackboard, Chalk
	Database Protection: Security Issues, Threats to Databases, Security Mechanisms, Role of DBA, Discretionary Access Control	03		Blackboard, Chalk
	Views (creating, altering dropping, renaming and manipulating views)	03		Blackboard, Chalk
	DCL Statements (creating/dropping users, privileges introduction, granting/revoking privileges, viewing privileges)	03		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: SYCS

SEMESTER: III MONTH: JUNE- SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Write, compile and execute Java programs
- Build robust applications using Java's object-oriented features
- Create robust applications using Java class libraries
- Develop platform-independent GUIs
- Read and write data using Java streams

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS302, Core Java Unit 1	The Java Language: Features of Java, Java programming format, Java Tokens, Java Statements, Java Data Types, Typecasting, Arrays .	05	1) Herbert Schildt, Java The Complete Reference, Ninth Edition, McGraw-Hill Education, 2014 2) E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014 3) https://docs.oracle.com/javase/tutorial/	Black Board and chalk, Powerpoint

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	OOPS: Introduction, Class, Object, Static Keywords, Constructors, this Key Word, Inheritance, super Key Word, Polymorphism (overloading and overriding), Abstraction, Encapsulation, Abstract Classes, Interfaces	05	1. E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
	String Manipulations: String, String Buffer, String Tokenizer	01	https://docs.oracle.com/javase/tutorial/	Black Board and chalk, PowerPoint
	Packages: Introduction to predefined packages (java.lang, java.util,java.io,Java.sql, java.swing),User Defined Packages, Access specifiers	04	1. E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
USCS302, Core Java Unit 2	Exception Handling: Introduction, Pre-Defined Exceptions, Try-Catch-Finally, Throws, throw, User Defined Exception examples.	05	1. Herbert Schildt, Java The Complete Reference, Ninth Edition, McGraw-Hill Education, 2014	Black Board and chalk, PowerPoint
	Multithreading: Thread Creations, Thread Life Cycle, Life Cycle Methods, Synchronization, Wait() notify() notify all() methods I/O	04	1. Herbert Schildt, Java The Complete Reference, Ninth Edition, McGraw-Hill Education, 2014	Black Board and chalk, PowerPoint
	Streams: Introduction, Byte-oriented streams, Character-oriented streams, File, Random access File, Serialization	03	1.Herbert Schildt, Java The Complete Reference, Ninth Edition, McGraw-Hill Education, 2014	PowerPoint

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	Networking: Introduction, Socket, Server socket, Client – Server Communication	03	https://www.tutorialspoint.com/java/java_networking.html	PowerPoint
USCS302, Core Java Unit 3	Wrapper Classes: Introduction, Byte, Short, Integer, Long, Float, Double, Character, Boolean classes	02	1.E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
	Collection Framework: Introduction, util Package interfaces, List, Set, Map, List interface & its classes, Set interface & its classes, Map interface & its classes	04	1.E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
	Inner Classes: Introduction, Member inner class, Static inner class, Local inner class, Anonymous inner class	04	1.E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
	AWT: Introduction, Components, Event-Delegation-Model, Listeners, Layouts, Individual components Label, Button, CheckBox, Radio Button, Choice, List, Menu, Text Field, Text Area	05	1. E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: IT CLASS:S.Y.B.Sc.(C.S)

SEMESTER: III MONTH:JUNE-JULY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Importance of Operating System, role ,operations and function and environment
- Operating system services, system calls and structure
- Process scheduling, inter process communication and details of threads

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Unit 1 Operating Systems	**Introduction and Operating-Systems Structures**: Definition of Operating system, Operating System's role, Operating-System Operations, Functions of Operating System, Computing Environments	7	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk
	Operating-System Structures: Operating-System Services, User and Operating-System Interface, System Calls, Types of System Calls, Operating-System Structure	5	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk
	Processes: Process Concept, Process Scheduling, Operations on Processes, Interprocess Communication. **Threads**: Overview, Multicore Programming, Multithreading Models	3	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GayatreeKarnik DEPARTMENT: IT

CLASS:S.YB.Sc.(C.S..) SEMESTER:III MONTH:JULY-AUGUST ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- How the process are synchronized and scheduled in the CPU
- Different scheduling algorithms
- Deadlocks, how to avoid and recover from deadlocks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Unit 2 Operating Systems	**Process Synchronization**: General structure of a typical process, race condition, The Critical-Section Problem, Peterson's Solution, Synchronization Hardware, Mutex Locks, Semaphores, Classic Problems of Synchronization, Monitors	5	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk
	CPU Scheduling: Basic Concepts, Scheduling Criteria, Scheduling Algorithms (FCFS, SJF, SRTF, Priority, RR, Multilevel Queue Scheduling, Multilevel Feedback Queue Scheduling), Thread Scheduling	5	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk
	Deadlocks: System Model, Deadlock Characterization, Methods for Handling Deadlocks, Deadlock Prevention, Deadlock Avoidance, Deadlock Detection, Recovery from Deadlock	5	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GayatreeKarnik DEPARTMENT: IT

CLASS:S.Y.B.Sc.(C.S.) SEMESTER:III MONTH: AUGUST-SEPT. ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Difference between Main memory and virtual memory, memory allocation
- Overview of Disk structure, scheduling and management
- File Interface and how file system is implemented.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Unit 3 Operating Systems	**Main Memory**: Background, Logical address space, Physical address space, MMU, Swapping, Contiguous Memory Allocation, Segmentation, Paging, Structure of the Page Table	4	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk
	Virtual Memory: Background, Demand Paging, Copy-on-Write, Page Replacement, Allocation of Frames, Thrashing	4	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk
	Mass-Storage Structure: Overview, Disk Structure, Disk Scheduling, Disk Management	3	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk
	File-System Interface: File Concept, Access Methods, Directory and Disk Structure, File-System Mounting, File Sharing	2	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk

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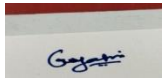
	File-System Implementation: File-System Structure, File-System Implementation, Directory Implementation, Allocation Methods, Free-Space Management	2	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Mr. ABHAY SHASHIKANT DHANMEHER DEPARTMENT: MATHEMATICS

CLASS: S.Y.B.Sc.C.S. SEMESTER: III MONTH: JULY – OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Appreciate beauty of combinatorics and how combinatorial problems naturally arise in many settings.
2. Understand the combinatorial features in real world situations and Computer Science applications.
3. Apply combinatorial and graph theoretical concepts to understand Computer Science concepts and apply them to solve problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – I **COMBINATORICS AND GRAPH THEORY**	**Introduction to Combinatorics:** Enumeration, Combinatorics and Graph Theory/ Number Theory/Geometry and Optimization, Sudoku Puzzles	3	Applied Combinatorics Mitchel T. Keller and William T. Trotter	Black-Board
	. Strings, Sets, and Binomial Coefficients: Strings- A First Look, Combinations, Combinatorial, The Ubiquitous Nature of Binomial Coefficients,	4		
	The Binomial, Multinomial Coefficients. Induction: Introduction, The Positive Integers are Well Ordered, The Meaning of Statements,	4		
	Binomial Coefficients Revisited, Solving Combinatorial Problems Recursively, Mathematical Induction, and Inductive Definitions Proofs by Induction. Strong Induction	4		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – II **COMBINATORICS AND GRAPH THEORY**	**Graph Theory:** Basic Notation and Terminology, Introduction of Graph, Representation Of Graph, Isomorphism,	3	Applied Combinatorics Mitchel T. Keller and William T. Trotter	Black-Board
	Connected nd Disconnected Graph, Multigraphs : Loops and Multiple Edges, Eulerian and Hamiltonian Graphs, Graph Coloring,	3		
	Chromatic Number, Priifer Code Planar Counting, Labeled Trees, A Digression into Complexity Theory. Applying Probability to Combinatorics,	4		
	The Pigeon Holes Principle Small Ramsey Numbers, Estimating Ramsey Numbers, Applying Probability to Ramsey Theory, Ramsey's Theorem The Probabilistic Method	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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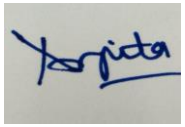
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – III **COMBINATORICS AND GRAPH THEORY**	**Network Flows:** Basic Notation and Terminology, Flows and Cuts, Augmenting Paths, The Ford-Fulkerson Labeling Algorithm, 15L A Concrete Example,	5	Applied Combinatorics Mitchel T. Keller and William T. Trotter	Black-Board
	Labelling Algorithm Halts, Integer Solutions of Linear Programming Problems. Combinatorial Applications of Network Flows: Introduction,	6		
	Matching in Bipartite Graphs, Chain partitioning, Pólya's Enumeration Theorem: Coloring the Vertices of a Square.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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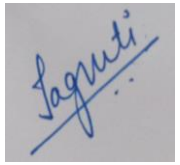

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT:CS

CLASS:SYCS SEMESTER: SEM-3 MONTH: JUN-SEP ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
Students are able to :
Learn physical interfaces and electronics of Raspberry Pi and program them using practical's
Learn how to make consumer grade IoT safe and secure with proper use of protocols.

PAPER,TITLE, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 6 Physical computing and IOT programming UNIT 1	**SoC and Raspberry PiSystem on Chip**: What is System on chip? Structure of System on Chip. **SoC products:** FPGA, GPU, APU, Compute Units.	4	Physical computing IOT programming by Himalaya publication	BLACK BOARD AND CHALK
	ARM 8 Architecture: SoC on ARM 8. ARM 8 Architecture Introduction	4		
	Introduction to Raspberry Pi: Introduction to Raspberry Pi, Raspberry Pi Hardware, Preparing your raspberry Pi.	4		
	Raspberry Pi Boot: Learn how this small SoC boots without BIOS. Configuring boot sequences and hardware	3		

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UNIT 2	**Programming Raspberry Pi** **Raspberry Pi and Linux**: About Raspbian, Linux Commands, Configuring Raspberry Pi with Linux Commands	3	Physical computing IOT programming by Himalaya publication	BLACK BOARD AND CHALK
	Programing interfaces: Introduction to Node.js, Python.	4		
	Raspberry Pi Interfaces: UART, GPIO, I2C, SPI	4		
	Useful Implementations: Cross Compilation, Pulse Width Modulation, SPI for Camera.	4		
Unit 3	. **Introduction to IoT**: What is IoT? IoT examples, Simple IoT LED Program.	3	Physical computing IOT programming by Himalaya publication	BLACK BOARD AND CHALK
	IoT and Protocols **IoT Security**: HTTP, UPnp, CoAP, MQTT, XMPP.	4		
	IoT Service as a Platform: Clayster, Thinger.io, SenseIoT, carriots and Node RED.	4		

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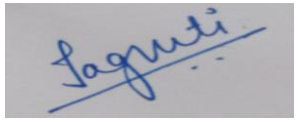
	IoT Security and Interoperability: Risks, Modes of Attacks, Tools forSecurity and Interoperability.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **S.Y.B.Sc.(CS)**

SEMESTER: **III** MONTH: **June - September** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able:

1. Understand Grammar and Languages.
2. Learn about Automata theory and its application in Language Design.
3. Learn about Turing Machines and Pushdown Automata.
4. Understand Linear Bound Automata and its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS301 Paper I **Theory of Computation** **UNIT I**	**Automata Theory:** Defining Automaton, Finite Automaton, Transitions and Its properties, Acceptability by Finite Automaton	4	Theory of Computer Science, K. L. P Mishra, Chandrasekharan, PHI,3rd Edition. Introduction to Computer Theory, Daniel Cohen, Wiley,2nd Edition.	Chalk and Board
	Nondeterministic Finite State Machines, DFA and NDFA equivalence, Mealy and Moore Machines, Minimizing Automata.	4		
	Formal Languages: Defining Grammar, Derivations, Languges generated by Grammar	3		
	Chomsky Classification of Grammar and Languages, Recursive Enumerable Sets, Operations on Languages, Languages and Automata	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS301 Paper I **Theory of Computation** **UNIT II**	**Regular Sets and Regular Grammar:** Regular Grammar, Regular Expressions, Finite automata and Regular Expressions	4	Theory of Computer Science, K. L. P Mishra, Chandrasekharan, PHI,3rd Edition. Introduction to Computer Theory, Daniel Cohen, Wiley,2nd Edition.	Chalk and Board
	Pumping Lemma and its Applications, Closure Properties, Regular Sets and Regular Grammar	4		
	Context Free Languages: Context-free Languages, Derivation Tree, Ambiguity of Grammar, CFG simplification, Normal Forms, Pumping Lemma for CFG	4		
	Pushdown Automata: Definitions, Acceptance by PDA, PDA and CFG	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS301 Paper I **Theory of Computation** **UNIT III**	**Linear Bound Automata:** The Linear Bound Automata Model, Linear Bound Automata and Languages.	4	Theory of Computer Science, K. L. P Mishra, Chandrasekharan, PHI,3rd Edition. Introduction to Computer Theory, Daniel Cohen, Wiley,2nd Edition.	Chalk and Board
	Turing Machines: Turing Machine Definition, Representations, Acceptability by Turing Machines.	4		
	Designing and Description of Turing Machines, Turing Machine Construction, Variants of Turing Machine,	3		
	Undecidability: The Church-Turing thesis, Universal Turing Machine, Halting Problem, Introduction to Unsolvable Problems	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT

CLASS:SYCS SEMESTER: SEM-III MONTH:JUN-SEP ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:Master concepts of stored procedure and triggers and its use.Learn about using PL/SQL for data management and understand concepts and implementations of transaction management and crash recovery.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-4 DBMS, UNIT-1	**Stored Procedures:** Types and benefits of stored procedures, creating stored procedures, executing stored procedures, altering stored procedures, viewing stored procedures.	4	SQL,PL/SQL - The Programming language of Oracle by Ivan Bayross , Database Management Systems by Ramakrishnam, Gehrke.	Blackboard & Chalk
	Triggers: Concept of triggers, Implementing triggers – creating triggers, Insert, delete, and update triggers, nested triggers, viewing, deleting and modifying triggers, and enforcing data integrity through triggers.	5		
	Sequences: creating sequences, referencing, altering and dropping a sequence.	2		
	File Organization and Indexing: Cluster, Primary and secondary indexing, Index data structure: hash and Tree based indexing	2		

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	Comparison of file organization: cost model, Heap files, sorted files, clustered files. Creating, dropping and maintaining indexes.	2		
UNIT-2	**Fundamentals of PL/SQL:** Defining variables and constants, PL/SQL expressions and comparisons: Logical Operators, Boolean Expressions, CASE Expressions Handling.	3	SQL,PL/SQL - The Programming language of Oracle by Ivan Bayross	Blackboard & Chalk
	Null Values in Comparisons and Conditional Statements, PL/SQL Datatypes: Number Types, Character Types, Boolean Type, Datetime and Interval Types.	3		
	Overview of PL/SQL Control Structures: Conditional Control: IF and CASE Statements, IF-THEN Statement, IF-THEN-ELSE Statement,	4		
	CASE Statement, Iterative Control: LOOP and EXIT Statements, WHILE-LOOP, FOR-LOOP, Sequential Control: GOTO and NULL Statements	5		
UNIT 3	**Transaction Management:** ACID Properties, Serializability, Two-phase Commit Protocol, Concurrency Control, Lock Management	3	SQL,PL/SQL - The Programming language of Oracle by Ivan Bayross, Database Management Systems by	Blackboard & Chalk
	Lost Update Problem, Inconsistent Read Problem , Read-Write Locks, Deadlocks Handling, Two Phase Locking protocol	3		
	DCL Statements: Defining a transaction, Making Changes Permanent with COMMIT, Undoing Changes with ROLLBACK, Undoing Partial Changes with SAVEPOINT and ROLLBACK.	3		

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	Crash Recovery: ARIES algorithm. The log based recovery, recovery related structures like transaction and dirty page table	3	Ramakrishnam, Gehrke	
	Write-ahead log protocol, check points, recovery from a system crash, Redo and Undo phases.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT/CS

CLASS: SYCS SEMESTER: III MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to design and develop state of - the art web applications using client-side scripting, server-side scripting, and database connectivity

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
SKILL ENHANCEMENT: WEB PROGRAMMING (USCS307) Unit I	**HTML5:** Fundamental Elements of HTML, Formatting Text in HTML, Organizing Text in HTML, Links and URLs in HTML, Tables in HTML, Images on a Web Page, Image Formats, Image Maps, Colours, FORMs in HTML, Interactive Elements, Working with Multimedia - Audio and Video File Formats, HTML elements for inserting Audio / Video on a web page	8	HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP and jQuery, 2ed, Dreamtech Press	Black Board and Chalk, Computers while practical session
	CSS: Understanding the Syntax of CSS, CSS Selectors, Inserting CSS in an HTML Document, CSS properties to work with background of a Page, CSS properties to work with Fonts and Text Styles, CSS properties for positioning an element	7		
SKILL ENHANCEMENT: WEB PROGRAMMING (USCS307)	**JavaScript:** Using JavaScript in an HTML Document, Programming Fundamentals of JavaScript – Variables, Operators, Control Flow Statements, Popup Boxes, Functions – Defining and Invoking a Function, Defining Function arguments, Defining a Return Statement, Calling Functions with Timer	6	HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP and	Black Board and Chalk, Computers while practical session

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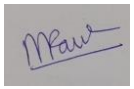
Unit II	**JavaScript Objects** - String, RegExp, Math, Date, Browser Objects - Window, Navigator, History, Location, Document, Cookies, Document Object Model, Form Validation using JavaScript	2	jQuery, 2ed, Dreamtech Press	Black Board and Chalk, Computers while practical session
	XML: Comparing XML with HTML, Advantages and Disadvantages of XML, Structure of an XML Document, XML Entity References, DTD, XSLT: XSLT Elements and Attributes - xsl:template, xsl:apply-templates, xsl:import, xsl:call-template, xsl:include, xsl:element, xsl:attribute, xsl:attribute-set, xsl:value-of	7		Black Board and Chalk, Computers while practical session
SKILL ENHANCEMENT: WEB PROGRAMMING (USCS307) Unit III	**AJAX**: AJAX Web Application Model, How AJAX Works, XMLHttpRequest Object – Properties and Methods, Handling asynchronous requests using AJAX	4	HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP and jQuery, 2ed, Dreamtech Press, PHP: A Beginners Guide, Vikram Vaswani, TMH	Black Board and Chalk, Computers while practical session
	PHP: Variables and Operators, Program Flow, Arrays, Working with Files and Directories, Working with Databases, Working with Cookies, Sessions and Headers	7		Black Board and Chalk, Computers while practical session
	Introduction to jQuery: Fundamentals, Selectors, methods to access HTML attributes, methods for traversing, manipulators, events, effects	4		Black Board and Chalk, Computers while practical session

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **T.Y.B.Sc.(CS)**

SEMESTER: **V** MONTH: **June - September** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able:

- To get a clear understanding of AI and different search algorithms used for solving problems.
- To get acquainted with different learning algorithms and models used in machine learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 **Paper I** **Artificial Intelligence** **UNIT I**	**What Is AI:** Foundations, History and State of the Art of AI.	4	Artificial Intelligence: A Modern Approach, Stuart Russell and Peter Norvig,3rd Edition.	Microsoft PowerPoint Presentation
	Intelligent Agents: Agents and Environments, Nature of Environments, Structure of Agents.	3		
	Problem Solving by searching: Problem-Solving Agents, Example Problems, Searching for Solutions, Uninformed Search Strategies.	4		
	Informed (Heuristic) Search Strategies, Heuristic Functions.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 **Paper I** **Artificial Intelligence** **UNIT II**	**Learning from Examples:** Forms of Learning, Supervised Learning, Learning Decision Trees	3	Artificial Intelligence: A Modern Approach, Stuart Russell and Peter Norvig,3rd Edition.	Microsoft PowerPoint Presentation
	Evaluating and Choosing the Best Hypothesis, Theory of Learning	3		
	Regression and Classification with Linear Models ,Artificial Neural Networks	4		
	Nonparametric Models, Support Vector Machines, Ensemble Learning, Practical Machine Learning	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 **Paper I** **Artificial Intelligence** **UNIT III**	**Learning probabilistic models:** Statistical Learning, Learning with Complete Data.	4	Artificial Intelligence: A Modern Approach, Stuart Russell and Peter Norvig,3rd Edition.	Microsoft PowerPoint Presentation
	Learning with Hidden Variables: The EM Algorithm	3		
	Reinforcement learning: Passive Reinforcement Learning, Active Reinforcement Learning,	4		
	Generalization in Reinforcement Learning, Policy Search, Applications of Reinforcement Learning.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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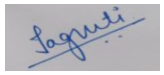

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV** DEPARTMENT: **IT** CLASS:**TYBSCCS**

SEMESTER:**V** MONTH:**JUNE-SEPT** ACADEMIC YEAR:**2019-20**

LEARNING OBJECTIVE/S:

The learners will be able to :

understand computer Graphics programming using Directx or Opengl. Along with the VR and AR they should also aware of GPU, newer technologies and programming using most important API for windows.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS507 **Game Programming** Unit-1	**Cartesian Coordinate system:** The Cartesian XY-plane, Function Graphs, Geometric Shapes, Polygonal Shapes, Areas of Shapes, Theorem of Pythagoras in 2D, Coordinates, Theorem of Pythagoras in 3D, 3D Polygons, Euler's Rule	04	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Black Board and chalk
	Vectors: Vector Manipulation, multiplying a Vector by a Scalar, Vector Addition and Subtraction, Position Vectors, Unit Vectors, Cartesian Vectors, Vector Multiplication, Scalar Product, Example of the Dot Product, The Dot Product in Lighting Calculations, The Dot Product in Back-Face Detection, The Vector Product, The Right-Hand Rule, deriving a Unit	03	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Black Board and chalk,power point

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	Normal Vector for a Triangle Areas, Calculating 2D Areas			
	Transformations: 2D Transformations, Matrices, Homogeneous Coordinates, 3D Transformations, Change of Axes, Direction Cosines, rotating a Point about an Arbitrary Axis, Transforming Vectors, Determinants, Perspective Projection, Interpolation	06	Computer Graphics, C Version, Donald Hern and Pauline Baker, Pearson Education, 2nd Edition, 1997	Black Board and chalk,power point
	DirectX: Understanding GPU and GPU architectures. How they are different from CPU Architectures? Understanding how to solve by GPU?	02	Introduction To 3D Game Programming With Directx® 11	Black Board and chalk,power point
USCS507 **Game Programming** Unit-2	**Introduction To DirectX 11:** COM, Textures and Resources Formats, The swap chain and Page flipping, Depth Buffering, Texture Resource Views, Multisampling Theory and MS in Direct3D, Feature Levels	03	Introduction To 3D Game Programming With Directx® 11	Black Board and chalk,power point
	Direct3D 11 Rendering Pipeline: Overview, Input Assembler Stage (IA), Vertex Shader Stage (VS), The Tessellation Stage (TS), Geometry Shader Stage (GS), Pixel Shader Stage (PS), Output merger Stage (OM) Understanding Meshes or Objects, Texturing, Lighting, Blending.	03	Introduction To 3D Game Programming With Directx® 11	Black Board and chalk,power point
	Trigonometry: The Trigonometric Ratios, Inverse Trigonometric Ratios, Trigonometric	03	Introduction To 3D Game Programming With Directx® 11	Black Board and chalk,power point

	Relationships, The Sine Rule, The Cosine Rule, Compound Angles, Perimeter Relationships			
	Interpolation: Linear Interpolant, Non-Linear Interpolation, Trigonometric Interpolation, Cubic Interpolation, Interpolating Vectors, Interpolating Quaternions	03	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Black Board and chalk,power point
	Curves: Circle, Bezier, B-Splines **Analytic Geometry:** Review of Geometry, 2D Analytic Geometry, Intersection Points, Point in Triangle, and Intersection of circle with straight line.	03	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Black Board and chalk,power point
USCS507 **Game Programming** Unit-3	**Introduction to Rendering Engines:** Understanding the current market Rendering Engines. Understanding AR, VR and MR.Depth Mappers, Mobile Phones, Smart Glasses, HMD's **Unity Engine: Multi-platform publishing, VR + AR:** Introduction and working in Unity, 2D, Graphics, Physics, Scripting, Animation, Timeline, Multiplayer and Networking, UI, Navigation and Pathfinding, XR, Publishing.	10	https://docs.unity3d.com/Manual/index.html	Black Board and chalk,power point
	Scripting: Scripting Overview, Scripting Tools and Event Overview **XR:** VR, AR, MR, Conceptual Differences. SDK, Devices	05	https://docs.unity3d.com/Manual/index.html	Black Board and chalk,power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAMPADA DESHMUKH DEPARTMENT: INFORMATION TECHNOLOGY CLASS: T.Y.C.S.

SEMESTER: V MONTH: JUNE - SEPTEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concepts of basic computer security, Network Security and Cryptography.
- Understand different techniques of cryptography.
- Learn security threats and vulnerabilities and identify security problems.
- Identify threats of Network Security and apply protocol for the network.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS504 Unit 1, **Information and Network Security**	Security Trends, The OSI Security Architecture, Security Attacks, Security Services, Security Mechanisms	03	Cryptography and Network Security: Principles and Practice 5th Edition, William	Black Board and chalk
	Classical Encryption Techniques: Symmetric Cipher Model, Substitution Techniques . Transposition Techniques, Steganography, Block Cipher Principles, The Data Encryption Standard, The Strength of DES	04	Cryptography and Network Security, Atul Kahate, Tata McGraw-Hill, 2013.	Black Board and chalk
	Multiple encryption Triple DES	02	Cryptography and Network Security, Atul Kahate, Tata McGraw-Hill, 2013.	Black Board and chalk

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	Advanced Encryption Algorithm			
	Principles of public key cryptosystem concept and working Modes of operation Block cipher	03	Cryptography and Network Security: Principles and Practice 5th Edition, William	Black Board and chalk
	Stream cipher RSA Algorithm concept RSA algorithm problem solving	03	Cryptography and Network Security, Atul Kahate, Tata McGraw-Hill, 2013.	Black Board and chalk
USCS504, Unit 2, **Information and Network Security**	**Key Management:** Public-Key Cryptosystems Key Management Diffie-Hellman Key Exchange	03	Cryptography and Network Security: Principles and Practice 5th Edition, William	Black Board and chalk
	Message Authentication and Hash Functions: Authentication Requirements, Authentication Functions, Message Authentication Codes Hash Functions, Security of Hash Functions and Macs,	04	Cryptography and Network Security, Atul Kahate, Tata McGraw-Hill, 2013.	Black Board and chalk
	HMAC Secure Hash Algorithm **Digital Signatures and Authentication:** Digital Signatures, Authentication Protocols	04	Cryptography and Network Security: Principles and Practice 5th Edition, William	Black Board and chalk
	Digital Signature Standard **Authentication Applications:** Kerberos, X.509 Authentication, Public-Key Infrastructure	04	Cryptography and Network Security: Principles and Practice 5th Edition, William	Black Board and chalk

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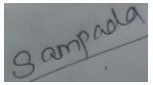
USCS504, Unit 3, **Information and Network Security**	**Electronic Mail Security:** Pretty Good Privacy, S/MIME **IP Security:** Overview, Architecture, Authentication Header, Encapsulating Security Payload, Combining Security Associations, Key Management	05	Cryptography and Network Security: Principles and Practice 5th Edition, William	Black Board , Projector
	Web Security: Web Security Considerations, Secure Socket Layer and Transport Layer Security, Secure Electronic Transaction **Intrusion:** Intruders, Intrusion Techniques, Intrusion Detection	05	Cryptography and Network Security: Principles and Practice 5th Edition, William	Black Board , projector
	Malicious Software: Viruses and Related Threats, Virus Countermeasures, DDOS **Firewalls:** Firewall Design Principles, Types of Firewalls	05	Cryptography and Network Security: Principles and Practice 5th Edition, William	Black Board , Projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande DEPARTMENT: Computer Science CLASS: T.Y.C.S.

SEMESTER: V MONTH: June - September ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand various software testing methods and strategies. Understand a variety of software metrics, and identify defects and managing those defects for improvement in quality for given software. Design SQA activities, SQA strategy, formal technical review report for software quality control and assurance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 Software Testing and Quality Assurance UNIT : 01	**Software Testing and Introduction to quality :** Introduction, Nature of errors, an example for Testing, Definition of Quality , QA, QC, QM and SQA , Software Development Life Cycle, Software Quality Factors	05	Software Engineering for Students, A Programming Approach, Douglas Bell, 4th Edition,, Pearson Education, 2005	Blackboard PPT Projector
	Verification and Validation : Definition of V &V , Different types of V & V Mechanisms, Concepts of Software Reviews, Inspection and Walkthrough	05		Blackboard PPT Projector
	Software Testing Techniques : Testing Fundamentals, Test Case Design, White Box Testing and its types, Black Box Testing and its types	05		Blackboard PPT Projector

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USCS501 Software Testing and Quality Assurance UNIT : 02	**Software Testing Strategies :** Strategic Approach to Software Testing, Unit Testing, Integration Testing, Validation Testing, System Testing	05	Software Engineering – A Practitioners Approach, Roger S. Pressman, 5th Edition, Tata McGraw Hill, 2001	Blackboard PPT
	Software Metrics : Concept and Developing Metrics, Different types of Metrics, Complexity metrics	05		Blackboard PPT
	Defect Management: Definition of Defects, Defect Management Process, Defect Reporting, Metrics Related to Defects, Using Defects for Process Improvement.	05		Blackboard PPT
USCS501 Software Testing and Quality Assurance UNIT : 03	**Software Quality Assurance :** Quality Concepts, Quality Movement, Background Issues, SQA activities, Software Reviews, Formal Technical Reviews, Formal approaches to SQA, Statistical Quality Assurance, Software Reliability, The ISO 9000 Quality Standards, , SQA Plan , Six sigma, Informal Reviews	07	Quality Management, Donna C. S. Summers, 5th Edition, Prentice-Hall, 2010. Total Quality Management, Dale H. Besterfield, 3rd Edition, Prentice Hall, 2003.	Blackboard PPT
	Quality Improvement : Introduction, Pareto Diagrams, Cause-effect Diagrams, Scatter Diagrams, Run charts	03		Blackboard PPT
	Quality Costs : Defining Quality Costs, Types of Quality Costs, Quality Cost Measurement, Utilizing Quality Costs for Decision-Making **Textbook**(s	05		Blackboard PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: Information Technology

CLASS: TYCS SEMESTER: V MONTH: JUNE to SEPT ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE/S:

•To understand the details of web services technologies like SOAP, WSDL, and UDDI. To learn how to implement and deploy web service client and server.

•To understand the design principles and application of SOAP and REST based web services (JAX-Ws and JAX-RS).

•To understand WCF service. To design secure web services and QoS of Web Services

The learners will be able to:

•Emphasis on SOAP based web services and associated standards such as WSDL. Design SOAP based / RESTful / WCF services Deal with Security and QoS issues of Web Services

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Web Services Elective-II USCS506 Unit 1	**Web services basics:** What Are Web Services? Types of Web Services Distributed computing infrastructure,	5	Web Services: Principles and Technology,Michael P. Papazoglou, Pearson Education Limited, 2008	Projector, Laptop, Black board& Chalk
	overview of XML, SOAP, Building Web Services with JAX-WS, Registering and Discovering Web Services, Service Oriented Architecture	5	Web Services: Principles and Technology,Michael P. Papazoglou, Pearson Education Limited, 2008	Projector, Laptop, Black board& Chalk
	Web Services Development Life Cycle,	5	Web Services: Principles and Technology,Michael P.	Projector, Laptop, Black board& Chalk

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	Developing and consuming simple Web Services across platform		Papazoglou, Pearson Education Limited, 2008	
Web Services Elective-II USCS506 Unit 2	**The REST Architectural style:** Introducing HTTP, The core architectural elements of a RESTful system, Description and discovery of RESTful web services,	5	RESTful Java Web Services, Jobinesh Purushothaman, PACKT Publishing,2 nd Edition, 2015	Projector, Laptop, Black board& Chalk
	Java tools and frameworks for building RESTful web services, JSON message format and tools and frameworks around JSON, Build RESTful web services with JAX-RS APIs,	5	RESTful Java Web Services, Jobinesh Purushothaman, PACKT Publishing,2 nd Edition, 2015	Projector, Laptop, Black board& Chalk
	The Description and Discovery of RESTful Web Services, Design guidelines for building RESTful web services, Secure RESTful web services.	5	RESTful Java Web Services, Jobinesh Purushothaman, PACKT Publishing,2 nd Edition, 2015	Projector, Laptop, Black board& Chalk
Web Services Elective-II USCS506 Unit 3	**Developing Service-Oriented Applications with WCF :** What Is Windows Communication Foundation, Fundamental Windows Communication Foundation Concepts	5	Developing Service-Oriented Applications with WCF, Microsoft, 2017 https://docs.microsoft.com/en-us/dotnet/framework/wcf/index	Projector, Laptop, Black board& Chalk
	Windows Communication Foundation Architecture,	3	Developing Service-Oriented Applications with WCF, Microsoft, 2017 https://docs.microsoft.com/en-us/dotnet/framework/wcf/index	Projector, Laptop, Black board& Chalk
	WCF and .NET Framework Client Profile, Basic WCF Programming, WCF Feature Details. Web Service QoS	7	Developing Service-Oriented Applications with WCF, Microsoft, 2017 https://docs.microsoft.com/en-us/dotnet/framework/wcf/index	Projector, Laptop, Black board& Chalk

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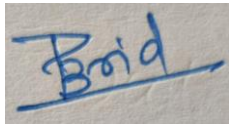
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: II MONTH: DECEMBER - JANUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of limit, continuity and derivative of a function.
- Check the continuity of the function at the given point.
- Find the derivatives of functions of various functions
- Use derivatives in various applications like concavity, maxima/minima, increasing/decreasing functions etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CALCULUS Unit 1 Derivatives & its applications	➢ Limit, continuity and derivative of a function ➢ Asymptotes, increasing/decreasing functions, concavity. ➢ Absolute and relative maxima and minima ➢ Graphing of polynomials and Newton's method	5 3 4 3	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: II MONTH: FEBRUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Evaluate indefinite integral using different methods like substitution, integration by parts etc.
- Evaluate definite integral using the properties of definite integration and by Simpson's rule
- Find the area bounded between curves and length of plane curve using integration.
- Solve the given differential equation using different methods

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CALCULUS Unit 2 Integration & its applications	➢ Indefinite and definite integration ➢ Area between two curves ➢ Length of plane curve ➢ Simpson's rule ➢ Solving differential equations	5 3 1 2 4	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

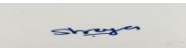
CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: II MONTH: MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of limits, continuity and derivatives of functions of two or more variables.
- Find the first and second order partial derivatives of functions of two variables.
- Find the linearization of the given function at the given point.
- Understand the concept of gradients and directional derivatives.
- Find the derivative of a function of two variable using chain rule.
- Find the relative extrema and saddle point of the given function of two variables using partial derivatives.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CALCULUS Unit 3 Partial Derivatives & its applications	➢ Limit, continuity and partial derivatives of functions of two or more variables ➢ Linearization and chain rule ➢ Directional derivatives and gradients ➢ Tangent planes and normal lines ➢ Maxima and minima of functions of two variables	5 2 3 2 3	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: FYCS

SEMESTER: II MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Be familiar with basic techniques of algorithm analysis
- Be familiar with writing recursive methods
- Describe common applications for arrays, records, linked structures, stacks, queues, trees, and graphs
- Ability to summarize searching and sorting techniques.
- Be familiar with advanced data structures such as balanced search trees, hash tables, priority queues and the disjoint set union/find data structure

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS204, Data Structures Unit 1	Abstract Data Types: Introduction, The Date Abstract Data Type, Bags, Iterators. Application Type,	03	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, Powerpoint
	Arrays: Array Structure, Python List, Two Dimensional Arrays, Matrix Abstract Data	03	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
	Application Sets and Maps: Sets-Set ADT, Selecting Data Structure, List based Implementation, Maps-Map ADT, List Based Implementation, Multi-Dimensional Arrays-	04	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016	Black Board and chalk, PowerPoint

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	Multi-Array ADT, Implementing Multiarrays, Application		Wiley India Edition	
	Application Searching and Sorting: Searching-Linear Search, Binary Search, Sorting-Bubble, Selection and Insertion Sort, Working with Sorted Lists-Maintaining Sorted List, Maintaining sorted Lists.	03	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
	Algorithm Analysis: Complexity Analysis-Big-O Notation, Evaluating Python Code, Evaluating Python List, Amortized Cost, Evaluating Set ADT,	02	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
USCS204, Data Structures Unit 2	Linked Structures: Introduction, Singly Linked List-Traversing, Searching, Prepending and Removing Nodes, Bag ADT-Linked List Implementation. Comparing Implementations, Linked List Iterators, More Ways to Build Kinked Lists	05	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
	Applications-Polynomials Stacks: Stack ADT, Implementing Stacks-Using Python List, Using Linked List, Stack Applications-Balanced Delimiters, Evaluating Postfix Expressions	04	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
	, Queues: Queue ADT, Implementing Queue-Using Python List, Circular Array, Using List, Priority Queues- Priority Queue ADT, Bounded and unbounded Priority Queues	03	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
	Advanced Linked List: Doubly Linked Lists-Organization and Operation, Circular Linked List-Organization and Operation, Multi Lists	03	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint

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USCS204, Data Structures Unit 3	Recursion: Recursive Functions, Properties of Recursion, Its working, Recursive	03	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
	Hash Table: Introduction, Hashing-Linear Probing, Clustering, Rehashing, Separate Chaining, Hash Functions	04	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
	Advanced Sorting: Merge Sort, Quick Sort, Radix Sort, Sorting Linked List	03	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
	Applications Binary Trees: Tree Structure, Binary Tree-Properties, Implementation and Traversals, Expression Trees, Heaps and Heapsort,Search Trees	05	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT

CLASS:FYCS SEMESTER: SEM-II MONTH:DEC-MAR ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:Develop logicwhich will help them to write, compile and debug programs in C language, able to use different data types in a computer program.Also by learning thedesign programs involving decision structures, loops and functions.It use different data structures and create/update basic data files.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-1 PROGRAMMING WITH C, UNIT 1	**Structure of C program:** Header and body, Use of comments. Interpreters vs compilers, Python vs C. Compilation of a program. Formatted I/O: printf(), scanf().	2	Programming in ANSI C : E Balagurusamy	Blackboard & Chalk
	Data: Variables, Constants, data types like: int, float char, double and void, short and long size qualifiers, signed and unsigned qualifiers. Compare with datatypes in Python. Compare static typing in C vs dynamic typing in Python .	2		
	Variables: Declaring variables, scope of the variables according to block, hierarchy of data types. Compare explicit declarations in C with implicit declarations in Python.	2		

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	Types of operators: Arithmetic, relational, logical, compound assignment, increment and decrement, conditional or ternary, bitwise and comma operators. Precedence and order of evaluation, statements and Expressions. Automatic and explicit type conversion.	4		
	Iterations: Control statements for decision making: (i) Branching: if statement, else.. if statement, (does the writer mean if-else or nested ifs)switch statement. (ii) Looping: while loop, do.. while, for loop. (iii) Jump statements: break, continue and goto.	5		
UNIT-2	**Arrays**: (One and two dimensional), declaring array variables, initialization of arrays, accessing array elements. Compare array types of C with list and tuple types of Python.	4	Programming in ANSI C : E Balagurusamy	Blackboard & Chalk
	Data Input and Output functions: Character I/O format: getch(), getche(), getchar(), getc(), gets(), putchar(), putc(), puts().	4		
	Manipulating Strings: Declaring and initializing String variables, Character and string handling functions. Compare with Python strings.	2		

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	Functions: Function declaration, function definition, Global and local variables, return statement, Calling a function by passing values.	4		
	Recursion: Definition, Recursive functions.	1		
UNIT 3	**Pointer**: Fundamentals, Pointer variables, Referencing and de-referencing, Pointer Arithmetic, Using Pointers with Arrays, Using Pointers with Strings, Array of Pointers, Pointers as function arguments, Functions returning pointers.	4	Programming in ANSI C : E Balagurusamy	Blackboard & Chalk
	Dynamic Memory Allocation:malloc(), calloc(), realloc(), free() and sizeof operator. Compare with automatic garbage collection in Python.	3		
	Structure: Declaration of structure, reading and assignment of structure variables, Array of structures, arrays within structures, structures within structures. Compare C structures with Python tuples.	4		
	Unions: Defining and working with unions.	1		

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	File handling: Different types of files like text and binary, Different types of functions: fopen(), fclose(), fgetc(), fputc(), fgets(), fputs(), fscanf(), fprintf(), getw(), putw(), fread(), fwrite(), fseek().	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS CLASS: FYCS

SEMESTER: SEM-2 MONTH:DEC-MARCH ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

- Familiarize with the concept of Green Computing and Green IT infrastructure for making computing andinformation system environment sustainable.
- Learn about green IT can be achieved in and by hardware, software, network communication and datacenter operations.
- Understand the strategies, frameworks, processes and management of green IT.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
7 GREEN TECHNOLOGY UNIT 1	**Green IT Overview:**Introduction , Environmental Concerns and SustainableDevelopment, Environmental Impacts of IT, Green I , Holistic Approach to Greening IT,Greening IT, Applying IT for Enhancing Environmental Sustainability, Green IT Standards and Eco-Labelling of IT , Enterprise Green IT Strategy, Green Washing, Green IT: Burdenor Opportunity?	4	Harnessing Green IT: Principles and Practices bySan Murugesan, G. R. Ganadharan, Wiley & IEEE.	BLACK BOARD AND CHALK
	Green Devices and Hardware: Introduction , Life Cycle of a Device or Hardware, Reuse,Recycle and Dispose	3		
	Green Software: Introduction , Processor Power States , Energy-Saving SoftwareTechniques, Evaluating and Measuring Software Impact to Platform Power	4		

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	Sustainable Software Development: Introduction, Current Practices, SustainableSoftware, Software Sustainability Attributes, Software Sustainability Metrics,Sustainable Software Methodology, Defining Actions	4		
UNIT 2	**Green Data Centres:**Data Centres and Associated Energy Challenges, Data Centre ITInfrastructure, Data Centre Facility Infrastructure: Implications for Energy Efficiency, ITInfrastructure Management, Green Data Centre Metrics	4	Harnessing Green IT: Principles and Practices by San Murugesan, G. R. Ganadharan, Wiley & IEEE.	BLACK BOARD AND CHALK
	Green Data Storage: Introduction , Storage Media Power Characteristics, EnergyManagement Techniques for Hard Disks, System-Level Energy Management	4		
	Green Networks and Communications: Introduction, Objectives of Green NetworkProtocols, Green Network Protocols and Standards	3		
	Enterprise Green IT Strategy: Introduction, Approaching Green IT Strategies, Business Drivers of Green IT Strategy, Business Dimensions for Green IT Transformation, Organizational Considerations in a Green IT Strategy, Steps in Developing a Green ITStrategy, Metrics and Measurements in Green Strategies.	4		

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UNIT 3	**Sustainable Information Systems and Green Metrics:**Introduction, MultilevelSustainable Information, Sustainability Hierarchy Models, Product Level Information,Individual Level Information, Functional Level Information, Organizational LevelInformation, Measuring the Maturity of Sustainable ICT	4	Harnessing Green IT: Principles and Practices bySan Murugesan, G. R. Ganadharan, Wiley & IEEE.	BLACK BOARD AND CHALK
	Enterprise Green IT Readiness: Introduction, Readiness and Capability, Development ofthe G-Readiness Framework, Measuring an Organization's G-Readiness	3		
	Sustainable IT Services: Creating a Framework for Service Innovation: Introduction,Factors Driving the Development of Sustainable IT, Sustainable IT Services (SITS), SITSStrategic Framework	4		
	Green Enterprises and the Role of IT: Introduction, Organizational and EnterpriseGreening, Information Systems in Greening Enterprises, Greening the Enterprise: ITUsage and Hardware, Inter-organizational Enterprise Activities and Green Issues	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar DEPARTMENT: Computer Science

CLASS: F.Y.B.Sc.(CS) SEMESTER: 2 MONTH: December to March ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

- The learners will be able to know descriptive statistical concepts
- The learner will able to study probability concepts required for computer learners.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: 6 **Statistical methods and testing of hypothesis** **<u>Unit 1</u>**	Standard distribution: ● Random variable, discrete random variable, continuous random variable, ● Expectation and variance of discrete and continuous random variable	4	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	● Pmf and Cdf for discrete random variable	2	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	● PDF and Cdf for continuous random variable ● Reliability	3	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	Introduction and properties without proof for following distribution: ● Binomial distribution	3	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster

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	● Normal distribution			
	Introduction and properties without proof for following distribution: ● Chi-square distribution ● T- distribution ● F- distribution	3	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Statistical methods and testing of hypothesis **<u>Unit 2</u>**	Hypothesis testing: ● One sided and two sided hypothesis ● Critical region ● P- value	3	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	● Test based on t distribution ● Test based on normal distribution ● Test based on f distribution	5	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	● Confidence interval	1	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	Analysis of Variance: ● One -way ANOVA	3	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	Analysis of Variance: ● Two- way ANOVA	3	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Statistical methods and testing of hypothesis **<u>Unit 3</u>**	Non parametric tests ● Need of non- parametric tests	1	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	Non parametric tests: ● Sign test ● Willcoxon's signed rank test ● Willcoxon's rank sum test	5	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	Non parametric tests: ● Run test ● Kruskal-wali's test	4	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	Post hoc analysis of one way ANOVA: ● Ducann's tets	2	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	● Chi-square test of association	3	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: COMPUTER SCIENCE CLASS: FYCS

SEMESTER: II MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand how to read/write to files using python.
- Catch their own errors that happen during execution of programs.
- Get introductions to the concept of pattern matching.
- Be familiar with the concepts of GUI controls and designing GUI applications.
- Connect to the database to move the data to/from the application.
- Know how to connect to computers, read from URL and send email.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS202, Unit 1, Programming with Python- II	Python File Input-Output: Opening and closing files, various types of file modes, reading and writing to files, manipulating directories. Iterables, iterators and their problem solving applications.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	Exception handling: What is an exception, various keywords to handle exceptions such try, catch, except, else, finally, raise.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk

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	Regular Expressions: Concept of regular expression, various types of regular expressions, using match function.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
USCS202, Unit 2, Programming with Python- II	GUI Programming in Python (using Tkinter/wxPython/Qt) What is GUI, Advantages of GUI	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	Introduction to GUI library. Layout management, events and bindings, fonts, colours, drawing on canvas (line, oval, rectangle, etc.)	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	Widgets such as : frame, label, button, checkbutton, entry, listbox, message, radiobutton, text, spinbox etc	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
USCS202, Unit 3, Programming with Python-II	Database connectivity in Python: Installing mysql connector, accessing connector module module, using connect, cursor, execute & close functions.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk

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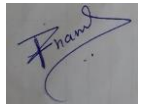
	Reading single & multiple results of query execution, executing different types of statements, executing transactions, understanding exceptions in database connectivity	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	Network connectivity: Socket module, creating server-client programs, sending email, reading from URL	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: FYCS SEMESTER: II MONTH:DEC-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: Students should have a good working knowledge of Linux, from botha graphical and command line perspective, allowing them to easily use any Linux distribution.This course shall help student to learn advanced subjects in computer science practically. Student shall be able to progress as a Developer or Linux System Administrator using the acquired skill set.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS203 Linux Unit I	Introduction History of Linux, Philosophy, Community, Terminology, Distributions, Linux kernel vsdistribution.Why learn Linux? Importance of Linux in software ecosystem: web servers, supercomputers, mobile, servers.	05	Unix Concepts and Applications by Sumitabha Das., Official Ubuntu Book, 8th Edition, by Matthew Helmke& Elizabeth K. Joseph with Jose Antonio Rey and Philips Ballew, Prentice Hall	Blackboard, Chalk
	Installation Installation methods, Hands on Installation using CD/DVD or USB drive.	03		Blackboard, Chalk
	Linux Structure Linux Architecture, Filesystem basics, The boot process, init scripts, runlevels,shutdown process, Very basic introductions to Linux processes, Packaging methods:rpm/deb, Graphical Vs Command line.	07		Blackboard, Chalk
USCS203 Linux	Graphical Desktop: Session Management, Basic Desktop Operations, Network	07	Unix Concepts and Applications	Blackboard, Chalk

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Unit II	Management, Installingand Updating Software, Text editors: gedit, vi, vim, emacs, Graphics editors,Multimedia applications.		by SumitabhaDas., Official Ubuntu Book, 8th Edition, by Matthew Helmke& Elizabeth K. Joseph with Jose Antonio Rey and Philips Ballew, Prentice Hall	
	Command Line Command line mode options, Shells, Basic Commands, General Purpose Utilities,Installing Software, User management, Environment variables, Command aliases.	03		Blackboard, Chalk
	Linux Documentation: man pages, GNU info, help command, More documentation sources	02		Blackboard, Chalk
	File Operations Filesystem, Filesystem architecture, File types, File attributes, Working with files, Backup, compression	03		Blackboard, Chalk
	Security Understanding Linux Security, Uses of root, sudo command, working with passwords, Bypassing user authentication, Understanding ssh	05	Unix Concepts and Applications by Sumitabha Das., Official Ubuntu Book, 8th Edition, by Matthew Helmke& Elizabeth K. Joseph with Jose Antonio Rey and Philips Ballew, Prentice Hall	Blackboard, Chalk
	Networking: Basic introduction to Networking, Network protocols: http, ftp etc., IP address, DNS,Browsers, Transferring files.ssh, telnet, ping, traceroute, route, hostname, networking GUI.	04		Blackboard, Chalk
	Basic Shell Scripting Features and capabilities, Syntax, Constructs, Modifying files, Sed, awkcommand,File manipulation utilities, Dealing with large files and Text, String manipulation,Boolean expressions, File tests, Case, Debugging, Regular expressions	06		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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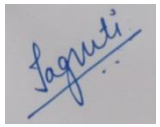

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV----** DEPARTMENT: **IT** CLASS:**SYBSCCS**

SEMESTER:**IV** MONTH:**DEC-MARCH** ACADEMIC YEAR:**2019-20**

LEARNING OBJECTIVE/S:

The learners will be able to :

understand basic principles of algorithm design and why algorithm analysis is important
understand how to implement algorithms in Python
understand how to transform new problems into algorithmic problems with efficient solutions
understand algorithm design techniques for solving different problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS401 **Fundamentals of Algorithms** UNIT-1	Introduction to algorithm, Why to analysis algorithm, Running time analysis, How to Compare Algorithms, Rate of Growth, Commonly Used Rates of Growth, Types of Analysis, Asymptotic Notation, Big-O Notation, Omega-Ω Notation, Theta-Θ Notation, Asymptotic Analysis, Properties of Notations,	07	Introduction to Algorithm, Thomas H Cormen, PHI	Black board and chalk,power point
	Commonly used Logarithms and Summations, Performance characteristics of algorithms, Master Theorem for Divide and Conquer, Divide and Conquer Master Theorem: Problems & Solutions, Master Theorem for Subtract and Conquer Recurrences, Method of Guessing and Confirming	08	Introduction to Algorithm,	Black board and chalk,power point

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			Thomas H Cormen, PHI	
USCS401 **Fundamentals of Algorithms** UNIT-2	Tree algorithms: What is a Tree? Glossary, Binary Trees, Types of Binary Trees, Properties of Binary Trees, Binary Tree Traversals, Generic Trees (N-ary Trees), Threaded Binary Tree Traversals, Expression Trees, Binary Search Trees (BSTs), Balanced Binary Search Trees, AVL (Adelson-Velskii and Landis) Trees	06	Introduction to Algorithm, Thomas H Cormen, PHI	Black board and chalk,power point
	Graph Algorithms: Introduction, Glossary, Applications of Graphs, Graph Representation, Graph Traversals, Topological Sort, Shortest Path Algorithms, Minimal Spanning Tree Selection Algorithms: What are Selection Algorithms? Selection by Sorting, Partition-based Selection Algorithm, Linear Selection Algorithm - Median of Medians Algorithm, Finding the K Smallest Elements in Sorted Order	09	Introduction to Algorithm, Thomas H Cormen, PHI	Black board and chalk,power point
USCS401 **Fundamentals of Algorithms** UNIT-3	Algorithms Design Techniques: Introduction, Classification, Classification by Implementation Method, Classification by Design Method Greedy Algorithms: Introduction, Greedy Strategy, Elements of Greedy Algorithms, Advantages and Disadvantages of Greedy Method, Greedy Applications, Understanding Greedy Technique Divide and Conquer Algorithms: Introduction, What is Divide and Conquer Strategy? Divide and Conquer Visualization, Understanding Divide and Conquer, Advantages of Divide and Conquer, Disadvantages of Divide and Conquer, Master Theorem, Divide and Conquer Applications	07	Introduction to Algorithm, Thomas H Cormen, PHI	Black board and chalk,power point

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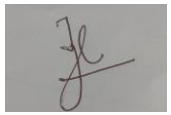
	Dynamic Programming: Introduction, What is Dynamic Programming Strategy? Properties of Dynamic Programming Strategy, Problems which can be solved using Dynamic Programming, Dynamic Programming Approaches, Examples of Dynamic Programming Algorithms, Understanding Dynamic Programming, Longest Common Subsequence	09	Introduction to Algorithm, Thomas H Cormen, PHI	Black board and chalk,power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar DEPARTMENT: Computer Science CLASS: S.Y.B.Sc.(CS)

SEMESTER: 4 MONTH: December to March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Appreciate the relevance of linear algebra in a field of computer science.
- Understand the concept through program implementation.
- Instill the computational thinking while learning linear algebra.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS405 **Linear Algebra using python** **<u>Unit 1</u>**	**Field**: ● Introduction to complex number,numbers in python,Abstracting over field ● playing with GF(2),	4	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster
	Vector Space: ● Vectors are functions, ● Vector addition and scalar multiplication ● Combining vector addition and scalar multiplication ● Geometry of sets of vectors	3	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster
	● Dictionary based representation of vectors ● Dot product	2	Coding the matrix linear algebra through application to computer science, edition 1 philip N	Black board, chalk and duster

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			Klein, Newtonian press(2013)	
	Linear system : ● Homogeneous and non homogeneous equation ● Solving triangular system of linear equations	3	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster
	● Linear combination and linear span	3	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS405 **Linear Algebra using python** **<u>Unit 2</u>**	**Matrix:** ● Matrices as vectors, transpose ● Matrix -vector and vector-matrix multiplication in terms of linear combination ● Matrix -vector and vector-matrix multiplication in terms of dot-product	3	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board,chalk and duster
	● Null space, computing Sparse matrix, vector product	3	Coding the matrix linear algebra through	Black board,chalk and duster

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	• Linear function • Inner product and outer product • From function inverse to matrix inverse		application to computer science, edition 1 philip N Klein, Newtonian press(2013)	
	Basis: • Coordinate system,Two greedy algorithm for finding set of generators • Minimum spanning forest and GF(2) • Linear dependence and independence	3	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board,chalk and duster
	Basis: • Basis, unique representation,change of basis • Computational problems involving finding a basis	3	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board,chalk and duster
	Dimensions: • Dimension and rank, • Direct sum • Dimension and linear function • The annihilator	3	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board,chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS405 **Linear Algebra using python** **<u>Unit 3</u>**	**Gaussian elimination:** ● Row echelon form, Gaussian elimination over GF(2) ● Solving matrix - vector equation using Gaussian distribution ● Finding basis for null space ● Factoring integers	4	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster
	Inner product: ● The inner product for vectors over field ● Orthogonality	2	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster
	Orthogonalisation: ● Projection orthogonal to multiple vectors ● Projecting orthogonal to mutually orthogonal vectors ● Finding an orthogonal set of generators ● Orthogonal complement	4	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster
	Eigen vectors: ● Modeling discrete dynamic processes ● Diagonalization of the Fibonacci matrix ● Finding Eigen values and Eigen vectors ● Coordinate representation in terms of Eigen vectors	3	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster

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	• The internet worm • Markow chains • Modeling a web surfer-page rank	2	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

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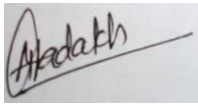

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: S.Y.B.Sc.CS_ SEMESTER: IV MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

- Capable of team and organizational leadership in computing settings.
- Acquire Skill and knowledge to advance their career, including continually upgrading professional, communication, analytic, and technical skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Unit II Software Engineering	**System Design:** System/Software Design, Architectural Design, Low-Level Design Coupling and Cohesion,	2	A Concise Introduction to Software Engineering, Pankaj Jalote, Springer	Blackboard, Chalk
	Functional-Oriented Versus The Object-Oriented Approach, Design Specifications, Verification for Design, Monitoring and Control for Design Software	3	Software Engineering, Ian Sommerville, Pearson Education	Blackboard, Chalk
	Measurement and Metrics: Product Metrics – Measures, Metrics, and Indicators, Function-Based Metrics, Metrics for Object-Oriented Design, Operation-Oriented Metrics, User Interface Design Metrics, Metrics for Source Code, Halstead Metrics Applied to Testing, Metrics for Maintenance,	4	Software Engineering, Ian Sommerville, Pearson Education	Blackboard, Chalk

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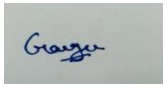
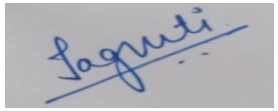
	Cyclomatic Complexity, Software Measurement - Size-Oriented, Function-Oriented Metrics, Metrics for Software Quality			
	Software Project Management: Estimation in Project Planning Process –Software Scope And Feasibility, Resource Estimation, Empirical Estimation Models – COCOMO II, Estimation for Agile Development, The Make/Buy Decision,	3	Software Engineering, Ian Sommerville, Pearson Education	Blackboard, Chalk
	Project Scheduling - Basic Principles, Relationship Between People and Effort, Effort Distribution, Time-Line Charts	3	Software Engineering, Ian Sommerville, Pearson Education	Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **S.Y.B.Sc.(CS)**

SEMESTER: **IV** MONTH: **December - March** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able:1. Understand flow of software modeling process.

2. Understand software metrics, agile development and change management as a part of industrial requirements.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS404 Paper 4 **Software Engineering** **UNIT I**	**Introduction:** The Nature of Software, Software Engineering, The Software Process, Generic Process Model, The Waterfall Model, Incremental Process Models, Evolutionary Process Models, Concurrent Models	4	Software Engineering, A Practitioner's Approach, Roger S, Pressman.(2014) Software Engineering, Ian Sommerville, Pearson Education	Microsoft PowerPoint Presentation
	Component-Based Development, The Unified Process Phases, Agile Development- Agility, Agile Process, Extreme Programming	4		
	Requirement Analysis and System Modeling: Requirements Engineering, Eliciting Requirements, SRS Validation, Components of SRS, Characteristics of SRS	3		
	Object-oriented design using the UML - Class diagram, Object diagram, Use case diagram, Sequence diagram, Collaboration diagram, State chart diagram, Activity diagram, Component diagram, Deployment diagram	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS404 Paper 4 **Software Engineering** **UNIT III**	**Risk Management** - Software Risks, Risk Identification, Risk Projection and Risk Refinement, RMMM Plan	4	Software Engineering, A Practitioner's Approach, Roger S, Pressman.(2014) Software Engineering, Ian Sommerville, Pearson Education	Microsoft PowerPoint Presentation
	Software Quality Assurance: Elements of SQA, SQA Tasks, Goals, and Metrics, Formal Approaches to SQA, Six Sigma, Software Reliability, The ISO 9000 Quality Standards, Capability Maturity Model	4		
	Software Testing : Verification and Validation, Introduction to Testing, Testing Principles, Testing Objectives, Test Oracles,	3		
	Levels of Testing, White-Box Testing/Structural Testing, Functional/Black-Box Testing, Test Plan, Test-Case Design	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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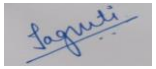

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DORIN REBELLO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYBSc(CS) SEMESTER: IV MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : To explore .NET technologies for designing and developing dynamic, interactive and responsive web applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper:USCS406 unit:1, Title: .Net Technologies	**The .NET Framework:**.NET Languages, Common Language Runtime, .NET Class Library	2	Beginning ASP.NET 4.5 in C#	Presentation, board, projector
	C# Language Basics: Comments, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods, Classes, Value Types and Reference Types, Namespaces and Assemblies, Inheritance, Static Members, Casting Objects, Partial Classes	3	Beginning ASP.NET 4.5 in C#	Presentation, board, projector
	ASP.NET: Creating Websites, Anatomy of a Web Form - Page Directive, Doctype, Writing Code - Code-Behind Class, Adding Event Handlers, Anatomy of an ASP.NET Application - ASP.NET File Types, ASP.NET Web Folders,	5	Beginning ASP.NET 4.5 in C#	Presentation, board, projector
	HTML Server Controls - View State, HTML Control Classes, HTML Control Events, HtmlControl Base Class,	5		

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	HtmlContainerControl Class, HtmlInputControl Class, Page Class, global.asax File, web.config File		Beginning ASP.NET 4.5 in C#	
Paper:USCS406 unit:2, Title: .Net Technologies	**Web Controls:** Web Control Classes, WebControl Base Class, List Controls, Table Controls, Web Control Events and AutoPostBack, Page Life Cycle	3	Beginning ASP.NET 4.5 in C#	Presentation, board, projector
	State Management: ViewState, Cross-Page Posting, Query String, Cookies, Session State, Configuring Session State, Application State	2	Beginning ASP.NET 4.5 in C#	Presentation, board, projector
	Validation: Validation Controls, Server-Side Validation, Client-Side Validation, HTML5 Validation, Manual Validation, Validation with Regular Expressions	3	Beginning ASP.NET 4.5 in C#	Presentation, board, projector
	Rich Controls: Calendar Control, AdRotator Control, MultiView Control	2	Beginning ASP.NET 4.5 in C#	Presentation, board, projector
	Themes and Master Pages: How Themes Work, Applying a Simple Theme, Handling Theme Conflicts, Simple Master Page and Content Page, Connecting Master pages and Content Pages, Master Page with Multiple Content Regions, Master Pages and Relative Paths	3	Beginning ASP.NET 4.5 in C#	Presentation, board, projector
	Website Navigation: Site Maps, URL Mapping and Routing, SiteMapPath Control, TreeView Control, Menu Control	2	Beginning ASP.NET 4.5 in C#	Presentation, board, projector

Paper:USCS406 unit:3, Title: .Net Technologies	**ADO.NET:** Data Provider Model, Direct Data Access - Creating a Connection, Select Command, DataReader, Disconnected Data Access	3	Beginning ASP.NET 4.5 in C#	Presentation, board, projector
	Data Binding: Introduction, Single-Value Data Binding, Repeated-Value Data Binding, Data Source Controls – SqlDataSource	2	Beginning ASP.NET 4.5 in C#	Presentation, board, projector
	Data Controls: GridView, DetailsView, FormView	2	Beginning ASP.NET 4.5 in C#	Presentation, board, projector
	Working with XML: XML Classes – XMLTextWriter, XMLTextReader	2	Beginning ASP.NET 4.5 in C#	Presentation, board, projector
	Caching: When to Use Caching, Output Caching, Data Caching	2	Beginning ASP.NET 4.5 in C#	Presentation, board, projector
	LINQ: Understanding LINQ, LINQ Basics,	2	Beginning ASP.NET 4.5 in C#	Presentation, board, projector
	ASP.NET AJAX: ScriptManager, Partial Refreshes, Progress Notification, Timed Refreshes	2	Beginning ASP.NET 4.5 in C#	Presentation, board, projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE EACH UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande DEPARTMENT: Computer Science CLASS: S.Y.C.S.

SEMESTER: IV MONTH: Dec - March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

Learner will able to understand the concept of networking.
Useful to proceed with industrial requirement and international vendor certification

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS403 Computer Networks UNIT - 1	Introduction to data communication, Components, Data Representation, Data Flow, Networks, Network Criteria, Physical Structures, Network types, Local Area Network, Wide Area Network, Switching, The Internet, Accessing the Internet, standards and administration Internet Standards.	02	Data Communication and Networking , Behrouz Forouzan	Blackboard PPT
	Network Models, Protocol layering, Scenarios, Principles of Protocol Layering, Logical Connections, TCP/IP Protocol Suite, Layered Architecture, Layers in the TCP/IP Protocol Suite, Encapsulation and Decapsulation, Addressing, Multiplexing and Demultiplexing. Detailed introduction to Physical Layer, Detailed introduction to Data-Link Layer, Detailed introduction to Network	08		Blackboard PPT

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	Layer, Detailed introduction to Transport Layer, Detailed introduction to Application Layer.			
	Data and Signals, Analog and Digital Data, Analog and Digital Signals, Sine Wave Phase, Wavelength, Time and Frequency Domains, Composite Signals, Bandwidth, Digital Signal, Bit Rate, Bit Length, Transmission of Digital Signals, Transmission Impairments, Attenuation, Distortion, Noise, Data Rate Limits, Performance, Bandwidth, Throughput, Latency (Delay)	05		Blackboard PPT
USCS403 Computer Networks UNIT - 2	Digital Transmission digital-to-digital conversion, Line Coding, Line Coding Schemes, analog-to-digital conversion, Pulse Code Modulation (PCM), Transmission Modes, Parallel Transmission, Serial Transmission. Analog Transmission, digital-to-analog Conversion, Aspects of Digital-to-Analog Conversion, Amplitude Shift Keying, Frequency Shift Keying, Phase Shift Keying, analog-to-analog Conversion, Amplitude Modulation (AM), Frequency Modulation (FM), Phase Modulation (PM), Multiplexing, Frequency-Division Multiplexing, Wavelength-Division Multiplexing, Time-Division Multiplexing. Transmission Media, Guided Media, Twisted-Pair Cable, Coaxial Cable, Fiber-Optic Cable. Switching, Three Methods of Switching , Circuit Switched Networks, Packet Switching,	09	Data Communication and Networking , Behrouz Forouzan	Blackboard PPT
	Introduction to Data-Link Layer, Nodes and Links, Services, Two Sub-layers, Three Types of addresses, Address Resolution Protocol (ARP). Error Detection and Correction, introduction, Types of Errors, Redundancy, Detection versus Correction,	06		Blackboard PPT
USCS403	Media Access Control (MAC), random access, CSMA, CSMA/CD, CSMA/CA, controlled access, Reservation, Polling, Token Passing, channelization, FDMA, TDMA, CDMA.	02	Data Communication	Blackboard PPT

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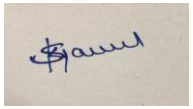
Computer Networks UNIT - 3			and Networking , Behrouz Forouzan	
	Connecting Devices and Virtual LANs, connecting devices, Hubs, Link-Layer	02		
	Introduction to Network Layer, network layer services, Packetizing, Routing and Forwarding, Other Services, IPv4 addresses, Address Space, Classful Addressing.	03		
	Unicast Routing, General Idea, Least-Cost Routing, Routing Algorithms, Distance-Vector Routing, Link-State Routing, Path-Vector Routing, Introduction to Transport Layer, Transport-Layer Services, Connectionless and Connection-Oriented Protocols.	03		
	Transport-Layer Protocols, Service, Port Numbers, User Datagram Protocol, User Datagram, UDP Services, UDP Applications, Transmission Control Protocol, TCP Services, TCP Features, Segment.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **C.S**

CLASS: **SYCS** SEMESTER: **IV** MONTH: **Dec-March** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVES:
The learners will be able to :

- Understand the requirements of Mobile programming environment.
- Learn about basic methods, tools and techniques for developing Apps
- Explore and practice App development on Android Platform
- Develop working prototypes of working systems for various uses in daily lives.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
VII,1, Skill Enhancement: Android Developer Fundamentals 2	What is Android? Obtaining the required tools, creating first android app, understanding the components of screen, adapting display orientation, action bar, Activities and Intents	5	"Beginning Android 4 Application Development", Wei-Meng Lee, March 2012, WROX	Chalk and Duster, Projector
	Activity Lifecycle and Saving State, Basic Views: TextView, Button, ImageButton, EditText, CheckBox, ToggleButton, RadioButton, and RadioGroup Views,	5	https://developers.google.com/training/courses/android-fundamentals	Chalk and Duster, Projector
	ProgressBar View, AutoCompleteTextView, TimePicker View, DatePicker View, ListView	5	https://developers.google.com/training/courses/android-fundamentals	Chalk and Duster, Projector

	View, Spinner View			
VII,2, Skill Enhancement: Android Developer Fundamentals 2	User Input Controls, Menus, Screen Navigation, RecyclerView, Drawables, Themes and Styles, Material design	5	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector
	Providing resources for adaptive layouts, AsyncTask and AsyncTaskLoader,	5	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector
	Connecting to the Internet, Broadcast receivers, Services, Notifications, Alarm managers, Transferring data efficiently	5	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector
VII,3, Skill Enhancement: Android Developer Fundamentals 2	Data - saving, retrieving, and loading: Overview to storing data, Shared preferences, SQLite primer	5	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector
	store data using SQLite database, ContentProviders, loaders to load and display data,	5	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector
	Permissions, performance and security, Firebase and AdMob, Publish your app	5	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS: SYCS

SEMESTER: IV MONTH: December to March ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE/S:

- Explore advanced topic of Java programming for solving problems.

The learners will be able to:

- Understand the concepts related to Java Technology
- Explore and understand use of Java Server Programming

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Advanced Java USCS402 Unit 1	Swing: Need for swing components, Difference between AWT and swing, Components hierarchy, Panes, Swing components: Jlabel, JTextField and JPasswordField, JTextAres, JButton, JCheckBox, JRadioButton, JComboBox and JList	9	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th Edition AND Internet	Projector, Laptop, Black board& Chalk
	JDBC: Introduction, JDBC Architecture, Types of Drivers, Statement, ResultSet, Read Only ResultSet, Updatable ResultSet, Forward Only ResultSet, Scrollable ResultSet, PreparedStatement, Connection Modes, SavePoint, Batch Updations, CallableStatement, BLOB & CLOB	6	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th EditionAND Internet	Projector, Laptop, Black board& Chalk

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Advanced Java USCS402 Unit 2	**Servlets:** Introduction, Web application Architecture, Http Protocol & Http Methods, Web Server & Web Container, Servlet Interface, GenericServlet, HttpServlet, Servlet Life Cycle, ServletConfig, ServletContext, Servlet Communication, Session Tracking Mechanisms	7	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th EditionAND Internet		
	JSP: Introduction, JSP LifeCycle, JSP Implicit Objects & Scopes, JSP Directives, JSP Scripting Elements, JSP Actions: Standard actions and customized actions,	8	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th EditionAND Internet	Projector, Laptop, Black board& Chalk	
Advanced Java USCS402 Unit 3	**Java Beans:** Introduction, JavaBeans Properties, Examples	4	Joe Wigglesworth and Paula McMillan, Java Programming: Advanced Topics, Thomson Course Technology (SPD) ,3rd EditionAND INTERNET	Projector, Laptop, Black board& Chalk	
	Struts 2: Basic MVC Architecture, Struts 2 framework features, Struts 2 MVC pattern, Request life cycle, Examples, Configuration Files, Actions, Interceptors, Results & Result Types, Value Stack/OGNL	6	Joe Wigglesworth and Paula McMillan, Java Programming: Advanced Topics, Thomson Course Technology (SPD) ,3rd EditionAND INTERNET	Projector, Laptop, Black board& Chalk	
	JSON: Overview, Syntax, DataTypes, Objects, Schema, Comparison with XML, JSON with Java	5	Joe Wigglesworth and Paula McMillan, Java Programming: Advanced Topics,	Projector, Laptop, Black board& Chalk	

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			Thomson Course Technology (SPD) ,3rd Edition AND INTERNET	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: TYCS

SEMESTER: VI MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Ability to use knowledge of data structures and indexing methods in information retrieval Systems·
- Understand the underlined problems related to IR
- Acquire the necessary experience to design, and implement real applications using Information Retrieval systems.

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS604, Information Retrieval Unit 1	Introduction to Information Retrieval: Introduction, History of IR, Components of IR, and Issues related to IR, Boolean retrieval, Dictionaries and tolerant retrieval.	07	1. Introduction to Information Retrieval, C. Manning, P. Raghavan, and H. Schütze, Cambridge University Press, 2008 2. Modern Information Retrieval: The Concepts and Technology behind Search, Ricardo Baeza - Yates and Berthier Ribeiro – Neto, 2 nd Edition, ACM Press Books 2011.	Black Board and chalk, PowerPoint
USCS604, Information	Link Analysis and Specialized Search: Link Analysis, hubs and authorities, Page Rank and HITS algorithms, Similarity,	12	1. Introduction to Information Retrieval, C.	Black Board and chalk, PowerPoint

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Retrieval Unit 2	Hadoop & Map Reduce, Evaluation, Personalized search, Collaborative filtering and content-based recommendation of documents and products, handling ―invisible‖ Web, Snippet generation, Summarization, Question Answering, Cross-Lingual Retrieval.		Manning, P. Raghavan, and H. Schütze, Cambridge University Press, 2008	
USCS604, Information Retrieval Unit 3	Web Search Engine: Web search overview, web structure, the user, paid placement, search engine optimization/spam, Web size measurement, search engine optimization/spam, Web Search Architectures.	06	1. Introduction to Information Retrieval, C. Manning, P. Raghavan, and H. Schütze, Cambridge University Press, 2008	Black Board and chalk, PowerPoint
	XML retrieval: Basic XML concepts, Challenges in XML retrieval, A vector space model for XML retrieval, Evaluation of XML retrieval, Text-centric versus data-centric XML retrieval.	06	1. Introduction to Information Retrieval, C. Manning, P. Raghavan, and H. Schütze, Cambridge University Press, 2008	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAMPADA DESHMUKH DEPARTMENT: INFORMATION TECHNOLOGY CLASS: T.Y.C.S.

SEMESTER: VI MONTH: DECEMBER - MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the procedures for identification, preservation, and extraction of electronic evidence
- Understand auditing and investigation of network and host system intrusions
- Learn analysis of documentation of information gathered
- Investigate various media to collect evidence, report them in a way that would be acceptable in the court of law
- Plan and prepare for all stages of an investigation - detection, initial response and management interaction

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS603 Unit 1, **Cyber Forensics**	Introduction to Computer Forensics and standard procedure, Incident Verification and System Identification ,	03	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board and Projector
	Recovery of Erased and damaged data, Disk Imaging and Preservation, Data Encryption and Compression, Automated Search Techniques, Forensics Software	04	Guide to computer forensics and investigations, Bill Nelson, Amelia	Black Board and Projector

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			Philips and Christopher Steuart, course technology,5th Edition,2015	
	Introduction to Network Forensics and tracking network traffic, Reviewing Network Logs	02	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board and Projecor
	Network Forensics Tools, Performing Live Acquisitions, Order of Volatility, Standard Procedure	03	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board and Projector
	Cell Phone and Mobile Device Forensics: Overview, Acquisition Procedures for Cell Phones and Mobile Devices	03	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board and Projector
USCS603, Unit 2, **Cyber Forensics**	Introduction to Internet Forensics, World Wide Web Threats, Hacking and Illegal access Obscene and Incident transmission	03	Guide to computer forensics and investigations, Bill Nelson, Amelia	Black Board and Projector

			Philips and Christopher Steuart, course technology,5th Edition,2015	
	Domain Name Ownership Investigation, Reconstructing past internet activities and events e-mail analysis, e-mail headers and spoofing, Laws against	04	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board and chalk
	Yahoo Messenger Social Media Forensics Social Media Investigations Browser Forensics	04	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board and chalk
	Cookie Storage and Analysis, Analyzing Cache and temporary internet files, Web browsing activity reconstruction	04	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board and chalk
USCS603, Unit 3, **Cyber Forensics**	Investigation, Evidence presentation and Legal aspects of Digital Forensics Authorization to collect the evidence Acquisition of Evidence, Authentication of the	05	Guide to computer forensics and investigations, Bill Nelson, Amelia	Black Board , Projector

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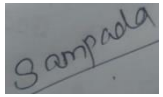
	evidence		Philips and Christopher Steuart, course technology,5th Edition,2015	
	Analysis of the evidence, Reporting on the findings, Testimony Introduction to Legal aspects of Digital Forensics	05	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board , projector
	Laws & regulations, Information Technology Act, Giving Evidence in court, Case Study – Cyber Crime cases, Case Study – Cyber Crime cases	05	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board , Projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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VidhyaDayanandPatil College of Arts
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **T.Y.B.Sc.(CS)**

SEMESTER: **VI** MONTH: **December - March** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able:

- To get a clear understanding of AI and different search algorithms used for solving problems.
- To get acquainted with different learning algorithms and models used in machine learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS606 **Paper 4** **Data Science** **UNIT I**	**Introduction to Data Science:** What is Data? Different kinds of data	3	Doing Data Science, Rachel Schutt and Cathy O'Neil, O'Reilly,2013 Mastering Machine Learning with R, Cory Lesmeister, PACKT Publication,2015	Microsoft PowerPoint Presentation R Tool
	Introduction to high level programming language + Integrated Development Environment (IDE)	4		
	Exploratory Data Analysis (EDA) + Data Visualization, Different types of data sources	4		
	Data Management: Data Collection, Data cleaning/extraction, Data analysis &Modeling	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS606 **Paper 4** **Data Science** **UNIT II**	**Data Curation:** Query languages and Operations to specify and transform data, Structured/schema based systems as users and acquirers of data	4	Doing Data Science, Rachel Schutt and Cathy O'Neil, O'Reilly,2013 Mastering Machine Learning with R, Cory Lesmeister, PACKT Publication,2015	Microsoft PowerPoint Presentation R Tool
	Semi-structured systems as users and acquirers of data, Unstructured systems in the acquisition and structuring of data,	3		
	Security and ethical considerations in relation to authenticating and authorizing access to data on remote systems,	4		
	Software development tools, Large scale data systems, Amazon Web Services (AWS)	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS606 **Paper 4** **Data Science** **UNIT III**	**Statistical Modelling and Machine Learning:** Introduction to model selection: Regularization, bias/variance tradeoff e.g. parsimony, AIC, BIC, Cross validation, Ridge regressions and penalized regression e.g. LASSO	5	Doing Data Science, Rachel Schutt and Cathy O'Neil, O'Reilly,2013 Mastering Machine Learning with R, Cory Lesmeister, PACKT Publication,2015	Microsoft PowerPoint Presentation R Tool
	Data transformations: Dimension reduction, Feature extraction, Smoothing and aggregating	2		
	Supervised Learning: Regression, linear models, Regression trees, Time-series Analysis, Forecasting, Classification: classification trees, Logistic regression, separating hyperplanes, k-NN	4		
	Unsupervised Learning: Principal Components Analysis (PCA), k-means clustering, Hierarchical clustering, Ensemble methods	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande DEPARTMENT: Computer Science CLASS: T.Y.C.S.

SEMESTER: VI MONTH: Dec - March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

After completion of this course, learner should be able to list various applications of wireless sensor networks, describe the concepts, protocols, design, implementation and use of wireless sensor networks. Also implement and evaluate new ideas for solving wireless sensor network design issues.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS601 **Wireless Sensor Networks and Mobile Communication** UNIT : 01	**Introduction:** Introduction to Sensor Networks, unique constraints and challenges. Advantage of Sensor Networks, Applications of Sensor Networks, Mobile AdhocNETworks (MANETs) and Wireless Sensor Networks, Enabling technologies for Wireless Sensor Networks.	07	Protocols and Architectures for Wireless Sensor Network, Holger Kerl, Andreas Willig, John Wiley and Sons, 2005	Blackboard PPT Projector
	Sensor Node Hardware and Network Architecture: Single-node architecture, Hardware components & design constraints, Operating systems and execution environments, introduction to TinyOS and nesC. Network architecture, Optimization goals and figures of merit, Design principles for WSNs, Service interfaces of WSNs, Gateway concepts.	08		Blackboard PPT Projector

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USCS601 **Wireless Sensor Networks and Mobile Communication** UNIT : 02	**Medium Access Control Protocols:** Fundamentals of MAC Protocols, MAC Protocols for WSNs, Sensor-MAC Case Study.	05	Wireless Sensor Networks Technology, Protocols, and Applications ,KazemSohraby, Daniel Minoli and TaiebZnati, John Wiley & Sons, 2007	Blackboard PPT
	Routing Protocols : Data Dissemination and Gathering, Routing Challenges and Design Issues in Wireless Sensor Networks, Routing Strategies in Wireless Sensor Networks.	05		Blackboard PPT
	Transport Control Protocols : Traditional Transport Control Protocols, Transport Protocol Design Issues, Examples of Existing Transport Control Protocols, Performance of Transport Control Protocols.	05		Blackboard PPT
USCS601 **Wireless Sensor Networks and Mobile Communication** UNIT : 03	**Introduction, Wireless Transmission and Medium Access Control:** Applications, A short history of wireless communication.	02	Mobile communications, Jochen Schiller,2nd Edition, Addison wisely , Pearson Education,2012	Blackboard PPT
	Wireless Transmission: Frequency for radio transmission, Signals, Antennas, Signal propagation, Multiplexing, Modulation, Spread spectrum, Cellular systems.	05		Blackboard PPT
	Telecommunication, Satellite and Broadcast Systems: GSM: Mobile services, System architecture, Radio interface, Protocols, Localization And Calling, Handover, security, New data services; DECT: System architecture, Protocol architecture; ETRA, UMTS and IMT- 2000. Satellite Systems: History, Applications, Basics: GEO, LEO, MEO; Routing, Localization, Handover.	08		Blackboard PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS: TYCS

SEMESTER: V MONTH: December to March ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE/S:

- To understand the ethics, legality, methodologies and techniques of hacking.

The learners will be able to:

- Learner will know to identify security vulnerabilities and weaknesses in the target applications.
- They will also know to test and exploit systems using various tools and understand the impact of hacking in real time machines.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Ethical Hacking Elective-II USCS506 Unit 1	**Information Security : Attacks and Vulnerabilities** **Introduction to information security :** Asset, Access Control, CIA, Authentication, Authorization, Risk, Threat, Vulnerability, Attack, Attack Surface, Malware, Security-Functionality-Ease of Use Triangle	4	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND Internet	Projector, Laptop, Black board& Chalk
	Types of malware : Worms, viruses, Trojans, Spyware, Rootkits	2	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND	Projector, Laptop, Black board& Chalk

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			Internet	
	Types of vulnerabilities : OWASP Top 10 : cross-site scripting (XSS), cross site request forgery (CSRF/XSRF), SQL injection, input parameter manipulation, broken authentication, sensitive information disclosure, XML External Entities, Broken access control, Security Misconfiguration, Using components with known vulnerabilities, Insufficient Logging and monitoring, OWASP Mobile Top 10, CVE Database	4	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND Internet	Projector, Laptop, Black board& Chalk
	Types of attacks and their common prevention mechanisms : Keystroke Logging, Denial of Service (DoS /DDoS), Waterhole attack, brute force, phishing and fake WAP, Eavesdropping, Man-in-the-middle, Session Hijacking, Clickjacking, Cookie Theft, URL Obfuscation, buffer overflow, DNS poisoning, ARP poisoning, Identity Theft, IoT Attacks, BOTs and BOTNETs	4	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND Internet	Projector, Laptop, Black board& Chalk
	Case-studies : Recent attacks – Yahoo, Adult Friend Finder, eBay, Equifax, WannaCry, Target Stores, Uber, JP Morgan Chase, Bad Rabbit	1	Internet	Projector, Laptop, Black board& Chalk
Ethical Hacking Elective-II USCS506 Unit 2	**Ethical Hacking – I (Introduction and pre-attack) Introduction:** Black Hat vs. Gray Hat vs. White Hat (Ethical) hacking, Why is Ethical hacking needed?, How is Ethical hacking different from security auditing and digital forensics?, Signing NDA, Compliance and Regulatory 15L concerns, Black box vs. White box vs. Black box, Vulnerability assessment and Penetration Testing.	5	CEH official Certified Ethical Hacking Review Guide, Wiley India Edition, 2007 AND Internet	Projector, Laptop, Black board& Chalk

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	Approach : Planning - Threat Modeling, set up security verification standards, Set up security testing plan – When, which systems/apps, understanding functionality, black/gray/white, authenticated vs. unauthenticated, internal vs. external PT, Information gathering, Perform Manual and automated (Tools: WebInspect/Qualys, Nessus, Proxies, Metasploit) VA and PT, How WebInspect/Qualys tools work: Crawling/Spidering, requests forging, pattern matching to known vulnerability database and Analyzing results, Preparing report, Fixing security gaps following the report	5	CEH official Certified Ethical Hacking Review Guide, Wiley India Edition, 2007 AND INTERNET	Projector, Laptop, Black board& Chalk
	Enterprise strategy : Repeated PT, approval by security testing team, Continuous Application Security Testing,	3	CEH official Certified Ethical Hacking Review Guide, Wiley India Edition, 2007 AND INTERNET	Projector, Laptop, Black board& Chalk
	Phases: Reconnaissance/foot-printing/Enumeration, Scanning, Sniffing	2	CEH official Certified Ethical Hacking Review Guide, Wiley India Edition, 2007 AND INTERNET	Projector, Laptop, Black board& Chalk
Ethical Hacking Elective-II	**Ethical Hacking :**Enterprise Security Phases : Gaining and Maintaining Access : Systems hacking – Windows and Linux – Metasploit and Kali Linux, Keylogging, Buffer Overflows, Privilege Escalation, Network hacking - ARP Poisoning, Password Cracking, WEP Vulnerabilities, MAC Spoofing, MAC Flooding, IPSpoofing, SYN Flooding, Smurf attack,	5	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	Projector, Laptop, Black board& Chalk
	Applications hacking : SMTP/Email-based attacks, VOIP vulnerabilities, Directory traversal, Input Manipulation, Brute force attack, Unsecured login mechanisms, SQL injection, XSS, Mobile	5	Certified Ethical Hacker Study Guide v9, Sean-Philip	Projector, Laptop, Black board& Chalk

USCS506 Unit 3	apps security,		Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	
	Malware analysis : Netcat Trojan, wrapping definition, reverse engineering	1	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	Projector, Laptop, Black board& Chalk
	Phases : Covering your tracks : Steganography, Event Logs alteration	1	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	Projector, Laptop, Black board& Chalk
	Additional Security Mechanisms : IDS/IPS, Honeypots and evasion techniques, Secure Code Reviews (Fortify tool, OWASP Secure Coding Guidelines)	3	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	Projector, Laptop, Black board& Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: CS

CLASS:M.Sc(CS) Part-2 SEMESTER: SEM-3 MONTH: JUL-NOV ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

- Design and develop location based messaging app
- Design and develop chat messaging app which is a location-based
- Design and develop app demonstrating Simple Downstream Messaging
- Design and develop app demonstrating Send Upstream Messages
- Implementing GCM Network Manager
- Demonstrate use of OpenGTS (Open Source GPS Tracking System)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS301 Ubiquitous Computing UNIT 1	**Basics of Ubiquitous Computing :**Examples of Ubiquitous Computing Applications, Holistic Framework for UbiCom: Smart DEI, Modeling the Key Ubiquitous Computing Properties, Ubiquitous System Environment Interaction, Architectural Design for UbiCom Systems: Smart DEI Model, Smart Devices and Services, Service Architecture Models, Service Provision Life Cycle.	15	Ubiquitous Computing Smart Devices, Environments and Interactions, Stefan Poslad, Wiley, 2009.	Laptop,PPT

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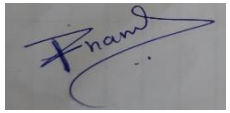
PSCS30 Ubiquitous Computing UNIT 2	**Smart Environments Tagging, Sensing and Controlling**, Tagging the Physical World, Sensors and Sensor Networks, Micro Actuation and Sensing: MEMS, Embedded Systems and Real Time Systems, Control Systems.	15	Ubiquitous Computing Smart Devices, Environments and Interactions, Stefan Poslad, Wiley, 2009.	Laptop,PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.CS

SEMESTER: III MONTH: JULY TO NOVEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- Able to understand the application areas of Ubiquitous Computing ·
- Able to realize the revolution of Internet in Mobile Devices, Cloud & Sensor Networks ·
- Able to understand building blocks of Ubiquitous computing and characteristics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS301 Ubiquitous Computing **UNIT 2**	Smart Mobiles, Cards and Device Networks Smart Mobile Devices, Users Resources and Code Operating Systems for Mobile Computers and Communicator Devices Smart Card Devices Device Networks. Human–Computer Interaction (HCI): Explicit HCI, Implicit HCI User Interfaces and Interaction for Devices Hidden UI Via Basic Smart Devices, Hidden UI Via Wearable Implanted Devices, Human Centered Design (HCD)	10	Ubiquitous Computing Smart Devices, Environments and Interactions, Stefan Poslad, Wiley, 2009.	Powerpoint

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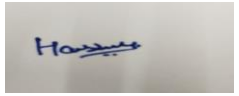
PSCS301, Ubiquitous Computing **UNIT 4**	Ubiquitous Communication Audio Networks, Data Networks, Wireless Data Networks, Universal and Transparent Audio, Video and Alphanumeric Data Network Access, Ubiquitous Networks, Network Design Issues.	10	Ubiquitous Computing Smart Devices, Environments and Interactions, Stefan Poslad, Wiley, 2009	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

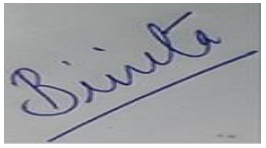
NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. C.S SEMESTER: III MONTH: July-November ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with various network forensics tools.
b. Work with analyzing evidence .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Cyber and Information Security-II Unit -III	Sources of Network Based Evidence, Principles of Internetworking, Internet Protocol Suite. Evidence Acquisition: Physical Interception, Traffic Acquisition Software, Active Acquisition.	4	Network Forensics, Sherri Davidoff, Jonathan HAM, Prentice Hall, 2012.	PowerPoint presentation through projector
	Traffic Analysis: Protocol Analysis, Packet Analysis, Flow Analysis, Higher-Layer Traffic analysis. Statistical Flow Analysis: Sensors, Flow Record Export Protocols, Collection and Aggregation, Analysis.	4		PowerPoint presentation through projector
	Wireless:the IEEE Layer 2 Protocol Series, Wireless Access Point, Wireless Traffic Capture and Analysis, Common Attacks, Locating Wireless Devices. Network Intrusion Detection and Analysis: NIDS/NIPS Functionality, Modes of Detection, Types of NIDS/NIPS, NIDS/NIPS Evidence Acquisition.	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

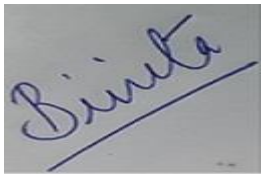
NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. C.S SEMESTER: III MONTH: July-November ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with various network forensics tools.
b. Work with analyzing evidence.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Cyber and Information Security-II Unit -IV	Sources of Logs, Network Architecture, Collecting and Analyzing Evidence	4	Network Forensics, Sherri Davidoff, Jonathan HAM, Prentice Hall, 2012. Mobile Phone Security and Forensic: A Practical Approach, Second Edition, Iosif I. Androulidkis, Springer, 2012.	PowerPoint presentation through projector
	switches, routers, firewalls, interfaces Web Proxies: Need to Investigate Web Proxies, Functionality, Evidence, Squid, Web Proxy Analysis, Encrypted Web Traffic.	4		PowerPoint presentation through projector
	Mobile Phone Forensics: Crime and Mobile Phones, Voice, SMS and Identification of Data Interception in GSM, Mobile Phone Tricks, SMS Security, Mobile Forensic.	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: COMPUTER SCIENCE CLASS: MSc.CS(Part 1)

SEMESTER: I MONTH: AUGUST-DECEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the concepts of Robotics and Artificial Intelligence.
- Develop logic for developing Robot.
- Be familiar about the basic concepts of Artificial Intelligence.
- Apply the problem solving skills on Artificial Intelligence Algorithms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS104, Unit 1, Robotics and Artificial Intelligence.	What is a Robot? Definition, History of Robots: Control Theory, Cybernetics, Grey Walter Tortoise, Analog Electronic Circuit, Reactive Theory, Braitenberg's Vehicle, Artificial Intelligence, Vision Based Navigation, Types of Robot Control.	05	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation
	Robot Components: Embodiment, Sensors, States, Action, Brains and Brawn, Autonomy, Arms, Legs, Wheels, Tracks, and What really drives them effectors and actuators: Effector, Actuator, Passive and Active Actuation, Types of Actuator, Motors, Degree of freedom Locomotion: Stability, Moving and Gaits, Wheels and Steering, Staying on the path.	05	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation

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	Manipulators: Endeffectors, Teleoperation, Why is manipulation hard? Sensors: Types of Sensors, Levels of Processing, Passive and Active sensors, Switches, Light sensors, Resistive position sensor.	05	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation
PSCS104, Unit 2, Robotics and Artificial Intelligence.	Ultrasonic and Sonar sensing, Specular Reflection, Laser Sensing, Visual Sensing, Cameras, Edge Detection, Motion Vision, Stereo Vision, Biological Vision, Vision for Robots	07	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation
	Feedback or Closed Loop Control: Example of Feedback Control Robot, Types of feedback control, Feed forward or Open loop control.	08	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation
PSCS104, Unit 3, Robotics and Artificial Intelligence.	Algorithm, Architecture, The many ways to make a map, What is planning, Cost of planning, Reactive systems, Action selection, Subsumption architecture.	07	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation
	How to sequence behavior through world, hybrid control, Behavior based control and Behavior Coordination, Behavior Arbitration, Distributed mapping, Navigation and Path planning.	08	The Robotics Primer by Maja J Matarić, MIT	Power Point Presentation

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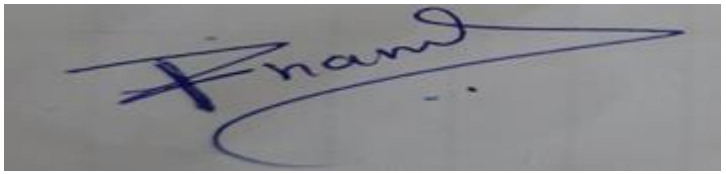
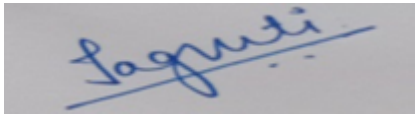
			press Cambridge, Massachusetts, London, England (2007).	
PSCS104, Unit 4, Robotics and Artificial Intelligence.	Introduction, State space search: Generate and test, Simple search, Depth First Search (DFS), Breadth First Search (DFS), Comparison and quality of solutions.	07	Artificial Intelligence: A Modern Approach, 3e, Stuart Jonathan Russell, Peter Norvig, Prentice Hall Publications (2010)	Power Point Presentation
	Heuristic Search: Heuristic functions, Best First Search (BFS), Hill Climbing, Local Maxima, Beam search, Tabu search. Finding Optimum paths: Brute force, branch & bound, refine search, Dijkstra's algorithm, A* algorithm. Admissibility of A* algorithm.	08	Artificial Intelligence: A Modern Approach, 3e, Stuart Jonathan Russell, Peter Norvig, Prentice Hall Publications (2010)	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shilpa Rodrigues **DEPARTMENT**: COMPUTER SCIENCE **CLASS**: MSc.CS(Part II)

SEMESTER: **III** **MONTH**: July - Nov **ACADEMIC YEAR**: 2019-20

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the social networks in real world.
- Represtation of social networks in graph theory.
- Identifying equivalence classes and analysis of equivalence classes.
- Understanding one mode and two mode netwroks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS302 , Unit 3 , Social Network Analysis.	Approaches to network positions and social roles- defining equivalence or similarity, structural equivalence, automorphic equivalence, finding equivalence sets, brute force and Tabu search, regular equivalence,	07	Introduction to Social Network Methods: Robert A. Hanneman, Mark Riddle	Power Point Presentation
	equivalence of distances: Maxsim, regular equivalence, Measuring similarity/dissimilarity- valued relations, Pearson correlations covariance and cross-products, Understanding clustering- agglomerative and divisive clusters, Euclidean, Manhattan, and squared distances, binary relations, matches: exact, Jaccard, Hamming,	08	Introduction to Social Network Methods: Robert A. Hanneman, Mark Riddle	Power Point Presentation

PSCS302 , Unit 4 , Social Network Analysis.	Understanding mode networks- Bi-partite data structures, visualizing two-mode data, quantitative analysis using two-mode Singular value decomposition (SVD) analysis.	07		Power Point Presentation
	two-mode factor analysis, two-mode correspondence analysis, qualitative analysis using two-mode core-periphery analysis, two-mode factions analysis, affiliation and attribute networks.	08		Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shilpa Rodrigues **DEPARTMENT**: COMPUTER SCIENCE **CLASS**: MSc.CS(Part II)

SEMESTER: **III** **MONTH**: July - Nov **ACADEMIC YEAR**: 2019-20

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the social networks in real world.
- Represtation of social networks in graph theory.
- Identifying equivalence classes and analysis of equivalence classes.
- Understanding one mode and two mode netwroks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS302 , Unit 3 , Social Network Analysis.	Approaches to network positions and social roles- defining equivalence or similarity, structural equivalence, automorphic equivalence, finding equivalence sets, brute force and Tabu search, regular equivalence,	07	Introduction to Social Network Methods: Robert A. Hanneman, Mark Riddle	Power Point Presentation
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PSCS302 , Unit 4 , Social Network Analysis.	Understanding mode networks- Bi-partite data structures, visualizing two-mode data, quantitative analysis using two-mode Singular value decomposition (SVD) analysis.	07		Power Point Presentation
	two-mode factor analysis, two-mode correspondence analysis, qualitative analysis using two-mode core-periphery analysis, two-mode factions analysis, affiliation and attribute networks.	08		Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **MSCCS** SEMESTER:I

MONTH: **AUG-DEC** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:

The learners will be able to :

understand basic principles of algorithm design and why algorithm analysis is important
understand how to implement algorithms in JAVA
understand how to transform new problems into algorithmic problems with efficient solutions
understand algorithm design techniques for solving different problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS101 Analysis of Algorithms and Researching Computing **Unit I: Design strategies**	The Role of Algorithms in Computing: Algorithms as a technology. Getting Started: Insertion sort, Analyzing algorithms, Designing algorithms. Growth of Functions: Asymptotic notation, Standard notations and common functions. Divide-and-Conquer: The maximum-subarray problem, Strassen's algorithm for matrix multiplication, The substitution method for solving recurrences. Probabilistic Analysis and Randomized Algorithms: The hiring problem, Indicator random variables, Randomized algorithms.	15	Introduction to Algorithm, Thomas H Cormen, PHI	power point

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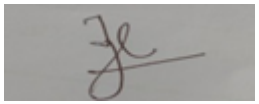
PSCS101 **Unit II: Advanced Design and Analysis Techniques**	Dynamic Programming: Rod cutting, Elements of dynamic programming, longest common subsequence. Greedy Algorithms: An activity-selection problem, Elements of the greedy strategy, Huffman codes. Elementary Graph Algorithms: Representations of graphs, Breadth-first search, Depth-first search. Minimum Spanning Trees: Growing a minimum spanning tree, Algorithms of Kruskal and Prim. Single-Source Shortest Paths: The Bellman-Ford algorithm, Single-source shortest paths in directed acyclic graphs, Dijkstra's algorithm.	15	Introduction to Algorithm, Thomas H Cormen, PHI	power point
PSCS101 **Unit III: Number-Theoretic Algorithms and NP – Completeness**	Elementary number-theoretic notions, Greatest common divisor, Modular arithmetic, Solving modular linear equations, The Chinese remainder theorem, Powers of an element, The RSA public-key cryptosystem NP-Completeness: Polynomial time, Polynomial-time verification, NP-completeness and reducibility, NP-complete problems. Approximation Algorithms: The vertex-cover problem, The traveling-salesman problem, The set-covering problem, subset-sum problem.	15	Introduction to Algorithm, Thomas H Cormen, PHI	power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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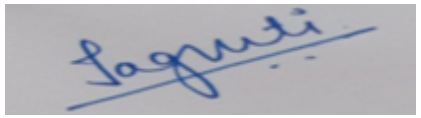

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **M.Sc. (CS)**

SEMESTER: **I** MONTH: **August - December** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able:

- To acquire knowledge about how to execute queries on these fragments that will demonstrate distributed databases environment.
- To learn how to create temporal database
- To learn how to create XML database
- To understand multimedia database systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS103 **Paper III** **Advanced Database Systems** **UNIT I**	**Unit I: Distributed Database Concepts** Definition of Distributed databases and Distributed Database Management System (DDBMS), Distributed transparent system. DDBMS Architecture: DBMS standardization, Global, Local, External, and Internal Schemas, Architectural models for DDBMS. Distributed database design: Design problem of distributed systems, Design, strategies (top-down, bottom-up), Fragmentation, Allocation and replication of fragments. Query Processing Overview, Query Optimization.	15	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS103 **Paper III** **Advanced Database Systems** **UNIT II**	**Unit II: Transaction Processing in Distributed databases and Parallel databases** Transaction Management: Definition and examples, formalization of a transaction, ACID properties, classification of transaction. Concurrency Control: definition, execution schedules, examples, locking based algorithms, timestamp ordering algorithms, deadlock management. DBMS reliability: Definitions and Basic Concepts, Local Recovery Management, In-place update, out-of-place update, Distributed Reliability Protocols, Two phase commit protocol, Three phases commit protocol. Parallel Database System: Definition of Parallel Database Systems. Parallel query evaluation: Speed up and scale up, Query Parallelism: I/O Parallelism (Data Partitioning) Intra-query Parallelism, Inter –Query Parallelism, Intra Operation Parallelism, Inter Operation Parallelism.	15	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PSCS103 **Paper III** **Advanced Database Systems** **UNIT III**	**Unit III: Object Oriented, Temporal and Spatial Databases:** Object Oriented Database: Object Identity, Object structure, Type Constructors, Encapsulation of Operations, Methods, Persistence, Type and Class Hierarchies, Inheritance, Complex Objects, Object-oriented DBMS, Languages and Design: ODMG Model, Object Definition Languages (ODL), Object Query Languages (OQL). Temporal and Spatial Database: Introduction to Temporal Database: Time ontology, structure, and granularity, Temporal data models, Temporal relational algebras. Introduction to Spatial Database: Definition, Types of spatial data, Geographical Information Systems (GIS), Conceptual Data Models for spatial databases, Logical data models for spatial databases: rastor and vector model. Physical data models for spatial databases: Clustering methods (space filling curves), Storage methods (R-tree). Query processing.	15	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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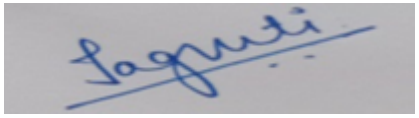
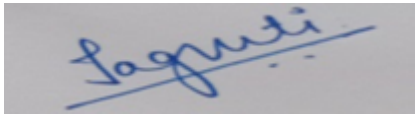
PSCS103 **Paper III** **Advanced Database Systems** **UNIT IV**	**Unit IV: Deductive, Active, Multimedia and XML Databases** Deductive Database: Introduction to recursive queries, Datalog Notation, Clause Form and Horn Clauses, Interpretation of model: Least Model semantics, The fixed point operator, safe Datalog program, recursive query with negation. Active Database: Languages for rule specification: Events, Conditions, Actions. XML and Database: Structure of XML Data, XML Document Schema, Querying and Transformation, Storage of XML Data. Introduction to multimedia database systems.	15	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **M.Sc. (CS)**

SEMESTER: **III** MONTH: **August - December** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
The learners will be able:

- Understand the key issues in big data management and its associated applications in intelligent business and scientific computing.
- Achieve adequate perspectives of big data analytics in various applications like recommender systems, social media applications.
- Explain data mining, neural networks, text analytics, text mining, sentiment analysis, web mining, web analytics, social analytics, social network analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS3033 **Paper IV** **Business Intelligence and Big Data Analytics –II (Mining Massive Data sets)** **UNIT III**	**Unit III: SHINGLING OF DOCUMENTS** Finding Similar Items, Applications of Near-Neighbor Search, Jaccard similarity of sets, Similarity of documents, Collaborative filtering as a similar-sets problem, Documents, k-Shingles, Choosing the Shingle Size, Hashing Shingles, Shingles built from Words. Similarity-Preserving Summaries of Sets, Locality-Sensitive hashing for documents. The Theory of Locality-Sensitive functions. Methods for high degrees of similarity.	15	Mining of Massive Datasets, Anand Rajaraman and Jeffrey David Ullman, Cambridge University Press, 2012.	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15
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PSCS3033 **Paper IV** **Business Intelligence and Big Data Analytics –II (Mining Massive Data sets)** **UNIT III**	**Unit IV: MINING DATA STREAMS** Introduction to streams concepts – Stream data model and architecture, Stream computing, Sampling data in a stream, Filtering streams, Counting distinct elements in a stream, Estimating moments, Counting oneness in a Window, Decaying window, Real time analytics Platform(RTAP).	15	Mining of Massive Datasets, Anand Rajaraman and Jeffrey David Ullman, Cambridge University Press, 2012.	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. C.S SEMESTER: I MONTH: August-December ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:
a. learn different networking protocols, virtualization technique, wireless sensor network.
b. working of wireless sensor network

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II PSCS102 Advanced Networking Concepts Unit 1	Networking Internet and Intranet, Protocol layer and their services, Network Applications like Web, HTTP, FTP and Electronic Mail in the Internet, Domain Name System, Transport-Layer Services, Multiplexing and Demultiplexing, UDP, TCP, TCP Congestion Control, Network Layer, Virtual Circuit and Datagram Networks, Need of Router, The Internet Protocol (IP), Routing Algorithms, Routing in the Internet.	15	Computer Networking: A Top-Down Approach 6th edition, James F. Kurose, Keith W. Ross, Pearson (2012).	PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

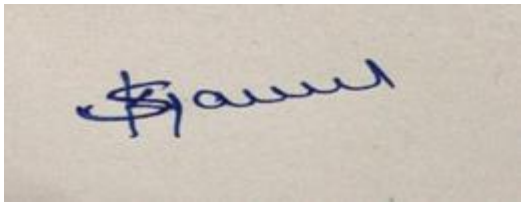
CLASS: M. Sc. C.S SEMESTER: I MONTH: August-December ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:
a. learn different networking protocols, virtualization technique, wireless sensor network.
b. working of wireless sensor network

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II PSCS102 Advanced Networking Concepts Unit 2	Network Virtualization Need for Virtualization, The Virtual Enterprise, Transport Virtualization-VNs, Central Services Access: Virtual Network Perimeter, A Virtualization Technologies primer: theory, Network Device Virtualization, Data-Path Virtualization, Control-Plane Virtualization, Routing Protocols.	15	Network Virtualization, Victor Moreno, Kumar Reddy, Cisco Press (2006).	PowerPoint presentation
Paper II PSCS102 Advanced Networking Concepts Unit 3	Adhoc Networking Introduction, application of MANET, challenges, Routing in Ad hoc networks, topology & position based approaches, Routing protocols: topology based, position based, Broadcasting, Multicasting, & Geocasting, Wireless LAN, Transmission techniques, MAC protocol issues, Wireless PANs, The Bluetooth technology.	15	Ad Hoc and Sensor Networks: Theory and Applications 2nd edition; Carlos de Morais Cordeiro, Dharma Prakash Agrawal, World Scientific Publishing Company; 2 edition (2011)	PowerPoint presentation

Paper II PSCS102 Advanced Networking Concepts Unit 4	Wireless Sensor networks: Need and application of sensor networks, sensor networks design considerations, empirical energy consumption, sensing and communication range, design issues, localization scheme, clustering of SNs, Routing layer, Sensor networks in controlled environment and actuators, regularly placed sensors, network issues, RFID as passive sensors.	15	Ad Hoc and Sensor Networks: Theory and Applications 2nd edition; Carlos de Morais Cordeiro, Dharma Prakash Agrawal, World Scientific Publishing Company; 2 edition (2011)	PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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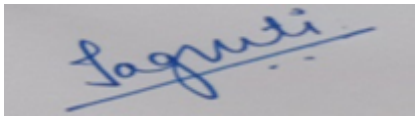

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. BRIJESH Y JOSHI DEPARTMENT: Computer Science

CLASS: M.Sc.C.S. SEMESTER: III MONTH: AUG to OCT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

- To be able to understand Big data platform, statistical concepts
- To understand the overview of Big data processing i.e. MapReduce Processing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Elective I- Track C Business Intelligence and Big Data Analytics –II (Mining Massive Data sets)Unit-I	**Big data:** Introduction to Big data Platform, Traits of big data, Challenges of conventional systems, Web data, Analytic processes and tools, Analysis vs Reporting, Modern data analytic tools, Statistical concepts: Sampling distributions, Re-sampling, Statistical Inference, Prediction error. **Data Analysis:** Regression modeling, Analysis of time Series: Linear systems analysis, Nonlinear dynamics, Rule induction, Neural networks: Learning and Generalization, Competitive Learning, Principal Component Analysis and Neural Networks, Fuzzy Logic: Extracting Fuzzy Models from Data, Fuzzy Decision Trees, Stochastic Search Methods.	12	Mining of Massive Datasets, Anand Rajaraman and Jeffrey David Ullman, Cambridge University Press, 2012.	Laptop, PPT

Elective I- Track C Business Intelligence and Big Data Analytics –II (Mining Massive Data sets)Unit-II	**Introduction to Map Reduce:** The map tasks, Grouping by key, The reduce tasks, Combiners, Details of MapReduce Execution, Coping with node failures. Algorithms Using **MapReduce:** Matrix-Vector Multiplication, Computing Selections and Projections, Union, Intersection, and Difference, Natural Join. Extensions to MapReduce: Workflow Systems, Recursive extensions to MapReduce, Common map reduce algorithms		Mining of Massive Datasets, Anand Rajaraman and Jeffrey David Ullman, Cambridge University Press, 2012.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

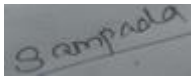
NAME OF THE STAFF: Mrs.Sampada Deshmukh DEPARTMENT:Computer Science

CLASS:M.Sc.(C.S) SEMESTER: III MONTH: July- November ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Learn basics of computer forensics fundamental, collection of evidences.
- Study different computer forensics methods and tools.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Cyber and Information Security Unit 1	**Computer Forensic Fundamentals:** Introduction to Computer Forensics and objective, the Computer Forensics Specialist, Use of Computer Forensic in Law Enforcement, Users of Computer Forensic Evidence, Case Studies, InformationSecurity Investigations. Types of Computer Forensics Technology: Types of Military Computer Forensic Technology	5	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using projector
	Types of Law Enforcement Computer Forensic Technology, Types of Business Computer Forensic Technology, Specialized Forensics Techniques, Hidden Data, Spyware and Adware, Encryption Methods	5	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using projector



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	andVulnerabilities, Protecting Data from Being Compromised			
	Internet Tracing Methods,Security and Wireless Technologies. Types of Computer Forensics Systems: Studydifferent Security System: Internet, Intrusion Detection, Firewall, Storage Area, Network Disaster Recovery, Public Key Infrastructure, Wireless Network, Satellite Encryption,Instant Messaging (IM), Net Privacy, Identity Management, Biometric, Identity Theft.	5	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

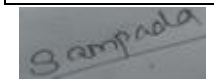
NAME OF THE STAFF: Mrs. Sampada Deshmukh DEPARTMENT:Computer Science

CLASS:M.Sc. SEMESTER:III MONTH:July-November ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

- Learn different data recovery method.
- Learn security techniques for forensic purpose.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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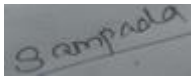
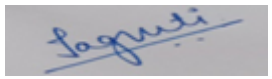
Paper 3 Cyber and Information Security Unit 2	**Data Recovery:** Data Recovery and Backup, Role of Data Recovery, Hiding and Recovering Hidden Data. Evidence Collection: Need to Collect the Evidence, Types of Evidences, The Rules of Evidence, Collection Steps. Computer Image Verification and Authentication	6	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using projector
	Special Needs of Evidence Authentication. Identification of Data: Timekeeping, Forensic Identification and Analysis of Technical Surveillance Devices,	5	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using projector
	Reconstructing Past Events: How to Become a Digital Detective, Useable File Formats, Unusable File Formats, Converting Files.	4	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Computer Science.

CLASS: M.Sc. SEMESTER: III MONTH: July To November ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

- To understand social network and analyze the communication and predict the relationship between those actors.
- To understand Graph theory and network centrality and page rank for accessing webpages.
- To understand network structures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS302 Social Network Analysis UNIT-I	**Introduction to social network analysis (SNA)** Introduction to networks and relations- analyzing relationships to understand people and groups, binary and valued relationships, symmetric and asymmetric relationships, multimode relationships,	6	1. Social Network Analysis for Startups- Finding connections on the social web 2. Social Network Analysis- 3rd edition	Projector, PPT.
	Using graph theory for social networks analysis- adjacency matrices, edge-lists, adjacency lists, graph traversals and distances, depth-first traversal, breadth-first traversal paths and walks, Dijkstra's algorithm, graph distance and graph diameter, social networks vs. link analysis, ego-centric and socio-centric density.	6		Projector, PPT.
PSCS302 Social Network Analysis	**Networks, Centrality and centralization in SNA** Understanding networks- density, reachability, connectivity, reciprocity, group-external and group-internal ties in networks, ego	8	1. Social Network Analysis for	Projector, PPT.

UNIT-II	networks, extracting and visualizing ego networks, structural holes, Centrality- degree of centrality, closeness and betweenness centrality, local and global centrality, centralization and graph centers, notion of importance within network, Google pagerank algorithm,		Startups- Finding connections on the social web 2. Social Network Analysis- 3rd edition	
	Analyzing network structure- bottom-up approaches using cliques, N-cliques, N-clans, K-plexes, K-cores, F-groups and top-down approaches using components, blocks and cut-points, lambda sets and bridges, and factions.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. BRIJESH Y JOSHI DEPARTMENT: Computer Science

CLASS: M.Sc.C.S. SEMESTER: I MONTH: AUG to OCT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

- To be able to understand the purpose and products of research
- To understand the overview of research process.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-01 Analysis of Algorithms and Researching Computing, Unit-4	Researching Computing Introduction, purpose and products of research, overview of research process, internet research, participants and research ethics, reviewing literature, design and creation, experiments, Quantitative data analysis, presentation of research	12	Research Methodology, Methods and Techniques, Kothari, C.R.,1985, third edition, New Age International (2014) . Basic of Qualitative Research (3rd Edition), Juliet Corbin & Anselm Strauss:, Sage Publications (2008).	Laptop, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.CS

SEMESTER: IV MONTH: JAN TO APRIL ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand basics of Cryptography and Network Security.
- To be able to secure a message over insecure channel by various means.
- To learn about how to maintain the Confidentiality, Integrity and Availability of a data.
- To understand various protocols for network security to protect against the threats in the networks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS4022 Cyber and Information Security (Cryptography and Crypt Analysis) **UNIT 1**	: Introduction to Number Theory Topics in Elementary Number Theory: O and notations, time estimates for doing arithmetic-divisibility and the Euclidean algorithm, Congruence: Definitions and properties, linear congruence, residue classes, Euler's phi function, Fermat's Little Theorem, Chinese Reminder Theorem, Applications to factoring, finite fields, quadratic residues and reciprocity: Quadratic residues, Legendre symbol, Jacobi Symbol. (proofs of the theorems are not expected to cover).	10	Discrete Mathematics and Its Applications, Kenneth H. Rosen, 7 th Edition, McGraw Hill, 2012. Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005	Powerpoint,Black Board and chalk

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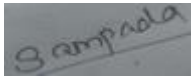

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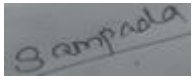
PSCS4022 Cyber and Information Security (Cryptography and Crypt Analysis) **UNIT 3**	RSA Cryptosystem The RSA Algorithm, Primarily Testing, Legendre and Jacobi Symbols, The SolovayStrassen Algorithm, The Miller-Rabin Algorithm, Factoring Algorithm: The pollard p-1 Algorithm, Dixon's Random Squares Algorithm, Attacks on RSA, The Rabin Cryptosystem. Public Key Cryptosystems: The idea of public key Cryptography, The Diffie-Hellman Key Agreement, ElGamal Cryptosystem, The Pollard Rho Discrete Logarithm Algorithm, Elliptic Curves, Knapsack problem.	10	Discrete Mathematics and Its Applications, Kenneth H. Rosen, 7 th Edition, McGraw Hill, 2012. Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005. Network Security and Cryptography, Atul Kahate, McGraw Hill, 2003. Cryptography and Network Security: Principles and Practices, William Stalling, Fourth Edition, Prentice Hall, 2013.	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.CS

SEMESTER: IV MONTH: JAN TO APRIL ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand basics of Cryptography and Network Security.
- To be able to secure a message over insecure channel by various means.
- To learn about how to maintain the Confidentiality, Integrity and Availability of a data.
- To understand various protocols for network security to protect against the threats in the networks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS4022 Cyber and Information Security (Cryptography and Crypt Analysis) **UNIT 1**	: Introduction to Number Theory Topics in Elementary Number Theory: O and notations, time estimates for doing arithmetic-divisibility and the Euclidean algorithm, Congruence: Definitions and properties, linear congruence, residue classes, Euler's phi function, Fermat's Little Theorem, Chinese Reminder Theorem, Applications to factoring, finite fields, quadratic residues and reciprocity: Quadratic residues, Legendre symbol, Jacobi Symbol. (proofs of the theorems are not expected to cover).	10	Discrete Mathematics and Its Applications, Kenneth H. Rosen, 7 th Edition, McGraw Hill, 2012. Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005	Powerpoint,Black Board and chalk

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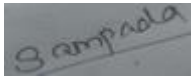

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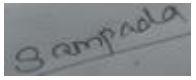
PSCS4022 Cyber and Information Security (Cryptography and Crypt Analysis) **UNIT 3**	RSA Cryptosystem The RSA Algorithm, Primarily Testing, Legendre and Jacobi Symbols, The SolovayStrassen Algorithm, The Miller-Rabin Algorithm, Factoring Algorithm: The pollard p-1 Algorithm, Dixon's Random Squares Algorithm, Attacks on RSA, The Rabin Cryptosystem. Public Key Cryptosystems: The idea of public key Cryptography, The Diffie-Hellman Key Agreement, ElGamal Cryptosystem, The Pollard Rho Discrete Logarithm Algorithm, Elliptic Curves, Knapsack problem.	10	Discrete Mathematics and Its Applications, Kenneth H. Rosen, 7 th Edition, McGraw Hill, 2012. Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005. Network Security and Cryptography, Atul Kahate, McGraw Hill, 2003. Cryptography and Network Security: Principles and Practices, William Stalling, Fourth Edition, Prentice Hall, 2013.	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: COMPUTER SCIENCE CLASS: MSc.CS(Part II)

SEMESTER: **IV** MONTH: JANUARY-APRIL ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the concepts of Simulation and Modeling.
- Develop logic for developing Simulation Scenarios.
- Be familiar about the basic concepts of Agent Based Modeling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS401 Unit 1, Simulation and Modeling	Introduction to Simulation, Need of Simulation, Time to simulate, Inside simulation software: Modeling the progress of Time, Modeling Variability, Conceptual Modeling: Introduction to Conceptual modelling.	07	Simulation: The Practice of Model Development and Use by Stewart Robinson, John Wiley and Sons, Ltd, 2004.	Power Point Presentation
	Defining conceptual model, Requirements of the conceptual model, Communicating the conceptual model, Developing the Conceptual Model: Introduction, A framework for conceptual modeling, methods of model simplification.	08	Simulation: The Practice of Model Development and Use by Stewart Robinson, John Wiley and Sons,	Power Point Presentation

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			Ltd, 2004.	
PSCS401 Unit 3, Simulation and Modeling.	Types of models, Analytical vs Simulation modeling, Application of simulation modeling, Level of abstraction, Simulation Modeling. Methods, System Dynamics, Discrete Event Modeling, Agent Based modeling: Introduction to Agent, Agent-based modeling, Time in agent based models, Space in agent based models, Discrete space, Continuous space movement in continuous space, Communication between agents, Dynamic creation and destruction of agents, Statics on agent population, Condition triggered events and transition in agents.	07	The Big Book of Simulation Modeling: Multi Method Modeling by Andrei Borshchev, 2013.	Power Point Presentation
	Building agents based models: The problem statement, Phases of modeling, Assumptions, 3 D animation. Dynamics Systems: Stock and flow diagrams, examples of stock and flow diagrams. Multi-method modeling: Architecture, Technical aspects of combining modeling methods, Examples.	08	The Big Book of Simulation Modeling: Multi Method Modeling by Andrei Borshchev, 2013.	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shilpa Rodrigues **DEPARTMENT**: COMPUTER SCIENCE **CLASS**: MSc.CS(Part II)

SEMESTER: IV **MONTH**: JANUARY-APRIL **ACADEMIC YEAR**: 2019-20

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the concepts of Simulation and Modeling.
- Develop logic for developing Simulation Scenarios.
- Be familiar about the basic concepts of Agent Based Modeling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS401 Unit 2, Simulation and Modeling	Data Collection and Analysis: Introduction, Data requirements, Obtaining data, Representing unpredictable variability, Selecting statistical distributions. Obtaining Accurate Results: Introduction, The nature of simulation models and simulation output, Issues in obtaining accurate simulation results, example model, dealing with initialization bias: warm-up and initial conditions, Selecting the number of replications and run-length.	07	Simulation: The Practice of Model Development and Use by Stewart Robinson, John Wiley and Sons, Ltd, 2004.	Power Point Presentation
	Searching the Solution Space: Introduction, The nature of simulation experimentation, Analysis of results from a single scenario, Comparing alternatives, Search experimentation, and Sensitive analysis.	08	Simulation: The Practice of Model Development and	Power Point Presentation

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	Verification, Validation and Confidence: Introduction, Defining Verification and Validation, The difficulties of verification and validation, Methods of verification and validation, Independent verification and validation.		Use by Stewart Robinson, John Wiley and Sons, Ltd, 2004.	
PSCS401 Unit 4, Simulation and Modeling.	Designing state-based behavior: Statecharts, State transitions, Viewing and debugging Statecharts at runtime, Statecharts for dynamic objects. Discrete events and Event model object: Discrete event, Event-the simplest low level model object, Dynamic events, and Exchanging data with external world. Presentation and animation: Working with shapes, groups and colors.	07	The Big Book of Simulation Modeling: Multi Method Modeling by Andrei Borshchev, 2013.	Power Point Presentation
	, Designing interactive models: using controls, Dynamic properties of controls, 3D Animation. Randomness in Models: Probability distributions, sources of randomness in the model, randomness in system dynamics model, random number generators, Model time, date and calendar: Virtual and real time: The model time, date and calendar, Virtual and real-time execution modes.	08	The Big Book of Simulation Modeling: Multi Method Modeling by Andrei Borshchev, 2013.	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **MSCCS** SEMESTER:II

MONTH: **FEB-MAY** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:

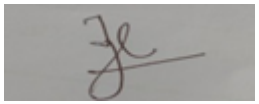
The learners will be able to :

understand basic concepts of security in cloud
understand basic concepts of security in mobile.
Understand services of mobile

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS2032 Cyber and Information Security **Unit III: Cloud Security ign strategies**	How concepts of Security apply in the cloud, User authentication in the cloud; How the cloud provider can provide this- Virtualization System Security Issues: e.g. ESX and ESXi Security, ESX file system security- storage considerations, backup and recovery- Virtualization System Vulnerabilities, security management standards- SaaS, PaaS, IaaS availability management- access control- Data security and storage in cloud.	15	Cloud Security: A Comprehensive Guide to Secure Cloud Computing, Ronald L. Krutz, Russell Dean Vines, Wiley	power point

PSCS2032 **Cyber and Information Security** **Unit IV: Mobile Security:**	Mobile system architectures, Overview of mobile cellular systems, GSM and UMTS Security & Attacks, Vulnerabilities in Cellular Services, Cellular Jamming Attacks & Mitigation, Security in Cellular VoIP Services, Mobile application security. Securing Wireless Networks: Overview of Wireless Networks, Scanning and Enumerating 802.11 Networks, Attacking 802.11 Networks, Bluetooth Scanning and Reconnaissance, Bluetooth Eavesdropping, Attacking & Exploiting Bluetooth, Zigbee Security & Attacks	15	Mobile and Wireless Security and Privacy, Kia Makki, Peter Reiher, Springer	power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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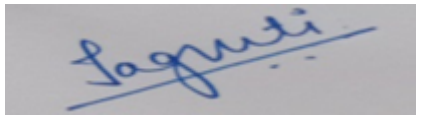

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. C.S SEMESTER: II MONTH: February-May ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:
Learn different computer attacks and different security techniques

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 PSCS2032 Cyber and Information Security (Network Security) Unit 1	Computer Security Principles of Security, Different Attacks: malicious and non-malicious program, Types of Computer Criminals. Operating System Security: Protected objects and methods of protection. Memory address protection: Fence, Relocation, Base/Bound Registers, Tagged Architecture, Segmentation, Paging, Directory, access control list. Database Security: Security requirements, Integrity, Confidentiality, Availability, Reliability of Database, Sensitive data, Multilevel database, Proposals for multilevel security. .	15	Security in Computing 4th edition, Charles P. Pfleeger, Charles P. Pfleeger, Shari Lawrence Pfleeger, Prentice Hall; 4th edition (2006)	PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

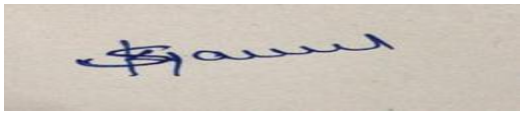
NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. C.S SEMESTER: II MONTH: February-May ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to:
Learn different computer attacks and different security techniques

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 PSCS2032 Cyber and Information Security (Network Security) Unit 2	Network Security Different types of network layer attacks, Firewall (ACL, Packet Filtering, DMZ, Alerts and Audit Trials) – IDS,IPS and its types (Signature based, Anomaly based, Policy based, Honeypot based). Web Server Security: SSL/TLS Basic Protocol-computing the keys-client authentication-PKI as deployed by SSL Attacks fixed in v3-ExportabilityEncoding-Secure Electronic Transaction (SET), Kerberos.	15	Security in Computing 4th edition, Charles P. Pfleeger, Charles P. Pfleeger, Shari Lawrence Pfleeger, Prentice Hall; 4th edition (2006)	PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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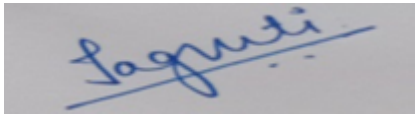

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Sampada Deshmukh DEPARTMENT: CS

CLASS: M. Sc. SEMESTER: II MONTH: January- April ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Understand the concept of Operating System and kernel.

b.Understand the concept of process communication.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Advanced Operating System Unit -I	**Linux Operating Systems** Introduction to kernel, Types of kernel (monolithic, micro, exo)	5	Operating Systems: Design and Implementation, Third Edition, Andrew S. Tanenbaum, Albert S. Woodhull, Prentice Hall, 2006.	Powerpoint presentation through projector
	Operating system booting process GRUB-I, GRUB-II. Processes,	5		Powerpoint presentation through projector
	Interprocess Communication, Scheduling.	5		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Sampada Deshmukh DEPARTMENT: CS

CLASS: M. Sc. SEMESTER: II MONTH: January-April ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Understand the concept of memory management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Advanced operating system Unit -II	Basic memory management, swapping, virtual memory, Page replacement algorithms,	8	Operating Systems: Design and Implementation, Third Edition, Andrew S. Tanenbaum, Albert S. Woodhull, Prentice Hall, 2006.	Powerpoint presentation through projector
	Design issues for paging systems, segmentation. Case Study: Linux memory management .	7		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs.Sampada Deshmukh DEPARTMENT: CS

CLASS:M. Sc. SEMESTER: II MONTH: January-April ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Understand the concept of principle of hardware and software.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Advanced operating system Unit -III	Principles of I/O Hardware, Principles of I/O Software, Deadlocks, RAM Disks, Disks,	7	Operating Systems: Design and Implementation, Third Edition, Andrew S. Tanenbaum, Albert S. Woodhull, Prentice Hall, 2006.	Powerpoint presentation through projector
	Terminals. File Systems: Files, Directories, File System Implementation, Security, Protection mechanisms in different Linux versions	8		Powerpoint presentation through projector
				Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Sampada Deshmukh DEPARTMENT: CS

CLASS: M. Sc. SEMESTER: II MONTH: April-January ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. learn android operating system working.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Advanced operating system Unit -IV	The Android Software Stack, The Linux Kernel – its functions, essential hardware drivers. Libraries - Surface Manager, Media framework, SQLite, WebKit, OpenGL.	5	Operating Systems: Design and Implementation, Third Edition, Andrew S. Tanenbaum, Albert S. Woodhull, Prentice Hall, 2006.	Powerpoint presentation through projector
	Android Runtime - Dalvik Virtual Machine, Core Java Libraries. Application Framework - Activity Manager, Content Providers, Telephony Manager, Location Manager, Resource	5		Powerpoint presentation through projector
	Manager. Android Application – Activities and Activity Lifecycle, applications such as SMS client app, Dialer, Web browser, Contact manager	5		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Computer Science.

CLASS: M.Sc. SEMESTER: II MONTH: February To May ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

- To understand structure of compiler.
- How to implement basic compiler.
- To understand Parser Implementation.
- To understand data flow analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS202 Design and implementation of Modern Compilers UNIT-I	**Introduction to Compilers** The structure of a compiler, A simple approach to the design of lexical analyzers, Regular expressions, Finite automata, From regular expressions to finite automata, Minimizing the number of states of a DFA.	6	1. Compilers: Principles, Techniques and Tools 2nd edition 2. Modern Compiler Implementation in Java, Second Edition	Projector, PPT.
	Context-free grammars, Derivations and Parse trees, Parsers, Shift-reduce parsing, Operator-precedence parsing, Top- down parsing, Predictive parsers.	6		Projector, PPT.

PSCS202 Design and implementation of Modern Compilers UNIT-II	**Automatic Construction of Efficient Parsers** LR parsers, The canonical collection of LR(0) items, Constructing SLR parsing tables, Constructing canonical LR parsing tables, Constructing LALR parsing tables, Using ambiguous grammars,	6	1. Compilers: Principles, Techniques and Tools 2nd edition 2. Modern Compiler Implementation in Java, Second Edition	Projector, PPT.
	An automatic parser generator, Implementation of LR parsing tables, Constructing LALR sets of items.	6		
PSCS202 Design and implementation of Modern Compilers UNIT-III	**Advanced syntax analysis and basic semantic analysis** Syntax-directed translation schemes, Implementation of syntax-directed translators, Initial introduction to the ongoing Tiger compiler, bindings for the Tiger compiler, type-checking expressions, type-checking declarations, activation records, stack frames, frames in the Tiger compiler, translation to intermediate code, intermediate representation trees, translation into trees, declarations, basic blocks and traces, taming conditional branches, liveness analysis, solution of dataflow equations, liveness in the Tiger compiler, interference graph construction.	12	1. Compilers: Principles, Techniques and Tools 2nd edition 2. Modern Compiler Implementation in Java, Second Edition	Projector, PPT.
PSCS202 Design and implementation of Modern Compilers UNIT-IV	**Dataflow analysis and loop optimization** The principle sources of optimization, Loop optimization: The DAG representation of basic blocks, Dominators, Reducible flow graphs, Depth-first search, Loop-invariant computations, Induction variable elimination, Some other loop optimizations. Dataflow Analysis: intermediate representation for flow analysis, various dataflow analyses, transformations using dataflow analysis, speeding up dataflow analysis, alias analysis.	12	1. Compilers: Principles, Techniques and Tools 2nd edition 2. Modern Compiler Implementation in Java, Second Edition	Projector, PPT.

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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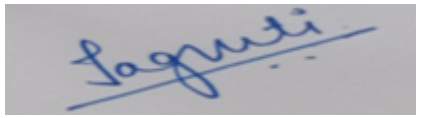

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. BRIJESH Y JOSHI DEPARTMENT: Computer Science

CLASS: M.Sc.C.S. SEMESTER: I MONTH: JAN to MARCH ACADEMIC YEAR: 2019-2020

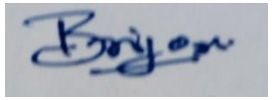
LEARNING OBJECTIVE/S:

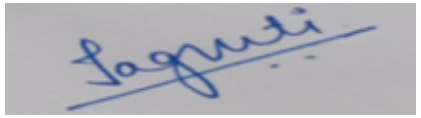
- To be able to understand Big data platform, statistical concepts
- To understand the overview of Big data processing i.e. MapReduce Processing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Elective II - Track C: Business Intelligence and Big Data Analytics (Business Intelligence	**Elective II - Track C: Business Intelligence and Big Data Analytics (Business Intelligence** Operational and Decision Support System, Data-Information-Knowledge-Decision making-Action cycle. Basic definitions-Business Intelligence; Data warehousing, Business Intelligence architecture, Use and benefits of Business Intelligence. Knowledge Discovery in Databases: KDD process model, Data Pre-processing: Cleaning: Missing Values; Noisy Values; Inconsistent values; redundant values. Outliers, Integration, transformation, reduction, Discretization: Equal Width Binning; Equal Depth Binning, Normalization, Smoothing.	12	Business Intelligence (2nd Edition), Efraim Turban, Ramesh Sharda, Dursun Delen, David King, Pearson (2013)	Laptop, PPT

Elective II - Track C: Business Intelligence and Big Data Analytics (Business Intelligence	**Unit II: Introduction to Business Data Warehouse** Definition of Data warehouse, Logical architecture of Data Warehouse, Data Warehouse model- Enterprise warehouse; Data Marts; Virtual warehouse. Populating business Data Warehousing: data integration and extract, transform, load (ETL).	12	Business Intelligence (2nd Edition), Efraim Turban, Ramesh Sharda, Dursun Delen, David King, Pearson (2013)	Laptop, PPT
Elective II - Track C: Business Intelligence and Big Data Analytics (Business Intelligence)	**Unit III: Designing Business Data Warehouse** OLTP and OLAP systems, Designing business information warehouse: Principles of dimensional modeling, Data cubes, Data cube operations, data cube schemas.	12	Business Intelligence (2nd Edition), Efraim Turban, Ramesh Sharda, Dursun Delen, David King, Pearson (2013)	Laptop, PPT
Elective II - Track C: Business Intelligence and Big Data Analytics (Business Intelligence)	**Unit IV: Introduction to Data Mining** Data mining definitions and process: business and data understanding. Association Analysis: Definition of association rule, General issues: Support; Confidence; Lift; Conviction, Frequent Item sets: APriori Algorithm; Issues with APriori Algorithm, Data structures: Hash tree and FP tree	12	Data Mining: Introductory and Advanced Topics, Dunham, Margaret H, Prentice Hall (2006)	Laptop, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs.Sampada Deshmukh DEPARTMENT: C .S.

CLASS: M. Sc. SEMESTER: IV MONTH: JAN-APRIL ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

a. study different secret key exchange method algorithm and patterns.
b. Learn different protocols

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Cyber and Information Security Unit –II	Shift Cipher, Substitution Cipher, Affine Cipher, Vigenère Cipher, Vermin Cipher, HillCipher, Permutation Cipher, Stream Cipher, Cryptanalysis of Affine Cipher, Substitution	6	Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005.	Powerpoint presentation through projector
	Cipher, Vigenère Cipher and Hill Cipher, Block Ciphers, Algorithm Modes, DES, Double DES, Triple DES, Meet-in-Middle Attack, AES, IDEA algorithm. Cryptographic HashFunctions	6		Powerpoint presentation through projector
	Hash Functions and Data Integrity, Security of Hash Functions, Secure HashAlgorithm, Message Authentication Code, Nested MACs, HMAC.	3		Powerpoint presentation through projector
				Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Sampada Deshmukh DEPARTMENT: CS

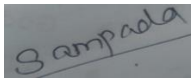
CLASS: M. Sc. SEMESTER: IV MONTH: July-November ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

c. study different secret key exchange method algorithm and patterns.
d. Learn different protocols.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Cyber and Information Security Unit –IV	Diffie-Hellman Key distribution and Key agreement scheme, Key Distribution Patterns, Mitchell-Piper Key distribution pattern, Station-to-station protocol, MTI Key Agreement	8	Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005.	Powerpoint presentation through projector
	Public-Key Infrastructure: What is PKI?, Secure Socket Layer, Certificates, Certificate Life cycle, Trust Models: Strict Hierarchy Model, Networked PKIs, The web browser Model, Pretty Good Privacy.	7		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BRIJESH YATINDRA JOSHI **DEPARTMENT: INFORMATION TECHNOLOGY**

CLASS: TYIT DIV - A SEMESTER: VI MONTH: Dec to March ACADEMIC YEAR: 2018-2019

Learning Objectives

1. Understand the concept of business intelligence and Decision support systems
2. Understand the concept of decision making and use of it in decision making
3. Understand the concept of Data mining and data preparation
4. Understand the concept and various algorithms of Classification and clustering
5. Understand the concept of Business intelligence applications such as marketing models logistics and production models
6. Understanding concept of Knowledge management ,AI and Expert systems

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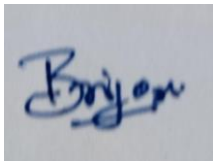
PAPER ,UNIT , TITLE	SUB TOPICS	NO OF LECTURES ALLOCATED	REFERENCE/S	TEACHING METHODS /ICT TOOLS USED
USIT603 Business Intelligence UNIT I	Business intelligence: Effective and timely decisions, Data, information and knowledge, The role of mathematical models, Business intelligence architectures, Ethics and business intelligence	6	Business Intelligence: Data Mining and Optimization for Decision Making, Carlo Vercellis	BLACK BOARD AND CHALK
	Business intelligence: Effective and timely decisions, Data, information and knowledge, The role of mathematical models, Business intelligence architectures, Ethics and business intelligence	6		
UNIT II	Mathematical models for decision making: Structure of mathematical models, Development of a model, Classes of models Data mining: Definition of data mining, Representation of input data , Data mining process, Analysis methodologies Data preparation: Data validation, Data transformation, Data reduction	12	Business Intelligence: Data Mining and Optimization for Decision Making, Carlo Vercellis	BLACK BOARD AND CHALK
UNIT III	Classification: Classification problems, Evaluation of	6	Business	BLACK BOARD AND

	classification models, Bayesian methods, Logistic regression, Neural networks, Support vector machines		Intelligence: Data Mining and Optimization for Decision Making, Carlo Vercellis	CHALK
	Clustering: Clustering methods, Partition methods, Hierarchical methods, Evaluation of clustering models	6		
UNIT IV	Business intelligence applications: Marketing models: Relational marketing, Sales force management, Logistic and production models: Supply chain optimization, Optimization models for logistics planning, Revenue management systems.	6	Decision support and Business Intelligence Systems	BLACK BOARD AND CHALK
	Data envelopment analysis: Efficiency measures, Efficient frontier, The CCR model, Identification of good operating practices	6		
UNIT V	Knowledge Management: Introduction to Knowledge Management, Organizational Learning and Transformation, Knowledge Management Activities, Approaches to Knowledge Management, Information Technology (IT) In Knowledge Management, Knowledge Management Systems Implementation, Roles of People in Knowledge Management	6	Decision support and Business Intelligence Systems	BLACK BOARD AND CHALK
	Artificial Intelligence and Expert Systems: Concepts and Definitions of Artificial Intelligence, Artificial	6		

	Intelligence Versus Natural Intelligence, Basic Concepts of Expert Systems, Applications of Expert Systems, Structure of Expert Systems, Knowledge Engineering, Development of Expert Systems			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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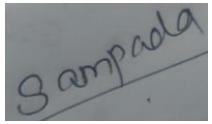

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: T.Y.B.Sc.(I.T) SEMESTER: VI MONTH: DEC-JAN ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- How online contracts are done and their authenticity
- Contracts and their jurisdiction in India
- Foreign judgments given related to their place of action

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Cyber Laws Uniy2	**Contracts in Infotech World:** Click-Wrap and Shrink-Wrap Contract: Status under the Indian Contract Act, 1872	2	Cyber Law Simplified By Vivek Sood Cybersecurity Law By Jeff Kosseff	Black Board and Chalk
	Contract Formation Under the Indian Contract Act, 1872, Contract Formation on the Internet, Terms and Conditions of Contracts. Jurisdiction	2	Cyber Law Simplified By Vivek Sood Cybersecurity Law By Jeff Kosseff	Black Board and Chalk
	Jurisdiction in the Cyber World: Questioning the Jurisdiction and Validity of the Present Law of Jurisdiction, Civil Law of Jurisdiction in India, Cause of Action, Jurisdiction and the Information Technology Act,2000, Foreign Judgements in India	4	Cyber Law Simplified By Vivek Sood Cybersecurity Law By Jeff Kosseff	Black Board and Chalk
	Place of Cause of Action in Contractual and IPR Disputes, Exclusion Clauses in Contracts, Abuse of Exclusion Clauses,	4	Cyber Law Simplified By Vivek Sood Cybersecurity Law	Black Board and Chalk

	Objection of Lack of Jurisdiction, Misuse of the Law of Jurisdiction, Legal Principles on Jurisdiction in the United State of America, Jurisdiction Disputes w.r.t. the Internet in the United State of America. III		By Jeff Kosseff	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: T.YB.Sc.(I.T.) SEMESTER: VI MONTH: JAN ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- What is cyber squatting
- What is copy right and its violation, remedies , infringement
- Copyright owners and Computer Software piracy

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Cyber Law Unit 3	**Battling Cyber Squatters and Copyright Protection in the Cyber World:** Concept of Domain Name and Reply to Cyber Squatters, Meta-Tagging, Legislative and Other Innovative Moves Against Cyber Squatting,	2	Cyber Law Simplified By Vivek Sood Cybersecurity Law By Jeff Kosseff	Black Board and Chalk
	The Battle Between Freedom and Control on the Internet, Works in Which Copyright Subsists and meaning of Copyright, Copyright Ownership and Assignment, License of Copyright, Copyright Terms and Respect for Foreign Works	4	Cyber Law Simplified By Vivek Sood Cybersecurity Law By Jeff Kosseff	Black Board and Chalk
	Copyright Infringement, Remedies and Offences, Copyright Protection of Content on the Internet; Copyright Notice, Disclaimer and Acknowledgement, Downloading for Viewing Content on the Internet, Hyper-Linking and Framing, Liability of	4	Cyber Law Simplified By Vivek Sood Cybersecurity	Black Board and Chalk

	ISPs for Copyright		Law By Jeff Kosseff	
	Violation in the Cyber World: Legal Developments in the US, Napster and its Cousins: A Revolution on the Internet but a Crisis for Copyright Owners, Computer Software Piracy	2	Cyber Law Simplified By Vivek Sood Cybersecurity Law By Jeff Kosseff	Black Board and Chalk

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: T.Y.B.Sc.(I.T) SEMESTER: VI MONTH: FEB ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Virtual transactions(E-commerce taxation)
- Internet and Custom duties
- Digital signatures and its liability

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Cyber Law Unit 4	**E-Commerce Taxation**: Real Problems in the Virtual World: A Tug of War on the Concept of „Permanent Establishment", Finding the PE in Cross Border E-Commerce,	2	Cyber Law Simplified By Vivek Sood Cybersecurity Law By Jeff Kosseff	Black Board and Chalk
	The United Nations Model Tax Treaty, The Law of Double Taxation Avoidance Agreements and Taxable Jurisdiction Over Non-Residents, Under the Income Tax Act, 1961, Tax Agents of Non-Residents under the Income Tax Act,1961 and the Relevance to E-Commerce, Source versus Residence and Classification between Business Income and Royalty	4	Cyber Law Simplified By Vivek Sood Cybersecurity Law By Jeff Kosseff	Black Board and Chalk
	The Impact of the Internet on Customer Duties, Taxation Policies in India: At a Glance.	2	Cyber Law Simplified By Vivek Sood	Black Board and Chalk

			Cybersecurity Law By Jeff Kosseff	
	Digital Signature, Certifying Authorities and E-Governance: Digital Signatures, Digital Signature Certificate, Certifying Authorities and Liability in the Event of Digital Signature Compromise, E-Governance in India: A Warning to Babudom!	4	Cyber Law Simplified By Vivek Sood Cybersecurity Law By Jeff Kosseff	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: T.Y.B.Sc.(I.T) SEMESTER: VI MONTH: FEB-MARCH ACADEMIC YEAR:2018-19

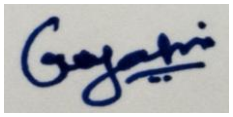
LEARNING OBJECTIVE/S:
The learners will be able to :

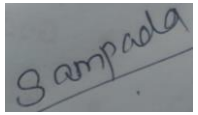
- Electronic record as proof its relevancy and probative value
- How cyber consumers are protected under consumer protection act
- How the cyber consumers should beware of foreign goods sold in India

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Cyber Law Unit 5	**The Indian Evidence Act of 1872 v. Information Technology Act, 2000:** Status of Electronic Records as Evidence, Proof and Management of Electronic Records; Relevancy, Admissibility and Probative Value of E-Evidence, Proving Digital Signatures, Proof of Electronic Agreements,	4	Cyber Law Simplified By Vivek Sood Cybersecurity Law By Jeff Kosseff	Black Board and Chalk
	Proving Electronic Messages, Other Amendments in the Indian Evidence Act by the IT Act, Amendments to the Bankers Books Evidence Act, 1891 and Reserve Bank of India 12 Act, 1934.	2	Cyber Law Simplified By Vivek Sood Cybersecurity Law By Jeff Kosseff	Black Board and Chalk
	Protection of Cyber Consumers in India: Are Cyber Consumers Covered Under the Consumer Protection Act? Goods and Services, Consumer Complaint, Defect in Goods and	2	Cyber Law Simplified By Vivek Sood	

	Deficiency in Services, Restrictive and Unfair Trade Practices, Instances of Unfair Trade Practices, Reliefs Under CPA,		Cybersecurity Law By Jeff Kosseff	
	Beware Consumers, Consumer Foras, Jurisdiction and Implications on cyber Consumers in India, Applicability of CPA to Manufacturers, Distributors, Retailers and Service Providers Based in Foreign Lands Whose Goods are Sold or Services Provided to a Consumer in India. Amendments in Indian IT Act 2000	4	Cyber Law Simplified By Vivek Sood Cybersecurity Law By Jeff Kosseff	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**T.Y.B.SC(IT)-A**_____ SEMESTER: ____**VI**_____MONTH: _____**DECEMBER-MARCH** _____ ACADEMIC YEAR: _____**2018-2019**_____

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the Geographical Information Systemfor processing standard geographic data.
- Make you understand where GIS system can be applied.Learning about different applications(example:GPS).
- How geographic data are capture, updated, profiled, stored and represented in the system.
- Enable to understand software and hardware trends, DBMS and varieties of Models.
- To understand how geographic data can be display with help of Maps and to understand the making of Maps.
- Studying about spatial referencing and positioning of data in system.
- To understand different operations and functions on data and to analyze and explore information in the system.
- To provide better visualization of data both in vector and raster manner.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-04 (USIT604)	**A Gentle Introduction to GIS** **The nature of GIS:** Some fundamental observations, Defining GIS, GISystems, GIScience and GIApplications, Spatial data and Geoinformation.	04	Principles of Geographic Information Systems- An	Textbook, Blackboard, Chalk and Duster, Projector,

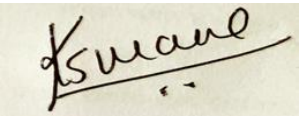
Principles of Geographic Information Systems **Unit No -01**	**The real world and representations of it:** Models and modelling, Maps, Databases, Spatial databases and spatial analysis		Introductory Text Book By Editors: Otto Huisman and Rolf A. , The International Institute of Geoinformation Science and Earth Observation Introduction to Geographic Information Systems Chang Kang-tsung McGrawHill	Laptop, PPTs.
	Geographic Information and Spatial Database Models and Representations of the real world **Geographic Phenomena:** Defining geographic phenomena, types of geographic phenomena, Geographic fields, Geographic objects, Boundaries	03		
	Computer Representations of Geographic Information: Regular tessellations, irregular tessellations, Vector representations, Topology and Spatial relationships, Scale and Resolution, Representation of Geographic fields, Representation of Geographic objects	03		
	Organizing and Managing Spatial Data The Temporal Dimension	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -02 Principles of Geographic Information Systems	**Data Management and Processing Systems Hardware and Software Trends** **Geographic Information Systems:** GIS Software, GIS Architecture and functionality, Spatial Data Infrastructure (SDI)	04	Principles of Geographic Information Systems- An Introductory Text Book By	Projector, Laptop, PPTs
	Stages of Spatial Data handling: Spatial data handling and preparation, Spatial Data Storage and maintenance, Spatial Query and Analysis, Spatial Data Presentation.	03		

	Database management Systems: Reasons for using a DBMS, Alternatives for data management, The relational data model, Querying the relational database.	03	Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	
	GIS and Spatial Databases: Linking GIS and DBMS, Spatial database functionality.	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -03 **Principles of Geographic Information Systems**	**Spatial Referencing and Positioning** **Spatial Referencing:** Reference surfaces for mapping, Coordinate Systems, Map Projections, Coordinate Transformations	03	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Projector, Laptop, PPTs.
	Satellite-based Positioning: Absolute positioning, Errors in absolute positioning, Relative positioning, Network positioning, code versus phase measurements, Positioning technology	03		
	Data Entry and Preparation **Spatial Data Input:** Direct spatial data capture, Indirect spatial data captiure, Obtaining spatial data elsewhere	02		
	Data Quality: Accuracy and Positioning, Positional accuracy, Attribute accuracy, Temporal accuracy, Lineage, Completeness, Logical consistency	02		
	Data Preparation: Data checks and repairs, Combining data from multiple sources	01		

	Point Data Transformation: Interpolating discrete data, Interpolating continuous data	01		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -04 **Principles of Geographic Information Systems**	**Spatial Data Analysis** **Classification of analytical GIS Capabilities** **Retrieval, classification and measurement:** Measurement, Spatial selection queries, Classification	03	Principles of Geographic Information Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Textbook, Blackboard, Chalk and Duster, Projector, Laptop, PPTs
	Overlay functions: Vector overlay operators,Raster overlay operators	01		
	Neighbourhood functions: Proximity computations, Computation of diffusion, Flow computation, Raster based surface analysis	03		
	Analysis: Network analysis, interpolation, terrain modelling	01		
	GIS and Application models: GPS, Open GIS Standards, GIS Applications and Advances	02		
	Error Propagation in spatial data processing: How Errors propagate, Quantifying error propagation	02		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12			
Unit No -05 **Principles of Geographic**	**Data Visualization** **GIS and Maps, The Visualization Process** **Visualization Strategies: Present or explore?**	04	Principles of Geographic Information	Textbook, Blackboard, Chalk and Duster,

Information Systems			Systems- An Introductory Text Book By Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation	Projector, Laptop, PPTs
	The cartographic toolbox: What kind of data do I have?, How can I map my data?	03		
	How to map?: How to map qualitative data, How to map quantitative data, How to map the terrain elevation, How to map time series	03		
	Map Cosmetics, Map Dissemination	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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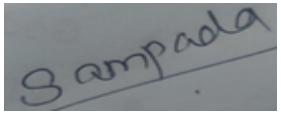

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc. SEMESTER: VI MONTH: Dec to March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: To provide security against users, software, devices, operating systems, networks, cloud and data.

The learners will be able to :

- To understand the concept of Information Security.
- To know how to use Security Methodology, Strategy and Tactics.
- To analyze Risk by identifying possible Threat, Types of Attacks.
- To learn about Secure Design Principles like the CIA Triad and Other Models, Defense Models.
- To know Intrusion Detection and Prevention Systems.
- To learn Voice over IP (VoIP) and PBX Security, TEM (Telecom Expense Management).
- To understand Operating System Security Models, International Standards for Operating System Security.
- To have information related to Virtual Machines and Cloud Computing.
- To study Secure Application Design in Web Application Security, Client Application Security, Remote Administration Security.
- To know how to implement Physical Security by Choosing Site Location for Security, Securing Assets - Locks and Entry Controls, Physical Intrusion Detection.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT602 Security in computing UNIT-I	**Information Security Overview**: The Importance of Information Protection, The Evolution of Information Security, Justifying Security Investment, Security Methodology, How to Build a Security Program, The Impossible Job, The Weakest Link, Strategy and Tactics, Business Processes vs. Technical Controls.	4	1. The Complete Reference: Information Security 2. Essential	Black Board, Projector, PPT.

	Risk Analysis: Threat Definition, Types of Attacks, Risk Analysis.	4	Cybersecurity Science 3. Principles of Computer Security: CompTIA Security+ and Beyond	Black Board, Projector, PPT.
	Secure Design Principles: The CIA Triad and Other Models, Defense Models, Zones of Trust, Best Practices for Network Defense.	4		Black Board, Projector, PPT.
USIT602 Security in computing UNIT-IV	**Intrusion Detection and Prevention Systems**: IDS Concepts, IDS Types and Detection Models, IDS Features, IDS Deployment Considerations, Security Information and Event Management (SIEM).	5	1. The Complete Reference: Information Security 2. Essential Cybersecurity Science 3. Principles of Computer Security: CompTIA Security+ and Beyond	Black Board, Projector, PPT.
	Voice over IP (VoIP) and PBX Security: Background, VoIP Components, VoIP Vulnerabilities and Countermeasures, PBX, TEM: Telecom Expense Management.	5		
	Operating System Security Models: Operating System Models, Classic Security Models, Reference Monitor, Trustworthy Computing, International Standards for Operating System Security.	2		
USIT602 Security in computing UNIT-V	**Virtual Machines and Cloud Computing**: Virtual Machines, Cloud Computing.	4	1. The Complete Reference: Information Security 2. Essential Cybersecurity Science	Black Board, Projector, PPT.
	Secure Application Design: Secure Development Lifecycle, Application Security Practices, Web Application Security, Client Application Security, Remote Administration Security.	4		

	Physical Security: Classification of Assets, Physical Vulnerability Assessment, Choosing Site Location for Security, Securing Assets : Locks and Entry Controls, Physical Intrusion Detection.	4	3. Principles of Computer Security: CompTIA Security+ and Beyond	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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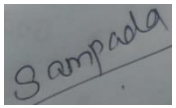

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sampada Deshmukh DEPARTMENT: Information Technology

CLASS: T. Y. B. Sc. I. T –A SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

Learn authentication and authorization

Understand security concept and different encryption techniques

Understand the concept of database security and storage security with its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -II	**Authentication and Authorization**: Authentication, Authorization	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	Black board and projector
	Encryption: A Brief History of Encryption, Symmetric-Key Cryptography, Public Key Cryptography, Public Key Infrastructure.	5		Black board and projector
	Storage Security: Storage Security Evolution, Modern Storage Security, Risk Remediation, Best Practices.	2		Black board and projector
	Database Security: General Database Security Concepts, Understanding Database Security Layers, Understanding Database-Level Security, Using Application Security, Database Backup and Recovery, Keeping Your Servers Up to Date, Database Auditing and Monitoring.	2		Black board and projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sampada Deshmukh DEPARTMENT: Information Technology

CLASS: T. Y. B. Sc. I. T –A SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the concept of SNA

Learn about firewall its types and applications

Understand and apply wireless network technology.

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -III	**Secure Network Design**: Introduction to Secure Network Design, Performance, Availability, Security.	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	Black board and projector
	Network Device Security: Switch and Router Basics, Network Hardening.	3		Black board and projector
	Firewalls: Overview, The Evolution of Firewalls, Core Firewall Functions, Additional Firewall Capabilities, Firewall Design.	3		Black board and projector
	Wireless Network Security: Radio Frequency Security Basics, Data-Link Layer Wireless Security Features, Flaws, and Threats, Wireless Vulnerabilities and Mitigations, Wireless Network Hardening Practices and Recommendations, Wireless Intrusion Detection and Prevention, Wireless Network Positioning and Secure Gateways.	3		Black board and projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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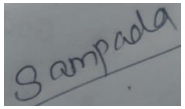

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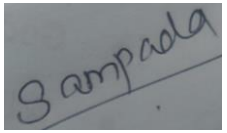

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHARVARI PATIL DEPARTMENT: IT CLASS: T.Y.I.T SEMESTER: VI

MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the definition of software Quality.
- Learn the fundamentals of Testing.
- Gain knowledge about different types of testing.
- Learn the various methods of verification and validation.
- Understand the importance of special tests.

Paper No.,Paper Title, Unit No.	**Sub Topics:**	**No. of Lectures**	**References**	**Teaching Method/ICT tools used**
USIT601 Software Quality Assurance	Introduction to Quality: Historical Perspective of Quality,What is Quality? (Is it a fact or perception?),Definitions of Quality,Core Components of Quality,Quality View, Financial Aspect of Quality, Customers, Suppliers and Processes, Total Quality Management (TQM) ,Quality Principles of Total Quality Management	6	Reference Book: Software Testing and Continuous	Chalk, Blackboard, ICT

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Unit 1	Quality Management Through Statistical Process Control,Quality Management Through Cultural Changes,Continual (Continuous) Improvement Cycle,Quality in Different Areas,Benchmarking and Metrics,Problem Solving Techniques,Problem Solving Software Tool Software Quality: Introduction, Constraints of Software ,Product Quality Assessment,Customer is a King,Quality and Productivity Relationship,Requirements of a Product ,Organisation Culture,Characteristics of Software, software Development Process,Types of Products, Schemes of Criticality Definitions, Problematic Areas of Software Development Life Cycle, Software Quality Management, Why Software Has Defects? Processes Related to Software Quality, Quality Management System Structure, Pillars of Quality Management System, Important Aspects of Quality Management	6	Quality Improvement William E. Lewis	
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT601	Fundamentals of testing: Introduction, Necessity of testing, What is	6		

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Software Quality Assurance Unit 2	testing? Fundamental test process, The psychology of testing, Historical Perspective of Testing, Definitions of Testing, Approaches to Testing, Testing During DevelopmentLife Cycle, Requirement Traceability Matrix, Essentials of Software Testing, Workbench, Important Features of Testing Process, Misconceptions About Testing, Principles of Software Testing, Salient Features of Good Testing, Test Policy, Test Strategy or Test Approach, Test Planning, Testing Process and Number of Defects Found in Testing, Test Team Efficiency, Mutation Testing, Challenges in Testing, Test Team Approach, Process Problems Faced by Testing, Cost Aspect of Testing, Establishing Testing Policy,Methods, Structured Approach to Testing, Categories of Defect, Defect, Error, or Mistake in Software, Developing Test Strategy, Developing Testing Methodologies (Test Plan), Testing Process, Attitude Towards Testing (Common People Issues), Test Methodologies/Approaches, People Challenges in Software Testing, Raising Management Awareness for Testing, Skills Required by Tester,Testing throughout the software life cycle, Software development models, Test levels, Test types, the targets of testing, Maintenance testing	3 3	Reference Book: Software Testing: Principles, Techniques and Tools M. G. Limaye	Chalk, Blackboard

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	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT601 Software Quality Assurance Unit 3	Unit Testing: Boundary Value Testing: Normal Boundary Value Testing, Robust Boundary Value Testing, Worst-Case Boundary ValueTesting, Special Value Testing, Examples, Random Testing, Guidelines for Boundary Value Testing, Equivalence Class Testing: Equivalence Classes, Traditional Equivalence Class Testing, Improved Equivalence Class Testing, Edge Testing, Guidelines and Observations Decision Table–Based Testing: Decision Tables, Decision Table Techniques, Cause And Effect Graphing, Guidelines and Observations, Path Testing: Program Graphs, DD Paths, Test Coverage Metrics, Basis Path Testing, Guidelines and Observations, Data Flow Testing: Define/Use Testing, Slice-Based Testing, Program Slicing Tools	3 3 2 2 2	Reference Book: Software Testing: A Craftsman's Approach Paul C. Jorgenson	Chalk, Blackboard, ICT

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	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT601 Software Quality Assurance Unit 4	Software Verification and Validation: Introduction, Verification, Verification Workbench, Methods of Verification, Types of reviews on the basis of Stage Phase, Entities involved in verification, Reviews in testing lifecycle, Coverage in Verification, Concerns of Verification, Validation, Validation Workbench, Levels of Validation, Coverage in Validation, Acceptance Testing, Management of Verification and Validation, Software development verification and validation activities. V-test Model: Introduction, V-model for software, Testing during Proposal stage, Testing during requirement stage, Testing during test planning phase, Testing during design phase, Testing during coding, VV Model, Critical Roles and Responsibilities.	6 6	Reference Book: Software Testing: Principles, Techniques and Tools M. G. Limaye, Foundations of Software Testing Dorothy Graham	Chalk, Blackboard
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		

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USIT601 Software Quality Assurance Unit 5	Levels of Testing: Introduction, Proposal Testing, Requirement Testing, Design Testing, Code Review, Unit Testing, Module Testing, Integration Testing, Big-Bang Testing, Sandwich Testing, Critical Path First, Sub System Testing, System Testing, Testing Stages. Special Tests: Introduction, GUI testing, Compatibility Testing, Security Testing, Performance Testing, Volume Testing, Stress Testing, Recovery Testing, Installation Testing, Requirement Testing, Regression Testing, Error Handling Testing, Manual Support Testing, Intersystem Testing, Control Testing, Smoke Testing, Adhoc Testing, Parallel Testing, Execution Testing, Operations Testing, Compliance Testing, Usability Testing,Decision Table Testing, Documentation Testing, Training testing, Rapid Testing, Control flow graph, Generating tests on the basis of Combinatorial Designs, State Graph, Risk Associated with New Technologies, Process maturity level of Technology, Testing Adequacy of Control in New technology usage, Object Oriented Application Testing, Testing of Internal Controls, COTS Testing, Client Server Testing, Web Application Testing, Mobile Application Testing, eBusiness eCommerce Testing, Agile Development Testing,Data Warehousing Testing.	2 10	Reference Book: Software Testing: Principles, Techniques and Tools M. G. Limaye	Chalk, Blackboard ICT

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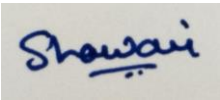
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		



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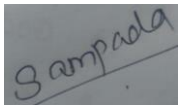

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.I.T**

CLASS: **TYIT B** SEMESTER: **VI** MONTH: **Dec-March** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVES:
The learners will be able to :

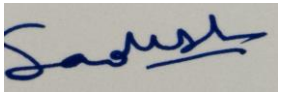
- Understand the role of Business Intelligence system and Decision support system in improvising the business.
- Understand different algorithms used in BI systems.
- Understand the use of AI and Knowledge management system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
III,1, Business Intelligence	Business intelligence: Effective and timely decisions, Data, information and knowledge, The role of mathematical models, Business intelligence architectures, Ethics and business intelligence	5	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Chalk and Duster
	Decision support systems: Definition of system, Representation of the decision-making process, Evolution of information systems, Definition of decision support system, Development of a decision support system	5	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Chalk and Duster

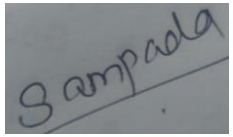
III,2, Business Intelligence	Mathematical models for decision making: Structure of mathematical models	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Chalk and Duster
	Development of a model, Classes of models Data mining: Definition of data mining,	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Chalk and Duster
	Representation of input data , Data mining process, Analysis methodologies Data preparation: Data validation, Data transformation, Data reduction	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Chalk and Duster
III,3, Business Intelligence	Classification: Classification problems, Evaluation of classification models, Bayesian methods, Logistic regression, Neural networks, Support vector machines	5	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Chalk and Duster
	Clustering: Clustering methods, Partition methods, Hierarchical methods, Evaluation of clustering models	5	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Chalk and Duster
	Business intelligence applications: Marketing models: Relational marketing, Sales force management	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First	Chalk and Duster

III,4, Business Intelligence	Logistic and production models: Supply chain optimization, Optimization models for logistics planning, Revenue management systems.	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	Chalk and Duster
	Data envelopment analysis: Efficiency measures, Efficient frontier, The CCR model, Identification of good operating practices	4	Business Intelligence: Data Mining and Optimization for Decision Making Carlo Vercellis Wiley First 2009	
III,5, Business Intelligence	Knowledge Management: Introduction to Knowledge Management, Organizational Learning and Transformation, Knowledge Management Activities, Approaches to Knowledge Management, Information Technology (IT) In Knowledge Management, Knowledge Management Systems Implementation, Roles of People in Knowledge Management	5	Decision support and Business Intelligence Systems Efraim Turban, Ramesh Sharda, Dursun Delen Pearson Ninth 2011	Chalk and Duster
	Artificial Intelligence and Expert Systems: Concepts and Definitions of Artificial Intelligence, Artificial Intelligence Versus Natural Intelligence, Basic Concepts of Expert Systems, Applications of Expert Systems, Structure of Expert Systems, Knowledge Engineering, Development of Expert Systems	5	Decision support and Business Intelligence Systems Efraim Turban, Ramesh Sharda, Dursun Delen Pearson Ninth 2011	Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 54



SIGNATURE OF THE STAFF



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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: TYIT SEMESTER: VI MONTH: DECE to MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

To develop the understanding of relationship between commerce and cyberspace

To enable learner to understand, explore, and acquire a critical understanding Cyber Law.

To give learners in depth knowledge of Information Technology Act and legal frame work of Right to Privacy, Data Security and Data Protection

To make learner conversant with the social and intellectual property issues emerging from 'Cyberspace

PAPER, UNIT,	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT

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TITLE		ALLOTED		TOOLS USED
Paper-07 Cyber Law Unit 3	**Battling Cyber Squatters and Copyright Protection in the Cyber World:** Concept of Domain Name and Reply to Cyber Squatters, Meta-Tagging, Legislative and Other Innovative Moves Against Cyber Squatting, The Battle Between Freedom and Control on the Internet, Works in Which Copyright Subsists and meaning of Copyright, Copyright Ownership and Assignment, License of Copyright, Copyright Terms and Respect for Foreign Works, Copyright Infringement, Remedies and Offences, Copyright Protection of Content on the Internet; Copyright Notice, Disclaimer and Acknowledgement, Downloading for Viewing Content on the Internet, Hyper-Linking and Framing, Liability of ISPs for Copyright Violation in the Cyber World: Legal Developments in the US, Napster and its Cousins: A Revolution on the Internet but a Crisis for Copyright Owners, Computer Software Piracy.	12	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
Paper-07 Cyber Law Unit 4	**E-Commerce Taxation:** Real Problems in the Virtual World: A Tug of War on the Concept of „Permanent Establishment", Finding the PE in Cross Border E-Commerce, The United Nations Model Tax Treaty, The Law of Double Taxation Avoidance Agreements and Taxable Jurisdiction Over Non-Residents, Under the Income Tax Act, 1961, Tax Agents of Non-Residents under the Income Tax Act,1961 and the Relevance to E-Commerce, Source versus Residence and Classification between Business Income and Royalty, The Impact of the Internet on Customer Duties, Taxation Policies in India: At a Glance.	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
	Digital Signature, Certifying Authorities and E-Governance: Digital Signatures, Digital Signature Certificate, Certifying Authorities and Liability in the Event of Digital Signature	6	Cyber Law Simplified Vivek Sood	Projector, Laptop, Black board & Chalk

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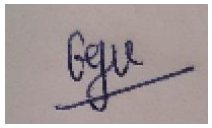
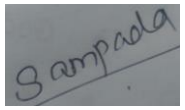
	Compromise, E-Governance in India: A Warning to Babudom!		TMH Education	
Paper-07 Cyber Law Unit 5	**The Indian Evidence Act of 1872 v. Information Technology Act, 2000:** Status of Electronic Records as Evidence, Proof and Management of Electronic Records; Relevancy, Admissibility and Probative Value of E-Evidence, Proving Digital Signatures, Proof of Electronic Agreements, Proving Electronic Messages, Other Amendments in the Indian Evidence Act by the IT Act, Amendments to the Bankers Books Evidence Act, 1891 and Reserve Bank of India Act, 1934.	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk
	Protection of Cyber Consumers in India: Are Cyber Consumers Covered Under the Consumer Protection Act? Goods and Services, Consumer Complaint, Defect in Goods and Deficiency in Services, Restrictive and Unfair Trade Practices, Instances of Unfair Trade Practices, Reliefs Under CPA, Beware Consumers, Consumer Foras, Jurisdiction and Implications on cyber Consumers in India, Applicability of CPA to Manufacturers, Distributors, Retailers and Service Providers Based in Foreign Lands Whose Goods are Sold or Services Provided to a Consumer in India. Amendments in Indian IT Act 2000	6	Cyber Law Simplified Vivek Sood TMH Education	Projector, Laptop, Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:T.Y.BSC(I.T)-B SEMESTER: **VI** MONTH:DECEMBER-MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : To create more awareness about **cyber** legal issues and challenges.

To provide advice, inputs as also guidance to students on their day-to-day legal issues concerning the use of cyberspace.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cyber Laws Elective I USIT607 Unit-1	**Power of Arrest Without Warrant Under the IT Act, 2000:** A Critique, Crimes of this Millennium, Section 80 of the IT Act, 2000 – A Weapon or a Farce?	1	Cyber Law Simplified - Vivek Sood	Powerpoint Presentation, Blackboard,projector
	Forgetting the Line Between Cognizable and Non-Cognizable Offences.	2		
	Necessity of Arrest without Warrant from Any Place, Public or Otherwise.	2		
	Check and Balances Against Arbitrary Arrests,Arrest for "About to Commit" an Offence Under the IT Act: A Tribute to Draco, Arrest, But NO Punishment!	2		
	Cyber Crime and Criminal Justice: Penalties, Adjudication and Appeals Under the IT Act,2000: Concept of "Cyber Crime " and the IT Act , 2000, Hacking.	2		

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	Teenage Web Vandals, Cyber Fraud and Cyber Cheating, Virus on the Internet,Defamation, Harassment and Email Abuse, Cyber Pornography, Other IT Act Offences	2		
	. Monetary Penalties, Adjudication and Appeals Under IT Act , 2000, Network Service Providers, Jurisdiction and Cyber Crime.	2		
	Nature of Cyber Criminality, Strategies to Tackle Cyber Crime and Trends, Criminal Justice in India and Implications on Cyber Crime.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		
Cyber Laws Elective I USIT607 Unit-2	**Contracts in the Infotech World:** Contracts in the Infotech World, Click-Wrap and Shrink-Wrap Contract: Status under the Indian Contract Act, 1872.	2	Cyber Law Simplified - Vivek Sood	Powerpoint Presentation, Blackboard,projector
	Contract Formation Under the Indian Contract Act, 1872, Contract Formation on the Internet.	2		
	Terms and Conditions of Contracts.	1		
	Jurisdiction in the Cyber World: Questioning the Jurisdiction and Validity of the Present Law of Jurisdiction,Civil Law of Jurisdiction in India.	2		
	Cause of Action, Jurisdiction and the Information Technology Act,2000.	2		
	Foreign Judgements in India, Place of Cause of Action in Contractual and IPR Disputes.	2		

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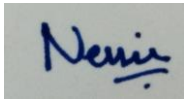
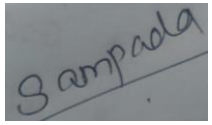
	Exclusion Clauses in Contracts, Abuse of Exclusion Clauses, Objection of Lack of Jurisdiction, Misuse of the Law of Jurisdiction.	2		
	Legal Principles on Jurisdiction in the United State of America, Jurisdiction Disputes w.r.t. the Internet in the United State of America.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: T.Y. BSc (IT) DIV-B SEMESTER:SEM -6 MONTH: DEC-MAR ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

- **GIS** helps visualizing important data about educational facilities and general statistics on local and national levels
- To display spatial data and to solve problems that involve spatial factors.
- To useful for relating, integrating, and analyzing information from these different themes (or layers) of spatial information.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604 Principles of Geographic Information Systems UNIT 1	A Gentle Introduction to GIS The nature of GIS: Some fundamental observations, Defining GIS, GIS Systems, GIS Science and GIS Applications, Spatial data and Geoinformation.	3	1. Principles of Geographic Information Systems An Introductory Text Book Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation Fourth edition 2009	Black board and chalk , Projector
	The real world and representations of it: Models and modelling, Maps, Databases, Spatial databases and spatial analysis	3		
	Geographic Information and Spatial Database Models and Representations of the real world Geographic Phenomena: Defining geographic phenomena, types of geographic phenomena, Geographic fields, Geographic objects, Boundaries Computer Representations of Geographic Information: Regular tessellations, irregular	6		

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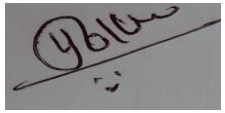
	tessellations, Vector representations, Topology and Spatial relationships, Scale and Resolution, Representation of Geographic fields, Representation of Geographic objects Organizing and Managing Spatial Data The Temporal Dimension			
USIT604 Principles of Geographic Information Systems UNIT 2	Data Management and Processing Systems Hardware and Software Trends Geographic Information Systems: GIS Software, GIS Architecture and functionality, Spatial Data Infrastructure (SDI).	3	Principles of Geographic Information Systems An Introductory Text Book Editors: Otto Huisman and Rolf A. The International Institute of Geoinformation Science and Earth Observation Fourth edition 2009	Black board and chalk,projector
	Stages of Spatial Data handling: Spatial data handling and preparation, Spatial Data Storage and maintenance, Spatial Query and Analysis, Spatial Data Presentation.	3		
	Database management Systems: Reasons for using a DBMS, Alternatives for data management, The relational data model, Querying the relational database.	3		
	GIS and Spatial Databases: Linking GIS and DBMS, Spatial database functionality.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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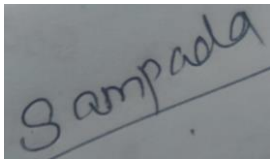

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Sandesh Akre DEPARTMENT: Information Technology CLASS:TYIT

SEMESTER: VI MONTH: December 2019 ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Acquaint Geographic Information System (GIS)
- Apply GIS logic to generate graphs
- Generate Spatial queries
- Research on Geospatial Information

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT6P4 Principles of Geographic Information Systems Unit 3	Spatial Referencing and Positioning Spatial Referencing: Reference surfaces for mapping, Coordinate Systems, Map Projections, Coordinate Transformations Satellite-based Positioning: Absolute positioning, Errors in absolute positioning, Relative positioning, Network positioning, code versus phase measurements, Positioning technology Data Entry and Preparation Spatial Data Input: Direct spatial data capture, Indirect spatial data captiure, Obtaining spatial data elsewhere Data Quality: Accuracy and Positioning, Positional accuracy, Attribute	12	Introduction to Geographic Information Systems (Karl), Chang Kang-tsung	Chalk and Board

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	accuracy, Temporal accuracy, Lineage, Completeness, Logical consistency Data Preparation: Data checks and repairs, Combining data from multiple sources Point Data Transformation: Interpolating discrete data, Interpolating continuous data			
Unit 4	Spatial Data Analysis Classification of analytical GIS Capabilities Retrieval, classification and measurement: Measurement, Spatial selection queries, Classification Overlay functions: Vector overlay operators, Raster overlay operators Neighbourhood functions: Proximity computations, Computation of diffusion, Flow computation, Raster based surface analysis Analysis: Network analysis, interpolation, terrain modelling GIS and Application models: GPS, Open GIS Standards, GIS Applications and Advances Error Propagation in spatial data processing: How Errors propagate, Quantifying error propagation	8	Introduction to Geographic Information Systems (Karl), Chang Kang-tsung	Chalk and Board
Unit 5	Data Visualization GIS and Maps, The Visualization Process Visualization Strategies: Present or explore? The cartographic toolbox: What kind of data do I have?, How can I map my data?	8	Introduction to Geographic Information Systems (Karl), Chang Kang-tsung	Chalk and Board

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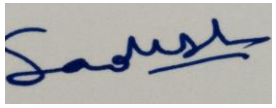
	How to map?: How to map qualitative data, How to map quantitative data, How to map the terrain elevation, How to map time series Map Cosmetics, Map Dissemination			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28



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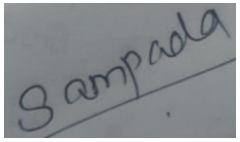

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -I	**Information Security Overview** : The Importance of Information Protection, The Evolution of Information Security, Justifying Security Investment, Security Methodology, How to Build a Security Program, The Impossible Job, The Weakest Link, Strategy and Tactics, Business Processes vs. Technical Controls.	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	Powerpoint presentation through projector
	Risk Analysis: Threat Definition, Types of Attacks, Risk Analysis.	4		Powerpoint presentation through projector
	Secure Design Principles: The CIA Triad and Other Models, Defense Models, Zones of Trust, Best Practices for Network Defense.	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -II	**Authentication and Authorization**: Authentication, Authorization	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	Powerpoint presentation through projector
	Encryption: A Brief History of Encryption, Symmetric-Key Cryptography, Public Key Cryptography, Public Key Infrastructure.	5		Blackboard
	Storage Security: Storage Security Evolution, Modern Storage Security, Risk Remediation, Best Practices.	2		Powerpoint presentation through projector
	Database Security: General Database Security Concepts, Understanding Database Security Layers, Understanding Database-Level Security, Using Application Security, Database Backup and Recovery, Keeping Your Servers Up to Date, Database Auditing and Monitoring.	2		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -III	**Secure Network Design**: Introduction to Secure Network Design, Performance, Availability, Security.	3	The Complete Reference: Information Security by Mark Rhodes-Ousley	Powerpoint presentation through projector
	Network Device Security: Switch and Router Basics, Network Hardening.	3		Powerpoint presentation through projector
	Firewalls: Overview, The Evolution of Firewalls, Core Firewall Functions, Additional Firewall Capabilities, Firewall Design.	3		Powerpoint presentation through projector
	Wireless Network Security: Radio Frequency Security Basics, Data-Link Layer Wireless Security Features, Flaws, and Threats, Wireless Vulnerabilities and Mitigations, Wireless Network Hardening Practices and Recommendations, Wireless Intrusion Detection and Prevention, Wireless Network Positioning and Secure Gateways.	3		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -IV	**Intrusion Detection and Prevention Systems**: IDS Concepts, IDS Types and Detection Models, IDS Features, IDS Deployment Considerations, Security Information and Event Management (SIEM).	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	Powerpoint presentation through projector
	Voice over IP (VoIP) and PBX Security: Background, VoIP Components, VoIP Vulnerabilities and Countermeasures, PBX, TEM: Telecom Expense Management.	4		Powerpoint presentation through projector
	Operating System Security Models: Operating System Models, Classic Security Models, Reference Monitor, Trustworthy Computing, International Standards for Operating System Security.	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: VI MONTH: December-March ACADEMIC YEAR: 2018-2019

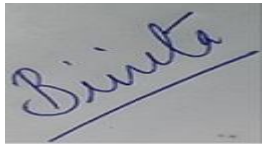
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various concepts of Security

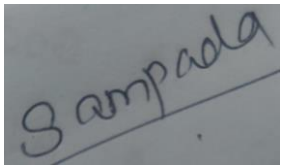
b. Work with domains of security

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Security in Computing Unit -V	**Virtual Machines and Cloud Computing**: Virtual Machines, Cloud Computing.	4	The Complete Reference: Information Security by Mark Rhodes-Ousley	Powerpoint presentation through projector
	Secure Application Design: Secure Development Lifecycle, Application Security Practices, Web Application Security, Client Application Security, Remote Administration Security.	4		Powerpoint presentation through projector
	Physical Security: Classification of Assets, Physical Vulnerability Assessment, Choosing Site Location for Security, Securing Assets: Locks and Entry Controls, Physical Intrusion Detection.	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



SIGNATURE OF THE STAFF



SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **TYBSCIT** SEMESTER:**VI**

MONTH: **DEC-MARCH** ACADEMIC YEAR:**2018-19**

LEARNING OBJECTIVE/S:

The learners will be able to :

Understanding the customers priority for **quality assurance** while developing ...
that **will** be created by the organization, The scope of **Software** Testing applies to ... improvements of the processes through **learning** & innovation
Understand Manual and automated testing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT601 Software Quality Assurance UNIT-1	**Introduction to Quality:** Historical Perspective of Quality, What isQuality? (Is it a fact or perception?), Definitions of Quality, Core Components of Quality, Quality View, Financial Aspect of Quality, Customers, Suppliers and Processes, Total Quality Management (TQM), Quality Principles of Total Quality Management, Quality Management Through Statistical Process Control, Quality Management Through Cultural Changes, Continual (Continuous) Improvement Cycle, Quality in Different Areas, Benchmarking and Metrics, Problem Solving Techniques, Problem Solving Software Tools.	07	Software Testing: Principles, Techniques and Tools M. G. Limaye	Black board and chalk, power point
	Software Quality: Introduction, Constraints of Software Product Quality Assessment, Customer is a King, Quality and Productivity Relationship, Requirements of a Product, Organisation Culture, Characteristics of Software, Software Development Process, Types of Products, Schemes of Criticality Definitions, Problematic Areas of Software Development Life	05	Software Testing: Principles, Techniques and Tools M. G. Limaye	Black board and chalk, power point

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	Cycle, Software Quality Management, Why Software Has Defects?Processes Related to Software Quality, Quality Management System Structure, Pillars of Quality Management System, Important Aspects of Quality Management..			
USIT601 Software Quality Assurance UNIT-2	**Fundamentals of testing:** Introduction, Necessity of testing, What is testing? Fundamental test process, The psychology of testing,Historical Perspective of Testing, Definitions of Testing, Approaches to Testing, Testing During Development Life Cycle, Requirement Traceability Matrix, Essentials of Software Testing, Workbench,Important Features of Testing Process, Misconceptions About Testing,Principles of Software Testing, Salient Features of Good Testing, Test Policy, Test Strategy or Test Approach, Test Planning, Testing Process and Number of Defects Found in Testing, Test Team Efficiency, Mutation Testing, Challenges in Testing, Test Team Approach, Process Problems Faced by Testing, Cost Aspect of Testing, Establishing Testing Policy, Methods	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	Black board and chalk, power point
	Structured Approach to Testing, Categories of Defect, Defect, Error, or Mistake in Software, Developing Test Strategy, Developing Testing Methodologies (Test Plan), Testing Process, Attitude Towards Testing (Common People Issues), Test Methodologies/Approaches, People Challenges in Software Testing, Raising Management Awareness for Testing, Skills Required by Tester, Testing throughout the software life cycle, Software development models, Test levels, Test types, the targets of testing, Maintenance testing	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	Black board and chalk, power point
USIT601	**Unit Testing: Boundary Value Testing:** Normal Boundary ValueTesting, Robust Boundary Value Testing, Worst-Case Boundary ValueTesting, Special Value Testing, Examples,	05	Software Testing:	Black board and chalk, power point

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Software Quality Assurance UNIT-3	Random Testing, Guidelines for Boundary Value Testing, **Equivalence Class Testing:** Equivalence Classes, Traditional Equivalence Class Testing, Improved Equivalence Class Testing, Edge Testing, Guidelines and Observations.		Principles, Techniques and Tools M. G. Limaye	
	Decision Table–Based Testing: Decision Tables, Decision Table Techniques, Cause-and-Effect Graphing, Guidelines and Observations, **Path Testing:** Program Graphs, DD-Paths, Test Coverage Metrics, Basis Path Testing, Guidelines and Observations,**Data Flow Testing:** Define/Use Testing, Slice-Based Testing,Program Slicing Tools.	07	Software Testing: Principles, Techniques and Tools M. G. Limaye	Black board and chalk, power point
USIT601 Software Quality Assurance UNIT-4	**Software Verification and Validation:**Introduction, Verification, Verification Workbench, Methods of Verification, Types of reviews on the basis od Stage Phase, Entities involved in verification, Reviews in testing lifecycle, Coverage in Verification, Concerns of Verification, Validation, Validation Workbench, Levels of Validation,Coverage in Validation, Acceptance Testing, Management of Verification and Validation, Software development verification and validation activities	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	Black board and chalk, power point
	V-test Model: Introduction, V-model for software, Testing during Proposal stage, Testing during requirement stage, Testing during test planning phase, Testing during design phase, Testing during coding,VV Model, Critical Roles and Responsibilities.	06	Software Testing: Principles, Techniques and Tools M. G. Limaye	Black board and chalk, power point
USIT601 Software Quality Assurance	**Levels of Testing:** Introduction, Proposal Testing, Requirement Testing, Design Testing, Code Review, Unit Testing, Module Testing, Integration Testing, Big-Bang Testing, Sandwich	04	Software Testing: Principles, Techniques	Black board and chalk, power point

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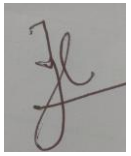
UNIT-5	Testing, Critical Path First, Sub System Testing, System Testing, Testing Stages.		and Tools M. G. Limaye	
	Special Tests: Introduction, GUI testing, Compatibility Testing, Security Testing, Performance Testing, Volume Testing, Stress Testing, Recovery Testing, Installation Testing, Requirement Testing,Regression Testing, Error Handling Testing, Manual Support Testing,Intersystem Testing, Control Testing, Smoke Testing, Adhoc Testing,Parallel Testing, Execution Testing, Operations Testing, Compliance Testing, Usability Testing, Decision Table Testing, Documentation Testing, Training testing, Rapid Testing, Control flow graph, Generating tests on the basis of Combinatorial Designs, State Graph,Risk Associated with New Technologies, Process maturity level of Technology, Testing Adequacy of Control in New technology usage,Object Oriented Application Testing, Testing of Internal Controls COTS Testing, Client Server Testing, Web Application Testing,Mobile Application Testing, eBusiness eCommerce Testing, Agile Development Testing, Data Warehousing Testing.	08	Software Testing: Principles, Techniques and Tools M. G. Limaye	Black board and chalk, power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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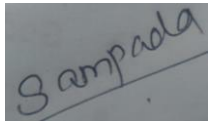

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: TYIT

SEMESTER: VI MONTH: DEC-MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the use of business intelligence in real life.
- Describe the different mathematical models to develop decision making systems.
- Get the difference between supervised learning and unsupervised learning techniques.
- Understand the use of mathematical models in relational marketing, support chain optimization, CCR model.
- Familiar with knowledge management and Artificial intelligence and expert systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT603, Business Intelligence Unit I	**Business intelligence:** Effective and timely decisions, Data, information and knowledge, The role of mathematical models, Business intelligence architectures, Ethics and business intelligence	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, Powerpoint
	Decision support systems: Definition of system, Representation of the decision-making process, Evolution of information systems, Definition of decision support system, Development of a decision support system	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint

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USIT603, Business Intelligence Unit II	**Mathematical models for decision making:** Structure of mathematical models, Development of a model, Classes of models	05	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Data mining: Definition of data mining, Representation of input data , Data mining process, Analysis methodologies	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Data preparation: Data validation, Data transformation, Data reduction	03	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
USIT603, Business Intelligence Unit III	**Classification**: Classification problems, Evaluation of classification models, Bayesian methods, Logistic regression, Neural networks, Support vector machines	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Clustering: Clustering methods, Partition methods, Hierarchical methods, Evaluation of clustering models	06	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
USIT603, Business Intelligence Unit IV	**Marketing models**: Relational marketing, Sales force management,	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Logistic and production models: Supply chain optimization, Optimization models for logistics planning, Revenue management systems.	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint
	Data envelopment analysis: Efficiency measures, Efficient frontier, The CCR model, Identification of good operating practices	04	Business Intelligence: Data Mining and Optimization for Decision Making by Carlo Vercellis, Wiley, First, 2009	Black Board and chalk, PowerPoint

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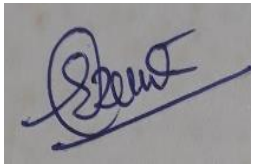
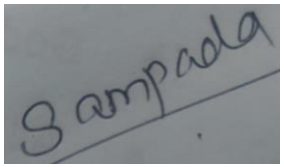
USIT603, Business Intelligence Unit V	**Knowledge Management:** Introduction to Knowledge Management, Organizational Learning and Transformation, Knowledge Management Activities, Approaches to Knowledge Management, Information Technology (IT) In Knowledge Management, Knowledge Management Systems Implementation, Roles of People in Knowledge Management	06	Decision support and Business Intelligence Systems by Efraim Turban, Ramesh Sharda, Dursun Delen , Pearson,Ninth,2011	Black Board and chalk, PowerPoint
	Artificial Intelligence and Expert Systems: Concepts and Definitions of Artificial Intelligence, Artificial Intelligence Versus Natural Intelligence, Basic Concepts of Expert Systems, Applications of Expert Systems, Structure of Expert Systems, Knowledge Engineering, Development of Expert Systems	06	Decision support and Business Intelligence Systems by Efraim Turban, Ramesh Sharda, Dursun Delen , Pearson,Ninth,2011	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Sandesh Akre DEPARTMENT: Information technology CLASS: TYIT

SEMESTER: V MONTH: July ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand Legal aspects of Information technology
- Conceptual arrangements of Laws and amendments
- Pass on the legal information about how one should use technology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT607, Cyber Laws Unit 1	Power of Arrest Without Warrant Under the IT Act, 2000: A Critique, Crimes of this Millennium, Section 80 of the IT Act, 2000 – A Weapon or a Farce? Forgetting the Line Between Cognizable and Non-Cognizable Offences, Necessity of Arrest without Warrant from Any Place, Public or Otherwise, Check and Balances Against Arbitrary Arrests, Arrest for "About to Commit" an Offence Under the IT Act: A Tribute to Draco, Arrest, But NO Punishment! Cyber Crime and Criminal Justice: Penalties, Adjudication and Appeals Under the IT Act, 2000: Concept of "Cyber	12	Cyber Law Simplified – Vivek Sood	Chalk & Board

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	Crime " and the IT Act , 2000, Hacking, Teenage Web Vandals, Cyber Cheating, Virus on the Internet, Defamation, Harassment and E-mail Abuse, Cyber Pornography, Other IT Act Offences, Monetary Penalties, Adjudication and Appeals Under IT Act , 2000, Network Service Providers, Jurisdiction and Cyber Crime, Nature of Cyber Criminality, Strategies to Tackle Cyber Crime and Trends, Criminal Justice in India and Implications on Cyber Crime.			
Unit 2 Unit 3	Contracts in the Infotech World: Contracts in the Infotech World, Click-Wrap and Shrink-Wrap Contract: Status under the Indian Contract Act, 1872, Contract Formation Under the Indian Contract Act, 1872, Contract Formation on the Internet, Terms and Conditions of Contracts. Jurisdiction in the Cyber World: Questioning the Jurisdiction and Validity of the Present Law of Jurisdiction, Civil Law of Jurisdiction in India, Cause of Action, Jurisdiction and the Information Technology Act,2000, Foreign Judgements in India, Place of Cause of Action in Contractual and IPR Disputes, Exclusion Clauses in Contracts, Abuse of Exclusion Clauses, Objection of Lack of Jurisdiction, Misuse of the Law of Jurisdiction, Legal Principles on Jurisdiction in the United State of America, Jurisdiction Disputes w.r.t. the Internet in the United State of America.	12	Cyber Law Simplified – Vivek Sood	Chalk & Board

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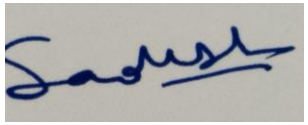
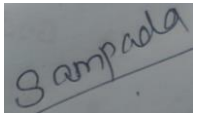
Unit 4	Battling Cyber Squatters and Copyright Protection in the Cyber World: Concept of Domain Name and Reply to Cyber Squatters, Meta- Tagging, Legislative and Other Innovative Moves Against Cyber Squatting, The Battle Between Freedom and Control on the Internet, Works in Which Copyright Subsists and meaning of Copyright, Copyright Ownership and Assignment, License of Copyright, Copyright Terms and Respect for Foreign works, Copyright Infringement, Remedies and Offences, Copyright Protection of Content on the Internet; Copyright Notice, Disclaimer and Acknowledgement, Downloading for Viewing Content on the Internet, Hyper-Linking and Framing, Liability of ISPs for Copyright Violation in the Cyber World: Legal Developments in the US, Napster and its Cousins: A Revolution on the Internet but a Crisis for Copyright Owners, Computer Software Piracy.	12	Cyber Law Simplified – Vivek Sood	Chalk & Board
	E-Commerce Taxation: Real Problems in the Virtual World: A Tug of War on the Concept of 'Permanent Establishment', Finding the PE in Cross Border E-Commerce, The United Nations Model Tax Treaty, The Law of Double Taxation Avoidance Agreements and Taxable Jurisdiction Over Non-Residents, Under the Income Tax Act, 1961, Tax Agents of Non-Residents under the Income Tax Act,1961 and the Relevance to E-Commerce, Source versus Residence and Classification between Business Income and Royalty, The Impact of the	12	Cyber Law Simplified – Vivek Sood	Chalk & Board

Unit 5	Internet on Customer Duties, Taxation Policies in India: At a Glance. Digital Signature, Certifying Authorities and E-Governance: Digital Signatures, Digital Signature Certificate, Certifying Authorities and Liability in the Event of Digital Signature Compromise, E- Governance in India: A Warning to Babudom!			
	The Indian Evidence Act of 1872 v. Information Technology Act, 2000: Status of Electronic Records as Evidence, Proof and Management of Electronic Records; Relevancy, Admissibility and Probative Value of E-Evidence, Proving Digital Signatures, Proof of Electronic Agreements, Proving Electronic Messages, Other Amendments in the Indian Evidence Act by the IT Act, Amendments to the Bankers Books Evidence Act, 1891 and Reserve Bank of India Act, 1934. Protection of Cyber Consumers in India: Are Cyber Consumers 12 Covered Under the Consumer Protection Act? Goods and Services, Consumer Complaint, Defect in Goods and Deficiency in Services, Restrictive and Unfair Trade Practices, Instances of Unfair Trade Practices, Reliefs Under CPA, Beware Consumers, Consumer Foras, Jurisdiction and Implications on cyber Consumers in India, Applicability of CPA to Manufacturers, Distributors, Retailers and Service Providers Based in Foreign Lands Whose Goods are Sold or Services Provided to a Consumer in India. Amendments in Indian IT Act 2000	12	Cyber Law Simplified – Vivek Sood	Chalk & Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Miss Shilpa James Rodrigues **DEPARTMENT**: IT

CLASS: T.Y.I.T.-C (Principles of Geographic Information Systems) **SEMESTER**:VI

MONTH:December - March **ACADEMIC YEAR**: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the basics of geographic information system.
- Learn GIS Models.
- Understand different types of GIS Data.
- Analyze data, explore issues, problem solve, and evaluate situations in a geographic and spatial context.
- Explore mapped data
- Relate GIS with remote sensing technologies
- Analyze spatial data, using GIS analysis tools
- Develop and manage geodatabases
- Create maps ans images to communicate spatial data in a meaningful way to others.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

USIT604, Unit 1, Principles of Geographic Information Systems.	**A Gentle Introduction to GIS** **The nature of GIS:** Some fundamental observations, Defining GIS, GISystems, GIScience and GIApplications, Spatial data and Geoinformation. **The real world and representations of it:** Models and modelling, Maps, Databases, Spatial databases and spatial analysis.	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.
	Models and Representations of the real world Geographic Phenomena: Defining geographic phenomena, types of geographic phenomena, Geographic fields, Geographic objects, Boundaries	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.
	Computer Representations of Geographic Information: Regular tessellations, irregular tessellations, Vector representations, Topology and Spatial relationships, Scale and Resolution, Representation of Geographic fields, Representation of Geographic objects , Organizing and Managing Spatial Data ,The Temporal Dimension	06	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 2, Principles of Geographic Information Systems.	**Data Management and Processing Systems** **Hardware and Software Trends** **Geographic Information Systems:** GIS Software, GIS Architecture and functionality, Spatial Data Infrastructure (SDI)	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.
	Stages of Spatial Data handling: Spatial data handling and Preparation, Spatial Data Storage and maintenance, Spatial Query and Analysis, Spatial Data Presentation.	05	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.
	Database management Systems: Reasons for using a DBMS, Alternatives for data management, The relational data model, Querying the relational database. **GIS and Spatial Databases:** Linking GIS and DBMS, Spatial database functionality.	04	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 3, Principles of Geographic Information Systems.	**Spatial Referencing and Positioning** **Spatial Referencing:** Reference surfaces for mapping, Coordinate Systems, Map Projections, Coordinate Transformations .	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power point.
	Satellite-based Positioning: Absolute positioning, Errors in absolute positioning, Relative positioning, Network positioning, code versus phase measurements, Positioning technology	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power point.
	Data Entry and Preparation **Spatial Data Input:** Direct spatial data capture, Indirect spatial data captiure, Obtaining spatial data elsewhere **Data Quality:** Accuracy and Positioning, Positional accuracy, Attribute accuracy, Temporal accuracy, Lineage, Completeness, Logical consistency	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power point.

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	Data Preparation: Data checks and repairs, Combining data from multiple sources ,**Point Data Transformation:** Interpolating discrete data, Interpolating continuous data.	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power point.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 4, Principles of Geographic Information Systems.	. **Spatial Data Analysis** **Classification of analytical GIS Capabilities** **Retrieval, classification and measurement:** Measurement, Spatial selection queries, Classification	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.
	Overlay functions: Vector overlay operators,Raster overlay operators **Neighbourhood functions:** Proximity computations, Computation of diffusion, Flow computation, Raster based surface analysis **Analysis:** Network analysis, interpolation, terrain modeling	06	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.

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	GIS and Application models:GPS, Open GIS Standards, GIS Applications and Advances **Error Propagation in spatial data processing:** How Errors propagate, Quantifying error propagation.	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT604, Unit 5, Principles of Geographic Information Systems.	**Data Visualization** **GIS and Maps, The Visualization Process** **Visualization Strategies: Present or explore?**	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point.
	The cartographic toolbox: What kind of data do I have?, How can I map my data? **How to map?:** How to map qualitative data, How to map quantitative data, How to map the terrain elevation, How to map time series	06	Principles of Geographic Information Systems An Introductory Text Book	Black Board, chalk and Power Point,YouTube video.

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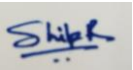
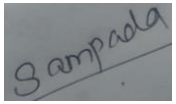
			- Otto Huisman and Rolf A.	
	Map Cosmetics, Map Dissemination	03	Principles of Geographic Information Systems An Introductory Text Book - Otto Huisman and Rolf A.	Black Board, chalk and Power Point,YouTube video.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: INFORMATION TECHNOLOGY CLASS: TYIT-C

SEMESTER: VI MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the concepts of information security, Risk Analysis.
- Understand various security areas such as storage, database, Physical, application, operating system.
- Be familiar about the basic designing of secure network.
- Detect intrusion and how to prevent it, introduction to virtual machines and cloud computing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT602, Unit 1, Security in Computing	Information Security Overview: The Importance of Information Protection, The Evolution of Information Security, Justifying Security Investment, Security Methodology, How to Build a Security Program, The Impossible Job, The Weakest Link, Strategy and Tactics, Business Processes vs. Technical Controls.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Risk Analysis: Threat Definition, Types of Attacks, Risk Analysis	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, powerpoint
	Secure Design Principles: The CIA Triad and Other Models, Defense Models, Zones of Trust, Best Practices for Network Defense.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint t

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USIT602, Unit 2, Security in Computing	Authentication and Authorization: Authentication, Authorization	03	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Encryption: A Brief History of Encryption, Symmetric-Key Cryptography, Public Key Cryptography, Public Key Infrastructure.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Storage Security: Storage Security Evolution, Modern Storage Security, Risk Remediation, Best Practices.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Database Security: General Database Security Concepts, Understanding Database Security Layers, Understanding DatabaseLevel Security, Using Application Security, Database Backup and Recovery, Keeping Your Servers Up to Date, Database Auditing and Monitoring.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
USIT602, Unit 3, Security in Computing	Secure Network Design: Introduction to Secure Network Design, Performance, Availability, Security.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Network Device Security: Switch and Router Basics, Network Hardening.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint

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	Firewalls: Overview, The Evolution of Firewalls, Core Firewall 12 38 Functions, Additional Firewall Capabilities, Firewall Design.	03	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Wireless Network Security: Radio Frequency Security Basics, DataLink Layer Wireless Security Features, Flaws, and Threats, Wireless Vulnerabilities and Mitigations, Wireless Network Hardening Practices and Recommendations, Wireless Intrusion Detection and Prevention, Wireless Network Positioning and Secure Gateways	03	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
USIT602, Unit 4, Security in Computing	Intrusion Detection and Prevention Systems: IDS Concepts, IDS Types and Detection Models, IDS Features, IDS Deployment Considerations, Security Information and Event Management (SIEM).	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Voice over IP (VoIP) and PBX Security: Background, VoIP Components,VoIP Vulnerabilities and Countermeasures, PBX, TEM: Telecom Expense Management	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Operating System Security Models: Operating System Models, Classic Security Models, Reference Monitor, Trustworthy Computing, International Standards for Operating System Security.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
USIT602, Unit 5, Security in Computing	Virtual Machines and Cloud Computing: Virtual Machines, Cloud Computing.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint

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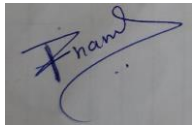
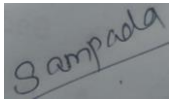
	Secure Application Design: Secure Development Lifecycle, Application Security Practices, Web Application Security, Client Application Security, Remote Administration Security	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint
	Physical Security: Classification of Assets, Physical Vulnerability Assessment, Choosing Site Location for Security, Securing Assets: Locks and Entry Controls, Physical Intrusion Detection.	04	The Complete Reference: Information Security by Mark Rhodes Ousley	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ARPITA BANERJEE DEPARTMENT: IT-CS

CLASS: TYIT-DIV C SEMESTER: VI MONTH: DEC-MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

- The learners will be able to: know fundamentals of Testing, the idea of Test Policy, Test Strategy & Test Planning. Also they will learn different methods of Unit Testing, Verification, Validation, Acceptance Testing, how to use various Special Tests and understand different Risk Associated with New Technologies and how to overcome. Eventually learners will be able to use the knowledge in their future project.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT601 Software Quality Assurance II	**Fundamentals of testing:** Introduction, Necessity of testing, What is testing? Fundamental test process, The psychology of testing, Historical Perspective of Testing, Definitions of Testing, Approaches to Testing, Testing During Development Life Cycle, Requirement Traceability Matrix, Essentials of Software Testing, Workbench, Important Features of Testing Process, Misconceptions About Testing.	3	Software Testing: Principles, Techniques and Tools By M. G. Limaye	Blackboard & chalk
	Principles of Software Testing, Salient Features of Good Testing, Test Policy, Test Strategy or Test Approach, Test Planning, Testing Process and Number of Defects Found in Testing, Test Team Efficiency, Mutation Testing, Challenges in Testing, Test Team Approach, Process Problems Faced by Testing, Cost Aspect of Testing, Establishing Testing Policy, Methods, Structured Approach to Testing,	3		
	Categories of Defect, Defect, Error, or Mistake in Software, Developing Test Strategy, Developing Testing Methodologies	3		

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	(Test Plan), Testing Process, Attitude Towards Testing(Common People Issues), Test Methodologies/ Approaches.			
	People Challenges in Software Testing, Raising Management Awareness for Testing, Skills Required by Tester, Testing throughout the software life cycle, Software development models, Test levels, Test types, the targets of testing, Maintenance testing.	3		
III	**Unit Testing: Boundary Value Testing:** Normal Boundary Value Testing, Robust Boundary Value Testing, Worst-Case Boundary Value Testing, Special Value Testing, Examples, Random Testing, Guidelines for Boundary Value Testing.	3	Software Testing: A Craftsman's Approach By Paul C. Jorgenson	Blackboard & chalk, PowerPoint Presentation
	Equivalence Class Testing: Equivalence Classes, Traditional Equivalence Class Testing, Improved Equivalence Class Testing, Edge Testing, Guidelines and Observations.	3		
	Decision Table–Based Testing: Decision Tables, Decision Table Techniques, Cause-and-Effect Graphing, Guidelines and Observations.	2		
	Path Testing: Program Graphs, DD-Paths, Test Coverage Metrics, Basis Path Testing, Guidelines and Observations, **Data Flow Testing:** Define/Use Testing, Slice-Based Testing, Program Slicing Tools.	4		
IV	**Software Verification and Validation:** Introduction, Verification, Verification Workbench, Methods of Verification, Types of reviews on the basis of Stage Phase, Entities involved in verification, Reviews in testing lifecycle, Coverage in Verification, Concerns of Verification.	4	Software Testing: Principles, Techniques and Tools	Blackboard & chalk
	Validation, Validation Workbench, Levels of Validation, Coverage in Validation, Acceptance Testing, Management of Verification and Validation, Software development verification and validation activities.	4		

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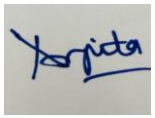
	V-test Model: Introduction, V-model for software, Testing during Proposal stage, Testing during requirement stage, Testing during test planning phase, Testing during design phase, Testing during coding, VV Model, Critical Roles and Responsibilities.	4	By M. G. Limaye	
V	**Levels of Testing:** Introduction, Proposal Testing, Requirement Testing, Design Testing, Code Review, Unit Testing, Module Testing, Integration Testing, Big-Bang Testing, Sandwich Testing, Critical Path First, Sub System Testing, System Testing, Testing Stages.	4	Software Testing: Principles, Techniques and Tools By M. G. Limaye	Blackboard & chalk, PowerPoint Presentation
	Special Tests: Introduction, GUI testing, Compatibility Testing, Security Testing, Performance Testing, Volume Testing, Stress Testing, Recovery Testing, Installation Testing, Requirement Testing, Regression Testing, Error Handling Testing, Manual Support Testing, Intersystem Testing, Control Testing, Smoke Testing, Adhoc Testing, Parallel Testing, Execution Testing, Operations Testing, Compliance Testing, Usability Testing, Decision Table Testing, Documentation Testing, Training testing, Rapid Testing, Control flow graph, Generating tests on the basis of Combinatorial Designs, State Graph,	4		
	Risk Associated with New Technologies, Process maturity level of Technology, Testing Adequacy of Control in New technology usage, Object Oriented Application Testing, Testing of Internal Controls, COTS Testing, Client Server Testing, Web Application Testing, Mobile Application Testing, eBusiness/eCommerce Testing, Agile Development Testing, Data Warehousing Testing.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 48



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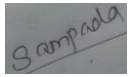

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande DEPARTMENT: Computer Science

CLASS: T.Y.I.T SEMESTER: VI

MONTH: Dec - March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

Student will able to understand the importance of software quality.
Aspects that the related to software quality.
Stakeholders and their relationship.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCSIT601 Software Quality Assurance UNIT - I	**Introduction to Quality:** Historical Perspective of Quality, What is Quality? (Is it a fact or perception?), Definitions of Quality, Core Components of Quality, Quality View, Financial Aspect of Quality, Customers, Suppliers and Processes, Total Quality Management (TQM), Quality Principles of Total Quality Management, Quality Management Through Statistical Process Control, Quality Management Through Cultural Changes, Continual (Continuous) Improvement Cycle, Quality in Different Areas, Benchmarking and Metrics, Problem Solving Techniques, Problem Solving Software Tools.	6	Software Testing and Continuous Quality Improvement Software Testing: Principles, Techniques and Tools	Blackboard PPT
	Software Quality: Introduction, Constraints of Software Product Quality Assessment, Customer is a King, Quality and Productivity Relationship, Requirements of a Product, Organisation Culture,	6		Blackboard PPT

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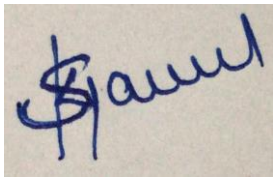
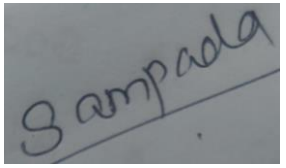
	Characteristics of Software, Software Development Process, Types of Products, Schemes of Criticality Definitions, Problematic Areas of Software Development Life Cycle, Software Quality Management, Why Software Has Defects? Processes Related to Software Quality, Quality Management System Structure, Pillars of Quality Management System, Important Aspects of Quality Management.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: TYIT DIV-A

SEMESTER: VI MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Make Learner Conversant With The Social And Intellectual Property Issues Emerging From 'Cyberspace.
- Explore The Legal And Policy Developments In Various Countries To Regulate Cyberspace;
- Develop The Understanding Of Relationship Between Commerce And Cyberspace
- Give Learners In Depth Knowledge Of Information Technology Act And Legal Frame Work Of Right To Privacy, Data Security And Data Protection.
- Make Study On Various Case Studies On Real Time Crimes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT607, Cyber Laws Unit 1	Power of Arrest Without Warrant Under the IT Act, 2000: A Critique, Crimes of this Millennium, Section 80 of the IT Act, 2000 – A Weapon or a Farce? Forgetting the Line Between Cognizable and Non-Cognizable Offences, Necessity of Arrest without Warrant from Any Place, Public or Otherwise, Check and Balances Against Arbitrary Arrests,Arrest for "About to Commit" an Offence Under the IT Act: A Tribute to Draco, Arrest, But NO Punishment!	05	1. Cyber Law Simplified VivekSood TMH Education 2001 2. Cybersecurity Law Jeff Kosseff Wiley 2017	Black Board and chalk, Powerpoint
	Cyber Crime and Criminal Justice: Penalties, Adjudication and Appeals Under the IT Act,2000: Concept of "Cyber Crime " and the IT Act , 2000, Hacking, Teenage Web Vandals, Cyber Fraud and Cyber Cheating, Virus on the Internet, Defamation, Harassment and Email Abuse, Cyber Pornography, Other IT Act Offences, Monetary Penalties, Adjudication and Appeals Under IT Act , 2000, Network Service Providers, Jurisdiction and Cyber Crime,	07	1. Cyber Law Simplified VivekSood TMH Education 2001	Black Board and chalk, PowerPoint

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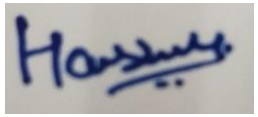
	Nature of Cyber Criminality, Strategies to Tackle Cyber Crime and Trends, Criminal Justice in India and Implications on Cyber Crime.		2. Cybersecurity Law Jeff Kosseff Wiley 2017	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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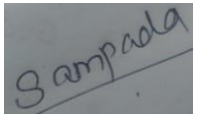

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SURBHI SHAH DEPARTMENT: IT-CS CLASS:SYIT-DIV A

SEMESTER: SEM-4 MONTH: JANUARY-MARCH ACADEMIC YEAR: 2018-2019

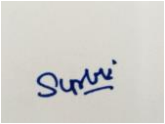
LEARNING OBJECTIVE/S:

The learners will be able to The learners will be able to: to think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems to apply their knowledge and skills to be employed and excel in IT professional careers and/or to continue their education in IT and/or related post graduate programmes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:-II TITLE:- Introduction to Embedded Systems UNIT 1	**Introduction:** Embedded Systems and general purpose computer systems, history, classifications, applications and purpose of embedded systems	3	Introduction to embedded systems By Shibu K V	Reference book,chalk and blackboard
	Core of embedded systems: microprocessors and microcontrollers, RISC and CISC controllers, Big endian and Little endian processors, Application specific ICs, Programmable logic devices, COTS, sensors and actuators, communication interface, embedded firmware, other system components.	6		
	Characteristics and quality attributes of embedded systems: Characteristics, operational and non-operational quality attributes.	3		
UNIT 4	**Designing Embedded System with 8051 Microcontroller:** Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	3	Programming Embedded Systems in C and C++	Reference book,chalk and blackboard

	Programming embedded systems: structure of embedded program, infinite loop, compiling, linking and debugging.	4	by Michael Barr	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 19



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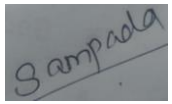

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT:CS

CLASS:SYIT-DIV A SEMESTER: SEM-4 MONTH: DEC-MAR ACADEMIC YEAR: 2018-2019

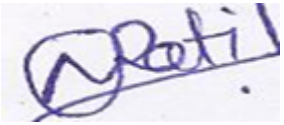
LEARNING OBJECTIVE/S:
Have a knowledge and understanding of geometrical transformations and 3D viewing.
Have a knowledge and understanding of techniques for representing 3D geometrical objects
Explain different Image enhancement techniques
Understand and review image transforms

PAPER, TITLE, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5,Computer graphics and animation, UNIT 3	**Viewing in 3D:Stages in 3D viewing, Canonical View Volume (CVV), Specifying an Arbitrary 3D View, Examples of 3D Viewing, The Mathematics of Planar Geometric Projections, Combined transformation matrices for projections and viewing, Coordinate Systems and matrices, camera model and viewing pyramid.**	7	Computer graphics by Rajesh mourya Image processing by Dhananjay	BLACK BOARD AND CHALK
	Light:Radiometry,Transport,Equation,Photometry	4		
	Color:Colorimetry,ColorSpaces,ChromaticAdaptation,Color Appearance	4		

UNIT 4	**Visible-Surface Determination:Techniques for efficient Visible-Surface Algorithms, Categories of algorithms, Back face removal, The z-Buffer Algorithm, Scan-line method, Painter's algorithms (depth sorting), Area sub-division method, BSP trees, Visible-Surface Ray Tracing, comparison of the methods.**	7	Computer graphics by Rajesh mourya Image processing by Dhananjay	BLACK BOARD AND CHALK
	Plane Curves and Surfaces:Curve Representation, Nonparametric Curves, Parametric Curves,Parametric Representation of a Circle, Parametric Representation of an Ellipse, Parametric Representation of a Parabola, Parametric Representation of a Hyperbola	3		
	Representation of Space Curves,Cubic Splines, , Bezier Curves, B-spline Curves, B-spline Curve Fit,B-spline Curve Subdivision, Parametric Cubic Curves, Quadric Surfaces. Bezier Surfaces	6		
Unit 5	**Computer Animation:Principles of Animation, Key framing, Deformations, Character Animation, Physics-Based Animation, Procedural Techniques, Groups of Objects.**	6	Computer graphics by Rajesh mourya Image processing by Dhananjay	BLACK BOARD AND CHALK
	Image Manipulation and Storage: What is an Image? Digital image file formats, Image compression standard – JPEG,	4		

	Image Processing - Digital image enhancement,contrast stretching, Histogram Equalization, smoothing and median Filtering.	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 46



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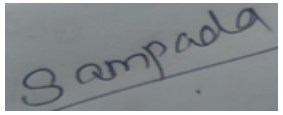

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT-CS

CLASS:SYIT-DIV A SEMESTER: SEM-IV MONTH: DEC-MAR ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the basic concepts of Computer Graphics. Demonstrate various algorithms for scan conversion and filling of basic objects and their comparative analysis. Apply geometric transformations, viewing and clipping on graphical objects.

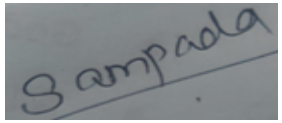
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-5, CGA, UNIT-1	**Introduction to Computer Graphics:**Overview of Computer Graphics, Computer Graphics Application and Software, Description of some graphics devices, Input Devices for Operator Interaction, Active and Passive Graphics Devices, Display Technologies, Storage Tube Graphics Displays, Calligraphic Refresh Graphics Displays	3	Computer Graphics by Hearn, Baker	Blackboard & Chalk
	Raster Refresh (Raster-Scan) Graphics Displays, Cathode Ray Tube Basics, Color CRT Raster Scan Basics, Video Basics, The Video Controller, Random-Scan Display Processor, LCD displays.	2		
	Scan conversion – Digital Differential Analyzer (DDA) algorithm, Bresenhams' Line drawing algorithm.Bresenhams' method of Circle drawing, Midpoint Circle Algorithm, Midpoint Ellipse Algorithm	3		

	Mid-point criteria, Problems of Aliasing, end-point ordering and clipping lines, Scan Converting Circles, Clipping Lines algorithms– Cyrus-Beck, Cohen-Sutherland and Liang-Barsky, Clipping Polygons, problem with multiple components.	3		
UNIT-2	**Two-Dimensional Transformations:**Transformations and Matrices, Transformation Conventions, 2D Transformations, Homogeneous Coordinates and Matrix Representation of 2D Transformations, Translations and Homogeneous Coordinates	2	Computer Graphics by Hearn, Baker	Blackboard & Chalk
	Rotation, Reflection, Scaling, Combined Transformation, Transformation of Points, Transformation of The Unit Square, Solid Body Transformations, Rotation About an Arbitrary Point.	2		
	Reflection through an Arbitrary Line ,A Geometric Interpretation of Homogeneous Coordinates, The Window-to Viewport Transformations.	2		
	Three-Dimensional Transformations: Three-Dimensional Scaling, Three-Dimensional Shearing, Three Dimensional Rotation, Three-Dimensional Reflection, Three Dimensional Translation, Multiple Transformation, Rotation about an Arbitrary Axis in Space, Reflection through an Arbitrary Plane.	3		
	Matrix Representation of 3D Transformations, Composition of 3D Transformations, Affine and Perspective Geometry, Perspective Transformations, Techniques for Generating Perspective Views, Vanishing Points	2		

	the Perspective Geometry and camera models, Orthographic Projections, Axonometric Projections, Oblique Projections, View volumes for projections.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: SYIT

SEMESTER: IV MONTH: DEC-MARCH ACADEMIC YEAR: 2018-19

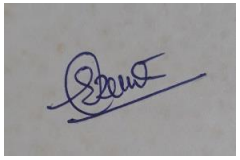
LEARNING OBJECTIVE/S:
The learners will be able to:

- Acquire knowledge of programming language java.
- Understand data types, control flow statements, iterations and classes.
- Gain proficiency in inheritance and packages.
- Understand enumeration, arrays, exceptions and byte stream.
- Acquire knowledge of event handling and layouts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401, Core Java, Unit III	**Inheritance:** Derived Class Objects, Inheritance and Access Control, Default Base Class Constructors, this and super keywords.	04	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Black Board and chalk
	Abstract Classes And Interfaces, Abstract Classes, Abstract Methods, Interfaces, What Is An Interface? How Is An Interface Different From An Abstract Class?, Multiple Inheritance, Default Implementation, Adding New Functionality, Method Implementation, Classes V/s Interfaces, Defining An Interface, Implementing Interfaces.	05	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Black Board and chalk
	Packages: Creating Packages, Default Package, Importing Packages, Using A Package.	03	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Black Board and chalk

USIT401, Core Java, Unit V	**Event Handling:** Delegation Event Model, Events, Event classes, Event listener interfaces, Using delegation event model, adapter classes and inner classes.	03	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Black Board and chalk
	Abstract Window Toolkit: Window Fundamentals, Component, Container, Panel, Window, Frame, Canvas. Components – Labels, Buttons, Check Boxes, Radio Buttons, Choice Menus, Text Fields, Text, Scrolling List, Scrollbars, Panels, Frames	07	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Black Board and chalk
	Layouts: Flow Layout, Grid Layout, Border Layout, Card Layout.	02	Core Java 8 for Beginners by Vaishali Shah, Sharnam Shah, SPD,1st, 2015	Black Board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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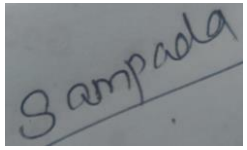

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Miss Shilpa James Rodrigues

DEPARTMENT: IT

CLASS: S.Y.I.T.-A (Core Java)

SEMESTER:IV

MONTH:December - March

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

-Understand basics of Java programming language .

-Learn to control the flow of execution of the program.

-Understand of to create java classes and objects and using them to make java application

-Learn the concepts of multi threading and exception handling.

-Learn to use streams for reading and writing data to and from files.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401, Unit 1, Core Java .	**Introduction:** History, architecture and its components, Java Class File, Java Runtime Environment, The Java Virtual Machine, JVM Components, The Java API, java platform, java development kit, Lambda Expressions, Methods References, Type Annotations, Method Parameter Reflection, setting the path environment variable, Java Compiler And Interpreter, java programs, java applications, main(), public, static, void, string[]	08	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Black Board and chalk.

	args, statements, white space, case sensitivity, identifiers, keywords, comments, braces and code blocks, variables, variable name			
	Data types: primitive data types, Object Reference Types, Strings, Auto boxing, operators and properties of operators, Arithmetic operators, assignment operators, increment and decrement operator, relational operator, logical operator, bitwise operator, conditional operator.	04	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Black Board and chalk.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401, Unit 2, Core Java .	**Control Flow Statements:** The If…Else If…Else Statement, The Switch…Case Statement	02	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Black Board and chalk.
	Iterations: The While Loop, The Do … While Loop, The For Loop, The Foreach Loop, Labeled Statements, The Break And Continue Statements, The Return Statement	04	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Black Board and chalk.
	Classes: Types of Classes, Scope Rules, Access Modifier, Instantiating Objects From A Class, Initializing The Class Object And Its Attributes, Class Methods, Accessing A Method, Method Returning A Value, Method's Arguments, Method Overloading, Variable Arguments [Varargs], Constructors, this Instance, super Instance, Characteristics Of Members Of A Class, constants, this instance, static fields of a class, static methods of a class, garbage collection.	06	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Black Board and chalk.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401, Unit 4, Core Java .	**Enumerations, Arrays:** Two Dimensional Arrays, Multi-Dimensional Arrays, Vectors, Adding Elements To A Vector, Accessing Vector Elements, Searching For Elements In A Vector, Working With The Size of The Vector.	03	Core Java 8 for Beginners -Vaishali Shah, Sharnam Shah	Black Board, chalk and Power point.
	Multithreading: the thread control methods, thread life cycle, the main thread, creating a thread, extending the thread class.	03	Core Java 8 for Beginners -Vaishali Shah, Sharnam Sha	Black Board, chalk and Power point.
	Exceptions: Catching Java Exceptions, Catching Run-Time Exceptions, Handling Multiple Exceptions, The finally Clause, The throws Clause	03	Core Java 8 for Beginners -Vaishali Shah, Sharnam Sha	Black Board, chalk and Power point.
	Byte streams: reading console input, writing console output, reading file, writing file, writing binary data, reading binary data, getting started with character streams, writing file, reading file	03	Core Java 8 for Beginners -Vaishali Shah, Sharnam Sha	Black Board, chalk and Power point.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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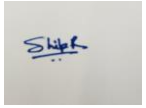

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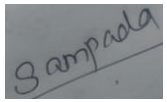

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT SEMESTER: IV MONTH: December to March
ACADEMIC YEAR: 2018-19
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -I The Mean, Median, Mode, and Other Measures of Central Tendency	The Mean, Median, Mode, and Other Measures of Central Tendency: Index, or Subscript, Notation, Summation Notation, Averages, or Measures of Central Tendency ,The Arithmetic Mean , The Weighted Arithmetic Mean ,Properties of the Arithmetic Mean ,The Arithmetic Mean Computed from Grouped Data ,The Median ,The Mode, The Empirical Relation Between the Mean, Median, and Mode, The Geometric Mean G, The Harmonic Mean H ,The Relation Between the Arithmetic, Geometric, and Harmonic Means, The Root Mean Square, Quartiles, Deciles, and Percentiles, Software and Measures of Central Tendency. The Standard Deviation and Other Measures of Dispersion: Dispersion, or Variation, The Range, The Mean Deviation, The Semi-Interquartile Range, The 10–90 Percentile Range, The Standard Deviation, The Variance, Short Methods for Computing the Standard Deviation, Properties of the Standard Deviation, Charlie's Check, Sheppard's Correction for Variance, Empirical Relations Between Measures of Dispersion, Absolute and Relative Dispersion; Coefficient of Variation, Standardized Variable; Standard Scores, Software and Measures of Dispersion. Introduction to R:	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	Black board , chalk

	Basic syntax, data types, variables, operators, control statements, R-functions, R –Vectors, R – lists, R Arrays..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT SEMESTER: IV MONTH: December to March
ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -III Statistical Estimation Theory, Statistical Decision Theory,	Statistical Estimation Theory: Estimation of Parameters, Unbiased Estimates, Efficient Estimates, Point Estimates and Interval Estimates; Their Reliability, Confidence-Interval Estimates of Population Parameters, Probable Error. Statistical Decision Theory: Statistical Decisions, Statistical Hypotheses, Tests of Hypotheses	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	Black board , chalk

	and Significance, or Decision Rules, Type I and Type II Errors, Level of Significance, Tests Involving Normal Distributions, Two-Tailed and One-Tailed Tests, Special Tests, Operating-Characteristic Curves; the Power of a Test, p-Values for Hypotheses Tests, Control Charts, Tests Involving Sample Differences, Tests Involving Binomial Distributions. Statistics in R: mean, median, mode, Normal Distribution , Binomial Distribution, Frequency Distribution in R.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT
SEMESTER: IV MONTH: December to March ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -IV Small Sampling Theory, The Chi-Square Test:	Small Sampling Theory: Small Samples, Student's t Distribution, Confidence Intervals, Tests of Hypotheses and Significance, The Chi-Square Distribution, Confidence Intervals for Sigma , Degrees of Freedom, The F Distribution. The Chi-Square Test: Observed and Theoretical Frequencies, Definition of chi-square, Significance Tests, The	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	Black board , chalk

	Chi-Square Test for Goodness of Fit, Contingency Tables, Yates' Correction for Continuity, Simple Formulas for Computing chi-square, Coefficient of Contingency, Correlation of Attributes, Additive Property of chi-square.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

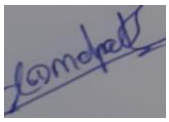
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT
SEMESTER: IV MONTH: December to March ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -V Curve Fitting and the Method of Least Squares: Correlation Theory:,	Curve Fitting and the Method of Least Squares: Relationship Between Variables, Curve Fitting, Equations of Approximating Curves, Freehand Method of Curve Fitting, The Straight Line, The Method of Least Squares, The Least-Squares Line, Nonlinear Relationships, The Least-Squares Parabola, Regression, Applications to Time Series, Problems Involving More Than Two Variables. Correlation Theory: Correlation and Regression, Linear Correlation, Measures of Correlation, The Least-Squares Regression Lines, Standard Error of Estimate, Explained and Unexplained Variation, Coefficient of Correlation, Remarks Concerning the Correlation Coefficient, Product-Moment Formula for the Linear Correlation Coefficient, Short Computational Formulas, Regression Lines and the Linear	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	Black board , chalk

	Correlation Coefficient, Correlation of Time Series, Correlation of Attributes, Sampling Theory of Correlation, Sampling Theory of Regression..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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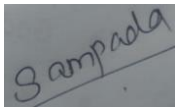

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: SYIT SEMESTER: IV MONTH: DEC to MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

To provide experience to integrate hardware and software for microcontroller applications systems.

To acquire knowledge about microcontrollers embedded processors and their applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 Embedded System Unit 2	**Embedded Systems – Application and Domain Specific:** Application specific – washing machine, domain specific - automotive.	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Embedded Hardware: Memory map, i/o map, interrupt map, processor family, external peripherals, memory – RAM , ROM, types of RAM and ROM, memory testing, CRC ,Flash memory.	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012	Projector, Laptop, Black board & Chalk

			And Embedded Systems Rajkamal Tata Mcgraw-Hill	
	Peripherals: Control and Status Registers, Device Driver, Timer Driver - Watchdog Timers.	4	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
Paper-02 Embedded System Unit 3	**The 8051 Microcontrollers:** Microcontrollers and Embedded processors, Overview of 8051 family.8051 Microcontroller hardware, Input/output pins, Ports, and Circuits, External Memory.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	8051 Programming in C: Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs.	6	Introduction to embedded systems Shibu K V	Projector, Laptop, Black board & Chalk

			Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	
Paper-02 Embedded System Unit 5	**Real Time Operating System (RTOS):** Operating system basics, types of operating systems, Real-Time Characteristics, Selection Process of an RTOS	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk
	Design and Development: Embedded system development Environment – IDE, types of file generated on cross compilation, disassembler/ de-compiler, simulator, emulator and debugging, embedded product development life-cycle, trends in embedded industry.	6	Introduction to embedded systems Shibu K V Tata Mcgraw-Hill First 2012 And Embedded Systems Rajkamal Tata Mcgraw-Hill	Projector, Laptop, Black board & Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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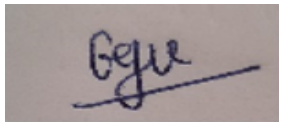

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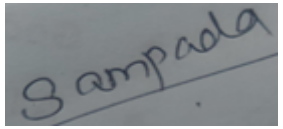

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.Y.B.Sc.(I.T) SEMESTER: IV MONTH: DEC-JAN ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The learners will be able to :

- Understand the Software Development Life Cycle and its Phases
- Understand the processes and models of Software
- Develop new software from the previous existing software.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Software Engineering Unit 1	**Introduction**: What is software engineering? Software Development Life Cycle, Requirements Analysis, Software Design, Coding, Testing, Maintenance etc. **Software Requirements:** Functional and Non-functional requirements, User Requirements, System Requirements, Interface Specification, Documentation of the software requirements.	4	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk
	Software Processes: Process and Project, Component Software Processes. **Software Development Process Models.** ● Waterfall Model. ● Prototyping. ● Iterative Development.	5	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk

	• Rational Unified Process. • The RAD Model • Time boxing Model			
	Agile software development: Agile methods, Plan-driven and agile development, Extreme programming, Agile project management, Scaling agile methods.	3	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(I.T.) SEMESTER:IV MONTH: JAN ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the difference between Socio-technical system and Critical system
- Different process of Requirement Engineering and its importance
- How to prepare various system models and its importance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Software Engineering Unit 2	**Socio-technical system** :Essential characteristics of socio technical systems, Emergent System Properties, Systems Engineering, Components of system such as organization, people and computers, Dealing Legacy Systems.	2	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk
	Critical system: Types of critical system, A simple safety critical system, Dependability of a system, Availability and Reliability, Safety and Security of Software systems.	4	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk
	Requirements Engineering Processes: Feasibility study, Requirement selicitation and analysis, Requirements Validations, Requirements Management.	4	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach	Black Board and Chalk

			By- Roger Pressman	
	System Models: Models and its types, Context Models, Behavioural Models, Data Models, Object Models, Structured Methods.	2	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.Y.B.Sc.(I.T) SEMESTER:IV MONTH: JAN-FEB ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Develop an interactive user interface and its importance
- Planning and Managing risk of a project
- Managing and measuring the quality of a software project.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Software Engineering Unit 3	**Architectural Design:** Architectural Design Decisions, System Organisation, Modular Decomposition Styles, Control Styles, Reference Architectures.	2	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk
	User Interface Design: Need of UI design, Design issues, The UI design Process, User analysis, User Interface Prototyping, Interface Evaluation. **Project Management** Software Project Management, Management activities, Project Planning, Project Scheduling, Risk Management.	4	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk
	Quality Management: Process and Product Quality, Quality assurance and Standards, Quality Planning,	6	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach	Black Board and Chalk

	Quality Control, Software Measurement and Metrics.		By- Roger Pressman	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.Y.B.Sc.(I.T) SEMESTER: IV MONTH: FEB ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Two main aspects of testing Verification and validation
- Different types of testing
- Different aspects of measuring the software
- Different techniques of estimating the cost of the software to the stakeholder.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Software Engineering Unit 4	**Verification and Validation:** Planning Verification and Validation, Software Inspections, Automated Static Analysis, Verification and Formal Methods. **Software Testing:** System Testing, Component Testing, Test Case Design, Test Automation.	7	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk
	Software Measurement: Size-Oriented Metrics, Function-Oriented Metrics, Extended Function Point Metrics. **Software Cost Estimation**: Software Productivity, Estimation Techniques, Algorithmic Cost Modelling, Project Duration and Staffing	5	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.Y.B.Sc.(I.T) SEMESTER: IV MONTH: FEB-MARCH ACADEMIC YEAR:2018-19

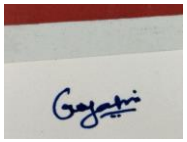
LEARNING OBJECTIVE/S:
The learners will be able to :

- How to improve and measure the process with the help of CMMI Process Improvement Framework
- How the services and the components of the software can be reused.
- How a software can be developed and used as a service

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 Software Engineering Unit 5	**Process Improvement:** Process and product quality, Process Classification, Process Measurement, Process Analysis and Modeling, Process Change, The CMMI Process Improvement Framework. **Service Oriented Software Engineering:** Services as reusable components,. Service Engineering, Software Development with Services.	8	Software Engineering, edition, By-Ian Somerville Software engineering, a practitioner's approach By- Roger Pressman	Black Board and Chalk
	Software reuse: The reuse landscape, Application frameworks, Software product lines, COTS product reuse.	4	Software Engineering, edition, By-Ian Somerville	Black Board and Chalk

	Distributed software engineering: Distributed systems issues, Client–server computing, Architectural patterns for distributed systems, Software as a service		Software engineering, a practitioner's approach By- Roger Pressman	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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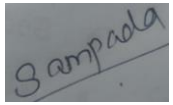

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: S. Y. B. Sc. I. T –B SEMESTER: IV MONTH: December-March ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various transformations

b. Create various objects and applications using graphics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-V Computer Graphics and Applications Unit -II	**Two-Dimensional Transformations:** Transformations and Matrices, Homogeneous Coordinates and Matrix Representation of-Translations, Rotation, Reflection, Scaling, Combined Transformation, Transformation of Points, Unit Square, Solid Body Transformations, Rotation About an Arbitrary Point, Reflection through an Arbitrary Line, The Window-to-Viewport Transformations.	7	Computer Graphics by Rajesh Maurya	Blackboard
	Three-Dimensional Transformations: 3D- Scaling, Shearing, Rotation, Reflection, Translation, Multiple Transformation, Rotation about an Arbitrary Axis in Space, Reflection through an Arbitrary Plane, Composition of 3D Transformations, Affine and Perspective Geometry, Perspective Transformations, Vanishing Points, the Perspective Geometry, Orthographic Projections, Axonometric Projections, Oblique Projections, View volumes for projections.	5		Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: S. Y. B. Sc. I. T –B SEMESTER: IV MONTH: December-March ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various transformations

b. Create various objects and applications using graphics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-V Computer Graphics and Applications Unit -V	**Computer Animation:** Principles of Animation, Key framing, Deformations, Character Animation, Physics-Based Animation, Procedural Techniques, Groups of Objects.	3	Computer Graphics by Rajesh Maurya	Powerpoint Presentation through Projector
	Image Manipulation and Storage: What is an Image? Digital image file formats, Image compression standard – JPEG, Image Processing - Digital image enhancement, contrast stretching, Histogram Equalization, smoothing and median Filtering.	9	Image Processing by Dhananjay	Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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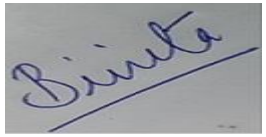

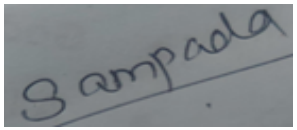

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT/CS

CLASS: SYIT- B SEMESTER: IV MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to learn basics things of computer graphics and able to work on Animation. Learner will able to learn different algorithms related to Computer Graphics and Animation

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Computer Graphics and Animation (USIT405) Unit I	**Introduction to Computer Graphics:** Overview of Computer Graphics, Computer Graphics Application and Software, Description of some graphics devices, Input Devices for Operator Interaction, Active and Passive Graphics Devices, Display Technologies, Storage Tube Graphics Displays, Calligraphic Refresh Graphics Displays, Raster Refresh (Raster-Scan) Graphics Displays, Cathode Ray Tube Basics, Color CRT Raster Scan Basics, Video Basics, The Video Controller, Random-Scan Display Processor, LCD displays	6	Computer Graphics by R. K. Mourya, Computer Graphics by Hearn, Baker	Black Board and Chalk
	Scan conversion – Digital Differential Analyzer (DDA) algorithm, Bresenhams' Line drawing algorithm. Bresenhams' method of Circle drawing, Midpoint Circle Algorithm, Midpoint Ellipse Algorithm, Mid-point criteria, Problems of Aliasing, end-point ordering and clipping lines, Scan Converting Circles, Clipping Lines algorithms– Cyrus-Beck, Cohen-Sutherland and Liang-Barsky, Clipping Polygons, problem with multiple components	6	Computer Graphics by R. K. Mourya, Computer Graphics by Hearn, Baker	Black Board and Chalk

Computer Graphics and Animation (USIT405) Unit III	**Viewing in 3D** Stages in 3D viewing, Canonical View Volume (CVV), Specifying an Arbitrary 3D View, Examples of 3D Viewing, The Mathematics of Planar Geometric Projections, Combined transformation matrices for projections and viewing, Coordinate Systems and matrices, camera model and viewing pyramid.	6	Computer Graphics by Hearn, Baker Computer Graphics by R. K. Mourya	Black Board and Chalk
	Light: Radiometry, Transport, Equation, Photometry	3		Black Board and Chalk
	Color: Colorimetry, Color Spaces, Chromatic Adaptation, Color Appearance	3		Black Board and Chalk
Computer Graphics and Animation (USIT405) Unit IV	**Visible-Surface Determination**: Techniques for efficient Visible-Surface Algorithms, Categories of algorithms, Back face removal, The z-Buffer Algorithm, Scan-line method, Painter's algorithms (depth sorting), Area sub-division method, BSP trees, Visible-Surface Ray Tracing, comparison of the methods	6	Computer Graphics by R. K. Mourya, Computer Graphics by Hearn, Baker	Black Board and Chalk
	Plane Curves and Surfaces: Curve Representation, Nonparametric Curves, Parametric Curves, Parametric Representation of a Circle, Parametric Representation of an Ellipse, Parametric Representation of a Parabola, Parametric Representation of a Hyperbola, Representation of Space Curves, Cubic Splines, , Bezier Curves, B-spline Curves, B-spline Curve Fit, B-spline Curve Subdivision, Parametric Cubic Curves, Quadric Surfaces. Bezier Surfaces	6	Computer Graphics by R. K. Mourya, Computer Graphics by Hearn, Baker	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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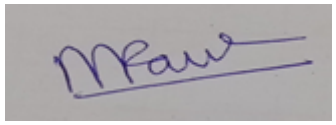

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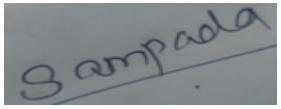

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT:CS
CLASS:SYIT-DIV B SEMESTER: SEM-4 MONTH: DEC-MAR ACADEMIC YEAR: 2018-2019

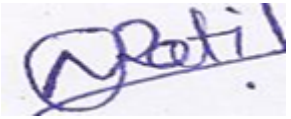
LEARNING OBJECTIVE/S:
To learn why Java is useful for the design of desktop and web applications.
To learn how to implement object-oriented designs with Java.
To identify Java language components and how they work together in applications.
To design and program stand-alone Java applications.

PAPER, TITLE, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1,Core Java, UNIT 2	**Control Flow Statements: The If…Else If…Else Statement, The Switch…Case Statement Iterations: The While Loop, The Do … While Loop, The For Loop,The Foreach Loop, Labeled Statements, The Break And Continue Statements,**	**4**	**Core Java by vaishali shah and Sherman shah**	**BLACK BOARD AND CHALK**
	The Return Statement Classes: Types of Classes, Scope Rules, Access Modifier,Instantiating Objects From A Class, Initializing The Class Object And Its Attributes, Class Methods, Accessing A Method, Method Returning A Value, Method's Arguments, Method Overloading,Variable Arguments [Varargs], Constructors, this Instance, super Instance,	**5**		
	Characteristics Of Members Of A Class, constants, this instance, static fields of a class, static methods of a class, garbag collection.	**3**		

UNIT 3	Inheritance: Derived Class Objects, Inheritance and Access Control,Default Base Class Constructors, this and super keywords.Abstract Classes And Interfaces,	4	Core Java by vaishali shah and Sherman shah	BLACK BOARD AND CHALK
	Abstract Classes And Interfaces, Abstract Classes, Abstract Methods,Interfaces, What Is An Interface? How Is An Interface Different From An Abstract Class?	4		
	Multiple Inheritance, Default Implementation,Adding New Functionality, Method Implementation	2		
	Classes Interfaces, Defining An Interface, Implementing Interfaces.Packages: Creating Packages, Default Package, Importing Packages,Using A Package	3		
Unit 4	Enumerations,Arrays: Two Dimensional Arrays, Multi-Dimensional Arrays, Vectors, Adding Elements To A Vector, Accessing Vector Elements, Searching For Elements In A Vector, Working With The Size of The Vector.	3	Core Java by vaishali shah and Sherman shah	BLACK BOARD AND CHALK
	Multithreading: the thread control methods, thread life cycle, the main thread, creating a thread, extending the thread class.	3		
	Exceptions:Catching Java Exceptions, Catching Run-Time Exceptions, Handling Multiple Exceptions, The finally Clause	4		

	The throws Clause Byte streams: reading console input, writing console output, reading file, writing file, writing binary data, reading binary data, getting started with character streams, writing file, reading file	**3**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36



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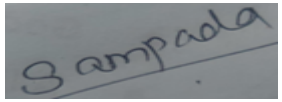

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHARVARI PATIL DEPARTMENT: IT CLASS: S.Y.I.T SEMESTER: IV

MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2018-19

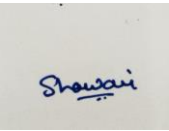
LEARNING OBJECTIVE/S:
The learners will be able to:

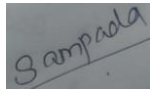
- Understand the Importance of Java Programming language.
- Learn the features and environment of java API.
- Understand the concept of data types.
- Gain knowledge about event handling and AWT.

Paper No.,Paper Title, Unit No.	**Sub Topics:**	**No.of Lectures**	**References**	**Teaching Method/ICT tools used**
USIT401 Core Java Unit 1	Introduction: History,architecture and its components,Java Class File, Java Runtime Environment, The Java Virtual Machine, JVM Components, The Java API, java platform, java development kit, Lambda Expressions, Methods References, Type Annotations, Method Parameter Reflection, setting the path environment variable, Java Compiler And Interpreter, java programs, java applications, main(), public, static, void, string[] args, statements, white space, case	8	Reference Book: Core Java 8 for Beginners	Chalk, Blackboard

	sensitivity, identifiers, keywords, comments, braces and code blocks, variables, variable name Data types: primitive data types, Object Reference Types, Strings, Auto boxing, operators and properties of operators, Arithmetic operators, assignment operators, increment and decrement operator, relational operator, logical operator, Bitwise operator, conditional operator.	4		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT401 Core Java Unit 5	Event Handling: Delegation Event Model, Events, Event classes, Event listener interfaces, Using delegation event model, adapter classes and inner classes. Abstract Window Toolkit: Window Fundamentals, Component, Container, Panel, Window, Frame, CanvasComponents–Labels, Buttons, Check Boxes, Radio Buttons, Choice Menus, Text Fields, Text, Scrolling List, Scrollbars, Panels, Frames Layouts: Flow Layout, Grid Layout, Border Layout, Card Layout	8 4	Reference Book: Core Java 8 for Beginners	Chalk, Blackboard

	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		





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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT SEMESTER: IV MONTH: December to March
ACADEMIC YEAR: 2018-19
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -I The Mean, Median, Mode, and Other Measures of Central Tendency	The Mean, Median, Mode, and Other Measures of Central Tendency: Index, or Subscript, Notation, Summation Notation, Averages, or Measures of Central Tendency ,The Arithmetic Mean , The Weighted Arithmetic Mean ,Properties of the Arithmetic Mean ,The Arithmetic Mean Computed from Grouped Data ,The Median ,The Mode, The Empirical Relation Between the Mean, Median, and Mode, The Geometric Mean G, The Harmonic Mean H ,The Relation Between the Arithmetic, Geometric, and Harmonic Means, The Root Mean Square, Quartiles, Deciles, and Percentiles, Software and Measures of Central Tendency. The Standard Deviation and Other Measures of Dispersion: Dispersion, or Variation, The Range, The Mean Deviation, The Semi-Interquartile Range, The 10–90 Percentile Range, The Standard Deviation, The Variance, Short Methods for Computing the Standard Deviation, Properties of the Standard Deviation, Charlie's Check, Sheppard's Correction for Variance, Empirical Relations Between Measures of Dispersion, Absolute and Relative Dispersion; Coefficient of Variation, Standardized Variable; Standard Scores, Software and Measures of Dispersion. Introduction to R:	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	Black board , chalk

	Basic syntax, data types, variables, operators, control statements, R-functions, R –Vectors, R – lists, R Arrays..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT SEMESTER: IV MONTH: December to March
ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -III Statistical Estimation Theory, Statistical Decision Theory,	Statistical Estimation Theory: Estimation of Parameters, Unbiased Estimates, Efficient Estimates, Point Estimates and Interval Estimates; Their Reliability, Confidence-Interval Estimates of Population Parameters, Probable Error. Statistical Decision Theory: Statistical Decisions, Statistical Hypotheses, Tests of Hypotheses	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	Black board , chalk

	and Significance, or Decision Rules, Type I and Type II Errors, Level of Significance, Tests Involving Normal Distributions, Two-Tailed and One-Tailed Tests, Special Tests, Operating-Characteristic Curves; the Power of a Test, p-Values for Hypotheses Tests, Control Charts, Tests Involving Sample Differences, Tests Involving Binomial Distributions. Statistics in R: mean, median, mode, Normal Distribution , Binomial Distribution, Frequency Distribution in R.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics CLASS: SYIT
SEMESTER: IV MONTH: December to March ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -IV Small Sampling Theory, The Chi-Square Test:	Small Sampling Theory: Small Samples, Student's t Distribution, Confidence Intervals, Tests of Hypotheses and Significance, The Chi-Square Distribution, Confidence Intervals for Sigma , Degrees of Freedom, The F Distribution. The Chi-Square Test: Observed and Theoretical Frequencies, Definition of chi-square, Significance Tests, The	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	Black board , chalk

	Chi-Square Test for Goodness of Fit, Contingency Tables, Yates' Correction for Continuity, Simple Formulas for Computing chi-square, Coefficient of Contingency, Correlation of Attributes, Additive Property of chi-square.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

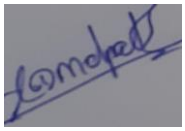
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT
SEMESTER: IV MONTH: December to March ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -V Curve Fitting and the Method of Least Squares: Correlation Theory:,	Curve Fitting and the Method of Least Squares: Relationship Between Variables, Curve Fitting, Equations of Approximating Curves, Freehand Method of Curve Fitting, The Straight Line, The Method of Least Squares, The Least-Squares Line, Nonlinear Relationships, The Least-Squares Parabola, Regression, Applications to Time Series, Problems Involving More Than Two Variables. Correlation Theory: Correlation and Regression, Linear Correlation, Measures of Correlation, The Least-Squares Regression Lines, Standard Error of Estimate, Explained and Unexplained Variation, Coefficient of Correlation, Remarks Concerning the Correlation Coefficient, Product-Moment Formula for the Linear Correlation Coefficient, Short Computational Formulas, Regression Lines and the Linear	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	Black board , chalk

	Correlation Coefficient, Correlation of Time Series, Correlation of Attributes, Sampling Theory of Correlation, Sampling Theory of Regression..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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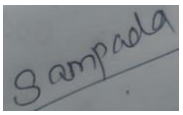

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: IT

CLASS: SY BSc IT SEMESTER: IV MONTH: DEC-MAR ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to:
1. Understand what is a microcontroller, microcomputer, embedded system.
2. Understand different components of a micro-controller and their interactions.
3. Become familiar with programming environment used to develop embedded systems.
4. Understand key concepts of embedded systems like IO, timers, interrupts, interaction with peripheral devices.
5. Learn debugging techniques for an embedded system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 ES UNIT 1	Embedded Systems and general purpose computer systems, history, classifications, applications and purpose of embedded systems	4	Introduction to embedded systems by Shibu K V	Black board and chalk
	Microprocessors and microcontrollers ,RISC and CISC controllers, Big endian and Little endian processors, Application specific ICs, Programmable logic devices, COTS.	3		
	Sensors and actuators, communication interface, embedded firmware, other system components.	3		

	Characteristics, operational and non-operational quality attributes.	2		
UNIT 2	Application specific – washing machine, domain specific - automotive.	3	Introduction to embedded systems by Shibu K V	Black board and chalk
	Memory map, i/o map, interrupt map, processor family, external peripherals	3		
	memory – RAM , ROM, types of RAM and ROM, memory testing, CRC ,Flash memory .	3		
	Control and Status Registers, Device Driver, Timer Driver - Watchdog Timers.	3		
UNIT 3	Microcontrollers and Embedded processors, Overview of 8051 family.8051 Microcontroller hardware	4	Programming Embedded Systems in C C++ by Michael Barr	Black board and chalk
	Input/output pins, Ports, and Circuits, External Memory.	4		
	Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs.	4		
UNIT 4	Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	4	https://www.tutorialspoint.com/embedded_systems Introduction to embedded systems by Shibu K V	Black board and chalk
	structure of embedded program, infinite loop	4		

	compiling, linking and debugging	4		
UNIT 5	Operating system basics, types of operating systems, Real-Time Characteristics, Selection Process of an RTOS.	4	https://www.tutorialspoint.com/embedded_systems	Black board and chalk
	Embedded system development Environment – IDE, types of file generated on cross compilation, disassembler/ de-compiler,	4		
	simulator, emulator and debugging, embedded product development life-cycle, trends in embedded industry.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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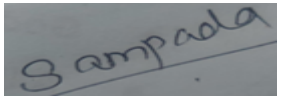

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____BSC-IT___ CLASS: __SYIT___ SEMESTER: ___IV

MONTH: ____December to March_____ ACADEMIC YEAR: ____2018-19__

LEARNING OBJECTIVE/S:
The learners will be able to:

To adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct. To be capable of managing complex IT projects with consideration of the human, financial and environmental factors. To work effectively as a part of a team to achieve a common stated goal.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Software Engineering USIT404 Unit - 1	**Introduction**: What is software engineering? Software Development Life Cycle, Requirements Analysis, Software Design, Coding, Testing, Maintenance etc. Software Requirements: Functional and Non-functional requirements, User Requirements, System Requirements, Interface Specification, Documentation of the software requirements. Software Processes: Process and Project, Component Software Processes. Software Development Process Models. Waterfall Model. Prototyping. Iterative	3 4 3	Ian Somerville Roger Pressman	Chalk, Blackboard

	Development. Rational Unified Process. The RAD Model Time boxing Model. Agile software development: Agile methods. Plan-driven and agile development, Extreme programming, Agile project management methods.	2		
Software Engineering USIT404 Unit - 2	**Socio-technical system:** Essential characteristics of socio technical systems, Emergent System Properties, Systems Engineering. Components of system such as organization, people and computers, Dealing Legacy Systems. Critical system: Types of critical system. A simple safety critical system, Dependability of a system, Availability and Reliability, Safety and Security of Software systems. Requirements Engineering Processes: Feasibility study, Requirements elicitation and analysis, Requirements Validations, Requirements Management	3 3 3 3	Ian Somerville Roger Pressman	Chalk, Blackboard
Software Engineering USIT404 Unit - 3	**Architectural Design:** Architectural Design Decisions, System Organisation, Modular Decomposition Styles, Control Styles, Reference Architectures. User Interface Design: Need of UI design, Design issues, The UI design Process, User analysis, User Interface Prototyping, Interface Evaluation. Project Management	2 3 2	Ian Somerville Roger Pressman	Chalk, Blackboard

	Software Project Management, Management activities, Project Planning, Project Scheduling, Risk Management. Quality Management: Process and Product Quality, Quality assurance and Standards, Quality Planning, Quality Control, Software Measurement and Metrics.	2 3		
Software Engineering USIT404 Unit - 4	**Verification and Validation:** Planning Verification and Validation, Software Inspections, Automated Static Analysis, Verification and Formal Methods. Software Testing: System Testing, Component Testing, Test Case Design, Test Automation. Software Measurement: Size-Oriented Metrics, Function-Oriented Metrics, Extended Function Point Metrics **Software Cost Estimation:** Software Productivity, Estimation Techniques, Algorithmic Cost Modelling, Project Duration and Staffing.	3 3 3 3	Ian Somerville Roger Pressman	Chalk, Blackboard
Software Engineering USIT404 Unit - 5	**Process Improvement:** Process and product quality, Process Classification, Process Measurement, Process Analysis and Modeling, Process Change. The CMMI Process Improvement Framework. Service Oriented Software Engineering: Services as reusable components, Service Engineering. Software Development with Services. Software reuse: The reuse landscape, Application frameworks, Software product lines, COTS product reuse. Distributed software engineering: Distributed systems issues, Client–server computing, Architectural patterns for distributed systems, Software as a service.	3 3 3 3	Ian Somerville Roger Pressman	Chalk, Blackboard

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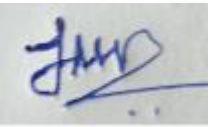
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __60_____



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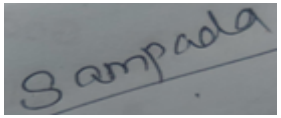

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:S.Y.BSC(I.T) Div-C SEMESTER: **IV** MONTH:DECEMBER-MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : To list the basic concepts used in computer graphics

To implement various algorithms to scan, convert the basic geometrical primitives, transformations, Area filling, clipping.

To describe the importance of viewing and projections.

To define the fundamentals of animation, virtual reality and its related technologies.

To understand a typical graphics pipeline

To design an application with the principles of virtual reality

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Computer Graphics and Animation USIT405 Unit-1	**Introduction to Computer Graphics:** Overview of Computer Graphics, Computer Graphics Application andSoftware, Description of some graphics devices, Input Devices forOperator Interaction, Active and Passive Graphics Devices, DisplayTechnologies, Storage Tube Graphics Displays, Calligraphic Refresh Graphics Displays, Raster Refresh (Raster-Scan) Graphics Displays,Cathode Ray Tube Basics, Color CRT Raster Scan Basics, VideoBasics, The Video Controller, Random-Scan Display Processor, LCD displays.	5	Computer Graphics -Hearn, Baker Computer Graphics-Rajesh.k.Mourya	Powerpoint presentation,Projector,chalk blackboard

	Scan conversion – Digital Differential Analyzer (DDA) algorithm,Bresenhams' Line drawing algorithm.Bresenhams' method of Circle drawing	3		
	Midpoint Circle Algorithm, Midpoint Ellipse Algorithm,Mid-point criteria	3		
	Problems of Aliasing, end-point ordering andclipping lines, Scan Converting Circles	2		
	Clipping Lines algorithms–Cyrus-Beck, Cohen-Sutherland and Liang-Barsky, Clipping Polygons,problem with multiple components.	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	15		
Computer Graphics and Animation USIT405 Unit-3	**Viewing in 3D** Stages in 3D viewing, Canonical View Volume (CVV), Specifying an Arbitrary 3D View, Examples of 3D Viewing, The Mathematics of Planar Geometric Projections, Combined transformation matrices for projections and viewing, Coordinate Systems and matrices, camera model and viewing pyramid.	5	Computer Graphics -Hearn, Baker Computer Graphics-Rajesh.k.Mourya Computer Graphics - Principles and Practice- J. D. Foley, A. Van	Powerpoint presentation,Projector,chalk blackboard
	Light: Radiometry,Transport,Equation,Photometry	3		
	Color: Colorimetry,ColorSpaces,ChromaticAdaptation, Color Appearance	3		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	11		

			Dam, S. K. Feiner and J. F. Hughes	
Computer Graphics and Animation USIT405 Unit-4	**Visible-Surface Determination:** Techniques for efficient Visible-Surface Algorithms, Categories of algorithms, Back face removal, The z-Buffer Algorithm, Scan-line method, Painter's algorithms (depth sorting), Area subdivision method, BSP trees, Visible-Surface Ray Tracing, comparison of the methods.	5	Computer Graphics -Hearn, Baker Computer Graphics-Rajesh.k.Mourya Computer Graphics - Principles and Practice-J. D. Foley, A. Van	Powerpoint presentation,Projector,chalk blackboard
	Plane Curves and Surfaces: Curve Representation, Nonparametric Curves, Parametric Curves, Parametric Representation of a Circle, Parametric Representation of an Ellipse, Parametric Representation of a Parabola, Parametric Representation of a Hyperbola, Representation of Space Curves, Cubic Splines, , Bezier Curves, B-spline Curves, B-spline Curve Fit, B-spline Curve Subdivision, Parametric Cubic Curves, QuadricSurfaces. Bezier Surfaces.	5		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	10		

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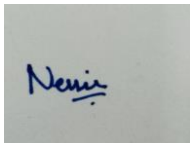

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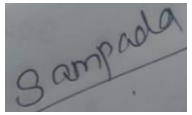

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**SY.B SC(IT)-C**_____ SEMESTER: ____**IV**_____ MONTH: _____**DECEMBER-MARCH**_____ ACADEMIC YEAR: _____**2018-2019**_____

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the concept of transformations and its types in 2D and 3D in computer graphics and how those can be implemented in variation of applications including Animation. Understanding the representation of matrices, projection in CG and its usage. To implement concepts, creation and how it works with different types of animation. To make understand what is image ,how it is created and how it is used in varieties of processing, To make understand the concept of image enhancement, compression, filtering and histogram of image to study subjective improvisation of image in applications to reduce the noise

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-05 (USIT405) **Computer Graphics and Animation** **Unit No -02**	**Two-Dimensional Transformations:** Transformations and Matrices, Transformation Conventions, 2D Transformations, Homogeneous Coordinates and Matrix Representation of 2D Transformations, Translations and Homogeneous Coordinates, Rotation, Reflection, Scaling, Combined Transformation, Transformation of Points, Transformation of The Unit Square, Solid Body Transformations, Rotation About an Arbitrary Point, Reflection through an Arbitrary Line, A Geometric Interpretation of Homogeneous Coordinates, The Window-to-Viewport Transformations.	06	Computer Graphics by R.K Maurya	Textbook, Blackboard, Chalk and Duster.

	Three-Dimensional Transformations: Three-Dimensional Scaling, Three-Dimensional Shearing, Three-Dimensional Rotation, Three-Dimensional Reflection, Three-Dimensional Translation, Multiple Transformation, Rotation about an Arbitrary Axis in Space, Reflection through an Arbitrary Plane, Matrix Representation of 3D Transformations, Composition of 3D Transformations,. Affine and Perspective Geometry, Perspective Transformations, Techniques for Generating Perspective Views, Vanishing Points, the Perspective Geometry and camera models, Orthographic Projections, Axonometric Projections, Oblique Projections, View volumes for projections.	06	Computer Graphics by R.K Maurya	Textbook, Blackboard, Chalk and Duster. Projector, Laptop, PPTs.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	**Computer Animation:** Principles of Animation, Key framing, Deformations, Character Animation, Physics-Based Animation, Procedural Techniques, Groups of Objects.	06	Computer Graphics by R.K Maurya.	Projector, Laptop, PPTs.
	Image Manipulation and Storage: What is an Image? Digital image file formats, Image compression standard – JPEG, Image Processing - Digital image enhancement, contrast stretching, Histogram Equalization, smoothing and median Filtering.	06	Digital Image Processing by Dhananjay.	Textbook, Blackboard, Chalk and Duster, Projector, Laptop, PPTs.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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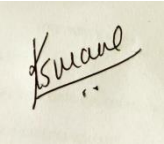

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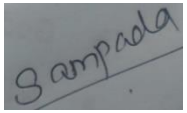

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ARPITA BANERJEE DEPARTMENT: IT-CS

CLASS: SYIT-DIV C SEMESTER: IV MONTH: DEC - MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: Develop logics to write programs, build application using Core Java. This will also help them to understand some basic concepts of object-oriented programming like class, inheritance, polymorphism, message passing. Also they will get to know the idea of multithreading, package, exception-handling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT401 Core Java II	**Control Flow Statements:** The If…Else If…Else Statement, The Switch…Case Statement	3	Core Java 8 for Beginners By Vaishali Shah, Sharnam Shah	Blackboard & chalk
	Iterations: The While Loop, The Do … While Loop, The For Loop, The Foreach Loop, Labeled Statements, The Break And Continue Statements, The Return Statement	3		
	Classes: Types of Classes, Scope Rules, Access Modifier, Instantiating Objects From A Class, Initializing The Class Object And Its Attributes, Class Methods, Accessing A Method, Method Returning A Value, Method's Arguments, Method Overloading	3		
	Variable Arguments [Varargs], Constructors, this Instance, super Instance, Characteristics Of Members Of A Class, constants, this instance, static fields of a class, static methods of a class, garbage collection.	3		
	Inheritance: Derived Class Objects, Inheritance and Access Control, Default Base Class Constructors, this and super keywords.	3		

III	Abstract Classes And Interfaces, Abstract Classes, Abstract Methods, Interfaces, What Is An Interface? How Is An Interface Different From An Abstract Class?	3	Core Java 8 for Beginners By Vaishali Shah, Sharnam Shah	Blackboard & chalk
	Multiple Inheritance, Default Implementation, Adding New Functionality, Method Implementation, Classes V/s Interfaces, Defining An Interface, Implementing Interfaces.	4		
	Packages: Creating Packages, Default Package, Importing Packages, Using A Package.	2		
IV	**Enumerations, Arrays:** Two Dimensional Arrays, Multi-Dimensional Arrays, Vectors, Adding Elements To A Vector, Accessing Vector Elements, Searching For Elements In A Vector, Working With The Size of The Vector.	3	Core Java 8 for Beginners By Vaishali Shah, Sharnam Shah	Blackboard & chalk
	Multithreading: the thread control methods, thread life cycle, the main thread, creating a thread, extending the thread class.	3		
	Exceptions: Catching Java Exceptions, Catching Run-Time Exceptions, Handling Multiple Exceptions, The finally Clause, The throws Clause	3		
	Byte streams: reading console input, writing console output, reading file, writing file, writing binary data, reading binary data, getting started with character streams, writing file, reading file	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36

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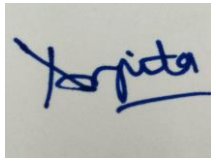

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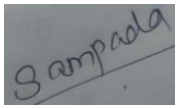

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT:CS

CLASS: SY BSc IT DIV-C(CJ) SEMESTER:SEM-4 MONTH:DEC-MAR ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

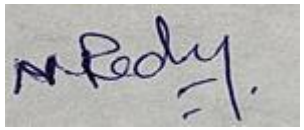
The learners will be able to :

- To learn why Java is useful for the design of desktop and web applications.
- To learn how to implement object-oriented designs with Java.
- To identify Java language components and how they work together in applications.
- To design and program stand-alone Java applications.
- To learn how to design a graphical user interface (GUI) .
- To understand how to use Java APIs for program development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CORE JAVA PAPER-1 Unit 1	**Introduction:**History, architecture and its components,Java Class File, Java Runtime Environment, The Java Virtual Machine, JVM Components, The Java API, java platform, java development kit,	2	Core Java 8 for Beginners BY Vaishali Shah, Sharnam Shah	BLACK BOARD AND CHALK
	Lambda Expressions, Methods References, Type Annotations, Method Parameter Reflection, setting the path environment variable, Java Compiler And Interpreter, java programs, java applications,	2		
	main(), public, static, void, string[] args, statements, white space, case sensitivity, identifiers, keywords, comments, braces and code blocks, variables, variable name	2		
	Data types: primitive data types, Object Reference Types, Strings, Auto boxing, operators and properties of operator	4		

Unit 5	Arithmetic operators, assignment operators, increment and decrement operator, relational operator, logical operator,		Core Java 8 for Beginners BY Vaishali Shah, Sharnam Shah	BLACK BOARD AND CHALK
	bitwise operator, conditional operator.	2		
	Event Handling: Delegation Event Model, Events, Event classes, Event listener interfaces, Using delegation event model, adapter classes and inner classes.	3		
	Abstract Window Toolkit: Window Fundamentals, Component, Container, Panel, Window, Frame, Canvas	3		
	.Components – Labels, Buttons, Check Boxes, Radio Buttons, Choice Menus, Text Fields, Text, Scrolling List, Scrollbars, Panels, Frames	3		
	Layouts: Flow Layout, Grid Layout, Border Layout, Card Layout.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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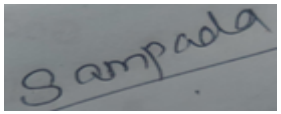

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT SEMESTER: IV MONTH: December to March
ACADEMIC YEAR: 2018-19
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -I The Mean, Median, Mode, and Other Measures of Central Tendency	The Mean, Median, Mode, and Other Measures of Central Tendency: Index, or Subscript, Notation, Summation Notation, Averages, or Measures of Central Tendency ,The Arithmetic Mean , The Weighted Arithmetic Mean ,Properties of the Arithmetic Mean ,The Arithmetic Mean Computed from Grouped Data ,The Median ,The Mode, The Empirical Relation Between the Mean, Median, and Mode, The Geometric Mean G, The Harmonic Mean H ,The Relation Between the Arithmetic, Geometric, and Harmonic Means, The Root Mean Square, Quartiles, Deciles, and Percentiles, Software and Measures of Central Tendency. The Standard Deviation and Other Measures of Dispersion: Dispersion, or Variation, The Range, The Mean Deviation, The Semi-Interquartile Range, The 10–90 Percentile Range, The Standard Deviation, The Variance, Short Methods for Computing the Standard Deviation, Properties of the Standard Deviation, Charlie's Check, Sheppard's Correction for Variance, Empirical Relations Between Measures of Dispersion, Absolute and Relative Dispersion; Coefficient of Variation, Standardized Variable; Standard Scores, Software and Measures of Dispersion. Introduction to R:	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	Black board , chalk

	Basic syntax, data types, variables, operators, control statements, R-functions, R –Vectors, R – lists, R Arrays..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT SEMESTER: IV MONTH: December to March
ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -III Statistical Estimation Theory, Statistical Decision Theory,	Statistical Estimation Theory: Estimation of Parameters, Unbiased Estimates, Efficient Estimates, Point Estimates and Interval Estimates; Their Reliability, Confidence-Interval Estimates of Population Parameters, Probable Error. Statistical Decision Theory: Statistical Decisions, Statistical Hypotheses, Tests of Hypotheses	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	Black board , chalk

	and Significance, or Decision Rules, Type I and Type II Errors, Level of Significance, Tests Involving Normal Distributions, Two-Tailed and One-Tailed Tests, Special Tests, Operating-Characteristic Curves; the Power of a Test, p-Values for Hypotheses Tests, Control Charts, Tests Involving Sample Differences, Tests Involving Binomial Distributions. Statistics in R: mean, median, mode, Normal Distribution , Binomial Distribution, Frequency Distribution in R.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT
SEMESTER: IV MONTH: December to March ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -IV Small Sampling Theory, The Chi-Square Test:	Small Sampling Theory: Small Samples, Student's t Distribution, Confidence Intervals, Tests of Hypotheses and Significance, The Chi-Square Distribution, Confidence Intervals for Sigma , Degrees of Freedom, The F Distribution. The Chi-Square Test: Observed and Theoretical Frequencies, Definition of chi-square, Significance Tests, The	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	Black board , chalk

	Chi-Square Test for Goodness of Fit, Contingency Tables, Yates' Correction for Continuity, Simple Formulas for Computing chi-square, Coefficient of Contingency, Correlation of Attributes, Additive Property of chi-square.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

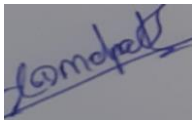
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: SYIT
SEMESTER: IV MONTH: December to March ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
The learners will be able to : Curve fitting, Least square method for linear and non-linear, Regression of line Regression coefficient, correlation coefficient sampling theory of regression, Standard Error.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST Unit -V Curve Fitting and the Method of Least Squares: Correlation Theory:,	Curve Fitting and the Method of Least Squares: Relationship Between Variables, Curve Fitting, Equations of Approximating Curves, Freehand Method of Curve Fitting, The Straight Line, The Method of Least Squares, The Least-Squares Line, Nonlinear Relationships, The Least-Squares Parabola, Regression, Applications to Time Series, Problems Involving More Than Two Variables. Correlation Theory: Correlation and Regression, Linear Correlation, Measures of Correlation, The Least-Squares Regression Lines, Standard Error of Estimate, Explained and Unexplained Variation, Coefficient of Correlation, Remarks Concerning the Correlation Coefficient, Product-Moment Formula for the Linear Correlation Coefficient, Short Computational Formulas, Regression Lines and the Linear	12	Techmax Higher Engineering of Mathematics Statistics by Gupta	Black board , chalk

	Correlation Coefficient, Correlation of Time Series, Correlation of Attributes, Sampling Theory of Correlation, Sampling Theory of Regression..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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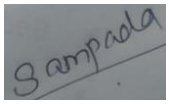

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: S.Y. BSc (IT)DIV-C SEMESTER:SEM 4 MONTH: DEC-MAR ACADEMIC YEAR: 2018-2019

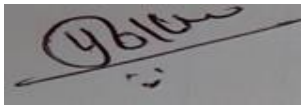
LEARNING OBJECTIVE/S:
The learners will be able to :
1. Understand what is Embedded system and its uses.
2. Understand different components of a micro-controller and their interactions.
3. Become familiar with programming environment used to develop embedded systems .
4. Understand key concepts of embedded systems like IO, timers, interrupts, interaction with peripheral devices .
5. Learn debugging techniques for an embedded system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT402 Introduction to Embedded Systems UNIT 1	**Embedded Systems and general purpose** computer systems, history, classifications, applications and purpose of embedded systems	4	Introduction to embedded systems by Shibu K V	Black board and chalk
	Core of embedded systems: Microprocessors and microcontrollers ,RISC and CISC controllers, Big endian and Little endian processors, Application specific ICs, Programmable logic devices, COTS.	3		
	Sensors and actuators, communication interface, embedded firmware, other system components.	2		

	Characteristics and quality attributes of embedded systems: Characteristics, operational and non-operational quality attributes.	3		
USIT402 Introduction to Embedded Systems UNIT 2	**Application specific** – washing machine, domain specific - automotive.	3	Introduction to embedded systems by Shibu K V	Black board and chalk
	Memory map, i/o map, interrupt map, processor family, external peripherals	3		
	Embedded Hardware: memo**ry** – RAM , ROM, types of RAM and ROM, memory testing, CRC ,Flash memory .	2		
	Peripherals: Control and Status Registers, Device Driver, Timer Driver - Watchdog Timers.	4		
USIT402 Introduction to Embedded Systems UNIT 3	**The 8051 Microcontrollers**:Microcontrollers and Embedded processors, Overview of 8051 family.8051 Microcontroller hardware	5	Programming Embedded Systems in C C++ by Michael Barr	Black board and chalk
	Input/output pins, Ports, and Circuits, External Memory.	3		
	8051 Programming in C:Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs.	4		
USIT402	**Designing Embedded System with 8051 Microcontroller:** Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051.	5	Programming Embedded Systems in C C++ by	Black board and chalk, Projector

Introduction to Embedded Systems UNIT 4			Michael Barr www.tutorialspoint.com	
	Programming embedded systems: structure of embedded program, infinite loop	3		
	compiling, linking and debugging	4		
USIT402 Introduction to Embedded Systems UNIT 5	**Real Time Operating System (RTOS):** Operating system basics, types of operating systems, Real-Time Characteristics, Selection Process of an RTOS.	6	Introduction to embedded systems by Shibu K V , www.tutorialspoint.com	Black board and chalk
	Design and Development: Embedded system development Environment – IDE, types of file generated on cross compilation, disassembler/ de-compiler, simulator, emulator and debugging, embedded product development life-cycle, trends in embedded industry	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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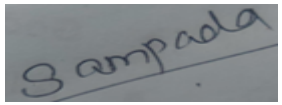

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYIT SEMESTER: IV MONTH: DEC-MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: To provide a understanding of software engineering, its basic concepts and functioning. Develop and master understanding of various models used by software industries for various purposes. Also conceptual learning of various aspects of it such as cost estimation techniques, project management, quality assurance etc.

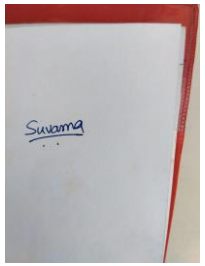
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT404, Software Engineering Unit-I	Introduction: What is software engineering? Software Development Life Cycle, Requirements Analysis, Software Design, Coding, Testing, Maintenance etc. Agile software development: Agile methods, Plan-driven and agile development, Extreme programming, Agile project management, Scaling agile methods.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Blackboard, Chalk
	Software Requirements: Functional and Non-functional requirements, User Requirements, System Requirements, Interface Specification, Documentation of the software requirements.	02		Blackboard, Chalk
	Software Processes: Process and Project, Component Software Processes. Software Development Process Models. • Waterfall Model. • Prototyping. • Iterative Development. • Rational Unified Process. • The RAD Model • Time boxing Model.	04		Blackboard, Chalk
	Agile software development: Agile methods, Plan-driven and agile development, Extreme programming, Agile project management, Scaling agile methods.	03		Blackboard, Chalk

USIT404, Software Engineering Unit-II	Socio-technical system:Essential characteristics of socio technical systems, Emergent System Properties, Systems Engineering, Components of system such as organization, people and computers, Dealing Legacy Systems.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Blackboard, Chalk
	Critical system: Types of critical system, A simple safety critical system, Dependability of a system, Availability and Reliability, Safety and Security of Software systems.	03		Blackboard, Chalk
	Requirements Engineering Processes: Feasibility study, Requirementselicitation and analysis, Requirements Validations, Requirements Management.	03		Blackboard, Chalk
	System Models: Models and its types, Context Models, Behavioural Models, Data Models, Object Models, Structured Methods	03		Blackboard, Chalk
USIT404, Software Engineering Unit-III	Architectural Design: Architectural Design Decisions, System Organisation, Modular Decomposition Styles, Control Styles, Reference Architectures.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata	Blackboard, Chalk
	User Interface Design: Need of UI design, Design issues, The UI design Process, User analysis, User Interface Prototyping, Interface Evaluation	03		Blackboard, Chalk
	Project Management Software Project Management, Management activities, Project Planning, Project Scheduling, Risk Management.	03		Blackboard, Chalk
	Quality Management: Process and Product Quality, Quality assurance and Standards, Quality Planning, Quality Control, Software Measurement and Metrics	03		Blackboard, Chalk

			Mcgraw-hill Seventh edition	
USIT404, Software Engineering Unit-IV	Verification and Validation: Planning Verification and Validation, Software Inspections, Automated Static Analysis, Verification and Formal Methods.	04	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication , Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Blackboard, Chalk
	Software Testing: System Testing, Component Testing, Test Case Design, Test Automation. Software Measurement: Size-Oriented Metrics, Function-Oriented Metrics, Extended Function Point Metrics	04		Blackboard, Chalk
	Software Cost Estimation:Software Productivity, Estimation Techniques, Algorithmic Cost Modelling, Project Duration and Staffing	04		Blackboard, Chalk
USIT404, Software Engineering Unit-V	Process Improvement: Process and product quality, Process Classification, Process Measurement, Process Analysis and Modeling, Process Change, The CMMI Process Improvement Framework.	03	Software Engineering, Ian Somerville Pearson Education. Ninth edition, Software Engineering Pankaj Jalote Narosa Publication ,	Blackboard, Chalk
	Service Oriented Software Engineering: Services as reusable components, Service Engineering, Software Development with Services.	03		Blackboard, Chalk
	Software reuse: The reuse landscape, Application frameworks, Software product lines, COTS product reuse.	03		Blackboard, Chalk

	Distributed software engineering: Distributed systems issues, Client–server computing, Architectural patterns for distributed systems, Software as a service	03	Software engineering, a practitioner's approach Roger Pressman Tata Mcgraw-hill Seventh edition	Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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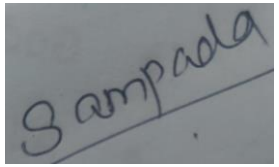

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYIT-A SEMESTER: SEM-2 MONTH: DEC-MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

- To gain an understanding why the green computing is instrumental for the environment.
- Identify key issues relevant to green computing and evaluate different approaches to these problems.
- Study of designing, engineering, manufacturing, using and disposing of computing devices in a way that reduces their environmental impact.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
5 GREEN COMPUTING UNIT 2	Minimizing Power Usage: Power Problems, Monitoring Power Usage, Servers, Low-Cost Options, Reducing Power Use, Data De-Duplication, Virtualization, Management, Bigger Drives, Involving the Utility Company,	3	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	BLACK BOARD AND CHALK
	Low Power Computers, PCs, Linux, Components, Servers, Computer Settings, Storage, Monitors, Power Supplies, Wireless Devices, Software.	3		
	Cooling: Cooling Costs, Power Cost, Causes of Cost, Calculating Cooling Needs, Reducing Cooling Costs, Economizers, On-Demand Cooling, HP's Solution, Optimizing Airflow, Hot Aisle/Cold Aisle, Raised Floors, Cable Management, Vapour Seal,	3		

	Prevent Recirculation of Equipment Exhaust, Supply Air Directly to Heat Sources, Fans, Humidity, Adding Cooling, Fluid Considerations, System Design, Datacentre Design, Centralized Control, Design for Your Needs, Put Everything Together.	3		
UNIT 3	**Changing the Way of Work:** Old Behaviours, starting at the Top, Process Reengineering with Greening Mind, Analysing the Global Impact of Local Actions,	3	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	BLACK BOARD AND CHALK
	Steps: Water, Recycling, Energy, Pollutants, Teleworkers and Outsourcing, Telecommuting, Outsourcing, how to Outsource.	3		
	Going Paperless: Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Billing, Handheld Computers vs. the Clipboard,	3		
	Unified Communications, Intranets, What to Include, Building an Intranet, Microsoft Office SharePoint Server 2007, Electronic Data Interchange (EDI), Nuts and Bolts, Value Added Networks, Advantages, Obstacles.	3		
UNIT 5	**Greening Your Information Systems:** Initial Improvement Calculations, Selecting Metrics, Tracking Progress, Change Business Processes, Customer Interaction, Paper Reduction,	3	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	BLACK BOARD AND CHALK
	Green Supply Chain, Improve Technology Infrastructure, Reduce PCs and Servers, Shared Services, Hardware Costs,	3		

	Cooling.			
	Staying Green: Organizational Check-ups, Chief Green Officer, Evolution, Sell the CEO, SMART Goals, Equipment Check-ups, Gather Data, Tracking the data,	3		
	Baseline Data, Benchmarking, Analyse Data, Conduct Audits, Certifications, Benefits, Realities, Helpful Organizations.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36

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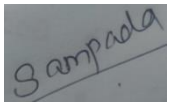

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT: CS

CLASS: FYIT-A SEMESTER: SEM-2 MONTH: DEC-MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

- To gain an understanding why the green computing is instrumental for the environment.
- Identify key issues relevant to green computing and evaluate different approaches to these problems.
- Study of designing, engineering, manufacturing, using and disposing of computing devices in a way that reduces their environmental impact.

PAPER, TITLE, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 5,GREEN COMPUTING, UNIT 1	**Overview and Issues:** Problems: Toxins, Power Consumption, Equipment Disposal, Company's Carbon Footprint: Measuring, Details, reasons to bother, Plan for the Future, Cost Savings: Hardware, Power.	4	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	BLACK BOARD AND CHALK
	Initiatives and Standards: Global Initiatives: United Nations, Basel Action Network, Basel Convention	4		
	North America: The United States, Canada, Australia, Europe, WEEE Directive, RoHS, National Adoption, Asia: Japan,	4		

	China, Korea.			
UNIT 4	**Recycling:** Problems, China, Africa, Materials, Means of Disposal, Recycling, Refurbishing, Make the Decision, Life Cycle, from beginning to end, Life, Cost, Green Design, Recycling Companies, Finding the Best One, Checklist, Certifications	3	Green IT by Toby Velte, Anthony Velte, Robert Elsenpeter	BLACK BOARD AND CHALK
	Hard Drive Recycling, Consequences, cleaning a Hard Drive, Pros and cons of each method, CDs and DVDs, good and bad about CD and DVDs disposal, Change the mind-set, David vs. America Online	3		
	Hardware Considerations: Certification Programs, EPEAT, RoHS, Energy Star, Computers, Monitors, Printers, Scanners, All-in-Ones, Thin Clients, Servers, Blade Servers, Consolidation, Products,	3		
	Hardware Considerations, Planned Obsolescence, Packaging, Toxins, Other Factors, Remote Desktop, Using Remote Desktop, Establishing a Connection, In Practice	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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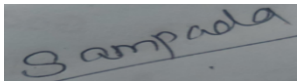

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.IT - A SEMESTER: II MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2018-2019

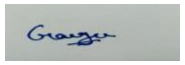
LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand and realize the Interfacing of memory & various I/O devices with 8085 microprocessors.
- Understand and classify the instruction set of 8085 microprocessor and distinguish the use of different instructions and apply it in assembly language programming.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-III Microprocessor Architecture	**Programming Techniques With Additional Instructions:** Programming Techniques: Looping, Counting and Indexing, Additional Data Transfer and 16-Bit Arithmetic Instructions, Arithmetic Instruction Related to Memory, Logic Operations: Rotate, Logics Operations: Compare, Dynamic Debugging.	5	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Blackboard, Chalk
	Counters and Time Delays: Counters and Time Delays, Illustrative Program: Hexadecimal Counter, Illustrative Program: zero-to-nine (Modulo Ten) Counter, Generating Pulse Waveforms, Debugging Counter and Time-Delay Programs.	4		Blackboard, Chalk
	Stacks and Sub-Routines: Stack, Subroutine, Restart, Conditional Call, Return Instructions, Advanced Subroutine concepts.	3		Blackboard, Chalk

Paper-II UNIT-IV Microprocessor Architecture	**Code Conversion, BCD Arithmetic, and 16-Bit Data Operations:** BCD-to-Binary Conversion, Binary-to-BCD Conversion, BCD-toSeven-Segment-LED Code Conversion, Binary-to-ASCII and ASCIIto-Binary Code Conversion, BCD Addition, BCD Subtraction, Introduction To Advanced Instructions and Applications, Multiplication, Subtraction With Carry.	5	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Blackboard, Chalk
	Software Development System and Assemblers: Microprocessors-Based Software Development system, Operating System and Programming Tools, Assemblers and Cross-Assemblers, Writing Program Using Cross Assemblers.	4		Blackboard, Chalk
	Interrupts: The 8085 Interrupt, 8085 Vectored Interrupts, Restart as S/W Instructions, Additional I/O Concepts and processes.	3		Blackboard, Chalk
Paper-II UNIT-V Microprocessor Architecture	**The Pentium and Pentium Pro microprocessors:** Introduction, Special Pentium registers, Memory management, Pentium instructions, Pentium Pro microprocessor, Special Pentium Pro features.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Blackboard, Chalk
	Core 2 and later Microprocessors: Introduction, Pentium II software changes, Pentium IV and Core 2, i3, i5 and i7.	4		Blackboard, Chalk
	SUN SPARC Microprocessor: Architecture, Register file, data types and instruction format	4		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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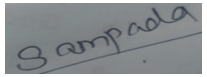

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Gauri Gaurav Vartak DEPARTMENT: Information Technology

CLASS: FYIT SEMESTER: II MONTH: DECE to MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

To become familiar with the architecture and the instruction set of an Intel microprocessor

To study the Assembly language programming as well as the design of various types of digital and analog interfaces

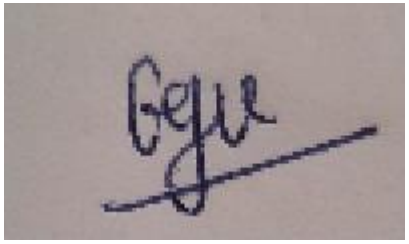
To understand the architecture of 8085 and 8051

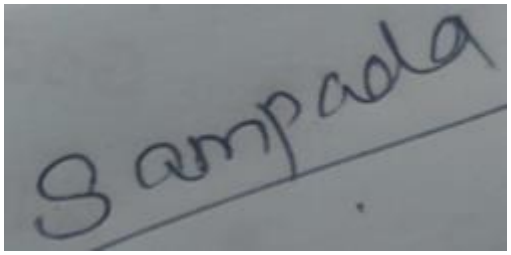
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 MPA Unit 1	**Microprocessor, microcomputers, and Assembly Language:** Microprocessor, Microprocessor Instruction Set and Computer Languages, From Large Computers to Single-Chip Microcontrollers, Applications.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
	Microprocessor Architecture and Microcomputer System: Microprocessor Architecture and its operation's, Memory, I/O Devices, Microcomputer System, Logic Devices and Interfacing, Microprocessor-Based System Application.	4	Microprocessors Architecture, Programming and Applications with the 8085.	Black board & Chalk

			Ramesh Gaonkar PENRAM Fifth 2012	
	8085 Microprocessor Architecture and Memory Interface: Introduction, 8085 Microprocessor unit, 8085-Based Microcomputer, Memory Interfacing, Interfacing the 8155 Memory Segment, Illustrative Example: Designing Memory for the MCTS Project, Testing and Troubleshooting Memory Interfacing Circuit, 8085-Based Single-Board microcomputer.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
Paper-02 MPA Unit 2	**Interfacing of I/O Devices** : Basic Interfacing concepts, Interfacing Output Displays, Interfacing Input Devices, Memory Mapped I/O, Testing and Troubleshooting I/O Interfacing Circuits.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
	Introduction to 8085 Assembly Language Programming: The 8085 Programming Model, Instruction Classification, Instruction, Data and Storage, Writing assembling and Execution of a simple program, Overview of 8085 Instruction Set, Writing and Assembling Program.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	Black board & Chalk
	Introduction to 8085 Instructions:	4	Microprocessors Architecture,	Black board & Chalk

	Data Transfer Operations, Arithmetic Operations, Logic Operation, Branch Operation, Writing Assembly Languages Programs, Debugging a Program		Programming and Applications with the 8085. Ramesh Gaonkar PENRAM Fifth 2012	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT SEMESTER: II MONTH: December to March ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -II Solutions of Algebraic and Transcendental Equations: Interpolation:	Solutions of Algebraic and Transcendental Equations: The Bisection Method, The Newton-Raphson Method, The Regula-falsi method, The Secant Method. Interpolation: Forward Difference, Backward Difference, Newton's Forward Difference Interpolation, Newton's Backward Difference Interpolation, Lagrange's Interpolation.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	Black Board and Chalk

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT
SEMESTER: II MONTH: December to March ACADEMIC YEAR:2018-19
LEARNING OBJECTIVE/S:
.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -III Solution of simultaneous algebraic equations (linear) using iterative methods: Numerical differentiation and Integration:	Solution of simultaneous algebraic equations (linear) using iterative methods: Gauss-Jordan Method, Gauss-Seidel Method. Numerical differentiation and Integration: Numberical differentiation, Numerical integration using Trapezoidal Rule, Simpson's 1/3rd and 3/8th rules. Numerical solution of 1st and 2nd order differential equations: Taylor series, Euler's Method, Modified Euler's Method, Runge-Kutta Method for 1st and 2 nd Order Differential Equations.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	Black Board and Chalk

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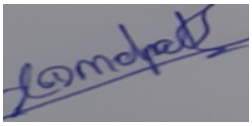
NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT SEMESTER: II MONTH: December to March
ACADEMIC YEAR: 2018-19
LEARNING OBJECTIVE/S:
.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -IV Least-Squares Regression: Linear Programming:	Least-Squares Regression: Linear Regression, Polynomial Regression, Multiple Linear Regression, General Linear Least Squares, Nonlinear Regression Linear Programming: Linear optimization problem, Formulation and Graphical solution, Basic solution and Feasible solution.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	Black Board and Chalk



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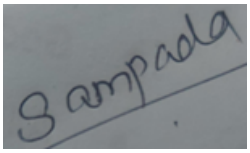

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Information Technology.

CLASS: F.Y.B.Sc. SEMESTER: II MONTH: Dec To March ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

- Object-oriented programming aims to implement real-world entities like inheritance, hiding, polymorphism, etc in programming. The main aim of OOP is to bind together the data and the functions that operate on them so that no other part of the code can access this data except that function.

The learners will be able to :

- To understand difference between object oriented and procedural oriented language.
- To understand advantages benefits and applications of object oriented language.
- To understand characteristics of object oriented language.
- To gain how to implement classes, methods and objects.
- To understand constant variables, data types, operators of C++ language.
- To understand use of constructor and destructor and using its implementation.
- To enable use of arrays, pointers and objects.
- To understand polymorphism and its types.
- To understand virtual function and pure virtual function / abstract function.
- To understand inheritance and its types with constructor.
- To understand run time error handling using try, catch and throw key words and benefits of it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

USIT201 Object Oriented Programming UNIT-I	**Object Oriented Methodology:** Introduction, Advantages and Disadvantages of Procedure Oriented Languages, what is Object Oriented? What is Object Oriented Development? Object Oriented Themes, Benefits and Application of OOPS.	6	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.
	Principles of OOPS: OOPS Paradigm, Basic Concepts of OOPS: Objects, Classes, Data Abstraction and Data Encapsulation, Inheritance, Polymorphism, Dynamic Binding, Message Passing	6		Black Board, Projector, PPT.
USIT201 Object Oriented Programming UNIT-II	**Classes and Objects:** Simple classes (Class specification, class members accessing), Defining member functions, passing object as an argument, Returning object from functions, friend classes, Pointer to object, Array of pointer to object.	8	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.
	Constructors and Destructors: Introduction, Default Constructor, Parameterized Constructor and examples, Destructors	4		
USIT201 Object Oriented Programming UNIT-III	**Polymorphism:** Concept of function overloading, overloaded operators, overloading unary and binary operators, overloading comparison operator, overloading arithmetic assignment operator, Data Conversion between objects and basic types,	7	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.
	Virtual Functions: Introduction and need, Pure Virtual Functions, Static Functions, this Pointer, abstract classes, virtual destructors.	5		
USIT201 Object Oriented Programming UNIT-IV	**Program development using Inheritance:** Introduction, understanding inheritance, Advantages provided by inheritance, choosing the access specifier, Derived class declaration, derived class constructors, class hierarchies, multiple inheritance, multilevel inheritance, containership, hybrid inheritance.	8	1. Object Oriented Analysis and Design 2. Mastering C++	Black Board, Projector, PPT.
	Exception Handling: Introduction, Exception Handling Mechanism, Concept of throw & catch with example	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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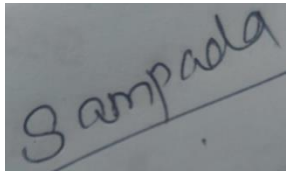

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS;FY BSc IT DIV-A(OOP) SEMESTER: SEM-2 MONTH:DEC-MAR ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to :

- To learn how inheritance and virtual functions implement dynamic binding with polymorphism.
- To learn how to design and implement generic classes with C++ templates.
- To learn how to use exception handling in C++ programs

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 1 OOP UNIT 5	**Templates:** Introduction, Function Template and examples,	2	Object Oriented Programming with C++ BY E. Balagurusamy	BLACK BOARD AND CHALK
	Class Template and examples.	2		
	Working with Files: Introduction, File Operations,	2		
	Various File Modes,	2		
	File Pointer and their Manipulation	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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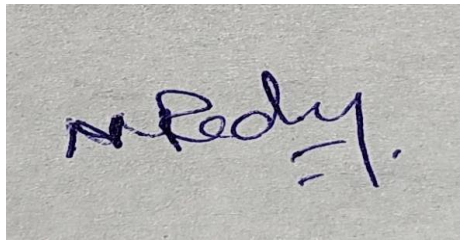

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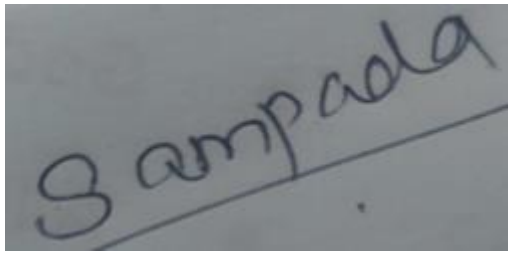

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE **DEPARTMENT**: ____IT____

CLASS: FYIT_A DIV **SEMESTER**: 2 **MONTH**: Dec to March **ACADEMIC YEAR:** 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand HTML**
- **Understand JavaScript**
- **Understand how server-side programming works on the web.**
- **PHP Basic syntax for variable types and calculations.**
- **Creating conditional structures**
- **Storing data in arrays**
- **Using PHP built-in functions and creating custom functions**
- **Understanding POST and GET in form submission.**
- **How to receive and process form submission data.**
- **Reading and writing cookies.**
- **Security tips (i.e. SQL Injection)**
- **Create a database in phpMyAdmin.**
- **Read and process data in a MySQL database. Students will learn JavaScript's role in websites and web apps.**
- **Students will be introduced to basic CS concepts**
- **Students will learn basic programming structures such as: variables, functions arrays etc.**
- **Students will learn how JavaScript works with HTML and CSS.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT203 Web Programming Unit I	**Internet and the World Wide Web:** What is Internet? Introduction to internet and its applications, E-mail, telnet, FTP, e-commerce, video conferencing, e-business. Internet service providers, domain name server, internet address, World Wide Web (WWW): World Wide Web and its evolution, uniform resource locator (URL), browsers – internet explorer, Netscape navigator, opera, Firefox, chrome, Mozilla. search engine, web saver – apache, IIS, proxy server, HTTP protocol	6	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	BLACK BOARD AND CHALK
	HTML5: Introduction, Why HTML5? Formatting text by using tags, using lists and backgrounds, Creating hyperlinks and anchors. Style sheets, CSS formatting text using style sheets, formatting paragraphs using style sheets.	6		

Unit II	**HTML5 Page layout and navigation:** Creating navigational aids: planning site organization, creating text based navigation bar, creating graphics based navigation bar, creating graphical navigation bar, creating image map, redirecting to anotherURL, creating division based layouts: HTML5 semantic tags, creating divisions, creating HTML5 semantic layout, positioning and formatting divisions	6	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	BLACK BOARD AND CHALK
	HTML5 Tables, Forms and Media: Creating tables: creating simple table, specifying the size of the table, specifying the width of the column, merging table cells, using tables for page layout, formatting tables: applying table borders, applying background and foreground fills, changing cell padding, spacing and alignment, creating user forms: creating basic form, using check boxes and option buttons, creating lists, additional input types in HTML5, Incorporating sound and video: audio and video in HTML5, HTML multimedia basics, embedding video clips, incorporating audio on web page	6		

UNIT III	Java Script: Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security,	2	JavaScript 2.0: The Complete Reference BY Thomas Powell and Fritz Schneider	BLACK BOARD AND CHALK
	Operators: Assignment Operators, Comparison Operators, Arithmetic Operators, % (Modulus), ++(Increment), --(Decrement), -(Unary Negation), Logical Operators, Short-Circuit Evaluation, String Operators, Special Operators, ?: (Conditional operator), , (Comma operator), delete, new, this, void	3		
	Statements: Break, comment, continue, delete, do...while, export, for, for...in, function, if...else, import, labelled, return, switch, var, while, with	2		
	.Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, regExp Document and its associated objects: document, Link, Area, Anchor, Image, Applet, Layer	2		
	Events and Event Handlers : General Information about Events, Defining Event Handlers, event, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp	3		

UNIT IV	PHP: Why PHP and MySQL? Server-side scripting, PHP syntax and variables, comments, types,	3	PHP Project for Beginners BY SharanamShah, Vaishali	BLACK BOARD AND CHALK
	control structures, branching, looping, termination, functions, passing information with PHP, GET, POST,	3		
	formatting form variables, superglobal arrays, strings and string functions	3		
	regular expressions, arrays, number handling, basic PHP errors/problems	3		
UNIT V	Advanced PHP and MySQL : PHP/MySQL Functions, Integrating web forms and databases,	3	PHP Project for Beginners BY SharanamShah, Vaishaliz	BLACK BOARD AND CHALK
	Displaying queries in tables, Building Forms from queries,	3		
	String and Regular Expressions, Sessions,	3		
	Cookies and HTTP, E-Mail	3		

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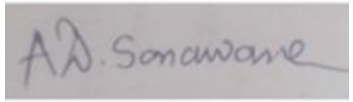
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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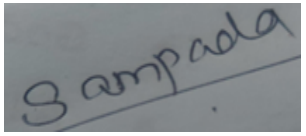

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE **DEPARTMENT**: ____IT____

CLASS: FYIT_B DIV **SEMESTER**: 2 **MONTH**: Dec to March **ACADEMIC YEAR:** 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand Green Computing**
- **Understand Problems of green Computing**
- **Understand how to solve problem properly**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT205 Green Computing Unit 1	Overview and Issues**:** Problems: Toxins, Power Consumption, Equipment Disposal, Company's Carbon Footprint: Measuring, Details, reasons to bother, Plan for the Future, Cost Savings: Hardware, Power.	6	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter	Blackboard and chalk

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	Initiatives and Standards: Global Initiatives: United Nations, Basel Action Network, Basel Convention, North America: The United States, Canada, Australia, Europe, WEEE Directive, RoHS, National Adoption, Asia: Japan, China, Korea	6		
Unit 2	Minimizing Power Usage: Power Problems, Monitoring Power Usage, Servers, Low-Cost Options, Reducing Power Use, Data De-Duplication, Virtualization, Management, Bigger Drives, Involving the Utility Company, LowPower Computers, PCs, Linux, Components, Servers, Computer Settings, Storage, Monitors, Power Supplies, Wireless Devices, Software.	6	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter	Blackboard and chalk
	Cooling: Cooling Costs, Power Cost, Causes of Cost, Calculating Cooling Needs, Reducing Cooling Costs, Economizers, On-Demand Cooling, HP's Solution, Optimizing Airflow, Hot Aisle/Cold Aisle, Raised	6		

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	Floors, Cable Management, Vapour Seal, Prevent Recirculation of Equipment Exhaust, Supply Air Directly to Heat Sources, Fans, Humidity, Adding Cooling, Fluid Considerations, System Design, Datacentre Design, Centralized Control, Design for Your Needs, Put Everything Together.			
UNIT 3	Changing the Way of Work: Old Behaviours, starting at the Top, Process Reengineering with Green in Mind, Analysing the Global Impact of Local Actions, Steps: Water, Recycling, Energy, Pollutants, Teleworkers and Outsourcing, Telecommuting, Outsourcing, how to Outsource.	6	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter	Blackboard and chalk
	Going Paperless: Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Billing, Handheld Computers vs. the Clipboard, Unified Communications, Intranets, What to Include,	6		

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	Building an Intranet, Microsoft Office SharePoint Server 2007, Electronic Data Interchange (EDI), Nuts and Bolts, Value Added Networks, Advantages, Obstacles.			
UNIT 4	Recycling: Problems, China, Africa, Materials, Means of Disposal, Recycling, Refurbishing, Make the Decision, Life Cycle, from beginning to end, Life, Cost, Green Design, Recycling Companies, Finding the Best One, Checklist, Certifications, Hard Drive Recycling, Consequences, cleaning a Hard Drive, Pros and cons of each method, CDs and DVDs, good and bad about CD and DVDs disposal, Change the mind-set, David vs. America Online	6	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter	Blackboard and chalk
	Hardware Considerations: Certification Programs, EPEAT, RoHS, Energy Star, Computers, Monitors, Printers, Scanners, All-in-Ones, Thin Clients, Servers, Blade Servers, Consolidation, Products, Hardware Considerations, Planned	6		

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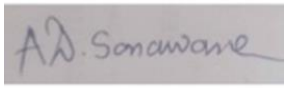
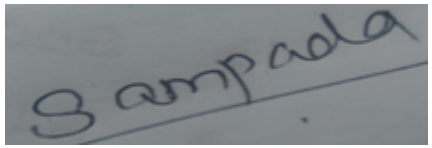
	Obsolescence, Packaging, Toxins, Other Factors, Remote Desktop, Using Remote Desktop, Establishing a Connection, In Practice			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 48





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BRIJESH YATINDRA JOSHI **DEPARTMENT: INFORMATION TECHNOLOGY**

CLASS: _FYIT DIV -A **SEMESTER: II** **MONTH: Dec to March** **ACADEMIC YEAR: 2018-2019**

Learning Objectives

1. Able to understand initial improvement calculations
2. Understand to select appropriate metrics
3. Understand the concept of change business process
4. Understand the concept of hardware cost
5. Understand the process of organizational check ups
6. Understanding Audit process

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PAPER ,UNIT , TITLE	SUB TOPICS	NO OF LECTURES ALLOCATED	REFERENCE/S	TEACHING METHODS /ICT TOOLS USED
USIT205 **Green Computing** UNIT V	Greening Your Information Systems: Initial Improvement Calculations, Selecting Metrics, Tracking Progress, Change Business Processes, Customer Interaction, Paper Reduction, Green Supply Chain, Improve Technology Infrastructure, Reduce PCs and Servers, Shared Services, Hardware Costs, Cooling.	6	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter McGraw Hill	BLACK BOARD AND CHALK
	Staying Green: Organizational Check-ups, Chief Green Officer, Evolution, Sell the CEO, SMART Goals, Equipment Check-ups, Gather Data, Tracking the data, Baseline Data, Benchmarking, Analyse Data, Conduct Audits, Certifications, Benefits, Realities, Helpful Organizations.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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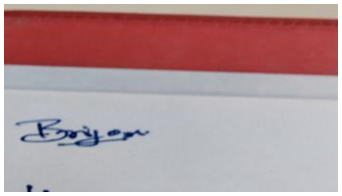

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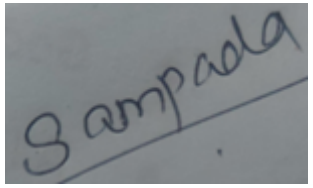

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: IT

CLASS: FY BSc IT SEMESTER:II MONTH: DEC-MAR ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to:

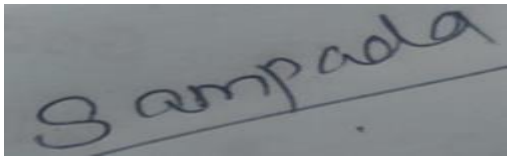
1. To learn about how computer systems work and underlying principles.
2. To understand the basics of digital electronics needed for computers.
3. To understand the basics of instruction set architecture for reduced and complex instruction sets.
4. To understand the basics of processor structure and operation.
5. To understand how data is transferred between the processor and I/O devices.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 MPA UNIT 2	Basic Interfacing concepts, Interfacing Output Displays, Interfacing Input Devices, Memory Mapped I/O, Testing and Troubleshooting I/O Interfacing Circuits.	3	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	Black board and chalk
	The 8085 Programming Model, Instruction Classification, Instruction, Data and Storage, Writing assembling and Execution of a simple Program.	3		
	Overview of 8085 Instruction Set, Writing and Assembling Program, Data Transfer Operations.	2		

	Arithmetic Operations, Logic Operation, Branch Operation, Writing Assembly Languages Programs, Debugging a Program.	4		
UNIT 3	Programming Techniques: Looping, Counting and Indexing, Additional Data Transfer and 16-Bit Arithmetic Instructions, Arithmetic Instruction Related to Memory.	3	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	Black board and chalk
	Logic Operations: Rotate, Logics Operations: Compare, Dynamic Debugging, Counters and Time Delays.	3		
	Illustrative Program: Hexadecimal Counter, zero-to-nine (Modulo Ten) Counter, Generating Pulse Waveforms, Debugging Counter and Time-Delay Programs.	3		
	Stack Subroutine, Restart, Conditional Call, Return Instructions, Advanced Subroutine concepts.	3		
UNIT 4	BCD-to-Binary Conversion, Binary-to-BCD Conversion, BCD-to-Seven-Segment-LED Code Conversion, Binary-to-ASCII and ASCII-to-Binary Code Conversion,	4	Microprocessors Architecture, Programming and Applications with t 8085 by Ramesh Gaonkar	Black board and chalk
	BCD Addition, BCD Subtraction, Introduction To Advanced Instructions and Applications, Multiplication, Subtraction With Carry.	2		
	Microprocessors-Based Software Development system, OS and Programming Tools, Assemblers and Cross-Assemblers, Writing Program Using Cross Assemblers.	3		

	The 8085 Interrupt, 8085 Vectored Interrupts, Restart as S/W Instructions, Additional I/O Concepts and processes.	3		
UNIT 5	Introduction, Special Pentium registers, Memory management, Pentium instructions, Pentium Pro microprocessor.	3	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	Black board and chalk
	Special Pentium Pro features, Introduction, Pentium II software changes.	3		
	Pentium IV and Core 2, i3, i5 and i7.	3		
	Architecture, Register file, data types and instruction format	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: IT CLASS: FYIT MONTH: Dec-March

ACADEMIC YEAR:2018-19

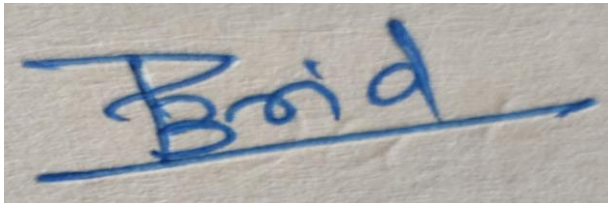
LEARNING OBJECTIVE/S:
The learners will be able to :

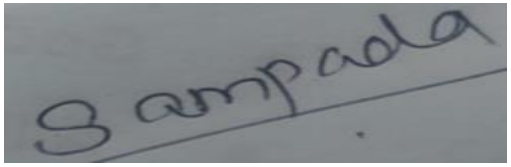
- The learners will be able to understand the Microprocessor architecture and its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Microprocessor Architecture Paper 2 Course Code: USIT202 Unit 1	**Microprocessor, microcomputers, and Assembly Language:** Microprocessor, Microprocessor Instruction Set and Computer Languages, From Large Computers to Single-Chip Microcontrollers, Applications.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonka	Black board & Chalk
	Microprocessor Architecture and Microcomputer System: Microprocessor Architecture and its operation's, Memory, I/O Devices, Microcomputer System, Logic Devices and Interfacing, Microprocessor-Based System Application.	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonka	Black board & Chalk
	8085 Microprocessor Architecture and Memory Interface: Introduction, 8085 Microprocessor unit, 8085-Based Microcomputer, Memory Interfacing, Interfacing the 8155 Memory Segment, Illustrative Example: Designing Memory	4	Microprocessors Architecture, Programming and Applications with the 8085. Ramesh Gaonka	Black board & Chalk

	for the MCTS Project, Testing and Troubleshooting Memory Interfacing Circuit, 8085-Based Single-Board microcomputer			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT SEMESTER: II MONTH: December to March ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -II Solutions of Algebraic and Transcendental Equations: Interpolation:	Solutions of Algebraic and Transcendental Equations: The Bisection Method, The Newton-Raphson Method, The Regula-falsi method, The Secant Method. Interpolation: Forward Difference, Backward Difference, Newton's Forward Difference Interpolation, Newton's Backward Difference Interpolation, Lagrange's Interpolation.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	Black Board and Chalk

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT
SEMESTER: II MONTH: December to March ACADEMIC YEAR:2018-19
LEARNING OBJECTIVE/S:
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -III Solution of simultaneous algebraic equations (linear) using iterative methods: Numerical differentiation and Integration:	Solution of simultaneous algebraic equations (linear) using iterative methods: Gauss-Jordan Method, Gauss-Seidel Method. Numerical differentiation and Integration: Numberical differentiation, Numerical integration using Trapezoidal Rule, Simpson's 1/3rd and 3/8th rules. Numerical solution of 1st and 2nd order differential equations: Taylor series, Euler's Method, Modified Euler's Method, Runge-Kutta Method for 1st and 2 nd Order Differential Equations.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	Black Board and Chalk

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT SEMESTER: II MONTH: December to March
ACADEMIC YEAR: 2018-19
LEARNING OBJECTIVE/S:
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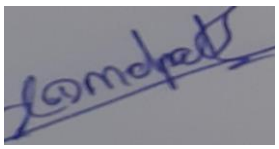
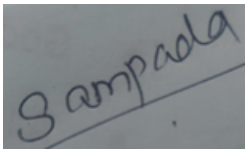
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -IV Least-Squares Regression: Linear Programming:	Least-Squares Regression: Linear Regression, Polynomial Regression, Multiple Linear Regression, General Linear Least Squares, Nonlinear Regression Linear Programming: Linear optimization problem, Formulation and Graphical solution, Basic solution and Feasible solution.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	Black Board and Chalk





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS:FY BSc IT DIV-B(OOP) SEMESTER: SEM-2 MONTH:DEC-MAR ACADEMIC YEAR: 2018-2019

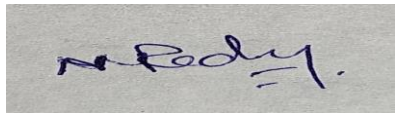
LEARNING OBJECTIVE/S:

- The learners will be able to :
- To understand how C++ improves C with object-oriented features.
- To learn how to write inline functions for efficiency and performance.
- To learn the syntax and semantics of the C++ programming language.
- To learn how to design C++ classes for code reuse.
- To learn how to implement copy constructors and class member functions.
- To understand the concept of data abstraction and encapsulation.
- To learn how to overload functions and operators in C++.
- To learn how containment and inheritance promote code reuse in C++.
- To learn how inheritance and virtual functions implement dynamic binding with polymorphism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER1 OOP UNIT 1	**Object Oriented Methodology**: Introduction, Advantages and Disadvantages of Procedure Oriented Languages,	3	Object Oriented Programming with C++ BY E. Balagurusamy	BLACK BOARD AND CHALK
	what is Object Oriented? What is Object Oriented Development? Object Oriented Themes, Benefits and Application of OOPS.	3		
	Principles of OOPS: OOPS Paradigm, Basic Concepts of OOPS: Objects, Classes, Data Abstraction and Data Encapsulation,	3		
	Inheritance, Polymorphism, Dynamic Binding	3		
UNIT 3	**Polymorphism:** Concept of function overloading, overloaded operators,	3	Object Oriented Programming	BLACK BOARD AND CHALK

	overloading unary and binary operators, overloading comparison operator, overloading arithmetic assignment operator, Data Conversion between objects and basic types,	3	with C++ BY E. Balagurusamy	
	Virtual Functions: Introduction and need, Pure Virtual Functions,	3		
	Static Functions, this Pointer, abstract classes, virtual	3		
UNIT 4	**Program development using Inheritance:** Introduction, understanding inheritance, Advantages provided by inheritance,	3	Object Oriented Programming with C++ BY E. Balagurusamy	BLACK BOARD AND CHALK
	choosing the access specifier, Derived class declaration, derived class constructors, class hierarchies,	3		
	multiple inheritance, multilevel inheritance, containership, hybrid inheritance.	3		
	Exception Handling: Introduction, Exception Handling Mechanism	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36



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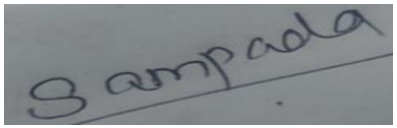

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT: CS

CLASS: FYIT-DIV B SEMESTER: SEM-2 MONTH: DEC-MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

- Perform object oriented programming to develop solution to problems demonstrating usage of control structures, modularity, I/O and other standard language constructs.
- Demonstrate adeptness of object oriented programming to develop solution to problem demonstration usage of data abstraction, encapsulation, and inheritance.

PAPER, TITLE,UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1,Object oriented programming ,UNIT 2	**Classes and Objects:** Simple classes (Class specification, class members accessing), Defining member functions, passing object as an argument	4	Object Oriented Programming with C++ by E.Balagurusamy	BLACK BOARD AND CHALK
	Returning object from functions, friend classes, Pointer to object, Array of pointer to object.	4		
	Constructors and Destructors: Introduction, Default Constructor, Parameterized Constructor and examples, Destructor	4		

UNIT 5	**Templates:** Introduction, Function Template and examples,	3	Object Oriented Programming with C++ by E.Balagurusamy	BLACK BOARD AND CHALK
	Class Template and examples.	3		
	Working with Files: Introduction, File Operations, Various File Modes,	4		
	File Pointer and their Manipulation	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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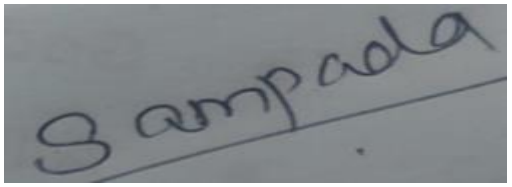

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.IT - B SEMESTER: II MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

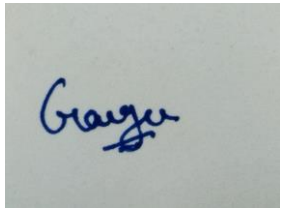
- design dynamic websites that meet specified needs and interests.
- write well-structured, easily maintained, standards-compliant, accessible HTML code.
- use JavaScript to add dynamic content to pages.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III UNIT-II WEB PROGRAMMING	**HTML5 Page layout and navigation:** Creating navigational aids: planning site organization, creating text based navigation bar, creating graphics based navigation bar, creating graphical navigation bar, creating image map, redirecting to another URL,	3	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	Blackboard, Chalk
	creating division based layouts: HTML5 semantic tags, creating divisions, creating HTML5 semantic layout, positioning and formatting divisions.	2		Blackboard, Chalk
	HTML5 Tables, Forms and Media: Creating tables: creating simple table, specifying the size of the table, specifying the width of the column, merging table cells, using tables for page layout,	2		Blackboard, Chalk

	formatting tables: applying table borders, applying background and foreground fills, changing cell padding, spacing and alignment,	2		Blackboard, Chalk
	creating user forms: creating basic form, using check boxes and option buttons, creating lists, additional input types in HTML5, Incorporating sound and video: audio and video in HTML5, HTML multimedia basics, embedding video clips, incorporating audio on web page	3		Blackboard, Chalk
PAPER-III UNIT-III WEB PROGRAMMING	**Java Script:** Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security,	1	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	Blackboard, Chalk
	Operators: Assignment Operators, Comparison Operators, Arithmetic Operators, % (Modulus), ++(Increment), --(Decrement), -(Unary Negation), Logical Operators, Short-Circuit Evaluation, String Operators, Special Operators, ?: (Conditional operator), , (Comma operator), delete, new, this, void	2		Blackboard, Chalk
	Statements: Break, comment, continue, delete, do...while, export, for, for...in, function, if...else, import, labelled, return, switch, var, while, with	2		Blackboard, Chalk
	Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, regExp	2		Blackboard, Chalk
	Document and its associated objects: document, Link, Area, Anchor, Image, Applet, Layer	2		Blackboard, Chalk
	Events and Event Handlers : General Information about Events, Defining Event Handlers, event, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad,	3		Blackboard, Chalk

	onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp, onMove, onReset, onResize, onSelect, onSubmit, onUnload			
PAPER-III UNIT-V WEB PROGRAMMING	**Advanced PHP and MySQL :** PHP/MySQL Functions, Integrating web forms and databases,	5	Web Design The Complete Reference Thomas Powell Tata McGraw Hill	Blackboard, Chalk
	Displaying queries in tables, Building Forms from queries, String and	3		Blackboard, Chalk
	Regular Expressions, Sessions, Cookies and HTTP, E-Mail	4		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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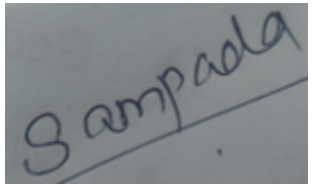

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SURBHI SHAH DEPARTMENT: IT-CS

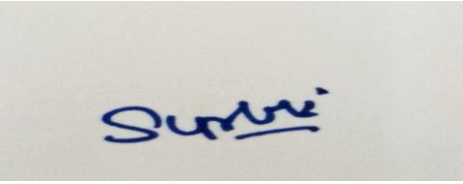
CLASS:FYIT-DIV B SEMESTER: SEM-II MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: learn advanced html programming with its basic concepts and to create database with the help of php and mysql.and to be capable of managing complex IT projects with consideration of the human, financial and environmental factors. to work effectively as a part of a team to achieve a common stated goal.to adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:-III TITLE:- Web Programming UNIT 1	**Internet and the World Wide Web:** What is Internet? Introduction to internet and its applications, E-mail, telnet, FTP, e-commerce, video conferencing, e-business.	2	Web Design The Complete Reference By Thomas Powell And HTML5 Step by Step by Faithe Wempen	BLACK BOARD AND CHALK
	Internet service providers, domain name server, internet address, World Wide Web (WWW): World Wide Web and its evolution, uniform resource locator (URL), browsers – internet explorer, Netscape navigator, opera, Firefox,	2		
	chrome, Mozilla. search engine, web saver – apache, IIS, proxy server, HTTP protocol	2		
	HTML5: Introduction, Why HTML5? Formatting text by using tags,	3		
	using lists and backgrounds, Creating hyperlinks and anchors. Style sheets, CSS formatting text using style sheets, formatting paragraphs using style sheets.	3		

UNIT 4	**PHP:** Why PHP and MySQL? Server-side scripting, PHP syntax and variables, comments,	3	PHP 5.1 for Beginners By Ivan Bayross Sharanam Shah,	BLACK BOARD AND CHALK
	types, control structures, branching, looping, termination, functions,	3		
	passing information with PHP, GET, POST, formatting form variables, superglobal arrays,	3		
	strings and string functions, regular expressions, arrays, number handling, basic PHP errors/problems	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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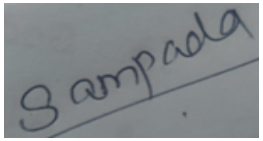

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: F.Y.B.Sc.IT - C SEMESTER: II MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2018-2019

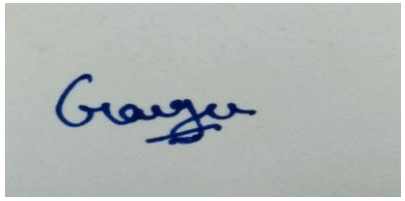
LEARNING OBJECTIVE/S:
The learners will be able to :

- Identify IT Infrastructure Management and Green Data Centre Metrics for software development
- Illustrate various green IT services and its roles.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-V Unit-II Green Computing	**Minimizing Power Usage:** Power Problems, Monitoring Power Usage, Servers, Low-Cost Options, Reducing Power Use, Data De-Duplication, Virtualization, Management, Bigger Drives, Involving the Utility Company, LowPower Computers, PCs, Linux, Components, Servers, Computer Settings, Storage, Monitors, Power Supplies, Wireless Devices, Software.	5	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter McGraw Hill 2008	Blackboard, Chalk
	Cooling: Cooling Costs, Power Cost, Causes of Cost, Calculating Cooling Needs, Reducing Cooling Costs, Economizers, On-Demand Cooling, HP's Solution, Optimizing Airflow, Hot Aisle/Cold Aisle, Raised Floors, Cable Management,	3		Blackboard, Chalk
	Vapour Seal, Prevent Recirculation of Equipment Exhaust, Supply Air Directly to Heat Sources, Fans, Humidity, Adding Cooling, Fluid Considerations, System Design, Datacentre Design, Centralized Control, Design for Your Needs, Put Everything Together.	4		Blackboard, Chalk

Paper-V Unit-IV Green Computing	**Recycling:** Problems, China, Africa, Materials, Means of Disposal, Recycling, Refurbishing, Make the Decision, Life Cycle, from beginning to end, Life, Cost, Green Design,	3	Green IT Toby Velte, Anthony Velte, Robert Elsenpeter McGraw Hill 2008	Blackboard, Chalk
	Recycling Companies, Finding the Best One, Checklist, Certifications, Hard Drive Recycling, Consequences, cleaning a Hard Drive, Pros and cons of each method, CDs and DVDs, good and bad about CD and DVDs disposal, Change the mind-set, David vs. America Online	3		Blackboard, Chalk
	Hardware Considerations: Certification Programs, EPEAT, RoHS, Energy Star, Computers, Monitors, Printers, Scanners, All-in-Ones, Thin Clients, Servers, Blade Servers, Consolidation, Products, Hardware Considerations, Planned Obsolescence, Packaging, Toxins, Other Factors, Remote Desktop, Using Remote Desktop, Establishing a Connection, In Practice	6		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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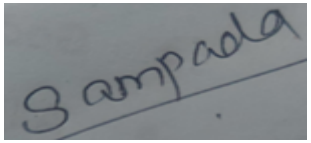

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TEACHING PLAN (UNIT PLAN)

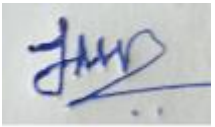
NAME OF THE STAFF: ____ HEMANT WANI_ DEPARTMENT: _____BSC-IT___ CLASS: __FYIT___ SEMESTER: II

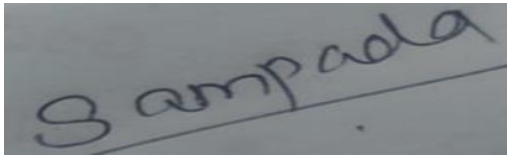
MONTH: ____December to March_____ ACADEMIC YEAR: ____2018-19__

LEARNING OBJECTIVE/S:
The learners will be able to:

Get knowledge that how to disposed e-wastages and to recycle the product and save our environment. To be capable of managing complex IT projects with consideration of the human, financial and environmental factors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Green Computing USIT205 Unit 1	**Introduction**: Overview and Issues: Problems: Toxins, Power Consumption, Equipment .	3	Toby Velte, Anthony Velte, Robert Elsenpeter	Chalk, Blackboard
	Disposal Company's Carbon Footprint: Measuring, Details, reasons to bother, Plan for the Future,	3		
	Cost Savings: Hardware, Power. Initiatives and Standards:	3		
	Global Initiatives: United Nations, Basel Action Network, Basel Convention, North America: The	3		





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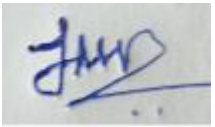
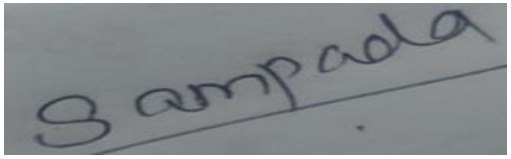
	United States, Canada, Australia, Europe, WEEE Directive, RoHS, National Adoption, Asia: Japan.			
Green Computing USIT205 Unit 3	**Changing the Way of Work: Old** Behaviours, starting at the Top, Process Reengineering with Green in Mind, Analysing the Global Impact of Local Actions, Steps: Water, Recycling, Energy, Pollutants, Teleworkers and Outsourcing, Telecommuting, Outsourcing, how to Outsource. Going Paperless: Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Include, Building an Intranet, Microsoft Office Interchange (EDI), Nuts and Bolts.	4 2 3 3	Toby Velte, Anthony Velte, Robert Elsenpeter	Chalk, Blackboard
Green Computing USIT205 Unit 5	**Greening Your Information Systems**: Initial Improvement Calculations, Selecting Metrics, Customer Interaction, Paper Reduction, Green Supply Chain, Improve Technology Infrastructure, Reduce PCs	3 4	Toby Velte, Anthony Velte, Robert Elsenpeter	Chalk, Blackboard





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	and Servers, Shared Services, Hardware Costs, Cooling. Staying Green: Organizational Check-ups.			
	Chief Green Officer, Evolution, Sell the CEO, SMART Goals, Equipment Check-ups, Gather Data, Tracking the data, Baseline Data, Benchmarking, Analyse Data,	3		
	Conduct Audits, Certifications, Benefits, Realities, Helpful Organizations	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __36_____

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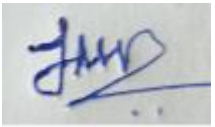

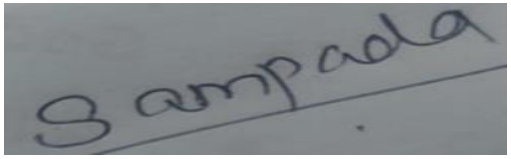

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT SEMESTER: II MONTH: December to March ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -II Solutions of Algebraic and Transcendental Equations: Interpolation:	Solutions of Algebraic and Transcendental Equations: The Bisection Method, The Newton-Raphson Method, The Regula-falsi method, The Secant Method. Interpolation: Forward Difference, Backward Difference, Newton's Forward Difference Interpolation, Newton's Backward Difference Interpolation, Lagrange's Interpolation.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	Black Board and Chalk

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT
SEMESTER: II MONTH: December to March ACADEMIC YEAR:2018-19
LEARNING OBJECTIVE/S:
.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -III Solution of simultaneous algebraic equations (linear) using iterative methods: Numerical differentiation and Integration:	Solution of simultaneous algebraic equations (linear) using iterative methods: Gauss-Jordan Method, Gauss-Seidel Method. Numerical differentiation and Integration: Numberical differentiation, Numerical integration using Trapezoidal Rule, Simpson's 1/3rd and 3/8th rules. Numerical solution of 1st and 2nd order differential equations: Taylor series, Euler's Method, Modified Euler's Method, Runge-Kutta Method for 1st and 2 nd Order Differential Equations.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	Black Board and Chalk

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NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics
CLASS: FYIT SEMESTER: II MONTH: December to March
ACADEMIC YEAR: 2018-19
LEARNING OBJECTIVE/S:
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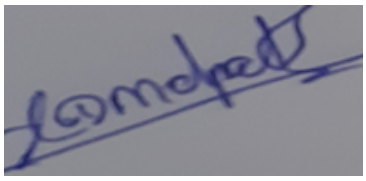
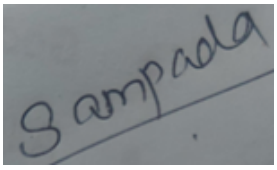
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
NSM Unit -IV Least-Squares Regression: Linear Programming:	Least-Squares Regression: Linear Regression, Polynomial Regression, Multiple Linear Regression, General Linear Least Squares, Nonlinear Regression Linear Programming: Linear optimization problem, Formulation and Graphical solution, Basic solution and Feasible solution.	12	Fundamentals of Mathematical Statistics S. C. Gupta, V. K. Kapoor	Black Board and Chalk





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYIT-C SEMESTER: SEM-2 MONTH: DEC-MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

- Perform object oriented programming to develop solution to problems demonstrating usage of control structures, modularity, I/O and other standard language constructs.
- Demonstrate adeptness of object oriented programming to develop solution to problem demonstration usage of data abstraction, encapsulation, and inheritance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1 OBJECT ORIENTED PROGRAMMING UNIT 4	**Program development using Inheritance:** Introduction, understanding inheritance, Advantages provided by inheritance, choosing the access specifier, *Derived class declaration,*	3	Object Oriented Programming with C++ by E.Balagurusamy	BLACK BOARD AND CHALK
	derived class constructors, class hierarchies, multiple inheritance,	3		
	Multilevel inheritance, Containership, hybrid inheritance. Exception Handling: Introduction,	3		
	Exception Handling Mechanism, Concept of throw & catch with example	3		

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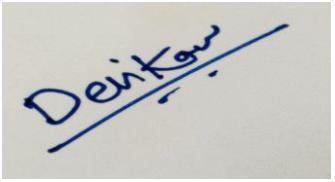
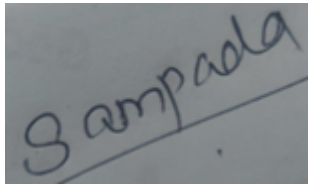
UNIT 5	**Templates:** Introduction, Function Template and examples,	3	Object Oriented Programming with C++ by E.Balagurusamy	BLACK BOARD AND CHALK
	Class Template and examples.	3		
	Working with Files: Introduction, File Operations, Various File Modes,	4		
	File Pointer and their Manipulation	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT-CS

CLASS:FYIT-DIV C SEMESTER: SEM-II MONTH: DEC-MAR ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: To apply fundamental programming constructs. To illustrate the concept of classes and objects, Data Abstraction and Data Encapsulation. To implement the concept of Pointer, friend function , Virtual Functions, Constructor& Destructors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-1, OOPS, UNIT 1	**Object Oriented Methodology:** Introduction, Advantages and Disadvantages of Procedure Oriented Languages, what is Object Oriented? What is Object Oriented Development? Object Oriented Themes, Benefits and Application of OOPS.	4	Object Oriented Programming with C++ -by E. Balagurusamy	Blackboard & Chalk
	Principles of OOPS: OOPS Paradigm, Basic Concepts of OOPS: Objects, Classes, Data Abstraction and Data Encapsulation	4		
	Inheritance, Polymorphism, Dynamic Binding, Message Passing	4		
UNIT 2	**Classes and Objects:** Simple classes (Class specification, class members accessing), Defining member functions	4	Object Oriented Programming with C++ -by E. Balagurusamy	Blackboard & Chalk

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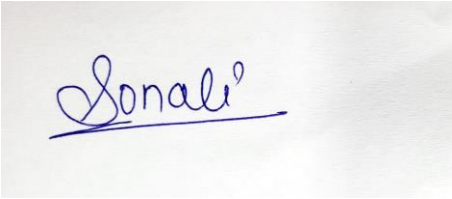
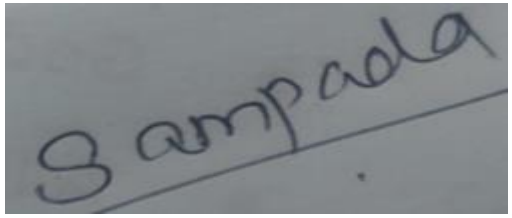
	passing object as an argument, Returning object from functions, friend classes, Pointer to object, Array of pointer to object.	4		
	Constructors and Destructors: Introduction, Default Constructor, Parameterized Constructor and examples, Destructors	4		
UNIT 3	**Polymorphism:** Concept of function overloading, overloaded operators, overloading unary and binary operators	5	Object Oriented Programming with C++ -by E. Balagurusamy	Blackboard & Chalk
	overloading comparison operator, overloading arithmetic assignment operator, Data Conversion between objects and basic types.	4		
	Virtual Functions: Introduction and need, Pure Virtual Functions, Static Functions, this Pointer, abstract classes, virtual destructors.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SURBHI SHAH DEPARTMENT: IT-CS CLASS:FYIT-DIV C

SEMESTER: SEM-II MONTH: JAN-MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: to think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems to apply their knowledge and skills to be employed and excel in IT professional careers and/or to continue their education in IT and/or related post graduate programmes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER NO:II TITLE OF PAPER:- **Microprocessor Architecture** UNIT 1	**Microprocessor, microcomputers, and Assembly Language:** Microprocessor, Microprocessor Instruction Set and Computer Languages, From Large Computers to Single-Chip Microcontrollers, Applications.	3	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	• Reference book,chalk and blackboard
	Microprocessor Architecture and Microcomputer System: Microprocessor Architecture and its operation's, Memory, I/O Devices, Microcomputer System, Logic Devices and Interfacing, Microprocessor-Based System Application.	4		
	8085 Microprocessor Architecture and Memory Interface: Introduction, 8085 Microprocessor unit, 8085-Based Microcomputer, Memory Interfacing, Interfacing the 8155 Memory Segment, Illustrative Example: Designing Memory for the MCTS Project, Testing and Troubleshooting Memory Interfacing Circuit, 8085-Based Single-Board microcomputer	5		

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UNIT 2	**Interfacing of I/O Devices** Basic Interfacing concepts, Interfacing Output Displays, Interfacing Input Devices, Memory Mapped I/O, Testing and Troubleshooting I/O Interfacing Circuits.	3	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	Reference book,chalk and blackboard
	Introduction to 8085 Assembly Language Programming: The 8085 Programming Model, Instruction Classification, Instruction, Data and Storage, Writing assembling and Execution of a simple program, Overview of 8085 Instruction Set, Writing and Assembling Program.	5		
	Introduction to 8085 Instructions: Data Transfer Operations, Arithmetic Operations, Logic Operation, Branch Operation, Writing Assembly Languages Programs, Debugging a Program.	4		
UNIT 3	**Programming Techniques With Additional Instructions:** Programming Techniques: Looping, Counting and Indexing, Additional Data Transfer and 16-Bit Arithmetic Instructions, Arithmetic Instruction Related to Memory, Logic Operations: Rotate, Logics Operations: Compare, Dynamic Debugging.	4	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	Reference book,chalk and blackboard
	Counters and Time Delays: Counters and Time Delays, Illustrative Program: Hexadecimal Counter, Illustrative Program: zero-to-nine (Modulo Ten) Counter, Generating Pulse Waveforms, Debugging Counter and Time-Delay Programs.	4		
	Stacks and Sub-Routines: Stack, Subroutine, Restart, Conditional Call, Return Instructions, Advanced Subroutine concepts.	4		

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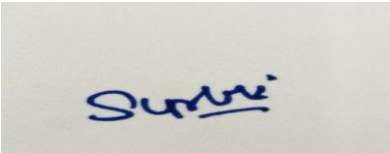
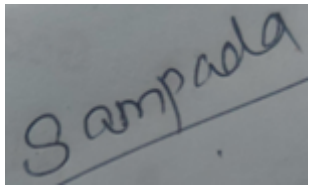
UNIT 4	**Code Conversion, BCD Arithmetic, and 16-Bit Data Operations:** BCD-to-Binary Conversion, Binary-to-BCD Conversion, BCD-to-Seven-Segment-LED Code Conversion, Binary-to-ASCII and ASCII-to-Binary Code Conversion, BCD Addition, BCD Subtraction, Introduction To Advanced Instructions and Applications, Multiplication, Subtraction With Carry.	4	Microprocessors Architecture, Programming and Applications with the 8085 by Ramesh Gaonkar	Reference book,chalk and blackboard
	Software Development System and Assemblers: Microprocessors-Based Software Development system, Operating System and Programming Tools, Assemblers and Cross-Assemblers, Writing Program Using Cross Assemblers.	4		
	Interrupts:-The 8085 Interrupt, 8085 Vectored Interrupts, Restart as S/W Instructions, Additional I/O Concepts and processes.	4		
UNIT 5	**The Pentium and Pentium Pro microprocessors:** Introduction, Special Pentium registers, Memory management, Pentium instructions, Pentium Pro microprocessor, Special Pentium Pro features.	5	Structured Computer Organization By Andrew C. Tanenbaum And internet.	Reference book,chalk and blackboard
	Core 2 and later Microprocessors: Introduction, Pentium II software changes, Pentium IV and Core 2, i3, i5 and i7.	3		
	SUN SPARC Microprocessor: Architecture, Register file, data types and instruction format	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT/CS

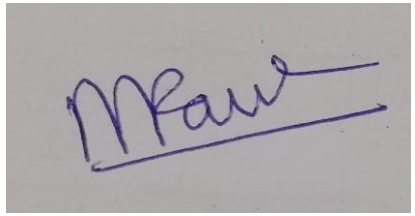
CLASS: FYIT-C SEMESTER: II MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to design valid, well-formed, scalable, and meaningful pages using emerging technologies, and database connectivity

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
WEB PROGRAMMING (USIT203) Unit I	**Internet and the World Wide Web:** What is Internet? Introduction to internet and its applications, E-mail, telnet, FTP, e-commerce, video conferencing, e-business. Internet service providers, domain name server, internet address, World Wide Web (WWW): World Wide Web and its evolution, uniform resource locator (URL), browsers – internet explorer, Netscape navigator, opera, Firefox, chrome, Mozilla. search engine, web saver – apache, IIS, proxy server, HTTP protocol	6	Web Design The Complete Reference-Thomas Powell Tata McGraw Hill, HTML5 Step by Step-Faithe Wempen	Black Board and Chalk
	HTML5: Introduction, Why HTML5? Formatting text by using tags, using lists and backgrounds, Creating hyperlinks and anchors. Style sheets, CSS formatting text using style sheets, formatting paragraphs using style sheets.	6	Web Design The Complete Reference-Thomas Powell Tata McGraw Hill, HTML5 Step by Step-Faithe Wempen	Black Board and Chalk

WEB PROGRAMMING (USIT203) Unit V	**Advanced PHP and MySQL :** PHP/MySQL Functions, Integrating web forms and databases, Displaying queries in tables, Building Forms from queries,	8	PHP 6 and MySQL Bible by Steve Suehring, Tim Converse, Joyce Park	Black Board and Chalk
	String and Regular Expressions, Sessions, Cookies and HTTP, E-Mail	4	PHP 5.1 for Beginners by Ivan Bayross, Sharanam Shah	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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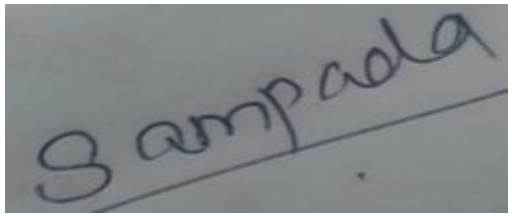

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:NAMITA NITIN RODE DEPARTMENT: CS

CLASS:FY BSc IT DIV C (WEB) SEMESTER:SEM -2 MONTH:DEC-MAR ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

Insert a graphic within a web page. Create a link within a web page.Create a table within a web page.

Insert heading levels within a web page. will learn JavaScript's role in websites and web apps.Students will be introduced to basic CS concepts

Students will learn basic programming structures such as: variables, functions arrays etc.Students will learn how JavaScript works with HTML and CSS.

Students will learn how to debug basic JavaScript errors. PHP Basic syntax for variable types and calculations.Creating conditional structures.Storing data in arrays.Using PHP built-in functions and creating custom functions.Understanding POST and GET in form submission.How to receive and process form submission data

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3 WEB PROGRAMMING UNIT 2	**HTML5 Page layout and navigation:** Creating navigational aids: planning site organization, creating text based navigation bar, creating graphics based navigation bar, creating graphical navigation bar, creating image map,	2	HTML5 Step by Step BY Faithe Wempen	BLACK BOARD AND CHALK
	redirecting to another URL, creating division based layouts: HTML5 semantic tags, creating divisions, creating HTML5 semantic layout, positioning and formatting divisions.	2		
	HTML5 Tables, Forms and Media: Creating tables: creating simple table, specifying the size of the table, specifying the width of the column, merging table cells, using tables for page layout,	2		

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	formatting tables: applying table borders, applying background and foreground fills, changing cell padding, spacing and alignment,	2		
	creating user forms: creating basic form, using check boxes and option buttons, creating lists, additional input types in	2		
	HTML5, Incorporating sound and video: audio and video in HTML5, HTML multimedia basics, embedding video clips, incorporating audio on web page.	2		
UNIT 3	**Java Script:** Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security,	2	JavaScript 2.0: The Complete Reference BY Thomas Powell and Fritz Schneider	BLACK BOARD AND CHALK
	Operators: Assignment Operators, Comparison Operators, Arithmetic Operators, % (Modulus), ++(Increment), --(Decrement), -(Unary Negation), Logical Operators, Short-Circuit Evaluation, String Operators, Special Operators, ?: (Conditional operator), , (Comma operator), delete, new, this, void	3		
	Statements: Break, comment, continue, delete, do...while, export, for, for...in, function, if...else, import, labelled, return, switch, var, while, with,	2		
	Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, regExp	2		
	Document and its associated objects: document, Link, Area, Anchor, Image, Applet, Layer	2		

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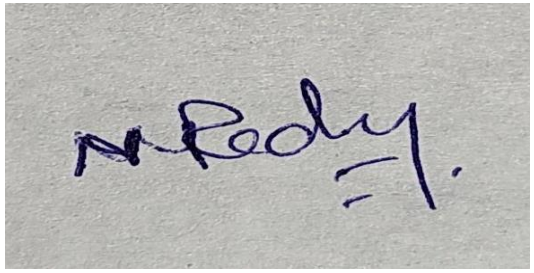
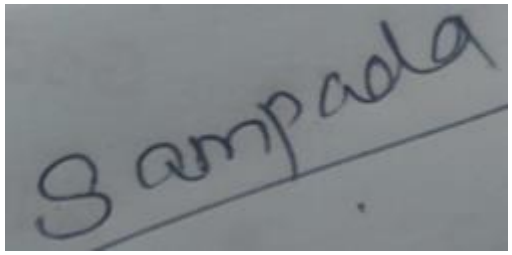
	Events and Event Handlers : General Information about Events, Defining Event Handlers, event, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp	3		
UNIT 4	**PHP:** Why PHP and MySQL? Server-side scripting, PHP syntax and variables, comments, types,	3	PHP Project for Beginners BY SharanamShah, Vaishali	BLACK BOARD AND CHALK
	control structures, branching, looping, termination, functions, passing information with PHP, GET, POST,	3		
	formatting form variables, superglobal arrays, strings and string functions,	3		
	regular expressions, arrays, number handling, basic PHP errors/problems	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 38





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: INFORMATION TECHNOLOGY CLASS: TYIT-A

SEMESTER: V MONTH: JUNE-SEPTEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the concepts of open source operating system Linux, command line working, managing soft wares on Linux .
- Develop logic for connecting to network, giving permissions to users.
- Be familiar about the basic file sharing, setting iptables in linux .
- Apply the problem solving skills on high availability of cluster, installation of servers, bash shell scripting.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT505, Unit 1, Linux System Administration	Introduction to Red Hat Enterprise Linux: Linux, Open Source and Red Hat, Origins of Linux, Distributions, Duties of Linux System Administrator.	02	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
	Command Line: Working with the Bash Shell, Getting the Best of Bash, Useful Bash Key Sequences, Working with Bash History, Performing Basic File System Management Tasks, Working with Directories, Piping and Redirection, Finding Files.	03	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, powerpoint
	System Administration Tasks: Performing Job Management Tasks, System and Process Monitoring and Management, Managing Processes with ps, Sending Signals to Processes with	04	Red Hat Enterprise Linux6	Black Board and chalk, PowerPoint t

	the kill Command, using top to Show Current System Activity, Managing Process Niceness, Scheduling Jobs, Mounting Devices, Working with Links, Creating Backups, Managing Printers, Setting Up System Logging, Setting Up Rsyslog, Common Log Files, Setting Up Logrotate		Administration by Sander van Vugt	
	Managing Software: Understanding RPM, Understanding Meta Package Handlers, Creating Your Own Repositories, Managing Repositories,Installing Software with Yum, Querying Software, Extracting Files from RPM Packages	03	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
USIT505, Unit 2, Linux System Administration	Configuring and Managing Storage: Understanding Partitions and Logical Volumes, Creating Partitions, Creating File Systems, File Systems Overview, Creating File Systems, Changing File System Properties, Checking the File System Integrity, Mounting File Systems Automatically Through fstab, Working with Logical Volumes, Creating Logical Volumes, Resizing Logical Volumes, Working with Snapshots, Replacing Failing Storage Devices, Creating Swap Space, Working with Encrypted Volumes	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
	Connecting to the Network: Understanding NetworkManager, Working with Services and Runlevels, Configuring the Network with NetworkManager, Working with system-config-network, NetworkManager Configuration Files, Network Service Scripts, Networking from the Command Line, Troubleshooting Networking, Setting Up IPv6, Configuring SSH, Enabling the SSH Server, Using the SSH Client, Using PuTTY on Windows Machines, Configuring Key-Based SSH Authentication, Using Graphical Applications with SSH, Using SSH Port Forwarding, Configuring VNC Server Access	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint

	Working with Users, Groups, and Permissions: Managing Users and Groups, Commands for User Management, Managing Passwords, Modifying and Deleting User Accounts, Configuration Files, Creating Groups, Using Graphical Tools for User, and Group Management, Using External Authentication Sources, the Authentication Process, sssd, nsswitch, Pluggable Authentication Modules, Managing Permissions, the Role of Ownership, Basic Permissions: Read, Write, and Execute, Advanced Permissions, Working with Access Control Lists, Setting Default Permissions with umask, Working with Attributes.	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
USIT505, Unit 3, Linux System Administration	Securing Server with iptables: Understanding Firewalls, Setting Up a Firewall with system-config-firewall, Allowing Services, Trusted Interfaces, Masquerading, Configuration Files, Setting Up a Firewall with iptables, Tables, Chains, and Rules, Composition of Rule, Configuration Example, Advanced iptables Configuration, Configuring Logging, The Limit Module, Configuring NAT	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
	Setting Up Cryptographic Services: Introducing SSL, Proof of Authenticity: The Certificate Authority, Managing Certificates with openssl, Creating a Signing Request, Working with GNU Privacy Guard, Creating GPG Keys, Key Transfer, Managing GPG Keys, Encrypting Files with GPG, GPG Signing, Signing RPM Files	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
	Configuring Server for File Sharing: What is NFS? Advantages and Disadvantages of NFS, Configuring NFS4, Setting Up NFSv4, Mounting an NFS Share, Making NFS Mounts Persistent, Configuring Automount, Configuring Samba, Setting Up a Samba File Server, Samba Advanced Authentication Options, Accessing Samba Shares, Offering FTP Services	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint

USIT505, Unit 4, Linux System Administration	Configuring DNS and DHCP:Introduction to DNS, The DNS Hierarchy, DNS Server Types, The DNS Lookup Process, DNS Zone Types, Setting Up a DNS Server, Setting Up a Cache-Only Name Server, Setting Up a Primary Name Server, Setting Up a Secondary Name Server, Understanding DHCP, Setting Up a DHCP Server	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
	Setting Up a Mail Server: Using the Message Transfer Agent, the Mail Delivery Agent, the Mail User Agent, Setting Up Postfix as an SMTP Server, Working with Mutt, Basic Configuration, Internet Configuration, Configuring Dovecot for POP and IMAP	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
	Configuring Apache on Red Hat Enterprise Linux: Configuring the Apache Web Server, creating a Basic Website, Understanding the Apache Configuration Files, Apache Log Files, Working with Virtual Hosts, Securing the Web Server with TLS Certificates, Configuring Authentication, Setting Up Authentication with .htpasswd, Configuring LDAP Authentication, Setting Up MySQL	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
USIT505, Unit 5, Linux System Administration	Introducing Bash Shell Scripting: Introduction, Elements of a Good Shell Script, Executing the Script, Working with Variables and Input, Understanding Variables, Variables, Subshells, and Sourcing, Working with Script Arguments, Asking for Input, Using Command Substitution, Substitution Operators, Changing Variable Content with Pattern Matching, Performing Calculations, Using Control Structures, Using if...then...else, Using case, Using while, Using until, Using for, Configuring booting with GRUB.	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint
	High-Availability Clustering: High-Availability Clustering, The Workings of High Availability, High-Availability Requirements, Red Hat High-Availability Add-on Software, Components,	04	Red Hat Enterprise Linux6	Black Board and chalk, PowerPoint

	Configuring Cluster-Based Services, Setting Up Bonding, Setting Up Shared Storage, Installing the Red Hat High Availability Add-On, Building the Initial State of the Cluster, Configuring Additional Cluster Properties, Configuring a Quorum Disk, Setting Up Fencing, Creating Resources and Services, Troubleshooting a Nonoperational Cluster, Configuring GFS2 File Systems		Administration by Sander van Vugt	
	Setting Up an Installation Server: Configuring a Network Server as an Installation Server, Setting Up a TFTP and DHCP Server for PXE Boot, Installing the TFTP Server, Configuring DHCP for PXE Boot, Creating the TFTP PXE Server Content, creating a Kickstart File, Using a Kickstart File to Perform an Automated, Installation, Modifying the Kickstart File with, system-config-kickstart, Making Manual Modifications to the Kickstart File	04	Red Hat Enterprise Linux6 Administration by Sander van Vugt	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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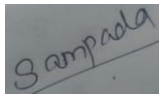

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: June to Sept ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: To learn the fundamental aspects of the JavaScript programming language and how to program using document object model application programming

The learners will be able to :

- To understand .Net framework and its run time environment.
- To gain basic knowledge of C# language with its object oriented concept.
- To gain the knowledge of namespaces and assemblies.
- To understand fundamentals of web application development.
- To make use of different server controls like validation, navigation and rich server control.
- To understand back hand connectivity with SQL using ADO .Net Frame.
- To use data binding with data controls like grid view, details view and form view.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT503 Advance Web Programming UNIT-I	**Introducing .NET**: The .NET Framework, C#, VB, and the .NET Languages, The Common Language Runtime, The .NET Class Library.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning	Black Board, Projector, PPT.
	The C# Language: C# Language Basics, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods.	4		Black Board, Projector, PPT.
	Types, Objects, and Namespaces: The Basics About Classes, Building a Basic Class, Value Types and Reference Types,	4		Black Board, Projector,

	Understanding Namespaces and Assemblies, Advanced Class Programming.		Visual C# 2010	PPT.
USIT503 Advance Web Programming UNIT-II	**Web Form Fundamentals**: Writing Code, Using the Code-Behind Class, Adding Event Handlers, Understanding the Anatomy of an ASP.NET Application, Introducing Server Controls, Using the Page Class, Using Application Events, Configuring an ASP.NET Application.	6	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	Black Board, Projector, PPT.
	Form Controls: Stepping Up to Web Controls, Web Control Classes, List Controls, Table Controls, Web Control Events and AutoPostBack, Validation, Understanding Validation, Using the Validation Controls, Rich Controls, The Calendar, The AdRotator, Pages with Multiple Views, User Controls and Graphics, User Controls, Dynamic Graphics, The Chart Control, Website Navigation: Site Maps, URL Mapping and Routing, The SiteMapPath Control, The TreeView Control, The Menu Control.	6		
USIT503 Advance Web Programming UNIT-III	**ADO.NET Fundamentals**: Understanding Databases, Configuring Your Database, Understanding SQL Basics, Understanding the Data Provider Model, Using Direct Data Access, Using Disconnected Data Access.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	Black Board, Projector, PPT.
	Data Binding: Introducing Data Binding, Using Single-Value Data Binding, Using Repeated-Value Data Binding, Working with Data Source Controls,	4		
	The Data Controls: The GridView, Formatting the GridView, selecting a GridView Row, Editing with the GridView, Sorting and Paging the GridView, Using GridView Templates, The DetailsView and FormView	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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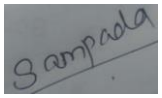

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHARVARI PATIL DEPARTMENT: IT CLASS: T.Y.I.T SEMESTER: V

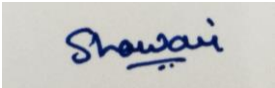
MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2018-19

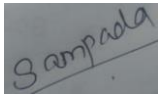
LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concept of error handling and session management.
- Learn web designing using AJAX
- Gain knowledge about various security fundamentals.

Paper No.,Paper Title, Unit No.	**Sub Topics:**	**No.of Lectures**	**References**	**Teaching Method/ICT tools used**
USIT503 Advance Web Programming Unit 4	Error Handling, Logging, and Tracing : Avoiding Common Errors, Understanding Exception Handling, Handling Exceptions, Throwing Your Own Exceptions, Using Page Tracing State Management : Understanding the Problem of State, Using View State, Transferring Information Between Pages, Using Cookies, Managing Session State, Configuring Session State, Using Application State, Comparing State Management Options Styles, Themes, and Master Pages : Styles, Themes, Master Page Basics, Advanced Master Pages,	5 4 1 2	Reference book: Beginning ASP.NET 4.5 in C#"	Chalk, Blackboard

	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT503 Advance Web Programming Unit 5	XML: XML Explained, The XML Classes, XML Validation, XML Display and Transforms. Security Fundamentals: Understanding Security Requirements, Authentication and Authorization, Forms Authentication, Windows Authentication. ASP.NET AJAX: Understanding Ajax, Using Partial Refreshes, Using Progress Notification, Implementing Timed Refreshes, Working with the ASP.NET AJAX Control Toolkit.	4 4 4	Reference book: Beginning ASP.NET 4.5 in C#""	Chalk, Blackboard
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: TYIT

SEMESTER: V MONTH: JUNE-SEPT ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the Java EE Architecture, Server and Containers.
- Describe the different servlet API and lifecycle of servlet.
- Get the difference between cookies, session and request dispatcher.
- Understand the use of tag library, naming directory, interceptors.
- Familiar with java beans, JPA, hibernate and JSP.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506, Enterprise Java Unit I	**Understanding Java EE:** What is an Enterprise Application? What is java enterprise edition? Java EE Technologies, Java EE evolution, Glassfish server	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, Powerpoint
	Java EE Architecture, Server and Containers: Types of System Architecture, Java EE Server, Java EE Containers.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Introduction to Java Servlets: The Need for Dynamic Content, Java Servlet Technology, Why Servlets? What can Servlets do?	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali	Black Board and chalk, PowerPoint

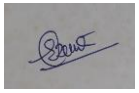
			Shah, SPD, First, 2012	
	Servlet API and Lifecycle: Java Servlet API, The Servlet Skeleton, The Servlet Life Cycle, A Simple Welcome Servlet	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Working With Servlets: Getting Started, Using Annotations Instead of Deployment Descriptor.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Working with Databases: What Is JDBC? JDBC Architecture, Accessing Database, The Servlet GUI and Database Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
USIT506, Enterprise Java Unit II	**Request Dispatcher:** Resquestdispatcher Interface, Methods of Requestdispatcher, Requestdispatcher Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	COOKIES: Kinds Of Cookies, Where Cookies Are Used? Creating Cookies Using Servlet, Dynamically Changing The Colors Of A Page	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	SESSION: What Are Sessions? Lifecycle Of Http Session, Session Tracking With Servlet API, A Servlet Session Example	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Working With Files: Uploading Files, Creating an Upload File Application, Downloading Files, Creating a Download File Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint

	Working With Non-Blocking I/O: Creating a Non-Blocking Read Application, Creating The Web Application, Creating Java Class, Creating Servlets, Retrieving The File, Creating index.jsp	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
USIT506, Enterprise Java Unit III	**Introduction To Java Server Pages:** Why use Java Server Pages? Disadvantages Of JSP, JSP v\s Servlets, Life Cycle of a JSP Page, How does a JSP function? How does JSP execute? About Java Server Pages	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Getting Started With Java Server Pages: Comments, JSP Document, JSP Elements, JSP GUI Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Action Elements: Including other Files, Forwarding JSP Page to Another Page, Passing Parameters for other Actions, Loading a Javabean.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Implicit Objects, Scope And El Expressions: Implicit Objects, Character Quoting Conventions, Unified Expression Language [Unified El], Expression Language.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Java Server Pages Standard Tag Libraries: What is wrong in using JSP Scriptlet Tags? How JSTL Fixes JSP Scriptlet's Shortcomings? Disadvantages Of JSTL, Tag Libraries.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
USIT506, Enterprise Java Unit IV	**Introduction To Enterprise Javabeans:** Enterprise Bean Architecture, Benefits of Enterprise Bean, Types of Enterprise Bean, Accessing Enterprise Beans, Enterprise Bean Application, Packaging Enterprise Beans	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Working With Session Beans: When to use Session Beans? Types of Session Beans, Remote and Local Interfaces, Accessing	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali	Black Board and chalk, PowerPoint

	Interfaces, Lifecycle of Enterprise Beans, Packaging Enterprise Beans, Example of Stateful Session Bean, Example of Stateless Session Bean, Example of Singleton Session Beans.		Shah, SPD, First, 2012	
	Working with Message Driven Beans: Lifecycle of a Message Driven Bean, Uses of Message Driven Beans, The Message Driven Beans Example.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Interceptors: Request And Interceptor, Defining An Interceptor, AroundInvoke Method, Applying Interceptor, Adding An Interceptor To An Enterprise Bean, Build and Run the Web Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Java Naming and Directory Interface: What is Naming Service? What is Directory Service? What is Java Naming and Directory interface? Basic Lookup, JNDI Namespace in Java EE, Resources and JNDI, Datasource Resource Definition in Java EE.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
USIT506, Enterprise Java Unit V	**Persistence, Object/Relational Mapping And JPA:** What is Persistence? Persistence in Java, Current Persistence Standards in Java, Why another Persistence Standards? Object/Relational Mapping,	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Introduction to Java Persistence API: The Java Persistence API, JPA, ORM, Database and the Application, Architecture of JPA, How JPA Works? JPA Specifications.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Writing JPA Application: Application Requirement Specifications, Software Requirements, The Application Development Approach, Creating Database And Tables in Mysql, Creating a Web Application, Adding the Required Library Files, Creating a Javabean Class, Creating Persistence Unit [Persistence.Xml], Creating JSPS, The JPA Application Structure, Running The JPA Application.	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint

	Introduction to Hibernate: What is Hibernate? Why Hibernate? Hibernate, Database and The Application, Components of Hibernate, Architecture of Hibernate, How Hibernate Works?	02	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint
	Writing Hibernate Application: Application Requirement Specifications, Software Requirements, The Application Development Approach, Creating Database and Tables in Mysql, Creating a Web Application, Adding The Required Library Files, Creating a Javabean Class, Creating Hibernate Configuration File, Adding a Mapping Class, Creating JSPS, Running The Hibernate Application.	03	Java EE 7 For Beginners by Sharanam Shah, Vaishali Shah, SPD, First, 2012	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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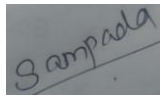

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BhaskarWaman Thakur College of Science
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VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: IT CLASS:TYIT SYSEMESTER: 5 MONTH: JUNE -SEPT

ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:

- To determine the market perspective of IoT
- To compare and contrast the use of devices, gateways and Data management in IoT
- To illustrate the applications of IoT in Industrial Automation and identify Real world design constraints.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Internet Of Things Paper 2 Code: USIT502 Unit 1	**The Internet of Things: An Overview**: The Flavour of the Internet of Things, The "Internet" of "Things", The Technology of the Internet of Things, Enchanted Objects, Who is Making the Internet of Things?	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board& Chalk
	Design Principles for Connected Devices: Calm and Ambient Technology, Magic as Metaphor, Privacy, Keeping Secrets, Whose Data Is It Anyway? Web Thinking for Connected Devices, Small Pieces, Loosely Joined, First-Class Citizens on The Internet, Graceful Degradation, Affordances.	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board& Chalk
	Internet Principles: Internet Communications: An Overview, IP, TCP, The IP Protocol Suite (TCP/IP), UDP, IP Addresses, DNS, Static IP Address Assignment, Dynamic IP Address Assignment,	4	Designing the	Projector, Laptop, Black board&

	IPv6, MAC Addresses, TCP and UDP Ports, An Example: HTTP Ports, Other Common Ports,Application Layer Protocols, HTTP,HTTPS: Encrypted HTTP, Other Application Layer Protocols		Internet of Things Adrian McEwen, Hakim Cassimally	Chalk
Internet Of Things Paper 2 Code: USIT502 Unit 2	**Thinking About Prototyping:** Sketching, Familiarity, Costs versus Ease of Prototyping, Prototypes and Production, Changing Embedded Platform, Physical Prototypes and Mass Personalisation, climbing into the Cloud, Open Source versus Closed Source, Why Closed? Why Open? Mixing Open and Closed Source, Closed Source for Mass Market Projects, Tapping into the Community.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board& Chalk
	Prototyping Embedded Devices: Electronics, Sensors, Actuators, Scaling Up the Electronics, Embedded Computing Basics, Microcontrollers, System-on-Chips, Choosing Your Platform, Arduino, developing on the Arduino, Some Notes on the Hardware, Openness, Raspberry Pi, Cases and Extension Boards, Developing on the Raspberry Pi, Some Notes on the Hardware, Openness.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board& Chalk

Internet Of Things Paper 2 Code: USIT502 Unit 3	**Prototyping the Physical Design:** Preparation, Sketch, Iterate, and Explore, Nondigital Methods, Laser Cutting, Choosing a Laser Cutter, Software, Hinges and Joints, 3D Printing, Types of 3D Printing, Software, CNC Milling, Repurposing/Recycling. Prototyping and Presence Protocol, Constrained Application Protocol.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board& Chalk
	Online Components: Getting Started with an API, Mashing Up APIs, Scraping, Legalities, writing a New API, Clockodillo, Security, implementing the API, Using Curl to Test, Going Further, Real-Time Reactions, Polling, Comet, Other Protocols, MQ Telemetry Transport, Extensible Messaging	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board& Chalk
Internet Of Things Paper 2 Code: USIT502 Unit 4	**Techniques for Writing Embedded Code:** Memory Management, 12 8 Types of Memory, Making the Most of Your RAM, Performance and Battery Life, Libraries,Debugging	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board& Chalk
	Business Models: A Short History of Business Models, Space and Time, From Craft to Mass Production, The Long Tailof the Internet, Learning from History, The Business Model Canvas, Who Is the Business Model For? Models, Make Thing, Sell Thing, Subscriptions, Customisation, be a Key Resource, Provide Infrastructure: Sensor Networks, take a Percentage, Funding an Internet of Things Startup, Hobby Projects and Open Source, Venture Capital, Government Funding, Crowdfunding, Lean Startups.	8	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board& Chalk
Internet Of	**Moving to Manufacture:** What Are You Producing? Designing Kits, Designing Printed circuit boards, Software Choices, The	6	Designing the Internet of Things Adrian	Projector, Laptop, Black board& Chalk

Things Paper 2 Code: USIT502 Unit 5	Design Process, Manufacturing Printed Circuit Boards, Etching Boards, Milling Boards. Assembly, Testing, Mass-Producing the Case and Other Fixtures, Certification, Costs, Scaling Up Software, Deployment, Correctness and Maintainability, Security, Performance, User Community.		McEwen, Hakim Cassimally	
	Ethics: Characterizing the Internet of Things, Privacy, Control, Disrupting Control,Crowdsourcing, Environment, Physical Thing, Electronics, Internet Service, Solutions, The Internet of Things as Part of the Solution, Cautious Optimism, The Open Internet of Things Definition.	6	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Projector, Laptop, Black board& Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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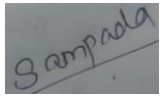

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:T.Y.BSC(I.T) SEMESTER: **V** MONTH:JUNE-SEPTEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : Apply project management concepts and techniques to an IT project. Identify issues that could lead to IT project success or failure. Explain project management in terms of the software development process. Describe the responsibilities of IT project managers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Software Project Management USIT501 Unit-1	**Introduction to Software Project Management:** Introduction, Why is Software Project Management Important? What is a Project? Software Projects versus Other Types of Project, Contract Management and Technical Project Management, Activities Covered by Software Project Management, Plans, Methods and Methodologies, Some Ways of Categorizing Software Projects, Project Charter, Stakeholders, Setting Objectives, The Business Case, Project Success and Failure, What is Management? Management Control, Project Management Life Cycle, Traditional versus Modern Project Management Practices.	5	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation,BlackBoard, Projector
	Project Evaluation and Programme Management:	5		

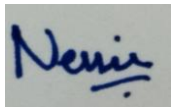
	Introduction, Business Case, Project PortfolioManagement, Evaluation of Individual Projects, Cost–benefit Evaluation Techniques, Risk Evaluation, Programme Management, Managing the Allocation of Resources within Programmes, Strategic Programme Management, Creating a Programme, Aids to Programme Management, Some Reservations about Programme Management, Benefits Management.			
	An Overview of Project Planning: Introduction to Step Wise Project Planning, Step 0: Select Project, Step 1: Identify Project Scope and Objectives, Step 2: Identify Project Infrastructure, Step 3: Analyse Project Characteristics, Step 4: Identify Project Products and Activities, Step 5: Estimate Effort for Each Activity, Step 6: Identify Activity Risks, Step 7: Allocate Resources, Step 8: Review/Publicize Plan, Steps 9 and 10: Execute Plan/Lower Levels of Planning **TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15**	5		
Software Project Management USIT501 Unit-2	**Selection of an Appropriate Project Approach:**Introduction, Build or Buy? Choosing Methodologies and Technologies, Software Processes and Process Models, Choice of Process Models, Structure versus Speed of Delivery, The Waterfall Model, The Spiral Model, Software Prototyping, Other Ways of Categorizing Prototypes, Incremental Delivery, Atern/Dynamic Systems Development Method, Rapid Application Development, Agile Methods, Extreme Programming (XP), Scrum, Lean Software Development, Managing Iterative Processes, Selecting the Most Appropriate Process Model.	5	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation,BlackBoard, Projector

	Software Effort Estimation: Introduction, Where are the Estimates Done? Problems with Over- and Under-Estimates, The Basis for Software Estimating, Software Effort Estimation Techniques, Bottomup Estimating, The Top-down Approach and Parametric Models, Expert Judgement, Estimating by Analogy, Albrecht Function Point Analysis, Function Points Mark II, COSMIC Full Function Points, COCOMO II: A Parametric Productivity Model, Cost Estimation, Staffing Pattern, Effect of Schedule Compression, Capers Jones Estimating Rules of Thumb. **TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10**	5		
Software Project Management USIT501 Unit-3	**Activity Planning:** Introduction, Objectives of Activity Planning, When to Plan, Project Schedules, Projects and Activities, Sequencing and Scheduling Activities, Network Planning Models, Formulating a Network Model, Adding the Time Dimension, The Forward Pass, Backward Pass, Identifying the Critical Path, Activity Float, Shortening the Project Duration, Identifying Critical Activities, Activity-on-Arrow Networks.	4	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation,BlackBoard, Projector
	Risk Management: Introduction, Risk, Categories of Risk, Risk Management Approaches, A Framework for Dealing with Risk, Risk Identification, Risk Assessment, Risk Planning, Risk Management, Evaluating Risks to the Schedule, Boehm"s Top 10 Risks and Counter Measures, Applying the PERT Technique, Monte Carlo Simulation, Critical Chain Concepts.	4		
	Resource Allocation: Introduction, Nature of Resources, Identifying Resource Requirements, Scheduling Resources, Creating Critical Paths, Counting the Cost, Being Specific, Publishing the Resource Schedule, Cost Schedules, Scheduling	3		

	Sequence. **TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11**			
Software Project Management USIT501 Unit-4	**Monitoring and Control**: Introduction, Creating the Framework, Collecting the Data, Review, Visualizing Progress, Cost Monitoring, Earned Value Analysis, Prioritizing Monitoring, Getting the Project Back to Target, Change Control, Software Configuration Management (SCM).	3	Software Project Management - Bob Hughes, Mike Cotterell, Rajib Mall TMH 6 th 2018	PowerPoint Presentation,BlackBoard, Projector
	Managing Contracts: Introduction, Types of Contract, Stages in Contract Placement, Typical Terms of a Contract, Contract Management, Acceptance	2		
	Managing People in Software Environments: Introduction, Understanding Behaviour, Organizational Behaviour: A Background, Selecting the Right Person for the Job, Instruction in the Best Methods, Motivation, The Oldham–Hackman Job Characteristics Model, Stress, Stress Management, Health and Safety, Some Ethical and Professional Concerns **TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9**	4		

USIT501 Software Project Management UNIT-5	**Working in Teams:** Introduction, Becoming a Team, Decision Making, Organization and Team Structures, Coordination Dependencies, Dispersed and Virtual Teams, Communication Genres, Communication Plans, Leadership	05	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
	Software Quality : Introduction, The Place of Software Quality in Project Planning, Importance of Software Quality, Defining Software Quality, Software Quality Models, ISO 9126, Product and Process Metrics, Product versus Process Quality Management, Quality Management Systems, Process Capability Models, Techniques to Help Enhance Software Quality, Testing,	05	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point

	Software Reliability,Quality Plans.			
	Project Closeout: Introduction, Reasons for Project Closure, Project Closure Process, Performing a Financial Closure, Project CloseoutReport	02	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point



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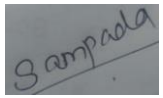

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Miss Shilpa James Rodrigues **DEPARTMENT**: IT

CLASS: T.Y.I.T.-B (Enterprise Java) **SEMESTER**:V

MONTH:June - September **ACADEMIC YEAR**: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Learn advance technology of java programming.
- Develop web based java program.
- Create dynamic content providing java web application using servlets.
- Describe and explain various multi-tier software architecture framework using Java EE including the roles and responsibilities of each relevant tier
- Develop enterprise software applications using the Java EE framework.
- Understand and implements new technologies like JSP, Session, Cookies, JSTL, Hibernate etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 , Unit 1, Enterprise Java.	**Understanding Java EE:** What is an Enterprise Application? What is java enterprise edition? Java EE Technologies, Java EE evolution, Glass fish server **JavaEE Architecture,Serverand Containers:** Types of System Architecture, Java EE Server, Java EE Containers.	04	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Power Point.

	Introduction to Java Servlets: The Need for Dynamic Content, Java Servlet Technology, Why Servlets? What can Servlets do? **Servlet API and Lifecycle:** Java Servlet API, The Servlet Skeleton, The Servlet LifeCycle, A Simple WelcomeS ervlet.	04	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Power Point.
	WorkingWithServlets: Getting Started, Using Annotations, Insteadof, Deployment Descriptor. **Working with Databases:** What Is JDBC? JDBC Architecture, Accessing Database, The Servlet GUI and Database Example.	04	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Power Point.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 , Unit 2, Enterprise Java.	**Request Dispatcher:** Resquest dispatcher Interface, Methods of Request dispatcher, Request dispatcher Application.	02	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Power Point.
	COOKIES: Kinds Of Cookies, Where Cookies Are Used? Creating Cookies.	02	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Power Point.
	SESSION: What Are Sessions? Lifecycle Of HttpSession, Session Tracking With Servlet API, AServlet Session Example	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Power Point.
	WorkingWith Files: Uploading Files, Creatingan Upload File Application, Downloading Files, Creatinga Download File Application.	02	Java EE 7 For Beginners -Sharanam Shah,	Black Board, chalk and Power Point.

			Vaishali Shah	
	Working With Non-Blocking I/O: Creatinga Non Blocking Read Application, Creating The Web Application, Creating Java Class, Creating Servlets, Retrieving The File, Creating index.jsp	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Power Point.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 , Unit 3 , Enterprise Java.	**Introduction To Java ServerPages:** Why use Java Server Pages? Disadvantages Of JSP, JSP v\s Servlets, Life Cycle of a JSP Page, How does a JSP function? How does JSP execute? About Java Server Pages **Getting Started With Java ServerPages:** Comments, JSP Document, JSP Elements, JSP GUI Example.	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Powerpoint.
	Action Elements: Including other Files, Forwarding JSP Page to Another Page, Passing Parameters for other Actions, Loadinga Javabean.	02	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Powerpoint.
	Implicit Objects, ScopeAnd ElExpressions: Implicit Objects, Character Quoting Conventions, Unified Expression Language[UnifiedEl], Expression Language.	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Powerpoint.

	Java Server Pages Standard Tag Libraries: What is wrong in using JSP Scriptlet Tags? How JSTL Fixes JSP Scriptlet's Short comings? Disadvantages Of JSTL, TagLibraries.	04	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Powerpoint.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 , Unit 4, Enterprise Java.	**Introduction To EnterpriseJavabeans:** Enterprise Bean Architecture, Benefits of Enterprise Bean, Types of EnterpriseBean, Accessing Enterprise Beans, Enterprise Bean Application, Packaging Enterprise Beans .	02	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Power Point.
	Working With Session Beans: When to use SessionBeans? Types of SessionBeans, Remote and Local Interfaces, Accessing Interfaces, Lifecycle of EnterpriseBeans, Packaging EnterpriseBeans, Example of Stateful SessionBean, Example of Stateless SessionBean, Example of Singleton SessionBeans.	04	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Power Point.
	Working with Message DrivenBeans: Lifecycle of a MessageDrivenBean, Uses of MessageDrivenBeans, The Message DrivenBeansExample.	01	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Power Point.

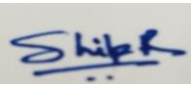
	Interceptors: Request And Interceptor, Defining An Interceptor, Around Invoke Method, Applying Interceptor, Adding An Interceptor To An Enterprise Bean, Build and Run the Web Application. JNDI, Datasource Resource Definition in Java EE.	02	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Power Point.
	Java Naming and Directory Interface: What is Naming Service? What is Directory Service? What is Java Naming and Directory interface? Basic Lookup, JNDI Namespace in Java EE, Resources and JNDI, Datasource Resource Definition in Java EE.	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Power Point.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 , Unit 5, Enterprise Java.	**Persistence, Object/Relational Mapping And JPA:** What is Persistence? Persistence in Java, Current Persistence Standards in Java,Object/RelationalMapping, **Introduction to JavaPersistence API:** The Java Persistence API, JPA,ORM, Architecture of JPA, JPA Specifications.	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Power Point.
	Writing JPA Application: Software Requirements, Creating Database And Tables in Mysql, Creating a WebApplication, Adding the Required Library Files, Creating aJavabean Class, Creating Persistence Unit[Persistence.Xml], Creating JSPS, The	03	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Power Point.

	JPA Application Structure, Running The JPA Application.			
	Introduction to Hibernate: What is Hibernate? Why Hibernate? , Database and The Application, Components of Hibernate, Architecture of Hibernate, How HibernateWorks? **WritingHibernateApplication:** Requirements, TheApplication Development Approach, Creating Database and Tables in Mysql, Creating aWeb Application, Adding The Required Library Files, Creatinga JavabeanClass, Creating Hibernate Configuration File, Addinga Mapping Class, Creating JSPS, Running The Hibernate Application.	06	Java EE 7 For Beginners -Sharanam Shah, Vaishali Shah	Black Board, chalk and Power Point.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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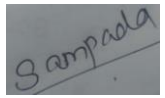

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande. DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc.I.T. SEMESTER: V MONTH: June to Sept ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: To learn the fundamental aspects of the JavaScript programming language and how to program using document object model application programming

The learners will be able to :

- To understand .Net framework and its run time environment.
- To gain basic knowledge of C# language with its object oriented concept.
- To gain the knowledge of namespaces and assemblies.
- To understand fundamentals of web application development.
- To make use of different server controls like validation, navigation and rich server control.
- To understand back hand connectivity with SQL using ADO .Net Frame.
- To use data binding with data controls like grid view, details view and form view.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT503 Advance Web Programming UNIT-I	**Introducing .NET**: The .NET Framework, C#, VB, and the .NET Languages, The Common Language Runtime, The .NET Class Library.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning	Black Board, Projector, PPT.
	The C# Language: C# Language Basics, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods.	4		Black Board, Projector, PPT.
	Types, Objects, and Namespaces: The Basics About Classes, Building a Basic Class, Value Types and Reference Types,	4		Black Board, Projector,

.

	Understanding Namespaces and Assemblies, Advanced Class Programming.		Visual C# 2010	PPT.
USIT503 Advance Web Programming UNIT-II	**Web Form Fundamentals**: Writing Code, Using the Code-Behind Class, Adding Event Handlers, Understanding the Anatomy of an ASP.NET Application, Introducing Server Controls, Using the Page Class, Using Application Events, Configuring an ASP.NET Application.	6	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	Black Board, Projector, PPT.
	Form Controls: Stepping Up to Web Controls, Web Control Classes, List Controls, Table Controls, Web Control Events and AutoPostBack, Validation, Understanding Validation, Using the Validation Controls, Rich Controls, The Calendar, The AdRotator, Pages with Multiple Views, User Controls and Graphics, User Controls, Dynamic Graphics, The Chart Control, Website Navigation: Site Maps, URL Mapping and Routing, The SiteMapPath Control, The TreeView Control, The Menu Control.	6		
USIT503 Advance Web Programming UNIT- III	**Error Handling, Logging, and Tracing** : Avoiding Common Errors, Understanding Exception Handling, Handling Exceptions, Throwing Your Own Exceptions, Using Page Tracing	5	C# 2015 Murach"s ASP.NET 4.6 Web Programming in C#2015 Beginning Visual C# 2010	Black Board, Projector, PPT.
	State Management : Understanding the Problem of State, Using View State, Transferring Information Between Pages, Using Cookies, Managing Session State, Configuring Session State, Using Application State, Comparing State Management Options	4		Black Board, Projector, PPT.
	Styles, Themes, and Master Pages : Styles, Themes, Master Page Basics, Advanced Master Pages,	3		Black Board, Projector,

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USIT503 Advance Web Programming UNIT-IV	**ADO.NET Fundamentals**: Understanding Databases, Configuring Your Database, Understanding SQL Basics, Understanding the Data Provider Model, Using Direct Data Access, Using Disconnected Data Access.	4	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	Black Board, Projector, PPT.
	Data Binding: Introducing Data Binding, Using Single-Value Data Binding, Using Repeated-Value Data Binding, Working with Data Source Controls,	4		
	The Data Controls: The GridView, Formatting the GridView, selecting a GridView Row, Editing with the GridView, Sorting and Paging the GridView, Using GridView Templates, The DetailsView and FormView	4		
USIT503 Advance Web Programming UNIT - V	**XML**: XML Explained, The XML Classes, XML Validation, XML Display and Transforms. .	3	1. Beginning ASP.NET 4.5 in C# 2. C# 2015 3. Murach"s ASP.NET 4.6 Web Programming in C#2015 4. Beginning Visual C# 2010	Black Board, Projector, PPT.
	Security Fundamentals: Understanding Security Requirements, Authentication and Authorization, Forms Authentication, Windows Authentication.	4		Black Board, Projector, PPT.
	ASP.NET AJAX: Understanding Ajax, Using Partial Refreshes, Using Progress Notification, Implementing Timed Refreshes, Working with the ASP.NET AJAX Control Toolkit	5		Black Board, Projector, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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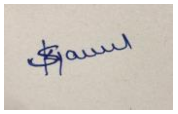

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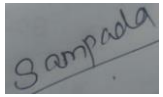

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: June-September ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various Linux OS commands

b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -I	**Introduction to Red Hat Enterprise Linux:** Linux, Open Source and Red Hat, Origins of Linux, Distributions, Duties of Linux System Administrator.	2	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Powerpoint presentation through projector
	Command Line: Working with the Bash Shell, Getting the Best of Bash, Useful Bash Key Sequences, Working with Bash History, Performing Basic File System Management Tasks, Working with Directories, Piping and Redirection, Finding Files	4		Blackboard
	System Administration Tasks: Job Tasks, Process Monitoring and Management, Mounting Devices, Links, Backups, Printers, Logging, Rsyslog, Common Log Files, Setting Up Logrotate	4		Powerpoint presentation through projector

	Managing Software: Understanding RPM, Understanding Meta Package Handlers, Creating Your Own Repositories, Managing Repositories, Installing Software with Yum, Querying Software, Extracting Files from RPM Packages	2		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: June-September ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various Linux OS commands

b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -II	**Configuring and Managing Storage:** Partitions, File systems, logical volumes, Snapshots, Replacing Failing Storage Devices, Swap Space, Encrypted Volumes	4	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Powerpoint presentation through projector
	Connecting to the Network: Configuring the Network with NetworkManager and command line, Services and Runlevels, system-config-network, Network Service Scripts, Troubleshooting, IPv6, Configuring SSH Server and Client, Key-Based SSH Authentication, SSH Port Forwarding, VNC Server Access	4		Powerpoint presentation through projector
	Working with Users, Groups, and Permissions: Creating, deleting and modifying Users, Groups, user accounts with Commands and GUI , Passwords, Using External Authentication Sources, sssd, nsswitch, Pluggable Authentication Modules, Managing Permissions, the Role of Ownership, Basic Permissions: Read,	4		Blackboard and Powerpoint presentation through projector

	Write, and Execute, Advanced Permissions, ACL, umask, Attributes			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: June-September ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various Linux OS commands

b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -III	**Securing Server with iptables:** Understanding Firewalls, Setting Up a Firewall with system-config-firewall, Allowing Services, Trusted Interfaces, Masquerading, Configuration Files, Setting Up a Firewall with iptables, Tables, Chains, and Rules, Composition of Rule, Configuration Example, Advanced iptables Configuration, Configuring Logging, The Limit Module, Configuring NAT	4	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Powerpoint presentation through projector
	Setting Up Cryptographic Services: Introducing SSL, Proof of Authenticity: the Certificate Authority, Managing Certificates with openssl, Creating a Signing Request, Working with GNU Privacy Guard, Creating GPG Keys, Key Transfer, Managing GPG Keys, Encrypting Files with GPG, GPG Signing, Signing RPM Files	4		Powerpoint presentation through projector

	Configuring Server for File Sharing: What is NFS? Advantages and Disadvantages of NFS, Configuring NFS4, Setting Up NFSv4, Mounting an NFS Share, Making NFS Mounts Persistent, Configuring Automount, Configuring Samba, Setting Up a Samba File Server, Samba Advanced Authentication Options, Accessing Samba Shares, Offering FTP Services.	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: June-September ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with various Linux OS commands

b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -IV	**Configuring DNS and DHCP:** Introduction to DNS, The DNS Hierarchy, DNS Server Types, The DNS Lookup Process, DNS Zone Types, Setting Up a DNS Server, Setting Up a Cache-Only Name Server, Setting Up a Primary Name Server, Setting Up a Secondary Name Server, Understanding DHCP, Setting Up a DHCP Server	4	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Powerpoint presentation through projector
	Setting Up a Mail Server: Using the Message Transfer Agent, the Mail Delivery Agent, the Mail User Agent, Setting Up Postfix as an SMTP Server, Working with Mutt, Basic Configuration, Internet Configuration, Configuring Dovecot for POP and IMAP	4		Powerpoint presentation through projector
	Configuring Apache on Red Hat Enterprise Linux: Configuring the Apache Web Server, Creating a Basic Website, Understanding the Apache Configuration Files, Apache Log Files, Working with	4		Powerpoint presentation through projector

	Virtual Hosts, Securing the Web Server with TLS Certificates, Configuring Authentication, Setting Up Authentication with .htpasswd, Configuring LDAP Authentication, Setting Up MySQL			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: T. Y. B. Sc. I. T –B SEMESTER: V MONTH: June-September ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

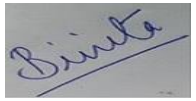
a. Work with various Linux OS commands

b. Work with configurations of various servers with Linux OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Linux System Administration Unit -V	**Introducing Bash Shell Scripting:** Introduction, Elements of a Good Shell Script, Executing the Script, Variables and Input, Subshells, Script Arguments, Asking for Input, Command Substitution, Substitution Operators, Pattern Matching, Performing Calculations, Using Control Structures- if...then...else, case, while, until, for, Configuring booting with GRUB.	6	Red Hat Enterprise Linux 6 Administration By Sander van Vugt	Blackboard
	High-Availability Clustering: Workings of High Availability-Requirements, Add-on Software, Components, Cluster-Based Services, Bonding, Shared Storage, Installing the Red Hat High Availability Add-On, Building the Initial State of the Cluster, Additional Cluster Properties, Quorum Disk, Fencing, Resources and Services, Troubleshooting a Nonoperational Cluster, Configuring GFS2 File Systems	3		Powerpoint presentation through projector

	Setting Up an Installation Server: Network Server as an Installation Server, Installing the TFTP Server, Configuring DHCP for PXE Boot, Kickstart File, system-config-kickstart, Manual Modifications to the Kickstart File	3		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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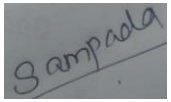

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: TYBSCIT SEMESTER:V

MONTH: **JUNE-SEPT** ACADEMIC YEAR:**2018-19**

LEARNING OBJECTIVE/S:

The learners will be able to :

Understand fundanentals of project

Be familiar with diff methods and tools used for project management

Do the project planning,scheduling,costing

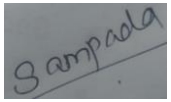
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT501 Software Project Management UNIT-1	**Introduction to Software Project Management**:Introduction, Whyis Software Project Management Important? What is a Project?Software Projects versus Other Types of Project, Contract Management and Technical Project Management, Activities Covered by Software Project Management, Plans, Methods and Methodologies,Some Ways of Categorizing Software Projects, Project Charter, Stakeholders, Setting Objectives, The Business Case, Project Successand Failure, What is Management? Management Control, Project Management Life Cycle, Traditional versus Modern Project Management Practices.	05	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
	Project Evaluation and Programme Management: Introduction, Business Case, Project Portfolio Management, Evaluation of Individual Projects, Cost–benefit Evaluation Techniques, Risk Evaluation, Programme Management,	04	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point

	Managing the Allocation of Resources within Programmes, Strategic Programme Management, Creating a Programme, Aids to Programme Management, Some Reservations about Programme Management, Benefits Management.			
	An Overview of Project Planning :Introduction to Step Wise Project Planning, Step 0: Select Project, Step 1: Identify Project Scope and Objectives, Step 2: Identify Project Infrastructure, Step 3: Analyse Project Characteristics, Step 4: Identify Project Products and Activities, Step 5: Estimate Effort for Each Activity, Step 6: Identify Activity Risks, Step 7: Allocate Resources, Step 8: Review/Publicize Plan, Steps 9 and 10: Execute Plan/Lower Levels of Planning	03	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
USIT501 Software Project Management UNIT-2	**Selection of an Appropriate Project Approach:**Introduction, Build or Buy? Choosing Methodologies and Technologies, Software Processes and Process Models, Choice of Process Models, Structure versus Speed of Delivery, The Waterfall Model, The Spiral Model, Software Prototyping, Other Ways of Categorizing Prototypes, Incremental Delivery, Atern/Dynamic Systems Development Method, Rapid Application Development, Agile Methods, Extreme Programming (XP), Scrum, Lean Software Development, Managing Iterative Processes, Selecting the Most Appropriate Process Model.	06	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
	Software Effort Estimation: Introduction, Where are the Estimates Done? Problems with Over- and Under-Estimates, The Basis for Software Estimating, Software Effort Estimation Techniques, Bottomup Estimating, The Top-down Approach and Parametric Models,Expert Judgement, Estimating by Analogy, Albrecht Function Point Analysis, Function Points Mark II, COSMIC Full Function Points,COCOMO II: A Parametric Productivity Model, Cost Estimation, Staffing Pattern, Effect of Schedule Compression, Capers Jones Estimating Rules of	06	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point

	Thumb.			
USIT501 Software Project Management UNIT-3	**Activity Planning:** Introduction, Objectives of Activity Planning,When to Plan, Project Schedules, Projects and Activities, Sequencing and Scheduling Activities, Network Planning Models, Formulating aNetwork Model, Adding the Time Dimension, The Forward Pass,Backward Pass, Identifying the Critical Path, Activity Float,Shortening the Project Duration, Identifying Critical Activities,Activity-on-Arrow Networks.	04	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
	Risk Management: Introduction, Risk, Categories of Risk, Risk Management Approaches, A Framework for Dealing with Risk, RiskIdentification, Risk Assessment, Risk Planning, Risk Management,Evaluating Risks to the Schedule, Boehm"s Top 10 Risks and Counter Measures, Applying the PERT Technique, Monte Carlo Simulation,Critical Chain Concepts	04	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
	Resource Allocation: Introduction, Nature of Resources, Identifying Resource Requirements, Scheduling Resources, Creating Critical Paths, Counting the Cost, Being Specific, Publishing the Resource Schedule, Cost Schedules, Scheduling Sequence	04	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
USIT501 Software Project Management UNIT-4	**Monitoring and Control**: Introduction, Creating the Framework, Collecting the Data, Review, Visualizing Progress, Cost Monitoring, Earned Value Analysis, Prioritizing Monitoring, Getting the Project Back to Target, Change Control, Software Configuration Management (SCM).	05	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
	Managing Contracts: Introduction, Types of Contract, Stages in Contract Placement, Typical Terms of a Contract, Contract Management, Acceptance.	04	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point

	Managing People in Software Environments: Introduction, Understanding Behaviour, Organizational Behaviour: A Background, Selecting the Right Person for the Job, Instruction in the Best Methods, Motivation, The Oldham–Hackman Job Characteristics Model, Stress, Stress Management, Health and Safety, Some Ethical and Professional Concerns.	03	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
USIT501 Software Project Management UNIT-5	**Working in Teams:** Introduction, Becoming a Team, Decision Making, Organization and Team Structures, Coordination Dependencies, Dispersed and Virtual Teams, Communication Genres, Communication Plans, Leadership	05	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
	Software Quality : Introduction, The Place of Software Quality in Project Planning, Importance of Software Quality, Defining Software Quality, Software Quality Models, ISO 9126, Product and Process Metrics, Product versus Process Quality Management, Quality Management Systems, Process Capability Models, Techniques to Help Enhance Software Quality, Testing, Software Reliability,Quality Plans.	05	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point
	Project Closeout: Introduction, Reasons for Project Closure, Project Closure Process, Performing a Financial Closure, Project CloseoutReport	02	Bob Hughes, Mike Cotterell, Rajib Mall	Black Board,and Chalk ,power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BRIJESH YATINDRA JOSHI **DEPARTMENT: INFORMATION TECHNOLOGY**

CLASS: TYIT DIV - A SEMESTER: V MONTH: June to September ACADEMIC YEAR: 2018-2019

Learning Objectives

1. **Understand .NET Framework, Learn C # language , implementation of object oriented programming concepts using C# language**
2. **Understand the fundamentals of web form, learn to develop the .net application.**
3. **Understand various GUI controls and their use .**
4. **Understand the concept and implementation of error handling ,logging and tracing .**
5. **Understand the concept and implementation of state management , styles, themes and master pages**
6. **Understand the basics of ADO.Net and basics of Data binding and data controls**
7. **Understand various concepts in XML ,security fundamentals and ASP.NET AJAX**

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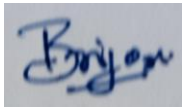
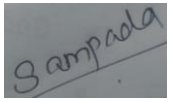
PAPER ,UNIT , TITLE	SUB TOPICS	NO OF LECTURES ALLOCATED	REFERENCE/S	TEACHING METHODS /ICT TOOLS USED
USIT503 Advanced Web Programming UNIT I	Introducing .NET: The .NET Framework, C#, VB, and the .NET Languages, The Common Language Runtime, The .NET Class Library. The C# Language: C# Language Basics, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods	6	C# 2015, Anne Bohem and Joel Murach, Murach ASP.NET 4.0 programming, J. Kanjilal ,Tata McGraw-Hill	BLACK BOARD AND CHALK, Power point presentation
	Types, Objects, and Namespaces: The Basics About Classes, Building a Basic Class, Value Types and Reference Types, Understanding Namespaces and Assemblies, Advanced Class Programming	6		
UNIT II	Web Form Fundamentals: Writing Code, Using the Code-Behind Class, Adding Event Handlers, Understanding the Anatomy of an ASP.NET Application, Introducing Server Controls, Using the Page Class, Using Application Events, Configuring an ASP.NET Application.	6	ASP.NET 4.0 programming, J. Kanjilal ,Tata McGraw-Hill	BLACK BOARD AND CHALK Power point presentation
	Form Controls: Stepping Up to Web Controls, Web Control Classes, List Controls, Table Controls, Web Control Events and AutoPostBack, Validation, Understanding Validation, Using the Validation Controls, Rich Controls, The Calendar, The	6		

	AdRotator, Pages with Multiple Views, User Controls and Graphics, User Controls, Dynamic Graphics, The Chart Control, Website Navigation: Site Maps, URL Mapping and Routing, The SiteMapPath Control, The TreeView Control, The Menu Control.			
UNIT III	Error Handling, Logging, and Tracing : Avoiding Common Errors, Understanding Exception Handling, Handling Exceptions, Throwing Your Own Exceptions, Using Page Tracing	4	ASP.NET 4.0 programming, J. Kanjilal ,Tata McGraw-Hill	BLACK BOARD AND CHALK Power point presentation
	State Management : Understanding the Problem of State, Using View State, Transferring Information Between Pages, Using Cookies, Managing Session State, Configuring Session State, Using Application State, Comparing State Management Options Styles, Themes, and Master Pages : Styles, Themes, Master Page Basics, Advanced Master Pages,	8		
UNIT IV	ADO.NET Fundamentals: Understanding Databases, Configuring Your Database, Understanding SQL Basics, Understanding the Data Provider Model, Using Direct Data Access, Using Disconnected Data Access.	6	ASP.NET 4.0 programming, J. Kanjilal ,Tata McGraw-Hill	BLACK BOARD AND CHALK Power point presentation
	Data Binding: Introducing Data Binding, Using Single-Value Data Binding, Using Repeated-Value Data Binding, Working with Data Source Controls, The Data Controls: The GridView, Formatting the	6		

	GridView, Selecting a GridView Row, Editing with the GridView, Sorting and Paging the GridView, Using GridView Templates, The DetailsView and FormView			
UNIT V	XML: XML Explained, The XML Classes, XML Validation, XML Display and Transforms. Security Fundamentals: Understanding Security Requirements, Authentication and Authorization, Forms Authentication, Windows Authentication.	6	ASP.NET 4.0 programming, J. Kanjilal ,Tata McGraw-Hill	BLACK BOARD AND CHALK Power point presentation
	ASP.NET AJAX: Understanding Ajax, Using Partial Refreshes, Using Progress Notification, Implementing Timed Refreshes, Working with the ASP.NET AJAX Control Toolkit.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHARVARI PATIL DEPARTMENT: IT CLASS: T.Y.I.T (C) SEMESTER: V

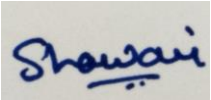
MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concept of error handling and session management.
- Learn web designing using AJAX
- Gain knowledge about various security fundamentals.

Paper No.,Paper Title, Unit No.	**Sub Topics:**	**No.of Lectures**	**References**	**Teaching Method/ICT tools used**
USIT503 Advance Web Programming Unit 4	Error Handling, Logging, and Tracing : Avoiding Common Errors, Understanding Exception Handling, Handling Exceptions, Throwing Your Own Exceptions, Using Page Tracing State Management : Understanding the Problem of State, Using View State, Transferring Information Between Pages, Using Cookies, Managing Session State, Configuring Session State, Using Application State, Comparing State Management Options Styles, Themes, and Master Pages : Styles, Themes, Master Page Basics, Advanced Master Pages,	5 4 1 2	Reference book: Beginning ASP.NET 4.5 in C#"	Chalk, Blackboard

	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT503 Advance Web Programming Unit 5	XML: XML Explained, The XML Classes, XML Validation, XML Display and Transforms. Security Fundamentals: Understanding Security Requirements, Authentication and Authorization, Forms Authentication, Windows Authentication. ASP.NET AJAX: Understanding Ajax, Using Partial Refreshes, Using Progress Notification, Implementing Timed Refreshes, Working with the ASP.NET AJAX Control Toolkit.	4 4 4	Reference book: Beginning ASP.NET 4.5 in C#""	Chalk, Blackboard
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		



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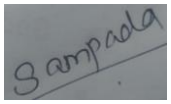

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Information Technology.

CLASS: T.Y.B.Sc. SEMESTER: V MONTH: June To Sept ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

- To support for many industry standards and continues simplification of enterprise ready APIs.

The learners will be able to :

- To understand Java Enterprise edition with its different technologies.
- To understand Java EE architectural server and contains.
- To understand server side technology like Java Servlets with its API and life cycle.
- To make data base connectivity using JDBC.
- To navigate using request dispatcher interface.
- To understand state management using cookies and session.
- To understand how to upload and download the file.
- To be able to work with non-blocking I/O resources.
- To understand server side technology like Java Server Pages.
- To make use of action elements, implicit objects, expression language and JSTL.
- To understand enterprise bill, architectural and its bill.
- To be able to working with session beans and message driven beans.
- To understand interceptors and JNDI.
- To make use of ORM and JPA with its API.
- To understand writing JPA application.
- To be able to understand hibernate architectural and components.
- To understand writing hibernate application.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT506 Enterprise Java UNIT-I	**Understanding Java EE:** WhatisanEnterpriseApplication? Whatisjavaenterpriseedition? JavaEETechnologies, JavaEEevolution,Glassfishserver.	2	1. Java EE 7 For Beginners 2. Java EE 8 Cookbook: Build reliable applications with the most robust and mature technology for enterprise development 3. Advanced Java Programming	Black Board, Projector, PPT.
	JavaEE Architecture,Serverand Containers: TypesofSystemArchitecture, JavaEEServer, JavaEEContainers.	2		Black Board, Projector, PPT.
	Introduction to Java Servlets: TheNeedforDynamicContent, JavaServletTechnology, WhyServlets? WhatcanServletsdo?	2		Black Board, Projector, PPT.
	Servlet API and Lifecycle: JavaServletAPI, TheServletSkeleton, TheServletLifeCycle, ASimpleWelcomeServlet	2		
	WorkingwithServlets: GettingStarted, UsingAnnotationsInsteadofDeploymentDescriptor.	2		
	Working with Databases: WhatIsJDBC? JDBCArchitecture, AccessingDatabase, TheServletGUI and DatabaseExample.	2		
USIT506 Enterprise Java	**Request Dispatcher:** Resquestdispatcher Interface, Methods of Requestdispatcher, Requestdispatcher Application	2	1. Java EE 7 For Beginners	Black Board, Projector,

UNIT-II	**COOKIES:** KindsofCookies, WhereCookiesAreUsed? CreatingCookiesUsingServlet, DynamicallyChangingtheColorsofAPage	3	2. Java EE 8 Cookbook: Build reliable applications with the most robust and mature technology for enterprise development 3. Advanced Java Programming	PPT.
	SESSION: WhatAreSessions? LifecycleofHttpSession, SessionTrackingWithServletAPI, AServlet Session Example	2		
	Workingwith Files: UploadingFiles, CreatinganUploadFileApplication, DownloadingFiles, CreatingaDownloadFileApplication.	2		
	Workingwith Non-Blocking I/O: CreatingaNon-BlockingReadApplication, CreatingTheWeb Application, CreatingJavaClass, Creating Servlets, Retrieving The File, Creating index.jsp	3		
USIT506 Enterprise Java UNIT-III	**Introduction To Java ServerPages:** WhyuseJava ServerPages? DisadvantagesOfJSP, JSPv\sServlets, LifeCycleofaJSPPage, HowdoesaJSPfunction? HowdoesJSPexecute? AboutJava ServerPages	3	1. Java EE 7 For Beginners 2. Java EE 8 Cookbook: Build reliable applications with the most robust and mature technology for enterprise development 3. Advanced Java Programming	Black Board, Projector, PPT.
	Getting Started With Java ServerPages: Comments, JSPDocument,JSPElements, JSPGUIExample	2		
	Action Elements: IncludingotherFiles, ForwardingJSPPagetoAnotherPage, PassingParametersforotherActions, LoadingaJavabean.	2		
	Implicit Objects, Scopeand ElExpressions: ImplicitObjects, CharacterQuotingConventions, UnifiedExpressionLanguage[UnifiedEl], ExpressionLanguage.	3		
	Java Server Pages Standard Tag Libraries: WhatiswronginusingJSPScriptletTags?	2		

	HowJSTLFixesJSPScriptlet'sShortcomings? DisadvantagesOfJSTL, TagLibraries.			
USIT506 Enterprise Java UNIT-IV	**Introduction To EnterpriseJavabeans:** EnterpriseBeanArchitecture, BenefitsofEnterpriseBean, TypesofEnterpriseBean, AccessingEnterpriseBeans, EnterpriseBeanApplication, PackagingEnterpriseBeans	2	1. Java EE 7 For Beginners 2. Java EE 8 Cookbook: Build reliable applications with the most robust and mature technology for enterprise development 3. Advanced Java Programming	Black Board, Projector, PPT.
	Workingwith Session Beans: WhentouseSessionBeans? TypesofSessionBeans, RemoteandLocalInterfaces, AccessingInterfaces, LifecycleofEnterpriseBeans, PackagingEnterpriseBeans, Exampleof StatefulSessionBean, Example ofStatelessSessionBean, Example of SingletonSessionBeans.	3		
	Working with Message DrivenBeans: LifecycleofaMessageDrivenBean, UsesofMessageDrivenBeans, TheMessage DrivenBeansExample.	2		
	Interceptors: Request andInterceptor, Defining An Interceptor, AroundInvokeMethod, ApplyingInterceptor, Adding An Interceptor To An Enterprise Bean, Build and Run the Web Application.	2		
	Java Naming and Directory Interface: What is Naming Service? What is Directory Service? What is Java Naming and Directory interface? Basic Lookup, JNDI Namespace in Java EE, Resources and JNDI, Datasource Resource Definition in Java EE.	3		
USIT506 Enterprise Java UNIT-V	**Persistence, Object/Relational Mapping And JPA:** WhatisPersistence? PersistenceinJava,Current Persistence Standards in Java, Why an other Persistence Standards? Object/RelationalMapping,	2	1. Java EE 7 For Beginners 2. Java EE 8 Cookbook: Build reliable applications with the	Black Board, Projector, PPT.
	Introduction to JavaPersistence API: TheJavaPersistenceAPI, JPA,ORM,DatabaseandtheApplication, ArchitectureofJPA, HowJPAWorks? JPA Specifications.	2		

	Writing JPA Application: ApplicationRequirementSpecifications, SoftwareRequirements, TheApplicationDevelopmentApproach, CreatingDatabaseandTablesinMysql, creatingaWebApplication, AddingtheRequiredLibraryFiles, creatingaJavabeanClass, CreatingPersistenceUnit[Persistence.Xml], CreatingJSPS, TheJPAApplicationStructure, RunningtheJPAApplication.	3	most robust and mature technology for enterprise development 3. Advanced Java Programming	
	Introduction to Hibernate: WhatisHibernate? WhyHibernate? Hibernate,DatabaseandTheApplication, ComponentsofHibernate, ArchitectureofHibernate, HowHibernateWorks?	2		
	WritingHibernateApplication: ApplicationRequirementSpecifications, SoftwareRequirements, TheApplicationDevelopmentApproach, CreatingDatabaseandTablesinMysql, creatingaWebApplication, AddingtheRequiredLibraryFiles, creatingaJavabeanClass, CreatingHibernateConfigurationFile, AddingaMappingClass, CreatingJSPS, RunningTheHibernateApplication.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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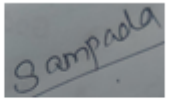

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: T.Y. BSc (IT) DIV-C SEMESTER:SEM -5 MONTH: JUN-SEPT ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand what is a The Internet of Things and its applications .
- Introduction of Prototyping the Physical Design and online design.
- Understand different techniques of Prototyping.
- Learn the concept of automation.

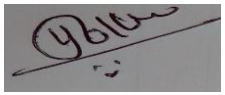
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT502 Internet Of Things UNIT 1	**The Internet of Things:** An Overview: The Flavour of the Internet of Things, The "Internet" of "Things", The Technology of the Internet of Things, Enchanted Objects, Who is Making the Internet of Things?	4	Designing the Internet of Things Adrian McEwen, Hakim Cassimally WILEY First 2014	Black board and chalk , Projector
	Design Principles for Connected Devices: Calm and Ambient Technology, Magic as Metaphor, Privacy, Keeping Secrets, Whose Data Is It Anyway? Web Thinking for Connected Devices, Small Pieces, Loosely Joined, First-Class Citizens on The Internet, Graceful Degradation, Affordances.	4		
	Internet Principles: Internet Communications: An Overview, IP, TCP, The IP Protocol Suite (TCP/IP), UDP, IP Addresses,	4		

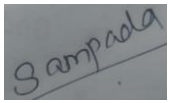
	DNS, Static IP Address Assignment, Dynamic IP Address Assignment, IPv6, MAC Addresses, TCP and UDP Ports, An Example: HTTP Ports, Other Common Ports, Application Layer Protocols, HTTP, HTTPS: Encrypted HTTP, Other Application Layer Protocols.			
USIT502 Internet Of Things UNIT 2	**Thinking About Prototyping**: Sketching, Familiarity, Costs versus Ease of Prototyping, Prototypes and Production, Changing Embedded Platform, Physical Prototypes and Mass Personalisation	4	1.Designing the Internetof Things Adrian McEwen, Hakim Cassimally WILEY First 2014 , 2.Internet of Things – Architecture and Design Raj Kamal McGraw Hill First 201	Black board and chalk, Projector
	Climbing into the Cloud Open Source versus Closed Source, Why Closed? Why Open? Mixing Open and Closed Source, Closed Source for Mass Market Projects, Tapping into the Community	4		
	Prototyping Embedded Devices: Electronics, Sensors, Actuators, Scaling Up the Electronics, Embedded Computing Basics, Microcontrollers, System-on-Chips, Choosing Your Platform, Arduino, developing on the Arduino, Some Notes on the Hardware, Openness, Raspberry Pi, Cases and Extension Boards, Developing on the Raspberry Pi, Some Notes on the Hardware, Openness	4		
USIT502 Internet Of Things	**Prototyping the Physical Design:** Preparation, Sketch, Iterate, and Explore, Nondigital Methods, Laser Cutting, Choosing a Laser Cutter, Software, Hinges and Joints, 3D Printing, Types of 3D Printing, Software, CNC Milling, Repurposing/Recycling.	5	Designing the Internet of Things Adrian McEwen, Hakim Cassimally WILEY First 2014	Black board and chalk, Projector

UNIT 3	**Prototyping Online Components**: Getting Started with an API, Mashing Up APIs, Scraping, Legalities, writing a New API, Clockodillo, Security, implementing the API, Using Curl to Test, Going Further	3		
	Real-Time Reactions, Polling, Comet, Other Protocols, MQ Telemetry Transport, Extensible Messaging and Presence Protocol, Constrained Application Protocol.	4		
USIT502 Internet Of Things UNIT 4	**Techniques for Writing Embedded Code:** Memory Management,Types of Memory, Making the Most of Your RAM, Performance and Battery Life, Libraries,Debugging.	5	Designing the Internet of Things Adrian McEwen, Hakim Cassimally WILEY First 2014 www.tutorialspoint.com	Black board and chalk, Projector
	Business Models: A Short History of Business Models, Space and Time, From Craft to Mass Production, The Long Tail of the Internet, Learning from History, The Business Model Canvas, Who Is the Business Model For? Models	3		
	Make Thing, Sell Thing, Subscriptions, Customisation, be a Key Resource, Provide Infrastructure: Sensor Networks, take a Percentage, Funding an Internet of Things Startup, Hobby Projects and Open Source, Venture Capital, Government Funding, Crowdfunding, Lean Startups.	4		
USIT502	**Moving to Manufacture:** What Are You Producing? Designing Kits, Designing Printed circuit boards, Software Choices, The Design	5	1.DesigningtheInternetof Things Adrian McEwen, Hakim Cassimally WILEY First 2014 ,	Black board and chalk, Projector

Internet Of Things UNIT 5	Process, Manufacturing Printed Circuit Boards, Etching Boards, Milling Boards. Assembly, Testing, Mass-Producing the Case and Other Fixtures.		2.Getting Started with Raspberry Pi Matt Richardson and Shawn Wallace SPD Third 2016	
	Certification, Costs, Scaling Up Software, Deployment, Correctness and Maintainability, Security, Performance, User Community.	3		
	Ethics: Characterizing the Internet of Things, Privacy, Control, Disrupting Control,Crowdsourcing, Environment, Physical Thing, Electronics, Internet Service, Solutions, The Internet of Things as Part of the Solution, Cautious Optimism, The Open Internet of Things Definition	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**T.Y.B SC(IT)-C**_____ SEMESTER: ____**V**_____ MONTH: _____ _____**JUNE-SEPTEMBER** _____ ACADEMIC YEAR: _____**2018-2019**_____

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand the background of Red Hat Linux administration as an operating system.**
- **How to work with various commands and their implementation in Linux bash shell system.**
- **To understand basic management tasks, administrative tasks and managing different services with RPM.**
- **Helps to make you configure and install the software, working with the networks and creation of users, groups and permissions in system.**
- **To make you understand the security concept of the system and cryptographic services.**
- **It also make you understand how to configure and to install different servers(FTP, Mail services, DHCP, Samba etc.) and to enable its services and to provide client server architecture working.**
- **Helps to create clusters and provide better understanding of shell scripting.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-04 (USIT505) **Linux System**	**Introduction to Red Hat Enterprise Linux:** Linux, Open Source and Red Hat, Origins of Linux, Distributions, Duties of Linux System Administrator.	01	Red Hat Enterprise Linux 6 Administration By	Textbook, Blackboard, Chalk and Duster.

Administration **Unit No -01**	**Command Line:** Working with the Bash Shell, Getting the Best of Bash, Useful Bash Key Sequences, Working with Bash History, Performing Basic File System Management Tasks, Working with Directories, Piping and Redirection, Finding Files	04	Sander van Vugt , John Wiley and Sons	Textbook, Blackboard, Chalk and Duster, Projector, Laptop, PPTs.
	System Administration Tasks: Performing Job Management Tasks, System and Process Monitoring and Management, Managing Processes with ps, Sending Signals to Processes with the kill Command, Using top to Show Current System Activity, Managing Process Niceness, Scheduling Jobs, Mounting Devices, Working with Links, Creating Backups, Managing Printers, Setting Up System Logging, Setting Up Rsyslog, Common Log Files, Setting Up Logrotate	04		Projector, Laptop, PPTs.
	Managing Software: Understanding RPM, Understanding Meta Package Handlers, Creating Your Own Repositories, Managing Repositories, Installing Software with Yum, Querying Software, Extracting Files from RPM Packages	03		Projector, Laptop, PPTs.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -02	**Configuring and Managing Storage:** Understanding Partitions and Logical Volumes, Creating Partitions, Creating File Systems, File Systems Overview, Creating File Systems, Changing File System Properties, Checking the File System Integrity, Mounting File Systems Automatically Through fstab, Working with Logical Volumes, Creating Logical Volumes, Resizing Logical Volumes, Working with Snapshots, Replacing Failing Storage Devices, Creating Swap Space, Working with Encrypted	04	Red Hat Enterprise Linux 6 Administration By Sander van Vugt , John Wiley and	Projector, Laptop, PPTs.

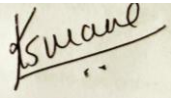
	Volumes .		Sons	
	Connecting to the Network: Understanding NetworkManager, Working with Services and Runlevels, Configuring the Network with NetworkManager, Working with system-config-network, NetworkManager Configuration Files, Network Service Scripts, Networking from the Command Line, Troubleshooting Networking, Setting Up IPv6, Configuring SSH, Enabling the SSH Server, Using the SSH Client, Using PuTTY on Windows Machines, Configuring Key-Based SSH Authentication, Using Graphical Applications with SSH, Using SSH Port Forwarding, Configuring VNC Server Access	04		Projector, Laptop, PPTs.
	Working with Users, Groups, and Permissions: Managing Users and Groups, Commands for User Management, Managing Passwords, Modifying and Deleting User Accounts, Configuration Files, Creating Groups, Using Graphical Tools for User, and Group Management, Using External Authentication Sources, the Authentication Process, sssd, nsswitch, Pluggable Authentication Modules, Managing Permissions, the Role of Ownership, Basic Permissions: Read, Write, and Execute, Advanced Permissions, Working with Access Control Lists, Setting Default Permissions with umask, Working with Attributes	04		Projector, Laptop, PPTs.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -03	**Securing Server with iptables:** Understanding Firewalls, Setting Up a Firewall with system-config-firewall, Allowing	04	Red Hat	Projector, Laptop,

	Services, Trusted Interfaces, Masquerading, Configuration Files, Setting Up a Firewall with iptables, Tables, Chains, and Rules, Composition of Rule, Configuration Example, Advanced iptables Configuration, Configuring Logging, The Limit Module, Configuring NAT		Enterprise Linux 6 Administration By Sander van Vugt , John Wiley and Sons	PPTs.
	Setting Up Cryptographic Services: Introducing SSL, Proof of Authenticity: the Certificate Authority, Managing Certificates with openssl, Creating a Signing Request, Working with GNU Privacy Guard, Creating GPG Keys, Key Transfer, Managing GPG Keys, Encrypting Files with GPG, GPG Signing, Signing RPM Files	04		Projector, Laptop, PPTs.
	Configuring Server for File Sharing: What is NFS? Advantages and Disadvantages of NFS, Configuring NFS4, Setting Up NFSv4, Mounting an NFS Share, Making NFS Mounts Persistent, Configuring Automount, Configuring Samba, Setting Up a Samba File Server, Samba Advanced Authentication Options, Accessing Samba Shares, Offering FTP Services.	04		Projector, Laptop, PPTs.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	**Configuring DNS and DHCP:** Introduction to DNS, The DNS Hierarchy, DNS Server Types, The DNS Lookup Process, DNS Zone Types, Setting Up a DNS Server, Setting Up a Cache-Only Name Server, Setting Up a Primary Name Server, Setting Up a Secondary Name Server, Understanding DHCP, Setting Up a DHCP Server	04	Red Hat Enterprise Linux 6 Administration By Sander van Vugt ,	Projector, Laptop, PPTs.

	Setting Up a Mail Server: Using the Message Transfer Agent, the Mail Delivery Agent, the Mail User Agent, Setting Up Postfix as an SMTP Server, Working with Mutt, Basic Configuration, Internet Configuration, Configuring Dovecot for POP and IMAP	03	John Wiley and Sons	Projector, Laptop, PPTs.
	Configuring Apache on Red Hat Enterprise Linux: Configuring the Apache Web Server, Creating a Basic Website, Understanding the Apache Configuration Files, Apache Log Files, Working with Virtual Hosts, Securing the Web Server with TLS Certificates, Configuring Authentication, Setting Up Authentication with .htpasswd, Configuring LDAP Authentication, Setting Up MySQL	05		Projector, Laptop, PPTs.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	**Introducing Bash Shell Scripting:** Introduction, Elements of a Good Shell Script, Executing the Script, Working with Variables and Input, Understanding Variables, Variables, Subshells, and Sourcing, Working with Script Arguments, Asking for Input, Using Command Substitution, Substitution Operators, Changing Variable Content with Pattern Matching, Performing Calculations, Using Control Structures, Using if...then...else, Using case, Using while, Using until, Using for, Configuring booting with GRUB.	03	Red Hat Enterprise Linux 6 Administration By Sander van Vugt , John Wiley and Sons	Textbook, Blackboard, Chalk and Duster, Projector, Laptop, PPTs.
	High-Availability Clustering: High-Availability Clustering, The Workings of High Availability, High-Availability Requirements, Red Hat High-Availability Add-on Software, Components, Configuring Cluster-Based Services, Setting Up Bonding, Setting Up Shared Storage, Installing the Red Hat High	05		Projector, Laptop, PPTs.

	Availability Add-On, Building the Initial State of the Cluster, Configuring Additional Cluster Properties, Configuring a Quorum Disk, Setting Up Fencing, Creating Resources and Services, Troubleshooting a Nonoperational Cluster, Configuring GFS2 File Systems			
	Setting Up an Installation Server: Configuring a Network Server as an Installation Server, Setting Up a TFTP and DHCP Server for PXE Boot, Installing the TFTP Server, Configuring DHCP for PXE Boot, Creating the TFTP PXE Server Content, Creating a Kickstart File, Using a Kickstart File to Perform an Automated, Installation, Modifying the Kickstart File with, system-config-kickstart, Making Manual Modifications to the Kickstart File	04		Projector, Laptop, PPTs.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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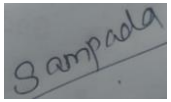

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Sandesh Akre DEPARTMENT: Information technology CLASS: TYIT

SEMESTER: V MONTH: June ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Learn Software Development Methodology
- Conceptual Software development Approaches
- Different development techniques

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT501 Software Project Management Unit 1	Introduction to Software Project Management: Introduction, Whyis Software Project Management Important? What is a Project? Software Projects versus Other Types of Project, Contract Management and Technical Project Management, Activities Covered by Software Project Management, Plans, Methods and Methodologies, Some Ways of Categorizing Software Projects, Project Charter, Stakeholders, Setting Objectives, The Business Case, Project Success and Failure, What is Management? Management Control, Project Management Life Cycle, Traditional versus	12	Software Project Management Bob Hughes, MikeCotterell, Rajib Mall	Chalk and Board

Unit 2	Modern Project Management Practices. Project Evaluation and Programme Management: Introduction, Business Case, Project Portfolio Management, Evaluation of Individual Projects, Cost–benefit Evaluation Techniques, Programme Management, Managing the Allocation of Resources within Programmes, Strategic Programme Management, Creating a Programme, Aids to Programme Management, Some Reservations about Programme Management, Benefits Management. An Overview of Project Planning : Introduction to Step Wise Project Planning, Step 0: Select Project, Step 1: Identify Project Scope and Objectives, Step 2: Identify Project infrastructure, Step 3: Analyse Project Characteristics, Step 4: Identify Project Products and Activities, Step 5: Estimate Effort for Each Activity, Step 6: Identify activity Risks, Step 7: Allocate Resources, Step 8: Review/Publicize Plan, Steps 9 and 10: Execute Plan/Lower Levels of Planning			
	Selection of an Appropriate Project Approach: Introduction, Build or Buy? Choosing Methodologies and Technologies, Software Processes and Process Models, Choice of Process Models, Structure versus Speed of Delivery, The Waterfall Model, The Spiral Model, Software Prototyping, Other Ways of Categorizing Prototypes, Incremental Delivery, Atern/Dynamic Systems Development Method, Rapid	12	Software Project Management Bob Hughes, MikeCotterell, Rajib Mall	Chalk and Board

Unit 3	Application Development, Agile Methods, Extreme Programming (XP), Scrum, Lean Software Development, Managing Iterative Processes, Selecting the Most Appropriate Process Model. Software Effort Estimation: Introduction, Where are the EstimatesDone? Problems with Over- and Under-Estimates, The Basis for Software Estimating, Software Effort Estimation Techniques, Bottom- up Estimating, The Top-down Approach and Parametric Models, Expert Judgement, Estimating by Analogy, Albrecht Function Point Analysis, Function Points Mark II, COSMIC Full Function Points, COCOMO II: A Parametric Productivity Model, Cost Estimation, Staffing Pattern, Effect of Schedule Compression, Capers Jones Estimating Rules of Thumb.			
	Activity Planning: Introduction, Objectives of Activity Planning, When to Plan, Project Schedules, Projects and Activities, Sequencing and Scheduling Activities, Network Planning Models, Formulating a Network Model, Adding the Time Dimension, The Forward Pass, Backward Pass, Identifying the Critical Path, Activity Float, Shortening the Project Duration, Identifying Critical Activities, Activity-on-Arrow Networks. Risk Management: Introduction, Risk, Categories of Risk, Risk Management Approaches, A Framework for Dealing with Risk, Risk Identification, Risk Assessment,	12	Software Project Management Bob Hughes, MikeCotterell, Rajib Mall	Chalk and Board

Unit 4	Risk Planning, Risk Management, Evaluating Risks to the Schedule, Boehm's Top 10 Risks and Counter Measures, Applying the PERT Technique, Monte Carlo Simulation, Critical Chain Concepts. Resource Allocation: Introduction, Nature of Resources, Identifying Resource Requirements, Scheduling Resources, Creating Critical Paths, Counting the Cost, Being Specific, Publishing the Resource Schedule, Cost Schedules, Scheduling Sequence.			
Unit 5	Monitoring and Control: Introduction, Collecting the Data, Review, Visualizing Progress, Cost Monitoring, Earned Value Analysis, Prioritizing Monitoring, Getting the Project Back to Target, Change Control, Software Configuration Management (SCM). Managing Contracts: Introduction, Types of Contract, Stages in Contract Placement, Typical Terms Management, Acceptance. Managing People in Software Environments: Introduction, Understanding Behaviour, Organizational Behaviour: A Background, Selecting the Right Person for the Job, Instruction in the Best Methods, Motivation, The Oldham–Hackman Job Characteristics Model, Stress, Stress Management, Health and Safety, Some Ethical and Professional Concerns.	12	Software Project Management Bob Hughes, MikeCotterell, Rajib Mall	Chalk and Board
	Working in Teams: Introduction, Becoming a Team, Decision Making, Organization and Team Structures, Coordination Dependencies, Dispersed and Virtual Teams, Communication Genres, Communication Plans, Leadership.	12	Software Project Management Bob Hughes, MikeCotterell,	Chalk and Board

	Software Quality : Introduction, The Place of Software Quality in Project Planning, Importance of Software Quality, Defining Software Quality, Software Quality Models, ISO 9126, Product and Process Metrics, Product versus Process Quality Management, Quality Management Systems, Process Capability Models, Techniques to Help Enhance Software Quality, Testing, Software Reliability, Quality Plans. Project Closeout: Introduction, Reasons for Project Closure, Project Closure Process, Performing a Financial Closure, Project Closeout Report.		Rajib Mall	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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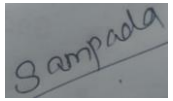

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: TYIT DIV-B

SEMESTER: V MONTH: JUNE- SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Able to understand the application areas of IOT ·
- Able to realize the revolution of Internet in Mobile Devices, Cloud & Sensor Networks ·
- Able to understand building blocks of Internet of Things and characteristics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT502, Internet of Things Unit 1	The Internet of Things: An Overview: The Flavour of the Internet of Things, The "Internet" of "Things", The Technology of the Internet of Things, Enchanted Objects, Who is Making the Internet of Things?	03	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, Powerpoint
	Design Principles for Connected Devices: Calm and Ambient Technology, Magic as Metaphor, Privacy, Keeping Secrets, Whose Data Is It Anyway? Web Thinking for Connected Devices, Small Pieces, Loosely Joined, First-Class Citizens on The Internet, Graceful Degradation, Affordances.	04	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Internet Principles: Internet Communications: An Overview, IP, TCP, The IP Protocol Suite (TCP/IP), UDP, IP Addresses, DNS, Static IP Address Assignment, Dynamic IP Address Assignment, IPv6, MAC Addresses, TCP and UDP Ports, An Example: HTTP Ports, Other	03	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint

	Common Ports, Application Layer Protocols, HTTP, HTTPS: Encrypted HTTP, Other Application Layer Protocols			
USIT502, Internet of Things **Unit 2**	Thinking About Prototyping: Sketching, Familiarity, Costs versus Ease of Prototyping, Prototypes and Production, Changing Embedded Platform, Physical Prototypes and Mass Personalisation, climbing into the Cloud, Open Source versus Closed Source, Why Closed? Why Open? Mixing Open and Closed Source, Closed Source for Mass Market Projects, Tapping into the Community	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Prototyping Embedded Devices: Electronics, Sensors, Actuators, Scaling Up the Electronics, Embedded Computing Basics, Microcontrollers, System-on-Chips, Choosing Your Platform, Arduino, developing on the Arduino, Some Notes on the Hardware, Openness, Raspberry Pi, Cases and Extension Boards, Developing on the Raspberry Pi, Some Notes on the Hardware, Openness.	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
USIT502, Internet of Things **Unit 3**	Prototyping the Physical Design: Preparation, Sketch, Iterate, and Explore, Nondigital Methods, Laser Cutting, Choosing a Laser Cutter, Software, Hinges and Joints, 3D Printing, Types of 3D Printing, Software, CNC Milling, Repurposing/Recycling	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Prototyping Online Components: Getting Started with an API, Mashing Up APIs, Scraping, Legalities, writing a New API, Clockodillo, Security, implementing the API, Using Curl to Test, Going Further, Real-Time Reactions, Polling, Comet, Other Protocols, MQ Telemetry Transport, Extensible Messaging and Presence Protocol, Constrained Application Protocol.	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint

USIT502, Internet of Things **Unit 4**	Techniques for Writing Embedded Code: Memory Management, 12 8 Types of Memory, Making the Most of Your RAM, Performance and Battery Life, Libraries,Debugging.	04	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Business Models: A Short History of Business Models, Space and Time, From Craft to Mass Production, The Long Tail of the Internet, Learning from History, The Business Model Canvas, Who Is the Business Model For? Models, Make Thing, Sell Thing, Subscriptions, Customisation, be a Key Resource, Provide Infrastructure: Sensor Networks, take a Percentage, Funding an Internet of Things Startup, Hobby Projects and Open Source, Venture Capital, Government Funding, Crowdfunding, Lean Startups.	06	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
USIT502, Internet of Things **Unit 5**	Moving to Manufacture: What Are You Producing? Designing Kits, Designing Printed circuit boards, Software Choices, The Design Process, Manufacturing Printed Circuit Boards, Etching Boards, Milling Boards. Assembly, Testing, Mass-Producing the Case and Other Fixtures, Certification, Costs, Scaling Up Software, Deployment, Correctness and Maintainability, Security, Performance, User Community.	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint
	Ethics: Characterizing the Internet of Things, Privacy, Control, Disrupting Control,Crowdsourcing, Environment, Physical Thing, Electronics, Internet Service, Solutions, The Internet of Things as Part of the Solution, Cautious Optimism, The Open Internet of Things Definition	05	Designing the Internet of Things Adrian McEwen, Hakim Cassimally	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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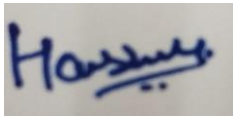

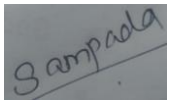

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.I.T**

CLASS: **FYIT A** SEMESTER: **I** MONTH: **July-Oct** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVES:
The learners will be able to :

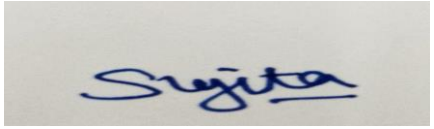
- Understand the Business Communication strategies and its importance.
- Also the paper acts like a personality development course for the student.
- Also the students gets confidence in facing the problems faced during interviews.

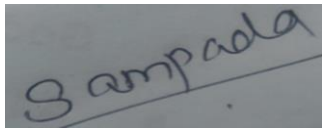
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
V,1, Communication Skills	The Seven Cs of Effective Communication: Completeness, Conciseness, Consideration, Concreteness, Clarity, Courtesy, Correctness	4	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster
	Understanding Business Communication: Nature and Scope of Communication, Non-verbal Communication,	4	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster
	Cross-cultural communication, Technology-enabled Business Communication	4	Business Communication Edited by Meenakshi Raman and	Chalk and Duster

V,2, Communication Skills	Writing Business Messages and Documents: Business writing, Business Correspondence, Instructions Business Reports and Proposals,	5	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster
	Career building and Resume writing, Developing Oral Communication Skills for Business: Effective Listening, Business Presentations and Public Speaking,	5	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster
	Conversations, Interviews	2	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster
V,3, Communication Skills	Developing Oral Communication Skills for Business: Meetings and Conferences,	5	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster
	Group Discussions and Team Presentations, Team Briefing,	5	Business Communication Edited by Meenakshi Raman and Prakash Singh	Chalk and Duster
	Understanding Specific Communication Needs: Communication across Functional Areas	2	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster

V,4, Communication Skills	Understanding Specific Communication Needs: Corporate Communication, Persuasive Strategies in Business Communication	6	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster
	Ethics in Business Communication, Business Communication Aids	4	Business Communication Edited by Meenakshi Raman and Prakash Singh Oxford University Press Second	Chalk and Duster
V,5, Communication Skills	Presentation Process: Planning the resentations, executing the presentations, Impressing the audience by performing,	4	Strategies for improving your business communication Prof. M. S. Rao Shroff publishers and distributors	Chalk and Duster
	Planning stage: Brainstorming, mind maps / concept maps, executing stage: chunking theory, creating outlines, Use of templates. Adding graphics to your presentation: Visual communication, Impress stage: use of font, colour, layout, Importance of practice and performance.	4	Strategies for improving your business communication Prof. M. S. Rao Shroff publishers and distributors	Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 54





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SURBHI SHAH DEPARTMENT: IT-CS CLASS:FYIT-DIV A SEMESTER: SEM-1

MONTH: SEPTEMBER-DECEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The learners will be able to learn and understand the basic concepts of digital electronics with its applications and various laws to be implemented in area of electronics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper no :2 Title of paper: - Digital Electronics UNIT 1	**Number System:** Analog System, digital system, numbering system, binary number system, octal number system, hexadecimal number system, conversion from one number system to another, floating point numbers	4	Digital Electronics and Logic Design By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	Reference book,chalk and blackboard,
	weighted codes binary coded decimal, non-weighted codes Excess – 3 code, Gray code, Alphanumeric codes – ASCII Code, EBCDIC, ISCII Code, Hollerith Code, Morse Code, Teletypewriter (TTY)	3		
	Error detection and correction, Universal Product Code, Code conversion.	1		
	Binary Arithmetic Binary addition, Binary subtraction, Negative number representation, Subtraction using 1's complement and 2's complement	2		
	Binary multiplication and division, Arithmetic in octal number system, Arithmetic in hexadecimal number system BCD and Excess – 3 arithmetic	2		
UNIT 2	**Boolean Algebra and Logic Gates:-**Introduction, Logic (AND OR NOT), Boolean theorems, Boolean Laws, De Morgan's Theorem,	3	Digital Electronics and Logic Design	Reference book,chalk and blackboard,

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	Perfect Induction, Reduction of Logic expression using BooleanAlgebra,		By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	
	Deriving Boolean expression from given circuit, exclusive OR and Exclusive NOR gates, Universal Logic gates,	2		
	Implementation of other gates using universal gates, Input bubbled logic, Assertion level	1		
	Minterm, Maxterm and Karnaugh Maps: Introduction, minterms and sum of minterm form, maxterm and Product of maxterm form, Reduction technique using Karnaugh maps – 2/3/4/5/6 variable K-maps Grouping of variables in K-maps, K-maps for product of sum form, minimize Boolean expression using K-map and obtain K-map from Boolean expression, Quine Mc Cluskey Method.	6		
UNIT 3	**Combinational Logic Circuits:** Introduction, Multi-input, multi-output Combinational circuits, Code converters design and implementations	4	Digital Electronics: Principles, Devices and Applications by Anil K. Maini	Reference book,chalk and blackboard,
	Arithmetic Circuits: Introduction, Adder, BCD Adder, Excess – 3 Adder, Binary Subtractors, BCD Subtractor, Multiplier, Comparator.	4		
Unit 4	**Multiplexer, Demultiplexer, ALU, Encoder and Decoder:** Introduction, Multiplexer, Demultiplexer, Decoder, ALU, Encoders.	4	Modern Digital Electronics - R. P. Jain	Reference book,chalk and blackboard,
	Sequential Circuits: Flip-Flop: Introduction, Terminologies used, S-R flip-flop, D flip-fop, JK flip-flop, Race-around condition, Master – slave JK flip-flop, T flip-flop	4		
	conversion from one type of flip-flop to another, Application of flip-flops	3		

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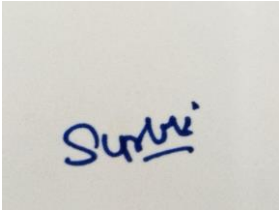
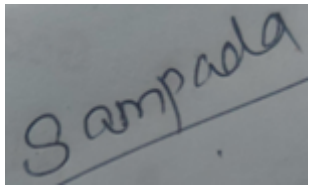
Unit 5	**Counters:** Introduction, Asynchronous counter, Terms related to counters, IC 7493 (4-bit binary counter), Synchronous counter,	3	Modern Digital Electronics - R. P. Jain	Reference book,chalk and blackboard,
	Bushing, Type T Design, Type JK Design, Presettable counter, IC 7490, IC 7492, Synchronous counter ICs, Analysis of counter circuits	4		
	Shift Register: Introduction, parallel and shift registers, serial shifting, serial–in serial–out, serial–in parallel–out , parallel–in parallel–out,	3		
	Ring counter, Johnson counter, Applications of shift registers,	1		
	Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 51





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics CLASS: FYIT SEMESTER: I

MONTH: Jully to Octomber ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : _Set,types of sets ,operation of sets, Russell's paradox,Logic ,Valid invalid statements,Converse,inverse,contrapositive statement,Truth

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT) Unit -I Set theory and Logic	Variables,The Language of sets ,The Language of relation and function.	02		
	Set Theory - Defination and the element method of proof,properties of sets Disproof,Algebric proofs, Boolean Algebra,Russells paradox and Halting problem	05	DM by kolman, DM by Techmax, DM by Kenneth Roshen	Black board and chalk
	The Logic of compound Statements - Logical form and logical equivalance ,Conditional Statements,Va	05		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: FYIT

SEMESTER: I MONTH: Jully to Octomber ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : ___Quantified, predicator, method of proof ,Euclidian Theroem,Quotient Reminder Theroem Rational Number,Indirect proof ,classical Theroem, floor and ceiling function.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT) Unit II Quantified Statement and method of proof	1) Quantified Statements: Predicates and quantified statements ,statement with multiple quantifiers,Arguments with quantified statements 2)Elementary Number Theory and Method of proof : Introductiontodirectproof,Rationalnumbers,Divisiblity,Division into cases and Quotient Reminder Theroem,Floor and ceiling Indirect 3) Argument : Contradiction and contrapositive ,Two Classical Theroem,Application in Algorithms	4+4+4=12	DM by kolman DM by Techmax DM by Roshen	Blackboard,chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Archana Malpathak DEPARTMENT: Mathematics CLASS: FYIT SEMESTER: I MONTH: Jully to Octomber

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : _Reletion its properties,Equivalance relation graphs,Trees.different types of graphs

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT Sem -I) Unit -IV Relation, Graph and Trees	1) Relation on sets - Inverse of Relation,Directed graph of a Relation,Reflexivity, Symmetry, Transitivity : Definations ,closure propertise of relation R,Matrix of a Relation,Digraph of a relation 2)Equivalance Relation,partial order relation Hasse Diagram, 3) Graphs and Trees :Definations and basic properties Trail,path,Circuits,Euler Circutis,Isomorphism of Graphs,Trees ,rooted Trees,Spanning trees,weighted graphs and weighted trees ,Minimum spanning Trees	4+4+4=12	DM by kolman DM by Roshen DM by Techmax	Blackboard and chalk

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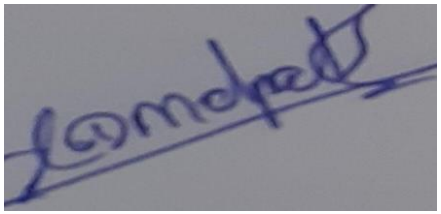
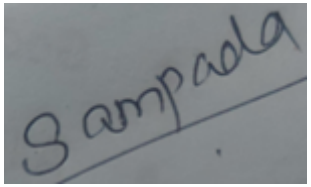
The Number of lecture allotated to unit =12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT:CS

CLASS:FYIT-DIV A SEMESTER: SEM-1 MONTH: JUL-OCT ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: develop logics which will help them to create programs, applications in C. Also by learning the basic programming constructs they can easily switch over to any other language in future.

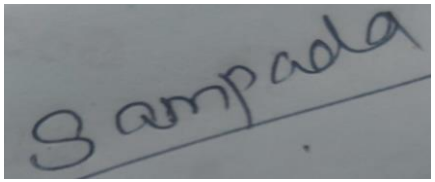
PAPER, TITLE, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 1,Imperative programming, UNIT 1	**Introduction**: Types of Programming languages, History, features and application. Simple program logic, program development cycle	3	Let us c-by Yashwant Kanetkar	BLACK BOARD AND CHALK
	pseudocode statements and flowchart symbols, sentinel value to end a program, programming and user environments, evolution of programming models., desirable program characteristics	3		
	Fundamentals: Structure of a program. Compilation and Execution of a Program,Character Set, identifiers and keywords, data types	3		

	constants, variables and arrays, declarations, expressions, statements, Variable definition, symbolic constants	3		
UNIT 2	**Operators and Expressions:** Arithmetic operators, unary operators, relational and logical operators	3	Let us c-by Yashwant Kanetkar	BLACK BOARD AND CHALK
	assignment operators, assignment operators, the conditional operator, library functions.	3		
	Data Input and output: Single character input and output, entering input data	2		
	scanf function, printf function, gets and puts functions, interactive programming	3		
Unit 3	**Conditional Statements and Loops:** Decision Making Within AProgram,Conditions, Relational Operators, Logical Connectives, If Statement, If-Else Statement.	3	Let us c-by Yashwant kanetkar	BLACK BOARD AND CHALK

	Loops: While Loop, Do While, For Loop. Nested Loops, Infinite Loops,Switch Statement	4		
	Functions: Overview, defining a function, accessing a function, passing arguments to a function, specifying argument data types, function prototypes,recursion, modular programming and functions, standard library of c functions	3		
	prototype of a function: foo1lal parameter list, return type,function call, block structure, passing arguments to a function: call by reference,call by value	3		
UNIT 4	**Program structure:** Storage classes, automatic variables, external variables, static variables,multifile programs	3	Let us c-by Yashwant Kanetkar	BLACK BOARD AND CHALK
	more library functions,Preprocessor: Features, #define and #include, Directives and Macros	3		
	Arrays: Definition, processing, passing arrays to functions, multidimensional arrays, arrays and strings.	4		

Unit 5	**Pointers:** Fundamentals, declarations, Pointers Address Operators, Pointer Type Declaration, Pointer Assignment, Pointer Initialization.	3	Let us c-by Yashwant kanetkar	BLACK BOARD AND CHALK
	Pointer Arithmetic, Functions and Pointers, Arrays And Pointers, Pointer Arrays, passing functions to other functions	3		
	Structures and Unions: Structure Variables, Initialization, Structure Assignment, Nested Structure, Structures and Functions,	3		
	Structures and Arrays: Arrays of Structures, Structures Containing Arrays, Unions, Structures and pointer	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 58



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ARPITA BANERJEE DEPARTMENT: IT-CS

CLASS: FYIT-DIV A SEMESTER: I MONTH: JULY-OCT ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: Develop basic understanding of Operating System, the concept of Memory management, File System, I/O System, Deadlock. Also they will be able to know new concepts like virtualization and cloud computing. Finally through case studies they can have practical knowledge on present day OS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT103 Operating Systems I	**Introduction:** What is an operating system? History of operating system, computer hardware.	3	Modern Operating Systems by Andrew S. Tanenbaum	Blackboard & chalk
	Different operating systems, operating system concepts, system calls, operating system structure.	3		
	Processes and Threads: Processes, Threads, Interprocess-communication.	3		
	Scheduling, IPC problems.	3		
II	**Memory Management**: No memory abstraction, memory abstraction: address spaces, virtual memory.	2	Modern Operating Systems by Andrew S. Tanenbaum	Blackboard & chalk
	Page Replacement Algorithms, design issues for paging systems, implementation issues and segmentation.	4		
	File Systems: Files, directories, file system implementation, file-system management and optimization.	3		

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	MS-DOS file system, UNIX V7 file system, CD ROM file system.	3		
III	**Input-Output:** Principles of I/O hardware, Principles of I/O software, I/O software layers.	3	Modern Operating Systems by Andrew S. Tanenbaum	Blackboard & chalk
	disks, clocks, user interfaces: keyboard, mouse, monitor, thin clients, power management Resources.	3		
	Deadlocks: Introduction to deadlocks, the ostrich algorithm, deadlock detection and recovery.	3		
	Deadlock avoidance, deadlock prevention, issues.	3		
IV	**Virtualization and cloud**: History, requirements for virtualization, type 1 and 2 hypervisors, techniques for efficient virtualization.	3	Modern Operating Systems by Andrew S. Tanenbaum	Blackboard & chalk
	Hypervisor microkernels, memory virtualization, I/O virtualization, Virtual appliances.	3		
	Virtual machines on multicore CPUs, Clouds.	2		
	Multiple Processor System: Multiprocessors, multicomputer, distributed systems.	4		
V	**Case Study on LINUX and ANDROID:** History of Unix and Linux, Linux Overview, Processes in Linux, Memory management in Linux, I/O in Linux, Linux file system, security in Linux.	4	Modern Operating Systems by Andrew S. Tanenbaum	Blackboard & chalk, PowerPoint Presentation
	Android	2		
	Case Study on Windows: History of windows through Windows 10, programming windows, system structure, processes and threads in windows.	4		

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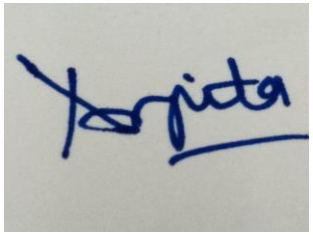
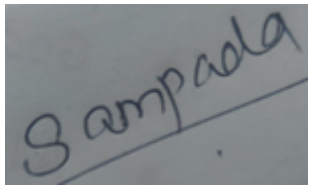
	Memory management, caching in windows, I/O in windows, Windows NT file system, Windows power management, Security in windows.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE DEPARTMENT: ____IT____

CLASS: _FYIT_B DIV SEMESTER: 1_ MONTH: July to Oct ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

- **Understand communication**
- **Enhance communication**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT105 Communication Skills	The Seven Cs of Effective Communication: Completeness, Conciseness, Consideration, Concreteness, Clarity, Courtesy, Correctness	6	Professional Communication Aruna Koneru Tata McGraw Hill	BLACK BOARD AND CHALK

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Unit I	Understanding Business Communication: Nature and Scope of Communication, Non-verbal Communication, Cross-cultural communication, Technology-enabled Business Communication	6		
Unit II	Writing Business Messages and Documents: Business writing, Business Correspondence, Instructions Business Reports and Proposals, Career building and Resume writing.	6	Professional Communication Aruna Koneru Tata McGraw Hill	BLACK BOARD AND CHALK
	Developing Oral Communication Skills for Business: Effective Listening, Business Presentations and Public Speaking, Conversations, Interviews	6		
UNIT III	Developing Oral Communication Skills for Business: Meetings and Conferences, Group Discussions and Team Presentations, Team Briefing,	6	Professional Communication Aruna Koneru Tata McGraw Hill	BLACK BOARD AND CHALK
	Understanding Specific Communication Needs: Communication across Functional Areas	6		
UNIT IV	Understanding Specific Communication Needs: Corporate Communication, Persuasive Strategies in Business	12	Professional Communication Aruna Koneru Tata McGraw	BLACK BOARD AND CHALK

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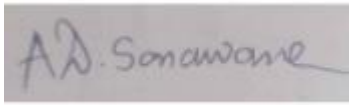
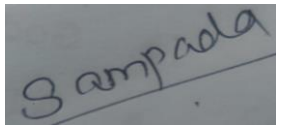
	Communication, Ethics in Business Communication, Business Communication Aids		Hill	
UNIT V	Presentation Process: Planning the presentations, executing the presentations, Impressing the audience by performing, Planning stage: Brainstorming, mind maps / concept maps, executing stage: chunking theory, creating outlines, Use of templates. Adding graphics to your presentation: Visual communication, Impress stage: use of font, colour, layout, Importance of practice and performance.	12	Professional Communication Aruna Koneru Tata McGraw Hill	BLACK BOARD AND CHALK

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SURBHI SHAH DEPARTMENT: IT-CS CLASS:FYIT-DIV B SEMESTER: SEM-1

MONTH: SEPTEMBER-DECEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The learners will be able to learn and understand the basic concepts of digital electronics with its applications and various laws to be implemented in area of electronics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper no :2 Title of paper: - Digital Electronics UNIT 1	**Number System:** Analog System, digital system, numbering system, binary number system, octal number system, hexadecimal number system, conversion from one number system to another, floating point numbers	4	Digital Electronics and Logic Design By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	Reference book,chalk and blackboard,
	weighted codes binary coded decimal, non-weighted codes Excess – 3 code, Gray code, Alphanumeric codes – ASCII Code, EBCDIC, ISCII Code, Hollerith Code, Morse Code, Teletypewriter (TTY)	3		
	Error detection and correction, Universal Product Code, Code conversion.	1		
	Binary Arithmetic Binary addition, Binary subtraction, Negative number representation, Subtraction using 1's complement and 2's complement	2		
	Binary multiplication and division, Arithmetic in octal number system, Arithmetic in hexadecimal number system BCD and Excess – 3 arithmetic	2		
UNIT 2	**Boolean Algebra and Logic Gates:-**Introduction, Logic (AND OR NOT), Boolean theorems, Boolean Laws, De Morgan's Theorem,	3	Digital Electronics and Logic Design	Reference book,chalk and blackboard,

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	Perfect Induction, Reduction of Logic expression using BooleanAlgebra,		By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	
	Deriving Boolean expression from given circuit, exclusive OR and Exclusive NOR gates, Universal Logic gates,	2		
	Implementation of other gates using universal gates, Input bubbled logic, Assertion level	1		
	Minterm, Maxterm and Karnaugh Maps: Introduction, minterms and sum of minterm form, maxterm and Product of maxterm form, Reduction technique using Karnaugh maps – 2/3/4/5/6 variable K-maps Grouping of variables in K-maps, K-maps for product of sum form, minimize Boolean expression using K-map and obtain K-map from Boolean expression, Quine Mc Cluskey Method.	6		
UNIT 3	**Combinational Logic Circuits:** Introduction, Multi-input, multi-output Combinational circuits, Code converters design and implementations	4	Digital Electronics: Principles, Devices and Applications by Anil K. Maini	Reference book,chalk and blackboard,
	Arithmetic Circuits: Introduction, Adder, BCD Adder, Excess – 3 Adder, Binary Subtractors, BCD Subtractor, Multiplier, Comparator.	4		
Unit 4	**Multiplexer, Demultiplexer, ALU, Encoder and Decoder:** Introduction, Multiplexer, Demultiplexer, Decoder, ALU, Encoders.	4	Modern Digital Electronics - R. P. Jain	Reference book,chalk and blackboard,
	Sequential Circuits: Flip-Flop: Introduction, Terminologies used, S-R flip-flop, D flip-fop, JK flip-flop, Race-around condition, Master – slave JK flip-flop, T flip-flop	4		
	conversion from one type of flip-flop to another, Application of flip-flops	3		

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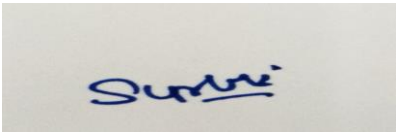
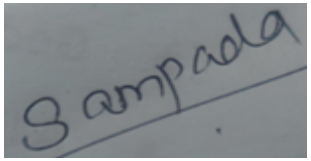
Unit 5	**Counters:** Introduction, Asynchronous counter, Terms related to counters, IC 7493 (4-bit binary counter), Synchronous counter,	3	Modern Digital Electronics - R. P. Jain	Reference book,chalk and blackboard,
	Bushing, Type T Design, Type JK Design, Presettable counter, IC 7490, IC 7492, Synchronous counter ICs, Analysis of counter circuits	4		
	Shift Register: Introduction, parallel and shift registers, serial shifting, serial–in serial–out, serial–in parallel–out , parallel–in parallel–out,	3		
	Ring counter, Johnson counter, Applications of shift registers,	1		
	Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 51





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics CLASS: FYIT SEMESTER: I

MONTH: Jully to Octomber ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : _Set,types of sets ,operation of sets, Russell's paradox,Logic ,Valid invalid statements,Converse,inverse,contrapositive statement,Truth

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT) Unit -I Set theory and Logic	Variables,The Language of sets ,The Language of relation and function.	02		
	Set Theory - Defination and the element method of proof,properties of sets Disproof,Algebric proofs, Boolean Algebra,Russells paradox and Halting problem	05	DM by kolman, DM by Techmax, DM by Kenneth Roshen	Black board and chalk
	The Logic of compound Statements - Logical form and logical equivalance ,Conditional Statements,Va	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: FYIT

SEMESTER: I MONTH: Jully to Octomber ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : ___Quantified, predicator, method of proof ,Euclidian Theroem,Quotient Reminder Theroem Rational Number,Indirect proof ,classical Theroem, floor and ceiling function.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT) Unit II Quantified Statement and method of proof	1) Quantified Statements: Predicates and quantified statements ,statement with multiple quantifiers,Arguments with quantified statements 2)Elementary Number Theory and Method of proof : Introductiontodirectproof,Rationalnumbers,Divisiblity,Division into cases and Quotient Reminder Theroem,Floor and ceiling Indirect 3) Argument : Contradiction and contrapositive ,Two Classical Theroem,Application in Algorithms	4+4+4=12	DM by kolman DM by Techmax DM by Roshen	Blackboard,chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Archana Malpathak DEPARTMENT: Mathematics CLASS: FYIT SEMESTER: I MONTH: Jully to Octomber

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : _Reletion its properties,Equivalance relation graphs,Trees.different types of graphs

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT Sem -I) Unit -IV Relation, Graph and Trees	1) Relation on sets - Inverse of Relation,Directed graph of a Relation,Reflexivity, Symmetry, Transitivity : Definations ,closure propertise of relation R,Matrix of a Relation,Digraph of a relation 2)Equivalance Relation,partial order relation Hasse Diagram, 3) Graphs and Trees :Definations and basic properties Trail,path,Circuits,Euler Circutis,Isomorphism of Graphs,Trees ,rooted Trees,Spanning trees,weighted graphs and weighted trees ,Minimum spanning Trees	4+4+4=12	DM by kolman DM by Roshen DM by Techmax	Blackboard and chalk

The Number of lecture allotated to unit =12

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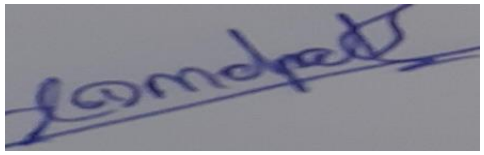

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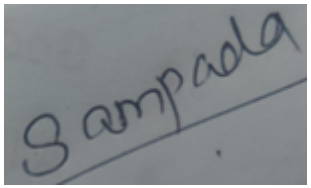

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.I.T**

CLASS: **FYIT B** SEMESTER: **I** MONTH: **July-Oct** ACADEMIC YEAR: **2018-2019**

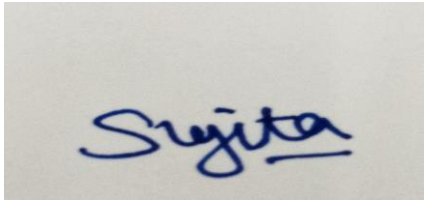
LEARNING OBJECTIVES:
The learners will be able to :

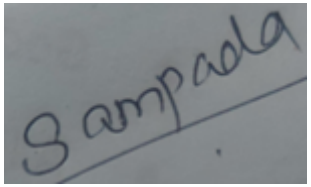
- Understand the basics of Object Oriented Programming.
- Since C being the basics for other learning high level language the student get the chance to understand the programming from its scratch.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I,3, Imperative Programming	Decision Making Within A Program, Conditions, Relational Operators, Logical Connectives, If Statement,	3	Let us C Yashwant P. Kanetkar, BPB publication	Chalk and Duster
	If-Else Statement, Loops: While Loop, Do While, For Loop. Nested Loops, Infinite Loops, Switch Statement	3	C for beginners Madhusudan Mothe X-Team Series 1st 2008	Chalk and Duster
	Functions: Overview, defining a function, accessing a function, passing arguments to a function, specifying argument data types, function prototypes,	3	Let us C Yashwant P. Kanetkar, BPB publication	Chalk and Duster
	recursion, modular programming and functions, standard library of c functions, prototype of a function: foo1lal parameter list, return type,	3	Let us C Yashwant P. Kanetkar, BPB publication	Chalk and Duster
I,5, Imperative Programming	Pointers: Fundamentals, declarations, Pointers Address Operators, Pointer Type Declaration	3	C for beginners Madhusudan Mothe X-Team Series 1st 2008	Chalk and Duster

	Pointer Assignment, Pointer Initialization, Pointer Arithmetic, Functions and Pointers, Arrays And Pointers, Pointer Arrays, passing functions to other functions	3	Let us C Yashwant P. Kanetkar, BPB publication	Chalk and Duster
	Structures and Unions: Structure Variables, Initialization, Structure Assignment, Nested Structure,	3	Let us C Yashwant P. Kanetkar, BPB publication	Chalk and Duster
	Structures and Functions, Structures and Arrays: Arrays of Structures, Structures Containing Arrays, Unions, Structures and pointers	3	Let us C Yashwant P. Kanetkar, BPB publication	Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24





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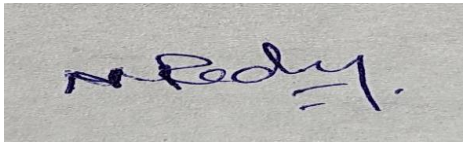
TEACHING PLAN (UNIT PLAN)

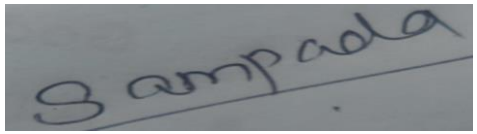
NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS:FYIT-DIV B SEMESTER: SEM-1 MONTH: JUL-OCT ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: develop logics which will help them to create programs, applications in C. Also by learning the basic programming constructs they can easily switch over to any other language in future.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 1 IP UNIT 1	**Introduction**: Types of Programming languages, History, features and application. Simple program logic, program development cycle	3	Let us c-by Yashwant Kanetkar	BLACK BOARD AND CHALK
	pseudocode statements and flowchart symbols, sentinel value to end a program, programming and user environments, evolution of programming models., desirable program characteristics	3		





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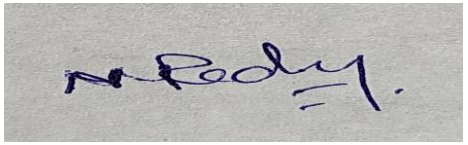
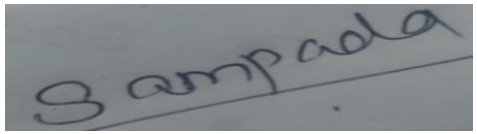
	Fundamentals: Structure of a program. Compilation and Execution of a Program,Character Set, identifiers and keywords, data types	3		
	constants, variables and arrays, declarations, expressions, statements, Variable definition, symbolic constants	3		
UNIT 2	**Operators and Expressions:** Arithmetic operators, unary operators, relational and logical operators	3	Let us c-by Yashwant Kanetkar	BLACK BOARD AND CHALK
	assignment operators, assignment operators, the conditional operator, library functions.	3		
	Data Input and output: Single character input and output, entering input data	2		





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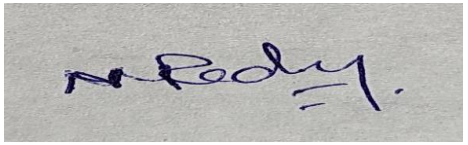
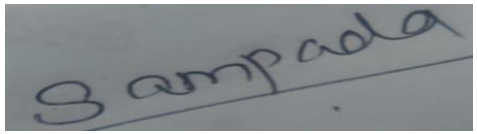
	scanf function, printf function, gets and puts functions, interactive programming	3		
UNIT 4	**Program structure:** Storage classes, automatic variables, external variables, static variables,multifile programs	3	Let us c-by Yashwant Kanetkar	BLACK BOARD AND CHALK
	more library functions,Preprocessor: Features, #define and #include, Directives and Macros	3		
	Arrays: Definition, processing, passing arrays to functions, multidimensional arrays, arrays and strings.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 33





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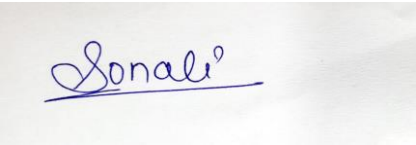
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT-CS

CLASS:FYIT-DIV B SEMESTER: SEM-I MONTH: JUL-SEP ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: Understand role of Operating System in terms of process, memory, file and I/O management. Apply and analysis the concept of a process, thread, mutual exclusion and deadlock. Evaluate performance of process scheduling algorithms and IPC. Apply and analysis the concepts of memory management techniques. Apply and analyze different techniques of file and I/O management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3, OS, UNIT-1	**Introduction:** What is an operating system? History of operating system, computer hardware, different operating systems, operating system concepts, system calls, operating system structure.	4	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	Blackboard & Chalk
	Processes and Threads: Processes, threads	4		
	Interprocess communication, scheduling, IPC problems.	4		



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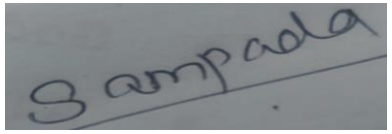

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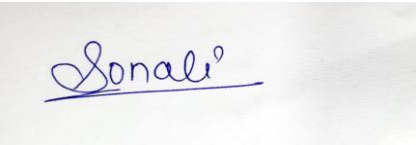
UNIT-2	**Memory Management**: No memory abstraction, memory abstraction: address spaces, virtual memory	3	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	Blackboard & Chalk
	page replacement algorithms, design issues for paging systems, implementation issues, segmentation.	3		
	File Systems: Files, directories, file system implementation, file-system management and optimization	4		
	MS-DOS file system, UNIX V7 file system, CD ROM file system.	2		
UNIT-3	**Input-Output:** Principles of I/O hardware, Principles of I/O software	4	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	Blackboard & Chalk
	I/O software layers, disks, clocks,user interfaces: keyboard, mouse, monitor, thin clients, power management	3		
	Deadlocks: Resources, introduction to deadlocks, the ostrich algorithm,	2		
	deadlock detection and recovery, deadlock avoidance, deadlock prevention, issues.	3		
UNIT-4	**Virtualization and Cloud**: History, requirements for virtualization, type 1 and 2 hypervisors, techniques for efficient virtualization, hypervisor microkernels	2		



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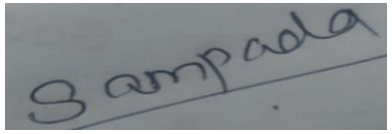

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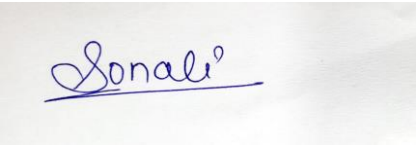
	memory virtualization, I/O virtualization, Virtual appliances, virtual machines on multicore CPUs, Clouds.	2	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	Blackboard & Chalk
	Multiple Processor Systems : Multiprocessors	3		
	Multicomputers, Distributed systems.	5		
UNIT 5	**Case Study on LINUX and ANDROID:** History of Unix and Linux, Linux Overview, Processes in Linux	3	Modern Operating Systems-by Andrew S. Tanenbaum, Herbert Bos	Blackboard & Chalk
	Memory management in Linux, I/O in Linux, Linux file system, security in Linux. Android.	3		
	Case Study on Windows: History of windows through Windows 10, programming windows, system structure, processes and threads in windows	3		
	memory management, caching in windows, I/O in windows, Windows NT file system, Windows power management, Security in windows.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:60



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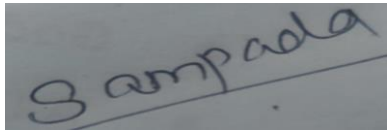

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS

CLASS: FYIT-C SEMESTER: SEM-1 MONTH: JULY-OCT ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

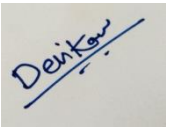
- Understand the process of communication and its effect on giving and receiving information.
- Learn about historical and theoretical developments in the field of communication.
- Apply effective communication skills in a variety of public and interpersonal settings.
- Develop analytical, research, and organizational skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
5 COMMUNICATION SKILLS UNIT 2	**Writing Business Messages and Documents:** Business writing, Business Correspondence,	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	BLACK BOARD AND CHALK
	Instructions Business Reports and Proposals, Career building and	4		
	Resume writing. **Developing Oral Communication Skills for Business:** Effective Listening, Business Presentations and	4		
	Public Speaking ,Conversations, Interviews	3		

UNIT 3	**Developing Oral Communication Skills for Business:** Meetings and Conferences,	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	BLACK BOARD AND CHALK
	Group Discussions *and*	3		
	Team Presentations, Team Briefing,	3		
	Understanding Specific Communication Needs: Communication across Functional Areas	3		
UNIT 4	**Understanding Specific Communication Needs:** Corporate Communication,	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	BLACK BOARD AND CHALK
	Persuasive Strategies in Business Communication,	3		
	Ethics in Business Communication, Business Communication Aids	4		
UNIT 5	**Presentation Process:** Planning the presentations, executing the presentations, Impressing the audience by performing,	3	Business Communication Edited by Meenakshi Raman and Prakash Singh	BLACK BOARD AND CHALK
	Planning stage: Brainstorming, mind maps / concept maps,	3		
	executing stage: chunking theory, creating outlines, Use of templates	3		

	Adding graphics to your presentation: Visual communication, Impress stage: use of font, colour, layout, Importance of practice and performance.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 48



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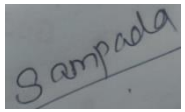

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Sandesh Akre DEPARTMENT: Information Technology CLASS: FYIT

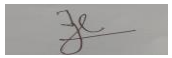
SEMESTER: I MONTH: July ACADEMIC YEAR: 2018-19

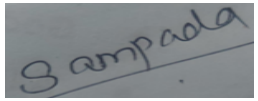
LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand seven C of communication.
- Courtesy in Communication
- You Attitude

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT105 Communication Skills UNIT - I	The Seven Cs of Effective Communication: Completeness, Conciseness, Consideration, Concreteness, Clarity, Courtesy, Correctness Understanding Business Communication: Nature and Scope of Communication, Non-verbal Communication, Cross-cultural communication, Technology-enabled Business	10	Business Communication, Edited by Meenakshi Raman and Prakash Singh	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS:FYIT-DIV C SEMESTER: SEM-1 MONTH: JUL-OCT ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

- To able to learn and understand the basic concepts of digital electronics with its applications and various laws to be implemented in area of electronics.
- To think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT102 Digital Electronics UNIT 1	**Number System:** Analog System, digital system, numbering system, binary number system, octal number system, hexadecimal number system, conversion from one number system to another, floating point numbers	4	Digital Electronics and Logic Design By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	BLACK BOARD AND CHALK
	weighted codes binary coded decimal, non-weighted codes Excess – 3 code, Gray code, Alphanumeric codes – ASCII Code, EBCDIC, ISCII Code, Hollerith Code, Morse Code, Teletypewriter (TTY) Error detection and correction, Universal Product Code, Code conversion	4		
	Binary Arithmetic Binary addition, Binary subtraction, Negative number representation, Subtraction using 1's complement and 2's complement	2		
	Binary multiplication and division, Arithmetic in octal number system, Arithmetic in hexadecimal number system BCD and Excess – 3 arithmetic	2		
USIT102	**Boolean Algebra and Logic Gates:-**Introduction, Logic (AND OR NOT), Boolean theorems, Boolean Laws, De Morgan's Theorem,	3	Digital Electronics and Logic Design	BLACK BOARD AND CHALK

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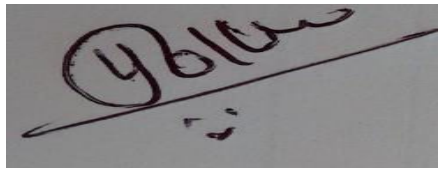
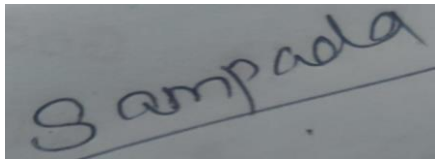
Digital Electronics UNIT 2	Perfect Induction, Reduction of Logic expression using Boolean Algebra,		By N. G. Palan And Digital Electronics: Principles, Devices and Applications by Anil K. Maini	
	Deriving Boolean expression from given circuit, exclusive OR and Exclusive NOR gates, Universal Logic gates, Implementation of other gates using universal gates, Input bubbled logic, Assertion level, Implementation of other gates using universal gates, Input bubbled logic, Assertion level	3		
	Minterm, Maxterm and Karnaugh Maps: Introduction, minterms and sum of minterm form, maxterm and Product of maxterm form, Reduction technique using Karnaugh maps – 2/3/4/5/6 variable K-maps Grouping of variables in K-maps, K-maps for product of sum form, minimize Boolean expression using K-map and obtain K-map from Boolean expression, Quine Mc Cluskey Method.	6		
USIT102 Digital Electronics UNIT 3	**Combinational Logic Circuits:** Introduction, Multi-input, multi-output Combinational circuits, Code converters design and implementations	6	Digital Electronics: Principles, Devices and Applications by Anil K. Maini	BLACK BOARD AND CHALK
	Arithmetic Circuits: Introduction, Adder, BCD Adder, Excess – 3 Adder, Binary Subtractors, BCD Subtractor, Multiplier, Comparator.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **B.Sc.I.T**

CLASS: **FYIT C** SEMESTER: **I** MONTH: **July-Oct** ACADEMIC YEAR: **2018-2019**

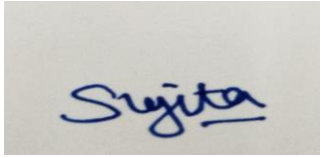
LEARNING OBJECTIVES:
The learners will be able to :

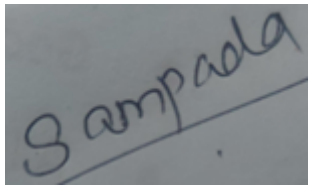
- Understand the basics concept of Digital circuit which includes MUX, DEMUX, Flip flops, counters etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II,4, Digital Electronics	Multiplexer, Demultiplexer, ALU, Encoder and Decoder: Introduction, Multiplexer, Demultiplexer, Decoder, ALU, Encoders	4	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Chalk and Duster
	Sequential Circuits: Flip-Flop: Introduction, Terminologies used, S-R flip-flop, D flip-fop	4	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Chalk and Duster
	JK flipflop, Race-around condition, Master – slave JK flip-flop, T flip-flop, conversion from one type of flip-flop to another, Application of flipflops.	4	Digital Principles and Applications Malvino and Leach Tata McGraw Hill	Chalk and Duster
II,5, Digital Electronics	Counters:	3	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Chalk and Duster

	Introduction, Asynchronous counter, Terms related to counters, IC7493 (4-bit binary counter),			
	Synchronous counter, Bushing, Type T Design, Type JK Design, Presettable counter, IC 7490, IC 7492, Synchronous counter ICs, Analysis of counter circuits.	3	Digital Principles and Applications Malvino and Leach Tata McGraw Hill	Chalk and Duster
	Shift Register: Introduction, parallel and shift registers, serial shifting, serial–in serial–out, serial–in parallel–out , parallel–in parallel–out,	2	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Chalk and Duster
	Ring counter, Johnson counter, Applications of shift registers, Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters.	2	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Chalk and Duster
	Pseudo-random binary sequence generator, IC7495, Seven Segment displays, analysis of shift counters.	2	Modern Digital Electronics R. P. Jain Tata McGraw Hill 3rd	Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT: Mathematics CLASS: FYIT SEMESTER: I

MONTH: Jully to Octomber ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : _Set,types of sets ,operation of sets, Russell's paradox,Logic ,Valid invalid statements,Converse,inverse,contrapositive statement,Truth

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT) Unit -I Set theory and Logic	Variables,The Language of sets ,The Language of relation and function.	02		
	Set Theory - Defination and the element method of proof,properties of sets Disproof,Algebric proofs, Boolean Algebra,Russells paradox and Halting problem	05	DM by kolman, DM by Techmax, DM by Kenneth Roshen	Black board and chalk
	The Logic of compound Statements - Logical form and logical equivalance ,Conditional Statements,Va	05		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: FYIT

SEMESTER: I MONTH: Jully to Octomber ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : ___Quantified, predicator, method of proof ,Euclidian Theroem,Quotient Reminder Theroem Rational Number,Indirect proof ,classical Theroem, floor and ceiling function.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT) Unit II Quantified Statement and method of proof	1) Quantified Statements: Predicates and quantified statements ,statement with multiple quantifiers,Arguments with quantified statements 2)Elementary Number Theory and Method of proof : Introductiontodirectproof,Rationalnumbers,Divisiblity,Division into cases and Quotient Reminder Theroem,Floor and ceiling Indirect 3) Argument : Contradiction and contrapositive ,Two Classical Theroem,Application in Algorithms	4+4+4=12	DM by kolman DM by Techmax DM by Roshen	Blackboard,chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Archana Malpathak DEPARTMENT: Mathematics CLASS: FYIT SEMESTER: I MONTH: Jully to Octomber

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : _Reletion its properties,Equivalance relation graphs,Trees.different types of graphs

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT Sem -I) Unit -IV Relation, Graph and Trees	1) Relation on sets - Inverse of Relation,Directed graph of a Relation,Reflexivity, Symmetry, Transitivity : Definations ,closure propertise of relation R,Matrix of a Relation,Digraph of a relation 2)Equivalance Relation,partial order relation Hasse Diagram, 3) Graphs and Trees :Definations and basic properties Trail,path,Circuits,Euler Circutis,Isomorphism of Graphs,Trees ,rooted Trees,Spanning trees,weighted graphs and weighted trees ,Minimum spanning Trees	4+4+4=12	DM by kolman DM by Roshen DM by Techmax	Blackboard and chalk

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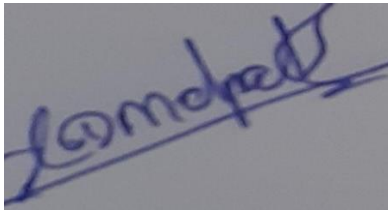
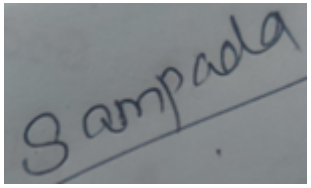
The Number of lecture allotated to unit =12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI_ DEPARTMENT: _____BSC-IT___ CLASS: __FYIT___ SEMESTER: ___I_____

MONTH: ____July to October_____ ACADEMIC YEAR: ____2018-19__

LEARNING OBJECTIVE/S:
The learners will be able to:

Think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems. To apply their knowledge and skills to be employed and excel in IT professional careers and/or to continue their education in IT and/or related post graduate programs.

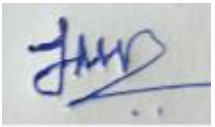
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Imperative Programming USIT101 Unit 1	**Introduction**: Types of Programming languages, History, features and application. Simple program logic, program development cycle, pseudocode statements and flowchart symbols sentinel value to end a program Evolution of programming models., desirable program characteristics. Fundamentals: Structure of a program. Compilation and Execution of a Program,Character Set, identifiers and keywords, data types, constants, variables	3 3 2 4	Yashwant Kanetkar 'Let us C'	Chalk, Blackboard

	and arrays, declarations, expressions, statements, Variable definition, symbolic constants			
Imperative Programming USIT101 Unit 2	**Operators and Expressions:** Arithmetic operators, unary operators, relational and logical operators, assignment operators, assignment operators, the conditional operator, library functions. **Data Input and output:** Single character input and output, entering input data, scanf function, printf function, gets and puts functions, interactive programming.	4 4 2 2	Yashwant Kanetkar 'Let us C'	Chalk, Blackboard
Imperative Programming USIT101 Unit 3	**Conditional Statements and Loops:** Decision Making Within a Program, Conditions, Relational Operators, Logical Connectives, If Statement, If-Else Statement, Loops: While Loop, Do While, For Loop. Nested Loops, Infinite Loops, Switch statement **Functions:**	4 3 2	Yashwant Kanetkar 'Let us C'	Chalk, Blackboard

	Overview, defining a function, accessing a function, passing arguments to a function, specifying argument data types, function prototypes Recursion, modular programming and functions, standard library of c functions, prototype of a function: foo1lal parameter list, return type, function call, block structure, passing arguments to a function: call by reference, call by value.	3		
Imperative Programming USIT101 Unit 4	**Program structure:** Storage classes, automatic variables, external variables, static variables, multifile program Library functions, Preprocessor: Features, #define and #include, Directives and Macros **Arrays:** Definition, processing, passing arrays to functions, multidimensional arrays, arrays and strings.	3 3 2 4	Yashwant Kanetkar 'Let us C'	Chalk, Blackboard
Imperative Programming USIT101 Unit 5	**Pointers:** Fundamentals, declarations, Pointers Address Operators, Pointer Type Declaration, Pointer Assignment, Pointer Initialization	3 3 2	Yashwant Kanetkar 'Let us C'	Chalk, Blackboard

	Arithmetic, Functions and Pointers, Arrays And Pointers, Pointer Arrays, passing functions to other functions **Structures and Unions**: Structure Variables, Initialization, Structure Assignment, Nested Structure, Structures and Functions, Structures and Arrays: Arrays of Structures, Structures Containing Arrays, Unions, Structures and pointers.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __60_____



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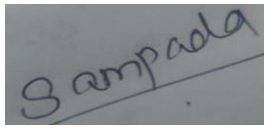

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: IT

CLASS: FY BSC IT SEMESTER: I MONTH: JUL-OCT ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to:

1. Learners must understand proper working of operating system.
2. To provide a sound understanding of Computer operating system, its structures, functioning and algorithms.
3. To provide a understanding of operating system, its structures and functioning.
4. Develop and master understanding of algorithms used by operating systems for various purposes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3 OS UNIT 1	What is an operating system? History of operating system, computer hardware, different operating systems	2	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	Black board and chalk
	Operating system concepts, system calls, operating system structure	3		
	Processes, threads	4		
	Interprocess communication, scheduling, IPC problem	4		

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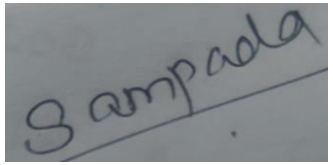
UNIT 4	History, requirements for virtualization, type 1 and 2 hypervisors, techniques for efficient virtualization.	3	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	Black board , chalk & PowerPoint Presentation
	Hypervisor microkernels, memory virtualization, I/O virtualization, Virtual appliances.	3		
	Virtual machines on multicore CPUs, Clouds.	2		
	Multiprocessors, multicomputer, distributed systems.	4		
UNIT 5	History of Unix and Linux, Linux Overview, Processes in Linux, Memory management in Linux, I/O in Linux.	3	Modern Operating Systems by Andrew S. Tanenbaum, Herbert Bos	Black board and chalk
	Linux file system, security in Linux. Android, History of windows through Windows 10, programming windows.	3		
	System structure, processes and threads in windows, Memory management, caching in windows, I/O in windows.	3		
	Windows NT file system, Windows power management, Security in windows.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: F. Y. B. Sc. I. T –C SEMESTER: I MONTH: July-October ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with Linux OS and Windows OS

b. Create various applications on different OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Operating Systems Unit -II	**Memory Management:** No memory abstraction, memory abstraction: address spaces, virtual memory	3	Modern Operating Systems by Andrew Tanenbaum	Blackboard
	Page replacement algorithms, design issues for paging systems, implementation issues, segmentation.	4		Powerpoint presentation through projector
	File Systems: Files, directories, file system implementation, file-system management and optimization, MS-DOS file system, UNIX V7 file system, CD ROM file system.	5		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: F. Y. B. Sc. I. T –C SEMESTER: I MONTH: July-October ACADEMIC YEAR: 2018-2019

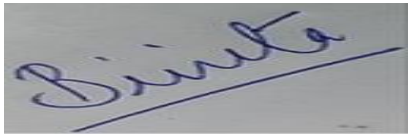
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Work with Linux OS and Windows OS

b. Create various applications on different OS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Operating Systems Unit -III	**Input-Output:** Principles of I/O hardware, Principles of I/O software, I/O software layers	3	Modern Operating Systems by Andrew Tanenbaum	Powerpoint presentation through projector
	disks, clocks, user interfaces: keyboard, mouse, monitor, thin clients, power management	3		Powerpoint presentation through projector
	Deadlocks: Resources, introduction to deadlocks, the ostrich algorithm, deadlock detection and recovery	3		Blackboard and Powerpoint presentation through projector
	Deadlock avoidance, deadlock prevention, issues.	3		Blackboard and Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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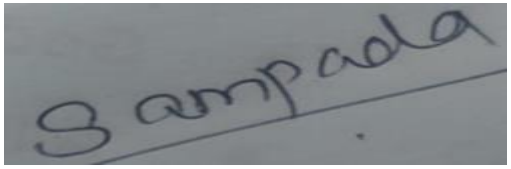

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SYIT SEM-III SUB-APPLIED MATHS-II DIV A

PROF –ARCHANA MALPATHAK

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT:Mathematics CLASS: SYIT SEMESTER: III MONTH: Aug to Nov ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II Unit-I Matrices and Complex Number	Matrices : Inverse,properties,Rank by Normal and Echelon form,Linearequations,Linear dependent and independent Linear transformation,ch roots and ch vectors Caley Hamiltonian theroem,Similarity of matrix,Digonal matrix Complex number - complex number equality of complex numberArgand digram,polar form and exponential of complex numberHyperbolic and Logarithmic function of complex number	12	Applied Maths by G.V.Kumbojkar Higher Engineering of mathematics TechMax	Black board and chalk

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: SYIT SEMESTER: II
MONTH: Aug to November ACADEMIC YEAR: 2018-2019.
LEARNING OBJECTIVE/S:
The learners will be able to : ___Variable separable,subtitutionmethod,Homogenous,Non homogeneous, Exavt differential equation,Non exact fifgerential equation, Integrating factor ,bernoullis differential,higher order differential equation solvable for Y,P,X .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths -II UNIT -II Differential equations	1) Equation of the first order and first degree :Sepratation of variables,Equation homogenous in x and y ,Non homogenous,Exactdifferential, 2)Integrating factor,Bernouils Equation ,Subtitution method general method,other methods 3)Diff equ of higher degree - Solvable for p, for X ,for YClairauts form of equationMethod of sepration, 4)Linear differential with constant coefficients - Differential operator,f(D)=0.f(D)=x ,1/f(D),1/f(D) X	3+3+3+3 =12	G.v.kumbojkar Higher Engineering of mathematics Balguru swami TechMax R.M.Baphna	Blackboard ,chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics. CLASS: SYIT. SEMESTER: III MONTH: July To Nov ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to : Double integration ,Types of double ,Triple Integration,Types oftriple, Area volume for double and triple integration_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Mathematics UNIT -IV Multiple integral	1) Multiple Intigration Double Integral,Change of. the order of the integration,Double integral in polar co - ordinates 2) Triple integral. 3) Application of integration :Areas,Volumes of. solids	4+4+4 =12	Higher Engineering of Mathematics TechMax R .M.Baphna	Black board ,chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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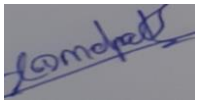
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -ARCHANA MALPATHAK Malpathak
DEPARTMENT: Mathematics CLASS: -SYIT SEMESTER: III MONTH: -JULLY TO_ NOVEMBER ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II (SYIT) UNIT-V Beta Gamma Function	1) Beta Gamma function -Defination,properties and problems,Duplication Formula 2) Differentiation Under Integral Sign 3)Error functions	5+4+3=12	Tech max Higher Engineering of mathematics Applied Maths II Nirali publication	Blackboard,chalk



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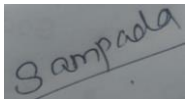

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.Y.B.Sc.(I.T) SEMESTER: III MONTH: JUNE-JULY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Basics of Data Communication, different signals of communication (Analog and Digital)
- Network models(OSI and TCP)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 1	**Introduction**: Data communications, networks, network types, Internet history,standards and administration.	4	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk
	Network Models:Protocol layering, TCP/IP protocol suite, The OSI model.	2	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk
	Introduction to Physical layer:Data and signals, periodic analog signals, digital signals, transmission impairment, data rate limits, performance.	3	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk
	Digital and Analog transmission: Digital-to-digital conversion, analog-to-digital conversion, transmission modes, digital-to-analog conversion, analog-to-analog conversion.	3	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.YB.Sc.(I.T.) SEMESTER:III MONTH: JULY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Different methods to utilize Bandwidth
- Type of Transmission media and methods of switching
- Basics of Data Link layer

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 2	**Bandwidth Utilization**: Multiplexing and Spectrum Spreading: Multiplexing, Spread Spectrum	2	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk
	Transmission media: Guided Media, Unguided Media **Switching**: Introduction, circuit switched networks, packet switching, structure of a switch	6	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk
	Introduction to the Data Link Layer:Link layer addressing, Data Link Layer Design Issues, Error detection and correction, block coding, cyclic codes, checksum, forward error correction, error correcting codes, error detecting codes.	4	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.Y.B.Sc.(I.T) SEMESTER:III MONTH: AUGUST ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Data link layer protocols
- Wireless LAN , Cellular Technology, Satellite Networks(google maps),and Virtual LANs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 3	**Data Link Control**: DLC services, data link layer protocols, HDLC, Point-to-point protocol.	2	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk
	Media Access Control: Random access, controlled access, channelization, Wired LANs – Ethernet Protocol, standard ethernet, fast ethernet, gigabit ethernet, 10 gigabit ethernet,	4	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk
	Wireless LANs: Introduction, IEEE 802.11 project, Bluetooth, WiMAX, Cellular telephony, Satellite networks. **Connecting devices and Virtual LANs.**	6	Data Communication and Networking By Behrouz A. Forouzan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

CLASS: S.Y.B.Sc.(I.T) SEMESTER: III MONTH: AUG-SEPT ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Learning the details of Network Layer
- Routing and routing algorithms
- IPv4 and IPv6 protocols, addressing and transition from IPv4 toIPv6 and vice-versa

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 4	**Introduction to the Network Layer**: Network layer services, packet switching, network layer performance, IPv4 addressing, forwarding of IP packets, Internet Protocol, ICMPv4, Mobile IP	4	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk
	Unicast Routing: Introduction, routing algorithms, unicast routing protocols.	4	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk
	Next generation IP: IPv6 addressing, IPv6 protocol, ICMPv6 protocol, transition from IPv4 to IPv6.	4	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gayatree Karnik DEPARTMENT: Information Technology

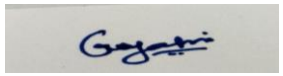
CLASS: S.Y.B.Sc.(I.T) SEMESTER: III MONTH: SEPT. ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Transport layer services and protocols
- Learning standard client server protocols

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 5	**Introduction to the Transport Layer:** Introduction, Transport layer protocols (Simple protocol, Stop-and-wait protocol, Go-Back-n protocol, Selective repeat protocol, Bidirectional protocols), Transport layer services, User datagram protocol, Transmission control protocol	8	TCP/IP Protocol Suite By Behrouz A. Forouzan	Black Board and Chalk
	Standard Client0Server Protocols: World-wide-web and HTTP, FTP, Electronic mail, Telnet, Secured Shell, Domain name system.	4	TCP/IP Protocol Suite By Behrouz A. Forouzan	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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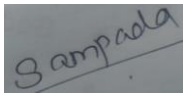

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ARPITA BANERJEE DEPARTMENT: IT-CS

CLASS: SYIT-DIV A SEMESTER: III MONTH: JUN-SEPT ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: Develop understanding of the concept of Transaction, concurrency control and serializability. They will be able to learn PL/SQL to write code.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT304 Database Management Systems IV	**Transaction management and Concurrency:** Control Transaction management: ACID properties.	3	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Blackboard & chalk
	Serializability and concurrency control, Lock based concurrency control (2PL, Deadlocks).	4		
	Time stamping methods, Optimistic methods.	3		
	Database Recovery management.	2		
V	PL/SQL: Beginning with PL / SQL, Identifiers and Keywords, Operators, Expressions, Sequences, Control Structures.	3	SQL,PL/SQL By Ivan Bayross	Blackboard & chalk
	Cursors and Transaction, Collections and composite data types, Procedures and Functions.	3		
	Exceptions Handling, Packages.	3		
	With Clause and Hierarchical Retrieval, Triggers.	3		

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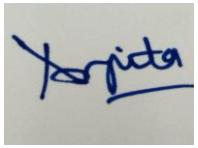
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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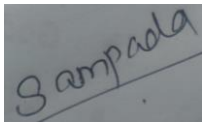

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____ HEMANT WANI__ DEPARTMENT: _____BSC-IT___ CLASS: __SYIT_____ SEMESTER: ___III_____

MONTH: ____June to September_____ ACADEMIC YEAR: ____2018-19__

LEARNING OBJECTIVE/S:
The learners will be able to: Develop understanding of the concept of Transaction, Relational Algebra and also learning the Constraints, Views.

TITLE PAPER, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Database Management Systems USIT304 Unit 1	**Introduction to Databases and Transactions-** What is database system, purpose of database system. View of data, relational databases, Database architecture and transaction management.	4 3 5	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Chalk, Blackboard
Unit 2	**Relational algebra:** introduction, Selection and projection set operations, renaming, Joins, Division, syntax, semantics. Operators, grouping and	4 4 4	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Chalk, Blackboard
Unit 3	**Constraint, Views and SQL:** Types of constraints, Views, security updates on views, Aggregate functions, join relations. Triggers.	4 3 5	Database System and Concepts by A Silberschatz, H Korth, S Sudarshan	Chalk, Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __36_____

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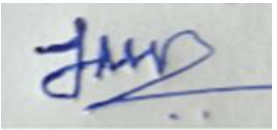

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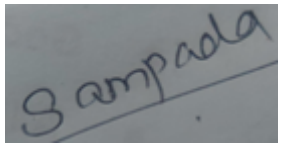

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**SY.B SC(IT)-A**_____SEMESTER: ____**III**_____MONTH: _____**JUNE-SEPTEMBER**_____ ACADEMIC YEAR:_____**2018-2019**_____

LEARNING OBJECTIVE/S:

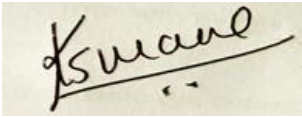
The learners will be able to :

- **Understand the concept of data structure and how it is stored.**
- **The varieties of symbols used to store data, analysis on data, algorithms used to reduce the complexity regarding time, space and programs can be understood.**
- **Understanding the concept of Arrays and operations on array, Stack and Queue and variation of operation on them.**
- **To make understand applications where it is used, advantages and disadvantages of operation.**
- **To enable to practically generate code for it and implement it for data storage.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-02 (USIT302) Data Structures **Unit No -01**	**Introduction:** Data and Information, Data Structure, Classification of Data Structures, Primitive Data Types, Abstract Data Types, Data structure vs. File Organization, Operations on Data Structure, Algorithm, Importance of Algorithm Analysis, Complexity of an Algorithm, Asymptotic Analysis and Notations, Big O Notation, Big Omega Notation, Big Theta Notation, Rate of Growth and Big O Notation.	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	Textbook, Chalk and Duster. Blackboard.

			SPD	
	Array:Introduction, One Dimensional Array, Memory Representation of One Dimensional Array, Traversing, Insertion, Deletion, Searching, Sorting, Merging of Arrays, Multidimensional Arrays, Memory Representation of Two Dimensional Arrays, General Multi-Dimensional Arrays, Sparse Arrays, SparseMatrix, Memory Representation of Special kind of Matrices, Advantages and Limitations of Arrays.	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Textbook, Laptop, Projector, Chalk and Duster. Blackboard.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -03	**Stack**: Introduction, Operations on the Stack Memory Representation of Stack, Array Representation of Stack, Applications of Stack, Evaluation of Arithmetic Expression, Matching Parenthesis, infix and postfix operations, Recursion**.**	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Textbook, Laptop, Projector, Chalk and Duster, Blackboard.
Data Structures	**Queue:** Introduction, Queue, Operations on the Queue, Memory Representation of Queue, Array representation of queue, Linked List Representation of Queue, Circular Queue, Some special kinds of queues, Deque, Priority Queue, Application of Priority Queue, Applications of Queues.	06	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar SPD	Textbook, Laptop, Projector, Chalk and Duster, Blackboard.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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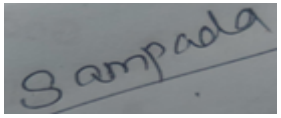

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT/CS

CLASS: SYIT-A, C SEMESTER: III MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to learn different structures of data, their operations and algorithms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DATA STRUCTURES (USIT302) Unit II	**Linked List:** Introduction to Subject, Syllabus, Linked List, One-way Linked List, Traversal of Linked List, Searching, Memory Allocation and De-allocation, Insertion in Linked List, Deletion from Linked List, Copying a List into Other List, Merging Two Linked Lists, Splitting a List into Two Lists, Reversing One way linked List, Circular Linked List, Applications of Circular Linked List	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	Black Board and Chalk
	Two way Linked List, Traversing a Two way Linked List, Searching in a Two way linked List, Insertion of an element in Two way Linked List, Deleting a node from Two way Linked List, Header Linked List, Applications of the Linked list, Representation of Polynomials, Storage of Sparse Arrays, Implementing other Data Structures	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	Black Board and Chalk

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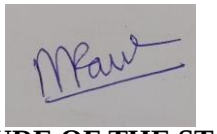
DATA STRUCTURES (USIT302) Unit IV	**Sorting and Searching Techniques:** Bubble, Selection, Insertion, Merge Sort. Searching: Sequential, Binary, Indexed Sequential Searches, Binary Search.	3	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	Black Board and Chalk
	Tree: Tree, Binary Tree, Properties of Binary Tree, Memory Representation of Binary Tree, Operations Performed on Binary Tree, Reconstruction of Binary Tree from its Traversals, Huffman Algorithm, Binary Search Tree, Operations on Binary Search Tree, Heap, Memory Representation of Heap, Operation on Heap, Heap Sort	6		Black Board and Chalk
	Advanced Tree Structures: Red Black Tree, Operations Performed on Red Black Tree, AVL Tree, and Operations performed on AVL Tree, 23 Tree, B-Tree.	3		Black Board and Chalk
DATA STRUCTURES (USIT302) Unit V	**Hashing Techniques** Hash function, Address calculation techniques, Common hashing functions Collision resolution, Linear probing, Quadratic, Double hashing, Bucket hashing, Deletion and rehashing	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	Black Board and Chalk
	Graph: Introduction, Graph, Graph Terminology, Memory Representation of Graph, Adjacency Matrix Representation of Graph, Adjacency List or Linked Representation of Graph, Operations Performed on Graph, Graph Traversal, Applications of the Graph, Reachability, Shortest Path Problems, Spanning Trees	6		Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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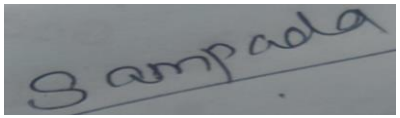

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHARVARI PATIL DEPARTMENT: IT CLASS: S.Y.I.T SEMESTER: III

MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the importance of python programming.
- Gain knowledge about function declaration and function call.
- Learn about various data structures used in python.
- Understand the use of regular expressions.
- Learn GUI development using python programming.

Paper No.,Paper Title, Unit No.	**Sub Topics:**	**No.of Lectures**	**References**	**Teaching Method/ICT tools used**
USIT301 Python Programming Unit 1	Introduction:The Python Programming Language, History, features, Installing Python, Running Python program, Debugging : Syntax Errors, Runtime Errors, Semantic Errors, Experimental Debugging, Formal and Natural Languages, The Difference Between Brackets, Braces, and Parentheses	4	Reference book: "Think Python"	Chalk, Blackboard
	Variables and Expressions:Values and Types, Variables, Variable Names and Keywords, Type conversion, Operators and Operands, Expressions, Interactive Mode and Script Mode	3		
	Conditional Statements:if, if-else, nested if –else	2		

	Looping:for, while, nested loops Control statements: Terminating loops, skipping specific conditions	1 2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT301 Python Programming Unit 2	Functions: Function Calls, Type Conversion Functions, Math Functions, Composition, Adding New Functions, Definitions and Uses, Flow of Execution, Parameters and Arguments, Variables and Parameters Are Local, Stack Diagrams, Fruitful Functions and Void Functions, Why Functions? Importing with from, Return Values, Incremental Development, Composition, Boolean Functions, More Recursion, Leap of Faith, Checking Types Strings: A String Is a Sequence, Traversal with a for Loop, String Slices, Strings Are Immutable, Searching, Looping and Counting, String Methods, The in Operator, String Comparison, String Operations.	4 4 2 2	Reference book: "Think Python"	Chalk, Blackboard
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT301	Lists: Values and Accessing Elements, Lists are mutable, traversing a List, Deleting elements from List, Built-in List Operators, Concatenation, Repetition, In Operator, Built-in List functions and methods	3	Reference book: "Think Python"	Chalk, Blackboard

Python Programming Unit 3	Tuples and Dictionaries: Tuples, Accessing values in Tuples, Tuple Assignment, Tuples as return values, Variable-length argument tuples, Basic tuples operations, Concatenation, Repetition, in Operator, Iteration, Built-in Tuple Functions Creating a Dictionary, Accessing Values in a dictionary, Updating Dictionary, Deleting Elements from Dictionary, Properties of Dictionary keys, Operations in Dictionary, Built-In Dictionary Functions, Built-in Dictionary Methods Files: Text Files, The File Object Attributes, Directories Exceptions: Built-in Exceptions, Handling Exceptions, Exception with Arguments, User-defined Exceptions	3 3 1 2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT301 Python Programming Unit 4	Regular Expressions – Concept of regular expression, various types of regular expressions, using match function. Classes and Objects: Overview of OOP (Object Oriented Programming), Class Definition, Creating Objects, Instances as Arguments, Instances as return values, Built-in Class Attributes, Inheritance, Method Overriding, Data Encapsulation, Data Hiding Multithreaded Programming: Thread Module, creating a thread, synchronizing threads, multithreaded priority queue	4 4 4	Reference book: "Think Python"	Chalk, Blackboard

	Modules: Importing module, Creating and exploring modules, Math module, Random module, Time module	4		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		
USIT301 Python Programming Unit 5	Creating the GUI Form and Adding Widgets: Widgets: Button, Canvas, Checkbutton, Entry, Frame, Label, Listbox, Menubutton, Menu, Message, Radiobutton, Scale, Scrollbar, text, Toplevel, Spinbox, PanedWindow, LabelFrame, tkMessagebox. Handling Standard attributes and Properties of Widgets. Layout Management: Designing GUI applications with proper Layout Management features. Look and Feel Customization: Enhancing Look and Feel of GUI using different appearances of widgets. Storing Data in Our MySQL Database via Our GUI : Connecting to a MySQL database from Python, Configuring the MySQL connection, Designing the Python GUI database, Using the INSERT command, Using the UPDATE command, Using the DELETE command, Storing and retrieving data from MySQL database	4 2 2 4	Reference book: "Think Python"	Chalk, Blackboard
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	**12**		

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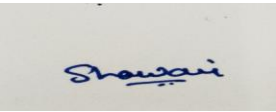

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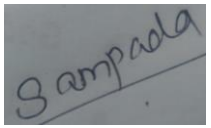

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SYIT SEM-III SUB-APPLIED MATHS-II DIV A

PROF –ARCHANA MALPATHAK

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT:Mathematics CLASS: SYIT SEMESTER: III MONTH: Aug to Nov ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II Unit-I Matrices and Complex Number	Matrices : Inverse,properties,Rank by Normal and Echelon form,Linearequations,Linear dependent and independent Linear transformation,ch roots and ch vectors Caley Hamiltonian theroem,Similarity of matrix,Digonal matrix Complex number - complex number equality of complex numberArgand digram,polar form and exponential of complex numberHyperbolic and Logarithmic function of complex number	12	Applied Maths by G.V.Kumbojkar Higher Engineering of mathematics TechMax	Black board and chalk

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: SYIT SEMESTER: II
MONTH: Aug to November ACADEMIC YEAR: 2018-2019.
LEARNING OBJECTIVE/S:
The learners will be able to : ___Variable separable,subtitutionmethod,Homogenous,Non homogeneous, Exavt differential equation,Non exact fifgerential equation, Integrating factor ,bernoullis differential,higher order differential equation solvable for Y,P,X .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths -II UNIT -II Differential equations	1) Equation of the first order and first degree :Sepratation of variables,Equation homogenous in x and y ,Non homogenous,Exactdifferential, 2)Integrating factor,Bernouils Equation ,Subtitution method general method,other methods 3)Diff equ of higher degree - Solvable for p, for X ,for YClairauts form of equationMethod of sepration, 4)Linear differential with constant coefficients - Differential operator,f(D)=0.f(D)=x ,1/f(D),1/f(D) X	3+3+3+3 =12	G.v.kumbojkar Higher Engineering of mathematics Balguru swami TechMax R.M.Baphna	Blackboard ,chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics. CLASS: SYIT. SEMESTER: III MONTH: July To Nov ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to : Double integration ,Types of double ,Triple Integration,Types oftriple, Area volume for double and triple integration_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Mathematics UNIT -IV Multiple integral	1) Multiple Intigration Double Integral,Change of. the order of the integration,Double integral in polar co - ordinates 2) Triple integral. 3) Application of integration :Areas,Volumes of. solids	4+4+4 =12	Higher Engineering of Mathematics TechMax R .M.Baphna	Black board ,chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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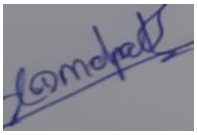
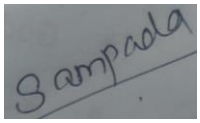
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -ARCHANA MALPATHAK Malpathak
DEPARTMENT: Mathematics CLASS: -SYIT SEMESTER: III MONTH: -JULLY TO_ NOVEMBER ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II (SYIT) UNIT-V Beta Gamma Function	1) Beta Gamma function -Defination,properties and problems,Duplication Formula 2) Differentiation Under Integral Sign 3)Error functions	5+4+3=12	Tech max Higher Engineering of mathematics Applied Maths II Nirali publication	Blackboard,chalk





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sampada Deshmukh DEPARTMENT: Information Technology

CLASS:S.Y.B.Sc.(I.T) SEMESTER: III MONTH:JUNE-JULY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the basics of Data Communication and concept of networking
- Understand the concept of Analog and Digital Signal.
- Understand the Network Model and their working for data transmission.
- Learn conversion of digital to analog and vice-versa.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 1	**Introduction**: Data communications, networks, network types, Internet history,standards and administration.	4	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk, Projector
	Network Models:Protocol layering, TCP/IP protocol suite, The OSI model.	2	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk, Projector
	Introduction to Physical layer:Data and signals, periodic analog signals, digital signals, transmission impairment, data rate limits, performance.	3	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk, Projector

	Digital and Analog transmission: Digital-to-digital conversion, analog-to-digital conversion, transmission modes, digital-to-analog conversion, analog-to-analog conversion.	3	Data Communication and Networking By Behrouz A. Forouzan	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sampada Deshmukh DEPARTMENT:Information Technology

CLASS:S.Y.B.Sc.(I.T) SEMESTER: III MONTH: AUGUST-SEPTEMBER ACADEMIC YEAR:2018-19

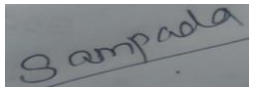
LEARNING OBJECTIVE/S:
The learners will be able to :

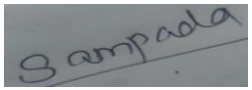
- Understand different transmission level protocol.
- Learn Client server Protocol and their application

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Computer Networks Unit 5	**Introduction to the Transport Layer:** Introduction, Transport layer protocols (Simple protocol, Stop-and-wait protocol, Go-Back-n protocol, Selective repeat protocol, Bidirectional protocols), Transport layer services, User datagram protocol, Transmission control protocol	8	TCP/IP Protocol Suite By Behrouz A. Forouzan	Black Board and Chalk, Projector

	Standard Client Server Protocols: World-wide-web and HTTP, FTP, Electronic mail, Telnet, Secured Shell, Domain name system.	4	TCP/IP Protocol Suite By Behrouz A. Forouzan	Black Board and Chalk, Projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Sandesh Akre DEPARTMENT: INFORMATION TECHNOLOGY CLASS: SYIT

SEMESTER: III MONTH: JUNE ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to:

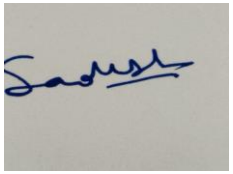
- List various applications of computer networks,
- describe the concepts, protocols,
- Design, implementation and use of computer networks.
- Also implement and evaluate new ideas for solving computer network design issues.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT303, Computer Networks, UNIT-III	Data Link Control: DLC services, data link layer protocols, HDLC, Point-to-point protocol.	02	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2, Computer Networks Andrew Tanenbaum Pearson Fifth 2013,	Blackboard, Chalk
	Media Access Control: Random access, controlled access, channelization, Wired LANs – Ethernet Protocol, standard ethernet, fast ethernet, gigabit ethernet, 10 gigabit ethernet,	03		Blackboard, Chalk
	Wireless LANs: Introduction, IEEE 802.11 project, Bluetooth, WiMAX, Cellular telephony, Satellite networks.	04		Blackboard, Chalk

	Connecting devices and Virtual LANs.	03	TCP/IP Protocol Suite Behrouz A. Forouzan Tata McGraw Hill Fourth Edition 2010	Blackboard, Chalk
USIT303, Computer Networks, UNIT-IV	Introduction to the Network Layer: Network layer services, packet switching, network layer performance, IPv4 addressing, forwarding of IP packets, Internet Protocol, ICMPv4, Mobile IP	05	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2, Computer Networks Andrew Tanenbaum Pearson Fifth 2013, TCP/IP Protocol Suite Behrouz A. Forouzan Tata McGraw Hill Fourth Edition 2010	Blackboard, Chalk
	Unicast Routing:Introduction, routing algorithms, unicast routing protocols.	02		Blackboard, Chalk
	Next generation IP: IPv6 addressing, IPv6 protocol, ICMPv6 protocol, transition from IPv4 to IPv6	05		Blackboard, Chalk
USIT303, Computer Networks, UNIT-V	Introduction to the Transport Layer: Introduction, Transport layer protocols (Simple protocol, Stop-and-wait protocol, Go-Back-n protocol, Selective repeat protocol, Bidirectional protocols), Transport 12 8 layer services, User datagram protocol, Transmission control protocol,	07	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2, Computer Networks Andrew Tanenbaum Pearson Fifth 2013, TCP/IP Protocol	Blackboard, Chalk
	Standard Client0Server Protocols:World wide-web and HTTP, FTP, Electronic mail, Telnet, Secured Shell, Domain name system.	05		Blackboard, Chalk

			Suite Behrouz A. Forouzan Tata McGraw Hill Fourth Edition 2010	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35



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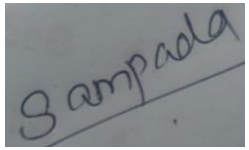

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAMITA NITIN RODE DEPARTMENT: CS

CLASS: SY BSc IT DIV-B(DBMS) SEMESTER:SEM 3 MONTH: JUN-SEP ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

- The learners will be able to : have a broad understanding of database concepts and database management system software
- have a high-level understanding of major DBMS components and their function
- be able to model an application's data requirements using conceptual modeling tools like ER diagrams and design database schemas based on the conceptual model.
- be able to write SQL commands to create tables and indexes, insert/update/delete data, and query data in a relational DBMS.
- be able to program a data-intensive application using DBMS APIs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 4 DBMS UNIT 1	Introduction to Databases and Transactions What is database system, purpose of database system, view of data, relationaldatabases, database architecture, transaction management	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Black board and chalk
	Data Models The importance of data models, Basic building blocks, Business rules, The evolutionof data models, Degrees of data abstraction.	4		
	Database Design,ER Diagram and Unified Modeling Language Database design and ER Model:overview, ERModel, Constraints, ERDiagrams, ERDIssues, weak entity sets, Codd's rules, Relational Schemas, Introduction to UML	4		
	Relational database model: Logical view of data, keys, integrity rules,	3		Black board and chalk

UNIT 2	Relational Database design: features of good relational database design, atomic domain and Normalization (1NF, 2NF, 3NF, BCNF).	3	DATABASE SYSTEM AND CONCEPTS BY H KORTH	
	Relational Algebra and Calculus Relational algebra: introduction, Selection and projection, set operations, renaming,Joins, Division, syntax, semantics	3		
	. Operators, grouping and ungrouping,relationalcomparison	2		
	Calculus: Tuple relational calculus, Domain relational Calculus, calculus vsalgebra,computational capabilities	4		
UNIT 3	Constraints, Views and SQL Constraints, types of constrains, Integrity constraints,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Black board and chalk
	Views: Introduction to views, data independence, security, updates on views,comparison between tables and views	4		
	SQL: data definition, aggregate function, Null Values, nested sub queries, Joined relations. Triggers	4		
UNIT 4	Transaction management and Concurrency Control Transaction management: ACID properties, serializability and concurrency control,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Black board and chalk
	Lock based concurrency control (2PL, Deadlocks),Time stamping methods,	4		
	optimistic methods, database recovery management.	4		
UNIT 5	PL-SQL: Beginning with PL / SQL,Identifiers and Keywords, Operators, Expressions, Sequences	4	PROGRAMMING WITH PL/SQL FOR BEGINNERS BY H. DAND,R. PATIL	Black board and chalk
	,Control Structures, Cursors and Transaction,	4		
	Collections and composite data types, Procedures and Functions, Exceptions Handling ,Packages,With Clause and Hierarchical Retrieval,Triggers.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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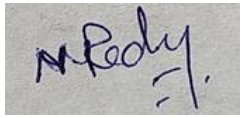

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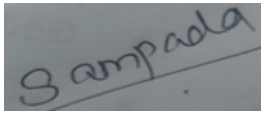

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NESSIE ROBERT COLACO DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:S.Y.BSC(I.T) DIV-B SEMESTER: **III** MONTH:JUNE-SEPTEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : Master the fundamentals of writing Python scripts,Learn core Python scripting elements such as variables and flow control structures,Discover how to work with lists and sequence data,Write Python functions to facilitate code reuse,Use Python to read and write files,Make their code robust by handling errors and exceptions properly,Work with the Python standard library,Explore Python's object-oriented features and Search text using regular expressions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Python Programming USIT301	**Introduction**: The Python Programming Language, History, features, Installing Python, Running Python program, Debugging : Syntax Errors, Runtime Errors, Semantic Errors, Experimental	3	Think Python- Allen Downey O'Reilly	Chalk, Blackboard

Unit-1	Debugging, Formal and Natural Languages, The Difference Between Brackets, Braces, and Parentheses			
	Variables and Expressions: Values and Types, Variables, Variable Names and Keywords, Type conversion, Operators and Operands, Expressions, Interactive Mode and Script Mode	2		
	Conditional Statements: if, if-else, nested if –else	3		
	Looping: for, while, nested loops	2		
	Control statements: Terminating loops, skipping specific conditions	2		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	12		
Python Programming USIT301 Unit-3	**Lists:** Values and Accessing Elements, Lists are mutable, traversing aList, Deleting elements from List, Built-in List Operators,Concatenation, Repetition, In Operator, Built-in List functions and methods.	3	Think Python- Allen Downey O'Reilly	Chalk, Blackboard
	Tuples and Dictionaries: Tuples, Accessing values in Tuples, Tuple Assignment, Tuples as return values, Variable-length argument tuples, Basic tuples operations, Concatenation, Repetition, in Operator,	5		

	Iteration, Built-in Tuple Functions Creating a Dictionary, Accessing Values in a dictionary, Updating Dictionary, Deleting Elements from Dictionary, Properties of Dictionary keys, Operations in Dictionary, Built-In Dictionary Functions, Built-in Dictionary Methods			
	Files: Text Files, The File Object Attributes, Directories	2		
	Exceptions: Built-in Exceptions, Handling Exceptions, Exception with Arguments, User-defined Exceptions	3		
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:	13		

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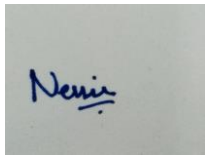

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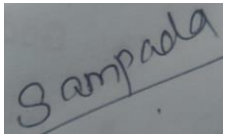

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Miss Shilpa James Rodrigues

DEPARTMENT: IT

CLASS: S.Y.I.T.-B (Python)

SEMESTER:III

MONTH:June - September

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand why Python is a useful scripting language for developers.
- Learn how to design and program Python applications.
- Learn how to use lists, tuples, and dictionaries in Python programs.
- Write functions and pass arguments in Python also to read and write files in Python.
- Learn how to design object-oriented programs with Python classes.
- Use exception handling in Python applications for error handling
- Understand the basics of python GUI component and be able to create GUI based application.
- Create Python application that will manage user data with the knowledge of DBMS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT301 , Unit 2, Python .	**Functions:** Function Calls, Type Conversion Functions, Math Functions, Composition, Adding New Functions, Flow of Execution, Parameters and Arguments, Variables and Parameters Are Local, Stack Diagrams, Fruitful Functions and Void Functions, Why Functions? Importing with from, Return Values, Incremental Development, Boolean Functions, More Recursion, Leap of Faith, Checking Types.	05	Think Python - Allen Downey	Black Board and chalk.

	Strings: A String Is a Sequence, Traversal with a for Loop, String Slices, Strings Are Immutable, Searching, Looping and Counting, String Methods, The in Operator, String Comparison, String Operations.	07	Think Python - Allen Downey	Black Board and chalk.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT301 , Unit 4, Python .	**Regular Expressions –** Concept of regular expression, various types of regular expressions, using match function.	03	Think Python - Allen Downey	Black Board and chalk.
	Classes and Objects: Overview of OOP (Object Oriented Programming), Class Definition, Creating Objects, Built-in Class Attributes, Inheritance, Method Overriding, Data Encapsulation.	04	Think Python - Allen Downey	Black Board and chalk.
	Multithreaded Programming: Thread Module, creating a thread, synchronizing threads, multithreaded priority queue	02	Think Python - Allen Downey	Black Board and chalk.
	Modules: Importing module, Creating and exploring modules, Math module, Random module, Time module	03	Think Python - Allen Downey	Black Board and chalk.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

USIT301 , Unit 5, Python .	**Creating the GUI Form and Adding Widgets:** **Widgets:** Button, Canvas, Checkbutton, Entry, Frame, Label, Listbox, Menubutton, Menu, Message, Radiobutton, Scale, Scrollbar, text, Toplevel, Spinbox, PanedWindow, LabelFrame, tkMessagebox. Handling Standard attributes and Properties of Widgets.	04	Python GUI Programming Cookbook -Burkhard A. Meier	Black Board, chalk and Powerpoint.
	Layout Management: Designing GUI applications with proper Layout Management features.	02	Python GUI Programming Cookbook - Burkhard A. Meier	Black Board, chalk and Powerpoint.
	Look and Feel Customization: Enhancing Look and Feel of GUI using different appearances of widgets.	02	Python GUI Programming Cookbook - Burkhard A. Meier	Black Board, chalk and Powerpoint.
	Storing Data in Our MySQL Database via Our GUI : Connecting to a MySQL database from Python, Configuring the MySQL connection, Designing the Python GUI database, Using the INSERT command, Using the UPDATE command, Using the DELETE command, Storing and retrieving data from MySQL database.	04	Python GUI Programming Cookbook - Burkhard A. Meier	Black Board, chalk and Powerpoint.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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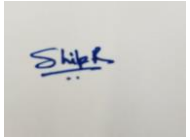

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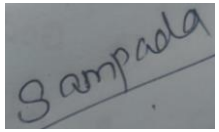

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SYIT SEM-III SUB-APPLIED MATHS-II DIV A

PROF –ARCHANA MALPATHAK

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak DEPARTMENT:Mathematics CLASS: SYIT SEMESTER: III MONTH: Aug to Nov ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II Unit-I Matrices and Complex Number	Matrices : Inverse,properties,Rank by Normal and Echelon form,Linearequations,Linear dependent and independent Linear transformation,ch roots and ch vectors Caley Hamiltonian theroem,Similarity of matrix,Digonal matrix Complex number - complex number equality of complex numberArgand digram,polar form and exponential of complex numberHyperbolic and Logarithmic function of complex number	12	Applied Maths by G.V.Kumbojkar Higher Engineering of mathematics TechMax	Black board and chalk

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: SYIT SEMESTER: II
MONTH: Aug to November ACADEMIC YEAR: 2018-2019.
LEARNING OBJECTIVE/S:
The learners will be able to : ___Variable separable,subtitutionmethod,Homogenous,Non homogeneous, Exavt differential equation,Non exact fifgerential equation, Integrating factor ,bernoullis differential,higher order differential equation solvable for Y,P,X .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths -II UNIT -II Differential equations	1) Equation of the first order and first degree :Sepratation of variables,Equation homogenous in x and y ,Non homogenous,Exactdifferential, 2)Integrating factor,Bernouils Equation ,Subtitution method general method,other methods 3)Diff equ of higher degree - Solvable for p, for X ,for YClairauts form of equationMethod of sepration, 4)Linear differential with constant coefficients - Differential operator,f(D)=0.f(D)=x ,1/f(D),1/f(D) X	3+3+3+3 =12	G.v.kumbojkar Higher Engineering of mathematics Balguru swami TechMax R.M.Baphna	Blackboard ,chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics. CLASS: SYIT. SEMESTER: III MONTH: July To Nov ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to : Double integration ,Types of double ,Triple Integration,Types oftriple, Area volume for double and triple integration_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Mathematics UNIT -IV Multiple integral	1) Multiple Intigration Double Integral,Change of. the order of the integration,Double integral in polar co - ordinates 2) Triple integral. 3) Application of integration :Areas,Volumes of. solids	4+4+4 =12	Higher Engineering of Mathematics TechMax R .M.Baphna	Black board ,chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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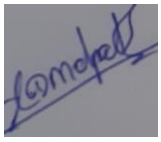
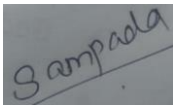
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -ARCHANA MALPATHAK Malpathak
DEPARTMENT: Mathematics CLASS: -SYIT SEMESTER: III MONTH: -JULLY TO_ NOVEMBER ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Maths II (SYIT) UNIT-V Beta Gamma Function	1) Beta Gamma function -Defination,properties and problems,Duplication Formula 2) Differentiation Under Integral Sign 3)Error functions	5+4+3=12	Tech max Higher Engineering of mathematics Applied Maths II Nirali publication	Blackboard,chalk





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: SYIT SEMESTER: III MONTH: JUNE-SEPTEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to : List various applications of computer networks, describe the concepts, protocols, design, implementation and use of computer networks. Also implement and evaluate new ideas for solving computer network design issues..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT303, Computer Networks, UNIT-I	Introduction: Data communications, networks, network types, Internet history,standards and administration	02	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2, Computer Networks Andrew Tanenbaum Pearson Fifth 2013	Blackboard, Chalk
	Network Models:Protocol layering, TCP/IP protocol suite, The OSI model.	02		Blackboard, Chalk
	Introduction to Physical layer:Data and signals, periodic analog signals, digital signals, transmission impairment, data rate limits,performance.	04		Blackboard, Chalk
	Digital and Analog transmission: Digital-to-digital conversion, analog-to-digital conversion, transmission modes, digital-to-analog conversion, analog-to-analog conversion	04		Blackboard, Chalk
	Bandwidth Utilization: Multiplexing and SpectrumSpreading: Multiplexing, Spread Spectrum	02	Data Communication and Networking Behrouz A. Forouzan Tata	Blackboard, Chalk
	Transmission media:Guided Media, Unguided Media	02		Blackboard, Chalk

USIT303, Computer Networks, UNIT-II	Switching: Introduction, circuit switched networks, packet switching, structure of a switch.	03	McGraw Hill Fifth Edition 2, Computer Networks Andrew Tanenbaum Pearson Fifth 2013, TCP/IP Protocol Suite Behrouz A. Forouzan Tata McGraw Hill Fourth Edition 2010	Blackboard, Chalk
	Introduction to the Data Link Layer:Link layer addressing, Data Link Layer Design Issues, Error detection and correction, block coding, cyclic codes, checksum, forward error correction, error correcting codes, error detecting codes.	05		Blackboard, Chalk
USIT303, Computer Networks, UNIT-III	Data Link Control: DLC services, data link layer protocols, HDLC, Point-to-point protocol.	02	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2, Computer Networks Andrew Tanenbaum Pearson Fifth 2013, TCP/IP Protocol Suite Behrouz A. Forouzan Tata McGraw Hill Fourth Edition 2010	Blackboard, Chalk
	Media Access Control: Random access, controlled access, channelization, Wired LANs – Ethernet Protocol, standard ethernet, fast ethernet, gigabit ethernet, 10 gigabit ethernet,	03		Blackboard, Chalk
	Wireless LANs: Introduction, IEEE 802.11 project, Bluetooth, WiMAX, Cellular telephony, Satellite networks.	04		Blackboard, Chalk
	Connecting devices and Virtual LANs.	03		Blackboard, Chalk

USIT303, Computer Networks, UNIT-IV	Introduction to the Network Layer: Network layer services, packet switching, network layer performance, IPv4 addressing, forwarding of IP packets, Internet Protocol, ICMPv4, Mobile IP	05	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2, Computer Networks Andrew Tanenbaum Pearson Fifth 2013, TCP/IP Protocol Suite Behrouz A. Forouzan Tata McGraw Hill Fourth Edition 2010	Blackboard, Chalk
	Unicast Routing:Introduction, routing algorithms, unicast routing protocols.	02		Blackboard, Chalk
	Next generation IP: IPv6 addressing, IPv6 protocol, ICMPv6 protocol, transition from IPv4 to IPv6	05		Blackboard, Chalk
USIT303, Computer Networks, UNIT-V	Introduction to the Transport Layer: Introduction, Transport layer protocols (Simple protocol, Stop-and-wait protocol, Go-Back-n protocol, Selective repeat protocol, Bidirectional protocols), Transport 12 8 layer services, User datagram protocol, Transmission control protocol,	07	Data Communication and Networking Behrouz A. Forouzan Tata McGraw Hill Fifth Edition 2, Computer Networks Andrew Tanenbaum Pearson Fifth 2013, TCP/IP Protocol Suite Behrouz A. Forouzan Tata McGraw Hill Fourth Edition 2010	Blackboard, Chalk
	Standard Client0Server Protocols:World wide-web and HTTP, FTP, Electronic mail, Telnet, Secured Shell, Domain name system.	05		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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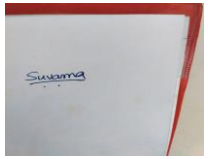

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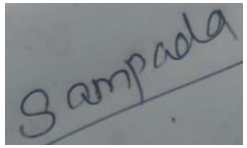

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KETAN THAKUR DEPARTMENT: IT

CLASS: SY BSc IT SEMESTER: SEM 3 MONTH: JUN-SEP ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

1. To have a broad understanding of database concepts and database management system software
2. To have a high-level understanding of major DBMS components and their function
3. To be able to model an application's data requirements using conceptual modeling tools like ER diagrams and design database schemas based on the conceptual model.
4. To be able to write SQL commands to create tables and indexes, insert/update/delete data, and query data in a relational DBMS.
5. To be able to program a data-intensive application using DBMS APIs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 DBMS UNIT 1	Introduction to Databases and Transactions What is database system, purpose of database system, view of data, relational databases, database architecture, transaction management.	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Black board and chalk
	Data Models The importance of data models, Basic building blocks, Business rules, The evolution of data models, Degrees of data abstraction.	4		
	Database Design, ER Diagram and Unified Modelling Language Database design and ER Model: overview, ER Model, Constraints, ER Diagrams, ERD Issues, weak entity sets, Codd's rules, Relational Schemas, Introduction to UML	4		
	Relational database model: Logical view of data, keys, integrity rules,	2		Black board and chalk

UNIT 2	Relational Database design: features of good relational database design, atomic domain and Normalization (1NF, 2NF, 3NF, BCNF).	3	DATABASE SYSTEM AND CONCEPTS BY H KORTH	
	Relational Algebra and Calculus Relational algebra: introduction, Selection and projection, set operations, renaming, Joins, Division, syntax, semantics	3		
	Operators, grouping and ungrouping, relational comparison	2		
	Calculus: Tuple relational calculus, Domain relational Calculus, calculus vs algebra, computational capabilities	2		
UNIT 3	Constraints, Views and SQL Constraints, types of constrains, Integrity constraints,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Black board and chalk
	Views: Introduction to views, data independence, security, updates on views, comparison between tables and views	4		
	SQL: data definition, aggregate function, Null Values, nested sub queries, Joined relations. Triggers	4		
UNIT 4	Transaction management and Concurrency Control Transaction management: ACID properties, serializability and concurrency control,	4	DATABASE SYSTEM AND CONCEPTS BY H KORTH	Black board and chalk
	Lock based concurrency control (2PL, Deadlocks),Time stamping methods,	4		
	Optimistic methods, database recovery management.	4		
UNIT 5	PL-SQL: Beginning with PL / SQL, Identifiers and Keywords, Operators, Expressions, Sequences	4	PROGRAMMING WITH PL/SQL FOR BEGINNERS BY H. DAND,R. PATIL	Black board and chalk
	,Control Structures, Cursors and Transaction,	4		
	Collections and composite data types, Procedures and Functions, Exceptions Handling, Packages with Clause and Hierarchical Retrieval, Triggers.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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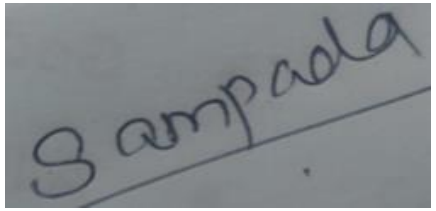

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. ARCHANA SANTOSH RAUT DEPARTMENT: IT CLASS: SYIT

SEMESTER: III MONTH: JUNE-SEPT ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Get deep knowledge about different types of data structures and also the importance of algorithm and its complexity.
- Understand the use of array and different types of linked list.
- Learn about stack, stack operations, queue and different types of it.
- Understand the use of different sorting and searching techniques.
- Learn about graph theory and different types of hashing techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USIT302, Data Structures, Unit I	**Introduction:** Data and Information, Data Structure, Classification of Data Structures, Primitive Data Types, Abstract Data Types, Data structure vs. File Organization, Operations on Data Structure, Algorithm, Importance of Algorithm Analysis, Complexity of an Algorithm, Asymptotic Analysis and Notations, Big O Notation, Big Omega Notation, Big Theta Notation, Rate of Growth and Big O Notation	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Black Board and chalk
	Array: Introduction, One Dimensional Array, Memory Representation of One Dimensional Array, Traversing, Insertion, Deletion, Searching, Sorting, Merging of Arrays, Multidimensional Arrays, Memory Representation of Two Dimensional Arrays, General MultiDimensional Arrays, Sparse Arrays, Sparse Matrix, Memory Representation of Special kind of Matrices, Advantages and Limitations of Arrays.	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Black Board and chalk

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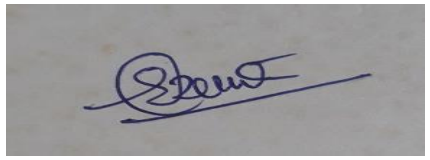
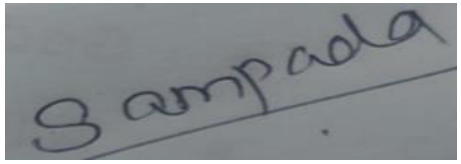
USIT302, Data Structures, Unit III	**Stack**: Introduction, Operations on the Stack Memory Representation of Stack, Array Representation of Stack, Applications of Stack, Evaluation of Arithmetic Expression, Matching Parenthesis, infix and postfix operations, Recursion**.**	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Black Board and chalk
	Queue: Introduction, Queue, Operations on the Queue, Memory Representation of Queue, Array representation of queue, Linked List Representation of Queue, Circular Queue, Some special kinds of queues, Deque, Priority Queue, Application of Priority Queue, Applications of Queues.	06	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Black Board and chalk
USIT302, Data Structures, Unit IV	**Sorting and Searching Techniques** Bubble, Selection, Insertion, Merge Sort. Searching: Sequential, Binary, Indexed Sequential Searches, Binary Search.	04	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Black Board and chalk
	Tree: Tree, Binary Tree, Properties of Binary Tree, Memory Representation of Binary Tree, Operations Performed on Binary Tree, Reconstruction of Binary Tree from its Traversals, Huffman Algorithm, Binary Search Tree, Operations on Binary Search Tree, Heap, Memory Representation of Heap, Operation on Heap, Heap Sort.	05	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Black Board and chalk
	Advanced Tree Structures: Red Black Tree, Operations Performed on Red Black Tree, AVL Tree, Operations performed on AVL Tree, 23 Tree, B-Tree.	03	Data Structure by Lalit Goyal,Vishal Goyal and Pawan kumar, SPD, 1st , 2014	Black Board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MONIKA MADHUKAR RAUT DEPARTMENT: IT/CS

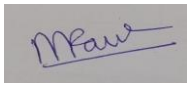
CLASS: SYIT-A, C SEMESTER: III MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to learn different structures of data, their operations and algorithms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DATA STRUCTURES (USIT302) Unit II	**Linked List:** Introduction to Subject, Syllabus, Linked List, One-way Linked List, Traversal of Linked List, Searching, Memory Allocation and De-allocation, Insertion in Linked List, Deletion from Linked List, Copying a List into Other List, Merging Two Linked Lists, Splitting a List into Two Lists, Reversing One way linked List, Circular Linked List, Applications of Circular Linked List	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	Black Board and Chalk
	Two way Linked List, Traversing a Two way Linked List, Searching in a Two way linked List, Insertion of an element in Two way Linked List, Deleting a node from Two way Linked List, Header Linked List, Applications of the Linked list, Representation of Polynomials, Storage of Sparse Arrays, Implementing other Data Structures	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	Black Board and Chalk
DATA STRUCTURES (USIT302) Unit IV	**Sorting and Searching Techniques:** Bubble, Selection, Insertion, Merge Sort. Searching: Sequential, Binary, Indexed Sequential Searches, Binary Search.	3	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	Black Board and Chalk
	Tree: Tree, Binary Tree, Properties of Binary Tree, Memory Representation of Binary Tree, Operations Performed on Binary	6		Black Board and Chalk

	Tree, Reconstruction of Binary Tree from its Traversals, Huffman Algorithm, Binary Search Tree, Operations on Binary Search Tree, Heap, Memory Representation of Heap, Operation on Heap, Heap Sort			
	Advanced Tree Structures: Red Black Tree, Operations Performed on Red Black Tree, AVL Tree, and Operations performed on AVL Tree, 23 Tree, B-Tree.	3		Black Board and Chalk
DATA STRUCTURES (USIT302) Unit V	**Hashing Techniques** Hash function, Address calculation techniques, Common hashing functions Collision resolution, Linear probing, Quadratic, Double hashing, Bucket hashing, Deletion and rehashing	6	A Simplified Approach to Data Structures by Lalit Goyal, Vishal Goyal, Pawan Kumar	Black Board and Chalk
	Graph: Introduction, Graph, Graph Terminology, Memory Representation of Graph, Adjacency Matrix Representation of Graph, Adjacency List or Linked Representation of Graph, Operations Performed on Graph, Graph Traversal, Applications of the Graph, Reachability, Shortest Path Problems, Spanning Trees	6		Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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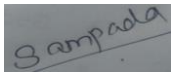

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TEACHING PLAN (UNIT PLAN)

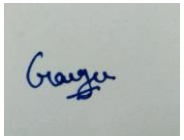
NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: S.Y.B.Sc.IT - C SEMESTER: III MONTH: JUNE-SEPTEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

- Students should be able to understand the concepts of programming before actually starting to write programs.
- Students should be able to develop logic for Problem Solving.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I	**Introduction:** The Python Programming Language, History, features, Installing Python, Running Python program,	3	Think Python Allen Downey	Blackboard, Chalk



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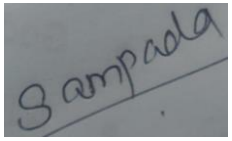

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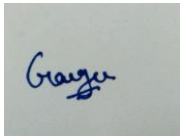
Unit I Python Programming	**Debugging :** Syntax Errors, Runtime Errors, Semantic Errors, Experimental Debugging, Formal and Natural Languages, The Difference Between Brackets, Braces, and Parentheses,	3	O'Reilly 1st2012	Blackboard, Chalk
	Variables and Expressions Values and Types, Variables, Variable Names and Keywords, Type conversion, Operators and Operands, Expressions, Interactive Mode and Script Mode, Order of Operations.	3		Blackboard, Chalk
	Conditional Statements: if, if-else, nested if –else	1		Blackboard, Chalk
	Looping: for, while, nested loops Control	1		Blackboard, Chalk
	statements: Terminating loops, skipping specific conditions	1		Blackboard, Chalk
Paper-I	**Functions:** Function Calls, Type Conversion Functions, Math Functions, Composition, Adding New Functions,	2	Think Python Allen Downey	Blackboard, Chalk



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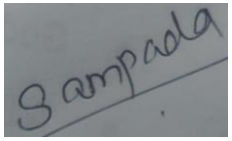

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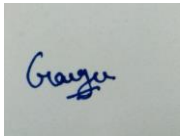
Unit II Python Programming	Definitions and Uses, Flow of Execution, Parameters and Arguments, Variables and Parameters Are Local, Stack Diagrams, Fruitful Functions and Void Functions, Why Functions?	3	O'Reilly 1st2012	Blackboard, Chalk
	Importing with from, Return Values, Incremental Development, Composition, Boolean Functions, More Recursion, Leap of Faith, Checking Types	3		Blackboard, Chalk
	Strings: A String Is a Sequence, Traversal with a for Loop, String Slices, Strings Are Immutable, Searching, Looping and Counting, String Methods, The in Operator, String Comparison, String Operations	4		Blackboard, Chalk
Paper-I Unit III Python Programming	**Lists:** Values and Accessing Elements, Lists are mutable, traversing a List, Deleting elements from List, Built-in List Operators, Concatenation, Repetition, In Operator, Built-in List functions and methods	4	Think Python Allen Downey O'Reilly 1st2012	Blackboard, Chalk
	Tuples and Dictionaries: Tuples, Accessing values in Tuples, Tuple Assignment, Tuples as return values, Variable-length argument tuples, Basic tuples operations, Concatenation, Repetition, in Operator, Iteration, Built-in Tuple Functions Creating a Dictionary, Accessing Values in a dictionary, Updating Dictionary, Deleting	4		Blackboard, Chalk



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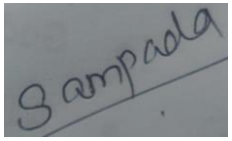

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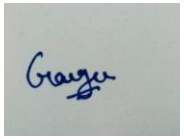
	Elements from Dictionary, Properties of Dictionary keys, Operations in Dictionary, Built-In Dictionary Functions, Built-in Dictionary Methods			
	Files: Text Files, The File Object Attributes, Directories	2		Blackboard, Chalk
	Exceptions: Built-in Exceptions, Handling Exceptions, Exception with Arguments, User-defined Exceptions	2		Blackboard, Chalk
Paper-I Unit IV Python Programming	**Regular Expressions –** Concept of regular expression, various types of regular expressions, using match function.	2	Think Python Allen Downey O'Reilly 1st2012	Blackboard, Chalk
	Classes and Objects: Overview of OOP (Object Oriented Programming), Class Definition, Creating Objects, Instances as Arguments, Instances as return values, Built-in Class Attributes, Inheritance, Method Overriding, Data Encapsulation, Data Hiding	4		Blackboard, Chalk
	Multithreaded Programming: Thread Module, creating a thread, synchronizing threads, multithreaded priority queue	3		Blackboard, Chalk
	Modules: Importing module, Creating and exploring modules, Math module, Random module, Time module	3		Blackboard, Chalk
Paper-I	**Creating the GUI Form and Adding Widgets:**	4	Think Python Allen Downey	Blackboard, Chalk



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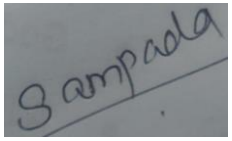

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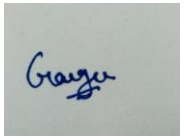
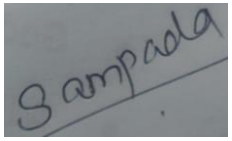
Unit V Python Programming	**Widgets:** Button, Canvas, Checkbutton, Entry, Frame, Label, Listbox, Menubutton, Menu, Message, Radiobutton, Scale, Scrollbar, text, Toplevel, Spinbox, PanedWindow, LabelFrame, tkMessagebox. Handling Standard attributes and Properties of Widgets.		O'Reilly 1st2012	
	Layout Management: Designing GUI applications with proper Layout Management features.	2		Blackboard, Chalk
	Look and Feel Customization: Enhancing Look and Feel of GUI using different appearances of widgets.	2		Blackboard, Chalk
	Storing Data in Our MySQL Database via Our GUI : Connecting to a MySQL database from Python, Configuring the MySQL connection, Designing the Python GUI database, Using the INSERT command, Using the UPDATE command, Using the DELETE command, Storing and retrieving data from MySQL database.	4		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS:MScIT

SEMESTER: I MONTH:AUG to DEC ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

To determine the market perspective of Embedded System

To compare and contrast the use of devices, hardware and software.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Distributed System, Unit-1	**Characterization Of Distributed Systems**: Introduction, Examples of Distributed Systems, Trends In Distributed Systems, Focus On Resource Sharing,Challenges, Case Study: The World Wide Web.	3	George Coulouris, Jean Dollimore, Tim Kindberg, Gordon Blair , Distributed Systems - Concepts and Design	Laptop, PPT, Chalk &Black Board
	System Models: Physical Models, Architectural Models, Fundamental Models	3	George Coulouris, Jean Dollimore, Tim Kindberg, Gordon Blair , Distributed Systems - Concepts and Design	Laptop, PPT, Chalk &Black Board
	Networking And Internetworking: Types Of Network, Network Principles, Internet Protocols, Case Studies: Ethernet, Wifi And Bluetooth.	3	George Coulouris, Jean Dollimore, Tim Kindberg, Gordon Blair , Distributed Systems - Concepts and	Laptop, PPT, Chalk &Black Board

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			Design	
Distributed System, Unit-2	**Interprocess Communication:** The Api For The Internet Protocols, External Data Representation And Marshalling,Multicast Communication, Network Virtualization: Overlay Networks, Case Study: MPI	3	George Coulouris, Jean Dollimore, Tim Kindberg, Gordon Blair , Distributed Systems - Concepts and Design	Laptop, PPT, Chalk &Black Board
Distributed System, Unit-3	**Remote Invocation:** Request-Reply Protocols, Remote Procedure Call, Remote Method Invocation,Case Study: Java RMI	3	George Coulouris, Jean Dollimore, Tim Kindberg, Gordon Blair , Distributed Systems - Concepts and Design	Laptop, PPT, Chalk &Black Board
	Indirect Communication: Group communication, Publish-subscribe systems, Message queues, Shared memory approaches	3	George Coulouris, Jean Dollimore, Tim Kindberg, Gordon Blair , Distributed Systems - Concepts and Design	Laptop, PPT, Chalk &Black Board
	Web Services: Web services,Service descriptions and IDL for web services, A directory service for use with web services, XML security, Coordination of web services, applications of web services.	3	George Coulouris, Jean Dollimore, Tim Kindberg, Gordon Blair , Distributed Systems - Concepts and Design	Laptop, PPT, Chalk &Black Board
Distributed System, Unit-4	**Programming Concept and Embedded Programming in C/C++ and Java** Software programming in Assembly Language (ALP) and in High-level Language 'C'., C program Elements: Header and Source Files and Pre-processor Directives, Program Elements: Macros and Functions, Program Elements: Types, Data Structures, Modifiers, Statements, Loops and Pointers, Object-Oriented Programming, Embedded Programming in C++, Embedded Programming in Java.	12	George Coulouris, Jean Dollimore, Tim Kindberg, Gordon Blair , Distributed Systems - Concepts and Design	Laptop, PPT, Chalk &Black Board

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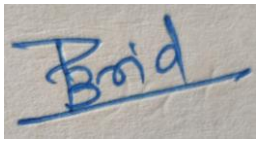
Distributed System, Unit-5	**Trends in the Embedded Industry** Processor trends in Embedded System, Embedded OS Trends, Development Language Trends, Introduction of PIC Family of Microcontrollers, Introduction of ARM Family of Microcontrollers, Introduction of AVR Family of Microcontrollers.	12	George Coulouris, Jean Dollimore, Tim Kindberg, Gordon Blair , Distributed Systems - Concepts and Design	Laptop, PPT, Chalk &Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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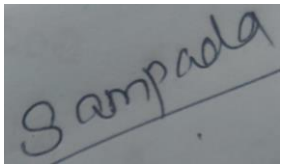

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. I. T – SEMESTER: I MONTH: August-December ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Understand the concept of data mining and its various algorithms.

b.Understand the concept of text mining , graph mining ,Social network analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Data Mining Unit -I	**Introduction:** Basics of data mining, related concepts, Data mining techniques. **Data:** Introduction, Attributes, Data Sets, and Data Storage, IssuesConcerning the Amount and Quality of Data	4	M. H. Dunham. Data Mining: Introductory and Advanced Topics. Pearson Education. 2010.	Powerpoint presentation through projector
	Knowledge Representation: Data Representation and their Categories: General Insights, Categories ofKnowledge Representation, Granularity of Data and KnowledgeRepresentation Schemes, Sets and Interval Analysis	4		Powerpoint presentation through projector
	Fuzzy Sets as Human- Centric Information Granules, Shadowed Sets, Rough Sets, Characterization ofKnowledge Representation Schemes, Levels of Granularity and PerceptionPerspectives, The Concept of Granularity in Rules.	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Sampada Deshmukh DEPARTMENT: IT

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Paper-I Data Mining Unit -II	**Data Preprocessing:** Descriptive Data Summarization, Data Cleaning, Data Integration and Transformation, Data Reduction, Data Discretization andConcept Hierarchy Generation.	6	J. Han and M. Kamber, " Data Mining: Concepts and Techniques", Second Edition, Elsevier, Reprinted 2008	Powerpoint presentation through projector
	Mining Frequent Patterns, Associations, and Correlations: Basic Concepts, Efficient and Scalable Frequent Itemset Mining Methods, Mining VariousKinds of Association Rules, From Association Mining to Correlation Analysis,Constraint-Based Association Mining	6		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs.Sampada Deshmukh DEPARTMENT: IT

CLASS:M. Sc. I. T SEMESTER: I MONTH: August-December ACADEMIC YEAR: 2018-2019

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Data Mining Unit -III	**Classification and Prediction:** What Is Classification?, What Is Prediction?,Issues Regarding Classification and Prediction, Classification by Decision Tree Induction, Bayesian Classification, Rule-Based Classification,	4	J. Han and M. Kamber, " Data Mining: Concepts and Techniques", Second Edition, Elsevier, Reprinted 2008	Powerpoint presentation through projector
	Classification by Back-propagation, Support Vector Machines, AssociativeClassification: Classification by Association Rule Analysis, Lazy Learners,Other Classification Methods	4		Powerpoint presentation through projector
	Prediction, Accuracy and Error Measures, Evaluating the Accuracy of a Classifier or Predictor, Ensemble MethodsIncreasing the Accuracy, Model Selection.	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: I MONTH: August-December ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

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b.Understand the concept of text mining , graph mining ,Social network analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Data Mining Unit -IV	**Cluster Analysis:** What Is Cluster Analysis?, Types of Data in ClusterAnalysis, A Categorization of Major Clustering Methods, Partitioning	6	J. Han and M. Kamber, " Data Mining: Concepts and Techniques", Second Edition, Elsevier, Reprinted 2008	Powerpoint presentation through projector
	Methods, Hierarchical Methods, Density-Based Methods, Grid-Based Methods, Model-Based Clustering Methods, Clustering High-Dimensional Data, Constraint-Based Cluster Analysis, Outlier Analysis	6		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs.Sampada Deshmukh DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: I MONTH: August-December ACADEMIC YEAR: 2018-2019

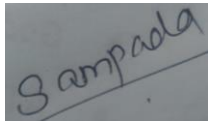
LEARNING OBJECTIVE/S:
The learners will be able to :

a. Understand the concept of data mining and its various algorithms.

b.Understand the concept of text mining , graph mining ,Social network analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Data Mining Unit -V	**Graph Mining, Social Network Analysis, and Multirelational DataMining:** Graph Mining, Social Network Analysis, Multirelational Data	6	J. Han and M. Kamber, " Data Mining: Concepts and Techniques", Second Edition, Elsevier, Reprinted 2008	Powerpoint presentation through projector
	.**Mining Object, Spatial, Multimedia, Text, and Web Data:** Multidimensional Analysis and Descriptive Mining of Complex Data Objects,Spatial Data Mining, Multimedia Data Mining, Text Mining, Mining theWorld Wide Web.	6		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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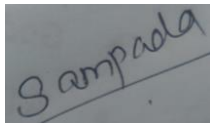

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. BRIJESH Y JOSHI DEPARTMENT: Information Technology

CLASS: M.Sc.IT SEMESTER: IV MONTH: AUG TO OCT ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

- To be able to Understand the basics of software testing and testing process
- To be able to understand test closure activities , various testing techniques
- To be able to understand software characteristics
- To be able to understand test standards

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
SOFTWARE TESTING UNIT I	**Test Basics:** Introduction, Testing in the Software Lifecycle, Specific Systems, Metrics and Measurement, Ethics **Testing Processes:** Introduction, Test Process Models, Test Planning and Control, Test Analysis and Design, Non-functional Test Objectives, Identifying and Documenting Test Conditions, Test Oracles, Standards, Static Tests, Metrics, Test Implementation and Execution, Test Procedure Readiness, Test Environment Readiness, Blended Test Strategies, Starting Test Execution, Running a Single Test Procedure, Logging Test Results, Use of Amateur Testers, Standards, Metrics, Evaluating Exit Criteria and Reporting, Test Suite, Defect Breakdown, Confirmation Test Failure Rate, System Test Exit Review, Standards, Evaluating Exit Criteria and Report	12	**Advanced SoftwareTesting—Vol. 3 by Rex Black and· Jamie L. Mitchell, Rocky Nook Publication,**	Laptop, PPT
SOFTWARE TESTING UNIT II	Closure Activities 4 II Test Management: Introduction, Test Management Documentation, Test Plan Documentation Templates, Test Estimation, Scheduling and Test Planning, Test Progress Monitoring and Control, Business Value of Testing, Distributed, Outsourced, and Insourced Testing, RiskBased Testing, Risk	12	**Advanced SoftwareTesting—Vol. 3 by Rex Black and· Jamie**	Laptop, PPT

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	Management, Risk Identification, Risk Analysis or Risk Assessment, Risk Mitigation or Risk Control, Risk Identification and Assessment Results, Risk-Based Testing throughout the Lifecycle, Risk-Aware Testing Standards, Risk- 7 Based Testing Exercise, Project Risk By-Products, Requirements Defect By-Products, Test Case Sequencing Guidelines, Failure Mode and Effects Analysis, Test Management Issues		**L. Mitchell, Rocky Nook Publication,**	
SOFTWARE TESTING **UNIT III**	Test Techniques Introduction, Specification-Based, Equivalence Partitioning, Avoiding Equivalence Partitioning Errors, Composing Test Cases with Equivalence Partitioning, Equivalence Partitioning Exercise, Boundary Value Analysis, Examples of Equivalence Partitioning and Boundary Values, Non-functional Boundaries, Functional Boundaries, Integers, Floating Point Numbers, Testing Floating Point Numbers, Number of Boundaries, Boundary Value Exercise, Decision Tables, Collapsing Columns in the, Combining Decision Table Testing with Other Techniques, Nonexclusive Rules in Decision Tables, 4 Decision Table Exercise, Decision Table Exercise Debrief, State-Based Testing and State Transition Diagrams, Superstates and Substates, State Transition Tables, Switch Coverage, State Testing with Other Techniques, State Testing Exercise, State Testing Exercise Debrief, RequirementsBased Testing Exercise, Requirements-Based Testing Exercise Debrief, Structure-Based, Control-Flow Testing, Building Control-Flow Graphs, Statement Coverage, Decision Coverage, Loop Coverage, Hexadecimal Converter Exercise, Hexadecimal Converter Exercise Debrief, Condition Coverage, Decision/Condition Coverage, Modified Condition/Decision Coverage(MC/DC), Multiple Condition Coverage, Control-Flow Exercise, Control-Flow Exercise Debrief, Path Testing, LCSAJ, Basis Path/Cyclomatic Complexity Testing, Cyclomatic Complexity Exercise, Cyclomatic Complexity Exercise Debrief, Final Word on Structural Testing, Structure-Based Testing Exercise, Structure-Based Testing Exercise Debrief, Defect- and Experience-Based, Defect Taxonomies, Error Guessing, Checklist Testing, Exploratory	12	**Advanced SoftwareTesting—Vol. 3 by Rex Black and· Jamie L. Mitchell, Rocky Nook Publication,**	Laptop ,PPT

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	Testing, Test Charters, Exploratory Testing Exercise, Software Attacks, An Example of Effective Attacks, Other Attacks, Software Attack Exercise, Software Attack Exercise Debrief, Specification-, Defect-, and Experience-Based Exercise, Specification-, Defect-,and Experience-Based Exercise Debrief, Common Themes, Static Analysis, Complexity Analysis, Code Parsing Tools, Standards and Guidelines, Data-Flow Analysis, Set-Use Pairs, Set-Use Pair Example, Data-Flow Exercise, Data-Flow Exercise Debrief, Data-Flow Strategies, Static Analysis for Integration Testing, Call-Graph Based Integration Testing, McCabe Design Predicate Approach to Integration Testing, Hex Converter Example, McCabe Design Predicate Exercise, McCabe Design Predicate Exercise Debrief, Dynamic Analysis, Memory Leak Detection, Wild Pointer Detection, API Misuse Detection.			
SOFTWARE TESTING **UNIT IV**	Tests of Software Characteristics Introduction, Quality Attributes for Domain Testing, Accuracy, Suitability, Interoperability, Usability, Usability Test Exercise, Usability Test Exercise Debrief, Quality Attributes for Technical Testing, Technical Security, Security Issues, Timely Information, Reliability, Efficiency, Multiple Flavours of Efficiency Testing, Modelling the System, Efficiency Measurements, Examples of 8 Efficiency Bugs, Exercise: Security, Reliability and Efficiency, Exercise: Security, Reliability, and Efficiency Debrief, Maintainability, Subcharacteristics of Maintainability, Portability, Maintainability and Portability Exercise. Reviews Introduction, The Principles of Reviews, Types of Reviews, Introducing Reviews, Success Factors for Reviews, Deutsch's Design Review Checklist, Marick's Code Review Checklist, The Open Laszlo Code Review Checklist, Code Review Exercise, Deutsch Checklist Review Exercise. Incident Management Introduction, When Can a Defect Be Detected? Defect Lifecycle, Defect Fields, Metrics and Incident Management, Communicating Incidents, Incident Management Exercise.	12	**Advanced SoftwareTesting—Vol. 3 by Rex Black and· Jamie L. Mitchell, Rocky Nook Publication,**	Laptop, PPT

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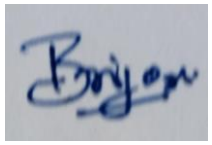
SOFTWARE TESTING **UNIT V**	Standards and Test Process Improvement Introduction, Standards Considerations, Test Improvement Process, Improving the Test Process,Improving the Test Process with TMM, Improving the Test Process with TPI, Improving the Test Process with CTP, Improving the Test Process with STEP, Capability Maturity Model Integration, CMMI, Test Improvement Process Exercise. Test Techniques Introduction, Test Tool Concepts, The Business Case for Automation, General Test Automation Strategies, An Integrated Test System Example, Test Tool Categories, Test Management Tools, Test Execution Tools, Debugging, Troubleshooting, Fault Seeding,and Injection Tools, Static and Dynamic Analysis Tools, Performance Testing Tools, Monitoring Tools, Web Testing Tools, Simulators and Emulators, Keyword-Driven Test Automation, Capture/Replay Exercise, Capture/Replay Exercise Debrief, Evolving from Capture/Replay, The Simple Framework Architecture, Data-Driven Architecture, Keyword-Driven Architecture, Keyword Exercise, Performance Testing, Performance Testing Exercise. People Skills and Team Composition Introduction, Individual Skills, Test Team Dynamics, Fitting Testing within an Organization, Motivation, Communication.	12	Advanced SoftwareTesting—Vol. 3 by Rex Black and· Jamie L. Mitchell, Rocky Nook Publication,	Laptop ,PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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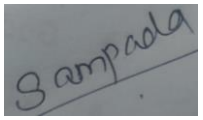

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hegde DEPARTMENT: IT

CLASS: M. Sc. I. T – SEMESTER: I MONTH: August-December ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Understand the concepts of C programming with for its use in computational statistics.

b. Understand the concept of statistics and its various distributions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Data Analysis Tools Unit -I	PART I : COMPUTING Statistics in Modern day, C : Lines, Variables and their declarations, Functions, The debugger	4	Modeling with Data: Tools and Techniques for Scientific Computing Ben Klemens, Princeton University Press	Powerpoint presentation through projector
	Compiling and running, Pointers , Arrays and other pointer tricks, Strings	4		Powerpoint presentation through projector
	Databases :Basic queries , Doing more with queries, Joins and subqueries, On database design , Folding queries into C code	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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Paper-I	Matrices and models :The GSL's matrices and vectors apo_da t, Shunting data, Linear algebra, Numbers, gsl_matrix and gsl_vector internals, Models	6	Modeling with Data: Tools and Techniques for Scientific Computing Ben Klemens, Princeton University Press	Powerpoint presentation through projector
Data Analysis Tools	Graphics: plot , Some common settings, From arrays to plots, A sampling of special plots, Animation, On producing good plots, Graphs--nodes and flowcharts, Printing and LATEX	6		Powerpoint presentation through projector
Unit -II				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hegde DEPARTMENT: IT

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Paper-I Data Analysis Toolsg Unit -III	More coding tools : Function pointers , Data structures, Parameters, Syntactic sugar, More tools	6	Modeling with Data: Tools and Techniques for Scientific Computing Ben Klemens, Princeton University Press	Powerpoint presentation through projector
	PART II : STATISTICS Distributions for description : Moments ,Sample distributions, Using the sample distributions , Non-parametric description	6		Powerpoint presentation through projector
				Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hegde DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: I MONTH: August-December ACADEMIC YEAR: 2018-2019

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Data Analysis Tools Unit -IV	Linear projections: Principal component analysis, OLS and friends, Discrete variables, Multilevel modelling	6	Computational Statistics, James E. Gentle, Springer	Powerpoint presentation through projector
	Hypothesis testing with the CLT: The Central Limit Theorem, Meet the Gaussian family, Testing a hypothesis, ANOVA, Regression , Goodness of fit.	6		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Hegde DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: I MONTH: August-December ACADEMIC YEAR: 2018-2019

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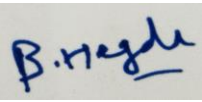
Paper-I	Maximum likelihood estimation: Log likelihood and friends, Description: Maximum likelihood estimators, Missing data, Testing with likelihoods	6	Computational Statistics, James E. Gentle, Springer	Powerpoint presentation through projector
Data Analysis Tools	Monte Carlo : Random number generation, Description: Finding 6 statistics for a distribution, Inference: Finding statistics for a parameter, Drawing a distribution, Non-parametric testing	6		Powerpoint presentation through projector
Unit -V				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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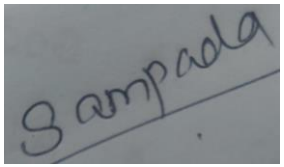

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: IT

CLASS: M.Sc.(IT) Part -2 SEMESTER:SEM -4 MONTH: JAN-APR ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To learn how to use Cloud Services.
- To implement Virtualization.
- To implement Task Scheduling algorithms.
- Apply Map-Reduce concept to applications.
- To build Private Cloud.

PSIT203 Cloud Computing and Ubiquitous System UNIT 1	**Distributed System Models and Enabling Technologies**: Scalable Computing Service over the Internet: The Age of Internet Computing, scalable computing Trends and New Paradigms, Internet of Things and Cyber-Physical Systems. System Models for Distributed and Cloud Computing: Clusters of Cooperative Computers, Grid Computing Infrastructures, Peer-to-Peer Network Families, Cloud Computing over the Internet. Software Environments for Distributed Systems and Clouds: Service-Oriented Architecture (SOA), Trends towards Distributed Operating Systems, Parallel and Distributed Programming Models. Performance, Security, and Energy-Efficiency: Performance Metrics and	12	Kai Hwang, Jack Dongarra, Geoffrey Fox: Distributed and Cloud Computing, From Parallel Processing to the Internet of Things, MK Publishers, 2012.	Laptop, power point, jamboard

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	Scalability Analysis, Fault-Tolerance and System Availability, Network Threats and Data Integrity, Energy-Efficiency in Distributed Computing.,			
PSIT203 Cloud Computing and Ubiquitous System UNIT 2	Computer Clusters for scalable parallel computing: Clustering for massive parallelism: Cluster Development Trends, Design Objective of Computer Clusters, Fundamental Cluster Design issues. Virtual machines and Virtualization of clusters and Data centers: Implementation levels of virtualization: levels of virtualization Implementation, VMM Design 12 requirements and providers, Virtualization support at the OS level, Middleware Support for Virtualization. Cloud Platform Architecture over Virtualized Data Centers: Cloud computing and Service Models: Public, Private, and Hybrid Clouds, Cloud Ecosystem and Enabling Technologies, Infrastructure-as- a-Service (IaaS), Platform- and Software-as-a-Service (Paas, SaaS). Architectural Design of Compute and Storage Clouds: A Generic Cloud Architecture Design, Layered Cloud Architectural development, Virtualization Support and Disaster Recovery, Architectural Design Challenges	12	Kai Hwang, Jack Dongarra, Geoffrey Fox: Distributed and Cloud Computing, From Parallel Processing to the Internet of Things, MK Publishers, 2012.	Laptop, power point
PSIT203	**Specialized Cloud Mechanisms:** Automated Scaling listener, Load Balancer, SLA monitor, Pay-per-use monitor, Audit monitor, fail over system, Hypervisor, Resource Centre, Multidevice broker, State Management Database.	12	Kai Hwang, Jack Dongarra, Geoffrey Distributed and Cloud Computing, Fr	

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Cloud Computing and Ubiquitous System UNIT 3	Public Cloud Platforms: GAE, AWS, and Azure: Public Clouds and Service Offerings, Google App Engine (GAE), Amazon Web Service (AWS), Microsoft Windows Azure. Inter-cloud Resource Management: Extended Cloud Computing Services, Resource Provisioning and Platform Deployment, Virtual Machine Creation and Management. Cloud Security and Trust management: Cloud Security Defense Strategies, Distributed Intrusion/Anomaly Detection, Data and Software Protection Techniques. Cloud Programming and Software Environments: Features of Cloud and Grid Platforms: Cloud Capabilities and Platform Features, Traditional Features Common To Grids and Clouds, Data Features and Databases, Programming and Runtime Support. Parallel and Distributed Programming Paradigms: Parallel Computing and Programming Paradigms, MapReduce, Twister and Iterative MapReduce, Hadoop Library from Apache		Parallel Processing to the Internet of Things, MK Publishers, 2012.	Laptop, power point
PSIT203 Cloud Computing	Programming Support of Google App Engine: Programming the Google App Engine, Google File System (GFS), Bigtable, Google's NOSQL system, Chubby, Google's Distributed Lock service. Programming on Amazon AWS and Microsoft Azure: Programming on Amazon EC2, Amazon Simple Storage Service S3, Amazon Elastic Block Store EBS and SimpleDB, Microsoft Azure programming support. Emerging Cloud Software Environments: Open Source Eucalyptus and Nimbus, OpenNebula,	12	Kai Hwang, Jack Dongarra, Geoffrey Fox: Distributed and Cloud Computing, From Parallel Processing to the Internet of Things, MK Publishers, 2012.	Laptop, power point

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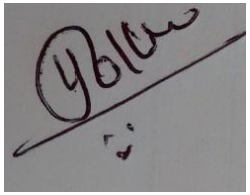
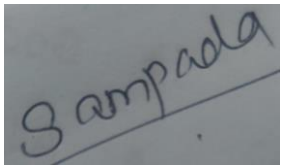
UNIT 4	Sector/Sphere, and OpenStack, Manjrasoft Aneka Cloud and Appliances.			
PSIT203 Cloud Computing and Ubiquitous System UNIT 5	Ubiquitous Clouds and the Internet of Things: Performance of Distributed Systems and the Cloud: Data-intensive Scalable Computing (DISC), Quality of Service in Cloud computing, Benchmarking MPI, Azure, EC2, MapReduce, and Hadoop. Online social and Professional Networking: Online Social Network Characteristics, Graph-Theoretic Analysis of Social networks, Communities and Applications of Social Networks, Facebook: The World's Largest Content-Sharing Network, Twitter for Microblogging, News and Alert Services.	12	Kai Hwang, Jack Dongarra, Geoffrey Distributed and Cloud Computing, Fr Parallel Processing to the Internet of T MK Publishers, 2012.	Laptop, power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. I.T SEMESTER: II MONTH: Jan - April ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:
a. learn different mobile networking concepts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I PSIT201 Mobile Computing Unit 1	Introduction: Applications, A short history of wireless communication Wireless Transmission: Frequency for radio transmission, Signals, Antennas, Signal propagation, Multiplexing, Modulation, Spread spectrum, Cellular systems.Medium Access Control: Motivation for a specialized MAC: Hidden and Exposed terminals. Near and Far terminals; SDMA, FDMA, TDMA: Fixed TDM, Classical Aloha, Slotted Aloha, Carrier sense multiple access, Demand assigned multiple access, PRMA packet reservation multiple access, Reservation TDMA, Multiple access with collision avoidance, Polling, Inhibit sense multiple access; CDMA: Spread Aloha	15	Jochen Schiller, "Mobile communications", Addison wisely , Pearson Education Wiiliam Stallings, "Wireless Communications and Networks"	PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. I.T SEMESTER: II MONTH: Jan - April ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:
a. learn different mobile networking concepts.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I PSIT201 Mobile Computing Unit 2	Telecommunication Systems: GSM: Mobile services, System architecture, Radio interface, Protocols, Localization And Calling, Handover, Security, New data services; DECT: System architecture, Protocol architecture; TETRA, UMTS and IMT-2000: UMTS Basic architecture, UTRA FDD mode, UTRA TDD mode Satellite Systems: History, Applications, Basics: GEO, LEO, MEO; Routing, Localization, Handover, Examples	15	Jochen Schiller, "Mobile communications", Addison wisely , Pearson Education Wiiliam Stallings, "Wireless Communications and Networks"	PowerPoint presentation
Paper I PSIT201 Mobile Computing Unit 3	Broadcast Systems: Overview, Cyclic repetition of data, Digital audio broadcasting: Multimedia object transfer protocol; Digital video broadcasting Wireless LAN: Infrared vs. Radio transmission, Infrastructure and Ad hoc Networks, IEEE 802.11: System architecture, Protocol architecture, Physical layer, Medium access control layer, MAC management, Future development; HIPERLAN: Protocol architecture, Physical layer, Channel access control. Sublayer, Medium access control Sublayer, Information bases And Networking;	15	Jochen Schiller, "Mobile communications", Addison wisely , Pearson Education Wiiliam Stallings, "Wireless	PowerPoint presentation

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	Bluetooth: User scenarios, Physical layer, MAC layer, Networking. Security, Link management.		Communications and Networks"	
Paper I PSIT201 Mobile Computing Unit 4	Wireless ATM: Motivation for WATM, Wireless ATM working group, WATM services, Reference model: Example configurations, Generic reference model; Functions: Wireless mobile terminal side, Mobility supporting network side; Radio access layer: Requirements, BRAN; Handover: Handover reference model, Handover requirements, Types of handover, Handover scenarios, Backward handover, Forward handover; Location management: Requirements for location management, Procedures and Entities; Addressing, Mobile quality of service, Access point control protocol. Mobile Network Layer: Mobile IP: Goals, assumptions and requirements, Entities and Terminology, IP packet delivery, Agent advertisement and discovery, Registration, Tunneling and Encapsulation , Optimizations, Reverse tunneling, Ipv6; Dynamic host configuration protocol, 10 Ad hoc networks: Routing, Destination sequence distance vector, Dynamic source routing, Hierarchical algorithms, Alternative metrics	15	Jochen Schiller, "Mobile communications", Addison wisely , Pearson Education Wiiliam Stallings, "Wireless Communications and Networks"	PowerPoint presentation
Paper I PSIT201 Mobile Computing Unit 1	Mobile Transport Layer: Traditional TCP: Congestion control, Slow start, Fast retransmit/fast recovery, Implications on mobility; Indirect TCP, Snooping TCP, Mobile TCP, Fast retransmit/fast recovery, Transmission/time-out freezing, Selective retransmission, Transaction oriented TCP. Support for Mobility: File systems: Consistency, Examples; World Wide Web: Hypertext transfer protocol, Hypertext markup language, Some approaches that might help wireless access, System architectures; Wireless application protocol: Architecture, Wireless datagram protocol, Wireless transport layer security, Wireless transaction protocol, Wireless session protocol, Wireless application environment, Wireless markup language, WML script, Wireless telephony application, Examples Stacks with Wap, Mobile databases, Mobile agents	15	Jochen Schiller, "Mobile communications", Addison wisely , Pearson Education Wiiliam Stallings, "Wireless Communications and Networks"	PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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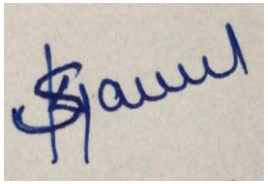

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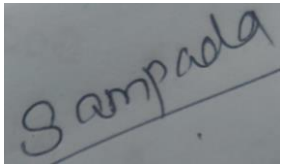

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TEACHING PLAN (UNIT PLAN)

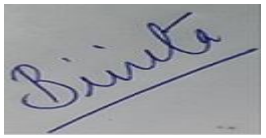
NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: II MONTH: February-May ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with various networking concepts.
b. Work with protocol design on GNS3.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Advanced Computer Networks Unit -I	TCP/IP Review- The TCP/IP Protocol Layers, The IP Packet Header, IP Addresses, ARP, ICMP, The Host-to-Host Layer	3	CCIE Professional Development Routing TCP/IP: Volume I by Jeff Doyle, Jennifer DeHaven Carroll, Cisco Press	PowerPoint presentation through projector
	Static Routing- The Route Table, Configuring Static Routes, Case Study: Simple Static Route, Summary Routes, Alternative Routes, Simple Floating Routes, Load Sharing, Recursive Table Lookups, Troubleshooting Static Routes, Case Study: Tracing a Failed Route, A Protocol Conflict	3		PowerPoint presentation through projector
	Dynamic Routing Protocols- Routing Protocol Basics Distance Vector Routing Protocols Link State Routing Protocols	3		PowerPoint presentation through projector
	Interior Gateway Protocol & Exterior Gateway Protocol- Operation of EGP, EGP Function, EGP Message Format, Shortcomings of EGP	3		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: II MONTH: February-May ACADEMIC YEAR: 2018-2019

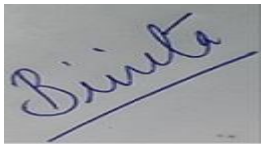
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with various networking concepts.

b. Work with protocol design on GNS3.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Advanced Computer Networks Unit -II	OSPF Overview and Neighbour Relationships, OSPF Topology	4	CCIE Professional Development Routing TCP/IP: Volume I by Jeff Doyle, Jennifer DeHaven Carroll, Cisco Press	PowerPoint presentation through projector
	Routes and Convergence, OSPF Route Summarization	4		PowerPoint presentation through projector
	Filtering and Default Routing OSPF Virtual Links and Frame Relay Operations	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: II MONTH: February-May ACADEMIC YEAR: 2018-2019

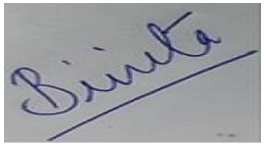
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with various networking concepts.

b. Work with protocol design on GNS3.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Advanced Computer Networks Unit -III	Policy-Based Routing and IP Service Level Agreement Internet Connectivity and BGP, External BGP, BGP Path Control	4	CCIE Professional Development Routing TCP/IP: Volume II by Jeff Doyle, Jennifer DeHaven Carroll, Cisco Press	PowerPoint presentation through projector
	Network Address Translation, IP Multicast Routing	4		PowerPoint presentation through projector
	IP Version 6 IPv6 overview, IPv4 and IPv6 Coexistence, Static Point-to-Point IPv6 Tunnels, Dynamic Multipoint IPv6 Tunnels	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: II MONTH: February-May ACADEMIC YEAR: 2018-2019

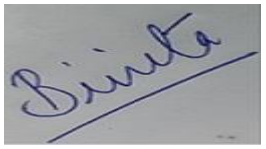
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with various networking concepts.

b. Work with protocol design on GNS3.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Advanced Computer Networks Unit -IV	Enterprise Campus Network Design-Designing High Availability in the Enterprise Campus, Designing an Optimum Design for Layer 2, Supporting Virtual Switching Systems Designs, Supporting a Layer 2 to Layer 3 Boundary Design, Supporting Infrastructure Services	4	Designing Cisco Network Service Architectures ARCH Foundation Learning Guide, 3rd Edition by John Tiso, Cisco Press	PowerPoint presentation through projector
	Developing an Optimum Design for Layer 3- Design Considerations for IPv6 in Campus Networks, Designing Advanced Routing, Migrating Between Routing Protocols, Designing Scalable OSPF Design, Designing Scalable BGP Designs	4		PowerPoint presentation through projector
	Advanced WAN Services Design Considerations- Advanced WAN Service Layers, Implementing Advanced WAN Services	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: II MONTH: February-May ACADEMIC YEAR: 2018-2019

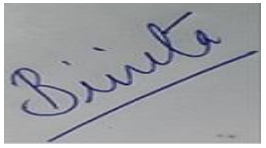
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with various networking concepts.

b. Work with protocol design on GNS3.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Advanced Computer Networks Unit -V	IPsec and SSL VPN Design-Designing Remote-Access VPNs, Designing Site-to-Site VPNs, Using IPsec VPN Technologies	4	Designing Cisco Network Service Architectures ARCH Foundation Learning Guide, 3rd Edition by John Tiso, Cisco Press	PowerPoint presentation through projector
	Enterprise Data Center Design- Integrated Fabric Designs Using Cisco Nexus Technology Overview, Challenges When Building a Unified Fabric Based on 10 Gigabit Ethernet	4		PowerPoint presentation through projector
	SAN Design Considerations- Identifying SAN Components and Technologies, Storage Topologies, SAN Technologies, Designing SAN and SAN Extension, SAN Extension Protocols	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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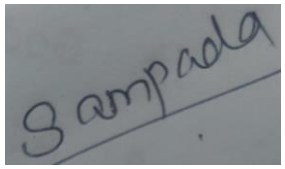

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **M.Sc. (CS)**

SEMESTER: **II** MONTH: **January - May** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able:

- To acquire knowledge about how to execute queries on these fragments that will demonstrate distributed databases environment.
- To learn how to create temporal database
- To learn how to create XML database
- To understand multimedia database systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT204 **Paper IV** **Advanced Database Systems** **UNIT I**	**The Extended Entity Relationship Model and Object Model:** The ER model revisited, Motivation for complex data types, User defined abstract data types and structured types, Subclasses, Super classes, Inheritance, Specialization and Generalization, Constraints and characteristics of specialization and Generalization, Relationship types of degree higher than two.	12	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT204 **Paper IV** **Advanced Database Systems** **UNIT II**	**Object-Oriented Databases:** Overview of Object-Oriented concepts, Object identity, Object structure, and type constructors, Encapsulation of operations, Methods, and Persistence, Type hierarchies and Inheritance, Type extents and queries, Complex objects; Database schema design for OODBMS; OQL, Persistent programming languages; OODBMS architecture and storage issues; Transactions and Concurrency control, Example of ODBMS	12	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT204 **Paper IV** **Advanced Database Systems** **UNIT III**	**Object Relational and Extended Relational Databases:** Database design for an ORDBMS - Nested relations and collections; Storage and access methods, Query processing and Optimization; An overview of SQL3, Implementation issues for extended type; Systems comparison of RDBMS, OODBMS, ORDBMS	12	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT204 **Paper IV** **Advanced Database Systems** **UNIT IV**	**Parallel and Distributed Databases and Client-Server Architecture:** Architectures for parallel databases, Parallel query evaluation; Parallelizing individual operations, Sorting, Joins; Distributed database concepts, Data fragmentation, Replication, and allocation techniques for distributed database design; Query processing in distributed databases; Concurrency control and Recovery in distributed databases. An overview of Client-Server architecture	12	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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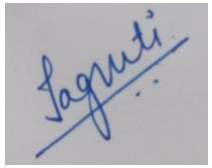
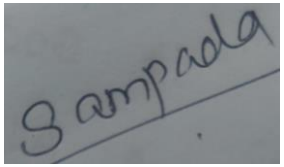
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT204 **Paper IV** **Advanced Database Systems** **UNIT V**	**Databases on the Web and Semi Structured Data:** Web interfaces to the Web, Overview of XML; Structure of XML data, DTD, XML Schema, XQuery, XSLT, Storage of XML data, XML applications, XML DOM, The semi structured data model, Implementation issues, Indexes for text data **Enhanced Data Models for Advanced Applications:** Active database concepts. Temporal database concepts.; Spatial databases, Concepts and architecture; Deductive databases and Query processing; Mobile databases, Geographic information systems.	12	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr.Sandesh Pandurang Akre DEPARTMENT: IT

CLASS: M. Sc. I. T – SEMESTER: III MONTH: August-December ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

knowledge of security management and incident response. knowledge of security in software and operating systems. knowledge of data security and secure system development. knowledge of privacy and data protection

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Information security management Unit -I	**Introduction:** Security Risk Assessment and Management: Introduction to Security Risk Management. Reactive and proactive approaches to risk management.	4	IT Security and Risk Management (Main reference) Slay, J. and Koronios, A 2006 Wiley	Powerpoint presentation through projector
	Risk assessment, quantitative and qualitative approaches and asset classification	4		Powerpoint presentation through projector
	Security Assurance Approaches: Introduction to OCTAVE and COBIT approaches	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr.Sandesh Pandurang Akre DEPARTMENT: IT

CLASS: M. Sc. I. T – SEMESTER: III MONTH: August-December ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

knowledge of security management and incident response. knowledge of security in software and operating systems. knowledge of data security and secure system development. knowledge of privacy and data protection

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Information security management Unit -II	Security Management of IT Systems: Network security management. Firewalls, IDS and IPS configuration management. Web and wireless security management.	6	IT Security and Risk Management (Main reference) Slay, J. and Koronios, A 2006 Wiley	Powerpoint presentation through projector
	General server configuration guidelines and maintenance. Information Security Management Information classification. Access control models, role-based and lattice models. Mandatory and discretionary access controls. Linux and Windows case studies. Technical controls, for authentication and confidentiality. Password management and key management for users. Case study: Kerberos.	6		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr.Sandesh Pandurang Akre DEPARTMENT: IT

CLASS:M. Sc. I. T SEMESTER: III MONTH: August-December ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

knowledge of security management and incident response. knowledge of security in software and operating systems. knowledge of data security and secure system development. knowledge of privacy and data protection

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Information security management Unit -III	Key Management in Organizations: Public-key Infrastructure. PKI Applications, secure email case study(S/ MIME or PGP).	4	IT Security and Risk Management (Main reference) Slay, J. and Koronios, A 2006 Wiley	Powerpoint presentation through projector
	Issues in public-key certificate issue and lifecycle management - Management of IT Security Infrastructure;	4		Powerpoint presentation through projector
	Computer security log management, malware handling and vulnerability management programs. Specifying and enforcing security policies.	4		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF Mr.Sandesh Pandurang Akre DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: III MONTH: August-December ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

knowledge of security management and incident response. knowledge of security in software and operating systems. knowledge of data security and secure system development. knowledge of privacy and data protection

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Information security management Unit -IV	Auditing and Business continuity Planning: Introduction to information security audit and principles of audit. Business continuity planning and disaster recovery.	6	IT Security and Risk Management (Main reference) Slay, J. and Koronios, A 2006 Wiley	Powerpoint presentation through projector
	Case study: 9/11 tragedy. Backup and recovery techniques for applications and storage.	6		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr.Sandesh Pandurang Akre DEPARTMENT: IT

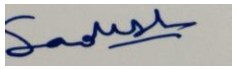
CLASS: M. Sc. I. T SEMESTER: III MONTH: August-December ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

knowledge of security management and incident response. knowledge of security in software and operating systems. knowledge of data security and secure system development. knowledge of privacy and data protection

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Information security management Unit -V	Computer forensics: techniques and tools. Audit Tools: NESSUS and NMAP	6	IT Security and Risk Management (Main reference) Slay, J. and Koronios, A 2006 Wiley	Powerpoint presentation through projector
	Information Security Standards and Compliance: Overview of ISO 17799 Standard. Legal and Ethical issues.	6		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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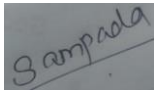

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: III MONTH: July-November ACADEMIC YEAR: 2018-2019

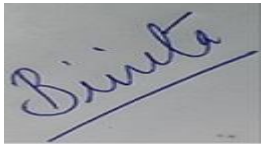
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with neural network models.

b. Work with algorithms and applications of neural networks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Artificial Neural Networks Unit -I	The Brain Metaphor- nature of computation, historical tour of brain science, classical AI and neural networks	4	Neural Networks, A Classroom Approach by Satish Kumar, 2nd Edition.	PowerPoint presentation through projector
	Lessons from Neuroscience- human brain, biological neurons, inner secrets of neuron	4		PowerPoint presentation through projector
	Artificial Neurons, Neural Networks and Architectures- neuron abstraction, neuron signal function, mathematical preliminaries, neural networks defined, architectures, properties	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: III MONTH: July-November ACADEMIC YEAR: 2018-2019

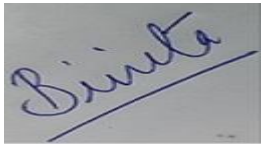
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with neural network models.

b. Work with algorithms and applications of neural networks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Artificial Neural Networks Unit -II	Geometry of Binary Threshold Neurons and their Networks-pattern recognition and classification, Boolean functions, non-linear separable problems, capacity of TLN, XOR problem, multilayer networks.	4	Neural Networks, A Classroom Approach by Satish Kumar, 2nd Edition.	PowerPoint presentation through projector
	Supervised Learning I: Perceptron and LMS- learning algorithms, error correction and gradient descent rules, objectives of TLN, perceptron learning algorithm, perceptron convergence theorem, LMS learning	4		PowerPoint presentation through projector
	Supervised Learning II: Backpropogation and Beyond- multilayer network architectures, backpropogation algorithm, universal fuction approximation, applications of feedforward network, reinforcement learning	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: III MONTH: July-November ACADEMIC YEAR: 2018-2019

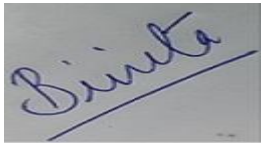
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with neural network models.

b. Work with algorithms and applications of neural networks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Artificial Neural Networks Unit -III	Neural Networks: A Statistical Pattern Recognition Perspective- baye's theorem, probabilistic interpretation of neuron discriminant function, mulilayerd networks, error functions, posterior probabilities.	4	Neural Networks, A Classroom Approach by Satish Kumar, 2nd Edition.	PowerPoint presentation through projector
	Statistical Learning Theory, Support Vector Machines and Radial Basis Functions Network- statistical learning theory, SVM, SVM applications, RBFN, RBFN applications.	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: III MONTH: July-November ACADEMIC YEAR: 2018-2019

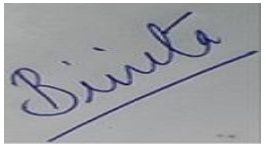
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with neural network models.

b. Work with algorithms and applications of neural networks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Artificial Neural Networks Unit -IV	Dynamical Systems Review- state, state vectors and dynamics, state equations, atttractors and stability, linear dynamical systems, lyapunov stability, neurodynamical systems.	4	Neural Networks, A Classroom Approach by Satish Kumar, 2nd Edition.	PowerPoint presentation through projector
	Attractor Neural Networks- associative learning, linear associative memory, Hopfield network, content addressable memory, spurious attractors	4		PowerPoint presentation through projector
	Adaptive Resonance Theory-noise-saturation dilemma, building blocks of adaptive resonance, substrate of resonance, ART1, applications	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: III MONTH: July-November ACADEMIC YEAR: 2018-2019

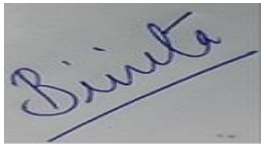
LEARNING OBJECTIVE/S:
The learners will be able to:

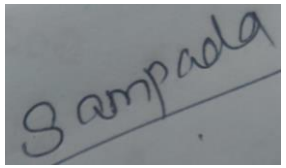
a. Work with neural network models.

b. Work with algorithms and applications of neural networks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III	Towards the Self-Organizing Feature Map- self organization, sanger's rule, generalized learning laws, vector quantization, mexican hat networks, Self-Organizing Feature Map, applications.	4	Neural Networks, A Classroom Approach by Satish Kumar, 2nd Edition.	PowerPoint presentation through projector
Artificial Neural Networks	Fuzzy Sets and Fuzzy Systems- fuzzy uncertainty and linguistic variables, fuzzy set, membership functions geometry of fuzzy sets, operations on fuzzy sets, rule composition and defuzzification, fuzzy engineering, applications.	4		PowerPoint presentation through projector
Unit -V	Evolutionary Algorithms- basic terminology, definition and streams, problem representation with strings, variation operators, genetic algorithms.	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**MSC(IT)**_____ SEMESTER: ____**III**_____ MONTH: _____ **JULY-NOVEMBER** _____ ACADEMIC YEAR: _____**2018-2019**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

Understand the concept of Image Processing, its elements and application. To make understand the concept of image enhancement techniques, filtering, colour processing , compression techniques, segmentation, morphology, representation and description of image and image recognition. To make understand what is image, how it is created and how it is used in varieties of processing. To study subjective improvisation of image in applications to reduce the noise.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Elective 2 PSIT304a Digital Image Processing **Unit No -01**	**Introduction to image processing**, Example of fields that uses image processing, Steps of image processing, Components, Applications, Image sensors and image formats	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.

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Unit No -02	**Visual Preliminaries** Brightness adaptation and contrast, Acuity and contour, Texture and pattern discrimination, Shape detection and recognition, perception of colour, Computational model of perceptual processing, Image sampling and quantization, Basic relationships between pixels	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
	Intensity transformations Introduction, Some basic intensity transformation functions, Histogram equalization, local histogram processing, Using histogram statistics for image enhancement	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.
	Spatial filtering Fundamentals of spatial filtering, Smoothing and Sharpening spatial filters, Combining spatial enhancement methods, Using fuzzy techniques for intensity transformations and spatial filtering	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			

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Unit No -03	**Colour image processing** Colour fundamentals, Colour models, Pseudocolour image processing, Basic of full-colour image processing, Colour transformations, Smoothing and Sharpening, Image segmentation bases on colour, Noise in colour images, Colour image compression	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.
	Image Compression Fundamentals, Some basic methods, Digital image watermarking, Full motion video compression	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	**Morphological Image Processing** Introduction, Erosion and Dilation, Opening and Closing, The Hit-or-Miss transformation, Some basic morphological algorithms, Gray scale morphology	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.
	Segmentation Fundamentals, Point, Line, and Edge detection, Thresholding, Region based segmentation, Segmentation using morphological watersheds, The use of motion in segmentation- Spatial techniques.	06	Digital Image Processing Gonzalez and Woods 3rd Edition	Blackboard, Chalk and Duster. PPts.

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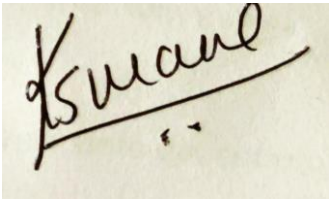
			Pearson Education	
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -05	**Representation and Description** Representation, Boundary Descriptors, Regional Descriptors, Use of Principal Components for Description, Relational Descriptors	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.
	Object Recognition Patterns and pattern classes, Recognition based on decision theoretic methods, Structural methods	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			



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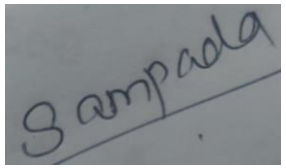

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS:MScIT

SEMESTER: III MONTH:JULY to NOV ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

To determine the market perspective of Embedded System

To compare and contrast the use of devices, hardware and software.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-01 Embedded System, Unit-1	**Introduction** What is an Embedded System, Embedded System Vs, General Computing System.	3	Introduction to embedded systems- Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board
	The Typical Embedded System Core of Embedded System, Memory, Sensors and Actuators, Communication Interface, Embedded Firmware.	3	Introduction to embedded systems- Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board
	Characteristic and quality attributes of Embedded System	3	Introduction to embedded systems- Shibu K. V	Laptop, PPT, Chalk &Black Board

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	Characteristics of an Embedded System, Quality Attributes of Embedded System. RAM, Performance and Battery Life, Libraries, Debugging.		& Embedded Systems Architecture, Programming and Design-- Raj Kamal	
	Embedded product development life cycle What is EDLC, Why EDLC? Objectives of EDLC, Different Phases of EDLC.	3	Introduction to embedded systems-Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board
Paper-01 Embedded System, Unit-2	**Hardware Software Co-design and Program Modelling** Fundamental Issues in Hardware Software Co-Design, Computational Models in Embedded Design, Introduction to Unified Modelling Language (UML), Hardware Software Trade-offs.	3	Introduction to embedded systems-Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board
	Embedded Hardware design and development Analog Electronic Components, Digital Electronic Components, Electronic design Automation (EDA) Tools, The PCB Layout design.	3	Introduction to embedded systems-Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board
	Embedded Firmware design and development Embedded Firmware Design Approaches, Embedded Firmware Development Languages	3	Introduction to embedded systems-Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board
	Real Time Operating System(RTOS) Operating System Basics, Types of Operating Systems, Device Drivers, How to choose an RTOS	3	Introduction to embedded systems-Shibu K. V &	Laptop, PPT, Chalk &Black Board

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			Embedded Systems Architecture, Programming and Design-- Raj Kamal	
Paper-01 Embedded System, Unit-3	**Memories and Memory Subsystem** Introduction, Classifying Memory, A general Memory Interface, ROM Overview, Static RAM Overview, Dynamic RAM Overview, Chip Organization, A SRAM Design, A DRAM Design, The DRAM Memory Interface, The Memory Map, Memory Subsystem Architecture, Basic Concepts of Caching, Design a cache system, Dynamic Memory Allocation, Testing Memories.	12	Introduction to embedded systems- Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board
Paper-01 Embedded System, Unit-4	**Programming Concept and Embedded Programming in C/C++ and Java** Software programming in Assembly Language (ALP) and in High-level Language 'C'., C program Elements: Header and Source Files and Pre-processor Directives, Program Elements: Macros and Functions, Program Elements: Types, Data Structures, Modifiers, Statements, Loops and Pointers, Object-Oriented Programming, Embedded Programming in C++, Embedded Programming in Java.	12	Introduction to embedded systems- Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board
Paper-01 Embedded System, Unit-5	**Trends in the Embedded Industry** Processor trends in Embedded System, Embedded OS Trends, Development Language Trends, Introduction of PIC Family of Microcontrollers, Introduction of ARM Family of Microcontrollers, Introduction of AVR Family of Microcontrollers.	12	Introduction to embedded systems- Shibu K. V & Embedded Systems Architecture, Programming and Design-- Raj Kamal	Laptop, PPT, Chalk &Black Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Vidhya Dayanand Patil College of Arts
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. BRIJESH Y JOSHI DEPARTMENT: Information Technology

CLASS: M.Sc.IT SEMESTER: IV MONTH: JAN TO APRIL ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

- To be able to Understand the concept of **ITIL, Service Life Cycle, Service Strategy**
- **To be able to understand Service Design , Service Transition , Service Operation , Continual service Improvement**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
IT Infrastructure Management UNIT I	**Introduction:** The four perspectives (attributes) of IT service management, benefits of IT service management, business and IT alignment, What is ITIL?, What are services?, Service Management as a practice, The concept of Good Practice, Concept of a Service, Concept of Service Management, Functions and Processes, The process model and the characteristics of processes. **The Service Lifecycle:** Mapping the Concepts of ITIL to the Service Lifecycle, How does the Service Lifecycle work? **Service Strategy:** Objectives, Creating Service Value, Service Packages and Service Level Packages, Service Strategy Processes, Service Portfolio Management, Financial Management, Demand Management, Service Strategy Summary, Interfaces with the Service Design Phase, Interfaces with the Service Transition Phase, Interfaces with the Service Operation Phase, Interfaces with the Continual Service Improvement Phase, Service Strategy Service Scenario,	12	**ITIL V3 Foundation Complete Certification Kit**	Laptop, PPT

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	Overall Service Strategy, Service Portfolio Management Considerations, Financial Management Considerations			
UNIT II	**Service Design:** Objectives, Major Concepts, Five Major Aspects of Service Design, Service Design Packages, Service Design Processes, Service Level Management, Supplier Management, Service Catalogue Management, Capacity Management, Availability Management, IT Service Continuity Management, Information Security Management, Service Design Scenario, Service Level Management Considerations, Capacity Management Considerations, Availability Management Considerations, Information Security Management Considerations, Service Catalogue Management Considerations, ITSCM Considerations, Supplier Management Considerations	12	**ITIL V3 Foundation Complete Certification Kit**	Laptop, PPT
UNIT III	**Service Transition:** Objectives, Service Transition Processes, Knowledge Management, Service Asset and Configuration Management, Change Management, Release and Deployment Management, Service Validation and Testing, Service Transition Summary, Service Transition Scenario, Knowledge Management Considerations, Service Asset and Configuration Management Considerations, Change Management Considerations, Release and Deployment Management Considerations, Service Validation and Testing Considerations	12	**ITIL V3 Foundation Complete Certification Kit**	Laptop ,PPT
UNIT IV	**Service Operation:** Objectives, Major Concepts, Service Operation Functions, The Service Desk, Technical Management, IT Operations Management, Application Management, Service Operation Processes, Event Management, Incident Management, Problem Management, Request Fulfillment, Access Management, Service Operation Summary, Service Operation Scenario, Functions, Processes	12	**ITIL V3 Foundation Complete Certification Kit**	Laptop, PPT

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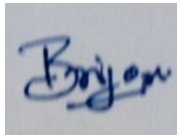
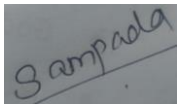
UNIT V	**Continual Service Improvement:** Objectives, Major Concepts Continual Service Improvement Processes, Service Level Management, Service Measurement and Reporting , CSI (7 Step) Improvement Process, Continual Service Improvement Summary, Continual Service Improvement Scenario, Service Level Management Service Measurement and Reporting, CSI Process	12	**ITIL V3 Foundation Complete Certification Kit**	Laptop ,PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **IT** CLASS: **M.Sc. (IT)**

SEMESTER: **IV** MONTH: **January - April** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able:

- To gain knowledge about Artificial Intelligence with Heuristic search.
- To acquire knowledge about AI representation using reasoning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT401 **Paper I** **Artificial Intelligence** **UNIT I**	Introduction : AI, Component of AI, History of AI, Salient Points, Knowledge and Knowledge Based systems, AI in Future, Applications. Logic and Computation: Classical Concepts, Computational Logic, FOL, Symbol Tablue, Resolution, Unification, Predicate Calculus, Model Logic, Temporal Logic. Heuristic Search: Search-based Problems, Informed Search, Water Jug Problem, TSP, Branch and Bound Method, TSP Algorithm	12	Artificial Intelligence, R.B.Mishra, PHI	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT401 **Paper I** **Artificial Intelligence** **UNIT II**	Game Playing : AND/OR Graph, Minimax Problem, Alpha-Beta Search, Puzzle solving Knowledge Representation : Structure of an RBS, Merit, Demerits and Applicability of RBS, Semantic Nets, Frames, Conceptual Graphs, Scripts Automated Reasoning : Default Logic, Problem for default reasoning, Predicate completion	12	Artificial Intelligence, R.B.Mishra, PHI	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT401 **Paper I** **Artificial Intelligence** **UNIT III**	Probabilistic Reasoning : Bayes Theorem, Bayesian Network, Confidence factor, Probabilistic Logic Knowledge Acquisition: Knowledge Acquisition Process, Automatic knowledge acquisition, Machine Learning, Induction, Inductive Learning	12	Artificial Intelligence, R.B.Mishra, PHI	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT401 **Paper I** **Artificial Intelligence** **UNIT IV**	Planning : Necessity of planning, Planning Agents, Non-hierarchical planning, Hierarchical Planning, Script-based planning, Algorithm for planning Constraint Satisfaction Problem : Constraints and Satisfiability, Basic search strategies for solving CSP, Representation of CSP problem	12	Artificial Intelligence, R.B.Mishra, PHI	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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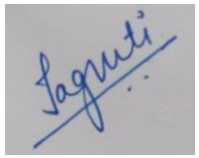
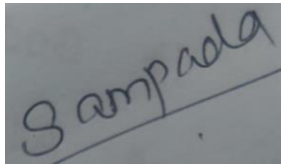
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSIT401 **Paper I** **Artificial Intelligence** **UNIT V**	Knowledge-Based System : Structure of an Expert System, Expert system in different Areas, Expert System shells, Web-based Expert system Prolog: Prolog programming features, syntax, syntax of rules, LIST structure. TURBO PROLOG	12	Artificial Intelligence, R.B.Mishra, PHI	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___**MS. KSHITIJA. P. MANE (PALAV)**_____DEPARTMENT: _____**INFORMATION TECHNOLOGY**_____ CLASS: ____**MSC(IT)**_____ SEMESTER: ____**IV**_____ MONTH: _____ **JANUARY-APRIL** _____ ACADEMIC YEAR: _____**2018-2019**_____

LEARNING OBJECTIVE/S:

The learners will be able to :

Understand the concept of Advanced Image Processing, its elements and application. To make understand the concept of image enhancement techniques in frequency domain, remote sensing and its applications. To make understand what are different platforms and sensors. To study subjective improvisation of medical image. To analyze the image and its applications in different areas. To under the different methods of feature representation and statistical measurements.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Elective 2 PSIT404b Advanced Image Processing **Unit No -01**	**Enhancement in Frequency domain** Introduction, 2-D Discrete Fourier Transform, Properties of Fourier transform, Basic filtering in the frequency domain, Smoothing and Sharpening filters, FFT algorithm. Discrete cosine transform (DCT), KL (PCT) transform, HAAR, Basics of wavelets.	06	Digital Image Processing Gonzalez and Woods 3rd Edition Pearson Education	Blackboard, Chalk and Duster. PPts.
	Remote Sensing	06	Text Book of Remote Sensing	Blackboard, Chalk and Duster.

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	Introduction (Passive and Active sensing), Electromagnetic remote sensing process, Physics of radiant energy, Energy source and its characteristics, Atmospheric interactions with electromagnetic radiation, Energy interaction with Earth's surface materials.		and Geographical Information Systems M. Anji Reddy 4th Edition BS publication	PPts
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -02	**Microwave Remote Sensing** Introduction, The Radar principle, Factors affecting microwave measurements, Radar wavebands, Side looking airborne (SLAR) systems, Synthetic Aperture Radar (SAR), Polarimetric SAR (PolSAR), Interaction between microwaves and Earth's surface, Interpreting SAR images, Geometric characteristics.	06	Text Book of Remote Sensing and Geographical Information Systems M. Anji Reddy 4th Edition BS publication	Blackboard, Chalk and Duster. PPts.
	Remotes Sensing Platforms and Sensors Introduction, Satellite system parameters, Spatial Resolution, Spectral Resolution, Radiometric Resolution, Temporal resolution, Imaging sensor systems (thermal, multispectral and microwave imaging), Earth resources satellites, Meteorological satellites, Satellites carrying microwave sensors, OCEASAT-1, IKONOS, Latest trends in remote sensing platforms and sensors (weather, land observation and marine satellites).	06	Text Book of Remote Sensing and Geographical Information Systems M. Anji Reddy 4th Edition BS publication	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			

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Unit No -03	**Image Analysis** Introduction, Visual interpretation, Elements of visual interpretation, Digital processing, Pre-processing, Enhancement, Transformations, Classification, Integration, Classification accuracy assessment.	06	Digital Image Processing and Analysis Bhabatosh Chanda, Dwijesh Dutta Majumder 2nd Edition PHI	Blackboard, Chalk and Duster. PPts.
	Applications Introduction, Agriculture, Forestry, Geology, Hydrology, Sea Ice, Land cover, Mapping, Oceans and Costal.	06	Digital Image Processing and Analysis Bhabatosh Chanda, Dwijesh Dutta Majumder 2nd Edition PHI	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			
Unit No -04	**Medical Image Processing** Various modalities of medical imaging, Breast cancer imaging, Mammographic imaging, Ultrasound imaging, Magnetic resonance imaging (MRI), Breast thermograph imaging, Problems with medical images. Image enhancement, Spatial domain methods, Frequency domain methods, Other modalities of medical imaging, Radiography, Positron emission tomography (PET), Computed tomography angiography (CTA), Echocardiogram.	12	Medical Image Processing Concepts and Applications Sinha, G.R., Patel, Bhagwati Charan PHI	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			

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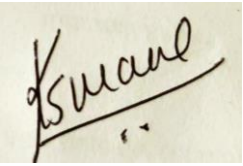
Unit No -05	**Feature Extraction and Statistical Measurement** Selection of features, Shape related features, Shape representation, Bounding box, Shape matrix, Moments of region and shape, Co-occurrence matrix, Principle feature analysis (PFA), Fourier descriptors, Snake boundary detection, Snake algorithm, Texture analysis, Texture features, Feature extraction using discrete Fourier transform, wavelet transform, Gabor filters for texture analysis, Breast tissue detection, Analysis of tissue structure.	12	Medical Image Processing Concepts and Applications Sinha, G.R., Patel, Bhagwati Charan PHI	Blackboard, Chalk and Duster. PPts.
	TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12			



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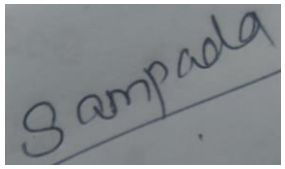

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TEACHING PLAN (UNIT PLAN)

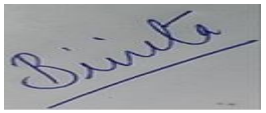
NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: IV MONTH: January-April ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with strategies for storing digital evidence.
b. Work with analyzing evidence with tools.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Computer Forensics Unit -I	Computer Forensics and Investigation Processes- Understanding Computer Forensics, Preparing for Computer Investigations, Maintaining Professional Conduct	3	Guide to Computer Forensics and Investigations by Bell Nelson, Amelia Phillips,Christopher Steuart, 4th edition	PowerPoint presentation through projector
	Understanding Computing Investigations- Preparing a Computer Investigation, Taking a Systematic Approach, Procedures for Corporate High-Tech Investigations, Understanding Data Recovery Workstations and Software, Conducting an Investigation	3		PowerPoint presentation through projector
	The Investigator's Office and Laboratory- Understanding Forensics Lab Certification Requirements, Determining the Physical Requirements for a Computer Forensics Lab, Selecting a Basic Forensic Workstation	3		PowerPoint presentation through projector
	Data Acquisitions- Understanding Storage Formats for Digital Evidence, Determining the Best Acquisition Method, Using Acquisition Tools, Validating Data Acquisitions, Performing RAID Data Acquisitions	3		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: IV MONTH: January-April ACADEMIC YEAR: 2018-2019

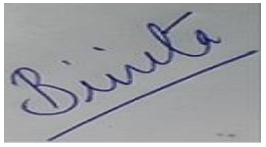
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with strategies for storing digital evidence.

b. Work with analyzing evidence with tools.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Computer Forensics Unit -II	Processing Crime and Incident Scenes- Identifying Digital Evidence, Preparing for a Search, Seizing Digital Evidence at the Scene, Storing Digital Evidence, Reviewing a Case	4	Guide to Computer Forensics and Investigations by Bell Nelson, Amelia Phillips,Christopher Steuart, 4th edition	PowerPoint presentation through projector
	Working with Windows and DOS Systems- Understanding File Systems, Exploring Microsoft File Structures, Examining NTFS Disks, Understanding Whole Disk Encryption, Understanding the Windows Registry, Understanding Virtual Machines	4		PowerPoint presentation through projector
	Current Computer Forensics Tools- Evaluating Computer Forensics Tool Needs, Computer Forensics Software Tools, Computer Forensics Hardware Tools, Validating and Testing Forensics Software	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: IV MONTH: January-April ACADEMIC YEAR: 2018-2019

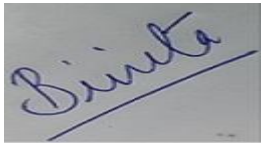
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with strategies for storing digital evidence.

b. Work with analyzing evidence with tools.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Computer Forensics Unit -III	Macintosh and Linux Boot Processes and File Systems- Understanding the Macintosh File Structure and Boot Process, Examining UNIX and Linux Disk Structures and Boot Processes, Understanding Other Disk Structures	4	Guide to Computer Forensics and Investigations by Bell Nelson, Amelia Phillips,Christopher Steuart, 4th edition	PowerPoint presentation through projector
	Computer Forensics Analysis- Determining What Data to Collect and Analyze, Validating Forensic Data, Addressing Data-Hiding Techniques, Performing Remote Acquisitions	4		PowerPoint presentation through projector
	Recovering Graphics Files- Recognizing a Graphics File, Understanding Data Compression, Locating and Recovering Graphics Files, Identifying Unknown File Formats, Understanding Copyright Issues with Graphics	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: IV MONTH: January-April ACADEMIC YEAR: 2018-2019

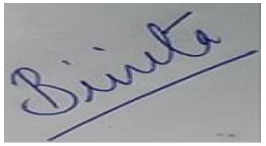
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with strategies for storing digital evidence.

b. Work with analyzing evidence with tools.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Computer Forensics Unit -IV	Virtual Machines, Network Forensics and Live Acquisitions- Virtual Machines Overview, Network Forensics Overview, Performing Live Acquisitions, Developing Standard Procedures for Network Forensics, Using Network Tools	4	Guide to Computer Forensics and Investigations by Bell Nelson, Amelia Phillips,Christopher Steuart, 4th edition	PowerPoint presentation through projector
	Email Investigations- Exploring the Role of E-mail in Investigations, Exploring the Roles of the Client and Server in E-mail, Investigating E-mail Crimes and Violations, Understanding E-mail Servers, Using Specialized E-mail Forensics Tools	4		PowerPoint presentation through projector
	Cell Phone and Mobile Device Forensics- Understanding Mobile Device Forensics, Understanding Acquisition Procedures for Cell Phones and Mobile Devices	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. I. T SEMESTER: IV MONTH: January-April ACADEMIC YEAR: 2018-2019

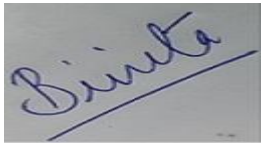
LEARNING OBJECTIVE/S:
The learners will be able to:

a. Work with strategies for storing digital evidence.

b. Work with analyzing evidence with tools.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Computer Forensics Unit -V	Report Writing for High-Tech Investigations- Understanding the Importance of Reports, Guidelines for Writing Reports, Generating Report Findings with Forensics Software Tools	4	Guide to Computer Forensics and Investigations by Bell Nelson, Amelia Phillips,Christopher Steuart, 4th edition	PowerPoint presentation through projector
	Expert Testimony in High-Tech Investigations- Preparing for Testimony, Testifying in Court, Preparing for a Deposition or Hearing, Preparing Forensics Evidence for Testimony	4		PowerPoint presentation through projector
	Ethics and High-Tech Investigations- Applying Ethics and Codes to Expert Witnesses, Organizations with Codes of Ethics, Ethical Difficulties in Expert Testimony, An Ethics Exercise	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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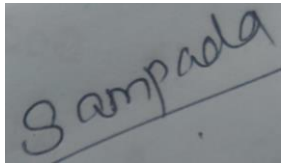

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: FYCS

SEMESTER: II MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Be familiar with basic techniques of algorithm analysis
- Be familiar with writing recursive methods
- Describe common applications for arrays, records, linked structures, stacks, queues, trees, and graphs
- Ability to summarize searching and sorting techniques.
- Be familiar with advanced data structures such as balanced search trees, hash tables, priority queues and the disjoint set union/find data structure

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS204, Data Structures Unit 1	Abstract Data Types: Introduction, The Date Abstract Data Type, Bags, Iterators. Application Type,	03	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, Powerpoint
	Arrays: Array Structure, Python List, Two Dimensional Arrays, Matrix Abstract Data	03	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
	Application Sets and Maps: Sets-Set ADT, Selecting Data Structure, List based Implementation, Maps-Map ADT,	04	1) Data Structure and algorithm Using Python,	Black Board and chalk, PowerPoint

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	List Based Implementation, Multi-Dimensional Arrays-Multi-Array ADT, Implementing Multiarrays, Application		Rance D. Necaise, 2016 Wiley India Edition	
	Application Searching and Sorting: Searching-Linear Search, Binary Search, Sorting-Bubble, Selection and Insertion Sort, Working with Sorted Lists-Maintaining Sorted List, Maintaining sorted Lists.	03	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
	Algorithm Analysis: Complexity Analysis-Big-O Notation, Evaluating Python Code, Evaluating Python List, Amortized Cost, Evaluating Set ADT,	02	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
USCS204, Data Structures Unit 2	Linked Structures: Introduction, Singly Linked List-Traversing, Searching, Prepending and Removing Nodes, Bag ADT-Linked List Implementation. Comparing Implementations, Linked List Iterators, More Ways to Build Kinked Lists	05	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
	Applications-Polynomials Stacks: Stack ADT, Implementing Stacks-Using Python List, Using Linked List, Stack Applications-Balanced Delimiters, Evaluating Postfix Expressions	04	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
	, Queues: Queue ADT, Implementing Queue-Using Python List, Circular Array, Using List, Priority Queues- Priority Queue ADT, Bounded and unbounded Priority Queues	03	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
	Advanced Linked List: Doubly Linked Lists-Organization and Operation, Circular Linked List-Organization and Operation, Multi Lists	03	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint

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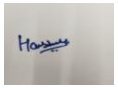
USCS204, Data Structures Unit 3	Recursion: Recursive Functions, Properties of Recursion, Its working, Recursive	03	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
	Hash Table: Introduction, Hashing-Linear Probing, Clustering, Rehashing, Separate Chaining, Hash Functions	04	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
	Advanced Sorting: Merge Sort, Quick Sort, Radix Sort, Sorting Linked List	03	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint
	Applications Binary Trees: Tree Structure, Binary Tree-Properties, Implementation and Traversals, Expression Trees, Heaps and Heapsort,Search Trees	05	1) Data Structure and algorithm Using Python, Rance D. Necaise, 2016 Wiley India Edition	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT

CLASS:FYCS SEMESTER: SEM-II MONTH:DEC-MAR ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:Develop logic which will help them to write, compile and debug programs in C language, able to use different data types in a computer program.Also by learning the design programs involving decision structures, loops and functions. It use different data structures and create/update basic data files.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-1 PROGRAMMING WITH C, UNIT 1	**Structure of C program:** Header and body, Use of comments. Interpreters vs compilers, Python vs C. Compilation of a program. Formatted I/O: printf(), scanf().	2	Programming in ANSI C : E Balagurusamy	Blackboard & Chalk
	Data: Variables, Constants, data types like: int, float char, double and void, short and long size qualifiers, signed and unsigned qualifiers. Compare with datatypes in Python. Compare static typing in C vs dynamic typing in Python .	2		
	Variables: Declaring variables, scope of the variables according to block, hierarchy of data types. Compare explicit declarations in C with implicit declarations in Python.	2		

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	Types of operators: Arithmetic, relational, logical, compound assignment, increment and decrement, conditional or ternary, bitwise and comma operators. Precedence and order of evaluation, statements and Expressions. Automatic and explicit type conversion.	4		
	Iterations: Control statements for decision making: (i) Branching: if statement, else.. if statement, (does the writer mean if-else or nested ifs)switch statement. (ii) Looping: while loop, do.. while, for loop. (iii) Jump statements: break, continue and goto.	5		
UNIT-2	**Arrays**: (One and two dimensional), declaring array variables, initialization of arrays, accessing array elements. Compare array types of C with list and tuple types of Python.	4	Programming in ANSI C : E Balagurusamy	Blackboard & Chalk
	Data Input and Output functions: Character I/O format: getch(), getche(), getchar(), getc(), gets(), putchar(), putc(), puts().	4		
	Manipulating Strings: Declaring and initializing String variables, Character and string handling functions. Compare with Python strings.	2		

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	Functions: Function declaration, function definition, Global and local variables, return statement, Calling a function by passing values.	4		
	Recursion: Definition, Recursive functions.	1		
UNIT 3	**Pointer**: Fundamentals, Pointer variables, Referencing and de-referencing, Pointer Arithmetic, Using Pointers with Arrays, Using Pointers with Strings, Array of Pointers, Pointers as function arguments, Functions returning pointers.	4	Programming in ANSI C : E Balagurusamy	Blackboard & Chalk
	Dynamic Memory Allocation:malloc(), calloc(), realloc(), free() and sizeof operator. Compare with automatic garbage collection in Python.	3		
	Structure: Declaration of structure, reading and assignment of structure variables, Array of structures, arrays within structures, structures within structures. Compare C structures with Python tuples.	4		
	Unions: Defining and working with unions.	1		

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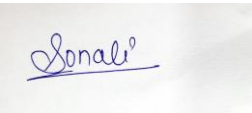
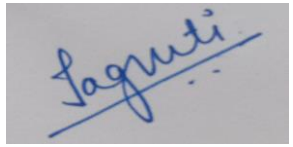
	File handling: Different types of files like text and binary, Different types of functions: fopen(), fclose(), fgetc(), fputc(), fgets(), fputs(), fscanf(), fprintf(), getw(), putw(), fread(), fwrite(), fseek().	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEVIKA VAMAN KENI DEPARTMENT: CS CLASS: FYCS

SEMESTER: SEM-2 MONTH:DEC-MARCH ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

- Familiarize with the concept of Green Computing and Green IT infrastructure for making computing andinformation system environment sustainable.
- Learn about green IT can be achieved in and by hardware, software, network communication and datacenter operations.
- Understand the strategies, frameworks, processes and management of green IT.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
7 GREEN TECHNOLOGY UNIT 1	**Green IT Overview:**Introduction , Environmental Concerns and SustainableDevelopment, Environmental Impacts of IT, Green I , Holistic Approach to Greening IT,Greening IT, Applying IT for Enhancing Environmental Sustainability, Green IT Standards and Eco-Labelling of IT , Enterprise Green IT Strategy, Green Washing, Green IT: Burdenor Opportunity?	4	Harnessing Green IT: Principles and Practices bySan Murugesan, G. R. Ganadharan, Wiley & IEEE.	BLACK BOARD AND CHALK
	Green Devices and Hardware: Introduction , Life Cycle of a Device or Hardware, Reuse,Recycle and Dispose	3		
	Green Software: Introduction , Processor Power States , Energy-Saving SoftwareTechniques, Evaluating and Measuring Software Impact to Platform Power	4		

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	Sustainable Software Development: Introduction, Current Practices, SustainableSoftware, Software Sustainability Attributes, Software Sustainability Metrics,Sustainable Software Methodology, Defining Actions	4		
UNIT 2	**Green Data Centres:**Data Centres and Associated Energy Challenges, Data Centre ITInfrastructure, Data Centre Facility Infrastructure: Implications for Energy Efficiency, ITInfrastructure Management, Green Data Centre Metrics	4	Harnessing Green IT: Principles and Practices by San Murugesan, G. R. Ganadharan, Wiley & IEEE.	BLACK BOARD AND CHALK
	Green Data Storage: Introduction , Storage Media Power Characteristics, EnergyManagement Techniques for Hard Disks, System-Level Energy Management	4		
	Green Networks and Communications: Introduction, Objectives of Green NetworkProtocols, Green Network Protocols and Standards	3		
	Enterprise Green IT Strategy: Introduction, Approaching Green IT Strategies, Business Drivers of Green IT Strategy, Business Dimensions for Green IT Transformation, Organizational Considerations in a Green IT Strategy, Steps in Developing a Green ITStrategy, Metrics and Measurements in Green Strategies.	4		

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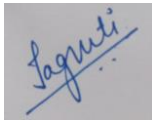
UNIT 3	**Sustainable Information Systems and Green Metrics:**Introduction, MultilevelSustainable Information, Sustainability Hierarchy Models, Product Level Information,Individual Level Information, Functional Level Information, Organizational LevelInformation, Measuring the Maturity of Sustainable ICT	4	Harnessing Green IT: Principles and Practices bySan Murugesan, G. R. Ganadharan, Wiley & IEEE.	BLACK BOARD AND CHALK
	Enterprise Green IT Readiness: Introduction, Readiness and Capability, Development ofthe G-Readiness Framework, Measuring an Organization's G-Readiness	3		
	Sustainable IT Services: Creating a Framework for Service Innovation: Introduction,Factors Driving the Development of Sustainable IT, Sustainable IT Services (SITS), SITSStrategic Framework	4		
	Green Enterprises and the Role of IT: Introduction, Organizational and EnterpriseGreening, Information Systems in Greening Enterprises, Greening the Enterprise: ITUsage and Hardware, Inter-organizational Enterprise Activities and Green Issues	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar DEPARTMENT: Computer Science

CLASS: F.Y.B.Sc.(CS) SEMESTER: 2 MONTH: December to March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

- The learners will be able to know descriptive statistical concepts
- The learner will able to study probability concepts required for computer learners.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: 6 **Statistical methods and testing of hypothesis** **<u>Unit 1</u>**	Standard distribution: • Random variable, discrete random variable, continuous random variable, • Expectation and variance of discrete and continuous random variable	4	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	• Pmf and Cdf for discrete random variable	2	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	• PDF and Cdf for continuous random variable	3	Gupta ,S.C.and Kapoor,V.K.	Black board, chalk and duster

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	• Reliability		(2002): Fundamentals of Mathematical statistics	
	Introduction and properties without proof for following distribution: • Binomial distribution • Normal distribution	3	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	Introduction and properties without proof for following distribution: • Chi-square distribution • T- distribution • F- distribution	3	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Statistical methods and testing of hypothesis **<u>Unit 2</u>**	Hypothesis testing: • One sided and two sided hypothesis • Critical region • P- value	3	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	• Test based on t distribution • Test based on normal distribution • Test based on f distribution	5	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	• Confidence interval	1	Gupta ,S.C.and Kapoor,V.K.	Black board, chalk and duster

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			(2002): Fundamentals of Mathematical statistics	
	Analysis of Variance: ● One -way ANOVA	3	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	Analysis of Variance: ● Two- way ANOVA	3	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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		ALLOTED		
Statistical methods and testing of hypothesis **<u>Unit 3</u>**	Non parametric tests ● Need of non- parametric tests	1	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	Non parametric tests: ● Sign test ● Willcoxon's signed rank test ● Willcoxon's rank sum test	5	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	Non parametric tests: ● Run test ● Kruskal-wali's test	4	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	Post hoc analysis of one way ANOVA: ● Ducann's tets	2	Gupta ,S.C.and Kapoor,V.K. (2002): Fundamentals of Mathematical statistics	Black board, chalk and duster
	● Chi-square test of association	3	Gupta ,S.C.and Kapoor,V.K.	Black board, chalk and duster

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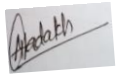
			(2002): Fundamentals of Mathematical statistics	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: COMPUTER SCIENCE CLASS: FYCS

SEMESTER: II MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand how to read/write to files using python.
- Catch their own errors that happen during execution of programs.
- Get introductions to the concept of pattern matching.
- Be familiar with the concepts of GUI controls and designing GUI applications.
- Connect to the database to move the data to/from the application.
- Know how to connect to computers, read from URL and send email.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS202, Unit 1, Programming with Python- II	Python File Input-Output: Opening and closing files, various types of file modes, reading and writing to files, manipulating directories. Iterables, iterators and their problem solving applications.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	Exception handling: What is an exception, various keywords to handle exceptions such try, catch, except, else, finally, raise.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk

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	Regular Expressions: Concept of regular expression, various types of regular expressions, using match function.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
USCS202, Unit 2, Programming with Python- II	GUI Programming in Python (using Tkinter/wxPython/Qt) What is GUI, Advantages of GUI	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	Introduction to GUI library. Layout management, events and bindings, fonts, colours, drawing on canvas (line, oval, rectangle, etc.)	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	Widgets such as : frame, label, button, checkbutton, entry, listbox, message, radiobutton, text, spinbox etc	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
USCS202, Unit 3, Programming with Python-II	Database connectivity in Python: Installing mysql connector, accessing connector module module, using connect, cursor, execute & close functions.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk

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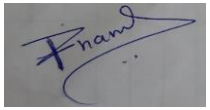
	Reading single & multiple results of query execution, executing different types of statements, executing transactions, understanding exceptions in database connectivity	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	Network connectivity: Socket module, creating server-client programs, sending email, reading from URL	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: II MONTH: DECEMBER - JANUARY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of limit, continuity and derivative of a function.
- Check the continuity of the function at the given point.
- Find the derivatives of functions of various functions
- Use derivatives in various applications like concavity, maxima/minima, increasing/decreasing functions etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CALCULUS Unit 1 Derivatives & its applications	➢ Limit, continuity and derivative of a function ➢ Asymptotes, increasing/decreasing functions, concavity. ➢ Absolute and relative maxima and minima ➢ Graphing of polynomials and Newton's method	5 3 4 3	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: II MONTH: FEBRUARY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Evaluate indefinite integral using different methods like substitution, integration by parts etc.
- Evaluate definite integral using the properties of definite integration and by Simpson's rule
- Find the area bounded between curves and length of plane curve using integration.
- Solve the given differential equation using different methods

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CALCULUS Unit 2 Integration & its applications	➢ Indefinite and definite integration ➢ Area between two curves ➢ Length of plane curve ➢ Simpson's rule ➢ Solving differential equations	5 3 1 2 4	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: II MONTH: MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of limits, continuity and derivatives of functions of two or more variables.
- Find the first and second order partial derivatives of functions of two variables.
- Find the linearization of the given function at the given point.
- Understand the concept of gradients and directional derivatives.
- Find the derivative of a function of two variable using chain rule.
- Find the relative extrema and saddle point of the given function of two variables using partial derivatives.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CALCULUS Unit 3 Partial Derivatives & its applications	➢ Limit, continuity and partial derivatives of functions of two or more variables ➢ Linearization and chain rule ➢ Directional derivatives and gradients ➢ Tangent planes and normal lines ➢ Maxima and minima of functions of two variables	5 2 3 2 3	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: FYCS SEMESTER: II MONTH: DEC-MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: Students should have a good working knowledge of Linux, from both a graphical and command line perspective, allowing them to easily use any Linux distribution.This course shall help student to learn advanced subjects in computer science practically. Student shall be able to progress as a Developer or Linux System Administrator using the acquired skill set.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS203 Linux Unit I	Introduction History of Linux, Philosophy, Community, Terminology, Distributions, Linux kernel vs distribution. Why learn Linux? Importance of Linux in software ecosystem: web servers, supercomputers, mobile, servers.	05	Unix Concepts and Applications by Sumitabha Das., Official Ubuntu Book, 8th Edition, by Matthew Helmke & Elizabeth K. Joseph with Jose Antonio Rey and Philips Ballew, Prentice Hall	Blackboard, Chalk
	Installation Installation methods, Hands on Installation using CD/DVD or USB drive.	03		Blackboard, Chalk
	Linux Structure Linux Architecture, Filesystem basics, The boot process, init scripts, runlevels,shutdown process, Very basic introductions to Linux processes, Packaging methods:rpm/deb, Graphical Vs Command line.	07		Blackboard, Chalk
USCS203 Linux Unit II	Graphical Desktop: Session Management, Basic Desktop Operations, Network Management, Installing and Updating Software,	07	Unix Concepts and Applications	Blackboard, Chalk

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	Text editors: gedit, vi, vim, emacs, Graphics editors,Multimedia applications.		by Sumitabha Das., Official Ubuntu Book, 8th Edition, by Matthew Helmke & Elizabeth K. Joseph with Jose Antonio Rey and Philips Ballew, Prentice Hall	
	Command Line Command line mode options, Shells, Basic Commands, General Purpose Utilities,Installing Software, User management, Environment variables, Command aliases.	03		Blackboard, Chalk
	Linux Documentation: man pages, GNU info, help command, More documentation sources	02		Blackboard, Chalk
	File Operations Filesystem, Filesystem architecture, File types, File attributes, Working with files, Backup, compression	03		Blackboard, Chalk
	Security Understanding Linux Security, Uses of root, sudo command, working with passwords, Bypassing user authentication, Understanding ssh	05	Unix Concepts and Applications by Sumitabha Das., Official Ubuntu Book, 8th Edition, by Matthew Helmke & Elizabeth K. Joseph with Jose Antonio Rey and Philips Ballew, Prentice Hall	Blackboard, Chalk
	Networking: Basic introduction to Networking, Network protocols: http, ftp etc., IP address, DNS,Browsers, Transferring files.ssh, telnet, ping, traceroute, route, hostname, networking GUI.	04		Blackboard, Chalk
	Basic Shell Scripting Features and capabilities, Syntax, Constructs, Modifying files, Sed, awk command,File manipulation utilities, Dealing with large files and Text, String manipulation,Boolean expressions, File tests, Case, Debugging, Regular expressions	06		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:MONIKA MADHUKAR RAUT DEPARTMENT: IT

CLASS:SYCS SEMESTER: IV MONTH:DECEMBER TO MARCH ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to explore .NET technologies for designing and developing dynamic, interactive and responsive web applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
.Net Technologies (USCS406) Unit I	**The .NET Framework:.**NET Languages, Common Language Runtime, .NET Class Library	2	Beginning ASP.NET 4.5 in C#, Matthew MacDonald	Black Board and Chalk, PowerPoint presentation
	C# Language Basics: Comments, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods, Classes, Value Types and Reference Types, Namespaces and Assemblies, Inheritance, Static Members, Casting Objects, Partial Classes	5		
	ASP.NET: Creating Websites, Anatomy of a Web Form - Page Directive, Doctype, Writing Code - Code-Behind Class, Adding Event Handlers, Anatomy of an ASP.NET Application - ASP.NET File Types, ASP.NET Web Folders	4	Beginning ASP.NET 4.5 in C#, Matthew MacDonald	
	HTML Server Controls - View State, HTML Control Classes, HTML Control Events, HtmlControl Base Class,	4		

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	HtmlContainerControl Class, HtmlInputControl Class, Page Class, global.asax File, web.config File			
.Net Technologies (USCS406) Unit II	**Web Controls:** Web Control Classes, WebControl Base Class, List Controls, Table Controls, Web Control Events and AutoPostBack, Page Life Cycle	3	Beginning ASP.NET 4.5 in C#, Matthew MacDonald	Black Board and Chalk
	State Management: ViewState, Cross-Page Posting, Query String, Cookies, Session State, Configuring Session State, Application State	2		Black Board and Chalk
	Validation: Validation Controls, Server-Side Validation, Client-Side Validation, HTML5 Validation, Manual Validation, Validation with Regular Expression,**Rich Controls:** Calendar Control, AdRotator Control, MultiView Control	4		Black Board and Chalk
	Themes and Master Pages: How Themes Work, Applying a Simple Theme,Handling Theme Conflicts, Simple Master Page and Content Page, Connecting Master pages and Content Pages, Master Page with Multiple Content Regions, Master Pages and Relative Paths	4		Black Board and Chalk
	Website Navigation: Site Maps, URL Mapping and Routing, SiteMapPath Control, TreeView Control, Menu Control	2		Black Board and Chalk
.Net Technologies (USCS406)	**ADO.NET:** Data Provider Model, Direct Data Access - Creating a Connection, Select Command, DataReader, Disconnected Data Access	3	Beginning ASP.NET 4.5 in	Black Board and Chalk

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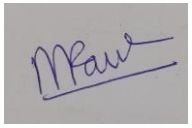
Unit III	**Data Binding**: Introduction, Single-Value Data Binding, Repeated-Value Data Binding, Data Source Controls – SqlDataSource	2	C#, Matthew MacDonald	Black Board and Chalk
	Data Controls: GridView, DetailsView, FormView	3	Beginning ASP.NET 4.5 in C#, Matthew MacDonald	Black Board and Chalk
	Working with XML: XML Classes – XMLTextWriter, XMLTextReader	2		Black Board and Chalk
	Caching: When to Use Caching, Output Caching, Data Caching	2		Black Board and Chalk
	LINQ: Understanding LINQ, LINQ Basics	1		Black Board and Chalk
	ASP.NET AJAX: ScriptManager, Partial Refreshes, Progress Notification, Timed Refreshes	2		Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS: SYCS

SEMESTER: IV MONTH: December to March ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE/S:

- Explore advanced topic of Java programming for solving problems.

The learners will be able to:

- Understand the concepts related to Java Technology
- Explore and understand use of Java Server Programming

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Advanced Java USCS402 Unit 1	Swing: Need for swing components, Difference between AWT and swing, Components hierarchy, Panes, Swing components: Jlabel, JTextField and JPasswordField, JTextAres, JButton, JCheckBox, JRadioButton, JComboBox and JList	9	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th Edition AND Internet	Projector, Laptop, Black board& Chalk
	JDBC: Introduction, JDBC Architecture, Types of Drivers, Statement, ResultSet, Read Only ResultSet, Updatable ResultSet, Forward Only ResultSet, Scrollable ResultSet, PreparedStatement, Connection Modes, SavePoint, Batch Updations, CallableStatement, BLOB & CLOB	6	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th EditionAND Internet	Projector, Laptop, Black board& Chalk

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Advanced Java USCS402 Unit 2	**Servlets:** Introduction, Web application Architecture, Http Protocol & Http Methods, Web Server & Web Container, Servlet Interface, GenericServlet, HttpServlet, Servlet Life Cycle, ServletConfig, ServletContext, Servlet Communication, Session Tracking Mechanisms	7	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th EditionAND Internet		
	JSP: Introduction, JSP LifeCycle, JSP Implicit Objects & Scopes, JSP Directives, JSP Scripting Elements, JSP Actions: Standard actions and customized actions,	8	Herbert Schildt, Java2: The Complete Reference, Tata McGraw-Hill,5th EditionAND Internet	Projector, Laptop, Black board& Chalk	
Advanced Java USCS402 Unit 3	**Java Beans:** Introduction, JavaBeans Properties, Examples	4	Joe Wigglesworth and Paula McMillan, Java Programming: Advanced Topics, Thomson Course Technology (SPD) ,3rd EditionAND INTERNET	Projector, Laptop, Black board& Chalk	
	Struts 2: Basic MVC Architecture, Struts 2 framework features, Struts 2 MVC pattern, Request life cycle, Examples, Configuration Files, Actions, Interceptors, Results & Result Types, Value Stack/OGNL	6	Joe Wigglesworth and Paula McMillan, Java Programming: Advanced Topics, Thomson Course Technology (SPD) ,3rd EditionAND INTERNET	Projector, Laptop, Black board& Chalk	
	JSON: Overview, Syntax, DataTypes, Objects, Schema, Comparison with XML, JSON with Java	5	Joe Wigglesworth and Paula McMillan, Java Programming: Advanced Topics,	Projector, Laptop, Black board& Chalk	

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			Thomson Course Technology (SPD) ,3rd Edition AND INTERNET	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS:**SYBSCC**

SSEMESTER:**IV** MONTH:**DEC-MARCH** ACADEMIC YEAR:**2018-19**

LEARNING OBJECTIVE/S:

The learners will be able to :

understand basic principles of algorithm design and why algorithm analysis is important
understand how to implement algorithms in Python
understand how to transform new problems into algorithmic problems with efficient solutions
understand algorithm design techniques for solving different problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS401 **Fundamentals of Algorithms** UNIT-1	Introduction to algorithm, Why to analysis algorithm, Running time analysis, How to Compare Algorithms, Rate of Growth, Commonly Used Rates of Growth, Types of Analysis, Asymptotic Notation, Big-O Notation, Omega-Ω Notation, Theta-Θ Notation, Asymptotic Analysis, Properties of Notations,	07	Introduction to Algorithm, Thomas H Cormen, PHI	Black board and chalk,power point
	Commonly used Logarithms and Summations, Performance characteristics of algorithms, Master Theorem for Divide and Conquer, Divide and Conquer Master Theorem: Problems &	08	Introduction to Algorithm,	Black board and chalk,power point

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	Solutions, Master Theorem for Subtract and Conquer Recurrences, Method of Guessing and Confirming		Thomas H Cormen, PHI	
USCS401 **Fundamentals of Algorithms** UNIT-2	Tree algorithms: What is a Tree? Glossary, Binary Trees, Types of Binary Trees, Properties of Binary Trees, Binary Tree Traversals, Generic Trees (N-ary Trees), Threaded Binary Tree Traversals, Expression Trees, Binary Search Trees (BSTs), Balanced Binary Search Trees, AVL (Adelson-Velskii and Landis) Trees	06	Introduction to Algorithm, Thomas H Cormen, PHI	Black board and chalk,power point
	Graph Algorithms: Introduction, Glossary, Applications of Graphs, Graph Representation, Graph Traversals, Topological Sort, Shortest Path Algorithms, Minimal Spanning Tree Selection Algorithms: What are Selection Algorithms? Selection by Sorting, Partition-based Selection Algorithm, Linear Selection Algorithm - Median of Medians Algorithm, Finding the K Smallest Elements in Sorted Order	09	Introduction to Algorithm, Thomas H Cormen, PHI	Black board and chalk,power point
USCS401 **Fundamentals of Algorithms** UNIT-3	Algorithms Design Techniques: Introduction, Classification, Classification by Implementation Method, Classification by Design Method Greedy Algorithms: Introduction, Greedy Strategy, Elements of Greedy Algorithms, Advantages and Disadvantages of Greedy Method, Greedy Applications, Understanding Greedy Technique Divide and Conquer Algorithms: Introduction, What is Divide and Conquer Strategy? Divide and Conquer Visualization, Understanding Divide and Conquer, Advantages of Divide and Conquer, Disadvantages of Divide and Conquer, Master Theorem, Divide and Conquer Applications	07	Introduction to Algorithm, Thomas H Cormen, PHI	Black board and chalk,power point

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	Dynamic Programming: Introduction, What is Dynamic Programming Strategy? Properties of Dynamic Programming Strategy, Problems which can be solved using Dynamic Programming, Dynamic Programming Approaches, Examples of Dynamic Programming Algorithms, Understanding Dynamic Programming, Longest Common Subsequence	09	Introduction to Algorithm, Thomas H Cormen, PHI	Black board and chalk,power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande DEPARTMENT: Computer Science

CLASS: S.Y.C.S. SEMESTER: IV MONTH: Dec - March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

Learner will able to understand the concept of networking.
Useful to proceed with industrial requirement and international vendor certification

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS403 Computer Networks UNIT - 1	Introduction to data communication, Components, Data Representation, Data Flow, Networks, Network Criteria, Physical Structures, Network types, Local Area Network, Wide Area Network, Switching, The Internet, Accessing the Internet, standards and administration Internet Standards.	02	Data Communication and Networking , Behrouz Forouzan	Blackboard PPT
	Network Models, Protocol layering, Scenarios, Principles of Protocol Layering, Logical Connections, TCP/IP Protocol Suite, Layered Architecture, Layers in the TCP/IP Protocol Suite, Encapsulation and Decapsulation, Addressing, Multiplexing and Demultiplexing. Detailed introduction to Physical Layer, Detailed introduction to Data-Link Layer, Detailed introduction to Network	08		Blackboard PPT

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	Layer, Detailed introduction to Transport Layer, Detailed introduction to Application Layer.			
	Data and Signals, Analog and Digital Data, Analog and Digital Signals, Sine Wave Phase, Wavelength, Time and Frequency Domains, Composite Signals, Bandwidth, Digital Signal, Bit Rate, Bit Length, Transmission of Digital Signals, Transmission Impairments, Attenuation, Distortion, Noise, Data Rate Limits, Performance, Bandwidth, Throughput, Latency (Delay)	05		Blackboard PPT
USCS403 Computer Networks UNIT - 2	Digital Transmission digital-to-digital conversion, Line Coding, Line Coding Schemes, analog-to-digital conversion, Pulse Code Modulation (PCM), Transmission Modes, Parallel Transmission, Serial Transmission. Analog Transmission, digital-to-analog Conversion, Aspects of Digital-to-Analog Conversion, Amplitude Shift Keying, Frequency Shift Keying, Phase Shift Keying, analog-to-analog Conversion, Amplitude Modulation (AM), Frequency Modulation (FM), Phase Modulation (PM), Multiplexing, Frequency-Division Multiplexing, Wavelength-Division Multiplexing, Time-Division Multiplexing. Transmission Media, Guided Media, Twisted-Pair Cable, Coaxial Cable, Fiber-Optic Cable. Switching, Three Methods of Switching , Circuit Switched Networks, Packet Switching,	09	Data Communication and Networking , Behrouz Forouzan	Blackboard PPT
	Introduction to Data-Link Layer, Nodes and Links, Services, Two Sub-layers, Three Types of addresses, Address Resolution Protocol (ARP). Error Detection and Correction, introduction, Types of Errors, Redundancy, Detection versus Correction,	06		Blackboard PPT
USCS403	Media Access Control (MAC), random access, CSMA, CSMA/CD, CSMA/CA, controlled access, Reservation, Polling, Token Passing, channelization, FDMA, TDMA, CDMA.	02	Data Communication	Blackboard PPT

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Computer Networks UNIT - 3			and Networking , Behrouz Forouzan	
	Connecting Devices and Virtual LANs, connecting devices, Hubs, Link-Layer	02		
	Introduction to Network Layer, network layer services, Packetizing, Routing and Forwarding, Other Services, IPv4 addresses, Address Space, Classful Addressing.	03		
	Unicast Routing, General Idea, Least-Cost Routing, Routing Algorithms, Distance-Vector Routing, Link-State Routing, Path-Vector Routing, Introduction to Transport Layer, Transport-Layer Services, Connectionless and Connection-Oriented Protocols.	03		
	Transport-Layer Protocols, Service, Port Numbers, User Datagram Protocol, User Datagram, UDP Services, UDP Applications, Transmission Control Protocol, TCP Services, TCP Features, Segment.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar DEPARTMENT: Computer Science CLASS: S.Y.B.Sc.(CS)

SEMESTER: 4 MONTH: December to March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Appreciate the relevance of linear algebra in a field of computer science.
- Understand the concept through program implementation.
- Instill the computational thinking while learning linear algebra.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS405 **Linear Algebra using python** **<u>Unit 1</u>**	**Field**: ● Introduction to complex number,numbers in python,Abstracting over field ● playing with GF(2),	4	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster
	Vector Space: ● Vectors are functions, ● Vector addition and scalar multiplication ● Combining vector addition and scalar multiplication ● Geometry of sets of vectors	3	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster
	● Dictionary based representation of vectors ● Dot product	2	Coding the matrix linear algebra through application to computer science, edition 1 philip N	Black board, chalk and duster

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			Klein, Newtonian press(2013)	
	Linear system : ● Homogeneous and non homogeneous equation ● Solving triangular system of linear equations	3	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster
	● Linear combination and linear span	3	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS405 **Linear Algebra using python** **<u>Unit 2</u>**	**Matrix:** ● Matrices as vectors, transpose ● Matrix -vector and vector-matrix multiplication in terms of linear combination ● Matrix -vector and vector-matrix multiplication in terms of dot-product	3	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board,chalk and duster
	● Null space, computing Sparse matrix, vector product	3	Coding the matrix linear algebra through	Black board,chalk and duster

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	● Linear function ● Inner product and outer product ● From function inverse to matrix inverse		application to computer science, edition 1 philip N Klein, Newtonian press(2013)	
	Basis: ● Coordinate system,Two greedy algorithm for finding set of generators ● Minimum spanning forest and GF(2) ● Linear dependence and independence	3	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board,chalk and duster
	Basis: ● Basis, unique representation,change of basis ● Computational problems involving finding a basis	3	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board,chalk and duster
	Dimensions: ● Dimension and rank, ● Direct sum ● Dimension and linear function ● The annihilator	3	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board,chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS405 **Linear Algebra using python** **<u>Unit 3</u>**	**Gaussian elimination:** ● Row echelon form, Gaussian elimination over GF(2) ● Solving matrix - vector equation using Gaussian distribution ● Finding basis for null space ● Factoring integers	4	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster
	Inner product: ● The inner product for vectors over field ● Orthogonality	2	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster
	Orthogonalisation: ● Projection orthogonal to multiple vectors ● Projecting orthogonal to mutually orthogonal vectors ● Finding an orthogonal set of generators ● Orthogonal complement	4	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster
	Eigen vectors: ● Modeling discrete dynamic processes ● Diagonalization of the Fibonacci matrix ● Finding Eigen values and Eigen vectors ● Coordinate representation in terms of Eigen vectors	3	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster

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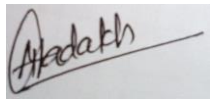
	• The internet worm • Markow chains • Modeling a web surfer-page rank	2	Coding the matrix linear algebra through application to computer science, edition 1 philip N Klein, Newtonian press(2013)	Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:GARGEE JAGDISH MHATRE. DEPARTMENT: INFORMATION TECHNOLOGY

CLASS:S.Y.B.Sc.CS_ SEMESTER:IV MONTH:DECEMBER-MARCH ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

- Capable of team and organizational leadership in computing settings.
- Acquire Skill and knowledge to advance their career, including continually upgrading professional, communication, analytic, and technical skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Unit II Software Engineering	**System Design:** System/Software Design, Architectural Design, Low-Level Design Coupling and Cohesion,	2	A Concise Introduction to Software Engineering, Pankaj Jalote, Springer	Blackboard, Chalk
	Functional-Oriented Versus The Object-Oriented Approach, Design Specifications, Verification for Design, Monitoring and Control for Design Software	3	Software Engineering, Ian Sommerville, Pearson Education	Blackboard, Chalk
	Measurement and Metrics: Product Metrics – Measures, Metrics, and Indicators, Function-Based Metrics, Metrics for Object-Oriented Design, Operation-Oriented Metrics, User Interface Design Metrics, Metrics for Source Code, Halstead Metrics Applied to Testing, Metrics for Maintenance,	4	Software Engineering, Ian Sommerville, Pearson Education	Blackboard, Chalk

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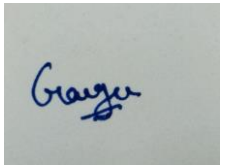
	Cyclomatic Complexity, Software Measurement - Size-Oriented, Function-Oriented Metrics, Metrics for Software Quality			
	Software Project Management: Estimation in Project Planning Process –Software Scope And Feasibility, Resource Estimation, Empirical Estimation Models – COCOMO II, Estimation for Agile Development, The Make/Buy Decision,	3	Software Engineering, Ian Sommerville, Pearson Education	Blackboard, Chalk
	Project Scheduling - Basic Principles, Relationship Between People and Effort, Effort Distribution, Time-Line Charts	3	Software Engineering, Ian Sommerville, Pearson Education	Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **S.Y.B.Sc.(CS)**

SEMESTER: **IV** MONTH: **December - March** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able:1. Understand flow of software modeling process.

2. Understand software metrics, agile development and change management as a part of industrial requirements.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 **Software Engineering** **UNIT I**	**Introduction:** The Nature of Software, Software Engineering, The Software Process, Generic Process Model, The Waterfall Model, Incremental Process Models, Evolutionary Process Models, Concurrent Models	4	Software Engineering, A Practitioner's Approach, Roger S, Pressman.(2014) Software Engineering, Ian Sommerville, Pearson Education	Microsoft PowerPoint Presentation
	Component-Based Development, The Unified Process Phases, Agile Development- Agility, Agile Process, Extreme Programming	4		
	Requirement Analysis and System Modeling: Requirements Engineering, Eliciting Requirements, SRS Validation, Components of SRS, Characteristics of SRS	3		
	Object-oriented design using the UML - Class diagram, Object diagram, Use case diagram, Sequence diagram, Collaboration diagram, State chart diagram, Activity diagram, Component diagram, Deployment diagram	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 4 **Software Engineering** **UNIT III**	**Risk Management** - Software Risks, Risk Identification, Risk Projection and Risk Refinement, RMMM Plan	4	Software Engineering, A Practitioner's Approach, Roger S, Pressman.(2014) Software Engineering, Ian Sommerville, Pearson Education	Microsoft PowerPoint Presentation
	Software Quality Assurance: Elements of SQA, SQA Tasks, Goals, and Metrics, Formal Approaches to SQA, Six Sigma, Software Reliability, The ISO 9000 Quality Standards, Capability Maturity Model	4		
	Software Testing : Verification and Validation, Introduction to Testing, Testing Principles, Testing Objectives, Test Oracles,	3		
	Levels of Testing, White-Box Testing/Structural Testing, Functional/Black-Box Testing, Test Plan, Test-Case Design	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUJITHA MOHAN** DEPARTMENT: **C.S**

CLASS: **SYCS** SEMESTER: **IV** MONTH: **Dec-March** ACADEMIC YEAR: **2018-2019**

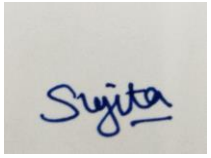
LEARNING OBJECTIVES:
The learners will be able to :

- Understand the requirements of Mobile programming environment.
- Learn about basic methods, tools and techniques for developing Apps
- Explore and practice App development on Android Platform
- Develop working prototypes of working systems for various uses in daily lives.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
VII,1, Skill Enhancement: Android Developer Fundamentals 2	What is Android? Obtaining the required tools, creating first android app, understanding the components of screen, adapting display orientation, action bar, Activities and Intents	5	"Beginning Android 4 Application Development", Wei-Meng Lee, March 2012, WROX	Chalk and Duster, Projector
	Activity Lifecycle and Saving State, Basic Views: TextView, Button, ImageButton, EditText, CheckBox, ToggleButton, RadioButton, and RadioGroup Views,	5	https://developers.google.com/training/courses/android-fundamentals	Chalk and Duster, Projector
	ProgressBar View, AutoCompleteTextView, TimePicker View, DatePicker View, ListView View, Spinner View	5	https://developers.google.com/training/courses/android-fundamentals	Chalk and Duster, Projector
VII,2, Skill Enhancement:	User Input Controls, Menus, Screen Navigation, RecyclerView, Drawables, Themes and Styles, Material design	5	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector

Android Developer Fundamentals 2	Providing resources for adaptive layouts, AsyncTask and AsyncTaskLoader,	5	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector
	Connecting to the Internet, Broadcast receivers, Services, Notifications, Alarm managers, Transferring data efficiently	5	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector
VII,3, Skill Enhancement: Android Developer Fundamentals 2	Data - saving, retrieving, and loading: Overview to storing data, Shared preferences, SQLite primer	5	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector
	store data using SQLite database, ContentProviders, loaders to load and display data,	5	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector
	Permissions, performance and security, Firebase and AdMob, Publish your app	5	https://developers.google.com /training/courses/android-fundamentals	Chalk and Duster, Projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: TYCS

SEMESTER: VI MONTH: DECEMBER-MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Ability to use knowledge of data structures and indexing methods in information retrieval Systems·
- Understand the underlined problems related to IR
- Acquire the necessary experience to design, and implement real applications using Information Retrieval systems.

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS604, Information Retrieval Unit 1	Introduction to Information Retrieval: Introduction, History of IR, Components of IR, and Issues related to IR, Boolean retrieval, Dictionaries and tolerant retrieval.	07	1. Introduction to Information Retrieval, C. Manning, P. Raghavan, and H. Schütze, Cambridge University Press, 2008 2. Modern Information Retrieval: The Concepts and Technology behind Search, Ricardo Baeza - Yates and Berthier Ribeiro – Neto, 2 nd Edition, ACM Press Books 2011.	Black Board and chalk, PowerPoint
USCS604,	Link Analysis and Specialized Search: Link Analysis, hubs and authorities, Page Rank and HITS algorithms, Similarity,	12	1. Introduction to Information Retrieval, C.	Black Board and chalk, PowerPoint

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Information Retrieval Unit 2	Hadoop & Map Reduce, Evaluation, Personalized search, Collaborative filtering and content-based recommendation of documents and products, handling ―invisible‖ Web, Snippet generation, Summarization, Question Answering, Cross-Lingual Retrieval.		Manning, P. Raghavan, and H. Schütze, Cambridge University Press, 2008	
USCS604, Information Retrieval Unit 3	Web Search Engine: Web search overview, web structure, the user, paid placement, search engine optimization/spam, Web size measurement, search engine optimization/spam, Web Search Architectures.	06	1. Introduction to Information Retrieval, C. Manning, P. Raghavan, and H. Schütze, Cambridge University Press, 2008	Black Board and chalk, PowerPoint
	XML retrieval: Basic XML concepts, Challenges in XML retrieval, A vector space model for XML retrieval, Evaluation of XML retrieval, Text-centric versus data-centric XML retrieval.	06	1. Introduction to Information Retrieval, C. Manning, P. Raghavan, and H. Schütze, Cambridge University Press, 2008	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: Information Technology CLASS: TYCS

SEMESTER: V MONTH: December to March ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE/S:

- To understand the ethics, legality, methodologies and techniques of hacking.

The learners will be able to:

- Learner will know to identify security vulnerabilities and weaknesses in the target applications.
- They will also know to test and exploit systems using various tools and understand the impact of hacking in real time machines.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Ethical Hacking Elective-II USCS506 Unit 1	**Information Security : Attacks and Vulnerabilities** **Introduction to information security :** Asset, Access Control, CIA, Authentication, Authorization, Risk, Threat, Vulnerability, Attack, Attack Surface, Malware, Security-Functionality-Ease of Use Triangle	4	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND Internet	Projector, Laptop, Black board& Chalk
	Types of malware : Worms, viruses, Trojans, Spyware, Rootkits	2	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND	Projector, Laptop, Black board& Chalk

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			Internet	
	Types of vulnerabilities : OWASP Top 10 : cross-site scripting (XSS), cross site request forgery (CSRF/XSRF), SQL injection, input parameter manipulation, broken authentication, sensitive information disclosure, XML External Entities, Broken access control, Security Misconfiguration, Using components with known vulnerabilities, Insufficient Logging and monitoring, OWASP Mobile Top 10, CVE Database	4	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND Internet	Projector, Laptop, Black board& Chalk
	Types of attacks and their common prevention mechanisms : Keystroke Logging, Denial of Service (DoS /DDoS), Waterhole attack, brute force, phishing and fake WAP, Eavesdropping, Man-in-the-middle, Session Hijacking, Clickjacking, Cookie Theft, URL Obfuscation, buffer overflow, DNS poisoning, ARP poisoning, Identity Theft, IoT Attacks, BOTs and BOTNETs	4	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND Internet	Projector, Laptop, Black board& Chalk
	Case-studies : Recent attacks – Yahoo, Adult Friend Finder, eBay, Equifax, WannaCry, Target Stores, Uber, JP Morgan Chase, Bad Rabbit	1	Internet	Projector, Laptop, Black board& Chalk
Ethical Hacking Elective-II USCS506 Unit 2	**Ethical Hacking – I (Introduction and pre-attack) Introduction:** Black Hat vs. Gray Hat vs. White Hat (Ethical) hacking, Why is Ethical hacking needed?, How is Ethical hacking different from security auditing and digital forensics?, Signing NDA, Compliance and Regulatory 15L concerns, Black box vs. White box vs. Black box, Vulnerability assessment and Penetration Testing.	5	CEH official Certified Ethical Hacking Review Guide, Wiley India Edition, 2007 AND Internet	Projector, Laptop, Black board& Chalk

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	Approach : Planning - Threat Modeling, set up security verification standards, Set up security testing plan – When, which systems/apps, understanding functionality, black/gray/white, authenticated vs. unauthenticated, internal vs. external PT, Information gathering, Perform Manual and automated (Tools: WebInspect/Qualys, Nessus, Proxies, Metasploit) VA and PT, How WebInspect/Qualys tools work: Crawling/Spidering, requests forging, pattern matching to known vulnerability database and Analyzing results, Preparing report, Fixing security gaps following the report	5	CEH official Certified Ethical Hacking Review Guide, Wiley India Edition, 2007 AND INTERNET	Projector, Laptop, Black board& Chalk
	Enterprise strategy : Repeated PT, approval by security testing team, Continuous Application Security Testing,	3	CEH official Certified Ethical Hacking Review Guide, Wiley India Edition, 2007 AND INTERNET	Projector, Laptop, Black board& Chalk
	Phases: Reconnaissance/foot-printing/Enumeration, Scanning, Sniffing	2	CEH official Certified Ethical Hacking Review Guide, Wiley India Edition, 2007 AND INTERNET	Projector, Laptop, Black board& Chalk
Ethical Hacking Elective-II	**Ethical Hacking :**Enterprise Security Phases : Gaining and Maintaining Access : Systems hacking – Windows and Linux – Metasploit and Kali Linux, Keylogging, Buffer Overflows, Privilege Escalation, Network hacking - ARP Poisoning, Password Cracking, WEP Vulnerabilities, MAC Spoofing, MAC Flooding, IPSpoofing, SYN Flooding, Smurf attack,	5	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	Projector, Laptop, Black board& Chalk
	Applications hacking : SMTP/Email-based attacks, VOIP vulnerabilities, Directory traversal, Input Manipulation, Brute force	5	Certified Ethical Hacker Study Guide v9, Sean-Philip	Projector, Laptop, Black board& Chalk

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USCS506 Unit 3	attack, Unsecured login mechanisms, SQL injection, XSS, Mobile apps security,		Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	
	Malware analysis : Netcat Trojan, wrapping definition, reverse engineering	1	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	Projector, Laptop, Black board& Chalk
	Phases : Covering your tracks : Steganography, Event Logs alteration	1	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	Projector, Laptop, Black board& Chalk
	Additional Security Mechanisms : IDS/IPS, Honeypots and evasion techniques, Secure Code Reviews (Fortify tool, OWASP Secure Coding Guidelines)	3	Certified Ethical Hacker Study Guide v9, Sean-Philip Oriyano, Sybex; Study Guide Edition,2016 AND INTERNET	Projector, Laptop, Black board& Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAMPADA DESHMUKH DEPARTMENT: INFORMATION TECHNOLOGY CLASS: T.Y.C.S.

SEMESTER: VI MONTH: DECEMBER - MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the procedures for identification, preservation, and extraction of electronic evidence
- Understand auditing and investigation of network and host system intrusions
- Learn analysis of documentation of information gathered
- Investigate various media to collect evidence, report them in a way that would be acceptable in the court of law
- Plan and prepare for all stages of an investigation - detection, initial response and management interaction

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS603 Unit 1, **Cyber Forensics**	Introduction to Computer Forensics and standard procedure, Incident Verification and System Identification ,	03	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board and Projector
	Recovery of Erased and damaged data, Disk Imaging and Preservation, Data Encryption and Compression, Automated Search Techniques, Forensics Software	04	Guide to computer forensics and investigations, Bill Nelson, Amelia	Black Board and Projector

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			Philips and Christopher Steuart, course technology,5th Edition,2015	
	Introduction to Network Forensics and tracking network traffic, Reviewing Network Logs	02	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board and Projecor
	Network Forensics Tools, Performing Live Acquisitions, Order of Volatility, Standard Procedure	03	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board and Projector
	Cell Phone and Mobile Device Forensics: Overview, Acquisition Procedures for Cell Phones and Mobile Devices	03	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board and Projector
USCS603, Unit 2, **Cyber Forensics**	Introduction to Internet Forensics, World Wide Web Threats, Hacking and Illegal access Obscene and Incident transmission	03	Guide to computer forensics and investigations, Bill Nelson, Amelia	Black Board and Projector

			Philips and Christopher Steuart, course technology,5th Edition,2015	
	Domain Name Ownership Investigation, Reconstructing past internet activities and events e-mail analysis, e-mail headers and spoofing, Laws against	04	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board and chalk
	Yahoo Messenger Social Media Forensics Social Media Investigations Browser Forensics	04	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board and chalk
	Cookie Storage and Analysis, Analyzing Cache and temporary internet files, Web browsing activity reconstruction	04	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board and chalk
USCS603, Unit 3, **Cyber Forensics**	Investigation, Evidence presentation and Legal aspects of Digital Forensics Authorization to collect the evidence	05	Guide to computer forensics and investigations, Bill Nelson, Amelia	Black Board , Projector

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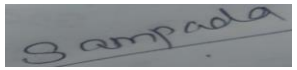
	Acquisition of Evidence, Authentication of the evidence		Philips and Christopher Steuart, course technology,5th Edition,2015	
	Analysis of the evidence, Reporting on the findings, Testimony Introduction to Legal aspects of Digital Forensics	05	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board , projector
	Laws & regulations, Information Technology Act, Giving Evidence in court, Case Study – Cyber Crime cases, Case Study – Cyber Crime cases	05	Guide to computer forensics and investigations, Bill Nelson, Amelia Philips and Christopher Steuart, course technology,5th Edition,2015	Black Board , Projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **T.Y.B.Sc.(CS)**

SEMESTER: **VI** MONTH: **December - March** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able:

- To get a clear understanding of AI and different search algorithms used for solving problems.
- To get acquainted with different learning algorithms and models used in machine learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS606 **Paper 4** **Data Science** **UNIT I**	**Introduction to Data Science:** What is Data? Different kinds of data	3	Doing Data Science, Rachel Schutt and Cathy O'Neil, O'Reilly,2013 Mastering Machine Learning with R, Cory Lesmeister, PACKT Publication,2015	Microsoft PowerPoint Presentation
	Introduction to high level programming language + Integrated Development Environment (IDE)	4		
	Exploratory Data Analysis (EDA) + Data Visualization, Different types of data sources	4		
	Data Management: Data Collection, Data cleaning/extraction, Data analysis &Modeling	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS606 **Paper 4** **Data Science** **UNIT II**	**Data Curation:** Query languages and Operations to specify and transform data, Structured/schema based systems as users and acquirers of data	4	Doing Data Science, Rachel Schutt and Cathy O'Neil, O'Reilly,2013 Mastering Machine Learning with R, Cory Lesmeister, PACKT Publication,2015	Microsoft PowerPoint Presentation
	Semi-structured systems as users and acquirers of data, Unstructured systems in the acquisition and structuring of data,	3		
	Security and ethical considerations in relation to authenticating and authorizing access to data on remote systems,	4		
	Software development tools, Large scale data systems, Amazon Web Services (AWS)	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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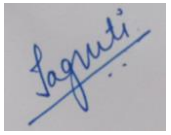
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS606 **Paper 4** **Data Science** **UNIT III**	**Statistical Modelling and Machine Learning:** Introduction to model selection: Regularization, bias/variance tradeoff e.g. parsimony, AIC, BIC, Cross validation, Ridge regressions and penalized regression e.g. LASSO	5	Doing Data Science, Rachel Schutt and Cathy O'Neil, O'Reilly,2013 Mastering Machine Learning with R, Cory Lesmeister, PACKT Publication,2015	Microsoft PowerPoint Presentation
	Data transformations: Dimension reduction, Feature extraction, Smoothing and aggregating	2		
	Supervised Learning: Regression, linear models, Regression trees, Time-series Analysis, Forecasting, Classification: classification trees, Logistic regression, separating hyperplanes, k-NN	4		
	Unsupervised Learning: Principal Components Analysis (PCA), k-means clustering, Hierarchical clustering, Ensemble methods	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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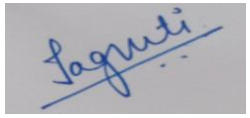

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande DEPARTMENT: Computer Science CLASS: T.Y.C.S.

SEMESTER: VI MONTH: Dec - March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

After completion of this course, learner should be able to list various applications of wireless sensor networks, describe the concepts, protocols, design, implementation and use of wireless sensor networks. Also implement and evaluate new ideas for solving wireless sensor network design issues.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS601 **Wireless Sensor Networks and Mobile Communication** UNIT : 01	**Introduction:** Introduction to Sensor Networks, unique constraints and challenges. Advantage of Sensor Networks, Applications of Sensor Networks, Mobile AdhocNETworks (MANETs) and Wireless Sensor Networks, Enabling technologies for Wireless Sensor Networks.	07	Protocols and Architectures for Wireless Sensor Network, Holger Kerl, Andreas Willig, John Wiley and Sons, 2005	Blackboard PPT Projector
	Sensor Node Hardware and Network Architecture: Single-node architecture, Hardware components & design constraints, Operating systems and execution environments, introduction to TinyOS and nesC. Network architecture, Optimization goals and figures of merit, Design principles for WSNs, Service interfaces of WSNs, Gateway concepts.	08		Blackboard PPT Projector

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USCS601 **Wireless Sensor Networks and Mobile Communication** UNIT : 02	**Medium Access Control Protocols:** Fundamentals of MAC Protocols, MAC Protocols for WSNs, Sensor-MAC Case Study.	05	Wireless Sensor Networks Technology, Protocols, and Applications ,KazemSohraby, Daniel Minoli and TaiebZnati, John Wiley & Sons, 2007	Blackboard PPT
	Routing Protocols : Data Dissemination and Gathering, Routing Challenges and Design Issues in Wireless Sensor Networks, Routing Strategies in Wireless Sensor Networks.	05		Blackboard PPT
	Transport Control Protocols : Traditional Transport Control Protocols, Transport Protocol Design Issues, Examples of Existing Transport Control Protocols, Performance of Transport Control Protocols.	05		Blackboard PPT
USCS601 **Wireless Sensor Networks and Mobile Communication** UNIT : 03	**Introduction, Wireless Transmission and Medium Access Control:** Applications, A short history of wireless communication.	02	Mobile communications, Jochen Schiller,2nd Edition, Addison wisely , Pearson Education,2012	Blackboard PPT
	Wireless Transmission: Frequency for radio transmission, Signals, Antennas, Signal propagation, Multiplexing, Modulation, Spread spectrum, Cellular systems.	05		Blackboard PPT
	Telecommunication, Satellite and Broadcast Systems: GSM: Mobile services, System architecture, Radio interface, Protocols, Localization And Calling, Handover, security, New data services; DECT: System architecture, Protocol architecture; ETRA, UMTS and IMT- 2000. Satellite Systems: History, Applications, Basics: GEO, LEO, MEO; Routing, Localization, Handover.	08		Blackboard PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AVINASH DILIP SONAWNAE DEPARTMENT: ____IT____

CLASS: _FYCS SEMESTER: 1 MONTH: July to Oct ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

Open Source has acquired a prominent place in software industry. Having knowledge of Open Source and its related technologies is an essential for Computer Science student. This course introduces Open Source methodologies and ecosystem to students.

Expected Learning Outcome:

1) Upon completion of this course, students should have a good working knowledge of Open Source ecosystem, its use, impact and importance.

2) This course shall help student to learn Open Source methodologies, case studies with real life examples

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS103 Free and Open-source Software Unit I	Introduction Introduction: Open Source, Free Software, Free Software vs. Open Source software, Public Domain Software, FOSS does not mean no cost. History: BSD, The Free Software Foundation and the GNU Project.	5	The Linux Documentation Project: http://www.tldp.org/ 2. Docker Project Home: http://www.docker.com 3. Linux kernel Home: http://kernel.org 4. Open Source Initiative: https://opensource.org/ 5. Linux Documentation Project: http://www.tldp.org/ 6. Wikipedia: https://en.wikipedia.org/ 7. https://en.wikipedia.org/wiki/Wikipedia:Contributing_to_Wikipedia 8. Github: https://help.github.com/ 9. The Linux Foundation: http://www.linuxfoundation.org/	BLACK BOARD AND CHALK
	Methodologies Open Source History, Initiatives, Principle and methodologies. Philosophy : Software Freedom, Open Source Development Model Licenses and Patents: What Is A License, Important FOSS Licenses (Apache,BSD,GPL, LGPL), copyrights and copy lefts, Patents Economics of FOSS : Zero Marginal Cost, Income-generation	5		

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	opportunities, Problems with traditional commercial software, Internationalization			
	Social Impact Open source vs. closed source, Open source government, Open source ethics. Social and Financial impacts of open source technology, Shared software, Shared source, Open Source in Government.	5		

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Unit II	Case Studies Example Projects: Apache web server, GNU/Linux, Android, Mozilla (Firefox), Wikipedia, Drupal, wordpress, GCC, GDB, github, Open Office	5	The Linux Documentation Project: http://www.tldp.org/ 2. Docker Project Home: http://www.docker.com 3. Linux kernel Home: http://kernel.org 4. Open Source Initiative: https://opensource.org/ 5. Linux Documentation Project: http://www.tldp.org/ 6. Wikipedia: https://en.wikipedia.org/ 7. https://en.wikipedia.org/wiki/Wikipedia:Contributing_to_Wikipedia 8. Github: https://help.github.com/ 9. The Linux Foundation: http://www.linuxfoundation.org/	BLACK BOARD AND CHALK
	. Study: Understanding the developmental models, licensings, mode of funding,commercial/non-commercial use. Open Source Hardware, Open Source Design, Open source Teaching. Open source media. Collaboration, Community and Communication Contributing to Open Source Projects	5		

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	Introduction to github, interacting with the community on github, Communication and etiquette, testing open source code, reporting issues, contributing code.	5		
UNIT III		5	The Linux Documentation Project: http://www.tldp.org/ 2. Docker Project Home: http://www.docker.com 3. Linux kernel Home: http://kernel.org 4. Open Source Initiative: https://opensource.org/ 5. Linux Documentation Project: http://www.tldp.org/ 6. Wikipedia: https://en.wikipedia.org/ 7. https://en.wikipedia.org/wiki/Wikipedia:Contributing_to_Wikipedia 8. Github: https://help.github.com/ 9. The Linux Foundation: http://www.linuxfoundation.org/	BLACK BOARD AND CHALK

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	Introduction to wikipedia, contributing to Wikipedia Or contributing to any prominent open source project of student's choice. Starting and Maintaining own Open Source Project.	Understanding Open Source Ecosystem Open Source Operating Systems: GNU/Linux, Android, Free BSD, Open Solaris. Open Source Hardware, Virtualization Technologies,	5			
	Containerization Technologies: Docker, Development tools, IDEs, debuggers, Programming languages, LAMP, Open Source database technologies	5				

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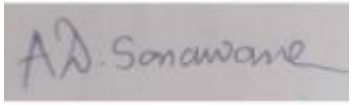
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GARGEE JAGDISH MHATRE. DEPARTMENT:INFORMATION TECHNOLOGY

CLASS:F.Y.B.Sc.CS SEMESTER:I MONTH:JULY-OCTOBER ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the digital representation of data in a computer system.
- Understand the theory and architecture of central processing unit.
- Learn the concepts of parallel processing, pipelining and interprocessor communication.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Unit I Computer Organization and Design	**Computer Abstractions and Technology:** Basic structure and operation of a computer, functional units and their interaction.	1	Carl Hamacher et al., Computer Organization and Embedded Systems, 6 ed., McGraw-Hill 2012	Blackboard, Chalk
	Representation of numbers and characters.	3		Blackboard, Chalk
	Logic circuits and functions:Combinational circuits and functions: Basic logic gates and functions, truth tables; logic circuits and functions.	1		Blackboard, Chalk
	Minimization with Karnaugh maps.	3		Blackboard, Chalk
	Synthesis of logic functions with and-or-not gates, nand gates, nor gates. Fan-in and fan-out requirements; tristate buffers.	2		Blackboard, Chalk
	Half adder, full adder, ripple carry adder. (Flip flops) Gated S-R and D latches, edge-triggered D latch.	2		Blackboard, Chalk

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	Shift registers and registers. Decoders, multiplexers.	1		Blackboard, Chalk
	Sequential circuits and functions: State diagram and state table; finite state machines and their synthesis.	2		Blackboard, Chalk
Paper-I Unit II Computer Organization and Design	**Instruction set architectures:** Memory organization, addressing and operations; word size, big-endian and little-endian arrangements.	2	Carl Hamacher et al., Computer Organization and Embedded Systems, 6 ed., McGraw-Hill 2012	Blackboard, Chalk
	Instructions, sequencing. Instruction sets for RISC and CISC (examples Altera NIOS II and Freescale ColdFire).	3		Blackboard, Chalk
	Operand addressing modes; pointers; indexing for arrays	3		Blackboard, Chalk
	Machine language, assembly language, assembler directives. Function calls, processor runtime stack, stack frame.	3		Blackboard, Chalk
	Types of machine instructions: arithmetic, logic, shift, etc.	2		Blackboard, Chalk
	Instruction sets, RISC and CISC examples.	2		Blackboard, Chalk
Paper-I Unit III Computer Organization and Design	**Basic Processor Unit:**Main components of a processor: registers and register files, ALU, control unit, instruction fetch unit, interfaces to instruction and data memories.	4	Carl Hamacher et al., Computer Organization and Embedded Systems, 6 ed., McGraw-Hill 2012	Blackboard, Chalk
	Datapath. Instruction fetch and execute; executing arithmetic/logic, memory access and	3		Blackboard, Chalk
	branch instructions; hardwired and microprogrammed control for RISC and CISC.	3		Blackboard, Chalk
	Basic I/O:Accessing I/O devices, data transfers between processor and I/O devices.	3		Blackboard, Chalk
	Interrupts and exceptions: interrupt requests and processing.	2		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: COMPUTER SCIENCE CLASS: FYCS

SEMESTER: I MONTH: JULY-OCTOBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concepts of programming before actually starting to write programs.
- Develop logic for Problem Solving.
- Be familiar about the basic constructs of programming such as data, operations, conditions, loops, functions etc.
- Apply the problem solving skills using syntactically simple language i.e. Python (version: 3.X or higher)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS102, Unit 1, Programming with Python- I	Reasons for Python as the learner's first programming language. Introduction to the IDLE interpreter (shell) and its documentation. Expression evaluation: similarities and differences compared to a calculator; expressions and operators of types int, float, boolean. Built-in function type. Operator precedence.	03	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	Enumeration of simple and compound statements. The expression statement. The assert statement, whose operand is a boolean expression (values true or false). The assignment statement, dynamic binding of names to values, automatic and implicit declaration of variable names with the assignment statement; assigning the valueNone to a name.	04	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	The del (delete) statement. Input/output with print and input functions. A statement list as a single interpreter command.	02	Paul Gries, Programming: An Introduction	Black Board and chalk

			to Computer Science Using Python 3	
	The import statement for already-defined functions and constants. The augmented assignment statement. The built-in help() function. Interactive and script modes of IDLE, running a script, restarting the shell. The compound statement def to define functions; the role of indentation for delimiting the body of a compound statement; calling a previously defined function. Compound data types str, tuple and list	03	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	Indexing individual elements within these types. Strings and tuples are immutable, lists are mutable. Built-in functions min, max, sum. Interactive solution of model problems, by repeatedly executing the body of a loop.	03	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
USCS102, Unit 2, Programming with Python- I	Advantages of functions, function parameters, formal parameters, actual parameters, global and local variables..	03	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	The range function, the iterative for statement. The conditional statements if, if-else, if-elif-else. The iterative statements while, while-else, for-else	04	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	The continue statement to skip over one iteration of a loop, the break statement to exit the loop. Nested compound statements.	04	Paul Gries, Programming: An Introduction	Black Board and chalk

			to Computer Science Using Python 3	
	Dictionaries: concept of key-value pairs, techniques to create, update and delete dictionary items. Problem-solving using compound types and statements	04	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
USCS102, Unit 3, Programming with Python- I	Anonymous functions. List comprehensions.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	Gentle introduction to object-oriented programming; using the built-in dir() function, enumerate the methods of strings, tuples, lists, dictionaries	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk
	Using these methods for problem-solving with compound types.	05	Paul Gries, Programming: An Introduction to Computer Science Using Python 3	Black Board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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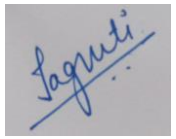

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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: I MONTH: JULY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define a function, its domain, co domain, range and bijective functions, composite and inverse functions
- Check whether a given relation is equivalence or partial order relation.
- Represent the given relation using diagraph, adjacency matrix and arrow diagram.
- Solve a recurrence relation using various methods like back tracking , generating function method etc.
- Explain and solve the tower of Hanoi puzzle.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DISCRETE MATHEMATICS Unit 1 Recurrence relations	➢ Functions, its domain, co domain and range ➢ Bijective, composite and inverse functions ➢ Relations: definition, examples and properties ➢ Equivalence & partial order relation, Hasse diagram ➢ Recurrence relation: definition, formulation & solving ➢ Tower of Hanoi puzzle	2 3 2 3 4 1	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: I MONTH: AUGUST-SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of fundamental principle of counting, permutations and combinations.
- State and prove binomial theorem, Pascal's identity, Vandermonde's identity.
- Find the number of ways of doing a task using permutations and combinations.
- State and use Pigeonhole principle to solve the problems.
- Understand the concept of finite state automata and finite state machine.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DISCRETE MATHEMATICS (Unit 2) Counting principles, Languages and Finite state machines	➢ FPC , permutations, combinations ➢ Binomial theorem, Pascal's & Vandermonde's identity ➢ Sum & product rule, pigeonhole principle ➢ Inclusion exclusion principle ➢ Languages, regular expression and regular grammar ➢ FSM, FSA, Godel numbers, turing machines	3 2 3 2 3 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: FY B.SC COMPUTER SCIENCE SEMESTER: I MONTH: OCTOBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Define graph and its types, adjacency and incidence matrix.
- Draw adjacency and incidence matrix of the given graph and vice versa.
- Find out the shortest path of weighted graph using Warshall's algorithm.
- Traverse a tree using inorder, preorder and postorder algorithm.
- Draw a tree for algebraic expressions and vice versa.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DISCRETE MATHEMATICS **(Unit 3)** Graphs & Trees	➢ Definition of Graphs and its types ➢ Diagraph, incidence and adjacency matrix ➢ Warshall's algorithm, BFS, DFS ➢ Trees : definition, types and properties ➢ Traversing binary trees ➢ Algorithms for searching, inserting and deleting in a binary tree	2 3 3 3 2 2	CALCULUS & ANALYTIC GEOMETRY (THOMAS & FINNY)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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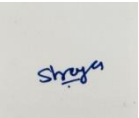

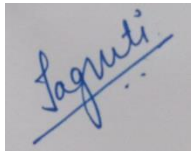

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar DEPARTMENT: Computer Science

CLASS: F.Y.B.Sc.(CS) SEMESTER: I MONTH: June to September ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

- The learners will be able to know descriptive statistical concepts
- The learner will able to study probability concepts required for computer learners.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper: 6 Descriptive statistics and introduction to probability **<u>Unit 1</u>**	**Data Presentation**: ● Data types:attribute,variable , discrete and continuous variable ● Data presentation: frequency distribution,histogram, O give curves, stem and leaf display	5	Gupta, S.C. and kapoor V.k.(1987): fundamental of mathematical statistics	Chalk and duster
	Data Aggregation: ● Measures of central tendency: mean , median, mode for raw data, discrete, grouped frequency distribution	5	Gupta, S.C. and kapoor V.k.(1987): fundamental of mathematical statistics	
	Measures of dispersion: ● Variance, standard deviation, coefficient of variation for raw data,discrete, grouped frequency distribution, quartiles, quantiles real life example	5	Gupta, S.C. and kapoor V.k.(1987): fundamental of mathematical statistics	

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Unit 2	**Moments**: ● Raw moments, Central moments,relation between raw and central moment	3		
	Measures of Skewness and kurtosis: ● Based on moments and quartiles ● Relation between mean , median and mode for symmetric and asymmetric frequency curve	3		
	Correlation and regression: ● Bivariate data, scatter plot, correlation,nonscence correlation, karl-pearson's coefficient of correlation, independence	5		
	Linear regression: ● Fitting of linear regression using least square method, coefficient of determination, properties of linear regression (only statement)	4		
Unit 3	**Probability:** ● Random experiment,sample space,events, types and operations of events ● Probability definition:classical, axiomatic ● Theorem of probability (without proof) -O<P(A)<1	8		

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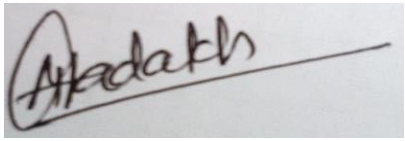
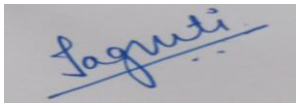
	- P(AUB)=P(A)+P(B)-P(AΔB) - P(A')=1-P(A) - P(A)<P(B) if A is subset of B			
	Conditional probability,Baye's theorem, independence, examples of probability	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Suvarna S Kannav DEPARTMENT: INFORMATION TECHNOLOGY

CLASS: FYCS SEMESTER: IMONTH:JULY-OCTOBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to : Students should be able to evaluate business information problem and find the requirements of a problem in terms of data. Students should be able to design the database schema with the use of appropriate data types for storage of data in database. Students should be able to create, manipulate, query and back up the databases.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS201, Introduction to Database Management Systems, UNIT-I	**Introduction of DBMS** Database, DBMS – Definition, Overview of DBMS, Advantages of DBMS, Levels of abstraction, Data independence, DBMS Architecture	03	Ramez Elmasri &Shamkant B.Navathe, Fundamentals of Database Systems, Pearson Education, Sixth Edition, 2010.	Blackboard, Chalk
	Data models – Client-Server Architecture,Object Based Logical Model, Record Based Logical Model (relational, hierarchical, network)	02		Blackboard, Chalk
	Entity Relationship Model - Entities, attributes, entity sets, relations, relationship sets , Additional constraints (key constraints, participation constraints, weak entities, aggregation / generalization, Conceptual Design using ER (entities VS attributes, Entity Vs relationship, binary Vs ternary, constraints beyond ER)	04		Blackboard, Chalk

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	Relational data model– Domains, attributes, Tuples and Relations, Relational Model Notation, Characteristics of Relations, Relational Constraints - primary key, referential integrity, unique constraint, Null constraint, Check constraint	04		Blackboard, Chalk
	Entity to Table, Relationship to tables with and without key constraints.	02		Blackboard, Chalk
USCS201, Introduction to Database Management Systems, UNIT-II	**ER to The Relational Model** Schema Refinement and normal forms :Functional Dependencies and 1NF, 2NF, 3NF and BCNF normal forms based on primary keys, lossless join decomposition.	03	1.RamezElmasri&ShamkantB.Navathe, Fundamentals of Database Systems, Pearson Education, Sixth Edition, 2010. 2. Joel Murach, Murach's MySQL, Murach, 2012	Blackboard, Chalk
	Relational Algebra operations (selection, projection, set operations union, intersection, difference, cross product, Joins –conditional, equi join and natural joins, division)	03		Blackboard, Chalk
	DDL Statements - Creating Databases, Using Databases, datatypes, Creating Tables (with integrity constraints – primary key, default, check, not null), Altering Tables, Renaming Tables, Dropping Tables, Truncating Tables, Backing Up and Restoring databases	02		Blackboard, Chalk
	DML Statements – Viewing the structure of a table insert, update, delete, Select – all columns, specific columns, unique records, conditional select, in clause, between clause, limit, aggregate functions (count, min, max, avg, sum), group by clause, having clause	03		Blackboard, Chalk

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	Functions – String Functions (concat, instr, left, right, mid, length, lcase/lower, ucase/upper, replace, strcmp, trim, ltrim, rtrim), Math Functions (abs, ceil, floor, mod, pow, sqrt, round, truncate) Date Functions (adddate, datediff, day, month, year, hour, min, sec, now, reverse)	02		Blackboard, Chalk
	Joining Tables – inner join, outer join (left outer, right outer, full outer)	02		Blackboard, Chalk
USCS201, Introduction to Database Management Systems, UNIT-III	**Sub queries** Sub queries – sub queries with IN, EXISTS, sub queries restrictions, Nested sub queries, ANY/ALL clause, correlated sub queries	03	Joel Murach, Murach's MySQL, Murach, 2012	Blackboard, Chalk
	Database Protection: Security Issues, Threats to Databases, Security Mechanisms, Role of DBA, Discretionary Access Control	03		Blackboard, Chalk
	Views (creating, altering dropping, renaming and manipulating views)	03		Blackboard, Chalk
	DCL Statements (creating/dropping users, privileges introduction, granting/revoking privileges, viewing privileges)	03		Blackboard, Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: SYCS

SEMESTER: III MONTH: JUNE- SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Write, compile and execute Java programs
- Build robust applications using Java's object-oriented features
- Create robust applications using Java class libraries
- Develop platform-independent GUIs
- Read and write data using Java streams

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS302, Core Java Unit 1	The Java Language: Features of Java, Java programming format, Java Tokens, Java Statements, Java Data Types, Typecasting, Arrays .	05	1) Herbert Schildt, Java The Complete Reference, Ninth Edition, McGraw-Hill Education, 2014 2) E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014 3) https://docs.oracle.com/javase/tutorial/	Black Board and chalk, Powerpoint

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	OOPS: Introduction, Class, Object, Static Keywords, Constructors, this Key Word, Inheritance, super Key Word, Polymorphism (overloading and overriding), Abstraction, Encapsulation, Abstract Classes, Interfaces	05	1. E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
	String Manipulations: String, String Buffer, String Tokenizer	01	https://docs.oracle.com/javase/tutorial/	Black Board and chalk, PowerPoint
	Packages: Introduction to predefined packages (java.lang, java.util,java.io, java.sql, java.swing), User Defined Packages, Access specifiers	04	1. E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
USCS302, Core Java Unit 2	Exception Handling: Introduction, Pre-Defined Exceptions, Try-Catch-Finally, Throws, throw, User Defined Exception examples.	05	1. Herbert Schildt, Java The Complete Reference, Ninth Edition, McGraw-Hill Education, 2014	Black Board and chalk, PowerPoint
	Multithreading: Thread Creations, Thread Life Cycle, Life Cycle Methods, Synchronization, Wait() notify() notify all() methods I/O	04	1. Herbert Schildt, Java The Complete Reference, Ninth Edition, McGraw-Hill Education, 2014	Black Board and chalk, PowerPoint
	Streams: Introduction, Byte-oriented streams, Character-oriented streams, File, Random access File, Serialization	03	1.Herbert Schildt, Java The Complete Reference, Ninth Edition, McGraw-Hill Education, 2014	PowerPoint

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	Networking: Introduction, Socket, Server socket, Client – Server Communication	03	https://www.tutorialspoint.com/java/java_networking.html	PowerPoint
USCS302, Core Java Unit 3	Wrapper Classes: Introduction, Byte, Short, Integer, Long, Float, Double, Character, Boolean classes	02	1.E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
	Collection Framework: Introduction, util Package interfaces, List, Set, Map, List interface & its classes, Set interface & its classes, Map interface & its classes	04	1.E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
	Inner Classes: Introduction, Member inner class, Static inner class, Local inner class, Anonymous inner class	04	1.E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint
	AWT: Introduction, Components, Event-Delegation-Model, Listeners, Layouts, Individual components Label, Button, CheckBox, Radio Button, Choice, List, Menu, Text Field, Text Area	05	1. E. Balagurusamy, Programming with Java, Tata McGraw-Hill Education India, 2014	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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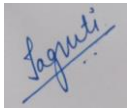

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:MONIKA MADHUKAR RAUT DEPARTMENT: IT

CLASS:SYCS SEMESTER: III MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to design and develop state of - the art web applications using client-side scripting, server-side scripting, and database connectivity

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
SKILL ENHANCEMENT: WEB PROGRAMMING (USCS307) Unit I	**HTML5:** Fundamental Elements of HTML, Formatting Text in HTML, Organizing Text in HTML, Links and URLs in HTML, Tables in HTML,Images on a Web Page, Image Formats, Image Maps, Colours, FORMs in HTML, Interactive Elements, Working with Multimedia - Audio and Video File Formats, HTML elements for inserting Audio / Video on a web page	8	HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP and jQuery, 2ed, Dreamtech Press	Black Board and Chalk, Computers while practical session
	CSS: Understanding the Syntax of CSS, CSS Selectors, Inserting CSS in an HTML Document, CSS properties to work with background of a Page, CSS properties to work with Fonts and Text Styles, CSS properties for positioning an element	7		
SKILL ENHANCEMENT: WEB PROGRAMMING (USCS307)	**JavaScript:**Using JavaScript in an HTML Document, Programming Fundamentals of JavaScript – Variables, Operators, Control Flow Statements, Popup Boxes, Functions – Defining and Invoking a Function, Defining Function arguments,Defining a Return Statement, Calling Functions with Timer	6	HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP and	Black Board and Chalk, Computers while practical session

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Unit II	**JavaScript Objects** - String, RegExp, Math, Date, Browser Objects - Window, Navigator, History, Location, Document, Cookies, Document Object Model, Form Validation using JavaScript	2	jQuery, 2ed, Dreamtech Press	Black Board and Chalk, Computers while practical session
	XML: Comparing XML with HTML, Advantages and Disadvantages of XML, Structure of an XML Document, XML Entity References, DTD, XSLT: XSLT Elements and Attributes - xsl:template, xsl:apply-templates, xsl:import, xsl:call-template, xsl:include, xsl:element, xsl:attribute, xsl:attribute-set, xsl:value-of	7		Black Board and Chalk, Computers while practical session
SKILL ENHANCEMENT: WEB PROGRAMMING (USCS307) Unit III	**AJAX**: AJAX Web Application Model, How AJAX Works, XMLHttpRequest Object – Properties and Methods, Handling asynchronous requests using AJAX	4	HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP and jQuery, 2ed, Dreamtech Press, PHP: A Beginners Guide, VikramVaswani, TMH	Black Board and Chalk, Computers while practical session
	PHP: Variables and Operators, Program Flow, Arrays, Working with Files and Directories, Working with Databases, Working with Cookies, Sessions and Headers	7		Black Board and Chalk, Computers while practical session
	Introduction to jQuery: Fundamentals, Selectors, methods to access HTML attributes, methods for traversing, manipulators, events, effects	4		Black Board and Chalk, Computers while practical session

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SONALI DATTATRAY SALVANIKAR DEPARTMENT: IT

CLASS:SYCS SEMESTER: SEM-III MONTH:JUN-SEP ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:Master concepts of stored procedure and triggers and its use.Learn about using PL/SQL for data management and understand concepts and implementations of transaction management and crash recovery.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-4 DBMS, UNIT-1	**Stored Procedures:** Types and benefits of stored procedures, creating stored procedures, executing stored procedures, altering stored procedures, viewing stored procedures.	4	SQL,PL/SQL - The Programming language of Oracle by Ivan Bayross , Database Management Systems by Ramakrishnam, Gehrke.	Blackboard & Chalk
	Triggers: Concept of triggers, Implementing triggers – creating triggers, Insert, delete, and update triggers, nested triggers, viewing, deleting and modifying triggers, and enforcing data integrity through triggers.	5		
	Sequences: creating sequences, referencing, altering and dropping a sequence.	2		
	File Organization and Indexing: Cluster, Primary and secondary indexing, Index data structure: hash and Tree based indexing	2		

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	Comparison of file organization: cost model, Heap files, sorted files, clustered files. Creating, dropping and maintaining indexes.	2		
UNIT-2	**Fundamentals of PL/SQL:** Defining variables and constants, PL/SQL expressions and comparisons: Logical Operators, Boolean Expressions, CASE Expressions Handling.	3	SQL,PL/SQL - The Programming language of Oracle by Ivan Bayross	Blackboard & Chalk
	Null Values in Comparisons and Conditional Statements, PL/SQL Datatypes: Number Types, Character Types, Boolean Type, Datetime and Interval Types.	3		
	Overview of PL/SQL Control Structures: Conditional Control: IF and CASE Statements, IF-THEN Statement, IF-THEN-ELSE Statement,	4		
	CASE Statement, Iterative Control: LOOP and EXIT Statements, WHILE-LOOP, FOR-LOOP, Sequential Control: GOTO and NULL Statements	5		
UNIT 3	**Transaction Management:** ACID Properties, Serializability, Two-phase Commit Protocol, Concurrency Control, Lock Management	3	SQL,PL/SQL - The Programming language of Oracle by Ivan Bayross, Database Management Systems by	Blackboard & Chalk
	Lost Update Problem, Inconsistent Read Problem , Read-Write Locks, Deadlocks Handling, Two Phase Locking protocol	3		
	DCL Statements: Defining a transaction, Making Changes Permanent with COMMIT, Undoing Changes with ROLLBACK, Undoing Partial Changes with SAVEPOINT and ROLLBACK.	3		

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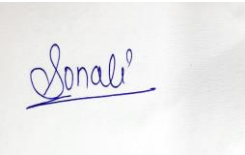
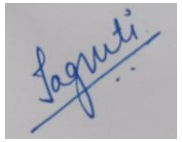
	Crash Recovery: ARIES algorithm. The log based recovery, recovery related structures like transaction and dirty page table	3	Ramakrishnam, Gehrke	
	Write-ahead log protocol, check points, recovery from a system crash, Redo and Undo phases.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Manisha Kotkar DEPARTMENT: CS

CLASS: S.Y.B.Sc.C.S. SEMESTER: III MONTH: JULY – OCTOBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Appreciate beauty of combinatorics and how combinatorial problems naturally arise in many settings.
2. Understand the combinatorial features in real world situations and Computer Science applications.
3. Apply combinatorial and graph theoretical concepts to understand Computer Science concepts and apply them to solve problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – I **COMBINATORICS AND GRAPH THEORY**	**Introduction to Combinatorics:** Enumeration, Combinatorics and Graph Theory/ Number Theory/Geometry and Optimization, Sudoku Puzzles	3	Applied Combinatorics Mitchel T. Keller and William T. Trotter	Black-Board
	. Strings, Sets, and Binomial Coefficients: Strings- A First Look, Combinations, Combinatorial, The Ubiquitous Nature of Binomial Coefficients,	4		
	The Binomial, Multinomial Coefficients. Induction: Introduction, The Positive Integers are Well Ordered, The Meaning of Statements,	4		
	Binomial Coefficients Revisited, Solving Combinatorial Problems Recursively, Mathematical Induction, and Inductive Definitions Proofs by Induction. Strong Induction	4		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – II **COMBINATORICS AND GRAPH THEORY**	**Graph Theory:** Basic Notation and Terminology, Introduction of Graph, Representation Of Graph, Isomorphism,	3	Applied Combinatorics Mitchel T. Keller and William T. Trotter	Black-Board
	Connected nd Disconnected Graph, Multigraphs : Loops and Multiple Edges, Eulerian and Hamiltonian Graphs, Graph Coloring,	3		
	Chromatic Number, Priifer Code Planar Counting, Labeled Trees, A Digression into Complexity Theory. Applying Probability to Combinatorics,	4		
	The Pigeon Holes Principle Small Ramsey Numbers, Estimating Ramsey Numbers, Applying Probability to Ramsey Theory, Ramsey's Theorem The Probabilistic Method	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – III **COMBINATORICS AND GRAPH THEORY**	**Network Flows:** Basic Notation and Terminology, Flows and Cuts, Augmenting Paths, The Ford-Fulkerson Labeling Algorithm, 15L A Concrete Example,	5	Applied Combinatorics Mitchel T. Keller and William T. Trotter	Black-Board
	Labelling Algorithm Halts, Integer Solutions of Linear Programming Problems. Combinatorial Applications of Network Flows: Introduction,	6		
	Matching in Bipartite Graphs, Chain partitioning, Pólya's Enumeration Theorem: Coloring the Vertices of a Square.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA RAJENDRAKUMAR PATIL DEPARTMENT:CS

CLASS:SYCS SEMESTER: SEM-3 MONTH: JUN-SEP ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
Students are able to :
Learn physical interfaces and electronics of Raspberry Pi and program them using practical's
Learn how to make consumer grade IoT safe and secure with proper use of protocols.

PAPER,TITLE, UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 6 Physical computing and IOT programming UNIT 1	**SoC and Raspberry PiSystem on Chip**: What is System on chip? Structure of System on Chip. **SoC products:** FPGA, GPU, APU, Compute Units.	4	Physical computing IOT programming by Himalaya publication	BLACK BOARD AND CHALK
	ARM 8 Architecture: SoC on ARM 8. ARM 8 Architecture Introduction	4		
	Introduction to Raspberry Pi: Introduction to Raspberry Pi, Raspberry Pi Hardware, Preparing your raspberry Pi.	4		
	Raspberry Pi Boot: Learn how this small SoC boots without BIOS. Configuring boot sequences and hardware	3		

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UNIT 2	**Programming Raspberry Pi** **Raspberry Pi and Linux**: About Raspbian, Linux Commands, Configuring Raspberry Pi with Linux Commands	3	Physical computing IOT programming by Himalaya publication	BLACK BOARD AND CHALK
	Programing interfaces: Introduction to Node.js, Python.	4		
	Raspberry Pi Interfaces: UART, GPIO, I2C, SPI	4		
	Useful Implementations: Cross Compilation, Pulse Width Modulation, SPI for Camera.	4		
Unit 3	. **Introduction to IoT**: What is IoT? IoT examples, Simple IoT LED Program.	3	Physical computing IOT programming by Himalaya publication	BLACK BOARD AND CHALK
	IoT and Protocols **IoT Security**: HTTP, UPnp, CoAP, MQTT, XMPP.	4		
	IoT Service as a Platform: Clayster, Thinger.io, SenseIoT, carriots and Node RED.	4		

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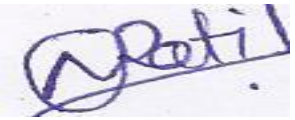
	IoT Security and Interoperability: Risks, Modes of Attacks, Tools forSecurity and Interoperability.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GayatreeKarnik DEPARTMENT: IT CLASS:S.Y.B.Sc.(C.S)

SEMESTER: III MONTH:JUNE-JULY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Importance of Operating System, role ,operations and function and environment
- Operating system services, system calls and structure
- Process scheduling, inter process communication and details of threads

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Unit 1 Operating Systems	**Introduction and Operating-Systems Structures**: Definition of Operating system, Operating System's role, Operating-System Operations, Functions of Operating System, Computing Environments	7	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk
	Operating-System Structures: Operating-System Services, User and Operating-System Interface, System Calls, Types of System Calls, Operating-System Structure	5	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk
	Processes: Process Concept, Process Scheduling, Operations on Processes, Interprocess Communication. **Threads**: Overview, Multicore Programming, Multithreading Models	3	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GayatreeKarnik DEPARTMENT: IT

CLASS:S.YB.Sc.(C.S..) SEMESTER:III MONTH:JULY-AUGUST ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- How the process are synchronized and scheduled in the CPU
- Different scheduling algorithms
- Deadlocks, how to avoid and recover from deadlocks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Unit 2 Operating Systems	**Process Synchronization**: General structure of a typical process, race condition, The Critical-Section Problem, Peterson's Solution, Synchronization Hardware, Mutex Locks, Semaphores, Classic Problems of Synchronization, Monitors	5	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk
	CPU Scheduling: Basic Concepts, Scheduling Criteria, Scheduling Algorithms (FCFS, SJF, SRTF, Priority, RR, Multilevel Queue Scheduling, Multilevel Feedback Queue Scheduling), Thread Scheduling	5	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk
	Deadlocks: System Model, Deadlock Characterization, Methods for Handling Deadlocks, Deadlock Prevention, Deadlock Avoidance, Deadlock Detection, Recovery from Deadlock	5	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GayatreeKarnik DEPARTMENT: IT

CLASS:S.Y.B.Sc.(C.S.) SEMESTER:III MONTH: AUGUST-SEPT. ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Difference between Main memory and virtual memory, memory allocation
- Overview of Disk structure, scheduling and management
- File Interface and how file system is implemented.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Unit 3 Operating Systems	**Main Memory**: Background, Logical address space, Physical address space, MMU, Swapping, Contiguous Memory Allocation, Segmentation, Paging, Structure of the Page Table	4	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk
	Virtual Memory: Background, Demand Paging, Copy-on-Write, Page Replacement, Allocation of Frames, Thrashing	4	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk
	Mass-Storage Structure: Overview, Disk Structure, Disk Scheduling, Disk Management	3	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk
	File-System Interface: File Concept, Access Methods, Directory and Disk Structure, File-System Mounting, File Sharing	2	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk

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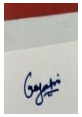
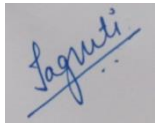
	File-System Implementation: File-System Structure, File-System Implementation, Directory Implementation, Allocation Methods, Free-Space Management	2	Abraham Silberschatz, Peter Galvin, Greg Gagne, Operating System Concepts, Wiley,8th Edition	Black Board and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **S.Y.B.Sc.(CS)**

SEMESTER: **III** MONTH: **June - September** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able:

1. Understand Grammar and Languages.
2. Learn about Automata theory and its application in Language Design.
3. Learn about Turing Machines and Pushdown Automata.
4. Understand Linear Bound Automata and its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS301 Paper I **Theory of Computation** **UNIT I**	**Automata Theory:** Defining Automaton, Finite Automaton, Transitions and Its properties, Acceptability by Finite Automaton	4	Theory of Computer Science, K. L. P Mishra, Chandrasekharan, PHI,3rd Edition. Introduction to Computer Theory, Daniel Cohen, Wiley,2nd Edition.	Chalk and Board
	Nondeterministic Finite State Machines, DFA and NDFA equivalence, Mealy and Moore Machines, Minimizing Automata.	4		
	Formal Languages: Defining Grammar, Derivations, Languges generated by Grammar	3		
	Chomsky Classification of Grammar and Languages, Recursive Enumerable Sets, Operations on Languages, Languages and Automata	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS301 **Paper I** **Theory of Computation** **UNIT II**	**Regular Sets and Regular Grammar:** Regular Grammar, Regular Expressions, Finite automata and Regular Expressions	4	Theory of Computer Science, K. L. P Mishra, Chandrasekharan, PHI,3rd Edition. Introduction to Computer Theory, Daniel Cohen, Wiley,2nd Edition.	Chalk and Board
	Pumping Lemma and its Applications, Closure Properties, Regular Sets and Regular Grammar	4		
	Context Free Languages: Context-free Languages, Derivation Tree, Ambiguity of Grammar, CFG simplification, Normal Forms, Pumping Lemma for CFG	4		
	Pushdown Automata: Definitions, Acceptance by PDA, PDA and CFG	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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USCS301 **Paper I** **Theory of Computation** **UNIT III**	**Linear Bound Automata:** The Linear Bound Automata Model, Linear Bound Automata and Languages.	4	Theory of Computer Science, K. L. P Mishra, Chandrasekharan, PHI,3rd Edition. Introduction to Computer Theory, Daniel Cohen, Wiley,2nd Edition.	Chalk and Board
	Turing Machines: Turing Machine Definition, Representations, Acceptability by Turing Machines.	4		
	Designing and Description of Turing Machines, Turing Machine Construction, Variants of Turing Machine,	3		
	Undecidability: The Church-Turing thesis, Universal Turing Machine, Halting Problem, Introduction to Unsolvable Problems	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **T.Y.B.Sc.(CS)**

SEMESTER: **V** MONTH: **June - September** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able:

- To get a clear understanding of AI and different search algorithms used for solving problems.
- To get acquainted with different learning algorithms and models used in machine learning.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 Paper I **Artificial Intelligence** **UNIT I**	**What Is AI:** Foundations, History and State of the Art of AI.	4	Artificial Intelligence: A Modern Approach, Stuart Russell and Peter Norvig,3rd Edition.	Microsoft PowerPoint Presentation
	Intelligent Agents: Agents and Environments, Nature of Environments, Structure of Agents.	3		
	Problem Solving by searching: Problem-Solving Agents, Example Problems, Searching for Solutions, Uninformed Search Strategies.	4		
	Informed (Heuristic) Search Strategies, Heuristic Functions.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 **Paper I** **Artificial Intelligence** **UNIT II**	**Learning from Examples:** Forms of Learning, Supervised Learning, Learning Decision Trees	3	Artificial Intelligence: A Modern Approach, Stuart Russell and Peter Norvig,3rd Edition.	Microsoft PowerPoint Presentation
	Evaluating and Choosing the Best Hypothesis, Theory of Learning	3		
	Regression and Classification with Linear Models ,Artificial Neural Networks	4		
	Nonparametric Models, Support Vector Machines, Ensemble Learning, Practical Machine Learning	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 **Paper I** **Artificial Intelligence** **UNIT III**	**Learning probabilistic models:** Statistical Learning, Learning with Complete Data.	4	Artificial Intelligence: A Modern Approach, Stuart Russell and Peter Norvig,3rd Edition.	Microsoft PowerPoint Presentation
	Learning with Hidden Variables: The EM Algorithm	3		
	Reinforcement learning: Passive Reinforcement Learning, Active Reinforcement Learning,	4		
	Generalization in Reinforcement Learning, Policy Search, Applications of Reinforcement Learning.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV** DEPARTMENT: **IT** CLASS:**TYBSCCS**

SEMESTER:**V** MONTH:**JUNE-SEPT** ACADEMIC YEAR:**2018-19**

LEARNING OBJECTIVE/S:

The learners will be able to :

understand computer Graphics programming using Directx or Opengl. Along with the VR and AR they should also aware of GPU, newer technologies and programming using most important API for windows.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS507 **Game Programming** Unit-1	**Cartesian Coordinate system:** The Cartesian XY-plane, Function Graphs, Geometric Shapes, Polygonal Shapes, Areas of Shapes, Theorem of Pythagoras in 2D, Coordinates, Theorem of Pythagoras in 3D, 3D Polygons, Euler's Rule	04	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Black Board and chalk
	Vectors: Vector Manipulation, multiplying a Vector by a Scalar, Vector Addition and Subtraction, Position Vectors, Unit Vectors, Cartesian Vectors, Vector Multiplication, Scalar Product, Example of the Dot Product, The Dot Product in Lighting Calculations, The Dot Product in Back-Face Detection, The Vector Product, The Right-Hand Rule, deriving a Unit	03	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Black Board and chalk,power point

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	Normal Vector for a Triangle Areas, Calculating 2D Areas			
	Transformations: 2D Transformations, Matrices, Homogeneous Coordinates, 3D Transformations, Change of Axes, Direction Cosines, rotating a Point about an Arbitrary Axis, Transforming Vectors, Determinants, Perspective Projection, Interpolation	06	Computer Graphics, C Version, Donald Hern and Pauline Baker, Pearson Education, 2nd Edition, 1997	Black Board and chalk,power point
	DirectX: Understanding GPU and GPU architectures. How they are different from CPU Architectures? Understanding how to solve by GPU?	02	Introduction To 3D Game Programming With Directx® 11	Black Board and chalk,power point
USCS507 **Game Programming** Unit-2	**Introduction To DirectX 11:** COM, Textures and Resources Formats, The swap chain and Page flipping, Depth Buffering, Texture Resource Views, Multisampling Theory and MS in Direct3D, Feature Levels	03	Introduction To 3D Game Programming With Directx® 11	Black Board and chalk,power point
	Direct3D 11 Rendering Pipeline: Overview, Input Assembler Stage (IA), Vertex Shader Stage (VS), The Tessellation Stage (TS), Geometry Shader Stage (GS), Pixel Shader Stage (PS), Output merger Stage (OM) Understanding Meshes or Objects, Texturing, Lighting, Blending.	03	Introduction To 3D Game Programming With Directx® 11	Black Board and chalk,power point
	Trigonometry: The Trigonometric Ratios, Inverse Trigonometric Ratios, Trigonometric	03	Introduction To 3D Game Programming With Directx® 11	Black Board and chalk,power point

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	Relationships, The Sine Rule, The Cosine Rule, Compound Angles, Perimeter Relationships			
	Interpolation: Linear Interpolant, Non-Linear Interpolation, Trigonometric Interpolation, Cubic Interpolation, Interpolating Vectors, Interpolating Quaternions	03	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Black Board and chalk,power point
	Curves: Circle, Bezier, B-Splines **Analytic Geometry:** Review of Geometry, 2D Analytic Geometry, Intersection Points, Point in Triangle, and Intersection of circle with straight line.	03	Mathematics for Computer Graphics, John Vince, Springer-Verlag London, 5th Edition,2017	Black Board and chalk,power point
USCS507 **Game Programming** Unit-3	**Introduction to Rendering Engines:** Understanding the current market Rendering Engines. Understanding AR, VR and MR.Depth Mappers, Mobile Phones, Smart Glasses, HMD's **Unity Engine: Multi-platform publishing, VR + AR:** Introduction and working in Unity, 2D, Graphics, Physics, Scripting, Animation, Timeline, Multiplayer and Networking, UI, Navigation and Pathfinding, XR, Publishing.	10	https://docs.unity3d.com/Manual/index.html	Black Board and chalk,power point
	Scripting: Scripting Overview, Scripting Tools and Event Overview **XR:** VR, AR, MR, Conceptual Differences. SDK, Devices	05	https://docs.unity3d.com/Manual/index.html	Black Board and chalk,power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAMPADA DESHMUKH DEPARTMENT: INFORMATION TECHNOLOGY CLASS: T.Y.C.S.

SEMESTER: V MONTH: JUNE - SEPTEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concepts of basic computer security, Network Security and Cryptography.
- Understand different techniques of cryptography.
- Learn security threats and vulnerabilities and identify security problems.
- Identify threats of Network Security and apply protocol for the network.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS504 Unit 1, **Information and Network Security**	Security Trends, The OSI Security Architecture, Security Attacks, Security Services, Security Mechanisms	03	Cryptography and Network Security: Principles and Practice 5th Edition, William	Black Board and chalk
	Classical Encryption Techniques: Symmetric Cipher Model, Substitution Techniques . Transposition Techniques, Steganography, Block Cipher Principles, The Data Encryption Standard, The Strength of DES	04	Cryptography and Network Security, Atul Kahate, Tata McGraw-Hill, 2013.	Black Board and chalk

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	Multiple encryption Triple DES Advanced Encryption Algorithm	02	Cryptography and Network Security, Atul Kahate, Tata McGraw-Hill, 2013.	Black Board and chalk
	Principles of public key cryptosystem concept and working Modes of operation Block cipher	03	Cryptography and Network Security: Principles and Practice 5th Edition, William	Black Board and chalk
	Stream cipher RSA Algorithm concept RSA algorithm problem solving	03	Cryptography and Network Security, Atul Kahate, Tata McGraw-Hill, 2013.	Black Board and chalk
USCS504, Unit 2, **Information and Network Security**	**Key Management:** Public-Key Cryptosystems Key Management Diffie-Hellman Key Exchange	03	Cryptography and Network Security: Principles and Practice 5th Edition, William	Black Board and chalk
	Message Authentication and Hash Functions: Authentication Requirements, Authentication Functions, Message Authentication Codes Hash Functions, Security of Hash Functions and Macs,	04	Cryptography and Network Security, Atul Kahate, Tata McGraw-Hill, 2013.	Black Board and chalk
	HMAC Secure Hash Algorithm	04	Cryptography and Network Security: Principles and Practice 5th Edition, William	Black Board and chalk

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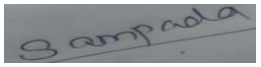
	Digital Signatures and Authentication: Digital Signatures, Authentication Protocols			
	Digital Signature Standard **Authentication Applications:** Kerberos, X.509 Authentication, Public-Key Infrastructure	04	Cryptography and Network Security: Principles and Practice 5th Edition, William	Black Board and chalk
USCS504, Unit 3, **Information and Network Security**	**Electronic Mail Security:** Pretty Good Privacy, S/MIME **IP Security:** Overview, Architecture, Authentication Header, Encapsulating Security Payload, Combining Security Associations, Key Management	05	Cryptography and Network Security: Principles and Practice 5th Edition, William	Black Board , Projector
	Web Security: Web Security Considerations, Secure Socket Layer and Transport Layer Security, Secure Electronic Transaction **Intrusion:** Intruders, Intrusion Techniques, Intrusion Detection	05	Cryptography and Network Security: Principles and Practice 5th Edition, William	Black Board , projector
	Malicious Software: Viruses and Related Threats, Virus Countermeasures, DDOS **Firewalls:** Firewall Design Principles, Types of Firewalls	05	Cryptography and Network Security: Principles and Practice 5th Edition, William	Black Board , Projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Priyanka Roshan Brid DEPARTMENT: Information Technology

CLASS: TYCS SEMESTER: V MONTH: JUNE to SEPT ACADEMIC YEAR:2018-2019

LEARNING OBJECTIVE/S:

•To understand the details of web services technologies like SOAP, WSDL, and UDDI. To learn how to implement and deploy web service client and server.

•To understand the design principles and application of SOAP and REST based web services (JAX-Ws and JAX-RS).

•To understand WCF service. To design secure web services and QoS of Web Services

The learners will be able to:

•Emphasis on SOAP based web services and associated standards such as WSDL. Design SOAP based / RESTful / WCF services Deal with Security and QoS issues of Web Services

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Web Services Elective-II USCS506 Unit 1	**Web services basics:** What Are Web Services? Types of Web Services Distributed computing infrastructure,	5	Web Services: Principles and Technology,Michael P. Papazoglou, Pearson Education Limited, 2008	Projector, Laptop, Black board& Chalk

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	overview of XML, SOAP, Building Web Services with JAX-WS, Registering and Discovering Web Services, Service Oriented Architecture	5	Web Services: Principles and Technology,Michael P. Papazoglou, Pearson Education Limited, 2008	Projector, Laptop, Black board& Chalk
	Web Services Development Life Cycle, Developing and consuming simple Web Services across platform	5	Web Services: Principles and Technology,Michael P. Papazoglou, Pearson Education Limited, 2008	Projector, Laptop, Black board& Chalk
Web Services Elective-II USCS506 Unit 2	**The REST Architectural style:** Introducing HTTP, The core architectural elements of a RESTful system, Description and discovery of RESTful web services,	5	RESTful Java Web Services, Jobinesh Purushothaman, PACKT Publishing,2 nd Edition, 2015	Projector, Laptop, Black board& Chalk
	Java tools and frameworks for building RESTful web services, JSON message format and tools and frameworks around JSON, Build RESTful web services with JAX-RS APIs,	5	RESTful Java Web Services, Jobinesh Purushothaman, PACKT Publishing,2 nd Edition, 2015	Projector, Laptop, Black board& Chalk
	The Description and Discovery of RESTful Web Services, Design guidelines for building RESTful web services, Secure RESTful web services.	5	RESTful Java Web Services, Jobinesh Purushothaman, PACKT Publishing,2 nd Edition, 2015	Projector, Laptop, Black board& Chalk
Web Services Elective-II USCS506 Unit 3	**Developing Service-Oriented Applications with WCF :** What Is Windows Communication Foundation, Fundamental Windows Communication Foundation Concepts	5	Developing Service-Oriented Applications with WCF, Microsoft, 2017 https://docs.microsoft.com/en-us/dotnet/framework/wcf/index	Projector, Laptop, Black board& Chalk
	Windows Communication Foundation Architecture,	3	Developing Service-Oriented Applications with WCF,	Projector, Laptop, Black board& Chalk

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			Microsoft, 2017 https://docs.microsoft.com/en-us/dotnet/framework/wcf/index	
	WCF and .NET Framework Client Profile, Basic WCF Programming, WCF Feature Details. Web Service QoS	7	Developing Service-Oriented Applications with WCF, Microsoft, 2017 https://docs.microsoft.com/en-us/dotnet/framework/wcf/index	Projector, Laptop, Black board& Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Kiran Yande DEPARTMENT: Computer Science CLASS: T.Y.C.S.

SEMESTER: V MONTH: June - September ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand various software testing methods and strategies. Understand a variety of software metrics, and identify defects and managing those defects for improvement in quality for given software. Design SQA activities, SQA strategy, formal technical review report for software quality control and assurance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USCS501 Software Testing and Quality Assurance UNIT : 01	**Software Testing and Introduction to quality :** Introduction, Nature of errors, an example for Testing, Definition of Quality , QA, QC, QM and SQA , Software Development Life Cycle, Software Quality Factors	05	Software Engineering for Students, A Programming Approach, Douglas Bell, 4th Edition,, Pearson Education, 2005	Blackboard PPT Projector
	Verification and Validation : Definition of V &V , Different types of V & V Mechanisms, Concepts of Software Reviews, Inspection and Walkthrough	05		Blackboard PPT Projector
	Software Testing Techniques : Testing Fundamentals, Test Case Design, White Box Testing and its types, Black Box Testing and its types	05		Blackboard PPT Projector

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USCS501 Software Testing and Quality Assurance UNIT : 02	**Software Testing Strategies :** Strategic Approach to Software Testing, Unit Testing, Integration Testing, Validation Testing, System Testing	05	Software Engineering – A Practitioners Approach, Roger S. Pressman, 5th Edition, Tata McGraw Hill, 2001	Blackboard PPT
	Software Metrics : Concept and Developing Metrics, Different types of Metrics, Complexity metrics	05		Blackboard PPT
	Defect Management: Definition of Defects, Defect Management Process, Defect Reporting, Metrics Related to Defects, Using Defects for Process Improvement.	05		Blackboard PPT
USCS501 Software Testing and Quality Assurance UNIT : 03	**Software Quality Assurance :** Quality Concepts, Quality Movement, Background Issues, SQA activities, Software Reviews, Formal Technical Reviews, Formal approaches to SQA, Statistical Quality Assurance, Software Reliability, The ISO 9000 Quality Standards, , SQA Plan , Six sigma, Informal Reviews	07	Quality Management, Donna C. S. Summers, 5th Edition, Prentice-Hall, 2010. Total Quality Management, Dale H. Besterfield, 3rd Edition, Prentice Hall, 2003.	Blackboard PPT
	Quality Improvement : Introduction, Pareto Diagrams, Cause-effect Diagrams, Scatter Diagrams, Run charts	03		Blackboard PPT
	Quality Costs : Defining Quality Costs, Types of Quality Costs, Quality Cost Measurement, Utilizing Quality Costs for Decision-Making **Textbook**(s	05		Blackboard PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: COMPUTER SCIENCE CLASS: MSc.CS(Part 1)

SEMESTER: I MONTH: AUGUST-DECEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:
The learners will be able to:

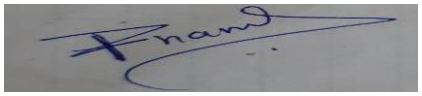
- Understand the concepts of Robotics and Artificial Intelligence.
- Develop logic for developing Robot.
- Be familiar about the basic concepts of Artificial Intelligence.
- Apply the problem solving skills on Artificial Intelligence Algorithms.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS104, Unit 1, Robotics and Artificial Intelligence.	What is a Robot? Definition, History of Robots: Control Theory, Cybernetics, Grey Walter Tortoise, Analog Electronic Circuit, Reactive Theory, Braitenberg's Vehicle, Artificial Intelligence, Vision Based Navigation, Types of Robot Control.	05	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation
	Robot Components: Embodiment, Sensors, States, Action, Brains and Brawn, Autonomy, Arms, Legs, Wheels, Tracks, and What really drives them effectors and actuators: Effector, Actuator, Passive and Active Actuation, Types of Actuator, Motors, Degree of freedom Locomotion: Stability, Moving and Gaits, Wheels and Steering, Staying on the path.	05	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation

	Manipulators: Endeffectors, Teleoperation, Why is manipulation hard? Sensors: Types of Sensors, Levels of Processing, Passive and Active sensors, Switches, Light sensors, Resistive position sensor.	05	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation
PSCS104, Unit 2, Robotics and Artificial Intelligence.	Ultrasonic and Sonar sensing, Specular Reflection, Laser Sensing, Visual Sensing, Cameras, Edge Detection, Motion Vision, Stereo Vision, Biological Vision, Vision for Robots	07	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation
	Feedback or Closed Loop Control: Example of Feedback Control Robot, Types of feedback control, Feed forward or Open loop control.	08	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation
PSCS104, Unit 3, Robotics and Artificial Intelligence.	Algorithm, Architecture, The many ways to make a map, What is planning, Cost of planning, Reactive systems, Action selection, Subsumption architecture.	07	The Robotics Primer by Maja J Matarić, MIT press Cambridge, Massachusetts, London, England (2007).	Power Point Presentation
	How to sequence behavior through world, hybrid control, Behavior based control and Behavior Coordination, Behavior Arbitration, Distributed mapping, Navigation and Path planning.	08	The Robotics Primer by Maja J Matarić, MIT press Cambridge,	Power Point Presentation

			Massachusetts, London, England (2007).	
PSCS104, Unit 4, Robotics and Artificial Intelligence.	Introduction, State space search: Generate and test, Simple search, Depth First Search (DFS), Breadth First Search (DFS), Comparison and quality of solutions.	07	Artificial Intelligence: A Modern Approach, 3e, Stuart Jonathan Russell, Peter Norvig, Prentice Hall Publications (2010)	Power Point Presentation
	Heuristic Search: Heuristic functions, Best First Search (BFS), Hill Climbing, Local Maxima, Beam search, Tabu search. Finding Optimum paths: Brute force, branch & bound, refine search, Dijkstra's algorithm, A* algorithm. Admissibility of A* algorithm.	08	Artificial Intelligence: A Modern Approach, 3e, Stuart Jonathan Russell, Peter Norvig, Prentice Hall Publications (2010)	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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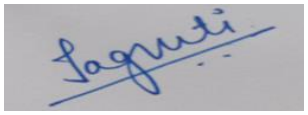

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **MSCCS** SEMESTER:I

MONTH: **AUG-DEC** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:

The learners will be able to :

understand basic principles of algorithm design and why algorithm analysis is important
understand how to implement algorithms in JAVA
understand how to transform new problems into algorithmic problems with efficient solutions
understand algorithm design techniques for solving different problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS101 Analysis of Algorithms and Researching Computing **Unit I: Design strategies**	The Role of Algorithms in Computing: Algorithms as a technology. Getting Started: Insertion sort, Analyzing algorithms, Designing algorithms. Growth of Functions: Asymptotic notation, Standard notations and common functions. Divide-and-Conquer: The maximum-subarray problem, Strassen's algorithm for matrix multiplication, The substitution method for solving recurrences. Probabilistic Analysis and Randomized Algorithms: The hiring problem, Indicator random variables, Randomized algorithms.	15	Introduction to Algorithm, Thomas H Cormen, PHI	Black board and chalk,power point

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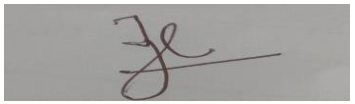
PSCS101 **Unit II: Advanced Design and Analysis Techniques**	Dynamic Programming: Rod cutting, Elements of dynamic programming, longest common subsequence. Greedy Algorithms: An activity-selection problem, Elements of the greedy strategy, Huffman codes. Elementary Graph Algorithms: Representations of graphs, Breadth-first search, Depth-first search. Minimum Spanning Trees: Growing a minimum spanning tree, Algorithms of Kruskal and Prim. Single-Source Shortest Paths: The Bellman-Ford algorithm, Single-source shortest paths in directed acyclic graphs, Dijkstra's algorithm.	15	Introduction to Algorithm, Thomas H Cormen, PHI	Black board and chalk,power point
PSCS101 **Unit III: Number-Theoretic Algorithms and NP – Completeness**	Elementary number-theoretic notions, Greatest common divisor, Modular arithmetic, Solving modular linear equations, The Chinese remainder theorem, Powers of an element, The RSA public-key cryptosystem NP-Completeness: Polynomial time, Polynomial-time verification, NP-completeness and reducibility, NP-complete problems. Approximation Algorithms: The vertex-cover problem, The traveling-salesman problem, The set-covering problem, subset-sum problem.	15	Introduction to Algorithm, Thomas H Cormen, PHI	Black board and chalk,power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **M.Sc. (CS)**

SEMESTER: **I** MONTH: **August - December** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able:

- To acquire knowledge about how to execute queries on these fragments that will demonstrate distributed databases environment.
- To learn how to create temporal database
- To learn how to create XML database
- To understand multimedia database systems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS103 **Paper III** **Advanced Database Systems** **UNIT I**	**Unit I: Distributed Database Concepts** Definition of Distributed databases and Distributed Database Management System (DDBMS), Distributed transparent system. DDBMS Architecture: DBMS standardization, Global, Local, External, and Internal Schemas, Architectural models for DDBMS. Distributed database design: Design problem of distributed systems, Design, strategies (top-down, bottom-up), Fragmentation, Allocation and replication of fragments. Query Processing Overview, Query Optimization.	15	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS103 **Paper III** **Advanced Database Systems** **UNIT II**	**Unit II: Transaction Processing in Distributed databases and Parallel databases** Transaction Management: Definition and examples, formalization of a transaction, ACID properties, classification of transaction. Concurrency Control: definition, execution schedules, examples, locking based algorithms, timestamp ordering algorithms, deadlock management. DBMS reliability: Definitions and Basic Concepts, Local Recovery Management, In-place update, out-of-place update, Distributed Reliability Protocols, Two phase commit protocol, Three phases commit protocol. Parallel Database System: Definition of Parallel Database Systems. Parallel query evaluation: Speed up and scale up, Query Parallelism: I/O Parallelism (Data Partitioning) Intra-query Parallelism, Inter –Query Parallelism, Intra Operation Parallelism, Inter Operation Parallelism.	15	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS103 **Paper III** **Advanced Database Systems** **UNIT III**	**Unit III: Object Oriented, Temporal and Spatial Databases:** Object Oriented Database: Object Identity, Object structure, Type Constructors, Encapsulation of Operations, Methods, Persistence, Type and Class Hierarchies, Inheritance, Complex Objects, Object-oriented DBMS, Languages and Design: ODMG Model, Object Definition Languages (ODL), Object Query Languages (OQL). Temporal and Spatial Database: Introduction to Temporal Database: Time ontology, structure, and granularity, Temporal data models, Temporal relational algebras. Introduction to Spatial Database: Definition, Types of spatial data, Geographical Information Systems (GIS), Conceptual Data Models for spatial databases, Logical data models for spatial databases: rastor and vector model. Physical data models for spatial databases: Clustering methods (space filling curves), Storage methods (R-tree). Query processing.	15	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

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PSCS103 **Paper III** **Advanced Database Systems** **UNIT IV**	**Unit IV: Deductive, Active, Multimedia and XML Databases** Deductive Database: Introduction to recursive queries, Datalog Notation, Clause Form and Horn Clauses, Interpretation of model: Least Model semantics, The fixed point operator, safe Datalog program, recursive query with negation. Active Database: Languages for rule specification: Events, Conditions, Actions. XML and Database: Structure of XML Data, XML Document Schema, Querying and Transformation, Storage of XML Data. Introduction to multimedia database systems.	15	Database Management Systems, 3rd edition, Raghu Ramakrishnan and Johannes Gehrke, McGraw-Hill (2002).	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. C.S SEMESTER: I MONTH: August-December ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:
a. learn different networking protocols, virtualization technique, wireless sensor network.
b. working of wireless sensor network

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II PSCS102 Advanced Networking Concepts Unit 1	Networking Internet and Intranet, Protocol layer and their services, Network Applications like Web, HTTP, FTP and Electronic Mail in the Internet, Domain Name System, Transport-Layer Services, Multiplexing and Demultiplexing, UDP, TCP, TCP Congestion Control, Network Layer, Virtual Circuit and Datagram Networks, Need of Router, The Internet Protocol (IP), Routing Algorithms, Routing in the Internet.	15	Computer Networking: A Top-Down Approach 6th edition, James F. Kurose, Keith W. Ross, Pearson (2012).	PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

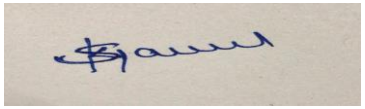
CLASS: M. Sc. C.S SEMESTER: I MONTH: August-December ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:
a. learn different networking protocols, virtualization technique, wireless sensor network.
b. working of wireless sensor network

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II PSCS102 Advanced Networking Concepts Unit 2	Network Virtualization Need for Virtualization, The Virtual Enterprise, Transport Virtualization-VNs, Central Services Access: Virtual Network Perimeter, A Virtualization Technologies primer: theory, Network Device Virtualization, Data-Path Virtualization, Control-Plane Virtualization, Routing Protocols.	15	Network Virtualization, Victor Moreno, Kumar Reddy, Cisco Press (2006).	PowerPoint presentation
Paper II PSCS102 Advanced Networking Concepts Unit 3	Adhoc Networking Introduction, application of MANET, challenges, Routing in Ad hoc networks, topology & position based approaches, Routing protocols: topology based, position based, Broadcasting, Multicasting, & Geocasting, Wireless LAN, Transmission techniques, MAC protocol issues, Wireless PANs, The Bluetooth technology.	15	Ad Hoc and Sensor Networks: Theory and Applications 2nd edition; Carlos de Morais Cordeiro, Dharma Prakash Agrawal, World Scientific Publishing Company; 2 edition (2011)	PowerPoint presentation
Paper II PSCS102	Wireless Sensor networks: Need and application of sensor networks, sensor networks design considerations, empirical energy consumption, sensing and	15	Ad Hoc and Sensor Networks: Theory and Applications 2nd	PowerPoint presentation

Advanced Networking Concepts Unit 4	communication range, design issues, localization scheme, clustering of SNs, Routing layer, Sensor networks in controlled environment and actuators, regularly placed sensors, network issues, RFID as passive sensors.		edition; Carlos de Morais Cordeiro, Dharma Prakash Agrawal, World Scientific Publishing Company; 2 edition (2011)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. BRIJESH Y JOSHI DEPARTMENT: Computer Science

CLASS: M.Sc.C.S. SEMESTER: I MONTH: AUG to OCT ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

- To be able to understand the purpose and products of research
- To understand the overview of research process.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-01 Analysis of Algorithms and Researching Computing, Unit-4	Researching Computing Introduction, purpose and products of research, overview of research process, internet research, participants and research ethics, reviewing literature, design and creation, experiments, Quantitative data analysis, presentation of research	12	Research Methodology, Methods and Techniques, Kothari, C.R.,1985, third edition, New Age International (2014) . Basic of Qualitative Research (3rd Edition), Juliet Corbin & Anselm Strauss:, Sage Publications (2008).	Laptop, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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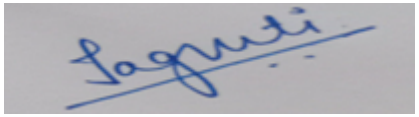

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. BRIJESH Y JOSHI DEPARTMENT: Computer Science

CLASS: M.Sc.C.S. SEMESTER: I MONTH: AUG to OCT ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

- To be able to understand the purpose and products of research
- To understand the overview of research process.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-01 Analysis of Algorithms and Researching Computing, Unit-4	Researching Computing Introduction, purpose and products of research, overview of research process, internet research, participants and research ethics, reviewing literature, design and creation, experiments, Quantitative data analysis, presentation of research	12	Research Methodology, Methods and Techniques, Kothari, C.R.,1985, third edition, New Age International (2014) . Basic of Qualitative Research (3rd Edition), Juliet Corbin & Anselm Strauss:, Sage Publications (2008).	Laptop, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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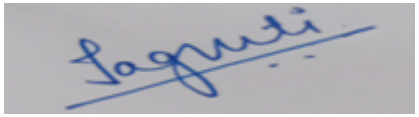

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shilpa Rodrigues **DEPARTMENT**: COMPUTER SCIENCE **CLASS**: MSc.CS(Part II)

SEMESTER: **III** **MONTH**: July - Nov **ACADEMIC YEAR**: 2018-19

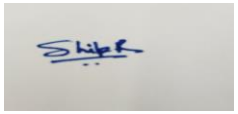
LEARNING OBJECTIVES:
The learners will be able to:

- Understand the social networks in real world.
- Represtation of social networks in graph theory.
- Identifying equivalence classes and analysis of equivalence classes.
- Understanding one mode and two mode netwroks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS302 , Unit 3 , Social Network Analysis.	Approaches to network positions and social roles- defining equivalence or similarity, structural equivalence, automorphic equivalence, finding equivalence sets, brute force and Tabu search, regular equivalence,	07	Introduction to Social Network Methods: Robert A. Hanneman, Mark Riddle	Power Point Presentation
	equivalence of distances: Maxsim, regular equivalence, Measuring similarity/dissimilarity- valued relations, Pearson correlations covariance and cross-products, Understanding clustering- agglomerative and divisive clusters, Euclidean, Manhattan, and squared distances, binary relations, matches: exact, Jaccard, Hamming,	08	Introduction to Social Network Methods: Robert A. Hanneman, Mark Riddle	Power Point Presentation

PSCS302 , Unit 4 , Social Network Analysis.	Understanding mode networks- Bi-partite data structures, visualizing two-mode data, quantitative analysis using two-mode Singular value decomposition (SVD) analysis.	07		Power Point Presentation
	two-mode factor analysis, two-mode correspondence analysis, qualitative analysis using two-mode core-periphery analysis, two-mode factions analysis, affiliation and attribute networks.	08		Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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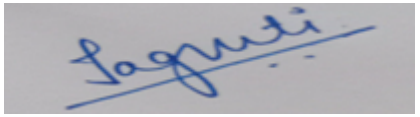

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. C.S SEMESTER: II MONTH: February-May ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:
Learn different computer attacks and different security techniques

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 PSCS2032 Cyber and Information Security (Network Security) Unit 1	Computer Security Principles of Security, Different Attacks: malicious and non-malicious program, Types of Computer Criminals. Operating System Security: Protected objects and methods of protection. Memory address protection: Fence, Relocation, Base/Bound Registers, Tagged Architecture, Segmentation, Paging, Directory, access control list. Database Security: Security requirements, Integrity, Confidentiality, Availability, Reliability of Database, Sensitive data, Multilevel database, Proposals for multilevel security. .	15	Security in Computing 4th edition, Charles P. Pfleeger, Charles P. Pfleeger, Shari Lawrence Pfleeger, Prentice Hall; 4th edition (2006)	PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

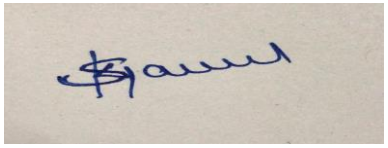
NAME OF THE STAFF: Ms. Shweta Kiran Yande DEPARTMENT: CS

CLASS: M. Sc. C.S SEMESTER: II MONTH: February-May ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:
Learn different computer attacks and different security techniques

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 PSCS2032 Cyber and Information Security (Network Security) Unit 2	Network Security Different types of network layer attacks, Firewall (ACL, Packet Filtering, DMZ, Alerts and Audit Trials) – IDS,IPS and its types (Signature based, Anomaly based, Policy based, Honeypot based). Web Server Security: SSL/TLS Basic Protocol-computing the keys-client authentication-PKI as deployed by SSL Attacks fixed in v3-ExportabilityEncoding-Secure Electronic Transaction (SET), Kerberos.	15	Security in Computing 4th edition, Charles P. Pfleeger, Charles P. Pfleeger, Shari Lawrence Pfleeger, Prentice Hall; 4th edition (2006)	PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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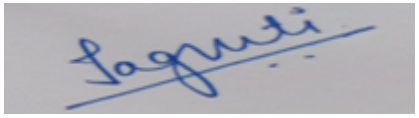

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: -**MRS.JYOTI PRABHAKAR JADHAV**----DEPARTMENT: **IT** CLASS: **MSCCS** SEMESTER:II

MONTH: **FEB-MAY** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:

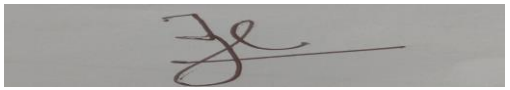
The learners will be able to :

understand basic concepts of security in cloud
understand basic concepts of security in mobile.
Understand services of mobile

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS2032 Cyber and Information Security **Unit III: Cloud Security ign strategies**	How concepts of Security apply in the cloud, User authentication in the cloud; How the cloud provider can provide this- Virtualization System Security Issues: e.g. ESX and ESXi Security, ESX file system security- storage considerations, backup and recovery- Virtualization System Vulnerabilities, security management standards- SaaS, PaaS, IaaS availability management- access control- Data security and storage in cloud.	15	Cloud Security: A Comprehensive Guide to Secure Cloud Computing, Ronald L. Krutz, Russell Dean Vines, Wiley	Black board and chalk,power point

PSCS2032 **Cyber and Information Security** **Unit IV: Mobile Security:**	Mobile system architectures, Overview of mobile cellular systems, GSM and UMTS Security & Attacks, Vulnerabilities in Cellular Services, Cellular Jamming Attacks & Mitigation, Security in Cellular VoIP Services, Mobile application security. Securing Wireless Networks: Overview of Wireless Networks, Scanning and Enumerating 802.11 Networks, Attacking 802.11 Networks, Bluetooth Scanning and Reconnaissance, Bluetooth Eavesdropping, Attacking & Exploiting Bluetooth, Zigbee Security & Attacks	15	Mobile and Wireless Security and Privacy, Kia Makki, Peter Reiher, Springer	Black board and chalk,power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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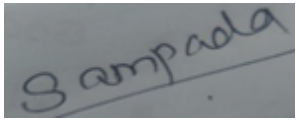

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Computer Science.

CLASS: M.Sc. SEMESTER: II MONTH: February To May ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

- To understand structure of compiler.
- How to implement basic compiler.
- To understand Parser Implementation.
- To understand data flow analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS202 Design and implementation of Modern Compilers UNIT-I	**Introduction to Compilers** The structure of a compiler, A simple approach to the design of lexical analyzers, Regular expressions, Finite automata, From regular expressions to finite automata, Minimizing the number of states of a DFA.	6	1. Compilers: Principles, Techniques and Tools 2nd edition 2. Modern Compiler Implementation in Java, Second Edition	Projector, PPT.
	Context-free grammars, Derivations and Parse trees, Parsers, Shift-reduce parsing, Operator-precedence parsing, Top- down parsing, Predictive parsers.	6		Projector, PPT.

PSCS202 Design and implementation of Modern Compilers UNIT-II	**Automatic Construction of Efficient Parsers** LR parsers, The canonical collection of LR(0) items, Constructing SLR parsing tables, Constructing canonical LR parsing tables, Constructing LALR parsing tables, Using ambiguous grammars,	6	1. Compilers: Principles, Techniques and Tools 2nd edition 2. Modern Compiler Implementation in Java, Second Edition	Projector, PPT.
	An automatic parser generator, Implementation of LR parsing tables, Constructing LALR sets of items.	6		
PSCS202 Design and implementation of Modern Compilers UNIT-III	**Advanced syntax analysis and basic semantic analysis** Syntax-directed translation schemes, Implementation of syntax-directed translators, Initial introduction to the ongoing Tiger compiler, bindings for the Tiger compiler, type-checking expressions, type-checking declarations, activation records, stack frames, frames in the Tiger compiler, translation to intermediate code, intermediate representation trees, translation into trees, declarations, basic blocks and traces, taming conditional branches, liveness analysis, solution of dataflow equations, liveness in the Tiger compiler, interference graph construction.	12	1. Compilers: Principles, Techniques and Tools 2nd edition 2. Modern Compiler Implementation in Java, Second Edition	Projector, PPT.
PSCS202 Design and implementation of Modern Compilers UNIT-IV	**Dataflow analysis and loop optimization** The principle sources of optimization, Loop optimization: The DAG representation of basic blocks, Dominators, Reducible flow graphs, Depth-first search, Loop-invariant computations, Induction variable elimination, Some other loop optimizations. Dataflow Analysis: intermediate representation for flow analysis, various dataflow analyses, transformations using dataflow analysis, speeding up dataflow analysis, alias analysis.	12	1. Compilers: Principles, Techniques and Tools 2nd edition 2. Modern Compiler Implementation in Java, Second Edition	Projector, PPT.

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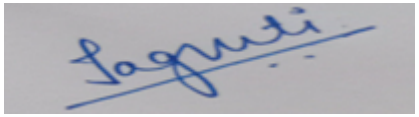
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Sampada Deshmukh DEPARTMENT: CS

CLASS: M. Sc. SEMESTER: II MONTH: January- April ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Understand the concept of Operating System and kernel.

b.Understand the concept of process communication.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Advanced Operating System Unit -I	**Linux Operating Systems** Introduction to kernel, Types of kernel (monolithic, micro, exo)	5	Operating Systems: Design and Implementation, Third Edition, Andrew S. Tanenbaum, Albert S. Woodhull, Prentice Hall, 2006.	Powerpoint presentation through projector
	Operating system booting process GRUB-I, GRUB-II. Processes,	5		Powerpoint presentation through projector
	Interprocess Communication, Scheduling.	5		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Sampada Deshmukh DEPARTMENT: CS

CLASS: M. Sc. SEMESTER: II MONTH: January-April ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Understand the concept of memory management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Advanced operating system Unit -II	Basic memory management, swapping, virtual memory, Page replacement algorithms,	8	Operating Systems: Design and Implementation, Third Edition, Andrew S. Tanenbaum, Albert S. Woodhull, Prentice Hall, 2006.	Powerpoint presentation through projector
	Design issues for paging systems, segmentation. Case Study: Linux memory management .	7		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs.Sampada Deshmukh DEPARTMENT: CS

CLASS:M. Sc. SEMESTER: II MONTH: January-April ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. Understand the concept of principle of hardware and software.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Advanced operating system Unit -III	Principles of I/O Hardware, Principles of I/O Software, Deadlocks, RAM Disks, Disks,	7	Operating Systems: Design and Implementation, Third Edition, Andrew S. Tanenbaum, Albert S. Woodhull, Prentice Hall, 2006.	Powerpoint presentation through projector
	Terminals. File Systems: Files, Directories, File System Implementation, Security, Protection mechanisms in different Linux versions	8		Powerpoint presentation through projector
				Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Sampada Deshmukh DEPARTMENT: CS

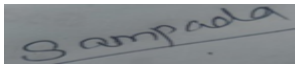
CLASS: M. Sc. SEMESTER: II MONTH: April-January ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. learn android operating system working.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-I Advanced operating system Unit -IV	The Android Software Stack, The Linux Kernel – its functions, essential hardware drivers. Libraries - Surface Manager, Media framework, SQLite, WebKit, OpenGL.	5	Operating Systems: Design and Implementation, Third Edition, Andrew S. Tanenbaum, Albert S. Woodhull, Prentice Hall, 2006.	Powerpoint presentation through projector
	Android Runtime - Dalvik Virtual Machine, Core Java Libraries. Application Framework - Activity Manager, Content Providers, Telephony Manager, Location Manager, Resource	5		Powerpoint presentation through projector
	Manager. Android Application – Activities and Activity Lifecycle, applications such as SMS client app, Dialer, Web browser, Contact manager	5		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15



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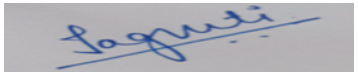

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.CS

SEMESTER: III MONTH: JULY TO NOVEMBER ACADEMIC YEAR: 2018-19

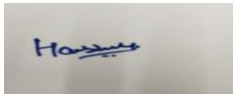
LEARNING OBJECTIVE/S:
The learners will be able to:

- Able to understand the application areas of Ubiquitous Computing ·
- Able to realize the revolution of Internet in Mobile Devices, Cloud & Sensor Networks ·
- Able to understand building blocks of Ubiquitous computing and characteristics

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS301 Ubiquitous Computing **UNIT 2**	Smart Mobiles, Cards and Device Networks Smart Mobile Devices, Users Resources and Code Operating Systems for Mobile Computers and Communicator Devices Smart Card Devices Device Networks. Human–Computer Interaction (HCI): Explicit HCI, Implicit HCI User Interfaces and Interaction for Devices Hidden UI Via Basic Smart Devices, Hidden UI Via Wearable Implanted Devices, Human Centered Design (HCD)	10	Ubiquitous Computing Smart Devices, Environments and Interactions, Stefan Poslad, Wiley, 2009.	Powerpoint

PSCS301, Ubiquitous Computing **UNIT 4**	Ubiquitous Communication Audio Networks, Data Networks, Wireless Data Networks, Universal and Transparent Audio, Video and Alphanumeric Data Network Access, Ubiquitous Networks, Network Design Issues.	10	Ubiquitous Computing Smart Devices, Environments and Interactions, Stefan Poslad, Wiley, 2009	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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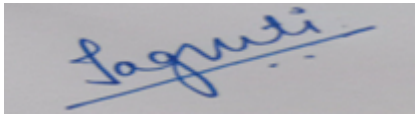

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TEACHING PLAN (UNIT PLAN)

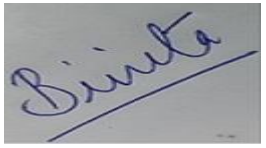
NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. C.S SEMESTER: III MONTH: July-November ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with various network forensics tools.
b. Work with analyzing evidence .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Cyber and Information Security-II Unit -III	Sources of Network Based Evidence, Principles of Internetworking, Internet Protocol Suite. Evidence Acquisition: Physical Interception, Traffic Acquisition Software, Active Acquisition.	4	Network Forensics, Sherri Davidoff, Jonathan HAM, Prentice Hall, 2012.	PowerPoint presentation through projector
	Traffic Analysis: Protocol Analysis, Packet Analysis, Flow Analysis, Higher-Layer Traffic analysis. Statistical Flow Analysis: Sensors, Flow Record Export Protocols, Collection and Aggregation, Analysis.	4		PowerPoint presentation through projector
	Wireless:the IEEE Layer 2 Protocol Series, Wireless Access Point, Wireless Traffic Capture and Analysis, Common Attacks, Locating Wireless Devices. Network Intrusion Detection and Analysis: NIDS/NIPS Functionality, Modes of Detection, Types of NIDS/NIPS, NIDS/NIPS Evidence Acquisition.	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

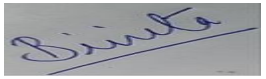
NAME OF THE STAFF: Ms. Binita Thakkar DEPARTMENT: IT

CLASS: M. Sc. C.S SEMESTER: III MONTH: July-November ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to:
a. Work with various network forensics tools.
b. Work with analyzing evidence.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Cyber and Information Security-II Unit -IV	Sources of Logs, Network Architecture, Collecting and Analyzing Evidence	4	Network Forensics, Sherri Davidoff, Jonathan HAM, Prentice Hall, 2012. Mobile Phone Security and Forensic: A Practical Approach, Second Edition, Iosif I. Androulidkis, Springer, 2012.	PowerPoint presentation through projector
	switches, routers, firewalls, interfaces Web Proxies: Need to Investigate Web Proxies, Functionality, Evidence, Squid, Web Proxy Analysis, Encrypted Web Traffic.	4		PowerPoint presentation through projector
	Mobile Phone Forensics: Crime and Mobile Phones, Voice, SMS and Identification of Data Interception in GSM, Mobile Phone Tricks, SMS Security, Mobile Forensic.	4		PowerPoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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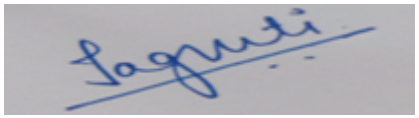

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Jagruti S. Raut** DEPARTMENT: **CS** CLASS: **M.Sc. (CS)**

SEMESTER: **III** MONTH: **July - November** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able:

- Understand the key issues in big data management and its associated applications in intelligent business and scientific computing.
- Achieve adequate perspectives of big data analytics in various applications like recommender systems, social media applications.
- Explain data mining, neural networks, text analytics, text mining, sentiment analysis, web mining, web analytics, social analytics, social network analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS3033 **Paper IV** **Business Intelligence and Big Data Analytics –II (Mining Massive Data sets)** **UNIT III**	**Unit III: SHINGLING OF DOCUMENTS** Finding Similar Items, Applications of Near-Neighbor Search, Jaccard similarity of sets, Similarity of documents, Collaborative filtering as a similar-sets problem, Documents, k-Shingles, Choosing the Shingle Size, Hashing Shingles, Shingles built from Words. Similarity-Preserving Summaries of Sets, Locality-Sensitive hashing for documents. The Theory of Locality-Sensitive functions. Methods for high degrees of similarity.	15	Mining of Massive Datasets, Anand Rajaraman and Jeffrey David Ullman, Cambridge University Press, 2012.	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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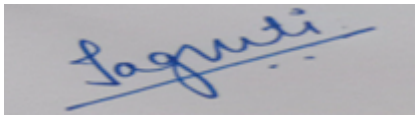
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS3033 **Paper IV** **Business Intelligence and Big Data Analytics –II (Mining Massive Data sets)** **UNIT III**	**Unit IV: MINING DATA STREAMS** Introduction to streams concepts – Stream data model and architecture, Stream computing, Sampling data in a stream, Filtering streams, Counting distinct elements in a stream, Estimating moments, Counting oneness in a Window, Decaying window, Real time analytics Platform(RTAP).	15	Mining of Massive Datasets, Anand Rajaraman and Jeffrey David Ullman, Cambridge University Press, 2012.	Microsoft PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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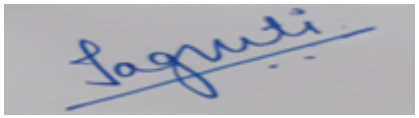

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs.Sampada Deshmukh DEPARTMENT:Computer Science

CLASS:M.Sc.(C.S) SEMESTER: III MONTH: July- November ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Learn basics of computer forensics fundamental, collection of evidences.
- Study different computer forensics methods and tools.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Cyber and Information Security Unit 1	**Computer Forensic Fundamentals:** Introduction to Computer Forensics and objective, the Computer Forensics Specialist, Use of Computer Forensic in Law Enforcement, Users of Computer Forensic Evidence, Case Studies, InformationSecurity Investigations. Types of Computer Forensics Technology: Types of Military Computer Forensic Technology	5	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using projector
	Types of Law Enforcement Computer Forensic Technology, Types of Business Computer Forensic Technology, Specialized Forensics Techniques, Hidden Data, Spyware and Adware, Encryption Methods andVulnerabilities, Protecting Data from Being Compromised	5	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using projector
	Internet Tracing Methods,Security and Wireless Technologies. Types of Computer Forensics Systems:	5	Computer Forensics Computer Crime Scene	Power Point Presentation using projector

	Studydifferent Security System: Internet, Intrusion Detection, Firewall, Storage Area, Network Disaster Recovery, Public Key Infrastructure, Wireless Network, Satellite Encryption,Instant Messaging (IM), Net Privacy, Identity Management, Biometric, Identity Theft.		Investigation, John R. Vacca, Second Edition, 2005.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Sampada Deshmukh DEPARTMENT:Computer Science

CLASS:M.Sc. SEMESTER:III MONTH:July-November ACADEMIC YEAR: 2018-19

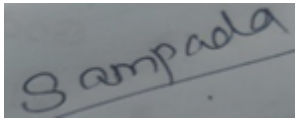
LEARNING OBJECTIVE/S:
The learners will be able to :

- Learn different data recovery method.
- Learn security techniques for forensic purpose.

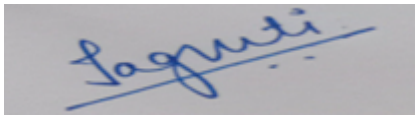
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper 3 Cyber and Information Security Unit 2	**Data Recovery:** Data Recovery and Backup, Role of Data Recovery, Hiding and Recovering Hidden Data. Evidence Collection: Need to Collect the Evidence, Types of Evidences, The Rules of Evidence, Collection Steps. Computer Image Verification and Authentication	6	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using projector

	Special Needs of Evidence Authentication. Identification of Data: Timekeeping, Forensic Identification and Analysis of Technical Surveillance Devices,	5	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using projector
	Reconstructing Past Events: How to Become a Digital Detective, Useable File Formats, Unusable File Formats, Converting Files.	4	Computer Forensics Computer Crime Scene Investigation, John R. Vacca, Second Edition, 2005.	Power Point Presentation using projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anuja Narottam Patil. DEPARTMENT: Computer Science.

CLASS: M.Sc. SEMESTER: III MONTH: July To November ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

- To understand social network and analyze the communication and predict the relationship between those actors.
- To understand Graph theory and network centrality and page rank for accessing webpages.
- To understand network structures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS302 Social Network Analysis UNIT-I	**Introduction to social network analysis (SNA)** Introduction to networks and relations- analyzing relationships to understand people and groups, binary and valued relationships, symmetric and asymmetric relationships, multimode relationships,	6	1. Social Network Analysis for Startups- Finding connections on the social web 2. Social Network Analysis- 3rd edition	Projector, PPT.
	Using graph theory for social networks analysis- adjacency matrices, edge-lists, adjacency lists, graph traversals and distances, depth-first traversal, breadth-first traversal paths and walks, Dijkstra's algorithm, graph distance and graph diameter, social networks vs. link analysis, ego-centric and socio-centric density.	6		Projector, PPT.
PSCS302 Social Network Analysis	**Networks, Centrality and centralization in SNA** Understanding networks- density, reachability, connectivity, reciprocity, group-external and group-internal ties in networks, ego networks, extracting and visualizing ego networks, structural holes,	8	1. Social Network Analysis for Startups- Finding	Projector, PPT.

UNIT-II	Centrality- degree of centrality, closeness and betweenness centrality, local and global centrality, centralization and graph centers, notion of importance within network, Google pagerank algorithm,		connections on the social web 2. Social Network Analysis- 3rd edition	
	Analyzing network structure- bottom-up approaches using cliques, N-cliques, N-clans, K-plexes, K-cores, F-groups and top-down approaches using components, blocks and cut-points, lambda sets and bridges, and factions.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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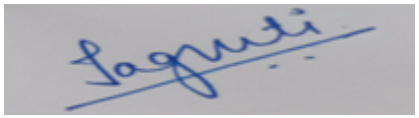

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRANALI DAYANAND THAKARE DEPARTMENT: CS

CLASS:M.Sc(CS) Part-2 SEMESTER: SEM-3 MONTH: JUL-NOV ACADEMIC YEAR: 2018-2019

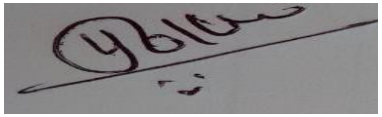
LEARNING OBJECTIVE/S:

- Design and develop location based messaging app
- Design and develop chat messaging app which is a location-based
- Design and develop app demonstrating Simple Downstream Messaging
- Design and develop app demonstrating Send Upstream Messages
- Implementing GCM Network Manager
- Demonstrate use of OpenGTS (Open Source GPS Tracking System)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS301 Ubiquitous Computing UNIT 1	**Basics of Ubiquitous Computing :**Examples of Ubiquitous Computing Applications, Holistic Framework for UbiCom: Smart DEI, Modeling the Key Ubiquitous Computing Properties, Ubiquitous System Environment Interaction, Architectural Design for UbiCom Systems: Smart DEI Model, Smart Devices and Services, Service Architecture Models, Service Provision Life Cycle.	15	Ubiquitous Computing Smart Devices, Environments and Interactions, Stefan Poslad, Wiley, 2009.	Laptop,PPT

PSCS301 Ubiquitous Computing UNIT 2	**Smart Environments Tagging, Sensing and Controlling**, Tagging the Physical World, Sensors and Sensor Networks, Micro Actuation and Sensing: MEMS, Embedded Systems and Real Time Systems, Control Systems.	15	Ubiquitous Computing Smart Devices, Environments and Interactions, Stefan Poslad, Wiley, 2009.	Laptop,PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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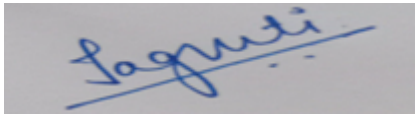

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. BRIJESH Y JOSHI DEPARTMENT: Computer Science

CLASS: M.Sc.C.S. SEMESTER: III MONTH: AUG to OCT ACADEMIC YEAR: 2018-2019

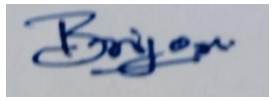
LEARNING OBJECTIVE/S:

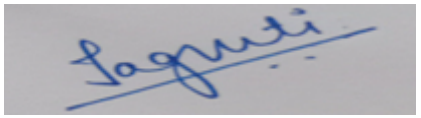
- To be able to understand Big data platform, statistical concepts
- To understand the overview of Big data processing i.e. MapReduce Processing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Elective I- Track C Business Intelligence and Big Data Analytics –II (Mining Massive Data sets)Unit-I	**Big data:** Introduction to Big data Platform, Traits of big data, Challenges of conventional systems, Web data, Analytic processes and tools, Analysis vs Reporting, Modern data analytic tools, Statistical concepts: Sampling distributions, Re-sampling, Statistical Inference, Prediction error. **Data Analysis:** Regression modeling, Analysis of time Series: Linear systems analysis, Nonlinear dynamics, Rule induction, Neural networks: Learning and Generalization, Competitive Learning, Principal Component Analysis and Neural Networks, Fuzzy Logic: Extracting Fuzzy Models from Data, Fuzzy Decision Trees, Stochastic Search Methods.	12	Mining of Massive Datasets, Anand Rajaraman and Jeffrey David Ullman, Cambridge University Press, 2012.	Laptop, PPT

Elective I- Track C Business Intelligence and Big Data Analytics –II (Mining Massive Data sets)Unit-II	**Introduction to Map Reduce:** The map tasks, Grouping by key, The reduce tasks, Combiners, Details of MapReduce Execution, Coping with node failures. Algorithms Using **MapReduce:** Matrix-Vector Multiplication, Computing Selections and Projections, Union, Intersection, and Difference, Natural Join. Extensions to MapReduce: Workflow Systems, Recursive extensions to MapReduce, Common map reduce algorithms		Mining of Massive Datasets, Anand Rajaraman and Jeffrey David Ullman, Cambridge University Press, 2012.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS.. HARSHALI SHAILESH MANKAR DEPARTMENT: IT CLASS: M.Sc.CS

SEMESTER: IV MONTH: JAN TO APRIL ACADEMIC YEAR: 2018-19

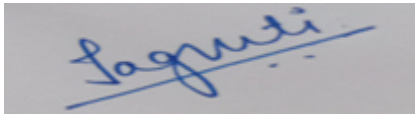
LEARNING OBJECTIVE/S:
The learners will be able to:

- To understand basics of Cryptography and Network Security.
- To be able to secure a message over insecure channel by various means.
- To learn about how to maintain the Confidentiality, Integrity and Availability of a data.
- To understand various protocols for network security to protect against the threats in the networks.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS4022 Cyber and Information Security (Cryptography and Crypt Analysis) **UNIT 1**	: Introduction to Number Theory Topics in Elementary Number Theory: O and notations, time estimates for doing arithmetic-divisibility and the Euclidean algorithm, Congruence: Definitions and properties, linear congruence, residue classes, Euler's phi function, Fermat's Little Theorem, Chinese Reminder Theorem, Applications to factoring, finite fields, quadratic residues and reciprocity: Quadratic residues, Legendre symbol, Jacobi Symbol. (proofs of the theorems are not expected to cover).	10	Discrete Mathematics and Its Applications, Kenneth H. Rosen, 7 th Edition, McGraw Hill, 2012. Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005	Powerpoint,Black Board and chalk

PSCS4022 Cyber and Information Security (Cryptography and Crypt Analysis) **UNIT 3**	RSA Cryptosystem The RSA Algorithm, Primarily Testing, Legendre and Jacobi Symbols, The SolovayStrassen Algorithm, The Miller-Rabin Algorithm, Factoring Algorithm: The pollard p-1 Algorithm, Dixon's Random Squares Algorithm, Attacks on RSA, The Rabin Cryptosystem. Public Key Cryptosystems: The idea of public key Cryptography, The Diffie-Hellman Key Agreement, ElGamal Cryptosystem, The Pollard Rho Discrete Logarithm Algorithm, Elliptic Curves, Knapsack problem.	10	Discrete Mathematics and Its Applications, Kenneth H. Rosen, 7 th Edition, McGraw Hill, 2012. Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005. Network Security and Cryptography, Atul Kahate, McGraw Hill, 2003. Cryptography and Network Security: Principles and Practices, William Stalling, Fourth Edition, Prentice Hall, 2013.	Black Board and chalk, PowerPoint

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shilpa Rodrigues **DEPARTMENT**: COMPUTER SCIENCE **CLASS**: MSc.CS(Part II)

SEMESTER: IV **MONTH**: JANUARY-APRIL **ACADEMIC YEAR**: 2018-2019

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the concepts of Simulation and Modeling.
- Develop logic for developing Simulation Scenarios.
- Be familiar about the basic concepts of Agent Based Modeling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS401 Unit 2, Simulation and Modeling	Data Collection and Analysis: Introduction, Data requirements, Obtaining data, Representing unpredictable variability, Selecting statistical distributions. Obtaining Accurate Results: Introduction, The nature of simulation models and simulation output, Issues in obtaining accurate simulation results, example model, dealing with initialization bias: warm-up and initial conditions, Selecting the number of replications and run-length.	07	Simulation: The Practice of Model Development and Use by Stewart Robinson, John Wiley and Sons, Ltd, 2004.	Power Point Presentation
	Searching the Solution Space: Introduction, The nature of simulation experimentation, Analysis of results from a single scenario, Comparing alternatives, Search experimentation, and Sensitive analysis. Verification, Validation and Confidence: Introduction, Defining	08	Simulation: The Practice of Model Development and	Power Point Presentation

	Verification and Validation, The difficulties of verification and validation, Methods of verification and validation, Independent verification and validation.		Use by Stewart Robinson, John Wiley and Sons, Ltd, 2004.	
PSCS401 Unit 4, Simulation and Modeling.	Designing state-based behavior: Statecharts, State transitions, Viewing and debugging Statecharts at runtime, Statecharts for dynamic objects. Discrete events and Event model object: Discrete event, Event-the simplest low level model object, Dynamic events, and Exchanging data with external world. Presentation and animation: Working with shapes, groups and colors.	07	The Big Book of Simulation Modeling: Multi Method Modeling by Andrei Borshchev, 2013.	Power Point Presentation
	, Designing interactive models: using controls, Dynamic properties of controls, 3D Animation. Randomness in Models: Probability distributions, sources of randomness in the model, randomness in system dynamics model, random number generators, Model time, date and calendar: Virtual and real time: The model time, date and calendar, Virtual and real-time execution modes.	08	The Big Book of Simulation Modeling: Multi Method Modeling by Andrei Borshchev, 2013.	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT

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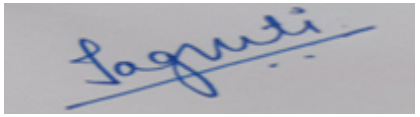

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA HATKAR DEPARTMENT: COMPUTER SCIENCE CLASS: MSc.CS(Part II)

SEMESTER: **IV** MONTH: JANUARY-APRIL ACADEMIC YEAR: 2018-2019

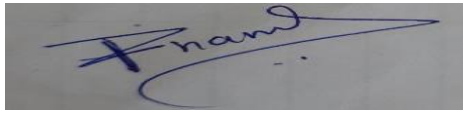
LEARNING OBJECTIVES:
The learners will be able to:

- Understand the concepts of Simulation and Modeling.
- Develop logic for developing Simulation Scenarios.
- Be familiar about the basic concepts of Agent Based Modeling.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PSCS401 Unit 1, Simulation and Modeling	Introduction to Simulation, Need of Simulation, Time to simulate, Inside simulation software: Modeling the progress of Time, Modeling Variability, Conceptual Modeling: Introduction to Conceptual modelling.	07	Simulation: The Practice of Model Development and Use by Stewart Robinson, John Wiley and Sons, Ltd, 2004.	Power Point Presentation
	Defining conceptual model, Requirements of the conceptual model, Communicating the conceptual model, Developing the Conceptual Model: Introduction, A framework for conceptual modeling, methods of model simplification.	08	Simulation: The Practice of Model Development and Use by Stewart Robinson, John	Power Point Presentation

			Wiley and Sons, Ltd, 2004.	
PSCS401 Unit 3, Simulation and Modeling.	Types of models, Analytical vs Simulation modeling, Application of simulation modeling, Level of abstraction, Simulation Modeling. Methods, System Dynamics, Discrete Event Modeling, Agent Based modeling: Introduction to Agent, Agent-based modeling, Time in agent based models, Space in agent based models, Discrete space, Continuous space movement in continuous space, Communication between agents, Dynamic creation and destruction of agents, Statics on agent population, Condition triggered events and transition in agents.	07	The Big Book of Simulation Modeling: Multi Method Modeling by Andrei Borshchev, 2013.	Power Point Presentation
	Building agents based models: The problem statement, Phases of modeling, Assumptions, 3 D animation. Dynamics Systems: Stock and flow diagrams, examples of stock and flow diagrams. Multi-method modeling: Architecture, Technical aspects of combining modeling methods, Examples.	08	The Big Book of Simulation Modeling: Multi Method Modeling by Andrei Borshchev, 2013.	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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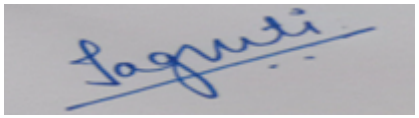

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs.Sampada Deshmukh DEPARTMENT: C .S.

CLASS: M. Sc. SEMESTER: IV MONTH: JAN-APRIL ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

a. study different secret key exchange method algorithm and patterns.
b. Learn different protocols

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Cyber and Information Security Unit –II	Shift Cipher, Substitution Cipher, Affine Cipher, Vigenère Cipher, Vermin Cipher, HillCipher, Permutation Cipher, Stream Cipher, Cryptanalysis of Affine Cipher, Substitution	6	Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005.	Powerpoint presentation through projector
	Cipher, Vigenère Cipher and Hill Cipher, Block Ciphers, Algorithm Modes, DES, Double DES, Triple DES, Meet-in-Middle Attack, AES, IDEA algorithm. Cryptographic HashFunctions	6		Powerpoint presentation through projector
	Hash Functions and Data Integrity, Security of Hash Functions, Secure HashAlgorithm, Message Authentication Code, Nested MACs, HMAC.	3		Powerpoint presentation through projector
				Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs. Sampada Deshmukh DEPARTMENT: CS

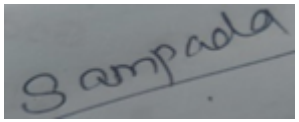
CLASS: M. Sc. SEMESTER: IV MONTH: July-November ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

c. study different secret key exchange method algorithm and patterns.
d. Learn different protocols.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Cyber and Information Security Unit –IV	Diffie-Hellman Key distribution and Key agreement scheme, Key Distribution Patterns, Mitchell-Piper Key distribution pattern, Station-to-station protocol, MTI Key Agreement	8	Cryptography Theory and Practice, 3rd Edition, Douglas R. Stinson, 2005.	Powerpoint presentation through projector
	Public-Key Infrastructure: What is PKI?, Secure Socket Layer, Certificates, Certificate Life cycle, Trust Models: Strict Hierarchy Model, Networked PKIs, The web browser Model, Pretty Good Privacy.	7		Powerpoint presentation through projector

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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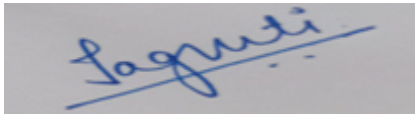

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TEACHING PLAN (UNIT PLAN)

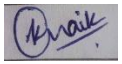
NAME OF THE STAFF: Komal Sudhir Naik DEPARTMENT: Mathematics CLASS: FYBSC(PMS)

SEMESTER: SEM I MONTH: July – November ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
STATISTICAL METHODS II UNIT I ELEMENTARY PROBABILITY THEORY	Trial, random experiment, sample point and sample space. Definition of an event. Operation of events, mutually exclusive and exhaustive events. Classical (Mathematical) and Empirical definitions of Probability and their properties. Theorems on Addition and Multiplication of probabilities. Independence of events, pairwise and mutual independence for three event Conditional probability, Bayes theorem and its applications.	15	Medhi J.: Statistical Methods, An Introductory Text, Second Edition	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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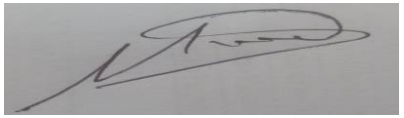

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TEACHING PLAN (UNIT PLAN)

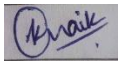
NAME OF THE STAFF: Komal Sudhir Naik DEPARTMENT: Mathematics CLASS: FYBSC(PMS)

SEMESTER: SEM II MONTH: December-April ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
STATISTICAL METHODS-2 UNIT I CONTINUOUS RANDOM VARIABLE	Concept of continuous random variable and properties of its probability distribution, Probability density function and Cumulative distribution function, Their graphical representations, Expectation of a random variable and its properties, Measures of location, dispersion, skewness and kurtosis, Raw and central moments (simple illustrations).	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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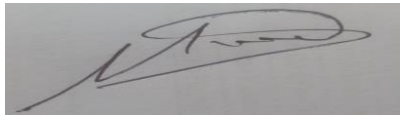


SIGNATURE OF HOD OF STATISTICS

Vishnu Waman Thakur Charitable Trust

Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

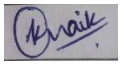
NAME OF THE STAFF: Komal Sudhir Naik DEPARTMENT: Mathematics CLASS: FYBSC(PMS)

SEMESTER: SEM II MONTH: December-April ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
STATISTICAL METHODS-2 UNIT II STANDARD CONTINUOUS DISTRIBUTIONS	Uniform, Exponential (location scale parameter), Memoryless property of exponential distribution, Normal distribution. Derivations of mean, median and variance for uniform and exponential distributions. Properties of normal distributions (without proof). Normal approximation to Binomial and Poisson distribution(statement only). Properties of Normal curve, Use normal tables.	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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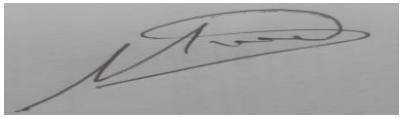

SIGNATURE OF HOD OF STATISTICS

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

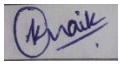
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Komal Sudhir Naik DEPARTMENT: Mathematics CLASS: SYBSC(MS)

SEMESTER: SEM III MONTH: July - November ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PROBABILITY DISTRIBUTIONS UNIT I UNIVARIATE RANDOM VARIABLES (DISCRETE AND CONTINUOUS)	Moment Generating Function (M.G.F.): Definition Properties: - Effect of change of origin and scale, - M.G.F of sum of two independent random variables X and Y, - Extension of this property for n independent random variables and for n i.i.d. random variables. All above properties with proof, - Uniqueness Property without proof. - Raw moments using M.G.F: using expansion method and using derivative method. Cumulant generating Function (C.G.F.): Definition Properties: - Effect of change and origin and scale, - Additive Property of C.G.F. and cumulants Both properties with proof. Obtaining Cumulants using C.G.F. Derivation of relationship between moments and cumulants up to order four.	15	Fundamentals of Mathematical Statistics: S.C. Gupta, V.K. Kapoor; Eighth Edition; Sultan Chand & Sons	Chalk and Board



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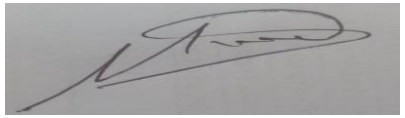

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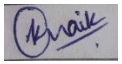
TEACHING PLAN (UNIT PLAN)

	Characteristic Function: Definition and properties (without Proof) Examples of obtaining raw moments and central moments up to order four using M.G.F. and C.G.F. for continuous and discrete distributions. Degenerate distribution (One point distribution) P(X=c) =1. Mean, Variance, Use of Degenerate distribution. Discrete Uniform distribution. Mean, Variance, coefficient of skewness using m.g.f., Bernoulli distribution. Mean, Variance, coefficient of skewness using m.g.f. Binomial distribution: Mean, Variance, Measures of skewness and Kurtosis based on moments using M.G.F. and C.G.F., Nature of probability curve, Mode, Additive property, If X follows Binomial, then to find distribution of n-X. Recurrence relation for moments with proof, Relation between Bernoulli and Binomial using m.g.f.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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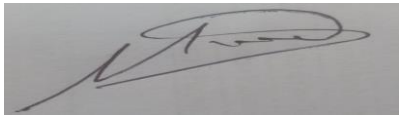

SIGNATURE OF HOD OF STATISTICS

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

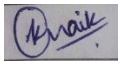
NAME OF THE STAFF: Komal Sudhir Naik DEPARTMENT: Mathematics CLASS: TYBSC(STATISTICS)

SEMESTER: SEM V MONTH: July - November ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I PROBABILITY AND DISTRIBUTION THEORY UNIT IV ORDER STATISTICS	(i) Definition of Order Statistics based on a random sample. (ii) Derivation of: (a) Cumulative distribution function of rth order statistic. (b) Probability density functions of the rth order statistic. (c) Joint Probability density function of the rth and the sth order statistic (r < s) (d) Joint Probability density functions of all n ordered statistics. (e) Distribution of Maximum observation (nth order statistic) and Minimum observation (first order statistic) in case of uniform and Exponential distribution. (f) Probability density function of the difference between rth and sth order statistic (r < s) in case of uniform and exponential distribution	15	Hogg R V and Tanis E. A.: Probability and statistical inference, Fourth edition	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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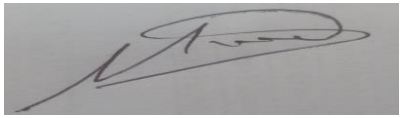

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

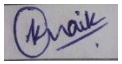
NAME OF THE STAFF: Komal Sudhir Naik DEPARTMENT: Mathematics CLASS: TYBSC(STATISTICS)

SEMESTER: SEM VI MONTH: December-April ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DISTRIBUTION THEORY AND STOCHASTIC PROCESSES UNIT IV QUEUING THEORY	Basic elements of the Queuing model. Roles of the Poisson and Exponential distributions. Derivation of Steady state probabilities for birth and death process. Steadystate probabilities and various average characteristics for the following models: (i) (M/M/1): (GD/ ∞ /∞) (ii) (M/M/1): (GD/ N /∞) (iii) (M/M/c): (GD/∞/∞) (iv) (M/M/c): (GD/ N /∞) (v) (M/M/∞): (GD/ ∞/∞)	15	1. Taha H.A.: Operations Research: An introduction, Eighth edition, Prentice Hall of India Pvt.Ltd.	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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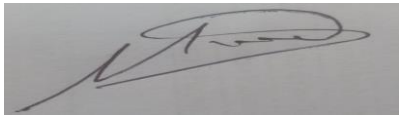

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

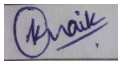
NAME OF THE STAFF: Komal Sudhir Naik DEPARTMENT: Mathematics CLASS: TYBSC(STATISTICS)

SEMESTER: SEM V MONTH: July - November ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II THEORY OF ESTIMATION UNIT II METHODS OF POINT ESTIMATION	Method of Maximum Likelihood Estimation (M.L.E.): 1. Definition of likelihood as a function of unknown parameter for a random sample from: Discrete distribution & Continuous distribution. 2. Derivation of Maximum likelihood estimator (M.L.E.) for parameters of Standard distributions (case of one and two unknown parameters). 3. Properties of MLE (without proof). Method of Moments: 1. Derivation of Moment estimators for standard distributions (case of one and two unknown parameters) Illustrations of situations where MLE and Moment Estimators are distinct and their comparison using Mean Square error. Method of Minimum Chi-square and Modified Minimum Chi-Square	15	Hogg R V and Tanis E. A.: Probability and statistical inference, Fourth edition	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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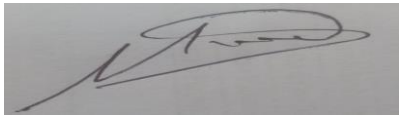

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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

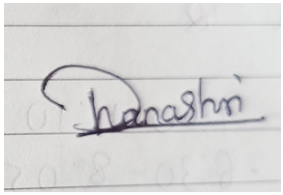
TEACHING PLAN (UNIT PLAN)

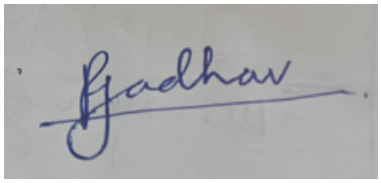
NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: FY PCM SEMESTER: I

MONTH:July - November ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the Concept of Relations & Functions. Equivalence relation, classes and Residue classes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Pape II Algebra I Unit II Functions , Relations & Binary Operation .	1. Relation and function, domain, co-domain, range of a function, composite functions, examples, Direct image and inverse image.	3	Vipul's Sheth Publication Algebra I	Chalk-Board Method
	2. Injective, surjective, bijective functions, Composite of injective, surjective, bijective functions when defined, invertible functions.	4		
	3. Examples of functions including constant, identity, projection, inclusion, Binary operation as a function, properties, examples	3		





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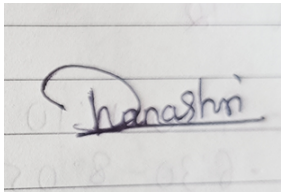
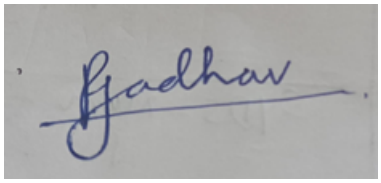
	5. Partition of Set, Equivalence relation, Equivalence classes, properties.	3		
	6. Residue classes and partition of Z, Addition modulo n, Multiplication modulo n, examples.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15





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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

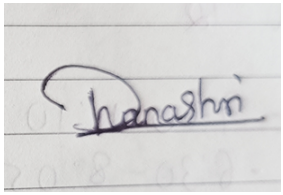
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: FY PCM SEMESTER: I

MONTH: July - November ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concept of Differential equation, methods of problem solving & it's applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Pape I Calculus , Unit III Differential Equation	1. Definition of a differential equation, order, degree, ordinary differential equation and partial differential equation, linear and nonlinear ODE	3	Vipul's Calculus III	Chalk-Board Method
	2. Solution of homogeneous and non-homogeneous differential equations of first order and first degree. Notion of partial derivatives.	4		
	3. Exact equations of first order and first degree. Necessary and sufficient condition for M dx + N dy = 0 to be exact	2		



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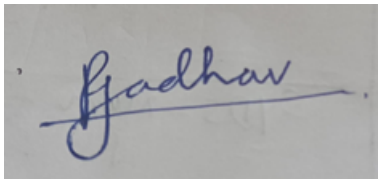

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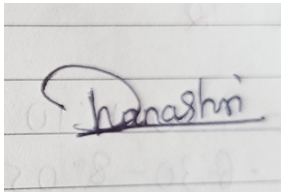
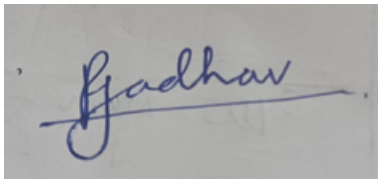
	4. non-exact equations: Rules for finding integrating factors for non-exact equations. Reduction of order.	4		
	5. Linear and reducible linear equations of first order, Applications to orthogonal trajectories, population growth, and finding the current at a given time.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15





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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

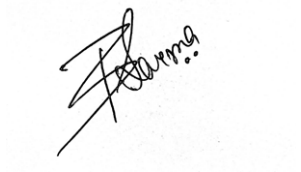
NAME OF THE STAFF: BIJOYA SARMA DEPARTMENT: MATHEMATICS

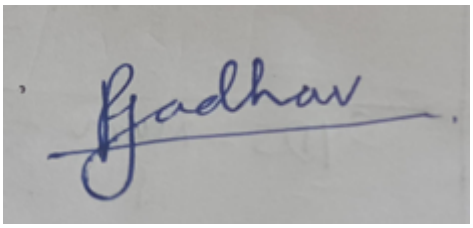
CLASS: TYB.Sc (MATHS) SEMESTER: V MONTH: JUNE- OCTOBER

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : understand the concept vector fields and define and evaluate line integrals using the Fundamental Theorem of Line Integrals and Green's Theorem; compute arc length.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I, UNIT II Line Integrals	Review of Scalar and Vector fields on R^n, Vector Differential Operators, Gradient, Curl, Divergence. Paths (parametrized curves) in R^n(emphasis on R^2 and R^3), Smooth and piecewise smooth paths. Closed paths. Equivalence and orientation preserving equivalence of paths	4	1. Textbook of Sheth Publication	Black board, chalk and duster
	Definition of the line integral of a vector field over a piecewise smooth path. Basic properties of line integrals including	4		





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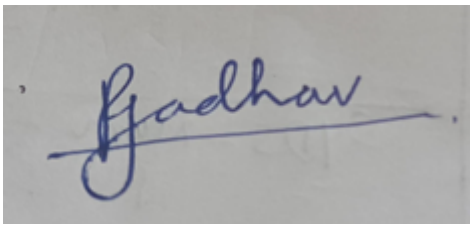
	linearity, path-additivity and behaviour under a change of parameters. Examples.			
	Line integrals of the gradient vector field, Fundamental Theorem of Calculus for Line Integrals, Necessary and sufficient conditions for a vector field to be conservative.	4		
	Green's Theorem (proof in the case of rectangular domains). Applications to evaluation of line integrals.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

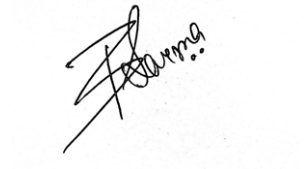
TEACHING PLAN (UNIT PLAN)

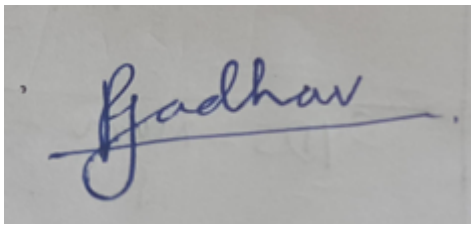
NAME OF THE STAFF: Rinkal A. Das DEPARTMENT: Mathematics CLASS: Sy BSc (PM/MS)

SEMESTE: sem III MONTH: July- November ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : develop critical and logical thinking and will able to solve various problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ORDINARY DIFFERENTIAL EQUATION UNIT-III	**Higher order Linear Differential equations:** **1.**The general n−th order linear differential equations, Linear independence, An existence and uniqueness theorem, the Wronskian, Classification: homogeneous and non-homogeneous, General solution of homogeneous and non-homogeneous LDE, The Differential operator	15	Units 5, 6, 7 and 8 of E.D. Rainville and P.E. Bedient; Elementary Differential Equations; Macmillan.	Chalk and board

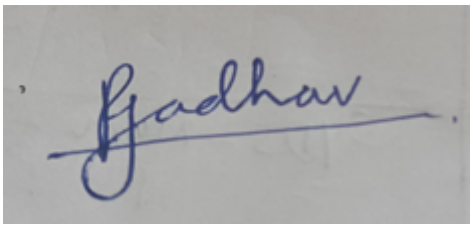




SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	and its properties. 2. Higher order homogeneous linear differential equations with constant coefficients, the auxiliary equations, Roots of the auxiliary equations: real and distinct, real and repeated, complex and complex repeated. 3.Higher order homogeneous linear differential equations with constant coefficients, the method of undermined coefficients, method of variation of parameters. 4. The inverse differential operator and particular integral, Evaluation of 1 f(D) for the functions like eax, sin ax, cos ax, xm, xm sin ax, xm cos ax, eaxV and xV where V is any function of x, 5. Higher order linear differential equations with variable coefficients: The Cauchy's equation: x3d3y/dx3+ x2 d2y/dx2+ x dy/dx + y = f(x) and The Legendre's equation: (ax + b)3d3y/dx3 + (ax +b)2 d2y/dx2+ (ax + b) dydx + y = f(x).			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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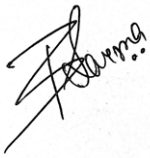

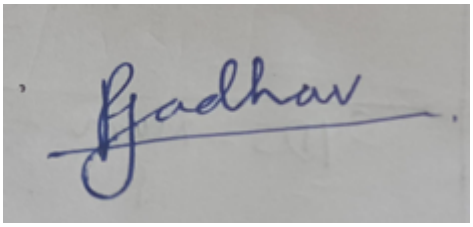

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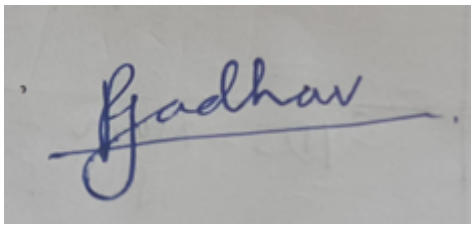
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rinkal A. Das DEPARTMENT: Mathematics CLASS: Fy BSc (PCM/PMS)

SEMESTE: sem I MONTH: July - November ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : develop critical and logical thinking and will able to solve various problems.

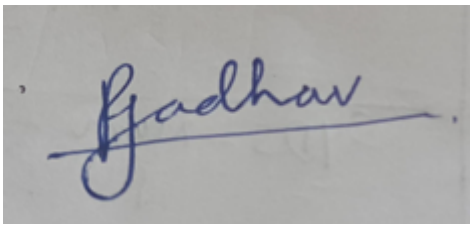
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Calculus I UNIT-II: Sequences in R	(1) Definition of a sequence and examples, Convergence of sequences, every convergent sequences is bounded. Limit of a convergent sequence and uniqueness of limit, Divergent sequences. (2) Convergence of standard sequences like $(1/1+na)\,\forall a>0$, $(bn)\,\forall b$, $0<b$ (3) Algebra of convergent sequences, sandwich theorem, monotone sequences,	15	R. R. Goldberg, Methods of Real Analysis, Oxford and IBH, 1964. E. A. Coddington , An Introduction to Ordinary Differential	Chalk and board



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	monotone convergence theorem and consequences as convergence of $\left(\left(1+\frac{1}{n}\right)^n\right)$. (4) Definition of subsequence, subsequence of a convergent sequence is convergent and converges to the same limit, definition of a Cauchy sequences, every convergent sequences s a Cauchy sequence and converse.		Equations.Prentice Hall, 1961.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

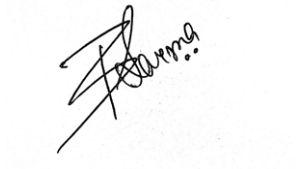
NAME OF THE STAFF: BIJOYA SARMA DEPARTMENT: MATHEMATICS

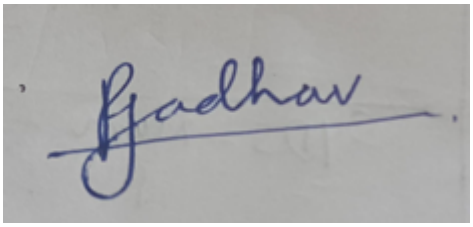
CLASS: SYB.Sc (PM/MS) SEMESTER: III MONTH: JULY- OCTOBER

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : understand application of system of homogeneous and non homogeneous equations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III, UNIT II Systems of First Order Linear Differential Equations	Existence and uniqueness theorem for the solutions of initial value problems for a system of two first order linear differential equations in two unknown functions x, y of a single independent variable t, of the form dx/dt = F(t, x, y) dy/dt = G(t, x, y) (Statement only).	4	1. Textbook of Vipul Publication	**White board and Marker**
	Homogeneous linear system of two first order differential equations in two unknown functions of a single independent variable t,	4		





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	of the form dx/dt = a_1(t)x + b_1 (t)y, dy/dt = a_2 (t)x + b_2(t)y.			
	Wronskian for a homogeneous linear system of first order linear differential equations in two functions x, y of a single independent variable t. Vanishing properties of the Wronskian. Relation with linear independence of solutions.	3		
	Non-homogeneous linear system of linear system of two first order differential equations in two unknown functions of a single independent variable t, of the form dx/dt = a_1(t)x + b_1 (t)y + f_1 (t), dy/dt = a_2 (t)x + b_2(t)y+ f_2 (t). General Solution of non-homogeneous system. Relation between the solutions of a system of non-homogeneous linear differential equations and the associated system of homogeneous linear differential equations.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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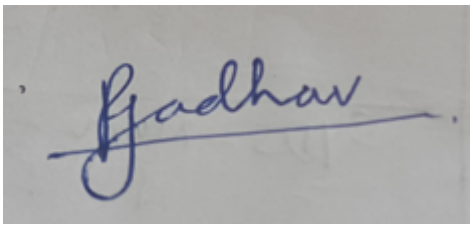

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TEACHING PLAN (UNIT PLAN)

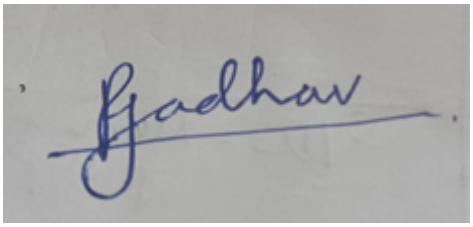
NAME OF THE STAFF: BIJOYA SARMA DEPARTMENT: MATHEMATICS

CLASS: SYB.Sc (PM/MS) SEMESTER: III MONTH: JULY- OCTOBER

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : understand application of numerical solution of ODE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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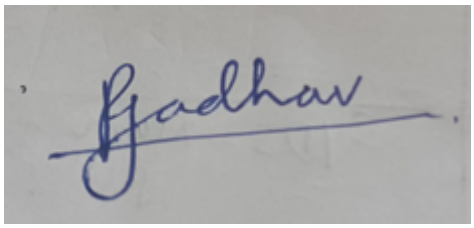
PAPER III Unit III Numerical Solution of Ordinary Differential Equations	rst order ordinary differential equation using: (i) Taylor's series method, (ii) Picard's method for successive approximation and its convergence, (iii) Euler's method and error estimates for Euler's method	4	1. Textbook of Vipul Publication	White board and Marker
	(iv) Modified Euler's Method, (v) Runge-Kutta method of second order and its error estimates, (vi) Runge-Kutta fourth order method.	4		
	2. Numerical solution of simultaneous and higher order ordinary differential equation using: (i) Runge-Kutta fourth order method for solving simultaneous ordinary differential equation	3		
	(ii) Finite difference method for the solution of two point linear boundary value problem.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

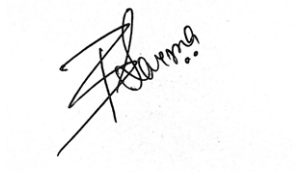
NAME OF THE STAFF: BIJOYA SARMA DEPARTMENT: MATHEMATICS

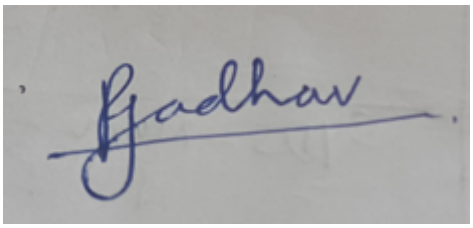
CLASS: FYB.Sc (PCM/PMS) SEMESTER: I MONTH: AUGUST- NOVEMBER

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : understand the concept of integers and divisibility

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II, UNIT I Integers & Divisibility	Statements of well-ordering property of non-negative integers, Principle of finite induction (first and second) as a consequence of Well-Ordering Principle.	4	1. Textbook of Sheth Publication	Black board, chalk and duster
	Divisibility in integers, division algorithm, greatest common divisor (g.c.d.) and least common multiple (l.c.m.) of two non zero integers, basic properties of g.c.d. such as existence and uniqueness of g.c.d. of two non zero integers a&b and that the g.c.d. can be expressed as ma + nb for some m, n $\in$ Z, Euclidean algorithm.	4		





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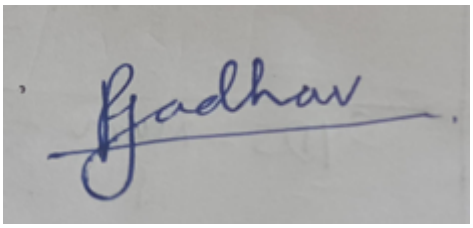
	Primes, Euclid's lemma, Fundamental Theorem of arithmetic, The set of primes is infinite, there are arbitrarily large gaps between primes, there exists infinitely many primes of the form $4n - 1$ or of the form $6n - 1$.	4		
	Congruence, definition and elementary properties, Results about linear congruence equations. Examples.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

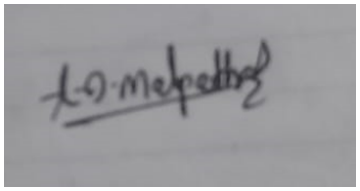
NAME OF THE STAFF: Archana Deepak Malpathak DEPARTMENT: _____Mathematics_____ CLASS: _____TYIT_____

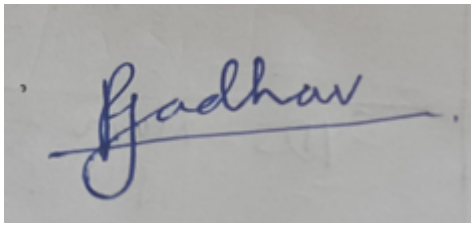
SEMESTER: ___V_____ MONTH: ___JUNE To September_____

ACADEMIC YEAR: ____2022-2023_____

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER , UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED





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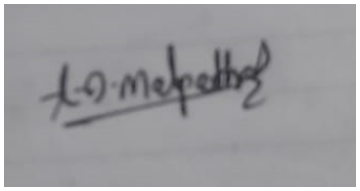
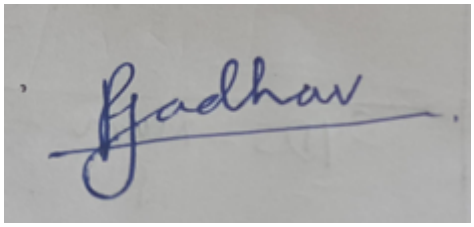
Unit No -1	GROUPS and Subgroup 1) Defination and elementary properties of a group.Orderof group, subgroup, criterian for a subset to a subgroup. A Eliana group, center of a group, Homomorphism and Isomorphism. 2) Example of group including z,Q,R,C,Kevin 4 group, symmetric and Alternating groupsS=the unit circle in c,GL®,SL®,On=order of group of n×noon singular upper triangular Matrices,Bn=Order of non singular upper triangular matrices and groups of symmetries of plane figures 3) Order of an element, subgroup generated by a subset of a group.	02	Abstract Algebra by S.K.Jain University of Algebra by N.S.Goplakrishnan	Blackboard and chalk





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TEACHING PLAN (UNIT PLAN)

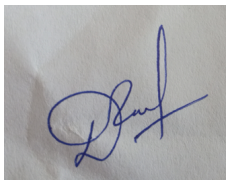
NAME OF THE STAFF: DIPASHREE PARAG VARTAK_____DEPARTMENT: MATHEMATICS _____ CLASS: TYBSC_____ SEMESTER: VI_____MONTH: NOVEMBER TO MARCH_____

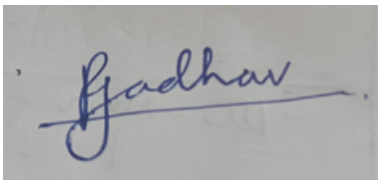
ACADEMIC YEAR:_2022-2023_____

LEARNING OBJECTIVE/S:

- The learners will be able to : understand the concept of power series, to find radius of convergence of different power series and analyze the results, to acquire knowledge about Cauchy residue Theorem and its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
MATHEMATICS I BASIC COMPLEX ANALYSIS	Power series of complex numbers and related results	3	J. W. BROWN AND R.V.CHURCILL,	WHITE BOARD AND MARKERS, DUSTER





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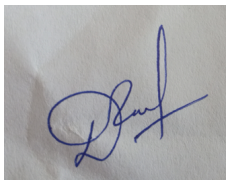
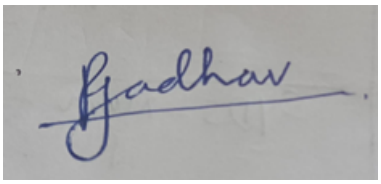
UNIT III **COMPLEX** POWER SERIES, LAURENT SERIES AND ISOLATED SINGULANTES.	Radius of convergences, disc of convergence, uniqueness of series representation, examples.	3	Complex analysis and applications	Explanation, Discussion, Problem solving assignments
	Definition of Laurent series , Definition of isolated singularity, statement (without proof) of existence of Laurent series expansion in neighbourhood of an isolated singularity,	4		
	type of isolated singularities viz. removable, pole and essential defined using Laurent series expansion, examples	3		
	Statement of Residue theorem and calculation of residue.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15___





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VIVA COLLEGE, Virar (W)

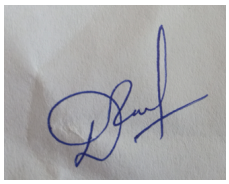
TEACHING PLAN (UNIT PLAN)

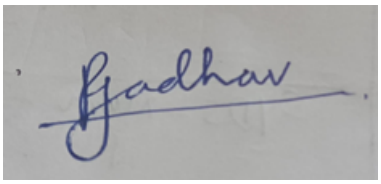
NAME OF THE STAFF: Rinkal A. Das DEPARTMENT: Mathematics CLASS: Sy BSc (PM/MS)

SEMESTE: sem III MONTH: July- November ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : develop critical and logical thinking and will able to solve various problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ORDINARY DIFFERENTIAL EQUATION UNIT-III	**Higher order Linear Differential equations:** **1.**The general n−th order linear differential equations, Linear independence, An existence and uniqueness theorem, the Wronskian, Classification: homogeneous and non-homogeneous, General solution of homogeneous and non-homogeneous LDE, The Differential operator and its properties.	15	Units 5, 6, 7 and 8 of E.D. Rainville and P.E. Bedient; Elementary Differential Equations; Macmillan.	Chalk and board





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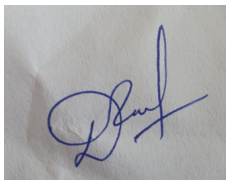
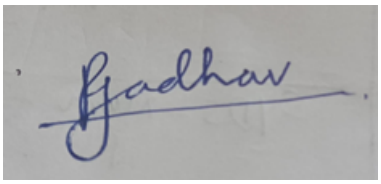
	2. Higher order homogeneous linear differential equations with constant coefficients, the auxiliary equations, Roots of the auxiliary equations: real and distinct, real and repeated, complex and complex repeated. 3.Higher order homogeneous linear differential equations with constant coefficients, the method of undermined coefficients, method of variation of parameters. 4. The inverse differential operator and particular integral, Evaluation of 1 f(D) for the functions like eax, sin ax, cos ax, xm, xm sin ax, xm cos ax, eaxV and xV where V is any function of x, 5. Higher order linear differential equations with variable coefficients: The Cauchy's equation: x3d3y/dx3+ x2 d2y/dx2+ x dy/dx + y = f(x) and The Legendre's equation: (ax + b)3d3y/dx3 + (ax +b)2 d2y/dx2+ (ax + b) dydx + y = f(x).			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

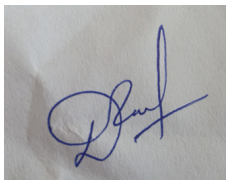
TEACHING PLAN (UNIT PLAN)

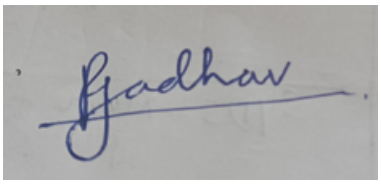
NAME OF THE STAFF: Rinkal A. Das DEPARTMENT: Mathematics CLASS: Fy BSc (PCM/PMS)

SEMESTE: sem I MONTH: July - November ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : develop critical and logical thinking and will able to solve various problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Calculus I UNIT-II: Sequences in R	(1) Definition of a sequence and examples, Convergence of sequences, every convergent sequences is bounded. Limit of a convergent sequence and uniqueness of limit, Divergent sequences. (2) Convergence of standard sequences like $(1/1 + na)\ \forall a > 0,\ (bn)\ \forall b,\ 0 < b$ (3) Algebra of convergent sequences, sandwich theorem, monotone sequences,	15	R. R. Goldberg, Methods of Real Analysis, Oxford and IBH, 1964. E. A. Coddington , An Introduction to Ordinary Differential	Chalk and board





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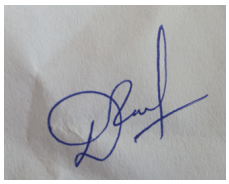
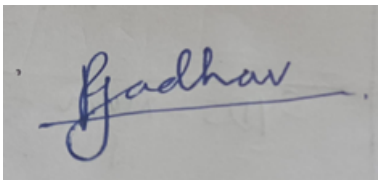
	monotone convergence theorem and consequences as convergence of $\left(\left(1+\frac{1}{n}\right)^n\right)$. (4) Definition of subsequence, subsequence of a convergent sequence is convergent and converges to the same limit, definition of a Cauchy sequences, every convergent sequences s a Cauchy sequence and converse.		Equations.Prentice Hall, 1961.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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VIVA COLLEGE, Virar (W)

Teaching plan for T.Y.B.Sc. (Maths) sem 5 2022-23
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manisha Machhindra Kotkar

DEPARTMENT: Mathematics

CLASS: Tybsc(Maths)

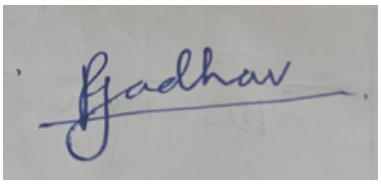
SEMESTER: 5

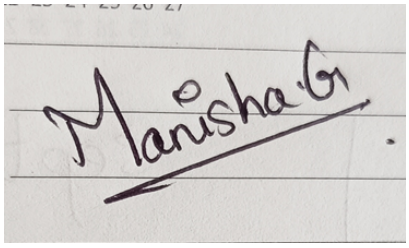
MONTH: August to December

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

- Demonstrate an understanding of concepts of metric spaces and topological spaces and their roll in mathematics.
- prove the basic results about compactness.
- Apply the theory in course to solve variety of problems at an appropriate level of difficulties
- Demonstrate the skill in communicating mathematics orally and in writing.





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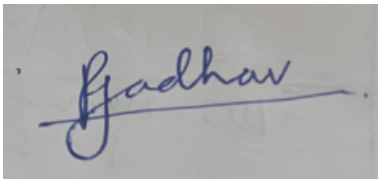
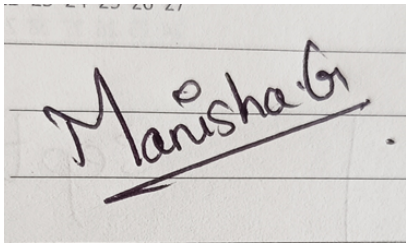
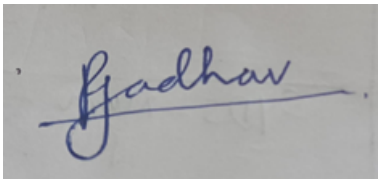
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USMT503 **Topology of Metric Space** **<u>unit 1</u>**	Metric space;: ● Definition and examples of Metric spaces R , R^2 , Euclidean space R^n with it's Euclidean ● Sup and sum metric, complex jumper metric ● The space l^1 and $l^2$of sequence and the space C[a,b] of real valued continuous functions on [a,b] ● Discrete metric space	3	P.K. Jain, K.Ahmed, Metric spaces Narosa, New Delhi, 1996	Black board, chalk and duster
	● Distance metric induced by the norm, translation invariance of metric induced by norm ● Metric subspaces ● Product of two metric spaces	3	P.K. Jain, K.Ahmed, Metric spaces Narosa, New Delhi, 1996	Black board, chalk and duster

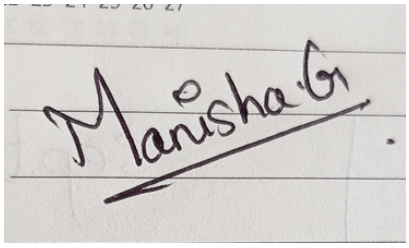




SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	• Open balls and open sets in metric space • Examples of open sets in various metric space • Haus-droff property, Interior of a set • Properties of open sets, structure of open sets in R • Equivalent metrices	3	P.K. Jain, K.Ahmed, Metric spaces Narosa, New Delhi, 1996	Black board, chalk and duster
	• Distance of a point from a set, between two sets • Diameter of a set in metric space • Bounded sets	2	P.K. Jain, K.Ahmed, Metric spaces Narosa, New Delhi, 1996	Black board, chalk and duster
	• Closed ball and closed set in metric space- definition and example • Limit point of a set • Isolated point • Closed set contains all its limit points	4	P.K. Jain, K.Ahmed, Metric spaces Narosa, New Delhi, 1996	Black board, chalk and duster



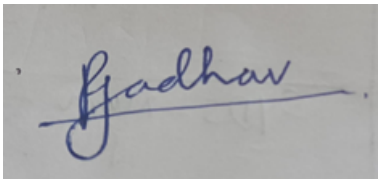


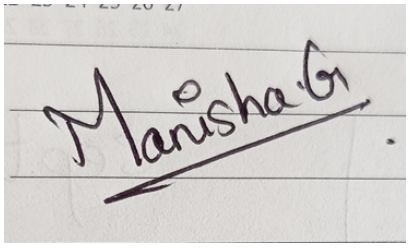
SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	• Closure of a set and boundary of a set			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
USMT503 **Topology of Metric Space** **<u>unit 3</u>**	**Compact set:** • Definition of compact set using open cover • Examples of compact sets in different metric spaces R,R^2 , R^n,	4	P.K. Jain, K.Ahmed, Metric spaces Narosa, New Delhi, 1996	Black board, chalk and duster
	Properties of compact set: • A compact set is closed and bounded(converse is not true) • Every infinite bounded subset of compact set has limit point	3	P.K. Jain, K.Ahmed, Metric spaces Narosa, New Delhi, 1996	Black board, chalk and duster





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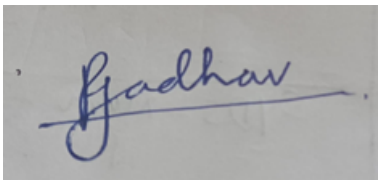
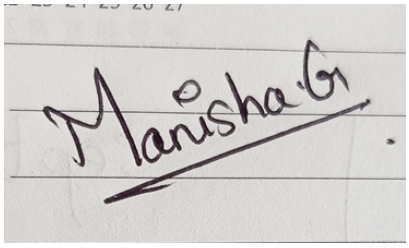
	• A closed subset of compact set is compact. • Union and intersection of compact sets	3	P.K. Jain, K.Ahmed, Metric spaces Narosa, New Delhi, 1996	Black board, chalk and duster
	Equivalent statements for compact set: • Sequential compactness property • Heine- Borel property • Closed and boundedness property • Bolzano-Weierstrass property	5	P.K. Jain, K.Ahmed, Metric spaces Narosa, New Delhi, 1996	Black board, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures





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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

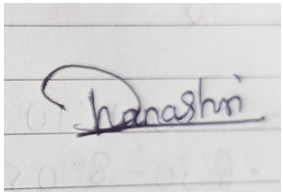
TEACHING PLAN (UNIT PLAN)

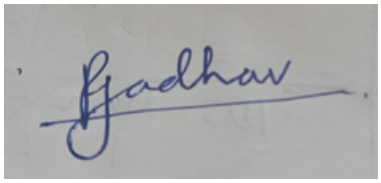
NAME OF THE STAFF: Ms. Dhanashri Ravikant Pawar. DEPARTMENT: Mathematics. CLASS: TY B.Sc. Mathematics SEMESTER: V

MONTH: July ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: Understand applications of derivative.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I: Multivariable Calculus II Unit III: Surface Integral	Parameterized surfaces. Smoothly equivalent parameterizations. Examples.	2	G. B. Thomas and R.L Finney T.Y.B.Sc Calculus -Sheth publications 2. T. M. Apostol, Calculus Vol I	Chalk board method.
	Area of such surfaces. Definition of surface integrals of scalar-valued functions as well as of vector fields defined on a surface.	4		
	Curl and divergence of a vector field. Elementary identities involving gradient, curl and divergence.	3		
	Stroke's Theorem (proof assuming the general from of Green's Theorem).	3		
	Gauss' Divergence Theorem (proof only in the case of cubical domains). Examples	3		





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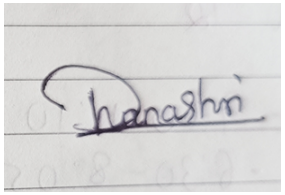
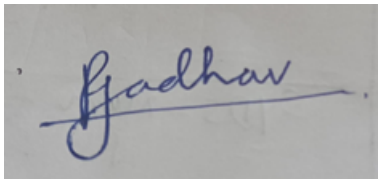
VIVA COLLEGE, Virar (W)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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VIVA COLLEGE, Virar (W)

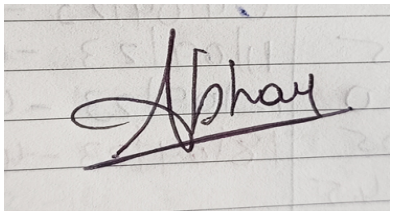
TEACHING PLAN (UNIT PLAN)

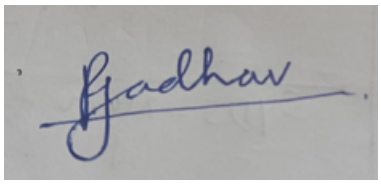
NAME OF THE STAFF: _Mr. ABHAY SHASHIKANT DHANMEHER DEPARTMENT: MATHEMATICS CLASS: T.Y.B.Sc.MATHS

SEMESTER: V MONTH: JULY – OCTOBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Component Computer Programming and system analysis UNIT – I **RELATIONAL DATA BASE MANAGE**	**Introduction to Data base Concepts**: Database, Overview of data base management system. Data base Languages- Data Definition Languages (DDL) and Data Manipulation Languages (DML).	3	Data base management system, RamKrish	Black-Board
	Entity Relation Model : Entity, artibutes, keys, relations, Designing ER diagram, integrity Constraints over relations, conversion of ER to relations with and without constrains.	3		
	SQL Commands and functions Creating and altering tables: Handling data using SQL selecting data using SELECT statement, FROM clause, WHERE clause, HAVING clause, ORDERBY, GROUP BY, DISTINCT and	3		





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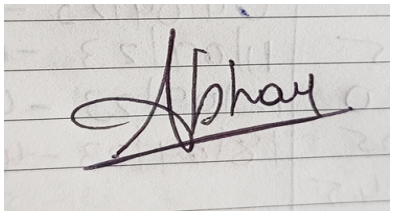
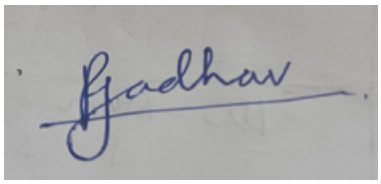
MENT SYSTEM	ALL predicates, Adding data with INSERT statement,		nam, Gehrke, McGraw-Hill	
	c) Functions: Aggregate function, Numeric Funstion,String Function, Data function, Clauses of commands Group by, Having	3		
	d) Joining tables: Inner, outer and cross joins, union.Clauses	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

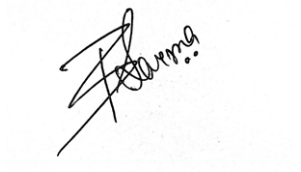
NAME OF THE STAFF: BIJOYA SARMA DEPARTMENT: MATHEMATICS

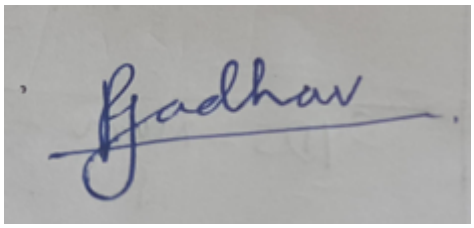
CLASS: TYB.Sc (MATHS) SEMESTER: V MONTH: JULY - OCTOBER

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : understand the concept of cyclic group , subgroup and its generators.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II, UNIT II Cyclic group and cyclic susubgroup	Examples of cyclic groups such as Z and the group µn of the n−th roots of unity.	2	1.University Algebra by N.S. Gopalkrishna 2. Abstract Algebra By Khanna & Bhambri	White board & Marker
	Properties of cyclic groups and cyclic subgroup	4		
	Finite cyclic groups	3		
	Infinite cyclic groups and their generators.	4		





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	Properties of generators.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

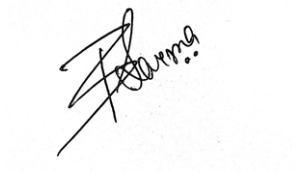
TEACHING PLAN (UNIT PLAN)

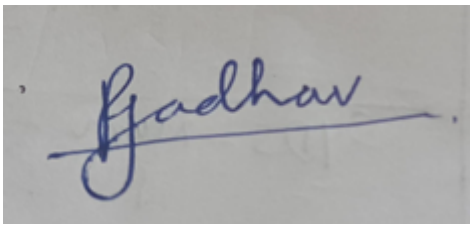
CLASS: TYB.Sc (MATHS) SEMESTER: V MONTH: JULY- OCTOBER

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

The learners will be able to : understand the concept of Lagrange's theorem with the help of normal subgroup.





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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II, UNIT III Lagrange's Theorem	Cosets of a subgroup in a group. Lagrange's Theorem. Normal subgroups.	4	1.University Algebra by N.S. Gopalkrishna 2.Contemporary Abstract Algebra by J. Gallian	White board & Marker
	Alternating group An. Listing normal subgroups of A4, S3. Quotient (or Factor) groups. Fundamental Theorem of homomorphisms of groups.	4		
	The group Z/nZ of residue classes (mod n). Characterization of cyclic groups (as being isomorphic to Z or Z/nZ for some n ∈ N).	4		
	Cayley's Theorem for finite groups.	1		
	External direct products of groups. Examples.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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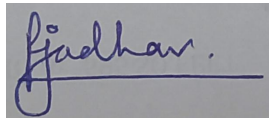
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rakhee N Jadhav DEPARTMENT: MATHEMATICS

CLASS: SYB.Sc (PM/MS) SEMESTER: IV (Maths Paper II) MONTH: December-March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : concept the of Definition of a linear transformation of vector spaces; elementary properties, Rank-Nullity Theorem, Invertible linear transformations,Similar matrices.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II UNIT I. Linear Transformation	1. Definition of a linear transformation of vector spaces; elementary properties. Examples. Sums and scalar multiples of linear transformations. Composites of linear transformations. A Linear transformation of V $\longrightarrow$ W, where V, W are vector spaces over R and V is a finite-dimensional vector space is completely determined by its action on an ordered basis of V.	3	2. Serge Lang; Introduction to Linear Algebra; Springer.	Chalk and duster ,black board
	2. Null-space (kernel) and the image (range) of a linear transformation. Nullity and rank	4		



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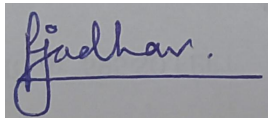

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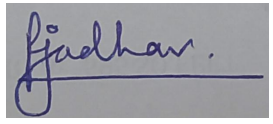
TEACHING PLAN (UNIT PLAN)

	of a linear transformation. Rank-Nullity Theorem (Fundamental Theorem of Homomor- phisms).			
	3. Matrix associated with linear transformation of V −→ W where V and W are finite dimensional vector spaces over R.. Matrix of the composite of two linear transformations. Invertible linear transformations (isomorphisms), Linear operator, Effect of change of bases on matrices of linear operator.	4		
	4. Equivalence of the rank of a matrix and the rank of the associated linear transformation. Similar matrices.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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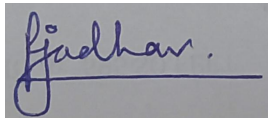

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

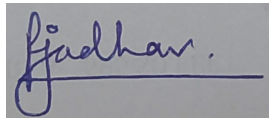
NAME OF THE STAFF: Rakhee N Jadhav **DEPARTMENT: MATHEMATICS**

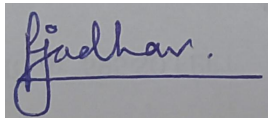
CLASS: SYB.Sc (PM/MS) **SEMESTER: IV (Maths Paper II)** **MONTH: December-March** **ACADEMIC YEAR: 2022-2023**

LEARNING OBJECTIVE/S:

The learners will be able to learn inner product space, properties, Cauchy Schwarz Inequality, orthogonal complement, orthogonal decomposition.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II UNIT II. Inner Products and Orthogonality	Inner product spaces (over R). Examples, including the Euclidean space Rn and the space of real valued continuous functions on a closed and bounded interval. Norm associated to an inner product. Cauchy-Schwarz inequality. Triangle inequality.	3	2. Serge Lang; Introduction to Linear Algebra; Springer.	Chalk and duster ,black board
	Angle between two vectors. Orthogonality of vectors. Pythagoras theorem and some	4		





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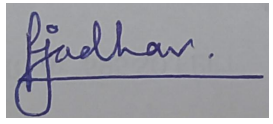
TEACHING PLAN (UNIT PLAN)

	geometric applications in R2 . Orthogonal sets, Orthonormal sets. Gram-Schmidt orthogonalizaton process. Orthogonal basis and orthonormal basis for a finite-dimensional inner product space.			
	Orthogonal complement of any set of vectors in an inner product space. Orthogonal complement of a set is a vector subspace of the inner product space	4		
	Orthogonal decomposition of an inner product space with respect to its subspace. Orthogonal projection of a vector onto a line (one dimensional subspace). Orthogonal projection of an inner product space onto its subspace.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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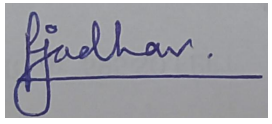

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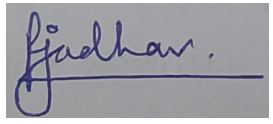
TEACHING PLAN (UNIT PLAN)

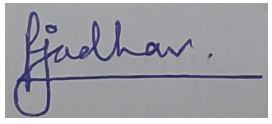
NAME OF THE STAFF: Rakhee N Jadhav DEPARTMENT: MATHEMATICS

CLASS: SYB.Sc (PM/MS) SEMESTER: IV (Maths Paper II) MONTH: December-March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to learn eigen values and eigen vector of linear transformation, Cayley Hamilton Theorem, diagonalisable matrix,spectral theorem and application to quadratic form

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II UNIT III. Eigenvalues, Eigenvectors and Diagonalisation	Eigenvalues and eigenvectors of a linear transformation of a vector space into itself and of square matrices. The eigenvectors corresponding to distinct eigenvalues of a linear transformation are linearly independent. Eigen spaces. Algebraic and geometric multiplicity of an eigenvalue	3	2. Serge Lang; Introduction to Linear Algebra; Springer.	Chalk and duster ,black board
	Characteristic polynomial. Properties of characteristic polynomials (only statements). Examples. Cayley-Hamilton Theorem. Applications. Invariance of the characteristic polynomial and eigenvalues of similar matrices	4		





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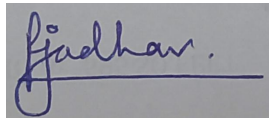
TEACHING PLAN (UNIT PLAN)

	Diagonalisable matrix. A real square matrix A is diagonalisable if and only if there is a basis of Rn consisting of eigenvectors of A. (Statement only - An×n is diagonalisable if and only if sum of algebraic multiplicities is equal to sum of geometric multiplicities of all the eigenvalues of A = n). Procedure for diagonalising a matrix.	4		
	Spectral Theorem for Real Symmetric Matrices (Statement only). Examples of orthogonal diagonalisation of real symmetric matrices. Applications to quadratic forms and classification of conic sections.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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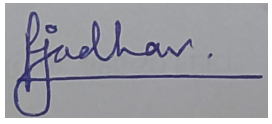

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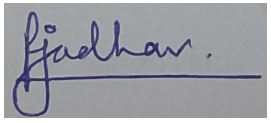
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rakhee N Jadhav DEPARTMENT: MATHEMATICS

CLASS: SYBSC (PM/MS) SEMESTER: III (Subject -Maths Paper I) MONTH: July -September ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : concept the of infinite series,test for convergence,alternating infinite series briefly.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1. Infinite series in R. Definition of convergence and divergence. Basic examples including geometric series. Elementary results for n=1 but converse not true. Cauchy Criterion. Algebra of convergent series	3		
	Tests for convergence: Comparison Test, Limit Comparison Test, Ratio Test (without proof), Root Test (without proof), Abel Test (without proof) and Dirichlet Test (without proof).	4		
	Examples. The decimal expansion of real numbers. Convergence of $\sum 1/n^p$	4		



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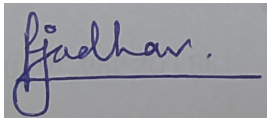

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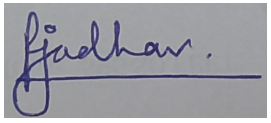
TEACHING PLAN (UNIT PLAN)

	Divergence of harmonic series ∑1/n			

PAPER I, UNIT I Infinite Series			1. Sudhir Ghorpade, Balmohan Limaye; A Course in Calculus and Real Analysis (second edition); Springer. 2. R.R. Goldberg; Methods of Real Analysis; Oxford and IBH Pub. Co.,	Chalk,Duster and Blackboard
	Alternating series. Leibnitz's Test. Examples. Absolute convergence, absolute convergence implies convergence but not conversely. Conditional Convergence.	4		



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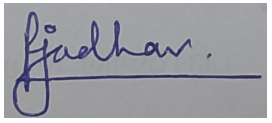

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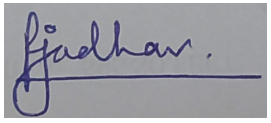
			New Delhi, 1970.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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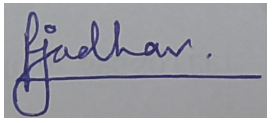

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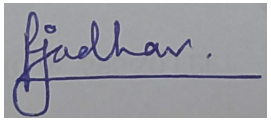
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rakhee N Jadhav DEPARTMENT: MATHEMATICS

CLASS: SYBSC (PM/MS) SEMESTER: III (Subject -Maths Paper I) MONTH: July -September ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : concept the of Riemann integrable function , their algebra, criterion of Riemann integrable function.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I, UNIT II Riemann Integration	1)Idea of approximating the area under a curve by inscribed and circumscribed rectangles. Partitions of an interval. Refinement of a partition. Upper and Lower sums for a bounded	3	1. Sudhir Ghorpade, Balmohan Limaye; A Course in	Chalk,Duster and Blackboard



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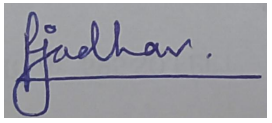

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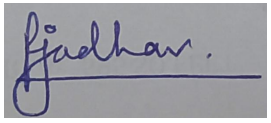
TEACHING PLAN (UNIT PLAN)

	real valued function on a closed and bounded interval. Riemann integrability and the Riemann integral.		Calculus and Real Analysis (second edition); Springer. 2. R.R. Goldberg; Methods of Real Analysis; Oxford and IBH Pub. Co., New Delhi, 1970.	
	2)Criterion for Riemann integrability. Characterization of the Riemann integral as the limit of a sum. Examples	4		
	3. Algebra of Riemann integrable functions. Also, basic results	4		
	4)Riemann integrability of a continuous function, and more generally of a bounded function whose set of discontinuities has only finitely many points. Riemann integrability of monotone functions.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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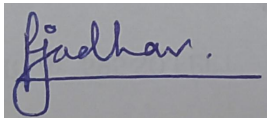

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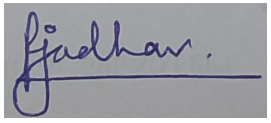
TEACHING PLAN (UNIT PLAN)



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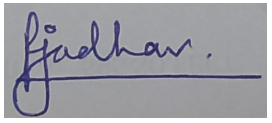

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TEACHING PLAN (UNIT PLAN)

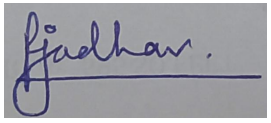
NAME OF THE STAFF: Rakhee N Jadhav **DEPARTMENT: MATHEMATICS**

CLASS: SYBSC (PM/MS) **SEMESTER: III (Subject -Maths Paper I)** **MONTH: July -September** **ACADEMIC YEAR: 2022-2023**

LEARNING OBJECTIVE/S:

The learners will be able to : concept the of area between the two curves,first and second fundamental theorem of calculus, Beta and Gamma function

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I Unit III Applications of Integrations and Improper Integrals	1.Area between the two curves. Lengths of plane curves. Surface area of surfaces of revolution.	3	1. Sudhir Ghorpade, Balmohan Limaye; A Course in Calculus and Real Analysis (second edition); Springer. 2. R.R. Goldberg; Methods of Real Analysis; Oxford and	Chalk,Duster and Blackboard
	2Continuity of the function . First and Second Fundamental Theorems of Calculus.	4		
	3Mean value theorem. Integration by parts formula. Leibnitz's Rule. 4. Definition of two types of improper integrals. Necessary and sufficient conditions for convergence.	4		
	5Absolute convergence. Comparison and limit comparison tests for convergence. 6. Gamma and Beta functions and their properties. Relationship between them (without	4		



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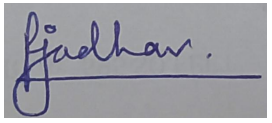

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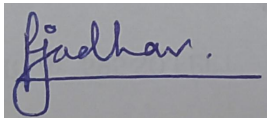
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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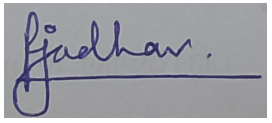

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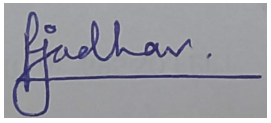
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rakhee N Jadhav DEPARTMENT: MATHEMATICS

CLASS: SYBSC (PM/MS) SEMESTER: III (Subject -Maths Paper II) MONTH: June -October ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : concept the of System of Equations, Matrices, Determinants briefly

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit I. System of Equations, Matrices	1. Systems of homogeneous and non-homogeneous linear equations, Simple examples of find- ing solutions of such systems. Geometric and algebraic understanding of the solutions. Matrices (with real entries), Matrix representation of system of homogeneous and non-homogeneous linear equations. Algebra of solutions of systems of homogeneous linear equations. A system of homogeneous linear equations with number of unknowns more than the number of equations has infinitely many solutions.	4	1)Serge Lang, Introduction to Linear Algebra, Springer. 2) S Kumaresan, Linear Algebra - A Geometric Approach, PHI Learning.	Chalk ,duster , blackboard
	2. Elementary row and column operations. Row equivalent matrices. Row reduction (of a matrix to its row echelon form). Gaussian elimination. Applications to solving systems of linear equations. Examples	4		



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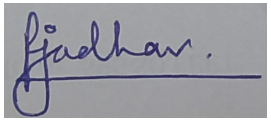

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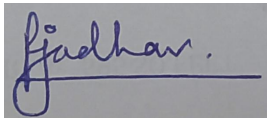
TEACHING PLAN (UNIT PLAN)

	Elementary matrices. Relation of elementary row operations with elementary matrices. Invertibility of elementary matrices. Consequences such as (i) a square matrix is invertible if and only if its row echelon form is invertible.	4		
	ii) invertible matrices are products of elementary matrices. Examples of the computation of the inverse of a matrix using Gauss elimination method	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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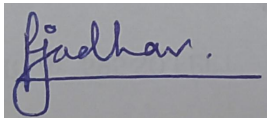

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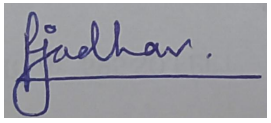
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rakhee N Jadhav **DEPARTMENT: MATHEMATICS**

CLASS: SYBSC (PM/MS) **SEMESTER: III (Subject -Maths Paper II)** **MONTH: June -October** **ACADEMIC YEAR: 2022-2023**

LEARNING OBJECTIVE/S: The learners will be able to understand concept the ofVector Space, Subspace, basis of a vector space, properties .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit II. Vector space over R	Definition of a vector space over R. Subspaces; criterion for a nonempty subset to be a subspace of a vector space. Examples of vector spaces, including the Euclidean space Rn , lines, planes and hyperplanes in Rn passing through the origin, space of systems of homogeneous linear equations, space of polynomials, space of various types of matrices, space of real valued functions on a set.	4	1)Serge Lang, Introduction to Linear Algebra, Springer. 2) S Kumaresan, Linear Algebra - A Geometric Approach, PHI Learning.	Chalk ,duster , blackboard
	Intersections and sums of subspaces. Direct sums of vector spaces. Quotient space of a vector space by its subspace.	4		
	Linear combination of vectors. Linear span of a subset of a vector space. Definition of a finitely generated vector space. Linear dependence and independence of subsets of a vector	4		



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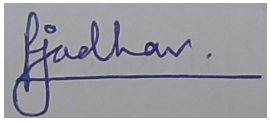

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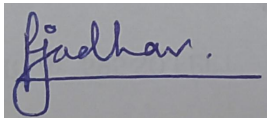
TEACHING PLAN (UNIT PLAN)

	space.			
	Basis of a vector space. Basic results that any two bases of a finitely generated vector space have the same number of elements. Dimension of a vector space. Examples. Bases of a vector space as a maximal linearly independent sets and as minimal generating sets.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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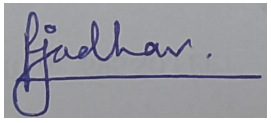

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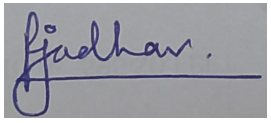
TEACHING PLAN (UNIT PLAN)

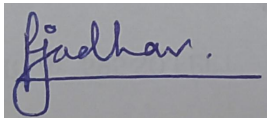
NAME OF THE STAFF: Rakhee N Jadhav DEPARTMENT: MATHEMATICS

CLASS: SYBSC (PM/MS) SEMESTER: III (Subject -Maths Paper II) MONTH: June -October ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:The learners will be able to understand concept the ofdeterminant and properties of determinant,row and column Space

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper II Unit III. Determinants, Linear Equations	1. Inductive definition of the determinant of a n × n matrix (e. g. in terms of expansion along the first row). Example of a lower triangular matrix. Laplace expansions along an arbitrary row or column. Determinant expansions using permutations 2. Basic properties of determinants (Statements only); (i) det A = det AT	4	1)Serge Lang, Introduction to Linear Algebra, Springer. 2) S Kumaresan, Linear	Chalk ,duster , blackboard





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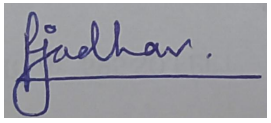
TEACHING PLAN (UNIT PLAN)

	. (ii) Multilinearity and alternating property for columns and rows. (iii) A square matrix A is invertible if and only if det A 6= 0. (iv) Minors and cofactors. Formula for A−1 when det A 6= 0. (v) det(AB) = det A det B.		Algebra - A Geometric Approach, PHI Learning.	
	3. Row space and the column space of a matrix as examples of vector space. Notion of row rank and the column rank. Equivalence of the row rank and the column rank. Invariance of rank upon elementary row or column operations. Examples of computing the rank using row reduction.	4		
	4. Relation between the solutions of a system of non-homogeneous linear equations and the associated system of homogeneous linear equations. Necessary and sufficient condition for a system of non-homogeneous linear equations to have a solution [viz., the rank of the coefficient matrix equals the rank of the augmented matrix [A|B]]. Equivalence of statements (in which A denotes an n × n matrix) such as the following.	4		



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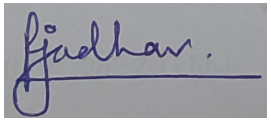

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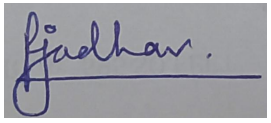
TEACHING PLAN (UNIT PLAN)

	(i) The system Ax = b of non-homogeneous linear equations has a unique solution. (ii) The system Ax = 0 of homogeneous linear equations has no nontrivial solution. (iii) A is invertible. (iv) det A 6= 0. (v) rank(A) = n.			
	5. Cramers Rule. LU Decomposition. If a square matrix A is a matrix that can be reduced to row echelon form U by Gauss elimination without row interchanges, then A can be factored as A = LU where L is a lower triangular matrix.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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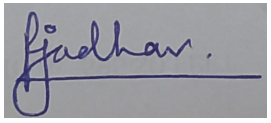

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

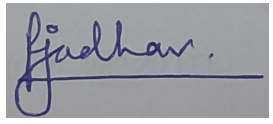
NAME OF THE STAFF: Rakhee N Jadhav DEPARTMENT: STATISTICS

CLASS: TYB.Sc (STATISTICS) SEMESTER: V Subject -(Stats Paper V) MONTH:JULY-NOVEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : learn mathematical formulation,simplex method, properties of duality

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper V Unit I : LINEAR PROGRAMMIN G PROBLEM	Mathematical Formulation : Maximization and Minimization type problems. Concepts of solution, Feasible solution,	3	1..Kantiswarup, P. K. Gupta, Manmohan : Operations Research, Twelfth edition, Sultan Chand & sons. 2. Sharma S. D. : Operations Research, Eighth edition, KedarnathRamnat h& Co	Chalk, duster, blackboard
	Basic solution, Basic feasible solution, Optimal solution. Graphical solution to problems.	4		
	. Simplex method of solving problems with two or more variables. Big M method. Concept of Duality,	4		
	Properties of Duality. Its use in solving L.P.P. Relationship between optimum solutions to Primal and Dual. Economic interpretation of Dual.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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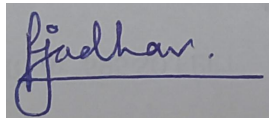

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rakhee N Jadhav DEPARTMENT: MATHEMATICS

CLASS: FYB.Sc (PCM) SEMESTER: II (Subject : _____Maths Paper I_____)

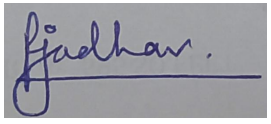
MONTH: _____ ACADEMIC YEAR: _____

MONTH: January-April ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

The learners will be able to : definition of limit, continuity, intermediate value theorem

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit-I: Limits and Continuity	{Brief review: Domain and range of a function, injective function, surjective function, bijective function, composite of two functions (when defined), Inverse of a bijective function. Graphs of some standard functions such as |x|, ex, log x, over suitable intervals of R.}	3	James Stewart, Calculus, Third Edition, Brooks/ Cole Publishing	Chalk and duster method, black board



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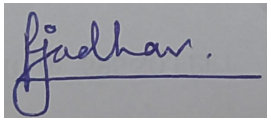

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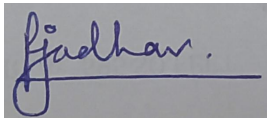
TEACHING PLAN (UNIT PLAN)

	(1) $\varepsilon - \delta$ definition of Limit of a function, uniqueness of limit if it exists, algebra of limits, limits of composite function, sandwich theorem, left-hand-limit f(x), right-handlimit lim f(x), non-existence of limits	4	company, 1994.	
	(2) Continuous functions: Continuity of a real valued function at a point and on a set using $- \delta$ definition, examples, Continuity of a real valued function at end points of domain using definition, f is continuous at a if and only if lim x−→af(x) exists and equals to f(a), Sequential continuity, Algebra of continuous functions, discontinuous functions, examples of removable and essential discontinuity.	4		
	(3) Intermediate Value theorem and its applications, Bolzano-Weierstrass theorem (statement only): A continuous function on a closed and bounded interval is bounded and attains its bounds.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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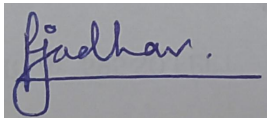

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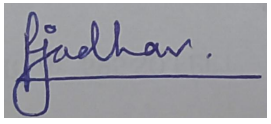
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rakhee N Jadhav DEPARTMENT: MATHEMATICS
CLASS: FYB.Sc (PCM) SEMESTER: II (Subject : _____Maths Paper I_____)
MONTH: _____ ACADEMIC YEAR: _____
MONTH: January-April ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : concept the of Differentiation,examples of differentiable functions,Chain rule, derivatives of inverese functions briefly.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit-II: Differentiability	Differentiation of real valued function of one variable: Definition of differentiability of a function at a point of an open interval,	3	James Stewart, Calculus, Third Edition, Brooks/ Cole Publishing company, 1994.	Chalk and duster method
	examples of differentiable and non differentiable functions, differentiable functions are continuous but not conversely, algebra of differen-tiable function	4		



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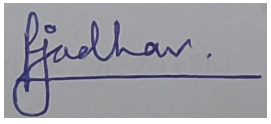

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TEACHING PLAN (UNIT PLAN)

	Chain rule, Higher order derivatives, Leibniz rule,	4		
	Derivative of inverse functions, Implicit differentiation (only examples)	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

CLASS: FYB.Sc (PCM) **SEMESTER: II** **(Subject : _____Maths Paper I_____)**

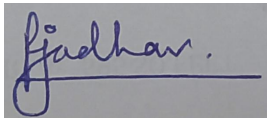
MONTH: _____ **ACADEMIC YEAR: _____**

MONTH: January-April **ACADEMIC YEAR: 2022-2023**

LEARNING OBJECTIVE/S:

The learners will be able to Mean Value Theorem,L-Hospital rule

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Unit-III Applications of differentiability	Rolle's Theorem, Lagrange's and Cauchy's Mean Value Theorems, applications and examples, Monotone increasing and decreasing functions, examples.	3	James Stewart, Calculus, Third Edition, Brooks/ Cole Publishing company, 1994.	Chalk and duster method, black board
	L-Hospital rule (without proof), examples of indeterminate forms, Taylor's theorem with Lagrange's form of remainder with proof, Taylor polynomial and applications.	4		



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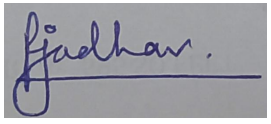

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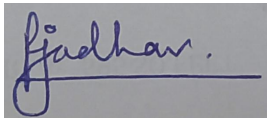
TEACHING PLAN (UNIT PLAN)

	Definition of critical point, local maximum/minimum, necessary condition, stationary points, second derivative test, examples, concave/convex functions, point of inflection	4		
	Sketching of graphs of functions using properties.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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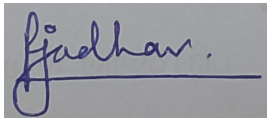

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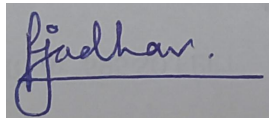
TEACHING PLAN (UNIT PLAN)

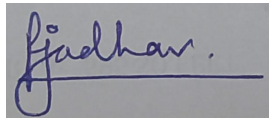
NAME OF THE STAFF: Rakhee N Jadhav DEPARTMENT: MATHEMATICS

CLASS:SYBSC (PM/MS) SEMESTER: IV (Maths Paper I) MONTH: December-March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : concept the concept of vectors in R^n ,algebra of sequence in R^n,functions of several variables briefly.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I UNIT I. Functions of Several Varisables	1. Review of vectors in R^n n=2,3and basic notions such as addition and scalar multiplication, inner product, length (norm), and distance between two points	3	R. G. Bartle- D. R. Sherbert, Introduction to Real Analysis, John Wiley & Sons, 1994.	Chalk, duster, blackboard
	2. Real-valued functions of several variables (Scalar fields). Graph of a function. Level sets (level curves, level surfaces, etc). Examples. Vector valued functions of several variables (Vector fields). Component functions. Examples.	4		
	Algebra of convergent sequences, sandwich theorem, monotone sequences, monotone convergence theorem and consequences as convergence of $\left((1+\frac{1}{n})^n\right)$	4		
	Definition of subsequence, subsequence of a convergent sequence is convergent and converges to the same limit, definition of a	4		





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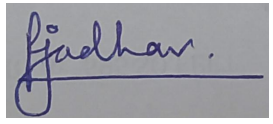
TEACHING PLAN (UNIT PLAN)

	Cauchy sequences, every convergent sequences s a Cauchy sequence and converse.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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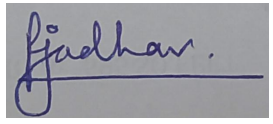

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

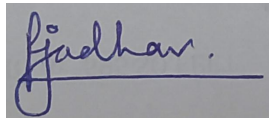
NAME OF THE STAFF: Rakhee N Jadhav **DEPARTMENT: MATHEMATICS**

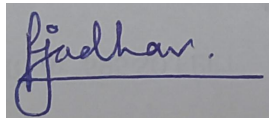
CLASS:SYBSC (PM/MS) **SEMESTER: IV** **(Maths Paper I) MONTH: December-March** **ACADEMIC YEAR: 2022-2023**

LEARNING OBJECTIVE/S:

The learners will be able to Differentiability of scalar fields, Gradient, relation between total derivative and gradient, Euler theorem, higher order partial derivative.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I UNIT II. Differentiation of Scalar Fields	Differentiability of scalar fields (in terms of linear transformation). The concept of (total) derivative. Uniqueness of total derivative of a differentiable function at a point. Examples of functions of two or three variables. Increment Theorem. Basic properties including (i) continuity at a point of differentiability, (ii)existence of partial derivatives at a point of differentiability, and (iii) differentiability when the partial derivatives exist and are continuous.	3	R. G. Bartle- D. R. Sherbert, Introduction to Real Analysis, John Wiley & Sons, 1994.	Chalk, duster, blackboard
	Gradient. Relation between total derivative and gradient of a function. Chain rule. Geometric properties of gradient. Tangent planes	4		





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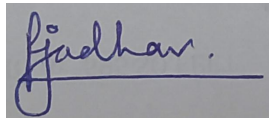
TEACHING PLAN (UNIT PLAN)

	Euler's Theorem.	4		
	Higher order partial derivatives. Mixed Partial Theorem (n=2)	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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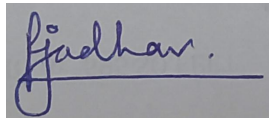

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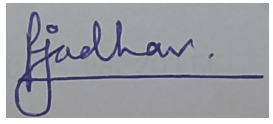
TEACHING PLAN (UNIT PLAN)

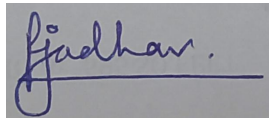
NAME OF THE STAFF: Rakhee N Jadhav DEPARTMENT: MATHEMATICS

CLASS:SYBSC (PM/MS) SEMESTER: IV (Maths Paper I) MONTH: December-March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to learn application of differentiation of scalar field, derivative test, differentiation of vector field,chainrule.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I UNIT III. Applications of Differentiation of Scalar Fields and Differentiation of Vector Fields	Applications of Differentiation of Scalar Fields: The maximum and minimum rate of change of scalar fields. Taylor's Theorem for twice continuously differentiable functions. Notions of local maxima, local minima and saddle points.	3	R. G. Bartle- D. R. Sherbert, Introduction to Real Analysis, John Wiley & Sons, 1994.	Chalk, duster, blackboard
	First Derivative Test. Examples. Hessian matrix. Second Derivative Test for functions of two variables. Examples. Method of Lagrange Multipliers.	4		
	Differentiation of Vector Fields: Differentiability and the notion of (total) derivative. Differentiability of a vector field implies continuity, Jacobian matrix	4		





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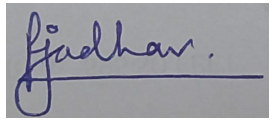
TEACHING PLAN (UNIT PLAN)

	Relationship between total derivative and Jacobian matrix. The chain rule for derivative of vector fields (statements only).	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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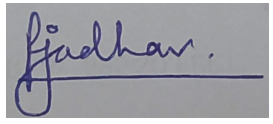

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TEACHING PLAN (UNIT PLAN)

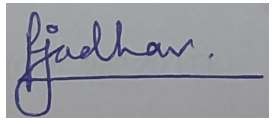
NAME OF THE STAFF: Rakhee N Jadhav DEPARTMENT: MATHEMATICS

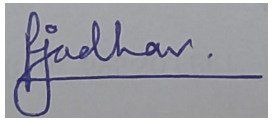
CLASS:TYB.Sc (Mathematics) SEMESTER: VI (Subject -Maths Paper IV) MONTH: December-March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : concept the of coloring of graph, planar graphs, combinatorics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I, UNIT I Colorings of graph	Vertex coloring- evaluation of vertex chromatic number of some standard graphs, critical graph.	3	1 Bondy and Murty Grapgh, Theory with Applications. 2 Balkrishnan and Ranganathan, Graph theory and applications.	Chalk and duster method,black board
	Upper and lower bounds of Vertex chromatic Number- Statement of Brooks theorem. Edge coloring- Evaluation of edge chromatic number of standard graphs such as complete graph,	4		
	complete bipartite graph, cycle. Statement of VizingTheorem. Chromatic polynomial of graphs- Recurrence Relation and properties of Chromatic polynomials. Vertex and Edge cuts vertex	4		
	the relation between vertex and edge connectivity. Equality of vertex and edge connectivity of cubic graphs. Whitney's theorem on 2-vertex connected graph	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

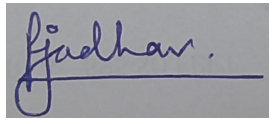
NAME OF THE STAFF: Rakhee N Jadhav DEPARTMENT: MATHEMATICS

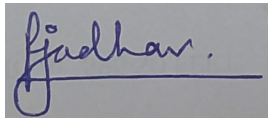
CLASS:TYB.Sc (Mathematics) SEMESTER: VI (Subject -Maths Paper IV) MONTH: December-March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

The learners will be able to planar graph,5 color theorem, network and flow,max flow and min cut theorem

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I, UNIT II Planar graph	Definition of planar graph. Euler formula and its consequences. Non planarity of K5 ; K(3; 3). Dual of a graph. Polyhedran in $\mathbb{R}$ and existence of exactly five regular polyhedra-	3	1 Bondy and Murty Grapgh, Theory with Applications. 2 Balkrishnan and Ranganathan, Graph theory and applications.	Chalk and duster , black board
	(Platonic solids) Colorabilty of planar graphs- 5 color theorem for planar graphs	4		
	statement of 4 color theorem. Networks and flow and cut in a network- value of a flow and the capacity of cut in a network	4		
	relation between flow and cut. Maximal flow and minimal cut in a network and Ford-Fulkerson theorem.	4		





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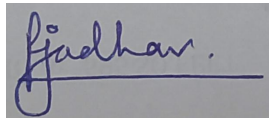

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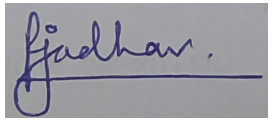

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TEACHING PLAN (UNIT PLAN)

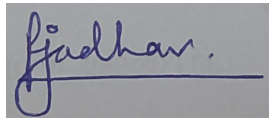
NAME OF THE STAFF: Rakhee N Jadhav DEPARTMENT: MATHEMATICS

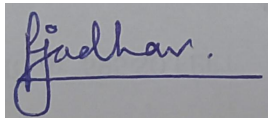
CLASS:TYB.Sc (Mathematics) SEMESTER: VI (Subject -Maths Paper IV) MONTH: December-March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to learn Applications of Inclusion Exclusion Principle, solving recurrence relation, hall's theorem of SDR

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I, UNIT III Combinatorics	Applications of Inclusion Exclusion Principle- Rook polynomial, Forbidden position problems Introduction to partial fractions and using Newton's binomial theorem for real power find series	3	1 Bondy and Murty Grapgh, Theory with Applications. 2 Balkrishnan and Ranganathan, Graph theory and applications.	Chalk and duster,black board
	expansion of some standard functions. Forming recurrence relation and getting a generating function.	4		
	Solving a recurrence relation using ordinary generating functions. System of Distinct Representatives	4		
	Hall's theorem of SDR.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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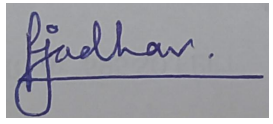
TEACHING PLAN (UNIT PLAN)



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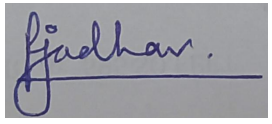

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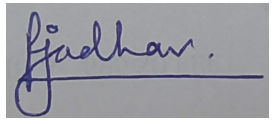
TEACHING PLAN (UNIT PLAN)

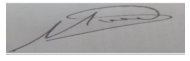
NAME OF THE STAFF: Rakhee N Jadhav DEPARTMENT: MATHEMATICS

CLASS: TYB.Sc (Statistics) SEMESTER: VI (Subject-Stats Paper III) MONTH: January-March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : concept the of Simplex Method,dual simplex method, effect on optimal solution to LPP

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III, UNIT I LINEAR PROGRAMMING PROBLEM	Two-Phase Simplex Method, Algorithm.	3	1. Vora N. D. : Quantitative Techniques in Management, Third edition, McGraw Hill Companies. 2. Kantiswarup, P.K. Gupta, Manmohan: Operations Research, Twelfth edition, Sultan Chand & sons.	Chalk and duster method
	Dual Simplex Method, Algorithm. Post Optimality Sensitivity Analysis.	4		
	Effect on optimal solution to the LPP and improvement in the solution due to (i) Change in cost coefficient,	4		
	(ii)Change in the element of requirement vector, (iii) Addition/deletion of a variable,(iv) Addition/deletion of a constraint. (All expressions without proof)	4		





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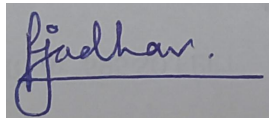
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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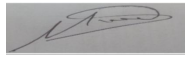

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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

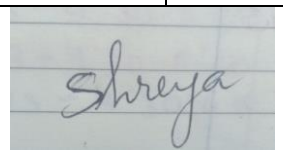
NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICSCLASS: TY

B.SC MATHSSEMESTER: VMONTH: SEPTEMBER-NOVEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of convergent and Cauchy sequences in metric spaces.
- Deduce various results related to Cauchy and convergent sequences.
- Define subsequence and eventually constant sequence in metric space.
- Characterize limit points and closure points in terms of sequences.
- Understand the concept of dense subsets in metric space and separability.
- Define complete metric space and check whether given metric space is complete or not.
- State and prove Cantor's intersection theorem and its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
TOPOLOGY OF METRIC SPACES	➢ Convergent & Cauchy sequences in a metric space ➢ Subsequence and eventually constant sequence ➢ Characterization limit points and closure points in terms of sequences	2 2 2	1.TOPOLOGY OF METRIC SPACES (KUMARESAN)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD



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Sequences & Complete Metric Spaces (UNIT 2)	➢ Dense subsets in metric space and separability ➢ Complete metric space with examples ➢ Cantor's intersection theorem and its applications	2 3 4	2. METRIC SPACES (JAIN & AHMED)	TEACHING AIDS : Whiteboard, marker, duster, pentab

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

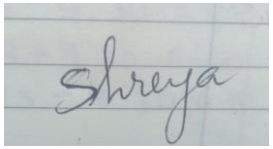
NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: TY B.SC MATHS SEMESTER: VI MONTH: JANUARY- FEBRUARY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of limit of a complex valued function.
- Define and check the continuity and differentiability of complex valued functions.
- Gain knowledge about the stereographic projection of complex numbers.
- Understand the concept of analytic functions and the necessary sufficient conditions to check whether function is analytic.
- Find the harmonic conjugate of harmonic functions.
- Analyze various results based on analytic functions.

PAPER, UNIT,	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT



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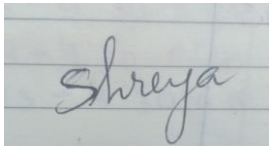
TITLE		ALLOTED		TOOLS USED
COMPLEX ANALYSIS Introduction to Complex Analysis (Unit 1)	➢ Review of complex numbers ➢ Limit and continuity at a point, derivatives of complex valued functions ➢ Cauchy Riemann equations, sufficient condition of differentiability ➢ Analytic functions, harmonic functions and harmonic conjugate.	3 4 3 5	COMPLEX VARIABLES AND APPLICATIONS (BROWN & CHURCHILL)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Whiteboard, marker, duster, pentab

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



SIGNATURE OF THE STAFF

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VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

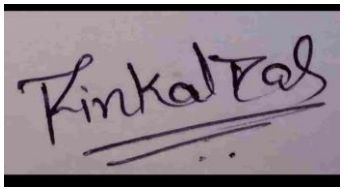
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rinkal A. Das DEPARTMENT: Mathematics CLASS: Fy BSc (PCM/PMS)

SEMESTE: sem II MONTH: December- April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : develop critical and logical thinking and will able to solve various problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Calculus II UNIT-I: Limits and continuity	(1) $\varepsilon - \delta$ definition of Limit of a function, uniqueness of limit if it exists, algebra of limits, limits of composite function, sandwich theorem, left-hand-limit lim x−→a− f(x), right-handlimit Lim x−→a+f(x), non-existence of limits, lim x−→−∞f(x), lim x−→∞ f(x) and limx−→a f(x) = ±∞. (2) Continuous functions: Continuity of a real valued function at a point and on a set using ε-δ definition, examples, Continuity of a real valued function at end points of domain using ε-δ definition, f is continuous at a if and only if limx−→a f(x) exists and equals to f(a),Sequential continuity, Algebra of continuous	15	R. R. Goldberg, Methods of Real Analysis, Oxford and IBH, 1964. E. A. Coddington , An Introduction to Ordinary Differential Equations.Prentice Hall, 1961.	Chalk and board



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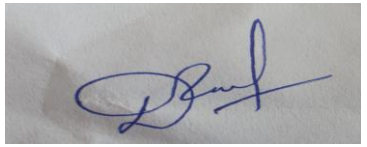

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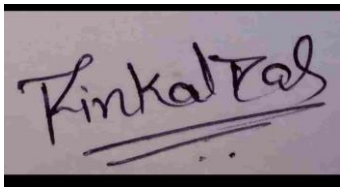
	functions, discontinuous functions, examples of removable and essential discontinuity. (3) Intermediate Value theorem and its applications, Bolzano-Weierstrass theorem (statement only): A continuous function on a closed and bounded interval is bounded and attains its bound			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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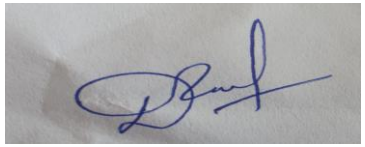

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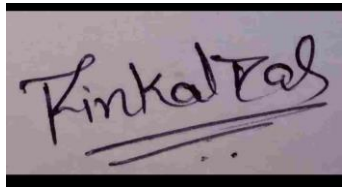
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rinkal A. Das DEPARTMENT: Mathematics CLASS: Sy BSc (Maths)

SEMESTE: sem II MONTH: December - April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : develop critical and logical thinking and will able to solve various problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Multivariable Calculus I UNIT-1	**Differentiation of Scalar Fields:** Differentiability of scalar fields (in terms of linear transformation). The concept of (total) derivative. Uniqueness of total derivative of a differentiable function at a point. Examples of functions of two or three variables. Increment Theorem. Basic properties including (i) continuity at a point of differentiability, (ii)existence of partial derivatives at a point of differentiability, and (iii) differentiability when the partial derivatives exist and are continuous. Gradient. Relation between total derivative and gradient of a	15	T. Apostol; Calculus, Vol. 2 (Second Edition); John Wiley. Walter Rudin; Principles of Mathematical Analysis; McGraw-Hill, Inc.	Google meet



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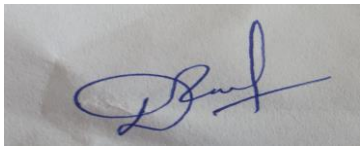

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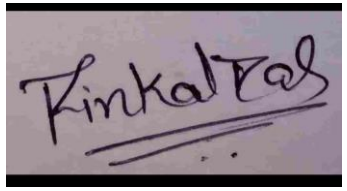
	function. Chain rule. Geometric properties of gradient. Tangent planes. Euler's Theorem. Higher order partial derivatives. Mixed Partial Theorem (n=2).			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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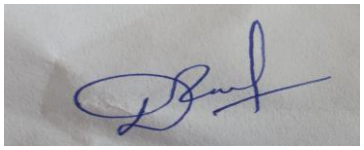

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

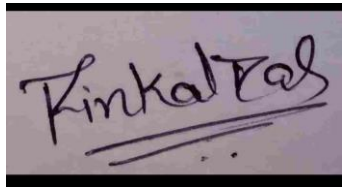
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rinkal A. Das DEPARTMENT: Mathematics CLASS: Sy BSc (Statistics)

SEMESTE: sem IV MONTH: December- April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : develop critical and logical thinking and will able to solve various problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Operations Research - 2 UNIT-I CPM AND PERT	Objective and Outline of the techniques. Diagrammatic representation of activities in a project: Gantt Chart and Network Diagram. Slack time and Float times. Determination of Critical path. Probability consideration in projectscheduling. Project cost analysis. Updating	15	PERT and CPM, Principles and Applications: Srinath. 2nd edition, East-West Press Pvt. Ltd	Google Meet



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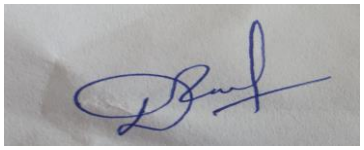

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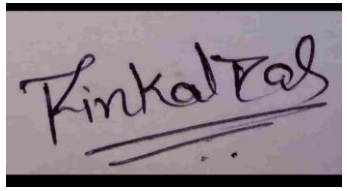
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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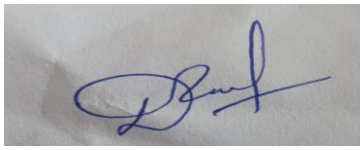

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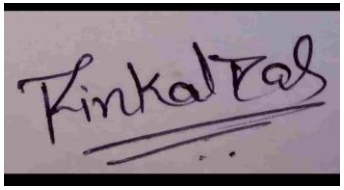
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rinkal A. Das DEPARTMENT: Mathematics CLASS: Ty Bsc (Maths)

SEMESTE: sem II MONTH: December - April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : develop critical and logical thinking and will able to solve various problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Algebra UNIT-III	**Polynomial Rings and Field theory:** Principal ideal, maximal ideal, prime ideal, the characterization of the prime and maximal ideals in terms of quotient rings. Polynomial rings, R[X] when R is an integral domain/ Field. Divisibility in Integral Domain, Definitions of associates, irreducible and primes. Prime (irreducible) elements in R[X], Q[X], Zp[X]. Eisensteins criterion for irreducibility of a polynomial over Z. Prime and maximal ideals in polynomial rings. Definition of field, subfield and examples, characteristic of fields. Any field is an ID and a finite ID is a field. Characterization of fields in terms of maximal ideals, irreducible	151	N. Herstein. Topics in Algebra, Wiley Eastern Limited, Second edition. M. Artin, Algebra, Prentice Hall of India,	Chalk and board



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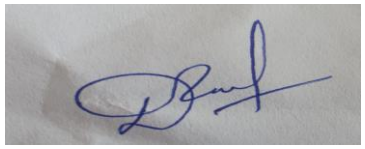

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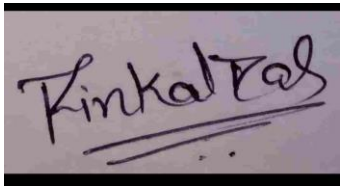
	polynomials. Construction of quotient field of an integral domain (Emphasis on Z, Q). A field contains a subfield isomorphic to Zp or Q.		New Delhi	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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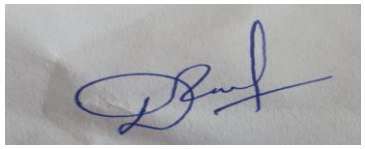

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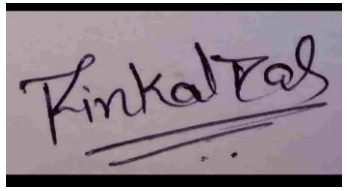
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rinkal A. Das DEPARTMENT: Mathematics CLASS: Ty BSc (Statistics)

SEMESTE: sem VI MONTH: December- April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : develop critical and logical thinking and will able to solve various problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper- 1 DISTRIBUTION THEORY AND STOCHASTIC PROCESSES UNIT-I BIVARIATE	(i) Definition of joint probability distribution (X, Y). Joint Moment Generating function, moments μ_{rs} where r=0, 1, 2 and s=0, 1, 2. Marginal & Conditional distributions. Their Means & Variances. Correlation coefficient between the random variables. Necessary and sufficient condition for the independence of X and Y. Distribution of aX + bY, where 'a' and 'b' are constants. (ii) Distribution of sample correlation coefficient when ρ = 0.Testing the significance of a correlation coefficient. Fisher's z – transformation.	15	Introduction to Mathematical Statistics: R.V.Hogg, A.T. Craig; Fourth Edition; Collier McMillan Publishers S.C. Gupta and V.K.Kapoor Fundamental of Mathematical	Chalk and board



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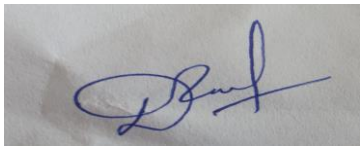

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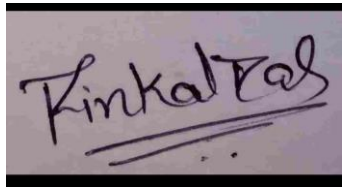
NORMAL DISTRIBUTION	Tests for i) H0: ρ = ρ0 ii) H0: ρ1 = ρ2, Confidence interval for ρ.		Statistics,Sultan Chand and Sons 10. V K R.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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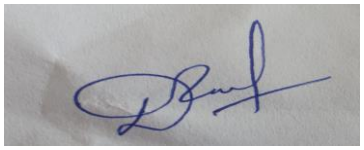

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TEACHING PLAN (UNIT PLAN)

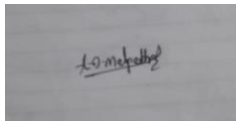
NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: MathematicsCLASS:FYIT

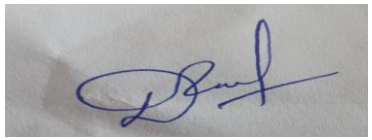
SEMESTER: IMONTH:Jully to Octomber ACADEMIC YEAR:2020--2021

LEARNING OBJECTIVE/S:
The learners will be able to : ___Quantified, predicator, method of proof ,Euclidian Theroem,Quotient Reminder Theroem Rational Number,Indirect proof ,classical Theroem, floor and ceiling function.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT) Unit II Quantified Statement and method of proof	1) Quantified Statements: Predicates and quantified statements ,statement with multiple quantifiers,Arguments with quantified statements 2)Elementary Number Theory and Method of proof : Introductiontodirectproof,Rationalnumbers,Divisiblity,Division into cases and Quotient Reminder Theroem,Floor and ceiling Indirect 3) Argument : Contradiction and contrapositive ,Two Classical Theroem,Application in Algorithms	4+4+4=12	DM by kolman DM by Techmax DM by Roshen	Blackboard,chalk

TOTAL NUMBEROFLECTURESALLOCATEDTOTHEUNIT:__12__


Sign of staff


Sign of HOD

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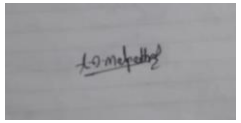
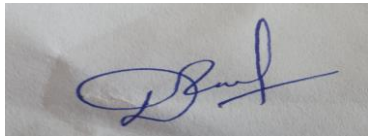


Sign of staff



Sign of HOD

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TEACHING PLAN (UNIT PLAN)

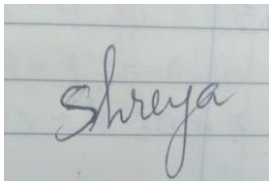
NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICSCLASS: TY

B.SC MATHSSEMESTER: VMONTH: SEPTEMBER-NOVEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of convergent and Cauchy sequences in metric spaces.
- Deduce various results related to Cauchy and convergent sequences.
- Define subsequence and eventually constant sequence in metric space.
- Characterize limit points and closure points in terms of sequences.
- Understand the concept of dense subsets in metric space and separability.
- Define complete metric space and check whether given metric space is complete or not.
- State and prove Cantor's intersection theorem and its applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
TOPOLOGY OF METRIC	➢ Convergent & Cauchy sequences in a metric space ➢ Subsequence and eventually constant sequence ➢ Characterization limit points and closure points in terms	2 2 2	1.TOPOLOGY OF METRIC SPACES	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD



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SPACES Sequences & Complete Metric Spaces (UNIT 2)	of sequences ➢ Dense subsets in metric space and separability ➢ Complete metric space with examples ➢ Cantor's intersection theorem and its applications	2 3 4	(KUMARESAN) 2. METRIC SPACES (JAIN & AHMED)	TEACHING AIDS : Whiteboard, marker, duster, pentab

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

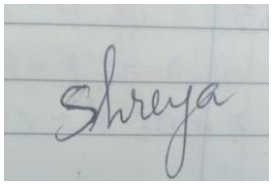
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: TY B.SC MATHS SEMESTER: VI MONTH: JANUARY- FEBRUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- Understand the concept of limit of a complex valued function.
- Define and check the continuity and differentiability of complex valued functions.
- Gain knowledge about the stereographic projection of complex numbers.
- Understand the concept of analytic functions and the necessary sufficient conditions to check whether function is analytic.
- Find the harmonic conjugate of harmonic functions.
- Analyze various results based on analytic functions.



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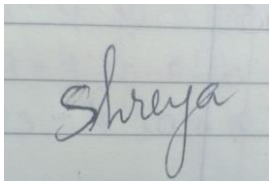
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMPLEX ANALYSIS Introduction to Complex Analysis (Unit 1)	➢ Review of complex numbers ➢ Limit and continuity at a point, derivatives of complex valued functions ➢ Cauchy Riemann equations, sufficient condition of differentiability ➢ Analytic functions, harmonic functions and harmonic conjugate.	3 4 3 5	COMPLEX VARIABLES AND APPLICATIONS (BROWN & CHURCHILL)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Whiteboard, marker, duster, pentab

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: MATHEMATICS

CLASS: TY B.SC MATHS SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2020-21



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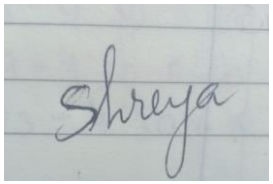
LEARNING OBJECTIVE/S:
The learners will be able to :

- find the line integral over different curves.
- prove Cauchy theorem and Cauchy Integral formula.
- Solve questions based on Cauchy theorem and Cauchy Integral formula.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMPLEX ANALYSIS Cauchy Integral formula (Unit 2)	➢ Line integration ➢ Cauchy theorem, Cauchy Integral formula and the applications	2 3	COMPLEX VARIABLES AND APPLICATIONS (BROWN & CHURCHILL)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS : Whiteboard, marker, duster, pentab

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5



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TEACHING PLAN (UNIT PLAN)

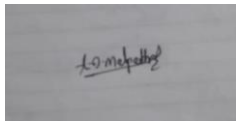
NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: TYBSc(Maths) SEMESTER: VIMONTH: janavary to April

ACADEMIC YEAR:2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Normal subgroup, Quotient Group, Alternating group,FirstIsomorphism,SecondIsomorphism,Third Isomorphism ,Caley'sTheroem,External direct produtgroup,Order of Group.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Algebra Unit. I Normal Subgroup	1)Normal subgroupofgroup,Defination and problem including center of group,QuotientGroup,AlternatingGroup,Cycles,Listing A4 & S3 ,first Isomorphism,Caley'sTheroem , 2) External direct product,Order of an elementin a direct product Classification of group of order less than five.	8+7=15	I.N.Hestrin Abstract Algebra by S.K.jain	Blackboard, chalk.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15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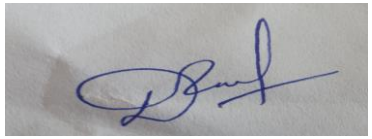
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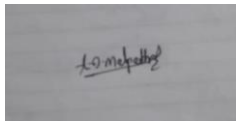
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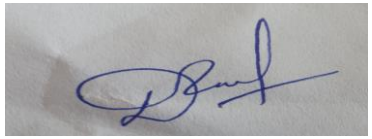
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TEACHING PLAN (UNIT PLAN)

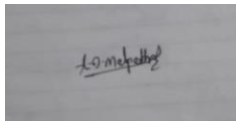
NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: MathematicsCLASS:FYIT

SEMESTER: IMONTH:Jully to Octomber ACADEMIC YEAR:2019--2020

LEARNING OBJECTIVE/S:
The learners will be able to : ___Quantified, predicator, method of proof ,Euclidian Theroem,Quotient Reminder Theroem Rational Number,Indirect proof ,classical Theroem, floor and ceiling function.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT) Unit II Quantified Statement and method of proof	1) Quantified Statements: Predicates and quantified statements ,statement with multiple quantifiers,Arguments with quantified statements 2)Elementary Number Theory and Method of proof : Introductiontodirectproof,Rationalnumbers,Divisiblity,Division into cases and Quotient Reminder Theroem,Floor and ceiling Indirect 3) Argument : Contradiction and contrapositive ,Two Classical Theroem,Application in Algorithms	4+4+4=12	DM by kolman DM by Techmax DM by Roshen	Blackboard,chalk

TOTAL NUMBEROFLECTURESALLOCATEDTOTHEUNIT:__12__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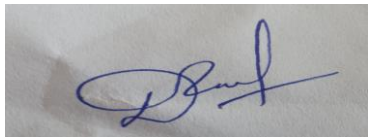
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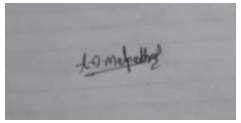

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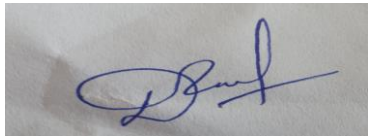

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: FYPCM_____ SEMESTER: _____I_____ MONTH: _____july-August2019_____ ACADEMIC YEAR: __2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to :Real numbers, properties,inequalities,hausdorff properties,supremum nad infimum, Archiemedian properties,examples

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Calculus I/unit I Real number system	1. Real number system and order properties of , absolute value | | and its properties R R	4	Methods of real analysis by R.R Goldberg	Blackboard,chalk
	AM -GM inequality, Cauchy-Schwarz inequality, Intervals and neihoods,	3	Methods of real analysis by R.R Goldberg	
	Hausdorff property.Bounded sets, statements of l.u.b. axiom and its consequences,	4	Introduction to real analysis by R.G Bartle	
	Supremum and infimum, Maximum and minimum, Problems based on that	2	Introduction to real analysis by R.G Bartle	
	Archimedean property and its applications, density of rationals	2	Methods of real analysis by R.R Goldberg	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: FYPCM_____ SEMESTER: _____I_____ MONTH: _____september-oct__2019_____ ACADEMIC YEAR: __2019-20_____

The learners will be able to : Functyion,definition, examples,Invertible functions,equivalence relations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II : (Algebra II) Paper II Functions and Equivalence relations	Definition of function, domain, co-domain and range of a function, compositefunctions, examples, Direct image ( ) and inverse image ( ) for a ( ) and inverse image ( ) for a function , injective, surjective, bijective	4	David M burton,Elementary number theory	Blackboard,chalk
	invertible functions, bijective functions are invertible and conversely examples of functions including constant, identity, projection, inclusion, Binary operation as a function, properties, examples.	4	David M burton,Elementary number theory	
	Equivalence relation, Equivalence classes, properties	2	David M burton,Elementary number theory	
	Definition of partition, every partition gives an equivalence relation and vice versa	2	David M burton,Elem num theory	
	Examples on bijective functions,,inverse,equivalence relation	3	David M burton,Elem num theory	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: SYPM_____ SEMESTER: _____III_____ MONTH: _____July-aug2019_____ ACADEMIC YEAR: __2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : _Differentiability of scalar field,total derivative,examples

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I /Calculus III Unit II Differentiation	1. Differentiability of a scalar eld at a point of Rn (in terms of linear transformation)	3	Mathematical analysis by T Apostol	Blackboard, chalk
	open subset of Rn; the total derivative, uniqueness of total derivative of a di er-entiable function at a point	2	Mathematical analysis by T Apostol	
	simple examples of nding total derivative of functions such as f(x; y) = x2 + y2; f(x; y; z) = x + y + z;,	4	Mathematical analysis by T Apostol	
	differentiability at a point of a function f implies continuity	2	Mathematical analysis by T Apostol	
	and existence of direction derivatives of f at the point, the existence of continuous partial derivatives in a neighbourhood of point	3	Mathematical analysis by T Apostol	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: ___SYBSC(PM)_____ SEMESTER: _____III_____ MONTH: _____aug-sept__2019_____ ACADEMIC YEAR: _____2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : Mean value inequality,differentiability of vector field,Hessian matrix

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I/Calculus III/Unit III Applications	Second order Taylor's formula for scalar fields.	2	Mathematical analysis by T Apostol	Blackboard,chalk
	Differentiability of vector elds, de nition of di erentiability of a vector eld at a point, Jacobian matrix, di erentiability	3	Mathematical analysis by T Apostol	
	The chain rule for derivative of vector elds (statements only)	2	Mathematical analysis by T Apostol	
	Mean value inequality. . Hessian matrix, Maxima, minima and saddle points	4	Mathematical analysis by T Apostol	
	Second derivative test for extrema of functions of two variables. 6. Method of Lagrange Multipliers.	4	Mathematical analysis by T Apostol	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: SYPM_____ SEMESTER: _____III_____ MONTH: _____June-july2019_____ ACADEMIC YEAR: __2019-2020_____

The learners will be able to : Euclidean inner product, neighbourhood of point,directional derivatives,examples

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I /Calculus III/Unit I: Functions of several variables	The Euclidean inner product on Rn and Euclidean norm function on Rn, distance between two points, open ball in Rn:	3	Mathematical analysis by T Apostol	Blackboard,chalk
	definition of an open subset of Rn; neighbourhood of a point in Rn; sequences in Rn, convergence of sequences- these concepts should be speci cally discussed for n = 3 and n = 3	4	Mathematical analysis by T Apostol	
	Functions from Rn ! R (scalar elds) and from Rn ! Rm (vector elds), limits, continuity of functions, basic results on limits and continuity of sum, di erence, scalar multiples of vector elds, continuity and components of a vector elds.	4	Mathematical analysis by T Apostol	
	Directional derivatives and partial derivatives of scalar fields.	2	Mathematical analysis by T Apostol	
	Mean value theorem for derivatives of scalar felds.	2	Mathematical analysis by T Apostol	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: SYPM_____ SEMESTER: _____III_____ MONTH: _____June-july2019_____ ACADEMIC YEAR: __2019-2020_____

The learners will be able to : Euclidean inner product, neighbourhood of point,directional derivatives,examples

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I /Calculus III/Unit I: Functions of several variables	The Euclidean inner product on Rn and Euclidean norm function on Rn, distance between two points, open ball in Rn:	3	Mathematical analysis by T Apostol	Blackboard,chalk
	definition of an open subset of Rn; neighbourhood of a point in Rn; sequences in Rn, convergence of sequences- these concepts should be speci cally discussed for n = 3 and n = 3	4	Mathematical analysis by T Apostol	
	Functions from Rn ! R (scalar elds) and from Rn ! Rm (vector elds), limits, continuity of functions, basic results on limits and continuity of sum, di erence, scalar multiples of vector elds, continuity and components of a vector elds.	4	Mathematical analysis by T Apostol	
	Directional derivatives and partial derivatives of scalar fields.	2	Mathematical analysis by T Apostol	
	Mean value theorem for derivatives of scalar felds.	2	Mathematical analysis by T Apostol	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Rakhee N Jadhav_____

DEPARTMENT:__Mathematics_____ CLASS: __SYBS (PM)_____ SEMESTER: _III_____

MONTH: ____Sept-oct19_____ ACADEMIC YEAR: 2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : ____Inner product space,definition,examples, Orthogonality of vectors,norm of vectors

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III: Inner Product Spaces	1. Dot product in Rn; De nition of general inner product on a vector space over R: Examples of inner product including the inner product	3	Introduction to linear algebra by S.Lang	Chalk,Blackboard
	the space of continuous real valued functions	2	Introduction to linear algebra by S.Lang	
	Norm of a vector in an inner product space. Cauchy-Schwartz inequality, Triangle in-equality	4	Linear algebra a geometric aproach by S kumaresan	
	Orthogonality of vectors, Pythagoras theorem and geometric applications in R2;Projections on a line	3	Linear algebra a geometric aproach by S kumaresan	
	The projection being the closest approximation, Orthogonal com-plements of a subspace,	3	Introduction to linear algebra by S.Lang	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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NAME OF THE STAFF: _Rakhee N Jadhav_____ DEPARTMENT: __Mathematics_____ CLASS: __SYBS (PM)_____ SEMESTER: _III_____ MONTH: ___July-Aug19_____ ACADEMIC YEAR: 2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : ___ Kernel and image of a linear transformation, Rank- Nullity theorem , Equivalence of rank of an m n matrix A and rank of the linear transformation,_examples_

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Linear Transformations and Matrices	Review of linear transformations: Kernel and image of a linear transformation, Rank- Nullity theorem (with proof), Linear isomorphisms, inverse	2	Introd to linear algebra by .Lang	Chalk,Blackboard
	The matrix units, row operations, elementary matrices, elementary matrices are invertible and an invertible matrix is a product of elementary matrices	4	Introduction to linear algebra by S.Lang	
	. Row space, column space of an m n matrix, row rank and column rank of a matrix,	4	Linear algebra a geometric apprch by S kumaresan	
	Equivalence of rank of an m n matrix A and rank of the linear transformation LA : Rn ! Rm (LA(X) = AX).	2	Linear algebra a geometric aproach by S kumaresan	
	The general solution of the system is the sum of a particular solution of the system and the solution of the associated homo	3	Linear algebra a geometric appoach by S kumaresan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Rakhee N Jadhav_____ DEPARTMENT: __Mathematics_____ CLASS: __SYBS (PM)_____ SEMESTER: _III_____ MONTH: ___Aug-Sep19_____ ACADEMIC YEAR: 2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : _ Defnition of determinant , Determinant as area and volume. 2. Existence and uniqueness of determinant , Computation of de-terminant of order 2 ,3 matrices, diagonal matrices, examples

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II: Determinants	De nition of determinant as an n linear skew-symmetric function from Rn	2	Intro to linear algbra by S.Lang	Chalk,Blackboard
	determinant of (E1;E2; : : : ;En) is 1, where Ej denotes the jth column of the n n identity matrix In: Determinant of a matrix as determinant of its column vectors (or row vectors).	4	Linear algebra a geometric aproach by S kumaresan	
	Determinant as area and volume. 2. Existence and uniqueness of determinant function via permutation	3	Intro to linear algbra by S.Lang	
	Computation of de-terminant of 2 matrices, diagonal matrices, Basic results on determinants suchas det(At) = det(A); det(AB) = det(A) det(B); Laplace expansion	3	Linear algebra a geometric aproach by S kumaresan	
	Linear dependence and independence of vectors in Rn	3	Intro to linear algbra by S.Lang	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: __TYBSC(Maths)_____ SEMESTER: __V_____ MONTH: _____Sept-Oct2019_____ ACADEMIC YEAR: ___2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to : ___Eulerian graph,_ its characterization- Fleury's Algorithm, Sufficient condition for Hamiltonian graphs, Line graph of graph

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
/PaperIV/Unit III. Eulerian and Hamiltonian graphs	Eulerian graph and its characterization- Fleury's Algorithm- (Chinese postman problem),	3	Bondy &murty,grph theory	Blackboard,Chalk
	Hamil- tonian graph, Necessary condition for Hamiltonian graphs using G- S where S is a proper subset of V(G),	3	Bondy &murty,grph theory	
	Sufficient condition for Hamiltonian graphs- Ore's theorem and Dirac's theorem, Hamil- tonian closure of a graph	3	West D.G grph theory	
	Cube graphs and properties like regular, bipartite, Connected and Hamiltonian nature of cube graph	3	Bondy &murty,grph theory	
	Line graph of graph and simple results.	3	West D.G grph theory	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: __TYBSC(Maths)_____ SEMESTER: __V_____ MONTH: _____June-July2019_____ ACADEMIC YEAR: ___2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to : __ De nition of general graph, Types of graphs- Complete graph, Null graph, Complementary graphs , Havel- Hakimi theorem

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PaperIV /Unit I. Basics of Graphs	De nition of general graph, Directed and undirected graph, Simple and multiple graph, Types of graphs- Complete graph, Null graph, Complementary graphs	3	Bondy &murty,grph theory	Blackboard,Chalk
	regular graphs Sub graph of a graph, Vertex and Edge induced sub graphs, Spanning	3	West D.G grph theory	
	Basic terminology- degree of a vertex, Minimum and maximum degree, Walk, Trail, Circuit, Path, Cycle. Handshaking the- orem and its applications,	3	West D.G grph theory	
	Bipartite graphs and characterization in terms of cycle lengths	3	Bondy &murty,grph theory	
	Havel- Hakimi theorem, Distance in a graph- shortest path problems, Dijkstra's algorithm.	3	West D.G grph theory	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: __TYBSC(Maths)_____ SEMESTER: __V_____ MONTH: _____July-aug2019_____ ACADEMIC YEAR: ___2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to : Trees,cut edge,cut vertices, Algorithms for spanning tree

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PaperIV /Unit II. Trees	Cut edges and cut vertices and relevant results, Characterization of cut edge, De nition of atree and its characterizations,	3	West D.G grph theory	Blackboard,Chalk
	Spanning tree, Recurrence relation of spanning trees and Cayley formula for spanning trees of Kn ,	3	West D.G grph theory	
	Algorithms for spanning tree-BFS and DFS, Binary and m-ary tree, Pre x codes and Hu man coding	3	West D.G grph theory	
	, Weighted graphs and minimal spanning	3	West D.G grph theory	
	Kruskal's algorithm for minimal spanning trees.	3	West D.G grph theory	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: FYPCM_____ SEMESTER: _____II_____ MONTH: _____February-mar2020_____ ACADEMIC YEAR: __2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : ___Definition of limits,continuioty, their algebra,differentiation, Leibnitz test

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Calculus II(Paper I)Unit –II : Limits and Continuity of functions	Definition of Limit lim → ( ) of a function ( ), , algebra of limits	3	Methods of real analysis by R.R Goldberg	Chalk,blackboard
	limit of composite function, sandwich theorem, left-right hand-limit Continuous functions: Continuity of real valued function	3	Methods of real analysis by R.R Goldberg	
	continuity of a real valued function at end points of domain, Sequential continuity, Algebra of continuous functions	3	Methods of real analysis by R.R Goldberg	
	removable and essential discontinuity. Intermediate value theorem and it's applications, Bolzano- Weierstrass theorem	3	Methods of real analysis by R.R Goldberg	
	Differentiation of real valued function of one variable: Definition of differentiation, examples of differentiable and non differentiable functions, differentiable functions are continuous chain rule , Higher order derivatives, Leibnitz rule, Derivative of inverse functions	3	Methods of real analysis by R.R Goldberg	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: SYPM_____ SEMESTER: _____IV_____ MONTH: _____Feb-mar2020_____ ACADEMIC YEAR: __2019-20_____

The learners will be able to : __ Integrable and differentiable functions , Applications of definite Integrals,__ Lengths of plane curves, Ar-eas of surfaces of revolution

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I /Calculus IV/Unit III: Applications	Integrable and differentiable functions and their properties,	3	Mathematical analysis by T Apostol	Blackboard ,chalk
	Applications of definite Integrals	3	Mathematical analysis by T Apostol	
	Area between curves,findinding volumes by slicing,	2	Mathematical analysis by T Apostol	
	volumes of solids of revolution-Disks and Washers, Cylindrical Shells	4	Mathematical analysis by T Apostol	
	Lengths of plane curves, Ar-eas of surfaces of revolution.	3	Mathematical analysis by T Apostol	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: SYPM_____ SEMESTER: _____IV_____ MONTH: _____Feb-mar2020_____ ACADEMIC YEAR: __2019-20_____

The learners will be able to : __ Integrable and differentiable functions , Applications of definite Integrals,__ Lengths of plane curves, Ar-eas of surfaces of revolution

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I /Calculus IV/Unit III: Applications	Integrable and differentiable functions and their properties,	3	Mathematical analysis by T Apostol	Blackboard ,chalk
	Applications of definite Integrals	3	Mathematical analysis by T Apostol	
	Area between curves,findinding volumes by slicing,	2	Mathematical analysis by T Apostol	
	volumes of solids of revolution-Disks and Washers, Cylindrical Shells	4	Mathematical analysis by T Apostol	
	Lengths of plane curves, Ar-eas of surfaces of revolution.	3	Mathematical analysis by T Apostol	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: SYPM_____ SEMESTER: _____IV_____ MONTH: _____Dec-jan2020_____ ACADEMIC YEAR: __2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to :

Approximation of area, Upper/Lower Riemann sums ,Properties of Riemann integration

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
/ Paper I /Calculus IV Unit I: Riemann Integration	Approximation of area, Upper/Lower Riemann sums , Criterion of Riemann in- tegrability,	2	Mathematical analysis by T Apostol	Black board,chalk
	Properties of integration	4	Mathematical analysis by T Apostol	
	If f is bounded with nite number of discontinuities then f 2 R[a; b], generalize this if f is monotone then f is integrable R[a; b]:	3	Mathematical analysis by T Apostol	
	properties, Upper/Lower integrals,Defnition of Riemann integral on a closed and bounded interval	4	Mathematical analysis by T Apostol	
	Related theorem on integration	2	Mathematical analysis by T Apostol	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: SYPM_____ SEMESTER: _____IV_____ MONTH: _____Jan-feb2020_____ ACADEMIC YEAR: __2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to :

Continuity of F(x) , Integration by parts, Leibnitz rule, Improper integrals-type 1 and type 2

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I/Calculus IV/Unit II: Inde definite and improper integrals	Continuity of F(x) = Z x a f(t) dt where f 2 R[a; b],	3	Mathematical analysis by T Apostol	Black board ,chalk
	Fundamental theorem of calculus, Mean value theorem,	3	Mathematical analysis by T Apostol	
	Integration by parts, Leibnitz rule, Improper integrals-type 1 and type 2	3	Mathematical analysis by T Apostol	
	Abso- lute convergence of improper integrals,	3	Mathematical analysis by T Apostol	
	Comparison tests, Abel's and Dirichlet's tests	3	Mathematical analysis by T Apostol	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Rakhee N Jadhav_____ DEPARTMENT: __Mathematics_____ CLASS: __SYBS (PM)_____ SEMESTER: _IV_____ MONTH: ___feb-mar2020_____ ACADEMIC YEAR: 2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : Defnition of Coset and properties, Group homomorphisms and isomorphisms, automorphisms, Lagrange's theorem and consequences

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III: Lagrange's Theorem and Group homomorphism	Defnition of Coset and properties such as :1) IF H is a subgroup of a group G and x 2 G then (i) xH = H if and only if x 2 H. (ii) Hx = H if and only if x 2 H:	4	Abstract algebra by bhattacharya	Chalk,Blackboard
	If H is a subgroup of a group G and x; y 2 G then (i) xH = yH if and only if x 1y 2 H:	2	Abstract algebra by bhattacharya	
	Lagrange's theorem and consequences such as Fermat's Little theorem, Euler's theo- rem and if a group G has no nontrivial subgroups then order of G is a prime and G is Cyclic	4	Abstract algebra by bhattacharya	
	Group homomorphisms and isomorphisms, automorphisms i) Definition. ii) Kernel and image of a group homomorphism.	2	Abstract algebra by bhattacharya	
	G0 is a group homomorphism then (i) G is abelian if and only if G0 is abelian. (ii) G is cyclic if and only if G0 is cyclic.	3	Abstract algebra by bhattacharya	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Rakhee N Jadhav_____ DEPARTMENT: __Mathematics_____ CLASS: __SYBS (PM)_____ SEMESTER: _IV_____ MONTH: ____feb-mar2020_____ ACADEMIC YEAR: 2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : Defnition of Coset and properties, Group homomorphisms and isomorphisms, automorphisms, Lagrange's theorem and consequences

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III: Lagrange's Theorem and Group homomorphism	Defnition of Coset and properties such as :1) IF H is a subgroup of a group G and x 2 G then (i) xH = H if and only if x 2 H. (ii) Hx = H if and only if x 2 H:	4	Abstract algebra by bhattacharya	Chalk,Blackboard
	If H is a subgroup of a group G and x; y 2 G then (i) xH = yH if and only if x 1y 2 H:	2	Abstract algebra by bhattacharya	
	Lagrange's theorem and consequences such as Fermat's Little theorem, Euler's theo- rem and if a group G has no nontrivial subgroups then order of G is a prime and G is Cyclic	4	Abstract algebra by bhattacharya	
	Group homomorphisms and isomorphisms, automorphisms i) Definition. ii) Kernel and image of a group homomorphism.	2	Abstract algebra by bhattacharya	
	G0 is a group homomorphism then (i) G is abelian if and only if G0 is abelian. (ii) G is cyclic if and only if G0 is cyclic.	3	Abstract algebra by bhattacharya	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Rakhee N Jadhav_____ DEPARTMENT: __Mathematics_____ CLASS: __SYBS (PM)_____ SEMESTER: _IV_____ MONTH: ____Dec-Jan2020_____ ACADEMIC YEAR: 2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : De nition of a group, abelian group, order of a group ,Matrix groups,examples_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I: Groups and Subgroups	De nition of a group, abelian group, order of a group, nite and in nite groups.Examples of groups i	3	Topics in algebra by Herstein	Chalk,Blackboard
	Z;Q;R;C under addition.) Q (= Q n f0g);R (= R n f0g);C (= C n f0g):Q+(= positive rational numbers)under multiplication.iii) Zn	3	Abstract algebra by bhattacharya	
	U(n); the group of prime residue classes modulo n under multiplication.v) The symmetric group Sn:vi) The group of symmetries of a plane gure. The Dihedral	4	Topics in algebra by Herstein	
	Matrix groups Mn n(R) under addition of matrices, GLn(R); the set of invertiblereal matrices, under multiplication of matrices. ix) Examples such as S1 as subgroup of C; n the subgroup	3	Topics in algebra by Herstein	
	In a group (G; :) the following are true: i) The identity element e of G is unique	2	Abstract algebra by bhattacharya	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Rakhee N Jadhav_____ DEPARTMENT: ___Mathematics_____ CLASS: __SYBS (PM)_____ SEMESTER: _IV_____ MONTH: ____Jan-Feb2020_____ ACADEMIC YEAR: 2019-20_____LEARNING OBJECTIVE/S:

The learners will be able to : __ Cyclic subgroup of a group, Properties, Subgroup of a cyclic groups

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II: Cyclic groups and cyclic subgroups	Cyclic subgroup of a group, cyclic groups, (examples including Z;Zn and n	2	Abstract algebra by bhattacharya	Chalk,Blackboard
	Properties such as:(i) Every cyclic group is abelian.(ii) Finite cyclic groups, in nite cyclic groups and their generators	4	Topics in algebra by Herstein	
	A finite cyclic group has a unique subgroup for each divisor of the order of the group	3	Abstract algebra by bhattacharya	
	Subgroup of a cyclic group is cyclic.(v) In a nite group G;G =< a > if and only if o(G) = o(a).	3	Topics in algebra by Herstein	
	If G =< a > and o(a) = n then G =< am > if and only if (n;m) = 1:(vii) If G is a cyclic group of order pn and H < G;K < G then prove that either H K or K H:	3	Topics in algebra by Herstein	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: __TYBSC(Maths)_____ SEMESTER: __VI_____ MONTH: _____Dec-jan2020_____ ACADEMIC YEAR: ___2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to : Vertex coloring, Edge coloring , the relation between vertex and edge connectivity

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PaperIV /Unit I. Colorings of graph	Vertex coloring- evaluation of vertex chromatic number of some standard graphs, critical graph. Upper and lower bounds of Vertex chromatic Number- Statement of Brooks theorem	2	Bondy &murty,grph theory	Blackboard,Chalk
	Edge coloring- Evaluation of edge chromatic number of standard graphs such as complete graph	4	West D.G grph theory	
	com- plete bipartite graph, cycle. Statement of Vizing Theorem. Chromatic polynomial of graphs-	3	Bondy &murty,grph theory	
	Recurrence Relation and properties of Chromatic polynomials. Vertex and Edge cuts vertex and edge connectivity	3	West D.G grph theory	
	the relation between vertex and edge connectivity. Equality of vertex and edge connectivity of cubic graphs. Whitney's theorem on 2-vertex connected graphs	3	West D.G grph theory	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: __TYBSC(Maths)_____ SEMESTER: __VI_____ MONTH: _____feb-mar2020_____ ACADEMIC YEAR: ___2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to : Applications of Inclusion Exclusion Principle , expansion of some standard function,__ Solving a recurrence relation

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PaperIV /Unit III. Combinatorics	Applications of Inclusion Exclusion Principle- Rook polynomial	3	Bondy &murty,grph theory	Blackboard,Cha
	Forbidden position problems Introduction to partial fractions and using Newtons binomial theorem for real power nd series	3	West D.G grph theory	
	expansion of some standard functions. Forming recurrence relation and getting a generating function.	3	West D.G grph theory	
	Solving a recurrence relation using ordinary generating functions. System of Distinct Representatives and Hall's theorem of SDR.	3	West D.G grph theory	
	Introduction to matching, M alternating and M augmenting path, Berge theorem. Bipartite graphs	3	Bondy &murty,grph theory	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: __TYBSC(Maths)_____ SEMESTER: __VI_____ MONTH: _____Jan-febt2020_____ ACADEMIC YEAR: ___2019-2020_____LEARNING OBJECTIVE/S:
The learners will be able to : Defnition of planar graph. Euler formula , Colorabilty of planar graphs

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PaperIV /Unit II. Planar graph	De nition of planar graph. Euler formula and its consequences. Non planarity of K5;K(3; 3). Dual of a graph.	3	Bondy &murty,grph theory	Blackboard,Chalk
	Polyhedran in R3 and existence of exactly ve regular polyhedra- (Platonic solids)	3	Bondy &murty,grph theory	
	Colorabilty of planar graphs- 5 color theorem for planar graphs, statement of 4 color theorem	3	Bondy &murty,grph theory	
	Networks and flow and cut in a network- value of a ow and the capacity of cut in a network,	3	Bondy &murty,grph theory	
	relation between ow and cut. Maximal ow and minimal cut in a network and Ford- Fulkerson theorem.	3	Bondy &murty,grph theory	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

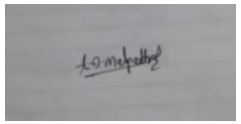
NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: Mathematics CLASS: TYBSc(Maths) SEMESTER: VIMONTH: janavary to April

ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to: Normal subgroup, Quotient Group, Alternating group,FirstIsomorphism,SecondIsomorphism,Third Isomorphism ,Caley'sTheroem,External direct produtgroup,Order of Group.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Algebra Unit. I Normal Subgroup	1)Normal subgroupofgroup,Defination and problem including center of group,QuotientGroup,AlternatingGroup,Cycles,Listing A4 & S3 ,first Isomorphism,Caley'sTheroem , 2) External direct product,Order of an elementin a direct product Classification of group of order less than five.	8+7=15	I.N.Hestrin Abstract Algebra by S.K.jain	Blackboard, chalk.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15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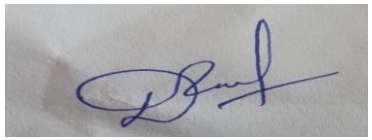
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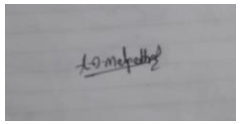
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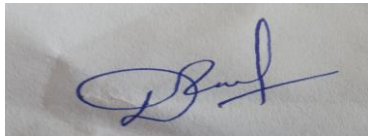
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TEACHING PLAN (UNIT PLAN)

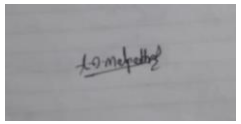
NAME OF THE STAFF: Archana Malpathak__ DEPARTMENT: Mathematics. CLASS: _TYBSc SEMESTER: _V

MONTH: Jully to November ACADEMIC YEAR: __2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : _Eigen value Eigen vector linearly dependent and indepent of vector, solve minimal polynomial,similar matrices

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Linear Algebra Unit -II Eigen Value and Eigen vectors	Eigen values and eigen vectors of a linear transformation T:V-V where v is finite dimensional real vector spaceand example Eigen values Eigen vectors of n x n real matrices ,The linear independence of eigen vectors corresponding to distinct eigen values of a linear transformation and a matrix.The characteristics polynomial of a n x n real matrix and a linear transformation of a finite dimensional real vector space to itself ,characteristics roots ,similar matrices, Relation with change of basis Invariance of the ch polynomial and eigen values of similar matrices,Minimal polynomial of a matrix ,Example like minimal polynomial of scalar matrix diagonal matrix similar matrix ,invariant subspace.	15	S.k.kumaresan L.Smith Linear Algebra,Springer K.Hoffman and kunze	Blackboard ,chalk. Online teaching method

L NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15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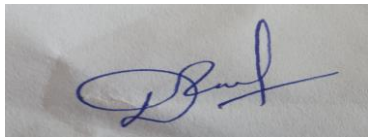
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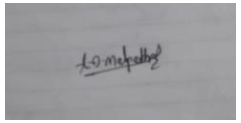
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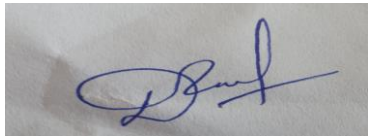
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TEACHING PLAN (UNIT PLAN)

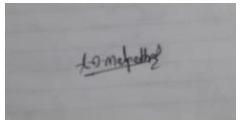
NAME OF THE STAFF: Archana Malpathak. DEPARTMENT: MathematicsCLASS:FYIT

SEMESTER: IMONTH:Jully to Octomber ACADEMIC YEAR:2018--2019

LEARNING OBJECTIVE/S:
The learners will be able to : ___Quantified, predicator, method of proof ,Euclidian Theroem,Quotient Reminder Theroem Rational Number,Indirect proof ,classical Theroem, floor and ceiling function.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Discrete Mathematics (FYIT) Unit II Quantified Statement and method of proof	1) Quantified Statements: Predicates and quantified statements ,statement with multiple quantifiers,Arguments with quantified statements 2)Elementary Number Theory and Method of proof : Introductiontodirectproof,Rationalnumbers,Divisiblity,Division into cases and Quotient Reminder Theroem,Floor and ceiling Indirect 3) Argument : Contradiction and contrapositive ,Two Classical Theroem,Application in Algorithms	4+4+4=12	DM by kolman DM by Techmax DM by Roshen	Blackboard,chalk

TOTAL NUMBEROFLECTURESALLOCATEDTOTHEUNIT:__12__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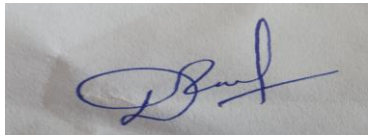
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TEACHING PLAN (UNIT PLAN)

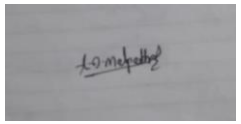
NAME OF THE STAFF: Archana Malpathak__ DEPARTMENT: Mathematics. CLASS: _TYBSc SEMESTER: _V

MONTH: Jully to November ACADEMIC YEAR: __2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : _Eigen value Eigen vector linearly dependent and indepent of vector, solve minimal polynomial,similar matrices

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Linear Algebra Unit -II Eigen Value and Eigen vectors	Eigen values and eigen vectors of a linear transformation T:V-V where v is finite dimensional real vector spaceand example Eigen values Eigen vectors of n x n real matrices ,The linear independence of eigen vectors corresponding to distinct eigen values of a linear transformation and a matrix.The characteristics polynomial of a n x n real matrix and a linear transformation of a finite dimensional real vector space to itself ,characteristics roots ,similar matrices, Relation with change of basis Invariance of the ch polynomial and eigen values of similar matrices,Minimal polynomial of a matrix ,Example like minimal polynomial of scalar matrix diagonal matrix similar matrix ,invariant subspace.	15	S.k.kumaresan L.Smith Linear Algebra,Springer K.Hoffman and kunze	Blackboard ,chalk. Online teaching method

L NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15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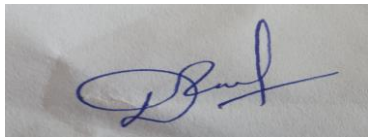
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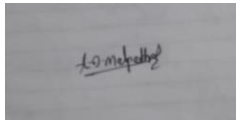
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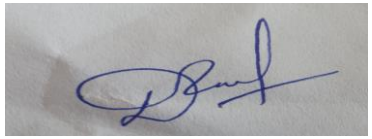
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: FYPCM_____ SEMESTER: _____I_____ MONTH: _____August-sept__2018_____ ACADEMIC YEAR: __2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to :Real numbers, properties,inequalities,hausdorff properties,supremum nad infimum, Archiemedian properties,examples

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I Calculus I/unit I Real number system	1. Real number system and order properties of , absolute value | | and its properties $\mathbb{R}$ $\mathbb{R}$	4	Methods of real analysis by R.R Goldberg	Blackboard,chalk
	AM-GM inequality, Cauchy-Schwarz inequality, Intervals and neihoods,	3	Methods of real analysis by R.R Goldberg	
	Hausdorff property,Bounded sets, statements of l.u.b. axiom and its consequences,	4	Introduction to real analysis by R.G Bartle	
	Supremum and infimum, Maximum and minimum, Problems based on that	2	Introduction to real analysis by R.G Bartle	
	Archimedean property and its applications, density of rationals	2	Methods of real analysis by R.R Goldberg	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: SYPM_____ SEMESTER: _____III_____ MONTH: _____June-july2018_____ ACADEMIC YEAR: __2018-19_____

The learners will be able to : Euclidean inner product, neighbourhood of point,directional derivatives,examples

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I /Calculus III/Unit I: Functions of several variables	The Euclidean inner product on Rn and Euclidean norm function on Rn, distance between two points, open ball in Rn:	3	Mathematical analysis by T Apostol	Blackboard,chalk
	definition of an open subset of Rn; neighbourhood of a point in Rn; sequences in Rn, convergence of sequences- these concepts should be speci cally discussed for n = 3 and n = 3	4	Mathematical analysis by T Apostol	
	Functions from Rn ! R (scalar elds) and from Rn ! Rm (vector elds), limits, continuity of functions, basic results on limits and continuity of sum, di erence, scalar multiples of vector elds, continuity and components of a vector elds.	4	Mathematical analysis by T Apostol	
	Directional derivatives and partial derivatives of scalar fields.	2	Mathematical analysis by T Apostol	
	Mean value theorem for derivatives of scalar felds.	2	Mathematical analysis by T Apostol	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: SYPM_____ SEMESTER: _____III_____ MONTH: -June-July2018_____ ACADEMIC YEAR: __2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : _Differentiability of scalar field,total derivative,examples

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I /Calculus III **Unit II Differentiation**	1. Differentiability of a scalar eld at a point of Rn (in terms of linear transformation)	3	Mathematical analysis by T Apostol	Blackboard, chalk
	open subset of Rn; the total derivative, uniqueness of total derivative of a di er-entiable function at a point	2	Mathematical analysis by T Apostol	
	simple examples of nding total derivative of functions such as f(x; y) = x2 + y2; f(x; y; z) = x + y + z;.	4	Mathematical analysis by T Apostol	
	differentiability at a point of a function f implies continuity	2	Mathematical analysis by T Apostol	
	and existence of direction derivatives of f at the point, the existence of continuous partial derivatives in a neighbourhood of point	3	Mathematical analysis by T Apostol	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: ___SYBSC(PM)_____ SEMESTER: _____III_____ MONTH: _____aug-sept__2018_____ ACADEMIC YEAR: _____2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : Mean value inequality,differentiability of vector field,Hessian matrix

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I/Calculus III/Unit III Applications	Second order Taylor's formula for scalar fields.	2	Mathematical analysis by T Apostol	Blackboard,chalk
	Differentiability of vector elds, de nition of di erentiability of a vector eld at a point, Jacobian matrix, di erentiability	3	Mathematical analysis by T Apostol	
	The chain rule for derivative of vector elds (statements only)	2	Mathematical analysis by T Apostol	
	Mean value inequality. . Hessian matrix, Maxima, minima and saddle points	4	Mathematical analysis by T Apostol	
	Second derivative test for extrema of functions of two variables. 6 Method of Lagrange Multipliers.	4	Mathematical analysis by T Apostol	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15_____

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NAME OF THE STAFF: _Rakhee N Jadhav_____ DEPARTMENT: ___Mathematics_____ CLASS: __SYBS (PM)_____ SEMESTER: _III_____ MONTH: ____July-Aug18_____ ACADEMIC YEAR: 2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to : ___Kernel and image of a linear transformation, Rank- Nullity theorem , Equivalence of rank of an m n matrix A and rank of the linear transformation,_examples_

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Linear Transformations and Matrices	Review of linear transformations: Kernel and image of a linear transformation, Rank- Nullity theorem (with proof), Linear isomorphisms, inverse	2	Introd to linear algebra by .Lang	Chalk,Blackboard
	The matrix units, row operations, elementary matrices, elementary matrices are invertible and an invertible matrix is a product of elementary matrices	4	Introduction to linear algebra by S.Lang	
	Row space, column space of an m n matrix, row rank and column rank of a matrix,	4	Linear algebra a geometric apprch by S kumaresan	
	Equivalence of rank of an m n matrix A and rank of the linear transformation LA : Rn ! Rm (LA(X) = AX)	2	Linear algebra a geometric aproach by S kumaresan	
	The general solution of the system is the sum of a particular solution of the system and the solution of the associated homo	3	Linear algebra a geometric appoach by S kumaresan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Rakhee N Jadhav_____ DEPARTMENT: __Mathematics_____ CLASS: __SYBS (PM)_____ SEMESTER: _III_____ MONTH: ____Aug-Sep18_____ ACADEMIC YEAR: 2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to : _ Defnition of determinant , Determinant as area and volume. 2. Existence and uniqueness of determinant , Computation of de-terminant of order 2 ,3 matrices, diagonal matrices, examples

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II: Determinants	De nition of determinant as an n linear skew-symmetric function from Rn	2	Intro to linear algbra by S.Lang	Chalk,Blackboard
	determinant of (E1:E2: : : :;En) is 1, where Ej denotes the jth column of the n n identity matrix In: Determinant of a matrix as determinant of its column vectors (or row vectors)	4	Linear algebra a geometric aproach by S kumaresan	
	Determinant as area and volume. 2. Existence and uniqueness of determinant function via permutation	3	Intro to linear algbra by S.Lang	
	Computation of de-terminant of 2 matrices, diagonal matrices, Basic results on determinants suchas det(At) = det(A): det(AB) = det(A) det(B): Laplace expansion	3	Linear algebra a geometric aproach by S kumaresan	
	Linear dependence and independence of vectors in Rn	3	Intro to linear algbra by S.Lang	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Rakhee N Jadhav_____

DEPARTMENT:__Mathematics_____ CLASS: __SYBS (PM)_____ SEMESTER: _III_____

MONTH: ____Sept-oct18_____ ACADEMIC YEAR: 2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to : ____Inner product space,definition,examples, Orthogonality of vectors,norm of vectors

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III: Inner Product Spaces	1. Dot product in Rn: De nition of general inner product on a vector space over R: Examples of inner product including the inner product	3	Introduction to linear algebra by S.Lang	Chalk,Blackboard
	the space of continuous real valued functions	2	Introduction to linear algebra by S.Lang	
	Norm of a vector in an inner product space. Cauchy-Schwartz inequality, Triangle in-equality	4	Linear algebra a geometric aproach by S kumaresan	
	Orthogonality of vectors, Pythagoras theorem and geometric applications in R2:Projections on a line	3	Linear algebra a geometric aproach by S kumaresan	
	The projection being the closest approximation, Orthogonal com-plements of a subspace.	3	Introduction to linear algebra by S.Lang	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: __TYBSC(Maths)_____ SEMESTER: __V_____ MONTH: _____June-July2018_____ ACADEMIC YEAR: ___2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to : __ De nition of general graph, Types of graphs- Complete graph, Null graph, Complementary graphs , Havel- Hakimi theorem

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PaperIV /Unit I. Basics of Graphs	De nition of general graph, Directed and undirected graph, Simple and multiple graph, Types of graphs- Complete graph, Null graph, Complementary graphs	3	Bondy &murty,grph theory	Blackboard,Chalk
	regular graphs Sub graph of a graph, Vertex and Edge induced sub graphs, Spanning	3	West D.G grph theory	
	Basic terminology- degree of a vertex, Minimum and maximum degree, Walk, Trail, Circuit, Path, Cycle. Handshaking the- orem and its applications,	3	West D.G grph theory	
	Bipartite graphs and characterization in terms of cycle lengths	3	Bondy &murty,grph theory	
	Havel- Hakimi theorem, Distance in a graph- shortest path problems, Dijkstra's algorithm.	3	West D.G grph theory	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: __TYBSC(Maths)_____ SEMESTER: __V_____ MONTH: _____July-aug2018_____ ACADEMIC YEAR: ___2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to : Trees,cut edge,cut vertices, Algorithms for spanning tree

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PaperIV /Unit II. Trees	Cut edges and cut vertices and relevant results, Characterization of cut edge, De nition of atree and its characterizations,	3	West D.G grph theory	Blackboard,Chalk
	Spanning tree, Recurrence relation of spanning trees and Cayley formula for spanning trees of Kn ,	3	West D.G grph theory	
	Algorithms for spanning tree-BFS and DFS, Binary and m-ary tree, Pre x codes and Hu man coding	3	West D.G grph theory	
	, Weighted graphs and minimal spanning	3	West D.G grph theory	
	Kruskal's algorithm for minimal spanning trees.	3	West D.G grph theory	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: __TYBSC(Maths)_____ SEMESTER: __V_____ MONTH: _____Sept-Oct2018_____ ACADEMIC YEAR: ___2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : ___Eulerian graph,_ its characterization- Fleury's Algorithm, Sufficient condition for Hamiltonian graphs, Line graph of graph

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
/PaperIV/Unit III. Eulerian and Hamiltonian graphs	Eulerian graph and its characterization- Fleury's Algorithm- (Chinese postman problem),	3	Bondy &murty,grph theory	Blackboard,Chalk
	Hamil- tonian graph, Necessary condition for Hamiltonian graphs using G- S where S is a proper subset of V(G),	3	Bondy &murty,grph theory	
	Sufficient condition for Hamiltonian graphs- Ore's theorem and Dirac's theorem, Hamil- tonian closure of a graph	3	West D.G grph theory	
	Cube graphs and properties like regular, bipartite, Connected and Hamiltonian nature of cube graph	3	Bondy &murty,grph theory	
	Line graph of graph and simple results.	3	West D.G grph theory	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: FYPCM_____ SEMESTER: _____II_____ MONTH: _____Jan-feb2019_____ ACADEMIC YEAR: __2018-19_____

LEARNING OBJECTIVE/S:

The learners will be able to : _____Series,algebra of series,con vergence criterio,examples_

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
/Paper I (Calculus II)Unit-I : Series	1. Series Σ pf real numbers, simple examples of series, Sequence of partial sums of a series, convergent series, divergent series. Necessary condition :	4	Methods of real analysis by R.R Goldberg	Black board,chalk
	algebra of convergent series, 2. Cauchy criterion, divergence of harmonic series, convergence of Σ (P>1	3	Introduction to real analysis by R.G Bartle	
	comparison test, limit comparison test, alternating series, Leibnitz's theorem (alternating series test) and convergence of Σ ()	4	Methods of real analysis by R.R Goldberg	
	absolute convergence,conditional convergence, absolute convergence	2	Introduction to real analysis by R.G Bartle	
	Ratio test (without proof), root test(without proof) and examples.	2	Introduction to real analysis by R.G Bartle	

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: FYPCM_____ SEMESTER: _____II_____ MONTH: _____Feb-mar2019_____ ACADEMIC YEAR: __2018-19_____

LEARNING OBJECTIVE/S:

The learners will be able to : ___Definition of limits,continuioty, their algebra,differentiation, Leibnitz test

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Calculus II(Paper I)Unit -II : Limits and Continuity of functions	Definition of Limit lim → ( ) of a function ( ), , algebra of limits	3	Methods of real analysis by R.R Goldberg	Chalk,blackboard
	limit of composite function, sandwich theorem, left-right hand-limit Continuous functions: Continuity of real valued function	3	Methods of real analysis by R.R Goldberg	
	continuity of a real valued function at end points of domain, Sequential continuity, Algebra of continuous functions	3	Methods of real analysis by R.R Goldberg	
	removable and essential discontinuity. Intermediate value theorem and it's applications, Bolzano- Weierstrass theorem	3	Methods of real analysis by R.R Goldberg	
	Differentiation of real valued function of one variable: Definition of differentiation, examples of differentiable and non differentiable functions, differentiable functions are continuous chain rule , Higher order derivatives, Leibnitz rule, Derivative of inverse functions	3	Methods of real analysis by R.R Goldberg	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: SYPM_____ SEMESTER: _____IV_____ MONTH: _____Dec-jan2019_____ ACADEMIC YEAR: __2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to :

Approximation of area, Upper/Lower Riemann sums ,Properties of Riemann integration

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
/ Paper I /Calculus IV **Unit I: Riemann Integration**	Approximation of area, Upper/Lower Riemann sums , Criterion of Riemann in- tegrability,	2	Mathematical analysis by T Apostol	Black board,chalk
	Properties of integration	4	Mathematical analysis by T Apostol	
	If f is bounded with nite number of discontinuities then f 2 R[a; b], generalize this if f is monotone then f is integrable R[a; b];	3	Mathematical analysis by T Apostol	
	properties, Upper/Lower integrals,Defnition of Riemann integral on a closed and bounded interval	4	Mathematical analysis by T Apostol	
	Related theorem on integration	2	Mathematical analysis by T Apostol	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: SYPM_____ SEMESTER: _____IV_____ MONTH: _____Jan-feb2019_____ ACADEMIC YEAR: __2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to :

Continuity of F(x) , Integration by parts, Leibnitz rule, Improper integrals-type 1 and type 2

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I/Calculus IV/Unit II: Inde definite and improper integrals	Continuity of F(x) = Z x a f(t) dt where f 2 R[a, b],	3	Mathematical analysis by T Apostol	Black board ,chalk
	Fundamental theorem of calculus, Mean value theorem,	3	Mathematical analysis by T Apostol	
	Integration by parts, Leibnitz rule, Improper integrals-type 1 and type 2	3	Mathematical analysis by T Apostol	
	Abso- lute convergence of improper integrals,	3	Mathematical analysis by T Apostol	
	Comparison tests, Abel's and Dirichlet's tests	3	Mathematical analysis by T Apostol	

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: SYPM_____ SEMESTER: _____IV_____ MONTH: _____Feb-mar2019_____ ACADEMIC YEAR: __2018-19_____

The learners will be able to : __ Integrable and differentiable functions , Applications of definite Integrals,__ Lengths of plane curves, Ar-eas of surfaces of revolution

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper I /Calculus IV/Unit III: Applications	Integrable and differentiable functions and their properties,	3	Mathematical analysis by T Apostol	Blackboard ,chalk
	Applications of definite Integrals	3	Mathematical analysis by T Apostol	
	Area between curves,findinding volumes by slicing,	2	Mathematical analysis by T Apostol	
	volumes of solids of revolution-Disks and Washers, Cylindrical Shells	4	Mathematical analysis by T Apostol	
	Lengths of plane curves, Ar-eas of surfaces of revolution.	3	Mathematical analysis by T Apostol	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Rakhee N Jadhav_____ DEPARTMENT: ___Mathematics_____ CLASS: __SYBS (PM)_____ SEMESTER: _IV_____ MONTH: ____Dec-Jan2019_____ ACADEMIC YEAR: 2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : De nition of a group, abelian group, order of a group ,Matrix groups,examples_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I: Groups and Subgroups	De nition of a group, abelian group, order of a group, nite and in nite groups.Examples of groups i	3	Topics in algebra by Herstein	Chalk,Blackboard
	Z:Q:R:C under addition) Q (= Q n f0g) R (= R n f0g):C (= C n f0g):Q+(= positive rational numbers)under multiplication iii) Zn	3	Abstract algebra by bhattacharya	
	U(n): the group of prime residue classes modulo n under multiplication v) The symmetric group Sn:vi) The group of symmetries of a plane gure. The Dihedral	4	Topics in algebra by Herstein	
	Matrix groups Mn n(R) under addition of matrices, GLn(R): the set of invertiblereal matrices, under multiplication of matrices. ix) Examples such as S1 as subgroup of C; n the subgroup	3	Topics in algebra by Herstein	
	In a group (G; :) the following are true: i) The identity element e of G is unique	2	Abstract algebra by bhattacharya	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Rakhee N Jadhav_____ DEPARTMENT: ___Mathematics_____ CLASS: __SYBS (PM)_____ SEMESTER: _IV_____ MONTH: ____Jan-Feb2019_____ ACADEMIC YEAR: 2018-2019_____LEARNING OBJECTIVE/S:
The learners will be able to : __ Cyclic subgroup of a group, Properties, Subgroup of a cyclic groups

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II: Cyclic groups and cyclic subgroups	Cyclic subgroup of a group, cyclic groups, (examples including Z:Zn and n	2	Abstract algebra by bhattacharya	Chalk,Blackboard
	Properties such as:(i) Every cyclic group is abelian.(ii) Finite cyclic groups, In nite cyclic groups and their generators	4	Topics in algebra by Herstein	
	A finite cyclic group has a unique subgroup for each divisor of the order of the group	3	Abstract algebra by bhattacharya	
	Subgroup of a cyclic group is cyclic.(v) In a nite group G:G =< a > if and only if o(G) = o(a).	3	Topics in algebra by Herstein	
	If G =< a > and o(a) = n then G =< am > if and only if (n:m) = 1:(vii) If G is a cyclic group of order pn and H < G:K < G then prove that either H K or K H:	3	Topics in algebra by Herstein	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Rakhee N Jadhav_____ DEPARTMENT: ___Mathematics_____ CLASS: __SYBS (PM)_____ SEMESTER: _IV_____ MONTH: ____feb-mar2019_____ ACADEMIC YEAR: 2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : Defnition of Coset and properties. Group homomorphisms and isomorphisms, automorphisms, Lagrange's theorem and consequences

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III: Lagrange's Theorem and Group homomorphism	Defnition of Coset and properties such as :1) IF H is a subgroup of a group G and x 2 G then (i) xH = H if and only if x 2 H. (ii) Hx = H if and only if x 2 H:	4	Abstract algebra by bhattacharya	Chalk,Blackboard
	If H is a subgroup of a group G and x: y 2 G then (i) xH = yH if and only if x 1y 2 H:	2	Abstract algebra by bhattacharya	
	Lagrange's theorem and consequences such as Fermat's Little theorem, Euler's theo- rem and if a group G has no nontrivial subgroups then order of G is a prime and G is Cyclic	4	Abstract algebra by bhattacharya	
	Group homomorphisms and isomorphisms, automorphisms i) Definition. ii) Kernel and image of a group homomorphism.	2	Abstract algebra by bhattacharya	
	G0 is a group homomorphism then (i) G is abelian if and only if G0 is abelian. (ii) G is cyclic if and only if G0 is cyclic.	3	Abstract algebra by bhattacharya	

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: __TYBSC(Maths)_____ SEMESTER: __VI_____ MONTH: _____Dec-jan2019_____ ACADEMIC YEAR: ___2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to : Vertex coloring, Edge coloring , the relation between vertex and edge connectivity

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PaperIV /Unit I. Colorings of graph	Vertex coloring- evaluation of vertex chromatic number of some standard graphs, critical graph. Upper and lower bounds of Vertex chromatic Number- Statement of Brooks theorem	2	Bondy &murty,grph theory	Blackboard,Chalk
	Edge coloring- Evaluation of edge chromatic number of standard graphs such as complete graph	4	West D.G grph theory	
	com- plete bipartite graph, cycle. Statement of Vizing Theorem. Chromatic polynomial of graphs-	3	Bondy &murty,grph theory	
	Recurrence Relation and properties of Chromatic polynomials. Vertex and Edge cuts vertex and edge connectivity	3	West D.G grph theory	
	the relation between vertex and edge connectivity. Equality of vertex and edge connectivity of cubic graphs. Whitney's theorem on 2-vertex connected graphs	3	West D.G grph theory	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: __TYBSC(Maths)_____ SEMESTER: __VI_____ MONTH: _____Jan-febt2019_____ ACADEMIC YEAR: ___2018-2019_____

LEARNING OBJECTIVE/S:

The learners will be able to : Defnition of planar graph. Euler formula , Colorabilty of planar graphs

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PaperIV /Unit II. Planar graph	De nition of planar graph. Euler formula and its consequences. Non planarity of K5:K(3: 3). Dual of a graph.	3	Bondy &murty,grph theory	Blackboard,Chalk
	Polyhedran in R3 and existence of exactly ve regular polyhedra- (Platonic solids)	3	Bondy &murty,grph theory	
	Colorabilty of planar graphs- 5 color theorem for planar graphs, statement of 4 color theorem	3	Bondy &murty,grph theory	
	Networks and flow and cut in a network- value of a ow and the capacity of cut in a network,	3	Bondy &murty,grph theory	
	relation between ow and cut. Maximal ow and minimal cut in a network and Ford- Fulkerson theorem.	3	Bondy &murty,grph theory	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Rakhee N Jadhav_____ DEPARTMENT: _____Mathematics_____ CLASS: __TYBSC(Maths)_____ SEMESTER: __VI_____ MONTH: _____feb-mar2019_____ ACADEMIC YEAR: ___2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to : Applications of Inclusion Exclusion Principle , expansion of some standard function,__ Solving a recurrence relation

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PaperIV /Unit III. Combinatorics	Applications of Inclusion Exclusion Principle- Rook polynomial	3	Bondy &murty,grph theory	Blackboard,Cha
	Forbidden position problems Introduction to partial fractions and using Newtons binomial theorem for real power nd series	3	West D.G grph theory	
	expansion of some standard functions. Forming recurrence relation and getting a generating function	3	West D.G grph theory	
	Solving a recurrence relation using ordinary generating functions. System of Distinct Representatives and Hall's theorem of SDR	3	West D.G grph theory	
	Introduction to matching, M alternating and M augmenting path, Berge theorem. Bipartite graphs	3	Bondy &murty,grph theory	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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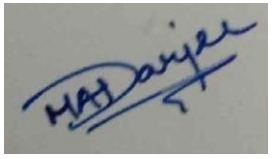
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _F. Y. B. Sc. _____ SEMESTER: I MONTH: August-Nov. ACADEMIC YEAR: 2022-23

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C –1 U–1 Overview of Indian Society	Understand the multi-cultural diversity of Indian society through its demographic composition: population distribution according to religion, caste, and gender; Appreciate the concept of linguistic diversity in relation to the Indian situation; Understand regional variations according to rural, urban and tribal characteristics; Understanding the concept of diversity as difference.	05	Manan prakashan	Chalk & board Method



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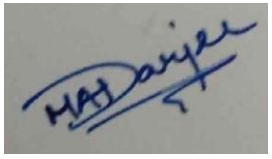
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __05

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C –1 U-II Concept of Disparity- 1:	Understand the concept of disparity as arising out of stratification and inequality; Explore the disparities arising out of gender with special reference to violence against women, female foeticide (declining sex ratio), and portrayal of women in media; Appreciate the inequalities faced by people with disabilities and understand the issues of people with physical and mental disabilities.	10	Manan prakashan	Chalk & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10



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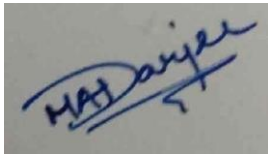
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C –1 U-III Concept of Disparity- 2	Examine inequalities manifested due to the caste system and inter-group conflicts arising thereof; Understand inter-group conflicts arising out of communalism; Examine the causes and effects of conflicts arising out of regionalism and linguistic differences.	10	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C –1 U-IV	The Indian Constitution: Philosophy of the Constitution as set out in the Preamble;The structure of	10	Manan prakashan	Chack & board Method



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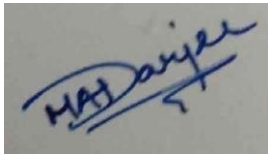
The Indian Constitution:	the Constitution-the Preamble, Main Body and Schedules;Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C –1 U-V Signigicant aspects of Political Parties	The party system in Indian politics; Local self-government in urban and rural areas; the 73rd and 74th Amendments and their implications for inclusive politics;Role and significance of women in politics.	10	Manan prakashan	Chack & board Method



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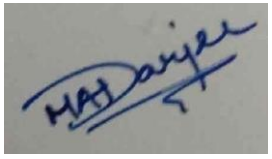
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C –1 U-VI Growing Social Problems in India	a) Substance abuse- impact on youth & challenges for the future b) HIV/AIDS– awareness, prevention, treatment and services c) Problems of the elderly- causes, implications and response d) Issue of child labour- magnitude, causes, effects and response e) Child abuse- effects and ways to prevent f) Tra cking of women- causes, effects and response	15	Manan prakashan	Chack & board Method



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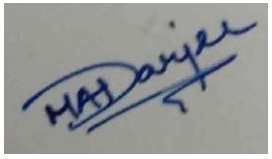
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15

NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _F. Y. B. Sc. _____ SEMESTER: II MONTH: August-Nov.

ACADEMIC YEAR: 2022-23

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -2 U-I Globalisation and Indian Society:	(Understanding the concepts of liberalization, privatization and globalization; Growth of information technology and communication and its impact manifested in everyday life; Impact of globalization on industry: changes in employment and increasing migration; Changes in agrarian sector due to globalization; rise in corporate farming and	07	Manan prakashan	Chack & board Method



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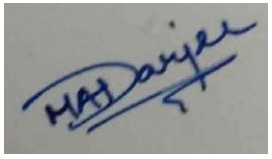
	increase in farmers' suicides.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __07

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -2 U-II Human Rights	Concept of Human Rights; origin and evolution of the concept; The Universal Declaration of Human Rights;Human Rights constituents with special reference to Fundamental Rights stated in the Constitution;.	10	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10



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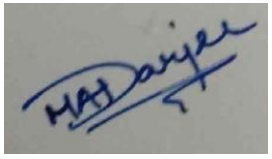
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -2 U-III Ecology	Importance of Environment Studies in the current developmental context; Understanding concepts of Environment, Ecology and their interconnectedness; Environment as natural capital and connection to quality of human life; Environmental Degradation- causes and impact on human life; Sustainable development- concept and components; poverty and environment	10	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10



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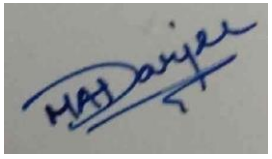
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -2 U-IV Understanding Stress and Conflict	Causes of Stress and Conflict in Individuals and Society, Agents of Socialization And the role played by them in Developing the individual, Significance of Values,Ethics and Prejudices in Developing the individual, Stereotyping and prejudices as the significant factors in Causing Conflicts in Society, Aggression and violence as the Public Expression Conflicts	10	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10



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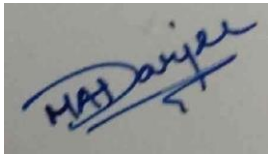
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -2 U-V Managing stress and Conflict in Contemporary Society	Types of Conflicts and use of Coping Mechanisms for managing Individual Stress, Maslow's Theory of Self-Actualization,Different Methods of Responding to Conflicts in Society , Conflicts -Resolution and Efforts towards building peace and Harmony in Society	10	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10



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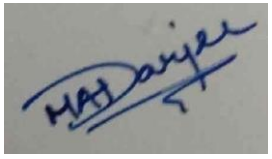
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -2 U-VI Contemporary Societal Challenges	Increasing Urbanization,Housing, Health and Sanitation, Changing Values and Lifestyles. Impact of mass media on Culture,Farmer's Suicides and Agrarian Distress, Debate regarding genetically modified crop, Development projects and human rights violation, dam and impact on Human rights, Nuclear power projects and impact on human rights, thermo electric projects and impact on human rights, Crime among Youths, Suicide Among Youths	13	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __13



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anushita A. Moger DEPARTMENT:Physics CLASS:FYBSc SEMESTER:1

MONTH: July-September ACADEMIC YEAR:2022-23

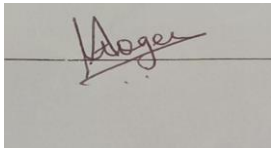
LEARNING OBJECTIVE/S:
The learners will be able to :

1) understand nuclear properties and nuclear behavior.

2)demonstrate quantitative problem-solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Phy-2(unit-2) Nuclear physics	Chp-1 Interaction between particles and matter, I.P.counter and GM counter.	07		Chalk & duster method & google classroom
	Chp-2 Types of reaction and conservation laws, concept of compound and direct reaction, problems based on nuclear fusion and fission.	08		Chalk & duster method & google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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NAME: Anushita A. Moger. DEPARTMENT: Physics CLASS: S.Y.B.Sc. SEMESTER:3

MONTH: June-September. ACADEMICYEAR:2022-23

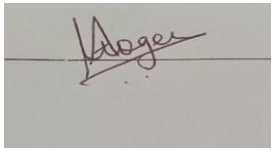
LEARNINGOBJECTIVE/S:
The learners will be able to:

1) understand basic concept of oscillator and be able to perform calculations using them.

2)to demonstrate quantitative problem solving skills in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
Phy-2(unit-3)Applied electronics	Chp-1.Oscillators, requirements for Oscillations,phase shift oscillator,wein bridge oscillator,colpitts oscillator and Hartley oscillator	07		Chalk & duster method & google classroom
	Chp-2Opamp-introduction and schematic symbol and ac analysis ,bandwidth of an opamp ,slew rate , frequency response and negative feedback of an opamp, inverting and non inverting amplifier,voltage follower ,summing amplifier and it's applications, integrator and differentiator	08		Chalk & duster method & google classroom

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15



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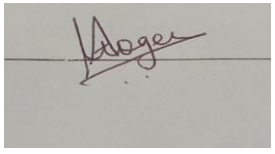
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -II (Physics –I vector calculus ,analog electronics), Unit-I	1.line ,surface & volume integral, the fundamental theorem of calculus ,the fundamental theorem of gradient ,the fundamental theorem of curl, fundamental theorem of divergence	05	Sheth Publication S.Y.B.Sc. Phy-II Textbook	Lecture &chalk method
	Problems of chapter-I	05	Sheth Publication S.Y.B.Sc. Phy-II Textbook	Lecture & chalk method
	2.Cylindrical & spherical coordinates & problems	04	Sheth Publication S.Y.B.Sc. Phy-II Textbook	Lecture & chalk method



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			Sheth Publication S.Y.B.Sc. Phy-II Textbook	Lecture & chalk method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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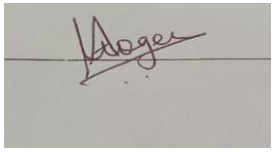

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NAMEOFTHESTAFF: Anushita A. Moger. DEPARTMENT: Physics CLASS: T.Y.B.Sc. SEMESTER:5

MONTH: June-September ACADEMICYEAR:2020-21

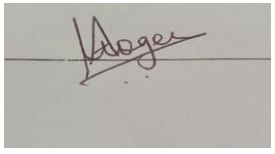
LEARNING OBJECTIVE/S:
The learners will be able to:

1)understand the laws of electrodynamics & be able to perform calculations using them.

2)Understand Maxwell's electrodynamics & Its relation to relativity.

3)Understand how optical laws can be derived from electromagnetic principles.

4)Develop quantitative problem-solving skills.



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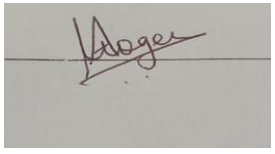
PAPER, UNIT,TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
Phy-4.(unit -3) electrodynamics	Magnetism and varying fields-diamagnet,paramagnet and ferromagnetism, magnetisation,bound currents and their physical interpretation,ampere's law in magnetised material,deceptive equation in matter and boundary conditions, electrodynamics before Maxwell,Maxwell's correction to ampere's law,Maxwell equation in matter and it's boundary conditions and magnetic charge	15		Chalk & duster method & google classroom
Phy-4(unit-4) electrodynamics	Electromagnetic waves, continuity equation,poynting theorem,Newton's third law,wave equation for electric and magnetic fields, monochromatic plane waves, energy and momentum in electromagnetic waves, propagation in linear media,reflection and transmission of electromagnetic waves at normal incidence.	15		Chalk & duster method & google classroom

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15



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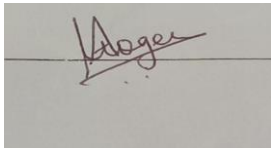
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-IV, U-I, Electrodynamics	1. Electrostatics: Field lines,flux and Gauss law,The divergence of E,application of Gauss law,The curl of E.	07	1. David J. Griffiths; Introduction to Electrodynamics	Lecture Method /Chalk & Board
	2.Poisson's equation and Laplace equation,The potential of localized charge distribution,first uniqueness theorem.	03		
	3. The classic image problem,Infinite conducting plane.	05		

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15



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NAME OF THE STAFF: Anushita A. Moger. DEPARTMENT: Physics CLASS:FYBSc SEMESTER:2

MONTH: December-February ACADEMICYEAR:2022-23

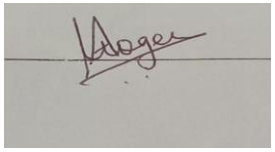
LEARNINGOBJECTIVE/S:
The learners will be able to:

1)the basic mathematical concept and applications of them in physical situation.

2)demonstrate quantitative problem solving skills in all the topics covered.

PAPER, UNIT,TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
Phy-1(unit-1) electrodynamics	Chp-1 vectors,scalars,vector algebra and it's laws,scalar and vector field and problems based on them,cross product,dot product, commutative and distributive laws,scalar and vector triple products.	07		Chalk & duster method & google classroom
	Chp-2 Gradient, curl and divergence,their significance, distributive laws for all the three terms,problems based on them.	08		Chalk & duster method & google classroom

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15



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NAME OF THE STAFF: Anushita A.Moger. DEPARTMENT: Physics CLASS: S.Y.B.Sc. SEMESTER:4

MONTH: November-February ACADEMICYEAR:2022-23

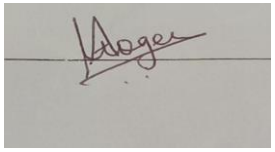
LEARNING OBJECTIVE/S:
The learners will be able to:

1) understand the postulates of quantum mechanics and to understand its importance in explaining significant phenomena in physics.

2)todemonstratequantitativeproblemsolvingskillsinallthetopicscovered.

PAPER, UNIT,TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
Phy-2(unit-1) quantum mechanics	Schrodinger's wave equation,concept of wave function ,Born interpretation of wave function, position, momentum and energy operators,eigen value equation , expectation value of operators, postulates of quantum mechanics,analogy between wave and Schrodinger's equation,STDE and STIE ,superposition principle, probability current density ,equation of continuity and it's physical interpretation.	15		Chalk & duster method & google classroom

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15



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NAME OF THE STAFF: Anushita A. Moger. DEPARTMENT:Physics CLASS: T.Y.B.Sc. SEMESTER:6

MONTH: November-February ACADEMICYEAR:2022-23

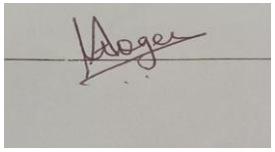
LEARNING OBJECTIVE/S:

1) understand the significance of Michelson Morley experiment and failure of the existing theories to explain the null result.

2) the importance postulates of special relativity, Lorenz transformation equations and how it changed the way we look at space and time

, Absolute time and relativity, Commonsense versus Einstein concept of Space and time.

3) Understand the transformation equations for: Space and time, velocity, frequency, mass, momentum ,force ,Energy, Charge and current density, electric and magnetic fields.



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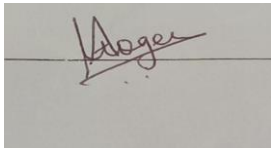
PAPER, UNIT,TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
Phy 4(unit-1) relativity	Special theory of relativistic kinematics,experimental background of special theory of relativity,Galilean transformation,Newtonian relativity, electromagnetism and Newtonian relativity, attempt to locate absolute frame, Michelson Morley experiment, attempt to preserve the concept of a ether frame,lorentz Fitzgerald contractions and ether drag hypothesis, attempt to modify electrodynamics,postulates of special theory of relativity.	15		Chalk & duster method & google classroom

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: November-February

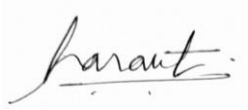
ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the fundamental principles and concepts governing alpha decay.

2. Understand the concepts of spectrum of alpha particles, alpha decay paradox penetration

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III(Nuclear Physics), Unit-I, Alpha Decay	Velocity ,energy and absorption of alpha particles :Range, ionization and stopping power Nuclear energy levels .Range of alpha particles, alpha particle spectrum .fine structure ,long range alpha particles, alpha decay paradox penetration (Gamow's theory of alpha decay and Geiger-Nuttal law) Problems based on alpha decay	15	Sheth Publication's T.Y.Bsc. Nuclear Physics S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: November-February

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concept of beta decay and beta spectrum .

2. Understand the concepts of neutrino ,Pauli's Neutrino hypothesis and energetics of beta decay .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III (Nuclear Physics) Unit-II, Beta Decay	Introduction, Velocity and energy of beta particles, energy levels and decay schemes, Continuous beta ray spectrum-Difficulties encountered to understand it, Pauli's neutrino hypothesis, Detection of neutrino, Energetics of beta -decay. Problems based on above topics	15	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: December-February

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of asymmetric fission -Mass yield emission of delayed electrons.

2. Understand the concepts of Nuclear fission and fusion.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III (Nuclear Physics), Unit-III (Nuclear Energy & Particle accelerators) 1.Nuclear Energy 2.Particle Accelerators	1.Introduction,Asymmetric fission-Mass yield Emission of delayed electrons ,Nuclear release in fission ,Nature of fission fragments ,Energy released in the fission chain reaction ,Neutron cycle in a thermal nuclear reactors ,nuclear power and breeder reactors ,Natural Fusion Possibility of controlled fusion. Problem based on the above topics	09	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

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	2.Van de Graff Generators, Cyclotron, Synchrotron, Betatron and Idea of large Hadron Collider	06	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: December -February

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of Meson theory of Nuclear force

2. Understand the concepts of elementary particles.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III(Nuclear Physics), Unit-IV (Nuclear Force and elementary particle)	1. Introduction, Deuteron problems, Meson theory of Nuclear force -A qualitative discussion	05	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

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1.Nuclear Force 2.Elementary particle	2.Introduction,Claasifications of elementary particles ,Particle interactions ,conservation laws ,particles and antiparticles ,photons ,Mesons ,Quark model	10	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: F.Y.B.Sc SEMESTER: II MONTH: December-February

ACADEMIC YEAR: 2022-23

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -I (Physics), Unit-II	1. Optical Instruments and Eyepieces: Human Eye as an optical instrument, Camera and Lenses of Camera, Simple Microscope & Compound Microscope, Concept of eyepiece & its significance: Huygens Eyepiece and Ramsden Eyepiece (Principle, Construction, Expression for Equivalent Focal Length, Merits and Demerits), Comparison of Huygens Eyepiece and Ramsden Eyepiece, Gauss Eyepiece, Refracting Astronomical Telescope (Construction and Working), Reflecting Telescope (Qualitative). 2 .	09	Sheth Publication's Physics I	Lecture Method /Chalk and Board

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	Interference in Thin Films: Interference due to reflected and transmitted light in plane thin films, Conditions for Maxima and Minima, Interference pattern in wedge- shaped film & Newtons rings.	06		Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

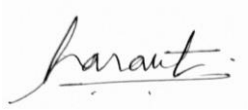
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: F.Y.B.Sc SEMESTER: II MONTH: December -February

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of Laser & Optical Fibers

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -I(Physics), Unit-III	Lasers and Fibre Optics 1. An Introduction to LASERS: Absorption and Emission, Spontaneous and Stimulated	06		Lecture Method /Chalk and Board



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	Emission, Components of laser, Ruby laser, He-Ne Laser, Laser Beam Characteristics, Applications of Laser.			
	2. An Introduction to Optical Fibre: Total Internal Reflection, Propagation of light through an Optical fibre, Numerical Aperture, Classification of Optical fibres. Single Mode Step Index Fibre, Multimode Step Index Fibre, Graded Index Fibre, Optical Fibre applications (Optical fibre based communication system & Optical Fibre based Temperature sensor). Note: A good number of numerical examples are expected	09		Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi A. Raut. DEPARTMENT:Physics CLASS: _T. Y. B. Sc. __ SEMESTER: V MONTH: June-oct.
ACADEMIC YEAR: 2022-2023

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-III, Solid State Physics	Band Theory of Solids and Conduction in Semiconductors 1. Band theory of solids, The Kronig- Penney model (Omit eq. 6.184 to 6.188),Brillouin zones, Number of wave functions in a band, Motion of electrons in a one-dimensional periodic potential, Distinction between metals, insulators and intrinsic semiconductors.	07	1.Sheth Publications, 2.MH : Electronic Devices and Circuits :Millman, Halkias & Satyabrata Jit. (3rd Ed.) Tata McGraw Hill.	Chalk & board Method

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	2. Electrons and Holes in an Intrinsic Semiconductor, Conductivity of a Semiconductor, Carrier concentrations in an intrinsic semiconductor, Donor and Acceptor impurities, Charge densities in a semiconductor, Fermi level in extrinsic semiconductors, Diffusion, Carrier lifetime, The continuity equation, Hall Effect.	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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P-II, U-IV, Solid State Physics	Diode, magnetism and superconductivity 1.Semiconductor-diode Characteristics: Qualitative theory of the p-n junction, The p-n junction as a diode, Band structure of an open-circuit p-n junction, The current components in a p-n junction diode, Quantitative theory of p-n diode currents, The Volt-Ampere characteristics, The temperature dependence of p-n characteristics, Diode resistance.	08	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method
	2. Superconductivity: Experimental Survey, Occurrence of Superconductivity, destruction of superconductivity by magnetic field, The Meissner effect, London equation, BCS theory of superconductivity, Type I and Type II Superconductors, Vortex state. dependence of p-n characteristics, Diode resistance.	07	3. MH : Electronic Devices and Circuits :Millman, Halkias & Satyabrata Jit. (3rd Ed.) Tata McGraw Hill. 4. Solid State Physics : A. J. Dekker, Prentice Hall	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15

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NAME OF THE STAFF: Dr. Hemangi A. Raut. DEPARTMENT:Physics CLASS: _F. Y. B. Sc. __ SEMESTER: I MONTH: June-oct.
ACADEMIC YEAR: 2022-2023

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-III,	Origin of Quantum theory, Black body (definition), Black Body spectrum, Wien's displacement law, Matter waves, wave particle duality, Heisenberg's uncertainty Principle. Davisson-Germer experiment, G. P. Thomson experiment.	7	1.Sheth Publications, Paper2 Modern physics –A. Beiser	Chalk & board Method
	2. X-Rays production and properties. Continuous and characteristic X-Ray spectra, X-Ray Diffraction, Bragg's Law, Applications of X-Rays	4		
	. 3. Compton Effect, Pair production, Photons and Gravity, Gravitational Red Shift.	4		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut___DEPARTMENT:__Physics_____CLASS: _T. Y. B. Sc. __ SEMESTER:_____V___

MONTH:___June-September _____ ACADEMIC YEAR:_____2022-2023 _____

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Understand the working of Transducers, Sensors and Optoelectronics devices.

2. Understand the basic concept of Modern Techniques and Appliances.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-V, U-I, Electronics Instrumentation (Applied	1. Transducers: Definition, Classification, Selection of transducer. 2. Electrical transducers: Thermistor, Thermocouple, Pressure Transducer: Strain gauges (wire, foil, & semiconductor), Displacement transducer: LVDT, Peizo-electric Transducer.	04	1. Sheth Publications. 2.Electronic Instrumentation – H S Kalsi, Tata McGraw-Hill Publishing Company	Lecture Method /Chalk & Board
	3. Chemical sensors: PH sensor, Gas sensor (Fundamental aspects), Humidity sensor (Resistive). 4. Electronic Weighing Systems: Operating principle, Blockdiagram,features	05		

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	5. Optoelectronic Devices: LDR, LED (Construction, Working & Applications), Multicolour LED, Seven Segment Display, Liquid Crystal Display (LCD), Photodiode (construction, Characteristics & applications), Phototransistor	06	Limited, New Delhi.	
P-V, U-IV, Electronics Instrumentation (Applied Physics)	1. Printed Circuit Board: Idea of PCB, advantages, copper clad, Etching processes, Principle of Photolithography (For PCB).	06	1. Sheth Publications. 2. . PCB design basics, Mahmoud Wahby, EDN Networks, Nov 2013. 3.Medical instrumentation Application and design- J. C. Wobster	Lecture Method /Chalk & Board
	2. Microwave Oven: Operating principle, block diagram, features.	03		
	3. Medical instruments: Bio-Potential, Types of electrodes, ECG, EEG, EMG, CT Scan and MRI (principle, block diagram and features), Ultrasonography: working principle	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____30_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: January-February

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concept of OOP & POP.

2. Understand the concept of C++ and different concepts available in C++.

3. Apply different concepts of C++ to write different program.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -VI (Electronic Instrumentation -II) Unit – IV Basic concepts of object oriented programming with C++ 1. Basics of OOP with C++ 2. Token & expressions	Procedure oriented programming, OOP , basic concepts of OOP, objects Benefits of OOP ,application of OOP ,programming language of C++ ,simple C++ program ,the cout & cin cascading of I/O operators	03	C++ by Balguruswami	PowerPoint presentation
	Tokens ,variables& constants ,keywords ,basic data types ,power of constants ,operators, binary operators ,arithmetic operators ,logical operators, assignment operator ,comma operator ,typecast operator ,operator precedence ,formatting of output	04	C++ by Balguruswami E-I-II textbook by sheth publication	PowerPoint presentation
	Simple if statement ,if -else statement ,nested if -else ,the switch statement ,the while ,Do-while ,for loop ,programs	06	C++ by Balguruswami	PowerPoint presentation
	Functions ,types of function ,structure of C++ function prototyping ,function calling ,inline function ,default	02	C++ by Balguruswami	PowerPoint presentation

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in C++ 3. Control structures & functions	argument ,const argument ,function overloading ,mathematical library function			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: February -March

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of microcontrollers.

2. Understands the different instructions used in Microcontroller

3. Understand the concepts of different ports & hardware structure in microcontroller

4. Apply the instructions to write a program for 8051.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACING METHOD/ ICT TOOLS USED
Paper -V (E-II) Unit-III Introduction to Microcontroller 1. Introduction	1. Introduction, Microcontrollers and Microprocessors, History of Microcontrollers and Microprocessors, Block diagram of 8051 Microcontroller*, Embedded Versus External Memory Devices, 8-bit & 16-bit Microcontrollers, CISC and RISC Processors,	05	Introduction to Microcontroller by Ajay Deshmukh	Lecture Method /PPT

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2. 8051 microcontrollers 3. 8051 instruction set and programming	Harvard and Von Neumann Architectures, Commercial Microcontrollers. 2. 8051 Microcontrollers: Introduction, MCS-Architecture, Registers in MCS-51, 8051 Pin Description, 8051 Connections, 8051 Parallel I/O Ports, Memory Organization. 3. MCS-51 Addressing Modes and Instructions: 8051 Addressing modes, MCS-51 Instruction Set, 8051 Instructions and Simple Programs, Using Stack Pointer	10	Introduction to Microcontroller by Ajay Deshmukh	Lecture Method /PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: March -April

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of Chaos

2. Understand the concepts of Duffing's Equation.

3. Understand the concept of Bifurcations and strange attractors aspects of Chaotic Behaviour (Logistic map)

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -I : Classical Mechanics unit IV: Non-Linear Mechanics 1. Non-linear Mechanics 2. Transition to Chaos	1. Qualitative approach to Chaos ,the an harmonic oscillator ,Numerical solutions of Duffing's solutions	08	Seth publication Classical mechanics	Lecture Method /PPT
	2.Bifurcations and strange attractors aspects of Chaotic Behaviour (Logistic map)	07	Seth publication Classical mechanics	Lecture Method /PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: IV MONTH: December-March
ACADEMIC YEAR: 2022-23
LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of Polarisation
2. Understand the concepts of different methods of polarisation.
3 .Develop the problem solving skill.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper -I (Optics), Unit-II (Polarization)	Polarization: Types of polarization, Plane polarized light, Circularly polarized light, Elliptically polarized light, Partially polarized light, Production of Plane polarized light, Polarization by reflection from dielectric surface, Polarization by refraction –pile of plates, Polarization by scattering, Polarization by selective Absorption, Polarization by double refraction, Polarizer and Analyzer, Malus' Law, Anisotropic crystal, Calcite crystal, Optic Axis, Double refraction in calcite crystal, Huygens' explanation of double refraction, Ordinary and Extra ordinary rays, Positive and Negative crystals, Superposition of waves linearly polarized at right angles, Superposition of e-Ray and o-Ray, Retarders, Quarter wave plate,	13	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board

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	Half wave plate, Production of linearly polarized light, Production of elliptically polarized light, Production of circularly polarized light, Analysis of polarized light, Applications of polarized light.			
	Problems on above topics	02	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: IV MONTH: January -February
ACADEMIC YEAR: 2022-23 Subject: Foundation Course-IV
LEARNING OBJECTIVE/S:
The learners will be able to: 1. Develop a basic understanding of the importance of communication.
2. Gain an overview of significant skills required to address competition in career choice.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-III (Science and Technology-II)	A.1.Laser Technology: Use of Laser remote sensing, GIS/GPS mapping, medical use, 2.Satellite Technology : various uses in satellite navigation system ,GPS and imprecise climate &weather	04	Foundation Course by Manan Prakashan	Discussion method

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A. Some significance modern technologies, features& applications B. Issue of Control access and misuse of Technology	change			
	3. ICT: convergence of various technologies like satellite, computer sand digitalin the information revolution of today's society,4. Biotechnology and Genetics Engg: applied biology & uses in medicine, agriculture, genetically modified plant, animal & human life.	03	Foundation Course by Manan Prakashan	Discussion method
	Nanotechnology: definition, control &application B. Issues of control, access and misuse of technology	04	Foundation Course by Manan Prakashan	Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: IV MONTH: February-March
ACADEMIC YEAR: 2022-23 Subject: Foundation Course-IV
LEARNING OBJECTIVE/S:
The learners will be able to: 1. Develop a basic understanding of importance of communication.
2. Gain an overview of significant skills required to address competition in career choice.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-IV (Introduction to Competitive Examinations)	1.Exams conducted for entry into professional courses - GRE,GMAT,CAT&SAT	02	Foundation Course by Manan Prakashan	Lecture Method /Chalk and Board
	2.Exams conducted for entry into jobs by Union Public Service	02	Foundation Course by Manan Prakashan	Discussion method

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A. Basic Information on competitive examinations B. Soft skills required for competitive Examinations	Commission :S.S.C, State Public Service Commissions ,Banking & Insurance Sector and NET/SET for teaching Profession.			
	B.1.Information on areas tested : Ability ,Data interpretations ,Verbal Ability & logical Reasoning ,creativity and Lateral Thinking 2. Motivation: Concepts ,theories and types of motivation 3. Goal setting :Types of goals ,SMART goals ,Stephan Covey's concepts of human endowment . 4.Time management :Effective strategies for time management 5. Writing skills ,paragraph writing, report writing ,filing and application under RTI act ,Consumer grievance Letter .	07	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **_LAXMI K. PARATE_____**DEPARTMENT:_____PHYSICS_____

_ CLASS: T.Y.B.Sc_____SEMESTER: _V_____MONTH:___JUNE TO SEPTEMBER____ACADEMIC YEAR:**2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to : The students are expected to be able to solve simple problems in probability, understand the concept of independent events and work with standard continuous distributions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I MATHEMATICAL PHYSICS UNIT-I PROBABILITY	sample space, events, independent events, conditional probability, probability theorems, methods of counting (derivation of formulae not expected), random variables, continuous distributions (omit joint distributions), binomial distribution, the normal distribution, the Poisson distribution.	15	Mathematical Methods in the Physical sciences: Mary L. Boas Wiley	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____CLASS: T.Y.B.Sc_____SEMESTER: _V_____MONTH: ___JUNE_--_SEPTEMBER_____ACADEMIC YEAR:**2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to : The students will have an idea of the functions of complex variables; solve nonhomogeneous differential equations and partial differential equations using simple methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I MATHEMATICAL PHYSICS UNIT-II COMPLEX NO. DIFFERENTIAL EQUATION	Functions of complex variables: The exponential and trigonometric functions, hyperbolic functions, logarithms, complex roots and powers, inverse trigonometric and hyperbolic functions, some applications.	7	Mathematical Methods in the Physical sciences: Mary L. Boas Wiley	Chalk/Board
	Second-order nonhomogeneous equations with constant coefficients, partial differential equations, some important partial differential equations in physics, method of separation of variables.	8	Mathematical Physics: H. K. Das,	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **_LAXMI K. PARATE**_____DEPARTMENT:

_____PHYSICS_____CLASS: S.Y.B.Sc_____SEMESTER: _III_____MONTH:

_JUNE-SEPTEMBER_____ACADEMIC YEAR:2022-23_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concepts of mechanics & properties of matter & to apply them to problems.

_ * Demonstrate tentative problem solving skills in all above areas.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-I Mechanics	Expression for period, maximum and minimum time period, centres of suspension and oscillations , reversible compound pendulum. Kater's reversible pendulum , compound pendulum and simple pendulum- a relative study.	3	Heat thermodynamics and Statistical Physics, Brijlal, N.Subramanyam , P. S. Hemne, S. Chand,	Chalk/Board
	enter of Mass , .Motion of the Center of Mass , Linear momentum of a Particle Linear momentum of a System of Particles , Linear momentum wrt CM coordinate (i.e shift of origin from Lab to CM), Conservation of Linear	7	Heat thermodynamics and Statistical Physics, Brijlal, N.Subramanyam , P. S.	Chalk/Board

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	Momentum , Some Applications of the Momentum Principle , System of Variable Mass Torque Acting on a Particle , Angular Momentum of a Particle , Angular Momentum of System of Particles , Total angular momentum wrt CM coordinate. Conservation of Angular Momentum		Hemne, S. Chand,	
	Oscillations , The Simple Harmonic Oscillator , Relation between Simple Harmonic Motion and Uniform Circular Motion , Two Body Oscillations, Damped Harmonic Motion , Forced Oscillations and Resonance.	5	Heat thermodynamics and Statistical Physics, Brijlal, N.Subramanyam , P. S. Hemne, S. Chand,	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____CLASS: F.Y.B.Sc_____SEMESTER: _I_____MONTH: ___JULY-OCTOBER_____ACADEMIC YEAR:2022-23_____

LEARNING OBJECTIVE/S:
The learners will be able to : Apply the laws of thermodynamics to formulate the relations necessary to analyze a thermodynamic process.

Demonstrate quantitative problem solving skills in all the topics covered

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-III THERMODYNAMICS	Behavior of real gases and real gas equation, Van der Waal equation, relation between vander waals coefficient and critical constant, Boyles Temperature,Numericals	6	Brijlal, Subramanyam and Hemne, Heat Thermodynamics and Statistical Physics,	Chalk/Board
	Thermodynamic Systems, Zeroth law of thermodynamics, Concept of Heat, The first law, Non Adiabatic process and Heat as a path function, Internal energy, , Heat Capacity and specific heat, Applications of first law to simple processes, general relations from the first law, Indicator	9	Brijlal, Subramanyam and Hemne, Heat Thermodynamics and Statistical Physics,	Chalk/Board

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	diagrams, Work done during isothermal and adiabatic processes, Worked examples, Problems.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **_LAXMI K. PARATE**_____DEPARTMENT: _____PHYSICS_____CLASS: S.Y.B.Sc_____SEMESTER: _III_____MONTH: _JUNE-SEPTEMBER_____ACADEMIC YEAR:2022-23_____

LEARNING OBJECTIVE/S:
The learners will be able to : _*_ Comprehend the basic concepts of thermodynamics & its applications in physical situation.
_ * Demonstrate tentative problem solving skills in all above areas.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-II THERMODYNAMICS	Heat engine, Carnot's cycle: its efficiency,NUMERICALS	3	Heat thermodynamics and Statistical Physics, Brijlal, N.Subramanyam, P. S. Hemne, S. Chand,	Chalk/Board

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	Second law of thermodynamics, Statements, Equivalence of Kelvin and Plank statement, Carnot's theorem, Reversible and irreversible process, Absolute scale of temperature.	5	Heat thermodynamics and Statistical Physics, Brijlal, N.Subramanyam, P. S. Hemne, S. Chand,	Chalk/Board
	Clausius theorem, Entropy, Entropy of a cyclic process, Reversible process, Entropy change, Reversible heat transfer, Principle of increase in entropy, generalized form of first and second law, entropy change of an ideal gas, entropy of steam, entropy and unavailable energy, entropy and disorder, absolute entropy.	7	Heat thermodynamics and Statistical Physics, Brijlal, N.Subramanyam, P. S. Hemne, S. Chand,	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____CLASS: F.Y.B.Sc_____SEMESTER: _I_____MONTH: ___JULY-OCTOBER_____ACADEMIC YEAR:2022-23_____

LEARNING OBJECTIVE/S:
The learners will be able to : Apply the laws of mechanics to formulate the relations necessary to analyze process.

Demonstrate quantitative problem solving skills in all the topics covered

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-I Mechanics	Newton's first, second and third laws of motion, interpretation and applications, pseudo forces, inertial and non-inertial frames of reference Worked out examples (with friction present)	6	Brijlal, Subramanyam and Hemne, Heat Thermodynamics and Statistical Physics,	Chalk/Board
	Friction :- Advantages & disadvantages of friction in daily life, Friction as the component of Contact force, Kinetic Friction, Static friction, laws of friction, Understanding friction at Atomic level..	3	Brijlal, Subramany Heat Thermodynan Statistical Physics,	Chalk/Board

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	Work and Energy :- Kinetic Energy, Work and Work-energy theorem, Potential Energy, Conservative and Non Conservative Forces, Different forms of Energy: Mass Energy Equivalence Worked out Examples	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _PHYSICS_

CLASS: F.Y.B.Sc____SEMESTER: _I_____MONTH:___JULY-OCTOBER_____ACADEMIC YEAR:2022-23__

LEARNING OBJECTIVE/S:
The learners will be able to : Apply the laws of thermodynamics to formulate the relations necessary to analyze a thermodynamic process. Demonstrate quantitative problem solving skills in all the topics covered

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-III THERMODYNAMICS	Behavior of real gases and real gas equation, Van der Waal equation, relation between vander waals coefficient and critical constant, Boyles Temperature,Numericals	6	Brijlal, Subramanyam and Hemne, Heat Thermodynamics and Statistical Physics,	Chalk/Board
	Thermodynamic Systems, Zeroth law of thermodynamics, Concept of Heat, The first law, Non Adiabatic process and Heat as a path function, Internal energy, , Heat Capacity and specific heat, Applications of first law to simple processes, general relations from the first law, Indicator diagrams, Work done during isothermal and adiabatic processes, Worked examples, Problems.	9	Brijlal, Subramanyam and Hemne, Heat Thermodynamics and Statistical Physics,	PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____CLASS: T.Y.B.Sc_____SEMESTER: _VI_____MONTH: _NOVEMBER-MARCH_____ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the kinds of motions that can occur under a central potential and their applications to planetary orbits. The students should also appreciate the effect of moving coordinate system, rectilinear as well as rotating.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-I CENTRAL FORCE	Motion under a central force, the central force inversely proportional to the square of the distance, Elliptic orbits, The Kepler problem.	10	Classical Mechanics: Herbert Goldstein	Chalk/Board
	Moving origin of coordinates, Rotating coordinate systems, Laws of motion on the rotating earth, The Foucault pendulum, Larmor's theorem	5	Classical Mechanics: Herbert Goldstein	Chalk/Board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____CLASS: T.Y.B.Sc_____SEMESTER: _VI_____MONTH: NOVEMBER-MARCH _____ACADEMIC YEAR:2022-23_____

LEARNING OBJECTIVE/S:
The learners will be able to : Learn the concepts needed for the important formalism of Lagrange's equations and derive the equations using D'Alembert's principle. They should also be able to solve simple examples using this formalism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-II LAGRANGE'S EQUATIONS	D'Alembert's principle, Constraints, Examples of holonomic constraints, examples of nonholonomic constraints, degrees of freedom and generalized coordinates, virtual displacement, virtual work, D'Alembert's principle, illustrative problems.	10	Classical Mechanics : J. C. Upadhyaya	Chalk/Board
	Lagrange's equations (using D'Alembert's principle), properties of Lagrange's equations, illustrative problems, canonical momentum, cyclic or ignorable coordinates	5		Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT:___PHYSICS_____

CLASS: T.Y.B.Sc_____SEMESTER: _VI_____MONTH: NOVEMBER-MARCH___ACADEMIC YEAR:2022-23_

LEARNING OBJECTIVE/S:
The learners will be able to : The introduction to simple concepts from fluid mechanics and understanding of the dynamics of rigid bodies is also expected. Finally, they should appreciate the drastic effect of adding nonlinear corrections to usual problems of mechanics and nonlinear mechanics can help understand the irregularity we observe around us in nature..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-III Fluid Motion and Rigid body rotation	Kinematics of moving fluids, Equation of motion for an ideal fluid, Conservation laws for fluid motion, Steady flow.	7	KRS: Mechanics : Keith R. Symon, (Addision Wesely) 3rd Ed	Chalk/Board
	Rigid dynamics: introduction, degrees of freedom, rotation about an axis: orthogonal matrix, Euler's theorem, Eulerian angles, inertia tensor, angular momentum of rigid body, Euler's equation of motion of rigid body, free motion of rigid body, motion of symmetric top	8	KRS: Mechanics : Keith R. Symon, (Addision Wesely) 3rd Ed	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____CLASS: S.Y.B.Sc_____SEMESTER: _IV_____MONTH: _ NOVEMBER-FEBRUARY_____ACADEMIC YEAR2022-23_____

LEARNING OBJECTIVE/S: The learners will be able to : Understand the concept of Basics of communication, Concept of modulation and its various types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-III UNIT-III COMMUNICATION SYSTEM,RADIATION PHYSICS	Block diagram of communication system, types of communication system: simplex, duplex, analog and digital communication, Electromagnetic spectrum, base band and broad band communication. Noise concept and types, signal to noise ratio, noise figure, noise temperature	4	Electronics Communication Systems by Kennedy	PPT,Chalk/Board
	Need of modulation, concept of modulation, AM waveform, mathematical expression , concept of sideband, demodulation principles. TRF and superheterodyne receiver	3	Electronics Communication Systems by Kennedy	PPT,Chalk/Board
	FM modulation: definition, mathematical representation, frequency spectrum, bandwidth and	4	Electronics Communicat	PPT,Chalk/Board

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	modulation index. 4.Concept of ASK, PSK, FSK, PAM, PWM, PPM, PCM.		ion Systems by Kennedy	
	radioactivity, Alpha, beta and gamma radiation, high energy electron radiation and X-rays, Radiation units, Sources of radiation Radiation protection Radiation Detectors and Beam Calibration Types of radiation detectors, Ionization detectors, scintillation detectors, particle detectors, TLD, thin film detectors, Radiation field analyzer, Basic principles of beam profile	3	Electronics Communication Systems by Kennedy	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____CLASS: S.Y.B.Sc_____SEMESTER: _IV_____MONTH: _ NOVEMBER-FEBRUARY_____ACADEMIC YEAR2022-23_____

LEARNING OBJECTIVE/S: The learners will be able to : Understand the concept of Basics of digital ElectronicsConcept of flipflop and its various types and application

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-III Digital Electronic Binary number system	Digital IC signal levels, Binary to Decimal ,Decimal to binary , Hexadecimal number, Hexadecimal to decimal Conversion, Decimal to hexadecimal conversion, Hexadecimal to binary conversion, Binary to hexadecimal conversion, Binary addition, Unsigned binary numbers, Sign magnitude numbers , 1's complement , 2's complement , Converting to and from 2's complement representation , 2's complement arithmetic,	4	Electronics Communication Systems by Kennedy	Chalk/Board
	RS Flip-Flops (only NOR gate latch, NAND gate latch) , Gated Flip-Flops, Edge Triggered RS Flip-Flop, Edge-	3	Electronics Communication Systems by Kennedy	Chalk/Board

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	Triggered D Flip-Flop, Edge-Triggered J-K Flip-Flop, JK Master- Slave Flip-Flops, Bounce elimination switch			
	.Types of registers : SISO , SIPO, PISO , PIPO [in this chapter the teacher should make all IC specific diagrams into general diagrams ie. Ignore pin numbers and IC numbers]	4	Electronics Communication Systems by Kennedy	Chalk/Board
	Asynchronous counter -3 bit (ignore IC specific diagrams), Synchronous counter only mod 8, Decade Counters Mod5 and Mod10	3	Electronics Communication Systems by Kennedy	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____CLASS: F.Y.B.Sc_____SEMESTER: _II_____MONTH: ___DECEMBER-MARCH_____ACADEMIC YEAR:2022-23

LEARNING OBJECTIVE/S: The learners will be able to : Understand the basic Electronics concepts and their applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-II UNIT-I A.C.CIRCUIT	AC circuit containing pure R, pure L and pure C, representation of sinusoids by complex numbers, Series L-R, C-R and LCR circuits. Resonance in LCR circuit (both series and parallel), Power in ac circuit. Q-factor.	9	PRINCIPLE OF ELECTRONICS By V K Mehta and R Mehta	Chalk/Board
	AC-bridges: General AC bridge, Maxwell, de-Sauty, Wien Bridge , Hay brigde,Numericals	6	PRINCIPLE OF ELECTRONICS By V K Mehta and R Mehta	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _S. Y. B. Sc. ___ SEMESTER: I**II** MONTH: July-oct.

ACADEMIC YEAR: 2022-23

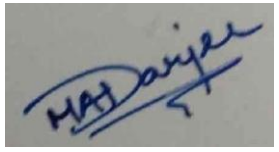
LEARNING OBJECTIVE/S:
The learners will be able to :

• To develop analytical abilities towards real world problems.

• To familiarize with current and recent scientific and technological

developments.

• To enrich knowledge through problem solving, hands on activities, applications base study etc.



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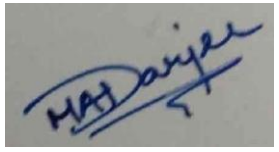
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III, U-II Applied Physics-1	Crystal Physics 1) Lattice points and space lattice, The basis and crystal structure, Unit Cells and lattice parameters, Primitive Cells, Crystal Systems, Crystal Symmetry,Bravais space lattices	05	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method
	2) Metallic crystal structures, relation between the density of crystal material and lattice constant in a cubic lattice, Directions, Planes, Miller Indices, Important planes in simple cubic structure, separation between lattice planes in a cubic crystal.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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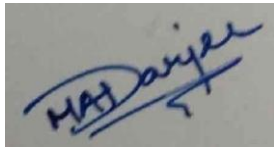
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I, U-III	1.Third law of thermodynamics, Nernst heat theorem, Consequences of the third law, Maxwell's thermodynamic relations, Clausius – Clapeyron equation, Thermal Expansion.	05	1.Sheth Publications	Chalk & board Method
	2) Steam engine, Rankine cycle, Otto engine, Efficiency of Otto cycle, Diesel cycle, Efficiency of Diesel cycle, Otto and diesel comparison	03		
	3) Low temp Physics: Different methods of liquefaction of gases, methods of freezing, Cooling by evaporation, cooling by adiabatic expansion Joule - Thompson effect, JT effect of Van der Waal's gas, Liquefaction of helium, properties and uses of liquid Helium	07		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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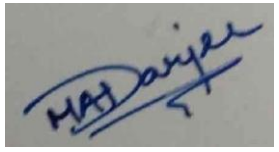
NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _S. Y. B. Sc. ___ SEMESTER: IV MONTH: nov-april.
ACADEMIC YEAR: 2022-23

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II Quantum mechanics	Applications of Schrodinger steady state equation- 15 Lectures 1. Free particle. 2. Particle in infinitely deep potential well (one - dimension). 3. Particle in finitely deep potential well (one - dimension). 4. Step potential. 5. Particle in three dimension rigid box, degeneracy of energy state	**15**	**1.Sheth Publications**	Chalk & board Method
P-II, U-III Quantum mechanics	Applications of Schrodinger steady state equation –II 1. Potential barrier (Finite height and width) penetration and tunneling effect (derivation of approximate transmission probability)	07	Sheth Publications,	Chalk & board Method
	2. Theory of alpha particle decay from radioactive nucleus.	02		
	3. Harmonic oscillator (one-dimension), correspondence principle.	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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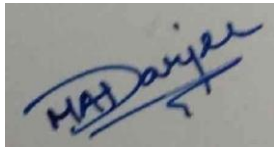
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III, U-I Geophysics	1 : GEOLOGY AND GEOPHYSICS 1.1 Introduction to Geophysics its branches and relationship with other sciences. 1.2 Earth and solar system: Meteorites and other extra-terrestrial materials. 1.3 Age of Earth and various methods of determination. Planetary evolution of the Earth and its internal structure: Elastic waves and variation of physical and chemical properties in the interior of Earth. 1.4 Major tectonic features of the ocean oceanic and continental crust. 1.5 Continental drift – geological and geophysical evidence: mechanisms, objections and present status. 1.6 Gravity and magnetic anomalies at Mid-ocean ridges: deep sea trenches, continental shield areas and mountain chains.	06	1.Sheth Publications,	Chalk & board Method
	2.1 Geomagnetism, elements of Earth's magnetism: Internal, external fields and their causes, Palaeomagnetism, Polar wandering paths and reversals, Seafloor spreading and Plate tectonics. 2.2 Seismic belts of the Earth: Seismicity and plate movements. 2.3 Geodynamics of the Indian plate. 2.4 Utility of the different geophysical techniques (discussed above) in exploration for academic as well as for harnessing resources. Geophysical potential fields: Principles of Gravity and Magnetic methods. 2.5 Instrumentation, field procedures used in geophysical studies. 2.6 Case studies	09,		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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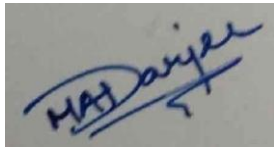
NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _T. Y. B. Sc. __ SEMESTER: V MONTH: June-oct.
ACADEMIC YEAR: 2022-23

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, Solid State Physics	Crystal Physics 1. Lattice points and space lattice, The basis and crystal structure, Unit Cells and lattice parameters, Primitive Cells, Crystal Systems, Crystal Symmetry, Bravais space lattices, Metallic crystal structures, relation between the density of crystal material and lattice constant in a cubic lattice, Directions, Planes, Miller Indices, Important planes in simple cubic structure, separation between lattice planes in a cubic crystal, Reciprocal Lattice(Omit Vector-algebraic discussion), X-ray Diffraction.	11	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method
	2. Classical free electron theory of metals, Drawbacks of classical theory, Relaxation time, Collision time and mean free patH.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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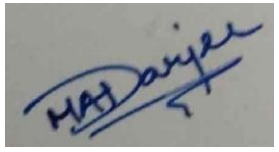
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Solid State Physics	Electrical properties of metals 1.Quantum theory of free electrons, Fermi Dirac statistics and electronic distribution in solids, Density of energy states and Fermi energy, The Fermi distribution function, Heat capacity of the Electron gas, Mean energy of electron gas at 0 K, Electrical conductivity from quantum mechanical considerations..	08	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method
	1.Band theory of solids, The Kronig- Penney model (Omit eq. 6.184 to 6.188), Brillouin zones, Number of wave functions in a band, Motion of electrons in a one-dimensional periodic potential, Distinction between metals, insulators and intrinsic semiconductors.	07		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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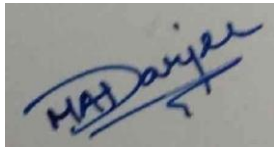
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-IV, U-II, Electrodynamics	1. Dielectrics,induced dipoles,alignment of polar molecules,bound charges and their physical interpretation,Gauss law in presence of dielectrics,Permittivity,dielectric constant.	10	1.Sheth Publications 2. David J. Griffiths; Introduction to Electrodynamics	Chalk & board Method
	2. Straight line current ,The divergence and curl of B,Application of Amperes law in the case of a long solenoid ,comparision of Magnetostatics and Electrostatics.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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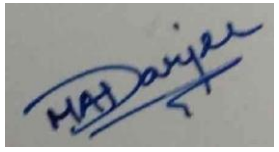
NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _T. Y. B. Sc. __ SEMESTER: VI MONTH: Nov-april.
ACADEMIC YEAR: 2022-23

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-IV, U-II, Special theory of relativity	Relativistic Kinematics Relativistic Kinematics (continued): The relativistic addition of velocities and acceleration transformation equations, Aberration and Doppler effect in relativity, The common sense of special relativity..	07	1.Sheth Publications, 2. RR : Introduction to Special Relativity : Robert Resnick (Wiley Student Edition)	Chalk & board Method
	The Geometric Representation of Space-Time: Space-Time Diagrams, Simultaneity, Length contraction and Time dilation, The time order and space separation of events, The twin paradox	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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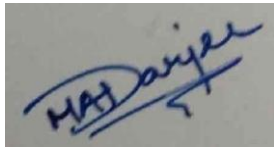
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-IV, U-IV, Special theory of relativity	Relativity and Electromagnetism: Introduction, The interdependence of Electric and Magnetic fields, The Transformation for E and B, The field of a uniformly moving point charge, Force and fields near a current-carrying wire, Force between moving charges, The invariance of Maxwell's equations.	13	1.Sheth Publications, 2. RR : Introduction to Special Relativity : Robert Resnick (Wiley Student Edition)	Chalk & board Method
	The principle of equivalence and general relativity, Gravitational red shift.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **T.Y.B.Sc.**

SEMESTER: **V** MONTH: **- June - September** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Apply theory of quantum physics in atomic physics.
- Understand importance of electron spins, symmetric & antisymmetric wave functions & vector atom model.
- Learn the Effect of magnetic field on atoms & its application.
- Learn molecular physics & its application.
- This course will be useful to get an insight into spectroscopy.
- Get the insight of the modern medical instruments in principle, which are used in day to day life.
- From this course, the students are expected to learn some mathematical techniques required to understand the physical phenomena at the undergraduate level and get exposure to important ideas of statistical mechanics.
- The units on statistical mechanics would introduce the students to the concept of microstates, Boltzmann distribution and statistical origins of entropy.
- It is also expected that the student will understand the difference between different statistics, classical as well as quantum.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III, Unit -3	1. Molecular spectra (Diatomic Molecules): Rotational energy levels, Rotational spectra, Vibrational energy	15	B: Perspectives of Modern Physics: Arthur	chalk and Board

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Atomic & molecular Physics	levels, Vibrational-Rotational spectra. Electronic Spectra of Diatomic molecules: The Born-Oppenheimer approximation, Intensity of vibrational-electronic spectra: The Franck-Condon principle. 2. Infrared spectrometer & Microwave spectrometer		Beiser Page 8 of 18 McGraw Hill.	
Paper-III, Unit -4 Atomic & molecular Physics	1. Raman Effect: Quantum Theory of Raman Effect, Pure Rotational Raman spectra: Linear molecules, symmetric top molecules, Asymmetric top molecules, Vibrational Raman spectra: Raman activity of vibrations, Experimental set up of Raman Effect. 2. Electron spin resonance: Introduction, Principle of ESR, ESR spectrometer. 3. Nuclear magnetic resonance: Introduction, principle and NMR instrumentation.	15	BM: Fundamentals of Molecular Spectroscopy: C. N. Banwell & E. M. McCash (TMH).(4th Ed.) . GA: Molecular structure and spectroscopy : G Aruldhas (2nd Ed) PHI learning Pvt Ltd.	chalk and Board
Paper-I, Unit -3 Mathematical, Thermal and Statistical Physics	1. Microstates and configurations, derivation of Boltzmann distribution, dominance of Boltzmann distribution, physical meaning of the Boltzmann distribution law. 2. Definition of the canonical ensemble, relating Q to q for an ideal gas. 3. Translational partition function, equipartition theorem, energy, entropy.	15	Thermodynamics, Statistical Thermodynamics and Kinetics: T. Engel and P. Reid (Pearson).	chalk and Board

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Paper-I, Unit - 4 **Mathematical, Thermal and Statistical Physics**	1. The probability of a distribution, The most probable distribution, Maxwell Boltzmann statistics, Molecular speeds. 2. Bose-Einstein statistics, Black-body radiation, The Rayleigh-Jeans formula. 3. The Planck radiation formula, Fermi-Dirac statistics, Comparison of results.	15	Perspectives of Modern Physics: Arthur Beiser, (Mc Graw Hill International).	chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **S.Y.B.Sc.**

SEMESTER: **III** MONTH: **June-September** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Comprehend the basic concepts of thermodynamics & its applications in physical situation.
- Learn about situations in low temperature.
- Demonstrate tentative problem solving skills in all above areas.
- Students will be exposed to contextual real life situations.
- Students will appreciate the role of Physics in 'interdisciplinary areas related to Acoustics.
- The learner will understand the scope of the subject in Industry & Research.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-3 Applied Physics – I Unit-3 Properties of Material	1) Electrical properties: Review of energy band diagram for materials – conductors, semiconductors and insulators, Electrical conductivity in metals, semiconductors and insulators (dielectrics), effect of temperature on conductivity. 2) Optical properties: Reflection, refraction, absorption and transmission of electromagnetic radiation in solids. 3) Magnetic properties: Origin of magnetism in solids (basic idea), Types of magnetic order (paramagnetism, diamagnetism, antiferromagnetism, ferromagnetism, ferrimagnetism),magnetic hysteresis. 4) Applications: Dielectric materials: Piezoelectric, ferroelectric and pyroelectric materials.	15	Electronic Properties of Materials, Rolf E Hummel. Materials Science and Engineering: A First Course by V.Raghavan.	chalk and Board

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Paper-3 Applied Physics – I Unit-1 Acoustics , Lasers and fibre optics	1. Acoustics of Buildings: Reverberation, Sabine's formula (without derivation) Absorption coefficient, Acoustics of Buildings, factors affecting Acoustics of Buildings, Sound distribution in an auditorium. 2. Laser : Introduction, transition between Atomic energy states (without derivation), Principle of Laser, Properties of Laser, Helium–Neon Laser, Application of Laser, Holography 3. Fibre Optics: Light propagation through Fibres, Fibre Geometry, Internal reflection, Numerical Aperture, Step-Index and Graded-Index Fibres, Applications of Fibres.	15	Modern Physics Concept and Applications – SanjeevPuri, Narosa Publication. Properties of matter and Acoustics – R Murugeshan and K. Shivaprasath, S Chand &Co.Ltd. (2005-Ed)	chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **F.Y.B.Sc.**

SEMESTER: **I** MONTH: **July- October** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to:

- UnderstandNewton'slawsandapplications in daily life.
- Understand The Concepts Of Friction
- UnderstandWorkandEnergyEquivalence
- UnderstandtheconceptsofElasticity,Viscosity and Fluid dynamics
- Understandbehaviorofrealgasesinrelationtotheirthermodynamicalresponse.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-1 Unit-2 Classical Physics	1. Elasticity: An introduction to Elasticity,Stress,Strain,Hooke's Law and Moduli of Elasticity and relation between them.	15	HCV:H.C.Verma,ConceptsofPhysics–PartI,(SecondReprint of2020)BharatiBhav	chalk and Board

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	2. Viscosity: An introduction to Viscosity, Flow through a Narrow Tube: Poiseuille's Equation,Stokes' Law, Terminal velocity, Measuring Coefficient of Viscosity by Stokes' method, CriticalvelocityandReynoldsnumber.Worked out Examples. 3. Fluid Mechanics: Streamline and Turbulent flow, Equation of Continuity, Bernoulli's equation,ApplicationsofBernoulli's equation.Worked out Examples.		anPublishersand Distributers	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **T.Y.B.Sc.**

SEMESTER: **VI** MONTH: **November- March** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the basics of semiconductor devices and their applications.
- Understand the basic electronic circuits for universal logic building blocks and basic concepts of digital communication.
- Develop quantitative problem solving skills in all the topics covered.
- Analyze/design and implement combinational logic circuits.
- Develop assembly language programming skills and real time applications of microprocessor.
- Illustrate how to interface the I/O peripheral (PPI) with 8085 microprocessor.
- Understand architecture, silent features, instruction set, programming and interfacing of 8051 microcontroller.
- Get practical training to interface different programmable peripherals and I/O devices to microprocessor and microcontroller.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper- 2 Unit – I Electronics	1. Field effect transistors: JFET: Basic ideas, Drain curve, The	15	MB: Electronic Principles, Malvino & Bates -7th Ed TMH Publication.	Chalk and board Notes provided

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	transconductance curve, Biasing in the ohmic region and the active region, Transconductance, JFET common source amplifier, JFET analog switch, multiplexer, voltage controlled resistor, Current sourcing. 2. MOSFET: Depletion and enhancement mode, MOSFET operation and characteristics, digital switching. 3. SCR – construction, static characteristics, Analysis of the operation of SCR, Gate Triggering Characteristics, Variable half wave rectifier and Variable full wave rectifier, Current ratings of SCR. 4. UJT: Construction, Operation, characteristics and application as a relaxation oscillator.		AM: Electronic Devices and Circuits, Allen Mottershead -PHI Publication.	
Paper- 2 **Unit – IV**	1. Logic families: Standard TTL NAND, TTL NOR, Open	15	ML:Digital Principles and Applications, Malvino and Leach (4th Ed)(TMH).	Chalk and board Notes provided

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Electronics	collector gates, Three state TTL devices, MOS inverters, CMOS NAND and NOR gates, CMOS characteristics. 2. Digital Communication Techniques: Digital Transmission of Data, Benefits of Digital Communication, Disadvantages of Digital Communication, Parallel and Serial Transmission, Pulse Modulation, Comparing Pulse-Modulation Methods (PAM, PWM, PPM), Pulse-Code Modulation.		LF: Communication Electronics: Principles and applications, Louis E Frenzel 4th edition TMH Publications.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 75

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **S.Y.B.Sc.**

SEMESTER: **IV** MONTH: **November- March** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the diffraction and polarization processes and applications of them in physical situations.
- Understand the applications of interference in design and working of interferometers.
- Understand architecture, silent features, instruction set, programming and interfacing of 8085 microprocessor.
- Develop assembly language programming skills and real time applications of microprocessor.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper- 1 Unit – I Optics	1. Background knowledge (devote one lecture at commencement): i. Introduction, Huygens's - Fresnel theory, Distinction between interference and diffraction, Fresnel and Fraunhoffer types of diffraction. ii. Introduction of Polarization, Natural light is unpolarized, unpolarized and polarized	15	A Text Book Of Optics By: Dr.N.Subrahmanyam, Brijlal, Dr M.N. Avadhaanulu (S.Chand, 25th	Chalk and board Notes provided

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	light iii. Brewster's law, Polaroid sheets iv. Prism and grating spectra, Cornu's spiral, Fresnel's integrals. 2. Fresnel's Diffraction: Fresnel's assumptions, Rectilinear propagation (Half period zones) of light, Diffraction pattern due to straight edge, Positions of maxima and minima in intensity, Intensity at a point inside the geometrical shadow(straight edge), Diffraction due to a narrow slit, Diffraction due to a narrow wire 3. Fraunhoffer Diffraction : Introduction, Fraunhoffer diffraction at a single slit, Intensity distribution in diffraction pattern due to a single slit, Fraunhoffer diffraction at a double slit,Distinction between single slit and double slit diffraction pattern and missing orders, Plane diffraction Grating, Theory of plane transmission grating, Width of principal maxima .		Revised edition2012 Reprint 2013) AJOY GHATAK: OPTICS (5thEdition)	
Paper-III Unit- II Applied Physics – II	1. Building Concept of Microprocessor Introduction, Study of Memory, Input Device, Output Device, and Input/output Device Central Processing Unit.	15	V.J. Vibhute & P.B. Borole, Fifth Revised Edition	Chalk and board Notes provided

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Microprocessors	2. Introduction , Features of Inter 8085 , Pin Diagram of 8085 , 8085 CPU Architecture , Arithmetic and Logical Group (ALU , Accumulator , Temporary Register , Flag Register (PSW)) , Register Group (Temporary Registers (W and Z) , General purpose registers , Special Purpose registers) , Interrupt Control , Serial I/O Control Group , Instruction Register , Decoder and Control Group (Instruction Register , Instruction Decoder , Timing and Control) 3. Introduction , Flowchart , Classification of Instruction Set (Data Transfer Group , Arithmetic Group , Logical Group , Branching Group , Stack and Machine Control Group) , Notations used in Instructions and Opcode , Data Transfer Group , Program Examples for Data Transfer Group , Arithmetic Operation Group , Branch Group , Logical Group , Addressing Modes , 8085 Programmers Model.		RG: Microprocessor Architecture, Programming and Applications with the 8085, Ramesh Gaonkar, 5th Edition	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **F.Y.B.Sc.**

SEMESTER: **II** MONTH: **December - March** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the basic mathematical concepts and applications of them in physical situations.
- Demonstrate quantitative problem solving skills in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper- 1 Unit – I Optics	1. Lens Maker's Formula (Review), Newton's lens equation, magnification-lateral, longitudinal and angular. 2. Equivalent focal length of two thin lenses, thick lens, cardinal points of thick lens, Ramsdenand Huygens eyepiece 3. Aberration: Spherical Aberration, Reduction of Spherical Aberration, Chromatic aberration and condition for achromatic aberration.	15	Brijlal,Subramanyam and Avadhanulu A Textbook of Optics, 25th revised ed.(2012) S. Chand Jenkins and White, Fundamentals of Optics by (4th	Chalk and board Notes provided

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			Ed.), McGraw Hill International.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: F. Y. B. Sc. SEMESTER: I MONTH: OCT-DEC

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVES:
The learners will be able to :

1. Understand nuclear size, nuclear properties and nuclear behavior.

2. Understand the type isotopes and their applications.

3. Numericals problem solving skills in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, Modern Physics	1.Structure of Nuclei:Basic properties of nuclei, Composition, Charge, Size, Rutherford's expt. for estimation of nuclear size, density of nucleus, Mass defect and Binding energy, Packing fraction, BE/A vs A plot, stability of nuclei (N Vs Z plot) and problems.	06	1.Sheth Publications, 2.SBP: Dr. S. B. Patel, Nuclear Physics Reprint 2009, New Age International	Lecture Method/ chalk & board
	2.Radioactivity: Radioactive disintegration concept of natural and artificial radioactivity, Properties of α, β, γ-rays, laws of	07		

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	radioactive decay, half-life, mean life (derivation not required), units of radioactivity, successive disintegration and equilibriums, radioisotopes. Numerical Problems.			
	3.Carbon dating and other applications of radioactive isotopes (Agricultural, Medical, Industrial, Archaeological -information from net).	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: F. Y. B. Sc. SEMESTER: II MONTH: JAN-MARCH

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to :

1.Understand the basic concepts of digital electronics , power supply, Circuit Theorem and their applications.

2. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Electricity & Electronics	1.Circuit theorems: (Review: ohm's law, Kirchhoff's laws) Superposition Theorem, Thevenin's Theorem, Ideal Current Sources, Norton's Theorem, Reciprocity Theorem, Maximum Power Transfer Theorem. Numericals related to circuit analysis using the above theorems.	06	1.Sheth Publications. 2.VKM: V K Mehta and R Mehta Electronics Principals, MulticolouredRevised 11th Ed. reprint in 2012 ,S Chand. 3.A P Malvino, Digital Principles and Applications: Tata	Lecture Method / chalk & Black board
	2.DC power supply: Half wave rectifier , Full wave rectifier, Bridge rectifier, PIV and Ripple factor of full wave rectifier, Clipper and Clampers, Capacitor Filter.	05		

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	Zener diode as voltage stabilizer.			
	3.Digital electronics : Logic gates(Review), NAND and NOR as universal building blocks. EXOR gate: logic expression, logic symbol, truth table, Implementation using basic gates and its applications, Boolean algebra, Boolean theorems. De-Morgan theorems, Half adder and Full adder	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: S.Y. B. Sc. SEMESTER: III MONTH: SEPT-DEC

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVES:

The learners will be able to :

1.Understand the basics of transistor biasing, operational amplifiers, their applications.

2.Demonstrate quantitative problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Analog Electronics	1.Transistor Biasing: Inherent Variations of Transistor Parameters, Stabilisation, Essentials of a Transistor Biasing Circuit, Stability Factor, Methods of Transistor Biasing, Base Resistor Method, Emitter Bias Circuit, Circuit analysis of Emitter Bias, Biasing with Collector Feedback Resistor, Voltage Divider Bias Method, Stability factor for Potential Divider Bias.	07	1.Sheth Publications, 2.Principles of Electronics – V. K. Mehta and Rohit Mehta. (S. Chand– Multicoloured illustrative	Lecture Method / chalk & Black board
	2.General amplifier characteristics: Concept of amplification, amplifier notations, current gain, Voltage gain, power gain, input	06		

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	resistance, output resistance, general theory of feedback, reasons for negative feedback, loop gain.			
	3.Practical circuit of transistor amplifier, phase reversal, frequency response, Decibel gain and Band width.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: T.Y. B. Sc. SEMESTER: V MONTH: SEPT-DEC

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVES:

The learners will be able to :

1. Understand the working of Data acquisition system, D to A and A to D Converters.

2. Understand the basic concept of Electron Spin and Spin orbit coupling etc.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-V, U-III, Electronics Instrumentation (Applied Physics)	1. Data acquisition systems: Objectives of DAS, Singal conditioning of inputs, Single channel Data acquisition systems, Multichannel Data acquisition system.	06	1. Sheth Publications 2. Digital Principles and Applications : A. P. Malvino and D. P. Leach. Tata M	Lecture Method/ chalk and board
	2. D to A Converters: Resistive divider network, Binary ladder network.	04		

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	3. A to D Converters: Successive approximation type, Voltage to time (Single slope, Dual slope).	04		
P-III, U-II, Atomic Physics	1. Electron Spin: The Stern-Gerlach experiment, Pauli's Exclusion Principle, Symmetric and Antisymmetric wave functions.	07	1.Sheth Publications, 2.1. AB : Perspectives of Modern Physics : Arthur	Lecture Method/ chalk and board
	2. Spin orbit coupling, Hund's Rule, Total angular momentum, Vector atom model,L-S and j-j coupling. Origin of spectral lines, Selection rules.	08		

P-V, U-II, Electronics Instrumentation (Applied Physics)	1.Half wave precision rectifier, Active peak detector ,active positive clamper , 2.Active positive and negative clippers	03	1. Sheth Publications 2. Digital Principles and Applications : A. P. Malvino and D. P. Leach. Tata M	Lecture Method/ chalk and board
	2.Characteristics, types ,carbon microphones and dynamic type microphone (Principle ,construction & working).Characteristics,Dynamic speaker ,multi -way speaker system .5.basic monolithic switching regulators (Buck ,Boost & Buck-boost)	07		
	3. C.R.O. (Block diagram), Front Panels, Dual Trace Mode, Probes and half digit, resolution and sensitivity, general specification	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _45_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS. CLASS: T. Y. B. Sc. SEMESTER: VI MONTH: JAN-MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to :

1. Understand the working of DC power supply, Differential amplifier and Multivibrators circuit.

2. Understand the basic concepts of 555 Timer and OP-AMP Applications.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Electronics	1. Regulated DC power supply: Supply characteristics, series voltage regulator,Short circuit protection (current limit and fold back) Monolithic linear IC voltage Regulators. (LM 78XX, LM 79XX, LM 317).	07	1.Sheth Publications, 2. 1. MB : Electronic Principles : A. P. Malvino and D.J. Bates, (7th Ed.) – (TMH).	Lecture Method/ chalk and board
	2. Differential Amplifier using transistor: The Differential Amplifier, DC and ACanalysis of a differential amplifier, Input	05		

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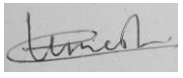
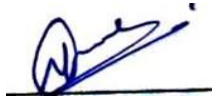
	characteristic-effect of input bias, offset current and input offset voltage on output, common mode gain, CMRR.		3. VKM : Principles of Electronics : V. K. Mehta and Rohit Mehta. S. Chand Publications. (11th	
	3. Transistor Multivibrators: Astable, Monostable and Bistable Multivibrators,Schmitt trigger.	03		
P-II, U-III, Electronics	1. Op Amp Applications: Log amplifier, Instrumentation amplifiers, Voltage controlled current sources (grounded load), First order Active filters, Astableusing OP AMP, square wave and triangular wave generator using OP AMP,Wein-bridge oscillator using OP AMP.	09	1. Sheth Publications 2. 1. MB : Electronic Principles : A. P. Malvino and D.J. Bates, (7th Ed.) – (TMH).	Lecture Method/ chalk and board
	2. 555 Timer: Review Block diagram, Monostable and Astable operationVoltage Controlled Oscillator, Pulse Width modulator, Triggered linear ramp generator.	O6		

Paper -V (E-II) Unit-II, Advanced 8085 Programmi	1. Introduction to advanced instructions & applications Stack & subroutine	09	1. Sheth Publications 2. Ramesh Gaonkar	Lecture Method/ chalk and board
	2. The 8255 programmable peripheral interface: block diagram of 8255 ,mode 0-simple input/output mode ,BSR mode.	O6		





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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _45_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: S.Y. B. Sc. SEMESTER: III MONTH: SEPT-DEC

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVES:

The learners will be able to :

1. Develop a basic understanding about issues related to Human Rights of weaker sections and Dealing with Environmental Concerns.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course, Module-I, Humans Rights Provisions, Violations and Redressal	A. Scheduled Castes- Constitutional and legal rights, Forms of violations, Redressal mechanisms. B. Scheduled tribes- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	04	1. Foundation course - II: Mannan Prakashan.	Lecture Method/ chalk and board
	C. Women- Constitutional and legal rights, Forms of violations, Redressal mechanisms. D. Children- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	04		
	E. People with Disabilities, Minorities, and the Elderly population- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	04		

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Foundation Course, Module-II, Dealing with Environmental Concerns	A. Concept of Disaster and general effects of Disasters on human life- physical, psychological, economic and social effects. B. Some locally relevant case studies of environmental disasters.	05	1. Foundation course - II: Mannan Prakashan.	Lecture Method/ chalk and board
	C. Dealing with Disasters - Factors to be considered in Prevention, Mitigation (Relief and Rehabilitation) and disaster Preparedness. D. Human Rights issues in addressing disasters- issues related to compensation, equitable and fair distribution of relief and humanitarian approach to resettlement and rehabilitation.	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _23

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: S. Y. B. Sc. SEMESTER: IV MONTH: JAN-MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to :

1.Develop a basic understanding about issues related to Human Rights of weaker sections and ecology.

2. Appreciate the importance of developing a scientific temper towards technology and its use

in everyday life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course, Module-I, Significant, contemporary Rights of Citizens	A. Rights of Consumers-Violations of consumer rights and important provisions of the Consumer Protection Act, 2016; Other important laws to protect consumers; Consumer courts and consumer movements. B. Right to Information- Genesis and relation with transparency and accountability; important provisions of the Right to Information Act, 2005; some success stories.	06	1. Foundation course - II: Mannan Prakashan.	Lecture Method/ chalk and board

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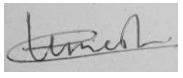
	C. Protection of Citizens'/Public Interest-Public Interest Litigation, need and procedure tofile a PIL; some landmark cases.	03		
	D. Citizens' Charters, Public Service Guarantee Acts.	03		
Foundation Course, Module-II, Approaches to understanding Ecology	A. Understanding approaches to ecology- Anthropocentrism, Biocentrism and Eco centrism, Ecofeminism and Deep Ecology. B. Environmental Principles-1: the sustainability principle; the polluter pays principle, the precautionary principle.	07	1. Foundation course - II: Mannan Prakashan.	Lecture Method/ chalk and board
	C. Environmental Principles-2: the equity principle; human rights principles; the participation principle.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _23



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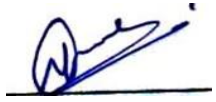

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anushita A. Moger DEPARTMENT:Physics CLASS:FYBSc SEMESTER:1

MONTH: July-September ACADEMIC YEAR:2021-22

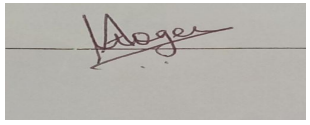
LEARNING OBJECTIVE/S:
The learners will be able to :

1) understand nuclear properties and nuclear behavior.

2)demonstrate quantitative problem-solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Phy-2(unit-2) Nuclear physics	Chp-1 Interaction between particles and matter, I.P.counter and GM counter.	07		Google meet & google classroom
	Chp-2 Types of reaction and conservation laws, concept of compound and direct reaction, problems based on nuclear fusion and fission.	08		Google meet & google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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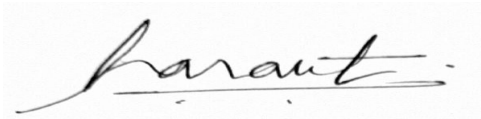

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NAME: Anushita A. Moger. DEPARTMENT: Physics CLASS: S.Y.B.Sc. SEMESTER:3

MONTH: June-September. ACADEMICYEAR:2021-22

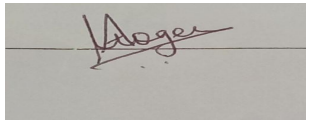
LEARNINGOBJECTIVE/S:
The learners will be able to:

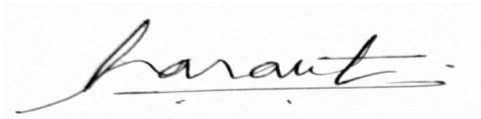
1) understand basic concept of oscillator and be able to perform calculations using them.

2)to demonstrate quantitative problem solving skills in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
Phy-2(unit-3)Applied electronics	Chp-1.Oscillators, requirements for Oscillations,phase shift oscillator,wein bridge oscillator,colpitts oscillator and Hartley oscillator	07		Google meet & google classroom
	Chp-2Opamp-introduction and schematic symbol and ac analysis ,bandwidth of an opamp ,slew rate , frequency response and negative feedback of an opamp, inverting and non inverting amplifier,voltage follower ,summing amplifier and it's applications, integrator and differentiator	08		Google meet & google classroom

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15





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NAMEOFTHESTAFF: Anushita A. Moger. DEPARTMENT: Physics CLASS: T.Y.B.Sc. SEMESTER:5

MONTH: June-September ACADEMICYEAR:2020-21

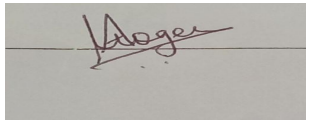
LEARNING OBJECTIVE/S:
The learners will be able to:

1)understand the laws of electrodynamics & be able to perform calculations using them.

2)Understand Maxwell's electrodynamics & Its relation to relativity.

3)Understand how optical laws can be derived from electromagnetic principles.

4)Develop quantitative problem-solving skills.



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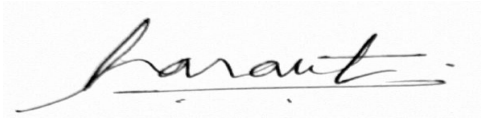

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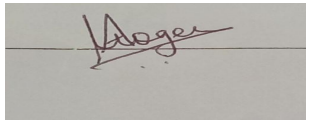
PAPER, UNIT,TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
Phy-4.(unit -3) electrodynamics	Magnetism and varying fields-diamagnet,paramagnet and ferromagnetism, magnetisation,bound currents and their physical interpretation,ampere's law in magnetised material,deceptive equation in matter and boundary conditions, electrodynamics before Maxwell,Maxwell's correction to ampere's law,Maxwell equation in matter and it's boundary conditions and magnetic charge	15		Google meet & google classroom
Phy-4(unit-4) electrodynamics	Electromagnetic waves, continuity equation,poynting theorem,Newton's third law,wave equation for electric and magnetic fields, monochromatic plane waves, energy and momentum in electromagnetic waves, propagation in linear media,reflection and transmission of electromagnetic waves at normal incidence.	15		Google meet & google classroom

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15



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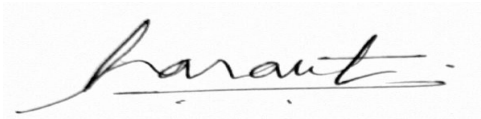

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NAME OF THE STAFF: Anushita A. Moger. DEPARTMENT: Physics CLASS:FYBSc SEMESTER:2

MONTH: December-February ACADEMICYEAR:2021-22

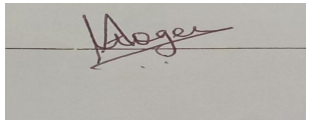
LEARNINGOBJECTIVE/S:
The learners will be able to:

1)the basic mathematical concept and applications of them in physical situation.

2)demonstrate quantitative problem solving skills in all the topics covered.

PAPER, UNIT,TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
Phy-1(unit-1) electrodynamics	Chp-1 vectors,scalars,vector algebra and it's laws,scalar and vector field and problems based on them,cross product,dot product, commutative and distributive laws,scalar and vector triple products.	07		Google meet & google classroom
	Chp-2 Gradient, curl and divergence,their significance, distributive laws for all the three terms,problems based on them.	08		Google meet & google classroom

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15



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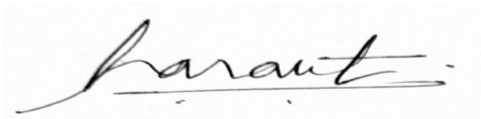

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NAME OF THE STAFF: Anushita A.Moger. DEPARTMENT: Physics CLASS: S.Y.B.Sc. SEMESTER:4

MONTH: November-February ACADEMICYEAR:2021-22

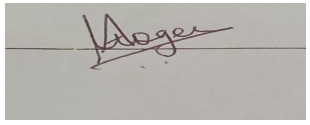
LEARNING OBJECTIVE/S:
The learners will be able to:

1) understand the postulates of quantum mechanics and to understand its importance in explaining significant phenomena in physics.

2)todemonstratequantitativeproblemsolvingskillsinallthetopicscovered.

PAPER, UNIT,TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
Phy-2(unit-1) quantum mechanics	Schrodinger's wave equation,concept of wave function ,Born interpretation of wave function, position, momentum and energy operators,eigen value equation , expectation value of operators, postulates of quantum mechanics,analogy between wave and Schrodinger's equation,STDE and STIE ,superposition principle, probability current density ,equation of continuity and it's physical interpretation.	15		Google meet & google classroom

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15



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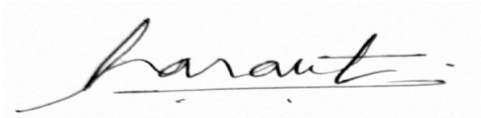

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NAME OF THE STAFF: Anushita A. Moger. DEPARTMENT:Physics CLASS: T.Y.B.Sc. SEMESTER:6

MONTH: November-February ACADEMICYEAR:2021-22

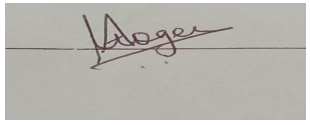
LEARNING OBJECTIVE/S:

1)understand the significance of Michelson Morley experiment and failure of the existing theories to explain the null result.

2)the importance postulates of special relativity, Lorenz transformation equations and how it changed the way we look at space and time

, Absolute time and relativity, Commonsense versus Einstein concept of Space and time.

3)Understand the transformation equations for: Space and time, velocity, frequency, mass, momentum ,force ,Energy, Charge and current density, electric and magnetic fields.



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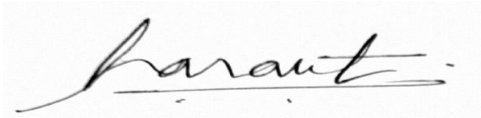

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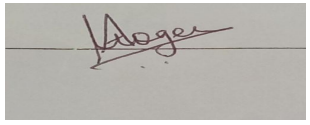
PAPER, UNIT,TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
Phy 4(unit-1) relativity	Special theory of relativistic kinematics,experimental background of special theory of relativity,Galilean transformation,Newtonian relativity, electromagnetism and Newtonian relativity, attempt to locate absolute frame, Michelson Morley experiment, attempt to preserve the concept of a ether frame,lorentz Fitzgerald contractions and ether drag hypothesis, attempt to modify electrodynamics,postulates of special theory of relativity.	15		Google meet & google classroom

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15



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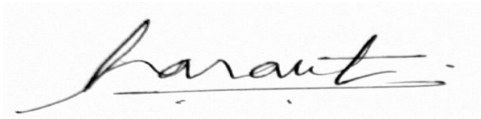

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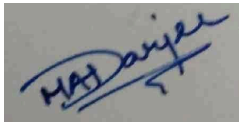
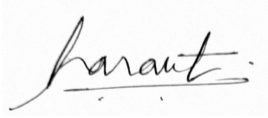
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _F. Y. B. Sc. ___ SEMESTER: I MONTH: August-Nov. ACADEMIC YEAR: 2021-22

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -1 U-1 Overview of Indian Society	Understand the multi-cultural diversity of Indian society through its demographic composition: population distribution according to religion, caste, and gender; Appreciate the concept of linguistic diversity in relation to the Indian situation; Understand regional variations according to rural, urban and tribal characteristics; Understanding the concept of diversity as difference.	05	Manan prakashan	Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _05





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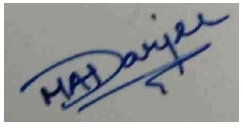
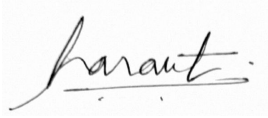
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -1 U-II Concept of Disparity- 1:	Understand the concept of disparity as arising out of stratification and inequality; Explore the disparities arising out of gender with special reference to violence against women, female foeticide (declining sex ratio), and portrayal of women in media; Appreciate the inequalities faced by people with disabilities and understand the issues of people with physical and mental disabilities.	10	Manan prakashan	Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10





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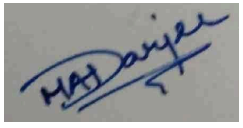
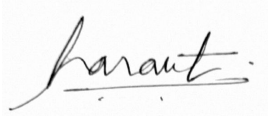
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -1 U-III Concept of Disparity- 2	Examine inequalities manifested due to the caste system and inter-group conflicts arising thereof; Understand inter-group conflicts arising out of communalism; Examine the causes and effects of conflicts arising out of regionalism and linguistic differences.	10	Manan prakashan	Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -1 U-IV The Indian Constitution:	The Indian Constitution: Philosophy of the Constitution as set out in the Preamble;The structure of the Constitution-the Preamble, Main Body and Schedules;Fundamental Duties of the Indian	10	Manan prakashan	Google meet





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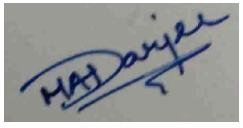
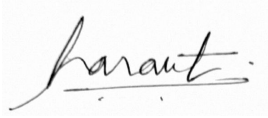
	Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -1 U-V Signigicant aspects of Political Parties	The party system in Indian politics; Local self-government in urban and rural areas; the 73rd and 74th Amendments and their implications for inclusive politics;Role and significance of women in politics.	10	Manan prakashan	Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10





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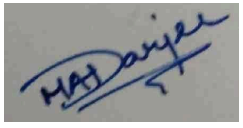
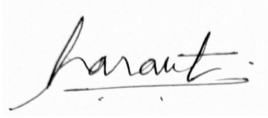
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -1 U-VI Growing Social Problems in India	a) Substance abuse- impact on youth & challenges for the future b) HIV/AIDS- awareness, prevention, treatment and services c) Problems of the elderly- causes, implications and response d) Issue of child labour- magnitude, causes, effects and response e) Child abuse- effects and ways to prevent f) Trafficking of women- causes, effects and response	15	Manan prakashan	Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15





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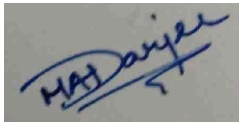
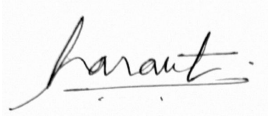
NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: __F. Y. B. Sc. ___ SEMESTER: II MONTH: August-Nov.

ACADEMIC YEAR: 2021-22

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -2 U-I Globalisation and Indian Society:	(Understanding the concepts of liberalization, privatization and globalization; Growth of information technology and communication and its impact manifested in everyday life; Impact of globalization on industry: changes in employment and increasing migration; Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides.	07	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _07





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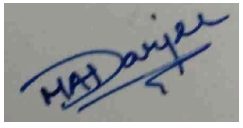
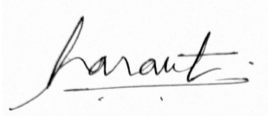
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -2 U-II Human Rights	Concept of Human Rights; origin and evolution of the concept; The Universal Declaration of Human Rights;Human Rights constituents with special reference to Fundamental Rights stated in the Constitution;.	10	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10





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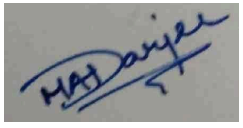
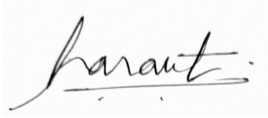
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -2 U-III Ecology	Importance of Environment Studies in the current developmental context; Understanding concepts of Environment, Ecology and their interconnectedness; Environment as natural capital and connection to quality of human life; Environmental Degradation- causes and impact on human life; Sustainable development- concept and components; poverty and environment	10	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10





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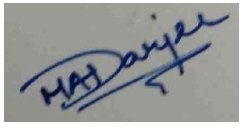
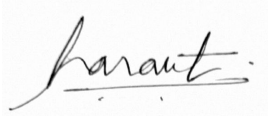
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -2 U-IV Understanding Stress and Conflict	Causes of Stress and Conflict in Individuals and Society, Agents of Socialization And the role played by them in Developing the individual, Significance of Values,Ethics and Prejudices in Developing the individual, Stereotyping and prejudices as the significant factors in Causing Conflicts in Society, Aggression and violence as the Public Expression Conflicts	10	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10





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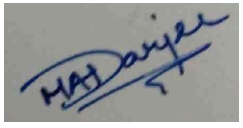
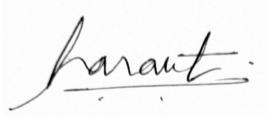
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -2 U-V Managing stress and Conflict in Contemporary Society	Types of Conflicts and use of Coping Mechanisms for managing Individual Stress, Maslow's Theory of Self-Actualization,Different Methods of Responding to Conflicts in Society , Conflicts -Resolution and Efforts towards building peace and Harmony in Society	10	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10





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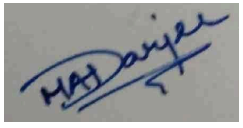
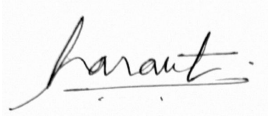
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -2 U-VI Contemporary Societal Challenges	Increasing Urbanization,Housing, Health and Sanitation, Changing Values and Lifestyles. Impact of mass media on Culture,Farmer's Suicides and Agrarian Distress, Debate regarding genetically modified crop, Development projects and human rights violation, dam and impact on Human rights, Nuclear power projects and impact on human rights, thermo electric projects and impact on human rights, Crime among Youths, Suicide Among Youths	13	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _13





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: November-February

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the fundamental principles and concepts governing alpha decay.

2. Understand the concepts of spectrum of alpha particles, alpha decay paradox penetration

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III(Nuclear Physics), Unit-I, Alpha Decay	Velocity ,energy and absorption of alpha particles :Range, ionization and stopping power Nuclear energy levels .Range of alpha particles, alpha particle spectrum .fine structure ,long range alpha particles, alpha decay paradox penetration (Gamow's theory of alpha decay and Geiger-Nuttal law) Problems based on alpha decay	15	Sheth Publication's T.Y.Bsc. Nuclear Physics S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: November-February

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concept of beta decay and beta spectrum .

2. Understand the concepts of neutrino ,Pauli's Neutrino hypothesis and energetics of beta decay .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III (Nuclear Physics) Unit-II, Beta Decay	Introduction, Velocity and energy of beta particles, energy levels and decay schemes, Continuous beta ray spectrum-Difficulties encountered to understand it, Pauli's neutrino hypothesis, Detection of neutrino, Energetics of beta -decay. Problems based on above topics	15	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: December-February

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of asymmetric fission -Mass yield emission of delayed electrons.

2. Understand the concepts of Nuclear fission and fusion.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III (Nuclear Physics), Unit-III (Nuclear Energy & Particle accelerators) 1.Nuclear Energy 2.Particle Accelerators	1.Introduction,Asymmetric fission-Mass yield Emission of delayed electrons ,Nuclear release in fission ,Nature of fission fragments ,Energy released in the fission chain reaction ,Neutron cycle in a thermal nuclear reactors ,nuclear power and breeder reactors ,Natural Fusion Possibility of controlled fusion. Problem based on the above topics	09	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

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	2.Van de Graff Generators, Cyclotron, Synchrotron, Betatron and Idea of large Hadron Collider	06	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: December -February

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of Meson theory of Nuclear force

2. Understand the concepts of elementary particles.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III(Nuclear Physics), Unit-IV (Nuclear Force and elementary particle)	1. Introduction, Deuteron problems, Meson theory of Nuclear force -A qualitative discussion	05	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

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1.Nuclear Force 2.Elementary particle	2.Introduction,Claasifications of elementary particles ,Particle interactions ,conservation laws ,particles and antiparticles ,photons ,Mesons ,Quark model	10	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi A. Raut. DEPARTMENT:Physics CLASS: _T. Y. B. Sc. __ SEMESTER: V MONTH: June-oct.
ACADEMIC YEAR: 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-III, Solid State Physics	Band Theory of Solids and Conduction in Semiconductors 1. Band theory of solids, The Kronig- Penney model (Omit eq. 6.184 to 6.188),Brillouin zones, Number of wave functions in a band, Motion of electrons in a one-dimensional periodic potential, Distinction between metals, insulators and intrinsic semiconductors.	07	1.Sheth Publications, 2.MH : Electronic Devices and Circuits :Millman, Halkias & Satyabrata Jit. (3rd Ed.) Tata McGraw Hill.	Chalk & board Method
	2. Electrons and Holes in an Intrinsic Semiconductor, Conductivity of a Semiconductor, Carrier concentrations in an intrinsic semiconductor, Donor and Acceptor impurities, Charge densities in a semiconductor, Fermi level in extrinsic semiconductors, Diffusion, Carrier lifetime, The continuity equation, Hall Effect.	08		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-IV, Solid State Physics	Diode, magnetism and superconductivity 1.Semiconductor-diode Characteristics: Qualitative theory of the p-n junction, The p-n junction as a diode, Band structure of an open-circuit p-n junction, The current components in a p-n junction diode, Quantitative theory of p-n diode currents, The Volt-Ampere characteristics, The temperature dependence of p-n characteristics, Diode resistance.	08	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method

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	2. Superconductivity: Experimental Survey, Occurrence of Superconductivity, destruction of superconductivity by magnetic field, The Meissner effect, London equation, BCS theory of superconductivity, Type I and Type II Superconductors, Vortex state. dependence of p-n characteristics, Diode resistance.	07	3. MH : Electronic Devices and Circuits :Millman, Halkias & Satyabrata Jit. (3rd Ed.) Tata McGraw Hill.	
			4. Solid State Physics : A. J. Dekker, Prentice Hall	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T. Y. B. Sc. SEMESTER: V MONTH: June-September ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Understand the working of Transducers, Sensors and Optoelectronics devices.

2. Understand the basic concept of Modern Techniques and Appliances.

3. Numericals problem solving skill in all the topics covered.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-V, U-I, Electronics Instrumentation (Applied Physics)	1. Transducers: Definition, Classification, Selection of transducer. 2. Electrical transducers: Thermistor, Thermocouple, Pressure Transducer: Strain gauges (wire, foil, & semiconductor), Displacement transducer: LVDT, Peizo-electric Transducer.	04	1. Sheth Publications. 2.Electronic Instrumentation – H S Kalsi, Tata McGraw-Hill Publishing Company Limited, New Delhi.	Lecture Method /Chalk & Board
	3. Chemical sensors: PH sensor, Gas sensor (Fundamental aspects), Humidity sensor (Resistive). 4. Electronic Weighing Systems: Operating principle, Blockdiagram,features	05		
	5. Optoelectronic Devices: LDR, LED (Construction, Working & Applications), Multicolour LED, Seven Segment Display, Liquid Crystal Display (LCD), Photodiode (construction, Characteristics & applications), Phototransistor	06		
P-V, U-IV, Electronics Instrumentation (Applied Physics)	1. Printed Circuit Board: Idea of PCB, advantages, copper clad, Etching processes, Principle of Photolithography (For PCB).	06	1. Sheth Publications. 2. . PCB design basics, Mahmoud Wahby, EDN Networks, Nov 2013. 3.Medical instrumentation Application and design- J. C. Wobster	Lecture Method /Chalk & Board
	2. Microwave Oven: Operating principle, block diagram, features.	03		

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	3. Medical instruments: Bio-Potential, Types of electrodes, ECG, EEG, EMG, CT Scan and MRI (principle, block diagram and features), Ultrasonography: working principle	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut __ DEPARTMENT: __Physics _____ CLASS: _T. Y. B. Sc. __ SEMESTER: _____V___

MONTH: ___June-September _____ ACADEMIC YEAR: _____2021-2022_____

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Understand the working of Transducers, Sensors and Optoelectronics devices.

2. Understand the basic concept of Modern Techniques and Appliances.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-V, U-I, Electronics Instrumentation (Applied Physics)	1. Transducers: Definition, Classification, Selection of transducer. 2. Electrical transducers: Thermistor, Thermocouple, Pressure Transducer: Strain gauges (wire, foil, & semiconductor), Displacement transducer: LVDT, Peizo-electric Transducer.	04	1. Sheth Publications. 2.Electronic Instrumentation – H S Kalsi, Tata McGraw-Hill Publishing Company	Lecture Method /Chalk & Board
	3. Chemical sensors: PH sensor, Gas sensor (Fundamental aspects), Humidity sensor (Resistive). 4. Electronic Weighing Systems: Operating principle, Blockdiagram,features	05		

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	5. Optoelectronic Devices: LDR, LED (Construction, Working & Applications), Multicolour LED, Seven Segment Display, Liquid Crystal Display (LCD), Photodiode (construction, Characteristics & applications), Phototransistor	06	Limited, New Delhi.	
P-V, U-IV, Electronics Instrumentation (Applied Physics)	1. Printed Circuit Board: Idea of PCB, advantages, copper clad, Etching processes, Principle of Photolithography (For PCB).	06	1. Sheth Publications. 2. . PCB design basics, Mahmoud Wahby, EDN Networks, Nov 2013. 3.Medical instrumentation Application and design- J. C. Wobster	Lecture Method /Chalk & Board
	2. Microwave Oven: Operating principle, block diagram, features.	03		
	3. Medical instruments: Bio-Potential, Types of electrodes, ECG, EEG, EMG, CT Scan and MRI (principle, block diagram and features), Ultrasonography: working principle	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: V MONTH: August-September

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Solve the Schrodinger's equation for H-atom
2. Understand the concept of different quantum numbers
3. Apply quantum mechanics in atomic Physics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III (Atomic and molecular Physics), Unit-I, 1. Hydrogen Atom 2. Electron Spin	Schrodinger's Equation for H-atom, Separation of Variables,	07	Sheth Publication's T.Y.Bsc. Atomic & Molecular Physics	Lecture Method /Chalk and Board
	Quantum Numbers: total quantum number, orbital quantum number, Magnetic quantum Number, angular momentum	04	Sheth Publication's T.Y.Bsc. Atomic & Molecular Physics	Lecture Method /Chalk and Board
	Electron Probability Density	01	Arthur Beiser, Perspective of Modern Physics	Lecture Method /Chalk and Board
	The Stern-Gerlach Experiment, Pauli's Exclusion Principle	02	Arthur Beiser, Perspective of Modern	Lecture Method /Chalk and

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			Physics	Board
	Symmetric and antisymmetric wave Functions	01	Sheth Publication T.Y.Bsc. Atomic & Molecular Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: V MONTH: November-December
ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concept of signal conditioning, devices used and their operations.
2. Get acquainted with the measuring instruments used in the laboratory.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -V (E-I)	1.Half wave precision rectifier, Active peak detector ,active positive clamper , 2.Active positive and negative clippers	02	Electronic Instrumentation-I Sheth Publication	Lecture Method /Chalk and Board

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Unit-II, 1.Precision rectifier, detector, Active positive clamper 2.Active and negative clippers 3.Microphones 4.Loudspekers 5.Switching Regulators 6. C.R.O. 7.DMM	3.Characteristics, types ,carbon microphones and dynamic type microphone (Principle ,construction & working)	04	Electronic Instrumentation-I Sheth Publication	Lecture Method /Chalk and Board
	4.Characteristics,Dynamic speaker ,multi -way speaker system .5.basic monolithic switching regulators (Buck ,Boost & Buck-boost)	04	Electronic Instrumentation-I Sheth Publication	Lecture Method /Chalk and Board
	6. C.R.O. (Block diagram), Front Panels, Dual Trace Mode, Probes: 1:1&10:1.	04	Electronic Instrumentation - H.S.Kalsi	Lecture Method /Chalk and Board
	7. 3 and half digit, resolution and sensitivity, general specification.	01	Electronic Instrumentation - H.S.Kalsi	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: III MONTH: September-October

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of energy band gap of different materials.

2. Understand the concepts of electrical, optical & magnetic properties.

3. Students will appreciate the role of Physics in interdisciplinary areas related to materials and acoustics etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III (Applied Physics -I), Unit-III (Properties of Material), 1.Electrical Properties 2.Optical	1.Energy Band diagram for Materials -conductors, semiconductors & insulators, Effect of Temperature on conductivity.	03	Sheth Publication S.Y.B.Sc. Phy-III Textbook	Lecture Method /Chalk and Board
	2.Reflection, refraction, absorption & transmission of electromagnetic radiation in solids	04	Sheth Publication S.Y.B.Sc. Phy-III Textbook	Lecture Method /Chalk and Board
	3.Origin of Magnetism in solids, Types of magnetic order, magnetic hysteresis	06	Sheth Publication S.Y.B.Sc. Phy-III Textbook	Lecture Method /Chalk and Board

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Properties 3.Magnetic Properties 4.Applications	4.Dielectric materials: Piezoelectric, ferroelectric, and pyro electric materials	02	Sheth Publication S.Y.B.Sc. Phy-III Textbook	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc. SEMESTER: III MONTH: November –December

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the basic concepts of mathematical physics and their applications in physical situations.
2. Understand the basic laws of electrodynamics and be able to perform calculations using them.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II (Vector calculus, Analog	1.Fundamental Theorems of Calculus, Fundamental Theorems of gradient, Fundamental Theorems of Divergence, Fundamental Theorems of Curl, Problems based on these theorems	08	Introduction to Electrodynamics by D.J. Griffith	

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Electronics), Unit-I 1.Line, Surface and Volume Integrals 2. Curvilinear co-ordinate	2.Cylindrical Coordinates, Spherical Coordinates Problems based on these topics	07	Sheth Publication's S.Y.B.Sc Textbook	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: F.Y.B.Sc SEMESTER: I MONTH: August -September

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of black body radiation and different laws associated with it.

2. Understand the concepts of Compton affect, Pair production, Gravitational -Red shift.

3. Understand and able to solve the problem related to topic.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -II, Unit-III 1.Origin of quantum Mechanics 2.Wave Nature of Particle 3. Particle Nature of	1.Black Body (Definition), Black body Spectrum, Wein's Displacement law, Rayleigh -Jeans Formula	03	Sheth Publication F.Y.B.Sc. Textbook	Lecture Method /Chalk and Board
	2. Production of X-ray, Properties of X-ray, Davisson - Germer Experiment,G.P.Thompson experiment, Diffraction of X-rays, Bragg's law, Application of X-rays	05	Sheth Publication F.Y.B.Sc. Textbook	Lecture Method /Chalk and Board
	3.Compton effect, Pair production, Gravitational -Red shift	05	Arthur Beiser, Perspective of Modern Physics	Lecture Method /Chalk and Board

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Wave	3.Heisenberg's Uncertainty Principle ,Problems on covered topics	02	Arthur Beiser, Perspective of Modern Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: III MONTH: September-October

ACADEMIC YEAR: 2021-22 Subject: Foundation Course-III

LEARNING OBJECTIVE/S:

The learners will be able to: 1. Appreciate the importance of developing a scientific temper towards technology and its use in everyday life.

2. Understand the values of scientific attitude towards the Indian society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-III (Science & Technology-I)	1.the ancient culture, the classical era, the middle ages, the Renaissance, the age of Reason and Enlightenment	03	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board
1.Devepolment of science	2.Principle and characteristics, science as empirical, practical theoretical, validated knowledge.	02	Foundation Course by manan Prakashan	Discussion method

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2.Nature of Science 3.Science and superstition 4.Science in everyday life	3.role of science exploding myths, blind beliefs and prejudice ,science temper as a fundamental duty of the Indian society	03	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: III MONTH: October-November

ACADEMIC YEAR: 2021-22 Subject: Foundation Course-III

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Develop a basic understanding of the importance of communication.

2) Gain an overview of significant skills required to address competition in career choice.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-IV (Soft skill for effective Interpersonal communication) 1.effective listening 2.Formal and Informal Communication 3.Leadership Skills	1.Importance and features of listening, Verbal and non-verbal communication, Barrier to effective communication	04	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board
	2.formal and informal communication: purpose and type, writing formal applications, SOP and resume ,Group discussion, Interviews and presentations	04	Foundation Course by manan Prakashan	Discussion method
	3.Leadership skills and self-improved -Characteristics of leadership ,styles of leadership and team building	03	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: December -January

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concept of OOP & POP.

2. Understand the concept of C++ and different concepts available in C++.

3. Apply different concepts of C++ to write different program.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -VI (Electronic Instrumentation -II) Unit – IV Basic concepts of object oriented programming with C++ 1. Basics of OOP with C++	Procedure oriented programming, OOP , basic concepts of OOP, objects Benefits of OOP ,application of OOP ,programming language of C++ ,simple C++ program ,the cout & cin cascading of I/O operators	03	C++ by Balguruswami	PowerPoint presentation
	Tokens ,variables& constants ,keywords ,basic data types ,power of constants ,operators, binary operators ,arithmetic operators ,logical operators, assignment operator ,comma operator ,typecast operator ,operator precedence ,formatting of output	04	C++ by Balguruswami E-I-II textbook by sheth publication	PowerPoint presentation
	Simple if statement ,if -else statement ,nested if -else ,the switch statement ,the while ,Do-while ,for loop ,programs	06	C++ by Balguruswami	PowerPoint presentation

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2. Token & expressions in C++ 3. Control structures & functions	Functions ,types of function ,structure of C++ function function prototyping ,function calling ,inline function ,default argument ,const argument ,function overloading ,mathematical library function	02	C++ by Balguruswami	PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: February -March

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of stack & subroutine.

2. Understands the different instructions used for stack & subroutine

3. Understand the concepts of mode 0.mode 1& mode 2 in 8255 & also BSR mode

4. Apply the concepts of different modes to program 8255.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -V (E-II) Unit-II,	Introduction to advanced instructions & applications Stack & subroutine	05	Electronic Instrumentation-II Sheth Publication	Lecture Method /PPT

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Advanced 8085 Programming & 8255 (PPI) 1. Introduction to advanced instructions & applications 2. Stack & subroutines 3. The 8255 programmable Peripheral Interface	The 8255 programmable peripheral interface: block diagram of 8255 ,mode 0-simple input/output mode ,BSR mode	07	Electronic Instrumentation-II Sheth Publication	Lecture Method /PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: January -February

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of K-map & Boolean expressions.

2. Understand the concepts of decoder, encoder ad differentiate between them.

3. Understand the concept of multiplexer & demultiplexer in combinational logic design

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4. Apply k-map to build different circuit for SOP & POS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -V (E-II) Unit-I, Digital Electronics 1. Combinational logic design 2. Design & implementation of	Introduction ,Boolean identities , SOP & POS ,k-map (2,3 & 4 variable)	05	Electronic Instrumentation-II Sheth Publication	Lecture Method /PPT
	Decoder ,encoder ,multiplexer ,demultiplexers ,use of MUX & DEMUX in combinational logic design	07	Electronic Instrumentation-II Sheth Publication	Lecture Method /PPT
	Code converters (based on -binary ,BCD ,Gray & Excess -3 codes),Tri-state logic ,buffers ,D latch	03	Electronic Instrumentation-II Sheth Publication	Lecture Method /PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: IV MONTH: December-March
ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of Potential barrier penetration and tunnelling effect.
2. Understand the concepts of Harmonic oscillator.

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3. Develop the problem solving skill.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -II (Quantum Mechanics), Unit-III(Application of Schrodinger's steady state equation-II) 1.Potentail barrier 2.Theory of alpha particle 3. Harmonic Oscillator	1.Potentail Barrier penetration and tunnelling effect	04	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board
	2.Theory of alpha particle decay from radioactive nucleus	02	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board
	3. Harmonic Oscillator (1-D). Correspondence theory	04	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board
	4.Problems on above topics	04	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: F.Y.B.Sc SEMESTER: II MONTH: December-March
ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the basic mathematical concepts.
2. Apply the differential equations in real world problems of physics.
3. Solve the problem related to differential equations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper -I (Applied Physics -I), Unit-II 1.Differental Equation 2.Transient Response of a circuits: LR, CR &LCR growth and decay of current	1.Introduction, Ordinary Differential equation, first order homogeneous and non-homogeneous equation with variable coefficient, Exact differentials,	03	Mathematical Physics H.K. Das	Lecture Method /Chalk and Board
	1.Second order homogeneous equations with constant coefficients, problems depicting physical situations like LC &LR circuits, SHMs	04	Mathematical Physics H.K. Das Himalya Publication Textbook of F.Y.B.Sc.	Lecture Method /Chalk and Board
	2.Transient response of circuits: LR -Growth and decay of current, Transient response of circuits: CR -Growth and decay of current. Problems on the above topic	06	Sheth Publication's Physics -I (Textbook)	Lecture Method /Chalk and Board
	2. Transient response of circuits: LCR -Growth and decay of current. Problems on the above topic	02	Sheth Publication's Physics -I (Textbook)	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: IV MONTH: December -February
ACADEMIC YEAR: 2021-22 Subject: Foundation Course-IV
LEARNING OBJECTIVE/S:
The learners will be able to: 1. Develop a basic understanding of importance of communication.
2. Gain an overview of significant skills required to address competition in career choice.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-III (Science and	A.1.Laser Technology: Use of Laser remote sensing, GIS/GPS mapping, medical use, 2.Satellite Technology : various uses in	04	Foundation Course by manan Prakashan	Discussion method

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Technology-II) A. Some significance modern technologies, features& applications B. Issue of Control access and misuse of Technology	satellite navigation system ,GPS and imprecise climate &weather change			
	3. ICT: convergence of various technologies like satellite, computer sand digitalin the information revolution of today's society,4. Biotechnology and Genetics Engg: applied biology & uses in medicine, agriculture, genetically modified plant, animal & human life.	03	Foundation Course by manan Prakashan	Discussion method
	Nanotechnology: definition, control &application B. Issues of control, access and misuse of technology	04	Foundation Course by manan Prakashan	Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: IV MONTH: February-March
ACADEMIC YEAR: 2021-22 Subject: Foundation Course-IV
LEARNING OBJECTIVE/S:
The learners will be able to: 1. Develop a basic understanding of importance of communication.
2. Gain an overview of significant skills required to address competition in career choice.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-IV (Introduction to	1.Exams conducted for entry into professional courses - GRE,GMAT,CAT&SAT	02	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board

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Competitive Examinations) A. Basic Information on competitive examinations B. Soft skills required for competitive Examinations	2.Exams conducted for entry into jobs by Union Public Service Commission :S.S.C, State Public Service Commissions ,Banking & Insurance Sector and NET/SET for teaching Profession.	02	Foundation Course by manan Prakashan	Discussion method
	B.1.Information on areas tested : Ability ,Data interpretations ,Verbal Ability & logical Reasoning ,creativity and Lateral Thinking 2. Motivation: Concepts ,theories and types of motivation 3.Goal setting :Types of goals ,SMART goals ,Stephan Covey's concepts of human endowment . 4.Time management :Effective strategies for time management 5.Writing skills ,paragraph writing,report writing ,filing and application under RTI act ,Consumer grievance Letter .	07	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _**LAXMI K. PARATE**_____DEPARTMENT: _____PHYSICS____

_ CLASS: T.Y.B.Sc_____SEMESTER: _V_____MONTH: ___JUNE TO SEPTEMBER_____ ACADEMIC YEAR:**2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to : The students are expected to be able to solve simple problems in probability, understand the concept of independent events and work with standard continuous distributions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I MATHEMATICAL PHYSICS UNIT-I PROBABILITY	events, independent events, conditional probability, prob methods of counting (derivation of formulae not expect variables, continuous distributions (omit joint distributi distribution, the normal distribution, the Poisson distrib	15	Mathematical Methods in the Physical sciences: Mary L. Boas Wiley	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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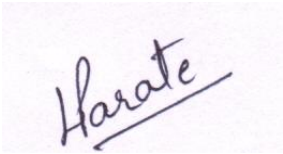
TEACHING PLAN (UNIT PLAN)

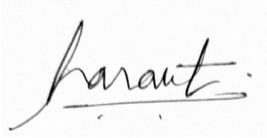
NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____ CLASS: T.Y.B.Sc_____SEMESTER: _V_____MONTH: ___JUNE_--_SEPTEMBER_____ ACADEMIC YEAR:**2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to : The students will have an idea of the functions of complex variables; solve nonhomogeneous differential equations and partial differential equations using simple methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I MATHEMATICAL PHYSICS UNIT-II COMPLEX NO. DIFFERENTIAL EQUATION	Second-order nonhomogeneous equations with constant coefficients, partial differential equations, some important partial differential equations in physics, method of separation of variables.	8	Mathematical Physics: H. K. Das,	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _**LAXMI K. PARATE**_____DEPARTMENT:

_____PHYSICS_____ CLASS: S.Y.B.Sc_____SEMESTER: _III_____MONTH: _JUNE-SEPTEMBER_____

ACADEMIC YEAR:**2021-22**_____

LEARNING OBJECTIVE/S:
The learners will be able to : _*_ Comprehend the basic concepts of thermodynamics & its applications in physical situation.

_ * Demonstrate tentative problem solving skills in all above areas.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-II THERMODYNAMICS	Heat engine, Carnot's cycle: its efficiency,NUMERICALS	3	Heat thermodynamics and Statistical Physics, Brijlal, N.Subramanyam, P. S. Hemne, S. Chand,	Chalk/Board
	Second law of thermodynamics, Statements, Equivalence of Kelvin and Plank statement,	5	Heat thermodynamics and Statistical Physics, Brijlal,	Chalk/Board

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	Carnot's theorem, Reversible and irreversible process, Absolute scale of temperature.		N.Subramanyam, P. S. Hemne, S. Chand,	
	Clausius theorem, Entropy, Entropy of a cyclic process, Reversible process, Entropy change, Reversible heat transfer, Principle of increase in entropy, generalized form of first and second law, entropy change of an ideal gas, entropy of steam, entropy and unavailable energy, entropy and disorder, absolute entropy.	7	Heat thermodynamics and Statistical Physics, Brijlal, N.Subramanyam, P. S. Hemne, S. Chand,	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT:

_____PHYSICS_____ CLASS: F.Y.B.Sc_____SEMESTER: _I_____MONTH: ___JULY-OCTOBER_____

ACADEMIC YEAR:**2021-22**_____

LEARNING OBJECTIVE/S:
The learners will be able to : Apply the laws of thermodynamics to formulate the relations necessary to analyze a thermodynamic process.

Demonstrate quantitative problem solving skills in all the topics covered

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-III THERMODYNAMICS	Behavior of real gases and real gas equation, Van der Waal equation, relation between vander waals coefficient and critical constant, Boyles Temperature,Numericals	6	Brijlal, Subramanyam and Hemne, Heat Thermodynamics and Statistical Physics,	Chalk/Board
	Thermodynamic Systems, Zeroth law of thermodynamics, Concept of Heat, The first law, Non Adiabatic process and Heat as a path function, Internal energy, , Heat Capacity and specific heat, Applications of first law to simple processes, general relations from the first law, Indicator diagrams, Work done during isothermal and adiabatic processes, Worked examples, Problems.	9	Brijlal, Subramanyam and Hemne, Heat Thermodynamics and Statistical Physics,	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

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TEACHING PLAN (UNIT PLAN)

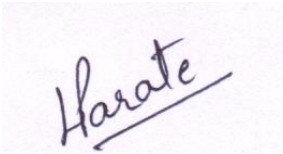
NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

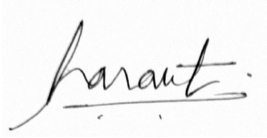
CLASS: T.Y.B.Sc_____SEMESTER: _VI_____MONTH: _NOVEMBER-MARCH__ _____ ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the kinds of motions that can occur under a central potential and their applications to planetary orbits. The students should also appreciate the effect of moving coordinate system, rectilinear as well as rotating.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-I CENTRAL FORCE	Motion under a central force, the central force inversely proportional to the square of the distance, Elliptic orbits, The Kepler problem.	10	Classical Mechanics: Herbert Goldstein	Chalk/Board
	Moving origin of coordinates, Rotating coordinate systems, Laws of motion on the rotating earth, The Foucault pendulum, Larmor's theorem	5	Classical Mechanics: Herbert Goldstein	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15__





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT:

_____PHYSICS_____ CLASS: T.Y.B.Sc_____SEMESTER: _VI_____MONTH: NOVEMBER-MARCH __ _____

ACADEMIC YEAR:2021-22_____

LEARNING OBJECTIVE/S:
The learners will be able to : Learn the concepts needed for the important formalism of Lagrange's equations and derive the equations using D'Alembert's principle. They should also be able to solve simple examples using this formalism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-II LAGRANGE'S EQUATIONS	D'Alembert's principle, Constraints, Examples of holonomic constraints, examples of nonholonomic constraints, degrees of freedom and generalized coordinates, virtual displacement, virtual work, D'Alembert's principle, illustrative problems.	10	Classical Mechanics: J. C. Upadhyaya	Chalk/Board
	Lagrange's equations (using D'Alembert's principle), properties of Lagrange's equations, illustrative problems, canonical momentum, cyclic or ignorable coordinates	5		Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT:

_____PHYSICS_____ CLASS: S.Y.B.Sc_____SEMESTER: _IV_____MONTH: _ NOVEMBER-FEBRUARY_ _____

ACADEMIC YEAR**2021-22**_____

LEARNING OBJECTIVE/S: The learners will be able to : Understand the concept of Basics of communication, Concept of modulation and its various types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-III UNIT-III COMMUNICATION SYSTEM,RADIATION PHYSICS	Block diagram of communication system, types of communication system: simplex, duplex, analog and digital communication, Electromagnetic spectrum, base band and broad band communication. Noise concept and types, signal to noise ratio, noise figure, noise temperature	4	Electronics Communication Systems by Kennedy	Chalk/Board
	Need of modulation, concept of modulation, AM waveform, mathematical expression , concept of sideband, demodulation principles. TRF and superheterodyne receiver	3	Electronics Communication Systems by Kennedy	Chalk/Board
	FM modulation: definition, mathematical representation, frequency spectrum, bandwidth and modulation index. 4.Concept of ASK, PSK, FSK, PAM, PWM, PPM, PCM.	4	Electronics Communication Systems by Kennedy	Chalk/Board
	radioactivity, Alpha, beta and gamma radiation, high energy electron radiation and X-rays, Radiation units,	3	Electronics Communicati	Chalk/Board

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	Sources of radiation Radiation protection Radiation Detectors and Beam Calibration Types of radiation detectors, Ionization detectors, scintillation detectors, particle detectors, TLD, thin film detectors, Radiation field analyzer, Basic principles of beam profile		on Systems by Kennedy	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____ CLASS: F.Y.B.Sc_____SEMESTER: _II_____MONTH: ___DECEMBER-MARCH_____

ACADEMIC YEAR:2021-22

LEARNING OBJECTIVE/S: The learners will be able to : Understand the basic Electronics concepts and their applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-II UNIT-I A.C.CIRCUIT	AC circuit containing pure R, pure L and pure C, representation of sinusoids by complex numbers, Series L-R, C-R and LCR circuits. Resonance in LCR circuit (both series and parallel), Power in ac circuit. Q-factor.	9	PRINCIPLE OF ELECTRONICS By V K Mehta and R Mehta	Chalk/Board
	AC-bridges: General AC bridge, Maxwell, de-Sauty, Wien Bridge , Hay brigde,Numericals	6	PRINCIPLE OF ELECTRONICS By V K Mehta and R Mehta	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _S. Y. B. Sc. __ SEMESTER: **III** MONTH: July-oct.

ACADEMIC YEAR: 2021-22

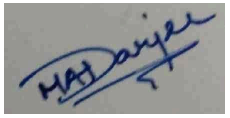
LEARNING OBJECTIVE/S:
The learners will be able to :

• To develop analytical abilities towards real world problems.

• To familiarize with current and recent scientific and technological

developments.

• To enrich knowledge through problem solving, hands on activities, applications base study etc.



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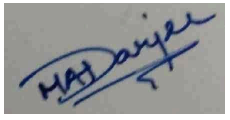
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III, U-II Applied Physics-1	Crystal Physics 1) Lattice points and space lattice, The basis and crystal structure, Unit Cells and lattice parameters, Primitive Cells, Crystal Systems, Crystal Symmetry,Bravais space lattices	05	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method
	2) Metallic crystal structures, relation between the density of crystal material and lattice constant in a cubic lattice, Directions, Planes, Miller Indices, Important planes in simple cubic structure, separation between lattice planes in a cubic crystal.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _S. Y. B. Sc. __ SEMESTER: IV MONTH: nov-april.
ACADEMIC YEAR: 2021-22

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-III Quantum mechanics	Applications of Schrodinger steady state equation –II 1. Potential barrier (Finite height and width) penetration and tunneling effect (derivation of approximate transmission probability)	07	1.Sheth Publications,	Chalk & board Method
	2. Theory of alpha particle decay from radioactive nucleus.	02		
	3. Harmonic oscillator (one-dimension), correspondence principle.	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15

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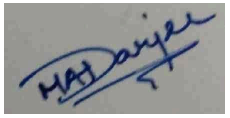
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III, U-I Geophysics	1 : GEOLOGY AND GEOPHYSICS 1.1 Introduction to Geophysics its branches and relationship with other sciences. 1.2 Earth and solar system: Meteorites and other extra-terrestrial materials. 1.3 Age of Earth and various methods of determination. Planetary evolution of the Earth and its internal structure: Elastic waves and variation of physical and chemical properties in the interior of Earth. 1.4 Major tectonic features of the ocean oceanic and continental crust. 1.5 Continental drift – geological and geophysical evidence: mechanisms, objections and present status. 1.6 Gravity and magnetic anomalies at Mid-ocean ridges: deep sea trenches, continental shield areas and mountain chains. 1.7 Geomagnetism, elements of Earth's magnetism: Internal, external fields and their causes, Palaeomagnetism, Polar wandering paths and reversals, Seafloor spreading and Plate tectonics. 1.8 Seismic belts of the Earth: Seismicity and plate movements. 1.9Geodynamics of the Indian plate. 1.10 Utility of the different geophysical techniques (discussed above) in exploration for academic as well as for harnessing resources. Geophysical potential fields: Principles of Gravity and Magnetic methods. 1.11 Instrumentation, field procedures used in geophysical studies. 1.12 Case studies	06	1.Sheth Publications,	Chalk & board Method



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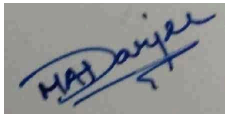
	2 : GEO-ENVIRONMENTAL SCIENCES 2.1 Environmental Magnetic Analysis relating to magnetic minerals and environmental systems, soil magnetism, mineral magnetic studies of lake and marine sediments and magnetic monitoring of air-, land- and water-pollution. 2.2 Geo-Environmental Studies relating to mining, urban, industrial, coastal and desert management, palaeoclimate, palaeoenvironment, medical geology, climate change and studies related to their impact on ecosystem. 2.3 Natural Hazard Investigations including scientific studies related to natural hazards such as earthquakes, landslides, floods and tsunamis. 2.4 Impact Assessment of Anthropogenic Activities such as heavy metal pollution in Mumbai aquatic system with industries and thermal power plants, urbanization, disposal of industrial and radio-active waste, excessive withdrawal of ground water and use of fertilizers.	09,		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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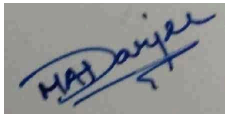
NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _T. Y. B. Sc. __ SEMESTER: V MONTH: June-oct.
ACADEMIC YEAR: 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, Solid State Physics	Crystal Physics 1. Lattice points and space lattice, The basis and crystal structure, Unit Cells and lattice parameters, Primitive Cells, Crystal Systems, Crystal Symmetry, Bravais space lattices, Metallic crystal structures, relation between the density of crystal material and lattice constant in a cubic lattice, Directions, Planes, Miller Indices, Important planes in simple cubic structure, separation between lattice planes in a cubic crystal, Reciprocal Lattice(Omit Vector-algebraic discussion), X-ray Diffraction.	11	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method
	2. Classical free electron theory of metals, Drawbacks of classical theory, Relaxation time, Collision time and mean free patH.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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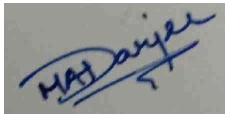
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Solid State Physics	Electrical properties of metals 1.Quantum theory of free electrons, Fermi Dirac statistics and electronic distribution in solids, Density of energy states and Fermi energy, The Fermi distribution function, Heat capacity of the Electron gas, Mean energy of electron gas at 0 K, Electrical conductivity from quantum mechanical considerations..	08	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method
	1.Band theory of solids, The Kronig- Penney model (Omit eq. 6.184 to 6.188), Brillouin zones, Number of wave functions in a band, Motion of electrons in a one-dimensional periodic potential, Distinction between metals, insulators and intrinsic semiconductors.	07		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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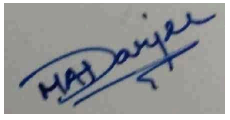
NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _T. Y. B. Sc. __ SEMESTER: VI MONTH: Nov-april.
ACADEMIC YEAR: 2021-22

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-IV, U-II, Special theory of relativity	Relativistic Kinematics Relativistic Kinematics (continued): The relativistic addition of velocities and acceleration transformation equations, Aberration and Doppler effect in relativity, The common sense of special relativity..	07	1.Sheth Publications, 2. RR : Introduction to Special Relativity : Robert Resnick (Wiley Student Edition)	Chalk & board Method
	The Geometric Representation of Space-Time: Space-Time Diagrams, Simultaneity, Length contraction and Time dilation, The time order and space separation of events, The twin paradox	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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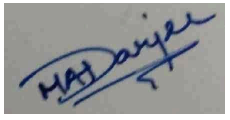
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-IV, U-IV, Special theory of relativity	Relativity and Electromagnetism: Introduction, The interdependence of Electric and Magnetic fields, The Transformation for E and B, The field of a uniformly moving point charge, Force and fields near a current-carrying wire, Force between moving charges, The invariance of Maxwell's equations.	13	1.Sheth Publications, 2. RR : Introduction to Special Relativity : Robert Resnick (Wiley Student Edition)	Chalk & board Method
	The principle of equivalence and general relativity, Gravitational red shift.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **T.Y.B.Sc.**

SEMESTER: **V** MONTH: **- June - September** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Apply theory of quantum physics in atomic physics.
- Understand importance of electron spins, symmetric & antisymmetric wave functions & vector atom model.
- Learn the Effect of magnetic field on atoms & its application.
- Learn molecular physics & its application.
- This course will be useful to get an insight into spectroscopy.
- Get the insight of the modern medical instruments in principle, which are used in day to day life.
- From this course, the students are expected to learn some mathematical techniques required to understand the physical phenomena at the undergraduate level and get exposure to important ideas of statistical mechanics.
- The units on statistical mechanics would introduce the students to the concept of microstates, Boltzmann distribution and statistical origins of entropy.
- It is also expected that the student will understand the difference between different statistics, classical as well as quantum.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III, Unit -3 **Atomic & molecular Physics**	1. Molecular spectra (Diatomic Molecules): Rotational energy levels, Rotational spectra, Vibrational energy levels, Vibrational-Rotational spectra. Electronic Spectra of Diatomic molecules: The	15	B: Perspectives of Modern Physics: Arthur Beiser Page 8 of 18 McGraw Hill.	Power point presentation, Jamboard, PDF ,

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	Born-Oppenheimer approximation, Intensity of vibrational-electronic spectra: The Franck-Condon principle. 2. Infrared spectrometer & Microwave spectrometer			
Paper-III, Unit -4 **Atomic & molecular Physics**	1. Raman Effect: Quantum Theory of Raman Effect, Pure Rotational Raman spectra: Linear molecules, symmetric top molecules, Asymmetric top molecules, Vibrational Raman spectra: Raman activity of vibrations, Experimental set up of Raman Effect. 2. Electron spin resonance: Introduction, Principle of ESR, ESR spectrometer. 3. Nuclear magnetic resonance: Introduction, principle and NMR instrumentation.	15	BM: Fundamentals of Molecular Spectroscopy: C. N. Banwell & E. M. McCash (TMH).(4th Ed.) . GA: Molecular structure and spectroscopy : G Aruldhas (2nd Ed) PHI learning Pvt Ltd.	Power point presentation, Jamboard, PDF
Paper-I, Unit -3 **Mathematical, Thermal and Statistical Physics**	1. Microstates and configurations, derivation of Boltzmann distribution, dominance of Boltzmann distribution, physical meaning of the Boltzmann distribution law. 2. Definition of the canonical ensemble, relating Q to q for an ideal gas. 3. Translational partition function, equipartition theorem, energy, entropy.	15	Thermodynamics, Statistical Thermodynamics and Kinetics: T. Engel and P. Reid (Pearson).	Power point presentation, Jamboard, PDF
Paper-I, Unit - 4 **Mathematical, Thermal and**	1. The probability of a distribution, The most probable distribution, Maxwell Boltzmann statistics, Molecular speeds.	15	Perspectives of Modern Physics: Arthur Beiser,	Power point presentation, Jamboard, PDF

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Statistical Physics	2. Bose-Einstein statistics, Black-body radiation, The Rayleigh-Jeans formula. 3. The Planck radiation formula, Fermi-Dirac statistics, Comparison of results.		(Mc Graw Hill International).	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **S.Y.B.Sc.**

SEMESTER: **III** MONTH: **June-September** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Comprehend the basic concepts of thermodynamics & its applications in physical situation.
- Learn about situations in low temperature.
- Demonstrate tentative problem solving skills in all above areas.
- Students will be exposed to contextual real life situations.
- Students will appreciate the role of Physics in 'interdisciplinary areas related to Acoustics.
- The learner will understand the scope of the subject in Industry & Research.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper-1 Unit-3 Mechanics and thermodynamics	1. Third law of thermodynamics, Nernst heat theorem, Consequences of the third law, Maxwell's thermodynamic relations, Clausius – Clapeyron equation, Thermal Expansion. 2. Steam engine, Rankine cycle, Otto engine, Efficiency of Otto cycle, Diesel cycle, Efficiency of Diesel cycle, Otto and diesel comparison 3. Low temp Physics: Different methods of liquefaction of gases, methods of freezing, Cooling by evaporation, cooling by adiabatic expansion Joule - Thompson effect, JT effect of Vander Waal's gas, Liquefaction of helium, properties and uses of liquid Helium	15	Thermal Physics, AB Gupta and H. Roy, Book and Allied (P) Ltd, Reprint 2008, 2009. Heat, thermodynamics and Statistical Physics, Brijlal, N.Subramanyam, P. S. Hemne, S. Chand, edition 2007.	Power point presentation, Jamboard, PDF
Paper-3 Applied Physics – I Unit-1 Acoustics , Lasers and fibre optics	1. Acoustics of Buildings: Reverberation, Sabine's formula (without derivation) Absorption coefficient, Acoustics of Buildings, factors affecting Acoustics of Buildings, Sound distribution in an auditorium. 2. Laser : Introduction, transition between Atomic energy states (without derivation), Principle of Laser, Properties of Laser, Helium–Neon Laser, Application of Laser, Holography 3. Fibre Optics: Light propagation through Fibres, Fibre Geometry, Internal reflection, Numerical Aperture, Step-Index and Graded-Index Fibres, Applications of Fibres.	15	Modern Physics Concept and Applications – SanjeevPuri, Narosa Publication. Properties of matter and Acoustics – R Murugeshan and K. Shivaprasath,	Power point presentation, Jamboard, PDF

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			S Chand &Co.Ltd. (2005-Ed)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **F.Y.B.Sc.**

SEMESTER: **I** MONTH: **July- October** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concepts of lens system and interference.
- Demonstrate quantitative problem solving skills in all the topics covered

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-1 Unit-2 Classical Physics	1. Lens Maker's Formula (Review), Newton's lens equation, magnification-lateral, longitudinal and angular.	15	Brijlal,Subramanyam and Avadhanulu A Textbook of Optics,	Power point presentation, Jamboard, PDF

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	2. Equivalent focal length of two thin lenses, thick lens, cardinal points of thick lens, Ramsdenand Huygens eyepiece 3. Aberration: Spherical Aberration, Reduction of Spherical Aberration, Chromatic aberration and condition for achromatic aberration. 4. Interference: Interference in thin films, Fringes in Wedge shaped films, Newton's Rings (Reflective).		25th revised ed.(2012) S. Chand Jenkins and White, Fundamentals of Optics by (4th Ed.), McGraw Hill International.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **T.Y.B.Sc.**

SEMESTER: **VI** MONTH: **November- March** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the basics of semiconductor devices and their applications.
- Understand the basic electronic circuits for universal logic building blocks and basic concepts of digital communication.
- Develop quantitative problem solving skills in all the topics covered.
- Analyze/design and implement combinational logic circuits.
- Develop assembly language programming skills and real time applications of microprocessor.
- Illustrate how to interface the I/O peripheral (PPI) with 8085 microprocessor.
- Understand architecture, silent features, instruction set, programming and interfacing of 8051 microcontroller.
- Get practical training to interface different programmable peripherals and I/O devices to microprocessor and microcontroller.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper- 2 **Unit – I** **Electronics**	1. Field effect transistors: JFET: Basic ideas, Drain curve, The transconductance curve, Biasing in the ohmic region and the active	15	MB: Electronic Principles, Malvino & Bates -7th Ed TMH Publication. AM: Electronic Devices and Circuits, Allen Mottershead -PHI Publication.	Chalk and board Notes provided

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	region, Transconductance, JFET common source amplifier, JFET analog switch, multiplexer, voltage controlled resistor, Current sourcing. 2. MOSFET: Depletion and enhancement mode, MOSFET operation and characteristics, digital switching. 3. SCR – construction, static characteristics, Analysis of the operation of SCR, Gate Triggering Characteristics, Variable half wave rectifier and Variable full wave rectifier, Current ratings of SCR. 4. UJT: Construction, Operation, characteristics and application as a relaxation oscillator.			
Paper- 2 Unit – IV Electronics	1. Logic families: Standard TTL NAND, TTL NOR, Open collector gates, Three state TTL devices, MOS inverters, CMOS	15	ML:Digital Principles and Applications, Malvino and Leach (4th Ed)(TMH). LF: Communication Electronics: Principles and applications, Louis E Frenzel 4th edition TMH Publications.	Chalk and board Notes provided

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	NAND and NOR gates, CMOS characteristics. 2. Digital Communication Techniques: Digital Transmission of Data, Benefits of Digital Communication, Disadvantages of Digital Communication, Parallel and Serial Transmission, Pulse Modulation, Comparing Pulse-Modulation Methods (PAM, PWM, PPM), Pulse-Code Modulation.			
Applied Component, Unit -I Digital Electronics	1. Combinational Logic Design: Introduction, Boolean identities, K – map (2, 3 and 4 variable), Ref: N G P 4.1 – 4.8. (Additional ref. RPJ). 2. Design and implementations of: Decoders, Encoders, Multiplexers, Demultiplexers, Use of MUX and DEMUX in Combinational Logic design. Code Converters (based on – binary, BCD, Gray and Excess – 3 codes). Tri-State logic, buffers, D latch.	15	NGP: Digital Electronics and Logic design by N G PALAN, https://archive.org/details/hellomr82k_gmail_DE RPJ: R. P. Jain, Modern Digital Electronics, Tata McGraw Hill, 4th Edition.	Chalk and board Notes provided

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Applied Component, Unit -II Advanced 8085 Programming and 8255(PPI)	1. Introduction to advanced instructions and applications Ref. RG: 10.7, 10.8, 10.9 2. Stack and Subroutines: Stack, Subroutine Ref. RG: 9.1, 9.1.1, 9.2&9.2.1 3. The 8255 Programmable Peripheral Interface: Block Diagram of the 8255, Mode 0 – Simple Input / Output mode, BSR (Bit Set/Reset Mode) Ref. RG: 15.1.1, 15.1.2& 15.1.3	15	RG: Microprocessor Architecture, Programming and Applications with the 8085, Ramesh Gaonkar, 5th Edition.	Chalk and board Notes provided
Applied Component, Unit -III Introduction to Microcontrollers	1. Introduction, Microcontrollers and Microprocessors, History of Microcontrollers and Microprocessors, Block diagram of 8051 Microcontroller*, Embedded Versus External Memory Devices, 8-bit & 16-bit Microcontrollers, CISC and RISC Processors, Harvard and Von Neumann Architectures, Commercial Microcontrollers. 2. 8051 Microcontrollers: Introduction, MCS-Architecture, Registers in MCS-51, 8051 Pin Description, 8051 Connections, 8051 Parallel I/O Ports, Memory Organization.	15	AVD: Microcontrollers (Theory and Applications) by Ajay V Deshmukh, The Tata-McGraw-Hill Companies MMM - For * Refer 1.2 The 8051 Microcontroller & Embedded Systems by M.A. Mazidi, J.G. Mazidiand R. D. Mckinlay, Second Edition, Pearson.	Chalk and board Notes provided

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	3. MCS-51 Addressing Modes and Instructions: 8051 Addressing modes, MCS-51 Instruction Set, 8051 Instructions and Simple Programs, Using Stack Pointer .			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 75

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **S.Y.B.Sc.**

SEMESTER: **IV** MONTH: **November- March** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the diffraction and polarization processes and applications of them in physical situations.
- Understand the applications of interference in design and working of interferometers.
- Understand architecture, silent features, instruction set, programming and interfacing of 8085 microprocessor.
- Develop assembly language programming skills and real time applications of microprocessor.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper- 1 Unit – I Optics	1. Background knowledge (devote one lecture at commencement): i. Introduction, Huygens's - Fresnel theory, Distinction between interference and diffraction, Fresnel and Fraunhoffer types of diffraction. ii. Introduction of Polarization, Natural light is unpolarized, unpolarized and polarized light iii. Brewster's law, Polaroid sheets iv. Prism and grating spectra, Cornu's spiral, Fresnel's integrals. 2. Fresnel's Diffraction: Fresnel's assumptions, Rectilinear propagation (Half period zones) of light, Diffraction pattern due to straight edge, Positions of maxima and minima in intensity, Intensity at a point inside the geometrical shadow(straight edge), Diffraction due to a narrow slit, Diffraction due to a narrow wire 3. Fraunhoffer Diffraction : Introduction, Fraunhoffer diffraction at a single slit, Intensity distribution in diffraction pattern due to a single slit, Fraunhoffer diffraction at a double slit,Distinction between single slit and double slit diffraction pattern and missing orders, Plane diffraction Grating, Theory	15	A Text Book Of Optics By: Dr.N.Subrahmanyam, Brijlal, Dr M.N. Avadhaanulu (S.Chand, 25th Revised edition2012 Reprint 2013) AJOY GHATAK: OPTICS (5thEdition)	Chalk and board Notes provided

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	of plane transmission grating, Width of principal maxima .			
Paper-III Unit- II Applied Physics – II Microprocessors	1. Building Concept of Microprocessor Introduction, Study of Memory, Input Device, Output Device, and Input/output Device Central Processing Unit. 2. Introduction , Features of Inter 8085 , Pin Diagram of 8085 , 8085 CPU Architecture , Arithmetic and Logical Group (ALU , Accumulator , Temporary Register , Flag Register (PSW)) , Register Group (Temporary Registers (W and Z) , General purpose registers , Special Purpose registers) , Interrupt Control , Serial I/O Control Group , Instruction Register , Decoder and Control Group (Instruction Register , Instruction Decoder , Timing and Control) 3. Introduction , Flowchart , Classification of Instruction Set (Data Transfer Group , Arithmetic Group , Logical Group , Branching Group , Stack and Machine Control Group) , Notations used in Instructions and Opcode , Data Transfer Group , Program Examples for Data Transfer Group , Arithmetic Operation Group , Branch Group , Logical Group , Addressing Modes , 8085 Programmers Model.	15	V.J. Vibhute & P.B. Borole, Fifth Revised Edition RG: Microprocessor Architecture, Programming and Applications with the 8085, Ramesh Gaonkar, 5th Edition	Chalk and board Notes provided

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **F.Y.B.Sc.**

SEMESTER: **II** MONTH: **December - March** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the basic mathematical concepts and applications of them in physical situations.
- Demonstrate quantitative problem solving skills in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper- 1 Unit – III Mathematical Physics	1. Superposition of Collinear Harmonic oscillations: Linearity and Superposition Principle. Superposition of two collinear oscillations having (1) equal frequencies and (2) different frequencies (Beats). 2. Superposition of two perpendicular Harmonic Oscillations: Graphical and Analytical Methods. Lissajous Figures with equal an unequal frequency and their uses.	15	Waves: Berkeley Physics Course, vol. 3, Francis Crawford, 2007, Tata McGraw-Hill. The Physics of Vibrations and Waves, H. J. Pain, 2013, John	Chalk and board Notes provided

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	3. Wave Motion: Transverse waves on string, Travelling and standing waves on a string. Normal modes of a string, Group velocity, Phase velocity, Plane waves, Spherical waves, Wave intensity.		Wiley and Sons. The Physics of Waves and Oscillations, N.K. Bajaj, 1998, Tata McGraw Hill.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: F. Y. B. Sc. SEMESTER: I MONTH: OCT-DEC

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVES:
The learners will be able to :

1. Understand nuclear size, nuclear properties and nuclear behavior.

2. Understand the type isotopes and their applications.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, Modern Physics	1.Structure of Nuclei:Basic properties of nuclei, Composition, Charge, Size, Rutherford's expt. for estimation of nuclear size, density of nucleus, Mass defect and Binding energy, Packing fraction, BE/A vs A plot, stability of nuclei (N Vs Z plot) and problems.	06	1.Sheth Publications, 2.SBP: Dr. S. B. Patel, Nuclear Physics Reprint 2009, New Age International	Inkredible board / PPT

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	2.Radioactivity: Radioactive disintegration concept of natural and artificial radioactivity, Properties of α, β, γ-rays, laws of radioactive decay, half-life, mean life (derivation not required), units of radioactivity, successive disintegration and equilibriums, radioisotopes. Numerical Problems.	07		
	3.Carbon dating and other applications of radioactive isotopes (Agricultural, Medical, Industrial, Archaeological -information from net).	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: F. Y. B. Sc. SEMESTER: II MONTH: JAN-MARCH

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to :

1.Understand the basic concepts of digital electronics , power supply, Circuit Theorem and their applications.

2. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Electricity & Electronics	1.Circuit theorems: (Review: ohm's law, Kirchhoff's laws) Superposition Theorem, Thevenin's Theorem, Ideal Current Sources, Norton's Theorem, Reciprocity Theorem, Maximum Power Transfer Theorem. Numericals related to circuit analysis using the above theorems.	06	1.Sheth Publications. 2.VKM: V K Mehta and R Mehta Electronics Principals, MulticolouredRevised 11th Ed. reprint in 2012 ,S Chand.	Inkredible board & Black board/ PPT

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	2.DC power supply: Half wave rectifier , Full wave rectifier, Bridge rectifier, PIV and Ripple factor of full wave rectifier, Clipper and Clampers, Capacitor Filter. Zener diode as voltage stabilizer.	05	3.A P Malvino, Digital Principles and Applications: Tata McGraw Hill	
	3.Digital electronics : Logic gates(Review), NAND and NOR as universal building blocks. EXOR gate: logic expression, logic symbol, truth table, Implementation using basic gates and its applications, Boolean algebra, Boolean theorems. De-Morgan theorems, Half adder and Full adder	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: S.Y. B. Sc. SEMESTER: III MONTH: SEPT-DEC

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVES:

The learners will be able to :

1.Understand the basics of transistor biasing, operational amplifiers, their applications.

2.Demonstrate quantitative problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Analog Electronics	1.Transistor Biasing: Inherent Variations of Transistor Parameters, Stabilisation, Essentials of a Transistor Biasing Circuit, Stability Factor, Methods of Transistor Biasing, Base Resistor Method, Emitter Bias Circuit, Circuit analysis of Emitter Bias, Biasing with Collector Feedback Resistor, Voltage Divider Bias Method, Stability factor for Potential Divider Bias.	07	1.Sheth Publications, 2.Principles of Electronics – V. K. Mehta and Rohit Mehta. (S. Chand–	Inkredible board / PPT

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	2.General amplifier characteristics: Concept of amplification, amplifier notations, current gain, Voltage gain, power gain, input resistance, output resistance, general theory of feedback, reasons for negative feedback, loop gain.	06	Multicoloured illustrative edition)	
	3.Practical circuit of transistor amplifier, phase reversal, frequency response, Decibel gain and Band width.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: S. Y. B. Sc. SEMESTER: IV MONTH: JAN-MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to :

1. Understand the working of digital circuits.

2. Understand the conversion of binary, decimal and hexadecimal numbers.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Unit- II Applied Physics – II Microprocessors	1. Building Concept of Microprocessor Introduction, Study of Memory, Input Device, Output Device, and Input/output Device Central Processing Unit.	03	1.V.J. Vibhute & P.B. Borole, Fifth Revised Edition 2.RG: Microprocessor Architecture, Programming and Applications	Inkredible board & Black board/ PPT

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	2. Introduction , Features of Inter 8085 , Pin Diagram of 8085 , 8085 CPU Architecture , Arithmetic and Logical Group (ALU , Accumulator , Temporary Register , Flag Register (PSW)) , Register Group (Temporary Registers (W and Z) , General purpose registers , Special Purpose registers) , Interrupt Control , Serial I/O Control Group , Instruction Register , Decoder and Control Group (Instruction Register , Instruction Decoder , Timing and Control)	07	with the 8085, Ramesh Gaonkar, 5th Edition	
	3. Introduction , Flowchart , Classification of Instruction Set (Data Transfer Group , Arithmetic Group , Logical Group , Branching Group , Stack and Machine Control Group) , Notations used in Instructions and Opcode , Data Transfer Group , Program Examples for Data Transfer Group , Arithmetic Operation Group , Branch Group , Logical Group , Addressing Modes , 8085 Programmers Model.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: T.Y. B. Sc. SEMESTER: V MONTH: SEPT-DEC

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVES:

The learners will be able to :

1. Understand the working of Data acquisition system, D to A and A to D Converters.

2. Understand the basic concept of Electron Spin and Spin orbit coupling etc.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-V, U-III, Electronics Instrumentation (Applied Physics)	1. Data acquisition systems: Objectives of DAS, Singal conditioning of inputs, Single channel Data acquisition systems, Multichannel Data acquisition system.	06	1. Sheth Publications 2. Digital Principles and Applications : A. P. Malvino and	Inkredible board / PPT

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	2. D to A Converters: Resistive divider network, Binary ladder network.	04	D. P. Leach. Tata McGraw Hill.	
	3. A to D Converters: Successive approximation type, Voltage to time (Single slope, Dual slope).	04		
P-III, U-II, Atomic Physics	1. Electron Spin: The Stern-Gerlach experiment, Pauli's Exclusion Principle, Symmetric and Antisymmetric wave functions.	07	1.Sheth Publications, 2.1. AB : Perspectives of Modern Physics : Arthur Beiser McGraw Hill.	Inkredible board / PPT
	2. Spin orbit coupling, Hund's Rule, Total angular momentum, Vector atom model,L-S and j-j coupling. Origin of spectral lines, Selection rules.	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _30_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS. CLASS: T. Y. B. Sc. SEMESTER: VI MONTH: JAN-MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to :

1. Understand the working of DC power supply, Differential amplifier and Multivibrators circuit.

2. Understand the basic concepts of 555 Timer and OP-AMP Applications.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Electronics	1. Regulated DC power supply: Supply characteristics, series voltage regulator,Short circuit protection (current limit and fold back) Monolithic linear IC voltage Regulators. (LM 78XX, LM 79XX, LM 317).	07	1.Sheth Publications, 2. 1. MB : Electronic Principles : A. P. Malvino and D.J.	Inkredible board & Black board/ PPT

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	2. Differential Amplifier using transistor: The Differential Amplifier, DC and ACanalysis of a differential amplifier, Input characteristic-effect of input bias, offset current and input offset voltage on output, common mode gain, CMRR.	05	Bates, (7th Ed.) – (TMH). 3. VKM : Principles of Electronics : V. K. Mehta and Rohit Mehta. S. Chand Publications. (11th Ed.)	
	3. Transistor Multivibrators: Astable, Monostable and Bistable Multivibrators,Schmitt trigger.	03		
P-II, U-III, Electronics	1. Op Amp Applications: Log amplifier, Instrumentation amplifiers, Voltage controlled current sources (grounded load), First order Active filters, Astableusing OP AMP, square wave and triangular wave generator using OP AMP,Wein-bridge oscillator using OP AMP.	09	1. Sheth Publications 2. 1. MB : Electronic Principles : A. P. Malvino and D.J. Bates, (7th Ed.) – (TMH).	Inkredible board & Black board/ PPT
	2. 555 Timer: Review Block diagram, Monostable and Astable operationVoltage Controlled Oscillator, Pulse Width modulator, Triggered linear ramp generator.	O6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _30_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: S.Y. B. Sc. SEMESTER: III MONTH: SEPT-DEC

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVES:

The learners will be able to :

1. Develop a basic understanding about issues related to Human Rights of weaker sections and Dealing with Environmental Concerns.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course, Module-I, Humans Rights Provisions, Violations and Redressal	A. Scheduled Castes- Constitutional and legal rights, Forms of violations, Redressal mechanisms. B. Scheduled tribes- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	04	1. Foundation course - II: Mannan Prakashan.	Inkredible board / PPT
	C. Women- Constitutional and legal rights, Forms of violations, Redressal mechanisms. D. Children- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	04		

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	E. People with Disabilities, Minorities, and the Elderly population- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	04		
Foundation Course, Module-II, Dealing with Environmental Concerns	A. Concept of Disaster and general effects of Disasters on human life- physical, psychological, economic and social effects. B. Some locally relevant case studies of environmental disasters.	05	1. Foundation course - II: Mannan Prakashan.	Inkredible board / PPT
	C. Dealing with Disasters - Factors to be considered in Prevention, Mitigation (Relief and Rehabilitation) and disaster Preparedness. D. Human Rights issues in addressing disasters- issues related to compensation, equitable and fair distribution of relief and humanitarian approach to resettlement and rehabilitation.	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _23

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: S. Y. B. Sc. SEMESTER: IV MONTH: JAN-MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to :

1.Develop a basic understanding about issues related to Human Rights of weaker sections and ecology.

2. Appreciate the importance of developing a scientific temper towards technology and its use

in everyday life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course, Module-I, Significant, contemporary	A. Rights of Consumers-Violations of consumer rights and important provisions of the Consumer Protection Act, 2016; Other important laws to protect consumers; Consumer courts and consumer movements.	06	1. Foundation course - II: Mannan Prakashan.	Inkredible board / PPT

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Rights of Citizens	B. Right to Information- Genesis and relation with transparency and accountability; important provisions of the Right to Information Act, 2005; some success stories.			
	C. Protection of Citizens'/Public Interest-Public Interest Litigation, need and procedure tofile a PIL; some landmark cases.	03		
	D. Citizens' Charters, Public Service Guarantee Acts.	03		
Foundation Course, Module-II, Approaches to understanding Ecology	A. Understanding approaches to ecology- Anthropocentrism, Biocentrism and Eco centrism, Ecofeminism and Deep Ecology. B. Environmental Principles-1: the sustainability principle; the polluter pays principle, the precautionary principle.	07	1. Foundation course - II: Mannan Prakashan.	Inkredible board / PPT
	C. Environmental Principles-2: the equity principle; human rights principles; the participation principle.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _23

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anushita A. Moger DEPARTMENT:Physics CLASS:FYBSc SEMESTER:1

MONTH: October-December ACADEMIC YEAR:2020-21

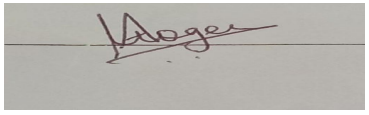
LEARNING OBJECTIVE/S:
The learners will be able to :

1) understand nuclear properties and nuclear behavior.

2)demonstrate quantitative problem-solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Phy-2(unit-2) Nuclear physics	Chp-1 Interaction between particles and matter, I.P.counter and GM counter.	07		Powerpoint presentation
	Chp-2 Types of reaction and conservation laws, concept of compound and direct reaction, problems based on nuclear fusion and fission.	08		Powerpoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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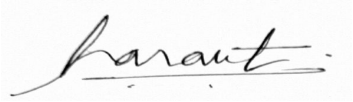

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NAME: Anushita A. Moger. DEPARTMENT: Physics CLASS: S.Y.B.Sc. SEMESTER:3

MONTH: September-December. ACADEMICYEAR:2020-21

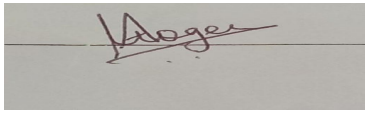
LEARNINGOBJECTIVE/S:
The learners will be able to:

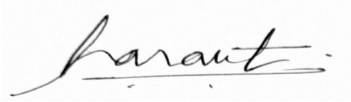
1) understand basic concept of oscillator and be able to perform calculations using them.

2)to demonstrate quantitative problem solving skills in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
Phy-2(unit-3)Applied electronics	Chp-1.Oscillators, requirements for Oscillations,phase shift oscillator,wein bridge oscillator,colpitts oscillator and Hartley oscillator	07		Powerpoint presentation
	Chp-2Opamp-introduction and schematic symbol and ac analysis ,bandwidth of an opamp ,slew rate , frequency response and negative feedback of an opamp, inverting and non inverting amplifier,voltage follower ,summing amplifier and it's applications, integrator and differentiator	08		Powerpoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15





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NAMEOFTHESTAFF: Anushita A. Moger. DEPARTMENT: Physics CLASS: T.Y.B.Sc. SEMESTER:5

MONTH: September-December ACADEMICYEAR:2020-21

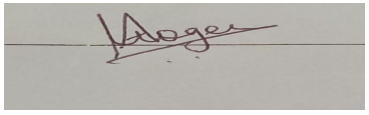
LEARNING OBJECTIVE/S:
The learners will be able to:

1)understand the laws of electrodynamics & be able to perform calculations using them.

2)Understand Maxwell's electrodynamics & Its relation to relativity.

3)Understand how optical laws can be derived from electromagnetic principles.

4)Develop quantitative problem-solving skills.



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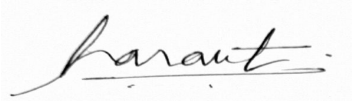

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PAPER, UNIT,TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
Phy-4.(unit -3) electrodynamics	Magnetism and varying fields-diamagnet,paramagnet and ferromagnetism, magnetisation,bound currents and their physical interpretation,ampere's law in magnetised material,deceptive equation in matter and boundary conditions, electrodynamics before Maxwell,Maxwell's correction to ampere's law,Maxwell equation in matter and it's boundary conditions and magnetic charge	15		Powerpoint presentation
Phy-4(unit-4) electrodynamics	Electromagnetic waves, continuity equation,poynting theorem,Newton's third law,wave equation for electric and magnetic fields, monochromatic plane waves, energy and momentum in electromagnetic waves, propagation in linear media,reflection and transmission of electromagnetic waves at normal incidence.	15		Powerpoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: November-February

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the fundamental principles and concepts governing alpha decay.

2. Understand the concepts of spectrum of alpha particles, alpha decay paradox penetration

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III(Nuclear Physics), Unit-I, Alpha Decay	Velocity ,energy and absorption of alpha particles :Range, ionization and stopping power Nuclear energy levels .Range of alpha particles, alpha particle spectrum .fine structure ,long range alpha particles, alpha decay paradox penetration (Gamow's theory of alpha decay and Geiger-Nuttal law) Problems based on alpha decay	15	Sheth Publication's T.Y.Bsc. Nuclear Physics S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: November-February

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concept of beta decay and beta spectrum .

2. Understand the concepts of neutrino ,Pauli's Neutrino hypothesis and energetics of beta decay .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III (Nuclear Physics) Unit-II, Beta Decay	Introduction, Velocity and energy of beta particles, energy levels and decay schemes, Continuous beta ray spectrum-Difficulties encountered to understand it, Pauli's neutrino hypothesis, Detection of neutrino, Energetics of beta -decay. Problems based on above topics	15	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: December-February

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of asymmetric fission -Mass yield emission of delayed electrons.

2. Understand the concepts of Nuclear fission and fusion.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III (Nuclear Physics), Unit-III (Nuclear Energy & Particle accelerators) 1.Nuclear Energy 2.Particle Accelerators	1.Introduction,Asymmetric fission-Mass yield Emission of delayed electrons ,Nuclear release in fission ,Nature of fission fragments ,Energy released in the fission chain reaction ,Neutron cycle in a thermal nuclear reactors ,nuclear power and breeder reactors ,Natural Fusion Possibility of controlled fusion. Problem based on the above topics	09	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

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	2.Van de Graff Generators, Cyclotron, Synchrotron, Betatron and Idea of large Hadron Collider	06	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: December -February

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of Meson theory of Nuclear force

2. Understand the concepts of elementary particles.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III(Nuclear Physics), Unit-IV (Nuclear Force and elementary particle)	1. Introduction, Deuteron problems, Meson theory of Nuclear force -A qualitative discussion	05	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

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1.Nuclear Force 2.Elementary particle	2.Introduction,Claasifications of elementary particles ,Particle interactions ,conservation laws ,particles and antiparticles ,photons ,Mesons ,Quark model	10	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi A. Raut. DEPARTMENT:Physics CLASS: _T. Y. B. Sc. __ SEMESTER: V MONTH: June-oct.
ACADEMIC YEAR: 2020-2021

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-III, Solid State Physics	Band Theory of Solids and Conduction in Semiconductors 1. Band theory of solids, The Kronig- Penney model (Omit eq. 6.184 to 6.188),Brillouin zones, Number of wave functions in a band, Motion of electrons in a one-dimensional periodic potential, Distinction between metals, insulators and intrinsic semiconductors.	07	1.Sheth Publications, 2.MH : Electronic Devices and Circuits :Millman, Halkias & Satyabrata Jit. (3rd Ed.) Tata McGraw Hill.	Chack & board Method(Jamboard) Google classroom, google meet, pdf
	2. Electrons and Holes in an Intrinsic Semiconductor, Conductivity of a Semiconductor, Carrier concentrations in an intrinsic semiconductor, Donor and Acceptor impurities, Charge densities in a semiconductor, Fermi level in extrinsic	08		

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	semiconductors, Diffusion, Carrier lifetime, The continuity equation, Hall Effect.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-IV, Solid State Physics	Diode, magnetism and superconductivity 1.Semiconductor-diode Characteristics: Qualitative theory of the p-n junction, The p-n junction as a diode, Band structure of an open-circuit p-n junction, The current components in a p-n junction diode, Quantitative theory of p-n diode currents, The Volt-Ampere characteristics, The temperature dependence of p-n characteristics, Diode resistance.	08	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chack & board Method(Jamboard app) Google classroom, google meet, pdf

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	2. Superconductivity: Experimental Survey, Occurrence of Superconductivity, destruction of superconductivity by magnetic field, The Meissner effect, London equation, BCS theory of superconductivity, Type I and Type II Superconductors, Vortex state. dependence of p-n characteristics, Diode resistance.	07	3. MH : Electronic Devices and Circuits :Millman, Halkias & Satyabrata Jit. (3rd Ed.) Tata McGraw Hill.	
			4. Solid State Physics : A. J. Dekker, Prentice Hall	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: V MONTH: August-September

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Solve the Schrodinger's equation for H-atom
2. Understand the concept of different quantum numbers
3. Apply quantum mechanics in atomic Physics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III (Atomic and molecular Physics), Unit-I, 1. Hydrogen Atom 2. Electron Spin	Schrodinger's Equation for H-atom, Separation of Variables,	07	Sheth Publication's T.Y.Bsc. Atomic & Molecular Physics	Lecture Method /Chalk and Board
	Quantum Numbers: total quantum number, orbital quantum number, Magnetic quantum Number, angular momentum	04	Sheth Publication's T.Y.Bsc. Atomic & Molecular Physics	Lecture Method /Chalk and Board
	Electron Probability Density	01	Arthur Beiser, Perspective of Modern Physics	Lecture Method /Chalk and Board

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	The Stern-Gerlach Experiment, Pauli's Exclusion Principle	02	Arthur Beiser, Perspective of Modern Physics	Lecture Method /Chalk and Board
	Symmetric and antisymmetric wave Functions	01	Sheth Publication T.Y.Bsc. Atomic & Molecular Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: V MONTH: November-December
ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concept of signal conditioning, devices used and their operations.
2. Get acquainted with the measuring instruments used in the laboratory.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1.Half wave precision rectifier, Active peak detector ,active positive clamper , 2.Active positive and negative clippers	02	Electronic Instrumentation-I Sheth	Lecture Method /Chalk and Board

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Paper -V (E-I) Unit-II, 1.Precision rectifier, detector, Active positive clamper 2.Active and negative clippers 3.Microphones 4.Loudspekers 5.Switching Regulators 6. C.R.O. 7.DMM			Publication	
	3.Characteristics, types ,carbon microphones and dynamic type microphone (Principle ,construction & working)	04	Electronic Instrumentation-I Sheth Publication	Lecture Method /Chalk and Board
	4.Characteristics,Dynamic speaker ,multi -way speaker system .5.basic monolithic switching regulators (Buck ,Boost & Buck-boost)	04	Electronic Instrumentation-I Sheth Publication	Lecture Method /Chalk and Board
	6. C.R.O. (Block diagram), Front Panels, Dual Trace Mode, Probes: 1:1&10:1.	04	Electronic Instrumentation - H.S.Kalsi	Lecture Method /Chalk and Board
	7. 3 and half digit, resolution and sensitivity, general specification.	01	Electronic Instrumentation - H.S.Kalsi	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: III MONTH: September-October

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of energy band gap of different materials.

2. Understand the concepts of electrical, optical & magnetic properties.

3. Students will appreciate the role of Physics in interdisciplinary areas related to materials and acoustics etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III (Applied Physics -I), Unit-III (Properties of Material), 1.Electrical Properties 2.Optical	1. Energy Band diagram for Materials -conductors, semiconductors & insulators, Effect of Temperature on conductivity.	03	Sheth Publication S.Y.B.Sc. Phy-III Textbook	Lecture Method /Chalk and Board
	2.Reflection, refraction, absorption & transmission of electromagnetic radiation in solids	04	Sheth Publication S.Y.B.Sc. Phy-III Textbook	Lecture Method /Chalk and Board
	3.Origin of Magnetism in solids, Types of magnetic order, magnetic hysteresis	06	Sheth Publication S.Y.B.Sc. Phy-III Textbook	Lecture Method /Chalk and Board

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Properties 3.Magnetic Properties 4.Applications	4.Dielectric materials: Piezoelectric, ferroelectric, and pyro electric materials	02	Sheth Publication S.Y.B.Sc. Phy-III Textbook	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc. SEMESTER: III MONTH: November –December

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the basic concepts of mathematical physics and their applications in physical situations.
2. Understand the basic laws of electrodynamics and be able to perform calculations using them.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II (Vector calculus, Analog	1.Fundamental Theorems of Calculus, Fundamental Theorems of gradient, Fundamental Theorems of Divergence, Fundamental Theorems of Curl, Problems based on these theorems	08	Introduction to Electrodynamics by D.J. Griffith	

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Electronics), Unit-I 1.Line, Surface and Volume Integrals 2. Curvilinear co-ordinate	2.Cylindrical Coordinates, Spherical Coordinates Problems based on these topics	07	Sheth Publication's S.Y.B.Sc Textbook	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: F.Y.B.Sc SEMESTER: I MONTH: August -September

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of energy band gaps of different materials.

2. Understand the concepts of electrical, optical & magnetic properties.

3. Students will appreciate the role of Physics in interdisciplinary areas related to materials and acoustics etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -II, Unit-III 1.Origin of quantum Mechanics 2.Wave Nature of Particle 3. Particle Nature of	1.Black Body (Definition), Black body Spectrum, Wein's Displacement law, Rayleigh -Jeans Formula	03	Sheth Publication F.Y.B.Sc. Textbook	Lecture Method /Chalk and Board
	2. Production of X-ray, Properties of X-ray, Davisson - Germer Experiment,G.P.Thompson experiment, Diffraction of X-rays, Bragg's law, Application of X-rays	05	Sheth Publication F.Y.B.Sc. Textbook	Lecture Method /Chalk and Board
	3.Compton effect, Pair production, Gravitational -Red shift	05	Arthur Beiser, Perspective of Modern Physics	Lecture Method /Chalk and Board

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Wave	3.Heisenberg's Uncertainty Principle ,Problems on covered topics	02	Arthur Beiser, Perspective of Modern Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: III MONTH: September-October

ACADEMIC YEAR: 2020 -21 Subjects: Foundation Course-III

LEARNING OBJECTIVE/S:

The learners will be able to: 1. Appreciate the importance of developing a scientific temper towards technology and its use in everyday life.

2. Understand the values of scientific attitude towards the Indian society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-III (Science & Technology-I)	1.the ancient culture, the classical era, the middle ages, the Renaissance, the age of Reason and Enlightenment	03	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board
1.Devepolment of science	2.Principle and characteristics, science as empirical, practical theoretical, validated knowledge.	02	Foundation Course by manan Prakashan	Discussion method

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2.Nature of Science 3.Science and superstition 4.Science in everyday life	3.role of science exploding myths, blind beliefs and prejudice ,science temper as a fundamental duty of the Indian society	03	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: III MONTH: October-November

ACADEMIC YEAR: 2020-21 Subject: Foundation Course-III

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Develop a basic understanding of the importance of communication.

2) Gain an overview of significant skills required to address competition in career choice.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-IV (Soft skill for effective Interpersonal communication) 1.effective listening 2.Formal and Informal Communication 3.Leadership Skills	1.Importance and features of listening, Verbal and non-verbal communication, Barrier to effective communication	04	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board
	2.formal and informal communication: purpose and type, writing formal applications, SOP and resume ,Group discussion, Interviews and presentations	04	Foundation Course by manan Prakashan	Discussion method
	3.Leadership skills and self-improved -Characteristics of leadership ,styles of leadership and team building	03	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: December -January

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concept of OOP & POP.

2. Understand the concept of C++ and different concepts available in C++ .

3. Apply different concepts of C++ to write different program.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -VI (Electronic Instrumentation -II) Unit – IV Basic concepts of object oriented programming with C++ 1. Basics of OOP with C++ 2. Token &	Procedure oriented programming, OOP , basic concepts of OOP, objects Benefits of OOP ,application of OOP ,programming language of C++ ,simple C++ program ,the cout & cin cascading of I/O operators	03	C++ by Balguruswami	PowerPoint presentation
	Tokens ,variables& constants ,keywords ,basic data types ,power of constants ,operators, binary operators ,arithmetic operators ,logical operators, assignment operator ,comma operator ,typecast operator ,operator precedence ,formatting of output	04	C++ by Balguruswami E-I-II textbook by sheth publication	PowerPoint presentation
	Simple if statement ,if -else statement ,nested if -else ,the switch statement ,the while ,Do-while ,for loop ,programs	06	C++ by Balguruswami	PowerPoint presentation

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expressions in C++ 3. Control structures & functions	Functions ,types of function ,structure of C++ function function prototyping ,function calling ,inline function ,default argument ,const argument ,function overloading ,mathematical library function	02	C++ by Balguruswami	PowerPoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: February -March

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of stack & subroutine.

2. Understands the different instructions used for stack & subroutine

3. Understand the concepts of mode 0.mode 1& mode 2 in 8255 & also BSR mode

4. Apply the concepts of different modes to program 8255.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -V (E-II) Unit-II, Advanced 8085 Programming & 8255	Introduction to advanced instructions & applications Stack & subroutine	05	Electronic Instrumentation-II Sheth Publication	Lecture Method /PPT
	The 8255 programmable peripheral interface: block diagram of 8255 ,mode 0-simple input/output mode ,BSR	07	Electronic Instrumentation-II	Lecture Method /PPT

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(PPI) 1. Introduction to advanced instructions & applications 2. Stack & subroutines 3. The 8255 programmable Peripheral Interface	mode		Sheth Publication	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: January -February

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of K-map & Boolean expressions.

2. Understand the concepts of decoder, encoder ad differentiate between them.

3. Understand the concept of multiplexer & demultiplexer in combinational logic design

4. Apply k-map to build different circuit for SOP & POS

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -V (E-II) Unit-I, Digital Electronics 1. Combinational logic design 2. Design & implementation of	Introduction ,Boolean identities , SOP & POS ,k-map (2,3 & 4 variable)	05	Electronic Instrumentation-II Sheth Publication	Lecture Method /PPT
	Decoder ,encoder ,multiplexer ,demultiplexers ,use of MUX & DEMUX in combinational logic design	07	Electronic Instrumentation-II Sheth Publication	Lecture Method /PPT
	Code converters (based on -binary ,BCD ,Gray & Excess -3 codes),Tri-state logic ,buffers ,D latch	03	Electronic Instrumentation-II Sheth Publication	Lecture Method /PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: IV MONTH: December-March
ACADEMIC YEAR: 2020-21
LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of Potential barrier penetration and tunnelling effect.
2. Understand the concepts of Harmonic oscillator.
3. Develop the problem solving skill.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -II (Quantum Mechanics), Unit-III(Application of Schrodinger's steady state equation-II) 1.Potentail barrier 2.Theory of alpha particle 3. Harmonic Oscillator	1.Potentail Barrier penetration and tunnelling effect	04	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board
	2.Theory of alpha particle decay from radioactive nucleus	02	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board
	3. Harmonic Oscillator (1-D). Correspondence theory	04	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board
	4.Problems on above topics	04	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: F.Y.B.Sc SEMESTER: II MONTH: December-March
ACADEMIC YEAR: 2020-21
LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the basic mathematical concepts.
2. Apply the differential equations in real world problems of physics.
3. Solve the problem related to differential equations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -I (Applied Physics -I), Unit-II 1.Differental Equation 2.Transient Response of a circuits: LR, CR &LCR growth and decay of current	1.Introduction, Ordinary Differential equation, first order homogeneous and non-homogeneous equation with variable coefficient, Exact differentials,	03	Mathematical Physics H.K. Das	Lecture Method /Chalk and Board
	1.Second order homogeneous equations with constant coefficients, problems depicting physical situations like LC &LR circuits, SHMs	04	Mathematical Physics H.K. Das Himalya Publication Textbook of F.Y.B.Sc.	Lecture Method /Chalk and Board
	2.Transient response of circuits: LR -Growth and decay of current, Transient response of circuits: CR -Growth and decay of current. Problems on the above topic	06	Sheth Publication's Physics -I (Textbook)	Lecture Method /Chalk and Board
	2. Transient response of circuits: LCR -Growth and decay of current. Problems on the above topic	02	Sheth Publication's Physics -I (Textbook)	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: IV MONTH: December -February
ACADEMIC YEAR: 2020-21 Subject: Foundation Course-IV
LEARNING OBJECTIVE/S:
The learners will be able to: 1. Develop a basic understanding of importance of communication.
2. Gain an overview of significant skills required to address competition in career choice.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-III (Science and Technology-II) A. Some significance modern technologies, features& applications B. Issue of Control access and misuse of Technology	A.1.Laser Technology: Use of Laser remote sensing, GIS/GPS mapping, medical use, 2.Satellite Technology : various uses in satellite navigation system ,GPS and imprecise climate &weather change	04	Foundation Course by manan Prakashan	Discussion method
	3. ICT: convergence of various technologies like satellite, computer sand digitalin the information revolution of today's society,4. Biotechnology and Genetics Engg: applied biology & uses in medicine, agriculture, genetically modified plant, animal & human life.	03	Foundation Course by manan Prakashan	Discussion method
	Nanotechnology: definition, control &application B. Issues of control, access and misuse of technology	04	Foundation Course by manan Prakashan	Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: IV MONTH: February-March
ACADEMIC YEAR: 2020-21 Subject: Foundation Course-IV
LEARNING OBJECTIVE/S:
The learners will be able to: 1. Develop a basic understanding of importance of communication.
2. Gain an overview of significant skills required to address competition in career choice.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-IV (Introduction to Competitive Examinations) A. Basic Information on competitive examinations B. Soft skills required for competitive Examinations	1.Exams conducted for entry into professional courses - GRE,GMAT,CAT&SAT	02	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board
	2. Exams conducted for entry into jobs by Union Public Service Commission: S.S.C, State Public Service Commissions, Banking & Insurance Sector and NET/SET for teaching Profession.	02	Foundation Course by manan Prakashan	Discussion method
	B.1.Information on areas tested : Ability ,Data interpretations ,Verbal Ability & logical Reasoning ,creativity and Lateral Thinking 2. Motivation: Concepts ,theories and types of motivation 3.Goal setting :Types of goals ,SMART goals ,Stephan Covey's concepts of human endowment . 4.Time management :Effective strategies for time management 5.Writing skills ,paragraph writing, report writing ,filing and application under RTI act ,Consumer grievance Letter .	07	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut __ DEPARTMENT: __Physics _____ CLASS: _T. Y. B. Sc. __ SEMESTER: _____V___

MONTH: ___June-September _____ ACADEMIC YEAR: _____2020-2021_____

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Understand the working of Transducers, Sensors and Optoelectronics devices.

2. Understand the basic concept of Modern Techniques and Appliances.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-V, U-I, Electronics Instrumentation (Applied Physics)	1. Transducers: Definition, Classification, Selection of transducer. 2. Electrical transducers: Thermistor, Thermocouple, Pressure Transducer: Strain gauges (wire, foil, & semiconductor), Displacement transducer: LVDT, Peizo-electric Transducer.	04	1. Sheth Publications. 2.Electronic Instrumentation – H S Kalsi, Tata McGraw-Hill Publishing Company	Lecture Method /Chalk & Board
	3. Chemical sensors: PH sensor, Gas sensor (Fundamental aspects), Humidity sensor (Resistive). 4. Electronic Weighing Systems: Operating principle, Blockdiagram,features	05		

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	5. Optoelectronic Devices: LDR, LED (Construction, Working & Applications), Multicolour LED, Seven Segment Display, Liquid Crystal Display (LCD), Photodiode (construction, Characteristics & applications), Phototransistor	06	Limited, New Delhi.	
P-V, U-IV, Electronics Instrumentation (Applied Physics)	1. Printed Circuit Board: Idea of PCB, advantages, copper clad, Etching processes, Principle of Photolithography (For PCB).	06	1. Sheth Publications. 2. . PCB design basics, Mahmoud Wahby, EDN Networks, Nov 2013. 3.Medical instrumentation Application and design- J. C. Wobster	Lecture Method /Chalk & Board
	2. Microwave Oven: Operating principle, block diagram, features.	03		
	3. Medical instruments: Bio-Potential, Types of electrodes, ECG, EEG, EMG, CT Scan and MRI (principle, block diagram and features), Ultrasonography: working principle	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _**LAXMI K. PARATE**_____DEPARTMENT: _____PHYSICS____

_ CLASS: T.Y.B.Sc_____SEMESTER: _V_____MONTH: SEPTEMBER toDECEMBER_____ ACADEMIC YEAR:**2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to : The students are expected to be able to solve simple problems in probability, understand the concept of independent events and work with standard continuous distributions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I MATHEMATICAL PHYSICS UNIT-I PROBABILITY	sample space, events, independent events, conditional probability, probability theorems, methods of counting (derivation of formulae not expected), random variables, continuous distributions (omit joint distributions), binomial distribution, the normal distribution, the Poisson distribution.	15	Mathematical Methods in the Physical sciences: Mary L. Boas Wiley	JAMBOARD/PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: T.Y.B.Sc_____SEMESTER: _V_____MONTH: _ SEPTEMBER TO DECEMBER_____ ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to : The students will have idea of the functions of complex variables; solve non homogeneous differential equations and partial differential equations using simple methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I MATHEMATICAL PHYSICS UNIT-II COMPLEX NO. DIFFERENTIAL EQUATION	Functions of complex variables: The exponential and trigonometric functions, hyperbolic functions, logarithms, complex roots and powers, inverse trigonometric and hyperbolic functions, some applications.	7	Mathematical Methods in the Physical sciences: Mary L. Boas Wiley	AMBOARD, PPT
	Second-order nonhomogeneous equations with constant coefficients, partial differential equations, some important partial differential equations in physics, method of separation of variables.	8	Mathematical Physics: H. K. Das,	JAMBOARD , PPT

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _**LAXMI K. PARATE**_____DEPARTMENT: _____PHYSICS_____

CLASS: S.Y.B.Sc_____SEMESTER: _III_____MONTH: -SEPTEMBER TO DECEMBER_____ ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to : _*_ Comprehend the basic concepts of thermodynamics & its applications in physical situation.

_ * Demonstrate tentative problem solving skills in all above areas.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-II THERMODYNAMICS	Heat engine, Carnot's cycle: its efficiency,NUMERICALS	3	Heat thermodynamics and Statistical Physics, Brijlal, N.Subramanyam, P. S. Hemne, S. Chand,	JAMBOARD , PPT
	Second law of thermodynamics, Statements, Equivalence of Kelvin and Plank statement, Carnot's theorem, Reversible and irreversible process, Absolute scale of temperature.	5	Heat thermodynamics and Statistical Physics, Brijlal, N.Subramanyam, P. S. Hemne, S. Chand,	JAMBOARD , PPT
	Clausius theorem, Entropy, Entropy of a cyclic process, Reversible process, Entropy change, Reversible heat transfer,	7	Heat thermodynamics and Statistical Physics, Brijlal,	JAMBOARD , PPT

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	Principle of increase in entropy, generalized form of first and second law, entropy change of an ideal gas, entropy of steam, entropy and unavailable energy, entropy and disorder, absolute entropy.		N.Subramanyam, P. S. Hemne, S. Chand,	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: F.Y.B.Sc_____SEMESTER: _I_____MONTH: __OCTOBER TO DECEMBER_____ ACADEMIC YEAR: **2020-21**_____

LEARNING OBJECTIVE/S:
The learners will be able to : Apply the laws of thermodynamics to formulate the relations necessary to analyze a thermodynamic process.

Demonstrate quantitative problem solving skills in all the topics covered

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-III THERMODYNAMICS	Behavior of real gases and real gas equation, Van der Waal equation, relation between vander waals coefficient and critical constant, Boyles Temperature,Numericals	6	Brijlal, Subramanyam and Hemne, Heat Thermodynamics and Statistical Physics,	JAMBOARD , PPT
	Thermodynamic Systems, Zeroth law of thermodynamics, Concept of Heat, The first law, Non Adiabatic process and Heat as a path function, Internal energy, , Heat Capacity and specific heat, Applications of first law to simple processes, general relations from the first law, Indicator diagrams, Work done during isothermal and adiabatic processes, Worked examples, Problems.	9	Brijlal, Subramanyam and Hemne, Heat Thermodynamics and Statistical Physics,	JAMBOARD , PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: T.Y.B.Sc_____SEMESTER: _VI_____MONTH: _JANUARY TO APRIL _____ ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the kinds of motions that can occur under a central potential and their applications to planetary orbits. The students should also appreciate the effect of moving coordinate system, rectilinear as well as rotating.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-I CENTRAL FORCE	Motion under a central force, the central force inversely proportional to the square of the distance, Elliptic orbits, The Kepler problem.	10	Classical Mechanics: Herbert Goldstein	JAMBOARD , PPT
	Moving origin of coordinates, Rotating coordinate systems, Laws of motion on the rotating earth, The Foucault pendulum, Larmor's theorem	5	Classical Mechanics: Herbert Goldstein	JAMBOARD , PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: T.Y.B.Sc_____SEMESTER: _VI_____MONTH: JANUARY TO APRIL __ _____ ACADEMIC YEAR: **2020-21**_____

LEARNING OBJECTIVE/S:
The learners will be able to : Learn the concepts needed for the important formalism of Lagrange's equations and derive the equations using D'Alembert's principle. They should also be able to solve simple examples using this formalism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-II LAGRANGE'S EQUATIONS	D'Alembert's principle, Constraints, Examples of holonomic constraints, examples of nonholonomic constraints, degrees of freedom and generalized coordinates, virtual displacement, virtual work, D'Alembert's principle, illustrative problems.	10	Classical Mechanics: J. C. Upadhyaya	JAMBOARD , PPT
	Lagrange's equations (using D'Alembert's principle), properties of Lagrange's equations, illustrative problems, canonical momentum, cyclic or ignorable coordinates	5		JAMBOARD , PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: S.Y.B.Sc_____SEMESTER: _IV_____MONTH: _ JANUARY TO APRIL _ _____ ACADEMIC YEAR: **2020-21**_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of Basics of communication, Concept of modulation and its various types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-III UNIT-III COMMUNICATION SYSTEM,RADIATION PHYSICS	Block diagram of communication system, types of communication system: simplex, duplex, analog and digital communication, Electromagnetic spectrum, base band and broad band communication. Noise concept and types, signal to noise ratio, noise figure, noise temperature	4	Electronics Communication Systems by Kennedy	JAMBOARD , PPT
	Need of modulation, concept of modulation, AM waveform, mathematical expression , concept of sideband, demodulation principles. TRF and superheterodyne receiver	3	Electronics Communication Systems by Kennedy	JAMBOARD , PPT
	FM modulation: definition, mathematical representation, frequency spectrum, bandwidth and modulation index. 4.Concept of ASK, PSK, FSK, PAM, PWM, PPM, PCM.	4	Electronics Communication	JAMBOARD , PPT

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			Systems by Kennedy	
	radioactivity, Alpha, beta and gamma radiation, high energy electron radiation and X-rays, Radiation units, Sources of radiation Radiation protection Radiation Detectors and Beam Calibration Types of radiation detectors, Ionization detectors, scintillation detectors, particle detectors, TLD, thin film detectors, Radiation field analyzer, Basic principles of beam profile	3	Electronics Communication Systems by Kennedy	JAMBOARD , PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: F.Y.B.Sc_____SEMESTER: _II_____MONTH: ___ JANUARY TO APRIL _____ ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S: The learners will be able to : Understand the basic Electronics concepts and their applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-II UNIT-I A.C.CIRCUIT	AC circuit containing pure R, pure L and pure C, representation of sinusoids by complex numbers, Series L-R, C-R and LCR circuits. Resonance in LCR circuit (both series and parallel), Power in ac circuit. Q-factor.	9	PRINCIPLE OF ELECTRONICS By V K Mehta and R Mehta	JAMBOARD , PPT
	AC-bridges: General AC bridge, Maxwell, de-Sauty, Wien Bridge , Hay bridge,Numericals	6	PRINCIPLE OF ELECTRONICS By V K Mehta and R Mehta	JAMBOARD , PPT

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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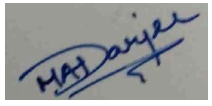
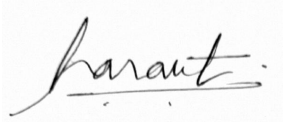
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _F. Y. B. Sc. ___ SEMESTER: I MONTH: August-Nov. ACADEMIC YEAR: 2020-21

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -1 U-1 Overview of Indian Society	Understand the multi-cultural diversity of Indian society through its demographic composition: population distribution according to religion, caste, and gender; Appreciate the concept of linguistic diversity in relation to the Indian situation; Understand regional variations according to rural, urban and tribal characteristics; Understanding the concept of diversity as difference.	05	Manan prakashan	Chalk & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _05





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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -1 U-II Concept of Disparity- 1:	Understand the concept of disparity as arising out of stratification and inequality; Explore the disparities arising out of gender with special reference to violence against women, female foeticide (declining sex ratio), and portrayal of women in media; Appreciate the inequalities faced by people with disabilities and understand the issues of people with physical and mental disabilities.	10	Manan prakashan	Chalk & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10

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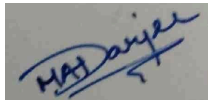
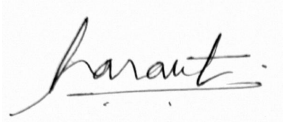
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -1 U-III Concept of Disparity- 2	Examine inequalities manifested due to the caste system and inter-group conflicts arising thereof; Understand inter-group conflicts arising out of communalism; Examine the causes and effects of conflicts arising out of regionalism and linguistic differences.	10	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	
F C -1 U-IV The Indian Constitution:	The Indian Constitution: Philosophy of the Constitution as set out in the Preamble;The structure of the Constitution-the Preamble, Main Body and Schedules;Fundamental Duties of	10	Manan prakashan	





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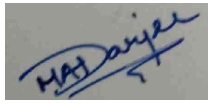
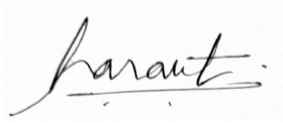
	the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	
F C -1 U-V Signigicant aspects of Political Parties	The party system in Indian politics; Local self-government in urban and rural areas; the 73rd and 74th Amendments and their implications for inclusive politics;Role and significance of women in politics.	10	Manan prakashan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10





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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	
F C -1 U-VI Growing Social Problems in India	a) Substance abuse- impact on youth & challenges for the future b) HIV/AIDS- awareness, prevention, treatment and services c) Problems of the elderly- causes, implications and response d) Issue of child labour- magnitude, causes, effects and response e) Child abuse- effects and ways to prevent f) Trafficking of women- causes, effects and response	15	Manan prakashan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15

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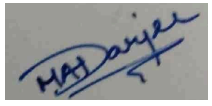
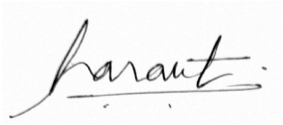
NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: __F. Y. B. Sc. ___ SEMESTER: II MONTH: August-Nov.

ACADEMIC YEAR: 2020-21

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -2 U-I Globalisation and Indian Society:	(Understanding the concepts of liberalization, privatization and globalization; Growth of information technology and communication and its impact manifested in everyday life; Impact of globalization on industry: changes in employment and increasing migration; Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides.	07	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _07





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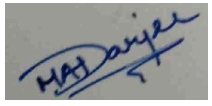
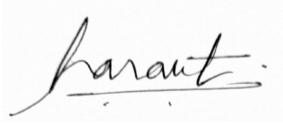
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -2 U-II Human Rights	Concept of Human Rights; origin and evolution of the concept; The Universal Declaration of Human Rights;Human Rights constituents with special reference to Fundamental Rights stated in the Constitution;.	10	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10





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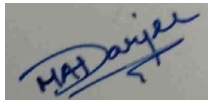
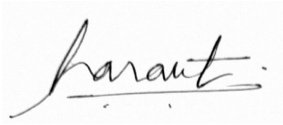
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -2 U-III Ecology	Importance of Environment Studies in the current developmental context; Understanding concepts of Environment, Ecology and their interconnectedness; Environment as natural capital and connection to quality of human life; Environmental Degradation- causes and impact on human life; Sustainable development- concept and components; poverty and environment	10	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **T.Y.B.Sc.**

SEMESTER: **V** MONTH: **September-December** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Apply theory of quantum physics in atomic physics.
- Understand importance of electron spins, symmetric & antisymmetric wave functions & vector atom model.
- Learn the Effect of magnetic field on atoms & its application.
- Learn molecular physics & its application.
- This course will be useful to get an insight into spectroscopy.
- Get the insight of the modern medical instruments in principle, which are used in day to day life.
- From this course, the students are expected to learn some mathematical techniques required to understand the physical phenomena at the undergraduate level and get exposure to important ideas of statistical mechanics.
- The units on statistical mechanics would introduce the students to the concept of microstates, Boltzmann distribution and statistical origins of entropy.
- It is also expected that the student will understand the difference between different statistics, classical as well as quantum.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III, Unit -3 **Atomic & molecular Physics**	1. Molecular spectra (Diatomic Molecules): Rotational energy levels, Rotational spectra, Vibrational energy levels, Vibrational-Rotational spectra. Electronic Spectra of Diatomic molecules: The	15	B: Perspectives of Modern Physics: Arthur Beiser Page 8 of 18 McGraw Hill.	Power point presentation, Jamboard, PDF ,

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	Born-Oppenheimer approximation, Intensity of vibrational-electronic spectra: The Franck-Condon principle. 2. Infrared spectrometer & Microwave spectrometer			
Paper-III, Unit -4 **Atomic & molecular Physics**	1. Raman Effect: Quantum Theory of Raman Effect, Pure Rotational Raman spectra: Linear molecules, symmetric top molecules, Asymmetric top molecules, Vibrational Raman spectra: Raman activity of vibrations, Experimental set up of Raman Effect. 2. Electron spin resonance: Introduction, Principle of ESR, ESR spectrometer. 3. Nuclear magnetic resonance: Introduction, principle and NMR instrumentation.	15	BM: Fundamentals of Molecular Spectroscopy: C. N. Banwell & E. M. McCash (TMH).(4th Ed.) . GA: Molecular structure and spectroscopy : G Aruldhas (2nd Ed) PHI learning Pvt Ltd.	Power point presentation, Jamboard, PDF
Paper-I, Unit -3 **Mathematical, Thermal and Statistical Physics**	1. Microstates and configurations, derivation of Boltzmann distribution, dominance of Boltzmann distribution, physical meaning of the Boltzmann distribution law. 2. Definition of the canonical ensemble, relating Q to q for an ideal gas. 3. Translational partition function, equipartition theorem, energy, entropy.	15	Thermodynamics, Statistical Thermodynamics and Kinetics: T. Engel and P. Reid (Pearson).	Power point presentation, Jamboard, PDF
Paper-I, Unit - 4 **Mathematical, Thermal and**	1. The probability of a distribution, The most probable distribution, Maxwell Boltzmann statistics, Molecular speeds.	15	Perspectives of Modern Physics: Arthur Beiser,	Power point presentation, Jamboard, PDF

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Statistical Physics	2. Bose-Einstein statistics, Black-body radiation, The Rayleigh-Jeans formula. 3. The Planck radiation formula, Fermi-Dirac statistics, Comparison of results.		(Mc Graw Hill International).	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **S.Y.B.Sc.**

SEMESTER: **III** MONTH: **September-December** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Comprehend the basic concepts of thermodynamics & its applications in physical situation.
- Learn about situations in low temperature.
- Demonstrate tentative problem solving skills in all above areas.
- Students will be exposed to contextual real life situations.
- Students will appreciate the role of Physics in 'interdisciplinary areas related to Acoustics.
- The learner will understand the scope of the subject in Industry & Research.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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		ALLOTED		
Paper-1 Unit-3 Mechanics and thermodynamics	1. Third law of thermodynamics, Nernst heat theorem, Consequences of the third law, Maxwell's thermodynamic relations, Clausius – Clapeyron equation, Thermal Expansion. 2. Steam engine, Rankine cycle, Otto engine, Efficiency of Otto cycle, Diesel cycle, Efficiency of Diesel cycle, Otto and diesel comparison 3. Low temp Physics: Different methods of liquefaction of gases, methods of freezing, Cooling by evaporation, cooling by adiabatic expansion Joule - Thompson effect, JT effect of Vander Waal's gas, Liquefaction of helium, properties and uses of liquid Helium	15	Thermal Physics, AB Gupta and H. Roy, Book and Allied (P) Ltd, Reprint 2008, 2009. Heat, thermodynamics and Statistical Physics, Brijlal, N.Subramanyam, P. S. Hemne, S. Chand, edition 2007.	Power point presentation, Jamboard, PDF
Paper-3 Applied Physics – I Unit-1 Acoustics , Lasers and fibre optics	1. Acoustics of Buildings: Reverberation, Sabine's formula (without derivation) Absorption coefficient, Acoustics of Buildings, factors affecting Acoustics of Buildings, Sound distribution in an auditorium. 2. Laser : Introduction, transition between Atomic energy states (without derivation), Principle of Laser, Properties of Laser, Helium–Neon Laser, Application of Laser, Holography	15	Modern Physics Concept and Applications – SanjeevPuri, Narosa Publication. Properties of matter and Acoustics – R Murugeshan and	Power point presentation, Jamboard, PDF

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	3. Fibre Optics: Light propagation through Fibres, Fibre Geometry, Internal reflection, Numerical Aperture, Step-Index and Graded-Index Fibres, Applications of Fibres.		K. Shivaprasath, S Chand &Co.Ltd. (2005-Ed)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **F.Y.B.Sc.**

SEMESTER: **I** MONTH: **October-December** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concepts of lens system and interference.
- Demonstrate quantitative problem solving skills in all the topics covered

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Paper-1 Unit-2 Classical Physics	1. Lens Maker's Formula (Review), Newton's lens equation, magnification-lateral, longitudinal and angular. 2. Equivalent focal length of two thin lenses, thick lens, cardinal points of thick lens, Ramsdenand Huygens eyepiece 3. Aberration: Spherical Aberration, Reduction of Spherical Aberration, Chromatic aberration and condition for achromatic aberration. 4. Interference: Interference in thin films, Fringes in Wedge shaped films, Newton's Rings (Reflective).	15	Brijlal,Subramanyam and Avadhanulu A Textbook of Optics, 25th revised ed.(2012) S. Chand Jenkins and White, Fundamentals of Optics by (4th Ed.), McGraw Hill International.	Power point presentation, Jamboard, PDF

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **T.Y.B.Sc.**

SEMESTER: **VI** MONTH: **January- April** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the basics of semiconductor devices and their applications.
- Understand the basic electronic circuits for universal logic building blocks and basic concepts of digital communication.
- Develop quantitative problem solving skills in all the topics covered.
- Analyze/design and implement combinational logic circuits.
- Develop assembly language programming skills and real time applications of microprocessor.
- Illustrate how to interface the I/O peripheral (PPI) with 8085 microprocessor.
- Understand architecture, silent features, instruction set, programming and interfacing of 8051 microcontroller.
- Get practical training to interface different programmable peripherals and I/O devices to microprocessor and microcontroller.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper- 2 Unit – I	1. Field effect transistors: JFET: Basic ideas, Drain curve, The	15	MB: Electronic Principles, Malvino & Bates -7th Ed TMH Publication.	Chalk and board Notes provided

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Electronics	transconductance curve, Biasing in the ohmic region and the active region, Transconductance, JFET common source amplifier, JFET analog switch, multiplexer, voltage controlled resistor, Current sourcing. 2. MOSFET: Depletion and enhancement mode, MOSFET operation and characteristics, digital switching. 3. SCR – construction, static characteristics, Analysis of the operation of SCR, Gate Triggering Characteristics, Variable half wave rectifier and Variable full wave rectifier, Current ratings of SCR. 4. UJT: Construction, Operation, characteristics and application as a relaxation oscillator.		AM: Electronic Devices and Circuits, Allen Mottershead -PHI Publication.	

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Paper- 2 Unit – IV Electronics	1. Logic families: Standard TTL NAND, TTL NOR, Open collector gates, Three state TTL devices, MOS inverters, CMOS NAND and NOR gates, CMOS characteristics. 2. Digital Communication Techniques: Digital Transmission of Data, Benefits of Digital Communication, Disadvantages of Digital Communication, Parallel and Serial Transmission, Pulse Modulation, Comparing Pulse-Modulation Methods (PAM, PWM, PPM), Pulse-Code Modulation.	15	ML:Digital Principles and Applications, Malvino and Leach (4th Ed)(TMH). LF: Communication Electronics: Principles and applications, Louis E Frenzel 4th edition TMH Publications.	Chalk and board Notes provided
Applied Component, Unit -I Digital Electronics	1. Combinational Logic Design: Introduction, Boolean identities, K – map (2, 3 and 4 variable), Ref: N G P 4.1 – 4.8. (Additional ref. RPJ).	15	NGP: Digital Electronics and Logic design by N G PALAN, https://archive.org/details/hellomr82k_gmail_DE RPJ: R. P. Jain, Modern Digital Electronics, Tata McGraw Hill, 4th Edition.	Chalk and board Notes provided

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	2. Design and implementations of: Decoders, Encoders, Multiplexers, Demultiplexers, Use of MUX and DEMUX in Combinational Logic design. Code Converters (based on – binary, BCD, Gray and Excess – 3 codes). Tri-State logic, buffers, D latch.			
Applied Component, Unit -II Advanced 8085 Programming and 8255(PPI)	1. Introduction to advanced instructions and applications Ref. RG: 10.7, 10.8, 10.9 2. Stack and Subroutines: Stack, Subroutine Ref. RG: 9.1, 9.1.1, 9.2&9.2.1 3. The 8255 Programmable Peripheral Interface: Block Diagram of the 8255, Mode 0 – Simple Input / Output mode, BSR (Bit Set/Reset Mode) Ref. RG: 15.1.1, 15.1.2& 15.1.3	15	RG: Microprocessor Architecture, Programming and Applications with the 8085, Ramesh Gaonkar, 5th Edition.	Chalk and board Notes provided
Applied Component, Unit -III Introduction to Microcontrollers	1. Introduction, Microcontrollers and Microprocessors, History of Microcontrollers and Microprocessors, Block diagram of 8051 Microcontroller*, Embedded Versus External Memory Devices, 8-bit & 16-bit Microcontrollers, CISC and RISC Processors, Harvard and Von	15	AVD: Microcontrollers (Theory and Applications) by Ajay V Deshmukh, The Tata-McGraw-Hill Companies MMM - For * Refer 1.2 The 8051 Microcontroller & Embedded Systems by M.A. Mazidi, J.G. Mazidiand R. D. Mckinlay, Second Edition, Pearson.	Chalk and board Notes provided

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	Neumann Architectures, Commercial Microcontrollers. 2. 8051 Microcontrollers: Introduction, MCS-Architecture, Registers in MCS-51, 8051 Pin Description, 8051 Connections, 8051 Parallel I/O Ports, Memory Organization. 3. MCS-51 Addressing Modes and Instructions: 8051 Addressing modes, MCS-51 Instruction Set, 8051 Instructions and Simple Programs, Using Stack Pointer .			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 75

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **S.Y.B.Sc.**

SEMESTER: **IV** MONTH: **January- April** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the diffraction and polarization processes and applications of them in physical situations.
- Understand the applications of interference in design and working of interferometers.
- Understand architecture, silent features, instruction set, programming and interfacing of 8085 microprocessor.
- Develop assembly language programming skills and real time applications of microprocessor.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper- 1 Unit – I Optics	1. Background knowledge (devote one lecture at commencement): i. Introduction, Huygens's - Fresnel theory, Distinction between interference and diffraction, Fresnel and Fraunhoffer types of diffraction. ii. Introduction of Polarization, Natural light is unpolarized, unpolarized and polarized light iii. Brewster's law, Polaroid sheets iv. Prism	15	A Text Book Of Optics By: Dr.N.Subrahmanyam, Brijlal, Dr M.N. Avadhaanulu (S.Chand, 25th Revised edition2012 Reprint 2013)	Chalk and board Notes provided

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	and grating spectra, Cornu's spiral, Fresnel's integrals. 2. Fresnel's Diffraction: Fresnel's assumptions, Rectilinear propagation (Half period zones) of light, Diffraction pattern due to straight edge, Positions of maxima and minima in intensity, Intensity at a point inside the geometrical shadow(straight edge), Diffraction due to a narrow slit, Diffraction due to a narrow wire 3. Fraunhoffer Diffraction : Introduction, Fraunhoffer diffraction at a single slit, Intensity distribution in diffraction pattern due to a single slit, Fraunhoffer diffraction at a double slit,Distinction between single slit and double slit diffraction pattern and missing orders, Plane diffraction Grating, Theory of plane transmission grating, Width of principal maxima .		AJOY GHATAK: OPTICS (5thEdition)	
Paper-III Unit- II Applied Physics – II Microprocessors	1. Building Concept of Microprocessor Introduction, Study of Memory, Input Device, Output Device, and Input/output Device Central Processing Unit.	15	V.J. Vibhute & P.B. Borole, Fifth Revised Edition RG: Microprocessor Architecture,	Chalk and board Notes provided

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	2. Introduction , Features of Inter 8085 , Pin Diagram of 8085 , 8085 CPU Architecture , Arithmetic and Logical Group (ALU , Accumulator , Temporary Register , Flag Register (PSW)) , Register Group (Temporary Registers (W and Z) , General purpose registers , Special Purpose registers) , Interrupt Control , Serial I/O Control Group , Instruction Register , Decoder and Control Group (Instruction Register , Instruction Decoder , Timing and Control) 3. Introduction , Flowchart , Classification of Instruction Set (Data Transfer Group , Arithmetic Group , Logical Group , Branching Group , Stack and Machine Control Group) , Notations used in Instructions and Opcode , Data Transfer Group , Program Examples for Data Transfer Group , Arithmetic Operation Group , Branch Group , Logical Group , Addressing Modes , 8085 Programmers Model.		Programming and Applications with the 8085, Ramesh Gaonkar, 5th Edition	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **F.Y.B.Sc.**

SEMESTER: **II** MONTH: **January- April** ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the basic mathematical concepts and applications of them in physical situations.
- Demonstrate quantitative problem solving skills in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper- 1 Unit – III Mathematical Physics	1. Superposition of Collinear Harmonic oscillations: Linearity and Superposition Principle. Superposition of two collinear oscillations having (1) equal frequencies and (2) different frequencies (Beats). 2. Superposition of two perpendicular Harmonic Oscillations: Graphical and Analytical Methods. Lissajous Figures with equal an unequal frequency and their uses.	15	Waves: Berkeley Physics Course, vol. 3, Francis Crawford, 2007, Tata McGraw-Hill. The Physics of Vibrations and Waves, H. J. Pain, 2013, John	Chalk and board Notes provided

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	3. Wave Motion: Transverse waves on string, Travelling and standing waves on a string. Normal modes of a string, Group velocity, Phase velocity, Plane waves, Spherical waves, Wave intensity.		Wiley and Sons. The Physics of Waves and Oscillations, N.K. Bajaj, 1998, Tata McGraw Hill.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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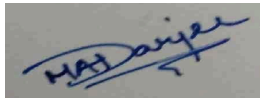
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _S. Y. B. Sc. __ SEMESTER: **III** MONTH: July-oct.
ACADEMIC YEAR: 2020-21
LEARNING OBJECTIVE/S:
The learners will be able to :

- To develop analytical abilities towards real world problems.
- To familiarize with current and recent scientific and technological developments.
- To enrich knowledge through problem solving, hands on activities, applications base study etc.



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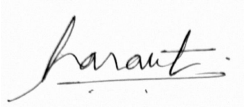

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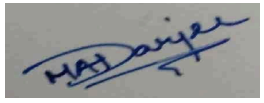
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III, U-II Applied Physics-1	Crystal Physics 1) Lattice points and space lattice, The basis and crystal structure, Unit Cells and lattice parameters, Primitive Cells, Crystal Systems, Crystal Symmetry,Bravais space lattices	05	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method
	2) Metallic crystal structures, relation between the density of crystal material and lattice constant in a cubic lattice, Directions, Planes, Miller Indices, Important planes in simple cubic structure, separation between lattice planes in a cubic crystal.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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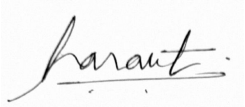

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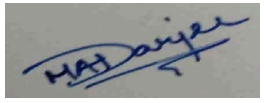
NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _S. Y. B. Sc. __ SEMESTER: IV MONTH: nov-april.
ACADEMIC YEAR: 2020-21

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-III Quantum mechanics	Applications of Schrodinger steady state equation –II 1. Potential barrier (Finite height and width) penetration and tunneling effect (derivation of approximate transmission probability)	07	1.Sheth Publications,	Chalk & board Method
	2. Theory of alpha particle decay from radioactive nucleus.	02		
	3. Harmonic oscillator (one-dimension), correspondence principle.	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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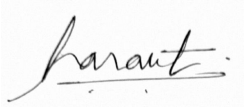

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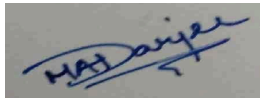
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III, U-I Geophysics	1 : GEOLOGY AND GEOPHYSICS 1.1 Introduction to Geophysics its branches and relationship with other sciences. 1.2 Earth and solar system: Meteorites and other extra-terrestrial materials. 1.3 Age of Earth and various methods of determination. Planetary evolution of the Earth and its internal structure: Elastic waves and variation of physical and chemical properties in the interior of Earth. 1.4 Major tectonic features of the ocean oceanic and continental crust. 1.5 Continental drift – geological and geophysical evidence: mechanisms, objections and present status. 1.6 Gravity and magnetic anomalies at Mid-ocean ridges: deep sea trenches, continental shield areas and mountain chains. 1.7 Geomagnetism, elements of Earth's magnetism: Internal, external fields and their causes, Palaeomagnetism, Polar wandering paths and reversals, Seafloor spreading and Plate tectonics. 1.8 Seismic belts of the Earth: Seismicity and plate movements. 1.9Geodynamics of the Indian plate. 1.10 Utility of the different geophysical techniques (discussed above) in exploration for academic as well as for harnessing resources. Geophysical	06	1.Sheth Publications,	Chalk & board Method



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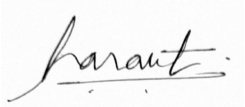

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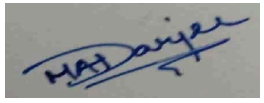
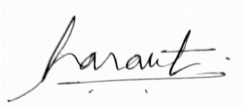
	potential fields: Principles of Gravity and Magnetic methods. 1.11 Instrumentation, field procedures used in geophysical studies. 1.12 Case studies			
	2 : GEO-ENVIRONMENTAL SCIENCES 2.1 Environmental Magnetic Analysis relating to magnetic minerals and environmental systems, soil magnetism, mineral magnetic studies of lake and marine sediments and magnetic monitoring of air-, land- and water-pollution. 2.2 Geo-Environmental Studies relating to mining, urban, industrial, coastal and desert management, palaeoclimate, palaeoenvironment, medical geology, climate change and studies related to their impact on ecosystem. 2.3 Natural Hazard Investigations including scientific studies related to natural hazards such as earthquakes, landslides, floods and tsunamis. 2.4 Impact Assessment of Anthropogenic Activities such as heavy metal pollution in Mumbai aquatic system with industries and thermal power plants, urbanization, disposal of industrial and radio-active waste, excessive withdrawal of ground water and use of fertilizers.	09,		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15





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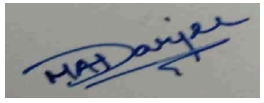
NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _T. Y. B. Sc. __ SEMESTER: V MONTH: June-oct.
ACADEMIC YEAR: 2020-2021

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, Solid State Physics	Crystal Physics 1. Lattice points and space lattice, The basis and crystal structure, Unit Cells and lattice parameters, Primitive Cells, Crystal Systems, Crystal Symmetry, Bravais space lattices, Metallic crystal structures, relation between the density of crystal material and lattice constant in a cubic lattice, Directions, Planes, Miller Indices, Important planes in simple cubic structure, separation between lattice planes in a cubic crystal, Reciprocal Lattice(Omit Vector-algebraic discussion), X-ray Diffraction.	11	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method
	2. Classical free electron theory of metals, Drawbacks of classical theory, Relaxation time, Collision time and mean free patH.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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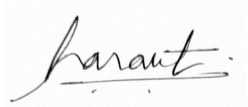

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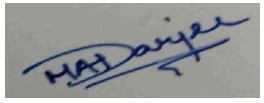
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Solid State Physics	Electrical properties of metals 1.Quantum theory of free electrons, Fermi Dirac statistics and electronic distribution in solids, Density of energy states and Fermi energy, The Fermi distribution function, Heat capacity of the Electron gas, Mean energy of electron gas at 0 K, Electrical conductivity from quantum mechanical considerations..	08	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method
	1.Band theory of solids, The Kronig- Penney model (Omit eq. 6.184 to 6.188), Brillouin zones, Number of wave functions in a band, Motion of electrons in a one-dimensional periodic potential, Distinction between metals, insulators and intrinsic semiconductors.	07		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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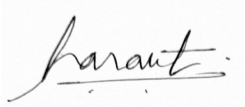

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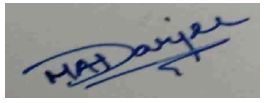
NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _T. Y. B. Sc. __ SEMESTER: VI MONTH: Nov-april.
ACADEMIC YEAR: 2020-21

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-IV, U-II, Special theory of relativity	Relativistic Kinematics Relativistic Kinematics (continued): The relativistic addition of velocities and acceleration transformation equations, Aberration and Doppler effect in relativity, The common sense of special relativity..	07	1.Sheth Publications, 2. RR : Introduction to Special Relativity : Robert Resnick (Wiley Student Edition)	Chalk & board Method
	The Geometric Representation of Space-Time: Space-Time Diagrams, Simultaneity, Length contraction and Time dilation, The time order and space separation of events, The twin paradox	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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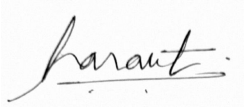

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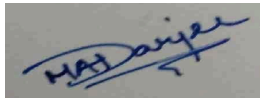
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-IV, U-IV, Special theory of relativity	Relativity and Electromagnetism: Introduction, The interdependence of Electric and Magnetic fields, The Transformation for E and B, The field of a uniformly moving point charge, Force and fields near a current-carrying wire, Force between moving charges, The invariance of Maxwell's equations.	13	1.Sheth Publications, 2. RR : Introduction to Special Relativity : Robert Resnick (Wiley Student Edition)	Chalk & board Method
	The principle of equivalence and general relativity, Gravitational red shift.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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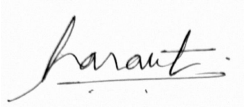

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: F. Y. B. Sc. SEMESTER: I MONTH: OCT-DEC

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:
The learners will be able to :

1. Understand nuclear size, nuclear properties and nuclear behavior.

2. Understand the type isotopes and their applications.

3. Numericals problem solving skills in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, Modern Physics	1.Structure of Nuclei:Basic properties of nuclei, Composition, Charge, Size, Rutherford's expt. for estimation of nuclear size, density of nucleus, Mass defect and Binding energy, Packing fraction, BE/A vs A plot, stability of nuclei (N Vs Z plot) and problems.	06	1.Sheth Publications, 2.SBP: Dr. S. B. Patel, Nuclear Physics Reprint 2009, New Age International	Inkredible board / PPT
	2.Radioactivity: Radioactive disintegration concept of natural and artificial radioactivity, Properties of α, β, γ-rays, laws of	07		

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	radioactive decay, half-life, mean life (derivation not required), units of radioactivity, successive disintegration and equilibriums, radioisotopes. Numerical Problems.			
	3.Carbon dating and other applications of radioactive isotopes (Agricultural, Medical, Industrial, Archaeological -information from net).	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: F. Y. B. Sc. SEMESTER: II MONTH: JAN-MARCH

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to :

1.Understand the basic concepts of digital electronics , power supply, Circuit Theorem and their applications.

2. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Electricity & Electronics	1.Circuit theorems: (Review: ohm's law, Kirchhoff's laws) Superposition Theorem, Thevenin's Theorem, Ideal Current Sources, Norton's Theorem, Reciprocity Theorem, Maximum Power Transfer Theorem. Numericals related to circuit analysis using the above theorems.	06	1.Sheth Publications. 2.VKM: V K Mehta and R Mehta Electronics Principals, MulticolouredRevised 11th Ed. reprint in 2012 ,S Chand. 3.A P Malvino, Digital Principles and	Inkredible board / PPT
	2.DC power supply: Half wave rectifier , Full wave rectifier, Bridge rectifier, PIV and Ripple factor of full wave rectifier, Clipper and Clampers, Capacitor Filter.	05		

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	Zener diode as voltage stabilizer.		Applications: Tata McGraw Hill	
	3.Digital electronics : Logic gates(Review), NAND and NOR as universal building blocks. EXOR gate: logic expression, logic symbol, truth table, Implementation using basic gates and its applications, Boolean algebra, Boolean theorems. De-Morgan theorems, Half adder and Full adder	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: S.Y. B. Sc. SEMESTER: III MONTH: SEPT-DEC

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:

The learners will be able to :

1.Understand the basics of transistor biasing, operational amplifiers, their applications.

2.Demonstrate quantitative problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Analog Electronics	1.Transistor Biasing: Inherent Variations of Transistor Parameters, Stabilisation, Essentials of a Transistor Biasing Circuit, Stability Factor, Methods of Transistor Biasing, Base Resistor Method, Emitter Bias Circuit, Circuit analysis of Emitter Bias, Biasing with Collector Feedback Resistor, Voltage Divider Bias Method, Stability factor for Potential Divider Bias.	07	1.Sheth Publications, 2.Principles of Electronics – V. K. Mehta and Rohit Mehta. (S. Chand– Multicoloured illustrative edition)	Inkredible board / PPT
	2.General amplifier characteristics: Concept of amplification, amplifier notations, current gain, Voltage gain, power gain, input	06		

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	resistance, output resistance, general theory of feedback, reasons for negative feedback, loop gain.			
	3.Practical circuit of transistor amplifier, phase reversal, frequency response, Decibel gain and Band width.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: S. Y. B. Sc. SEMESTER: IV MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to :

1. Understand the working of digital circuits.

2. Understand the conversion of binary, decimal and hexadecimal numbers.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Unit- II Applied Physics – II Microprocessors	1. Building Concept of Microprocessor Introduction, Study of Memory, Input Device, Output Device, and Input/output Device Central Processing Unit.	03	1.V.J. Vibhute & P.B. Borole, Fifth Revised Edition 2.RG: Microprocessor Architecture, Programming and Applications	Inkredible board / PPT

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	2. Introduction , Features of Inter 8085 , Pin Diagram of 8085 , 8085 CPU Architecture , Arithmetic and Logical Group (ALU , Accumulator , Temporary Register , Flag Register (PSW)) , Register Group (Temporary Registers (W and Z) , General purpose registers , Special Purpose registers) , Interrupt Control , Serial I/O Control Group , Instruction Register , Decoder and Control Group (Instruction Register , Instruction Decoder , Timing and Control)	07	with the 8085, Ramesh Gaonkar, 5th Edition	
	3. Introduction , Flowchart , Classification of Instruction Set (Data Transfer Group , Arithmetic Group , Logical Group , Branching Group , Stack and Machine Control Group) , Notations used in Instructions and Opcode , Data Transfer Group , Program Examples for Data Transfer Group , Arithmetic Operation Group , Branch Group , Logical Group , Addressing Modes , 8085 Programmers Model.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: T.Y. B. Sc. SEMESTER: V MONTH: SEPT-DEC

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:

The learners will be able to :

1. Understand the working of Data acquisition system, D to A and A to D Converters.

2. Understand the basic concept of Electron Spin and Spin orbit coupling etc.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-V, U-III, Electronics Instrumentation (Applied Physics)	1. Data acquisition systems: Objectives of DAS, Singal conditioning of inputs, Single channel Data acquisition systems, Multichannel Data acquisition system.	06	1. Sheth Publications 2. Digital Principles and Applications : A. P. Malvino and D. P. Leach. Tata McGraw Hill.	Inkredible board / PPT
	2. D to A Converters: Resistive divider network, Binary ladder network.	04		

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	3. A to D Converters: Successive approximation type, Voltage to time (Single slope, Dual slope).	04		
P-III, U-II, Atomic Physics	1. Electron Spin: The Stern-Gerlach experiment, Pauli's Exclusion Principle, Symmetric and Antisymmetric wave functions.	07	1.Sheth Publications, 2.1. AB : Perspectives of Modern Physics : Arthur Beiser McGraw Hill.	Inkredible board / PPT
	2. Spin orbit coupling, Hund's Rule, Total angular momentum, Vector atom model,L-S and j-j coupling. Origin of spectral lines, Selection rules.	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _30_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS. CLASS: T. Y. B. Sc. SEMESTER: VI MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to :

1. Understand the working of DC power supply, Differential amplifier and Multivibrators circuit.

2. Understand the basic concepts of 555 Timer and OP-AMP Applications.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Electronics	1. Regulated DC power supply: Supply characteristics, series voltage regulator,Short circuit protection (current limit and fold back) Monolithic linear IC voltage Regulators. (LM 78XX, LM 79XX, LM 317).	07	1.Sheth Publications, 2. 1. MB : Electronic Principles : A. P. Malvino and D.J. Bates, (7th Ed.) – (TMH).	Inkredible board / PPT
	2. Differential Amplifier using transistor: The Differential Amplifier, DC and ACanalysis of a differential amplifier, Input	05		

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	characteristic-effect of input bias, offset current and input offset voltage on output, common mode gain, CMRR.		3. VKM : Principles of Electronics : V. K. Mehta and Rohit Mehta. S. Chand Publications. (11th Ed.)	
	3. Transistor Multivibrators: Astable, Monostable and Bistable Multivibrators,Schmitt trigger.	03		
P-II, U-III, Electronics	1. Op Amp Applications: Log amplifier, Instrumentation amplifiers, Voltage controlled current sources (grounded load), First order Active filters, Astableusing OP AMP, square wave and triangular wave generator using OP AMP,Wein-bridge oscillator using OP AMP.	09	1. Sheth Publications 2. 1. MB : Electronic Principles : A. P. Malvino and D.J. Bates, (7th Ed.) – (TMH).	Inkredible board / PPT
	2. 555 Timer: Review Block diagram, Monostable and Astable operationVoltage Controlled Oscillator, Pulse Width modulator, Triggered linear ramp generator. Malvino: 23.8,23.9	O6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _30_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: S.Y. B. Sc. SEMESTER: III MONTH: SEPT-DEC

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:

The learners will be able to :

1. Develop a basic understanding about issues related to Human Rights of weaker sections and Dealing with Environmental Concerns.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course, Module-I, Humans Rights Provisions, Violations and Redressal	A. Scheduled Castes- Constitutional and legal rights, Forms of violations, Redressal mechanisms. B. Scheduled tribes- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	04	1. Foundation course - II: Mannan Prakashan.	Inkredible board / PPT
	C. Women- Constitutional and legal rights, Forms of violations, Redressal mechanisms. D. Children- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	04		
	E. People with Disabilities, Minorities, and the Elderly population- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	04		

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Foundation Course, Module-II, Dealing with Environmental Concerns	A. Concept of Disaster and general effects of Disasters on human life- physical, psychological, economic and social effects. B. Some locally relevant case studies of environmental disasters.	05	1. Foundation course - II: Mannan Prakashan.	Inkredible board / PPT
	C. Dealing with Disasters - Factors to be considered in Prevention, Mitigation (Relief and Rehabilitation) and disaster Preparedness. D. Human Rights issues in addressing disasters- issues related to compensation, equitable and fair distribution of relief and humanitarian approach to resettlement and rehabilitation.	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _23

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR.UMESH PRAJAPATI DEPARTMENT: PHYSICS CLASS: S. Y. B. Sc. SEMESTER: IV MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to :

1.Develop a basic understanding about issues related to Human Rights of weaker sections and ecology.

2. Appreciate the importance of developing a scientific temper towards technology and its use

in everyday life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course, Module-I, Significant, contemporary Rights of Citizens	A. Rights of Consumers-Violations of consumer rights and important provisions of the Consumer Protection Act, 2016; Other important laws to protect consumers; Consumer courts and consumer movements. B. Right to Information- Genesis and relation with transparency and accountability; important provisions of the Right to Information Act, 2005; some success stories.	06	1. Foundation course - II: Mannan Prakashan.	Inkredible board / PPT

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	C. Protection of Citizens'/Public Interest-Public Interest Litigation, need and procedure tofile a PIL; some landmark cases.	03		
	D. Citizens' Charters, Public Service Guarantee Acts.	03		
Foundation Course, Module-II, Approaches to understanding Ecology	A. Understanding approaches to ecology- Anthropocentrism, Biocentrism and Eco centrism, Ecofeminism and Deep Ecology. B. Environmental Principles-1: the sustainability principle; the polluter pays principle, the precautionary principle.	07	1. Foundation course - II: Mannan Prakashan.	Inkredible board / PPT
	C. Environmental Principles-2: the equity principle; human rights principles; the participation principle.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _23

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anushita A. Moger DEPARTMENT:Physics CLASS:FYBSc SEMESTER:1

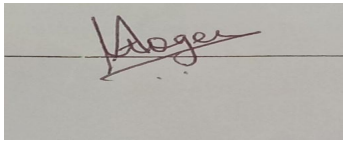
MONTH: July-September ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

1) understand nuclear properties and nuclear behavior.

2)demonstrate quantitative problem-solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Phy-2(unit-2) Nuclear physics	Chp-1 Interaction between particles and matter, I.P.counter and GM counter.	07		Chalk and duster method



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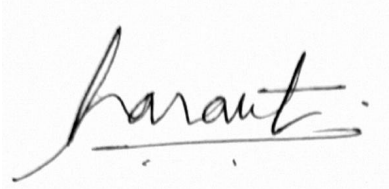

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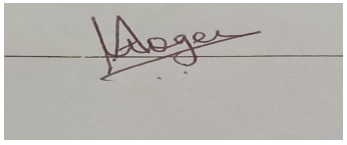
	Chp-2 Types of reaction and conservation laws, concept of compound and direct reaction, problems based on nuclear fusion and fission.	08		Chalk and duster method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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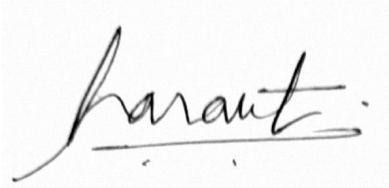

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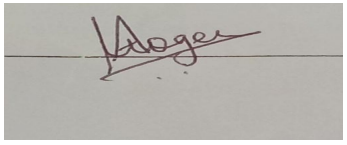
NAME: Anushita A. Moger. DEPARTMENT: Physics CLASS: S.Y.B.Sc. SEMESTER:3

MONTH: June-September. ACADEMICYEAR:2019-20

LEARNINGOBJECTIVE/S:
The learners will be able to:

1) understand basic concept of oscillator and be able to perform calculations using them.

2)to demonstrate quantitative problem solving skills in all the topics covered.



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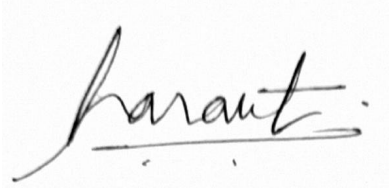

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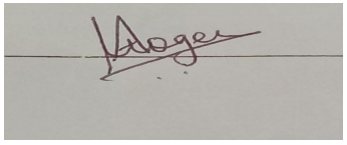
PAPER, UNIT, TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
Phy-2(unit-3)Applied electronics	Chp-1.Oscillators, requirements for Oscillations,phase shift oscillator,wein bridge oscillator,colpitts oscillator and Hartley oscillator	07		Chalk and duster method
	Chp-2Opamp-introduction and schematic symbol and ac analysis ,bandwidth of an opamp ,slew rate , frequency response and negative feedback of an opamp, inverting and non inverting amplifier,voltage follower ,summing amplifier and it's applications, integrator and differentiator	08		Chalk and duster method

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15



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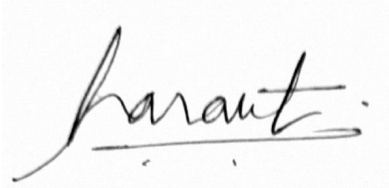

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NAMEOFTHESTAFF: Anushita A. Moger. DEPARTMENT: Physics CLASS: T.Y.B.Sc. SEMESTER:5

MONTH: June-September ACADEMICYEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

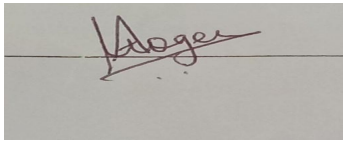
1)understand the laws of electrodynamics & be able to perform calculations using them.

2)Understand Maxwell's electrodynamics & Its relation to relativity.

3)Understand how optical laws can be derived from electromagnetic principles.

4)Develop quantitative problem-solving skills.

PAPER, UNIT,TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED



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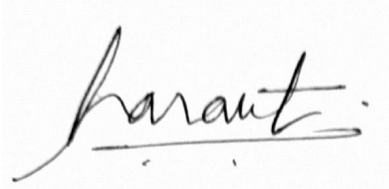

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Phy-4.(unit -3) electrodynamics	Magnetism and varying fields-diamagnet,paramagnet and ferromagnetism, magnetisation,bound currents and their physical interpretation,ampere's law in magnetised material,deceptive equation in matter and boundary conditions, electrodynamics before Maxwell,Maxwell's correction to ampere's law,Maxwell equation in matter and it's boundary conditions and magnetic charge	15		Chalk and duster method
Phy-4(unit-4) electrodynamics	Electromagnetic waves, continuity equation,poynting theorem,Newton's third law,wave equation for electric and magnetic fields, monochromatic plane waves, energy and momentum in electromagnetic waves, propagation in linear media,reflection and transmission of electromagnetic waves at normal incidence.	15		Chalk and duster method

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TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15

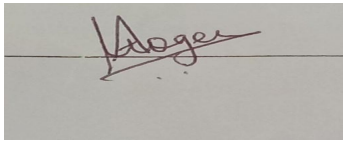
NAME OF THE STAFF: Anushita A. Moger. DEPARTMENT: Physics CLASS:FYBSc SEMESTER:2

MONTH: December-February ACADEMICYEAR:2019-20

LEARNINGOBJECTIVE/S:
The learners will be able to:

1)the basic mathematical concept and applications of them in physical situation.

2)demonstrate quantitative problem solving skills in all the topics covered.



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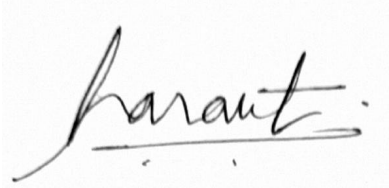

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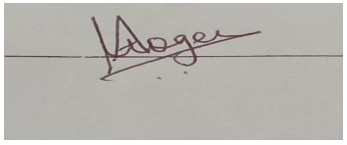
PAPER, UNIT,TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
Phy-1(unit-1) electrodynamics	Chp-1 vectors,scalars,vector algebra and it's laws,scalar and vector field and problems based on them,cross product,dot product, commutative and distributive laws,scalar and vector triple products.	07		Chalk and duster method
	Chp-2 Gradient, curl and divergence,their significance, distributive laws for all the three terms,problems based on them.	08		Chalk and duster method

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15



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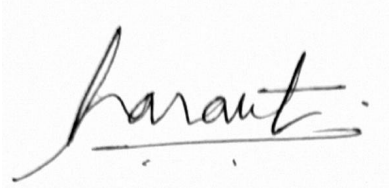

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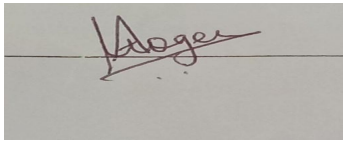
NAME OF THE STAFF: Anushita A.Moger. DEPARTMENT: Physics CLASS: S.Y.B.Sc. SEMESTER:4

MONTH: November-February ACADEMICYEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to:

1) understand the postulates of quantum mechanics and to understand its importance in explaining significant phenomena in physics.

2)todemonstratequantitativeproblemsolvingskillsinallthetopicscovered.



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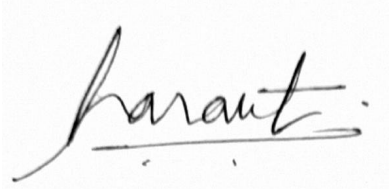

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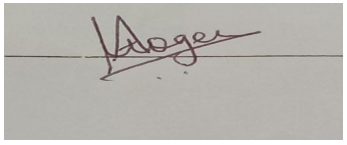
PAPER, UNIT,TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
Phy-2(unit-1) quantum mechanics	Schrodinger's wave equation,concept of wave function ,Born interpretation of wave function, position, momentum and energy operators,eigen value equation , expectation value of operators, postulates of quantum mechanics,analogy between wave and Schrodinger's equation,STDE and STIE ,superposition principle, probability current density ,equation of continuity and it's physical interpretation.	15		Chalk and duster method

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15



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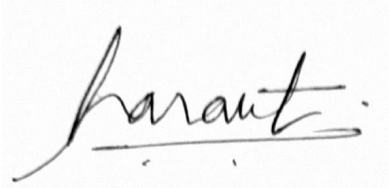

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NAME OF THE STAFF: Anushita A. Moger. DEPARTMENT:Physics CLASS: T.Y.B.Sc. SEMESTER:6

MONTH: November-February ACADEMICYEAR:2019-20

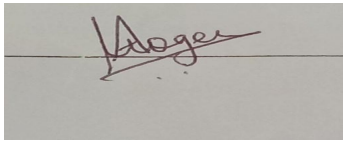
LEARNING OBJECTIVE/S:

1)understand the significance of Michelson Morley experiment and failure of the existing theories to explain the null result.

2)the importance postulates of special relativity, Lorenz transformation equations and how it changed the way we look at space and time

, Absolute time and relativity, Commonsense versus Einstein concept of Space and time.

3)Understand the transformation equations for: Space and time, velocity, frequency, mass, momentum ,force ,Energy, Charge and current density, electric and magnetic fields.



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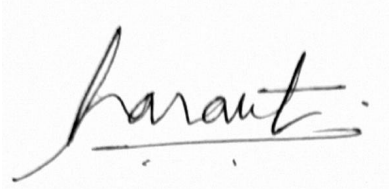

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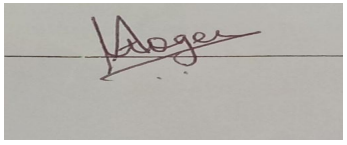
PAPER, UNIT,TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
Phy 4(unit-1) relativity	Special theory of relativistic kinematics,experimental background of special theory of relativity,Galilean transformation,Newtonian relativity, electromagnetism and Newtonian relativity, attempt to locate absolute frame, Michelson Morley experiment, attempt to preserve the concept of a ether frame,lorentz Fitzgerald contractions and ether drag hypothesis, attempt to modify electrodynamics,postulates of special theory of relativity.	15		Chalk and duster method

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15



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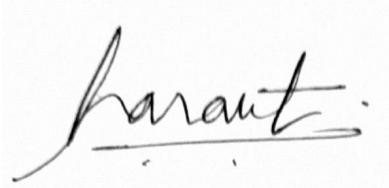

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: November-February

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the fundamental principles and concepts governing alpha decay.

2. Understand the concepts of spectrum of alpha particles, alpha decay paradox penetration

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III(Nuclear Physics), Unit-I, Alpha Decay	Velocity ,energy and absorption of alpha particles :Range, ionization and stopping power Nuclear energy levels .Range of alpha particles, alpha particle spectrum .fine structure ,long range alpha particles, alpha decay paradox penetration (Gamow's theory of alpha decay and Geiger-Nuttal law) Problems based on alpha decay	15	Sheth Publication's T.Y.Bsc. Nuclear Physics S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: November-February

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concept of beta decay and beta spectrum .

2. Understand the concepts of neutrino ,Pauli's Neutrino hypothesis and energetics of beta decay .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III (Nuclear Physics) Unit-II, Beta Decay	Introduction, Velocity and energy of beta particles, energy levels and decay schemes, Continuous beta ray spectrum-Difficulties encountered to understand it, Pauli's neutrino hypothesis, Detection of neutrino, Energetics of beta -decay. Problems based on above topics	15	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: December-February

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to: 1. Understand the concepts of asymmetric fission -Mass yield emission of delayed electrons.

2. Understand the concepts of Nuclear fission and fusion.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III (Nuclear Physics), Unit-III (Nuclear Energy & Particle accelerators) 1.Nuclear Energy 2.Particle Accelerators	1.Introduction,Asymmetric fission-Mass yield Emission of delayed electrons ,Nuclear release in fission ,Nature of fission fragments ,Energy released in the fission chain reaction ,Neutron cycle in a thermal nuclear reactors ,nuclear power and breeder reactors ,Natural Fusion Possibility of controlled fusion. Problem based on the above topics	09	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

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	2.Van de Graff Generators, Cyclotron, Synchrotron, Betatron and Idea of large Hadron Collider	06	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: December -February

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of Meson theory of Nuclear force

2. Understand the concepts of elementary particles.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III(Nuclear Physics), Unit-IV (Nuclear Force and elementary particle)	1. Introduction, Deuteron problems, Meson theory of Nuclear force -A qualitative discussion	05	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

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1.Nuclear Force 2.Elementary particle	2.Introduction,Claasifications of elementary particles ,Particle interactions ,conservation laws ,particles and antiparticles ,photons ,Mesons ,Quark model	10	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi A. Raut. DEPARTMENT:Physics CLASS: _T. Y. B. Sc. __ SEMESTER: V MONTH: June-oct.
ACADEMIC YEAR: 2019-2020

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-III, Solid State Physics	Band Theory of Solids and Conduction in Semiconductors 1. Band theory of solids, The Kronig- Penney model (Omit eq. 6.184 to 6.188),Brillouin zones, Number of wave functions in a band, Motion of electrons in a one-dimensional periodic potential, Distinction between metals, insulators and intrinsic semiconductors.	07	1.Sheth Publications, 2.MH : Electronic Devices and Circuits :Millman, Halkias & Satyabrata Jit. (3rd Ed.) Tata McGraw Hill.	Chalk & board Method
	2. Electrons and Holes in an Intrinsic Semiconductor, Conductivity of a Semiconductor, Carrier concentrations in an intrinsic semiconductor, Donor and Acceptor impurities, Charge densities in a semiconductor, Fermi level in extrinsic	08		

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	semiconductors, Diffusion, Carrier lifetime, The continuity equation, Hall Effect.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-IV, Solid State Physics	Diode, magnetism and superconductivity 1.Semiconductor-diode Characteristics: Qualitative theory of the p-n junction, The p-n junction as a diode, Band structure of an open-circuit p-n junction, The current components in a p-n junction diode, Quantitative theory of p-n diode currents, The Volt-Ampere characteristics, The temperature dependence of p-n characteristics, Diode resistance.	08	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method

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	2. Superconductivity: Experimental Survey, Occurrence of Superconductivity, destruction of superconductivity by magnetic field, The Meissner effect, London equation, BCS theory of superconductivity, Type I and Type II Superconductors, Vortex state. dependence of p-n characteristics, Diode resistance.	07	3. MH : Electronic Devices and Circuits :Millman, Halkias & Satyabrata Jit. (3rd Ed.) Tata McGraw Hill.	
			4. Solid State Physics : A. J. Dekker, Prentice Hall	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T. Y. B. Sc. SEMESTER: V MONTH: June-September ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Understand the working of Transducers, Sensors and Optoelectronics devices.

2. Understand the basic concept of Modern Techniques and Appliances.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-V, U-I, Electronics Instrumentation (Applied Physics)	1. Transducers: Definition, Classification, Selection of transducer. 2. Electrical transducers: Thermistor, Thermocouple, Pressure Transducer: Strain gauges (wire, foil, & semiconductor), Displacement transducer: LVDT, Peizo-electric Transducer.	04	1. Sheth Publications. 2.Electronic Instrumentation – H S Kalsi, Tata McGraw-Hill Publishing Company Limited, New Delhi.	Lecture Method /Chalk & Board
	3. Chemical sensors: PH sensor, Gas sensor (Fundamental aspects), Humidity sensor (Resistive). 4. Electronic Weighing Systems: Operating principle, Blockdiagram,features	05		

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	5. Optoelectronic Devices: LDR, LED (Construction, Working & Applications), Multicolour LED, Seven Segment Display, Liquid Crystal Display (LCD), Photodiode (construction, Characteristics & applications), Phototransistor	06		
P-V, U-IV, Electronics Instrumentation (Applied Physics)	1. Printed Circuit Board: Idea of PCB, advantages, copper clad, Etching processes, Principle of Photolithography (For PCB).	06	1. Sheth Publications. 2. . PCB design basics, Mahmoud Wahby, EDN Networks, Nov 2013. 3.Medical instrumentation Application and design- J. C. Wobster	Lecture Method /Chalk & Board
	2. Microwave Oven: Operating principle, block diagram, features.	03		
	3. Medical instruments: Bio-Potential, Types of electrodes, ECG, EEG, EMG, CT Scan and MRI (principle, block diagram and features), Ultrasonography: working principle	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T. Y. B. Sc. SEMESTER: V MONTH: June-September

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Understand the working of Transducers, Sensors and Optoelectronics devices.

2. Understand the basic concept of Modern Techniques and Appliances.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-V, U-I, Electronics Instrumentation (Applied Physics)	1. Transducers: Definition, Classification, Selection of transducer. 2. Electrical transducers: Thermistor, Thermocouple, Pressure Transducer: Strain gauges (wire, foil, & semiconductor), Displacement transducer: LVDT, Peizo-electric Transducer.	04	1. Sheth Publications. 2.Electronic Instrumentation – H S Kalsi, Tata McGraw-Hill Publishing Company Limited, New Delhi.	Lecture Method /Chalk & Board
	3. Chemical sensors: PH sensor, Gas sensor (Fundamental aspects), Humidity sensor (Resistive). 4. Electronic Weighing Systems: Operating principle, Blockdiagram,features	05		

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	5. Optoelectronic Devices: LDR, LED (Construction, Working & Applications), Multicolour LED, Seven Segment Display, Liquid Crystal Display (LCD), Photodiode (construction, Characteristics & applications), Phototransistor	06		
P-V, U-IV, Electronics Instrumentation (Applied Physics)	1. Printed Circuit Board: Idea of PCB, advantages, copper clad, Etching processes, Principle of Photolithography (For PCB).	06	1. Sheth Publications. 2. . PCB design basics, Mahmoud Wahby, EDN Networks, Nov 2013. 3.Medical instrumentation Application and design- J. C. Wobster	Lecture Method /Chalk & Board
	2. Microwave Oven: Operating principle, block diagram, features.	03		
	3. Medical instruments: Bio-Potential, Types of electrodes, ECG, EEG, EMG, CT Scan and MRI (principle, block diagram and features), Ultrasonography: working principle	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: V MONTH: June-September

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Solve the Schrodinger's equation for H-atom
2. Understand the concept of different quantum numbers
3. Apply quantum mechanics in atomic Physics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III (Atomic and molecular Physics), Unit-I, 1. Hydrogen Atom 2. Electron Spin	Schrodinger's Equation for H-atom, Separation of Variables,	07	Sheth Publication's T.Y.Bsc. Atomic & Molecular Physics	Lecture Method /Chalk and Board
	Quantum Numbers: total quantum number, orbital quantum number, Magnetic quantum Number, angular momentum	04	Sheth Publication's T.Y.Bsc. Atomic & Molecular Physics	Lecture Method /Chalk and Board
	Electron Probability Density	01	Arthur Beiser, Perspective of Modern Physics	Lecture Method /Chalk and Board
	The Stern-Gerlach Experiment, Pauli's Exclusion Principle	02	Arthur Beiser, Perspective of Modern Physics	Lecture Method /Chalk and Board
	Symmetric and antisymmetric wave Functions	01	Sheth Publication T.Y.Bsc. Atomic & Molecular Physics	Lecture Method /Chalk and Board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: V MONTH: August-September

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concept of signal conditioning, devices used and their operations.

2. Get acquainted with the measuring instruments used in the laboratory.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -V (E-I) Unit-II, 1.Precision rectifier, detector, Active positive clamper 2.Active and negative clippers 3.Microphones 4.Loudspekers 5.Switching Regulators	1.Half wave precision rectifier, Active peak detector ,active positive clamper , 2.Active positive and negative clippers	02	Electronic Instrumentation-I Sheth Publication	Lecture Method /Chalk and Board
	3.Characteristics, types ,carbon microphones and dynamic type microphone (Principle ,construction & working)	04	Electronic Instrumentation-I Sheth Publication	Lecture Method /Chalk and Board
	4.Characteristics,Dynamic speaker ,multi -way speaker system .5.basic monolithic switching regulators (Buck ,Boost & Buck-boost)	04	Electronic Instrumentation-I Sheth Publication	Lecture Method /Chalk and Board
	6. C.R.O. (Block diagram), Front Panels, Dual Trace Mode, Probes: 1:1&10:1.	04	Electronic Instrumentation - H.S.Kalsi	Lecture Method /Chalk and Board

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6. C.R.O. 7.DMM	7. 3 and half digit, resolution and sensitivity, general specification.	01	Electronic Instrumentation - H.S.Kalsi	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: III MONTH: July-September

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of energy band gap of different materials.

2. Understand the concepts of electrical, optical & magnetic properties.

3. Students will appreciate the role of Physics in interdisciplinary areas related to materials and acoustics etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III (Applied Physics -I), Unit-III (Properties of Material), 1.Electrical Properties 2.Optical	1.Energy Band diagram for Materials -conductors, semiconductors & insulators, Effect of Temperature on conductivity.	03	Sheth Publication S.Y.B.Sc. Phy-III Textbook	Lecture Method /Chalk and Board
	2.Reflection, refraction, absorption & transmission of electromagnetic radiation in solids	04	Sheth Publication S.Y.B.Sc. Phy-III Textbook	Lecture Method /Chalk and Board
	3.Origin of Magnetism in solids, Types of magnetic	06	Sheth Publication S.Y.B.Sc. Phy-III	Lecture Method /Chalk and Board

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Properties 3.Magnetic Properties 4.Applications	order, magnetic hysteresis		Textbook	
	4.Dielectric materials: Piezoelectric, ferroelectric, and pyro electric materials	02	Sheth Publication S.Y.B.Sc. Phy-III Textbook	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: F.Y.B.Sc SEMESTER: I MONTH: August -September

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of energy band gaps of different materials.

2. Understand the concepts of electrical, optical & magnetic properties.

3. Students will appreciate the role of Physics in interdisciplinary areas related to materials and acoustics etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -II, Unit-III 1.Origin of quantum Mechanics 2.Wave Nature of Particle	1.Black Body (Definition), Black body Spectrum, Wein's Displacement law, Rayleigh -Jeans Formula	03	Sheth Publication F.Y.B.Sc. Textbook	Lecture Method /Chalk and Board
	2. Production of X-ray, Properties of X-ray, Davisson - Germer Experiment,G.P.Thompson experiment, Diffraction of X-rays, Bragg's law, Application of X-rays	05	Sheth Publication F.Y.B.Sc. Textbook	Lecture Method /Chalk and Board

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3. Particle Nature of Wave	3.Compton effect, Pair production, Gravitational -Red shift	05	Arthur Beiser, Perspective of Modern Physics	Lecture Method /Chalk and Board
	3.Heisenberg's Uncertainty Principle ,Problems on covered topics	02	Arthur Beiser, Perspective of Modern Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: November –February

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Develop the programming skills in programming Language C++.

2.Develop the logic required to write an algorithm for a program.

3.Train their practical knowledge through lab experiments.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -V (Applied Physics -II), Unit-IV (Basic Concepts of OOP and C++), 1. Basic Concepts of OOP and Beginning with C++ 2.Tokens & Expressions in C++ 3. Control Structure and Functions	1.Concept of OOP, Benefits of OOP, Applications of OOP Introduction of C++, application, class program,	03	Object Oriented programming with C++ By E Balagurusamy	Lecture Method /Chalk and Board
	2.Introduction, tokens, keywords ,Identifiers Basic Data types	02	Object Oriented programming with C++ By E Balagurusamy	Lecture Method /Chalk and Board
	2.Operators in C++, scope resolution operators management operator, Manipulators, Type cast operator Memory Management operator, Special Assignment operator, Implicit conversion ,Operator Overloading ,Operator precedence	07	Object Oriented programming with C++ By E Balagurusamy	Lecture Method /Chalk and Board
	3. Control Structure, Functions: The main function, function prototyping call by Reference, Return by Reference, Inline functions, Default Arguments, Function Overloading, math library function.	07	Object Oriented programming with C++ By E Balagurusamy	Lecture Method /Chalk and Board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 19

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: IV MONTH: November-January

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: 1.Understands the concept of free particles.

2. Solve the following problem of particles in deep potential well using Schrodinger's Equation.

3. Develop the problem solving skills in all topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -II (Quantum Mechanics), Unit-II (Application of Schrodinger's steady state Equation) 1.Free particle 2.Particle in infinity deep potential well 3. Particle in finitely deep potential well 4.Step potential 5.Particle in three dimension rigid box	1.Free particle	02	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board
	2. Particle in infinity deep potential well (1-dimension)	02	Quantum mechanics by Griffith	Lecture Method /Chalk and Board
	3. Particle in finitely deep potential well(1-dimension)	02	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board
	4.Step potential	02	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board
	5. Particle in three dimension rigid box, degeneracy of energy state. Problems of above topics.	07	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: IV MONTH: January-February

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of Potential barrier penetration and tunneling effect.

2. Understand the concepts of Harmonic oscillators.

3. Develop problem solving skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -II (Quantum Mechanics), Unit-III(Application of Schrodinger's steady state equation-II) 1.Potentail barrier	1.Potential Barrier penetration and tunneling effect	04	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board
	2.Theory of alpha particle decay from radioactive nucleus	02	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board
	3. Harmonic Oscillator (1-D). Correspondence theory	04	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board

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2.Theory of alpha particle 3. Harmonic Oscillator	4.Problems on above topics	04	Sheth Publication's S.Y.B.Sc. Textbook	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: F.Y.B.Sc SEMESTER: II MONTH: November-February

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the basic mathematical concepts.

2. Apply the differential equations in real world problems of physics.

3. Solve the problem related to differential equations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -I (Applied Physics -I), Unit-II 1.Differental Equation 2.Transient	1.Introduction, Ordinary Differential equation, first order homogeneous and non-homogeneous equation with variable coefficient, Exact differentials,	03	Mathematical Physics H.K. Das	Lecture Method /Chalk and Board
	1.Second order homogeneous equations with constant coefficients, problems depicting physical situations like LC	04	Mathematical Physics H.K. Das	Lecture Method /Chalk and Board

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Response of a circuits: LR, CR &LCR growth and decay of current	&LR circuits, SHMs			
	2. Transient response of circuits: LR -Growth and decay of current, Transient response of circuits: CR -Growth and decay of current.	06	Sheth Publication Physics -I (Textbook)	Lecture Method /Chalk and Board
	2. Transient response of circuits: LCR -Growth and decay of current.	02	Sheth Publication's Physics -I (Textbook)	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: III MONTH: July-September

ACADEMIC YEAR: 2019-20 Subject: Foundation Course-III

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Appreciate the importance of developing a scientific temper towards technology and its use in everyday life.
2. Understand the values of scientific attitude towards the Indian society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-III (Science & Technology-I) 1.Devepolment of science 2.Nature of Science 3.Science and superstition 4.Science in everyday life	1.the ancient culture, the classical era, the middle ages, the Renaissance, the age of Reason and Enlightenment	03	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board
	2.Principle and characteristics, science as empirical, practical theoretical, validated knowledge.	02	Foundation Course by manan Prakashan	Discussion method
	3.role of science exploding myths, blind beliefs and prejudice ,science temper as a fundamental duty of the Indian society	03	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: III MONTH: July-September

ACADEMIC YEAR: 2019-20 Subject: Foundation Course-III

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Develop a basic understanding of the importance of communication.

2. Gain an overview of significant skills required to address competition in career choice.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-IV (Soft skill for effective Interpersonal communication) 1.effective listening 2.Formal and Informal Communication 3.Leadership Skills	1.Importance and features of listening, Verbal and non-verbal communication, Barrier to effective communication	04	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board
	2.formal and informal communication: purpose and type, writing formal applications, SOP and resume ,Group discussion, Interviews and presentations	04	Foundation Course by manan Prakashan	Discussion method
	3.Leadership skills and self-improved -Characteristics of leadership ,styles of leadership and team building	03	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: IV MONTH: November-February

ACADEMIC YEAR: 2019-20 Subject: Foundation Course-IV

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Develop a basic understanding of the importance of communication.

2. Gain an overview of significant skills required to address competition in career choice.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-III (Science and Technology-II) A. Some significance modern technologies, features & applications B. Issue of Control access and misuse of Technology	A.1.Laser Technology: Use of Laser remote sensing, GIS/GPS mapping, medical use, 2.Satellite Technology : various uses in satellite navigation system ,GPS and imprecise climate & weather change	04	Foundation Course by manan Prakashan	Discussion method
	3. ICT: convergence of various technologies like satellite, computers and digital in the information revolution of today's society,4. Biotechnology and Genetics Engg: applied biology & uses in medicine, agriculture, genetically modified plant, animal & human life.	03	Foundation Course by manan Prakashan	Discussion method
	Nanotechnology: definition, control & application B. Issues of control, access and misuse of technology	04	Foundation Course by manan Prakashan	Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: IV MONTH: November-February

ACADEMIC YEAR: 2019-20 Subject: Foundation Course-IV

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Develop a basic understanding of the importance of communication.

2. Gain an overview of significant skills required to address competition in career choice.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-IV (Introduction to Competitive Examinations) A. Basic Information on competitive examinations B. Soft skills required for competitive Examinations	1.Exams conducted for entry into professional courses - GRE,GMAT,CAT&SAT	02	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board
	2.Exams conducted for entry into jobs by the Union Public Service Commission :S.S.C, State Public Service Commissions ,Banking & Insurance Sector and NET/SET for teaching Profession.	02	Foundation Course by manan Prakashan	Discussion method
	B.1.Information on areas tested : Ability ,Data interpretations ,Verbal Ability & logical Reasoning ,creativity and Lateral Thinking 2. Motivation: Concepts ,theories and types of motivation	07	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board

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	3. Goal setting: Types of goals, SMART goals, Stephan Covey's concepts of human endowment. 4.Time management :Effective strategies for time management 5. Writing skills, paragraph writing, report writing, filing and application under RTI act, Consumer grievance Letter.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: F.Y.B.Sc SEMESTER: II MONTH: November-February

ACADEMIC YEAR: 2019-20 Subject: Foundation Course-II

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Develop a basic understanding of concepts of liberalization, Privatization & globalization

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-I (Globalization and Indian Society)	Understanding of the concepts of liberalization, Privatization & globalization, growth of ICT and its impact manifested in everyday life. Impact of Globalization on industry: Changes in employment and increasing Change in agrarian sector due to globalization and increase in Framer's suicide	07	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: F.Y.B.Sc SEMESTER: II MONTH: November-February

ACADEMIC YEAR: 2019-20 Subject: Foundation Course-II

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Develop an understanding of Human rights and fundamental duties of the constitution.

2. Gain an overview of the Universal Declaration of Human Rights.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-II (Human Rights)	Concepts of human rights, origin, and evolution of the concepts; The Universal Declaration of Human Rights. Human rights constituents with special references to fundamental rights stated in the Constitution	10	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: F.Y.B.Sc SEMESTER: II MONTH: November-February

ACADEMIC YEAR: 2019-20 Subject: Foundation Course-II

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Develop a basic understanding of Ecology.

2. Develop an understanding of sustainable development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-III (Ecology)	Concept of Environment and ecology, Importance of Environment studies -Development context, Environment as a Nature Capital and quality of Human life ,Environment degradation -Causes and impact on human life ,sustainable development -concept and components ,poverty and environment	10	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: F.Y.B.Sc SEMESTER: II MONTH: November-February

ACADEMIC YEAR: 2019-20 Subject: Foundation Course-II

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Develop a basic understanding of stress and conflicts.

2. Develop an attitude to solve problems in our life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-IV (Understanding Stress and Conflicts)	Causes of stress and conflicts in individual's society; agents of socialization and role played by them in developing the individual; significance of values, ethics, and prejudices in developing the individual. Stereotype & prejudice as significant factors in causing conflicts in society, aggression, and violence as the public expression of conflict	10	Foundation Course by manan Prakashan	Lecture Method /Chalk and Board Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

Jyoti

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: F.Y.B.Sc SEMESTER: II MONTH: November-February

ACADEMIC YEAR: 2019-20 Subject: Foundation Course-II

LEARNING OBJECTIVE/S:
The learners will be able to: 1.

Gain an overview of significant skills required to managing stress and conflicts in society

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-V (Managing stress and conflicts in Contemporary Society)	Types of conflicts and use of coping mechanisms for managing individual stress; Maslow's theory of self-actualization; Different methods of responding to conflicts in Society; conflicts -resolution and efforts towards building peace and harmony in Society	08	Foundation Course by manan Prakashan	Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

Jyoti

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: F.Y.B.Sc SEMESTER: II MONTH: November-February

ACADEMIC YEAR: 2019-20 Subject: Foundation Course-II

LEARNING OBJECTIVE/S:
The learners will be able to:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-V (Managing stress and conflicts in Contemporary Society)	Types of conflicts and use of coping mechanisms for managing individual stress; Maslow's theory of self-actualization; Different methods of responding to conflicts in Society; conflicts -resolution and efforts towards building peace and harmony in Society	08	Foundation Course by manan Prakashan	Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

Jyoti

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _**LAXMI K. PARATE**_____DEPARTMENT: _____PHYSICS____

_ CLASS: T.Y.B.Sc_____SEMESTER: _V_____MONTH: ___JUNE TO SEPTEMBER_____ ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : The students are expected to be able to solve simple problems in probability, understand the concept of independent events and work with standard continuous distributions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I MATHEMATICAL PHYSICS UNIT-I PROBABILITY	sample space, events, independent events, conditional probability, probability theorems, methods of counting (derivation of formulae not expected), random variables, continuous distributions (omit joint distributions), binomial distribution, the normal distribution, the Poisson distribution.	15	Mathematical Methods in the Physical sciences: Mary L. Boas Wiley	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: T.Y.B.Sc_____SEMESTER: _V_____MONTH: ___JUNE_--_SEPTEMBER_____ ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : The students will have idea of the functions of complex variables; solve nonhomogeneous differential equations and partial differential equations using simple methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I MATHEMATICAL PHYSICS UNIT-II COMPLEX NO. DIFFERENTIAL EQUATION	Functions of complex variables: The exponential and trigonometric functions, hyperbolic functions, logarithms, complex roots and powers, inverse trigonometric and hyperbolic functions, some applications.	7	Mathematical Methods in the Physical sciences: Mary L. Boas Wiley	Chalk/Board
	Second-order nonhomogeneous equations with constant coefficients, partial differential equations, some important partial differential equations in physics, method of separation of variables.	8	Mathematical Physics: H. K. Das,	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____ _

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _**LAXMI K. PARATE**_____DEPARTMENT: _____PHYSICS_____

CLASS: S.Y.B.Sc_____SEMESTER: _III_____MONTH: _JUNE-SEPTEMBER_____ ACADEMIC YEAR:2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : _*_ Comprehend the basic concepts of thermodynamics & its applications in physical situation.

_ * Demonstrate tentative problem solving skills in all above areas.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-II THERMODYNAMICS	Heat engine, Carnot's cycle: its efficiency,NUMERICALS	3	Heat thermodynamics and Statistical Physics, Brijlal, N.Subramanyam, P. S. Hemne, S. Chand,	Chalk/Board
	Second law of thermodynamics, Statements, Equivalence of Kelvin and Plank statement, Carnot's theorem, Reversible and irreversible process, Absolute scale of temperature.	5	Heat thermodynamics and Statistical Physics, Brijlal, N.Subramanyam, P. S. Hemne, S. Chand,	Chalk/Board
	Clausius theorem, Entropy, Entropy of a cyclic process, Reversible process, Entropy change, Reversible heat transfer, Principle of increase in entropy, generalized form of first and second law, entropy change of an ideal gas, entropy of steam, entropy and unavailable energy, entropy and disorder, absolute entropy.	7	Heat thermodynamics and Statistical Physics, Brijlal, N.Subramanyam, P. S. Hemne, S. Chand,	Chalk/Board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: F.Y.B.Sc_____SEMESTER: _I_____MONTH: ___JULY-OCTOBER_____ ACADEMIC YEAR:2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : Apply the laws of thermodynamics to formulate the relations necessary to analyze a thermodynamic process.

Demonstrate quantitative problem solving skills in all the topics covered

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-III THERMODYNAMICS	Behavior of real gases and real gas equation, Van der Waal equation, relation between vander waals coefficient and critical constant, Boyles Temperature,Numericals	6	Brijlal, Subramanyam and Hemne, Heat Thermodynamics and Statistical Physics,	Chalk/Board
	Thermodynamic Systems, Zeroth law of thermodynamics, Concept of Heat, The first law, Non Adiabatic process and Heat as a path function, Internal energy, , Heat Capacity and specific heat, Applications of first law to simple processes, general relations from the first law, Indicator diagrams, Work done during isothermal and adiabatic processes, Worked examples, Problems.	9	Brijlal, Subramanyam and Hemne, Heat Thermodynamics and Statistical Physics,	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: T.Y.B.Sc_____SEMESTER: _VI_____MONTH: _NOVEMBER-MARCH__ _____ ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the kinds of motions that can occur under a central potential and their applications to planetary orbits. The students should also appreciate the effect of moving coordinate system, rectilinear as well as rotating.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-I CENTRAL FORCE	Motion under a central force, the central force inversely proportional to the square of the distance, Elliptic orbits, The Kepler problem.	10	Classical Mechanics: Herbert Goldstein	Chalk/Board
	Moving origin of coordinates, Rotating coordinate systems, Laws of motion on the rotating earth, The Foucault pendulum, Larmor's theorem	5	Classical Mechanics: Herbert Goldstein	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: T.Y.B.Sc_____SEMESTER: _VI_____MONTH: NOVEMBER-MARCH __ _____ ACADEMIC YEAR:2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : Learn the concepts needed for the important formalism of Lagrange's equations and derive the equations using D'Alembert's principle. They should also be able to solve simple examples using this formalism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-II LAGRANGE'S EQUATIONS	D'Alembert's principle, Constraints, Examples of holonomic constraints, examples of nonholonomic constraints, degrees of freedom and generalized coordinates, virtual displacement, virtual work, D'Alembert's principle, illustrative problems.	10	Classical Mechanics: J. C. Upadhyaya	Chalk/Board
	Lagrange's equations (using D'Alembert's principle), properties of Lagrange's equations, illustrative problems, canonical momentum, cyclic or ignorable coordinates	5		Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: S.Y.B.Sc_____SEMESTER: _IV_____MONTH: _ NOVEMBER-FEBRUARY_ _____ ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of Basics of communication, Concept of modulation and its various types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-III UNIT-III COMMUNICATION SYSTEM	Block diagram of communication system, types of communication system: simplex, duplex, analog and digital communication, Electromagnetic spectrum, base band and broad band communication. Noise concept and types, signal to noise ratio, noise figure, noise temperature	4	Electronics Communication Systems by Kennedy	Chalk/Board
	Need of modulation, concept of modulation, AM waveform, mathematical expression of AM, concept of sideband, demodulation principles. AM Receiver: TRF and superheterodyne receiver,	6	Electronics Communication Systems by Kennedy	Chalk/Board
	FM modulation: definition, mathematical representation, frequency spectrum, bandwidth and modulation index. 4.Concept of ASK, PSK, FSK, PAM, PWM, PPM, PCM.	5	Electronics Communication Systems by Kennedy	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: S.Y.B.Sc_____SEMESTER: _IV_____MONTH: _ NOVEMBER-FEBRUARY _ _____ ACADEMIC YEAR:2019-20_____

LEARNING OBJECTIVE/S: Understand the concepts of Geophysics & properties of material to apply them to problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-III UNIT-I GEOPHYSICS	Introduction to Geophysics its branches and relationship with other sciences. Earth and solar system: Meteorites and other extra-terrestrial materials. Age of Earth and various methods of determination. Planetary evolution of the Earth and its internal structure: Elastic waves and variation of physical and chemical properties in the interior of Earth. Major tectonic features of the ocean oceanic and continental crust Continental drift – geological and geophysical evidence: mechanisms, objections and present status. Gravity and magnetic anomalies at Mid-ocean ridges: deep sea trenches, continental shield areas and mountain chains. Geomagnetism, elements of Earth's magnetism: Internal, external fields and their causes, Palaeomagnetism, Polar wandering paths and reversals, Seafloor spreading and Plate tectonics. Seismic belts of the Earth: Seismicity and plate movements. Geophysical potential fields: Principles of Gravity and Magnetic methods. Instrumentation, field procedures used in geophysical studies.	15		Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: F.Y.B.Sc_____SEMESTER: _II_____MONTH: ___December-March_____ ACADEMIC YEAR:2019-20_____

LEARNING OBJECTIVE/S: The learners will be able to : Understand the basic Electronics concepts and their applications

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-II UNIT-I A.C.CIRCUIT	AC circuit containing pure R, pure L and pure C, representation of sinusoids by complex numbers, Series L-R, C-R and LCR circuits. Resonance in LCR circuit (both series and parallel), Power in ac circuit. Q-factor.	9	PRINCIPLE OF ELECTRONICS By V K Mehta and R Mehta	Chalk/Board
	AC-bridges: General AC bridge, Maxwell, de-Sauty, Wien Bridge , Hay brigde,Numericals	6	PRINCIPLE OF ELECTRONICS By V K Mehta and R Mehta	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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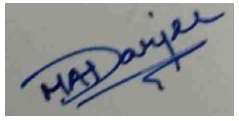
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _S. Y. B. Sc. __ SEMESTER: III MONTH: July-oct.

ACADEMIC YEAR: 2019-2020

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III, U-II Applied Physics-1	Crystal Physics 1) Lattice points and space lattice, The basis and crystal structure, Unit Cells and lattice parameters, Primitive Cells, Crystal Systems, Crystal Symmetry,Bravais space lattices	05	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method



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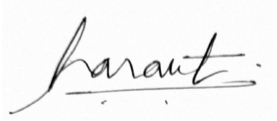

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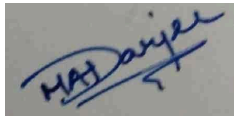
	2) Metallic crystal structures, relation between the density of crystal material and lattice constant in a cubic lattice, Directions, Planes, Miller Indices, Important planes in simple cubic structure, separation between lattice planes in a cubic crystal.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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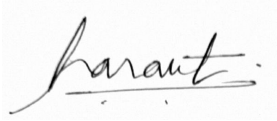

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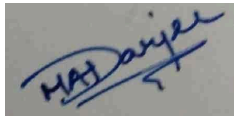
NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _T. Y. B. Sc. __ SEMESTER: V MONTH: June-oct.
ACADEMIC YEAR: 2020-2021

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, Solid State Physics	Crystal Physics 1. Lattice points and space lattice, The basis and crystal structure, Unit Cells and lattice parameters, Primitive Cells, Crystal Systems, Crystal Symmetry, Bravais space lattices, Metallic crystal structures, relation between the density of crystal material and lattice constant in a cubic lattice, Directions, Planes, Miller Indices, Important planes in simple cubic structure, separation between lattice planes in a cubic crystal, Reciprocal Lattice(Omit Vector-algebraic discussion), X-ray Diffraction.	15	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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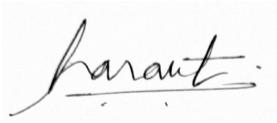

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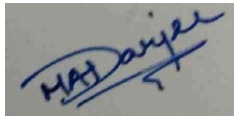
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Solid State Physics	Electrical properties of metals 1Classical free electron theory of metals, Drawbacks of classical theory,Relaxation time, Collision time and mean free path	04	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method
	Quantum theory of free electrons, Fermi Dirac statistics and electronic distribution in solids, Density of energy states and Fermi energy, The Fermi distribution function, Heat capacity of the Electron gas, Mean energy of electron gas at 0 K, Electrical conductivity from quantum mechanical considerations, Failure of Sommerfeld's free electron Theory	09		
	Thermionic Emission	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15



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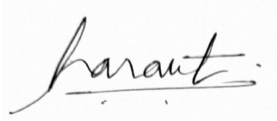

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **T.Y.B.Sc.**

SEMESTER: **V** MONTH: **June-September** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Apply theory of quantum physics in atomic physics.
- Understand importance of electron spins, symmetric & antisymmetric wave functions & vector atom model.
- Learn the Effect of magnetic field on atoms & its application.
- Learn molecular physics & its application.
- This course will be useful to get an insight into spectroscopy.
- Get the insight of the modern medical instruments in principle, which are used in day to day life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III, Unit -3 **Atomic & molecular Physics**	1. Molecular spectra (Diatomic Molecules): Rotational energy levels, Rotational spectra, Vibrational energy levels, Vibrational-Rotational spectra. Electronic Spectra of Diatomic molecules: The Born-Oppenheimer approximation, Intensity of vibrational-electronic spectra: The Franck-Condon principle. 2. Infrared spectrometer & Microwave spectrometer	15	B: Perspectives of Modern Physics: Arthur Beiser Page 8 of 18 McGraw Hill.	Chalk and board Notes provided

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Paper-III, Unit -4 **Atomic & molecular Physics**	1. Raman Effect: Quantum Theory of Raman Effect, Pure Rotational Raman spectra: Linear molecules, symmetric top molecules, Asymmetric top molecules, Vibrational Raman spectra: Raman activity of vibrations, Experimental set up of Raman Effect. 2. Electron spin resonance: Introduction, Principle of ESR, ESR spectrometer. 3. Nuclear magnetic resonance: Introduction, principle and NMR instrumentation.	15	BM: Fundamentals of Molecular Spectroscopy: C. N. Banwell & E. M. McCash (TMH).(4th Ed.) . GA: Molecular structure and spectroscopy : G Aruldhas (2nd Ed) PHI learning Pvt Ltd.	Chalk and board Notes provided

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **S.Y.B.Sc.**

SEMESTER: **III** MONTH: **June-September** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Comprehend the basic concepts of thermodynamics & its applications in physical situation.
- Learn about situations in low temperature.
- Demonstrate tentative problem solving skills in all above areas.
- Students will be exposed to contextual real life situations.
- Students will appreciate the role of Physics in 'interdisciplinary areas related to Acoustics.
- The learner will understand the scope of the subject in Industry & Research.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-1 Unit-3 Mechanics and thermodynamics	1. Third law of thermodynamics, Nernst heat theorem, Consequences of the third law, Maxwell's thermodynamic relations, Clausius – Clapeyron equation, Thermal Expansion. 2. Steam engine, Rankine cycle, Otto engine, Efficiency of Otto cycle, Diesel cycle, Efficiency of Diesel cycle, Otto and diesel comparison	15	Thermal Physics, AB Gupta and H. Roy, Book and Allied (P) Ltd, Reprint 2008, 2009. Heat, thermodynamics and Statistical	Chalk and board Notes provided

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	3. Low temp Physics: Different methods of liquefaction of gases, methods of freezing, Cooling by evaporation, cooling by adiabatic expansion Joule - Thompson effect, JT effect of Vander Waal's gas, Liquefaction of helium, properties and uses of liquid Helium		Physics, Brijlal, N.Subramanyam, P. S. Hemne, S. Chand, edition 2007.	
Paper-3 Applied Physics – I Unit-1 Acoustics , Lasers and fibre optics	1. Acoustics of Buildings: Reverberation, Sabine's formula (without derivation) Absorption coefficient, Acoustics of Buildings, factors affecting Acoustics of Buildings, Sound distribution in an auditorium. 2. Laser : Introduction, transition between Atomic energy states (without derivation), Principle of Laser, Properties of Laser, Helium–Neon Laser, Application of Laser, Holography 3. Fibre Optics: Light propagation through Fibres, Fibre Geometry, Internal reflection, Numerical Aperture, Step-Index and Graded-Index Fibres, Applications of Fibres.	15	Modern Physics Concept and Applications – SanjeevPuri, Narosa Publication. Properties of matter and Acoustics – R Murugeshan and K. Shivaprasath, S Chand &Co.Ltd. (2005-Ed)	Chalk and board Notes provided

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **F.Y.B.Sc.**

SEMESTER: **I** MONTH: **July-October** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concepts of lens system and interference.
- Demonstrate quantitative problem solving skills in all the topics covered

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-1 Unit-2 Classical Physics	1. Lens Maker's Formula (Review), Newton's lens equation, magnification-lateral, longitudinal and angular. 2. Equivalent focal length of two thin lenses, thick lens, cardinal points of thick lens, Ramsdenand Huygens eyepiece 3. Aberration: Spherical Aberration, Reduction of Spherical Aberration, Chromatic aberration and condition for achromatic aberration. 4. Interference: Interference in thin films, Fringes in Wedge shaped films, Newton's Rings (Reflective).	15	Brijlal,Subramanyam and Avadhanulu A Textbook of Optics, 25th revised ed.(2012) S. Chand Jenkins and White, Fundamentals of Optics by (4th Ed.), McGraw Hill International.	Chalk and board Notes provided

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **T.Y.B.Sc.**

SEMESTER: **VI** MONTH: **November- February** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the basics of semiconductor devices and their applications.
- Understand the basic electronic circuits for universal logic building blocks and basic concepts of digital communication.
- Develop quantitative problem solving skills in all the topics covered.
- Analyze/design and implement combinational logic circuits.
- Develop assembly language programming skills and real time applications of microprocessor.
- Illustrate how to interface the I/O peripheral (PPI) with 8085 microprocessor.
- Understand architecture, silent features, instruction set, programming and interfacing of 8051 microcontroller.
- Get practical training to interface different programmable peripherals and I/O devices to microprocessor and microcontroller.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper- 2 **Unit – I** **Electronics**	1. Field effect transistors: JFET: Basic ideas, Drain curve, The transconductance curve, Biasing in the ohmic region and the active	15	MB: Electronic Principles, Malvino & Bates -7th Ed TMH Publication. AM: Electronic Devices and Circuits, Allen Mottershead -PHI Publication.	Chalk and board Notes provided

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	region, Transconductance, JFET common source amplifier, JFET analog switch, multiplexer, voltage controlled resistor, Current sourcing. 2. MOSFET: Depletion and enhancement mode, MOSFET operation and characteristics, digital switching. 3. SCR – construction, static characteristics, Analysis of the operation of SCR, Gate Triggering Characteristics, Variable half wave rectifier and Variable full wave rectifier, Current ratings of SCR. 4. UJT: Construction, Operation, characteristics and application as a relaxation oscillator.			
Paper- 2 Unit – IV Electronics	1. Logic families: Standard TTL NAND, TTL NOR, Open collector gates, Three state TTL devices, MOS inverters, CMOS	15	ML:Digital Principles and Applications, Malvino and Leach (4th Ed)(TMH). LF: Communication Electronics: Principles and applications, Louis E Frenzel 4th edition TMH Publications.	Chalk and board Notes provided

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	NAND and NOR gates, CMOS characteristics. 2. Digital Communication Techniques: Digital Transmission of Data, Benefits of Digital Communication, Disadvantages of Digital Communication, Parallel and Serial Transmission, Pulse Modulation, Comparing Pulse-Modulation Methods (PAM, PWM, PPM), Pulse-Code Modulation.			
Applied Component, Unit -I Digital Electronics	1. Combinational Logic Design: Introduction, Boolean identities, K – map (2, 3 and 4 variable), Ref: N G P 4.1 – 4.8. (Additional ref. RPJ). 2. Design and implementations of: Decoders, Encoders, Multiplexers, Demultiplexers, Use of MUX and DEMUX in Combinational Logic design. Code Converters (based on – binary, BCD, Gray and Excess – 3 codes). Tri-State logic, buffers, D latch.	15	NGP: Digital Electronics and Logic design by N G PALAN, https://archive.org/details/hellomr82k_gmail_DE RPJ: R. P. Jain, Modern Digital Electronics, Tata McGraw Hill, 4th Edition.	Chalk and board Notes provided

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Applied Component, Unit -II Advanced 8085 Programming and 8255(PPI)	1. Introduction to advanced instructions and applications Ref. RG: 10.7, 10.8, 10.9 2. Stack and Subroutines: Stack, Subroutine Ref. RG: 9.1, 9.1.1, 9.2&9.2.1 3. The 8255 Programmable Peripheral Interface: Block Diagram of the 8255, Mode 0 – Simple Input / Output mode, BSR (Bit Set/Reset Mode) Ref. RG: 15.1.1, 15.1.2& 15.1.3	15	RG: Microprocessor Architecture, Programming and Applications with the 8085, Ramesh Gaonkar, 5th Edition.	Chalk and board Notes provided
Applied Component, Unit -III Introduction to Microcontrollers	1. Introduction, Microcontrollers and Microprocessors, History of Microcontrollers and Microprocessors, Block diagram of 8051 Microcontroller*, Embedded Versus External Memory Devices, 8-bit & 16-bit Microcontrollers, CISC and RISC Processors, Harvard and Von Neumann Architectures, Commercial Microcontrollers. 2. 8051 Microcontrollers: Introduction, MCS-Architecture, Registers in MCS-51, 8051 Pin Description, 8051 Connections, 8051 Parallel I/O Ports, Memory Organization.	15	AVD: Microcontrollers (Theory and Applications) by Ajay V Deshmukh, The Tata-McGraw-Hill Companies MMM - For * Refer 1.2 The 8051 Microcontroller & Embedded Systems by M.A. Mazidi, J.G. Mazidiand R. D. Mckinlay, Second Edition, Pearson.	Chalk and board Notes provided

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	3. MCS-51 Addressing Modes and Instructions: 8051 Addressing modes, MCS-51 Instruction Set, 8051 Instructions and Simple Programs, Using Stack Pointer .			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 75

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **S.Y.B.Sc.**

SEMESTER: **IV** MONTH: **November- February** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the diffraction and polarization processes and applications of them in physical situations.
- Understand the applications of interference in design and working of interferometers.
- Understand architecture, silent features, instruction set, programming and interfacing of 8085 microprocessor.
- Develop assembly language programming skills and real time applications of microprocessor.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper- 1 Unit – I Optics	1. Background knowledge (devote one lecture at commencement): i. Introduction, Huygens's - Fresnel theory, Distinction between interference and diffraction, Fresnel and Fraunhoffer types of diffraction. ii. Introduction of Polarization, Natural light is unpolarized, unpolarized and polarized light iii. Brewster's law, Polaroid sheets iv. Prism and grating spectra, Cornu's spiral, Fresnel's integrals.	15	A Text Book Of Optics By: Dr.N.Subrahmanyam, Brijlal, Dr M.N. Avadhaanulu (S.Chand, 25th Revised edition2012 Reprint 2013) AJOY GHATAK: OPTICS (5thEdition)	Chalk and board Notes provided

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	2. Fresnel's Diffraction: Fresnel's assumptions, Rectilinear propagation (Half period zones) of light, Diffraction pattern due to straight edge, Positions of maxima and minima in intensity, Intensity at a point inside the geometrical shadow(straight edge), Diffraction due to a narrow slit, Diffraction due to a narrow wire 3. Fraunhoffer Diffraction : Introduction, Fraunhoffer diffraction at a single slit, Intensity distribution in diffraction pattern due to a single slit, Fraunhoffer diffraction at a double slit,Distinction between single slit and double slit diffraction pattern and missing orders, Plane diffraction Grating, Theory of plane transmission grating, Width of principal maxima .			
Paper-III Unit- II Applied Physics – II Microprocessors	1. Building Concept of Microprocessor Introduction, Study of Memory, Input Device, Output Device, and Input/output Device Central Processing Unit. 2. Introduction , Features of Inter 8085 , Pin Diagram of 8085 , 8085 CPU Architecture , Arithmetic and Logical Group (ALU , Accumulator , Temporary Register , Flag Register (PSW)) , Register Group (Temporary Registers (W and Z) , General purpose	15	V.J. Vibhute & P.B. Borole, Fifth Revised Edition RG: Microprocessor Architecture, Programming and Applications with the 8085, Ramesh Gaonkar, 5th Edition	Chalk and board Notes provided

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	registers , Special Purpose registers) , Interrupt Control , Serial I/O Control Group , Instruction Register , Decoder and Control Group (Instruction Register , Instruction Decoder , Timing and Control) 3. Introduction , Flowchart , Classification of Instruction Set (Data Transfer Group , Arithmetic Group , Logical Group , Branching Group , Stack and Machine Control Group) , Notations used in Instructions and Opcode , Data Transfer Group , Program Examples for Data Transfer Group , Arithmetic Operation Group , Branch Group , Logical Group , Addressing Modes , 8085 Programmers Model.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **F.Y.B.Sc.**

SEMESTER: **II** MONTH: **November- February** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the basic mathematical concepts and applications of them in physical situations.
- Demonstrate quantitative problem solving skills in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper- 1 Unit – III Mathematical Physics	1. Superposition of Collinear Harmonic oscillations: Linearity and Superposition Principle. Superposition of two collinear oscillations having (1) equal frequencies and (2) different frequencies (Beats). 2. Superposition of two perpendicular Harmonic Oscillations: Graphical and Analytical Methods. Lissajous Figures with equal an unequal frequency and their uses. 3. Wave Motion: Transverse waves on string, Travelling and standing waves on a string. Normal modes of a string,	15	Waves: Berkeley Physics Course, vol. 3, Francis Crawford, 2007, Tata McGraw-Hill. The Physics of Vibrations and Waves, H. J. Pain, 2013, John Wiley and Sons. The Physics of Waves and	Chalk and board Notes provided

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	Group velocity, Phase velocity, Plane waves, Spherical waves, Wave intensity.		Oscillations, N.K. Bajaj, 1998, Tata McGraw Hill.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Umesh Prajapati DEPARTMENT: Physics CLASS: F. Y. B. Sc. SEMESTER: I MONTH: July-September

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Understand nuclear size, nuclear properties and nuclear behavior.

2. Understand the type isotopes and their applications.

3. Numericals problem solving skills in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, Modern Physics	1.Structure of Nuclei:Basic properties of nuclei, Composition, Charge, Size, Rutherford's expt. for estimation of nuclear size, density of nucleus, Mass defect and Binding energy, Packing fraction, BE/A vs A plot, stability of nuclei (N Vs Z plot) and problems.	07	1.Sheth Publications, 2.SBP: Dr. S. B. Patel, Nuclear Physics Reprint 2009, New Age International	Lecture Method /Chalk & Board
	2.Radioactivity: Radioactive disintegration concept of natural and artificial radioactivity, Properties of α, β, γ-rays, laws of	06		

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	radioactive decay, half-life, mean life (derivation not required), units of radioactivity, successive disintegration and equilibriums, radioisotopes. Numerical Problems.			
	3.Carbon dating and other applications of radioactive isotopes (Agricultural, Medical, Industrial, Archaeological -information from net).	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Umesh Prajapati DEPARTMENT: Physics CLASS: F. Y. B. Sc. SEMESTER: II MONTH: November-February

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1.Understand the basic concepts of digital electronics , power supply, Circuit Theorem and their applications.

2. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Electricity & Electronics	1.Circuit theorems: (Review: ohm's law, Kirchhoff's laws) Superposition Theorem, Thevenin's Theorem, Ideal Current Sources, Norton's Theorem, Reciprocity Theorem, Maximum Power Transfer Theorem. Numericals related to circuit analysis using the above theorems.	06	1.Sheth Publications. 2.VKM: V K Mehta and R Mehta Electronics Principals, MulticolouredRevised 11th Ed. reprint in 2012 ,S Chand. 3.A P Malvino, Digital Principles	Lecture Method /Chalk & Board
	2.DC power supply: Half wave rectifier , Full wave rectifier, Bridge rectifier, PIV and Ripple factor of full wave rectifier, Clipper and Clampers, Capacitor Filter. Zener diode as voltage stabilizer.	05		

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	3.Digital electronics : Logic gates(Review), NAND and NOR as universal building blocks. EXOR gate: logic expression, logic symbol, truth table, Implementation using basic gates and its applications, Boolean algebra, Boolean theorems. De-Morgan theorems, Half adder and Full adder	04	and Applications: Tata McGraw Hill	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Umesh Prajapati DEPARTMENT: Physics CLASS: S.Y. B. Sc. SEMESTER: III MONTH: June-September

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1.Understand the basics of transistor biasing, operational amplifiers, their applications.

2.Demonstrate quantitative problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Analog Electronics	1.Transistor Biasing: Inherent Variations of Transistor Parameters, Stabilisation, Essentials of a Transistor Biasing Circuit, Stability Factor, Methods of Transistor Biasing, Base Resistor Method, Emitter Bias Circuit, Circuit analysis of Emitter Bias, Biasing with Collector Feedback Resistor, Voltage Divider Bias Method, Stability factor for Potential Divider Bias.	07	1.Sheth Publications, 2.Principles of Electronics – V. K. Mehta and Rohit Mehta. (S. Chand – Multicoloured illustrative edition)	Lecture Method /Chalk & Board
	2.General amplifier characteristics: Concept of amplification, amplifier notations, current gain, Voltage gain, power gain, input resistance, output resistance, general theory of feedback, reasons for negative feedback, loop gain.	06		

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	3.Practical circuit of transistor amplifier, phase reversal, frequency response, Decibel gain and Band width.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Umesh Prajapati DEPARTMENT: Physics CLASS: S. Y. B. Sc. SEMESTER: IV MONTH: November-February

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Understand the working of digital circuits.

2. Understand the conversion of binary, decimal and hexadecimal numbers.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I, U-III, Digital Electronics	1. Number system : Digital IC signal levels, Binary to Decimal ,Decimal to binary , Hexadecimal number, Hexadecimal to decimal Conversion, Decimal to hexadecimal conversion, Hexadecimal to binary conversion, Binary to hexadecimal conversion, Binary addition, Unsigned binary numbers, Sign magnitude numbers , 1's complement , 2's complement , Converting to and from 2's complement representation , 2's complement arithmetic, The adder-subtractor (ignore IC specific diagrams)	07	1.Sheth Publications, 2. LMS – Digital Principles and AplicationsBy Leach, Malvino, Saha 6thedn.	Lecture Method /Chalk & Board

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	2. Flip-Flop: RS Flip-Flops (only NOR gate latch, NAND gate latch) , Gated Flip-Flops, Edge-Triggered RS Flip-Flop, Edge-Triggered D Flip-Flop, Edge-Triggered J-K Flip-Flop, JK Master-Slave Flip-Flops, Bounce elimination switch.	05		
	3.Types of registers : SISO , SIPO, PISO , PIPO, Asynchronous counter -3 bit (ignore IC specific diagrams), Synchronous counter only mod 8, Decade Counters Mod5 and Mod10	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Umesh Prajapati DEPARTMENT: Physics CLASS: T.Y. B. Sc. SEMESTER: V MONTH: June-September

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Understand the working of Data acquisition systems, D to A and A to D Converters.

2. Understand the basic concept of Electron Spin and Spin orbit coupling etc.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-V, U-III, Electronics Instrumentation (Applied Physics)	1. Data acquisition systems: Objectives of DAS, Singal conditioning of inputs, Single channel Data acquisition systems, Multichannel Data acquisition system.	07	1. Sheth Publications 2. Digital Principles and Applications : A. P. Malvino and D. P. Leach. Tata McGraw Hill.	Lecture Method /Chalk & Board
	2. D to A Converters: Resistive divider network, Binary ladder network.	03		
	3. A to D Converters: Successive approximation type, Voltage to time (Single slope, Dual slope).	05		

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P-III, U-II, Atomic Physics	1. Electron Spin: The Stern-Gerlach experiment, Pauli's Exclusion Principle, Symmetric and Antisymmetric wave functions.	07	1.Sheth Publications, 2.1. AB : Perspectives of Modern Physics : Arthur Beiser McGraw Hill.	Lecture Method /Chalk & Board
	2. Spin orbit coupling, Hund's Rule, Total angular momentum, Vector atom model,L-S and j-j coupling. Origin of spectral lines, Selection rules.	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _30_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Umesh Prajapati DEPARTMENT: Physics. CLASS: T. Y. B. Sc. SEMESTER: VI MONTH: November-February

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Understand the working of DC power supply, Differential amplifier and Multivibrators circuit.

2. Understand the basic concepts of 555 Timer and OP-AMP Applications.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Electronics	1. Regulated DC power supply: Supply characteristics, series voltage regulator,Short circuit protection (current limit and fold back) Monolithic linear IC voltage Regulators. (LM 78XX, LM 79XX, LM 317).	07	1.Sheth Publications, 2. 1. MB : Electronic Principles : A. P. Malvino and D.J. Bates, (7th Ed.) – (TMH). 3. VKM : Principles of Electronics : V.	Lecture Method /Chalk & Board
	2. Differential Amplifier using transistor: The Differential Amplifier, DC and ACanalysis of a differential amplifier, Input characteristic-effect of input bias, offset current and input offset voltage on output, common mode gain, CMRR.	05		

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	3. Transistor Multivibrators: Astable, Monostable and Bistable Multivibrators,Schmitt trigger.	03	K. Mehta and Rohit Mehta. S. Chand Publications. (11th Ed.)	
P-II, U-III, Electronics	1. Op Amp Applications: Log amplifier, Instrumentation amplifiers, Voltage controlled current sources (grounded load), First order Active filters, Astableusing OP AMP, square wave and triangular wave generator using OP AMP,Wein-bridge oscillator using OP AMP.	09	1. Sheth Publications 2. 1. MB : Electronic Principles : A. P. Malvino and D.J. Bates, (7th Ed.) – (TMH).	Lecture Method /Chalk & Board
	2. 555 Timer: Review Block diagram, Monostable and Astable operationVoltage Controlled Oscillator, Pulse Width modulator, Triggered linear ramp generator. Malvino: 23.8,23.9	O6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _30_

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Umesh Prajapati DEPARTMENT: Physics CLASS: S.Y. B. Sc. SEMESTER: III MONTH: June-September

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1.Develop a basic understanding about issues related to Human Rights of weaker sections and Dealing with Environmental Concerns.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course, Module-I, Humans Rights Provisions, Violations and Redressal	A. Scheduled Castes- Constitutional and legal rights, Forms of violations, Redressal mechanisms. B. Scheduled tribes- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	04	1. Foundation course - II: Mannan Prakashan.	Lecture Method /Chalk & Board
	C. Women- Constitutional and legal rights, Forms of violations, Redressal mechanisms. D. Children- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	04		
	E. People with Disabilities, Minorities, and the Elderly population- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	04		
Foundation Course, Module-II,	A. Concept of Disaster and general effects of Disasters on human life- physical, psychological, economic and social effects. B. Some locally relevant case studies of environmental disasters.	05	1. Foundation course - II: Mannan Prakashan.	Lecture Method /Chalk & Board

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Dealing with Environmental Concerns	C. Dealing with Disasters - Factors to be considered in Prevention, Mitigation (Relief and Rehabilitation) and disaster Preparedness. D. Human Rights issues in addressing disasters- issues related to compensation, equitable and fair distribution of relief and humanitarian approach to resettlement and rehabilitation.	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _23

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Umesh Prajapati DEPARTMENT: Physics CLASS: S. Y. B. Sc. SEMESTER: IV MONTH: November-February

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1.Develop a basic understanding about issues related to Human Rights of weaker sections and ecology.

2. Appreciate the importance of developing a scientific temper towards technology and its use

in everyday life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course, Module-I, Significant, contemporary Rights of Citizens	A. Rights of Consumers-Violations of consumer rights and important provisions of the Consumer Protection Act, 2016; Other important laws to protect consumers; Consumer courts and consumer movements. B. Right to Information- Genesis and relation with transparency and accountability; important provisions of the Right to Information Act, 2005; some success stories.	06	1. Foundation course - II: Mannan Prakashan.	Lecture Method /Chalk & Board
	C. Protection of Citizens'/Public Interest-Public Interest Litigation, need and procedure tofile a PIL; some landmark cases.	03		
	D. Citizens' Charters, Public Service Guarantee Acts.	03		

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Foundation Course, Module-II, Approaches to understanding Ecology	A. Understanding approaches to ecology- Anthropocentrism, Biocentrism and Eco centrism, Ecofeminism and Deep Ecology. B. Environmental Principles-1: the sustainability principle; the polluter pays principle, the precautionary principle.	07	1. Foundation course - II: Mannan Prakashan.	Lecture Method /Chalk & Board
	C. Environmental Principles-2: the equity principle; human rights principles; the participation principle.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _23

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut __ DEPARTMENT: __Physics _____ CLASS: _T. Y. B. Sc. __ SEMESTER: _____V___

MONTH: ___June-September _____ ACADEMIC YEAR: _____2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Understand the working of Transducers, Sensors and Optoelectronics devices.

2. Understand the basic concept of Modern Techniques and Appliances.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-V, U-I, Electronics Instrumentation (Applied Physics)	1. Transducers: Definition, Classification, Selection of transducer. 2. Electrical transducers: Thermistor, Thermocouple, Pressure Transducer: Strain gauges (wire, foil, & semiconductor), Displacement transducer: LVDT, Peizo-electric Transducer.	04	1. Sheth Publications. 2.Electronic Instrumentation – H S Kalsi, Tata McGraw-Hill Publishing Company	Lecture Method /Chalk & Board
	3. Chemical sensors: PH sensor, Gas sensor (Fundamental aspects), Humidity sensor (Resistive). 4. Electronic Weighing Systems: Operating principle, Blockdiagram,features	05		

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	5. Optoelectronic Devices: LDR, LED (Construction, Working & Applications), Multicolour LED, Seven Segment Display, Liquid Crystal Display (LCD), Photodiode (construction, Characteristics & applications), Phototransistor	06	Limited, New Delhi.	
P-V, U-IV, Electronics Instrumentation (Applied Physics)	1. Printed Circuit Board: Idea of PCB, advantages, copper clad, Etching processes, Principle of Photolithography (For PCB).	06	1. Sheth Publications. 2. . PCB design basics, Mahmoud Wahby, EDN Networks, Nov 2013. 3.Medical instrumentation Application and design- J. C. Wobster	Lecture Method /Chalk & Board
	2. Microwave Oven: Operating principle, block diagram, features.	03		
	3. Medical instruments: Bio-Potential, Types of electrodes, ECG, EEG, EMG, CT Scan and MRI (principle, block diagram and features), Ultrasonography: working principle	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Umesh Prajapati DEPARTMENT: Physics CLASS: F. Y. B. Sc. SEMESTER: I MONTH: July-September

ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Understand nuclear size, nuclear properties and nuclear behavior.

2. Understand the type isotopes and their applications.

3. Numericals problem solving skills in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, Modern Physics	1.Structure of Nuclei:Basic properties of nuclei, Composition, Charge, Size, Rutherford's expt. for estimation of nuclear size, density of nucleus, Mass defect and Binding energy, Packing fraction, BE/A vs A plot, stability of nuclei (N Vs Z plot) and problems.	07	1.Sheth Publications, 2.SBP: Dr. S. B. Patel, Nuclear Physics Reprint 2009, New Age International	Lecture Method /Chalk & Board

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	2.Radioactivity: Radioactive disintegration concept of natural and artificial radioactivity, Properties of α, β, γ-rays, laws of radioactive decay, half-life, mean life (derivation not required), units of radioactivity, successive disintegration and equilibriums, radioisotopes. Numerical Problems.	06		
	3.Carbon dating and other applications of radioactive isotopes (Agricultural, Medical, Industrial, Archaeological -information from net).	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Umesh Prajapati DEPARTMENT: Physics CLASS: F. Y. B. Sc. SEMESTER: II MONTH: November-February

ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

1.Understand the basic concepts of digital electronics , power supply, Circuit Theorem and their applications.

2. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Electricity & Electronics	1.Circuit theorems: (Review: ohm's law, Kirchhoff's laws) Superposition Theorem, Thevenin's Theorem, Ideal Current Sources, Norton's Theorem, Reciprocity Theorem, Maximum Power Transfer Theorem. Numericals related to circuit analysis using the above theorems.	06	1.Sheth Publications. 2.VKM: V K Mehta and R Mehta Electronics Principals, MulticolouredRevised 11th Ed. reprint in 2012 ,S Chand.	Lecture Method /Chalk & Board

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	2.DC power supply: Half wave rectifier , Full wave rectifier, Bridge rectifier, PIV and Ripple factor of full wave rectifier, Clipper and Clampers, Capacitor Filter. Zener diode as voltage stabilizer.	05	3.A P Malvino, Digital Principles and Applications: Tata McGraw Hill	
	3.Digital electronics : Logic gates(Review), NAND and NOR as universal building blocks. EXOR gate: logic expression, logic symbol, truth table, Implementation using basic gates and its applications, Boolean algebra, Boolean theorems. De-Morgan theorems, Half adder and Full adder	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Umesh Prajapati DEPARTMENT: Physics CLASS: S.Y. B. Sc. SEMESTER: III MONTH: June-September

ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

1.Understand the basics of transistor biasing, operational amplifiers, their applications.

2.Demonstrate quantitative problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Analog Electronics	1.Transistor Biasing: Inherent Variations of Transistor Parameters, Stabilisation, Essentials of a Transistor Biasing Circuit, Stability Factor, Methods of Transistor Biasing, Base Resistor Method, Emitter Bias Circuit, Circuit analysis of Emitter Bias, Biasing with Collector Feedback Resistor, Voltage Divider Bias Method, Stability factor for Potential Divider Bias.	07	1.Sheth Publications, 2.Principles of Electronics – V. K. Mehta and Rohit Mehta. (S. Chand – Multicoloured illustrative edition)	Lecture Method /Chalk & Board
	2.General amplifier characteristics: Concept of amplification, amplifier notations, current gain, Voltage gain, power gain, input	06		

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	resistance, output resistance, general theory of feedback, reasons for negative feedback, loop gain.			
	3.Practical circuit of transistor amplifier, phase reversal, frequency response, Decibel gain and Band width.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Umesh Prajapati DEPARTMENT: Physics CLASS: S. Y. B. Sc. SEMESTER: IV MONTH: November-February

ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Understand the working of digital circuits.

2. Understand the conversion of binary, decimal and hexadecimal numbers.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I, U-III, Digital Electronics	1. Number system : Digital IC signal levels, Binary to Decimal ,Decimal to binary , Hexadecimal number, Hexadecimal to decimal Conversion, Decimal to hexadecimal conversion, Hexadecimal to binary conversion, Binary to hexadecimal conversion, Binary addition, Unsigned binary numbers, Sign magnitude numbers , 1's complement , 2's complement , Converting to and from 2's complement representation , 2's	07	1.Sheth Publications, 2. LMS – Digital Principles and AplicationsBy Leach, Malvino, Saha 6thedn.	Lecture Method /Chalk & Board

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	complement arithmetic, The adder-subtractor (ignore IC specific diagrams)			
	2. Flip-Flop: RS Flip-Flops (only NOR gate latch, NAND gate latch) , Gated Flip-Flops, Edge-Triggered RS Flip-Flop, Edge-Triggered D Flip-Flop, Edge-Triggered J-K Flip-Flop, JK Master-Slave Flip-Flops, Bounce elimination switch.	05		
	3.Types of registers : SISO , SIPO, PISO , PIPO, Asynchronous counter -3 bit (ignore IC specific diagrams), Synchronous counter only mod 8, Decade Counters Mod5 and Mod10	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Umesh Prajapati DEPARTMENT: Physics CLASS: T.Y. B. Sc. SEMESTER: V MONTH: June-September

ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Understand the working of Data acquisition system, D to A and A to D Converters.

2. Understand the basic concept of Electron Spin and Spin orbit coupling etc.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-V, U-III, Electronics Instrumentation (Applied Physics)	1. Data acquisition systems: Objectives of DAS, Singal conditioning of inputs, Single channel Data acquisition systems, Multichannel Data acquisition system.	07	1. Sheth Publications 2. Digital Principles and Applications : A. P. Malvino and D. P. Leach. Tata McGraw Hill.	Lecture Method /Chalk & Board
	2. D to A Converters: Resistive divider network, Binary ladder network.	03		
	3. A to D Converters: Successive approximation type, Voltage to time (Single slope, Dual slope).	05		

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P-V, U-II, Electronics Instrumentation (Applied Physics)	1. Half wave precision rectifier, Active peak detector, Active positive Clamper, Active positive and negative Clippers 2. Microphones : characteristics, types, carbon microphone and dynamic type microphone. 3.Loud speakers : Characteristics, dynamic speaker, multi-way speaker system. 4. Switching Regulators : Basic and Monolithic switching regulators.	10	1.Sheth Publications, 2. Electronics Instrumentation : H. S Kalsi, Tata McGraw Hill.	Lecture Method /Chalk & Board
	5. Cathode Ray Oscilloscope: Single trace CRO, Front panel controls,dual trace CRO, probes, DSO. 6. DMM:3.5 digit, resolution and sensitivity, general specification.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _30_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Umesh Prajapati DEPARTMENT: Physics. CLASS: T. Y. B. Sc. SEMESTER: VI MONTH: November-February

ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Understand the working of DC power supply, Differential amplifier and Multivibrators circuit.

2. Understand the basic concepts of 555 Timer and OP-AMP Applications.

3. Numericals problem solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Electronics	1. Regulated DC power supply: Supply characteristics, series voltage regulator,Short circuit protection (current limit and fold back) Monolithic linear IC voltage Regulators. (LM 78XX, LM 79XX, LM 317).	07	1.Sheth Publications, 2. 1. MB : Electronic Principles : A. P. Malvino and D.J. Bates, (7th Ed.) – (TMH).	Lecture Method /Chalk & Board
	2. Differential Amplifier using transistor: The Differential Amplifier, DC and ACanalysis of a differential amplifier, Input characteristic-effect of input bias, offset current and input offset voltage on output, common mode gain, CMRR.	05		

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	3. Transistor Multivibrators: Astable, Monostable and Bistable Multivibrators,Schmitt trigger.	03	3. VKM : Principles of Electronics : V. K. Mehta and Rohit Mehta. S. Chand Publications. (11th Ed.)	
P-II, U-III, Electronics	1. Op Amp Applications: Log amplifier, Instrumentation amplifiers, Voltage controlled current sources (grounded load), First order Active filters, Astableusing OP AMP, square wave and triangular wave generator using OP AMP,Wein-bridge oscillator using OP AMP.	09	1. Sheth Publications 2. 1. MB : Electronic Principles : A. P. Malvino and D.J. Bates, (7th Ed.) – (TMH).	Lecture Method /Chalk & Board
	2. 555 Timer: Review Block diagram, Monostable and Astable operationVoltage Controlled Oscillator, Pulse Width modulator, Triggered linear ramp generator. Malvino: 23.8,23.9	O6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _30_

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Umesh Prajapati DEPARTMENT: Physics CLASS: S.Y. B. Sc. SEMESTER: III MONTH: June-September

ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

1.Develop a basic understanding about issues related to Human Rights of weaker sections and Dealing with Environmental Concerns.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course, Module-I, Humans Rights Provisions, Violations and Redressal	A. Scheduled Castes- Constitutional and legal rights, Forms of violations, Redressal mechanisms. B. Scheduled tribes- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	04	1. Foundation course - II: Mannan Prakashan.	Lecture Method /Chalk & Board
	C. Women- Constitutional and legal rights, Forms of violations, Redressal mechanisms. D. Children- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	04		
	E. People with Disabilities, Minorities, and the Elderly population- Constitutional and legal rights, Forms of violations, Redressal mechanisms.	04		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Foundation Course, Module-II, Dealing with Environmental Concerns	A. Concept of Disaster and general effects of Disasters on human life- physical, psychological, economic and social effects. B. Some locally relevant case studies of environmental disasters.	05	1. Foundation course - II: Mannan Prakashan.	Lecture Method /Chalk & Board
	C. Dealing with Disasters - Factors to be considered in Prevention, Mitigation (Relief and Rehabilitation) and disaster Preparedness. D. Human Rights issues in addressing disasters- issues related to compensation, equitable and fair distribution of relief and humanitarian approach to resettlement and rehabilitation.	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _23

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Umesh Prajapati DEPARTMENT: Physics CLASS: S. Y. B. Sc. SEMESTER: IV MONTH: November-February

ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

1.Develop a basic understanding about issues related to Human Rights of weaker sections and ecology.

2. Appreciate the importance of developing a scientific temper towards technology and its use

in everyday life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course, Module-I, Significant, contemporary Rights of Citizens	A. Rights of Consumers-Violations of consumer rights and important provisions of the Consumer Protection Act, 2016; Other important laws to protect consumers; Consumer courts and consumer movements. B. Right to Information- Genesis and relation with transparency and accountability; important provisions of the Right to Information Act, 2005; some success stories.	06	1. Foundation course - II: Mannan Prakashan.	Lecture Method /Chalk & Board
	C. Protection of Citizens'/Public Interest-Public Interest Litigation, need and procedure tofile a PIL; some landmark cases.	03		

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	D. Citizens' Charters, Public Service Guarantee Acts.	03		
Foundation Course, Module-II, Approaches to understanding Ecology	A. Understanding approaches to ecology- Anthropocentrism, Biocentrism and Eco centrism, Ecofeminism and Deep Ecology. B. Environmental Principles-1: the sustainability principle; the polluter pays principle, the precautionary principle.	07	1. Foundation course - II: Mannan Prakashan.	Lecture Method /Chalk & Board
	C. Environmental Principles-2: the equity principle; human rights principles; the participation principle.	04		
Foundation Course, Modules-III, Science and Technology II	1. Laser Technology- Light Amplification by Stimulated Emission of Radiation; use of laser in remote sensing, GIS/GPS mapping, medical use. 2. Satellite Technology- various uses in satellite navigation systems, GPS, and imprecise climate and weather analyses.	03	1. Foundation course - II: Mannan Prakashan.	Lecture Method /Chalk & Board
	3. Information and Communication Technology- convergence of various technologies like satellite, computer and digital in the information revolution of today's society. 4. Biotechnology and Genetic engineering- applied biology and uses in medicine, pharmaceuticals and agriculture; genetically modified plant, animal and human life. 5. Nanotechnology- definition: the study, control and application of phenomena and materials at length scales below 100 nm; uses in medicine, military intelligence and consumer products.	04		

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	6. Issues of Control, Access and Misuse of Technology.	04		
Foundation Course Module-I, Introduction to Competitive Examinations	Part A. Basic information on Competitive Examinations- the pattern, eligibility criteria and local centres: i. Examinations conducted for entry into professional courses - Graduate Record Examinations (GRE), Graduate Management Admission Test GMAT), Common Admission Test (CAT) and Scholastic Aptitude Test (SAT). ii. Examinations conducted for entry into jobs by Union Public Service Commission, Staff Selection Commission (SSC), State Public Service Commissions, Banking and Insurance sectors, and the National and State Eligibility Tests (NET / SET) for entry into teaching profession.	04	1. Foundation course - II: Mannan Prakashan.	Lecture Method /Chalk & Board
	Part B. Soft skills required for competitive examinations- i. Information on areas tested: Quantitative Ability, Data Interpretation, Verbal Ability and Logical Reasoning, Creativity and Lateral Thinking ii. Motivation: Concept, Theories and Types of Motivation iii. Goal-Setting: Types of Goals, SMART Goals, Stephen Covey's concept of human endowment iv. Time Management: Effective Strategies for Time Management v. Writing Skills: Paragraph Writing, Report Writing, Filing an application under the RTI Act, Consumer Grievance Letter.	07		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Anushita A. Moger DEPARTMENT:Physics CLASS:FYBSc SEMESTER:1

MONTH: July-September ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

1) understand nuclear properties and nuclear behavior.

2)demonstrate quantitative problem-solving skill in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Phy-2(unit-2) Nuclear physics	Chp-1 Interaction between particles and matter, I.P.counter and GM counter.	07		Chalk and duster method
	Chp-2 Types of reaction and conservation laws, concept of compound and direct reaction, problems based on nuclear fusion and fission.	08		Chalk and duster method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

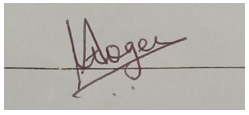
NAME: Anushita A. Moger. DEPARTMENT: Physics CLASS: S.Y.B.Sc. SEMESTER:3

MONTH: June-September. ACADEMICYEAR:2018-19

LEARNINGOBJECTIVE/S:
The learners will be able to:

1) understand basic concept of oscillator and be able to perform calculations using them.

2)to demonstrate quantitative problem solving skills in all the topics covered.



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PAPER, UNIT, TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
Phy-2(unit-3)Applied electronics	Chp-1.Oscillators, requirements for Oscillations,phase shift oscillator,wein bridge oscillator,colpitts oscillator and Hartley oscillator	07		Chalk and duster method
	Chp-2Opamp-introduction and schematic symbol and ac analysis ,bandwidth of an opamp ,slew rate , frequency response and negative feedback of an opamp, inverting and non inverting amplifier,voltage follower ,summing amplifier and it's applications, integrator and differentiator	08		Chalk and duster method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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NAMEOFTHESTAFF: Anushita A. Moger. DEPARTMENT: Physics CLASS: T.Y.B.Sc. SEMESTER:5

MONTH: June-September ACADEMICYEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

1)understand the laws of electrodynamics & be able to perform calculations using them.

2)Understand Maxwell's electrodynamics & Its relation to relativity.

3)Understand how optical laws can be derived from electromagnetic principles.

4)Develop quantitative problem-solving skills.

PAPER, UNIT,TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICT TOOLSUSED

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Phy-4.(unit -3) electrodynamics	Magnetism and varying fields-diamagnet,paramagnet and ferromagnetism, magnetisation,bound currents and their physical interpretation,ampere's law in magnetised material,deceptive equation in matter and boundary conditions, electrodynamics before Maxwell,Maxwell's correction to ampere's law,Maxwell equation in matter and it's boundary conditions and magnetic charge	15		Chalk and duster method
Phy-4(unit-4) electrodynamics	Electromagnetic waves, continuity equation,poynting theorem,Newton's third law,wave equation for electric and magnetic fields, monochromatic plane waves, energy and momentum in electromagnetic waves, propagation in linear media,reflection and transmission of electromagnetic waves at normal incidence.	15		Chalk and duster method

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15

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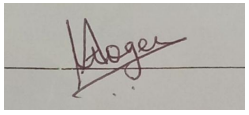
NAME OF THE STAFF: Anushita A. Moger. DEPARTMENT: Physics CLASS:FYBSc SEMESTER:2

MONTH: December-February ACADEMICYEAR:2018-19

LEARNINGOBJECTIVE/S:
The learners will be able to:

1)the basic mathematical concept and applications of them in physical situation.

2)demonstrate quantitative problem solving skills in all the topics covered.



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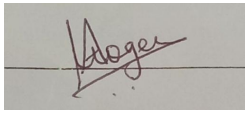
PAPER, UNIT,TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
Phy-1(unit-1) electrodynamics	Chp-1 vectors,scalars,vector algebra and it's laws,scalar and vector field and problems based on them,cross product,dot product, commutative and distributive laws,scalar and vector triple products.	07		Chalk and duster method
	Chp-2 Gradient, curl and divergence,their significance, distributive laws for all the three terms,problems based on them.	08		Chalk and duster method

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15



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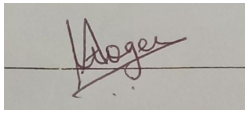
NAME OF THE STAFF: Anushita A.Moger. DEPARTMENT: Physics CLASS: S.Y.B.Sc. SEMESTER:4

MONTH: November-February ACADEMICYEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

1) understand the postulates of quantum mechanics and to understand its importance in explaining significant phenomena in physics.

2)todemonstratequantitativeproblemsolvingskillsinallthetopicscovered.



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PAPER, UNIT,TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
Phy-2(unit-1) quantum mechanics	Schrodinger's wave equation,concept of wave function ,Born interpretation of wave function, position, momentum and energy operators,eigen value equation , expectation value of operators, postulates of quantum mechanics,analogy between wave and Schrodinger's equation,STDE and STIE ,superposition principle, probability current density ,equation of continuity and it's physical interpretation.	15		Chalk and duster method

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15

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NAME OF THE STAFF: Anushita A. Moger. DEPARTMENT:Physics CLASS: T.Y.B.Sc. SEMESTER:6

MONTH: November-February ACADEMICYEAR:2018-19

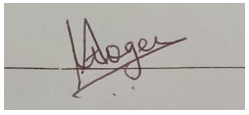
LEARNING OBJECTIVE/S:

1)understand the significance of Michelson Morley experiment and failure of the existing theories to explain the null result.

2)the importance postulates of special relativity, Lorenz transformation equations and how it changed the way we look at space and time

, Absolute time and relativity, Commonsense versus Einstein concept of Space and time.

3)Understand the transformation equations for: Space and time, velocity, frequency, mass, momentum ,force ,Energy, Charge and current density, electric and magnetic fields.



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PAPER, UNIT,TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
Phy 4(unit-1) relativity	Special theory of relativistic kinematics,experimental background of special theory of relativity,Galilean transformation,Newtonian relativity, electromagnetism and Newtonian relativity, attempt to locate absolute frame, Michelson Morley experiment, attempt to preserve the concept of a ether frame,lorentz Fitzgerald contractions and ether drag hypothesis, attempt to modify electrodynamics,postulates of special theory of relativity.	15		Chalk and duster method

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: November-February

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the fundamental principles and concepts governing alpha decay.

2. Understand the concepts of spectrum of alpha particles, alpha decay paradox penetration

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III(Nuclear Physics), Unit-I, Alpha Decay	Velocity ,energy and absorption of alpha particles :Range, ionization and stopping power Nuclear energy levels .Range of alpha particles, alpha particle spectrum .fine structure ,long range alpha particles, alpha decay paradox penetration (Gamow's theory of alpha decay and Geiger-Nuttal law) Problems based on alpha decay	15	Sheth Publication's T.Y.Bsc. Nuclear Physics S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: November-February

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concept of beta decay and beta spectrum .

2. Understand the concepts of neutrino ,Pauli's Neutrino hypothesis and energetics of beta decay .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III (Nuclear Physics) Unit-II, Beta Decay	Introduction, Velocity and energy of beta particles, energy levels and decay schemes, Continuous beta ray spectrum-Difficulties encountered to understand it, Pauli's neutrino hypothesis, Detection of neutrino, Energetics of beta -decay. Problems based on above topics	15	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: December-February

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of asymmetric fission -Mass yield emission of delayed electrons.

2. Understand the concepts of Nuclear fission and fusion.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III (Nuclear Physics), Unit-III (Nuclear Energy & Particle accelerators) 1.Nuclear Energy 2.Particle Accelerators	1.Introduction,Asymmetric fission-Mass yield Emission of delayed electrons ,Nuclear release in fission ,Nature of fission fragments ,Energy released in the fission chain reaction ,Neutron cycle in a thermal nuclear reactors ,nuclear power and breeder reactors ,Natural Fusion Possibility of controlled fusion. Problem based on the above topics	09	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

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	2.Van de Graff Generators, Cyclotron, Synchrotron, Betatron and Idea of large Hadron Collider	06	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi Raut DEPARTMENT: Physics CLASS: T.Y.B.Sc SEMESTER: VI MONTH: December -February

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the concepts of Meson theory of Nuclear force

2. Understand the concepts of elementary particles.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper -III(Nuclear Physics), Unit-IV (Nuclear Force and elementary particle)	1. Introduction, Deuteron problems, Meson theory of Nuclear force -A qualitative discussion	05	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

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1.Nuclear Force 2.Elementary particle	2.Introduction,Claasifications of elementary particles ,Particle interactions ,conservation laws ,particles and antiparticles ,photons ,Mesons ,Quark model	10	S.B. Patel Nuclear Physics	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. Hemangi A. Raut. DEPARTMENT:Physics CLASS: _T. Y. B. Sc. __ SEMESTER: V MONTH: June-oct.
ACADEMIC YEAR: 2018-2019

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-III, Solid State Physics	Band Theory of Solids and Conduction in Semiconductors 1. Band theory of solids, The Kronig- Penney model (Omit eq. 6.184 to 6.188),Brillouin zones, Number of wave functions in a band, Motion of electrons in a one-dimensional periodic potential, Distinction between metals, insulators and intrinsic semiconductors.	07	1.Sheth Publications, 2.MH : Electronic Devices and Circuits :Millman, Halkias & Satyabrata Jit. (3rd Ed.) Tata McGraw Hill.	Chalk & board Method
	2. Electrons and Holes in an Intrinsic Semiconductor, Conductivity of a Semiconductor, Carrier concentrations in an intrinsic semiconductor, Donor and Acceptor impurities, Charge densities in a semiconductor, Fermi level in extrinsic	08		

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	semiconductors, Diffusion, Carrier lifetime, The continuity equation, Hall Effect.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-IV, Solid State Physics	Diode, magnetism and superconductivity 1.Semiconductor-diode Characteristics: Qualitative theory of the p-n junction, The p-n junction as a diode, Band structure of an open-circuit p-n junction, The current components in a p-n junction diode, Quantitative theory of p-n diode currents, The Volt-Ampere characteristics, The temperature dependence of p-n characteristics, Diode resistance.	08	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method

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	2. Superconductivity: Experimental Survey, Occurrence of Superconductivity, destruction of superconductivity by magnetic field, The Meissner effect, London equation, BCS theory of superconductivity, Type I and Type II Superconductors, Vortex state. dependence of p-n characteristics, Diode resistance.	07	3. MH : Electronic Devices and Circuits :Millman, Halkias & Satyabrata Jit. (3rd Ed.) Tata McGraw Hill.	
			4. Solid State Physics : A. J. Dekker, Prentice Hall	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: T.Y.B.Sc. SEMESTER: V MONTH: June -September

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the effect of the magnetic field on atoms and its applications.

2 Understand the importance of vector atom model

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III (Atomic and Molecular Physics), Unit-II 1.Spin orbit coupling 2.Effects of magnetic field on an atom	1. Spin orbit coupling, Total angular momentum, Vector atom model, L-S coupling &j-j coupling, origin of spectral lines, selection rules.	07	Perspective of Modern Physics Arthur Beiser	Lecture Method /Chalk and Board
	2.Effect of magnetic field on atom, the normal Zeeman effect &its applications (Classical & quantum), The Lande g-Factor, Anomalous Zeeman effect, Problems based on above topics .	08	Sheth Publication's Atomic & molecular Physics	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc. SEMESTER: III MONTH: July -September

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Understand the basic concepts of mathematical physics and their applications in physical situations.

2. Understand the basic laws of electrodynamics and be able to perform calculations using them.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II (Vector calculus, Analog Electronics), Unit-I 1.Line, Surface and Volume Integrals 2. Curvilinear co-ordinate	1.Fundamental Theorems of Calculus, Fundamental Theorems of gradient, Fundamental Theorems of Divergence, Fundamental Theorems of Curl, Problems based on these theorems	08	Introduction to Electrodynamics by D.J. Griffith	Lecture Method /Chalk and Board
	2.Cylindrical Coordinates, Spherical Coordinates Problems based on these topics	07	Sheth Publication's S.Y.B.Sc Textbook	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: III MONTH: July-September

ACADEMIC YEAR: 2018-19 Subject: Foundation Course-III

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Appreciate the importance of developing a scientific temper towards technology and its use in everyday life.

2. Understand the values of scientific attitude towards Indian society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-III (Science & Technology-I) 1.Devepolment of science 2.Nature of Science 3.Science and superstition 4.Science in everyday life	1.the ancient culture, the classical era, the middle ages, the Renaissance, the age of Reason and Enlightenment	03	Foundation Course by Manan Prakashan	Lecture Method /Chalk and Board
	2.Principle and characteristics, science as empirical, practical theoretical, validated knowledge.	02	Foundation Course by Manan Prakashan	Discussion method
	3.role of science exploding myths ,blind beliefs and prejudice ,science temper as a fundamental duty of the Indian society	03	Foundation Course by Manan Prakashan	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Jyoti Gupta DEPARTMENT: Physics CLASS: S.Y.B.Sc SEMESTER: III MONTH: July-September

ACADEMIC YEAR: 2018-19 Subject: Foundation Course-III

LEARNING OBJECTIVE/S:
The learners will be able to: 1. Develop a basic understanding of the importance of communication.

2. Gain an overview of significant skills required to address competition in career choice.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-IV (Soft skill for effective Interpersonal communication) 1.effective listening 2.Formal and Informal Communication 3.Leadership Skills	1.Impotance and features of listening, Verbal and non-verbal communication, Barrier to effective communication	04	Foundation Course by Manan Prakashan	Lecture Method /Chalk and Board
	2.formal and informal communication: purpose and type, writing formal applications, SOP and resume ,Group discussion, Interviews and presentations	04	Foundation Course by Manan Prakashan	Discussion method
	3.Leadership skills and self-improved -Characteristics of leadership ,styles of leadership and team building	03	Foundation Course by Manan Prakashan	Lecture Method /Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _**LAXMI K. PARATE**_____DEPARTMENT: _____PHYSICS____

_ CLASS: T.Y.B.Sc_____SEMESTER: _V_____MONTH: ___JUNE TO SEPTEMBER_____ ACADEMIC YEAR:**2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to : The students are expected to be able to solve simple problems in probability, understand the concept of independent events and work with standard continuous distributions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I MATHEMATICAL PHYSICS UNIT-I PROBABILITY	sample space, events, independent events, conditional probability, probability theorems, methods of counting (derivation of formulae not expected), random variables, continuous distributions (omit joint distributions), binomial distribution, the normal distribution, the Poisson distribution.	15	Mathematical Methods in the Physical sciences: Mary L. Boas Wiley	Chalk/Board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: T.Y.B.Sc_____SEMESTER: _V_____MONTH: ___JUNE_--_SEPTEMBER_____ ACADEMIC YEAR:**2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to : The students will have idea of the functions of complex variables; solve nonhomogeneous differential equations and partial differential equations using simple methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I MATHEMATICAL PHYSICS UNIT-II COMPLEX NO.	Functions of complex variables: The exponential and trigonometric functions, hyperbolic functions, logarithms, complex roots and powers, inverse trigonometric and hyperbolic functions, some applications.	7	Mathematical Methods in the Physical sciences: Mary L. Boas Wiley	Chalk/Board

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DIFFERENTIAL EQUATION	Second-order nonhomogeneous equations with constant coefficients, partial differential equations, some important partial differential equations in physics, method of separation of variables.	8	Mathematical Physics: H. K. Das,	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _**LAXMI K. PARATE**_____DEPARTMENT: _____PHYSICS_____

CLASS: S.Y.B.Sc_____SEMESTER: _III_____MONTH: _JUNE-SEPTEMBER_____ ACADEMIC YEAR:**2018-19**_____

LEARNING OBJECTIVE/S:
The learners will be able to : _*_ Comprehend the basic concepts of thermodynamics & its applications in physical situation.

_ * Demonstrate tentative problem solving skills in all above areas.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-II THERMODYNAMICS	Heat engine, Carnot's cycle: its efficiency,NUMERICALS	3	Heat thermodynamics and Statistical Physics, Brijlal, N.Subramanyam, P. S. Hemne, S. Chand,	Chalk/Board
	Second law of thermodynamics, Statements, Equivalence of Kelvin and Plank statement, Carnot's theorem, Reversible and irreversible process, Absolute scale of temperature.	5	Heat thermodynamics and Statistical Physics, Brijlal, N.Subramanyam, P. S. Hemne, S. Chand,	Chalk/Board
	Clausius theorem, Entropy, Entropy of a cyclic process, Reversible process, Entropy change, Reversible heat transfer,	7	Heat thermodynamics and Statistical Physics, Brijlal,	Chalk/Board

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	Principle of increase in entropy, generalized form of first and second law, entropy change of an ideal gas, entropy of steam, entropy and unavailable energy, entropy and disorder, absolute entropy.		N.Subramanyam, P. S. Hemne, S. Chand,	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: F.Y.B.Sc_____SEMESTER: _I_____MONTH: ___JULY-OCTOBER_____ ACADEMIC YEAR:2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : Apply the laws of thermodynamics to formulate the relations necessary to analyze a thermodynamic process.

Demonstrate quantitative problem solving skills in all the topics covered

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-III THERMODYNAMICS	Behavior of real gases and real gas equation, Van der Waal equation, relation between vander waals coefficient and critical constant, Boyles Temperature,Numericals	6	Brijlal, Subramanyam and Hemne, Heat Thermodynamics and Statistical Physics,	Chalk/Board

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	Thermodynamic Systems, Zeroth law of thermodynamics, Concept of Heat, The first law, Non Adiabatic process and Heat as a path function, Internal energy, , Heat Capacity and specific heat, Applications of first law to simple processes, general relations from the first law, Indicator diagrams, Work done during isothermal and adiabatic processes, Worked examples, Problems.	9	Brijlal, Subramanyam and Hemne, Heat Thermodynamics and Statistical Physics,	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: T.Y.B.Sc_____SEMESTER: _VI_____MONTH: _NOVEMBER-MARCH__ _____ ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the kinds of motions that can occur under a central potential and their applications to planetary orbits. The students should also appreciate the effect of moving coordinate system, rectilinear as well as rotating.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-I CENTRAL FORCE	Motion under a central force, the central force inversely proportional to the square of the distance, Elliptic orbits, The Kepler problem.	10	Classical Mechanics: Herbert Goldstein	Chalk/Board
	Moving origin of coordinates, Rotating coordinate systems, Laws of motion on the rotating earth, The Foucault pendulum, Larmor's theorem	5	Classical Mechanics: Herbert Goldstein	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: T.Y.B.Sc_____SEMESTER: _VI_____MONTH: NOVEMBER-MARCH __ _____ ACADEMIC YEAR:2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : Learn the concepts needed for the important formalism of Lagrange's equations and derive the equations using D'Alembert's principle. They should also be able to solve simple examples using this formalism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-I UNIT-II LAGRANGE'S EQUATIONS	D'Alembert's principle, Constraints, Examples of holonomic constraints, examples of nonholonomic constraints, degrees of freedom and generalized coordinates, virtual displacement, virtual work, D'Alembert's principle, illustrative problems.	10	Classical Mechanics: J. C. Upadhyaya	Chalk/Board
	Lagrange's equations (using D'Alembert's principle), properties of Lagrange's equations, illustrative problems, canonical momentum, cyclic or ignorable coordinates	5		Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: S.Y.B.Sc_____SEMESTER: _IV_____MONTH: _ NOVEMBER-FEBRUARY_ _____ ACADEMIC YEAR:2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of Basics of communication, Concept of modulation and its various types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-III UNIT-III COMMUNICATION SYSTEM,RADIATION PHYSICS	Block diagram of communication system, types of communication system: simplex, duplex, analog and digital communication, Electromagnetic spectrum, base band and broad band communication. Noise concept and types, signal to noise ratio, noise figure, noise temperature	4	Electronics Communication Systems by Kennedy	Chalk/Board
	Need of modulation, concept of modulation, AM waveform, mathematical expression , concept of sideband, demodulation principles. TRF and superheterodyne receiver	3	Electronics Communication Systems by Kennedy	Chalk/Board

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	FM modulation: definition, mathematical representation, frequency spectrum, bandwidth and modulation index. 4.Concept of ASK, PSK, FSK, PAM, PWM, PPM, PCM.	4	Electronics Communication Systems by Kennedy	Chalk/Board
	radioactivity, Alpha, beta and gamma radiation, high energy electron radiation and X-rays, Radiation units, Sources of radiation Radiation protection Radiation Detectors and Beam Calibration Types of radiation detectors, Ionization detectors, scintillation detectors, particle detectors, TLD, thin film detectors, Radiation field analyzer, Basic principles of beam profile	3	Electronics Communication Systems by Kennedy	Chalk/Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _LAXMI K. PARATE_____DEPARTMENT: _____PHYSICS_____

CLASS: F.Y.B.Sc_____SEMESTER: _II_____MONTH: ___DECEMBER-MARCH_____ ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PHY-II UNIT-I A.C.CIRCUIT	AC circuit containing pure R, pure L and pure C, representation of sinusoids by complex numbers, Series L-R, C-R and LCR circuits. Resonance in LCR circuit (both series and parallel), Power in ac circuit. Q-factor.	9	PRINCIPLE OF ELECTRONICS By V K Mehta and R Mehta	Chalk/Board
	AC-bridges: General AC bridge, Maxwell, de-Sauty, Wien Bridge , Hay bridge,Numericals	6	PRINCIPLE OF ELECTRONICS By V K Mehta and R Mehta	Chalk/Board

The learners will be able to : Understand the basic Electronics concepts and their applications

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _F. Y. B. Sc. __ SEMESTER: I MONTH: July-oct.

ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

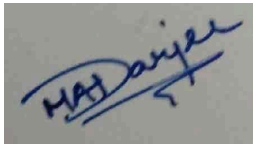
• To develop analytical abilities towards real world problems.

• To familiarize with current and recent scientific and technological

developments.

• To enrich knowledge through problem solving, hands on activities, applications base study etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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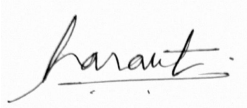
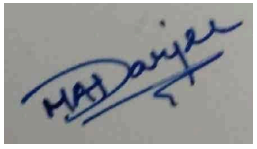
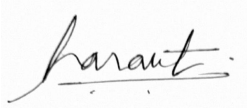


SIGNATURE OF THE H.O.D.

P-II, U-III, Modern Physics	1. Origin of Quantum theory, Black body (definition), Black Body spectrum, Wien's displacement law, Matter waves, wave particle duality, Heisenberg's uncertainty Principle. Davisson-Germer experiment, G. P. Thompson experiment..	08	1.Sheth Publications, 2.Arthur Beiser, Perspectives of ModernPhysics : Tata McGraw Hill	Chalk & board Method
	2. X-Rays production and properties. Continuous and characteristic X-Ray spectra, X-Ray Diffraction, Bragg's Law, Applications of X-Rays.	05		
	3. Compton Effect, Pair production, Photons and Gravity, Gravitational Red Shift.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15_





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NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _F. Y. B. Sc. __ SEMESTER: II MONTH: Nov-april.

ACADEMIC YEAR: 2018-2019

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-1, U-I Mathematical Physics	1. Vector Algebra : Vectors, Scalars, Vector algebra, Laws of Vector algebra, Unit vector, Rectangular unit vectors, Components of a vector, Scalar fields, Vector fields, Problems based on Vector algebra.Dot or Scalar product, Cross or Vector product, Commutative and Distributive Laws, Scalar Triple product, Vector Triple product (Omit proofs). Problems and applications based on Dot, Cross and Triple products..	08	1.Sheth Publications, 2.Arthur Beiser, Perspectives of ModernPhysics : Tata McGraw Hill	Chalk & board Method

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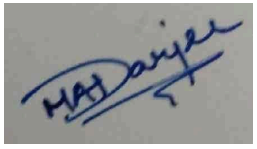
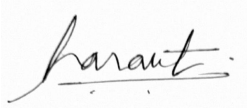
	2. Gradient, divergence and curl: The ∇ operator, Definitions and physical significance of Gradient, Divergence and Curl; Distributive Laws for Gradient, Divergence and Curl (Omit proofs); Problems based on Gradient, Divergence and Curl..	07		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15





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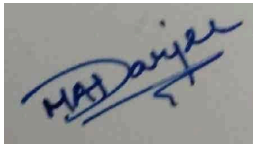
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _S. Y. B. Sc. __ SEMESTER: III MONTH: July-oct.

ACADEMIC YEAR: 2018-2019

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III, U-II Applied Physics-1	1. Biophysics: Introduction, definition, History & scope of biophysics, biological fluids, physico-chemical properties, viscosity, surface tension, pH, osmosis, osmotic pressure. Diffusion, Ficks' laws of diffusion, dialysis, Cell is unit of life, fundamental understanding prokaryotic and eukaryotic cell structure and function, eukaryotic cell membrane.	06	1. Cellular and Molecular Biology: Concept and Experiment by Gerald Karp 2. The Cell: A Molecular Approach by Geoffery Cooper 4. Medical Physiology by Guyton	Chalk & board Method



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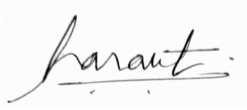

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			5. Molecular Biology of Cell by Bruce Albert	
	2. Fundamentals of transport process through biological membrane, membrane channels. electrical properties of cell, Action potential, propagation of action potential, methods of measurement of action potential, Nernst equation, Golman equation, The Hodgkin-Huxely model of action potential, voltage clamp technique, Patch clamp technique, cell impedance and Capacitance	09		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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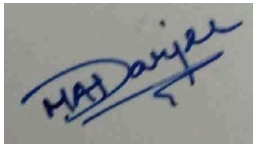
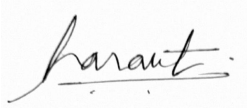
NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _S. Y. B. Sc. __ SEMESTER: IV MONTH: nov-april.
ACADEMIC YEAR: 2018-2019

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-III Quantum mechanics	Applications of Schrodinger steady state equation –II 1. Potential barrier (Finite height and width) penetration and tunneling effect (derivation of approximate transmission probability)	07	1.Sheth Publications,	Chalk & board Method
	2. Theory of alpha particle decay from radioactive nucleus.	02		
	3. Harmonic oscillator (one-dimension), correspondence principle.	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15





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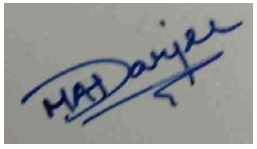
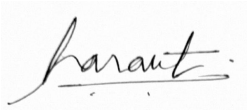
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III, U-I Geophysics	1 : GEOLOGY AND GEOPHYSICS 1.1 Introduction to Geophysics its branches and relationship with other sciences. 1.2 Earth and solar system: Meteorites and other extra-terrestrial materials. 1.3 Age of Earth and various methods of determination. Planetary evolution of the Earth and its internal structure: Elastic waves and variation of physical and chemical properties in the interior of Earth. 1.4 Major tectonic features of the ocean oceanic and continental crust. 1.5 Continental drift – geological and geophysical evidence: mechanisms, objections and present status. 1.6 Gravity and magnetic anomalies at Mid-ocean ridges: deep sea trenches, continental shield areas and mountain chains. 1.7 Geomagnetism, elements of Earth's magnetism: Internal, external fields and their causes, Palaeomagnetism, Polar wandering paths and reversals, Seafloor spreading and Plate tectonics. 1.8 Seismic belts of the Earth: Seismicity and plate movements.	06	1.Sheth Publications,	Chalk & board Method





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	1.9Geodynamics of the Indian plate. 1.10 Utility of the different geophysical techniques (discussed above) in exploration for academic as well as for harnessing resources. Geophysical potential fields: Principles of Gravity and Magnetic methods. 1.11 Instrumentation, field procedures used in geophysical studies. 1.12 Case studies			
	2 : GEO-ENVIRONMENTAL SCIENCES 2.1 Environmental Magnetic Analysis relating to magnetic minerals and environmental systems, soil magnetism, mineral magnetic studies of lake and marine sediments and magnetic monitoring of air-, land- and water-pollution. 2.2 Geo-Environmental Studies relating to mining, urban, industrial, coastal and desert management, palaeoclimate, palaeoenvironment, medical geology, climate change and studies related to their impact on ecosystem. 2.3 Natural Hazard Investigations including scientific studies related to natural hazards such as earthquakes, landslides, floods and tsunamis. 2.4 Impact Assessment of Anthropogenic Activities such as heavy metal pollution in Mumbai aquatic system with industries and thermal	09,		

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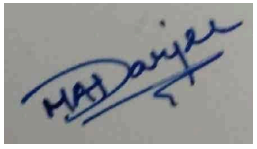
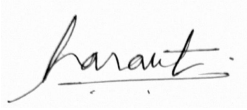
	power plants, urbanization, disposal of industrial and radio-active waste, excessive withdrawal of ground water and use of fertilizers.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15

NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _T. Y. B. Sc. __ SEMESTER: V MONTH: June-oct.
ACADEMIC YEAR: 2018-2019

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, Solid State Physics	Crystal Physics 1. Lattice points and space lattice, The basis and crystal structure, Unit Cells and lattice parameters, Primitive Cells, Crystal Systems, Crystal Symmetry, Bravais space lattices, Metallic crystal structures, relation between the density of crystal material and lattice constant in a cubic lattice, Directions, Planes, Miller Indices, Important planes in simple cubic structure, separation between lattice planes in a cubic	11	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method





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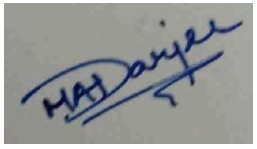
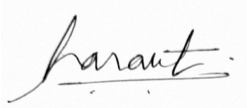
	crystal, Reciprocal Lattice(Omit Vector-algebraic discussion), X-ray Diffraction.			
	2. Classical free electron theory of metals, Drawbacks of classical theory, Relaxation time, Collision time and mean free patH.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15





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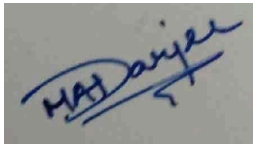
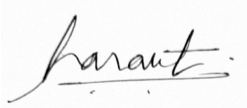
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Solid State Physics	Electrical properties of metals 1.Quantum theory of free electrons, Fermi Dirac statistics and electronic distribution in solids, Density of energy states and Fermi energy, The Fermi distribution function, Heat capacity of the Electron gas, Mean energy of electron gas at 0 K, Electrical conductivity from quantum mechanical considerations..	08	1.Sheth Publications, 2.SOP : Solid State Physics : S. O. Pillai, New Age International. 6th ed	Chalk & board Method
	1.Band theory of solids, The Kronig- Penney model (Omit eq. 6.184 to 6.188), Brillouin zones, Number of wave functions in a band, Motion of electrons in a one-dimensional periodic potential, Distinction between metals, insulators and intrinsic semiconductors.	07		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15





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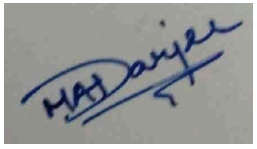
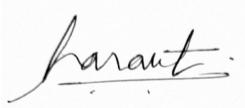
NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _T. Y. B. Sc. __ SEMESTER: VI MONTH: Nov-april.
ACADEMIC YEAR: 2018-2019

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-IV, U-II, Special theory of relativity	Relativistic Kinematics Relativistic Kinematics (continued): The relativistic addition of velocities and acceleration transformation equations, Aberration and Doppler effect in relativity, The common sense of special relativity..	07	1.Sheth Publications, 2. RR : Introduction to Special Relativity : Robert Resnick (Wiley Student Edition)	Chalk & board Method
	The Geometric Representation of Space-Time: Space-Time Diagrams, Simultaneity, Length contraction and Time dilation, The time order and space separation of events, The twin paradox	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15





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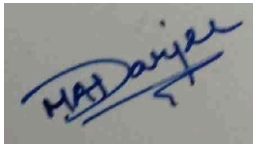
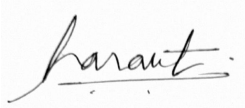
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-IV, U-IV, Special theory of relativity	Relativity and Electromagnetism: Introduction, The interdependence of Electric and Magnetic fields, The Transformation for E and B, The field of a uniformly moving point charge, Force and fields near a current-carrying wire, Force between moving charges, The invariance of Maxwell's equations.	13	1.Sheth Publications, 2. RR : Introduction to Special Relativity : Robert Resnick (Wiley Student Edition)	Chalk & board Method
	The principle of equivalence and general relativity, Gravitational red shift.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15





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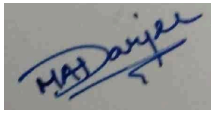
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _F. Y. B. Sc. ___ SEMESTER: I MONTH: July-oct.

ACADEMIC YEAR: 2018-2019

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -1 U-1 Overview of Indian Society	Understand the multi-cultural diversity of Indian society through its demographic composition: population distribution according to religion, caste, and gender; Appreciate the concept of linguistic diversity in relation to the Indian situation; Understand regional variations according to rural, urban and tribal characteristics; Understanding the concept of diversity as difference.	05	Manan prakashan	Chalk & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _05



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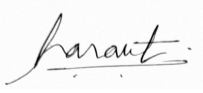

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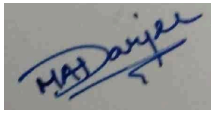
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -1 U-II Concept of Disparity-1:	Understand the concept of disparity as arising out of stratification and inequality; Explore the disparities arising out of gender with special reference to violence against women, female foeticide (declining sex ratio), and portrayal of women in media; Appreciate the inequalities faced by people with disabilities and understand the issues of people with physical and mental disabilities.	10	Manan prakashan	Chalk & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10



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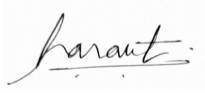

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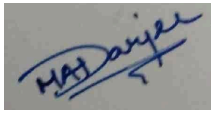
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -1 U-II Concept of Disparity- 2	Examine inequalities manifested due to the caste system and inter-group conflicts arising thereof; Understand inter-group conflicts arising out of communalism; Examine the causes and effects of conflicts arising out of regionalism and linguistic differences.	10	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10

NAME OF THE STAFF: Ms. Mrunal A. Darjee. DEPARTMENT:Physics CLASS: _F. Y. B. Sc. ___ SEMESTER: II MONTH: July-oct.

ACADEMIC YEAR: 2018-2019



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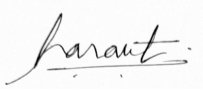

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
F C -2 U-I Globalisation and Indian Society:	(Understanding the concepts of liberalization, privatization and globalization; Growth of information technology and communication and its impact manifested in everyday life; Impact of globalization on industry: changes in employment and increasing migration; Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides.	07	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _07

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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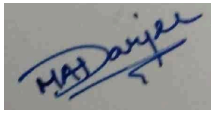
F C -2 U-II Human Rights	Concept of Human Rights; origin and evolution of the concept; The Universal Declaration of Human Rights;Human Rights constituents with special reference to Fundamental Rights stated in the Constitution;.	10	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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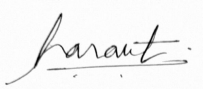

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F C -2 U-III Ecology	Importance of Environment Studies in the current developmental context; Understanding concepts of Environment, Ecology and their interconnectedness; Environment as natural capital and connection to quality of human life; Environmental Degradation- causes and impact on human life; Sustainable development- concept and components; poverty and environment	10	Manan prakashan	Chack & board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **T.Y.B.Sc.**

SEMESTER: **V** MONTH: **June-September** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Apply theory of quantum physics in atomic physics.
- Understand importance of electron spins, symmetric & antisymmetric wave functions & vector atom model.
- Learn the Effect of magnetic field on atoms & its application.
- Learn molecular physics & its application.
- This course will be useful to get an insight into spectroscopy.
- Get the insight of the modern medical instruments in principle, which are used in day to day life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III, Unit -3 **Atomic & molecular Physics**	1. Molecular spectra (Diatomic Molecules): Rotational energy levels, Rotational spectra, Vibrational energy levels, Vibrational-Rotational spectra. Electronic Spectra of Diatomic molecules: The Born-Oppenheimer approximation, Intensity of vibrational-electronic spectra: The Franck-Condon principle. 2. Infrared spectrometer & Microwave spectrometer	15	B: Perspectives of Modern Physics: Arthur Beiser Page 8 of 18 McGraw Hill.	Chalk and board Notes provided

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Paper-III, Unit -4 **Atomic & molecular Physics**	1. Raman Effect: Quantum Theory of Raman Effect, Pure Rotational Raman spectra: Linear molecules, symmetric top molecules, Asymmetric top molecules, Vibrational Raman spectra: Raman activity of vibrations, Experimental set up of Raman Effect. 2. Electron spin resonance: Introduction, Principle of ESR, ESR spectrometer. 3. Nuclear magnetic resonance: Introduction, principle and NMR instrumentation.	15	BM: Fundamentals of Molecular Spectroscopy: C. N. Banwell & E. M. McCash (TMH).(4th Ed.) . GA: Molecular structure and spectroscopy : G Aruldhas (2nd Ed) PHI learning Pvt Ltd.	Chalk and board Notes provided
Applied Component, Unit-4 Modern Techniques and Appliances	1. Printed Circuit Board: Idea of PCB, advantages, copper clad, Etching processes, Principle of Photolithography (For PCB). 2. Microwave Oven: Operating principle, block diagram, features. 3. Medical instruments: Bio-Potential, Types of electrodes, ECG, EEG, EMG, CT Scan and MRI (principle, block diagram and features), Ultrasonography: working principle	15	Consumer Electronics R. P. Bali, Pearson Education (2008) S.P Bali, "Consumer Electronics", Pearson Education Asia Pvt., Ltd., 2008 Edition, Printed Circuits Handbook pdf, Clyde F. Coombs. Jr. , McGraw Hill Handbooks, 6th ed. PCB design basics, Mahmoud Wahby, EDN Networks, Nov	Chalk and board Notes provided

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			2013. Introduction to Bio-medical Electronics: Joseph-Du-bary, McGraw Hill Co. Ltd. Medical instrumentation Application and design- J. C. Wobster Biomedical instruments and measurements – L. Cromwell, F. J. Weibell, Printice hall of India of India Pvt. Ltd, New Delhi.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **S.Y.B.Sc.**

SEMESTER: **III** MONTH: **June-September** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Comprehend the basic concepts of thermodynamics & its applications in physical situation.
- Learn about situations in low temperature.
- Demonstrate tentative problem solving skills in all above areas.
- Students will be exposed to contextual real life situations.
- Students will appreciate the role of Physics in 'interdisciplinary areas related to Acoustics.
- The learner will understand the scope of the subject in Industry & Research.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-1 Unit-3 Mechanics and thermodynamics	1. Third law of thermodynamics, Nernst heat theorem, Consequences of the third law, Maxwell's thermodynamic relations, Clausius – Clapeyron equation, Thermal Expansion. 2. Steam engine, Rankine cycle, Otto engine, Efficiency of Otto cycle, Diesel cycle, Efficiency of Diesel cycle, Otto and diesel comparison	15	Thermal Physics, AB Gupta and H. Roy, Book and Allied (P) Ltd, Reprint 2008, 2009. Heat, thermodynamics and Statistical Physics, Brijlal,	Chalk and board Notes provided

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	3. Low temp Physics: Different methods of liquefaction of gases, methods of freezing, Cooling by evaporation, cooling by adiabatic expansion Joule - Thompson effect, JT effect of Vander Waal's gas, Liquefaction of helium, properties and uses of liquid Helium		N.Subramanyam, P. S. Hemne, S. Chand, edition 2007.	
Paper-3 Applied Physics – I Unit-1 Acoustics , Lasers and fibre optics	1. Acoustics of Buildings: Reverberation, Sabine's formula (without derivation) Absorption coefficient, Acoustics of Buildings, factors affecting Acoustics of Buildings, Sound distribution in an auditorium. 2. Laser : Introduction, transition between Atomic energy states (without derivation), Principle of Laser, Properties of Laser, Helium–Neon Laser, Application of Laser, Holography 3. Fibre Optics: Light propagation through Fibres, Fibre Geometry, Internal reflection, Numerical Aperture, Step-Index and Graded-Index Fibres, Applications of Fibres.	15	Modern Physics Concept and Applications – SanjeevPuri, Narosa Publication. Properties of matter and Acoustics – R Murugeshan and K. Shivaprasath, S Chand &Co.Ltd. (2005-Ed)	Chalk and board Notes provided

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **F.Y.B.Sc.**

SEMESTER: **I** MONTH: **July-October** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concepts of lens system and interference.
- Demonstrate quantitative problem solving skills in all the topics covered

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-1 Unit-2 Classical Physics	1. Lens Maker's Formula (Review), Newton's lens equation, magnification-lateral, longitudinal and angular. 2. Equivalent focal length of two thin lenses, thick lens, cardinal points of thick lens, Ramsdenand Huygens eyepiece 3. Aberration: Spherical Aberration, Reduction of Spherical Aberration, Chromatic aberration and condition for achromatic aberration. 4. Interference: Interference in thin films, Fringes in Wedge shaped films, Newton's Rings (Reflective).	15	Brijlal,Subramanyam and Avadhanulu A Textbook of Optics, 25th revised ed.(2012) S. Chand Jenkins and White, Fundamentals of Optics by (4th Ed.), McGraw Hill International.	Chalk and board Notes provided

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **T.Y.B.Sc.**

SEMESTER: **VI** MONTH: **November- February** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the basics of semiconductor devices and their applications.
- Understand the basic electronic circuits for universal logic building blocks and basic concepts of digital communication.
- Develop quantitative problem solving skills in all the topics covered.
- Analyze/design and implement combinational logic circuits.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper- 2 Unit – I Electronics	1. Field effect transistors: JFET: Basic ideas, Drain curve, The transconductance curve, Biasing in the ohmic region and the active region, Transconductance, JFET common source amplifier, JFET analog switch, multiplexer, voltage controlled resistor, Current sourcing.	15	MB: Electronic Principles, Malvino & Bates -7th Ed TMH Publication. AM: Electronic Devices and Circuits, Allen Mottershead -PHI Publication.	Chalk and board Notes provided

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	2. MOSFET: Depletion and enhancement mode, MOSFET operation and characteristics, digital switching. 3. SCR – construction, static characteristics, Analysis of the operation of SCR, Gate Triggering Characteristics, Variable half wave rectifier and Variable full wave rectifier, Current ratings of SCR. 4. UJT: Construction, Operation, characteristics and application as a relaxation oscillator.			
Paper- 2 Unit – IV Electronics	1. Logic families: Standard TTL NAND, TTL NOR, Open collector gates, Three state TTL devices, MOS inverters, CMOS NAND and NOR gates, CMOS characteristics. 2. Digital Communication Techniques: Digital Transmission of Data, Benefits of Digital Communication, Disadvantages of Digital Communication, Parallel	15	ML:Digital Principles and Applications, Malvino and Leach (4th Ed)(TMH). LF: Communication Electronics: Principles and applications, Louis E Frenzel 4th edition TMH Publications.	Chalk and board Notes provided

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	and Serial Transmission, Pulse Modulation, Comparing Pulse-Modulation Methods (PAM, PWM, PPM), Pulse-Code Modulation.			
Applied Component, Unit -I Digital Electronics	1. Combinational Logic Design: Introduction, Boolean identities, K – map (2, 3 and 4 variable), Ref: N G P 4.1 – 4.8. (Additional ref. RPJ). 2. Design and implementations of: Decoders, Encoders, Multiplexers, Demultiplexers, Use of MUX and DEMUX in Combinational Logic design. Code Converters (based on – binary, BCD, Gray and Excess – 3 codes). Tri-State logic, buffers, D latch.	15	NGP: Digital Electronics and Logic design by N G PALAN, https://archive.org/details/hellomr82k_gmail_DE RPJ: R. P. Jain, Modern Digital Electronics, Tata McGraw Hill, 4th Edition.	Chalk and board Notes provided

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **S.Y.B.Sc.**

SEMESTER: **IV** MONTH: **November- February** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the diffraction and polarization processes and applications of them in physical situations.
- Understand the applications of interference in design and working of interferometers.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper- 1 Unit – I Optics	1. Background knowledge (devote one lecture at commencement): i. Introduction, Huygens's - Fresnel theory, Distinction between interference and diffraction, Fresnel and Fraunhoffer types of diffraction. ii. Introduction of Polarization, Natural light is unpolarized, unpolarized and polarized light iii. Brewster's law, Polaroid sheets iv. Prism and grating spectra, Cornu's spiral, Fresnel's integrals. 2. Fresnel's Diffraction: Fresnel's assumptions, Rectilinear propagation (Half period zones) of light, Diffraction pattern due to straight edge, Positions of	15	A Text Book Of Optics By: Dr.N.Subrahmanyam, Brijlal, Dr M.N. Avadhaanulu (S.Chand, 25th Revised edition2012 Reprint 2013) AJOY GHATAK: OPTICS (5thEdition)	Chalk and board Notes provided

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	maxima and minima in intensity, Intensity at a point inside the geometrical shadow(straight edge), Diffraction due to a narrow slit, Diffraction due to a narrow wire 3. Fraunhoffer Diffraction : Introduction, Fraunhoffer diffraction at a single slit, Intensity distribution in diffraction pattern due to a single slit, Fraunhoffer diffraction at a double slit,Distinction between single slit and double slit diffraction pattern and missing orders, Plane diffraction Grating, Theory of plane transmission grating, Width of principal maxima .			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MISS.NIYANTA DAVE** DEPARTMENT: **PHYSICS** CLASS: **F.Y.B.Sc.**

SEMESTER: **II** MONTH: **November- February** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the basic mathematical concepts and applications of them in physical situations.
- Demonstrate quantitative problem solving skills in all the topics covered.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper- 1 Unit – III Mathematical Physics	1. Superposition of Collinear Harmonic oscillations: Linearity and Superposition Principle. Superposition of two collinear oscillations having (1) equal frequencies and (2) different frequencies (Beats). 2. Superposition of two perpendicular Harmonic Oscillations: Graphical and Analytical Methods. Lissajous Figures with equal an unequal frequency and their uses. 3. Wave Motion: Transverse waves on string, Travelling and standing waves on a string. Normal modes of a string,	15	Waves: Berkeley Physics Course, vol. 3, Francis Crawford, 2007, Tata McGraw-Hill. The Physics of Vibrations and Waves, H. J. Pain, 2013, John Wiley and Sons.	Chalk and board Notes provided

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	Group velocity, Phase velocity, Plane waves, Spherical waves, Wave intensity.		The Physics of Waves and Oscillations, N.K. Bajaj, 1998, Tata McGraw Hill.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Prof. Bhakti Vilas Purandare** DEPARTMENT: Accounting And Finance CLASS: SYBAF SEMESTER: IV
Subject: Financial Accounting MONTH: November to March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will learn uniform costing, process costing.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	ACHING METHOD/ ICT TOOLS USED
Unit 1. Preparation of Partnership Final Accounts of companies	• Relevant Provision of company Act related to prepare Final account.	12		Chalk, board
Unit 2. Redemption of preference share	• Provision of companies act for redemption of preference shares. • Practical questions	12		Chalk, board

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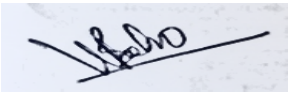

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TEACHING PLAN (UNIT PLAN)

Unit 3.. Redemption of Debentures	• Provision of Section 71 (1) and (4) of the companies act 2013 for redemption of Debentures. • Practical questions	12		Chalk, board
Unit 4. Profit Prior to Incorporation	• Principles of ascertainment. • Preparation of separate, combined and columnar Profit and Loss Accounts including different basis of allocation of expenses and income.	12		Chalk, board
Unit 5. Foreign branch	• Conversion as per AS 11 and incorporation in HO accounts	12		Chalk, board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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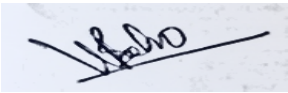

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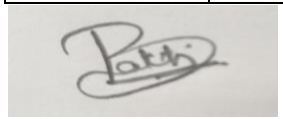
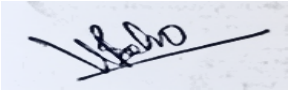
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Prof. Bhakti Vilas Purandare** DEPARTMENT: Accounting And Finance CLASS: SYBAF SEMESTER: IV
Subject: Management Accounting MONTH: November to March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will apply these management accounting related topics to their future prospectus.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	ACHING METHOD/ ICT TOOLS USED
Unit 1. Introduction to Management	• Introduction to management.	15		Chalk, board
Unit 2.Analysis and interpretation of accounts	• Vertical statement analysis • Trend analysis • Common size statement. • Comparative statement.	12		Chalk, board
Unit 3. Ratio Analysis	• Balance sheet Ratio • Profit and loss ration • Combine ratio	12		Chalk, board

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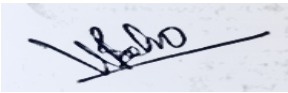
TEACHING PLAN (UNIT PLAN)

Working capital management	• Concept, nature, planning of working capital • Estimation, projection of working capital • Operating cycle practical problems	12		Chalk, board
Unit 5. Cash Flow Management	• Preparation of cash flow statement with reference to AS 3	12		Chalk, board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Megha Kulkarni DEPARTMENT: Self Finance CLASS: SY BAF SEMISTER: IV
SUBJECT: Information Technology in Accountancy -II MONTH: November-February ACADEMIC YEAR: 2022-23
LEARNING OBJECTIVE/S: The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & II Business Process, Computerized Accounting System	**Introduction,** Definition & meaning of Business Process ,Flow of business process for accounting, purchase, sales and finance Classification of business processes, Introduction, Definition and Meaning of Business Process Management, Principles and practices of Business Process Management Business Process Management life cycle, Theories of Business Management Process, Implementation of Business Process Management - need, key factors and importance, Automation of business Processes - benefits, risks, challenges, Accounting systems automation, IT and Business Process Management , Information Systems - Meaning, Use of IT in Accountancy	15	Information Technology in Accountancy - II by Verus D'sa, Internet source.	Chalk board method, discussion, debates.
	Introduction and Meaning Uses and Benefits Role Need and requirements of computerized accounting Basic requirements of computerized accounting system Limitations of computerized accounting system Understand the development and design of a computerized accounting system; determining how the accounting data will be processed, i.e. what accounts and books are needed and what is the desired output i.e. financial reports and other reports.	20		
	Accounting Software: Introduction and meaning, Advantages of Accounting Software, Use of Accounting Software, Various Accounting Softwares, Accounting Software Tally.			

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III & IV Concept of MIS Report in computer Environment & IT And Auditing	Introduction, concept of MIS, Need for MIS , Characteristic of MIS , Outputs of MIS, Role of MIS, Guidelines for developing MIS reports, Functional Aspects of the MIS , Problems in MIS , Knowledge required for studying MIS, MIS and Computer.	15	Information Technology in Accountancy II Verus D'Sa, Internet source.	Chalk board method, discussion, debates.
	Need and importance of IT in Auditing,Auditing in It Environment.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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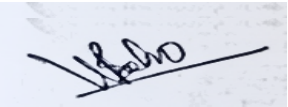

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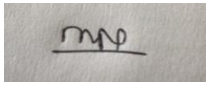
TEACHING PLAN (UNIT PLAN)

DEPARTMENT: SELF FINANCE (COMMERCE) CLASS: SYBAF SEMESTER: _IV_ (Subject : MANAGEMENT ACCOUNTING) MONTH: DEC TO APRIL ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: APPLY THESE MANAGEMENT ACCOUNTING RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction To Management Accounting Analysis & Interpretation of accounts	Introduction to Management Accounting Vertical Statement Analysis,Vertical Statement,Trend Analysis Comparative Statement,Common Size Statement	15	Management Accounting – M.Y. Khan. Management Accounting – I. M. Pandey. Cost & management accounting – Colinn Dury	Chalk & Duster Google classroom, PPT
Financial statement Analysis: Ratio Analysis	Ratio Analysis,Balance Sheet Ratios,Revenue Statement Ratios,Composite Ratios	15	Management Accounting – M.Y. Khan. Management Accounting – I. M. Pandey. Cost & management accounting – Colinn Dury	Chalk & Duster Google classroom, PPT
Working Capital Management	Concept, nature,Operating cycle practical problems	15		Chalk & Duster Google classroom, PPT
CASH FLOW MGMT	Preparation of cash flow statement –with reference to AS 3 (Indirect method only)	15		Chalk & Duster Google classroom, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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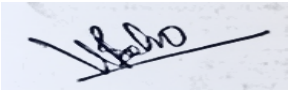

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA SANJAY MAHESHWARI DEPARTMENT: Accounting and Finance CLASS: SYBAF SEMESTER: IV

SUBJECT: RESEARCH METHODOLOGY MONTH: November to May ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the Research Methods in Business & Accounting.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1	· Introduction to Research Introduction and meaning of research, Objectives of research, Features and Importance of research in Accounting and Finance, Objectives and Types of research-Basic, Applied, Descriptive, Analytical and Empirical Research.	**8**	**C.R.Kothari, "Research Methodology - Methods & Techniques" , New Age**	**Blackboard, Chalk, Google classroom**

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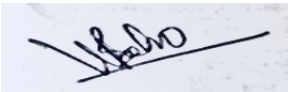

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TEACHING PLAN (UNIT PLAN)

	Formulation of research problem: Meaning and Selection Review of Literature		**International Publishers & Manan Prakashan book**	
Unit 2	Research Design in Accounting and Finance Meaning of Introduction, Need, and Good research design. Hypothesis: Formulation, Sources, Importance and Types Different Research designs	**7**	**C.R.Kothari, "Research Methodology - Methods & Techniques" , New Age International Publishers &**	**Blackboard, Chalk, Google classroom**

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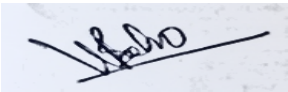

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TEACHING PLAN (UNIT PLAN)

			Manan Prakashan book	
Unit 3	Data Collection and Processing Data Collection: Introduction and meaning, types of data Primary data: Observation, Experimentation, Interview, Schedules, Survey, Questionnaires, Limitations of Primary data Secondary data: Sources and Limitations Factors affecting the choice of method of data collection. Sampling: Significance, Methods, Factors determining sample size Data Presentation: Significance in Research, Stages in Data Processing: Editing, Coding, Classification, Tabulation, Graphic Presentation	**4**	**C.R.Kothari, "Research Methodology - Methods & Techniques" , New Age International Publishers & Manan Prakashan book**	**Blackboard, Chalk, Google classroom**

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TEACHING PLAN (UNIT PLAN)

	Statistical Analysis: Tools and Techniques, Measures of Central Tendency, Measures of Dispersion, Correlation Analysis and Regression Analysis. Use of computer and internet in data collection and processing.			
Unit 4	Interpretation and Report Writing Meaning and techniques of interpretation, Research Report Writing: Importance, Essentials, Structure/layout, Types	**5**	**C.R.Kothari, "Research Methodology - Methods & Techniques" , New Age International Publishers &**	**Blackboard, Chalk, Google classroom**

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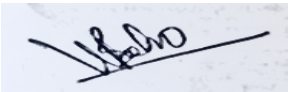

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TEACHING PLAN (UNIT PLAN)

			Manan Prakashan book	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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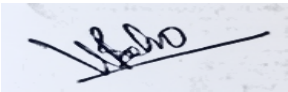

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pranali Prabhakar Gurav DEPARTMENT: Accountancy CLASS: TYBAF SEMESTER: IV (Subject :BUSINESS LAW)

MONTH: November to March ACADEMIC YEAR: 2022 - 23

LEARNING OBJECTIVE/S: The general education curriculum will enable students to acquire skill, knowledge and experience.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit : 1 Definitions	1. Section 2 2. Clause (2) Accounting Standard 3. Clause (7)- Auditing Standard 4. Clause (13) Books of Accounts 5. Clause (31) Deposit 6. Clause (41) Financial Year 7. Clause (42) Foreign Company 8. Clause (47) Independent Director	15	Business Law Textbook	Chalk and board

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TEACHING PLAN (UNIT PLAN)

	9. Clause (48) Indian Depository Receipts 10. Clause (62) - One Person Company 11. Clause (85) Small Company			
Unit 2 : Incorporation of Companies	Section 3 to Section 20 Unit 3 : Public Offer 1. Sections 23, 25 to 28, 33, 35, 39	30	Business Law Textbook	Chalk and board
Unit 4 : Private Placement	1. Section 42 Unit 5 : Share Capital and Debentures Sections 43, 46, 47, 52 to 56, 61 to 72	30	Business Law Textbook	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 75

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TEACHING PLAN (UNIT PLAN)

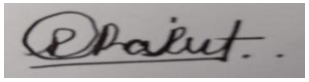
NAME OF THE STAFF: Ms. Priyanka Devnath Rajput DEPARTMENT: Commerce(Self-Finance) CLASS: SYBAF

SEMESTER: IV (Subject : Information Technology in ACC.FIN) MONTH: DECEMBER - APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to: To gain the knowledge of various business processes, how to use computerized accounting software, how manage information and little introduction to IT & auditing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Business Process	Introduction, Definition and Meaning of business process Flow of business process for accounting, purchase, sales and finance Classification of business processes Introduction, Definition and Meaning of Business Process Management Principles and practices of Business Process Management Business Process Management life cycle Theories of Business Management Process Implementation of Business process Management – need, key factors and importance Automation of business Processes – benefits, risks, challenges Accounting systems automation IT and Business Process Management Information systems – Meaning, Use of IT in accountancy.	15	Information Technology in Accounts and Finance By- Rimple Sanchla, Manan Publications. and www.wikipedia.com	Board , Chalk, Duster & Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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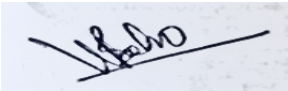

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Computerized accounting system	A) Introduction and meaning Uses and Benefits Role Need and requirements of computerized accounting Basic requirements of computerized accounting system.	05	Information Technology in Accounts and Finance By- Rimple Sanchla, Manan Publications. and www.wikipedia.com	Board , Chalk, Duster & Google Classroom
	B) Limitations of computerized accounting system Understand the development and design of a computerized accounting system; determining how the accounting data will be processed, i.e. what accounts and books are needed and what is the desired output i.e. financial reports and other reports.	07		
	C) Accounting Software Introduction and meaning Advantages of accounting software Uses of Accounting software Various accounting software.	05		
	D) Accounting software TALLY – Accounting and reports.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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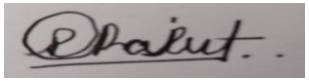
TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Concept of MIS Reports in Computer Environment	A) Introduction Concept of MIS Need for MIS Characteristic of MIS.	05	I.T in Accounts and Finance By- Rimple Sanchla, Manan Publications.& www.wikipedia.com	Board , Chalk, Duster & Google Classroom
	B) Outputs of MIS Role of MIS Guidelines for Developing MIS reports Functional Aspects of the MIS.	05		
	C) Problems in MIS Knowledge required for studying MIS, MIS and Computer.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV IT and Auditing	Need and importance of IT in auditing Auditing in IT environment.	10	I. T in Accounts and Finance By- Rimple Sanchla, Manan Publications. & www.wikipedia.com	Board , Chalk, Duster & Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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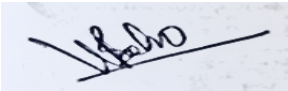

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **ANKITA PANDEY** DEPARTMENT: **SELF FINANCE** CLASS: **SYBAF** SEMESTER: **IV** Subject : (**BUSINESS LAW**)

MONTH: **NOVEMBER TO MAY** ACADEMIC YEAR: **2022 - 2023**

LEARNING OBJECTIVE/S: **The pupils will be able to learn about the contract Act, where they will learn the concept of contract, essentials and types and rules regarding the contract.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Section 2 Clause(2), (7), (13), (31), (41),(42),(47),(48),(62),(85) Accounting Standard, Auditing Standard, Books of Accounts, Deposits, Financial Year, Foreign Company, Independent Director, Indian Depository Receipts, One Person Company, Small Company	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board
UNIT 2	Incorporation to Companies Section 3 to Section 20 Incorporation of Company and matters Incidental Thereto, Exemptions and Privileges available to Private Company,	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board

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TEACHING PLAN (UNIT PLAN)

	Restrictions relating to a private company, Provisions applicable to one person company, MOA and AOA			
UNIT 3	Public Offer Section 23, 25 to 28, 33, 35, 39 Public Offer, Prospectus, Types, Issue of application forms for securities, Civil liability for Mis-statemememts in Prospectus, Allotment of securities by Company	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board
UNIT 4	Private Placement Section 42 What is Private Placement, Amendment in Private Placement Rules	07	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board
UNIT 5	Share Capital and Debentures Section 43, 46, 47, 52 to 56, 61 to 72 Kinds of Share Capital, Shares and Debentures as movable property, Distinction number to shares, Certificate of Shares, Voting Rights, Application of Premiums received on issue of shares, Sweat Equity, Power of limited Company to alter its shares capital	08	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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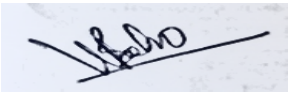

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Heena Obaid Qureshi DEPARTMENT: SFC CLASS: SYBAF SEMESTER:IV (Subject :DIRECT TAX)

MONTH: Nov-March ACADEMIC YEAR:2022-23

LEARNING OBJECTIVE/S: to understand and learn th concepts of direct tax of Individual assesee and partnership firm

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1.Clubbing of Income	Meaning,Nature,Types of clubbing,practical problems	06	Manan Prakashan text book,ICAI reference books	Chalk board
2.setoff and carry forward	Typesof setoff and carryforward ,practicalproblems	06		
3.computation of Income of Partnership firm				
	Practical problems on partnership firm	08		

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TEACHING PLAN (UNIT PLAN)

4.Computation of total income of Assesee	Practical sums and tax calculation of Individual Assesee			
5. Advance Tax	Calculation of Advance tax and interest	06		
6.TDS	Meaning,types of TDS,Rates of TDS ,Prctical problems	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:32

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Karishma Kale DEPARTMENT: Self Finance CLASS: SYBAF- A, B, C SEMESTER: IV (Subject: Research Methodology)

MONTH: November to May ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to: Have knowledge of the basic content related to Research and its conduction process, different methods and types related to research and basics of preparation of research report.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Introduction to Research	Meaning of Research, Features of Research, Objectives of Research, Importance of Research in Accounting and Finance, Types of Research, Stages in Research process, Steps in formulation of research problem, Factors influencing selection of research problem, Sources of research problem, Review of literature,	5	Manan Prakashan, Sheth Publications	Chalk and duster
2. Research Design in accounting and Finance	Meaning, Need and importance of Research Design, Essentials of a good research design, Types of Research Design, Sources of Hypothesis, Steps in formulation of hypothesis, Importance of Hypothesis, Types of hypothesis	5	Manan Prakashan, Sheth Publications	Chalk and duster

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TEACHING PLAN (UNIT PLAN)

3. Data Collection and Processing	Meaning and types of Data, Factors influencing choice of data collection, Primary Data- Methods: Experimentation, Interview, Survey, Schedule and Questionnaire, Advantages and limitations Secondary Data- Sources, Advantages and limitation Sampling- Significance, methods, Factors determining sample size Data Processing: Significance, Stages in Data processing, Sum	7	Manan Prakashan, Sheth Publications	Chalk and duster
4. Interpretation and Report writing	Meaning, Methods of Data Interpretation Report writing, Importance, Essentials of a good report, Structure of research report , TYpes of research report	4	Manan Prakashan, Sheth Publications	Chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 21

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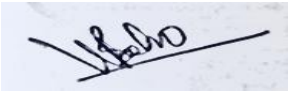

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TEACHING PLAN (UNIT PLAN)

SNAME OF THE STAFF: keyur Limbachiya DEPARTMENT: Commerce (SFC) CLASS: SYBAF SEMESTER: IV (Subject: Direct Tax)

MONTH: December - March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The general education curriculum will enable students to acquire skills, knowledge and experienced.

UNITS	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit no 1	Clubbing of income	03	Past papers ICAI modules and other online references, Mumbai university Book PDF, some reference books	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM
Unit no 2	Set off carry forward of losses	02		
Unit no 3	Computation of tax liability of individual & HUF	10		
Unit no 4	Computation of income tax partnership firm	10		
Unit no 5	Return of income – sec 139	10		
Unit no 6	Tax deduction at source advance tax interest payable	03		
Unit no 7	DTAA U/S 90 & 91	02		
Unit no 8	Tax planning & ethics in taxation	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. SEEMA SIHANA** DEPARTMENT: **SELF FINANCE** CLASS:- SYBAF SEMESTER: **IV**

SUBJECT: FOUNDATION COURSE IN MANAGEMENT **MONTH**: DECEMBER - APRIL 2023 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To enable students to obtain basic knowledge and skills required in the field of Management.

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course in Management	INTRODUCTION TO BASIC MANAGEMENT CONCEPTS:- Introduction and definition of management, nature and objectives of management, administration vs management, levels and principles of management. PLANNING:- Definition, Importance, Process, Limitations of Planning, Features of Sound Planning, Features and Process of Decision making. ORGANISING:- Definition, Nature and Significance, Process, Principles of Organisation, Formal and Informal Organisation- Features, Advantages and Disadvantages, Centralisation and	**45**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**

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(Accountancy) **(Commerce)**

	Decentralisation- Factors, Merits and Demerits, Departmentation and Delegation. STAFFING:- Meaning and Importance, Recruitment and its Sources, Selection Procedure, Distinguish between Recruitment and Selection			
			Text book and Internet	
				1 Chalk and Black Board Method **2 Example** **3 Discussion**
			Text book and Internet	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**
			Text book and Internet	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ASIS ALMEIDA DEPARTMENT: ACCOUNTING & FINANCE CLASS: SYBAF (A/B/C/D) SEMESTER: III (Subject : Financial Accounting)

MONTH: JUNE- AUGUST ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Learning about Financial accounting of the partnership firm and companies.
The learners will be able to : Students will be able to learn practical imposition of accounting entries and calculation in different ledgers and by different methods

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
3. Amalgamation of Firms	Introduction of Firm, Meaning of Purchase Firm, Vendor Firm, Types of Amalgamation. Ledgers/Journal Entries of old firms. Preparing b/sheet of new firm and adjustment of goodwill in the new firm. Realignment of capitals in the new firm by current accounts / Cash or a combination thereof. Practical Problems (09)	16	Manan Prakashan	Chalk, Board & Group Discussion.

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TEACHING PLAN (UNIT PLAN)

4. Conversion / Sale of a Partnership Firm into a Ltd. Company	Introduction, Realization method only. Calculation of Purchase Consideration, Journal/ Ledger Accounts of old firms. Preparing B/sheet of new company. Practical Problems. (07)	13	Manan Prakashan	Chalk, Board & Group Discussion
5. Accounting of Transactions of Foreign Currency	Introduction In relation to purchase & sale of goods, services & assets and loan & credit transactions. Computation & treatment of exchange rate differences. Practical Problems (05)	08	Manan Prakashan	Chalk, Board & Group Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:27

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Ashwini Gurav DEPARTMENT: Accountancy CLASS: SYBAF SEMESTER: III (Subject : Direct Tax)

MONTH: June to September ACADEMIC YEAR: 2022-23

1. LEARNING OBJECTIVE/S: Understand & Remember- the meaning of salary; section 10, sections 15-17; calculation of income from salary; various allowances (taxable, partly taxable, non-taxable); perquisities; rules and calculation of Gratuity, Pension, Leave encashment.
2. Understand & Remember- the meaning of income from other sources; sections 56-59; calculation of income from other sources.
3. Understand & Remember- the meaning of capital gains; Section 45, 48, 49, 50, 54 and 55, calculation of capital gains.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1 - Definitions	Definitions Residential Status Scope of Income	10	Book by Manan/Vipul publications/Internet	Chalk & Board

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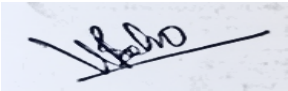

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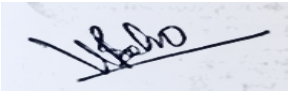
TEACHING PLAN (UNIT PLAN)

Unit 2- Heads of Income Unit 3 - Deduction under chapter Vl A Unit 4- Computation of Total Income	Salary Income from House Property Capital Gains Business & Profession Other sources	25	Book by Manan/Vipul publications/Internet	Chalk & Board
	80A, 80C, 80CCC, 80D, 80E, 80TTA, 80U	5	Book by Manan/Vipul publications/Internet	Chalk & Board
	Practical Sums on Total Income	5	Book by Manan/Vipul publications/Internet	Chalk & Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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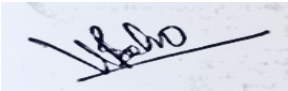

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Prof. Bhakti Vilas Purandare** DEPARTMENT: Accounting And Finance CLASS: SYBAF SEMESTER: III
Subject: Financial Accounting MONTH: June to October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will learn uniform costing, process costing.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	ACHING METHOD/ ICT TOOLS USED
Unit 1. Partnership Final Accounts	• Simple final account questions • Allocation of gross profit prior to and after admission/ retirement/death of partner	12		Chalk, board
Unit 2. Piecemeal Distribution of Cash	• Excess capital method • Assets taken over by partner	12		Chalk, board

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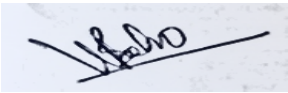

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36

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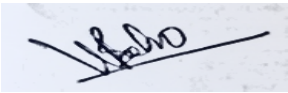

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: COMMERCE

CLASS: S.Y.BAF SEMESTER: III MONTH: JUN -SEPT ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVES: The learners will be able to understand the basic concepts and definitions under direct tax.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.DEFINITIONS & BASIS OF CHARGE	DEFINITIONS-ASSESEE, ASSESSEMNT YEAR,ANNUAL VALUE,PERSON.PREVIOUS YEAR	01	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK- BOARD
	BSIS OF CHARGE SECTION 3-9	01		
	EXCLUSIONS UNDER SCTION 10	01		
	RESIDENTIAL STATUS	02		
	SCOPE OF TOTAL INCOME	02		
3.DEDUCTION UNDER CHAPTER VI A	80A-RESRTICTION ON CLAIMS,80C-PAYMENT OF LIC	06	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK- BOARD
	80CCC-CONTRIBUTION TO PENSION FUND, 80D-MEDICLAIM INSURANCE PREMIUM,			
	80DD-MEDICAL TRATMENT OF HANDICAPPED			

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TEACHING PLAN (UNIT PLAN)

	80E-INTEREST ON EDUCATIONAL LOAN,80TTA-INTEREST ON SAVING BANK ACCOUNT 80U-HANDICAPED ASSESSEE			
4. COMPUTATION OF TOTAL INCOME	COMPUTATION OF TOTAL INCOME OF INDIVIDUAL, COMPUTATION OF TOTAL INCOME OF HUF AND DEDUCTIONS	05	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK- BOARD
5.Heads of Income	INCOME FROM HOUSE PROPERTY-SEC22 TO27, ANNUAL VALUE	05	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK- BOARD
	PROFIT & GAIN FROM BUSINESS &PROFESSION	05		

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28

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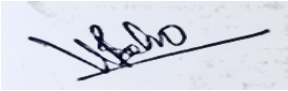

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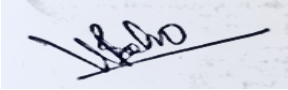

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____REENA BEHERA_____ DEPARTMENT: ____Business Economics_____ CLASS: __SYBAF_____
SEMESTER: _III_ (Subject : _____BUSINESS ECONOMICS__II_____)

MONTH: ____JUNE TO SEPT_____ ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: _____LEARNING OBJECTIVES:

The learners will be able to understand the concept of using macroeconomics for the growth of the economy by developing a core understanding regarding income, expenditure, measurement, and trade cycles, demand and supply of money and levels of inflation for the development of the economy.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Business Economics – II Macro Economics Unit: I & II	Unit I: Overview of Macro Economics Circular flow of income in open an closed economy Measurement of National Product , Green GNP and NNP Trade cycle: features and phases Say's Law of Market Unit II: Money, Prices and Inflation Money supply determinants and factors Demand for money, classical and Keynes approach and also Friedman approach Money & Prices Fisher and Cambridge equation	4 lectures per week	H.L AHUJA Modern ECONOMICS D.N. Diwedi Macro Economics	Ppt lectures via Google meet Google Classroom Assignment Group discussion

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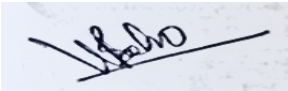

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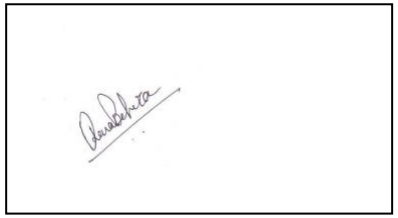
TEACHING PLAN (UNIT PLAN)

	Inflation: types, nature, Policy Measures			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____40



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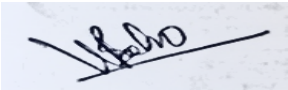

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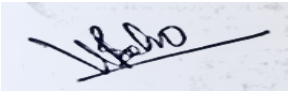

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: BAF CLASS: SYBAF Div:A,B,C SEMESTER: III (Subject : Direct TAX

MONTH:JULY 22- DECEMEBER 22 ACADEMIC YEAR: 22-23

LEARNING OBJECTIVE/S: TO GIVE KNOWLEDGE TO STUDENTS ABOUNT DIRECT TAX IN INDIA. STUDENTS WILL UNDERSTAND CLASSIFICATION OF TAX UNDER DIFFERENT HEADS OF INCOME

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	1. Definitions u/s – 2 , Basis of Charge and Exclusions from Total Income 1. Definitions u/s – 2 : Section 2 –Assessee, Assessment Year, Assessment, Annual value, Business, Capital asset, Income, Person, Previous Year, Transfer Basis of Charge : Section 3 – 9 –	7	SHETH , VIPUL,MANAN PRAKASHAN	PPT, CHALK AND BOARD

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TEACHING PLAN (UNIT PLAN)

	Previous Year, Residential Status, Scope Of Total Income, Deemed Income Exclusions from Total Income: Section 10 – restricted to, Agricultural Income, Sums Received From HUF By Member, Share of Profit from Firm, Casual & Non – Recurring Receipts, Scholarships, Income of Minor Child, Allowance to Members of Parliament and Legislative Assembly			
	2 Income From House Property : Section 22 – 27, Including Section 2 – Annual Value	7		
	3.Profits & Gains From Business & Profession : Vocation Section 28-32, 36, 37, 40, 40A, 43B, 44AD, 44ADA & 44AE including.: Section 2 – Business	9		
	4.Deductions under Chapter VI – A 80 A- Restriction on claim in Chapter VI- A deductions 80 C – Payment of LIC/PF and other eligible investments 80CCC – Contribution to certain Pension Fund 80D – Medical Insurance Premium 80 DD- Maintenance and medical treatment of handicapped dependent 80E – Interest on Educational Loan 80 TTA-	7		

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TEACHING PLAN (UNIT PLAN)

	Interest on Saving Bank account 80U – Deduction in the case of totally blind or physically handicapped or mentally retarded resident person			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:30

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TEACHING PLAN (UNIT PLAN)

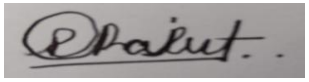
NAME OF THE STAFF: Ms. Priyanka Devnath Rajput DEPARTMENT: Commerce(Self-Finance) CLASS: SYBAF

SEMESTER: III (Subject : Information Technology in ACC.FIN) MONTH: - JULY- DECEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to: Learn Introduction to computer system and Web.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Introduction to Computers	A) History of Computers	02	Information Technology in Accounts and Finance By- Rimple Sanchla, Manan Publications. and www.wikipedia.com	Board , Chalk, Duster & Google classroom
	B) Parts of Computers, Hardwares: Specifications and Data Storage Management	02		
	C) Softwares: Concept of System Software and Applications	03		
	D) Networking: Introduction and types of network topologies	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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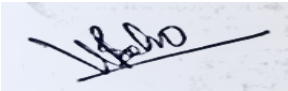

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Office Productivity Tools	A) MS Word: Creating, Editing, Formatting and Printing of Documents, Using Tools, Mail merge and Print Review and Set-up.	03	Information Technology in Accounts and Finance By- Rimple Sanchla, Manan Publications. and www.wikipedia.com	Board , Chalk, Duste, Google classroom MS_WORD,MS_EXCEL & MS_PowerPolint
	B) MS Excel: Creating Worksheet, Creating Various Formulae, Creating Charts, Rename and Copy of Worksheets, Using Tools, Printing Review and Set-up	04		
	C) Power Point: Create Project Report, Create Slides, Animation, Page Designing, Insert Image, View Page, Print Review and Set-up	03		
	D) Use of Tools In Accounting :– Preparation of vouchers, invoices and reports, Calculation of Interest, Depreciation,TDS, Salary, Taxes, inventory and reconciliation	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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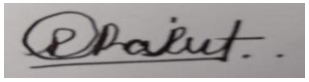
TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Web	A) Use of Various Web Browser	02	I.T in Accounts and Finance By- Rimple Sanchla, Manan Publications.& www.wikipedia.com	Board , Chalk, Duster & Google classroom
	B) Information Searching Tools, Downloading.	02		
	C) Create New email ID, Sending Data through email, Search engine optimization.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV Introduction to Internet and other Emerging Technologies	Introduction ,Internet components, electronic commerce – e-commerce applications, Electronic Data Exchange, Extranet, Payment systems – Risks and security considerations, Legal issues, Other emerging technologies	07	I. T in Accounts and Finance By- Rimple Sanchla, Manan Publications. & www.wikipedia.com	Board , Chalk, Duster & Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07



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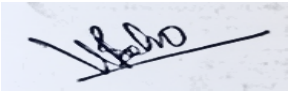

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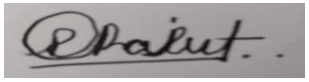
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - V Electronic Commerce	Meaning, Advantages and Limitations of E Commerce, The role of Strategy in E Commerce, Value chains in E Commerce, Infrastructure for Electronic Commerce Web Based Tools for Electronic Commerce, Electronic Commerce software, Security Threats to electronic Commerce , Implementing Security for Electronic Commerce, Electronic Payment Systems, Strategies for Marketing, Sales & Promotion Strategies for Purchasing Logistics & Support Activities, Electronic Markets & Communities, Business Plans for Implementing Electronic Commerce.	07	Information Technology in Accounts and Finance By- Rimple Sanchla, Manan Publications. and www.wikipedia.com	Board , Chalk, Duster & Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07



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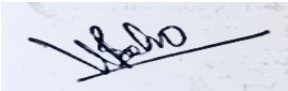

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: SYBAF SEMESTER: III (Subject : Cost Accounting)

MONTH: JUNE - JULY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 CLASSIFICATION OF COST AND COST SHEET	Classification of costs, Cost of Sales, Cost Centre, Cost Unit, Profit Centre and Investment Centre	2	COST ACCOUNTING BY SAXENA & VASHIST	• Chalk • Board • Discussion • Examples • Google Classroom
	Cost Sheet, Total Costs and Unit Costs, Different Costs for different purpose	1		
	Format of Cost sheet and calculation of per unit	1		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: SYBAF SEMESTER: III (Subject :Cost Accounting)

MONTH: AUGUST - SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 RECONCILIATION OF COST & FINANCIAL ACCOUNTING	Introduction to reconciliation, meaning, cost accounting and financial accounting.	1	COST ACCOUNTING BY SAXENA & VASHIST	• Chalk • Board • Discussion • Examples • Google classroom
	Need for reconciliation, rules for reconciliation	1		
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS Vishakha Sane/ Sampat** DEPARTMENT: **BUS. ECONOMICS** CLASS: **S.Y.BAF** SEMESTER: **III** (Subject : **BUS. ECONOMICS-II**)

MONTH: ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVES:

The student must be able to understand the basic analytical tools of macro economics and is designed to make system of overall economy understandable and relevant. The aim is to provide a clear explanation of many aspects of aggregate economic variables to inspire a consistent way of thinking about key macroeconomic phenomena. It intends to familiarize the commerce students with basic concepts of macroeconomics in order to understand certain common features of economic occurrence in the real world.

PER, UNIT, TITLE	SUBTOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
USNESS ECONOMICS - III UNIT I NTRODUCTION TO MACRO ECONOMICS	**Macroeconomics:** Meaning, Scope and Importance. **Circular flow of aggregate income and expenditure**: closed and open economy models **The Measurement of national product:** Meaning and Importance - conventional and Green GNP and NNP concepts - Relationship between National Income and Economic Welfare. • **Short run economic fluctuations :** Features and Phases of Trade Cycles	15	H. L. AHUJA MODREN ECONOMICSBhatia H.L.: Public Finance.	LECTURE METHOD T, GOOGLE FORM VIDEO

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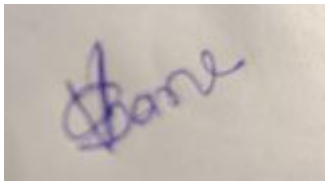
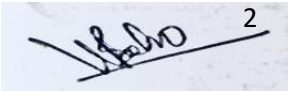
TEACHING PLAN (UNIT PLAN)

	• **The Keynesian Principle of Effective Demand:** Aggregate Demand and Aggregate Supply - Consumption Function - Investment function - effects of Investment Multiplier on Changes in Income and Output			
UNIT II M ONEY, INFLATION AND MONETARY POLICY	**oney Supply:** Determinants of Money Supply - Factors influencing Velocity of Circulation of Money **Demand for Money :** Classical and Keynesian approaches and Keynes' liquidity preference theory of interest **Money and prices** : Quantity theory of money - Fisher's equation of exchange - Cambridge cash balance approach **Inflation:** Demand Pull Inflation and Cost Push Inflation - Effects of Inflation- Nature of inflation in a developing economy. **Monetary policy :** Meaning, objectives and instruments, inflation targeting	**15**		
UNIT III **CONSTITUENTS OF FISCAL POLICY**	**Role of a Government** to provide Public goods- Principles of Sound and Functional Finance **Fiscal Policy:** Meaning, Objectives - Contra cyclical Fiscal Policy and DiscretionaryFiscal Policy **Instruments of Fiscal policy :** Canons of taxation - Factors influencing incidence of taxation - Effects of taxation Significance of Public Expenditure - Social security	**15**		





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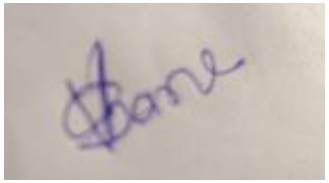
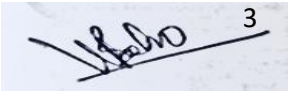
TEACHING PLAN (UNIT PLAN)

	contributions- Low Income Support and Social Insurance Programmes - Public Debt - Types, Public Debt and Fiscal Solvency, Burden of debt finance **Union budget** -Structure- Deficit concepts-Fiscal Responsibility and Budget Management Act			
UNIT IV OPEN ECONOMY : THEORY AND ISSUES OF INTERNATIONAL TRADE	**The basis of international trade :** Ricardo's Theory of comparative cost advantage - The Heckscher – Ohlin theory of factor endowments - terms of trade - meaning and types - Factors determining terms of trade - Gains from trade - Free trade versus protection •**Foreign Investment :** Foreign Portfolio investment- Benefits of Portfolio capital flowsForeign Direct Investment - Merits of Foreign Direct Investment - Role of Multinational corporations **Balance of Payments:** Structure - Types of Disequilibrium - Measures to correct disequilibrium in BOP. **Foreign Exchange and foreign exchange market** : Spot and Forward rate of Exchange - Hedging, Speculation and Arbitrage -Fixed and Flexible exchange rates- Managed flexibility	**15**		





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TOTAL LECTURES ALLOTED=60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ASIS ALMEIDA DEPARTMENT: ACCOUNTING & FINANCE CLASS: FYBAF (A, B, C) SEMESTER: I (Subject: Financial Accounting-I)

MONTH: OCTOBER-DECEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1. Accounting Standards	AS-1 Disclosure of Accounting Polices, AS-2 Valuation of Inventories (Stock), AS-9 Revenue Recognition	03	Manan Prakashan	Online / PPT, Group Discussion, Excel sheet
3. Final Accounts ofManufactu-ring Concern	Final Accounts of Manufacturing concern: - Introduction, Practical Sums 05	06		
4. Departmental Accounts	Departmental Accounts: - Introduction, Basis for Allocation, Format Practical Sums 05	06		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ASIS ALMEIDA DEPARTMENT: ACCOUNTS & FINANCE CLASS: FYBAF SEMESTER: I (Subject: Financial Management)

MONTH: AUGUST- DECEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to: Manage their financial resources both on the personal level and within the business plan. It's more than just balance sheets.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1. Introduction to Financial Management.	Introduction, Meaning, Importance, Scope & Objectives, Profit Vs. Value Maximization.	03	Manan Prakashan	Chalk, Board & Group Discussion
3. Leverage	Introduction, EBIT & EPS Analysis. Types of Leverages: Operating Leverage, Financial Leverage & Composite Leverage. Practical Problems (10)	10	Manan Prakashan	Chalk, Board & Group Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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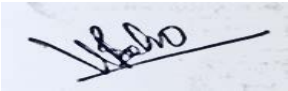

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. BRISTI BISWAS **DEPARTMENT**: Business Economics **CLASS**: FYBAF **SEMESTER**: II (**Subject**: BUSINESS ECONOMICS)

MONTH: SEP 2022-MARCH 2023 **ACADEMIC YEAR**: 2022-2023

LEARNING OBJECTIVE/S: To learn a better role of an entrepreneur and skilled manager Build familiarity with the operation of markets and optimization in an economic context

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Module I **Introduction to business economics** **Module II**	Introduction : Business Economics ,basic concepts for business economic analysis ,functional relations and tool for economic analysis. Introduction to market demand and supply, demand supply, market equilibrium, changes in market equilibrium.	15	H.l.Ahuja Advanced Economic Theory	Chalk & board

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Demand Analysis	demand function, price, income and substitution effects, nature of demand curve under different markets.	10		
Module III **Supply and production decisions and cost of production**	Meaning of demand,law of demand,determinants of demand, Meaning of elasticity, price elasticity of demand , income elasticity of demand , cross elasticity of demand,promotional elasticity of demand, importance of elasticity of demand , relationship between price elasticity of demand and revenue concept. Significance of demand forecasting ,types of demand forecasting, steps in demand forecasting ,methods of demand forecasting.	10	H.l.Ahuja Advanced Economic Theory	Chalk & board
	Features of monopolistic competition, short-run equilibrium of the firm, long run equilibrium of the firm , selling cost and its effects, role of advertisement.	10		

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MODULE IV	meaning of oligopoly, characteristics of oligopoly, collusive and non collusive oligopoly,price rigidity,collusive oligopoly, price leadership.			
MODULE V	Meaning of pricing practices, degrees of price discrimination, conditions for price discrimination, conditions for profitable price discrimination, equilibrium of price discriminating monopolist ,dumping. Introduction to pricing practices part II, marginal cost pricing ,cost plus pricing ,multi product pricing Transfer pricing	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

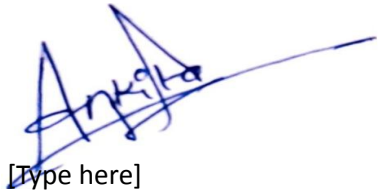
NAME OF THE STAFF: **ANKITA PANDEY** DEPARTMENT: **SELF FINANCE** CLASS: **FYBAF** SEMESTER: **I** (Subject : **BUSINESS ECONOMICS**)

MONTH: **AUG TO DECEMBER** ACADEMIC YEAR: **2022 - 2023**

LEARNING OBJECTIVE/S: **Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction	Scope and Importance of Business Economics – basic tools – Opportunity Cost principle – Incremental and Marginal Concepts. Basic economic relations – functional relations: equations – Total, Average and Marginal relations – use of Marginal analysis in decision making The basics of market demand, market supply and equilibrium price – shifts in the demand and supply curves and equilibrium	**(15 Lec.)**	**MANAN PRAKASHAN**	**Chalk and Board**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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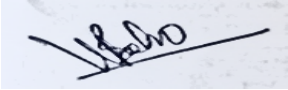

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____REENA BEHERA_____ DEPARTMENT: _____Business Economics____ CLASS: ____FYBAF___
SEMESTER: I__ (Subject : _____BUSINESS ECONOMICS I_____)

MONTH: _____July to October_ ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: _____Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes._____

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit I,II,III,IV	1 Introduction (a) Concept of Scarcity (b) Choice and Efficiency (with Reference to PPC) (c) Basic Tools in Economic Analysis i. Equations ii. Functions iii. Identities	4 lectures per week	H.l.Ahuja Advanced Economic Theory	Online lectures via Google meet Google Classroom Assignment Discussion

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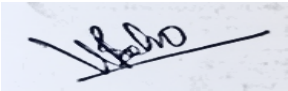

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TEACHING PLAN (UNIT PLAN)

	iv. Slope v. Time Series vi. Cross Section Data vii. Scatter Diagrams viii. Derivatives and Limits 2 Demand and Supply Analysis (a) Demand Function and Determinants of Demand (b) Supply Function and Determinants of Supply (c) Determination of Equilibrium Price in an Open Market (d) Concept and Importance of Elasticity of Demand: Price, Income, Cross and Promotional			

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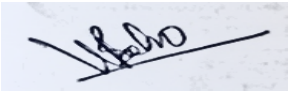

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TEACHING PLAN (UNIT PLAN)

	(e) Consumer's Surplus (f) Demand Forecasting: Meaning, Significance and Methods (g) Case Studies 3 Theory of Production (a) Production Function: Short Run and Long Run (b) Law of Variable Proportions (c) Producer's Equilibrium (d) Principle of Returns to Scale (e) Economies of Scale (f) Case Studies 4 Cost and Revenue Analysis			

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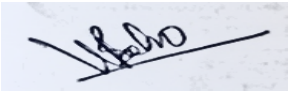

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TEACHING PLAN (UNIT PLAN)

	(a) Cost Concepts: Fixed and Variable Costs (b) Behavior of Cost Curves: Short Run and Long Run (c) Producer's Surplus (d) Revenue Concepts: Total Revenue, Average Revenue and Marginal Revenue under Perfect Competition and Monopoly (e) Break-Even Analysis (f) Case Studies 5 Market Structure (a) Features of Perfect Competition and Monopoly (b) Long-run Equilibrium of a Firm and Industry under Perfect Competition and Monopoly			

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TEACHING PLAN (UNIT PLAN)

	(c) Features of Monopolistic Competition (d) Features of Oligopoly: Price Indeterminateness, Cartel Formation and Forms of Price Leadership (e) Case Studies 6 Pricing Practices, Market Failure and Project Planning 6.1 Pricing Practices (a) Price Discrimination (b) Dumping (c) Marginal-Cost Pricing (d) Cost-Plus Pricing (e) Case Studies			

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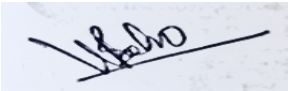

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	6.2 Market Failure (a) Concept of Market Failure and Inefficiency (Productive and Allocative Inefficiency using PPC) (b) Causes of Market Failure (Public Goods, Market Power, Externalities, Information Asymmetry and Equity) (c) Government Intervention and Market Efficiency (d) Case Studies 6.3 Capital Budgeting (a) Meaning and Importance (b) Steps in Investment Appraisal			

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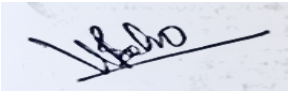

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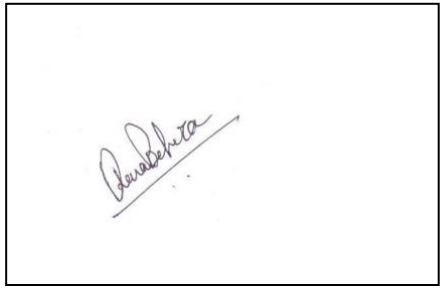
TEACHING PLAN (UNIT PLAN)

	(c) Case Stud			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____40



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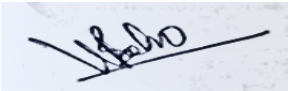

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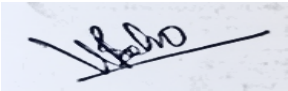

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SACHIN ARJUN KADAM DEPARTMENT: Accountancy CLASS: FYBAF SEMESTER: I (Subject : Cost Accounting)

MONTH: Oct ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to Imparting an adequate knowledge of the subject matter.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1	Cost and classification of costs Meaning, define, features, forms of classification,		Ainapure	Ppt, board
Unit 2	Material cost Meaning, define, pur requisition, bin card, FIFO, lifo, weighted average method, practical problems	6	Ainapure Ainapure	Ppt, board Ppt, board
Unit 3	Labour cost Meaning, define, straight piece system, tayor system, merrick system system, Halsey, rowan meaning, practical problems	6	Ainapure	Ppt, board
Unit 4	Overhead cost			

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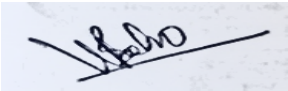

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TEACHING PLAN (UNIT PLAN)

	Meaning, define, features, allocation, Apportionment, practical problems	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_22___

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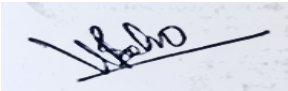

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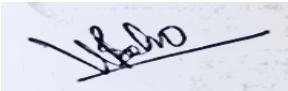

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. SEEMA SIHANA** DEPARTMENT: **SELF FINANCE** CLASS **F.Y.B.A.F.** SEMESTER: **I**

SUBJECT: FC I **MONTH**: AUGUST-DECEMBER 2022 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To make the students socially aware of the societal problem and their personality.
The learners will be able to: to understand the overall stratification of the society.
The learners will be able to: to understand the Indian constitution and its importance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FC I	Module-I Multi-cultural diversity and Indian society through its demographic composition: population distribution according to religion, caste, and gender, Appreciate the concept of linguistic diversity in relation to the Indian situation: Understand regional variations according to rural, urban and tribal	05	Text Book Internet	1.Chalk and Black Board Method 2 Example 3 Discussion 4. Google Classroom

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	characteristics Understanding the concept of diversity as difference.			
	Module II- Concept of disparity-1 1. Understanding the concept of disparity as arising out of stratification and inequality 2. Gender Ratio, Gender Discrimination 3. Violence against women 4. Female foeticide 5. Portrayal of women in media 6. Inequalities faced by people with disabilities and understand the issues of people with disabilities.	10	Text Book Internet	1.Chalk and Black Board Method 2 Example 3 Discussion 4. Google Classroom
	. Module III- Concept of disparity-2 Examine inequalities manifested due to the caste system and inter group conflicts arising there of Understanding inter group conflicts arising out of communalism Causes and effects of communalism, regionalism, linguistic casteism Unit - 4 The Indian Constitution	10	Text Book Internet	1.Chalk and Black Board Method 2 Example 3 Discussion 4. Google Classroom

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	Philosophy of the Constitution as set out in the Present, The structure of the Constitution - the Preamble, Main Body and Schedules Fundamental Duties of the Indian Citizen, tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society Basic features of the Constitution Unit - 5: Significant Aspects of Political Processes The party system in Indian political Local self-government in urban and rural areas The 73 and 74 Amendments and their implications for inclusive politics Role and significance of women in politics Topics for Project Guidance : Growing Social Problems in India	10 10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: FYBAF SEMESTER: I (Subject : Financial Management)

MONTH: AUGUST - SEPTEMBER ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 **TYPES OF FINANCING**	Introduction, Needs of Finance and Sources: Long Term, Medium Term, Short Term	02	FINANCIAL MANAGEMENT BY RAVI & KISHORE	• Chalk • Board • Discussion • Examples • Google Classroom
	Introduction, Needs of Finance and Sources: Long Term, Medium Term, Short Term	02		
	Long Term Sources of Finance	02		
	Short Term Sources of Finance	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT4: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: FYBAF SEMESTER: I (Subject : Financial Management)

MONTH: SEPTEMBER - OCTOBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 **COST OF CAPITAL**	Introduction Definition and Importance of Cost of Capital	01	FINANCIAL MANAGEMENT BY RAVI & KISHORE	• Chalk • Board • Discussion • Examples • Google classroom
	Measurement of Cost of Capital, WACC	02		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 5: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: FYBAF SEMESTER: I
(Subject : FINANCIAL ACCOUNTING MONTH: AUGUST ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 ACCOUNTING STANDARDS ISSUED BY ICAI AND INVENTORY VALAUATION	**Inventory Valuation** Meaning of Inventories Cost for Inventory Valuation Inventory Systems: Periodic Inventory System and Perpetual Inventory System	1	FINANCIAL ACCOUNTING BY R L GUPTA	• Chalk • Board • Discussion • Examples • Google ClassRoom
	Valuation: Meaning and Importance Methods of Stock Valuation as per AS-2 FIFO and Weighted Average Method	2		
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___TARIKA PATEL_____ DEPARTMENT: ___COMMERCE_____ CLASS: __FYBAF_____ SEMESTER: _I_
(Subject : ___FINANCIAL ACCOUNTING_____MONTH: _____AUGUST, SEPTEMBER_____ ACADEMIC YEAR: ____2022-2023_____
LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 FINAL ACCOUNTS	Expenditure: (a) Capital (b) Revenue Receipts: (a) Capital (b) Revenue Adjustments and Closing Entries	5	FINANCIAL ACCOUNTING BY R L GUPTA	• Chalk • Board • Discussion • Examples • Google ClassRoom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2:__5_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: FYBAF SEMESTER: I
(Subject : FINANCIAL ACCOUNTING MONTH: OCTOBER ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 ACCOUNTING FOR HIRE PURCHASE	Meaning, Calculation of Interest	2	FINANCIAL ACCOUNTING BY R L GUPTA	• Chalk • Board • Discussion • Examples • Google ClassRoom
	Accounting for hire purchase transactions by assets purchase method base on full cash price	3		
	Journal Entries, Ledger Accounts and disclosure in balance sheet for hirer and vendor (excluding default, repossession and calculation of cash price)	4		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 4: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHAKHA SANE DEPARTMENT: ECONOMICS CLASS:SYEME SEMESTER: **IV** MONTH:APRIL 2023

ACADEMIC YEAR:2022-2023 SUBJECT :ENVIRONMENTAL ECONOMICS

LEARNING OBJECTIVE/S: To take over the environmental status of the economy and to overcome the drawback with the help of different categories.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1,2,3 and 4:	Social Choice: Individual preferences regarding environmental protection, Biocentrism,Antoprocentricsm, Sustainability, Pareto efficiency, Social welfare,Arrow Impossible Theorem,	5lect		
	Efficiency and Markets: Efficiency in Goods and Bads, Efficiency in Production,First welfare Theorem,Consumer and Producer surplus,Cost Benefit Analysis.			
	Market Failure:Public Bads and externalities,Pricing of private versus public goods,Lindahl Pricing and free ridings,Externalities	5lect		

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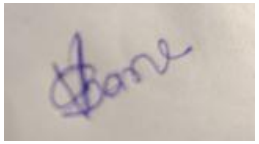
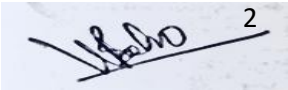
TEACHING PLAN (UNIT PLAN)

	Methods to drive the demand for environmental goods: Price Method, Property Values,Wage Regression,Value of statistic life,Household Production,Defensive Expenditure,Travel Cost,			
	Uses versus Non-Use Values,Willingness to Pay versus Willingness to accept. Regulating Pollution: Command and Control vs EnvironmentalTaxes vs Cap vs Trade and Liabilities. Pigouvian Fees: Single Polluter Single Damage, Single Polluter Multiple Damage, Multiple Polluter and the Equimarginal Principle,Fees versus Subsidies, Fees and Imperfect Competition Regulation with Unknown Control Cost,Price Versus Quantities Cost Theorem and Allocation of Property Rights.	10lect		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60





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TEACHING PLAN (UNIT PLAN)

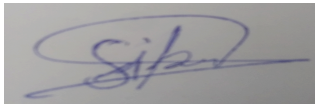
NAME OF THE STAFF: - Sarita Panigrahy DEPARTMENT: Mathematics(BIM) CLASS: FYBAF SEMESTER: - 2 (Subject : - Business Maths)

MONTH: Jan-April ACADEMIC YEAR: 2022-23

1. LEARNING OBJECTIVE/S: - Develop and maintain problem-solving skills
2. mathematical ideas to model real-world problems.
3. Translate words into math language, and construct an abstract model that describes the problem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	T EACHING METHOD/ ICT TOOLS USED
Unit -1	Ratio, proportion and percentage	10	VIPUL ,MANAN	Chalk and Duster Method
Unit-2	Profit and loss	10	RISHABH	Chalk and Duster Method
Unit-3	Interest and annuity	10	VIPUL ,MANAN	Chalk and Duster Method
Unit-4	Shares and mutual fund	8	RISHABH	Chalk and Duster Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 38



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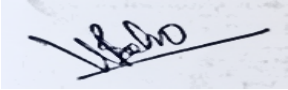

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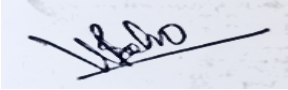

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: keyur Limbachiya DEPARTMENT: Commerce (SFC) CLASS: FYBAF SEMESTER: II (Subject: Business Law)

MONTH: December - March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The general education curriculum will enable students to acquire skills, knowledge and experienced.

UNITS	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT -1 Law of contract Act 1872	Nature of contract, classification of contracts, offer and acceptance, capacity of parties to contract, free consent, consideration, legality of object legality of object, agreement declared void, performance of contract, discharge of contract, Remedies for breach of contract, indemnity, guarantee, bailment and pledge, agency	15	Past papers ICAI modules and other online references, Mumbai university Book PDF, some reference books	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM
UNIT -2 Sales of Goods Act 1930	Formation of contract of sales, goods and their classifications, price, condition and warranties, Transfer of properties and goods performance of contract of sales, unpaid seller and his rights, sales by auction, hire purchase agreement	10		

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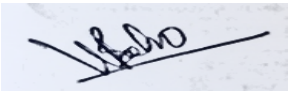

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TEACHING PLAN (UNIT PLAN)

UNIT -3. Negotiable instrument Act 1881	Definition of negotiable instruments, features of negotiable instruments, promissory notes, bills of exchange and cheque, holder and holder in due course, crossing of cheque, Types of crossing, dishonoured and discharge of negotiable instruments	10	Past papers ICAI modules and other online references, Mumbai university Book PDF,	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM
UNIT -4. Consumer protection Act 1986	Salient features, definition of consumer, deficiency in services, defects in goods	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:45

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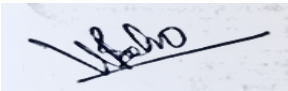

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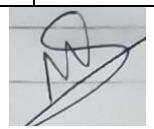
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:MADHURA ARVIND SURVE DEPARTMENT: SFC CLASS: FYBAF SEMESTER: II SUBJECT:FOUNDATION COURSE II MONTH: DECEMBER TO APRIL ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: know base of variety of new topics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**Globalizations & Indian Society** Concepts of liberalization, privatization and globalization Growth of information technology and communication and its impact manifested in everyday life	5	Manan Prakashan/Internet	CHALK & BLACK BOARD METHOD & GOOGLE CLASSROOM



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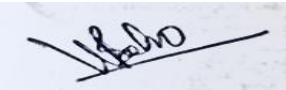

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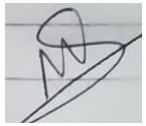

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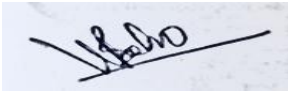

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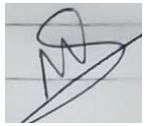
TEACHING PLAN (UNIT PLAN)

	Impact of globalization on industry: changes in employment and increasing migration Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides.			
UNIT 2	**<u>Human Rights</u>** a]Concept of Human Rights. b] Evolution of Human Rights c] The Universal Declaration of Human Rights d] Fundamental Rights in Constitution	10	Manan Prakashan/Internet	CHALK & BLACK BOARD METHOD & GOOGLE CLASSROOM



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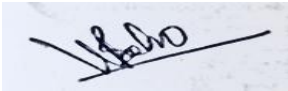

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UNIT 3	**<u>Ecology</u>** a] Concept of environment & ecology	10	Manan Prakashan/Internet	CHALK & BLACK BOARD METHOD & GOOGLE CLASSROOM

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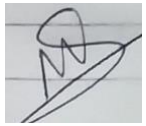

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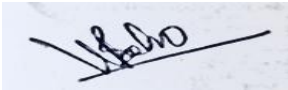

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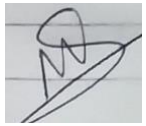
	b] Importance of environmental studies, Environment as a Natural capital & quality of human life c] Environmental Degradation. i. Causes ii. Impact on human life d] Sustainable Development i. Concept ii. Components e] Poverty & Environment			

TEACHING PLAN (UNIT PLAN)



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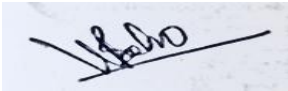

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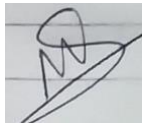
UNIT 4	**Understanding Stress & Conflicts** Causes of stress & Conflicts in individual & society, Agents of Socialization & the role played by them in developing the individual. Significance of values, ethics & prejudices in developing the individuals. Stereotyping & prejudice as significant factors in causing conflicts in society. Aggression & Violence as the public expression of conflicts.	5	Book by Manan publications/Internet	CHALK & BLACK BOARD METHOD & GOOGLE CLASSROOM
UNIT 5	**Managing stress & conflict in Contemporary Society** Types of conflicts and use of coping mechanisms for managing individual stress Maslow's theory of self-actualisation,	5	Book by Manan publications/Internet	CHALK & BLACK BOARD METHOD & GOOGLE CLASSROOM

TEACHING PLAN (UNIT PLAN)



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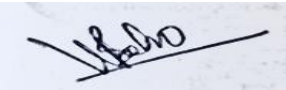

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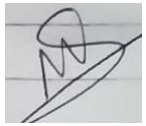
	Different methods of responding to conflicts in society, Conflict Resolution, & Efforts towards building peace & harmony in society.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 35



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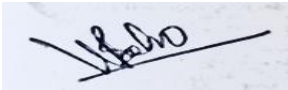

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA SANJAY MAHESHWARI DEPARTMENT: Accounting and Finance CLASS:FYBAF SEMESTER: II

SUBJECT: BUSINESS COMMUNICATION II MONTH: December to May ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to:

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	4 Principles of Effective Presentation Effective use of OHP Effective use of Transparencies How to make a Power-Point Presentation	5	Manan Prakashan book	CHALK & BLACK BOARD METHOD INTERACTIVE

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TEACHING PLAN (UNIT PLAN)

				METHOD GOOGLE CLASSROOM
2) Group Communication	**Interviews:** Group Discussion, Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit **Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics, Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **Conference:** Meaning and Importance of Conference, Organizing a Conference **Modern Methods:** Video and Tele – Conferencing **Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	10	Manan Prakashan book	CHALK & BLACK BOARD METHOD INTERACTIVE METHOD GOOGLE CLASSROOM
3) Business Correspondence	Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters, Promotional Leaflets and Fliers,	10	Manan Prakashan book	CHALK & BLACK BOARD METHOD INTERACTIVE METHOD GOOGLE CLASSROOM

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TEACHING PLAN (UNIT PLAN)

	Consumer Grievance Letters, Letters under Right to Information (RTI) Act			
4) Language and Writing Skills	**Reports:** Parts, **Types** - Feasibility Reports, Investigative Reports **Summarisation:** Identification of main and supporting/sub points, Presenting these in a cohesive manner	10	Manan Prakashan book	CHALK & BLACK BOARD METHOD INTERACTIVE METHOD GOOGLE CLASSROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:NEHA SANJAY MAHESHWARI DEPARTMENT: Accounting and Finance CLASS:FYBAF SEMESTER: II

SUBJECT:FOUNDATION COURSE II MONTH: December To May ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Globalisation & Indian Society Concepts of liberalization, privatization and globalization Growth of information technology and communication and its impact manifested in everyday life	5	Book by Manan publications/Internet	CHALK & BLACK BOARD METHOD & GOOGLE CLASSROOM

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TEACHING PLAN (UNIT PLAN)

	Impact of globalization on industry: changes in employment and increasing migration Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides.			
UNIT 2	Human Rights a]Concept of Human Rights. b] Evolution of Human Rights c] The Universal Declaration of Human Rights d] Fundamental Rights in Constitution	10	Book by Manan publications/Internet	CHALK & BLACK BOARD METHOD & GOOGLE CLASSROOM
UNIT 3	Ecology a] Concept of environment & ecology	10	Book by Manan publications/Internet	CHALK & BLACK BOARD METHOD & GOOGLE CLASSROOM

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TEACHING PLAN (UNIT PLAN)

	b] Importance of environmental studies, Environment as a Natural capital & quality of human life c] Environmental Degradation. i. Causes ii. Impact on human life d] Sustainable Development i. Concept ii. Components e] Poverty & Environment			

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TEACHING PLAN (UNIT PLAN)

UNIT 4	Understanding Stress & Conflicts Causes of stress & Conflicts in individual & society, Agents of Socialization & the role played by them in developing the individual. Significance of values, ethics & prejudices in developing the individuals. Stereotyping & prejudice as significant factors in causing conflicts in society. Aggression & Violence as the public expression of conflicts.	5	Book by Manan publications/Internet	CHALK & BLACK BOARD METHOD & GOOGLE CLASSROOM
UNIT 5	Managing stress & conflict in Contemporary Society Types of conflicts and use of coping mechanisms for managing individual stress Maslow's theory of self-actualisation,	3	Book by Manan publications/Internet	CHALK & BLACK BOARD METHOD & GOOGLE CLASSROOM

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TEACHING PLAN (UNIT PLAN)

	Different methods of responding to conflicts in society, Conflict Resolution, & Efforts towards building peace & harmony in society.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 33

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: BAF CLASS: FYBAF DIV:A,B,C SEMESTER: II (Subject :AUDITING)

MONTH: DECEMEBER 22 – MARCH 23 ACADEMIC YEAR: 22-23

LEARNING OBJECTIVE/S: To give knowledge to students about how to find reliability of financial position and profit and loss statements. The aim is to ensure tl the accounts reveal a true and fair face of the business and all of its transactions

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	1. **Introduction to Auditing** • Basics Financial Statements, Users of Financial Information, Definition of Auditing, Objectives of Auditing - Primary and Secondary, Expression of Opinion, Detection of Frauds and Errors, Inherent Limitations of Audit • Errors and Frauds Concepts, Reasons and Circumstances, Types of Errors -Commission, Omission, Principle and Compensating, Types of Frauds, Risk of Fraud and Error in Audit, Auditor's Duties and Responsibilities in Respect of Fraud • Principles of Audit Integrity, Objectivity,	15	SHETH , VIPUL,MANAN PRAKASHAN	PPT, CHALK AND BOARD

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TEACHING PLAN (UNIT PLAN)

	Independence, Confidentiality, Skills and Competence, Materiality and Work Performed by Others, Documentation, Planning, Audit Evidence, Accounting System and Internal Control, Audit Conclusions and Reporting • Types of Audit Meaning, Advantages and Disadvantages of Balance Sheet Audit, Interim Audit, Continuous Audit, Concurrent Audit, Annual Audit • Miscellaneous Advantages of Independent Audit, Qualities of Auditors, Auditing Vs Accounting, Auditing Vs Investigation, View the Concept True and Fair • Accounting Concepts Relevant to Auditing Materiality, Going Concern			
	2.**Audit Planning, Procedures and Documentation** • Audit Planning Meaning, Objectives, Factors to be Considered, Sources of Obtaining Information, Discussions with Client, Overall Audit Plan • Audit Programme Meaning, Factors to be Considered, Advantages, Disadvantages, Overcoming Disadvantages, Methods of Work, Instruction before Commencing Works of Audit, Overall Audit Approach	15		

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TEACHING PLAN (UNIT PLAN)

	• Audit working Papers Meaning, Importance, Factors Determining Form and Contents, Main Functions / Importance, Features, Contents of Permanent Audit File, Temporary Audit File, Ownership, Custody, Access of Other Parties to Audit Working Papers, Auditors Lien on Working Papers, Auditors Lien on Client's Books • Audit Notebook Meaning, Structure, Contents, General Information, Current Information and Importance			
	3.**Auditing Techniques** • Test Check Test Checking Vs Routing Checking, Test Check Meaning, Features, Factors to be Considered, When Test Checks can be Used, Advantages, Disadvantages and Precautions. • Audit Sampling Audit Sampling, Meaning, Purpose, Factors in Determining Sample Size - Sampling Risk, Tolerable Error and Expected Error, Methods of Selecting Sample Items Evaluation of Sample Results Auditors Liability in Conducting Audit based on Sample • Internal Control Meaning and Purpose, Review of Internal Control, Advantages, Auditors Duties, Review of Internal Control, Inherent Limitations of Internal Control, Internal Control Samples for Sales and Debtors, Purchases and Creditors, Wages and Salaries • Internal Checks Vs Internal Control, Internal Checks Vs Test Checks	15		

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TEACHING PLAN (UNIT PLAN)

	4.**Internal Audit** Meaning, Basic Principles of Establishing Internal Audit, Objectives, Evaluation of Internal Audit by Statutory Auditor, Usefulness of Internal Audit Internal Audit Vs External Audit, Internal Checks Vs Internal Audit	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pranali Prabhakar Gurav DEPARTMENT: Accountancy CLASS: FYBAF SEMESTER: II (Subject : AUDITING)

MONTH: June to November ACADEMIC YEAR: 2022 - 23

LEARNING OBJECTIVE/S: The general education curriculum will enable students to acquire skill, knowledge and experience.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1.Vouching	Audit of Income: 1.1.Revenue from Sales and Services, Rental Income, Interest and Dividends Income, Royalties Income, Recovery of Bad debts written off, Commission Received 1.2Audit of Expenditure: Purchases, Salaries and Wages, Rent, Insurance Premium, Telephone expense, Petty cash payment, Advertisement, Travelling Salesman's Commission, Freight Carriage and Custom Duties	15	Auditing Textbook	Chalk Board /Google classroom

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TEACHING PLAN (UNIT PLAN)

2. Verification	2.1 Audit of assets Plant and Machinery, Furniture and fixtures, Accounts Receivable, Investments, Inventory, Goodwill, Patent Right 2.2.Audit of Liabilities: Outstanding Expenses, Accounts Payable, Secured loans, Unsecured Loans, Contingent Liabilities, Public Deposits	15	Auditing Textbook	Chalk Board /Google classroom
3. Auditing Techniques	3.1Meaning Procedure of issuing Auditing Standards in India Brief overview of Auditing Standards in India Scope of SAs Significance of the Auditing Standards Responsibility of auditor for auditing standards 3.2SA 200, SA210, SA230, SA240, SA 250, SA300, SA315, SA320, SA505	15	Auditing Textbook	Chalk Board /Google classroom

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TEACHING PLAN (UNIT PLAN)

4. Audit of Companies	Qualifications, Disqualifications, Appointments, Reappointment, Removal of Auditors. Special auditors Branch auditors Rights and Duties of Company Auditors	15	Auditing Textbook	Chalk Board /Google classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Vicky Naresh Patil DEPARTMENT: Commerce CLASS: FYBAF SEMESTER: II (Subject : Business Communication)

MONTH: January ACADEMIC YEAR: 2023-24

LEARNING OBJECTIVE/S: _____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1 Presentation Skills	Principles of Effective Presentation, Effective use of OHP, Effective use of Transparencies, How to make a Power-Point Presentation.	15		Black Board, Chalk
2 Group Communication	1. **Interviews** : Group Discussion, Preparing for an Interview Types of Interviews- Selection, Appraisal, Grievance, Exit 2. **Meetings** : Need and Importance of Meetings, Conduct of Meeting and Group Dynamics Role of the Chairperson, Role of the Participants Drafting of Notice, Agenda and Resolutions	15		

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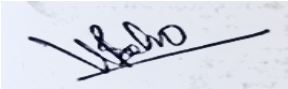

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TEACHING PLAN (UNIT PLAN)

	3. **Conference** : Meaning and Importance of Conference Organizing a Conference Modern Methods : Video and Tele-Conferencing 4. **Public Relations** : Meaning, Functions of PR Department External and Internal Measures of PR			
3. Business Correspondence	**Trade Letters** : Order, Credit and Status Enquiry, Collection Only following to be taught in detail : Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters, Promotional Leaflets and Fliers Consumer Grievance Letters Letters under Right to Information (RTI) Act	15		
4. Language and writing skills	1. **Reports :**Parts, Types, Feasibility Reports, Investigative Reports 2. **Summarisation :** Identification of main and supporting / sub points, Presenting these cohesive manner.	15		

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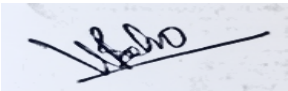

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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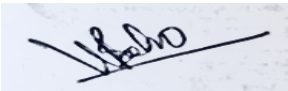

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ASIS ALMEIDA DEPARTMENT: ACCOUNTING & FINANCE CLASS: FYBAF (A, B, C) SEMESTER: I (Subject: Financial Accounting-I)

MONTH: OCTOBER-DECEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1. Accounting Standards	AS-1 Disclosure of Accounting Polices, AS-2 Valuation of Inventories (Stock), AS-9 Revenue Recognition	03	Manan Prakashan	Online / PPT, Group Discussion, Excel sheet
3. Final Accounts ofManufactu-ring Concern	Final Accounts of Manufacturing concern: - Introduction, Practical Sums 05	06		
4. Departmental Accounts	Departmental Accounts: - Introduction, Basis for Allocation, Format Practical Sums 05	06		

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ASIS ALMEIDA DEPARTMENT: ACCOUNTS & FINANCE CLASS: FYBAF SEMESTER: I (Subject: Financial Management)

MONTH: AUGUST- DECEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to: Manage their financial resources both on the personal level and within the business plan. It's more than just balance sheets.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1. Introduction to Financial Management.	Introduction, Meaning, Importance, Scope & Objectives, Profit Vs. Value Maximization.	03	Manan Prakashan	Chalk, Board & Group Discussion
3. Leverage	Introduction, EBIT & EPS Analysis. Types of Leverages: Operating Leverage, Financial Leverage & Composite Leverage. Practical Problems (10)	10	Manan Prakashan	Chalk, Board & Group Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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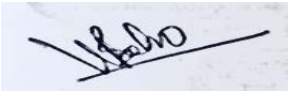

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. BRISTI BISWAS **DEPARTMENT**: Business Economics **CLASS**: FYBAF **SEMESTER**: II (**Subject**: BUSINESS ECONOMICS)

MONTH: SEP 2022-MARCH 2023 **ACADEMIC YEAR**: 2022-2023

LEARNING OBJECTIVE/S: To learn a better role of an entrepreneur and skilled manager Build familiarity with the operation of markets and optimization in an economic context

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Module I **Introduction to business economics** **Module II**	Introduction : Business Economics ,basic concepts for business economic analysis ,functional relations and tool for economic analysis. Introduction to market demand and supply, demand supply, market equilibrium, changes in market equilibrium.	15	H.l.Ahuja Advanced Economic Theory	Chalk & board

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TEACHING PLAN (UNIT PLAN)

Demand Analysis	demand function, price, income and substitution effects, nature of demand curve under different markets.	10		
Module III **Supply and production decisions and cost of production**	Meaning of demand,law of demand,determinants of demand, Meaning of elasticity, price elasticity of demand , income elasticity of demand , cross elasticity of demand,promotional elasticity of demand, importance of elasticity of demand , relationship between price elasticity of demand and revenue concept. Significance of demand forecasting ,types of demand forecasting, steps in demand forecasting ,methods of demand forecasting.	10	H.l.Ahuja Advanced Economic Theory	Chalk & board
	Features of monopolistic competition, short-run equilibrium of the firm, long run equilibrium of the firm , selling cost and its effects, role of advertisement.	10		

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TEACHING PLAN (UNIT PLAN)

MODULE IV	meaning of oligopoly, characteristics of oligopoly, collusive and non collusive oligopoly,price rigidity,collusive oligopoly, price leadership.			
MODULE V	Meaning of pricing practices, degrees of price discrimination, conditions for price discrimination, conditions for profitable price discrimination, equilibrium of price discriminating monopolist ,dumping. Introduction to pricing practices part II, marginal cost pricing ,cost plus pricing ,multi product pricing Transfer pricing	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

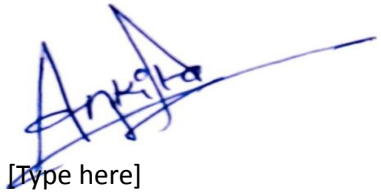
NAME OF THE STAFF: **ANKITA PANDEY** DEPARTMENT: **SELF FINANCE** CLASS: **FYBAF** SEMESTER: **I** (Subject : **BUSINESS ECONOMICS**)

MONTH: **AUG TO DECEMBER** ACADEMIC YEAR: **2022 - 2023**

LEARNING OBJECTIVE/S: **Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction	Scope and Importance of Business Economics – basic tools – Opportunity Cost principle – Incremental and Marginal Concepts. Basic economic relations – functional relations: equations – Total, Average and Marginal relations – use of Marginal analysis in decision making The basics of market demand, market supply and equilibrium price – shifts in the demand and supply curves and equilibrium	**(15 Lec.)**	**MANAN PRAKASHAN**	**Chalk and Board**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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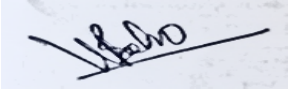

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____REENA BEHERA_____ DEPARTMENT: _____Business Economics____ CLASS: ____FYBAF___
SEMESTER: I__ (Subject : _____BUSINESS ECONOMICS I_____)

MONTH: _____July to October_ ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: _____Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes._____

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit I,II,III,IV	1 Introduction (a) Concept of Scarcity (b) Choice and Efficiency (with Reference to PPC) (c) Basic Tools in Economic Analysis i. Equations ii. Functions iii. Identities	4 lectures per week	H.l.Ahuja Advanced Economic Theory	Online lectures via Google meet Google Classroom Assignment Discussion

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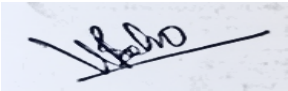

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TEACHING PLAN (UNIT PLAN)

	iv. Slope v. Time Series vi. Cross Section Data vii. Scatter Diagrams viii. Derivatives and Limits 2 Demand and Supply Analysis (a) Demand Function and Determinants of Demand (b) Supply Function and Determinants of Supply (c) Determination of Equilibrium Price in an Open Market (d) Concept and Importance of Elasticity of Demand: Price, Income, Cross and Promotional			

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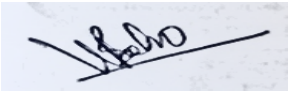

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TEACHING PLAN (UNIT PLAN)

	(e) Consumer's Surplus (f) Demand Forecasting: Meaning, Significance and Methods (g) Case Studies 3 Theory of Production (a) Production Function: Short Run and Long Run (b) Law of Variable Proportions (c) Producer's Equilibrium (d) Principle of Returns to Scale (e) Economies of Scale (f) Case Studies 4 Cost and Revenue Analysis			

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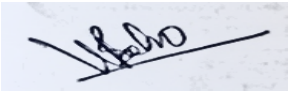

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	(a) Cost Concepts: Fixed and Variable Costs (b) Behavior of Cost Curves: Short Run and Long Run (c) Producer's Surplus (d) Revenue Concepts: Total Revenue, Average Revenue and Marginal Revenue under Perfect Competition and Monopoly (e) Break-Even Analysis (f) Case Studies 5 Market Structure (a) Features of Perfect Competition and Monopoly (b) Long-run Equilibrium of a Firm and Industry under Perfect Competition and Monopoly			

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TEACHING PLAN (UNIT PLAN)

	(c) Features of Monopolistic Competition (d) Features of Oligopoly: Price Indeterminateness, Cartel Formation and Forms of Price Leadership (e) Case Studies 6 Pricing Practices, Market Failure and Project Planning 6.1 Pricing Practices (a) Price Discrimination (b) Dumping (c) Marginal-Cost Pricing (d) Cost-Plus Pricing (e) Case Studies			

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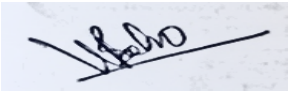

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TEACHING PLAN (UNIT PLAN)

	6.2 Market Failure (a) Concept of Market Failure and Inefficiency (Productive and Allocative Inefficiency using PPC) (b) Causes of Market Failure (Public Goods, Market Power, Externalities, Information Asymmetry and Equity) (c) Government Intervention and Market Efficiency (d) Case Studies 6.3 Capital Budgeting (a) Meaning and Importance (b) Steps in Investment Appraisal			

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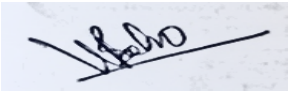

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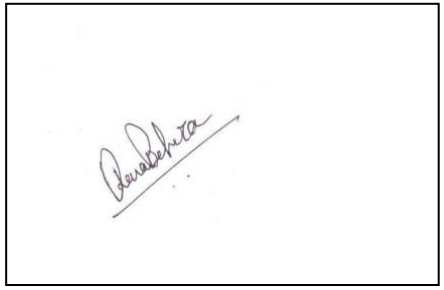
TEACHING PLAN (UNIT PLAN)

	(c) Case Stud			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____40



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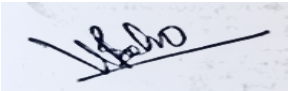

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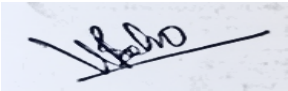

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SACHIN ARJUN KADAM DEPARTMENT: Accountancy CLASS: FYBAF SEMESTER: I (Subject : Cost Accounting)

MONTH: Oct ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to Imparting an adequate knowledge of the subject matter.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1	Cost and classification of costs Meaning, define, features, forms of classification,		Ainapure	Ppt, board
Unit 2	Material cost Meaning, define, pur requisition, bin card, FIFO, lifo, weighted average method, practical problems	6	Ainapure Ainapure	Ppt, board Ppt, board
Unit 3	Labour cost Meaning, define, straight piece system, tayor system, merrick system system, Halsey, rowan meaning, practical problems	6	Ainapure	Ppt, board
Unit 4	Overhead cost			

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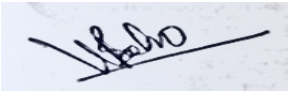

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TEACHING PLAN (UNIT PLAN)

	Meaning, define, features, allocation, Apportionment, practical problems	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_22___

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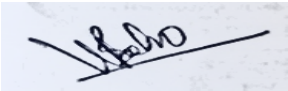

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TEACHING PLAN (UNIT PLAN)

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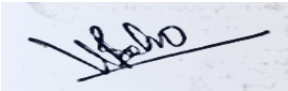

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. SEEMA SIHANA** DEPARTMENT: **SELF FINANCE** CLASS **F.Y.B.A.F.** SEMESTER: **I**

SUBJECT: FC I **MONTH**: AUGUST-DECEMBER 2022 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To make the students socially aware of the societal problem and their personality.
The learners will be able to: to understand the overall stratification of the society.
The learners will be able to: to understand the Indian constitution and its importance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FC I	Module-I Multi-cultural diversity and Indian society through its demographic composition: population distribution according to religion, caste, and gender, Appreciate the concept of linguistic diversity in relation to the Indian situation: Understand regional variations according to rural, urban and tribal	05	Text Book Internet	1.Chalk and Black Board Method 2 Example 3 Discussion 4. Google Classroom

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	characteristics Understanding the concept of diversity as difference.			
	Module II- Concept of disparity-1 1. Understanding the concept of disparity as arising out of stratification and inequality 2. Gender Ratio, Gender Discrimination 3. Violence against women 4. Female foeticide 5. Portrayal of women in media 6. Inequalities faced by people with disabilities and understand the issues of people with disabilities.	10	Text Book Internet	1.Chalk and Black Board Method 2 Example 3 Discussion 4. Google Classroom
	. Module III- Concept of disparity-2 Examine inequalities manifested due to the caste system and inter group conflicts arising there of Understanding inter group conflicts arising out of communalism Causes and effects of communalism, regionalism, linguistic casteism Unit - 4 The Indian Constitution	10	Text Book Internet	1.Chalk and Black Board Method 2 Example 3 Discussion 4. Google Classroom

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	Philosophy of the Constitution as set out in the Present, The structure of the Constitution - the Preamble, Main Body and Schedules Fundamental Duties of the Indian Citizen, tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society Basic features of the Constitution Unit - 5: Significant Aspects of Political Processes The party system in Indian political Local self-government in urban and rural areas The 73 and 74 Amendments and their implications for inclusive politics Role and significance of women in politics Topics for Project Guidance : Growing Social Problems in India	10 10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: FYBAF SEMESTER: I (Subject : Financial Management)

MONTH: AUGUST - SEPTEMBER ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 **TYPES OF FINANCING**	Introduction, Needs of Finance and Sources: Long Term, Medium Term, Short Term	02	FINANCIAL MANAGEMENT BY RAVI & KISHORE	• Chalk • Board • Discussion • Examples • Google Classroom
	Introduction, Needs of Finance and Sources: Long Term, Medium Term, Short Term	02		
	Long Term Sources of Finance	02		
	Short Term Sources of Finance	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT4: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: FYBAF SEMESTER: I (Subject : Financial Management)

MONTH: SEPTEMBER - OCTOBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 **COST OF CAPITAL**	Introduction Definition and Importance of Cost of Capital	01	FINANCIAL MANAGEMENT BY RAVI & KISHORE	• Chalk • Board • Discussion • Examples • Google classroom
	Measurement of Cost of Capital, WACC	02		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 5: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: FYBAF SEMESTER: I
(Subject : FINANCIAL ACCOUNTING MONTH: AUGUST ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 ACCOUNTING STANDARDS ISSUED BY ICAI AND INVENTORY VALAUATION	**Inventory Valuation** Meaning of Inventories Cost for Inventory Valuation Inventory Systems: Periodic Inventory System and Perpetual Inventory System	1	FINANCIAL ACCOUNTING BY R L GUPTA	• Chalk • Board • Discussion • Examples • Google ClassRoom
	Valuation: Meaning and Importance Methods of Stock Valuation as per AS-2 FIFO and Weighted Average Method	2		
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___TARIKA PATEL_____ DEPARTMENT: ___COMMERCE_____ CLASS: __FYBAF_____ SEMESTER: _I_
(Subject : ___FINANCIAL ACCOUNTING_____MONTH: _____AUGUST, SEPTEMBER_____ ACADEMIC YEAR: ____2022-2023_____
LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 FINAL ACCOUNTS	Expenditure: (a) Capital (b) Revenue Receipts: (a) Capital (b) Revenue Adjustments and Closing Entries	5	FINANCIAL ACCOUNTING BY R L GUPTA	• Chalk • Board • Discussion • Examples • Google ClassRoom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2:__5_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: FYBAF SEMESTER: I
(Subject : FINANCIAL ACCOUNTING MONTH: OCTOBER ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 ACCOUNTING FOR HIRE PURCHASE	Meaning, Calculation of Interest	2	FINANCIAL ACCOUNTING BY R L GUPTA	• Chalk • Board • Discussion • Examples • Google ClassRoom
	Accounting for hire purchase transactions by assets purchase method base on full cash price	3		
	Journal Entries, Ledger Accounts and disclosure in balance sheet for hirer and vendor (excluding default, repossession and calculation of cash price)	4		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 4: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHAKHA SANE DEPARTMENT: ECONOMICS CLASS:SYEME SEMESTER: **IV** MONTH:APRIL 2023

ACADEMIC YEAR:2022-2023 SUBJECT :ENVIRONMENTAL ECONOMICS

LEARNING OBJECTIVE/S: To take over the environmental status of the economy and to overcome the drawback with the help of different categories.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1,2,3 and 4:	Social Choice: Individual preferences regarding environmental protection, Biocentrism,Antoprocentricsm, Sustainability, Pareto efficiency, Social welfare,Arrow Impossible Theorem,	5lect		
	Efficiency and Markets: Efficiency in Goods and Bads, Efficiency in Production,First welfare Theorem,Consumer and Producer surplus,Cost Benefit Analysis.			
	Market Failure:Public Bads and externalities,Pricing of private versus public goods,Lindahl Pricing and free ridings,Externalities	5lect		

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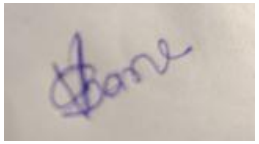
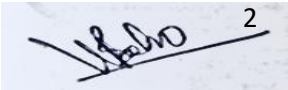
TEACHING PLAN (UNIT PLAN)

	Methods to drive the demand for environmental goods: Price Method, Property Values,Wage Regression,Value of statistic life,Household Production,Defensive Expenditure,Travel Cost,			
	Uses versus Non-Use Values,Willingness to Pay versus Willingness to accept. Regulating Pollution: Command and Control vs EnvironmentalTaxes vs Cap vs Trade and Liabilities. Pigouvian Fees: Single Polluter Single Damage, Single Polluter Multiple Damage, Multiple Polluter and the Equimarginal Principle,Fees versus Subsidies, Fees and Imperfect Competition Regulation with Unknown Control Cost,Price Versus Quantities Cost Theorem and Allocation of Property Rights.	10lect		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60





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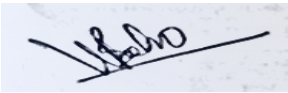
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Prof. Bhakti Vilas Purandare** DEPARTMENT: Accounting And Finance CLASS: TYBAF SEMESTER: V
Subject: Cost Accounting MONTH: June to October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will learn uniform costing, process costing.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	ACHING METHOD/ ICT TOOLS USED
Unit 1. Uniform costing and inter firm comparison	• Meaning and need of uniform costing • Essential for success of uniform costing • Advantages and limitations • Practical problems	12		Chalk, board
Unit 3. Operating costing	• Meaning of operating costing, determination of per unit cost. • Practical problems based on costing of hospitals, hotels and goods and passengers transport services.	12		Chalk, board



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Unit 4. Process costing	• Valuation of work in progress and equivalent production (FIFO and Weighted Average Method) • Inter process transfer at profit • Practical problems	12		Chalk, board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36

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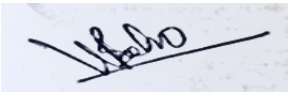

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Heena Obaid Qureshi DEPARTMENT: SFC(Accountancy) CLASS: TYBAF SEMESTER: V(Subject: Indirect Tax)

MONTH: June-Sept ACADEMIC YEAR: 20225-2023

LEARNING OBJECTIVE/S: The learners will be able to study the meaning and basic concepts of GST.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.INTRODUCTION TO INDIRECT TAX AND GST	FESTURES OF INDIRECT TAX,ADVANTAGES AND DISADVANTAGES,AUTHORITY OF TAXES IN INDIA	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	Chalk- Board
	GENESIS OF GST IN INDIA,POWER TO TAX GST,MEANING & DEFINITION OF GST	01		
	CONCEPTS- CGST,IGST,SGST,UTGST	01		
	EXPORT OF GOODS AND SERVICES,IMPORT OF GOODS AND SERVICES	01		
	GST COUNCIL AND GST NETWORK	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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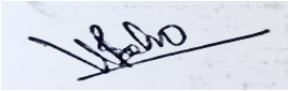
PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
2.LEVY AND COLLECTION OF GST	LEVY AND COLLECTION OF GST,	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	Chalk- board
	COMPOSITE AND MIXED SUPPLY	01		
	POWER TO GRANT EXEMPTION,NEGATIVE LIST OF GST	01		
	GST RATE SCHEDULE FOR GOODS AND SERVICES	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:04



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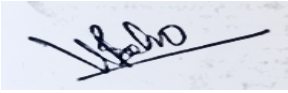
PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ TOOLS USED ICT
3.CONCEPTS OF SUPPLY	TAXABLE EVENT SUPPLY	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	Chalk- Board
	PLACE OF SUPPLY	01		
	TIME OF SUPPLY	01		
	VALUE OF SUPPLY	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04



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PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ TOOLS USED ICT
4.DOCUMENTATION	TAX INVOICES	02	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	PowerPoint presentation & MS excel
	DEBIT AND CREDIT NOTES	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: **Commerce**

CLASS: **TYBAF A, B & C** SEMESTER: **Sem V** MONTH: **June to Sep** ACADEMIC YEAR : **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Valuation of Goodwill and Shares using different methods
2) Statutory provisions and preparation of accounts for Limited Liability Partnership

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Finncial Accounting – VI	Unit 4 : Valuation of Goodwill and Shares	16	Manan & Vipul Publication	Chalk Board, PPT
	1) Valuation of Goodwill 2) Valuation of Shares			

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TEACHING PLAN (UNIT PLAN)

	Unit 5 : Accounting for Limited Liability Partnership	16	Manan & Vipul Publication	Chalk Board, PPT
	1) Statutory provisions 2) Conversion of partnership business into Limited Liability Partnership 3) Final accounts			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPANA JAIN DEPARTMENT: Accounting and Finance CLASS: TYBAF SEMESTER: V

SUBJECT: FINANCIAL MANAGEMENT MONTH: June to November ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to: : understand the financial problems related to investors, cooperations, and the communication between investors and companies in the capital markets.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1-STRATEGIC FINANCIAL MANAGEMENT	Introduction. Corporate Planning Financial Planning Profit Maximization Wealth Maximization Relationship of Finance to Economics and Accounting Role of Financial Manager	06	Khan and Jain	Chalk and Duster
2-CAPITAL BUDGETING -PROJECT PLANNING	Introduction Capital Budgeting Process	12	Prasanna Chandra	Chalk and Duster

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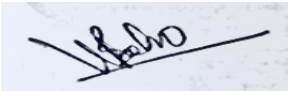

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TEACHING PLAN (UNIT PLAN)

AND RISK ANALYSIS	Techniques of Capital Budgeting Evaluation Capital Rationing Risk Evaluation In Capital Budgeting Risk Management Practical Questions			
3-CAPITAL STRUCTURE THEORIES AND DIVIDEND DECISIONS	Introduction Cost of Capital Practical Questions on Cost of Capital Introduction to Capital Structure Theories Net Income Approach Modigliani -Miller (MM) Approach Trade-Off Theory Pecking -Order Theory Traditional Approach	12	Dr.S.P.Gupta	Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pranali Prabhakar Gurav DEPARTMENT: Accountancy CLASS: TYBAF SEMESTER: V (Subject : Financial Accounting)

MONTH: June to November ACADEMIC YEAR: 2022 - 23

LEARNING OBJECTIVE/S: The general education curriculum will enable students to acquire skill, knowledge and experience.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit : 1 AS-14-Amalgamtion, Absorption and External Reconstruction (Excluding Inter-Company holdings)	1. In the nature of merger and purchase with corresponding accounting treatment of pooling of interests and purchase method respectively. 2. Meaning and Computation of Purchase Consideration. 3. Problems based on Purchase Method only.	20	Financial Accounting Textbook	Chalk Board

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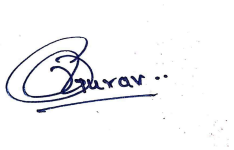
TEACHING PLAN (UNIT PLAN)

Unit 4 : Underwriting of Shares and Debentures.	1. Introduction, Underwriting, Underwriting Commission Provision of Companies Act with respect to Payment of Underwriting 1. Introduction, Underwriting, Underwriting Commission Provision of Companies Act with respect to Payment of Underwriting commision 2. Underwriters, Sub-Underwriters, Brokers and Manager to Issues 3. Types of Underwriting, Abatement Clause 4. Marked, Unmarked and Firm-Underwriting Applications, 5. Liability of the Underwriters in respect of Underwriting 6. Contract Practical Problems	15	Financial Accounting Textbook	Chalk Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35



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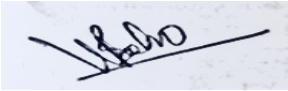

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pranali Prabhakar Gurav DEPARTMENT: Accountancy CLASS: TYBAF SEMESTER: V (Subject : Financial Management)

MONTH: June to November ACADEMIC YEAR: 2022 - 23

LEARNING OBJECTIVE/S: The general education curriculum will enable students to acquire skill, knowledge and experience.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Mutual Fund and Bond Valuation	Introduction to Mutual Fund- History & Origin, Definition, Meaning, Characteristics Advantages, Disadvantages, Limitations of Mutual Funds, Ethics in Mutual Fund Entities involved - Sponsor, Trust, Trustee, Asset Management Company, Registrar and Transfer Agent (RTA) and Fund Houses in India. Classification of Mutual Fund Functional/OperationalInterval, Calculations of NAV, Entry Load and Exit Load. Bond Valuation - Meaning, Measuring Bond Returns - Yield to Maturity, Yield to calland Bond Pricing. Bond Pricing Theorems, Bond Risks and Bond Duration. (Practical Problems on YTM and Bond Duration.)	15	Financial Management Textbook	Chalk and Board

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TEACHING PLAN (UNIT PLAN)

Credit Management	Credit Management Terms of Payment, Credit Policy Variables, Credit Evaluation, Credit Granting Decision, Control of Accounts Receivables ie Receivables Management, Ageing Schedule and Credit Management in India.	15	Financial Management Textbook	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: TYBAF SEMESTER: V
(Subject : FINANCIAL ACCOUNTING VI)MONTH: JUNE, JULY, AUGUST ACADEMIC YEAR: 2022-23
LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 FINAL ACCOUNTS OF BANKING COMPANY	Legal provision in Banking Regulation Act, 1949 relating to Accounts, Statutory reserves including Cash Reserve and Statutory Liquidity Ratio.	2	FINANCIAL ACCOUNTING BY R L GUPTA	• Chalk • Board • Discussion • Examples • Google Classrooms
	Bill purchase and discounted, rebate of bill discounted, Non–performing assets and Income from non–performing assets.	3		
	Classification of Advances, standard, sub–standard, doubtful and provisioning requirement.	1		
	Final Accounts in prescribed form	1		
	Capital Adequacy	2		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____TARIKA PATEL_____ DEPARTMENT: ___COMMERCE_____ CLASS: __TYBAF__ SEMESTER: _V_
(Subject : _____FINANCIAL ACCOUNTING VI_____)MONTH: ____SEPTEMBER, OCTOBER_____ ACADEMIC YEAR: __2022-23

LEARNING OBJECTIVE/S: _Understand the Concepts well and relate to practical knowledge_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 FINAL ACCOUNTS OF INSURANCE COMPANY	General Insurance – Various types of insurance, like fire, marine, Miscellaneous, Special terms like premium, claims, commission, Management expenses, Reserve for unexpired risk, reinsurance	4	FINANCIAL ACCOUNTING BY R L GUPTA	• Chalk • Board • Discussion • Examples • Google Classrooms
	Final Accounts in a prescribed form. Revenue Statement – Form B – Revenue Account, Profit / Loss Account – Form B – Profit & Loss and Balance Sheet Form B – BS	3		
	Practical Illustrations	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: _____15_____

T.R.Patel

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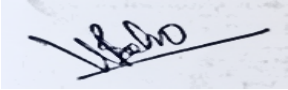

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:**GAURI YADAV** DEPARTMENT: **SELF FINANCE** CLASS: **TYBAF** SEMESTER: V (Subject : INDIRECT TAX)

MONTH: **JUN - NOV** ACADEMIC YEAR: **2022 - 23**

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
5. INPUT TAX CREDIT & COMPUTATION OF GST	ELIGIBILITY CONDITIONS FOR ITC, APPORTIONMENT OF BLOCKED CREDITS ,CREDIT IN SPECIAL CIRCUMSTANCES COMPUTATION OF GST UNDER INTERSTATE & INTRASTA ILLUSTRATION	19	TEXTBOOK (MANAN PRAKASH PUBLICATION), IC	CHALK-BOARD

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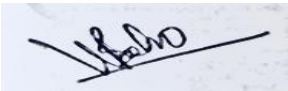
TEACHING PLAN (UNIT PLAN)

6.REGISTRATION	Person liable for registration, Person not liable for registration, Procedure Deemed Registration, Amendment, Cancelation and Revocation of Regist	13		CHALK-BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32



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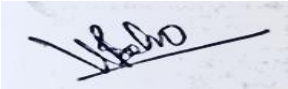

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **ANKITA PANDEY** DEPARTMENT: **SELF FINANCE** CLASS: **SYBAF** SEMESTER: **IV** Subject : (**BUSINESS LAW**)

MONTH: **NOVEMBER TO MAY** ACADEMIC YEAR: **2022 - 2023**

LEARNING OBJECTIVE/S: **The pupils will be able to learn about the contract Act, where they will learn the concept of contract, essentials and types and rules regarding the contract.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Section 2 Clause(2), (7), (13), (31), (41),(42),(47),(48),(62),(85) Accounting Standard, Auditing Standard, Books of Accounts, Deposits, Financial Year, Foreign Company, Independent Director, Indian Depository Receipts, One Person Company, Small Company	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board
UNIT 2	Incorporation to Companies Section 3 to Section 20 Incorporation of Company and matters Incidental Thereto, Exemptions and Privileges available to Private Company,	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board

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TEACHING PLAN (UNIT PLAN)

	Restrictions relating to a private company, Provisions applicable to one person company, MOA and AOA			
UNIT 3	Public Offer Section 23, 25 to 28, 33, 35, 39 Public Offer, Prospectus, Types, Issue of application forms for securities, Civil liability for Mis-statemememts in Prospectus, Allotment of securities by Company	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board
UNIT 4	Private Placement Section 42 What is Private Placement, Amendment in Private Placement Rules	07	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board
UNIT 5	Share Capital and Debentures Section 43, 46, 47, 52 to 56, 61 to 72 Kinds of Share Capital, Shares and Debentures as movable property, Distinction number to shares, Certificate of Shares, Voting Rights, Application of Premiums received on issue of shares, Sweat Equity, Power of limited Company to alter its shares capital	08	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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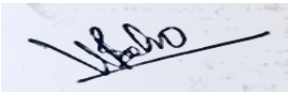

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Prof. Bhakti Vilas Purandare** DEPARTMENT: Accounting And Finance CLASS: SYBAF SEMESTER: IV
Subject: Financial Accounting MONTH: November to March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will learn uniform costing, process costing.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	ACHING METHOD/ ICT TOOLS USED
Unit 1. Preparation of Partnership Final Accounts of companies	• Relevant Provision of company Act related to prepare Final account.	12		Chalk, board
Unit 2. Redemption of preference share	• Provision of companies act for redemption of preference shares. • Practical questions	12		Chalk, board

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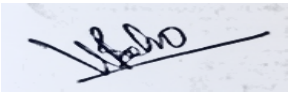

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TEACHING PLAN (UNIT PLAN)

Unit 3.. Redemption of Debentures	• Provision of Section 71 (1) and (4) of the companies act 2013 for redemption of Debentures. • Practical questions	12		Chalk, board
Unit 4. Profit Prior to Incorporation	• Principles of ascertainment. • Preparation of separate, combined and columnar Profit and Loss Accounts including different basis of allocation of expenses and income.	12		Chalk, board
Unit 5. Foreign branch	• Conversion as per AS 11 and incorporation in HO accounts	12		Chalk, board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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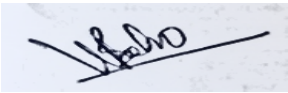

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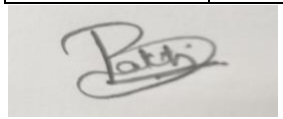
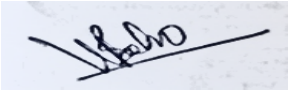
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Prof. Bhakti Vilas Purandare** DEPARTMENT: Accounting And Finance CLASS: SYBAF SEMESTER: IV
Subject: Management Accounting MONTH: November to March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will apply these management accounting related topics to their future prospectus.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	ACHING METHOD/ ICT TOOLS USED
Unit 1. Introduction to Management	• Introduction to management.	15		Chalk, board
Unit 2.Analysis and interpretation of accounts	• Vertical statement analysis • Trend analysis • Common size statement. • Comparative statement.	12		Chalk, board
Unit 3. Ratio Analysis	• Balance sheet Ratio • Profit and loss ration • Combine ratio	12		Chalk, board

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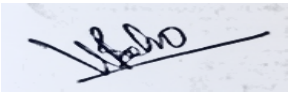
TEACHING PLAN (UNIT PLAN)

Working capital management	• Concept, nature, planning of working capital • Estimation, projection of working capital • Operating cycle practical problems	12		Chalk, board
Unit 5. Cash Flow Management	• Preparation of cash flow statement with reference to AS 3	12		Chalk, board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Heena Obaid Qureshi DEPARTMENT: SFC CLASS: SYBAF SEMESTER:IV (Subject :DIRECT TAX)

MONTH: Nov-March ACADEMIC YEAR:2022-23

LEARNING OBJECTIVE/S: to understand and learn th concepts of direct tax of Individual assesee and partnership firm

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1.Clubbing of Income	Meaning,Nature,Types of clubbing,practical problems	06	Manan Prakashan text book,ICAI reference books	Chalk board
2.setoff and carry forward	Typesof setoff and carryforward ,practicalproblems	06		
3.computation of Income of Partnership firm				
	Practical problems on partnership firm	08		

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TEACHING PLAN (UNIT PLAN)

4.Computation of total income of Assesee	Practical sums and tax calculation of Individual Assesee			
5. Advance Tax	Calculation of Advance tax and interest	06		
6.TDS	Meaning,types of TDS,Rates of TDS ,Prctical problems	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:32

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Karishma Kale DEPARTMENT: Self Finance CLASS: SYBAF- A, B, C SEMESTER: IV (Subject: Research Methodology)

MONTH: November to May ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to: Have knowledge of the basic content related to Research and its conduction process, different methods and types related to research and basics of preparation of research report.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Introduction to Research	Meaning of Research, Features of Research, Objectives of Research, Importance of Research in Accounting and Finance, Types of Research, Stages in Research process, Steps in formulation of research problem, Factors influencing selection of research problem, Sources of research problem, Review of literature,	5	Manan Prakashan, Sheth Publications	Chalk and duster
2. Research Design in accounting and Finance	Meaning, Need and importance of Research Design, Essentials of a good research design, Types of Research Design, Sources of Hypothesis, Steps in formulation of hypothesis, Importance of Hypothesis, Types of hypothesis	5	Manan Prakashan, Sheth Publications	Chalk and duster

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TEACHING PLAN (UNIT PLAN)

3. Data Collection and Processing	Meaning and types of Data, Factors influencing choice of data collection, Primary Data- Methods: Experimentation, Interview, Survey, Schedule and Questionnaire, Advantages and limitations Secondary Data- Sources, Advantages and limitation Sampling- Significance, methods, Factors determining sample size Data Processing: Significance, Stages in Data processing, Sum	7	Manan Prakashan, Sheth Publications	Chalk and duster
4. Interpretation and Report writing	Meaning, Methods of Data Interpretation Report writing, Importance, Essentials of a good report, Structure of research report , TYpes of research report	4	Manan Prakashan, Sheth Publications	Chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 21

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TEACHING PLAN (UNIT PLAN)

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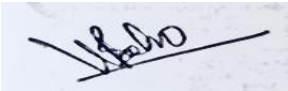

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TEACHING PLAN (UNIT PLAN)

SNAME OF THE STAFF: keyur Limbachiya DEPARTMENT: Commerce (SFC) CLASS: SYBAF SEMESTER: IV (Subject: Direct Tax)

MONTH: December - March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The general education curriculum will enable students to acquire skills, knowledge and experienced.

UNITS	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit no 1	Clubbing of income	03	Past papers ICAI modules and other online references, Mumbai university Book PDF, some reference books	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM
Unit no 2	Set off carry forward of losses	02		
Unit no 3	Computation of tax liability of individual & HUF	10		
Unit no 4	Computation of income tax partnership firm	10		
Unit no 5	Return of income – sec 139	10		
Unit no 6	Tax deduction at source advance tax interest payable	03		
Unit no 7	DTAA U/S 90 & 91	02		
Unit no 8	Tax planning & ethics in taxation	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Megha Kulkarni DEPARTMENT: Self Finance CLASS: SY BAF SEMISTER: IV
SUBJECT: Information Technology in Accountancy -II MONTH: November-February ACADEMIC YEAR: 2022-23
LEARNING OBJECTIVE/S: The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & II Business Process, Computerized Accounting System	**Introduction,** Definition & meaning of Business Process ,Flow of business process for accounting, purchase, sales and finance Classification of business processes, Introduction, Definition and Meaning of Business Process Management, Principles and practices of Business Process Management Business Process Management life cycle, Theories of Business Management Process, Implementation of Business Process Management - need, key factors and importance, Automation of business Processes - benefits, risks, challenges, Accounting systems automation, IT and Business Process Management , Information Systems - Meaning, Use of IT in Accountancy	15	Information Technology in Accountancy - II by Verus D'sa, Internet source.	Chalk board method, discussion, debates.
	Introduction and Meaning Uses and Benefits Role Need and requirements of computerized accounting Basic requirements of computerized accounting system Limitations of computerized accounting system Understand the development and design of a computerized accounting system; determining how the accounting data will be processed, i.e. what accounts and books are needed and what is the desired output i.e. financial reports and other reports.	20		
	Accounting Software: Introduction and meaning, Advantages of Accounting Software, Use of Accounting Software, Various Accounting Softwares, Accounting Software Tally.			

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III & IV Concept of MIS Report in computer Environment & IT And Auditing	Introduction, concept of MIS, Need for MIS , Characteristic of MIS , Outputs of MIS, Role of MIS, Guidelines for developing MIS reports, Functional Aspects of the MIS , Problems in MIS , Knowledge required for studying MIS, MIS and Computer.	15	Information Technology in Accountancy II Verus D'Sa, Internet source.	Chalk board method, discussion, debates.
	Need and importance of IT in Auditing,Auditing in It Environment.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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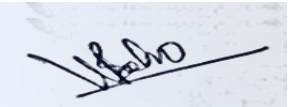

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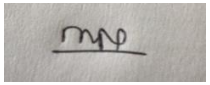
TEACHING PLAN (UNIT PLAN)

DEPARTMENT: SELF FINANCE (COMMERCE) CLASS: SYBAF SEMESTER: _IV_ (Subject : MANAGEMENT ACCOUNTING) MONTH: DEC TO APRIL ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S:
THE LEARNERS WILL BE ABLE TO: APPLY THESE MANAGEMENT ACCOUNTING RELATED TOPICS TO THEIR FUTURE PROSPECTS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction To Management Accounting Analysis & Interpretation of accounts	Introduction to Management Accounting Vertical Statement Analysis,Vertical Statement,Trend Analysis Comparative Statement,Common Size Statement	15	Management Accounting – M.Y. Khan. Management Accounting – I. M. Pandey. Cost & management accounting – Colinn Dury	Chalk & Duster Google classroom, PPT
Financial statement Analysis: Ratio Analysis	Ratio Analysis,Balance Sheet Ratios,Revenue Statement Ratios,Composite Ratios	15	Management Accounting – M.Y. Khan. Management Accounting – I. M. Pandey. Cost & management accounting – Colinn Dury	Chalk & Duster Google classroom, PPT
Working Capital Management	Concept, nature,Operating cycle practical problems	15		Chalk & Duster Google classroom, PPT
CASH FLOW MGMT	Preparation of cash flow statement –with reference to AS 3 (Indirect method only)	15		Chalk & Duster Google classroom, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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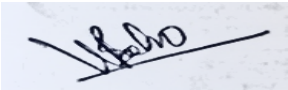

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA SANJAY MAHESHWARI DEPARTMENT: Accounting and Finance CLASS: SYBAF SEMESTER: IV

SUBJECT: RESEARCH METHODOLOGY MONTH: November to May ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the Research Methods in Business & Accounting.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1	· Introduction to Research Introduction and meaning of research, Objectives of research, Features and Importance of research in Accounting and Finance, Objectives and Types of research-Basic, Applied, Descriptive, Analytical and Empirical Research.	**8**	**C.R.Kothari, "Research Methodology - Methods & Techniques" , New Age**	**Blackboard, Chalk, Google classroom**

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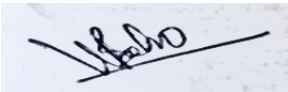

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TEACHING PLAN (UNIT PLAN)

	Formulation of research problem: Meaning and Selection Review of Literature		**International Publishers & Manan Prakashan book**	
Unit 2	Research Design in Accounting and Finance Meaning of Introduction, Need, and Good research design. Hypothesis: Formulation, Sources, Importance and Types Different Research designs	**7**	**C.R.Kothari, "Research Methodology - Methods & Techniques" , New Age International Publishers &**	**Blackboard, Chalk, Google classroom**

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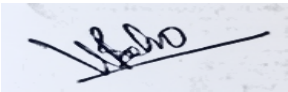

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TEACHING PLAN (UNIT PLAN)

			Manan Prakashan book	
Unit 3	Data Collection and Processing Data Collection: Introduction and meaning, types of data Primary data: Observation, Experimentation, Interview, Schedules, Survey, Questionnaires, Limitations of Primary data Secondary data: Sources and Limitations Factors affecting the choice of method of data collection. Sampling: Significance, Methods, Factors determining sample size Data Presentation: Significance in Research, Stages in Data Processing: Editing, Coding, Classification, Tabulation, Graphic Presentation	**4**	**C.R.Kothari, "Research Methodology - Methods & Techniques" , New Age International Publishers & Manan Prakashan book**	**Blackboard, Chalk, Google classroom**

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TEACHING PLAN (UNIT PLAN)

	Statistical Analysis: Tools and Techniques, Measures of Central Tendency, Measures of Dispersion, Correlation Analysis and Regression Analysis. Use of computer and internet in data collection and processing.			
Unit 4	Interpretation and Report Writing Meaning and techniques of interpretation, Research Report Writing: Importance, Essentials, Structure/layout, Types	**5**	**C.R.Kothari, "Research Methodology - Methods & Techniques" , New Age International Publishers &**	**Blackboard, Chalk, Google classroom**

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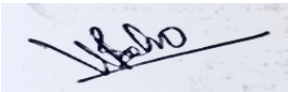

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TEACHING PLAN (UNIT PLAN)

			Manan Prakashan book	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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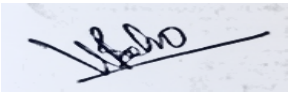

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pranali Prabhakar Gurav DEPARTMENT: Accountancy CLASS: TYBAF SEMESTER: IV (Subject :BUSINESS LAW)

MONTH: November to March ACADEMIC YEAR: 2022 - 23

LEARNING OBJECTIVE/S: The general education curriculum will enable students to acquire skill, knowledge and experience.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit : 1 Definitions	1. Section 2 2. Clause (2) Accounting Standard 3. Clause (7)- Auditing Standard 4. Clause (13) Books of Accounts 5. Clause (31) Deposit 6. Clause (41) Financial Year 7. Clause (42) Foreign Company 8. Clause (47) Independent Director	15	Business Law Textbook	Chalk and board

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TEACHING PLAN (UNIT PLAN)

	9. Clause (48) Indian Depository Receipts 10. Clause (62) - One Person Company 11. Clause (85) Small Company			
Unit 2 : Incorporation of Companies	Section 3 to Section 20 Unit 3 : Public Offer 1. Sections 23, 25 to 28, 33, 35, 39	30	Business Law Textbook	Chalk and board
Unit 4 : Private Placement	1. Section 42 Unit 5 : Share Capital and Debentures Sections 43, 46, 47, 52 to 56, 61 to 72	30	Business Law Textbook	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 75

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TEACHING PLAN (UNIT PLAN)

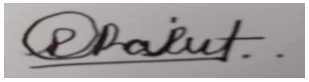
NAME OF THE STAFF: Ms. Priyanka Devnath Rajput DEPARTMENT: Commerce(Self-Finance) CLASS: SYBAF

SEMESTER: IV (Subject : Information Technology in ACC.FIN) MONTH: DECEMBER - APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to: To gain the knowledge of various business processes, how to use computerized accounting software, how manage information and little introduction to IT & auditing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Business Process	Introduction, Definition and Meaning of business process Flow of business process for accounting, purchase, sales and finance Classification of business processes Introduction, Definition and Meaning of Business Process Management Principles and practices of Business Process Management Business Process Management life cycle Theories of Business Management Process Implementation of Business process Management – need, key factors and importance Automation of business Processes – benefits, risks, challenges Accounting systems automation IT and Business Process Management Information systems – Meaning, Use of IT in accountancy.	15	Information Technology in Accounts and Finance By- Rimple Sanchla, Manan Publications. and www.wikipedia.com	Board , Chalk, Duster & Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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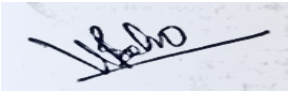

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Computerized accounting system	A) Introduction and meaning Uses and Benefits Role Need and requirements of computerized accounting Basic requirements of computerized accounting system.	05	Information Technology in Accounts and Finance By- Rimple Sanchla, Manan Publications. and www.wikipedia.com	Board , Chalk, Duster & Google Classroom
	B) Limitations of computerized accounting system Understand the development and design of a computerized accounting system; determining how the accounting data will be processed, i.e. what accounts and books are needed and what is the desired output i.e. financial reports and other reports.	07		
	C) Accounting Software Introduction and meaning Advantages of accounting software Uses of Accounting software Various accounting software.	05		
	D) Accounting software TALLY – Accounting and reports.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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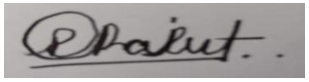
TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Concept of MIS Reports in Computer Environment	A) Introduction Concept of MIS Need for MIS Characteristic of MIS.	05	I.T in Accounts and Finance By- Rimple Sanchla, Manan Publications.& www.wikipedia.com	Board , Chalk, Duster & Google Classroom
	B) Outputs of MIS Role of MIS Guidelines for Developing MIS reports Functional Aspects of the MIS.	05		
	C) Problems in MIS Knowledge required for studying MIS, MIS and Computer.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV IT and Auditing	Need and importance of IT in auditing Auditing in IT environment.	10	I. T in Accounts and Finance By- Rimple Sanchla, Manan Publications. & www.wikipedia.com	Board , Chalk, Duster & Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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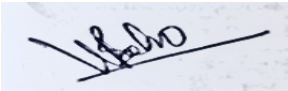

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. SEEMA SIHANA** DEPARTMENT: **SELF FINANCE** CLASS:- SYBAF SEMESTER: **IV**

SUBJECT: FOUNDATION COURSE IN MANAGEMENT **MONTH**: DECEMBER - APRIL 2023 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To enable students to obtain basic knowledge and skills required in the field of Management.

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course in Management	INTRODUCTION TO BASIC MANAGEMENT CONCEPTS:- Introduction and definition of management, nature and objectives of management, administration vs management, levels and principles of management. PLANNING:- Definition, Importance, Process, Limitations of Planning, Features of Sound Planning, Features and Process of Decision making. ORGANISING:- Definition, Nature and Significance, Process, Principles of Organisation, Formal and Informal Organisation- Features, Advantages and Disadvantages, Centralisation and	**45**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**

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	Decentralisation- Factors, Merits and Demerits, Departmentation and Delegation. STAFFING:- Meaning and Importance, Recruitment and its Sources, Selection Procedure, Distinguish between Recruitment and Selection			
			Text book and Internet	
				1 Chalk and Black Board Method **2 Example** **3 Discussion**
			Text book and Internet	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**
			Text book and Internet	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**

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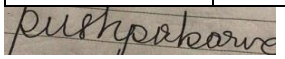
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PUSHPA RAKESH BARVE DEPARTMENT: COMMERCE(SFC) CLASS: FYBBI SEMESTER: I (Subject: FOUNDATION COUSE)

MONTH: JULY TO OCTOBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the structure of Indian Society and the concept of disparity.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 1 Overview of Indian Society	Understand the multi-cultural diversity of Indian society through demographic composition, population distribution according to caste, religion, and gender, appreciate the concept of linguistic diversity in relation to the Indian situation, understand regional variations according to rural, urban, and tribal characteristic's, understanding the concept of diversity as difference.	05	Textbook of Vipul's prakashan & online references	Blackboard, Chalk, Google classroom
UNIT 2 Concept of Disparity-1	Understand the concept of disparity as arising out of stratification and inequality. Explore the disparities arising out of gender with special reference to violence against women, female foeticide deciding sex ratio and portrayal of women in media. Appreciate the inequalities faced by people with disabilities and understand the issues of people with physical and mental disabilities	10	Textbook of Vipul's prakashan & online reference	Blackboard, Chalk, Google classroom



TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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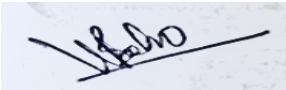

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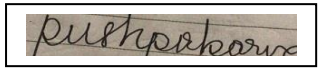
TEACHING PLAN (UNIT PLAN)



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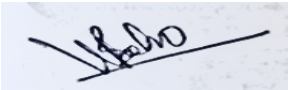

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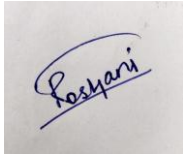
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Roshani Nagar DEPARTMENT: BBI. CLASS: F.Y.BBI SEMESTER: I SUB- POM MONTH: AUG,SEP,OCT ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Business, Management and Growth of business through different leaders.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3 & Unit 4	CH 5 – Organisation Structure – I – Meaning, Definition, Steps, Types, Departmentation, bases of Departmentation, centralisation – Meaning advantages and disadvantages, Formal organisationa vs Informal organization Ch 7 Business leaders, J. R. D. Tata, Ratan Tata, Mr. DhirubaivAmbani, leaders in banking and Insurance	12	Principle of management text& cases	Chalk and board method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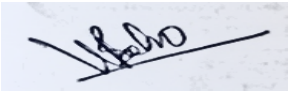

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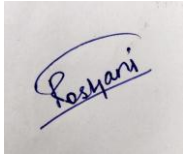
TEACHING PLAN (UNIT PLAN)

	Ch 8. Indian leaders K. V. Kamath, Deepak Parekh, Chanda Kochar., Hinduja, Godrej, Narayan Murthy, Governor of RBI Ch. 9 International leaders			
	President of world bank President of Asian Development Bank President of Federal Reserve President of International Monetary Fund.	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24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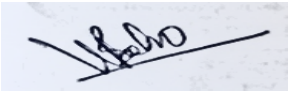

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE-SELF FINANCE CLASS: FYBBI SEMESTER: 1 (Subject : Environment and Management of Financial Services) MONTH: August - December ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to: Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Introduction to Financial System Unit 2- Phases of Development of Banking and Insurance Unit 3- Management, Regulation and Development	Financial System ♣ Institutional set- up ♣ Marketing Structure ♣ Instruments ♣ Overview of different kinds of financial services. (e.g Leasing, Hire purchase, factoring, forfaiting, Bill financing/Bill discounting, housing finance, letter of credit, insurance, venture capital, merchant banking, stock broking and credit rating.) • Meaning, Definition and scope of Banking and Insurance.	15	Vipul Publications	Lecture method, Discussion method
	Significance and Role of Banking and Insurance in mobilizing savings, investment, accumulation and economic growth.	8	Vipul Publications	Lecture method, Discussion method
	Functions and working of banking and insurance companies	7	Vipul Publications	Lecture method, Discussion method
	• Risk management within the organizations of Banks and Insurance companies • Asset - Liability Management in Banking and Insurance	10	Vipul Publications	Lecture method, Discussion method

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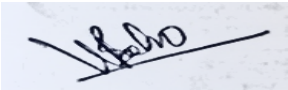

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TEACHING PLAN (UNIT PLAN)

	• Organisational structure and management	5	Vipul Publications	Lecture method, Discussion method
Unit 4: Regulatory and Developmental Framework of Banking & Insurance	Banking companies and RBI Acts and legal framework governing the insurance. • Developmental Activities of RBI and IRDA • Mechanism of supervision and regulation. • Prudential Norms.	15	Vipul Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15 each__

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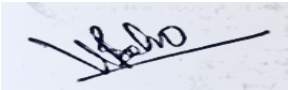

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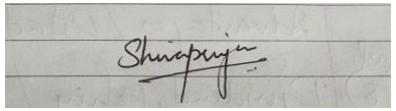
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHIVAPRIYA ACHARI DEPARTMENT: SELF FINANCE CLASS: F.Y.BBI SEMESTER: I (Subject : BUSINESS COMMUNICATION)

MONTH: JUNE-SEPT ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: _____

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit I,II,III,IV	Concept of Communication- Meaning, Definition, Process, Need, Feedback. Channels and Objectives of Communication: Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine Methods and Modes of Communication: Methods: Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette. Problems in Communication /Barriers to Communication, Listening: Importance of Listening Skills, Cultivating good Listening Skills, Introduction to Business Ethics: Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics.	15	Manan Publications, Vipul Publications, Seth Publications	Chalk, Board Google Classroom



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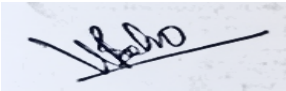

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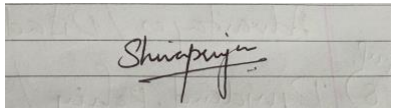
TEACHING PLAN (UNIT PLAN)

	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities Listening Comprehension Remedial Teaching Speaking Skills: Presenting a News Item, Dialogue and Speeches Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. Reading Comprehension: Analysis of texts from the fields of Commerce and Management			



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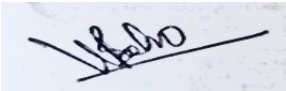

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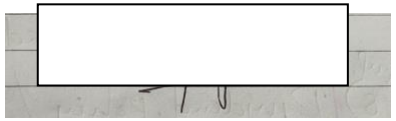
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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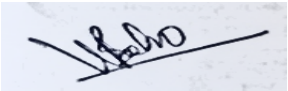

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Sunitha Nair_____ DEPARTMENT: Commerce_ CLASS: _F.Y.B.B.I__ SEMESTER: _I_ (Subject : _B.Economics)

MONTH: **_August-November_** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: To understand the application of microeconomics at the corporate level.

The learners will be able to : observe microeconomics in the real world and understand and take business decisions

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED

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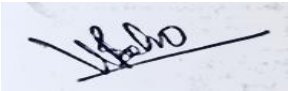

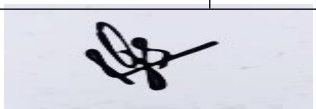

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE **Module I Introduction to business economics**	Introduction, Business Economics ,basic concepts for business economic analysis functional relations and tool for economic analysis. Introduction to market demand and supply, demand-supply, market equilibrium, changes in market equilibrium.			

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TEACHING PLAN (UNIT PLAN)

Module II Demand Analysis	Meaning of demand, law of demand, determinants of demand, demand function, price, income and substitution effects, nature of demand curve under different markets. Meaning of elasticity, price elasticity of demand , income elasticity of demand , cross elasticity of demand,promotional elasticity of demand, importance of elasticity of demand , relationship between price elasticity of demand and revenue concept.	10	Advanced Micro Economic Theory (H.L. Ahuja)	Chalk and board

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TEACHING PLAN (UNIT PLAN)

	Significance of demand forecasting ,types of demand forecasting, steps in demand forecasting ,methods of demand forecasting.				
Module III Supply and production	oncept of production, production function, isoquants ,ridge lines least cost combination of inputs ,expansion path. Types of production function ,law of variable proportions, laws of	12	Advanced Micro Economic Theory (H.L. Ahuja)		

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TEACHING PLAN (UNIT PLAN)

decisions and cost of production	returns to scale. Meaning of economies and diseconomies of scale, Internal economies and diseconomies of scale, external economies and diseconomies of scale. Cost concepts: money cost, accounting cost and economic cost, fixed , variable and total cost , total , average and marginal cost. Cost function, short run cost output ,relationship between AC, AFC ,AVC and MC, relationship between AC and MC ,short run average cost and output, long run cost output, long run average cost curve ,long run marginal cost curve ,learning curve, long run AC and output.				

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TEACHING PLAN (UNIT PLAN)

	Concept of break even point ,variables influencing the break even point ,business application of break even analysis ,limitations of break even analysis.				
Module IV Market structure perfect competition and	Market structure ,types of market ,need to analyse the market structure. Perfect competition meaning and features ,short run equilibrium of the firm, long run equilibrium of the firm, equilibrium of industry and firm. Features of monopoly , sources of monopoly power, equilibrium of		Advanced Micro Economic Theory (H.L. Ahuja)		

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TEACHING PLAN (UNIT PLAN)

monopoly and pricing and output decisions under imperfect competition	monopoly firm ,comparison between perfect competition and monopoly. Features of monopolistic competition, short run equilibrium of the firm, long run equilibrium of the firm ,selling cost and its effects, role of advertisement. Meaning of oligopoly ,characteristics of oligopoly ,collusive and non collusive oligopoly ,price rigidity , and price leadership.				
Module V Pricing practices	Meaning of pricing practices, degrees of price discrimination, conditions for price discrimination, conditions for profitable price discrimination, equilibrium of price discriminating monopolist ,dumping. Introduction to pricing practices part II, marginal cost pricing ,cost plus	10		Chalk and board	

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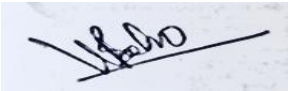

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TEACHING PLAN (UNIT PLAN)

	pricing ,multi product pricing Transfer pricing.				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_54___

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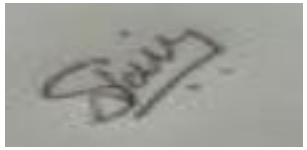
TEACHING PLAN (UNIT PLAN)



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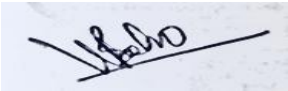

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: BBI CLASS: FYBBI SEMESTER: I (Subject : FINANCIAL ACCOUNTING)

MONTH: JULY 2022- DECEMBER 2022 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: _____

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	1. Classification of Income & Expenses & Accounting Standards Classifications of Income, Expenditure and Receipts on the basis of capital and revenue. Source documents required for practical accounting. Introduction to Bank Reconciliation Statement and Errors and their Rectification. Accounting Standard 1, 2, 6, 8, 9, 10. Understanding Fair value concept, Overview of Ind-AS vis-a-vis International Financial Reporting Standards (IFRSs).	12	SHETH , VIPUL,MANAN PRAKASHAN	PPT, CHALK AND BOARD
	2. Issues of Shares, Stock Valuation & Hire purchase Introduction to issue of shares. Stock valuation (FIFO	20	SHETH , VIPUL,MANAN PRAKASHAN	

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TEACHING PLAN (UNIT PLAN)

	and Weighted Average Method only) Hire Purchase Transactions (calculation of interest, accounting as per asset purchase method only, exclude repossession), Introduction to Depreciation: Fixed Installment method, Written Down Value Method, Change of method. Valuation of goodwill (problems based on average profit method and super profit method only)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:32

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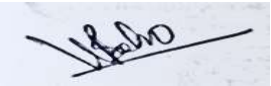

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TEACHING PLAN (UNIT PLAN)

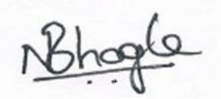
NAME OF THE STAFF: NEHA VAIBHAV TAMBE DEPARTMENT: BBI CLASS: FYBBI-B SEMESTER: I (Subject: EMFS)

MONTH: DEC- MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT1 INTRODUCTION TO FINANCIAL SYSTEM	a] Introduction to financial system, b]structure of financial system, indian financial system, components, functions of financial system, c] capital market, types of capital market, d] Institutional set up's (RBI, COMMERCIAL BANKS,COOPERATIVE BANKS, DEVELOPMENT BANKS, INVESTMENT BANKS) e) Marketing structure, financial instruments. f) Financial services (Fund based, Fee based, Bank related, securities related, Insurance related)	20	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD



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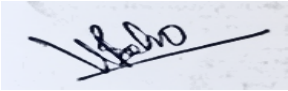

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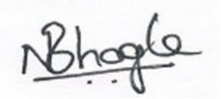
TEACHING PLAN (UNIT PLAN)

	g) Features of banking, needs, scope, Scope of insurance, Types of insurance ,Major recommendation of Malhotra committee.			
UNIT 2 Phases of development of banking & insurance	a] Phases of development of banks, significance of banking b] Role of banking, Functions of banking companies. c] Working of banking companies.	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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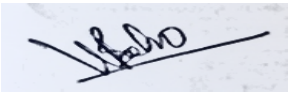

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **NEHA SANJAY MAHESHWARI** DEPARTMENT: **COMMERCE SFC** CLASS: **FYBBI** SEMESTER: **I**

(Subject :**Foundation course I)**

MONTH: **JULY-OCT** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: Understand the Indian Culture, Politics, Constitution, Rights

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 3	**Concept of Disparity-2** Examine inequalities manifested due to the caste system and inter-group conflicts arising thereof; Understand inter-group conflicts arising out of regionalism and linguistic differences	8	**Textbook of Vipul's prakashan & online refrenses**	**Blackboard, Chalk, Google classroom**
UNIT 4	**The Indian Constitution** Philosophy of the Constitution as set out in the preamble; The structure of the Constitution-the Preamble, Main Body and Schedules; Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening	8	**Textbook of Vipul's prakashan & online refrenses**	**Blackboard, Chalk, Google classroom**

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TEACHING PLAN (UNIT PLAN)

UNIT 5	the social fabric of Indian society; Basic features of the Constitution			
	Significant Aspects of Political Processes The party system in Indian politics; Local self-government in urban and rural areas; the 73rd and 74th Amendments and their implications for inclusive politics; Role and significance of woman in politics	8	**Textbook of Vipul's prakashan & online refrenses**	**Blackboard, Chalk, Google classroom**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:**GAURI YADAV** DEPARTMENT: **SELF FINANCE** CLASS: **FYBBI** SEMESTER: I (Subject : FINANCIAL ACCOUNTING)

MONTH: **AUG- DEC** ACADEMIC YEAR: **2022 - 23**

LEARNING OBJECTIVE/S: The learners will be able to :
Understand basic terminologies of Accounts and accounting,and different ways to bookkeeping systems and Financial statements with the help of Illustrations.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1 Introduction to accounting	**Meaning, scope, objectives, need, importance and limitations o Basic** **ccounting terminology. Branches of accounting. Accounting con Conventions and Principles. Double Entry System, Classification Rules of debit** **Credit. Writing of journal Entries and Ledger, Sub division of Trial Balance**	12	SHETH , VIPUL,M PRAKASHAN	CHALK AND BOARD

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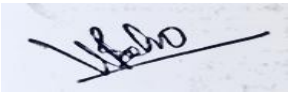
TEACHING PLAN (UNIT PLAN)

Unit 2	**Trading Account, Profit and Loss Account, Balance Sheet, Adjus ntroduction to Accounts of Non Profit Organizations**	16	SHETH , VIPUL,M PRAKASHAN	CHALK AND BOARD
Final Accounts				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28



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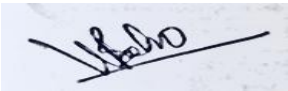
TEACHING PLAN (UNIT PLAN)



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: SFC CLASS: FYBBI (A) SEMESTER: I (Subject : PRINCIPLES OF MANAGEMENT)

MONTH: AUGUST TO NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to:

- Understand the meaning of management and different functions of management.
- Get knowledge of motivation and role of motivation in corporate life as well as in personal life.
- Interpret the success stories of different leaders in India and across the globe.
- Know in detail about the organizational structure of the banking sector and insurance sector.
- Gain insight on CRM and its importance in today's competitive world.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1- Introduction to management	A. Management- Meaning, definition, importance, nature and characteristics B. Management as arts, science and profession C. Traditional management- meaning, nature, advantages and disadvantages D. Contemporary management- meaning, characteristics E. Modern management by • Henry Fayol • F.W. Taylor • Peter Drucker	10	Management- task, responsibilities and practices by Peter Drucker	Chalk-board, discussion, example and test

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TEACHING PLAN (UNIT PLAN)

	• C.K. Prahlad • Mr. Vijay Govindarajan			
Unit2-Management process	**Management process**: meaning, elements of management process, features and nature **Management practices**: meaning and features **Functions of management**: **Planning**: meaning, steps, advantages, types, MBO **Organising**: Meaning, principles, delegation of authority, centralisation and decentralisation and its advantages **Staffing, Directing, Leading, coordinating, communicating, motivating, budgeting, reporting, controlling** **Motivation:** of banking and insurance employees **CRM:** in banking and insurance **Risk management:** meaning, process and types	10	Management-task, responsibilities and practices by Peter Drucker	Chalk-board, discussion, example and test

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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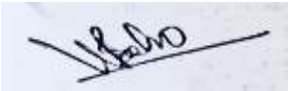

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: SELF FINANCE CLASS: FYBBI SEMESTER: II Subject: PRINCIPLES AND PRACTICES OF BANKING AND INSURANCE)

MONTH: DECEMBER - MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learner will be learning about the banking environment and insurance sector and their roles in the economy of our country.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 3	Understanding Risk- kinds of business risk- need and scope of insurance -Evolution of insurance – principles of insurance -types of insurance and policies- risk and return relationship	15	INSURANCE SECTOR-REGULATORY FRAMEWORK (THE FUTURE AHEAD) (Paperback, DR. BEENA DEVI, DR. ANSHU LOCHAB)	Lecture method, CHALK AND DUSTER METHOD
UNIT 4	Insurance business Environment in India- growth of business – actuarial role -claim and settlement procedures- insurance regulations role of IRDA	10	INSURANCE SECTOR-REGULATORY FRAMEWORK (THE FUTURE AHEAD) (Paperback, DR. BEENA DEVI, DR. ANSHU LOCHAB)	Lecture method, CHALK AND DUSTER METHOD

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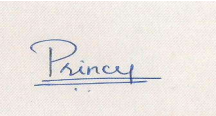
TEACHING PLAN (UNIT PLAN)

UNIT 1 & 2	Chapter 1: Financial system Institutional set up, marketing structure, over view of different kinds of financial services, meaning, definition and scope of banking and insurance Chapter 2: banking and insurance What is banking, functions, advantages, types of banks, insurance, its types	10	INSURANCE SECTOR-REGULATORY FRAMEWORK (THE FUTURE AHEAD) (Paperback, DR. BEENA DEVI, DR. ANSHU LOCHAB)	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40



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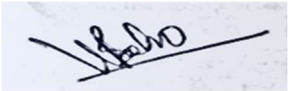

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: SYBBI SEMESTER: III
(Subject : FINANCIAL MANAGEMENT MONTH: AUGUST ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Finance and Financial Management	A) Introduction to Finance · Meaning and definition of finance · Importance finance · Types of Finance: Public and Private · Sources of finance 1. Long Term Sources : Term Loans, Debentures, Bonds, Zero Coupon bonds, Convertible Bonds, Equity shares, Preference shares, CD, CP, Public Deposits 2. Short Term sources: Bank Finance, Trade Credit ,Other Short Term Sources 3. Venture Capital and Hybrid Financing	3		• Chalk • Board • Discussion • Examples • Google Classrooms
	B) Financial Management · Meaning and Importance of Financial Management · Scope of Financial Management · Functions and Objectives of Financial Management · Primary Objective of Corporate Management · Agency Problem · Organization of Finance Function · Emerging role of Finance Managers in India.	3		
	C) Objectives of the Firm · Profit Maximization and Shareholders Wealth Maximization, · Profit V/s Value Maximization	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: SYBBI SEMESTER: III
(Subject : FINANCIAL MANAGEMENT MONTH: AUGUST, SEPTEMBER ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Financial Goal Setting & Time value of Money	A) Financial Goal Setting · Introduction · Financial Forecasting – Meaning, Techniques, Benefits · Approaches to Financial Planning · Economic Value Added (EVA)– Measurement & Components · Free Cash Flow (FCF) -	3		• Chalk • Board • Discussion • Examples • Google Classrooms
	B) Time Value of Money · Concept · Present Value · Annuity · Techniques of Discounting · Techniques of Compounding,	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 5

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: SYBBI SEMESTER: III
(Subject : FINANCIAL MANAGEMENT MONTH: SEPTEMBER, OCTOBER ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 Investment Decisions: Capital Budgeting	**Capital Budgeting** · Nature of Capital Budgeting · Purpose of Capital Budgeting · Capital Budgeting Process · Types of Capital Investment · Basic Principle of Measuring Project Cash Flows · Increment Principle, Long Term Funds Principle, Exclusion of Financial Cost Principle, Post Tax Principle Probability technique for measurement of cash flow · Capital Budgeting Techniques: Net Present Value Profitability Index and Discounted Pay Back Method. · A Comparison; Project Selection Under Capital Rationing	7	FINANCIAL ACCOUNTING BY R L GUPTA	• Chalk • Board • Discussion • Examples • Google Classrooms
	Practical Illustrations	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 3: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___TARIKA PATEL_____ DEPARTMENT: ___COMMERCE_____ CLASS: __SYBBI _____ SEMESTER: _III_
(Subject : ___FINANCIAL MANAGEMENT_____MONTH: ____OCTOBER____ ACADEMIC YEAR: ____2022-2023_____
LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 Financial Decisions	A) Cost of Capital : · Introduction and Definition of Cost of Capital · Measurement of Cost of Capital · Measurement of WACC using book value and market value method. · Measuring Marginal Cost of Capital	2	FINANCIAL ACCOUNTING BY R L GUPTA	• Chalk • Board • Discussion • Examples • Google Classrooms
	Practical Illustrations	6		
	B) Capital Structure Decisions: · Meaning and Choice of Capital Structure · Importance of Optimal Capital Structure · EBIT -EPS Analysis · Capital Structure Theories · Dividend Policies (Walter & Gordon)	1		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 4: _____15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sunitha Nair DEPARTMENT: Commerce CLASS: S.Y.B.B.I. SEMESTER: III (Subject : Foundation Course)

MONTH: June-November ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To understand the core of banking services.

The learners will be able to: learn the banking services provided banks.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED

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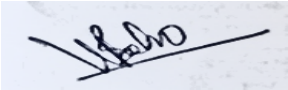

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TEACHING PLAN (UNIT PLAN)

Module I	**An Overview of Banking Industry** Principles of Banking, Banking System in India, Overview of RBI, Public, Private, Co-operative, Payment Bank, Regional Rural Banks, Emerging trends of banking - Universal banking, electronic banking, globalization of banking. Brief history of banking system from 1981-2000 and 1991-2000 and Current developments in banking sector, Regulatory Architecture – Overview of Banking Regulation Act 1949, Banking Regulation Act (Amendment 2015), Payment and Settlement Act 2007, Negotiable	**An Overview of Banking Industry** Definition of Bank, Types of Banks: Types of Banks, Principles of Banking, Banking System in India, Overview of RBI, Public, Private, Co-operative, Payment Bank, Regional Rural Banks, Emerging trends of banking - Universal banking, electronic banking, globalization of banking. Brief history of banking system from 1981-2000 and 1991-2000 and Current developments in banking sector, Regulatory Architecture – Overview of Banking Regulation Act 1949, Banking Regulation Act (Amendment 2015), Payment and Settlement Act 2007, Negotiable	10 lectures	10 lectures			

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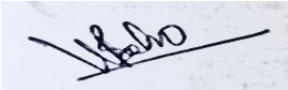

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TEACHING PLAN (UNIT PLAN)

	Instrument Act 1881, BIS Basel I and II, Indian Critical Evaluation of Banking Industry in India. **Commercial Banking and Customer Relationship** Definition and meaning of Commercial Bank, Evolution of Commercial Banking in India, Functions of Commercial Bank, Services offered by Commercial Bank. Retail Banking – Meaning, Features, Significance of Retail Banking and Overview of its products. Corporate Banking -Meaning, Features, Significance of Corporate Banking and Overview of its products. Rural Banking - Meaning, Features, Significance of Rural Banking and Overview of its products. Banking Ombudsman – Meaning and Functions.	Negotiable Instrument Act 1881, BIS Basel I and II, Indian Critical Evaluation of Banking Industry in India. **Commercial Banking and Customer Relationship** Definition and meaning of Commercial Bank, Evolution of Commercial Banking in India, Functions of Commercial Bank, Services offered by Commercial Bank. Retail Banking – Meaning, Features, Significance of Retail Banking and Overview of its products. Corporate Banking -Meaning, Features, Significance of Corporate Banking and Overview of its products. Rural Banking - Meaning, Features,	Bank Crises in India					Chalk and board

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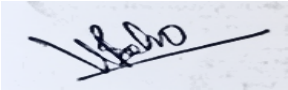

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TEACHING PLAN (UNIT PLAN)

Module II		Significance of Rural Banking and Overview of its products – Meaning and Functions.	10 lectures	Banking Ombudsman	10 lectures		
Module III	**Universal Banking & Technology in Banking sector:** A) Universal Banking Concept of Universal Banking, Evolution of Universal banking, Services to Government, Payment & Settlement, Merchant Banking, Mutual Fund, Depository Services, Wealth Management, Portfolio Management Bancassurance, NRI Remittance.	**Universal Banking & Technology in Banking sector:** A) Universal Banking Concept of Universal Banking, Evolution of Universal banking, Services to Government, Payment & Settlement, Merchant Banking, Mutual Fund, Depository Services, Wealth Management, Portfolio Management Bancassurance, NRI Remittance.	10 Lectures		10 Lectures	Chalk and board	Chalk and board

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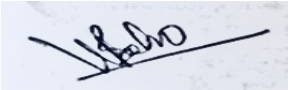

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TEACHING PLAN (UNIT PLAN)

	B) Technology in Banking Mobile Banking, Internet Banking, RTGS, POS Terminal, NEFT, IMPS, Brown Label ATM, White Label ATM, NUUP, UPI, APS, ACS, CBS, CTS, Digital Signature, MWallets, Online opening of bank accounts – savings & current, and apply for credit cards, loan, Applicability of KYC norms in Banking Sector. **Microfinance & Financial Inclusion** **A) Microfinance:** Introduction, Need and Code of Conduct for Microfinance Institutions in India, Advantages, Purpose, Limitations,	B) Technology in Banking Features and limitations of E-banking, Mobile Banking, Internet Banking, RTGS, POS Terminal, NEFT, IMPS, Brown Label ATM, White Label ATM, NUUP, UPI, APS, ACS, CBS, CTS, Digital Signature, MWallets, Online opening of bank accounts – savings & current, and apply for credit cards, loan, Applicability of KYC norms in Banking Sector. **Microfinance & Financial Inclusion** **A) Microfinance:** Introduction, Need and Code of Conduct for Microfinance Institutions in India, Advantages, Purpose, Limitations, and Models of SHG –					

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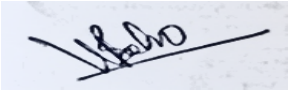

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TEACHING PLAN (UNIT PLAN)

Module IV	and Models of Bank Linkage Program. Role of NABARD in SHG-Portfolio Securitization, SHG-VMT, SHG-DVM, Priority Sector, and its Classification **B) Financial Inclusion:** Need & Extent RBI Committee Report of Medium Term Path on Financial Inclusion 2015, World Index Report 2015, NISM Report 2015, (Only Brief Extracts relating to bank account holdings and credit taken and contrast between developing and developed nations.) Features & Procedures of Pradhan Mantri Jan Dhan Yojana, and PM Mudra Yojana. Features, procedures, and significance of Stand up India Scheme for Green Field	3 SHG Linkage Program. Role of NABARD in SHG-Portfolio Securitization, SHG-VMT, SHG-DVM, Priority Sector, and its Classification **B) Financial Inclusion:** Need & Extent RBI Committee Report of Medium Term Path on Financial Inclusion 2015, World Index Report 2015, NISM Report 2015, (Only Brief Extracts relating to bank account holdings and credit taken and contrast between developing and developed nations.) Features & Procedures of Pradhan Mantri Jan Dhan Yojana, and PM Mudra Yojana. Features, procedures, and significance of Stand up India Scheme for Green Field	15 Lectures	15 Lectures			

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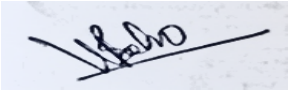

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_45___

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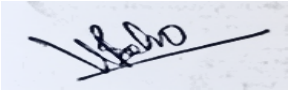

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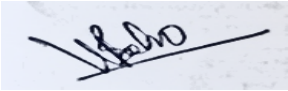

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: SYBBI SEMESTER: III (Subject : Financial Mgmt)

MONTH: _____JUNE -JULY ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 3 CAPITAL BUDGETING	Meaning, Features, Process of Capital Budgeting Cash flow and Capital Investment Decision ,Capital Expenditure and Control, Assumptions	3	FINANCIAL MANAGEMENT BY RAVI KISHORE	• Chalk • Board • Discussion • Examples • Chalk • Google classroom
	Techniques of Evolution	3		
	Practical Illustrations	8		
	B) Time value of Money- Concept, Present Value, Annuity, Techniques of Discounting and Compounding	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___16_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: SYFMG SEMESTER: III (Subject : Management Acc)

MONTH: AUGUST - SEPTEMBER _____ ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 2 **Financial Goal Setting & Time value of Money**	Introduction, Financial, Meaning, Techniques, Benefits, Approaches to Financial Planning, Economic Value Added (EVA)– Measurement & Components, Free Cash Flow (FCF)	6	FINANCIAL MANAGEMENT BY RAVI KISHORE	• Chalk • Board • Discussion • Examples • Chalk • Google classroom
	Concept of Present Value, Annuity	1		
	○ Techniques of Discounting ○ Techniques of Compounding	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___12

[Surekha Bhargav]
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TEACHING PLAN (UNIT PLAN)

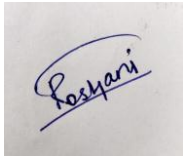
NAME OF THE STAFF: Dr.Roshani Nagar DEPARTMENT: Commerce CLASS: SYBBI A and B SEMESTER : SEM III MONTH: July,Aug,Sep
ACADEMIC YEAR: 2022-23

OBJECTIVE/S:

The learners will be able to : To study about the aspects related to derivative

To study the derivative market in detail

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**Financial Markets in India**	12lectures in each unit	N. Lakshmi kavitha	Chalk and duster method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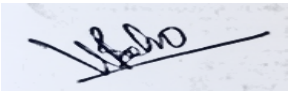

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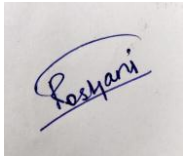
TEACHING PLAN (UNIT PLAN)

Financial Markets in India.	**1 Indian Financial System** **A) Introduction, Meaning, Functions of financial system,** Indian financial system from financial neutrality to financial activism and from financial volatility to financial stability, Role of Government in financial development, Overview of Phases of Indian financial system since independence (State Domination – 1947-1990, Financial sector reforms 1991 till Financial Sector Legislative Reforms Commission 2013), Monitoring framework for financial conglomerates. **B)** Structure of Indian Financial System – Banking & Non-Banking Financial Institutions, Organized and Unorganized Financial Markets, Financial			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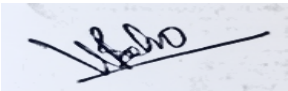

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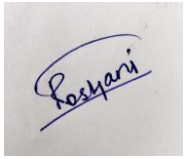
TEACHING PLAN (UNIT PLAN)

	Assets/Instruments, Fund based & Fee Based Financial Services. **2 Financial Markets in India** **A)** Indian Money Market – Meaning, Features, Functions, Importance, Defects, Participants, Components of Organized and Unorganized markets and Reforms **B)** Indian Capital Market - Meaning, Features, Functions, Importance, Participants, Instruments, Reforms in Primary and Secondary Market. **C)** Indian Stock Market - Meaning and functions of Stock Exchange- NSE and BSE. **D)** Equity Market – Primary Market, IPO, Book Building,			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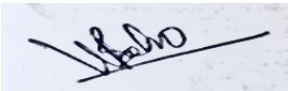

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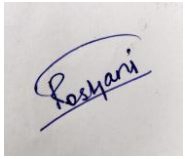
TEACHING PLAN (UNIT PLAN)

	Role of Merchant Bankers, ASBA , Green Shoe Option, Issue of Bonus shares, Right Shares, Sweat Equity shares, ESOP. **E)** Indian Debt Market –Market Instruments, Listing, Primary and Secondary Segments **3 Commodity Market** □ Introduction to commodities market - Meaning History & origin, Types of commodities traded, □ Structure of commodities market in India, □ Participants in commodities market, Trading in commodities in India(cash & derivative segment), □ Commodity exchanges in India & abroad □ Reasons for investing in commodities.			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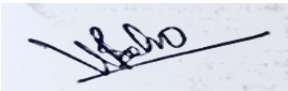

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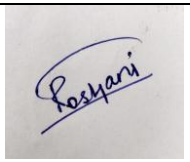
TEACHING PLAN (UNIT PLAN)

	4 **Derivatives Market** □ Introduction to Derivatives market- Meaning, History & origin, □ Elements of a derivative contract, □ Factors driving growth of derivatives market, □ Types of derivatives, Types of underlying assets, Participants in derivatives market, Advantages & disadvantages of trading in derivatives market, □ Current volumes of derivative trade in India, □ Difference between Forwards & Futures			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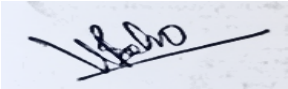

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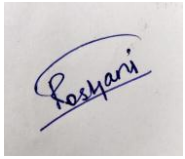
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 48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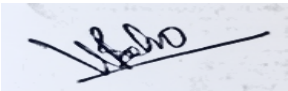

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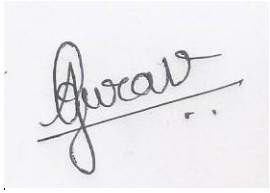
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Ashwini Gurav DEPARTMENT: Accountancy CLASS: SYBBI SEMESTER: III (Subject : Direct Tax)

MONTH: June to September ACADEMIC YEAR: 2022-23

1. LEARNING OBJECTIVE/S: Understand & Remember- the meaning of salary; section 10, sections 15-17; calculation of income from salary; various allowances (taxable, partly taxable, non-taxable); perquisities; rules and calculation of Gratuity, Pension, Leave encashment.
2. Understand & Remember- the meaning of income from other sources; sections 56-59; calculation of income from other sources.
3. Understand & Remember- the meaning of capital gains; Section 45, 48, 49, 50, 54 and 55, calculation of capital gains.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1 - Definitions	Definitions Residential Status Scope of Income	10	Book by Manan/Vipul publications/Internet	Chalk & Board



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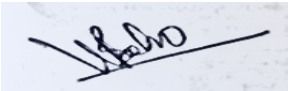

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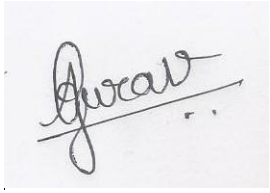
TEACHING PLAN (UNIT PLAN)

Unit 2- Heads of Income Unit 3 - Deduction under chapter Vl A Unit 4- Computation of Total Income	Salary Income from House Property Capital Gains Business & Profession Other sources	25	Book by Manan/Vipul publications/Internet	Chalk & Board
	80A, 80C, 80CCC, 80D, 80E, 80TTA, 80U	5	Book by Manan/Vipul publications/Internet	Chalk & Board
	Practical Sums on Total Income	5	Book by Manan/Vipul publications/Internet	Chalk & Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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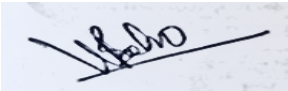

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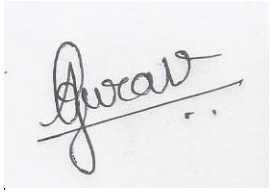

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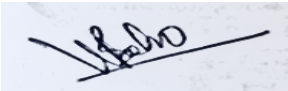

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani DEPARTMENT: Commerce CLASS: S.Y.BBI SEMESTER: III (Subject: FOUNDATION COURSE)

MONTH: June-September ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To understand the core of banking services.The learners will be able to: learn the banking services provided by banks. **Module I**	**An Overview of Banking Industry Definition of Banks**: Types of Banks, Principles of Banking Banking System in India, Overview of RBI, Public, Private, Co-operative, Payment Bank, Regional Rural Banks Emerging trends of banking - Universal banking, electronic banking, globalization of banking. Brief history of banking sector reforms from 1991-2000 and Current developments in banking sector Regulatory Architecture – Overview of Banking Regulation Act 1949, Banking Regulation Act(Amendment 2015), Payment and Settlement Act 2007, Negotiable Instrument Act 1881, BIS, Basel I, II and III. Bank Crises in India Critical Evaluation of Banking Industry in India.	10 lectures		Chalk and board
Module II	**Commercial Banking and Customer:** Banker Relationship Definition and meaning of Commercial Bank, Evolution of Commercial Banking in India, Functions of Commercial Bank, Services offered by Commercial Bank. Retail Banking – Meaning, Features, Significance of Retail Banking and Overview of its products Corporate Banking -Meaning, Features, Significance of Corporate Banking and Overview of its products Rural Banking - Meaning, Features, Significance of Rural Banking and Overview of its products Banking Ombudsman – Meaning and Functions.	10 lectures		

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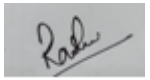
TEACHING PLAN (UNIT PLAN)

Module III	**Universal Banking & Technology in Banking sector:** A) Universal Banking Concept of Universal Banking, Evolution of Universal banking, Services to Government, Payment & Settlement, Merchant Banking, Mutual Fund, Depository Services, Wealth Management, Portfolio Management Bancassurance, NRI Remittance. B) Technology in Banking Features, norms and Limitations of E-banking, Mobile Banking, Internet Banking, RTGS, POS Terminal, NEFT, IMPS, Brown Label ATM, White Label ATM, NUUP, AEPS, APBS, CBS, CTS, Digital Signature, MWallets, Online opening of bank accounts – savings & current, and apply for credit cards, loan. Applicability of KYC norms in Banking Sector.	10 Lectures		Chalk and board
Module IV	**Microfinance & Financial Inclusion** **A) Microfinance:** Introduction, Need and Code of Conduct for Microfinance Institutions in India, Advantages, Purpose, Limitations, and Models of SHG – Bank Linkage Program. Role of NABARD and SIDBI, Portfolio Securitization, SHG-2, NRLM and SRLM, Priority Sector and its Classification **B) Financial Inclusion:** Need & Extent RBI Committee Report of Medium Term Path on Financial Inclusion 2015, World Findex Report 2015, NISM Report 2015, (Only Brief Extracts relating to bank account holdings and credit taken and contrast between developing and developed nations.) Features & Procedures of Pradhan Mantri Jan Dhan Yojana, and PM Mudra Yojana. Features, procedures, and significance of Stand up India Scheme for Green Field	15 Lectures		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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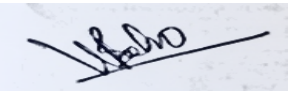

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Priyanka Bangera DEPARTMENT: Commerce SFC CLASS: SYBBI SEMESTER: III (Subject : OB)

MONTH: June July ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the Organizational Behavior is and how they work

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TEACHING PLAN (UNIT PLAN)

Unit 1	**The Individual Behaviour:** **(A) Personality: Meaning, Determinants of personality, Major personality traits influencing OB, The Big Five Model, Trait Theory of personality, Psychoanalytic Development, Locus of control, Self monitoring.**	**8**	**Textbook of Vipul's prakashan & online refrenses**	**Blackboard, Chalk, Google classroom**

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TEACHING PLAN (UNIT PLAN)

	(B) Learning: Meaning and Definition of learning-The learning process, principles of learning, Theories of Learning-classical conditions, Operant Conditioning, Social learning theory, Learning through Reinforcement, learning by observing, Learning through Experience.	8	Textbook of Vipul's prakashan & online refrenses	Blackboard, Chalk, Google classroom
	(C) Perception- Meaning, Factors influencing perception, Attribution theory, improving perception- Johari Window, Empathy. (D) Individual and Decision making : How are Decision made in organization, Decision making process, Decisions styles.	8	Textbook of Vipul's prakashan & online refrenses	Blackboard, Chalk, Google classroom

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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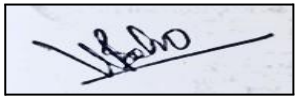

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: BBI CLASS: SYBBI Div:A,B,C SEMESTER: III (Subject : Direct TAX

MONTH:JULY 22- DECEMEBER 22 ACADEMIC YEAR: 22-23

LEARNING OBJECTIVE/S: TO GIVE KNOWLEDGE TO STUDENTS ABOUNT DIRECT TAX IN INDIA. STUDENTS WILL UNDERSTAND CLASSIFICATION OF TAX UNDER DIFFERENT HEADS OF INCOME

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	1. Definitions u/s – 2 , Basis of Charge and Exclusions from Total Income 1. Definitions u/s – 2 : Section 2 –Assessee, Assessment Year, Assessment, Annual value, Business, Capital asset, Income, Person, Previous Year, Transfer Basis of Charge : Section 3 – 9 –	7	SHETH , VIPUL,MANAN PRAKASHAN	PPT, CHALK AND BOARD

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TEACHING PLAN (UNIT PLAN)

	Previous Year, Residential Status, Scope Of Total Income, Deemed Income Exclusions from Total Income: Section 10 – restricted to, Agricultural Income, Sums Received From HUF By Member, Share of Profit from Firm, Casual & Non – Recurring Receipts, Scholarships, Income of Minor Child, Allowance to Members of Parliament and Legislative Assembly			
	2 Income From House Property : Section 22 – 27, Including Section 2 – Annual Value	7		
	3.Profits & Gains From Business & Profession : Vocation Section 28-32, 36, 37, 40, 40A, 43B, 44AD, 44ADA & 44AE including.: Section 2 – Business	9		
	4.Deductions under Chapter VI – A 80 A- Restriction on claim in Chapter VI- A deductions 80 C – Payment of LIC/PF and other eligible investments 80CCC – Contribution to certain Pension Fund 80D – Medical Insurance Premium 80 DD- Maintenance and medical treatment of handicapped dependent 80E – Interest on Educational Loan 80 TTA-	7		

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TEACHING PLAN (UNIT PLAN)

	Interest on Saving Bank account 80U – Deduction in the case of totally blind or physically handicapped or mentally retarded resident person			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Karishma Kale DEPARTMENT: Self Finance CLASS: SYBBI- A, B, C SEMESTER: III

Subject: An Overview of Banking Sector {FC III} MONTH: July to November ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to develop basic understanding about the banking sector, its working and various banking services.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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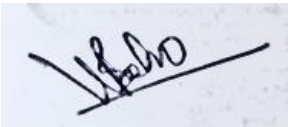

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TEACHING PLAN (UNIT PLAN)

1. An Overview of Banking Industry	• Definition of Banks, Types of Banks, Principles of Banking • Banking System in India, Overview of RBI, Public, Private, Co-operative, Payment Bank, Regional Rural Banks • Emerging trends of banking - Universal banking, electronic banking, globalization of banking. • Brief history of banking sector reforms from 1991-2000 and Current developments in banking sector • Regulatory Architecture – Overview of Banking Regulation Act 1949, Banking Regulation Act(Amendment 2015), Payment and Settlement Act 2007, Negotiable Instrument Act 1881, BIS, Basel I, II and III. • Bank Crises in India • Critical Evaluation of Banking Industry in India	10	Vipul Prakashan,	Chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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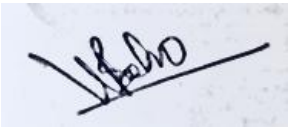

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TEACHING PLAN (UNIT PLAN)

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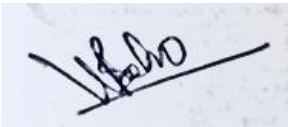

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: **SFC**

CLASS: **SYBBI Div C** SEMESTER: **III** MONTH: **June To Sep** ACADEMIC YEAR: **2022 - 23**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) Revise the concepts of Capital Structure Decisions
3) Solve practical questions using concepts
4) Financial Goal Setting.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Management	Unit 3 : Financial Goal Setting	16	Manan Publication, Vipul	Chalk Board, PPT

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			Publication	
	1) Introduction 2) Financial Forecasting – Meaning, Techniques, Benefits 3) Approaches to Financial Planning 4) Economic Value Added (EVA)– Measurement & Components 5) Free Cash Flow (FCF)		Sheth Publication	
	Unit 4 : Capital Structure Decisions	16	Manan Publication, Vipul Publication	Chalk Board, PPT
	1) Meaning and Choice of Capital Structure 2) Importance of Optimal Capital Structure 3) EBIT -EPS Analysis		Sheth Publication	

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	4) Capital Structure Theories 5) Dividend Policies (Walter & Gordon)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32

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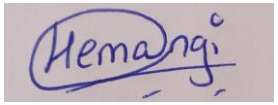
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT: COMMERCE (SFC) CLASS: SYBBI (Div A,B,C) SEMESTER:5 (Subject : ORGAISATIONAL BEHAVIOR SEMESTER: III)

MONTH: JUNE-SEPT ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to receive knowledge regarding organization behavior .

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
Unit 2: The Group Dynamics **Unit 3: The Organizational Dynamics** **Unit 4: Organization Behaviour In Banking and**	Group Communication: Importance, Corporate Communication – Need, Importance and Techniques of Corporate Communication. Power and Politics: Meaning of Power, Bases of Power, Power Tactics, Organizational Politics, Reasons for Organizational Politics, Managing Organizational Politics. Negotiations: Meaning, Process, Strategies, Third Party Negotiations, Crisis Negotiations, Focus Areas of Negotiations Virtual teams and Group Cohesiveness: Structure, Types,		Vipul Publication.	Chalk, Duster, Boards



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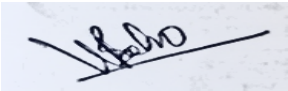

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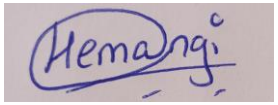
TEACHING PLAN (UNIT PLAN)

Insurance Sector	Stages in Management of Virtual teams, Features of Cohesive Groups, Effects/Consequences/Impact of Group Cohesion. Group Decision-Making: Advantages, Disadvantages, Assumptions, Managing Group Decision-Making, Strength and Weakness of Group Decision-Making. Organization structure: Meaning, Meaning and key features of the concept of Centralization, Decentralization, Span of control and Departmentation, Simple structure, Bureaucratic & Matrix structure. New design options: Team structure, Virtual organizations, Boundary less organizations Organization structure differentiation: Strategy, Organization size, Technology & Environment, Organizational Designs and employee behaviour Organizational Climate: Impact of Communication,			



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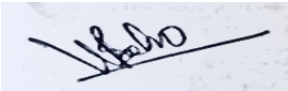

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TEACHING PLAN (UNIT PLAN)

	Impact of Rewards & Punishment, Quality work life with reference to Banking & Insurance, Job Frustration-Sources, Causes, Effects, Ways to Overcome Frustration, Impact of Frustration on Banking and Insurance companies. Practices of OB in Banks and Insurance Issue of organization behaviour in Banks Strategies to manage issues of organization behaviour in banks Case Studies – Transfer, Promotion, Separation.			

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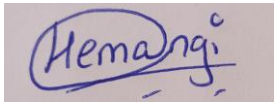
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____



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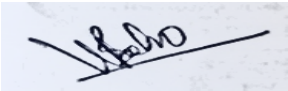

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:**GAURI YADAV** DEPARTMENT: **SELF FINANCE** CLASS: **SYBBI** SEMESTER: III (Subject : MANAGEMENT ACCOUNTING)

MONTH: JUN - SEPT_ACADEMIC YEAR: **2022 - 23**

LEARNING OBJECTIVE/S: Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world. Financial statemnets and ratio analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	Introduction and Meaning of Financial statement analysis, Steps, ob Analysis, simple sums on financial statement	12	Management Accounting By L.M Pandey	Chalk Board And Discussion Method
UNIT 2 Financial Staten	Ratio Analysis- Meaning, Classification , DU Pont chart, Advantage			
	Balance sheet ratio, Revenue statement Ratio and Combined Ratio formulas)			
	Practical Illustrations			

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TEACHING PLAN (UNIT PLAN)

		10	Management Accounting By L.M Pandey	Chalk Board And Discussion Method
	Meaning and Definition of Management Accounting, Nature and Fr			
UNIT 1 Introduction to Management Accounting	Functions of Management Accounting, Decision Making Process			
	Information of Decision making (Information, Strategic, tactical an information)			
	Financial Accounting v/s Management Accounting , Qualities of M Accounting			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

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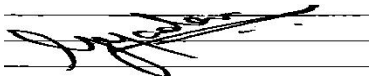

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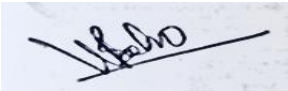

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TEACHING PLAN (UNIT PLAN)

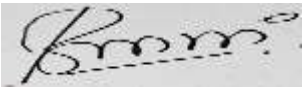
NAME OF THE STAFF: Bristi Gourgopal Biswas DEPARTMENT: Business Economics CLASS: S.Y.BBI SEMESTER: III (Subject: FOUNDATION COURSE)

MONTH: June-September ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To understand the core of banking services.

The learners will be able to: learn the banking services provided by banks.

Module I	**An Overview of Banking Industry Definition of Banks**: Types of Banks, Principles of Banking Banking System in India, Overview of RBI, Public, Private, Co-operative, Payment Bank, Regional Rural Banks Emerging trends of banking - Universal banking, electronic banking, globalization of banking. Brief history of banking sector reforms from 1991-2000 and Current developments in banking sector Regulatory Architecture – Overview of Banking Regulation Act 1949, Banking Regulation Act(Amendment 2015), Payment and Settlement Act 2007,	10 lectures		Chalk and board



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Module II	Negotiable Instrument Act 1881, BIS, Basel I, II and III. Bank Crises in India Critical Evaluation of Banking Industry in India. **Commercial Banking and Customer:** Banker Relationship Definition and meaning of Commercial Bank, Evolution of Commercial Banking in India, Functions of Commercial Bank, Services offered by Commercial Bank. Retail Banking – Meaning, Features, Significance of Retail Banking and Overview of its products Corporate Banking -Meaning, Features, Significance of Corporate Banking and Overview of its products Rural Banking - Meaning, Features, Significance of Rural Banking and Overview of its products Banking Ombudsman – Meaning and Functions.	10 lectures		
Module III	**Universal Banking & Technology in Banking sector:** A) Universal Banking Concept of Universal Banking, Evolution of Universal banking, Services to Government, Payment & Settlement, Merchant Banking, Mutual Fund, Depository Services, Wealth Management, Portfolio Management Bancassurance, NRI Remittance. B) Technology in Banking Features, norms and Limitations of E-banking, Mobile Banking, Internet Banking, RTGS, POS Terminal, NEFT, IMPS, Brown Label ATM, White Label ATM, NUUP, AEPS, APBS, CBS, CTS,	10 Lectures		Chalk and board

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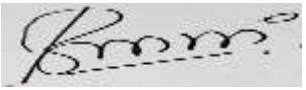
TEACHING PLAN (UNIT PLAN)

Module IV	Digital Signature, MWallets, Online opening of bank accounts – savings & current, and apply for credit cards, loan. Applicability of KYC norms in Banking Sector. **Microfinance & Financial Inclusion** **A) Microfinance:** Introduction, Need and Code of Conduct for Microfinance Institutions in India, Advantages, Purpose, Limitations, and Models of SHG – Bank Linkage Program. Role of NABARD and SIDBI, Portfolio Securitization, SHG-2, NRLM and SRLM, Priority Sector and its Classification **B) Financial Inclusion:** Need & Extent RBI Committee Report of Medium Term Path on Financial Inclusion 2015, World Findex Report 2015, NISM Report 2015, (Only Brief Extracts relating to bank account holdings and credit taken and contrast between developing and developed nations.) Features & Procedures of Pradhan Mantri Jan Dhan Yojana, and PM Mudra Yojana. Features, procedures, and significance of Stand up India Scheme for Green Field	15 Lectures		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: SFC CLASS: SYBBI (A, B & C) SEMESTER: I (Subject : Financial Markets)

MONTH: June to October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to:

- Understand the meaning of Indian financial system and different functions of financial system.
- Get knowledge of financial market and its components along with its functionality.
- Interpret the various financial instruments and services offered by financial institutions across globe.
- Know in detail about commodity market and various categories of commodities.
- Gain insight on commodity derivatives and various commodity exchanges.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1- Indian financial system	• Introduction, meaning, functions of financial system • Indian financial system from financial neutrality to financial activism and from volatility to financial stability • Role of government in financial development and overview of phases of Indian financial system since independence • Monitoring framework for financial conglomerates • Structure of Indian financial system • Banking and non-banking financial institutions • Organized and unorganized financial markets • Financial assets and instruments	15	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion, example and test

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	• Fund based and fee-based services			
Unit 3- Commodity Market	• Introduction to commodities market: meaning, History, origin and types of commodities traded in commodities market • Derivative commodities market • Structure of commodities market in India • Participants in commodities market • Trading in commodities in India (cash and derivative segment) • Commodity exchange in India and abroad • Reasons for investing in commodities	10	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion, example and test

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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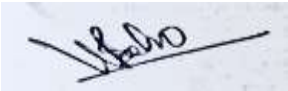

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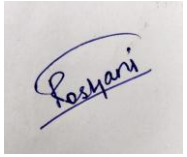
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Roshani Nagar DEPARTMENT: COMMERCE CLASS TYBBI SUB- TURNAROUND MANAGEMENT

SEMESTER: VI MONTH: JAN, FEB,MAR ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE -The learners will be able to understand about sick industries, symptoms,causes and remedial measures.It also makes to understand turnaround management and its strategies adopted by sick industries.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
TURNAROUND MANAGEMENT	**MODULE I :** **INTRODUCTION TO BUSINESS** ● Meaning,Definition,Importance,features,symptoms,types of Business Organaisation ● Different approaches for growth and survival: ● Internal and External ● External strategies ● Survival Strategies	10 LEC IN EACH UNIT		CHALK AND DUSTER METHOD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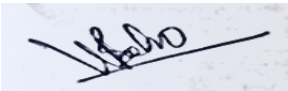

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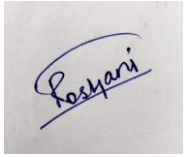
TEACHING PLAN (UNIT PLAN)

	MODULE IV Turnaround – Meaning, Definition, Indicators of Successful Turnaround · TQM and Restructuring. · Selling of a sick unit · BPR - Meaning, Definition, Elements, Need, Implications -		VIPUL	
	Approaches (Reengineering Team, BPR Leader, Process Owner, Kaizen, Flow Chart, 5S principles, Process Mapping)			
	MODULE I :			



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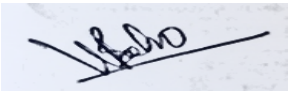

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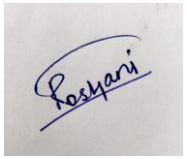
	INTRODUCTION TO BUSINESS ● Meaning,Definition,Importance,features,symptoms,types of Business Organaisation ● Different approaches for growth and survival: ● Internal and External ● External strategies ● Survival Strategies			
	MODULE II : **INDUSTRIAL SICKNESS** ●Meaning and Internal/External reasons of Industrial sickness. ● Symptoms of Industrial sickness. ● Measures to overcome sickness by government and stake holders. ● Roll of BIFR in sick industry			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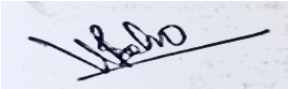

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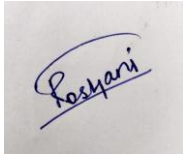
TEACHING PLAN (UNIT PLAN)

	MODULE V : **LEADERSHIP AND TURNAROUND MANAGEMENT** ●Out fitting the management team, the management team personal characteristic, focusing on present operations, focus on needs in turnaround management as a skill.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40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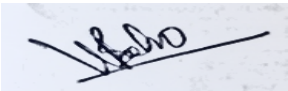

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TEACHING PLAN (UNIT PLAN)

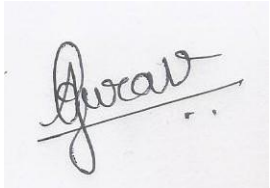
NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: Self Finance CLASS: T.Y.BBI (Subject: Auditing) SEMESTER: VI

MONTH: November to February ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to:

1) Understand & Remember- Concept of Auditing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Audit of Limited Companies	Qualifications, Disqualification	02	Book by Manan publications/Internet	Chalk & Board
	Audit report	02	Book by Manan publications/Internet	Chalk & Board
	Liabilities of Auditor, Duties, Rights	04	Book by Manan publications/Internet	Chalk & Board



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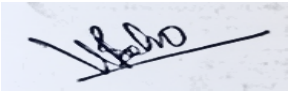

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TEACHING PLAN (UNIT PLAN)

Unit 2: Audit of Banking Companies	Financial statements, Appointment, remuneration, qualification, internal control system	6	Book by Manan publications/Internet	Chalk & Board
Unit 3: Audit of Insurance Companies	AS 3, 4, 9, 13, 17 Books & registers to be maintained	6	Book by Manan publications/Internet	Chalk & Board
Unit 4: New Areas of Auditing	Human resource management, management audit, tax audit, social audit, Forecast audit Audit in EDP Environment	6	Book by Manan publications/Internet	Chalk & Board
Unit 5: Professional Ethics & Misconduct	Schedules to the chartered accountants act, 1949	4	Book by Manan publications/Internet	Chalk & Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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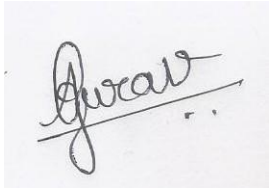

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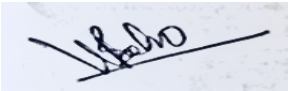

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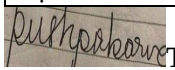
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PUSHPA RAKESH BARVE DEPARTMENT: COMMERCE(SFC) CLASS: TYBBI SEMESTER: V (Subject: International Banking and finance)

MONTH: SEPTEMBER-OCTOBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Imparting an adequate knowledge of the subject matter.

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
UNIT 1 Risk Management	Risk Management and Derivatives, Transaction, Translation and Economic Risk faced by Corporates, Transaction Position, Settlement-settlement Gap-Mismatch Risk faced by Banks, Internal and external hedging, Foreign Currency Derivatives Instrument for Risk Management Forward, Futures, Options, Swaps, Country risk management.	12	Dr. Chandra Iyer	Chalk & Board, Discussion Google Classroom You Tube Videos
UNIT 2 International Banking Operations	International Lending Operations, Loan Syndication, Parties involved, Phases in Loan syndication, Types of Syndication, Role of LIBOR, Risk in international Lending, Role of International credit Rating Agencies	06		



TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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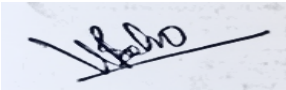

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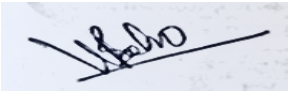

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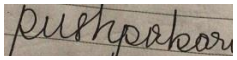

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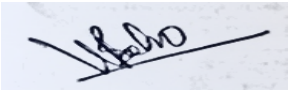

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pranali Prabhakar Gurav DEPARTMENT: Accountancy CLASS: TYBBI SEMESTER: V (Subject : FRA)

MONTH: June to November ACADEMIC YEAR: 2022 - 23

LEARNING OBJECTIVE/S: The general education curriculum will enable students to acquire skill, knowledge and experience.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit : 1 Final Accounts of Banking Company:	1. Legal Provisions in Banking Regulation Act, 1949 Relating to Accounts. 2. Statutory Reserves including Cash Reserve and Statutory Liquidity Ratio. 3. Bills Purchase and Discounted, Rebate on Bill Discounted. 4. Final Accounts in Prescribed Form. 5. Non-performing Assets and Income from Non - performing Assets. 6. Classification of Advances: Standard, Sub-standard, Doubtful and Provisioning Requirement.	20	Textbook of FRA	Chalk Board.

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TEACHING PLAN (UNIT PLAN)

Unit 4 : Final Accounts of Insurance Company:	1. Preparation and presentation of Corporate Final Accounts for Insurance Companies 2. Final Accounts in accordance with Insurance Legislation. 3. Study of Accounting Policies from Annual Reports of Listed Insurance Companies.	15	Textbook of FRA	Chalk Board.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35

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TEACHING PLAN (UNIT PLAN)

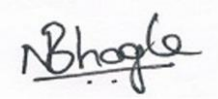
NAME OF THE STAFF: NEHA VAIBHAV TAMBE DEPARTMENT: BBI CLASS: TYBBI SEMESTER: V (Subject: STRATEGIC MANAGEMENT)

MONTH: JUNE-NOV ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT2 Environment of strategic management	a] Importance of Politics in Strategic management B]Role of competition c] Components of environment (political, social, economical, technological, legal, ecological) d] Environmental scanning, Ethics, SWOT analysis e) Analysis of strategies and choice of strategies, green banking f) Social responsibilities of business towards different stakeholders	10	Book by Manan publications/Internet	1. CHALK & BLACK BOARD METHOD .INTERACTIVE METHOD



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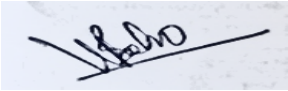

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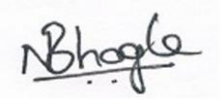
TEACHING PLAN (UNIT PLAN)

UNIT 4 Activating strategy and implementation	a] Process and natureof strategy implementation, barriers b] Model of strategy implementation structural, behavioural, and functional	10	Book by Manan publications/Internet	1. CHALK & BLACK BOARD METHOD .INTERACTIVE METHOD
UNIT 5 Strategic evaluation and control	a] Standards, benchmarking, gap analysis b] Features and importance of Evaluation, Barriers in evaluation, types c] Strategic control: Setting Standards, Comparison, Control process, system, approaches d] Techniques of evalution and control e] Role of information system	10	Book by Manan publications/Internet	1. CHALK & BLACK BOARD METHOD .INTERACTIVE METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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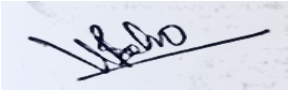

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pranali Prabhakar Gurav DEPARTMENT: Accountancy CLASS: TYBBI SEMESTER: V (Subject : AUDITING)

MONTH: June to November ACADEMIC YEAR: 2022 - 23

LEARNING OBJECTIVE/S: The general education curriculum will enable students to acquire skill, knowledge and experience.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit : 1 : Vouching	1. Audit Planning: Meaning, Objectives, Factors to be Considered, Sources of Obtaining Information, Discussion with Client, Overall Audit Approach. Audit Program: Meaning, Factors, Advantages and Disadvantages, Overcoming Disadvantages, Methods of Work, Instruction before Commencing Work, Overall Audit Approach.	20	Auditing Textbook	Chalk Board.

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TEACHING PLAN (UNIT PLAN)

	Audit Working Papers: Meaning, Importance, Factors Determining Form and Contents, Functions/Importance, Features, Main Contents of Permanent Audit File, Temporary Audit File, Ownership, Custody, Access of Other Parties to Audit Working Papers, Lien on Working Papers, Auditors Lien on Client's Books.Audit Notebook: Meaning, Structure, Contents, General Information, Current Information, Importance.			
Unit 4 : Auditing techniques and internal Audit introduction	1. Test Check: Test Checking Vs Routing Checking, Test Check meaning, Features, Factors to be Considered, When Test Checks Can be Used, Advantages, Disadvantages and Precautions. 2. Audit Sampling: Audit Sampling, Meaning, Purpose, Factors in Determining Sample Size - Sampling Risk, Tolerable Error and Expected Error, Methods of Selecting Sample Items, Evaluation of Sample Results, Auditors Liability in Conducting Audit Based on Sample.	18	Auditing Textbook	Chalk Board.

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TEACHING PLAN (UNIT PLAN)

	3. Internal Control: Meaning and Purpose, Review of Internal Control, Advantages, Auditors Duties, Review of Internal Control, Inherent Limitations of Internal Control, Internal Control Samples for Sales and Debtors, Purchases and Creditors, Wages and Salaries. Internal Checks Vs Internal Control, Internal Checks Vs Test Checks 4. Internal Audit: Meaning, Basic Principles of Establishing Internal Audit, Objectives, Evaluation of Internal Audit by Statutory Auditor, usefulness of Internal Audit, Internal Audit Vs External Audit, Internal Checks Vs Internal Audit.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 38

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TEACHING PLAN (UNIT PLAN)

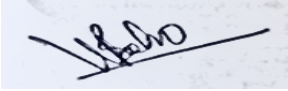
NAME OF THE STAFF: **NEHA SANJAY MAHESHWARI** DEPARTMENT: **COMMERCE SFC** CLASS**: TYBBI** SEMESTER: **V**

(Subject :**Research Methodology)**

MONTH: **JULY-OCT** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: Understand How to do Research and Methods to collect data..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 2	**Data Collection and Processing** • Types of Data and Sources-Primary and Secondary Data Sources • Methods of Collection of Primary data a. Observation- i) structured and unstructured, ii) disguised and undisguised, iii)mechanical observations (use of gadgets) b. Experimental i)Field ii) Laboratory c. Interview – i) Personal Interview ii) focused group, iii) in- depth interviews Method	8	**Textbook of Vipul's prakashan & online references**	**Blackboard, Chalk, Google classroom**



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TEACHING PLAN (UNIT PLAN)

Unit 3	d. Survey– Telephonic survey, Mail, E-mail, Internet survey, Social media, and Media listening. e. Survey instrument– i) Questionnaire designing. a. Types of questions–i) structured/close ended and ii) unstructured/ open ended, iii) Dichotomous, iv) Multiple Choice Questions. b. Scaling techniques- i)Likert scale, ii) Semantic Differential scale.			
Unit 4	**Data Analysis and Interpretation** • Processing of Data– Meaning & Essentials of i) Editing ii) Coding iii) Tabulation • Analysis of Data-Meaning, Purpose, Types. • Interpretation of Data-Essentials, Importance, Significance and Descriptive Analysis • Testing of hypothesis– One Sample T- Test, ANOVA, F- test, Chi Square and Paired Sample Test	8	**Textbook of Vipul's prakashan & online references**	**Blackboard, Chalk, Google classroom**
	Advanced Statistical Techniques Introduction, Characteristics and Application of	4	**Textbook of Vipul's prakashan**	**Blackboard, Chalk, Google classroom**

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TEACHING PLAN (UNIT PLAN)

	• Correlation and Regression Analysis • Factor Analysis • Cluster Analysis • Discriminant Analysis • Multidimensional Scaling		**& online references**	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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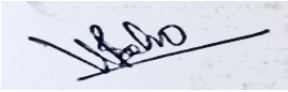

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: keyur Limbachiya DEPARTMENT: Commerce (SFC) CLASS: TYBBI SEMESTER: V (Subject: Auditing)

MONTH: June - September ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The general education curriculum will enable students to acquire skills, knowledge and experienced.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Auditing techniques: vouching	Audit of income: cash sales, sales on approval, consignment	**1**	Auditing – I by Sachine Bhandarkar And Sandeep Gupta Past papers ICAI modules and other online references,	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM
	Sales returns recovery of bad debts written off, rental receipt	**3**		
	Interest and dividends received; royalties received	**2**		
	Audit of expenditure: purchases, purchase returns,	**1**		
	Salaries and wages, rent, insurance, premium	**3**		

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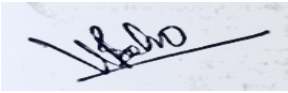

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TEACHING PLAN (UNIT PLAN)

	Telephone expense, postage and courier, petty cash, expenses	**3**		
	Travelling, commission, advertisement, interest expenses b	**2**		
PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**TEACHING METHOD/ ICT TOOLS USED**
UNIT V Auditing techniques: verification	Audit of assets book debts/debtors, stock: Auditors general duties	**1**	Auditing – I by Sachine Bhandarkar And Sandeep Gupta Past papers ICAI modules and other online references, ,	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM
	Pattern, loos tool, spare parts, empties and containers	**1**		
	Trade marks/copyrights, patents, plant and machinery	**1**		
	Land and building, furniture and fixture	**2**		
	Outstanding expenses, bills payable, secured loan	**2**		

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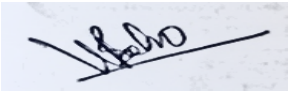

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TEACHING PLAN (UNIT PLAN)

	Unsecured loans, contingent liabilities	**2**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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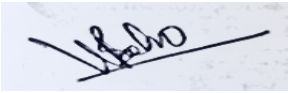

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TEACHING PLAN (UNIT PLAN)

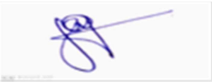
NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: **Commerce**

CLASS: **TYBBI A, B & C** SEMESTER: **Sem V** MONTH: **June to Sep** ACADEMIC YEAR : **2022-23**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Preparation of Financial Statements as per Companies Act.
2) Cash Flow Analysis as per AS 3
3) Introduction to IFRS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Reporting and Analysis	Unit : 3 Preparation of Final Accounts of Companies	14	Manan & Vipul Publication	Chalk Board, PPT
	1) Preparation of Financial Statements as per Companies Act. 2) AS 1 in Relation to Final Accounts of Companies 3) Adjustment for –			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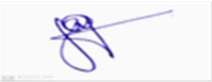
TEACHING PLAN (UNIT PLAN)

	1. Closing Stock 2. Depreciation Any other adjustments as per the prevailing accounting standard.			
	Unit 4 : Cash Flow Analysis & Ethical Behaviour and Implications for Accountants Cash Flow Analysis as per AS 3	14	Manan & Vipul Publication	Chalk Board, PPT
	Unit 5: Introduction to IFRS IFRS 1- First Time Adoption of International Financial Reporting Standards IFRS 2- Share Based Payment	04	Manan & Vipul Publication	Chalk Board, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __32_____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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI V MEHTA DEPARTMENT: COMMERCE-SELF FINANCE CLASS: TYBBI; Div A SEMESTER:V (Subject : IBF)

MONTH: July- October ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to: Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER,UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3: Foreign Exchange Markets	Introduction, Market and Market Participants, Foreign Exchange Management in India, Retail and Whole Sale Component of Indian Foreign Exchange Market, Role of FEDAI, FEMA and Regulatory Framework, Dealing Room Operations.	6	Vipul Publication	Chalk Board Flow Chart
Unit 5: International Banking Operations	Introduction, Definition, Features of International Banking, Reasons for Growth of International Banking, Recent Trends in International Banking, Emergence of Crypto currency - Overview, Brief Overview of Bitcoin and other Crypto Currencies, Note on Mining and Crypto Currency Exchanges, Advantages, Disadvantages of Crypto Currency.			

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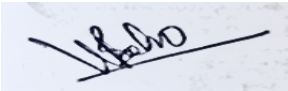

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TEACHING PLAN (UNIT PLAN)

	Functions of International Banking, Correspondent Banking, International Payment Systems, NRI accounts, Export Finance, Import Finance, International Merchant Banking, Financing Project Exports, Derivative Offering, Remittances, Compliance related-Interbank Functions, Internal Functions, Letter of Credit and Bank Guarantees.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____

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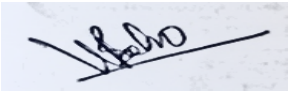

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TEACHING PLAN (UNIT PLAN)

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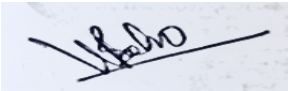

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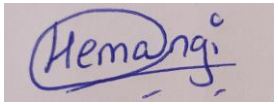
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT: COMMERCE (SFC) CLASS:TYBBI (Div. A) SEMESTER:V (Subject : FINANCIAL SERVICE MANAGEMENT)

MONTH: JUNE-SEPT ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to : Receive knowledge regarding organization behavior .

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	ACHING METHOD/ ICT TOOLS USED
Unit 1: Introduction to Financial Service **Unit 2: Mutual Funds, Factoring and Forfeiting**	**Financial Services** Meaning, Classification, Scope, Fund Based Activities, Non Fund Based Activities, Modern Activities, Sources of Revenue, Need for Financial Innovation, New Financial Products & Services, Innovative Financial Instruments, Challenges Facing the Financial Sector. **Merchant Banking** Definition, Origin, Merchant Banking in India, Merchant Banks and Commercial Banks, Services of Merchant Banks, Qualities of Merchant Bankers in Market Making Process, Progress of	06 06	Vipul Publication.	Chalk, Duster, Boards



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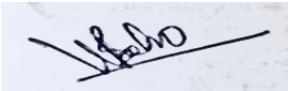

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TEACHING PLAN (UNIT PLAN)

	Merchant Banking in India, Problems, Scope of Merchant Banking in India. **Mutual Funds** Introduction to Mutual Funds, Structure of Mutual Fund in India, Classification of Mutual Funds, AMFI Objectives, Advantages of Mutual Funds, Disadvantages of Mutual Funds, NAV Calculation and Pricing of Mutual Funds, Mutual Funds Abroad, Mutual Funds in India, Reasons for Slow growth, Future of Mutual Funds Industry. **Factoring and Forfeiting** Factoring, Meaning, Modus Operandi, Terms and Conditions, Functions, Types of Factoring, Factoring vs. Discounting, Cost of factoring, Benefits, Factoring in India, International Factoring, Definition, Types of Export Factoring, Factoring in Other Countries, EDI Factoring, Forfeiting- Definition, Factoring vs. Forfeiting, Working of Forfeiting, Cost of Forfeiting, Benefits of Forfeiting, Drawbacks of Forfeiting.			

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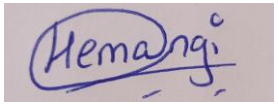
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____



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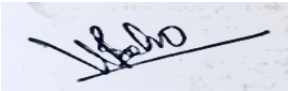

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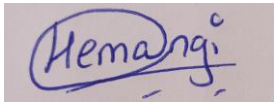
TEACHING PLAN (UNIT PLAN)



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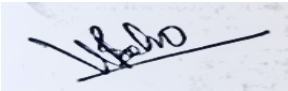

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Heena Obaid Qureshi DEPARTMENT: Commerce(SFC) CLASS: TYBBI SEMESTER: V(Subject : Auditing)

MONTH: JUNE-SEPT ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to: Understand theconcepts of Auditing and different methods of Auditing and understanding types of Audit

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
II- Audit Planning, Procedures and Documentation				
	Audit Planning- Meaning, Objectives, Factors to be Considered, Sources of Obtaining Information, Discussion with Client, Overall Audit Approach. **Audit Program**: Meaning, Factors, Advantages and Disadvantages, Overcoming Disadvantages, Methods of Work, Instruction before Commencing Work, Overall Audit Approach.	15	Vipul Prakashan	CHALK AND BOARD DISCUSSION METHOD, EXAMPLES

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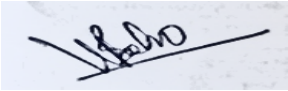

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TEACHING PLAN (UNIT PLAN)

III- Auditing techniques and Internal Audit Introduction	**Audit Working** Papers: Meaning, Importance, Factors Determining Form and Contents, Main Functions/ Importance, Features, Contents of Permanent Audit File, Ownership, Custody, Access of Other Parties to Audit Working Papers, Auditors Lien on Working papers, Auditors Lien on Client's Books.		Text Books and Reference material from Internet	
	Test Check- Test Checking VS Routine Checking, Test Check Meaning, Features, Factors to be considered, when Test Checks can be used, Advantages, Disadvantages, Precautions. Audit Sampling- Audit Sampling, Meaning, Purpose, Factors in determining sample size- Sampling Risk, Tolerable error and Expected Error, Methods of selecting Sample Items, Evaluation of Sample Results, Auditors liability in conducting audit based on sample.	15	Text Books and Reference material from Internet	

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:**GAURI YADAV** DEPARTMENT: **SELF FINANCE** CLASS: **TYBBI** SEMESTER: V (Subject :AUDITING)

MONTH: **JUL - OCT** ACADEMIC YEAR: **2022 - 23**

LEARNING OBJECTIVE/S: The learners will be able to: Understand the concepts of Auditing and different methods of Auditing and understanding types of Audit

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
II- Audit Planning, Procedures and Documentation	**Audit Planning**- Meaning, Objectives, Factors to be Considered, S Information, Discussion with Client, Overall Audit Approach. **Audit Program**: Meaning, Factors, Advantages and Disadvantages, Disadvantages, Methods of Work, Instruction before Commencing Audit Approach.	10	Vipul Prakashan Text Books and Reference material from Internet	CHALK AND BOARD DISCUSSION METHOD, EXAMPLES

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TEACHING PLAN (UNIT PLAN)

III- Auditing techniques and Internal Audit Introduction	**Audit Working** Papers: Meaning, Importance, Factors Determining Contents, Main Functions/ Importance, Features, Contents of Perma Ownership, Custody, Access of Other Parties to Audit Working Pap on Working papers, Auditors Lien on Client's Books.			
	Test Check- Test Checking VS Routine Checking, Test Check Mea Factors to be considered, when Test Checks can be used, Advantage Precautions. Audit Sampling- Audit Sampling, Meaning, Purpose, Factors in det size- Sampling Risk, Tolerable error and Expected Error, Methods c Items, Evaluation of Sample Results, Auditors liability in conductin sample.	10	Vipul Prakashan Text Books and Reference material from Internet	CHALK AND BOARD DISCUSSION METHOD, EXAMPLES

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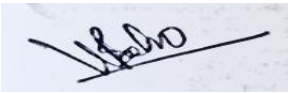
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Megha Kulkarni DEPARTMENT: Commerce (SFC) CLASS: SY BBI SEMISTER: IV

SUBJECT: Information Technology in Banking & Insurance-II MONTH: November-February ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & II E-Banking Business Models & Introduction of Techno Management	**Various Models**- Home Banking, Office Banking, Online Banking, Internet Banking, Mobile Banking, SMS Banking, Models of Electronic Payments, Other Business Models	15	Information Technology in Banking and Insurance - II by Verus D'sa, Internet source.	Chalk board method, discussion, debates.
	Induction of Techno Management - Development Life Cycle, Project Management, Building Data Centers, Role of DBMS in Banking, Data Warehousing and Data Mining, RDBMS Tools. ◆ **Technological Changes in Indian Banking Industry:** Trends in Banking and Information Technology, Technology in Role of Reserve Bank of India, New Horizons for Banking based IT, Automated Clearing House Operations, Electronic Wholesale Banking Credit Transfer, Credit Information Bureau (1) Ltd., Credit Information Company Regulation Bill - 2004, Automation in Indian Banks, Cheque Clearing using MICR Technology, Innovations, Products and Services, Core- Banking Solutions (CBS), Human Resource Development (HRD) - ◆ **Technology in Banking Industry :**Teleconferencing, Internet Banking, Digital Signature in Banking, MICR-Facility for 'Paper-based' Clearing, Cheque Truncation ◆ **Dealing with Fraudulent transactions under CTS:**Efficient Customer Service, Smart Quill Computer Pen, Institute for Development and Research in Banking and Technology (IDRBT) ◆ **E-ChecksProtocols and Standards:** Problems on Mechanization, E-Banking- RBI Regulations and Supervision, Technology Diffusion IT	20		

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III & IV IT Applications and Banking &MS-Office: Packages for Institutional Automation •	Objectives, Electronic Commerce and Banking, Banking Software, Electronic Clearing and Settlement Systems, Plastic Money	15	Information Technology in Accountancy II Verus D'Sa, Internet source.	Chalk board method, discussion, debates,practical explanation in lab .
	MS-PowerPoint Presentation: Internal Links between Slides, Hyperlinks, Embedding Multimedia content onto the Slides (Video/Audio / Stylish Text), Slide Animation, Timer, Creating New Presentation by Existing Theme, Import Online Themes, Creating a Template of Presentation, Save and Run the Slide Show (.ppsx) Applications of Internet: Introduction- to E-mail, Writing Professional E-mails, Creating Digitally Signed Documents Use of Outlook Express: Configuring Outlook Express, Creating and Managing Profile in Outlook, Sending and Receiving E-mails via Outlook Express, E-mailing the Merged Documents, Boomerang Facility of E-mail Google Drive: Usage of Google Drive in Storing the Google Documents, Excel Sheets, Presentations and PDF Files	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE-SELF FINANCE CLASS: SYBBI SEMESTER: IV
(Subject : ENTREPRENEURSHIP MANAGEMENT) MONTH: October- March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to: Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: The Entrepreneur	A) Entrepreneur: Meaning, Nature, origin and development of entrepreneurship in India, Need and Importance, Core elements, Principles, Essentials, Types, Functions, Concept of entrepreneurship management, Motives behind being an entrepreneur, Entrepreneurial Process	4	Vipul Publications	Lecture method, Discussion method
	B) Theories of Entrepreneurship: Innovation Theory of Schumpeter, Need for Achievement Theory of McClelland, Risk Bearing Theory of knight, Hagen's Theory of Entrepreneurship, Economic Theory of Entrepreneurship.	4	Vipul Publications	Lecture method, Discussion method
	C) Entrepreneurial Values and Attitudes, Dominant characteristics of successful entrepreneurs, Internal and external factors for entrepreneurial motivation	3	Vipul Publications	Lecture method, Discussion method
	D) Entrepreneurial Skills, Identifying business opportunities, Role of creativity in Entrepreneurship, the creative process, the Innovation process, types of innovation, sources of innovation, principles of innovation, Sources of Business Ideas.	4	Vipul Publications	Lecture method, Discussion method

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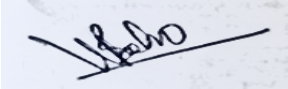

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

Unit 2: Business Planning	A) Forms of Entrepreneurial structures: • Sole Proprietorship-meaning, merits and limitations. • Partnership-Meaning, Forms, merits and limitations. • Corporations-Meaning, merits and limitations. • Limited Liability partnerships and corporations. • Franchising-Meaning, types, merits and limitations.	5	Vipul Publications	Lecture method, Discussion method
	B) Critical Factors for starting a new enterprise: Personal, Environmental, Sociological factors. Problems of a New Venture- Financial, administrative, marketing, production and other problems.	5	Vipul Publications	Lecture method, Discussion method
	C) Business Plan: Meaning, Benefits, Developing a business plan, Environment scanning, Elements/Areas to be covered in a Business Plan, Project Report preparation, Contents of a Project Report.	5	Vipul Publications	Lecture method, Discussion method
Unit 3: Key Areas of New Ventures	A) Marketing: New Product Development, Marketing Strategy for the new venture, Branding strategies, Distribution strategies, Pricing Strategies, Promotion strategies for new venture, Concept of Marketing Mix and Market segmentation, Marketing Plan	4	Vipul Publications	Lecture method, Discussion method
	B) Operations: Size and location of Enterprise, Layout, Inventory Control, Quality Control.	3	Vipul Publications	Lecture method, Discussion method
	C) Finance: Sources of long term and short term finance, Debt fund- Meaning, Merits and limitations, Equity Fund- Meaning, merits and limitations, Concept of Break Even analysis, Venture Capital-Meaning,	4	Vipul Publications	Lecture method, Discussion method

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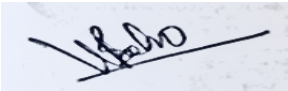

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TEACHING PLAN (UNIT PLAN)

	Merits and Limitations, Criteria for Evaluating New Venture Proposals by Venture Capitalist			
	D) Human Resource: Personnel Function, Important Labor Laws: Industrial Disputes Act, Factories Act, Provident Fund Act, Employee State Insurance Act, Payment of Wages Act, Minimum Wages Act, Payment of Gratuity Act, other related Acts and Role of HRD in new ventures	4	Vipul Publications	Lecture method, Discussion method
Unit 4: Evolving Concepts in Entrepreneurship	A) Social Entrepreneurship: Meaning, Social responsibility of an entrepreneur	2	Vipul Publications	Lecture method, Discussion method
	B) Barriers to entrepreneurship: Environmental, economic, non-economic, personal and entrepreneurial barriers.	2	Vipul Publications	Lecture method, Discussion method
	C) Intrapreneurship: Meaning, Characteristics, Intrapreneurs Activities, types of Corporate Entrepreneurs, Corporate V/s Intrapreneurial culture, Climate, Fostering Intrapreneurial culture, Promoting intrapreneurship- Pinchot's Spontaneous teams and Formal Venture teams, establishing intrapreneurial ventures.	4	Vipul Publications	Lecture method, Discussion method
	D) Ethics and Entrepreneurship: Defining Ethics, Approaches to Managerial ethics, ethics and business decisions, Ethical practices and code of conduct, Ethical considerations in corporate entrepreneurship.	3	Vipul Publications	Lecture method, Discussion method

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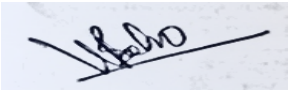

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TEACHING PLAN (UNIT PLAN)

	E) Institutional Support to Entrepreneurs: Importance, Incentives and facilities, Entrepreneurship Development Institute of India (EDI), NSIC, Small Industries Development Organization (SIDO), National Institute for Entrepreneurship and Small Business Development (NIESBUD), Others, Key features of National Policy on Skill Development and Entrepreneurship 2015	4	Vipul Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15 each__

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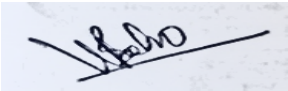

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____REENA BEHERA_____ DEPARTMENT: ____Business Economics_____ CLASS: __SYBBI_____
SEMESTER: _IV_ (Subject : _____BUSINESS ECONOMICS __II_____)

MONTH: _____July to October_____ ACADEMIC YEAR: _____2022-23____

LEARNING OBJECTIVE/S: ____The concept of using macroeconomics for the growth of the economy by developing a core understanding regarding income, expenditure, measurement, and trade cycles, demand and supply of money and levels of inflation for the development of the economy._____

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1,2,3,4	Introduction to Macroeconomics Macroeconomics: Meaning, Scope and Importance Circular Flow of Aggregate Income and Expenditure Closed and Open Economy Models	4 lectures per week	H.L.AHUJA Advanced Economic Theory M.l.Jhingan International	Chalk Duster Google Classroom Jam board Online Quiz Class Discussion You Tube

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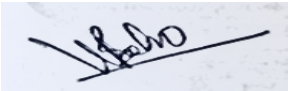

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TEACHING PLAN (UNIT PLAN)

	The Measurement of National Product: Meaning and Importance - Conventional and Green GNP and NNP Concepts Relationship Between National Income and Economic Welfare Short run Economic Fluctuations: Features and Phases of Trade Cycles The Keynesian Principle of Effective Demand: Aggregate Demand and Aggregate Supply - Consumption Function Investment Function - Effects of Investment Multiplier on Changes in Income and Output Money, Inflation and Monetary Policies		Trade Micro economics Mankiw	Presentation PPT

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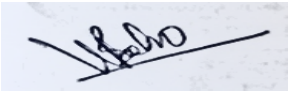

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TEACHING PLAN (UNIT PLAN)

	Money Supply: Determinants of Money Supply - Factor influencing Velocity of Circulation of Money Demand For Money: Classical and Keynesian Approaches and Keynes' Liquidity Preference Theory of Interest Money and Prices : Quantity Theory of Money - Fisher's Equation of Exchange - Cambridge Cash Balance Approach Inflation: Demand Pull Inflation and Cost Push Inflation - Effects of Inflation - Nature of Inflation in a Developing Economy Monetary Policy: Meaning, Objectives and Instruments,			

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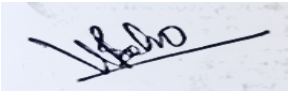

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TEACHING PLAN (UNIT PLAN)

	Inflation Targeting Constituents of Fiscal Policy Role of Government to provide Public Goods - Principles of Sound and Functional Finance Fiscal Policy: Meaning, Objectives - Contra Cyclical Fiscal Policy and Discretionary Fiscal Policy Instruments of Fiscal Policy: Canons of Taxation - Factors Influencing Incidence of Taxation - Effects of Taxation - Significance of Public Expenditure - Social Security Contributions - Low Income Support and Social Insurance Programmes - Public Debt - Types, Public Debt and Fiscal Solvency, Burden of Debt Finance			

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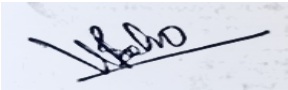

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TEACHING PLAN (UNIT PLAN)

	Union Budget: Structure Deficit Concepts - Fiscal Responsibility and Budget Management Act Open Economy: Theory and Issues of International Trade The Basis of International Trade: Ricardo's Theory of Comparative Cost Advantage - The Hecksher-Ohlin Theory of Factor Endowments Terms of Trade Meaning and Types - Factors Determining Terms of Trade - Gains from Trade - Free Trade versus Protection Foreign Investment: Foreign Portfolio Investment - Benefits of Portfolio Capital Flows Foreign Direct Investment - Merits of Foreign Direct Investment - Role of Multinational Corporations Balance of Payments: Structure - Types of Disequilibrium - Measures to Correct Disequilibrium in BOP			

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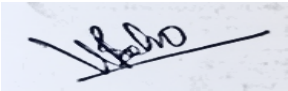

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TEACHING PLAN (UNIT PLAN)

	Foreign Exchange and Foreign Exchange Market: Spot and Forward Rate of Exchange - Hedging, Speculation and Arbitrage - Fixed and Flexible Exchange Rates - Managed FlexibilityIntroduction to Macroeconomics (15 Lec.) Macroeconomics: Meaning, Scope and Importance Circular Flow of Aggregate Income and Expenditure Closed and Open Economy Models The Measurement of National Product: Meaning and Importance - Conventional and Green GNP and NNP Concepts Relationship Between National Income and Economic Welfare Short run Economic Fluctuations: Features and Phases			

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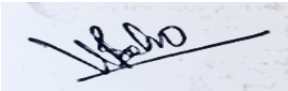

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TEACHING PLAN (UNIT PLAN)

	of Trade Cycles The Keynesian Principle of Effective Demand: Aggregate Demand and Aggregate Supply - Consumption Function Investment Function - Effects of Investment Multiplier on Changes in Income and Output Money, Inflation and Monetary Policy (15 Lec.) Money Supply: Determinants of Money Supply - Factor influencing Velocity of Circulation of Money Demand For Money: Classical and Keynesian Approaches			

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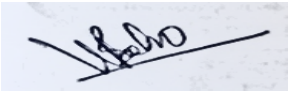

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TEACHING PLAN (UNIT PLAN)

	and Keynes' Liquidity Preference Theory of Interest Money and Prices : Quantity Theory of Money - Fisher's Equation of Exchange - Cambridge Cash Balance Approach Inflation: Demand Pull Inflation and Cost Push Inflation - Effects of Inflation - Nature of Inflation in a Developing Economy Monetary Policy: Meaning, Objectives and Instruments, Inflation Targeting Constituents of Fiscal Policy Role of Government to provide Public Goods - Principles of Sound and Functional Finance			

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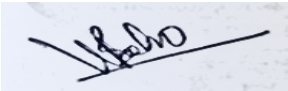

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TEACHING PLAN (UNIT PLAN)

	Fiscal Policy: Meaning, Objectives - Contra Cyclical Fiscal Policy and Discretionary Fiscal Policy Instruments of Fiscal Policy: Canons of Taxation - Factors Influencing Incidence of Taxation - Effects of Taxation - Significance of Public Expenditure - Social Security Contributions - Low Income Support and Social Insurance Programmes - Public Debt - Types, Public Debt and Fiscal Solvency, Burden of Debt Finance Union Budget: Structure Deficit Concepts - Fiscal Responsibility and Budget Management Act Open Economy: Theory and Issues of International Trade The Basis of International Trade: Ricardo's Theory of Comparative Cost Advantage - The Hecksher-Ohlin Theory of Factor			

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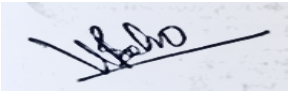

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TEACHING PLAN (UNIT PLAN)

	Endowments Terms of Trade Meaning and Types - Factors Determining Terms of Trade - Gains from Trade - Free Trade versus Protection Foreign Investment: Foreign Portfolio Investment - Benefits of Portfolio Capital Flows Foreign Direct Investment - Merits of Foreign Direct Investment - Role of Multinational Corporations Balance of Payments: Structure - Types of Disequilibrium - Measures to Correct Disequilibrium in BOP Foreign Exchange and Foreign Exchange Market: Spot and Forward Rate of Exchange - Hedging, Speculation and Arbitrage - Fixed and Flexible Exchange Rates - Managed Flexibility			

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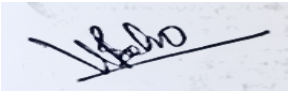

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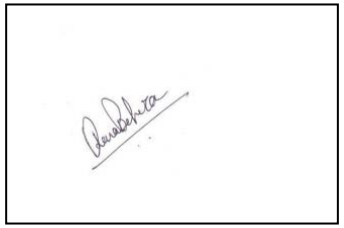
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____45



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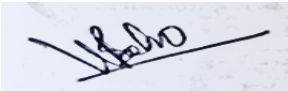

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___TARIKA PATEL_____ DEPARTMENT: ___COMMERCE_____ CLASS: __SYBBI _____ SEMESTER: _IV_
(Subject : ___FINANCIAL MANAGEMENT_____MONTH: _____NOVEMBER_____ ACADEMIC YEAR: ____2022-2023_____
LEARNING OBJECTIVE/S: The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1 Working Capital Management	Introduction, Meaning and Elements of Working Capital, Types of Working Capital	2	Financial Management	• Chalk • Board
	Estimating Working Capital needs, Operating / Working capital Cycle, Factors affecting working capital, Statement of working capital	3	By Ravi M Kishore	• Discussion • Examples
	Practical Illustrations	5		• Google Classrooms
	Woking Capital Financing,Trade credit, Bank Credit, Commercial Papers, Certificate of deposits, Financing	2		
	Practical Illustrations	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15__

T.R.Patel

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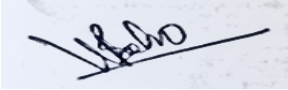

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____TARIKA PATEL_____ DEPARTMENT: ___COMMERCE_____ CLASS: __SYBBI _____ SEMESTER: _IV_

(Subject : ___FINANCIAL MANAGEMENT_____MONTH: _____DECEMBER_____ ACADEMIC YEAR: ____2022-2023_____

LEARNING OBJECTIVE/S: The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Management of Components of Working Capital	A) Management of Cash and Marketable Securities ,Motives for holding cash, Objectives of Cash Management, Factors Determining cash needs	1	Financial Management	• Chalk • Board
	Basic Strategies of cash management, Cash Management Techniques, Marketable securities and Cash management practices in India, Format of Cash Budget	1	By Ravi M Kishore	• Discussion • Examples
	Practical Illustrations	3		• Google Classrooms
	B) Receivable Management : Objectives, Credit Policies, Credit Terms, and Collection Policies, Practical Illustrations	5		
	C) Inventory Management : Objectives, and Techniques Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____TARIKA PATEL_____ DEPARTMENT: ___COMMERCE_____ CLASS: __SYBBI _____ SEMESTER: _IV_
(Subject : ___FINANCIAL MANAGEMENT_____MONTH: _____JANUARY_____ ACADEMIC YEAR: ____2022-2023_____
LEARNING OBJECTIVE/S: The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 3 Financial Planning	Introduction of Financial Planning, Meaning and Essentials of Budget, Objectives and Advantages & steps of Budgetary control	1	Financial Management	• Chalk • Board
	Types of Budget Sales Budget (Practical Illustrations)	4	By Ravi M Kishore	• Discussion • Examples
	Flexible Budget (Practical Illustrations)	4		• Google Classrooms
	1) Production Budget (Practical Illustrations), 2) Manpower Budget (Practical Illustrations), 3) Purchase Budget (Practical Illustrations), 4) Combined Budget (Practical Illustrations),	5		
	Other Types of Budget	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____TARIKA PATEL_____ DEPARTMENT: ___COMMERCE_____ CLASS: __SYBBI _____ SEMESTER: _IV_
(Subject : ___FINANCIAL MANAGEMENT_____MONTH: _____FEBRUARY, MARCH_____ ACADEMIC YEAR: ____2022-2023_____
LEARNING OBJECTIVE/S: The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 4 Financial Policy	**Financial Policy and Corporate Strategy** Meaning of Strategic Financial Management Strategic Financial Decision Making Framework Functions of Strategic Financial Management	5	Financial Management By Ravi M Kishore	• Chalk • Board
	Business Risk and Financial Risk Introduction Debt V/s Equity Financing Types of Leverages Investment Objectives Practical Illustration	10		• Discussion • Examples • Google Classrooms

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15___

T.R.Patel

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Heena Obaid Qureshi DEPARTMENT: SFC(Accountancy) CLASS: SYBBI SEMESTER: IV (Subject :Cost Accounting)

MONTH: Nov-March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understad and learn the concepts of cost accounting with practical problems.

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	EACHING METHOD/ ICT TOOLS USED
1.Introduction to Cost	Objectives and Scope of Cost Accounting,Cost Centres nd Cost Unit,Element of Cost	06	Manan Prakasham,Sheth Publication Text Book	Chalk-Board
2.Marginal Costing	Meaning,Application,Advantages, Disadvantages,Practical Problems	08		
3.Classification of Cost	Cost sheet and Reconciliation Practical Problems	10		
4.Standard Costing	Basic Concepts, Types of standard, Practical sums	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__34__

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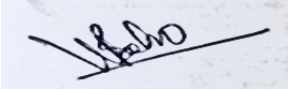

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TEACHING PLAN (UNIT PLAN)

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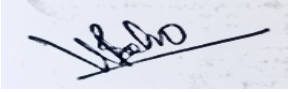

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Gurav DEPARTMENT: Self finance CLASS: SYBBI SEMESTER: IV (Subject : Cost Accounting)

MONTH: January to March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand & Remember- Concept of Cost Accounting

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Introduction to Cost Accounting	Objectives & Scope of Cost Accounting	02	Book by Manan publications/Internet	Google classroom, Chalk & Board
	Cost Centres & Cost Units	02	Book by Manan publications/Internet	Google classroom, Chalk & Board
	Elements of Cost	02	Book by Manan publications/Internet	Google classroom, Chalk & Board
Unit 2: Classification of cost and cost sheet	Classification of Cost Cost Sheet & Reconciliation Practical Problems	12	Book by Manan publications/Internet	Google classroom, Chalk & Board

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Unit 3: Standard Costing	Various types of standards, setting of standards, Basic concepts. Practical Problems	9	Book by Manan publications/Internet	Google classroom, Chalk & Board
Unit 4: Introduction to Marginal	Meaning, Application, Advantages, Disadvantages Practical Problems	8	Book by Manan publications/Internet	Google classroom, Chalk & Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 33

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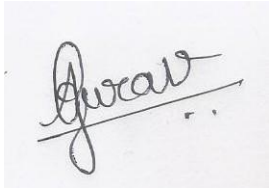

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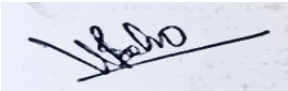

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **ANKITA PANDEY** DEPARTMENT: **SELF FINANCE** CLASS: **SYBBI** SEMESTER: **IV** Subject : (**CORPORATE LAW**)

MONTH: **NOVEMBER TO MAY** ACADEMIC YEAR: **2022 - 2023**

LEARNING OBJECTIVE/S: **The pupils will be able to learn about the contract Act, where they will learn the concept of contract, essentials and types and rules regarding the contract.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Company Law – An Overview	A) Development of Company Law in India. B) Doctrines Governing Corporates – Lifting the Corporate Veil, Doctrine of Ultra Vires, Constructive Notice, Indoor Management, Alter Ego. The Principle of Non Interference (Rule in Foss V/s Harbottle) – Meaning , Advantages , Disadvantages & Exceptions, Majority and Minority Rights under Companies Act C) Application of Company Law to Banking and Insurance Sector : Application of Companies Act to Banking and Insurance sector governed by Special Acts. S.1(4) of Companies Act 2013	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board

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TEACHING PLAN (UNIT PLAN)

UNIT 2 Regulatory Framework governing Stock Exchanges as per Securities Contracts Regulation Act 1956 :	Regulatory Framework governing Stock Exchanges as per Securities Contracts Regulation Act 1956 : □ Definition of Securities, Spot Delivery Contract, Ready Delivery Contract, Stock Exchange. □ Corporatisation and demutualisation of Stock Exchange – Meaning, procedure & Withdrawal □ Power of Recognised Stock Exchange to make rules restricting voting rights etc □ Power of Central Government to Direct Rules or Make rules □ Power of SEBI to make or amend bye laws of recognised stock exchange □ Books and Accounts to be maintained by recognized stock exchange □ Grounds on which stock exchange can delist the securities of a company. Section 3 to Section 20	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board

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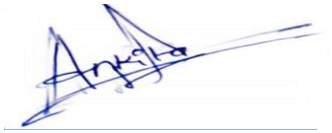
TEACHING PLAN (UNIT PLAN)

UNIT 3 Security Exchange Board Of India	Security Exchange Board Of India : A) SEBI: Objectives-terms-establishment-powers-functions-accounts and audit- penalties –registration. B) Issues of Disclosure Investors Protection Guidelines: Pre & Post obligations-conditions for issue-Debt Security-IPO-E-IPO-Employee option-right-bonus-preferential allotment intermediary-operational-promoter lock in period requirements-offer document.	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board
UNIT 4 The Depositories Act, 1996 :	The Depositories Act, 1996 : □ Depository – Meaning , Benefits , Models, Functions Participants □ The Depository Act 1996 – Objectives, Eligibility condition for depository services, Fungibility, Bye laws of depository , Governance of Depository and Internal audit of depository Participants □ BSDA and single registration for depository participants.	15	MANAN PRAKASHAN	Lecture method Case Study Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. BRISTI BISWAS **DEPARTMENT**: Business Economics **CLASS**: FYBFM **SEMESTER**: II (**Subject**: BUSINESS ECONOMICS)

MONTH: SEP 2022-MARCH 2023 **ACADEMIC YEAR**: 2022-2023

LEARNING OBJECTIVE/S: To learn a better role of an entrepreneur and skilled manager Build familiarity with the operation of markets and optimization in an economic context

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Module I **Introduction to business economics** **Module II**	Introduction : Business Economics ,basic concepts for business economic analysis ,functional relations and tool for economic analysis. Introduction to market demand and supply, demand supply, market equilibrium, changes in market equilibrium.	15	H.l.Ahuja Advanced Economic Theory	Chalk & board

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Demand Analysis	demand function, price, income and substitution effects, nature of demand curve under different markets.	10		
Module III **Supply and production decisions and cost of production**	Meaning of demand,law of demand,determinants of demand, Meaning of elasticity, price elasticity of demand , income elasticity of demand , cross elasticity of demand,promotional elasticity of demand, importance of elasticity of demand , relationship between price elasticity of demand and revenue concept. Significance of demand forecasting ,types of demand forecasting, steps in demand forecasting ,methods of demand forecasting.	10	H.l.Ahuja Advanced Economic Theory	Chalk & board
	Features of monopolistic competition, short-run equilibrium of the firm, long run equilibrium of the firm , selling cost and its effects, role of advertisement.	10		

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MODULE IV	meaning of oligopoly, characteristics of oligopoly, collusive and non collusive oligopoly,price rigidity,collusive oligopoly, price leadership.			
MODULE V	Meaning of pricing practices, degrees of price discrimination, conditions for price discrimination, conditions for profitable price discrimination, equilibrium of price discriminating monopolist ,dumping. Introduction to pricing practices part II, marginal cost pricing ,cost plus pricing ,multi product pricing Transfer pricing	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

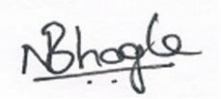
NAME OF THE STAFF: NEHA VAIBHAV TAMBE DEPARTMENT: BFM CLASS: FYBFM SEMESTER: I (Subject: IFS)

MONTH: JUNE-NOV ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT2 Financial Markets	a] Introduction to financial market b] Classification of Financial Markets	10	Book by Manan publications/Internet	1. CHALK & BLACK BOARD METHOD .INTERACTIVE METHOD
UNIT 4 Financial Instruments	a] Financial Instruments & its classification b) innovation in financial instruments c] Evaluation of Financial Instruments	10	Book by Manan publications/Internet	1. CHALK & BLACK BOARD METHOD



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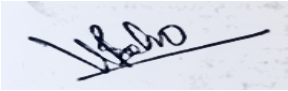

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TEACHING PLAN (UNIT PLAN)

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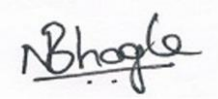
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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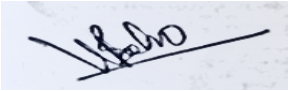

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Janhavi V. Raut DEPARTMENT: Commerce (SFC) CLASS: F.Y.B.F.M SEMESTER: II

MONTH: November - March ACADEMIC YEAR: 2022- 2023 SUBJECT: Environmental Science

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge about Environment and its Science & Environmental Management System . Even create better understanding about the Environmental Science.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Environment : An Overview	A) Environment : structure, components and typology	04	Book by Sheth publication & Vipul publications	Board , Chalk and Duster & interactive method
	B) Ecosystem as part of environment	04		
	C) Biodiversity	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Natural Resources	A) Natural Resources: Definition, Importance & classification	03	Book by Sheth publication & Vipul publications	Board , Chalk and Duster & Interactive method
	B) Utilization & conservation of natural resources	04		
	C) Natural Resources & Associated problems	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Environment & Economic Activities	A) Nature of economic activities	04	Book by Sheth publication & Vipul publications	Board , Chalk and Duster & Interactive method
	B) Environmental & Economic Activities and associated problems	02		
	C) case studies on impact of human activities on environment	02		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – IV Environment Management	A) Environmental Management – concept & Need	03	Book by Sheth publication & Vipul publications	Board , Chalk, Duster And Interactive method
	B) Tool of Environmental Management, Environmental Impact Assessment, Environmental Audit	04		
	C) Role of technology in Environment management – GIS, GPS, Remote sensing as tools	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

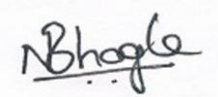
NAME OF THE STAFF: NEHA VAIBHAV TAMBE DEPARTMENT: BFM CLASS: FYBFM SEMESTER: II (Subject: FOUNDATION COURSE - II)

MONTH: DEC- MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 1 Globalisation & Indian Society	Concepts of liberalization, privatization and globalization. Growth of information technology and communication and its impact manifested in everyday life. Impact of globalization on industry: changes in employment and increasing migration. Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides.	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
UNIT 2 Human Rights	a]Concept of Human Rights. b] Evolution of Human Rights c] The Universal Declaration of Human Rights	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD



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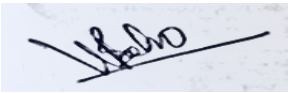

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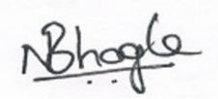
TEACHING PLAN (UNIT PLAN)

	d] Fundamental Rights in Constitution			• INTERACTIVE METHOD
UNIT 3 Ecology	a] Concept of environment & ecology. b] Importance of environmental studies, Environment as a Natural capital & quality of human life. c] Environmental Degradation, Causes, Impact on human life d] Sustainable Development – Concept, Components e] Poverty & Environment	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
UNIT 4 Understanding Stress & Conflicts	Causes of stress & Conflicts in individual & society. Agents of Socialization & the role played by them in developing the individual. Significance of values, ethics & prejudices in developing the individuals. Stereotypying & prejudice as significant factors in causing conflicts in society. Aggression & Violence as the public expression of conflicts.	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD



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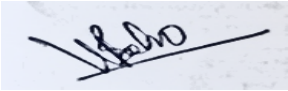

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TEACHING PLAN (UNIT PLAN)

UNIT 5 Managing stress & conflict in Contemporary Society	Types of conflicts and use of coping mechanisms for managing individual stress. Maslow's theory of self-actualisation. Different methods of responding to conflicts in society, Conflict Resolution, & Efforts towards building peace & harmony in society.	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 50

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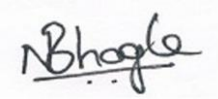

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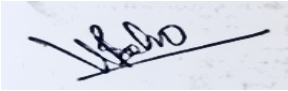

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pranali Prabhakar Gurav DEPARTMENT: Accountancy CLASS: FYBFM SEMESTER: II (Subject : Financial Accounting II)

MONTH: December to March ACADEMIC YEAR: 2022 - 23

LEARNING OBJECTIVE/S: The general education curriculum will enable students to acquire skill, knowledge and experience.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1 : Shares And Debentures:	1. Issue of Shares and Debentures. 2. Types of Shares and Debentures (in India). 3. Accounting Treatments for Issue of Shares and Debentures with New Market and SEBI	15	Financial Accounting Textbook	Chalk Board
Unit 2 : Corporate Accounting:	1. Capitalisation of Reserves and Issue of Bonus Shares. 2. Preparation of Corporate Financial Statements in Vertical Form.	15	Financial Accounting Textbook	Chalk Board
Unit 3 : Share Valuation:	1. Valuation of Shares. 2. Buyback of Shares and Own Debentures? 3. Investment Accounting.	15	Financial Accounting Textbook	Chalk Board

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Unit 4 : Indian Accounting Standards:	1. AS, GAAP and their Impact on Income Statement and Balance Sheet. 2. Latest Development: Computerization of Accounting and Softwares.	15	Financial Accounting Textbook	Chalk Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Priyanka Devnath Rajput DEPARTMENT: Commerce(Self-Finance) CLASS: FYBFM

SEMESTER: II (Subject : Computer Skills) MONTH: DECEMBER - APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S The learners will be able to: To gain the knowledge of Computer Hardware, Windows Operating System, Application of Internet, MS Word and MS Excel.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Computer Hardware	A) Personal Computers- identification/demonstration of different storage Devices like CD and CD drive, hard disk- HDD, storing and retrieving data from various storage devices.	04	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk, Duster & Google classroom
	B) Identification of various input and output devices. Primary memory, RAM and ROM- Processor- CPU, its speed- machine cycle, ports, computer buses, Different types of printers.	04		
	C) Introduction to trouble shooting of personal computers.	02		

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Windows	A) Introduction, features, various versions of windows, My computer, my documents, recycle bin, network neighborhood.	05	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk, Duster & Google classroom
	B) Start menu, taskbar, file and folder operation (creating, copying, moving, deleting), system tools, creating shortcuts.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Internet	A) What is internet, most popular internet services, functions of internet like email, WWW, FTP, UseNet, Instant messaging.	05	Computer Skills - I By Rimple Sanchla	Board , Chalk, Duster & Google

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TEACHING PLAN (UNIT PLAN)

	B) Internet telephony, using address book, working with task list, scheduling appointments, reminders, events.	05	and www.wikipedia.com	classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV Word – 2013	A) Getting started, The Word window, New documents, Document navigation, Editing text, Working with text, Undo and Redo commands, Cut, copy, and paste, Find and replace Text formatting,.	03	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk, Duster, Google Classroom, & Computer (MS-Word Software)
	B) Character formatting, Tab settings, Paragraph formatting, Paragraph spacing and indents Tables, Creating tables, Working with table content, Changing the table structure Page layout, Headers and footers.	04		
	C) Page setup Graphics, Adding graphics and clip art, Working with graphics Proofing, printing, and exporting, Spelling and grammar, AutoCorrect, Printing and exporting documents.	03		

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	Practical: - Create Window- Cut, Copy, Paste, Find & Replace Text Formatting, Header & Footers, Adding graphics and clip art, Spelling and grammar in Word - 2013.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - V Excel-2013	A) Fundamentals of Excel, Cut, Copy, Insert, Delete, Paste Special, Custom Formatting, Undo, Redo.	03	Computer Skills - I By Rimple Sanchla and	Board , Chalk, Duster And Computer (MS-Excel software)
	B) Excel Formulas – Basic, Useful functions and Paste Function, Calc, Comments, Drawing toolbar, Edit, Replace, Delete, Clear.	03		

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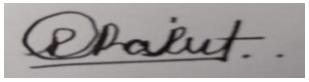
	C) Essential Printing, Data Sorting, Hiding, AutoFormats, Protection, Basic Charts, Basic Formatting, If Function.	04	www.wikipedia.com	
	Practical: - Create Spreadsheet in Excel - 2013, Create Table- Insert & Delete Records, Basic Excel Formulae, Cut, Copy, Paste & Basic Charts in Excel-2013.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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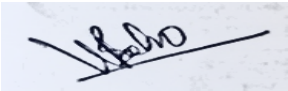

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Kavita Vilas Purandare DEPARTMENT: Financial Management CLASS: SYBFM SEMESTER: III
(Subject : Business Law) MONTH: June to October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To learn Indian Contract Act, Special contract, Sale of goods act and negotiable instrument act.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indian Contract Act	• Indian contract Act, 1872 • Definitions, agreement, kinds of agreement, contract, kinds of contract, valid, void, voidable, contingent and Quasi contract • Offer or proposal – definition, essentials of valid proposal or offer, distinguish between offer and invitation to offer. • Capacity to contract, consent and free consent	15		Chalk and Board
Special Contracts	• Law of Indemnity and guarantee (ss.124-125, ss-126-129, 132-147 • Law of Bailment and pledge • Law of Agency	15		Chalk and Board

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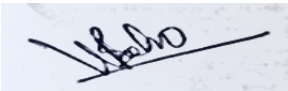

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TEACHING PLAN (UNIT PLAN)

Sale of goods act	• Introduction, Definition, Formalities of contract of sale • Distinguished between sale and agreement to sell, sale and hire purchase agreement • Transfer of property as between the seller and the buyer, rights of an unpaid seller.	15		Chalk and Board
Negotiable instruments act	• Meaning, definition, characteristics of negotiable instrument, evidence, presumptions, classifications • Promissory note and bill of exchange, • Definition of acceptor, acceptance, drawer, drawee	15		Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____

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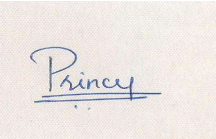
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: SELF FINANCE CLASS: SYBFM SEMESTER: III Subject: COMMODITY MARKETS

MONTH: June to October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:SCOPE OF COMMODITY MARKETS IN INDIA

PAPER,UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 3- COMMODITY EXCHANGES **UNIT 4-**	Function and Role Trading and clearing methods Commodity future Commodity Specific Exchange v/s Multi Commodity Exchange.	15	Commodity Exchange Concept, Tools, Guideline By Issouf Soumaré	CHALK AND BOARD
STRENGTHENING COMMODITY	Role of Government Role of Commodity Exchange	15	Commodity Exchange	YOUTUBE



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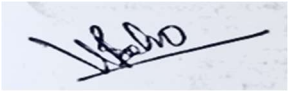

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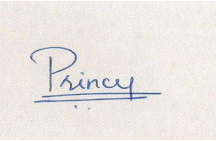
TEACHING PLAN (UNIT PLAN)

MARKETS IN INDIA	Other institutions Training and Development of Dealers.		Concept, Tools, Guideline By Issouf Soumaré	



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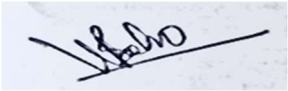

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Priyanka Bangera DEPARTMENT: Commerce SFC CLASS: SYBFM SEMESTER: III (Subject : Commodity Market)

MONTH: June to October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to : SCOPE OF COMMODITY MARKETS IN INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1- Introduction to Commodity Market	• Emergency of Commodity Market • Dynamic of Global Commodity Market.	12	Vipul Commodity Market -S.P Das	CHALK AND BOARD
UNIT 2 - COMMODITY MARKETS IN INDIA	• Commodity Exchange in India • Role of Information in commodity Market • Linkages between Equity and commodity Market.	15	Vipul Commodity Market -S.P Das	CHALK AND BOARD

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TEACHING PLAN (UNIT PLAN)

	• Commodity Market -Logistics and warehouse.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

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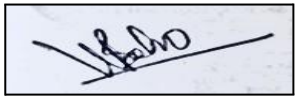

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Priyanka Bangera DEPARTMENT: Commerce SFC CLASS: SYBFM SEMESTER: III (Subject : Equity Market)

MONTH: June to October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to : The learners will be able to : SCOPE OF EQUITY MARKET

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2- Primary Market	• IPO - Methods followed, Book Building, Offer for sale • Role of Merchant bankers in fixing the price • Red – Herring Prospectus – it's unique features • ASBA and its features • Green Shoe option • Sweat equity, ESOP	15	Vipul Equity Market -Jia Makhija	CHALK AND BOARD

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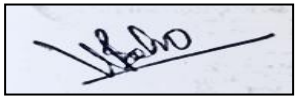

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TEACHING PLAN (UNIT PLAN)

	• Rights issue of shares, Non voting shares ,ADR, GDR,IDR			
UNIT 4- Importance of Equity Markets in developing country like India	• Need for attracting more investors towards equity • Need for strengthening secondary markets • Link between Primary Market and Secondary Market.	15	Vipul Equity Market -Jia Makhija	CHALK AND BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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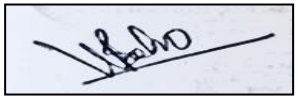

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Priyanka Devnath Rajput DEPARTMENT: Commerce(Self-Finance) CLASS: SYBFM

SEMESTER: III (Subject :Computer Skills -II) MONTH: JULY- DECEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of Excel, Data Base Management System, Different system of E-Business Software and Online Banking.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Advanced Spreadsheet	Pivot Table.	01	Computer Skills - II By Rimple Sanchla And www.Guru99.com https://www.guru99.com/excel-tutorials.html	Board, Chalk, Duster And Computer (MS-Excel Software)
	Advanced formulae.	03		
	Lookups.	02		
	Macros.	02		
	Working with other programs.	02		
	Inserting a spreadsheet sheet in word document.	01		
	Modifying an inserted spreadsheet.	01		
	Inserting a linked chart in a Word Document.	01		
	Inserting graphic in a spreadsheet.	02		
	Practical: Pivot, Advance Formulae, Lookups, Macros, Inserting linked chart in a word document	05		

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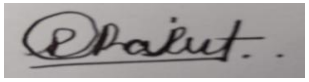
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Data Base Management System	Concepts.	01	Computer Skills - II By Rimple Sanchla And www.Guru99.com https://www.guru99.com/dbms-tutorial.html	Board , Chalk, Duster and Computer Software
	Tables.	02		
	Fields.	02		
	Datatypes.	03		
	RDBMS.	03		
	Primary Key.	02		
	Foreign Key.	02		
	Practical: - Create Table, Primary Key, Foreign Key, Insert Data, Delete table.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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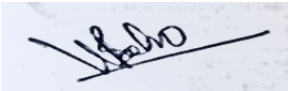

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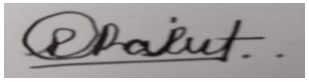
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Modern E Business Software Systems	Introduction.	01	Computer Skills - II By Rimple Sanchla And www.wikipedia.com	Board , Chalk and Duster
	Enterprise Resource Planning – ERP.	03		
	Supply chain Management- SCM.	02		
	Customer Relationship Management- CRM.	02		
	Sales Force Automation- SFA.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV Other Emerging Technologies	Other emerging technologies	03	Computer Skills - II By Rimple Sanchla And www.wikipedia.com	Board , Chalk and Duster
	Net-banking	03		
	Online banking software	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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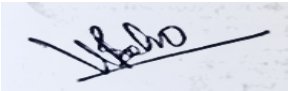

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. SEEMA SIHANA** DEPARTMENT: **SELF FINANCE** CLASS:- SYBFM SEMESTER: **III**

SUBJECT: MONEY MARKET **MONTH**: JUNE-OCTOBER 2022 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The subject of Money Market is very important as it provides vital information about opportunities for investment as well as capital formation to investors, job seekers and to the students. It helps to transform from traditional savers to smart investors.

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MONEY MARKET	**Module I- Introduction to Money Markets** **Meaning of money market, Features of money market, Importance of money market, Role of Primary dealers, Development of trade and industry, Development of capital market, Smooth functioning of commercial banks, Effective Central Bank Control, Formulation of suitable monetary policy, Source of finance to government**	**15**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**
	Module II- Regulatory Framework of Money Markets **Regulatory framework of RBI, FIMMDA (Fixed Income, Money Market and Derivatives Association) and FEDAI (Foreign Exchange Dealers Association of India), NDS-OM**	**15**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**

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	Web.			
	. **Module III- Money Market Instruments** **Conventional:- Treasury bills, Money at call and Short Notice in the Call Loan market, Commercial bills, Promissory notes in the bill market.** **Modern:- Commercial papers, Certificate of Deposit, Inter-bank Participation Certificates, Repo instrument, Banker's Acceptance.** **Money Market Mutual Fund:- Meaning, advantages, disadvantages, Regulatory framework for money market mutual funds, various money market funds operational in Indian market.**	15	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**
	Module IV- Recent Developments in Money Market **Integration of Unorganised sector with the Organised sector, Widening of call money market, Introduction of Innovative Instrument, Offering of market rates of interest, Promotion of**	**15**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**

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	bill culture, Entry of money market mutual funds, Setting up of credit rating agencies, Adoption of suitable monetary policy, Establishment of DFHI, Setting up of Security Trading Corporation of India Ltd (STCI).			

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: SYBFM SEMESTER: III (Subject : Management Acc)

MONTH: _____JUNE _____ ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Management Accounting	Meaning and Definition of Management Accounting, Nature and Frame work	1	Management Accounting By I.M Pandey	• Chalk • Board • Discussion • Examples • Google classroom
	Functions of Management Accounting, Decision Making Process	1		
	Information of Decision making (Information, Strategic, tactical and operational information)	1		
	Financial Accounting v/s Management Accounting , Qualities of Management Accounting	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____5____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: SYBFM SEMESTER: III (Subject : Management Acc)

MONTH: _____JULY-AUGUST _____ ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Analysis and Interpretation of Accounts	Introduction and importance of Financial statements, Vertical form of Balance sheet and Profit and loss Account suitable for analysis	3	Management Accounting By I.M Pandey	• Chalk • Board • Discussion • Examples • Google classroom
	Simple sums based on Analysis of Financial Statement	3		
	Format and Calculation Tricks of Trend Analysis Comparative Statement Common size Statement Practical Illustration	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: SYBFM SEMESTER: III (Subject : Management Acc)

MONTH: AUGUST - SEPTEMBER ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 Ratio Analysis and Interpretation based on Vertical Financial Statements	Introduction and Meaning of Financial statement analysis, Steps, objectives , Types of Analysis, simple sums on financial statement	3	Management Accounting By I.M Pandey	• Chalk • Board • Discussion • Examples • Google classroom
	Ratio Analysis- Meaning, Classification , DU Pont chart, Advantages and limitations.	2		
	Balance sheet ratio, Revenue statement Ratio and Combined Ratio (Applications of formulas)	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____8____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KALPANA JAIN** DEPARTMENT**:** ACCOUNTANCY CLASS: **S.Y.B.F.M.** SEMESTER: I**V**

SUBJECT: CORPORATE FINANCE MONTH: November - **February** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S : To explain the concepts of Corporate Finance.
The learners will be able to :understand the concepts in simple way which will help them to understand the importance of it in Practical life.

PER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**ACHING METHOD/ ICT TOOLS USED**
Unit I Corporate Finance -An Overview	***Functions of Finance in a Business enterprise** ***Emergence of Corporate Finance as an Integral part of Business Finance.** ***Need for professional approach in managing corporate finance.** ***Need for professional approach in managing corporate finance.** ***Role and Functions of a corporate finance Manager** ***Requirements of an efficient Corporate Finance Manager.**	02 02 02 02 01	Financial Derivatives – C.S.Divyesh Patel	Chalk-Board Method

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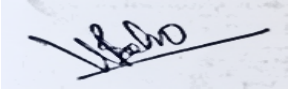

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		02		
Unit II Planning the Corporate Financial Activities	*Theories of Capitalisation. *Difference between Owned Capital and Borrowed Capital. * Cost of Capital * Practical problems based on Cost of Capital *Marginal Costing *Marginal cost Statement and Formulas *Break -Even Analysis *Practical problems on Marginal Costing	01 01 01 05 01 02 01 05	Options,Futures and Other	Chalk-Board Method
Unit III Capital Structure	*Meaning and Definition of Capital Structure *Factors affecting Capital structure -Trading on Equity. *Concepts of Watered Capital,Over-Capitalisation and Under-Capitalisation. *NPV,IRR,DCF Analysis and Payback Period.	01 01 02 03	Options,Futures and Other	Chalk-Board Method

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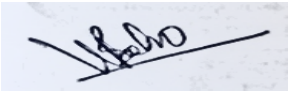

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	* Practical problems on calculation of EPS *Practical problems on calculation of NPV,IRR,PI and Payback Period.	05 05		
Unit-IV Sources and Method of Raising Corporate Finance	*Types and features of Corporate Securities. *Management of New issues including Pricing of securities. *Role of Commercial Banks and Investment Banking Financing the Corporate Sector. *Leasing as a method of Corporate Finance. *Practical problems	02 02 03 02 06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____

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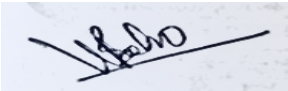

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE-SELF FINANCE CLASS: SYBFM SEMESTER: 4
(Subject: FOREIGN EXCHANGE (FC)) MONTH: October- March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to: Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Foreign Exchange Market:	An Introduction FOREX trading volume, FOREX trading locations, Details about major traded currencies, Evolution of foreign exchange ,Market and Foreign Exchange System Market Participants: Banks and Financial Institutions, Merchants, other customers, speculators and hedgers, Central Bank, Forex dealers and market makers and brokers, FOREX – trading and SWIFT Robots	15	Vipul Publications	Lecture method, Discussion method
Unit 2: Introduction to Indian Foreign Exchange Market	FOREX market in India: A historical perspective FERA Vs. FEMA, Pre-liberalization Exchange Rate Regime in India and Hawala market	12	Vipul Publications	Lecture method, Discussion method
	Brief introduction to currency convertibility in current and Capital account.	3	Vipul Publications	Lecture method, Discussion method
Unit 3: Operational aspects of	a) Floating Rate, Currency Boards &Currency Basket Systems, Brief review on various exchange rate regime, Advantages of free and Fixed Exchange Rate regime, Pros & Cons of managed floating exchange rate	8	Vipul Publications	Lecture method, Discussion method

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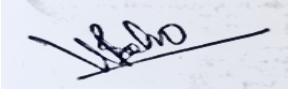

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foreign exchange market and foreign exchange contracts	regime, Prevalence of Currency Boards Regime, Practice of Currency Basket Regime.			
	b) Foreign Exchange Contracts: Spot and Forward Contracts Cash, Spot trading Trade Date, Settlement PR date Spot trading roll over mechanism. Foreign Exchange Forward contracts, Fixed Maturity Contract, Partially Optional Contract, Fully Optional Contract, Non-Delivery Forward Contracts, Foreign Exchange Futures Contract, Different Dimensions of Foreign Exchange Future, Contract specification trading at National Stock Exchange of India.	7	Vipul Publications	Lecture method, Discussion method
Unit 4: Foreign Exchange Arithmetic and Risk Management	Types of Exchange Rates Direct Rate, Indirect Rate and Cross Rate Arbitrage- Geographical and triangular Interest Rate- spot Contracts, forward contracts and SWAP Points Risk Management in Foreign Exchange Market- Need and importance of foreign exchange management methods adopted (Spot and forward, arbitrage, cross currency deals, SWAPS, options and futures	15	Vipul Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_15 EACH___

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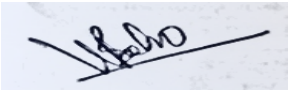

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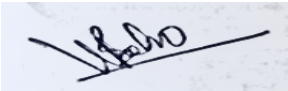

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE-SELF FINANCE CLASS: SYBFM SEMESTER: 4
(Subject: MERCHANT BANKING) MONTH: October- March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to: Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Introduction to Merchant Banking	Introduction to Merchant banking, Importance, need, functions, Merchant banking services - Project counselling, Loan syndication and Corporate counselling; Pre-issue merchant banking activities - Obtaining stock exchange approvals, action as per SEBI guide lines, Finalizing the appointments with - manager/advisers, Underwriters, Brokers, Bankers, Advertising agency, Drafting and approval of prospectus; Post-issue merchant banking activities – Issue subscription, Allotment of shares, Refunds, Periodical reports to SEBI.	15	Vipul Publications	Lecture method, Discussion method
Unit 2- Initial Public Offering (IPO)	Initial Public Offering - Issuance Process, Role of registrar, SEBI guidelines for IPO eligibility, IPO grading, Draft Red Herring Prospectus (DRHP), Listing agreement, Pricing the issue, Book building process, Allotment; SEBI Guidelines in Drafting the Offer Document; Pre and Post launch activities in IPO, SEBI Guidelines on QIP,	12	Vipul Publications	Lecture method, Discussion method
	Rights and Bond Issues	3	Vipul Publications	Lecture method, Discussion method

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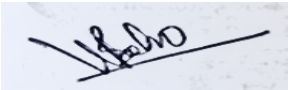

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Unit 3- Issue of DRs, ADRs and CPs	Types and Process of Issuing of Depository Receipts (DRs) - American Depository Receipts (ADRs), Global Depository Receipts (GDRs), European Depository Receipts (EDRs), Indian Depository Receipts (IDRs), ADR structure and norms, Indian Depository Receipts (IDRs) and Guidelines	12	Vipul Publications	Lecture method, Discussion method
	Procedure for issue of Commercial Paper – Credit Rating, Redemption process.	3	Vipul Publications	Lecture method, Discussion method
Unit 4: Issue of Bond and Debentures	Procedure for Issue of Bond and Debentures, Foreign currency convertible bonds	15	Vipul Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15 EACH__

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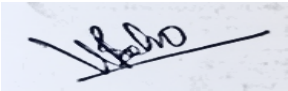

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. SEEMA SIHANA** DEPARTMENT: **SELF FINANCE** CLASS **SYBFM** SEMESTER: **IV**

SUBJECT: EQUITY MARKETS II **MONTH**: NOVEMBER TO MARCH 2023 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: **Gives insight to students about working and importance of equity and debt market in depth.**

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EQUITY MARKETS II	**Module I- Developments in Indian Equity Market:-** **Domestic Savings and Investments.** **Disinvestments, FDI and Foreign Portfolio Investment (FPI).** **Role of Retail Investors.** **Share Price and Share Price Volatility.** **Role of SEBI.**	**15**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**
	Module II- Valuation of Equities:-	**15**	**Text book and Internet**	
	Factors affecting Share Prices. **Balance Sheet Valuation.** **Dividend Discount model (Zero growth, constant growth and Multiple growth)**			**1 Chalk and Black Board Method** **2 Example** **3 Discussion**

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	Module III- Statistical Analysis of Share Price Movement:- **Efficient Market Hypothesis.** **Stochastic Models.** **Brownian Motion.** **BETA**	**15**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**
	Module IV- Dealings in Stock Exchanges:- **Role of Brokers.** **Stock Market Quotations.** **Procedure for Buying and Selling.** **BOLT - Online Trading/ NEAT System.** **Clearing and Settlement.** **Order Matching.**	**15**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Heena ObaidQureshi DEPARTMENT:Commerce CLASS:TYBFM SEMESTER: V (Subject : Business Valuation)

MONTH: June-Sept ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVES: To understand about the basics of business valuationThe learners will be able to learn business valuation and its methods

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1.Basics of valuation	Introduction, price v/s value, purpose, bias, uncertainties, role of valuation.	15	Vipul Prakashan, Taxmann	Chalk- Board
2. Valuation models		20		
	Asset based approach, income based approach, discounted flow, free cash flow.			

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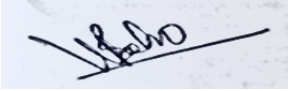

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Heena Obaid Qureshi DEPARTMENT: Commerce CLASS: TYBFM SEMESTER: VI (Subject : Financial Derivatives)

MONTH: June-Sept ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to study in depth about global and Indian Derivative Market.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1.INTRODUCTI 4.CLEARING AND	The learners will be able to study in depth about global and Indian Derivative Market, EXCHANGE TRADED vs OTC DEVELOPMENT OF EXCHANDE TRADED DERIVATIVES,GLOBAL DERIVATIVE MARKET, EXCHANGE TRADED vs OTC, L.C GUPTA &J.R VERMA COMMITTEE	15	Manan pralashan and Vipul Prakashan	Chalk-Board

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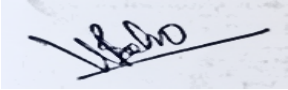

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

	FUTURES AND OPTIONS TRADING SYSTEM, TRADE WORK STATIONS, SPECIFICATION FOR STOCK & INDEX ELIGIBILITY FOR TRADING CHARGES, CLEARING MECHNISM, OPTION-OPEN POSITION CALCULATION MARGINING &SETTLEMENT MECHANISM, RISK MANAGEMENT MECHNICS OF SPAN,PORTFOLIO MARGIN REQUIREMENTS	20		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:35

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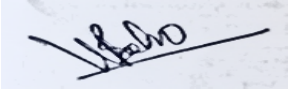

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TEACHING PLAN (UNIT PLAN)

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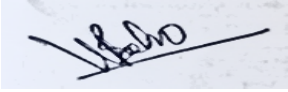

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: keyur Limbachiya DEPARTMENT: Commerce (SFC) CLASS: TYBFM SEMESTER: V (Subject: Equity research)

MONTH: June - September ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The general education curriculum will enable students to acquire skills, knowledge and experienced.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I Introduction to research and research methodology	Introduction of research,	**1**	Equity research by Kunal Rambhia Past papers ICAI modules and other online references,	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM
	Meaning of research	**3**		
	Objectives of research	**2**		
	Features of research	**2**		
	Importance of research in financial market	**2**		

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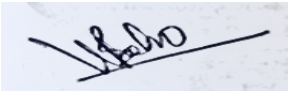

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TEACHING PLAN (UNIT PLAN)

	Objectives of research	**2**		
	types of research	**1**		
UNIT II Equity research – An overview	Introduction, meaning, goals of equity research	**2**	Equity research by Kunal Rambhia Past papers ICAI modules and other online references,	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM
	Elements And types of equity research, classifications of stock	**3**		
	Market participants,	**2**		
	role of equity research in capital market & different approaches to equity research	**2**		
	Role of research analyst, Responsibilities of research analyst	**2**		
	Basic principles of interaction with client/ companies	**2**		
	Qualities of research analyst	**1**		

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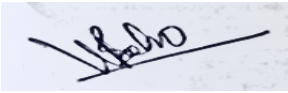

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TEACHING PLAN (UNIT PLAN)

UNIT IV Company analysis	History of business V/S future of business	**2**	Equity research by Kunal Rambhia	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM
	Reading of financial statement	**1**		
	Peer comparison	**1**		
	Dividend and earning history of the company	**2**		
	Role of corporate actions of the company	**2**		
	Interest rates and measure of interest rate sensitivity	**1**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 37

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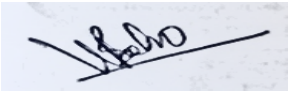

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TEACHING PLAN (UNIT PLAN)

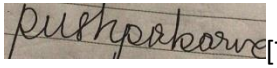
NAME OF THE STAFF: PUSHPA RAKESH BARVE DEPARTMENT: Commerce (SFC) CLASS: TYBFM SEMESTER: V (Subject : Business Ethics)

MONTH: JULY-AUGUST ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to : Imparting an adequate knowledge of the subject matter.

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
UNIT III Shareholders Rights	Rights of Shareholders	3	D.P. Mittal	Chalk talk discussion you tube online resourses
	Challenges of exercising shareholders rights	3		
	Corporate governance and third-party transactions	2		
	Role of investors association in securing shareholders rights	2		
	Role of institutional investors in corporate governance	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12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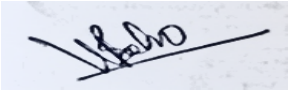

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TEACHING PLAN (UNIT PLAN)

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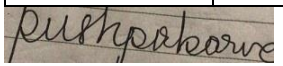
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PUSHPA RAKESH BARVE DEPARTMENT: COMMERCE(SFC) CLASS: TYBFM SEMESTER: V (Subject : Marketing of financial services)

MONTH: JULY- AUGUST ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: : Imparting an adequate knowledge of the subject matter.

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
UNIT II Marketing Mix	Service Market Segmentation positioning differentiation	3	Philip Kotler	Chalk & Board, Discussion Google Classroom You Tube Videos
	Promotion communication designing managing process	3	Manan textbook	
	Constructing service environment managing service	2		
	Service quality and productivity Customer Loyalty	2		
	Customer Relationship Management	2		



TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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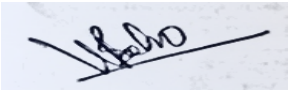

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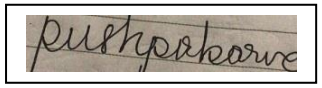

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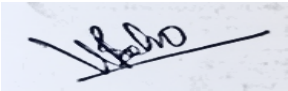

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: TYBFM SEMESTER: V (Subject : Business Valuation)

MONTH: _____JUNE _____ ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 **VALUATION OF SELECT TANGIBLE ASSETS**	Introduction, meaning of fixed assets, importance of asset valuation., Measuring asset value, related cost in relation to fixed asset valuation, self-constructed fixed assets., Assets acquired in exchange; fixed assets held for disposal	04	R.L. GUPTA	• Chalk • Board • Discussion • Examples • Google classroom
	Practical illustration	05		
	B) Valuation of Shares:- Meaning, Need, Importance, of valuation of shares, Factors affecting valuation of shares, Methods of valuation of shares.	02		
	Practical Illustrations	05		

NUMBER OF LECTURES ALLOCATED TO THE UNIT 4: _____16_____

[Surekha Bhargav]
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: TYBFM SEMESTER: V (Subject : Business Valuation)

MONTH: _____JULY-AUGUST _____ ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 **VALUATION OF GOODWILL AND SHARES**	A) Valuation of Goodwill:- Meaning, Nature, Features, Classes, Elements, Types of Goodwill, Factors of Goodwill Valuation and Methods of goodwill valuation	03	**R.L. GUPTA**	• Chalk • Board • Discussion • Examples • Google classroom
	Practical Illustration	05		
	B) Meaning and types of Patents and Copyright,	01		
	Practical illustration	5		
	Introduction, meaning of Brand, factors, steps, Valuation method of brand, Practical illustration	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 5: 16

[Surekha Bhargav]
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Heena Obaid Qureshi DEPARTMENT: _Commerce CLASS: TYBFM SEMESTER: _VI (Subject : Risk Management)

MONTH: Nov-April ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: _To understand the Risk factors in global market and hedging btechniques.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1.INTRODUCTIO	CONCEPT ANDIDENTIFICATION OF RISK,RISK AND UNCERTAINTY, STRATEGIC &OPERATIONAL RISK, DYNAMIC NATURE OF RISK,FINANCIAL RISK, BUSINESS RISK	10	Text book	Chalk-Board
2.Evaluation Of Risk	RISK MEASUREMENT,SOURCES &IMPACT OF COMMON BUSINESS RISK,MARKET ,CREDIT,LIQUIDITY, IMPACT UPON THE STAKEHOLDERS,NATURE &IMPORTANCE OF FINANCIAL RISK,	10		

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TEACHING PLAN (UNIT PLAN)

3.Foreign Exchange Risk	EVALUATION OF FINANCIAL RISK,ALTERNATIVE RISK MANAGEMENT TOOLS, ROLE OF RISK MANAGER & RISK COMMITTEE IN MANAGING RISK	06		
4.Exchange Rate Risk	INTEREST RATE MARKET, IDENTIFYING INTEREST RATE RISK MEASURING INTEREAT RATE RISK	08		

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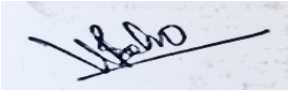

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pranali Prabhakar Gurav DEPARTMENT: Accountancy CLASS: TYBFM SEMESTER: VI (Subject : CORPORATE RESTRUCTURING)

MONTH: January to April ACADEMIC YEAR: 2022 - 23

LEARNING OBJECTIVE/S: The general education curriculum will enable students to acquire skill, knowledge and experience.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit : 1 Introduction and Concepts:	1. Meaning of Corporate Restructuring. 2. Need, Scope and Modes of Restructuring 3. Historical Background. 4. Emerging Trends. 5. Planning, Formulation and Execution of Various Corporate Restructuring Strategies - Mergers, Acquisitions, Takeovers, Disinvestments and Strategic Alliances, Demerger and Hiving off. 6. Expanding Role of Professionals.	15	Corporate Restructuring	Chalk Board.

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TEACHING PLAN (UNIT PLAN)

Unit 2 : Merger and Amalgamation, Corporate Demerger and Reverse Merger::	1. Introduction to Merger and Amalgamation, Corporate Demerger and Reverse Merger. 2. Legal, Procedural, Economic, Accounting, Taxation and Financial Aspects of Mergers and Amalgamat ionsincluding Stamp Duty and Allied Matters. 3. Interest of Small Investors. 4. Merger Aspects under Competition Law. 5. Cross Border Acquisition and Merger. 6. Concept of Demerger; Modes of Demerger - by Agreement, under Scheme of Arrangement. 7. Demerger and Voluntary Winding Up. 8. Legal and Procedural Aspects; Tax Aspects and Reliefs. 9. Reverse Mergers Procedural Aspects and Tax Implications. 10. Meaning and Concept of Takeover. 11. Types of Takeovers; Legal Aspects - SEBI Takeover Regulations. 12. Disclosure and Open Offer Requirements. 13. Bail Out Takeovers and Takeover of Sick Units.	15	Corporate Restructuring	Chalk Board.

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TEACHING PLAN (UNIT PLAN)

	14. Takeover Defenses. 15. Cross Border Takeovers.			
Unit 3 : Funding of Merger and Takeover and Financial Restructuring	1. Financial Alternatives; Merits and Demerits. 2. Funding through various Types of Financial Instruments including Equity and Preference Shares, Debentures, Securities with Differential Rights, Swaps, Stock Options; ECBS, Funding through Financial Institutions and Banks. 3. Rehabilitation Finance. 4. Management Buyouts/Leveraged Buyouts. 5. Reduction of Capital. 6. Reorganization of Share Capital. 7. Buy-Back of Shares - Concept and Necessity. 8. Procedure for Buy-Back of Shares by Listed and UnlistedCompanies.	15	Corporate Restructuring	Chalk Board.

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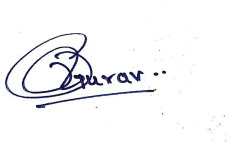
TEACHING PLAN (UNIT PLAN)

Unit 4 : Post-Merger Reorganization:	1. Factors involved in Post - Merger Reorganization. 2. Integration of Businesses and Operations. 3. Assessing Accomplishment of Post-Merger Objectives; Measuring Post Merger Efficiency.	15	Corporate Restructuring	Chalk Board.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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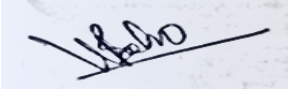

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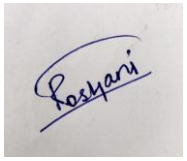
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dr.Roshani Nagar DEPARTMENT: SFC CLASS: TYEME SEMESTER: SEM SEM VI Subject : VENTURE CAPITALAND PRIVATE EQUITY

MONTH: JAN TO MAR ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: Venture capital and equity in detail

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1,2,3,4	1. Conceptual understanding of Venture Capital and Private Equity Venture Capital –Over View of Venture Capital- Definition- Features- Types –Roles • Concept of PE and its characteristics- Definition- Difference between PE,VC and Hedge Funds- Nature of PE Firm- Players in the PE market– Benefit of PE Finance • PE Fund –Legal structure and terms- Private Equity Investments and Financing-Private Equity Multiples and Prices- Private Equity Funds and Private Equity Firms- Investment Feature and	10 per unit	J C Verma	Chalk and board method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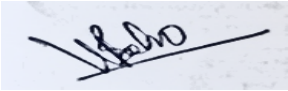

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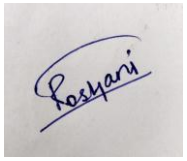
TEACHING PLAN (UNIT PLAN)

	Consideration **2 Structure and Valuation approaches** • Structure and Regulation of Venture Capital and Private Equity- Business Cycle of PE –Structure of VC/PE firms- Limited Liability Partnerships- Routes of VC/PE investments in India- Regulatory Aspects of VC/PE investments • Valuation approaches- Risk and Returns- Analysis of Funds- Conventional Method- Revenue Multiplier Method **3 Strategies of Private Equity** • Leverage Buyout, Growth Capital, Mezzanine Capital- • Distressed Debt, other Strategies • Due Diligence- Procedure and Challenges- Due Diligence in Emerging PE Market-Investing in Developing Market- Past Performance and Strategy			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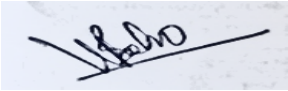

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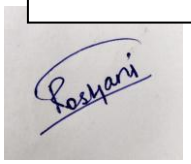
TEACHING PLAN (UNIT PLAN)

	4 Exit strategies for Private Equity • Modes of exits in Indian Context and Challenges involved- • IPO, Promoter Buyback ,Sale to Other PE funds, Sale to other strategic Investors, Stake Swap, M & A's, Open Market-, Secondary Market			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40



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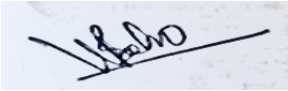

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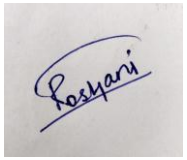
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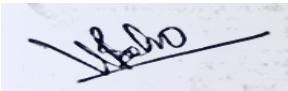

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: SFC CLASS: FYFMG SEMESTER: I (Subject : BUSINESS ENVIRONMENT)

MONTH: August TO November ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to:

- Understand the meaning of business and different types of business environments.
- Get knowledge of environmental analysis through PESTEL Analysis, SWOT Analysis
- Interpret foreign trade in India, Balance of Trade, FDI Investment Flows and its Implication for Indian Industries.
- Know in detail about WTO, MNC's and TNC's.
- Have in-depth knowledge about social audit, carbon credit and CSR of the corporate enterprise.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1- Business Ethics	• Business Objectives- meaning, features, importance and core objectives of business • Dynamics of Business and its Environment • Types of Business Environment • ENVIRONMENTAL ANALYSIS- Meaning, Importance, Factors • PESTEL Analysis	10	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion, example and test

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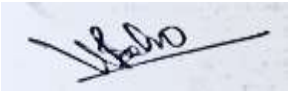

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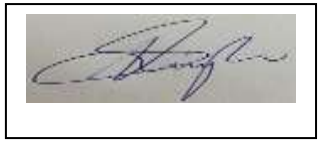
	• SWOT Analysis			
Unit 3- Contemporary Issues	• Corporate social responsibility • Social responsibility of business • Ecology and business • Carbon credit • Corporate governance • Social audit • Evolution of social audit • Benefits of social audit • Social audit v/s commercial audit •	10	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion, example and test

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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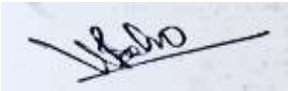

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: SFC CLASS: FYFMG SEMESTER: I (Subject : INDIAN FINANCIAL SYSTEM)

MONTH: August TO November ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to:

- Understand the meaning of Indian financial system and different functions of financial system.
- Get knowledge of financial market and its components along with its functionality.
- Interpret the various financial instruments and services offered by financial institutions across globe.
- Know in detail about commodity market and various categories of commodities.
- Gain insight on commodity derivatives and various commodity exchanges.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1- Financial System	• Financial System- meaning, nature, importance, role • Structure if Indian financial system • Flow of funds in financial system • Financial system and economic development • Economic development and economic growth • Financial development and its effect on economic development	10	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion, example and test

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TEACHING PLAN (UNIT PLAN)

	• Indicators of economic development • Factors influencing financial development in India			
Unit 2- Non-banking financial institutions	• NBFC's- meaning, concept, nature, role of NBFC's • Sources of finance • RBI guidelines for NBFC's- role and functions • NABARD- role and functions • SEBI- role and functions • SEBI as a regulator	10	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion, example and test

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHWINI GURAV DEPARTMENT: INVESTMENT MANAGEMENT CLASS: FYBIM SEMESTER: I (Subject : FINANCIAL ACCOUNTNG)

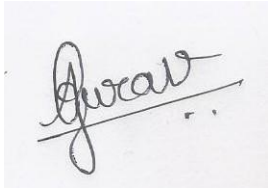
MONTH: ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

1) Understand & Remember- the concept of financial accounting, solve Final accounts

2) Understand & Remember- the concept of single entry system; solve single entry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3- Single Entry	Single Entry	01	Book by Vipul publications/Internet	Google Classroom, Chalk and duster
	Practical Problems	05	Book by Vipul publications/Internet	Google Classroom, chalk and duster



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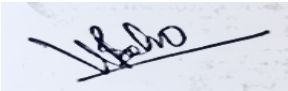

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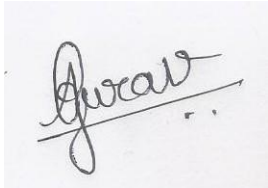
TEACHING PLAN (UNIT PLAN)

Unit 4- Final Accounts	Trading A/c, Profit & Loss A/c, Balance Sheet	01	Book by Vipul publications/Internet	Google Classroom, chalk and duster
	Practical Problems	05	Book by Vipul publication/Internet	Google classroom, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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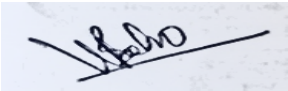

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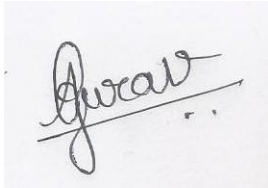

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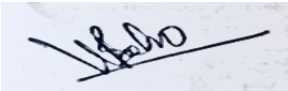

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TEACHING PLAN (UNIT PLAN)

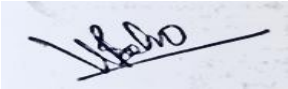
NAME OF THE STAFF **GAURI YADAV** DEPARTMENT: **SELF FINANCE** CLASS: **FYFMG** SEMESTER: I (Subject : FINANCIAL ACCOUNTING)

MONTH: **AUG - DEC** ACADEMIC YEAR: **2022 - 23**

1. LEARNING OBJECTIVE/S: Understand & Remember- the concept of financial accounting, need and also the ledger , journal postings

2) Understand & Remember- the concept of depreciation with both methods

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1. NATURE & PURPOSE OF ACCOUNTIN G	Meaning and scope of Accounting: Need, development & Definitio persons interest in Accounting disclosure, branches of accounting A and Accounting Standards	10	Sheth publication	Chalk & Duster



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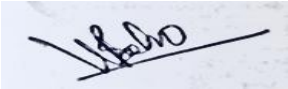
TEACHING PLAN (UNIT PLAN)

2. DEPRECIATION	Journals, ledger, subsidiary books Trial Balance, Financial Account Sums solved Q.1 to Q.6	15	Sheth publication	Chalk & Duster
	Meaning, clauses, types Straight line method, Written down value n claim	5	Sheth publication	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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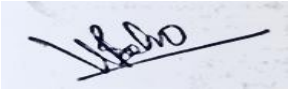

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: lejesh keloth DEPARTMENT:FMG CLASS: A SEMESTER: I (Subject : Business economic)

MONTH: JUNE TO OCT ACADEMIC YEAR: 22-23

LEARNING OBJECTIVE/S: Enable the students to pursue further studies in this discipline understanding the functioning of Domestic as well as global economy

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Micro-economics Paper-1	**Module 1- Scope importance of Business Economics:** Basic tools, opportunity cost principles, cost principle, basic economics relation, total average and marginal relation. The basis of market demand market supply equilibrium price-in demand and supply curve and equilibrium	05	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method
	Module 2- Demand Analysis: Market, what is competition -demand curve, market demand versus individual demand: movement along the demand curve shifts in demand curve supply, market supply and individual supply three steps in the analysing change in equilibrium, price ceiling and floor taxes and the impact- price elasticity of demand - total revenue and elasticity of demand- impact of price elasticity on revenue.	10	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method

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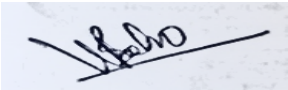

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	DEMAND ESTIMATION AND FORCSTING; Meaning and significance , method of demand estimation , survey and statistical method.			
Micro-economics Paper-1	**Module 3:SUPPLY AND PRODUCTION COSTOF PRODUCTION: Production function short run analysis with the law of variable production function with two variable , ridge lines and least cost combination of input ; long run production function and law of return to Scale ,economic and economics of Scale.** **COST CONCEPT;** Accounting cost and economic cost, implicit and explicit, social cost in private cost , historical cost and replacement cost, sankosh and incremental cost, fixed and variable cost, total average and marginal cost, cost output relation in short run and long run (sums)	05	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method
Micro-economics Paper-1	**Module 4** ;MARKET STRUCTURE; Perfect cooperation and monopoly and pricing and output decision under imperfect competition Short run and long run equilibrium of competitive firm and of industry – monopoly –short run n long run equilibrium of a firm under monopoly . Monopolistic competition ;Equilibrium of a firm under monopolistic competition , debate over role of advertising.	05	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method

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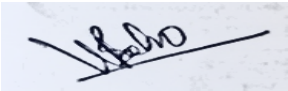

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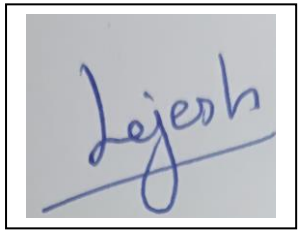
	Module 5 Pricing practices. **Cost orientation pricing method ; cost – plus (full cost0 pricing , marginal pricing , mark up pricing , discriminating pricing ,multiple – produt pricing – transfer pricing .**	05	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:30



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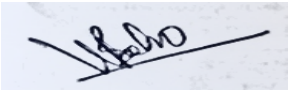

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TEACHING PLAN (UNIT PLAN)

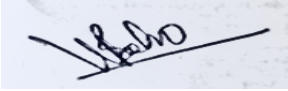
NAME OF THE STAFF: **NEHA SANJAY MAHESHWARI** DEPARTMENT: **COMMERCE SFC** CLASS: **FYFMG** SEMESTER: **I**

(Subject :**Foundation course I)**

MONTH: **JULY-OCT** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: Understand the Indian Culture, Politics, Constitution, Rights

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1	**Overview of Indian Society.** Understanding the multi-cultural diversity of Indian society through its demographic composition: population distribution according to religion, caste, and gender; Appreciate the concept of linguistic diversity in relation to the Indian situation; Understand regional variations according to rural, urban and tribal characteristics; Understanding the concept of diversity as difference	5	**Textbook of Vipul's prakashan & online refrenses**	**Blackboard, Chalk, Google classroom**
	Concept of Disparity-1 Understanding the concept of disparity as arising out of stratification and inequality; Explore the disparities arising out of gender with special reference to violence against women, female	8	**Textbook of Vipul's**	**Blackboard, Chalk, Google classroom**



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TEACHING PLAN (UNIT PLAN)

Unit 2	feticide (declining sex ratio),and portrayal of women in media; Appreciate the inequalities faced by people with disabilities and understand the issue of people with physical and mental disabilities		**prakashan & online refrenses**	
Unit 3	**Concept of Disparity-2** Examine inequalities manifested due to the caste system and inter-group conflicts arising thereof; Understand inter-group conflicts arising out of regionalism and linguistic differences	8	**Textbook of Vipul's prakashan & online refrenses**	**Blackboard, Chalk, Google classroom**
Unit 4	**The Indian Constitution** Philosophy of the Constitution as set out in the preamble; The structure of the Constitution-the Preamble, Main Body and Schedules; Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution	8	**Textbook of Vipul's prakashan & online refrenses**	**Blackboard, Chalk, Google classroom**

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TEACHING PLAN (UNIT PLAN)

Unit 5	**Significant Aspects of Political Processes** The party system in Indian politics; Local self-government in urban and rural areas; the 73rd and 74th Amendments and their implications for inclusive politics; Role and significance of woman in politics	8	**Textbook of Vipul's prakashan & online refrenses**	**Blackboard, Chalk, Google classroom**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 37

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE-SELF FINANCE CLASS: FYFMG SEMESTER: 1 (Subject : IFS)
MONTH: August - December ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to: Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2-Financial Institutions	Institutional Framework, Reserve Bank of India: Objectives, Functions, Commercial Banking: Role & Development of Commercial Banking, Services by commercial banks, Problems and challenges in banking industry, Development Banks- Concept, objectives, & functions, promotional role, a brief historical perspective. An update on the performance of SFCs, LIC & GIC.	15	Vipul Publications	Lecture method, Discussion method
Unit 4-Finance Companies	The Evolution of Finance Companies, The Present Status and the Micro Finance and its importance in Rural Economy.	15	Vipul Publication	Lecture method, Discussion method

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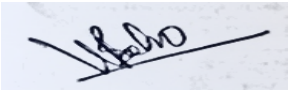

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_15___

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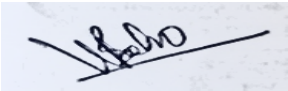

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE-SELF FINANCE CLASS: FYFMG SEMESTER: 1 (Subject : Business Environment) MONTH: August - December ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to: Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Business and Society	a) Business Ethics: Nature and Scope of Ethics, Ethical Dilemmas, Corporate Culture and Ethical Climate	5	Vipul Prakashan, Manan Prakashan	Lecture Method
	b) Development of Business Entrepreneurship: Entrepreneurship and Economic Development, Micro, Small and Medium Enterprises Development (MSMED) Act, 2006, Entrepreneurship as a Career Option	5	Vipul Prakashan, Manan Prakashan	Lecture Method
	c) Consumerism and Consumer Protection: Consumerism in India, Consumer Protection Act 1986	5	Vipul Prakashan, Manan Prakashan	Lecture Method

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TEACHING PLAN (UNIT PLAN)

Unit 4- International Environment	a) Strategies for going Global: MNCs and TNCs, WTO	7	Vipul Prakashan, Manan Prakashan	Lecture Method
	b) Foreign Trade in India- Balance of Trade, FDI Investment Flows and its Implication for Indian Industries	8	Vipul Prakashan, Manan Prakashan	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15__

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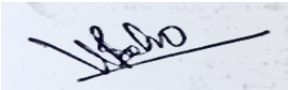

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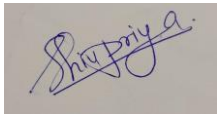
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shivpriya Acharya DEPARTMENT: Commerce (SFC) CLASS: FYFMG SEMESTER: II (Subject: Business communication I)

MONTH: July- November ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills. The learners will be able to Preparing resumes to attending interviews, convening meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills. To make students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit1. Theory of Communication	**1)** Concept of Communication- Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World Impact of technological advancements on communication 2) Channels and Objectives of Communication: Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine	**15**	Manan Publication, Sheth Publication, Vipul Publication	**Chalk - Board**
	Objectives of Communication: Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Moral of Employees 3) Methods and Modes of Communication:			



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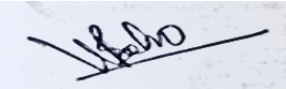

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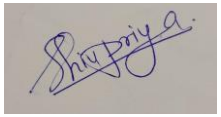
TEACHING PLAN (UNIT PLAN)

	Methods: Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette Modes: Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing			
Unit 2 - Obstacles to Communication in Business World	1) Problems in Communication /Barriers to Communication: Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers	**15**	Manan Publication, Sheth Publication, Vipul Publication	**Chalk - Board**
	2) Listening: Importance of Listening Skills, Cultivating good Listening Skills – 4 3) Introduction to Business Ethics: Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility Teachers can adopt a case study approach and address issues such as the following so as to orient and sensitize the student community to actual business practices: Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour			
Unit 3 : Business Correspondence	1)Theory of Business Letter Writing: Parts, Structure, Layouts—Full Block, Modified Block,	**15**	Manan Publication, Sheth	**Chalk - Board**



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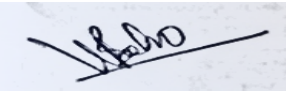

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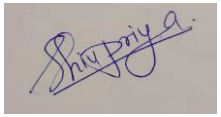
TEACHING PLAN (UNIT PLAN)

	Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation [Letter of Appointment, Promotion and Termination, Letter of Recommendation (to be taught but not to be tested in the examination)]		Publication, Vipul Publication	
Unit 4 :language and underwriting skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities ♣ Listening Comprehension ♣ Remedial Teaching ♣ Speaking Skills: Presenting a News Item, Dialogue and Speeches ♣ Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. ♣ Reading Comprehension: Analysis of texts from the fields of Commerce and Management	**15**	Manan Publication, Sheth Publication, Vipul Publication	**Chalk - Board**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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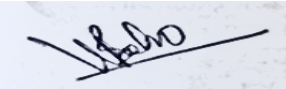

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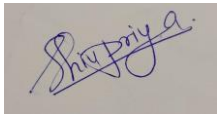
TEACHING PLAN (UNIT PLAN)



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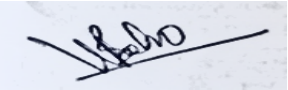

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Komal Sudhir Naik DEPARTMENT: Mathematics CLASS: FYFMG

SEMESTER: II Subject : Business Statistics MONTH: Dec-April ACADEMIC YEAR:2022-23

LEARNING OBJECTIVE/S: : develop critical and logical thinking and will able to solve various problems

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS UNIT I POPULATION AND SAMPLE	Definition of Statistics, Scope of Statistics in Management and Financial Markets, Concept of Population and Sample with Illustration. Methods of Sampling: SRSWR, SRSWOR, Stratified, Systematic (Description of Sampling Procedures Only). Data Condensation and Graphical Methods: Raw Data, Attributes and Variables, Classification, Frequency Distribution, Cumulative Frequency Distribution. Graphs: Histogram and Frequency Polygon. Diagrams: Multiple Bar, Pie, Subdivided Bar.	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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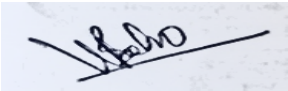

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Komal Sudhir Naik DEPARTMENT: Mathematics CLASS: FYFMG

SEMESTER: SEM II SUBJECT: Business Statistics MONTH: Dec-April ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS UNIT II MEASURES OF CENTRAL TENDENCY	Criteria for Good Measures of Central Tendency, Arithmetic Mean, Median, Mode for Grouped and Ungrouped Data, Combined Mean	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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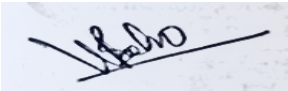

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Komal Sudhir Naik DEPARTMENT: Mathematics CLASS: FYFMG

SEMESTER: SEM II SUBJECT: Business Statistics MONTH: Dec-April ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS UNIT III MEASURES OF DISPERSION	Concept of Dispersion, Absolute and Relative Measures of Dispersion, Range Variance, Standard Deviation, Coefficient of Variation, Quartile Deviation, Coefficient of Quartile Deviation.	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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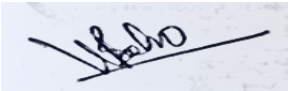

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Komal Sudhir Naik DEPARTMENT: Mathematics CLASS: FYFMG

SEMESTER: SEM II SUBJECT: Business Statistics MONTH: Dec-April ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS UNIT IV CORRELATION AND REGRESSION	Concept of Correlation, Positive and Negative Correlation, Karl Pearson's Coefficient of Correlation, Meaning of Regression, Two Regression Equations, Regression Coefficients and Properties.	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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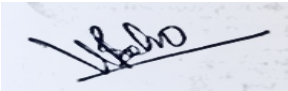

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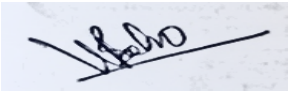

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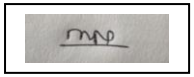
TEACHING PLAN (UNIT PLAN)

DEPARTMENT: SELF FINANCE (COMMERCE) CLASS: FYFMG SEMESTER: _II_ (Subject : FINANCIAL ACCOUNTING) MONTH: DEC TO APRIL ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S:
The learners will be able to : TO ENHANCE THE ABILITIES OF LEARNER TO DEVELOP THE CONCEPT OF FINANCIAL ACCOUNTING AND ITS SIGNIFICANCE IN THE BUSINESS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BRANCH ACCOUNTING	MEANING ,CLASSIFICATION OF BRANCHES, ACCOUNTING FOR DEPENDENT BRANCH NOT MAINTAINING FULL BOOKS DEBTORS METHOD , STOCK & DEBTORS METHOD	15	.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	CHALK & DUSTOR MEYTHOD PPT , GOOGLE CLASSROOM
DEPARTMENTAL ACCOUNTS	MEANING , BASIS OF ALLOCATION OF EXPESNSES & INCOMES, INTER DEPARTMENTAL TRANSFER AT COST PRICE & INVOICE PRICE, STOCK RESERVE DEPARTMENTAL TRADING P&L ACCOUNT & BALANCE SHEET	15	S.N. MAHESHWARY, KHAN & JAIN, Timothy R. Mayes	
HIRE PURCHASE INSTALLMENT	MEANING, CALCULATION OF INTEREST, ACCOUNTING FOR HIRE PURCHASE TRANSACTION , JOURNAL ENTRIREES, LEDGER ACCOUNTS DISCLOSURE IN BALANCE SHEET FOR HIRER & VENDOR	15		
PARTNERSHIP ACCOUNTS	ADMISSION OF A PARTNR, RETIREMENT OF A PARTNER, DEATH OF A PARTNER, DISSOLUTIN OF A PARTNERSHIP , PIECEMEAL DISTRIBUTION	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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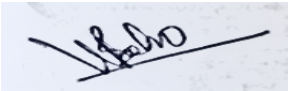

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **NEHA SANJAY MAHESHWARI** DEPARTMENT: **COMMERCE SFC** CLASS: **FYBFMG** SEMESTER: **II**

(Subject : **Principles of finance)**

MONTH: **OCT- JUNE** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: Understand the Financial Services and how they work

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1	**Introduction to Finance and Financial Planning** Finance, Definition, Nature and scope of Finance function Financial Management: Meaning, scope and objectives Organisational framework of financial management- Relationship of finance department with other departments- Role of Finance Manager Financial Planning: Concept- objectives-types-steps-significance- basic considerations- limitations	8	Introduction to Financial System by Jia Makhija by Vipul Prakashan	Chalk Board Flow Chart

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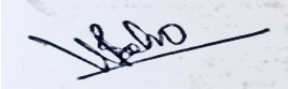

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Unit 2	**Capital Structure and Capitalisation** Meaning of Capital Structure- Criteria of determining capital structure- factors influencing capital structure Meaning of Capitalisation , narrower and broader interpretation Over capitalization - Meaning, causes, consequences, remedies Under capitalisation- Meaning, causes, consequences, remedies	7		
Unit 3	**External Sources of Finance** Shares- Meaning, types, advantages, limitations Debentures- Meaning, types, advantages, limitations Public Deposits- Meaning, advantages, limitations Borrowing from banks- types of loans, advantages, limitations	5		
Unit 4	**Internal Sources of Finance** Reserves and surplus, bonus shares, retained earnings, Dividend policy,	4		

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TEACHING PLAN (UNIT PLAN)

	Role of Depreciation, Importance, advantages and limitations of these sources.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

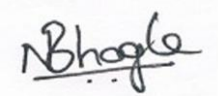
NAME OF THE STAFF: NEHA VAIBHAV TAMBE DEPARTMENT: FMG CLASS: FYFMG SEMESTER: II (Subject: FOUNDATION COURSE - II)

MONTH: DEC- MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 1 Globalisation & Indian Society	Concepts of liberalization, privatization and globalization. Growth of information technology and communication and its impact manifested in everyday life. Impact of globalization on industry: changes in employment and increasing migration. Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides.	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
UNIT 2 Human Rights	a]Concept of Human Rights. b] Evolution of Human Rights c] The Universal Declaration of Human Rights	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD



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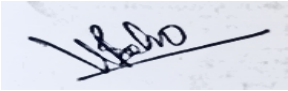

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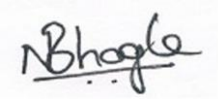
TEACHING PLAN (UNIT PLAN)

	d] Fundamental Rights in Constitution			• INTERACTIVE METHOD
UNIT 3 Ecology	a] Concept of environment & ecology. b] Importance of environmental studies, Environment as a Natural capital & quality of human life. c] Environmental Degradation, Causes, Impact on human life d] Sustainable Development – Concept, Components e] Poverty & Environment	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
UNIT 4 Understanding Stress & Conflicts	Causes of stress & Conflicts in individual & society. Agents of Socialization & the role played by them in developing the individual. Significance of values, ethics & prejudices in developing the individuals. Stereotypying & prejudice as significant factors in causing conflicts in society. Aggression & Violence as the public expression of conflicts.	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD



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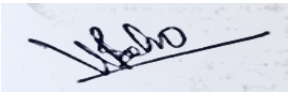

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UNIT 5 Managing stress & conflict in Contemporary Society	Types of conflicts and use of coping mechanisms for managing individual stress. Maslow's theory of self-actualisation. Different methods of responding to conflicts in society, Conflict Resolution, & Efforts towards building peace & harmony in society.	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 50

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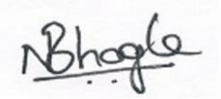

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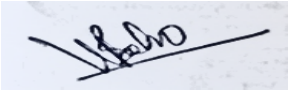

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Priyanka Devnath Rajput DEPARTMENT: Commerce(Self-Finance) CLASS: FYFMG

SEMESTER: II (Subject : Computer Skills -I) MONTH: DECEMBER- APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to: To gain the knowledge of Computer Hardware, Windows Operating System, Application of Internet, MS Word and MS Excel.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Computer Hardware	A) Personal Computers- identification/demonstration of different storage Devices like CD and CD drive, hard disk- HDD, storing and retrieving data from various storage devices.	04	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk , Duster & Google Classroom
	B) Identification of various input and output devices. Primary memory, RAM and ROM- Processor- CPU, its speed- machine cycle, ports, computer buses, Different types of printers.	04		
	C) Introduction to trouble shooting of personal computers.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Windows	A) Introduction, features, various versions of windows, My computer, my documents, recycle bin, network neighborhood.	05	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Start menu, taskbar, file and folder operation (creating, copying, moving, deleting), system tools, creating shortcuts.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Internet	A) What is internet, most popular internet services, functions of internet like email, WWW, FTP, UseNet, Instant messaging.	05	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Internet telephony, using address book, working with task list, scheduling appointments, reminders, events.	05		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV Word – 2013	A) Getting started, The Word window, New documents, Document navigation, Editing text, Working with text, Undo and Redo commands, Cut, copy, and paste, Find and replace Text formatting,.	03	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk, Duster And Computer (MS-Word Software)
	B) Character formatting, Tab settings, Paragraph formatting, Paragraph spacing and indents Tables, Creating tables, Working with table content, Changing the table structure Page layout, Headers and footers.	04		
	C) Page setup Graphics, Adding graphics and clip art, Working with graphics Proofing, printing, and exporting, Spelling and grammar, AutoCorrect, Printing and exporting documents.	03		
	Practical: - Create Window- Cut, Copy, Paste, Find & Replace Text Formatting, Header & Footers, Adding graphics and clip art, Spelling and grammar in Word - 2013.	05		

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - V Excel-2013	A) Fundamentals of Excel, Cut, Copy, Insert, Delete, Paste Special, Custom Formatting, Undo, Redo.	03	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk, Duster And Computer (MS-Excel software)
	B) Excel Formulas – Basic, Useful functions and Paste Function, Calc, Comments, Drawing toolbar, Edit, Replace, Delete, Clear.	03		
	C) Essential Printing, Data Sorting, Hiding, AutoFormats, Protection, Basic Charts, Basic Formatting, If Function.	04		
	Practical: - Create Spreadsheet in Excel - 2013, Create Table- Insert & Delete Records, Basic Excel Formulae, Cut, Copy, Paste & Basic Charts in Excel-2013.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Snehal Patil DEPARTMENT: Commerce (SFC) CLASS: FYFMG SEMESTER: II (Subject: Business communication II)

MONTH: Dec- February ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

1. To introduce key concepts of communication. To understand the various aspects of communication.
2. To make students aware with functional and operational use of language in organization
3. To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	4 Principles of Effective Presentation Effective use of OHP Effective use of Transparencies How to make a Power-Point Presentation	15	Reference book, university pdf, online material, PPT	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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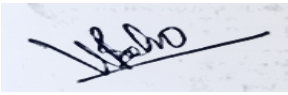

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Interviews:** Group Discussion, Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit **Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics, Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **Conference:** Meaning and Importance of Conference, Organizing a Conference **Modern Methods:** Video and Tele – Conferencing	12	Reference book, university pdf, online material , PPT	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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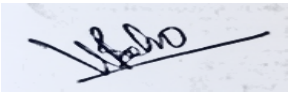

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2) Group Communication	**Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	03	PPT	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM
3) Business Correspondence	Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters, Promotional Leaflets and Fliers, Consumer Grievance Letters, Letters under Right to Information (RTI) Act	15	Reference book, university pdf, online material , PPT	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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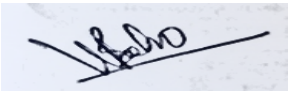

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TEACHING PLAN (UNIT PLAN)

4) Language and Writing Skills	**Reports:** Parts, **Types** - Feasibility Reports, Investigative Reports **Summarisation:** Identification of main and supporting/sub points, Presenting these in a cohesive manner	15	Reference book, university pdf, online material, PPT	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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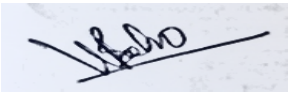

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms VALARMATHI TEVAR **DEPARTMENT:** FMG

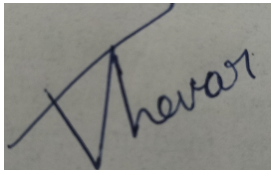
CLASS: F.Y.FMG. **SEMESTER:** II **MONTH: JANUARY ACADEMIC YEAR:** 2022-23

LEARNING OBJECTIVE/S:
The learnrs will be able to :

- Understand key concepts from economic, political, and social analysis as they pertain to the design and evaluation of environmental policies and institutions.
- Appreciate concepts and methods from ecological and physical sciences and their application in environmental problem solving.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EVS Modules 1: Environment: an overview	Environment structure, components and typology Ecosystem as part of environment- Functioning and levels of organisation Biodiversity- Classification, value, threats to biodiversity	15	Basics in Environmental Studies, Dr. Pushpendra	CHALK AND DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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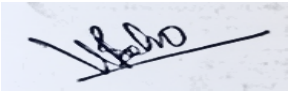

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:MsVALARMATHI TEVAR DEPARTMENT: FMG

CLASS: F.Y.FMG. SEMESTER: II MONTH: FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to :

Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EVS Modules 2: Natural Resources	Definition, importance and classification of natural resources Utilisation and conservation of water, forest, soil and energy resources Issues associated with natural resources	15	Environmental Management, Swapan Deb.·	CHALK AND DUSTER

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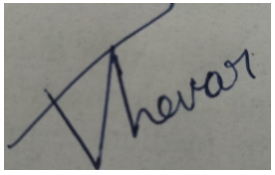
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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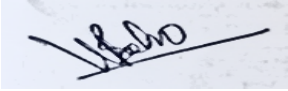

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Ms VALARMATHI TEVAR DEPARTMENT: FMG

CLASS: F.Y.FMG. SEMESTER: II MONTH: MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

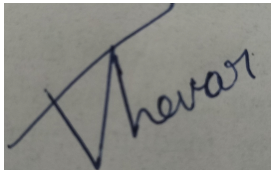
The learners will be able to :

Understand core concepts and methods from ecological and physical sciences and their application in environmental problem-solving.

Appreciate key concepts from economic, political, and social analysis as they pertain to the design and evaluation of environmental policies and instiPAPERtutions.

, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
EVS Modules 3:Economic activities Modules 4:Environment Management	nature and pattern- primary, secondary and tertiary Environmental problems associated with economic activities Case studies with reference to India Environment Management Environment management- Concept, need and relevance of environmental education Environmental Impact Assessment, Environmental audit Role of technology in Environment Management- GIS,GPS, Remote sensing as tools	30	Environment and Sustainable Development, Sundar, I.·	CHALK AND DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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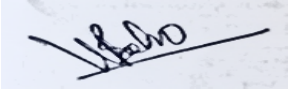

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: **SFC – BFMG**

CLASS: **SYBFMG Div A** SEMESTER**: III** MONTH: **June To Sep** ACADEMIC YEAR: **2022 - 23**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) Revise the concepts of Partnership Final Accounts
3) Solve practical questions using concepts
4) Introduction to Accounting with computer.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Corporate		16	Manan Publication,	Chalk Board, PPT

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TEACHING PLAN (UNIT PLAN)

Accounting	Unit 1 : Partnership Final Accounts		Vipul Publication	
	1) Concepts - Admission, Retirement & Death 2) Treatment of Goodwill 3) Practical problems		Sheth Publication	
	Unit 2 : Accounting with Computers	16	Manan Publication, Vipul Publication	Chalk Board, PPT
	1) Inventory vouchers- stock journal 2) Manufacturing Journal godown management, batch-wise management.		Sheth Publication	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Entrepre DEPARTMENT: Commerce (SFC)

CLASS:SYBFMG SEMESTER:III MONTH:June-oct ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III SOCIAL LAGISLATION & UNIT IV Laws related to compensation management	Employee state insurance Act, 1948	05	Business Regularity Framework by Dr. G.K.Vashney & WEB	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Miscellaneous provision Act, 1948	05		
	The payment of wages Act , 1948	05		
	Payment of bonus Act,, 1956	05		
	The payment of gratuity Act, 1972	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 26

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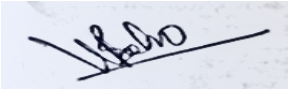

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Entrepreneurial Development (ED) DEPARTMENT: Commerce (SFC)

CLASS:SYBFMG SEMESTER:III MONTH:June-aug ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Entrepreneurial Project Development	Idea Generation – sources and methods , identification and classification of ideas ,Environment scanning and SWOT analysis .	04	Entrepreneurial Development by Dr.S.S.Khanka & S.Chand	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Preparation of project plan , points to be considered ,components of an ideal business plan	04		
	Project formulation , project appraisal – aspects and methods	04		
	Technological feasibility – managerial competency	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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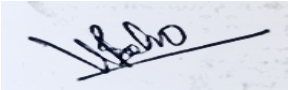

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Entrepreneurial Development (ED) DEPARTMENT: Commerce (SFC)

CLASS:SYBFMG SEMESTER:III MONTH:sep-oct ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III SLEGAL CONSIDERATION FOR DIFFERENT FORMS OF ORGANISATION	Cultural and environmental issues in setting up of business enterprise	02	Entrepreneurial Development by Dr.S.S.Khanka & S.Chand	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Sole trading firms , partnership firms	02		
	Unlimited liability partnership firms , limited company	02		
	Joint stock company , public co. , private co. NGOs	03		
	Quick start methods of business franchising	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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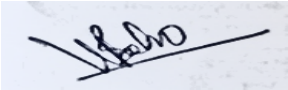

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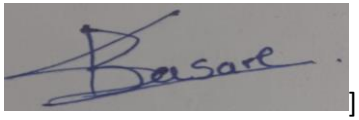
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SHRUTI BASARE** DEPARTMENT: **SELF FINANCE** CLASS: **SYFMG** SEMESTER: **III** (Subject :**CORPORATE ACCOUNTS**)

MONTH: **JULY TO OCT** ACADEMIC YEAR: **2022 - 2023**

LEARNING OBJECTIVE/S : **Creating, Evaluating, Analysing, Applying, Job Costing and Application of Process Costing. Practical Utilization of Standard Costing.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Corporate Accounts Unit 3: Amalgamation of Partnership Firms	• Amalgamation of firms: Concept and meaning • Realisation method only • Calculation of purchase consideration • Journal/ledger accounts of old firms • Preparation of the balance sheet of new firm • Adjustment of goodwill in the new firm • Realignment of capitals in the new firm by current accounts/ cash or a combination thereof. • Practical sums	15	MANAN PRAKASHAN	Lecture method Chalk and Board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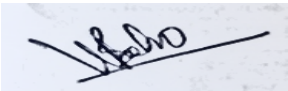

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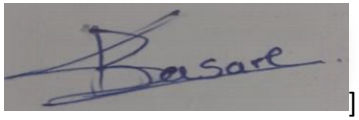
TEACHING PLAN (UNIT PLAN)

Corporate Accounts Unit 4: Conversion/ Sale of Partnership Firm into a Limited Company.	• Meaning and Introduction of Conversion/ Sale, Journal Entries. • Realisation method only • Calculation of New Purchase consideration, Journal / Ledger Accounts of old firms. Preparing Balance Sheet of new company	07	MANAN PRAKASHAN	Lecture method Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22



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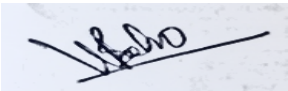

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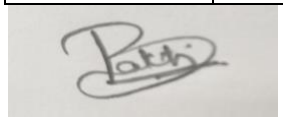
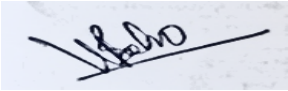
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Prof. Bhakti Vilas Purandare** DEPARTMENT: Financial Management CLASS: SYFMG SEMESTER: III
Subject: Cost Accounting MONTH: June to October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to understand the concept of cost accounting, material labour and overheads cost.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	ACHING METHOD/ ICT TOOLS USED
Unit 1. Introduction to cost accounting	Evolution Objectives and Scope of Cost Accounting Importance and Advantages of Cost Accounting Difference between Cost Accounting and Financial Accounting Limitations of Financial Accounting Definitions: Cost, Costing and Cost Accounting Classification of Cost on Different Bases Cost Allocation and Apportionment Essentials of Good Costing System, Coding System	15	Manan prakashan Cost Accounting: Principles & Practices Book Reference By M. N. Arora	Chalk, board
Unit 3. Labour cost	Labour Cost: The Concept Composition of Labour Cost Labour Cost Records Overtime / Idle Time / Incentive Schemes	15	Manan prakashan Cost Accounting: Principles & Practices Book	Chalk, board

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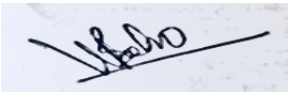
TEACHING PLAN (UNIT PLAN)

			Reference By M. N. Arora	
Unit 4. Overheads	Overheads: The Concept Classification of overheads on different bases Apportionment and Absorption of Overheads	15	Manan prakashan Cost Accounting: Principles & Practices Book Reference By M. N. Arora	Chalk, board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: COMMERCE

CLASS: SYFMG SEMESTER: III MONTH: JUN -SEPT ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVES: The learners will be able to understand the basic concepts and definitions under direct tax.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.DEFINITIONS & BASIS OF CHARGE	DEFINITIONS-ASSESEE, ASSESSEMNT YEAR,ANNUAL VALUE,PERSON.PREVIOUS YEAR	01	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK- BOARD
	BSIS OF CHARGE SECTION 3-9	01		
	EXCLUSIONS UNDER SCTION 10	01		
	RESIDENTIAL STATUS	02		
	SCOPE OF TOTAL INCOME	02		
3.DEDUCTION UNDER CHAPTER VI A	80A-RESRTICTION ON CLAIMS,80C-PAYMENT OF LIC 80CCC-CONTRIBUTION TO PENSION FUND, 80D-MEDICLAIM INSURANCE PREMIUM,	06	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK- BOARD

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	80DD-MEDICAL TRATMENT OF HANDICAPPED			

TEACHING PLAN (UNIT PLAN)

	80E-INTEREST ON EDUCATIONAL LOAN,80TTA-INTEREST ON SAVING BANK ACCOUNT 80U-HANDICAPED ASSESSEE			
4. COMPUTATION OF TOTAL INCOME	COMPUTATION OF TOTAL INCOME OF INDIVIDUAL, COMPUTATION OF TOTAL INCOME OF HUF AND DEDUCTIONS	05	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK- BOARD
5.Heads of Income	INCOME FROM HOUSE PROPERTY-SEC22 TO27, ANNUAL VALUE	05	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK- BOARD

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	PROFIT & GAIN FROM BUSINESS &PROFESSION	05		

TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28

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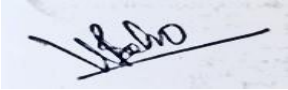

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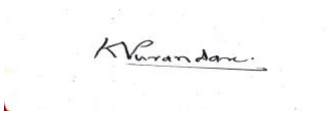
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Kavita Vilas Purandare DEPARTMENT: Financial Management CLASS: SYFMG SEMESTER: III
Subject : Business Law MONTH: June to October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To provide brief idea about framework of Indian Business Law.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 - Indian Contract Act-1872 Part-1:	Contract Definition of Contract and Agreement, Essentials of Valid Contract, Classification of Contracts, Offer and Acceptance Rules of valid offer and acceptance, Counter offer, standing or open offer, distinguish between offer and invitation to offer. Concept of Communication and Revocation of offer and acceptance (sec. 3,5) Capacity to Contract (S: 10-12)-Minor, Unsound Mind, Disqualified Persons. Consideration (5. 2 & 25)-Concept and Importance of consideration, Legal rules of Consideration, Exceptions to the Rule, 'No Consideration No Contract (Ss. 25) Unlawful Consideration (523)	12		Board and chalk



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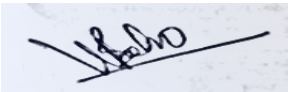

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TEACHING PLAN (UNIT PLAN)

UNIT 2 - Indian Contract Act-1872 Part-II:	Consent (Ss.13, 14-18, 39.53, 55, 66)-Agreements in which consent is not free Coercion, Undue Influence, Misrepresentation Fraud, Mistake Void Agreements (S. 24-30)-Concept, Void Agreements under Indian Contract Act Contingent Contract (5. 31), Quasi Contract (5.58-72), Concept of E- Contract& Legal Issues in formation and discharge of E-Contract. Concept of Performance of Contract (537) Modes of Discharge of Contract, Remedies on breach of Contract (73-75)	12		Board and chalk
UNIT 3 - Special Contracts:	Law of indemnity & Guarantee (Ss. 124-125, Ss. 126-129, 132-147) Concept, Essentials elements of Indemnity and Guarantee, Contract of Indemnity vs. Guarantee, Modes of Discharge of Surety. Law of Bailment (5, 148, 152-154, 162, 172, 178, 178A, 179)-Concept, Essentials: of Bailment, Kinds of Bailment, Rights and Duties of Bailor and Bailee Law of Pledge Concept, Essentials of valid Pledge, Lien concept. Difference - between Pledge and Lien, Rights of Pawnor& Pawnee (Ss 173, 174, 177) Law of Agency (Ss. 182 185, 201-209) Concept, Modes of creation of Agency. Modes of termination of Agency, Rights& Duties of Principal and Agent.	12		Board and chalk
UNIT 4 - The Sale of	Contract of Sale Essentials elements of contract of sale, Distinction between Sale and Agreement to sell (5.4) Distinguish between Sale and Hire Purchase Agreement, Types of Goods Effects of destruction of Goods (5-6,7,8), Conditions & Warranties (Ss) 11-25 & 62, 631-Concept. Distinguish between Conditions and Warranties, implied Conditions &	12		Board and chalk

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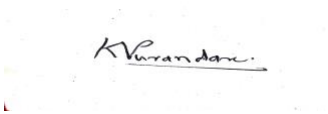
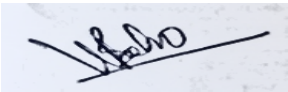
TEACHING PLAN (UNIT PLAN)

Goods Act-1930	Warranties, Concept of Doctrine of Caveat Emptor-Exceptions. Property-Concept, Rules of transfer of property (5s. 18-26) Unpaid Seller (5 45-54, 55 & 56), Concept, Rights of an unpaid seller, Remedies for Breach of contract of Sale (Ss. 55-61) Auction sale - Concept. Legal Provisions (S. 64)			
UNIT 5 - The Negotiable Instruments (Amended) Act 2015:	Negotiable Instruments Concept (513) Characteristics, Classification Negotiable Instruments (S. 11, 12, 17-20, 42, 43, 104,134,135) Maturity of Instruments Promissory Note and Bill of Exchange (Ss. 45, 108-116) Concept, Essentials of Promissory Note, Bill of Exchange S 4,5), Essential features of note and Bill of exchange, Kinds Promissory note and Bill of exchange. Cheque (5.6) Concept, Types & Crossing of Cheque, Distinguish between Bill of Exchange &Cheque, Dishonour of Cheque-Concept & Penalties (5s. 138, 139,142) Miscellaneous Provisions 15. 8-10, 22, 99-102, 118-122, 134 137) -Parties to Negotiable instruments Hoider, Hoider in due course, Rights & Privileges of Holder, in due course Payment in due course, Noting & Protest (99-104A)	12		Board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60





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TEACHING PLAN (UNIT PLAN)

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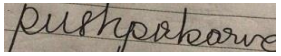
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PUSHPA RAKESH BARVE DEPARTMENT: COMMERCE(SFC) CLASS: SYFMG SEMESTER: III (Subject: BUSINESS REGULATORY FRAMEWORK) MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand various law pertaining to labour protection.

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
UNIT 1	Laws Related to Industrial Relations and Industrial Disputes: Industrial Disputes Act, 1947: Definition, Authorities, Awards, Settlements, Strikes Lockouts, Lay Offs, Retrenchment and Closure.	10	Textbook of Vipul's prakashan & online references D.P. Mittal	Blackboard, Chalk, Google classroom
UNIT 2	The Trade Union Act, 1926. Laws Related to Health, Safety and Welfare The Factories Act, 1948: (Provisions related to Health, Safety and Welfare)	12		



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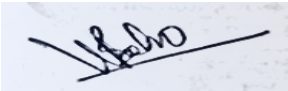

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TEACHING PLAN (UNIT PLAN)

	The Employees (Workmen's) Compensation Act, 1923 Provisions:	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28

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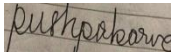
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PUSHPA RAKESH BARVE DEPARTMENT: COMMERCE(SFC) CLASS: SYFMG SEMESTER: III (Subject : Entrepreneurial Development)

MONTH: JUNE- AUGUST ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Imparting an adequate knowledge of the subject matter.

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
UNIT I & UNIT IV Concept of Entrepreneurship Entrepreneurship development programme	Concept of Entrepreneur, Intrapreneur, Characteristic	03	Entrepreneurial Development by Dr. S.S. Khanka & S. Chand	Chalk & Board, Discussion Google Classroom You Tube Videos
	Women Entrepreneur Classification and Types of Entrepreneurs	03		
	Theories of Entrepreneurship Mc Clelland, Max Weber, Joseph Schumpeter	03		
	SME, SHG with special reference to microfinance and woman entrepreneur	03		



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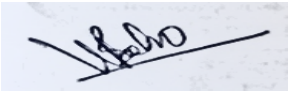

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TEACHING PLAN (UNIT PLAN)

	Definition of risks, types of risks, risk management strategies	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

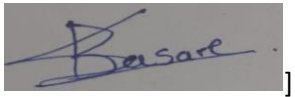
NAME OF THE STAFF: **SHRUTI BASARE** DEPARTMENT: **SELF FINANCE** CLASS: **SYFMG** SEMESTER: **III** (Subject :**COST ACCOUNTING**)

MONTH: **JULY TO OCT** ACADEMIC YEAR: **2022 - 2023**

LEARNING OBJECTIVE/S : **Creating, Evaluating, Analysing, Applying, Job Costing and Application of Process Costing. Practical Utilization of Standard Costing.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost Accounting Unit 2, Material Cost	• Material cost: The concept • Material control procedure • Documentation and recording • Stock ledger, bin card, Stock levels formulae • Stock level sums • Economic order quantity: concept and formulae • Economic order quantity practical sums • ABC analysis: concept and sums • Perpetual inventory system • FIFO, LIFO & Weighted Average sums • Inventory turnover: concept & formulae • Inventory turnover sums	15	MANAN PRAKASHAN	Lecture method Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15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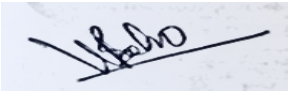

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: SYFMG SEMESTER: III (Subject : Management Acc)

MONTH: _____JUNE _____ ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world._____

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Management Accounting	Meaning and Definition of Management Accounting, Nature and Frame work	1	Management Accounting By I.M Pandey	• Chalk • Board • Discussion • Examples • Chalk
	Functions of Management Accounting, Decision Making Process	1		
	Information of Decision making (Information, Strategic, tactical and operational information)	1		
	Financial Accounting v/s Management Accounting, Qualities of Management Accounting	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___05_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: SYFMG SEMESTER: III (Subject : Management Acc)

MONTH: _____JULY-AUGUST _____ ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world._____

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 2 Analysis and Interpretation of Accounts	Introduction and importance of financial statements, Vertical form of Balance sheet and Profit and loss Account suitable for analysis	3	Management Accounting By I.M Pandey	• Chalk • Board • Discussion • Examples • Chalk
	Simple sums based on Analysis of Financial Statement	3		
	○ Format and Calculation Tricks of ○ Trend Analysis ○ Comparative Statement ○ Common size Statement ○ Practical Illustration	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: SYFMG SEMESTER: III (Subject : Management Acc)

MONTH: AUGUST - SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 4 CASH FLOW STATEMENT	Introduction and Meaning Of cash flow statement.	1	Management Accounting By I.M Pandey	• Chalk • Board • Discussion • Examples • Chalk
	Operating, Investing and financing activities	1		
	Format of cash flow statement	2		
	Practical illustration	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___09

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHWINI DATTATRAY BHOIR DEPARTMENT: COMMERCE CLASS: SYFMG SEMESTER: IV

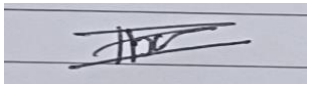
SUBJECT : BUSINESS LAW MONTH: NOVEMBER - MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to Know Various kinds of companies and features and procedure for incorporating a company.

The learners will be able to Know Partnership Meaning, Procedure for Registration of Partnership, Types of Partner, Rights and Duties of Partner.

The learners will be able to Know Rights of Consumers, forms of its Violation and Consumer Protection Act.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module. No. 1 Indian companies Act, 2013 Part -1	Chapter I – Company, Features, Role of promoters, Duties and Liabilities of the promoter, effects of pre incorporation contracts, consequences of non- registration, and lifting of corporate veil. Chapter II – Classification of companies, Distinction between		Company Law Avtar singh Indian Partnership Act,	1) Lecture and Discussion 2) Case Study



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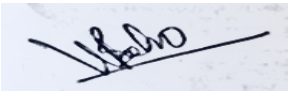

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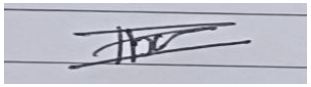
TEACHING PLAN (UNIT PLAN)

	Private company and public company, Advantages and disadvantages of Private company and public company, Common Procedure for Incorporation of company. Chapter III – Memorandum of Association and Article of Association – Concept, Clauses of MOA, AOA – Contents, Doctrine of constructive notice, Doctrine of Ultra Vires, Doctrine of Indoor management. Chapter IV - Prospectus : concept, Kinds, Contents, Private Placement	08	1932- Pollock & Mulla Agrawal V.K. Consumer protection Law and practice Vipul Prakashan	3) Black Board, Chalk and Duster
Module. No. 2 Indian companies Act, 2013 Part – 2	Chapter - I Member of a Company: Concept, Who can become a member, Modes of acquiring membership, Cessation of membership, Right and liabilities of members. Chapter – II Director: Qualification and disqualification, Classification, Director Identification number, Legal position of director.	08		



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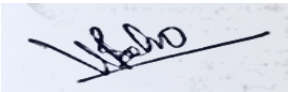

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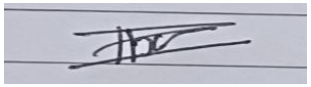
TEACHING PLAN (UNIT PLAN)

	Chapter – III Meetings : Types, Legal provisions of statutory meeting, Annual General meeting, Extra-Ordinary meeting.			
Module. No. 3 Indian Partnership Act, 1932	Chapter I - Partnership: Concept, Essentials, True test of Partnership, Partnership Deed, Types of Partnership, Rights and duties of Partners, Distinguish between Partnership and Hindu Undivided Family. Chapter II - Dissolution: Concept, Modes of Dissolution, Consequences of Dissolution Chapter III - Limited Liability Partnership 2008: Concept, Characteristics, Advantages and Disadvantages, Procedure for Incorporation. Chapter IV - Extent of L.L.P.: Conversation of LLP, Mutual Rights and Duties of Partners, winding up of LLP, Distinction	08		



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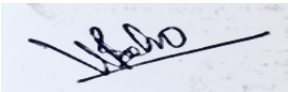

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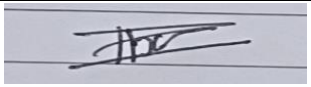
TEACHING PLAN (UNIT PLAN)

	between LLP and Partnership.			
Module No. 4 Consumer Protection Act, 1986 and Competition Act 2002.	Chapter - I Concept, Objects, Reasons for enacting the Consumer Protection Act, Definition of Consumer, Consumer Dispute, Complaint, Defect, Deficiency, Unfair Trade Practices, Goods and Services. Chapter - II - Consumer Protection Councils and Redressal Agencies: District, State and National. Chapter - III - Competition Act 2002: Concept, Salient Features, Objectives and Advantages. Chapter IV Abuse of Dominant Position, Competition Commission of India, Anti-Competition Agreements.	08		
Module No. 5	Chapter I – Intellectual Property right: Concept, Nature, Introduction and background of IPR in India.	08		



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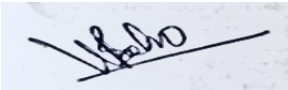

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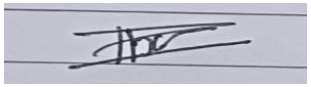
TEACHING PLAN (UNIT PLAN)

Intellectual Property Rights	Chapter II – IPR relating to patents, Concepts of Invention and discovery, comparison, Concepts of patents, General principals applicable to working of patented inventions, Terms of patents, Infringement of patent right and remedies. Chapter III - IPR Relating to Copyrights: Concept of Copyright, Ownership of Copy right, Duration or term of copy right, Original work and fairs use, Rights of copyright holder, Infringement of copyrights and Remedies. Chapter IV - IPR Relating to Trademarks: Concept, Functions, Types, trademarks that cannot be registered, Registration of trademarks and Rights of the Proprietor of Trade Marks. Procedure for registration of Trade Marks., infringement of Trademarks and Remedies.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40



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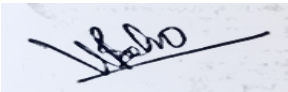

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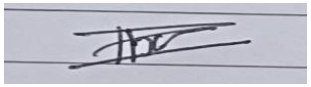

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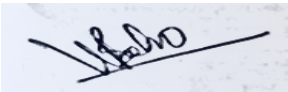

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:**GAURI YADAV** DEPARTMENT: **SELF FINANCE** CLASS: S**YFMG** SEMESTER: IV (Subject : CORPORATE FINANCE)

MONTH: **DEC - MAR** ACADEMIC YEAR: **2022 - 23**

LEARNING OBJECTIVE/S: The learners will be able to : understand the financial problems related to investors, cooperations, and the communication between investors and companies in the capital markets.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1.CORPORATE FINANCE AN OVERVIEW	Functions of finance in business enterprise Emergence of corporate finance as integral part of business finance Need for professional approach in managing corporate finance Requirement of an efficient corporate finance manager	10	Vipul prakashan	Chalk & Duster

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2. Planning the Corporate Financial Activities	Theories of Capitalisation Owned capital and borrowed capital cost of capital Break even analysis Illustrations Q.1 TO Q.6	15	Vipul prakashan	Chalk & Duster
3. Capital Structure	Meaning and definition Factors affecting capital structure Watered capital, over capitalization, and under capitalization NOV, IRR, DCF analysis and payback period Illustrations Q.1 TO Q.6	15	Vipul prakashan	Chalk & Duster
4.Sources and Methods of raising Corporate	Types and features of corporate securities Management of new issues including pricing of securities Role of commercial banks, investment bank in financing corporate s Leasing method of corp[orate finance	15	Vipul prakashan	Chalk & Duster

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TEACHING PLAN (UNIT PLAN)

Finance				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 55

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: keyur Limbachiya DEPARTMENT: Commerce (SFC) CLASS: SYFMG SEMESTER: IV (Subject: Corporate Accounting II)

MONTH: December - March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The general education curriculum will enable students to acquire skills, knowledge and experienced.

UNITS	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT -1 Preparation of final account	Relevant provisions of Companies Act related to preparation of Final Account Preparation of financial statements as per Companies Act. AS 1 in relation to final accounts of companies (disclosure of accounting policies)	10	Past papers ICAI modules and other online references, Mumbai university Book PDF,	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM
	Practical problems on preparation of final account			
UNIT -2 Redemption of	Provision of the Companies Act for redemption of Preference Shares (Sec 55 of the Companies Act, 2013), Companies (Share and Debentures) Rules. Methods of	10		

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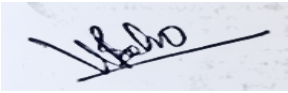

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TEACHING PLAN (UNIT PLAN)

preference shares	Redemption of fully paid-up Preference Shares as per Companies Act, 2013: redemption, (Question on entries and/or Balance Sheet)		Past papers ICAI modules and other online references, Mumbai university Book PDF,	
	Practical problem on redemption of preference shares.			
UNIT -3. Redemption of debentures	Introduction: Provisions of Section 71 (1) and (4) of the Companies Act, 2013, Creation and investment of DRR including The Companies (Share Capital and Debentures) Rules, 2014, the methods of writing-off discount/loss on issue of debentures; Terms of issue of debentures Methods of redemption of debentures: By payment in lumpsum and by payment in instalments, Conversion.	15		• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM

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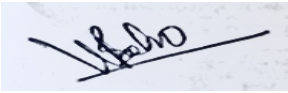

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TEACHING PLAN (UNIT PLAN)

	Practical problems (ledgers and/or Balance Sheet and /or redemption of preference shares)		Past papers ICAI modules and other online references, Mumbai university Book PDF,	
UNIT-4 ascertainment a treatment of profit prior to incorporation	Principles for ascertainment Preparation of separate, combined and columnar Profit and Loss Account including different basis of allocation of expenses/ incomes	15		
	Practical problems			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:50

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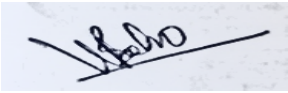

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _: Mrs. Manjushri Oak ___ DEPARTMENT: __SFC__ CLASS: _S.Y.F.Mg SEMESTER: IV (Subject : Information Technology in Management)

MONTH: _NOVEMBER - MARCH ACADEMIC YEAR: _2022- 2023_

LEARNING OBJECTIVE/S: To gain the knowledge of Business Process Management, E-Commerce, MIS and Tally accounting software

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Business Process	A) Introduction, Definition and Meaning of business process Flow of business process for accounting, purchase, sales and finance Classification of business processes.	03	Information Technology in Management By- Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Introduction, Definition and Meaning of Business Process Management Principles and practices of Business Process Management Business Process Management life cycle.	04		
	C) Theories of Business Management Process Implementation of Business process Management - need, key factors and importance Automation of business Processes - benefits, risks, challenges.	05		
	D) Accounting systems automation IT and Business Process Management Information systems - Meaning, Use of IT in Management.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Electronic Commerce	A) Meaning, Advantages and Limitations of E Commerce, The role of Strategy in E-Commerce, Value chains in E Commerce.	03	Information Technology in Management By - Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Infrastructure for Electronic Commerce Web Based Tools for Electronic Commerce, Electronic Commerce software, Security Threats to electronic Commerce.	04		
	C) Implementing Security for Electronic Commerce, Electronic Payment Systems, and Strategies for Marketing.	03		
	D) Sales & Promotion Strategies for Purchasing Logistics & Support Activities, Electronic Markets & Communities, Business Plans for Implementing Electronic Commerce.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Concept of MIS Reports in Computer Environment	A) Introduction, Concept of MIS, Need for MIS	03	Information Technology in Management By - Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Characteristic of MIS, Outputs of MIS, Role of MIS.	03		
	C) Guidelines for Developing MIS reports, Functional Aspects of the MIS, Problems in MIS.	05		
	D) Knowledge required for studying MIS, MIS and Computer.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV Computerized accounting system and Auditing	A) Role & Need and requirements of computerized accounting Basic requirements of computerized accounting system Limitations of computerized accounting system.	03	Information Technology in Management By - Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Understand the development and design of a computerized accounting system, determining how the accounting data will be processed.	03		
	C) Introduction of accounting software, Advantages, uses and various types of accounting software Accounting software TALLY - Accounting and reports.	05		
	D) Need and importance of IT in auditing, auditing in IT environment.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Office Management DEPARTMENT: Commerce (SFC)

CLASS: SYFMG SEMESTER:IV MONTH:Jan-feb ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & II Office accommodation and environment & Office automation	Office building , size , layout, safety and security measures, reception , importance shape size control.	6	Office Management by R.K.Chopra and Priyanka Gouri	Chalk board method, discussion, YouTube video, debates
	Communication –features, classification , barriers Arrangements and adjustment –furniture , chamber, cabin , rooms	6		
	Uses and abuses of labor saving appliances, kind of office machines.	6		
	Objective and advantages of various machines, use of machine, manual charts.	6		
	Kind of reports, report preparation, enquires.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Office Management DEPARTMENT: Commerce (SFC)

CLASS: SYFMG SEMESTER:IV MONTH: March-April ACADEMIC YEAR: 2022-23

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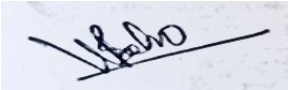

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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III & IV HRM for office management & Planning and scheduling office work	Recruitment , selection training and development of office staff Office supervision	6	Office Management by R.K.Chopra and Priyanka Gouri	Chalk board method, discussion, YouTube video, debates
	Motivation – financial and non-financial incentive to subordinate Discipline, work control ,work distribution	6		
	Office routine, flow of work, office manual, control over stationary	6		
	Routine of handling mail, importance of correspondence	6		
	Various forms of correspondence, forms and supplies.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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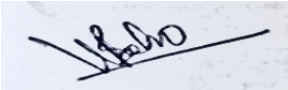

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: SYFMG SEMESTER: IV

(Subject : DIRECT TAX) MONTH: NOVEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To Understand the basic principles underlying the Provision of Tax, its procedures and sources.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT – 1 Clubbing of Income	Introduction of Clubbing of Income, Section 64(1)(ii), (iv),(vii) – Clubbing provisions relating to spouse Section 64(1) (vi) and (viii) – Clubbing provisions relating to son's wife Section 64(1A) – Clubbing provisions relating to Minor child	3	Income Taxes Law and Practice By Dr.V.K. Singhania	• Chalk • Board • Discussion • Examples • Google Class Room
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: SYFMG SEMESTER: IV

(Subject : DIRECT TAX) MONTH: NOVEMBER - DECEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: How the loss under Income Heads is adjusted (Provision regarding Set off and Carry forward

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT – 2 Setoff & Carry Forward of Losses	Sec: 70 - Set off Loss from one Source against Income from another Source under the Same Head of Income Sec: 71 - Set Off Loss from One Head against Income of another Head Sec: 71B - Carry Forward & Set off Losses from House Property Sec: 72 - Carry Forward & Set Off of Losses of Business Losses Sec: 73- Losses in Speculation Business Sec: 74- Loss under the head Capital Gains	4	Income Taxes Law and Practice By Dr.V.K. Singhania	• Chalk • Board • Discussion • Examples • Google Class Room
	Practical Illustrations	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

T.R.Patel

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: SYFMG SEMESTER: IV

(Subject : DIRECT TAX) MONTH: DECEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To Understand the basic principles underlying the Provision of Tax, its procedures and sources.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT – 3 Computation of Tax liability of Individual & HUF	Tax Slab Rate, Rebate, surcharges etc.	3	Income Taxes Law and Practice By Dr.V.K. Singhania	• Chalk • Board • Discussion • Examples • Google Class Room
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: SYFMG SEMESTER: IV

(Subject : DIRECT TAX) MONTH: JANUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To Understand the basic principles underlying the Provision of Tax, its procedures and sources.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT – 4 Computation of Income of Partnership Firm	Computation of Income of Partnership Firm in Relation to Sec: 40(b) & Tax Thereon With Applicable Rate of Tax	3	Income Taxes Law and Practice By Dr.V.K. Singhania	• Chalk • Board • Discussion • Examples • Google Class Room
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: SYFMG SEMESTER: IV

(Subject : DIRECT TAX) MONTH: JANUARY-FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To Understand the basic principles underlying the Provision of Tax, its procedures and sources.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT – 5 Return of Income	Introduction of Return on Income, Section 139(1) – compulsory filing of return of income Section 139(1A)-Furnishing return to employee	2	Income Taxes Law and Practice By Dr.V.K. Singhania	• Chalk • Board • Discussion • Examples • Google Class Room
	Section 139(1B)-Income tax return through computer Section 139 (1C) – Persons exempt from filing return	2		
	Section 139 (3) – Return of Loss, Section 139 (4) – Belated Return,	2		

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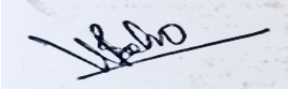

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TEACHING PLAN (UNIT PLAN)

	Section 139 (5) – Revised Return Section 139 (6) – Particulars furnished with returns			
	Section 139 (6A) – Particulars of Business with return Section 139 (9) – Defective Return	1		
	Practical Illustrations	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___10_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: SYFMG SEMESTER: IV

(Subject : DIRECT TAX) MONTH: FEBRUARY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To Understand the basic principles underlying the Provision of Tax, its procedures and sources.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT – 6 Tax Deducted at Source Advance Tax Interest Payable	Introduction of Tax Payment and TDS, Section 192- TDS on salary, Section 194A- TDS on Interest, Section 194C- TDS on contractor	2	Income Taxes Law and Practice By Dr.V.K. Singhania	• Chalk • Board • Discussion • Examples • Google Class Room
	Section 194H- TDS on Commission, Section 194I- TDS on Rent, Section 194J- TDS on Professional Fees	2		
	Advance Tax U/S 207, 208, 209, 210 ,211	4		
	Interest Payable U/S 234(A), 234(B), 234(C)	2		

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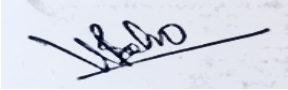

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TEACHING PLAN (UNIT PLAN)

	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___15_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: SYFMG SEMESTER: IV

(Subject : DIRECT TAX) MONTH: MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To Understand the basic principles underlying the Provision of Tax, its procedures and sources.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 7 DTAA	Introduction to DTAA, Types of Double Taxation Relief, Bilateral Relief Section 90 Unilateral Relief Section 91 Tax Slab Rate	3	Income Taxes Law and Practice By Dr.V.K. Singhania	• Chalk • Board • Discussion • Examples • Google Class Room
	Practical Illustrations	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___TARIKA PATEL_____ DEPARTMENT: _COMMERCE_____ CLASS: __SYFMG____ SEMESTER: IV
(Subject : _____DIRECT TAX _____) MONTH: ____MARCH_____ ACADEMIC YEAR: ____2022-23
LEARNING OBJECTIVE/S: To Understand the basic principles underlying the Provision of Tax, its procedures and sources.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 8 Tax Planning and Ethics in Taxation	Meaning of Tax Planning, Tax Management, Tax Avoidance Tax Evasion Ethics in Taxation Consequence of Tax Avoidance Difference between Tax Planning, Tax Avoidance, Tax Evasion Objectives, Importance, Essentials of Tax Planning Types and areas of Tax Planning Forms of the Organisation Corporate Structuring Financial Management Decisions Tax Planning for Employees Government Measures to prevent Tax Avoidance, Evasion	5	Income Taxes Law and Practice By Dr.V.K. Singhania	• Chalk • Board • Discussion • Examples • Google Class Room

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___5

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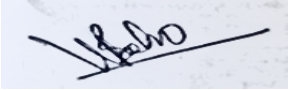

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: SFC CLASS: TYFMG SEMESTER: V (Subject : BUSINESS ETHICS)

MONTH: JUNE TO OCTOBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to:

- Understand the meaning of globalization and the world-wide business network.
- Get knowledge of business ethics in marketing and e-commerce.
- Interpret the relationship between business, business ethics and its effect on business development.
- Know in detail about Intellectual property right and its components like patents, copyright and trademark.
- Gain insight on ethical issues pertaining to IPR.

PER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**ACHING METHOD/ ICT TOOLS USED**
Unit 1- **Business Ethics in Global Economy**	• Concept of globalisation • Global business network • Relationship among business, business ethics and business development • Developing business ethics in global economy • Marketing ethics in foreign trade • Role of business ethics in business	13	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion, example and test

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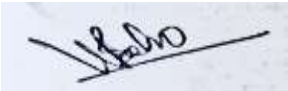

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TEACHING PLAN (UNIT PLAN)

	• Ethical issues in E-commerce • Measure to prevent unethical practices in e-commerce			
Unit 4- **Functional Ethics**	**1. Meaning of functional ethics** 2. **Types of ethics according to functions of business** (marketing, HRM and finance) **3. Intellectual Property Rights** • Patent • Copy-right • Trade Marks **4. Ethical issues:** • Patent • Copt right • Trade mark	13	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion, example and test

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 26

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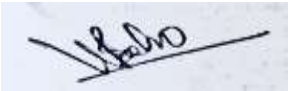

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Abigail D'mello SUBJECT: Auditing DEPARTMENT: Commerce

CLASS: TYFMG SEMESTER: V MONTH: June - July ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I Introduction to Auditing	Basics of Financial Statements, Users of Financial Statements, Definition of Auditing, Objectives of Auditing, Inherent Limitations of Auditing	04	Auditing by Ainapure, Auditing by Sachin Bhandarkar & Sandeep Gupta	Chalk & Board, Discussion.
	Errors & Frauds- Concept, Reasons & Circumstances. Types of Errors, Types of Frauds, Risk of Fraud & Error in Audit, Auditor's duties & responsibilities in respect of Fraud.	04		
	Principles of Audit	01		
	Types of Audit- Meaning, Advantages & Disadvantages	02		
	Miscellaneous Advantages of Independent Audit, Qualities of Auditor, Auditing vs Accounting, Auditing vs Investigation, View the concept of True & Fair	03		

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TEACHING PLAN (UNIT PLAN)

	Accounting Concepts relevant to Auditing- Materiality, Going Concern	01		

NAME OF THE STAFF: Abigail D'mello SUBJECT: Auditing DEPARTMENT: Commerce

CLASS: TYFMG SEMESTER: V MONTH: July- August ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Audit Planning, Procedures & Documentation	**Audit Planning-** Meaing, Objectives, Factors, Sources of obtaining Information, Discussion with Client, Overall Audit Plan	04	Auditing by Ainapure, Auditing by Sachin Bhandarkar & Sandeep Gupta	Chalk & Board, Discussion.
	Audit Programme- Meaning, Factors, Advantages, Disadvantages, Overcoming Disadvantages, Methods of Work, Pre Commencement Work of Audit, Overall Audit Approach	04		
	Audit Working Papers- Meaning, Importance, Factors, Features, Contents of Permanent Audit File, Contents of Temporary Audit File, Ownership Custody & Access of Working Papers, Auditors Lien on Working Papers & Clients' Books	04		

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TEACHING PLAN (UNIT PLAN)

	Audit Notebook- Meaning, Structure, Contents, General Information, Current Information & Importance	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

NAME OF THE STAFF: Abigail D'mello SUBJECT: Auditing DEPARTMENT: Commerce

CLASS: TYFMG SEMESTER: V MONTH: September ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Auditing Techniques	**Test Check-** Test Checking vs Routine Checking, Test Check Meaning, Features, Factors, When Test Checks can be used, Advantages, Disadvantages & Precautions	04	Auditing by Ainapure, Auditing by Sachin Bhandarkar & Sandeep Gupta	Chalk & Board, Discussion.
	Audit Sampling- Meaning, Purpose, Factors in determining sample size, Methods of selecting sample items, Evaluation of sample results, Auditors Liability in conducting Audit based on sample.	05		

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TEACHING PLAN (UNIT PLAN)

	Internal Control- Meaning & Purpose, Review, Advantages, Auditors duties, Inherent Limitations, Internal Control samples for Sales & Debtors, Purchases & Creditors, Wages & Salaries	04		
	Internal Check vs Internal Control, Internal Check vs Test Check	02		

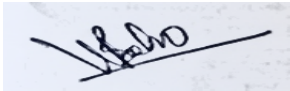
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

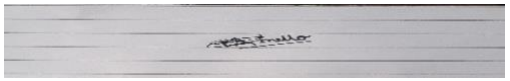
NAME OF THE STAFF: Abigail D'mello SUBJECT: Auditing DEPARTMENT: Commerce

CLASS: TYFMG SEMESTER: V MONTH: October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Internal Audit	Meaning & Basic Principles of establishing Internal Audit	03	Auditing by Ainapure, Auditing by Sachin Bhandarkar & Sandeep Gupta	Chalk & Board, Discussion.
	Objectives of Internal Audit	02		





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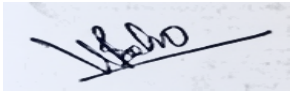
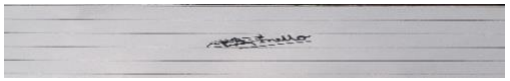
TEACHING PLAN (UNIT PLAN)

	Evaluation of Internal Audit by Statutory Auditor	03		
	Usefulness of Internal Audit	03		
	Internal Audit vs External Audit, Internal Check vs Internal Audit	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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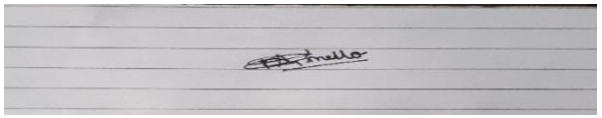
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Abigail D'mello SUBJECT: Corporate Accounting DEPARTMENT: Commerce

CLASS: TYFMG SEMESTER: V MONTH: September-October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Final Accounts of Insurance Companies(Excl. Life Insurance)	General Insurance- Various Types of Insurance	01	Corporate Accounting by Ainapure	Chalk & Board, Discussion.
	Special terms like Premium, Claims, Commission, Management Expenses, Reserve for Unexpired Risk, Reinsurance	02		
	Final Accounts in a prescribed Form – **Revenue Statement – Form B – RA (Sums)**	05		
	Profit/Loss Account – Form B – PL (Sums)	03		
	Balance Sheet – Form B – BS (Sums)	04		



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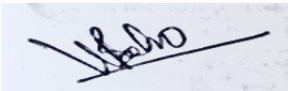

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TEACHING PLAN (UNIT PLAN)

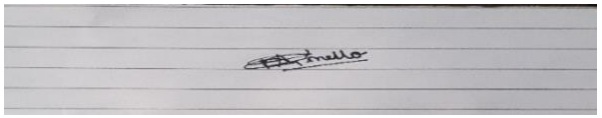
	(Including Comprehensive Sums)			

NAME OF THE STAFF: Abigail D'mello SUBJECT: Corporate Accounting
DEPARTMENT: Commerce

CLASS: TYFMG SEMESTER: V MONTH: June-July-August ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Accounting for Foreign Currency Transactions	Accounting of Foreign Currency Transactions in relation to purchase & sale of goods, services & assets and loan & credit transactions. Computation and Treatment of Exchange Rate Differences **(Sums)**	15	Corporate Accounting by Ainapure	Chalk & Board, Discussion.



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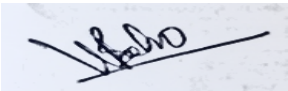

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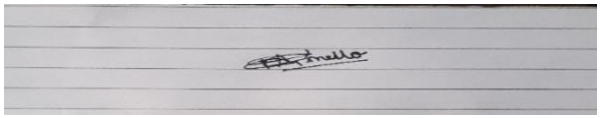
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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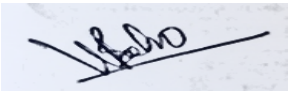

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Abigail D'mello SUBJECT: Financial Analysis & Business Valuation DEPARTMENT: Commerce

CLASS: TYFMG SEMESTER: V MONTH: June- July- August ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I Analysis of Financial Statements & Statement of Shareholder's Equity	**Financial Analysis-** Meaning, Importance & Types	02	Financial Analysis & Business Valuation by Farhat Fatma Shaikh and Heena Murad Khanche, And Internet	Chalk & Board, Discussion.
	Financial Statement Analysis- Meaning, Importance & Limitations	02		
	Analysis & Interpretation- Benefits, Limitations & Types	03		
	Financial Statement Analysis – Traditional Approach vs Modern Approach	02		
	Reformulating the statement of Owner's Equity	02		
	Comprehensive Income Reporting **(Sums)**	04		

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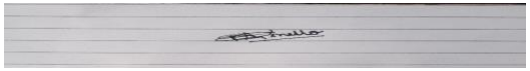

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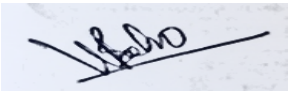

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Abigail D'mello SUBJECT: Financial Analysis & Business Valuation DEPARTMENT: Commerce

CLASS: TYFMG SEMESTER: V MONTH: October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Analysis of Income, Profitability, Growth & Sustainable Earning	Analysis of Changes in Income **(Sums)**	05	Financial Analysis & Business Valuation by Farhat Fatma Shaikh and Heena Murad Khanche, And Internet	Chalk & Board, Discussion.
	Bond Analysis, Profitability Analysis **(Sums)**	05		
	Growth Analysis	02		
	Analysis of Changes in Profitability & Sustainable Growth	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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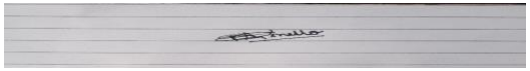

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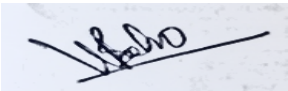

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Abigail D'mello SUBJECT: Financial Analysis & Business Valuation DEPARTMENT: Commerce

CLASS: TYFMG SEMESTER: V MONTH: August ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Business Valuation & Models	Meaning & Principles of Business Valuation	03	Financial Analysis & Business Valuation by Farhat Fatma Shaikh and Heena Murad Khanche, And Internet	Chalk & Board, Discussion.
	Techniques & Role of Business Valuation	03		
	Free Cash Flow Valuation	01		
	Valuation of Firm (CVA & EVA) **(EVA Sums)**	05		

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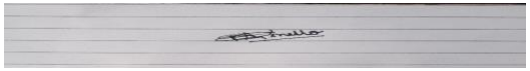

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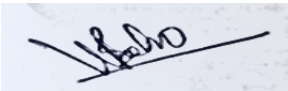

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TEACHING PLAN (UNIT PLAN)

	Contingent Claim Valuation	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

NAME OF THE STAFF: Abigail D'mello SUBJECT: Financial Analysis & Business Valuation DEPARTMENT: Commerce

CLASS: TYFMG SEMESTER: V MONTH: September ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Valuation of Business for Mergers & Acquisitions and Valuation of	Basics of Merger & Acquisition	01	Financial Analysis & Business Valuation by Farhat Fatma Shaikh and Heena Murad Khanche, And Internet	Chalk & Board, Discussion.
	Approaches to Valuation in case of M & A, Selection of appropriate cost of capital for valuation	02		
	Forms of Consideration & terms of Acquisition **(Sums)**	03		

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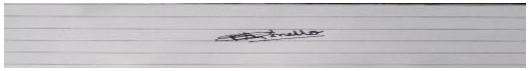

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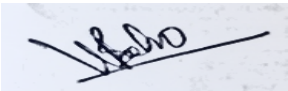

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TEACHING PLAN (UNIT PLAN)

Intellectual Property	Exchange Ratio based used for Computation **(Sums)**	03		
	Theory of Intellectual Property & Methods of Valuation	01		
	Valuation of Brands **(Sums)**	03		
	Valuation of Real Estates **(Sums)**	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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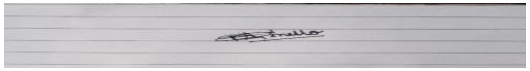

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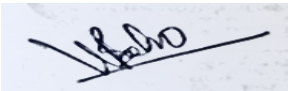

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Abigail D'mello SUBJECT: Financial Management -I DEPARTMENT: Commerce

CLASS: TYFMG SEMESTER: V MONTH: June-July-August ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Investment Decisions	Introduction , Purpose of Capital Budgeting	01	Financial Management by Arvind Dhond	Chalk & Board, Discussion.
	Capital Budgeting Process, Types of Capital Investment Decisions	01		
	Project Cash Flows & Net Profit Approval	01		
	Basic Principles of measuring Project Cash Flows	01		
	Capital Budgeting Techniques (Sums)- (Only Time Adjusted/ Discounted Cash Flows)- NPV, PI, IRR, Discounted Pay Back	06		

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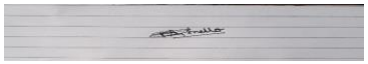

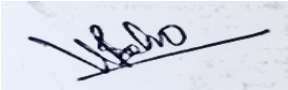

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TEACHING PLAN (UNIT PLAN)

	Capital Rationing (Sums)	05		

NAME OF THE STAFF: Abigail D'mello SUBJECT: Financial Management- I DEPARTMENT: Commerce

CLASS: TYFMG SEMESTER: V MONTH: August-September-October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Types of Financing	Introduction	01	Financial Management by Arvind Dhond	Chalk & Board, Discussion.
	Needs of Finance & Sources	03		
	Long Term Sources of Finance	07		
	Short Term Sources of Finance	04		

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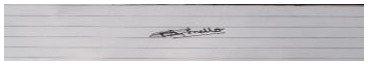

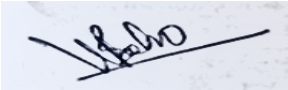

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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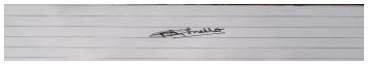

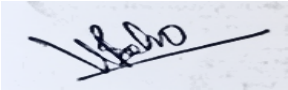

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TEACHING PLAN (UNIT PLAN)

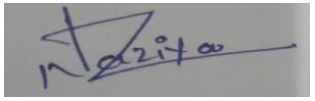
NAME OF THE STAFF: **NAZIYA SHAIKH** DEPARTMENT: **SELF FINANCE** CLASS: **TYFMG** SEMESTER: **V** Subject : **(BUSINESS ETHICS)**

MONTH: **JUNE TO AUG** ACADEMIC YEAR: **2022 - 2023**

LEARNING OBJECTIVE/S: **Understand Ethics and CSR.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1. Introduction To Ethics And Area Of Business Ethics	Ethics: Meaning, Objectives, important of ethics, Theories of Ethics, Business Ethics, -Nature and Characteristics, types, Causes of unethical behaviour, Factor Business Ethics: Meaning, Importance, Types ,factors Corporate Ethics: Meaning, Importance, Steps, Gandhian Philosophy of ethical behaviour Ethical Challenges for managers in the 21st century	10	MANAN PRAKASHAN	Lecture method Chalk and Board
MODULE 3. Corporate Social Responsibility	• Concept of Globalization and Various CSR of Business. • Relationship between CSR and Business ethics. • Business ethics and Environmental Protection. • Business Ethics and Consumer protection. • Business Ethics and Social justice. • Arguments for and against CSR	10	MANAN PRAKASHAN	Lecture method Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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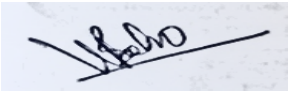

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TEACHING PLAN (UNIT PLAN)

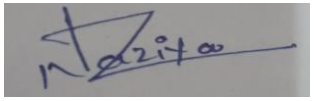
NAME OF THE STAFF: **NAZIYA SHAIKH** DEPARTMENT: **SELF FINANCE** CLASS: **TYFMG** SEMESTER: **V** Subject : **(RESEARCH METHODOLOGY)**

MONTH: **JUNE TO AUG** ACADEMIC YEAR: **2022 – 2023**

LEARNING OBJECTIVE/S: **To Understand Research , Types of Research, Hypothesis , Research Design, Sampling, Data collection and processing.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1. Introduction To Research.	Research: Meaning, Objectives, important of research, Research process, Characteristics of Good Research. Hypothesis : Meaning, Importance, Types and Sources. Research Design: Meaning, Importance, Steps, Scope & Essential of Good research. Sampling : Meaning , Methods of Sampling.: Probability Sampling Non-Probability Method.	10	MANAN PRAKASHAN	Lecture method Chalk and Board
MODULE 2. Data Collection And Processing	Types of Data and Sources: Primary and Secondary Data Sources. Methods of collection of Primary Data: Observation , Experiment, Interview , Survey. Survey Instrument: Questionnaire : Types of questions , Scaling techniques.	10	MANAN PRAKASHAN	Lecture method Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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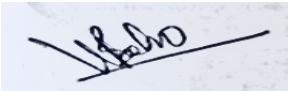

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ASIS ALMEIDA DEPARTMENT: FINANCIAL MANAGEMENT CLASS: TYFMG SEMESTER: VI (Subject : Security Analysis and Portfolio Management)

MONTH: JANUARAY- MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to: Students will be able to explored to different avenues of investment, equipped with the knowledge of security analysis, apply the concept of portfolio management for the better investment, invest in less risk & more return securities.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1.Portfolio Management- An Introduction	**Investment-** Meaning, Characteristics, Objectives, Investment VS Speculation, Investment Vs Gambling and types of investors. **Portfolio Management-** Meaning, Evolution, Phases, Role of portfolio managers, Advantages of portfolio management. **Investment Environment-** Investment Environment in India and factors conducive for Investment in India.	09	Vipul Prakashan	Chalk & Duster, Group Discussion

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TEACHING PLAN (UNIT PLAN)

	Portfolio Analysis- Meaning and its components, calculation of expected return and risk, calculation of covariance, Risk- Return trade off. **Portfolio Selection**-Meaning, Feasible Set of portfolios, Efficient set of portfolios, selection of optimal portfolio, Markowitz Model, Limitations Markowitz Model, Measuring Security Return and Portfolio Return, Risk under Single Index Model and Multi Index Model.			
2. **Portfolio Analysis and Selection.**	**Portfolio Management- Valuation** **Portfolio Revision:** Meaning, need, constraints and strategies. **Portfolio Evaluation: -** Meaning, need, measuring returns (Sharpe, Treynor and Jense Ratios) & Decomposition of performance. **Bond Valuation**: Meaning, Measuring Bond Returns, Yield to Maturity, Yield to call and Bond Pricing. Bond Pricing Theorems, Bond Risks & Bond Duration.	05		
3.	**Economy Analysis**: Meaning, Economic Analysis, Barometric or Indicator Approach, Econometric Model Building & Opportunistic Model Building.	09		

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TEACHING PLAN (UNIT PLAN)

Fundamental Analysis	Industry Analysis: Concept of Analysis, Industry Life Cycle, Industry Characteristics. **Company Analysis**: Financial Statements, Analysis of Financial Statements Practical Questions on – Debt Equity Ratios,Totall Debt Equity Ratio, Proprietory Ratios, Interest Coverage Ratio, Profitability Ratios related to Sales, Investment & Equity Shares Efficiency or Activity Ratios. Assessment Risk.			
4. **Technical Analysis**	Dow Theory Meaning and Principles of Technical Analysis, Price Chart, Line Chart, Bar Chart, Japanese Candlestick Chart, Trends & Trend Reversals, Chart Patterns, Support & Resistance, Reversal Patterns, Continuation Patterns & Elliot Wave Theory. **Mathematical Indicators:** Calculation of moving averages, Oscillators & Relative strength index. Market Indicators Fundamental Analysis v/s Technical Analysis	04		

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TEACHING PLAN (UNIT PLAN)

5. Efficient Market Theory and CAPM	Random Walk Theory The Efficient Market Hypothesis Forms of Market Efficiency Competitive Market Hypothesis CAPM Arbitrage Pricing Theory (APT).	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 31

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: keyur Limbachiya DEPARTMENT: Commerce (SFC) CLASS: TYFMG SEMESTER: VI (Subject: Corporate Accounting IV)

MONTH: December - March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The general education curriculum will enable students to acquire skills, knowledge and experienced.

UNITS	SUBTOPIC	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT -1 Consolidated financial stamen	Meaning, standalone financial statements Consolidation & disadvantages procedure of consolidation of balance sheet & profit and loss	10	Past papers ICAI modules and other online references, Mumbai university Book PDF,	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM
	Practical problems on preparation of consolidated balance sheet.			
UNIT -2 Internal reconstruction	Need for reconstruction and law provision, method including alteration of shares capital, variation of shareholder rights, sub division, surrender of shares and reissue of share capital	10		
	Practical problem on internal reconstruction, journal entry, preparation of capital reduction A/c and preparation of balance sheet in vertical form			

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TEACHING PLAN (UNIT PLAN)

UNIT -3. AS -14 Amalgamation, Absorptions	Meaning and computation of purchase consideration. Purchase method Intercompany debtors, creditors, loan, bills, loading in stock	15	Past papers ICAI modules and other online references, Mumbai university Book PDF,	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM
	Practical problems on amalgamation and absorption (only purchase method)		Past papers ICAI modules and other online references, Mumbai university Book PDF,	
UNIT -4. external reconstruction	Meaning of external reconstruction, distinction between internal and external reconstruction s.	15		
	Practical problems related to journal entry and preparation of ledger account calculate of purchase consideration, journal entry in new company, and preparation of balance sheet in vertical form new company as per AS -14			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:50

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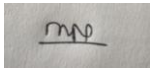
TEACHING PLAN (UNIT PLAN)

DEPARTMENT: SELF FINANCE (COMMERCE) CLASS: TYFMG SEMESTER: _VI_ (Subject : FINANCIAL MANAGEMENT II MONTH: DEC TO APRIL ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S:
The learners will be able to : TO ENHANCE THE ABILITIES OF LEARNER TO DEVELOP THE CONCEPT OF FINANCIAL MANAGEMENT AND ITS SIGNIFICANCE IN THE BUSINESS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RISK & RETURN	INTRODUCTION , MEANING OF RETURN, TYPES OF RETURN, HOLDING PERIOD RETRUN, ANNUALIZED RETURN, EXPECTED RETURN, MEANING OF RISK TYPES OF RISK – INCLUDING PRATICAL PROBLEMS	15	FUNDAMENTAL OF FINANCIAL MGMT- PRASANNA CHANDRA	CHALK & DUSTOR MEYTHOD PPT , GOOGLE CLASSROOM
CAPITAL STRUCTURE THEORIES	MEANING, TYPES OF LEVERAGES : COST OF CAPITAL , EBIT-EPS ANALYSIS, & MARKET PRICE SHARE ,CAPITAL STRUCTURE THEORIES, CAPITAL STRUCTURE DIVIDEND POLICY- PAYOUT RATIO (INCLUDING PRATICAL PROBLEMS)	15	PRINCIPLES OF CORPORATE FINANCE- R.A.BREALYS & S.C. MYRES.	CHALK & DUSTOR MEYTHOD PPT , GOOGLE CLASSROOM
CASH MANAGEMENT	MOTIVES FOR HOLDING CASH, OBJECTIVES OF CASH MANAGEMENT, FACTORS DETERMINING CASH NEEDS, BASIC STRATEGIES OF CASH MANAGEMENT, CASH MANAGEMENT TECHNIQUES OR PROCESS, MARKETABLE SECURITES ABD CASH MANAGEMENT PRACTICES IN INDIA INCLUDING PRACTICAL PROBLEMS	15	FUNDAMENTAL OF FINANCIAL MGMT- PRASANNA CHANDRA	CHALK & DUSTOR MEYTHOD PPT , GOOGLE CLASSROOM
RECEIVABLE MGMT	INTRODUCTION, ASPECTS OF RECEIVABLE MGMT, CREDIT POLICY, CREDIT EVALUATION, CREDIT GRANTING DECISION CONTROL ON ACCOUNTS, RECEIVABLE INCLUDING PRATICAL PROBLEMS	15		CHALK & DUSTOR MEYTHOD PPT , GOOGLE CLASSROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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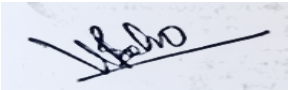

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: BFM CLASS: TYFMG SEMESTER: VI (Subject :AUDITING)

MONTH: DECEMEBER 22 – MARCH 23 ACADEMIC YEAR: 22-23

LEARNING OBJECTIVE/S: To give knowledge to students about how to find reliability of financial position and profit and loss statements. The aim is to ensure tl the accounts reveal a true and fair face of the business and all of its transactions

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	1.**VOUCHING** Audit of Income Revenue from Sales and Services, Rental Income, Interest & Dividends Income, Royalties Income, Recovery of Bad debts written off, Commission Received 1.2 Audit of Expenditure Purchases, Salaries & Wages, Rent, Insurance Premium, Telephone expense , Petty cash payment, Advertisement, Travelling Salesmen's Commission, Freight Carriage and Custom Duties	15	SHETH , VIPUL,MANAN PRAKASHAN	PPT, CHALK AND BOARD
	2.**VERIFICATION** 2.1 Audit of assets Plant & Machinery, Furniture and fixtures, Accounts Receivable, Investments, Inventory, Goodwill, Patent Rights 2.2 Audit of Liabilities	15		

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TEACHING PLAN (UNIT PLAN)

	Outstanding Expenses, Accounts Payable, Secured loans, Unsecured Loans, Contingent Liabilities, Public			
	3. **Audit and Assurance Standards** 3.1 Significance of the Audit and Assurance Standards issued by Institute of Chartered Accountants of India. Responsibility of auditor for AAS 3.2 Understanding of following standards SA 200 Basic principles of Governing an Audit SA 200A Objective and scope of the audit of financial statements SA 230 Audit documentation SA 320 Audit materiality SA 570 Going Concern	15		
	4**. Audit of Limited Companies** 4.1 Qualifications, Disqualifications, Appointments (First & Subsequent auditor), Reappointment, Removal of auditors.	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Organisational Behaviour DEPARTMENT: Commerce (SFC)

CLASS: TYFMG SEMESTER:VI MONTH:Jan-feb ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & II Introduction to OB and understanding others : Interpersonal relationships	Organisational Behaviour multidiscipline , different models of OB , perception, personality , value, attitude.	6	Organisational Behaviour by Robbings,Stephen , Pearson	Chalk board method, discussion, YouTube video,debates
	Job satisfaction, motivation, learning.	6		
	Conflict management,nature of conflict, level of conflict,source of conflict.	6		
	Effect of conflict,process of conflict,stages of conflict, conflict handling orientation.	6		
	Power and organisational politics, sources of power, organisational politics, political power.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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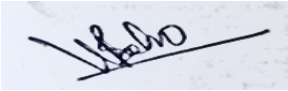

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT:Organisational Behaviour DEPARTMENT: Commerce (SFC)

CLASS: TYFMG SEMESTER:VI MONTH: March-April ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III & IV Group behaviour and team behaviour & Stress management and change	Group behaviour, Types of group, identifying and rewarding informal leader,key role of leaders	6	Organisational Behaviour by Robbings,Stephen , Pearson	Chalk board method, discussion, YouTube video,debates
	Team and team building,modern organisation,team work ,types of teams,skill useful in team building.	6		
	Stress management and councelling, elements of job performance, approaches to stress management	6		
	Councelling, characteristics and types of councelling, change and it's effects	6		
	Response to change, resistance to change, transformational leadership,three stage model of change process.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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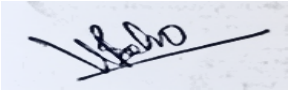

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:GAURI YADAV. DEPARTMENT: COMMERCE CLASS:. FYIMG SEMESTER: II

MONTH: DEC - MAR ACADEMIC YEAR : 2022-23 SUB: ACCOUNTING -II

LEARNING OBJECTIVE/S:
The learners will be able to : understand the financial problems related to investors, cooperations, and the communication between investors and companies in the capital markets.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1.Investment Accounting w.r.t AS 13 2. Foreign currency transactions vide AS 11	For shares (variable income bearing securities) For debenture bonds etc. (fixed income bearing securities) Accounting for transactions of purchase and sales of investments with ex and cum interest prices and finding cost of investment sold and carrying cost as per weighted average method Columnar format for investment account Illustration 1 to 6	15	Manan Prakashan	Chalk & Duster
	Accounting for translation of foreign currency transactions vide AS 11 (excluding foreign branches and forward exchange contracts and hedging contracts) "In relation to purchase and sale of goods,	15	Manan Prakashan	Chalk & Duster

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TEACHING PLAN (UNIT PLAN)

3. Accounts of Non–Trading Institutions & Service Industries	services and assets and loan and credit transactions." Computation and treatment of exchange differences Illustration 1 to 6			
	meaning of Non profit Organization , Features Difference between Profit and Non Profit organization Tpyes of receipts and payments Steps in preparation of income and expenditure account format Illustration 1 to 6	15	board of Maharashtra	Chalk & Duster
4.Issue of Shares and Debentures, Redemption of Preference sharee	Company Provisons for issue of share and debentures journal entries. Company Law / Legal Provisions for redemption of preference shares in Companies Act ii. Sources of redemption including divisible profits and proceeds of fresh issue of shares iii. Premium on redemption from security premium and profits of company iv. Capital Redemption Reserve Account - creation and use Illustration 1 to 6	15	Vipul prakashann	Chalk & Duster

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. SEEMA SIHANA** DEPARTMENT: **SELF FINANCE** CLASS **F.Y.B.I.M** SEMESTER: **II**

SUBJECT: INTRO TO FINANCIAL MARKETS **MONTH**: DECEMBER - APRIL 2023 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To have understanding about Financial Market and its functionings.

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Financial Markets	**Module I- An Introduction to the Financial Markets** **Overview of Financial Markets, Structure of Financial Markets, (Multiple ways to classify market functions)** **Capital formation process through markets.**	**5**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**
	Module II- Capital Markets and Money Markets	**10**	**Text book and Internet**	
	Capital Markets:- Meaning, classification and structure, various sub-segments of the market, Role played by the capital market, capital market instruments, participants in these markets, various capital market regulators, advantages and drawbacks.			**1 Chalk and Black Board Method** **2 Example** **3 Discussion**

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	Money Markets:- Meaning, classification and structure, various sub-markets of the market, Role played by the money market, money market instruments, participants in these markets, various money market regulators, advantages and drawbacks.			
	Module III- Foreign Exchange Markets, Commodity Markets and Derivatives Markets **Foreign Exchange Markets:- Meaning, classification and structure, role played by the foreign exchange markets, foreign exchange market instruments, participants in these markets, various foreign exchange market regulators, advantages and drawbacks, the link between exchange rates, forex markets and the currency reserves of a country.** **Commodity Markets:- Meaning, classification and structure, functions of the commodity market, Debate or commodity market as a financial market, structure and working of the market, regulation of the market, advantages and drawbacks.** **Derivative Markets:- Meaning, classification and structure, functions of the derivative markets, evolution of the derivative market, structure and the working of the market, regulation of the market, advantages and drawbacks.**	**10**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**

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	Module IV- Market Exchanges and Market Regulators **Market Exchanges:- Types of exchanges, role played by exchanges, NSE, BSE, MEX, OTCEI.** **Market Regulators:- SEBI**	**10**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: FYBIM SEMESTER: II (Subject : Introduction to Wealth Mgmt)

MONTH: DECEMBER - MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Overview of Wealth management	1.**Introduction to Wealth management-**Definition of Wealth management; understanding wealth management; wealth management process; phases in wealth management process; wealth management market in India	4	Wealth Management- TYBMS- Rishab Publication/Internet	• Chalk • Board • Discussion • Examples • Google Classroom
	2.**Holistic Planning Framework-**Sources of wealth; human Capital; Financial Capital; Financial Life Cycle; Working Life – Pre-family independence; Family; Pre-retirement; Retirement – Active retirement; Passive Retirement; Elderly Care; Retirement related risk – risk identification; Market Risk, Asset Allocation Risk, Interest Rate Risk, Inflation Risk, Health/liquidity risk, Longevity Risk	4		

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TEACHING PLAN (UNIT PLAN)

	3.**The Financial Planning process-**Establish and define the relationship with the client; Personal Fact Finding; Analyze Client's financial status, Risk profile and determine financial goals; Develop financial planning recommendation and present it to client; Implement client's financial planning recommendations; Monitor and review the client's situation	4		
	4.**Asset Classes-** Debt as an asset class; Role of debt in wealth management; risk of investing in debt securities; Equity as an asset class – investing in stks	3		
Unit 3: Retirement Planning	1.Employee Benefits and Superannuation Benefits-Employee Benefits – Salary and Bonus; Reimbursement of expenses; Health Benefits; Group Insurance; LTA, TA, Concessional Loans; Defined Benefit Plans and Limitations – Characteristics of DB Plans, Types of Defined Benefit Plans, their Features, Applicability and withdrawal norms, Taxability; Defined Contribution Plans and Limitations – Characteristics of DC Plans, Types of Defined contribution Plans, their features, Applicability. And withdrawal norms, taxability; Superannuation benefits and schemes –Trust Funds, Private Fund Managers, and Insurance Companies, Benefits - on retirement, Voluntary retirement and Death	4		

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TEACHING PLAN (UNIT PLAN)

	2.Retirement Needs and Factors in retirement Planning-Introduction to retirement planning - Significance of retirement planning; Purpose and need of retirement planning; Role of Wealth planner in retirement planning; Importance of starting early; Analysis of Client's Life Cycle – Early earning stage and established earning stage; stability and visibility of earnings; Accumulation and Distribution phase; Life Expectancy Vs. Retirement age; Early Vs. Delayed retirement; Risk of living longer than expected; Factors considered in retirement planning – Nature of Income; salaried, bonus and self-employed; standard of living; time horizon; inflation in accumulation and distribution phase; profile of assets sustainable till retirement; income generating potential of fixed assets; liquidity aspects of fixed and other assets; Profile of financial and other liabilities nearing retirement; Analysis of client's retirement needs – Estimating household expenses on retirement; Corpus estimated to meet post retirement needs; Alternate arrangements for supplementing retirement corpus; cost of escalation of medical expenses in post-retirement; charitable activities and social work	4		
	3.Retirement Planning Process	3		

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TEACHING PLAN (UNIT PLAN)

	4.Income Streams during Retirement – Employer Provided superannuation plans; Provident Fund; Public Provident Fund; Small Savings Schemes; NPS; Pension Plans from MF's and Insurance Companies; Reverse Mortgage to supplement post retirement expenses.	4		

NUMBER OF LECTURES ALLOCATED TO THE UNIT 1 & 3: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: FYBIM SEMESTER: II (Subject : Introduction to Wealth Mgmt)

MONTH: ___DECEMBER - MARCH_____ ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Role of Insurance in Wealth Management	Assessment and identification of Risk Cover – Gathering data on current Life Insurance Cover; Identifying clients life insurance needs	18	Wealth Management- TYBMS- Rishab Publication/Internet	• Chalk • Board • Discussion • Examples • Google classroom
	Analysis of Life Insurance Needs – Economic Value of human life; Replacement of the future income of the insured; Replacement of the expenses and financial liabilities of the insured; provision in the life cover of certain financial goals and financial liabilities; Review of coverage for changes in income, assets and financial liabilities			
	Types of Life Insurance Policies - Term Insurance; Whole Life Insurance: Endowment Policy; Investment Linked Insurance (ULIP); Insurance Linked annuities; Life insurance Policy riders Calculation of Claim amount and other benefits – Types of Bonus; Maturity Claim; Death Claim; Surrender Value; Return on Savings Component; Taxation aspect of various insurance Policies			

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TEACHING PLAN (UNIT PLAN)

	Health Insurance and Accident Insurance – Individual vs. Family floater Policy; Critical Illness policy; Group health Insurance; Personal and group accident Insurance; Personal Disability Insurance – Permanent and Temporary, Partial and Total; Scope of benefits – long term and short term disability			
	Property and Liability Insurance – basis of property cover – Reinstatement, Book or Market Value; Insuring House, Household items, business unit, plant and machinery; personal Umbrella Policy; miscellaneous oversees travel insurance; Motor Insurance – Comprehensive and Mandatory Third party coverage; No claim Bonus and claims			
	Professional Indemnity Insurance; Keyman Insurance; Marine Insurance, Cargo and Hull Insurance; Inland Transit Insurance			
	Insurance Regulatory and Development Authority (IRDA)Act-1999; TheInsuranceAct-1938; PublicLiabilityInsuranceAct-1991; MotorVehicleAct-1988 EmployeeStateInsuranceAct-1948			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 18

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TEACHING PLAN (UNIT PLAN)

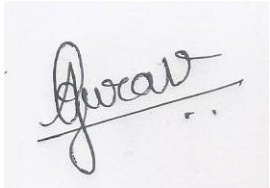
NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: Self Finance CLASS: SYBIM SEMESTER: III (Subject : SAPM)

MONTH: August to September ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

1) Understand & Remember- the concept of portfolio revision & portfolio evaluation
2) Understand and remember the concept of bond valuation

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 3- Portfolio Management	Portfolio revision	01	Book by Vipul publications/Internet	Google Classroom, Chalk and duster
	Portfolio Evaluation	02	Book by Vipul publications/Internet	Google Classroom, chalk and duster



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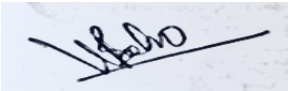

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TEACHING PLAN (UNIT PLAN)

Unit 4- Bond Valuation	Sums on Portfolio Evaluation	04	Book by Vipul publications/Internet	Google Classroom, chalk and duster
	Bond valuation	02	Book by Vipul publication/Internet	Google classroom, chalk and duster
	Sums on Bond Valuation	04	Book by Vipul publication/Internet	Google classroom, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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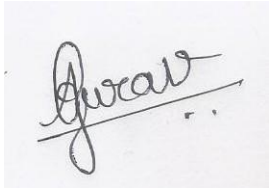

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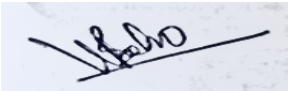

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: SELF- FINANCE CLASS: SYBIM SEMESTER:III (Subject : Fundamentals of Capital Market)

MONTH: JUNE-SEPT ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: _____

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
UNIT 2 & 3 FOCM	Introduction To Stock Exchange: Functions and Significance, Operations and Trading Mechanism of Stock Exchanges, Types of Delivery, Margins, Margin Trading, Book Closure and Record Date, Trading and Partly Paid Shares and Debentures, Trend Line, Trading Volume, Turnover and Outstanding Position, Market Making, Short Selling, Securities Lending and Borrowing, Straight Through Processing and Direct Market Access (DMA).	15	Wikipedia, Vipul Publications	Chalk, Board, Google Classroom, Charts.
	Introduction to SEBI (Collective Investment Schemes) Regulations 1999 – An Overview, Application fee to accompany the application, Furnishing of information, Conditions for eligibility, Grant of Certificate, Terms and Conditions, Procedure where registration is not granted, Restrictions on business activities, Obligations of Collective Investment Management			

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TEACHING PLAN (UNIT PLAN)

	Company (CIMC) Submission Of information and documents, Trustees and their Obligations, Contents of trust deed, Eligibility fir appointment as Trustee, Termination of trusteeship, Termination of the agreement with the Collective investment management company (CIMC) Procedure for launching of Schemes, Disclosures in the offer document, Allotment of units and refunds of money, Unit Certificates, Transfer of units, Investments and segregation of funds, Listing of schemes and winding up of schemes.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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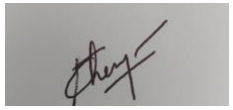

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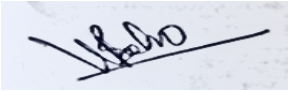

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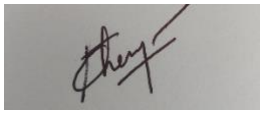
TEACHING PLAN (UNIT PLAN)



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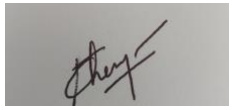

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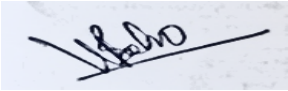

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: SELF- FINANCE CLASS: SYBIM SEMESTER:III (Subject : Mutual Fund)

MONTH: JUNE-SEPT ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: _____

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
UNIT 2 & 3 MUTUAL FUND	Unit 2 :- Types of Mutual Fund – (Introduction & Characteristics)Functional/Operational - Open ended, close ended, interval, Portfolio - Income, Growth, Balanced, MMMF, Geographical/ Location – Domestic, Offshore, Miscellaneous – Tax Savings Funds, Exchange Traded Funds, Balance Funds, Fixed Term Plan, Debt Funds, Systematic Investment Planning & Systematic Transfer Plan, Portfolio Maturity, Calculations of NAV, Entry load Exit load.	15	Wikipedia, Vipul Publications	Chalk, Board, Google Classroom, Charts.
	Unit 3 :- Fund Rating and Rating - its need and importance, Basis Of Ratings, Interpretation of Funding Rating by CRISIL,CARE and ICRA, Selection Criteria – (Size, Stability, Credit portfolio, performance).	08		
	Performance Measurement - Rolling Returns and Benchmarking.			

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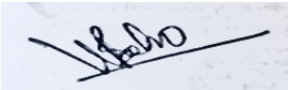

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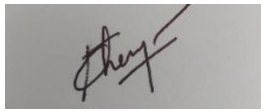
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 23



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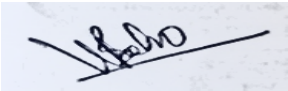

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Priyanka Bangera DEPARTMENT: Commerce SFC CLASS: SYBIM SEMESTER: III (Subject : Foundation course III)

MONTH: June July August ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & II Fundamental of Investment and it's	• Fundamentals of Investments- Meaning and definition, Needsand importance of investment, Investment objective, Elements of investment, Investment avenue, Taxes and investments, Place of liquidity in investment decisions, Importance of Investment management	05	Google, Derivative markets (SYBFM) Book, Equity Markets (	▪ Chalk – Board method ▪ Discussions ▪ Google classroom

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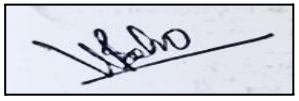

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TEACHING PLAN (UNIT PLAN)

Avenues	• Sources and Avenue of Investments- Bank products, Bank and credit union, Bonds, stocks, Investment funds, Annuities,	04	SYBFM) -old publication	▪ YouTube videos

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TEACHING PLAN (UNIT PLAN)

	Featured of Equity share & Preference share, Feature of Debenture,			
	• Valuation of Equity share and it's technique, Valuations of Debenture and it's Techniques, Valuations of bullion goldand silver, characteristics and important features of investment in bullion, Bullion market and it's operation,	04		
	• Factors influencing demand and supply of bullion, Gold, ETF, Linksge with foreign exchange & currency.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN

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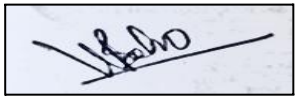

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Priyanka Bangera SUBJECT: Foundation Course (FC) DEPARTMENT: Commerce (SFC)

CLASS:SYBIM SEMESTER:III MONTH: sep-oct ACADEMIC YEAR: 2022-23

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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
UNIT III & IV Financial	• Introduction to Financial literacy:- Meaning, Needs & Importance of financial literacy, components of financial literacy	04	Introduction	▪ Chalk – Board method ▪ Discussions
	• Individual economic system, personal finance planning, RBI initiative in financial literacy.	03		

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TEACHING PLAN (UNIT PLAN)

literacy & Individual Investing	• Individual Investing:- Getting ready to invest- saving verse investment- Getting started - discipline & planning are key - Define your goal and investment time frame - Decide if you need incomegrowth or both	04	to Financial literacy	▪ Google classroom ▪ YouTube videos

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TEACHING PLAN (UNIT PLAN)

	• Understand the risk - Diversify to minimize risk - Recognize the importance of cost and tax	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

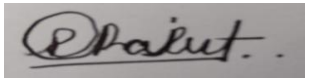
NAME OF THE STAFF: Ms. Priyanka Devnath Rajput DEPARTMENT: Commerce(Self-Finance) CLASS: S.Y.B.I.M

SEMESTER: III (Subject : I.T in Investment Management-I) MONTH: JULY- DECEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to: To gain the knowledge of E-Commerce, MIS, ERP, CRM, and Different types of E-Payment, MS Word and MS Excel.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I E-Commerce	A) Introduction to Electronic Commerce :- E-Commerce Framework, E-Commerce and media convergence, Anatomy of E-Commerce Applications, E-Commerce Consumer and Organization Applications.	04	E- Commerce -By Marriappa M. and www.wikipedia.com	Board , Chalk and Duster
	B) The network Infrastructure for Electronic Commerce: - Market forces influencing the I-way, Components of I-way, Network Access Equipment.	02		
	C) E-Commerce and World Wide Web: - Architectural framework of E-Commerce, WWW and its architecture, hypertext publishing, Technology behind the web, Security and the Web.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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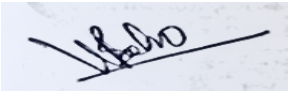

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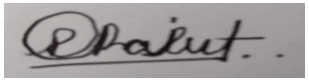
TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Support Systems	A) Management Information System (MIS) :- Definition of MIS, Role and Impact of MIS, MIS and Users, MIS as a Control System, MIS –a support to the Management, Management Effectiveness and MIS, Organization as a System, MIS: Organization Effectiveness.	06	Management Information System- by Waman Jawadekar and www.wikipedia.com	Board , Chalk, Duster & Google Classroom
	B) Enterprise Resource Planning(ERP) :- Definition of ERP, Need of ERP, History of ERP, Benefits of ERP, ERP applications and Emerging trends, ERP –A Subset of Enterprise Applications.	05		
	C) E-CRM: - Customer Relationship Management, Typical Business Touch points, Orbits.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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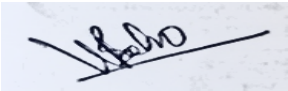

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III E-Payments	A) An overview, B2C payments, B2B payments.	04	Board of Studies in Banking& Finance, University of Mumbai and www.wikipedia.com	Board , Chalk, Duster & Google Classroom
	B) Types of E- payment system – Credit card payment, debit cards, accumulating balance, online stored value payment systems, digital cash, digital (electronic) wallets, agile wallet, smart cards and digital cheques, plastic money.	09		
	C) Secure Electronic Transaction (SET) Protocol.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV MS-Office: Packages for	A) Ms-Word: Usage of smart art tools, bookmark, cross-reference, hyperlink, mail merge utility and converting word as PDF files.	03	Microsoft Office Professional 2013 - By Beth Melton	Board , Chalk, Duster and Computer(MS-Word & MS-Excel

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TEACHING PLAN (UNIT PLAN)

Institutional Automation	B) Ms-Excel: Manipulating data, Working with charts, Working with PIVOT table and what-if analysis.	02	www.wikipedia.com	Software)
	C) Advanced excel functions-Vlookup(), hlookup(),pv(),fv(), pvschedule(),goal seek(), confidence(),AVERAGE(), averagea(),averageif(), averageifs(),MIN(), MAX(), COUNT(),COUNTA(), countif(), countifs(), ROUND(), INT(), avedev().	06		
	D) Nested functions, name,cells/ranges/constants, relative, absolute & mixed cell reA) ferences, >,<,=operators, Logical functions using if, and, or, not, date and time functions & annotating formulae.	06		
	E) Macros: Creating and executing VBA macros embedded in an excel sheet.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Fundamentals of Capital Markets(FOCM) DEPARTMENT: Commerce (SFC)

CLASS:SYBIM SEMESTER:III MONTH:June-july-aug ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I INTRODUCTION TO CAPITAL MARKET	Overview of Capital market – authorities governing capital market in INDIA , securities market reforms and regularity measures to promote investors confidence	05	CAPITAL MARKET AND INVESTMENT MANAGEMENT BY M.S. KHAN	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Capital market instruments and ratings – equity , debenture , preference shares , nonvoting shares	04		
	Derivatives ,hybrid instruments	03		
	Rating and grading of instruments – concept , scope , factors influencing rating of instruments .	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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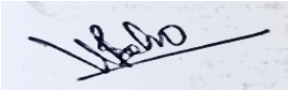

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Fundamentals of Capital Markets (FOCM) DEPARTMENT: Commerce (SFC)

CLASS:SYBIM SEMESTER:III MONTH: sep-oct ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV RESOURCE MOBILISATION IN INTERNATIONAL MARKET	Introduction to Global Finance – depository receipt , ADR & GDR , pricing of securities , two way fungibility scheme	04	CAPITAL MARKET AND INVESTMENT MANAGEMENT BY M.S. KHAN	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Provisions of companies act 2013 , issues relating to GDRs , procedure of issuance of GDR/FCCBs	03		
	Foreign Currency Exchangeable Bonds – FCCB & FCEB , issue of FCEB 2008 scheme	04		
	FCCB & ordinary shares scheme 1993 , external commercial borrowings – forms & features	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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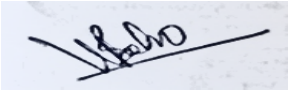

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. RASHMI GURUNANI SUBJECT: MUTUAL FUND MANAGEMENT DEPARTMENT: COMMERCE

CLASS:SYBIMSEMESTER: III MONTH:JUNE, JULY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to : Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 INTRODUCTION TO MUTUAL FUND	History, Origin, Definition, Meaning of Mutual Fund	1	MUTUAL FUNDS by R.K.Mohapatra	• Chalk • Board • Discussion • Examples • Google classroom • YouTube videos
	Characteristics, Advantages, Disadvantages of Mutual Fund, Ethics	1		
	Entities involved – Sponsors, Trust, Trustee, AMC, Registrar &Transfer Agent and Fund Houses in India	4		
	Legal Framework, Role of Regulatory agencies – SEBI, RBI, AMFI, Ministry of Finance, SRO, Company Law Board, Registrar of Companies	3		
	Mutual Fund guidelines on advertisement, accounting, taxation, valuation norms, purchase mutual fund, investor protection	4		
	Mutual Fund regulation and grievances mechanism	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms RASHMI GURUNANI SUBJECT: MUTUAL FUND MANAGEMENT DEPARTMENT: COMMERCE

CLASS: SYBIM SEMESTER: III MONTH: AUGUST, SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to : Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 FINANCIAL PLANNING AND MUTUAL FUND	A) Basics of Financial Planning – Steps, Life Cycle, Wealth Cycle, risk profiling, asset allocation, contingencies funds	3	MUTUAL FUNDS by R.K.Mohapatra	• Chalk • Board • Discussion • Examples • Google classroom • YouTube videos
	B) Investor guides towards Financial planning – Eligibility for investment in mutual fund, KYC, Long bond fund, Short bond fund, Ultra Short bond fund, Need for financial advisors, colour coding mutual fund, difference between advisors and distributor, FD and mutual fund, dividend and growth option	6		
	C) Developing model portfolio for Investors – meaning, step by step approach of building model portfolio	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 4: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: SYBIM SEMESTER: III (Subject : Cost & Management Acc)

MONTH: _____JUNE - JULY ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 1 **UNIT COSTING & RECONCILIATION OF COST & FINANCIAL ACCOUNTS**	Introduction to Costing – Characteristics, objectives, importance, advantages of cost, costing and cost accounting. Methods of costing, techniques of costing, types of cost	4	COST ACCOUNTING BY SAXENA & VASHIST	• Chalk • Board • Discussion • Examples • Chalk • Google classroom
	Classification of cost into – direct, indirect, factory, administrative, selling, fixed, variable and semi variable. Classification of costs, Cost of Sales, Cost Centre, Cost Unit, Profit Centre and Investment Centre	3		
	Cost Sheet, Total Costs and Unit Costs, Different Costs for different purpose, Format of Cost sheet and calculation of per unit	2		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___15_

[Surekha Bhargav]
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: SYBIM SEMESTER: III (Subject : Cost &Management Acc)

MONTH: _____JULY-AUGUST _____ ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 1 **UNIT COSTING & RECONCILIATION OF COST & FINANCIAL ACCOUNTS**	Introduction to reconciliation, meaning, cost accounting and financial accounting	1	COST ACCOUNTING BY SAXENA & VASHIST	• Chalk • Board • Discussion • Examples • Chalk • Google classroom
	Need for reconciliation, rules for reconciliation	1		
	Practical Illustration	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___07

[Surekha Bhargav]
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: SYBIM SEMESTER: III (Subject :Cost & Management Acc)

MONTH: _____AUGUST - SEPTEMBER ACADEMIC YEAR: _____2022-23_____

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 3 **MARGINAL COSTING**	Introduction to Marginal Costing, Meaning of Absorption Costing, Difference between Marginal costing and Marginal costing.	1	COST ACCOUNTING BY SAXENA & VASHIST	• Chalk • Board • Discussion • Examples • Chalk • Google classroom
	Features, Assumptions, Advantages, Limitations of Marginal costing	1		
	Marginal Cost, Marginal cost equations, P/V ratio, contribution, Break even analysis meaning and graphic presentation, MOS	2		
	Practical illustration	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___09

[Surekha Bhargav]
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ASIS ALMEIDA DEPARTMENT: INVESTMENT MANAGEMENT CLASS: SYBIM SEMESTER: IV (Subject : Security Analysis and Portfolio Mangement)

MONTH: JANUARY- MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to: Students will be able to explored to different avenues of investment, equipped with the knowledge of security analysis, apply the concept of portfolio management for the better investment, invest in less risk & more return securities.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1.Fundamental Analysis	**Economy Analysis:** Meaning, Economic Analysis, Barometric or Indicator Approach, Econometric Model Building & Opportunistic Model Building. **Industry Analysis:** Concept of Analysis, Industry Life Cycle, Industry Characteristics. **Company Analysis:** Financial Statements, Analysis of Financial Statements	09	Vipul Prakashan	Chalk & Duster, Group Discussion

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TEACHING PLAN (UNIT PLAN)

	Practical Questions on – Debt Equity Ratios,Totall Debt Equity Ratio, Proprietory Ratios, Interest Coverage Ratio, Profitability Ratios related to Sales, Investment & Equity Shares Efficiency or Activity Ratios. Assessment Risk.			
2. Technical Analysis	Dow Theory Meaning and Principles of Technical Analysis, Price Chart, Line Chart, Bar Chart, Japanese Candlestick Chart, Trends & Trend Reversals, Chart Patterns, Support & Resistance, Reversal Patterns, Continuation Patterns & Elliot Wave Theory. **Mathematical Indicators:** Calculation of moving averages, Oscillators & Relative strength index. Market Indicators Fundamental Analysis v/s Technical Analysis	04		
3. Efficient Market Theory	A) Random Walk Theory B) The Efficient Market Hypothesis	05		

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TEACHING PLAN (UNIT PLAN)

4. Capital Asset Pricing Model	C) Forms of Market Efficiency D) Competitive Market Hypothesis			
	A) CAPM- Fundamental Notions of Portfolio Theory, Assumptions of CAPM, Efficient Frontier with Riskless Lending & Borrowing, Capital Market Line, Security Market Line & Pricing of Securities with CAPM. B) Arbitrage Pricing Theory (APT)- The Return generating model, factors affecting stock return, Expected return on stock, APT V/s CAPM.	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Ashwini Gurav DEPARTMENT: Accountancy CLASS: SYBIM SEMESTER: IV (Subject : Direct Tax)

MONTH: January to March ACADEMIC YEAR: 2022-23

1. LEARNING OBJECTIVE/S: Understand & Remember- the meaning of salary; section 10, sections 15-17; calculation of income from salary; various allowances (taxable, partly taxable, non-taxable); perquisities; rules and calculation of Gratuity, Pension, Leave encashment.
2. Understand & Remember- the meaning of income from other sources; sections 56-59; calculation of income from other sources.
3. Understand & Remember- the meaning of capital gains; Section 45, 48, 49, 50, 54 and 55, calculation of capital gains.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1 - Definitions	Definitions Residential Status Scope of Income	10	Book by Manan/Vipul publications/Internet	Chalk & Board

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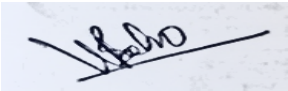

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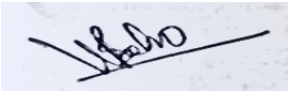
TEACHING PLAN (UNIT PLAN)

Unit 2- Heads of Income Unit 3 - Deduction under chapter Vl A Unit 4- Computation of Total Income	Salary Income from House Property Capital Gains Business & Profession Other sources	25	Book by Manan/Vipul publications/Internet	Chalk & Board
	80A, 80C, 80CCC, 80D, 80E, 80TTA, 80U	5	Book by Manan/Vipul publications/Internet	Chalk & Board
	Practical Sums on Total Income	5	Book by Manan/Vipul publications/Internet	Chalk & Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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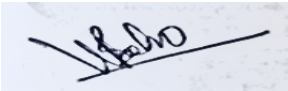

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: lejesh keloth DEPARTMENT:FYBIM CLASS: A SEMESTER: IV (Subject : Business economic-II)

MONTH: JUNE TO OCT ACADEMIC YEAR: 22-23

LEARNING OBJECTIVE/S: Enable the students to pursue further studies in this discipline understanding the functioning of Domestic as well as global economy

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Macro-economics Paper-II	**Module 1- Scope importance of Macro Economics:** Macroeconomics : Meaning, Scope and Importance ♦ Circular Flow of Aggregate Income and Expenditure : Closed and Open Economy Models ♦ The Measurement of National Product : Meaning and Importance – Conventional and Green GNP and NNP Concepts – Relationship Between National Income and Economic Welfare ♦ Short run Economic Fluctuations : Features and Phases of Trade Cycles ♦ The Keynesian Principle of Effective Demand : Aggregate Demand and Aggregate Supply – Consumption Function – Investment Function – Effects of Investment Multiplier on Changes in Income and Output	15	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method

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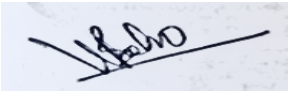

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TEACHING PLAN (UNIT PLAN)

MAcro-economics Paper-II	**Module 2-Money flow:** Money Supply : Determinants of Money Supply – Factor influencing Velocity of Circulation of Money ♦ Demand For Money : Classical and Keynesian Approaches and Keynes' Liquidity Preference Theory of Interest ♦ Money and Prices : Quantity Theory of Money – Fisher's Equation of Exchange – Cambridge Cash Balance Approach ♦ Inflation : Demand Pull Inflation and Cost Push Inflation – Effects of Inflation – Nature of Inflation in a Developing Economy ♦ Monetary Policy : Meaning, Objectives and Instruments, Inflation Targeting	15	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method
Macro-economics Paper-II	**Module 4** ; OPEN ECONOMIC THEORY AND ISSUES OF INTERNATIONAL TRADE; .		H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method
	The Basis of International Trade : Ricardo's Theory of Comparative Cost Advantage – The Hecksher-Ohlin Theory of Factor Endowments – Terms of Trade – Meaning and Types – Factors Determining Terms of Trade – Gains from Trade – Free Trade versus Protection	10	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method

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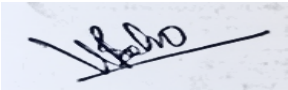

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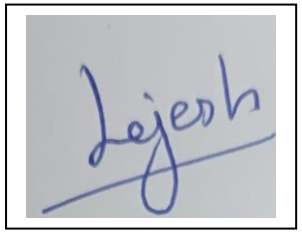
TEACHING PLAN (UNIT PLAN)

	♦ Foreign Investment : Foreign Portfolio Investment – Benefits of Portfolio Capital Flows – Foreign Direct Investment – Merits of Foreign Direct Investment – Role of Multinational Corporations ♦ Balance of Payments : Structure – Types of Disequilibrium – Measures to Correct Disequilibrium in BOP ♦ Foreign Exchange and Foreign Exchange Market : Spot and Forward Rate of Exchange – Hedging, Speculation and Arbitrage – Fixed and Flexible Exchange Rates – Managed Flexibility			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:40



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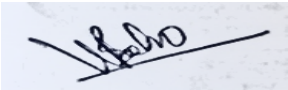

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TEACHING PLAN (UNIT PLAN)

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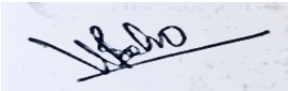

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Megha Kulkarni DEPARTMENT: Commerce (SFC) CLASS: SY BIM SEMISTER: IV
SUBJECT: Information Technology in Invest Management-II MONTH: November-February ACADEMIC YEAR: 2022-23
LEARNING OBJECTIVE/S: The learners will be able to: Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & II E Business & Security for E-Business	What is **E-Commerce,** History of E-Commerce ,types of E-commerce, comparison of traditional & E-commerce,E-commerce business model, advantage and disadvantages of E-commerce.	6	Internet source, Wikipedia.	Chalk board method, discussion, debates
	Web auctions, virtual communities, portals, E-business revenue models.	6		
	Security Threats-Overview, Implementing E-Commerce Security,Encryption -Decryption ,Cryptography methods,SSL protocol, Firewalls,.	6		
	Threat Hunting -Definition, Threat hunting threat detection, advantages of threat hunting & threat detection , Best practice for threat hunting, considerations of threat hunting, Threat hunting /detection software.	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III & IV Cyber Law & Security. Ms -Office : Package for Institutional Automation	**Cyber crime-**Various threat & attacks,phishing,key loggers, Identity Theft, Call & SMS forging, e-mail elated crimes,denial of service attack,Hacking, Online shopping frauds, credit card frauds. Cyber Stalking.	6	Internet source, Wikipedia.	Chalk board method, discussion, YouTube video,debates,Particle explanation on Computer
	Cyber Security- Computer security,E-security,Password Security, Reporting Internet fraud.	4		
	Cyber Law-Need of Cyber law, Its History, Legal aspect of E-Business, IT Act 2000 & its silent features.	4		
	Ms -Office- Ms power point Inter link between slides, hyperlinks,adding multiple content onto one slide,(video, audio, text etc), slide animation, adding time, using existing theme in new presentation, import online themes, creating template of presentation, save and run the slide show	6		
	Application of internet- introduction to email, writing professional e mails, creating digitally signed document, google drive:use of it in storing documents,sheets,presentation & PDF files.	4		
	Use of outlook express- Configuring outlook express, creating & managing profile in outlook, Sending and receiving e-mail via outlook , emailing merged document, boomerang facility of email.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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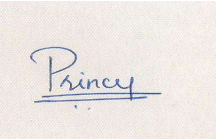
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: SELF FINANCE CLASS: SYIM SEMESTER: IV Subject : FUNDAMENTALS OF EQUITY MARKETS

MONTH: DECEMBER - MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learner will be learning about fundamentals of equity, shares, market force and their roles in the economy of our country.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1- INTRODUCTION TO EQUITY MARKET	Meaning and definition of Equity shares, growth of corporate sector and simultaneous growth of equity shareholders, tradeoff between ownership and management In companies. Development equity culture in india	15	Book by Manan publications/Internet)	Lecture method, CHALK AND DUSTER METHOD



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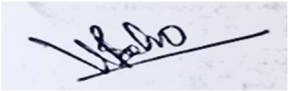

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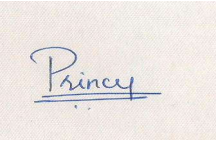
TEACHING PLAN (UNIT PLAN)

Unit 2- COMPONENTS OF EQUITY MARKET	A) Basics of Primary Market IPO, Book building, Red-Herring Prospectus -it's unique features. Green Shoe option, Sweat equity, ESOP Right issue of shares. Non-voting shares and Role of merchant bankers in fixing the price B) Market For Equity Secondary Markets Definition and functions ofStock Exchanges. Evolution and Growth of Stock Exchanges. Stock Exchanges in India, NSE, BSE, OTCEI and Overseas Stock Exchanges. Recent Development in Stock Exchanges and Stock Market Indices. C) Dealings in Stock Exchanges - Role of Brokers, Stock Market Quotations Procedure for buying & selling shares. BOLT - On Line Trading/ NEAT System, Clearing & Settlement systemUnderstanding Risk- kinds of business risk- need and scope of insurance -Evolution of insurance – principles of insurance -types of insurance and policies- risk and return relationship	20		



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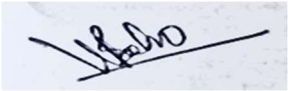

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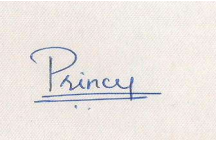
TEACHING PLAN (UNIT PLAN)

Unit 3: LAW RELATING TO ISSUE OF SHARES	Insurance business Environment in India- growth of business – actuarial role -claim and settlement procedures- insurance regulations role of IRDA Issue and listing of securities A) Meaning and Definition of equity shares, Growth of corporate sector the simultaneous growth of equity shareholders. Trade-off	10	Book by Manan publications/Internet	Lecture method, CHALK AND DUSTER METHOD
Unit 4: EVOLVING ROLE OF EQUITY MARKET	A) Issue and Listing of Securities Listing of Securities, Issue of Capital and Disclosure Requirements (ICDR), Procedure for issue of various types of shares and debentures, Employee Stock Option Scheme and Employee	15	Book by Manan publications/Internet	



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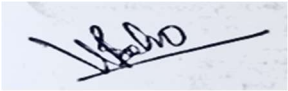

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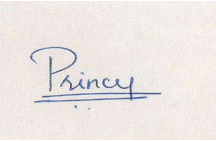
TEACHING PLAN (UNIT PLAN)

	Stock Purchase Scheme, Delisting of Securities. Evolving Role of Equity Market A) Role of Equity Markets in economic development Need for attracting more investors towards equity. Need for strengthening secondary markets, Link between primary Market and secondary market. B) Developments in the indian Equity Market, Channelizing domestic savings & investments, Role of FDI & Foreign Institution Investment, Role of Retail Investors and Role of SEBI in promoting equity markets Board of Studies in Banking & Finance, University of Mu			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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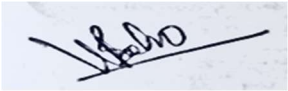

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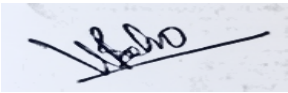
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Prof. Bhakti Vilas Purandare** DEPARTMENT: INVESTMENT Management CLASS: FYBIM SEMESTER: I
Subject: Financial Accounting MONTH: June to October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to understand the concept of cost accounting, material labour and overheads cost.

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
Unit 1. Introduction to accounting	• Meaning and scope of accounting, need, definition, objectives. Basic accounting terms. • AS 1 – Disclosure of accounting policies : Purpose, Areas, disclosure • AS 2 – Valuation of Inventory (Stock) : Meaning, definition, applicability, measurement. • As 9 – Revenue Recognition : Meaning, scope, sale of goods, rendering services, disclosure	15		Chalk, board
Unit 3. Final Accounts	• Final Accounts, Manufacturing Account, Trading Account, Profit and Loss Account, Balance sheet. Adjustment entries.	15		Chalk, board



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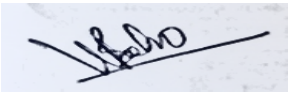
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____60



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TEACHING PLAN (UNIT PLAN)

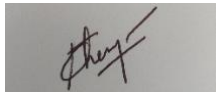
NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: SELF- FINANCE CLASS: FYBIM SEMESTER:I (Subject :BIWC)

MONTH: JUNE-SEPT ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: _____

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 4 Risk Profiling of Products and Investors -	Types of Investment Risk, Product Profiling in terms of Risk and Tenure Risk Profiling of Investors, Asset Allocation.	15	Wikipedia, Vipul Publications	Chalk, Board, Google Classroom, Charts.
	Types of Asset Allocation Strategies, Wealth Creation – Factors and Principles			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15_



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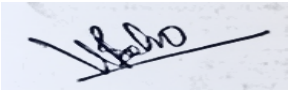

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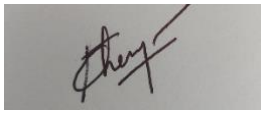

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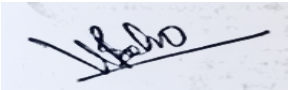

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: lejesh keloth DEPARTMENT: FYBIM CLASS: A SEMESTER: I (Subject : Business economic)

MONTH: JUNE TO OCT ACADEMIC YEAR: 22-23

LEARNING OBJECTIVE/S: Enable the students to pursue further studies in this discipline understanding the functioning of Domestic as well as global economy

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Micro-economics Paper-1	**Module 1- Scope importance of Business Economics:** Basic tools, opportunity cost principles, cost principle, basic economics relation, total average and marginal relation. The basis of market demand market supply equilibrium price-in demand and supply curve and equilibrium	05	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method
	Module 2- Demand Analysis: Market, what is competition -demand curve, market demand versus individual demand: movement along the demand curve shifts in demand curve supply, market supply and individual supply three steps in the analysing change in equilibrium, price ceiling and floor taxes and the impact- price elasticity of demand - total revenue and elasticity of demand- impact of price elasticity on revenue.	10	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method

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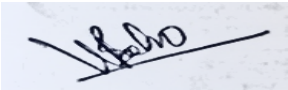

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TEACHING PLAN (UNIT PLAN)

	DEMAND ESTIMATION AND FORCSTING; Meaning and significance , method of demand estimation , survey and statistical method.			
Micro-economics Paper-1	**Module 3:SUPPLY AND PRODUCTION COSTOF PRODUCTION: Production function short run analysis with the law of variable production function with two variable , ridge lines and least cost combination of input ; long run production function and law of return to Scale ,economic and economics of Scale.** **COST CONCEPT;** Accounting cost and economic cost, implicit and explicit, social cost in private cost , historical cost and replacement cost, sankosh and incremental cost, fixed and variable cost, total average and marginal cost, cost output relation in short run and long run (sums)	05	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method
Micro-economics Paper-1	**Module 4** ;MARKET STRUCTURE; Perfect cooperation and monopoly and pricing and output decision under imperfect competition Short run and long run equilibrium of competitive firm and of industry – monopoly –short run n long run equilibrium of a firm under monopoly . Monopolistic competition ;Equilibrium of a firm under monopolistic competition , debate over role of advertising.	05	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method

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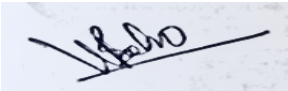

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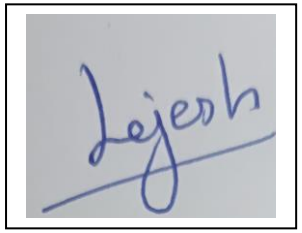
TEACHING PLAN (UNIT PLAN)

	Module 5 Pricing practices. **Cost orientation pricing method ; cost – plus (full cost0 pricing , marginal pricing , mark up pricing , discriminating pricing ,multiple – produt pricing – transfer pricing .**	05	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:30



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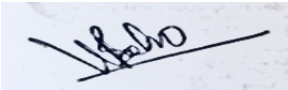

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **NEHA SANJAY MAHESHWARI** DEPARTMENT: **COMMERCE SFC** CLASS: **FY BIM** SEMESTER: **I**

(Subject : **INTRODUCTION TO FINANCIAL SYSTEM)**

MONTH: **AUGUST** ACADEMIC YEAR: **2022-23**

LEARNING OBJECTIVE/S: gain knowledge related to an overview of Financial System, Framework, Financial Institutions, Finance Services, Financial Regulators,Financial Instruments.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 1 AN INTRODUCTION TO THE FINANCIAL SYSTEM	Overview of Financial System. Functions of a Financial System. Evolution of Financial System. Constituents of the Financial System and interrelationship between various components.	15	Introduction to Financial System by Jia Makhija by Vipul Prakashan	Chalk Board Flow Chart
UNIT 2	Intermediation V/S Non-Intermediation: Definition.Role, Features,Mediums, How Non- Intermediation support intermediation.	10	Introduction to Financial System by Jia Makhija	Chalk Board Flow Chart

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INTERMEDIATION V/S NON-INTERMEDIATION	Financial Mrakets: Kinds of financial markets,Features, Role and Functions of each market, Size,structure,Participants and importance of each market.		by Vipul Prakashan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: BIM CLASS: FYBIM SEMESTER: I (Subject : Basic of Investment & Wealth Creation

MONTH:JULY 22- DECEMEBER 22 ACADEMIC YEAR: 22-23

LEARNING OBJECTIVE/S: TO GIVE KNOWLEDGE TO STUDENTS ABOUNT INVESTMENT DECISIONS.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	1. 1. Financial Mathematics - I Time Value Of Money Present Value; Net Present Value; Future Value; Annuities – Immediate and Deferred; Growing Annuities and Inflation adjusted Annuities Calculation of returns Nominal Rate of Return, Effective Rate of Return, Internal Rate of Return, Holding Period Return (HPR), Compounded Annual rate of Return (CAGR), Real Rate of Return after adjusting for Inflation, Rate of Return after	15	SHETH , VIPUL,MANAN PRAKASHAN	PPT, CHALK AND BOARD

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TEACHING PLAN (UNIT PLAN)

	adjusting taxes			
	2.Financial Mathematics – II Total Assets – Net Worth and Financial Ratios Net worth and its components, Liquidity Ratios, Debt to income Ratio, debt to financial assets, debt to total assets, savings Ratio Loan Calculations EMI Calculation; Loan restructuring – Present Value of future payments; Loan repayment schedules; Loan repayments with varying interest rates; Amortization; Home Equity; Refinancing cost; Fixed EMI Vs. Fixed Tenure.	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Basic of Investment & Wealth Creation (BIWC) DEPARTMENT: Commerce (SFC)

CLASS:FYBIM SEMESTER:I MONTH:aug-dec ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I GENERAL PRINCIPLES OF INVESTING	Introduction to investments – saving , investing , speculation , interest rate , compound interest rate	03	Basic of Investment & Wealth Creation by Kevin D.Peterson	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Investment objectives – SMART GOALs	02		
	Asset classes available for investments	02		
	Debt management ,personal financial statement analysis	02		
	Forms of business ownership	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 12

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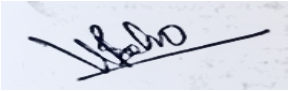

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: INDIAN FINANCIAL SYSTEM (IFS) DEPARTMENT: Commerce (SFC)

CLASS:FYBIM SEMESTER:I MONTH: aug -dec ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III FINANCIAL INSTITUTIONS AND FINANCIAL SERVICES & UNIT IV FINANCIAL REGULATORS AND FINANCIAL INSTRUMENTS	Financial institutions - Kinds of financial institutions ,features , functions , role , size , structure , participants & importance of each kind of institute .	06	INDIAN FINANCIAL SYSTEM by M.Y.Khan	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Financial services – role, function , types of financial services , a table showing the institution and services offered .	06		
	Financial regulators –features , role , functions , types . A table showing the various regulators , the markets they regulate .	06		
	Financial instruments – classification ,types , features New financial instruments .	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 3 &4: 24

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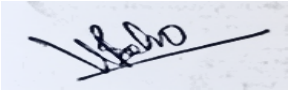

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Sarita Panigrahy DEPARTMENT: Mathematics(BIM) CLASS: FYBIM SEMESTER: - 1 (Subject : - Quantitative Method)

MONTH: June-December ACADEMIC YEAR: 2022-23

1. LEARNING OBJECTIVE/S: - Develop and maintain problem-solving skills
2. mathematical ideas to model real-world problems.
3. Translate words into math language, and construct an abstract model that describes the problem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	T EACHING METHOD/ ICT TOOLS USED
Unit -1	Introduction, Organising, Data, Frequency Distribution, Data Represen	10	VIPUL ,MANAN	Chalk and Duster Method
Unit-2	Measures of Central Tendencies	10	RISHABH	Chalk and Duster Method
Unit-3	Measures of Dispersion	10	VIPUL ,MANAN	Chalk and Duster Method
Unit-4	Co-variance, Correlation and Regression	8	RISHABH	Chalk and Duster Method
Unit-5	Probability, Probability Distribution and decision	10	VIPUL ,MANAN	Chalk and Duster Method
Unit-6	Index Nos.	8	VIPUL ,MANAN	Chalk and Duster Method
Unit-7	Insurance	6	RISHABH	Chalk and Duster Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:- 62

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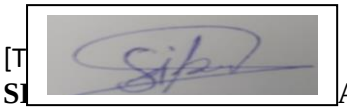
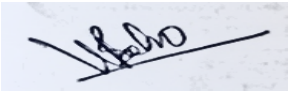
SI  **AFF**



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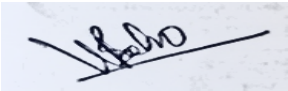

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. SEEMA SIHANA** DEPARTMENT: **SELF FINANCE** CLASS **F.Y.B.I.M.** SEMESTER: **I**

SUBJECT: FC I **MONTH**: AUGUST-DECEMBER 2022 ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To make the students socially aware of the societal problem and their personality.
The learners will be able to: to understand the overall stratification of the society.
The learners will be able to: to understand the Indian constitution and its importance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FC I	Module-I Multi-cultural diversity and Indian society through its demographic composition: population distribution according to religion, caste, and gender, Appreciate the concept of linguistic diversity in relation to the Indian situation: Understand regional variations according to rural, urban and tribal	05	Text Book Internet	1.Chalk and Black Board Method 2 Example 3 Discussion 4. Google Classroom

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	characteristics Understanding the concept of diversity as difference.			
	Module II- Concept of disparity-1 1. Understanding the concept of disparity as arising out of stratification and inequality 2. Gender Ratio, Gender Discrimination 3. Violence against women 4. Female foeticide 5. Portrayal of women in media 6. Inequalities faced by people with disabilities and understand the issues of people with disabilities.	10	Text Book Internet	1.Chalk and Black Board Method 2 Example 3 Discussion 4. Google Classroom
	. Module III- Concept of disparity-2 Examine inequalities manifested due to the caste system and inter group conflicts arising there of Understanding inter group conflicts arising out of communalism Causes and effects of communalism, regionalism, linguistic casteism Unit - 4 The Indian Constitution	10	Text Book Internet	1.Chalk and Black Board Method 2 Example 3 Discussion 4. Google Classroom

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	Philosophy of the Constitution as set out in the Present, The structure of the Constitution - the Preamble, Main Body and Schedules Fundamental Duties of the Indian Citizen, tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society Basic features of the Constitution Unit - 5: Significant Aspects of Political Processes The party system in Indian political Local self-government in urban and rural areas The 73 and 74 Amendments and their implications for inclusive politics Role and significance of women in politics Topics for Project Guidance : Growing Social Problems in India	10 10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: SFC CLASS: TYIM SEMESTER: V (Subject : International Finance)

MONTH: June to October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to:

- Understand the meaning of international finance and challenges and mechanisms of the same.
- Get knowledge of global investments through mergers and acquisitions.
- Interpret the distinction between mergers and acquisitions.
- Know in detail about various stock exchanges in the world and their functioning.
- Gain insight on depository receipts-ADR, GDR and IDR.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1- **Global financial environment**	• Introduction to international finance,The challenges of international finance • The finance function in global context-global financial market • Cost of capital, Structure intra company transfers • Capital budgeting, International financial management and imperfections in financial markets	13	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion, example and test

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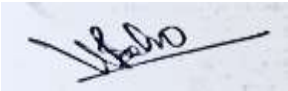

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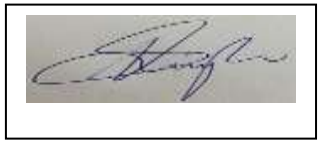
TEACHING PLAN (UNIT PLAN)

	• Growing international integrations- diversification, benefits of global investments • International mergers and acquisitions-classification, reasons for mergers and acquisitions, Changes in policy and regulations environment, Trends in cross border mergers and acquisitions			
Unit 2- **International money and equity markets**	• Introduction and role of international money market • Instruments traded in global money market • Returns on major money market instrument • Major stock markets of the world and Emerging stock markets • International equity trading and Multiple listing • International equity markets • Credit rating agencies and their roles • Depository receipts, GDR- characteristics, mechanism of issue and participants of GDR • ADR- types and characteristics and IDR	13	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion, example and test

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 26



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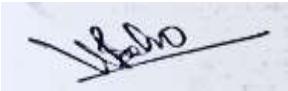

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Abigail D'mello SUBJECT: Operations in Equity Market DEPARTMENT: Commerce

CLASS: TYBIM SEMESTER: V MONTH: June-July ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I An Overview of Indian Equity Market	Meaning & Definition of Equity Shares, Growth of Corporate Sector & simultaneous growth in number of Equity Shareholders	04	Equity Markets by Jia Makhija	Chalk & Board, Discussion.
	Separation of Ownership & Management in the Company	02		
	Development of Equity Culture in India & Current Position	03		
	Security Market- An Overview	03		
	Market Terminology & Investment Procedure in Primary & Secondary Market	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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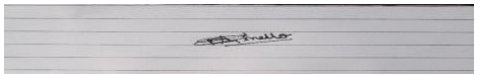

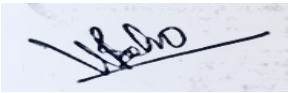

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Abigail D'mello SUBJECT: Operations in Equity Market DEPARTMENT: Commerce

CLASS: TYBIM SEMESTER: V MONTH: July- August
ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Primary & Secondary Markets	Primary Market- IPO, Methods Followed, Book Building, Offer for Sale	02	Equity Markets by Jia Makhija	Chalk & Board, Discussion.
	Role of Merchant Bankers in fixing the Price, Red Herring Prospectus, ASBA	02		
	Green Shoe Option, Sweat Equity, ESOP, Right Issue of Shares	02		
	ADR, GDR, IDR	01		
	Secondary Market- Definition , Functions, Evolution & Growth	02		
	NSE, BSE, SME Exchanges & Overseas Stock Exchanges, Recent Developments	03		

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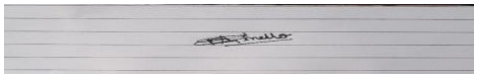

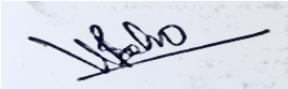

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TEACHING PLAN (UNIT PLAN)

	Merger of SEBI with FOMC, Stock Market Indices	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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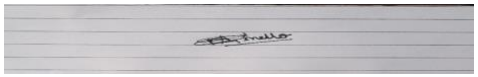

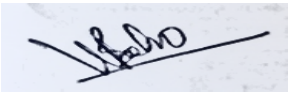

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Abigail D'mello SUBJECT: Operations in Equity Market DEPARTMENT: Commerce

CLASS: TYBIM SEMESTER: V MONTH: September ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Valuation of Equities	Factors affecting Share Prices	02	Equity Markets by Jia Makhija	Chalk & Board, Discussion.
	Balance Sheet Valuation	02		
	Dividend Discount Model, Price Earning Model	02		
	Fundamental Analysis- Macroeconomic factors, Market related factors	03		
	Role of Brokers, Stock Market Quotations	02		
	Procedure for Buying & Selling, BOLT online trading	02		

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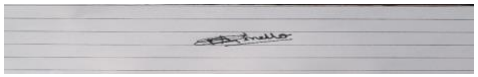

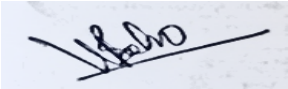

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TEACHING PLAN (UNIT PLAN)

	NEAT Clearing & Settlement, Order Matching	02		

NAME OF THE STAFF: Abigail D'mello SUBJECT: Operations in Equity Market DEPARTMENT: Commerce

CLASS: TYBIM SEMESTER: V MONTH: October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Trading Systems & Strategies	Trading System in Stock Exchange- Introduction, NEAT & BOLT, Screen Based Trading System	03	Equity Markets by Jia Makhija	Chalk & Board, Discussion.
	Market Phases, Order Management, Trade Management	03		
	Market Window Operations & Auction	03		
	Trading Strategies- Long vs Short, Brief Introduction to Hedging	04		
	Daily Settlement & Market Margins	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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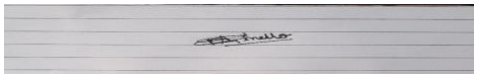

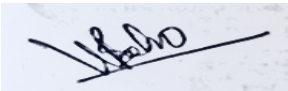

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TEACHING PLAN (UNIT PLAN)

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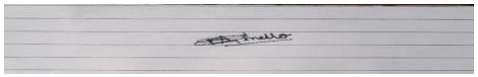

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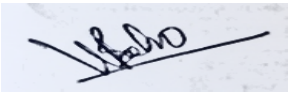

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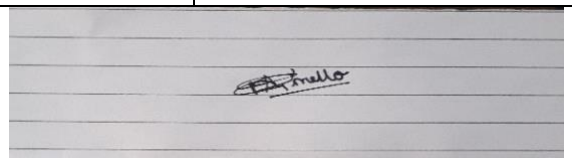
TEACHING PLAN (UNIT PLAN)

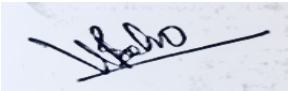
NAME OF THE STAFF: Abigail D'mello SUBJECT: Risk Management DEPARTMENT: Commerce

CLASS: TYBIM SEMESTER: V MONTH: June-July-August ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I Foundations of Risk Management	Basic Risk Types	03	Risk Management by Dhaval Parekh	Chalk & Board, Discussion.
	The Role of Risk Management	02		
	Enterprise Risk Management (ERM)	02		
	History of Financial Disasters & Risk Management Failures	06		
	2007 Financial Crisis	02		





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VIVA COLLEGE, Virar (W)

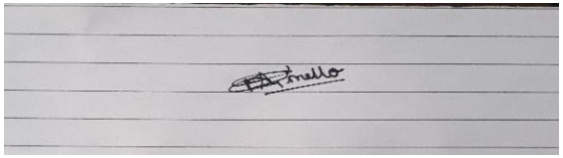
TEACHING PLAN (UNIT PLAN)

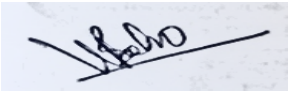
NAME OF THE STAFF: Abigail D'mello SUBJECT: Risk Management
DEPARTMENT: Commerce

CLASS: TYBIM SEMESTER: V MONTH: September-October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Capital Market Risk Management	Equity, Currencies & Commodities Market in India	02	Risk Management by Dhaval Parekh	Chalk & Board, Discussion.
	Introduction to Derivatives	01		
	Forward, Future & Options Contract	02		
	Hedging through Derivatives Contract	02		





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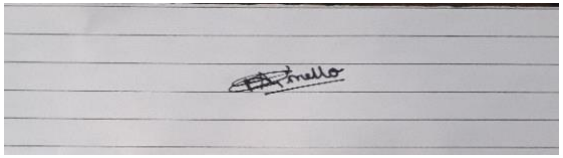
TEACHING PLAN (UNIT PLAN)

	Fixed Income Securities	03		
	Fixed Income Risk Management through Derivatives	02		
	Rating Agencies	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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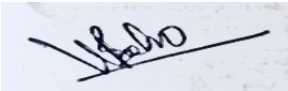

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Abigail D'mello SUBJECT: Corporate Accounting DEPARTMENT: Commerce

CLASS: TYBIM SEMESTER: V MONTH: September-October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Valuation of Shares	Meaning of Shares, Types of Shares	01	Corporate Accounting by Ainapure	Chalk & Board, Discussion.
	Shares as a means of Investment, Importance of Shares	01		
	Valuation of Shares in case of Merger & Acquisition of Shares	03		
	Intrinsic Value of Shares	04		
	Yield Value of Shares	03		
	Fair Value of Shares	03		

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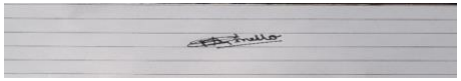

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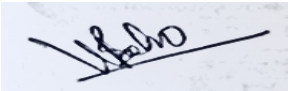

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15
NAME OF THE STAFF: Abigail D'mello SUBJECT: Corporate Accounting
DEPARTMENT: Commerce

CLASS: TYBIM SEMESTER: V MONTH: June-July-August-September ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Company Final Accounts	Relevant Provisions of Companies Act related to Preparation of Final Accounts	02	Corporate Accounting by Ainapure	Chalk & Board, Discussion.
	Notes to Accounts	05		
	Preparation of Financial Statements as per Companies Act: Statement of Profit & Loss	05		
	Balance Sheet (Including Comprehensive Sums)	06		

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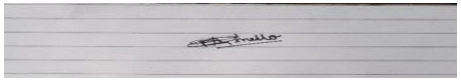

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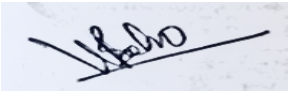

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TEACHING PLAN (UNIT PLAN)

	AS 1 in relation to Final Accounts of Companies (Disclosure of Accounting Policies)	02		

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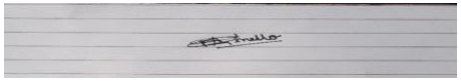

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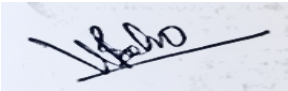

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: SELF- FINANCE CLASS: TYBIM SEMESTER:V (Subject : Business Ethics)

MONTH: JUNE-SEPT ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:Understand ethics in terms of ten commandments with finance, HR and various in depth of work rights.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
Unit 2 Organizational Ethics & Unit 4 Ethics and Social Responsibility	Ethical decision making: Decision Making (Normal Dilemmas and Problems): i) Utilitarianism, J. Bentham and J.S. Mill, Deontology (I. Kant) Virtue Ethics (Aristotle).	11	Wikipedia, Vipul Publications	Chalk, Board, Google Classroom, Charts.
	Gandhian Approach in Management and Trusteeship, Importance and Relevance of Trusteeship Principle in Modern Business. Ethical issues in Functional areas of Business, Ethics in Advertising (Truth in Advertising). Ethical issues in Finance.	11		

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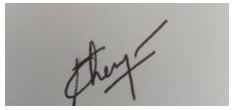

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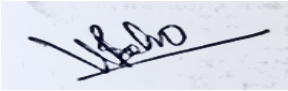

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VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

	Meaning and Definition of CSR, History & Evolution of CSR, Concept of Charity, Corporate Philanthropy, Ethics Relating to Environment Protection, Ethics Relating to Consumer Protection-Social Responsibility & Business Ethics Arguments for and against Social Responsibility. CSR through Tripple Bottom Line and Sustainable Business, Relation between Corporate Responsibility & Business Ethics.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

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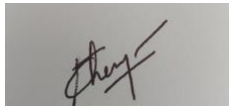

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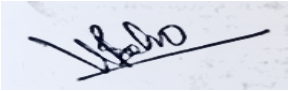

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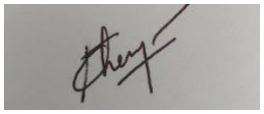
TEACHING PLAN (UNIT PLAN)



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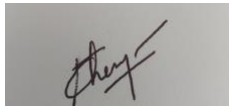

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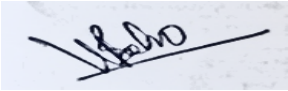

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: SELF- FINANCE CLASS: TYBIM SEMESTER:V (Subject : Business Ethics)

MONTH: JUNE-SEPT ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:Understand ethics in terms of ten commandments with finance, HR and various in depth of work rights.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
Unit 1 Introduction to Business Ethics Unit 5 Business Ethics in Global Economy	Definition, Meaning, Nature of Ethics, Meaning of moral & Ethics. Types of Ethics, Importance of Ethics, Business Ethics- Meaning and Nature. Importance of Ethics in Business, Areas of Business Ethics, Meaning of Functional Ethics, Types of Ethics According to Functions of Business- Marketing Ethics, Foreign Trade Ethics Relating to Copyright. Ethics relating to Free and Perfect Competitive Market.	15	Wikipedia, Vipul Publications	Chalk, Board, Google Classroom, Charts.

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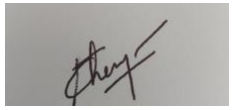

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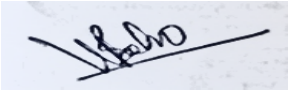

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TEACHING PLAN (UNIT PLAN)

	Ethics in the context of Global Economy- Relationship between Business Ethics, Business Development- Role of Business Ethics in Building a Civilized Society.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

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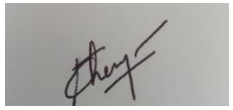

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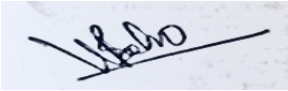

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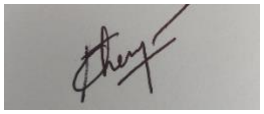
TEACHING PLAN (UNIT PLAN)



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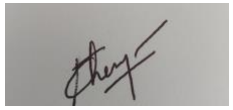

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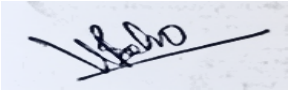

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: keyur Limbachiya DEPARTMENT: Commerce (SFC) CLASS: TYBIM SEMESTER: V (Subject: Risk management)

MONTH: June - September ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The general education curriculum will enable students to acquire skills, knowledge and experienced.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Credit Market Risk Management	Introduction	**1**	Risk management by Dhaval Parekh, Past papers ICAI modules and other online references, Mumbai university Book PDF,	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM
	Information required for evaluation of credit risk	**2**		
	Procedure for credit risk management	**1**		
	Credit lifecycle	**1**		
	Loan review mechanism	**2**		

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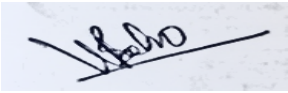

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TEACHING PLAN (UNIT PLAN)

	RBI guidelines on credit Rating Framework in Banks	**4**		
	Introduction of Basel Norms and calculation of capital adequacy ratio	**4**		
UNIT IV Risk Management	Estimation of volatilities and corelations, monte Carlo simulation.	**2**	Risk management by Dhaval Parekh, Past papers ICAI modules and other online references, Mumbai university Book PDF,	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD • GOOGLE CLASSROOM
	Linear value at Risk	**2**		
	Option Valuation	**1**		
	Risk- adjusted return on capital & beta calculation	**3**		
	Risk management of derivatives	**4**		
	Interest rates and measure of interest rate sensitivity	**3**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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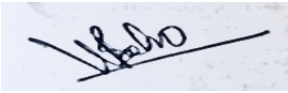

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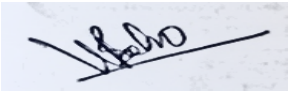

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: TYBIM SEMESTER: V
(Subject : CORPORATE ACCOUNTING) MONTH: JUNE, JULY ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 INTRODUCTION TO CORPORATE ACCOUNTING	Meaning of Company, Requirement of Accounting for Companies, Procedures of Accounting for Companies, Importance of Corporate Accounting, Use of Accounting Standards in Corporate Accounting, Issue of Shares, Issue of Debentures, Issue of Bonds, Recent Trends in Corporate Accounting	10	Dr. S.M.Shukla Dr. K.L.Gupta	• Chalk • Board • Discussion • Examples • Google Class Room

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

T.R.Patel

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: TYBIM SEMESTER: V
(Subject : CORPORATE ACCOUNTING) MONTH: AUGUST, SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 INVESTMENT ACCOUNTING	For Shares (Variable income bearing securities) For Debentures (fixed income bearing securities)	3	Dr. S.M.Shukla Dr. K.L.Gupta	• Chalk • Board • Discussion • Examples • Google Class Room
	Accounting for Transactions of Purchase and Sale of Investments with ex and cum interest and finding cost of investment sold and carrying cost as per weighted average method (Excl. brokerage) Format for Investment Accounting	5		
	Practical Illustrations	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 15

T.R.Patel

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: BIM CLASS: TYBIM SEMESTER: VI (Subject :COMMODITIES MARKET DERIVATIVES)

MONTH: DECEMEBER 22 – MARCH 23 ACADEMIC YEAR: 22-23

LEARNING OBJECTIVE/S: **To give knowledge to students about how to promote competitive, efficient, and transparent markets that help protect consumers from fraud and unscrupulous practices**

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	1.Introduction to Commodity Market • Emergence of Commodity Market • Dynamics of global commodity markets 2 Commodity Market in India • Commodity Exchanges in India • Role of Information in Commodity Markets • Linkages between equity markets and commodity markets • Commodity markets - Logistics and Warehousing	15	SHETH , VIPUL,MANAN PRAKASHAN	PPT, CHALK AND BOARD
	2.Commodity Exchanges • Function & Role • Trading & Clearing methods • Commodity futures • Commodity	15		

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TEACHING PLAN (UNIT PLAN)

	Specific Exchanges Vs Multi Commodity Exchanges 4 Strengthening commodity markets in India. • Role of Government • Role of Commodity Exchanges • Other Institutions • Training & development of Dealers **R**egulatory framework: forward maret commission: Rules governing commodity derivatives exchange, rules governing intermediaries, investor grievances, arbitration rules – Essential commodity Act- vat – forward contract regulation Act.			
	3**. Commodity Derivatives** Defination, types of derivatives, products, participants and functions, Exchange traded vs OTC derivatives – How commodity derivatives differ from financial derivatives, warehousing, quantity of underlying asset, global commodity exchanges, commodity exchange in India, commodities permitted for trading, KABRA committee report, commodities specific issues, cropping and growth patterns, global domestic demand, supply dynamics, price trends, and factors that influences prices.	15		
	4Pricing and trading in commodities derivatives. Inverstment assets vs consumption asset, the cost of carry model, pricing futures contract on investment commodities, pricing futures	15		

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TEACHING PLAN (UNIT PLAN)

	contract on consumption commodities, the futures basic , concept of speculation , hedging, arbitrage, Basic concepts such as margins, circuit filters, delivery norms, contracts specification, trading system, and entities in the trading system, trader workstation, order types and conditions, exposure limits, commodities to be traded, types of commodities, clearing , settlement and risk management			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:60

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TEACHING PLAN (UNIT PLAN)

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: TYBIM SEMESTER: VI (Subject : Auditing)

MONTH: JANUARY - MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1. Introduction to Auditing	Basics–Financial Statements, Users of Information, Definition of Auditing, Objectives of Auditing –Primary and Secondary, Expression of opinion, Detection of Frauds and Errors, Inherent limitations of Audit. Difference between Accounting and Auditing, Investigation and Auditing.	15	R.L. GUPTA	• Chalk • Board • Discussion • Examples • Google classroom
	Errors & Frauds–Definitions, Reasons and Circumstances, Types of Error – Commission, Omission, Compensating error. Types of frauds, Risk of fraud and Error in Audit, Auditors Duties and Responsibilities in case of fraud. Principles Of Audit–Integrity, Objectivity, Independence, Skills, Competence, Work performed by others, Documentation, Planning, Audi Evidence, Accounting System and Internal Control, Audit Conclusions and Reporting.			
	Types of Audit–Meaning, Advantages, Disadvantages of Balance sheet Audit, Interim Audit, Continuous Audit, Concurrent Audit and Annual Audit.			

NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 15

[Surekha Bhargav]
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: TYBIM SEMESTER: VI (Subject : Auditing)

MONTH: JANUARY - MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2. Audit Planning, Procedures and Documentation	Audit Planning–Meaning, Objectives, Factors to be considered, Sources of obtaining information, Discussion with Client, Overall Audit Approach.	15	R.L. GUPTA	• Chalk • Board • Discussion • Examples • Google classroom
	Audit Program–Meaning, Factors, Advantages and Disadvantages, Overcoming Disadvantages, Methods of Work , Instruction before commencing Work, Overall Audit Approach.			
	Audit Working Papers-Meaning, importance, Factors determining Form and Contents, Main Functions / Importance, Features, Contents of Permanent Audit File, Temporary Audit File, Ownership, Custody, Access of Other Parties to Audit Working Papers,			
	Auditors Lien on Working Papers, Auditors Lien on Client's Books Audit Notebook–Meaning, Structure, Contents, General Information, Current Information, Importance.			

NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: TYBIM SEMESTER: VI (Subject : Auditing)

MONTH: JANUARY - MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3. Auditing Techniques and Internal Audit Introduction	Test Check-Test Checking Vs Routing Checking, Test Check meaning, features, factors to be considered, when Test Checks can be used, advantages disadvantages precautions.	15	**R.L. GUPTA**	• Chalk • Board • Discussion • Examples • Google classroom
	Audit Sampling-Audit Sampling, Meaning, Purpose, Factors in determining Sample Size -Sampling Risk, Tolerable Error and Expected Error, Methods of Selecting, Sample Items, Evaluation of Sample Results			
	Auditors Liability in Conducting Audit Based on SampleInternal Control-Meaning and Purpose, Review of Internal Control, Advantages, Auditors Duties, Review of Internal Control, Inherent Limitations of Internal Control, internal Control Samples for Sales and Debtors, Purchases and Creditors, Wages and Salaries.			
	Internal Checks Vs Internal Control, Internal Checks Vs Test ChecksInternal Audit-Meaning, Basic Principles of Establishing Internal Audit, Objectives, Evaluation of Internal Audit by Statutory Auditor, Usefulness of Internal Audit, Internal Audit Vs External Audit,, Internal Checks Vs Internal Audi			

NUMBER OF LECTURES ALLOCATED TO THE UNIT 3: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SUREKHA BHARGAV** DEPARTMENT: ACCOUNTANCY CLASS: TYBIM SEMESTER: VI (Subject : Auditing)

MONTH: JANUARY - MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4. New Areas of Auditing and Professional Ethics	New Areas of Auditing Introduction to Cost Audit, Human Resource Audit, Management Audit, Operational Audit, Forecast Audit, Social Audit, Tax Audit, Forensic Audit and Environmental (Green) Audit	15	**R.L. GUPTA**	• Chalk • Board • Discussion • Examples • Google classroom
	Audit Committee. Audit in an EDP Environment-Introduction, General Approach to EDP based Audit and Special Techniques for Auditing in an EDP Environment. Professional Ethics and Misconduct Introduction			
	Meaning of Professional Ethics Meaning of Professional Misconduct, Schedules to the Chartered Accountants Act,1949 Relating to Professional Misconduct, Enquiry into Charges of Misconduct of Chartered Accountants			

NUMBER OF LECTURES ALLOCATED TO THE UNIT 4: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____REENA BEHERA_____ DEPARTMENT: _____BUSINESS ECONOMICS____ CLASS: _____SYEME__
SEMESTER: _III_ (Subject : _____ENVIRONMENTAL ECONOMICS_____)

MONTH: ____JUNE TO SEPTEMBER_____ ACADEMIC YEAR: ____2022-23_____

LEARNING OBJECTIVE/S: _____THIS PAPER WILL CREATE AWARENESS AMONG STUDENTS REGARDING ENVIRONMENT CONCERN AND HOW IT CAN AFFECT THE ECONOMY OF THE COUNTRY AND HOW INITIATIVE CAN BE TAKE TO SUPPORT THE ECONOMY BU CREATING A HEALTH HEALTHY ENVIRONMENT_____

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1,2,3,4,5	Environmental Economics — I Sem Ill Introductory micro-economic theory such as: supply and demand; price formulation; political means of control; environmental economic theories; Valuation methods; political means of control (administrative and incentive based) and their applicability on environmental problems; Natural resourse economics; renewable and non-renewable resources resource management regimes;	4 lectures per week	Online Resources	Chalk Duster Quiz, Test, Google Classroom PPT, Case studies, Assignment

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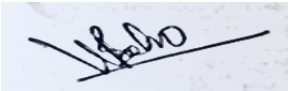

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TEACHING PLAN (UNIT PLAN)

	Ecological economics; the ecological system; technological pessimism vs technological optimism; International trade and the environment; Economic growth and the environment; and Case Studies			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___40_

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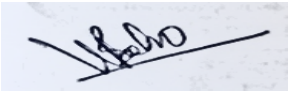

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHAKHA SANE DEPARTMENT: ECONOMICS CLASS:SYEME SEMESTER: **IV** MONTH:APRIL 2023

ACADEMIC YEAR:2022-2023 SUBJECT :ENVIRONMENTAL ECONOMICS

LEARNING OBJECTIVE/S: To take over the environmental status of the economy and to overcome the drawback with the help of different categories.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1,2,3 and 4:	Social Choice: Individual preferences regarding environmental protection, Biocentrism,Antoprocentricsm, Sustainability, Pareto efficiency, Social welfare,Arrow Impossible Theorem,	5lect		
	Efficiency and Markets: Efficiency in Goods and Bads, Efficiency in Production,First welfare Theorem,Consumer and Producer surplus,Cost Benefit Analysis.			
	Market Failure:Public Bads and externalities,Pricing of private versus public goods,Lindahl Pricing and free ridings,Externalities	5lect		

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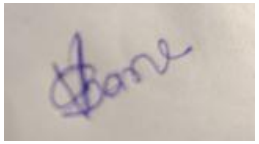
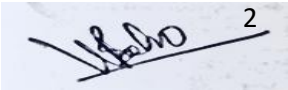
TEACHING PLAN (UNIT PLAN)

	Methods to drive the demand for environmental goods: Price Method, Property Values,Wage Regression,Value of statistic life,Household Production,Defensive Expenditure,Travel Cost,			
	Uses versus Non-Use Values,Willingness to Pay versus Willingness to accept. Regulating Pollution: Command and Control vs EnvironmentalTaxes vs Cap vs Trade and Liabilities. Pigouvian Fees: Single Polluter Single Damage, Single Polluter Multiple Damage, Multiple Polluter and the Equimarginal Principle,Fees versus Subsidies, Fees and Imperfect Competition Regulation with Unknown Control Cost,Price Versus Quantities Cost Theorem and Allocation of Property Rights.	10lect		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA MAHESHWARI DEPARTMENT: COMMERCE CLASS: SYBEME SEMESTER: III (Subject : Research Methodology)

MONTH: JUNE-OCT ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: Understand the Research Methods in Business.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1	• Fundamentals of Research: - Meaning, Objectives and Significance. Types of Research: - Basic research, Applied, Descriptive, historical, Exploratory, Experimental, Ex-post-factor and Case study approach. • Approaches to Research: - • a. Quantitative approach: - i Inferential ii Experimental iii Simulation • b. Qualitative approach: - i Ethnographic ii Phenomenological iii Field Research Importance of research in management decisions: - Various areas of research in business: a) Marketing Research b) Government policies and economic systems c) Social	8	**C.R.Kothari, "Research Methodology - Methods & Techniques" , New Age International Publishers**	**Blackboard, Chalk, Google classroom**

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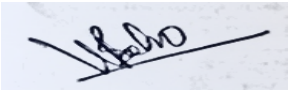

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	relationship d) Planning and operational problems of research in business			
Unit 2	• Research process: - Selecting the topic, defining the research problem, objectives of research, literature survey, sample design, data collection, execution of project, analysis of data and hypothesis testing, generalization and interpretation and preparation of research report. • Features of good research Research design – Meaning, need, features of good research design, types of research design – a) For exploratory research b) For descriptive research b) For causal research studies	7	**C.R.Kothari, "Research Methodology - Methods & Techniques" , New Age International Publishers**	**Blackboard, Chalk, Google classroom**
Unit 4	• Sources and Methods of data collection: - Primary and Secondary data. • a) Primary sources: - i. Observation ii. Interview iii. Questionnaire iv. Interview schedules b) Secondary sources Data processing – Tabulation - Data analysis and Interpretation Report writing – layout of research report	4	**C.R.Kothari, "Research Methodology - Methods & Techniques" , New Age International Publishers**	**Blackboard, Chalk, Google classroom**

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:19

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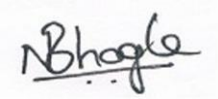
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA VAIBHAV TAMBE DEPARTMENT: EME CLASS: SYEME SEMESTER: III (Subject: Research Methodology) MONTH: DEC- MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: By the end of the session, Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Fundamentals of Research	Approaches to Research: - a. Quantitative approach: - i Inferential ii Experimental iii Simulation b. Qualitative approach: - i Ethnographic ii Phenomenological iii Field Research	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD



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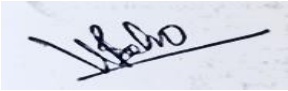

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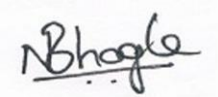
TEACHING PLAN (UNIT PLAN)

	Importance of research in management decisions: - Various areas of research in business: a) Marketing Research b) Government policies and economic systems c) Social relationship d) Planning and operational problems of research in business			
UNIT 3 HYPOTHESIS	Meaning, importance and types. Formulation of hypothesis and testing of hypothesis. Chi-square test, Correlation Co-efficient, Regression analysis. Sampling: - Meaning , Sample and sampling, essentials of good sample. Sample size, methods of sampling: - a) Probability sampling – cluster sampling, stratified sampling, multi	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD



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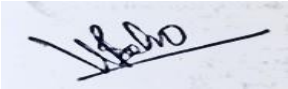

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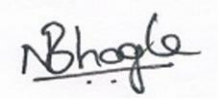
	stage sampling. b) Non-probability sampling: - Purposive sampling, Quota sampling, Convenience sampling.			



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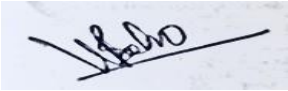

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPA PRADEEP DALVI DEPARTMENT: COMMERCE CLASS: SYEME SEMESTER: III (Subject : MARKETING MANAGEMENT)

MONTH: JUNE TO SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To learn about all marketing concepts, marketing research, consumer behavior.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1&2 UNIT 3 – ORGANISING	a) The 4 Ps and 3Cs of Marketing (b) Marketing as an activity, function, and philosophy (c) Needs, wants and demands; transactions, transfers & exchanges (d)Orientation of a firm: Production concept; product concept; selling concept; and marketing concept. New Trends in Marketing: E-Marketing, Internet Marketing, and Marketing using social networks Societal Marketing/Relationship Marketing Marketing Research; MIS; & Consumer Behaviour The micro environment of business (management structure; marketing channels: markets in which a	07	Google and BMS text books	Chalk and talk method

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TEACHING PLAN (UNIT PLAN)

	firm operates; competitors and stakeholders. Macro Environment: political factors; economic factors; socio-cultural factors; technological factors (pest analysis)			
	Marketing Research: Importance of Marketing Research Types of Marketing Research: Product research; sales research; consumer/customer research; promotion research.	03		Chalk and talk method
	Consumer Behaviour: Basic stimulus response model Influence on consumers decision-making process High involvement and low involvement products Influences on buying behaviour: cultural factors, social factors, personal factors and psychological factors (Maslow's Hierarchy) Methods of sales forecasting Industrial Buying Behaviour; Product & Brand Management; STP Industrial buying behaviour Decision making process DMUs and its composition Factors influencing purchasing: economic environment; organizational factors; inter-personal characteristics;	05		Chalk and talk method

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	and individual buyer characteristics Key differences between Consumer and Organizational Buying			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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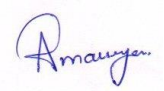
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Ashlesha Maurya DEPARTMENT: EME CLASS: SYEME SEMESTER: III MONTH: July - October ACADEMIC YEAR: 2022 -23 Subject: Global Warming and Climate Change

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand about lapse rate, temperature inversion and its effects.
- Understand about Kyoto Protocol

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Global warming and climate change Unit 3 and 5	Laps rates Causes of Climate change Temperature profile of the atmosphere	8	Online resources EnvironmentalManagement	1. lecture method 2.discussion method 3. Chalk and Board



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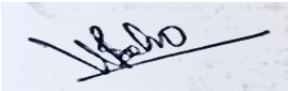

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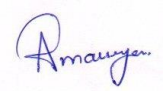
	Kyoto Protocol – Intergovernmental Panel on climate change (IPCC)		byH.V.Jadhav Environmental Managementby N.K.Uberoi	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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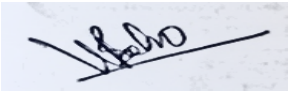

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: **SFC**

CLASS: **SYEME** SEMESTER: **III** MONTH: **June To Sep** ACADEMIC YEAR: **2022 - 23**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test.
2) Solve practical questions using concepts.
3) Financial Goal Setting & decision making.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Management	Financial Management	8	Manan Publication, Vipul	Chalk Board, PPT

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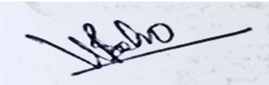

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	Introduction: Meaning and Scope of Financial Management Functions Objectives of Financial Management Changing Role of Finance Managers		Publication	
	Working Capital Management Definition - GWC & NWC (Explain Core Assets & Non Core Assets) Components of Working Capital Factors Determining Working capital	8	Sheth Publication	Chalk Board, PPT
	Receivables Management Meaning and Importance Credit Policy Variables Case Study on Credit Evaluation Methods of Traditional and Numerical Credit Scoring Monitoring the Debtors – Techniques DSO, Ageing	8	Manan Publication, Vipul Publication	Chalk Board, PPT, Notes

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TEACHING PLAN (UNIT PLAN)

	Schedule, Collection Matrix			
	Cash Management Motives Of Holding Cash Strategies Of Cash Management Cash Budget: Meaning and objectives Budgeting of receipts and payments Trading, non trading and capital Preparation of monthly budget and finding out closing cash Balance (Excl. Financial Statements to be made From the Working Capital Estimation)	8	Sheth Publication	Chalk Board, PPT
	Cost Of Capital & Capital Structures: Types of capital Debt Equity Retained Earnings Preference Cost of Capital for each type of capital Weighted Cost of Capital Marginal Cost of Capital (w.r.t. Expansion). Designing Capital Structure Alternatives	8		Chalk Board, PPT
	Types of Leverages (Combined , Operating , Financial)	6		Chalk Board, PPT

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TEACHING PLAN (UNIT PLAN)

	Capital Budgeting: Introduction, types of capital, sources of capital Evaluation of capital expenditure proposal from given cash flow, concept of present value Techniques of appraisal of investment proposal Payback period method, Average rate of return method Net present value method Profitability index method	8		Chalk Board, PPT
	Business Restructuring Importance Financial Implication Valuation Types of Business Restructuring Merger Amalgamation De-Merger Other Restructurings (Elementary accounting problems – testing fundamental knowledge only)	8		Chalk Board, PPT
	Long Term & Short Term Sources Of Finance Traditional & Modern instruments of Finance Including Securitizations.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 64

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TEACHING PLAN (UNIT PLAN)

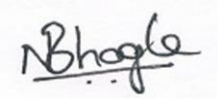
NAME OF THE STAFF: NEHA VAIBHAV TAMBE DEPARTMENT: EME CLASS: SYEME SEMESTER: III (Subject: Marketing Mangement)

MONTH: DEC- MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Marketing-	A)The 4 Ps and 3Cs of Marketing (b) Marketing as an activity, function, and philosophy (c) Needs, wants and demands; transactions, transfers & exchanges (d)Orientation of a firm: Production concept; product concept; selling concept; and marketing concept. New Trends in Marketing: E-Marketing, Internet Marketing, and Marketing using social networks Societal Marketing/Relationship Marketing Marketing Research; MIS; & Consumer Behaviour The micro environment of business (management structure; marketing channels: markets in which a firm operates; competitors and stakeholders. Macro	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD



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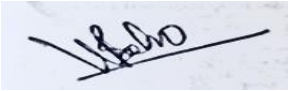

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TEACHING PLAN (UNIT PLAN)

	Environment: political factors; economic factors; socio-cultural factors; technological factors (pest analysis)			
UNIT 2 Product and Brand Management	Products: core, tangible and augmented products Product mixed decisions: product line decisions; strategic filling, line modernization decisions New product development process: idea generation, screening, concept development and testing, marketing strategy, product development, market testing, test marketing, and commercialization. Product life cycle: Introduction growth, marketing decline,	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD

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TEACHING PLAN (UNIT PLAN)

				• INTERACTIVE METHOD
UNIT 3 Branding management	Brand equity; branding decisions; brand extensions; brand portfolios Segmentation, Targeting and Positioning (STP): Segmentation variables for consumer markets: Geographic, demographic, psychographic, behavioural Segmentation variable for industrial markets: customer location, type of industry, size of the firm, purchase criteria, etc. Targeting: undifferentiated marketing; single segment and multi segment structures; guidelines for selecting target markets	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
UNIT 4 Pricing decision	Pricing objectives; factors influencing pricing decisions Ttypes of pricing: Mark up/cost plus pricing; perceived value pricing; value pricing; geographic pricing; etc. Responding to competitors Action through price and non price variables. Impact of the products: stage in the PLC on pricing decisions.	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

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TEACHING PLAN (UNIT PLAN)

UNIT 5 Ethics in marketing	Ethics in Marketing Advertising Standards Council of India code of ethics in advertising; promotion to children; unfair practices in marketing	10	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 50

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TEACHING PLAN (UNIT PLAN)

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Smita Khaire____ DEPARTMENT: _Environment Management and Economics CLASS: _SYEME_ SEMESTER: _III_

(Subject : Natural Resources and Management MONTH: July to September_____ACADEMIC YEAR: __2022-23_____

LEARNING OBJECTIVE/S: The learners will be able to acquire a knowledge and understanding about the protection of the Environment and natural resources.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
(Natural Resources and Management)	Unit 2- Land Resources: Definition, land use pattern, Waste land-types, Desertification Definition, causes and Impacts.	5	Environmental Science by Santra S.C	Chalk-Board Method
	Unit3- Water Resources: Hydrological Cycle, Surface water, Ground water, Dams- Uses and impacts on Environment, Marine resources, Biotic and Abiotic,	5	Essential of Ecology and Environment by S.V.S Rana.	Chalk-Board Method
	Unit 4: Living Resources-Agriculture-types of cultivation, high yielding varieties, HYV chemicals fertilizer and their impact; Microbes useful and harmful bacteria in Soil, Water, Air; Fungi-Beneficial and harmful.	5	Online Resources	Chalk-Board Method

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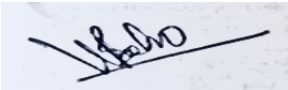

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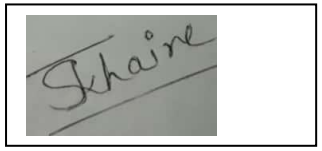
TEACHING PLAN (UNIT PLAN)

	Unit 5: Forest and Mineral resources. Forest product, food, fodder, fuelwood, timber. Mineral- metals and non-metals resources, non conventional resources	5	Environmental management by H.V. Jadhav	Chalk-Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:___5_



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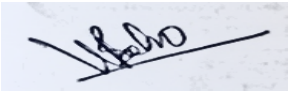

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti Pramod Patil DEPARTMENT: Commerce CLASS: S.Y.E.M.E SEMESTER: III

MONTH: June to September ACADEMIC YEAR: 2022-2023 Subject: Global warming and climate change

LEARNING OBJECTIVES:

The learners will be able to understand about lapse rate, temperature inversion and its effects.

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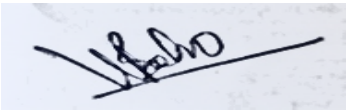
UNIT 2	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Global warming and climate change	1. Temperature profile of the atmosphere and Laps rates	3	1. A Textbook of Environmental Chemistry and Pollution Control: S.S.Dara 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: chalkboard, Google form
	2. Temperature inversion: effects of inversion on pollution dispersion.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06



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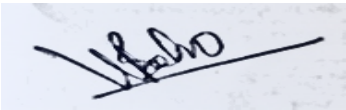
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVES:

The learners will be able to understand about climate change and its effects.

UNIT 3	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Climate change	1. Causes of Climate change	2	1. A Textbook of Environmental Chemistry and Pollution Control: S.S.Dara 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: chalkboard, Google form
	2. Change of Temperature in the environment	1		
	3. Melting of ice Pole, sea level rise and role of fossil fuels	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06



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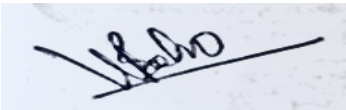
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVES:

The learners will be able to learn about alternative fuel measures.

UNIT 4	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Alternative fuel measures	1. Mitigation Measures- Cleaner production Alternative fuel measures	05	1. Environmental studies: P.G. Shinde 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: chalkboard, Google form

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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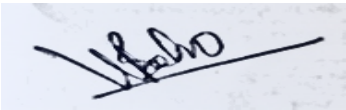
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVES:

The learners will be able to learn about ozone layer.

UNIT 1	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Ozone layer	1. Role of ozone in environment-ozone layer-ozone depleting gases-Green House Effect	05	1. Environmental studies: P.G. Shinde 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: chalkboard, Google form

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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TEACHING PLAN (UNIT PLAN)

UNIT 5	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1. Kyoto Protocol-Intergovernmental Panel on Climate change (IPCC)	05	1. Environmental studies: P.G. Shinde 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: chalkboard, Google form

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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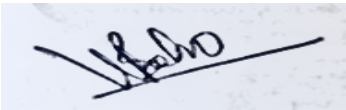

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashlesha Maurya DEPARTMENT: EME CLASS: SYEME SEMESTER: IV
MONTH: December to March
ACADEMIC YEAR: _2022-23 SUBJECT: Environmental Pollution and Management
LEARNING OBJECTIVES:

1. To understand the concepts of water, Air and soil pollution and the various remedial measures to it.
2. To provide a hands-on experience in environmental quality monitoring of Water, Air and Soil systems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT- 1	Water pollution – sources & types of water pollution – physical, chemical & biological – primary, secondary, tertiary-	6	Environment and Ecology- Vaishali Anand	Chalk and board
	effect of water pollution. Drinking water quality standards wastewater treatment –	2	Environment and Ecology- Vaishali Anand	Chalk and board
	water pollution prevention & control act – 1974.	2	Environment and Ecology- Vaishali Anand	Chalk and board

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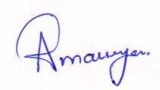
TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-2	Air pollution –structure and composition of atmosphere –	6	Environment and Ecology- Vaishali Anand	Chalk and board
	classification, sources & effects of air pollution	2	Environment and Ecology- Vaishali Anand	Chalk and board
	Acid rain –greenhouse effect –	2		Chalk and board

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-3	Prevention and control of air pollution particulate control –	4	Environment and Ecology- Vaishali Anand	Chalk and board
	settling chamber, scrubber, bag filter, cyclones electrostatic precipitators.	4	Environment and Ecology- Vaishali Anand	Chalk and board
	Gaseous emission control methods. Air pollution prevention and control Act 1981.	2	Environment and Ecology- Vaishali Anand	Chalk and board



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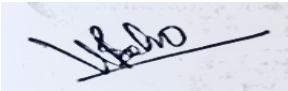

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT- 4 & 5	Soil Pollution – soil pollutants – types – sources, effects & Control.	4	Environment and Ecology- Vaishali Anand	Chalk and board
	Noise Pollution – sources effects & Control.	4	Environment and Ecology- Vaishali Anand	Chalk and board
	Government Agencies & Programs – The Tiwari committee	5	Environment and Ecology- Vaishali Anand	Chalk and board
	creation of NCEPC, Department of Environment & Forest –	5	Environment and Ecology- Vaishali Anand	Chalk and board
	Function of State Pollution Control Board.	2	Environment and Ecology- Vaishali Anand	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED : __40_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Smita Khaire__ DEPARTMENT: Environment Management and Economics CLASS: _SYEME_SEMESTER: IV

(Subject : _Environmental Safety, health and Management) MONTH: __Nov-March_____ ACADEMIC YEAR: ____2022-23_____

LEARNING OBJECTIVE/S: The learners will be able to acquire a knowledge and understanding about the Environment, Health and diseases. It will help to create awareness about protection of health .

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Environmental Safety, health and Management	UNIT-I Definition- need for good health- factors affecting health. Types of diseases {deficiency, infection, pollution diseases}. Personal hygiene- food (balanced diet). Food habits & cleanliness, food adulterants, avoiding smoking, drugs & alcohols.	5	Online Resources, websites Environmental Science by S.C.Santra	Lecture method Discussion method chalk-board method youtube
	UNIT-II Public health: communicable diseases, mode of transmission (epidemic and endemic diseases). Management of hygiene in public places (railway stations, bus stands and other public places).	5	Essential of Ecology and Environment by S.V.S Rana Online Resources, websites	Lecture method chalk-board method

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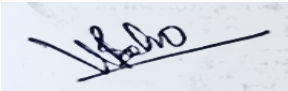

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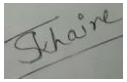
TEACHING PLAN (UNIT PLAN)

	UNIT-III Occupational health and safety. Occupational health and hazards-physical-chemical and biological. Occupational diseases-prevention and control.	5	Online Resources, websites	Lecture method chalk-board method
	UNIT-IV Industrial safety and management techniques: Industrial safety standards and regulations. Accidents-definitions-prevention and control.	5	Online Resources, websites	Lecture method chalk-board method
	UNIT-V Safety management system- concepts of safety management systems- EMS ISO 14000 and 14001. OSHA. PUBLIC LIABILITY INSURANCE ACT- MINING ACT	5	Online Resources, websites	Lecture method chalk-board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__5__



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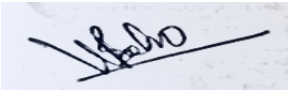

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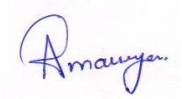
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashlesha Maurya DEPARTMENT: EME CLASS: SYEME SEMESTER: IV MONTH: December to March
ACADEMIC YEAR:2022-23 SUBJECT: Occupational health and safety
LEARNING OBJECTIVES:

1.To create an insight on the various occupational safety and health hazards methods in the workplace
2. To analyse the effects of workplace exposures, injuries and illnesses, fatalities, and the methods to prevent accidents.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1	Health and safety foundations, Policy, Organizing for health and safety,	6	ONLINE RESOURCES	Chalk and board
	Risk assessment, Principles of control, Incident investigation, Recording and Reporting;	2	ONLINE RESOURCES	Chalk and board
	Promoting a positive Health and Safety Culture	2	ONLINE RESOURCES	Chalk and board



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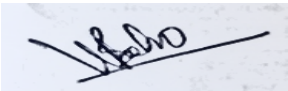

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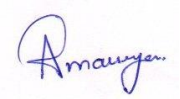
TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-2	Movement of people and vehicles, Electrical hazards and control,	4	ONLINE RESOURCES	Chalk and board
	Hazards and Control, Manual and Mechanical Handling Hazards and Control.	4	ONLINE RESOURCES	Chalk and board
	Work Equipment Hazards and Control,	1	ONLINE RESOURCES	Chalk and board



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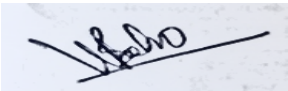

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TEACHING PLAN (UNIT PLAN)

	Fire Hazards and Control;	1	ONLINE RESOURCES	Chalk and board

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-3	Chemical Health Hazards and Control;	2	ONLINE RESOURCES	Chalk and board
	Physical Health Hazards and Control;	2	ONLINE RESOURCES	Chalk and board
	Biological Health Hazards and Control;	3	ONLINE RESOURCES	Chalk and board
	Psychological Health Hazards and Control;	3	ONLINE RESOURCES	Chalk and board

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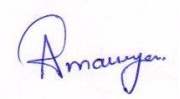
TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-4	Monitoring, Review and Audit; and	5	ONLINE RESOURCES	Chalk and board
	Cases, presentations, and exercises	5	ONLINE RESOURCES	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED: _____40___



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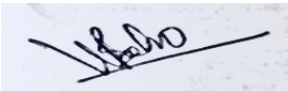

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TEACHING PLAN (UNIT PLAN)

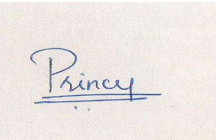
NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: SELF FINANCE CLASS: SYEME SEMESTER: IV Subject : MANAGEMENT INFORMATION SYSTEM

MONTH : SEPTEMBER-MARCH

ACADEMIC YEAR: 2022-23 SUBJECT : MANAGEMENT INFORMATION SYSTEM

LEARNING OBJECTIVE/S: HOW INFORMATION SYSTEM EFFECTIVE FOR AN ORGANIZATION DEVELOPMENT

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Basic Information Concepts and Definitions,Need for Information and Information Systems (IS) in an organization Characteristics of Information and Organisation with respect to organization form, structure, philosophy,hierarchy etc Types of IS- Transaction Operational Control	10	MIS By Effy Oz	Chalk and Duster, Youtube



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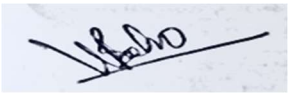

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TEACHING PLAN (UNIT PLAN)

UNIT 2	Management Control Decision Support Executive Information Systems Determining Information Needs for an Organisation/Individual Manager	10		
UNIT 3	Overview of use of data flow method, analysis of information for decision processes etc. Strategic use of Information and IS - Use of Information forCustomer Bonding , For Knowledge Management,For innovation,For Managing Business Risks,For Creating a new business models and new business reality.	10	MIS By Effy Oz	
UNIT 4	Information Security Sensitize students to the need for information security → Concepts such as confidentiality, Integrity and Availability. Types of threats	10	MIS By Effy Oz	

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TEACHING PLAN (UNIT PLAN)

	and risk, overview of some of the manual, procedural and automated controls in real life IT environments.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: SFC CLASS: TYEME SEMESTER: V (Subject : PROJECT MANAGEMENT)

MONTH: JUNE TO OCTOBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to:

- Understand the meaning of project and project management in an organization.
- Get knowledge of project life cycle, system development and project management system.
- Interpret the distinction PERT, CPM and Critical chain method.
- Know in detail about system integration and budgeting techniques needed in a project development.
- Gain insight on project control and various control processes

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT I: Introduction to project management	• Project- definition and objectives • Project life cycle • Purpose of project management • Project management maturity • Project selection and choices • Types of project • Project selection models • Analysis under uncertainty and rise • Project portfolio process.	08	Jack R. Meredith and Samuel J. Mantel Jr.- "Project management, A managerial approach"	Chalk-board, discussion, example and test

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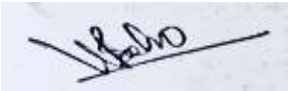

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TEACHING PLAN (UNIT PLAN)

UNIT – 2 Project manager	• Functional manager v/s project manager • Project responsibilities • Demands on project manager • Project manager selection • Culture and the project impact of institutional environments • Need for multicultural communities	08	Jack R. Meredith and Samuel J. Mantel Jr.- "Project management, A managerial approach	Chalk-board, discussion, example and test
Unit-3 Project organization	• Project organization • Pure project organization • Matrix • Mixed organisational system • Choosing a firm • Risk management • Project management officer • Project team • Human factors and project team • Sources of conflict	08	Jack R. Meredith and Samuel J. Mantel Jr.- "Project management, A managerial approach	Chalk-board, discussion, example and test
Unit -4 project planning and controlling System integration	• Project planning and controlling • System integration • Action plan • Work breakdown structure • Partnering – chartering • Categories of conflict • Principles of negotiation • Top down v/s bottom up budgeting • Activity v/s program budgeting	08	Jack R. Meredith and Samuel J. Mantel Jr.- "Project management, A managerial approach	Chalk-board, discussion, example and test

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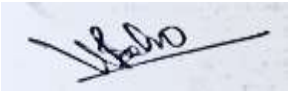

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TEACHING PLAN (UNIT PLAN)

Unit 5- network techniques	• Network techniques- PERT and CPM • Precedence programming • Resource loading and levelling • Goldratt's critical chain • Monitoring system design • Reporting process • Project management systems	08	Jack R. Meredith and Samuel J. Mantel Jr.- "Project management, A managerial approach"	Chalk Board, Discussion, and Test
Unit 6- Project control	• Project control- purpose, types and control process • Post control • Critical ration and control charts • Balance in control system • Project auditing • Purpose of evaluation • Use of audit report product audit life cycle • Measurement varieties of project termination	08	Jack R. Meredith and Samuel J. Mantel Jr.- "Project management, A managerial approach"	Chalk Board, Discussion, and Test

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 48

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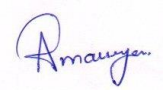
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashlesha Maurya DEPARTMENT: EME CLASS: TYEME SEMESTER: VI
MONTH: June to October ACADEMIC YEAR: 2022-23
SUBJECT- ENVIRONMENTAL IMPACT ASSESSMENT

LEARNING OBJECTIVE/S:
The learners will be able:

1. To identify and understand environmental clearance process, project impact assessment and audits
2. To develop TORs, EMPs, and apply tools for environmental management
3. To analyze national and international laws, treaties, and conventions for sustainable environment

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT- 1	EIA – Introduction	10	ONLINE RESOURCES	Chalk and board
	Concept of EIA- Scope and object of EIA –		ONLINE RESOURCES	Chalk and board
	Organization responsible for EIA –		ONLINE RESOURCES	Chalk and board



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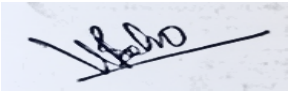

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TEACHING PLAN (UNIT PLAN)

	Site selection and area classification- Siting and setting criteria for EIA projects.		ONLINE RESOURCES	Chalk and board

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-2	Description of the environmental setting –	10	ONLINE RESOURCES	Chalk and board
	Inclusion or Exclusion of environmental Items		ONLINE RESOURCES	Chalk and board
	Some suggested approaches for developing a list of environmental Factors		ONLINE RESOURCES	Chalk and board
	Informational Sources for Environmental factors		ONLINE RESOURCES	Chalk and board
				Chalk and board

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-3	Various steps of EIA – Content of EIA	10	ONLINE RESOURCES	Chalk and board
	Assessment methodology- Ad-hoc, Overlay, Network, Matrix and checklist.		ONLINE RESOURCES	Chalk and board
	Cost benefit analysis		ONLINE RESOURCES	Chalk and board
	Case studies, Hydroelectric projects , Mining, Power plant Roads and airports.		ONLINE RESOURCES	Chalk and board
				Chalk and board

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT- 4 & 5	Environmental Impact Assessment Notification (1994)	10	ONLINE RESOURCES	Chalk and board
	Procedure for Environmental Clearance, List of the projects requiring Environmental Clearance,		ONLINE RESOURCES	Chalk and board
	Composition of Expert Committee for Impact Assessment		ONLINE RESOURCES	Chalk and board
	Public hearing Committee, Procedure for public hearing - Project clearance		ONLINE RESOURCES	Chalk and board
	Detailed content of EIS – Use of visual display methods – Statement documentation – general writing suggestion.		ONLINE RESOURCES	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40

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TEACHING PLAN (UNIT PLAN)

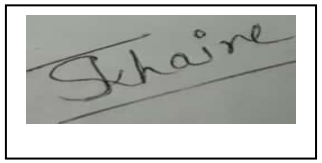
NAME OF THE STAFF: __Smita Khaire_ DEPARTMENT: Environment Management and Economics CLASS: __TYEME SEMESTER: V

(Subject : __ Environmental Legislation) MONTH: __July-October_____ ACADEMIC YEAR: 2022-23_____

LEARNING OBJECTIVE/S: The learners will be able to understand the Acts and important cases related to environmental protection.

PER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCES**	**ACHING METHOD/ ICT TOOLS USED**
Environmental Legislation	Unit 2- Hazardous Waste (Management and Handling) Rule :from Chapter VI Manufacture, Storage and Import of Hazardous Chemicals Rules,	2	Online resources Environmental Science - Santra S.C	Chalk Board method
	Unit 3- Important Judgements and Cases: Discussion on Landmark cases: Sriram Chemical Oleum Leak Case, Bhopal Gas Leak Case, Ganga Action Plan Case, Green Benches and case study	13	Online resources	Chalk Board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__13__



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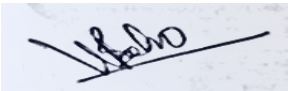

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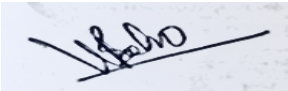

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHLESHA MAURYA DEPARTMENT: EME CLASS: TYEME SEMESTER: V MONTH: June to October

ACADEMIC YEAR: 2022-23

SUBJECT- ENVIRONMENTAL LEGISLATION

LEARNING OBJECTIVE/S:
The learners will be able:

1. To identify and understand the benefits, challenges, and gaps under the current scenarios of Environmental laws
2. To explain various environmental issues, pollution, and control measures
3. To analyze environmental laws along with the norms prevailing at international and national level.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT- 1	Constitutional Provisions for Environmental	10	ONLINE RESOURCES	Chalk and board

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TEACHING PLAN (UNIT PLAN)

	Protection:			
	Specific Provisions for Environmental Protection in the Constitution of India		ONLINE RESOURCES	Chalk and board
	Provisions in the Directive Principlesof State Policy.		ONLINE RESOURCES	Chalk and board

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-2	1. Environmental Acts, Rules, and Notifications: The following environmental Acts/Rules will be discussed in details; the rest of the acts, rulesand notifications will be referred to: a) Water (Prevention & Control of Pollution) Act and the	10	ONLINE RESOURCES	Chalk and board

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	corresponding Rule			
	Water (Prevention & Control of Pollution) Cess Act and the corresponding Rule		ONLINE RESOURCES	Chalk and board
	b) Air (Prevention & Control of Pollution) Act and the corresponding Rule		ONLINE RESOURCES	Chalk and board
	c) Environment (Protection) Act and Rule		ONLINE RESOURCES	Chalk and board

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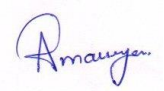
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT- 3 & 4	Public Liability Insurance Act and Rule	10	ONLINE RESOURCES	Chalk and board
	Forest Conservation Act 1980		ONLINE RESOURCES	Chalk and board
	Wildlife Protection Act 1972		ONLINE RESOURCES	Chalk and board
	Green Benches (National Green Tribunal Act 2010		ONLINE RESOURCES	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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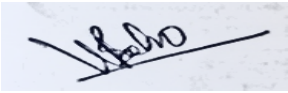

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TEACHING PLAN (UNIT PLAN)

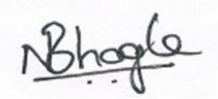
NAME OF THE STAFF: NEHA VAIBHAV TAMBE DEPARTMENT: EME CLASS: TYEME SEMESTER: V (Subject: EM)

MONTH: JUNE-NOV ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**Concept, meaning and definition of entrepreneur and entrepreneurship.** **Importance and significance of growth of entrepreneurial activity.** **Concept of intrapreneur.** **Characteristics and qualities of entrepreneurs Classification and types of entrepreneurs.** **Women entrepreneurs**	10	Book by Manan publications/Internet	1. CHALK & BLACK BOARD METHOD .INTERACTIVE METHOD



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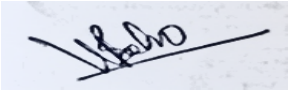

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TEACHING PLAN (UNIT PLAN)

	Theories of entrepreneurship Contribution of Mc Clelland and Joseph Schumpeter Book by Manan publications/Internet			
UNIT 2	Factors influencing entrepreneurial development and motivation. Role of culture in entrepreneurial development. Entrepreneurial development programme (EDP), Managing the problems faced by entrepreneurs Development of women entrepreneurs-with reference to SHGs Options available to entrepreneurs,-ancillarisation franchising and outsourcing. Cases on takeover, mergers and acquisitions in India and at global level. Social Entrepreneurship-Definition,importance and social responsibilities- NGOs	10	Book by Manan publications/Internet	1. CHALK & BLACK BOARD METHOD .INTERACTIVE METHOD
UNIT 3	Idea generation – sources and methods Identification and classification of ideas. Environmental Scanning and SWOT analysis Preparation of project plan –Points to be considered Components of an ideal business plan – market plan, financial plan, operational plan, and HR plan. Project	10	Book by Manan publications/Internet	1. CHALK & BLACK BOARD METHOD

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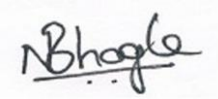
TEACHING PLAN (UNIT PLAN)

	formulation –project report significance and contents Project appraisal –Aspects and methods : Economic oriented appraisal Financial appraisal Market oriented appraisal Technological feasibility Managerial com			.INTERACTIVE ME THOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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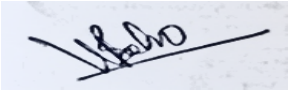

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Princy Tinish DEPARTMENT: Self-Finance CLASS: TY EME SEMESTER: V (Subject : Business Ethics)

MONTH: August - October ACADEMIC YEAR: 2022 - 2023

LEARNING OBJECTIVE/S: Learners will be able to understand about types of Ethics and its applicability.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I Introduction to Business Ethics	Normative Ethics, Prescriptive Ethics, Applied Ethics, Ethics Morality and Legality, Concept of Right and Duty, Perspective and Scope Relevance in Social Changes, Ethical Organism and Corporate Code of Conduct	08	An Introduction to Ethics by William Lillie	Chalk and Duster, Youtube
Unit II Business Ethics: Conceptual Background	Conceptual approaches to Business Ethics, Egoism Vs Altruism, Entrepreneur and manager: Roles and Responsibilities, Responsibilities towards stake holders, Profit Making	06	An Introduction to Ethics by William Lillie	Chalk and Duster, Youtube
Unit III Indian Perspective of Ethics	Purushartha: Dharma, Artha, Kaam Moksh, Concept of Dharma	02	An Introduction to Ethics by William Lillie	Chalk and Duster, Youtube
Unit IV Global Perspective	Ethics in Global marketing and advertising, Ethical perspective in Employment, Ethics and IT, Environmental Ethics, Ethics and cross culture influences, Ethical issues and functional aspects of business	08	An Introduction to Ethics by William Lillie	Chalk and Duster, Youtube

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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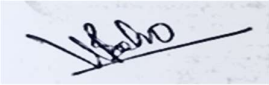

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. Priyanka Singh** DEPARTMENT: **Commerce** CLASS: **TYEME** SEMESTER: **V**
SUBJECT: MONTH: **JUNE -NOVEMBER** ACADEMIC YEAR: **2022-23**
LEARNING OBJECTIVE/S:
The learners will be able to : The students will get exposure to the various Strategies used in Corporates and they will learn the implementation of the Strategy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1	Introduction to Strategic Management. Definition, Nature, Benefits, Management Models, Overview of Strategic Management Process.	10	Namakumari Ramaswamy	Chalk and Duster
Unit 2	Strategy Formulation, Analyzing of Internal and External Environment, Strategy Making, Entrepreneurial Model, Adaptive Model, Planning Model, Types of Strategies.	10		Google Classroom, YouTube Videos
Unit 3	Strategy Implementation Production, Operations, Marketing , Finance, Human Resources Management.	05		
Unit 4	Strategy Evaluation Review, Feedback, Control and Contingency Planning and Audit.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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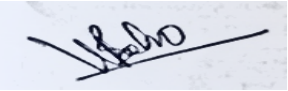

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashlesha Maurya DEPARTMENT: EME CLASS: TYEME SEMESTER: **VI** MONTH: JAN- APRIL
ACADEMIC YEAR:2022-23 SUBJECT: Disaster Management

LEARNING OBJECTIVES:

1) To Identify and explain major types of disasters and the appropriate mitigation strategies

2) To examine the importance of effective disaster preparedness, planning, and operations in ensuring reduction in damage

3) To evaluate the different Medical and Psycho-Social Preparedness to disasters

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1	Disaster – Introduction –Types of natural calamities,	05	Online Resources	Chalk and board
	major and minor calamities –		Online Resources	Chalk and board
	impact of calamities.		Online Resources	Chalk and board

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-2	Natural disaster – flood	05	Online Resources	Chalk and board
	cyclone – Tsunami		Online Resources	Chalk and board
	Landslides – earthquake		Online Resources	Chalk and board

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-3	Man Made disaster – Wars	10	Online Resources	Chalk and board
	Biological war (introduction of pathogens) – misuse of atomic bombs –		Online Resources	Chalk and board
	major accidents from industries e.g. Bhopal. Love canal disaster – London Smog.		Online Resources	Chalk and board

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-4	Medical Management of disaster –	10	Online Resources	Chalk and board
	Disaster Impacts and response		Online Resources	Chalk and board
	Identification of dead – Search rescue –first and relief phase –		Online Resources	Chalk and board
	Vaccination, basic sanitation and personal hygiene.		Online Resources	Chalk and board

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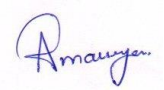
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-5	Environmental Disaster – Assessment, Planning – mitigation program – preparedness –	10	Online Resources	Chalk and board
	Resettlement rehabilitation – role of NGOS, Gos (relief camp),		Online Resources	Chalk and board
	Psychotherapy – simplified yoga and meditation, stress management.		Online Resources	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __40_____



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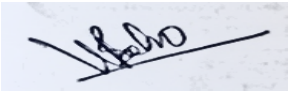

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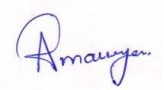
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashlesha Maurya DEPARTMENT: EME CLASS: TYEME SEMESTER: **VI** MONTH: JAN TO APRIL
ACADEMIC YEAR-2022-23
SUBJECT: Environmental Problems hazards and mitigation
LEARNING OBJECTIVES:

1. To identify and understand about pollution and environmental degradation
2. To examine best practices of urban and rural environmental management
3. To analyze environmental elements and importance of biodiversity

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Natural and Man-made Environmental Problems:	Environmental problems associated with urbanization,	3	Environment- shankar IAS Academy	Chalk and Board
	Environmental problems associated with industrialization	3	Environment- shankar IAS Academy	Chalk and Board
	Environmental problems associated with modernization of agriculture	4	Environment- shankar IAS Academy	Chalk and Board



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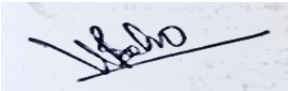

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2: Global and Regional Environmental Issues:	GreenHouse effect – causes and associated hazards,	2	Environment- shankar IAS Academy	Chalk and Board
	Ozone layer depletion – causes and associated hazards,	2	Environment- shankar IAS Academy	Chalk and Board
	Acid rain, Deforestation and loss of biodiversity;	3	Environment- shankar IAS Academy	Chalk and Board
	Major environmental problems in India	3	Environment- shankar IAS Academy	Chalk and Board

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3: Problems of Urban Environment:	Municipal waste, domestic waste, industrial waste; Biomedical wastes;	3	Environment- shankar IAS Academy	Chalk and Board
	Road traffic and noise pollution problem,	3	Environment- shankar IAS Academy	Chalk and Board
	Air pollution problem,	2	Environment- shankar IAS Academy	Chalk and Board
	Problem of housing, drinking water and sanitation, slum areas	2	Environment- shankar IAS Academy	Chalk and Board

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4: Problems of Rural Environment	Drinking water, Domestic fuel, Food and Fodder, Sanitation, Health, and Hygiene,	2	Environment- shankar IAS Academy	Chalk and Board
	Land degradation	3	Environment- shankar IAS Academy	Chalk and Board

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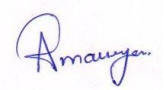
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 5: Environmental problems related to forest and wetlands:	Human intervention, Degradation, encroachment,	2	Environment- shankar IAS Academy	Chalk and Board
	loss of habitats and biodiversity	3	Environment- shankar IAS Academy	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED : __40_____



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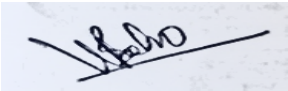

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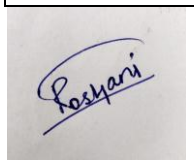
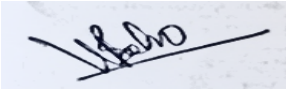
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dr.Roshani Nagar DEPARTMENT: SFC CLASS: TYEME SEMESTER: SEM VI Subject : CSR

MONTH: JAN TO MARCH SEM VI ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: The learners will be able to understand in CSR in detail.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Corporate Social Responsibility. Unit 1,2,3 and 4	Unit 1-Overview of CSR,TBL approach, Philanthropy, issues related to environment, social issue, labour issue,ehthical issues,human rights. Unit 2-Standards and codes. ISO-14001,OHSAS-18001,SA-8000, OCED, Global Compact, AA-1000, BS/ISO, ISO-26000. Unit-3Engaging the stakeholders. GRI initiative G-3, NGO and CSR, Programmes for the neighborhood, mkt for BOP, communication, Dilemmas,	10 Lectures in each unit	Jia Makhija Jia Makhija	Chalk and board method

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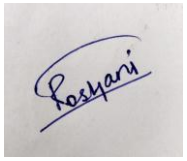
TEACHING PLAN (UNIT PLAN)

	FTSE4GOOD. Unit-4 cases and papers			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40



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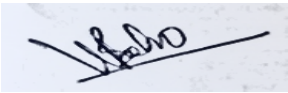

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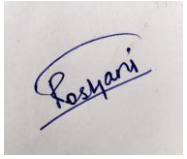
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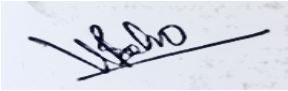

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Smita Khaire DEPARTMENT: _Environmental Management & Economics CLASS: _TYEME SEMESTER: VI__

(Subject : Solid &Hazardous Waste Management) MONTH: January - April ACADEMIC YEAR: _2022-23_

LEARNING OBJECTIVE/S: The learners will be able to understand the different types of Solid Waste and Importance of Solid & Hazardous Waste Management.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Solid & Hazardous Waste Management	UNIT I SOLID WASTE: Definition of solid wastes – types of solid wastes – Sources - Industrial, mining, agricultural and domestic – Characteristics. Solid waste Problems - impact on environmental health – Concepts of waste reduction, recycling and reuse.	4	Environmental Chemistry and Pollution Control by S.S. DARA	Chalk- Board Method,
	UNIT II COLLECTION, SEGREGATION AND TRANSPORT OF MUNICIPAL SOLID WASTES: Handling and segregation of wastes at source. Collection and storage of municipal solid wastes; analysis of Collection systems. Transfer stations – labeling and handling of hazardous wastes	4	Online Resources	Chalk- Board Method
	UNIT III MUNICIPAL SOLID WASTE MANAGEMENT: Solid waste processing technologies. Mechanical and thermal volume reduction. Biological and chemical techniques for energy and other resource recovery: composting, vermicomposting, Termigradation, fermentation. Incineration of solid wastes.	5	Environmental science by Santra S.C	Chalk- Board Method

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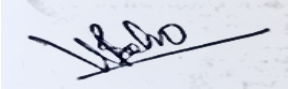

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TEACHING PLAN (UNIT PLAN)

	Disposal in landfills: site selection, design, and operation of sanitary landfills; Leachate and landfill gas management; landfill closure and post-closure environmental monitoring; landfill remediation. Regulatory aspects of municipal solid waste management.			
	UNIT IV HAZARDOUS WASTES: Hazardous waste definition. Physical and biological routes of transport of hazardous substances – sources and characterization categories and control. Sampling and analysis of hazardous wastes – analytical approach for hazardous waste characterization – proximate analysis – survey analysis – directed analysis – analytical methods. UNIT V HAZARDOUS WASTES MANAGEMENT: Sources and characteristics: handling, collection, storage and transport, TSDF concept. Hazardous waste treatment technologies - Physical, chemical and thermal treatment of hazardous waste: solidification, chemical fixation, encapsulation, pyrolysis and incineration. Hazardous waste land fills - Site selections, design and operation. HW reduction, recycling and reuse, Regulatory aspects of HWM.	4 5	online Resources Environmental Science - Santra S.C	Chalk- Board Method Chalk- Board Method

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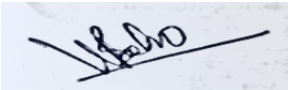

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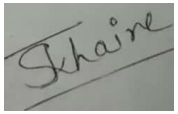
	UNIT VI BIOMEDICAL WASTE MANAGEMENT: Biomedical waste: Definition, sources, classification, collection, segregation Treatment and disposal. UNIT VII RADIOACTIVE WASTE MANAGEMENT: Radioactive waste: Definition, Sources, Low level and high level radioactive wastes and their management, Radiation standard by ICRP and AERB	4 3	Online Resources	Chalk- Board Method Chalk- Board Method
	UNIT VIII E-WASTE MANAGEMENT: Waste characteristics, generation, collection, transport and disposal	3	Online Resources	Chalk- Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__5__



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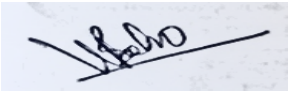

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. VALARMATHI THEVAR DEPARTMENT: EME CLASS: TYEME SEMESTER: VI MONTH: JANUARY

ACADEMIC YEAR: 2022-23 SUBJECT : ECOTOURISM

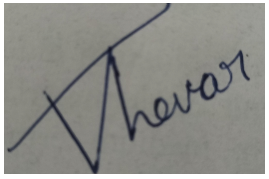
LEARNING OBJECTIVE/S:
a) understand the importance of ecotourism.

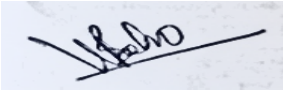
b) describe the link between ecotourism and reduction in poverty levels.

c) explain the human factors that have an impact on ecotourism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I,II	Agriculture-ContributiontoEconomicdevelopment-foodproblem	24		CHALK AND DUSTER
	landreformsinIndia,Bhoodanmovement-Greenrevolution-			
	PanchayatRaj-CommunitydevelopmentProjects -Co-Operativemovement.		Agarwal,A.N(1980) IndianAgriculture,Vikas publishingHouse,NewDelhi ,	
	Ruralsocialstructure-caste system,jointfamily-religioncaste,culturalsocial &psychologicalbarrierstoeconomicdevelopmen			
	overcoming-resistancetochange			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _24_____





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. VALARMATHI THEVAR DEPARTMENT: EME CLASS: TYEME SEMESTER: VI MONTH: FEBRUARY

ACADEMIC YEAR: 2022-23 SUBJECT : ECOTOURISM

LEARNING OBJECTIVE/S:

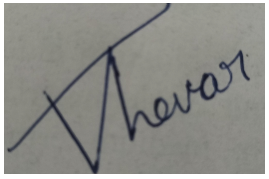
a) understand the importance of ecotourism.

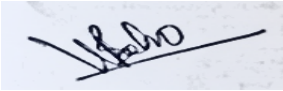
b) describe the link between ecotourism and reduction in poverty levels.

c) explain the human factors that have an impact on ecotourism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III	ConceptsofTourism-Classification-Religioustourism	12	Weaver,D.B(2001).	
	Culturaltourism-Heritagetourism-Monumentaltourism		TheEncyclopediaofEcotourism	CHALK AND DUSTER
	Adventuretourism-Marstourism-Sustainabletourism		CABI,Publishing,U.K	
	Consumptive&nonconsumptivetourism			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _12_____





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. VALARMATHI THEVAR DEPARTMENT: EME CLASS: TYEME SEMESTER: VI MONTH: MARCH

ACADEMIC YEAR: 2022-23 SUBJECT : ECOTOURISM

LEARNING OBJECTIVE/S:

a) understand the importance of ecotourism.

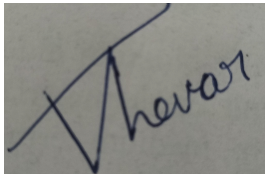
b) describe the link between ecotourism and reduction in poverty levels.

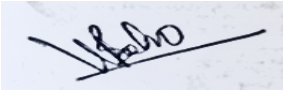
c) explain the human factors that have an impact on ecotourism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV	PrinciplesofEcotourism-TypesofEcotourism-ConceptsofEcotourism	12	Sinha,P.C(2003)	
			EncyclopediaofEcotourism	CHALK AND DUSTER
	ObjectivesofEcotourism-benefitsofEcotourism-trendsaffectingecotourism.		Vol-I,II&III,Anmolpublications Pvt.Ltd,NewDelhi	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _12_____

TEACHING PLAN (UNIT PLAN)





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NAME OF THE STAFF: Ms. VALARMATHI THEVAR DEPARTMENT: EME CLASS: TYEME SEMESTER: VI MONTH: APRIL

ACADEMIC YEAR: 2022-23 SUBJECT : ECOTOURISM

LEARNING OBJECTIVE/S:

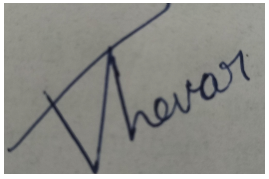
a) understand the importance of ecotourism.

b) describe the link between ecotourism and reduction in poverty levels.

c) explain the human factors that have an impact on ecotourism.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT V	ImpactofEcotourism-Economicimpacts(fiscalimpacts,concepts&Methods	12		
	TypesanddegreeofimpactsfromEcotourismactivities-Socioculturalimpacts		TourisminIndia	
	Ecotourismrelatedorganization-EcotourismResearchdisasters&Ecotourism		Bhatia,A.K(1978) TourisminIndia	CHALK AND DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _12_____



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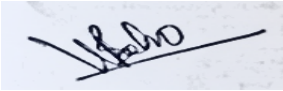

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH SUB: PRINCIPLES OF MANAGEMENT DEPARTMENT: COMMERCE

CLASS: FYBCOM(Banking and Insurance) SEMESTER: I MONTH: JULY TO DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVES:
The learners will be able to:

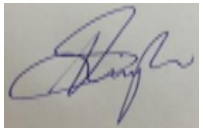
- Understand the meaning of management and different functions of management.
- Get knowledge of motivation and role of motivation in corporate life as well as in personal life.
- Interpret the success stories of different leaders in India and across globe.
- Know in detail about organizational structure of banking sector and insurance sector.
- Gain insight on CRM and its importance in today's competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

Unit2- Manageme nt process	**Management process**: meaning, elements of management process, features and nature **Management practices**: meaning and features **Functions of management**: **Planning**: meaning, steps, advantages, types, MBO **Organising**: Meaning, principles, delegation of authority, centralisation and decentralisation and its advantages **Staffing, Directing, Leading, coordinating, communicating, motivating, budgeting, reporting, controlling** **Motivation:** of banking and insurance employees **CRM:** in banking and insurance **Risk management:** meaning, process and types	7	Global Economy and business environment by Francis Cherunilam VIPUL, Manan prakashan and Sheth publication	Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible and google class room

Unit 3- Organisation al structure II	**Organisational structure** of banking companies **Organisational structure of** Insurance companies **IRDA**: meaning and functions	03		Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible
Unit **4**- Business leaders	**Indian leader and international leaders-** names and their achievements	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13



Signature of Staff **Signature of HOD**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STA: Babli Arvind Jha DEPARTMENT: Self-Finance
CLASS: F Y BCOM (BANKING AND INSURANCE) MONTH: JULY- DECEMBER
SEMESTER: I ACADEMIC YEAR: 2021-22

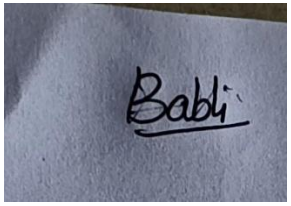
LEARNING OBJECTIVE/S:
The learners will be able to:
Demonstrate knowledge of preparation of financial statement and financial schedule in accordance with GAAP – Generally Accepted Accounting Principles, through analysis and synthesis of information as well. Students will learn relevant financial accounting career skills, applying both quantitative & qualitative knowledge to their future career in business.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy & Financial Management 1	**UNIT 2** **Classification of Income & Expenses & Accounting Standards** **1. Classifications of Income, Expenditure and Receipts on the basis of capital and revenue** **2. Source documents required for practical accounting.** **3. Introduction to Bank Reconciliation Statement** **4. Errors and their Rectification** **5. Accounting Standard 1, 2, 6, 8, 9, 10.** **6. Understanding Fair value concept, Overview of Ind-AS vis-a-vis International Financial Reporting Standards (IFRSs).**	15	*Financial Accounting by M. Mukherjee and M. Hanif, Tata McGraw Hill Education Pvt. Ltd., New Delhi* *Financial Accounting by Williams, Tata Mc. Grow Hill and Co. Ltd., Mumbai*	GOOGLE MEET FOR ONLINE TEACHING, GOOGLE CLASSROOM , Group Discussion, MS. EXCEL, PPT

	UNIT 4 **Final Accounts** **Trading Account, Profit and Loss Account, Balance Sheet, Adjustment Entries.** **Introduction to Accounts of Non-Profit Organization**	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

Babli Jha



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: CHETAN PRAKASH VARMA DEPARTMENT: SELF FINANACE CLASS: FYBCOM (BANKING & INSURANCE SEMESTER: I MONTH: JULY- DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

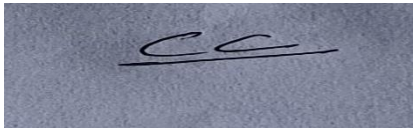
To make student understand the concepts of business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics-I	**Introduction** **Scope and Importance of Business Economics** - basic tools- Opportunity Cost principle- Incremental and Marginal Concepts. Basic economic relations - functional relations: equations- Total, Average and Marginal relations- use of Marginal analysis in decision making.	2	*Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases (S. Chand & Sons, N. Delhi, 2000)* • *Salvatore, D.: Managerial Economics in a global economy (Thomson South Western Singapore, 2001)*	Google meet, kahoot, quizzes, YouTube Channel Links

	The basics of market demand, market supply and equilibrium price- shifts in the demand and supply curves and equilibrium	2	• *Frank Robert.H ,Bernanke. Ben S., Principles of Economics (Tata McGraw Hill (ed.3)*	
	Market structure: Perfect competition and Monopoly and Pricing and Output Decisions under Imperfect Competition Short run and long run equilibrium of a competitive firm and of industry - monopoly - short run and long- run equilibrium of a firm under Monopoly	3	• *Gregory Mankiw., Principles of Economics, Thomson South western (2002 reprint)*	
	Monopolistic competition: Equilibrium of a firm under monopolistic competition, debate over role of advertising. *(topics to be taught using case studies from real life examples)* **Oligopolistic markets:** key attributes of oligopoly - Collusive and non-collusive oligopoly market - Price rigidity - Cartels and price leadership models *(with practical examples)*	4	• *Samuelson &Nordhas.: Economics (Tata McGraw Hills, New Delhi, 2002*	

	Pricing Practices Cost oriented pricing methods: cost – plus (full cost) pricing, marginal cost pricing, Mark up pricing, discriminating pricing, multiple – product pricing - transfer pricing *(case studies on how pricing methods are used in business world)*	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____14_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA VAIBHAV TAMBE **DEPARTMENT: Commerce** **CLASS: FYBCOM(Banking & Insurance)**
SUBJECT: FOUNDATION COURSE I **SEMESTER: I** **MONTH: JULY- DECEMBER** **ACADEMIC YEAR: 2021-2022**

A teaching plan is a document that outlines the structure and details of a single session. A good teaching plan is a comprehensive write-up of the step-by-step teaching methods, the estimated duration of each segment of teaching, and the materials and resources needed for the session.

LEARNING OBJECTIVE/S:

By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	EACHING METHOD/ ICT TOOLS USED
Unit 1. Foundation Course	Concept of Disparity, Gender Disparity, Female Foeticide & Decking gender ratio, inequalities	10	Foundation Course by Vipul Publication	Chalk & Board
	Understand the issues of people with physical and mental disabilities			
	Inequalities manifested in cast system		-	
	Intergroup conflicts , causes and effects of conflicts , Causes arising out of reginonalis communialism			
	Causes of linguistics differences.	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35

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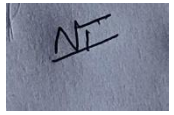
UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 Concept of Disparity 2	a]Inequalities manifested due to caste system	01	Book by Manan publications/Internet	Chalk & Board
	b]different types of conflicts arising out of caste system, inter- group conflict, cultural differences, lingual differences.	01	Book by Manan publications/Internet	Chalk & Board
	c]Inter-group conflict arising out of communalism and its effects on society.	01	Book by Manan publications/Internet	Chalk & Board
	d]Causes and Effects of conflicts arising out of regionalism.	01	Book by Vipul publication/internet	Chalk & Board
	e]Causes and Effects of conflicts arising out of linguistic differences.	01	Book by Vipul, Manan publication/ internet	Chalk & Board

Total no of lectures allocated 05



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Roshani Nagar DEPARTMENT: Commerce CLASS: FYBCOM(Banking and Insurance)

SEMESTER : SEM I MONTH: JULY-DECEMBER ACADEMIC YEAR: 2020-2021

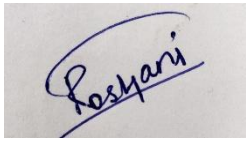
LEARNING OBJECTIVE/S:
The learners will be able to : To focus on the important aspects of preamble and study about the Indian constitutions.

To study about the political process in India perspective.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4. Indian Constitution	Philosophy of the Constitution as set out in the Preamble; The structure of the Constitution-the Preamble, Main Body and Schedules;	3	Rashmi , deepa and reshma Parab	PPT presentation
	Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution.4	3		PPT presentation

5. Significant Aspects of Political Process	The party system in Indian politics; Local self-government in urban and rural areas.	3		PPT presentation
	73rd and 74th Amendments and their implications for inclusive politics; Role and significance of women in politics	3		PPT presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12CHING PLAN (UNIT PLAN)



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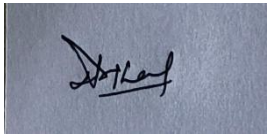
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: (SELF FINANCE) **CLASS:** FYBCOM (BANKING AND INSURANCE

SUBJECT – BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** July-December **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3) Business Correspondence	**1)Theory of Business Letter Writing:** Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing,	4	Manan Prakashan,	PPT, Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04



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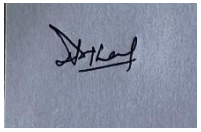
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3) Business Correspondence	**1)Theory of Business Letter Writing:** **Personal Correspondence:** Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation	11	Manan Prakashan	PPT. Online Lectures on Google Meet
4) Language and Writing Skills	**Commercial Terms used in Business Communication** **Paragraph Writing:** Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc	15	Manan Prakashan	PPT. Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 26



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SWETLANA DIAS **DEPARTMENT**: (SELF FINANCE) **CLASS:** FYBCOM (BANKING AND INSURANCE

SUBJECT – BUSINESS MATHEMATICS **SEMESTER:** I **MONTH:** September **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Quantitative Methods	Define Statistics and its scope. Methods of Sampling, importance of Statistic, its functions and limitations. Graphical methods like raw data, attributes and variables, frequency distribution. Study of Histogram and Frequency polygon	4	Business Mathematics by Vipul, Manan, Seth PublicationS,	PPT, Online Lectures on Google Meet

	☂ Study of multiple bars, sub divided, Pie diagrams.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SWETLANA DIAS **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBCOM (BANKING & INSURANCE) **SUBJECT –** BUSINESS MATHEMATICS **SEMESTER:** I **MONTH:** October **ACADEMIC YEAR:**2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	☂ Courses of action, states of nature, pay-off matrix regret table. ☂ Best decision under certainty	11	Manan Prakashan	PPT. Online Lectures on Google Meet

	Best decision under risk (EMV & EOL) ☂ Decision tree and finding optimum decision Drawing the pay-off matrix			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 26

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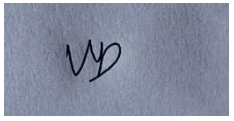
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR.VIDYA P.VERMA **DEPARTMENT**: SELF FINANCE **CLASS:** FYBCOM (BANKING AND INSURANCE)

SUBJECT – BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** July- December **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Theory of Communication	**1)Concept of Communication, Channels and Objectives of Communication: Channels, Objective of Communication, Methods and Modes of Communication**	4	Manan Prakashan,	PPT, Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04



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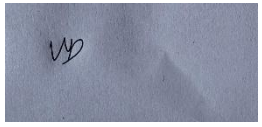
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Theory of Communication	**Channels and Objectives of Communication: Channels, Objective of Communication, Methods and Modes of Communication**	11	Manan Prakashan	PPT. Online Lectures on Google Meet
2) Obstacles to Communication in Business World	**Problems in Communication in Business/Barriers to Communication, Listening, Introduction to Business World**	15	Manan Prakashan	PPT. Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 26



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**:(SELF FINANCE) **CLASS:** FYBCOM BANKING AND INSURANCE

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** DECEMBER_APRIL **ACADEMIC YEAR :** 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students' writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	4 Principles of Effective Presentation Effective use of OHP Effective use of Transparencies How to make a Power-Point Presentation	15	Manan Prakashan	Chalk, Black Board, PPT

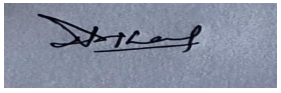
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Interviews:** Group Discussion, Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit **Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics, Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **Conference:** Meaning and Importance of Conference, Organizing a Conference **Modern Methods:** Video and Tele – Conferencing	12	Manan Prakashan	Chalk, Black Board, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3) Group Communication	**Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	03	Manan Prakashan	Chalk, Black Board, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: SELF FINANCE CLASS: FYBCOM (BANKING & INSURANCE) SEMESTER: II

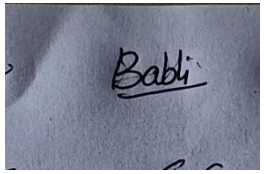
MONTH: DECEMBER- APRIL ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:
Learn about the working format of the company regarding raising of capital funds by way of issuing shares, debentures. Also, the legal procedure to raise these funds. It also helps to give practical knowledge of accounts. Additionally, the learner will be able to understand the method for the redemption of preference share and redemption of debentures and their calculation of settling the proceeds.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accountancy and Financial Management II	**Redemption of debentures** Redemption of debentures by payment from sources including out of capital and / or out of profits. Debenture redemption reserve and debenture redemption sinking fund excluding insurance policy. Redemption of debentures by conversion into new class of shares or debentures with options- including at par, premium and discount	12	Introduction to Accountancy T.S. Grewal S. Chand and Co. (P) Ltd., New Delhi Advanced Accounts Shukla and Grewal S. Chand and Co. (P) Ltd., New Delhi	Google Meet for online teaching, Excel, PowerPoint Presentation, MS word, Chalk & talk, Black-Board Method; Group Discussion

	Redemption of Preference Shares Provision of the Companies Act for redemption of Preference Shares (Sec 55 of the Companies Act, 2013), Companies (Share and Debentures) Rules. Methods of Redemption of fully paid-up Preference Shares as per Companies Act, 2013: The proceed of a fresh issue of shares, the capitalization of undistributed profits and a combination of both, calculation of minimum fresh issue to provide the fund for redemption, (Question on entries and/or Balance Sheet) Note: Companies governed by Section 133 of the Companies Act, 2013 and comply with the accounting standards prescribed for them. Hence, the balance in security premium account not to be utilized for premium payable on redemption of preference shares.	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI YADAV SUBJECT: FINANCIAL ACCOUNTING II CLASS: FYBCOM (Banking & Insurance)

SEMESTER: II MONTH: DECEMBER- APRIL ACADEMIC YEAR: 2021 - 2022 DEPARTMENT- COMMERCE

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 VALUATION OF GOODWILL AND SHARES	A) Valuation of Goodwill Meaning, Nature, Features, Classes, Elements, Types, Factors of Goodwill Valuation and Methods of goodwill Practical Illustration B) Valuation of Shares	15	Introduction to Accountancy T.S. Grewal S. Chand and Co. (P) Ltd., New Delhi Advanced Accounts Shukla and Grewal S. Chand and Co. (P) Ltd., New Delhi	Google Meet for online teaching, Excel, PowerPoint Presentation, MS word, Chalk & talk, Black-Board Method; Group Discussion.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II BUY-BACK OF EQUITY SHARES	A) Meaning, Effect, Objectives, Benefits, Drawbacks of Buy back. B) Company law/Legal Provision (including related restrictions, Power, Transfer to CRR, and Prohibitions). C) Compliance to conditions including Sources, Maximum Limit and Debt Equity Ratio. D) Practical Illustration	12	Introduction to Accountancy T.S. Grewal S. Chand and Co. (P) Ltd., New Delhi Advanced Accounts Shukla and Grewal S. Chand and Co. (P) Ltd., New Delhi	Google Meet for online teaching, Excel, PowerPoint Presentation, MS word, Chalk & talk, Black-Board Method; Group Discussion.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA VAIBHAV TAMBE DEPARTMENT: SELF FINANCE CLASS: F.Y.BCOM (BANKING AND INSURANCE)
SUBJECT: FOUNDATION COURSE II SEMESTER: II MONTH: DECEMBER - APRIL ACADEMIC YEAR: 2021-2022

A teaching plan is a document that outlines the structure and details of a single session. A good teaching plan is a comprehensive write-up of the step-by-step teaching methods, the estimated duration of each segment of teaching9oooooooooooo9 op, and the materials and resources needed for the session.
LEARNING OBJECTIVE/S:
By the end of the session Students will be able to:
The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected contexts so they can contribute to making life better for others, themselves and the larger world.

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Human Rights	a]Concept of Human Rights.	01	Book by Manan publications/Internet	1. CHALK & BLACK BOARD METHOD 2. INTERACTIVE METHOD
	b] Evolution of Human Rights	02	Book by Manan publications/Internet	1. CHALK & BLACK BOARD METHOD 2. INTERACTIVE METHOD
	c] The Universal Declaration of Human Rights	03	Book by Manan publications/Internet	1. CHALK & BLACK BOARD METHOD 2. INTERACTIVE METHO

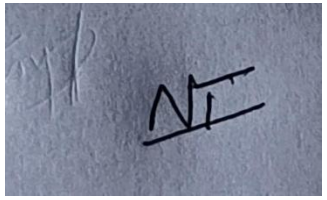
	d] Fundamental Rights in Constitution	04	Book by Manan publications/Internet	1. CHALK & BLACK BOARD METHOD 2. .INTERACTIVE METHOD

Total no of lecture 10

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 Ecology	a] Concept of environment & ecology	02	Book by Manan publications/Internet	1. CHALK & BLACK BOARD METHOD 2. .INTERACTIVE METHOD
	b] Importance of environmental studies, Environment as a Natural capital & quality of human life	03	Book by Manan publications/Internet	1. CHALK & BLACK BOARD METHOD 2. .INTERACTIVE METHOD
	c] Environmental Degradation. i. Causes ii. Impact on human life	02	Book by Manan publications/Internet	1. CHALK & BLACK BOARD METHOD 2. .INTERACTIVE METHOD

	d] Sustainable Development i. Concept ii. Components	02	Book by Vipul publication/internet	1. CHALK & BLACK BOARD METHOD 2 .INTERACTIVE METHOD
	e] Poverty & Environment	01		1.CHALK & BLACK BOARD METHOD 2. INTERACTIVE METHOD

Total no of lecture 10



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: SELF FINANCE CLASS: FYBCOM (BANKING AND INSURANCE)

SEMESTER: II MONTH: DECEMBER -APRIL ACADEMIC YEAR: 2021 -2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	Understanding Risk- kinds of business risk- need and scope of insurance -Evolution of insurance – principles of insurance -types of insurance and policies- risk and return relationship	15	INSURANCE SECTOR-REGULATORY FRAMEWORK (THE FUTURE AHEAD) (Paperback, DR. BEENA DEVI, DR. ANSHU LOCHAB)	Lecture method, POWER POINT PRESENTATION
UNIT 4	Insurance business Environment in India- growth of business – actuarial role -claim and settlement procedures- insurance regulations role of IRDA	15	INSURANCE SECTOR-REGULATORY FRAMEWORK (THE FUTURE AHEAD) (Paperback, DR. BEENA DEVI, DR. ANSHU LOCHAB	LECTURE METHOD
UNIT 1 and 2 INRODUCTION TO FINANCIAL SYSTEM	Chapter 1: Financial system Institutional set up, marketing structure, over view of different kinds of financial services, meaning, definition and scope of banking and insurance Chapter 2: banking and insurance What is banking, functions, advantages, types of banks, insurance, its types	10	Same as above	Lecture method

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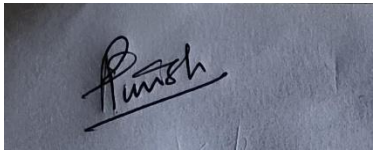
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40



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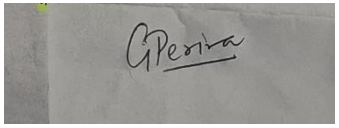
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: Self Finance
CLASS: SYBCOM (BANKING AND INSURANCE) SEMESTER: IV MONTH: DEC-APR ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to:

Familiarize with basic concepts of macroeconomics and with certain common features of economic occurrence in the real world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –III Unit 1 Introduction to macroeconomics Unit 2 Money, Inflation, and Monetary Policy	Macroeconomics Circular flow of income and expenditure Measurement of national product Trade cycles Classical macroeconomics The principle of effective demand Consumption function Investment function Theory of multiplier	10	Ahuja. H.L., Modern Economics — S.Chand Company Ltd. New Delhi	Chalk and Talk Discussion PPT
	Money Supply Demand for Money Money and Prices Inflation Monetary Policy	10	Gregory .N. Mankiw, Macroeconomics, Fifth Edition (2002) New York:Worth Publishers	Chalk and talk Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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NAME OF THE STAFF: JINAL CHOHAN DEPARTMENT: SELF FINANC CLASS: SYBCOM(BANKING AND INSURANCE) SEMESTER: IV

MONTH:DECEMBER -JANUARY ACADEMIC YEAR: 2021 -2022

LEARNING OBJECTIVE/S: The learners will be able to Entrepreneurship Management

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 KEY AREAS OF NEW VENTURE	A)MARKETING- New product development, marketing strategy for new venture, branding strategies, pricing strategies, distribution strategies, marketing plan. B)Operations- Size and location of enterprise,layout, inventory control, quality control. C)Finance- Sources of Long term and short term finance, debt fund, meaning,merit and limitations, equity fund, meaning. Merit and limitations,concept of break even analysis, venture capital,criteria D) Human resource- Personnel function, labor laws, Industrial disputes act,Factories act, provident fund act, employee state insurance act, payment of wages act, minimum wages act	15	ENTERPRENUERSHIP MANAGEMENT By Romeo S. Mascarenhas	PPT, Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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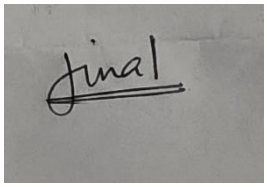
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 EVOLVING CONCEPT IN ENTREPRENEURSHIP	A) Social entrepreneurship- meaning, social responsibility of an entrepreneur B) Barriers to entrepreneurship- Environmental, economic, non economic, personal and entrepreneurial barriers C) Intrapreneurship- Meaning, Characteristics, Intrapreneurs activities, types of corporate entrepreneurs, corporate vs Intrapreneurial culture, climate, fostering intrapreneurial culture, pinchots spontaneous teams and formal venture teams D) Ethics and entrepreneurship- defining ethics, approaches to managerial skills, ethics and business decisions, ethical considerations E) Institutional support to entrepreneurs Institutional Support to Entrepreneurs: Importance, Incentives and facilities, Entrepreneurship Development Institute of India (EDI), NSIC, Small Industries Development	15	ENTERPRENUERSHIP MANAGEMENT By Romeo S. Mascarenhas	PPT, Google meet

	Organization (SIDO), National Institute for Entrepreneurship and Small Business Development (NIESBUD), Others, Key features of National Policy on Skill Development and Entrpreurship 2015			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **SELF FINANCE** CLASS**: S.Y.BCOM (BANKING AND INSURANCE)**

SEMESTER: **III** MONTH: **July -December** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Income Tax and its basic term(Definitions)
2. What is Residential status and which income is taxable and nontaxable in India (Scope of Total Income)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEFINITIONS AND RESIDENTIAL STATUS	**Definitions U/S 2:** Section 2-Assessee, Assessment Year, Assessment, Annual value, Business, Capital asset, Income, Person, Previous Year, Transfer **Basis of Charge :Section 3 to 9** Previous Year, Residential Status, Scope Of Total Income, Deemed Income	15	1.Direct Taxes Law & Practice by V.K Singhania-TAX MAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are the Provision regarding Income from Salary under Income Tax Act, 1961.
2. What are the Provision regarding Income from House Property under Income Tax Act, 1961.
3. What are the Provision regarding Income from Business and Profession under Income Tax Act, 1961.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME-1	**Salary Income: Section 15 – 17** Including Section 10 relating to House Rent Allowance, Travel Concession, Special Allowance, Gratuity, Pension ,Commutation, Leave Encashment, Compensation, Voluntary Retirement, Payment from Provident Fund	15	1.Direct Taxes Law & Practice by V.K Singhania-TAX MAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM.
	Income From House Property: Section 22 to 27, Including Section 2 - Annual Value Practical Question			
	Profits & Gains From Business & Profession, Vocation Section 28 to 32, 36, 37, 40, 40A, 43B, 44AD, 44ADA & 44AE Including.: Section 2 - Business			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are provision of Income from Capital Gain under Income Tax Act, 1961
2. What are provision of Income from Other Sources under Income Tax Act, 1961

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME-2	**Income from Capital Gains :** Section 45, 48, 49, 50, 54 and 55	15	1.Direct Taxes Law & Practice by V.K Singhania-TAX MAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM.
	Income from Other Sources: Section 56 to 59			
	Exemption U/s 10 Related to income from other sources			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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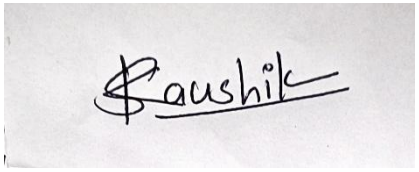
The learners will be able to:

1. What are provision of Deductions under Chapter VI - A under Income Tax Act, 1961
2. How to Compute Taxable income of Individual and HUF.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEDUCTIONS UNDER CHAPTER VI – A AND COMPUTATION OF TOTAL INCOME	**80 A**-Restriction on claim in Chapter VI- A deductions **80 C**- Payment of LIC/PF and other eligible investments **80CCC** - Contribution to certain Pension Fund **80D** - Medical Insurance Premium **80 DD**- Maintenance and medical treatment of handicapped dependent **80E** - Interest on Educational Loan **80 TTA**-Interest on Saving Bank account **80D** - Deduction in the case of totally blind or physically handicapped or mentally retarded resident person	15	1.Direct Taxes Law & Practice by V.K Singhania-TAX MAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM
	Computation of Total Income of Individual and HUF with respect to above heads and deductions			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

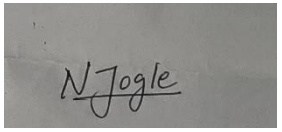
NAME OF THE STAFF: NIKITA SUNIL JOGLE DEPARTMENT: SELF FINANCE CLASS: SYBCOM (BANKING AND INSURANCE) SEMESTER: IV MONTH: NOVEMBER TO MARCH ACADEMIC YEAR: 2021 - 2022

LEARNING OBJECTIVE/S:
The learners will be able to : study in detail the components of working capital & its management & financial planning

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	WORKING CAPITAL MANAGEMENT ● Management of working capital in India ● Estimating working capital needs ● Operating or working capital cycle ● Working capital financing – trade credit, bank credit, commercial papers, certificate of deposits, financing	7	Text book	Google meet, power point presentation, chalk & board
UNIT 2	MANAGEMENT OF COMPONENTS OF WORKING CAPITAL ● Management of cash & marketable securities – motives for holding cash, objectives of cash management, factors determining cash needs, basic strategies of cash management, cash management techniques/processes, marketable securities & cash management practices in India	5	Text book	Google meet, power point presentation, chalk & board
UNIT 3	FINANCIAL PLANNING	6	Text book	Google meet, power point presentation, chalk & board

	• Introduction, meaning & essentials of budget, types of budget, advantages of budgeting, zero based budgeting, master budget, sales budget, production budget, material budget, cash budget & flexible budget			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18 Lectures



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: SELF FINANCE CLASS: SYBCOM(BANKING AND INSURANCE)

SEMESTER: IV MONTH:DECEMBER -MARCH ACADEMIC YEAR: 2021 -2022

LEARNING OBJECTIVE/S: The learners will be able to understand fundamentals of Insurance sector

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 Home insurance and Vehicle Insurance	SBI and ICICI plans- introduction ,Forms and procedures inclusions and exclusions in policies, Determinants of risk premium and impact of catastrophes on home insurance	10	INSURANCE SECTOR-REGULATORY FRAMEWORK (THE FUTURE AHEAD) (Paperback, DR. BEENA DEVI, DR. ANSHU LOCHAB)	GOOGLE MEET, POWER POINT PRESENTATIONS
	SBI and ICICI plans- introduction ,Forms and procedures inclusions and exclusions in policies, Determinants of risk premium ,inclusions and exclusions vehicle insurance		INSURANCE SECTOR-REGULATORY FRAMEWORK (THE FUTURE AHEAD) (Paperback, DR. BEENA DEVI, DR. ANSHU LOCHAB)	
UNIT 4 Role of insurance in logistics and Fire Insurance	Meaning and importance,hazards, protection ,social security-types of risks and accidents			
	SBI and ICICI plans- introduction ,Forms and procedures, standard fire and special perils policy, Tariff system and special policies	10		LECTURE METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: SELF FINANCE CLASS: SYBCOM (BANKING AND INSURANCE) SEMESTER: III

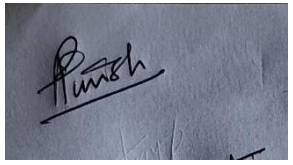
MONTH: SEPTEMBER TO DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: understand people better which in turn will help them manage people better. It will also lead more satisfying and fulfilling professional as well as personal life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1: The individual behavior	Chapter 4: Meaning of emotions, cognitive dissonance, emotional dissonance, managing emotions at work- 6 universal emotions. Meaning and types of values, sources of value systems, value across cultures, values and ethical behaviour Chapter 5: Individual decision making , decision making process, decisional styles, models of decisions	07	Organizational Behaviour by Stephen P. Robbins	GOOGLE MEET, POWER POINT PRESENTATIONS

UNIT 2: The group dynamics	Chapter 6: Group communication, importance , corporate communication, need, importance and techniques of corporate communication, types of communication in detail Chapter 7: Power and politics Meaning, bases of power, power tactics, organizational politics, reasons for organizational politics, managing politics, importance of handling politics	07	Organizational Behaviour by Stephen P. Robbins	GOOGLE MEET, POWER POINT PRESENTATIONS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Roshani Nagar_____DEPARTMENT: SELF FINANCE_____

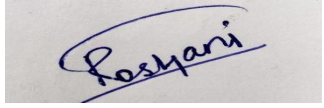
CLASS __S.Y.BCOM (BANKING AND INSURANCE) SEMESTER:III_____MONTH :-July to October ACADEMIC YEAR: __2021-2022__

LEARNING OBJECTIVES: -
The learners will be able to: to understand the behavior to be followed in organization

The learners will be able to: to understand the organizational structure that is been followed in banking and insurance sector

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Organisational Behaviour Unit II , III, and IV	**Unit II the Group Dynamics** **C) Negotiations: -** Meaning, Process, Strategies, Negotiations, Crises Negotiations. **D) Transactional Analysis Model: -** Types Of Transaction, Life Positions, E) **Virtual Teams**: - Meaning and structure, Types, Stages of Management of Virtual Teams F) **Group Cohesiveness**: - Meaning, Features, Factors Affecting, Effects, Consequences, Impact of group cohesion G) **Group Decision-Making: -**	10	Text Book Internet	.Chalk and Black Board Method 2 Example 3 Discussion

	Unit III:- Organisational Dynamics **A) Organisation Structure** :- Meaning, Centralisation, Decentralisation, Span Of Control, Departmentation **B) Common Organizational Designs:- Simple Structure, Bureaucratic Structure, Matrix Structure** C) **New Design Options:-** Team Structure, Virtual Organisations, Boundaryless Organisations **D) Organisation Structure Differentiation** **E) Need And Importance of organisational designs** **F) Organisational Climate:-** Managing Rewards, Impact of Rewards Punishments, Job Frustration , Meaning and importance of QWL	15	**Text book**	1)Chalk and Black Board Method 2 Example 3 Discussion
	Unit IV: Organisation Behaviour in Banking and Insurance Sector Concept and Definitions of OB, Practices of Ob in Banking and Insurance Company, Personality and OB, Perception and OB, Unethical Practices by Banking Employees, Issue of Organisation Behaviour In Banks	5	**Text book**	. 1)Chalk and Black Board Method 2 Example 3 Discussion



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL SUBJECT: COST ACCOUNTING DEPARTMENT: SELF FINANCE

CLASS: SYBCOM (BANKING AND INSURANCE) SEMESTER: IV MONTH: NOVEMBER - DECEMBER

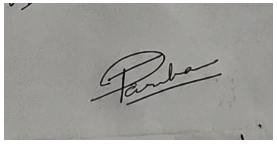
ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to : To understand the basic concept of Cost Accounting.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introducing to Cost Accounting	• Objectives and scope of Cost Accounting • Cost Centres and Cost Units • Cost Classification for stock valuation, profit measurement, decision making and control. • Coding Systems • Elements of Cost	10	Vipul Prakashan Manan Prakashan	• Google meet • Microsoft Power point

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: COST ACCOUNTING DEPARTMENT: ____SELF FINANCE___

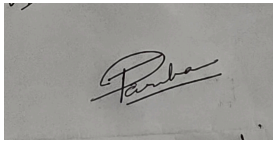
CLASS: ____SYBCOM (BANKING AND FINANCE__ SEMESTER: _____IV_____ MONTH: __DECEMBER- JANUARY ACADEMIC YEAR: ____2021-2022___

LEARNING OBJECTIVE/S:

The learners will be able to : To understand the Classification of cost and how to prepare cost sheet and reconciliation statement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Classification of Cost and Cost Sheet	• Classification of Costs, Cost of Sales, Cost Centre, Cost Unit, Profit Centre and Investment Centre • Cost Sheet • Reconciliation of Cost and Financial Accounts • Practical Illustrations	15	Vipul Prakashan Manan Prakashan	• Google meet • Microsoft Power point • Microsoft Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____



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NAME OF THE STAFF:____TARIKA PATEL____ SUBJECT: COST ACCOUNTING DEPARTMENT: ____SELF FINANCE___

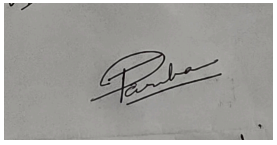
CLASS: ____SYBCOM (BANKING AND INSURANCE) SEMESTER: _____IV_____ MONTH: _JANUARY- FEBRUARY ACADEMIC YEAR: ____2021-2022___

LEARNING OBJECTIVE/S:

The learners will be able to : To understand the basic concept of Standard Costing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 Standard Costing	• Various types of standards, setting of standards, basic concepts of labour and overhead (Fixed and Variable) Variance Analysis • Formulas • Practical Illustrations	8	Vipul Prakashan Manan Prakashan	• Google meet • Microsoft Power point • Microsoft Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____8_____



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NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: COST ACCOUNTING DEPARTMENT: ____SEKF FINANCE___

CLASS: ____SYBCOM (BANKING AND INSURANCE)___ SEMESTER: _____IV_____ MONTH: __FEBRUARY- MARCH

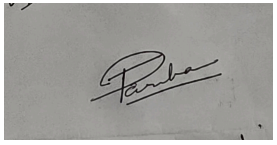
ACADEMIC YEAR: ____2021-2022___

LEARNING OBJECTIVE/S:

The learners will be able to : To understand the Concept of Marginal costing..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 Introduction to Marginal Costing	• Marginal Costing Meaning, Application, Advantages, Limitations, Contribution, Breakeven Analysis and Profit Volume Graph • Formulas • Practical Illustrations	10	Vipul Prakashan Manan Prakashan	• Google meet • Microsoft Power point • Microsoft Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____10_____



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TEACHING PLAN (UNIT PLAN)

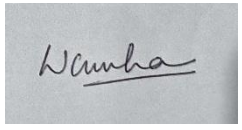
NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: (SELF FINANCE) CLASS: SYBCOM BANKING AND INSURANCE

SEMESTER: III MONTH: AUGUST-SEPTEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The learners will be able to know about Indian Financial system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Indian Financial System	**(A)** Introduction. Meaning. Functional financial system. Indian financial system from financial neutrality to financial activism and from to financial volatility to financial stability. Role of government in financial development over we were faces of. Indian financial system since independence. Monitoring framework for financial conglomerates.	8	Text Book	PPT
	(B) Structure of Indian financial system. Banking and non-banking financial institutions. Organized and unorganized financial markets. Financial assets. Instruments Fund based and fee based financial services.	7	Text Book	PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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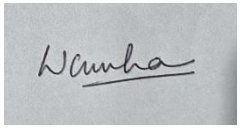
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: SYBBI SEMESTER: III MONTH: SEPTEMBER-OCTOBER ACADEMIC YEAR: 2021

LEARNING OBJECTIVE/S:
The learners will be able to get knowledge of Derivatives Market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 DERIVATIVES MARKET	Introduction to Derivatives market: Meaning, History, and origin. Elements of a Derivative contract. Factors driving growth of derivatives market. Types of Derivatives, of Underlying assets, Participants in Derivatives market, Advantages and Disadvantages of Trading in Derivatives market. Current volumes of Derivative Trade in India. Difference between Forward and Futures.	15	Text book	PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: SELF FINANCE CLASS: SYBCOM(BANKING AND INSURANCE)

SEMESTER: IV MONTH:DECEMBER -JANUARY ACADEMIC YEAR: 2021 -2022

LEARNING OBJECTIVE/S: The learners will be able to Entrepreneurship Management

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 THE ENTERPRENUER	Meaning and Definition, Origin and Development of Entrepreneurship in India, Stages in Evolution of Entrepreneurship, Factors Responsible for Emergence of Entrepreneurship,Need and Importance, Core Elements,Principles, Essentials ,Types ,Functions **Entrepreneurship and Entrepreneurship Management** Introduction to Entrepreneurship ,Definitions of Entrepreneurship ,Concept of Entrepreneurship Management,Motives behind being an Entrepreneur,Entrepreneurial Process **Theories of Entrepreneurship** Innovation Theory of Schumpeter,Need for Achievement Theories of McClelland,Risk Bearing Theory of Knight,Hagen's Theory of Entrepreneurship,Economic Period of Entrepreneurship **Entrepreneurial Values and Attitudes** Dominant Characteristics of Successful Entrepreneurs,Internal and External Factors for Entrepreneurial Motivation **Entrepreneurial Skills**	15	ENTERPRENUERSHIP MANAGEMENT By Romeo S. Mascarenhas	PPT, Google meet

	Types of skills required,Identifying Business Opportunities,Role of Creativity in Entrepreneurship,The Creative Process **Innovation** Meaning,Definitions,Types of Innovation,Seven Sources of Innovation,Essential Conditions for Successful Innovation, Innovation Process-Stages, Principles of Innovation, Sources of Business Ideas			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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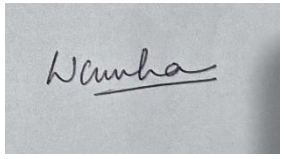
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 BUSINESS PLANNING	**Forms of entrepreneurial structures** **Sole proprietorship**: meaning merits and limitations **Partnership**: meaning forms, merits, and limitations. **Corporations**: meaning merits and limitations. **Limited liability partnership and corporations** **Franchising:** meaning type. Merits and limitations. **Critical factors for starting a new enterprise**: Personal and environmental sociological factors. Problem of new venture financial administrative, marketing, production and other problems. **Business plan:** Meaning benefits. Developing a business plan, environment, scanning elements, areas to be covered in business plan, project report preparation contains a project report.	15	ENTERPRENUERSHIP MANAGEMENT By Romeo S. Mascarenhas	PPT, Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Abhishek Madaye DEPARTMENT:SELF FINANCE
CLASS: T.Y.BCOM (BANKING AND INSURANCE)
SEMESTER: V MONTH: JULY-DECEMBER ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concepts of Auditing and different auditing techniques i.e: Vouching and Verification

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
III- Auditing techniques and Internal Audit Introduction	**Internal control:** meaning and purposes, review of internal control,advantages, auditors duties, inherent limitations of internal control, internal control samples for sales and debtors,purchases and creditors,wages and salaries.internal checks Vs internal control,internal checks v/s test checks Internal Audit: meaning, basic principles of establishing internal Audit, objectives,evaluation of internal audit by statutory auditor,usefulness of internal audit,internal Audit V/S external Audit,internal checks V/S internal Audit	08	TextBooks and Reference material from Internet	PPT, WORD

IV. Auditing techniques-vouching	**Audit of Income:** Cash Sales , sale on approval, consignment sales , sales return recovery bad debts written off,rental receipts, interest and dividends received,royalties received. **Audit of Expenditure: Purchases, purchases return, salaries and wages,rent, insurance premium,telephone expenses,postage and couriers,petty cash expenses,travelling commission,advertisement,interest expenses**	8	TextBooks and Reference material from InterneT	PPT, WORD
V. Auditing Techniques-verification	**Audit of liabilities: outstanding expenses,bills payable,secured loans,unsecured loans,contingent liabilities.**	6	Text Books and Reference material from Internet	PPT, WORD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___22_____

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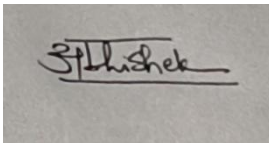

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHAKTI VILAS PURANDARE DEPARTMENT:SELF FINANCE CLASS: TYBCOM (Banking & Insurance) SEMESTER: V

SUBJECT: RESEARCH AND METHODOLOGY MONTH: JUNE TO NOVEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : understand data processing and analysis, hypothesis, correlation and regression, and writing of research report with essentials.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Data Analysis and interpretation:	* processing of data – editing coding tabulations, * analysis of data. * Essentials importance of data interpretation. * testing of hypothesis – one sample, T test, ANOVA, F test, chi square test.	20		Google meet
Advanced statistical techniques:	* Introduction characteristics and applications of – correlation and regression, factor analysis, cluster analysis, discriminant analysis, multidimensional scaling.	20	Regression modelling strategies- Frank Harrell	Google meet
Research report:	* report writing - meaning, importance, structure, types, process and essentials of a good report.	05		Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DILIP JAIN SUBJECT: Human Resource Management DEPARTMENT: Self Finance

CLASS: TYBCOM (BANKING & INSURANCE) SEMESTER:VI MONTH: DECEMBER- APRIL ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV	Training and Development Employee	5	HRM – By Gary Dessler HRM – By Sultan Chand And Sons	• Google Meet, • Google ClassRoom, • PPT presentation • Case Studies • Role Plays • Experiential Learning
	Training and Development - Nature and Process of Training, Training methods, On the job, Off the job. Management Development Program,	5		
	Performance Appraisal -Definition, Methods. Advantages and Limitations of Appraisal.	2		
UNIT V	Compensation	5		
	Meaning, Need and Importance, Current Trends in Compensation, Team Based Incentives -	4		
	Pension Schemes with Reference to Banking and Insurance, Fringe Benefits, Perquisites, Allowances and other Non – Monetary Benefits Voluntary Retirement Scheme	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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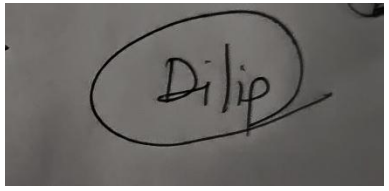
LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT Strategy Implementation And Control	Types of Control	2	Management Policy and Strategic Management (Concepts, Skills and Practices) , R.M.Shrivastava	Google meet,google classroom,ppt presentation
	Process of Strategic Control	2		
	Techniques of evaluation and control	2		
	Role of organizational system	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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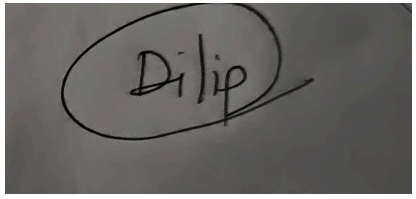
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DILIP JAIN SUBJECT: Strategic Management DEPARTMENT: SELF FINANCE

CLASS:TYBCOM (BANKING & INSURANCE) SEMESTER:V MONTH: JULY- NOVEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III LEVELS OF STRATEGIES AND ANALYSIS	CORPORATE LEVEL STRATEGIES	2	Management Policy and Strategic Management (Concepts, Skills and Practices), R.M.Shrivastava	Google meet,google classroom,ppt presentation
	TYPES OF CORPORATE LEVEL STRATEGIES A. CONCENTRATION B. INTEGRATION C. DIVERSIFICATION D. INTERNATIONALIZATION E. DIGITIZATION	4		
	PROCESS OF STRATEGIC CHOICE	2		
	STRATEGIC ANALYSIS	2		



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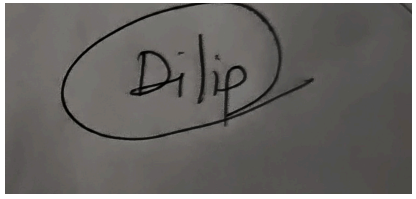
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Strategy Implementation And Control	Types of Control	2	Management Policy and Strategic Management (Concepts, Skills and Practices) , R.M.Shrivastava	Google meet,google classroom,ppt presentation
	Process of Strategic Control	2		
	Techniques of evaluation and control	2		
	Role of organizational system	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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TEACHING PLAN (UNIT PLAN)

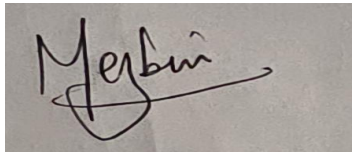
NAME OF THE STAFF: Prof Mezbin Lalani DEPARTMENT: Self Finance CLASS: T.Y.Bcom(Banking & Insurance)

SEMESTER: VI (SAPM) MONTH: DECEMBER- APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: to understand about management of portfolio.
The learners will be able to : understand various investment alternatives and the management of portfolios.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Fundamental Analysis	Economy, industry,company analysis, various important ratios for the company and investors concept of leverages and its types, practical sums on ratios & leverages	12	Investment analysis and management Mcgraw	Google Meet, google classroom, powerpoint presentations, pdf, etc
2.Technical analysis	Meaning of Technical analysis, types of charts and chart patterns, Dow theory, Elliot wave theory, Mathematical indicators, oscillators & relative strength index	12	Investment analysis and management Mcgraw	Google Meet, google classroom, powerpoint presentations, pdf, etc
3.Efficient market theory	Random walk theory, efficient market theory and its forms	06	Investment analysis and management Mcgraw	Google Meet, google classroom, powerpoint presentations, pdf, etc

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30_



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: SELF FINANCE CLASS: TYBCOM (BANKING & INSURANCE)

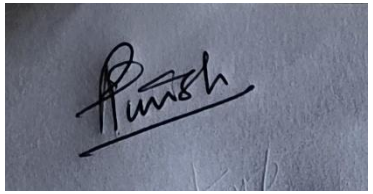
SEMESTER: VI MONTH: DECEMBER -MARCH ACADEMIC YEAR: 2021 -2022

LEARNING OBJECTIVE/S: The learners will be able to understand fundamentals of Turn around management

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Business	Business organization, definition, features, symptoms, different approaches for growth and survival-internal strategies, external strategies and survival strategies	10	Turnaround Management by Tom Lenahan	GOOGLE MEET, POWERPOINT PRESENTATIONS
UNIT 2 Industrial sickness	Meaning, reasons for industrial sickness, symptoms, measures to overcome sickness by government and stake holders, role of BIFR in sick industries	15		GOOGLE MEET, POWERPOINT PRESENTATIONS

UNIT 5 Leadership and turnaround management	Outfitting the management team, the management team, personal characteristic, focus on needs in turnaround, styles of decision making, organizational change, quality in the managerial process.	08		LECTURE METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 33



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TEACHING PLAN (UNIT PLAN)

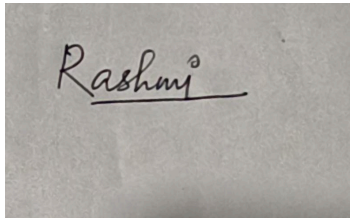
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Human Resources Management DEPARTMENT: Self Finance

CLASS:TYBCOM (Banking & Insurance) SEMESTER:V MONTH: DECEMBER- APRIL ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I Framework of HRM	Introduction to HRM , Scope of HRM, Functions and Objectives of HRM	2	HRM by Gary Dessler	Chalk Board,Discussion Google Meet , PPT Presentation , Google Form, WPS
	HRM Policies and Practices , Role and Functions of HR Manager	2		
	HRM and Strategies , understanding and Implementing Global Competitiveness and HR	2		
	Strategic HR , Linkages of Organizational and HR Strategies	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8



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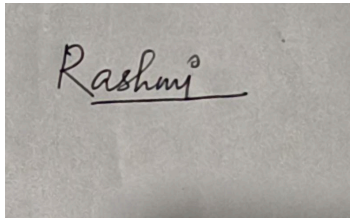
LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II & III HR Procurement , HR Planning and Recruitment	Job Analysis and Design , Job Analysis ,Importance , purpose , Benefits of Job evaluation , Competency Based Job Analysis	2	HRM by Gary Dessler	Chalk Board,Discussion, Google Meet , PPT Presentation , Google Form, WPS
	Job Design – Introduction ,Characteristics , Factor Affecting Job Design , Job Satisfaction .	2		
	Objectives and Needs & Importance of HR Planning ,Preparing Manpower Inventory.	2		
	Promotion & Transfers	2		
	Recruitment ,Sources of Recruitment ,Selection	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

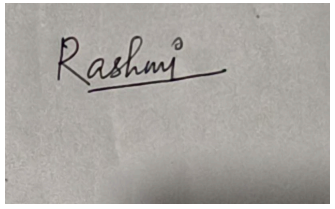
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Organizational Behavior DEPARTMENT: Self Finance

CLASS:TYBCOM (BANKING AND INSURANCE) SEMESTER:V MONTH: JULY-DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & II Introduction to OB	Importance of Politics in Strategic Management, Social ,Political And Technological Forces	2	Management Policy and Strategic Management (Concepts, Skills and Practices) , R.M.Shrivastava	Google meet,google class room,ppt presentation
	National and Global Business Environment	3		
	Components of Environment, Environmental Scanning,	3		
	Analysis of Strategies and Choice of Best Strategy, SWOT	2		
	Ethics, Social Responsibility, Impact of Legal Factor in SM	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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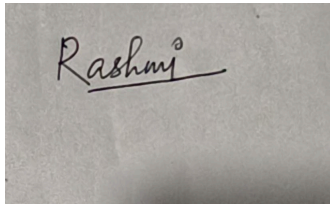
TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III & IV	Process and Nature of Strategy implementation	3	Management Policy and Strategic Management (Concepts, Skills and Practices) , R.M.Shrivastava	Google meet,google class room,ppt presentation
	Barriers of Strategy implementation	2		
	Models of Strategy implementation	2		
	Standard, Benchmarking , Gap Analysis	2		
	Features, importance , barriers and type of evolution	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Rashmi Mehbubani DEPARTMENT:SELF FINANCE CLASS: T.Y.BCOM (BANKING AND INSURANCE)
SEMESTER: V MONTH: JULY -DECEMBER ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concepts of Financial Services Management

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Introduction to financial services & Merchant Banking	**INTRODUCTION TO FINANCIAL SERVICES:** ● Introduction to financial services ● Functions ● Characteristics ● Scope of Financial Services ● Importance of Financial Service Market ● Agencies Providing Financial Services ● Financial Service Market Constituents ● Growth of Financial Services in India ● Problems in Financial Services in India **MERCHANT BANKING:** ● Introduction to financial services	08	TextBooks and	PPT, WORD

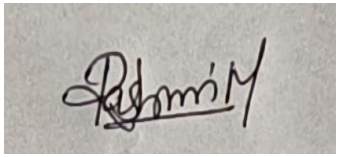
3. Securitization of Debt and Derivatives	• Merchant banking in India • Merchant Bank and Commercial Bank • Services of Merchant Banking • Qualities required of Merchant Bankers in Market Making Process • Responsibilities of Merchant Bankers in Market • Merchant Bankers Commission • Progress of Merchant Banking in India • Scope of Merchant Banking in India • Challenges Faced by the Merchant Bankers in India		Reference material from Internet	

3. Pledge and Hypothecation	**SECURITIZATION:** • Meaning • Definition • Parties involved • Instruments of securitization • Securitization V/s Factoring • Features of securitization • Securitization Mechanism • Process of securitization • Stage of securitization • Special purpose vehicle • Types of securities • Securitisable assets • Benefits of securitization • Disadvantages of securitization • Securitization in India **DERIVATIVES:** • Meaning • Definition • Participation in Derivative Market • Functions of Derivative Market • Feature of Financial Derivative • Cash Market vs Derivative Market	8	Textbooks and Reference material from Internet	PPT, WORD

	• Growth of Financial Derivative • Importance of Derivatives • Merits • Demerits • Types of Financial Derivatives • Forwards • Futures • Options • Swaps • Distincion between Futures and Forwards • Derivative market in India • Index futures and options trading system in India • Clearing Entities and their role in derivative segment			

	Pledge ● Hypothecation ● Pledge Vs. Hypothecation ● Procedure for Pledge/ Hypothecation in India ● Procedure of confirmation of creation of pledge/ Hypothecations by Pledgee ● Closure of a Pledge/ Hypothecation by Pledgor ● Request by the Pledgee ● Invocation of Pledge by Pledgee ● Request by the Pledgor	6	Text Books and Reference material from Internet	PPT, WORD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___22_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL REPORTING & ANALYSIS DEPARTMENT: SELF FINANACE

CLASS: T.Y.BCOM (BANKING AND INSURANCE) SEMESTER: V MONTH: JULY – AUGUST ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 FINAL ACCOUNTS OF BANKING COMPANY	Legal provision in Banking Regulation Act, 1949 relating to Accounts, Statutory reserves including Cash Reserve and Statutory Liquidity Ratio.	1	FINANCIAL ACCOUNTING BY R L GUPTA	• Google Meet • Excel • PowerPoint
	Bill purchase and discounted, rebate of bill discounted, Non–performing assets and Income from non–performing assets.	2		
	Classification of Advances, standard, sub–standard, doubtful and provisioning requirement.	1		
	Final Accounts in prescribed form	1		
	Practical Illustrations	3		

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LEARNING OBJECTIVE/S:

The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 FINAL ACCOUNTS OF INSURANCE COMPANY	Preparation and Presentation of Corporate Final Accounts for Insurance Companies	2	FINANCIAL ACCOUNTING BY R L GUPTA	• Google Meet • Excel • PowerPoint
	Final Accounts in accordance with Insurance Legislation	1		
	Study of Accounting Policies from Annual Reports of Listed Insurance Companies	2		
	Practical Illustrations	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 08

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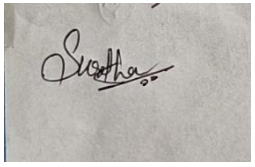
LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 INTRODUCTION TO IFRS	Introduction to IFRS, List of Accounting Standards in India, List Of IFRS	1	FINANCIAL ACCOUNTING BY R L GUPTA	• Google Meet • Excel • PowerPoint
	IFRS 1 – Objective, Scope, definition, recognition and measurement, reconciliation, interim financial report, Use of deemed cost and exceptions to retrospective application of other IFRS	2		
	IFRS 2 - Objective, Scope, definition, recognition, equity settle are based transaction, treatment of vesting condition, determining fair value of equity instruments, cash settled share based transaction, disclosures	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 5: 04



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: SECURITY ANALYSIS & PORTFOLIO MGMT DEPARTMENT: SELF FINANCE

CLASS: TYBCOM (BANKING & INSURANCE) SEMESTER: VI MONTH: DECEMBER - APRIL ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 PORTFOLIO MGMT – AN INTRODUCTION & PROCESS	Investment, Meaning characteristics, objectives, Investment v/s Speculation, Investment v/s Gambling, Types of Investors.	02		• Google Meet • Excel • PowerPoint
	Meaning, evolution, Phases, Role of portfolio managers, Advantages of Portfolio Management, Investment environment in India and factors conducive for investment in India.	03		
	Portfolio Analysis – Meaning, Components	01		
	Portfolio Selection – Meaning, Feasible set of Portfolios, Efficient set of Portfolios, Selection of Optimal Portfolio, Markowitz Model, Single index model. And Multi Index model.	02		
	Practical Illustrations	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 10

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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 PORTFOLIO MANAGEMENT-VALUATION	Portfolio Revision – Meaning, need, constraints, and strategies.	01		• Google Meet • Excel • PowerPoint
	Portfolio Evaluation – Meaning, need, Measuring returns. (Sharpe, Treynors, Jensen Measure)	01		
	Bond Valuation – Meaning, measuring bond returns, Yield to maturity, yield to call and bond pricing. Bond Pricing Theorems, Bond risks and Bond Duration.	02		
	Practical problems on evaluation and Bond valuation.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 07

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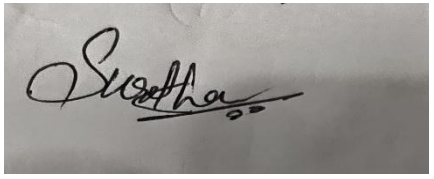
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 CAPM & APT	CAPM – Fundamental notions of portfolio Theory, Assumption of CAPM, Efficient frontier with riskless, lending and Borrowings, Capital market line, Security Market Line, and Pricing of securities with CAPM.	02		• Google Meet • Excel • PowerPoint
	APT – The return generating model, Factors affecting stock returns, Expected return on Stock, APT V/S CAPM.	02		
	Practical Illustrations	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 5: 06



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA A. ALMEIDA DEPARTMENT: B.COM ACCOUNTING AND FINANCE CLASS: FYBAF SEMESTER: I Month: - September - November

ACADEMIC YEAR:20212022

LEARNING OBJECTIVE/S:
The learners will be able to : Objectives of accounting in any business are; systematically record transactions, sort and analyzing them, prepare financial statements, assessing the financial position, and aid in decision making with financial data and information about the business.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Accounting Standards	AS-1 Disclosure of Accounting Polices, AS-2 Valuation of Inventories (Stock), AS-9 Revenue Recognition	03	Book by Manan Prakashan & Sheth Publication	Online Platform: - Google Meet, Google Classroom, PPT, Word, Group Discussion, Quiz.
3.	Final Accounts of Manufacturing Concern: - Introduction to Manufacturing A/c, Format of	06	Book by Manan	Online Platform: - Google Meet, Google Sheet, Google

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Final Accounts of Manufacturing Concern 4. Departmental Accounts	Manufacturing A/c. Practical Sums: 08 Departmental Accounts: - Introduction, Basis for Allocation, Format Practical Sums: - 08	06	Prakashan & Sheth Publication Book by Manan Prakashan	Classroom, PPT, Word, Group Discussion, Quiz.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA A. ALMEIDA DEPARTMENT: B.COM ACCOUNTING AND FINANCE CLASS: FYBAF SEMESTER: I Month: - September - November

ACADEMIC YEAR:20212022

LEARNING OBJECTIVE/S:
The learners will be able to : Objectives of accounting in any business are; systematically record transactions, sort and analyzing them, prepare financial statements, assessing the financial position, and aid in decision making with financial data and information about the business.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Accounting Standards	AS-1 Disclosure of Accounting Polices, AS-2 Valuation of Inventories (Stock), AS-9 Revenue Recognition	03	Book by Manan Prakashan & Sheth Publication	Online Platform: - Google Meet, Google Classroom, PPT, Word, Group Discussion, Quiz.
3.	Final Accounts of Manufacturing Concern: -	06	Book by	Online Platform: - Google

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Final Accounts of Manufacturing Concern 4. Departmental Accounts	Introduction to Manufacturing A/c, Format of Manufacturing A/c. Practical Sums: 08 Departmental Accounts: - Introduction, Basis for Allocation, Format Practical Sums: - 08	06	Manan Prakashan & Sheth Publication Book by Manan Prakashan	Meet, Google Sheet, Google Classroom, PPT, Word, Group Discussion, Quiz.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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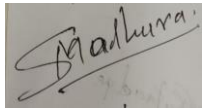
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Madhura Surve. DEPARTMENT: B.COM ACCOUNTING AND FINANCE CLASS: F.Y. BAF SEMESTER: I

MONTH: September- January ACADEMIC YEAR: 2021-22. LEARNING OBJECTIVE/S:

The learners will be able to : know about different aspect of business Environment

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3	**Ch 3 - Business and Society:** (a) Business Ethics: Nature and Scope of Ethics, Ethical Dilemmas, Corporate Culture and Ethical Climate. (b) Development of Business Entrepreneurship: Entrepreneurship and Economic Development, Micro, Small and Medium Enterprises Development (MSMED) Act, 2006, Entrepreneurship as a Career Option.	15	Vipul Prakashan, Manan Prakashan, Internet	Online lectures through Google Meet ,Chalk & duster



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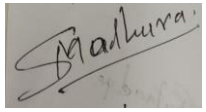
	(c) Consumerism and Consumer Protection: Consumerism in India, Consumer Protection Act, 1986.			
Unit 4				
	Ch 4-International Environment:	15		
	(a) Strategies for Going Global: MNCs and TNCs, WTO. (b) Foreign Trade in India: Balance of Trade, FDI Investment Flows and its Implication for Indian Industries.		Vipul Prakashan, Manan Prakashan, Internet.	Online lectures through Google Meet ,Chalk & duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA VAIBHAV TAMBE DEPARTMENT: B.COM ACCOUNTING AND FINANCE CLASS: F.Y.BAF SUBJECT: FOUNDATION COURSE I SEMESTER: I MONTH: September 21 to November 21
ACADEMIC YEAR: 2021-2022

A teaching plan is a document that outlines the structure and details of a single session. A good teaching plan is a comprehensive write-up of the step-by-step teaching methods, the estimated duration of each segment of teaching, and the materials and resources needed for the session.

LEARNING OBJECTIVE/S:

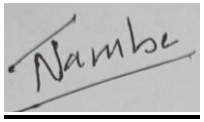
By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

(For a detailed description of each component see Appendix A).

APPENDIX {A}

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT2 Concept of Disparity 1	a]Concept of disparity as arising out of stratification and inequalities.	03	Book by Manan publications/Internet	Online
	b]gender disparities with special references to violence against women.	02	Book by Manan publications/Internet	Online



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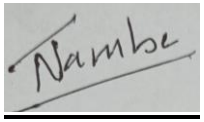
	c] Female Foeticide & Declining gender ratio	02	Book by Manan publications/Internet	Online
	d] inequalities faced by people with disabilities.	02	Book by Manan publications/Internet	Online
	e] Understand the issues of people with physical & mental disabilities. Special provisions and facilities for disabled personalities.	01	Book by Manan publications/Internet	Online

Total no of lecture 10

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 Concept of Disparity 2	a]Inequalities manifested due to caste system	01	Book by Manan publications/Internet	Online
	b]different types of conflicts arising out of caste system, inter- group conflict, cultural differences, lingual differences.	01	Book by Manan publications/Internet	Online
	c]Inter-group conflict arising out of communalism and its	01	Book by Manan	Online



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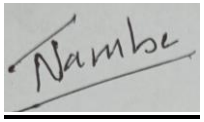
	effects on society.		publications/Internet	
	d]Causes and Effects of conflicts arising out of regionalism.	01	Book by Vipul publication/internet	Online
	e]Causes and Effects of conflicts arising out of linguistic differences.	01	Book by Vipul, Manan publication/ internet	Online

Total no of lecture 05



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TEACHING PLAN (UNIT PLAN)

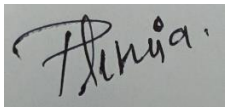
NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: B.COM ACCOUNTING AND FINANCE CLASS:FYBAF . SEMESTER: I

SUBJECT : FINANCIAL MANAGEMENT MONTH: SEPTEMBER 2021- NOVEMBER 2021 ACADEMIC YEAR:2021- 22

LEARNING OBJECTIVE/S:
The learners will be able to :

TO KNOW THE DIVERSITY OF DEMAND FOR FINANCIAL SERVICES AND TO IDENTIFY AND EXPLOIT NICHE IN THE MARKET WITH A NEW OR MODIFIED SERVICE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1. CONCEPTS IN VALUATION -TIME VALUE OF MONEY, BOND RETURNS,	7	SHETH , VIPUL,MANAN PRAKASHAN	GOOGLE MEET, PPT, EXCEL, WHITEBOARD
	-ANNUITY, TECHNIQUE OF DISCOUNTING AND COMPOUNDING	5		
	2. LEVERAGES	12		



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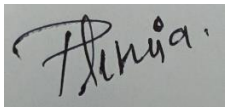
	3. TYPES OF FINANCING	9		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 33



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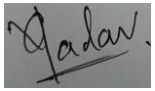
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI YADAV. DEPARTMENT: B.COM ACCOUNTING AND FINANCE CLASS: FYBAF SEMESTER: I MONTH: AUGUST-DECEMBER. ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : understand and learn Cost accounting. To learn material costing with different methods. Learn to analyze labour costing and calculate it's remuneration with different methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Material Costing	Concept of Material Cost, Material control Procedure, Documentation required.Various stock Ledger , Bin card , Different Stock levels, Economic Order Quantity. Format of FIFO and Weighted Average Method. Sums on EOQ ,. Stock levels, FIFO and Weighted method Q.1 to Q.6	15	Manan Prakashan	Google Meet, PPT, Excel to solve sums.
2. Labour Cost				
	Meaning & concept of labour cost. Composition of Labour cost.	15	Manan Prakashan	Google Meet, PPT, Eclxcel to solve sums



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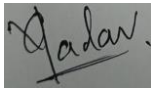
	Labour cost records. Overtime/Idle time / Incentive Schemes Sums solved on various methods...			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA SINGH

DEPARTMENT: COMMERCE

CLASS : B.COM ACCOUNTING AND FINANCE MONTH: SEPTEMBER NOVEMBER

ACADEMIC YEAR: 2021 2022

LEARNING OBJECTIVE/S:
The learners will be able to : understand the environment and it's impact on Business and its activities.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Business and Environment	Business objectives, dynamics of business objectives types of Business objectives, business environment components of business environment, Environmental analysis, Environmental scanning ,PESTLE Analysis SWOT Analysis	10	Business Environment by Justin Paul	PPT presentation online platform Google meet
Unit 3 Contemporary Issues	CSR, Corporate Governance, Social Responsibility of Business, Ecology, Carbon Credit , Social Audit , Benefits of Social Audit v/s Commercial Audit.	10	Business Environment by Justin Paul	PPT presentation online platform Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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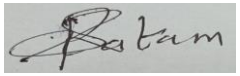
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan D. Satam DEPARTMENT: B.COM ACCOUNTING AND FINANCE CLASS FYBAF

SEMESTER:I MONTH: Sept-Nov 2021 ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: Learning about Foundation of Indian society, culture, constitution.
The learners will be able to : Students will be able to learn about Indian society, history of Indian society, values, culture, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation course -I	**1.Overview of Indian Society** Understand the multi-cultural diversity of Indian society through its demographic composition: population distribution according to religion, caste, and gender; Appreciate the concept of linguistic diversity in relation to the Indian situation; Understand regional variations according to rural, urban and tribal characteristics; Understanding the concept of diversity as difference	5	Manan and Vipul publication	Google meet, PPT and Wikipedia
	The Indian Constitution Philosophy of the Constitution as set out in the Preamble; The structure of the Constitution-the Preamble,	5	Manan and Vipul publication	Google meet, PPT and Wikipedia



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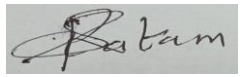
	Main Body and Schedules; Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution			
	Significant Aspect of political processes The party system in Indian politics, Local self-government in urban and rural areas, The 73rd and 74th amendments and their implications for inclusive politics, Role and significance of women in politics.	2	Manan and Vipul publication	Google meet, PPT and Wikipedia

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Sandra Shamir Almeida**

DEPARTMENT: **Commerce**

CLASS: **B.COM ACCOUNTING AND FINANCE**

SEMESTER: **Sem I**

MONTH: **Sept to Nov**

ACADEMIC YEAR : **2021-22**

LEARNING OBJECTIVE/S:

1) The learners will be able to learn various aspects about Financial Management and Cost of Capital in detail.
2) Management is an essential part of business.
3) Finance is the Lifeblood and Backbone of business.
4) This subject is helpful to develop Financial & Management skills among learners.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Management -I	**Module I : INTRODUCTION TO FIN MANAGEMENT** • Introduction • Meaning • Importance • Scope and Objectives • Profit v/s Value Maximisation	12	**1) Financial Management by S.P. Gupta** **2) Financial Management** **Lawrence D. Schall Charles W. Haley**	Google Meet, Google Class room, Power Point Presentations, Word & Table Top Method of teaching, Google forms for evaluation & Group discussion.
	Module IV : COST OF CAPITAL • Introduction	12	**1)Cost of Capital**	Google Meet, Google Class room, Power Point

	• Definition & Importance of Cost Of Capital • Measurement of Cost of Capital WACC (Including Practical Problems)		**Estimation and Applications** **Shannon P. Pratt** **Roger j. Grabowski** **2)Cost of Capital** **Applications and Examples** **Shannon P. Pratt** **Roger j. Grabowski**	Presentations, Word, Excel & Table Top Method of teaching, Google forms for evaluation & Group discussion.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __24_____

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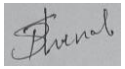
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: B.COM ACCOUNTING AND FINANCE **CLASS:** FYBAF (DIV- A, B, C) **SUBJECT –** BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** SEPTEMBER **ACADEMIC YEAR:** 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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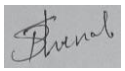
		ALLOTTED		
1) Theory of Communication	**1) Concept of Communication-** Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World Impact of technological advancements on communication **2) Channels and Objectives of Communication:** **Channels:** Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine **Objectives of Communication:** Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Morale of Employees **3) Methods and Modes of Communication:** **Methods:** Verbal and Nonverbal, Characteristics of Verbal Communication, Characteristics of Non-verbal Communication, Business Etiquette **Modes:** Telephone and SMS Communication (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication, Video and Satellite Conferencing	15	Manan Prakashan,	PPT, Online Lectures on Google Meet



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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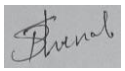
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: B.COM ACCOUNTING AND FINANCE **CLASS:** FYBAF (DIV- A, B, C) **SUBJECT –** BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** OCTOBER **ACADEMIC YEAR:**2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
		15	Manan Prakashan,	PPT, Online Lectures on Google Meet



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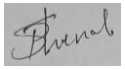
2) Obstacles to Communication in Business World	**1) Problems in Communication /Barriers to Communication:** Physical, Semantic/Language, Socio-Cultural, Psychological Barriers, Ways to Overcome these Barriers 2**) Listening:** Importance of Listening Skills, Cultivating good Listening Skills – **3) Introduction to Business Ethics:** Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility **Actual business practices:** Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical / E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour			PPT, Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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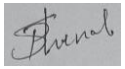
TEACHING PLAN (UNIT PLAN)



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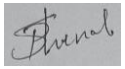
NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: B.COM ACCOUNTING AND FINANCE **CLASS:** FYBAF (DIV- A, B, C) **SUBJECT –** BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** NOVEMBER **ACADEMIC YEAR:**2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3) Business Correspondence	**1)Theory of Business Letter Writing:** Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, **Personal Correspondence:** Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation	15	Manan Prakashan,	PPT Online Lectures on Google Meet
4) Language and Writing Skills	**Commercial Terms used in Business Communication** **Paragraph Writing:** Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc	15	Manan Prakashan,	PPT Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHAKTI VILAS PURANDARE DEPARTMENT: B.com Accounting & Finance CLASS: FYBAF SEMESTER: II SUBJECT: FINANCIAL ACCOUNTING MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: prepare consignment A/c for consignor and consignee, branch account for dependent branch and make accounting from incomplete records.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accounting from incomplete records	• Steps for preparing final accounts from incomplete records. • Difference between single entry system and double entry system. • Format of various accounts to prepare for working notes. • Q1 to Q7 on incomplete records.	15		Google Meet
Consignment account	• Meaning of consignment, concepts of consignor and consignee. • Del credere commission. • Journal and ledger of consignor and consignee. • Q1 to Q6 on consignment in the books of both the parties.	15		Google Meet

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Branch account	• Concept of branch, format of dependent branch by debtors and stock & debtors method. • Q1 to Q8 on branch account by both method.	15		Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BIJOYA SARMA DEPARTMENT: MATHEMATICS

CLASS: B.COM ACCOUNTING AND FINANCE SEMESTER: II MONTH: DECEMBER- MARCH

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : understand the concept of profit and loss.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Business Mathematics, UNIT II Profit And Loss	Terms and formulae, Trade discount, cash discount	4	Textbook of Sheth Publication	Google meet Table top method
	Problems involving cost price, selling price, cash discount, trade discount.	4		
	Introduction to commission and brokerage	3		
	Problems on commission and brokerage	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BIJOYA SARMA DEPARTMENT: MATHEMATICS

CLASS: B.COM ACCOUNTING AND FINANCE SEMESTER: II MONTH: DECEMBER- MARCH

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : understand the concept of interest and annuity.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Business Mathematics, UNIT III Interest And Annuity	Simple interest, compound interest	4	Textbook of Sheth Publication	Google meet Table top method
	Equated monthly instalments, reducing balance and flat rate of interest	4		
	Annuity immediate- present value and future value	4		
	Stated annual rate and effective annual rate	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAVITA VILAS PURANDARE DEPARTMENT: B.com Accounting & Finance CLASS: FYBAF SEMESTER: II SUBJECT: Business Law MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to learn contract Act.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Law:	Meaning, Definitions, Features, Types, Sources and Classification Indian Constitution: Natural Justice, Special Leave Appeal, Features, Writs, Fundamental Rights	15		Google Meet
Contract Act:	Meaning, Essentials, Agreement, Offer, Acceptance, Consent, Free Consent, Consideration, Capacity of contract, Kinds and Classification of Contract, Performance, Discharge and Termination of Contract, Void - Quasi-Contingent -Wager - Minor Contracts, Breach and Remedies For the Contract.	15		Google Meet
Special Contract:	Indemnity & Guarantee - Meaning, Features, distinguish, position, Surety, discharge of surety Bailment: Meaning, Types, Features, Position, Lien, Finder of Goods Pledge Agency: Meaning, Features, types, Position, Ratification, Modes of Creation and Termination, Liabilities.	15		Google Meet

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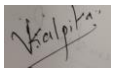
	Sale of Goods Act: Introduction, Meaning, Features, Terms, Goods Classification, Sale and Agreement to sell, Unpaid Seller and position Conditions and Warranty			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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TEACH.ING PLAN (UNIT PLAN)

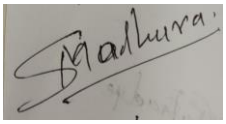
NAME OF THE STAFF: PROF. MADHURA ARVIND SURVE DEPARTMENT: COMMERCE CLASS: B.COM ACCOUNTING AND FINANCE SEMESTER: II (IFS)

MONTH: DECEMBER-FEBRUARY ACADEMIC YEAR: 2021-22

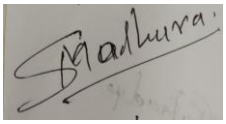
LEARNING OBJECTIVE/S: TO MAKE STUDENTS AWARE ABOUT FINANCIAL SYSTEM.

The learners will be able to: FINANCIAL SYSTEM AND THEIR BENEFIT

PAPER, UNIT, TITLE	SUBTOPICS		NO OF LECTURES ALLOTED	REFERENCE/S	
UNIT II & IV	**UNIT II: Consumer Finance and Credit Rating** a) Consumer Finance: Introduction, Sources, Types of Products, Consumer Finance Practice in India, Mechanics of Consumer Finance, Terms, Pricing, Marketing and Insurance of Consumer Finance, Consumer Credit Scoring, Case for and against Consumer Finance b) Plastic Money: • Growth of Plastic Money Services in India, Types of Plastic Cards-Credit card- Debit Card-Smart card-Add-on Cards, Performance of Credit Cards and Debit Cards, Benefits of Credit Cards, Dangers of Debit Cards, Prevention of Frauds and Misuse, Consumer Protection. Indian Scenario. Smart Cards-Features, Types, Security Features and Financial Applications c) Credit Rating:		15	VIPUL PRAKASHAN, MANAN PRAKASHAN, INTERNET	1. CHALK 2. INTERA 3. GOOGL

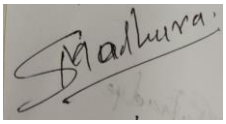


	Meaning, Origin, Features, Advantages of Rating, Regulatory Framework, Credit Rating Agencies, Credit Rating Process, Credit Rating Symbols. Credit Rating Agencies in India, Limitations of Rating				
	UNIT IV : 1. Consumer Finance: Introduction, Sources, Types of Products, Consumer Finance Practice in India, Mechanics of Consumer Finance, Terms, Pricing, Marketing and Insurance of Consumer Finance, Consumer Credit Scoring, Case for and against Consumer Finance 2. Plastic Money: Growth of Plastic Money Services in India, Types of Plastic Cards- Credit card- Debit Card-Smart card- Add-on Cards, Performance of Credit Cards and Debit Cards, Benefits of Credit Cards, Dangers of Debit Cards, Prevention of Frauds And Misuse, Consumer Protection. Indian Scenario. Smart Cards- Features, Types, Security Features and Financial Applications 3. Credit Rating: Meaning, Origin, Features, Advantages of Rating, Regulatory Framework, Credit Rating Agencies, Credit Rating Process, Credit Rating		15	VIPUL PRAKASHAN, MANAN PRAKASHAN, INTERNET	1. CHALK 2. INTERA 3. GOOGL



	Symbols. Credit Rating Agencies in India, Limitations of Rating				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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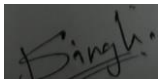
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA SINGH DEPARTMENT: B.COM ACCOUINTING AND FINANCE CLASS : FYBAF INNOVATIVE FINANCIAL SERVICES SEMESTER: II MONTH: JANUARY MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to understand organization. To make learners learn about various financial services and institutions

PAPER, UNIT,	**SUBTOPIC** Financial Services it's characteristics, scope types advantages disadvantages, Banking and Non banking Financial companies. Factoring it's features, types advantages. Forfeiting,Bill discounting,Bill market Scheme.	**NO OF LECTURES ALLOTED 8**	**REFERENCE/S** Financial market and services by E Gordan and K Natrajan	**TEACHING METHOD/ ICT TOOLS USED**
MODULE NO 1 Introduction to financial				Chalk and Duster



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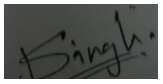
services MODULE NO 3 Financial services and it's Mechanism				
	Leasing types benefits and drawbacks , scope Hire purchase scope advantages and disadvantages. Difference between leasing and hire purchase. Housing finance policy,schemes, factors, major players, problems. Venture capital types, stages, disinvestment.	**8**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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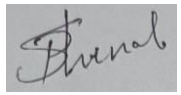
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: B.COM ACCOUNTING AND FINANCE **CLASS:** FYBAF (DIV- A, B, C) **SUBJECT –** BUSSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** January 2022 **ACADEMIC YEAR:** 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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1) Presentation Skills	4 Principles of Effective Presentatn Effective use of OHP Effective use of Transparencies How to make a Power-Point Presentation	15	PPT	Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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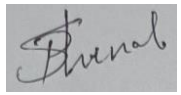
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: **B.COM ACCOUNTING AND FINANCE :** FYBAF (DIV- A, B, C)

SUBJCT – BUSSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** February 2022 **ACADEMIC YEAR:**2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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2) Group Communication	**Interviews:** Group Discussion, Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit **Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics, Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **Conference:** Meaning and Importance of Conference, Organizing a Conference **Modern Methods:** Video and Tele – Conferencing	12	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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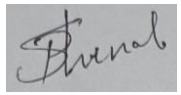
TEACHING PLAN (UNIT PLAN)



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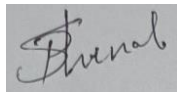
NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: B.COM ACCOUNTING AND FINANCE **CLASS:** FYBAF (DIV- A, B, C) **SUBJECT –** BUSSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** March 2022 **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	03	PPT	Online Lectures through Google Meet
3) Business Correspondence	Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters, Promotional Leaflets and Fliers, Consumer Grievance Letters, Letters under Right to Information (RTI) Act	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18



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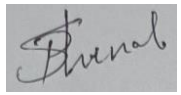
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: B.COM AND FINANCE **CLASS:** FYBAF (DIV- A, B, C) **SUBJECT –** BUSSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** April 2022 **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4) Language and Writing Skills	**Reports:** Parts, **Types** - Feasibility Reports, Investigative Reports **Summarisation:** Identification of main and supporting/sub points, Presenting these in a cohesive manner	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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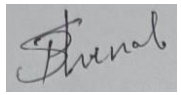

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TEACHING PLAN (UNIT PLAN)

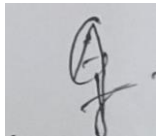
NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: Self Finance CLASS: B.COM ACCOUNTING AND FINANCE: III MONTH: July to October

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & Remember- the meaning of salary; section 10, sections 15-17; calculation of income from salary; various allowances (taxable, partly taxable, non-taxable); perquisities; rules and calculation of Gratuity, Pension, Leave encashment.
2) Understand & Remember- the meaning of income from other sources; sections 56-59; calculation of income from other sources.
3) Understand & Remember- the meaning of capital gains; Section 45, 48, 49, 50, 54 and 55, calculation of capital gains.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Heads of Income	Income from Salary	09	Book by Manan publications/Internet	Google Meet, Google Classroom, PPT, Excel
	Income from Other Sources	03	Book by Manan publications/Internet	Google Meet, Google Classroom, PPT, Excel
	Capital Gains	04	Book by Manan publications/Internet	Google Meet, Google Classroom, PPT, Excel



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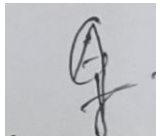
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____ANKITA ARUN RAUT_____ DEPARTMENT: B.COM ACCOUNTING AND FINANCE_____ CLASS: _____SYBAF_____ SEMESTER: ____III_____ MONTH: __July-Oct_____ ACADEMIC YEAR: ___2021-22_____

LEARNING OBJECTIVE/S:
The learners will be able to : The students will able to learn how to prepare Cost sheet, Reconciliation statement & different concept of Costing.

_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit1: Classification of Cost & Cost Sheet	Classification of Cost, Cost of Sales, Cost Centre, Cost Unit, Profit Centre, Investment Centre. Cost sheet, Total Cost, Unit Cost, Different Cost for different purpose. Total 6 Questions for Cost sheet & Estimated Cost sheet	8	Manan Prakashan, Internet.	PPT, MS Word, MS Excel, Google Sheet, Docs, Google Meet, etc.
Unit2: Reconciliation of Cost & Fin A/C	Introduction, Need & Reasons of Reconciliation Statement, Format of Reconciliation. 6 Questions	8	Manan Prakashan, Internet.	PPT, MS Word, MS Excel, Google Sheet, Docs, Google Meet, etc.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___16_____

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TEACHING PLAN (UNIT PLAN)

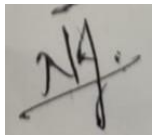
NAME OF THE STAFF: Jagruti Naukudkar DEPARTMENT: Self Finance CLASS: B.COM ACCOUNTING AND FINANCE: IV

MONTH: Dec - March ACADEMIC YEAR: 2016-17

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & Remember- the meaning of salary; section 10, sections 15-17;
2) calculation of income from salary; various allowances (taxable, partly taxable, non-taxable); perquisities; rules and calculation of Gratuity, Pension, Leave encashment.
3) Understand & Remember- the meaning of income from other sources; sections 56-59;
4) calculation of income from other sources.
5) Understand & Remember- the meaning of capital gains; Section 45, 48, 49, 50, 54 and 55,
6) calculation of capital gains.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Heads of Income	Income from Salary	09	Book by Manan publications/Internet	Chalk Board



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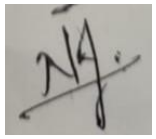
	Income From Agriculture Rebate			
	Income from Other Sources	03	Book by Manan publications/Internet	Chalk Board
	Capital Gains	04	Book by Manan publications/Internet	Chalk Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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9 CGPA

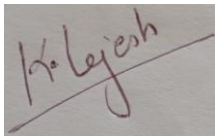
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: LEJESH KELOTH DEPARTMENT: COMMERCE (SELF-FINANCE) CLASS: B.COM ACCOUNTING AND FINANCE: III

MONTH: NOV-MARCH ACADEMIC YEAR: 2022 – 23

LEARNING OBJECTIVES:
The learners will be able to understand the concept of using macroeconomics for the growth of the economy by developing a core understanding regarding income, expenditure, measurement, and trade cycles, demand and supply of money and levels of inflation for the development of the economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics – II Macro Economics Unit: I, II & III IV,V	Unit I: Overview of Macro Economics - Circular flow of income in open an closed economy - Measurement of National Product , Green GNP and NNP - Trade cycle: features and phases - Say's Law of Market	3	H.L.Ahuja Modern Economics	PPT LECTURE VIA GOOGLE MEET, Google classroom, quiz, test, online discussion
	Unit II: Money, Prices and Inflation - Money supply determinants and factors - Demand for money, classical and Keynes approach and also Friedman approach - Money & Prices Fisher and Cambridge equation - Inflation: types, nature, Policy Measures Unit III: Introduction to Public Finance	4	D.N.Diwedi Macro Economics	



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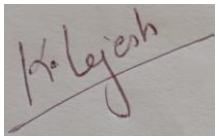
	- Meaning, Scope and Major Fiscal Functions			
	UNIT 3; **Public revenue, Public Expenditure and Debt Sources of Public Revenue:** tax and non-tax revenues Objectives of taxation - Canons of taxation - Types of taxes: direct and indirect - Tax Base and Rates of taxation: proportional, progressive and regressive taxation Shifting of tax burden: **Impact and incidence of taxation** - Processes- factors influencing incidence of taxation Economic Effects of taxation: on Income and Wealth, Consumption, Savings, Investments and Production. Redistributive and Anti – Inflationary nature of taxation and their implications **Public Expenditure**: Canons - classification - economic effects of public spending - on production, consumption, distribution, employment and stabilization – Theories of Public Expenditure: Wagner's Hypothesis and Wiseman Peacock Hypothesis - Causes for Public Expenditure Growth. Significance of Public Expenditure: Social security contributions- Low Income Support and Social Insurance Programmes. **Public Debt** : Classification - Burden of Debt Finance : Internal and External Public Debt and Fiscal Solvency	4 4	AHUJA .H.L, MODERN ECONOMIC BHATIA H.L PUBLIC GINANCE	PPT LECTURE VIA GOOGLE MEET, Google classroom, quiz, test, online discussion
	UNIT 4			



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	Fiscal Management and Financial Administration Fiscal Policy: Meaning, Objectives, constituents and Limitations. Contra cyclical Fiscal Policy and Discretionary Fiscal Policy : **Principles of Sound and Functional Finance Budget**- Meaning objectives and types - Structure of Union budget - Deficit concepts- **Fiscal Responsibility and Budget Management Act.** Intergovernmental Fiscal Relations : fiscal federalism and fiscal decentralization - central-state financial relations – 14th Finance Commission recommendations	5		PPT LECTURE VIA GOOGLE MEET, Google classroom, quiz, test, online discussion

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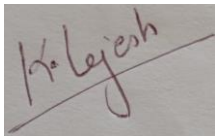

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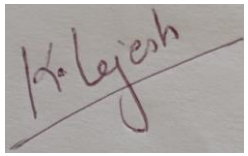
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: LEJESH KELOTH DEPARTMENT: COMMERCE CLASS: B.COM ACCOUNTING AND FINANCE: III MONTH: August

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : The learners will be able to understand the concept of using macroeconomics for the growth of the economy by developing a core understanding regarding income, expenditure, measurement, and trade cycles, demand and supply of money and levels of inflation for the development of the economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	UNIT 3; **Public revenue, Public Expenditure and Debt Sources of Public Revenue:** tax and non-tax revenues Objectives of taxation - Canons of taxation - Types of taxes: direct and indirect - Tax Base and Rates of taxation: proportional, progressive and regressive taxation Shifting of tax burden:	01Lecture In Each division (A,B,C)		GOOGLE CLASS ROOM, PPT QUIZE, CURRENT AFFAIRS ,



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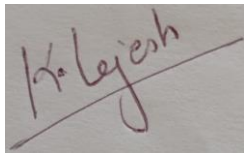
	Impact and incidence of taxation - Processes- factors influencing incidence of taxation Economic Effects of taxation: on Income and Wealth, Consumption, Savings, Investments and Production. Redistributive and Anti – Inflationary nature of taxation and their implications **Public Expenditure**: Canons - classification - economic effects of public spending - on production, consumption, distribution, employment and stabilization – Theories of Public Expenditure: Wagner's Hypothesis and Wiseman Peacock Hypothesis - Causes for Public Expenditure Growth. Significance of Public Expenditure: Social security contributions- Low Income Support and Social Insurance Programmes. **Public Debt** : Classification - Burden of Debt Finance : Internal and External Public Debt and Fiscal Solvency		AHUJA .H.L, MODERN ECONOMIC BHATIA H.L PUBLIC GINANCE MITHANI ,D.M MODERN PUBLIC FINANCE.	



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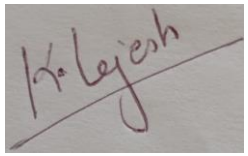
	UNIT 4			
	Fiscal Management and Financial Administration Fiscal Policy: Meaning, Objectives, constituents and Limitations. Contra cyclical Fiscal Policy and Discretionary Fiscal Policy : **Principles of Sound and Functional Finance Budget**- Meaning objectives and types - Structure of Union budget - Deficit concepts- **Fiscal Responsibility and Budget Management Act.** Intergovernmental Fiscal Relations : fiscal federalism and fiscal decentralization - central-state financial relations – 14th Finance Commission recommendations	01 Lecture In Each division (A,B,C)		

TOTAL NUMBER OF LECTURES ;(4 lectures per month in A, B, C division)



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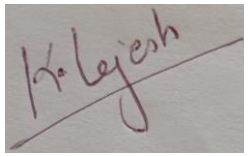

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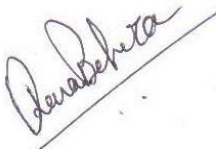
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: COMMERCE (SELF-FINANCE) CLASS: B.COM ACCOUNTING AND FINANCE: III

SEMESTER: III MONTH: June–October ACADEMIC YEAR: 2021 – 22

LEARNING OBJECTIVES:
The learners will be able to understand the concept of using macroeconomics for the growth of the economy by developing a core understanding regarding income, expenditure, measurement, and trade cycles, demand and supply of money and levels of inflation for the development of the economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics – II Macro Economics Unit: I, II & III	Unit I: Overview of Macro Economics - Circular flow of income in open an closed economy - Measurement of National Product , Green GNP and NNP - Trade cycle: features and phases - Say's Law of Market	3	H.L.Ahuja Modern Economics	PPT LECTURE VIA GOOGLE MEET, Google classroom, quiz, test, online discussion
	Unit II: Money, Prices and Inflation - Money supply determinants and factors - Demand for money, classical and Keynes approach and also Friedman approach - Money & Prices Fisher and Cambridge equation	Div: A,B,C	D.N.Diwedi Macro Economics	



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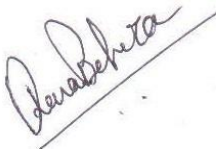
	- Inflation: types, nature, Policy Measures Unit III: Introduction to Public Finance - Meaning, Scope and Major Fiscal Functions			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __3 lecture per week_____



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TEACHING PLAN (UNIT PLAN)

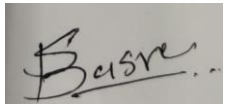
NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: Self Finance CLASS: B.COM ACCOUNTING AND FINANCE: III MONTH: August

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : how the cash left during the dissolution of partnership is to be treated and distributed and in what order. What accounting treatment needs to be given to foreign currency transactions and journal entries.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting III, piecemeal distribution of cash	Introduction and meaning, purpose and significance, order of priority.	1	Ainapure-Mannan prakashan	Online lectures, Google Slides, Google Sheets, Google Classroom,
	Excess capital method, format and basic problems	1		Google Forms
	Asset taken over by the partner, treatment of past losses and profits in the balance sheet	1		
	Contingent liabilities, realisation expenses, amount kept aside for expenses and adjustment of actual capital	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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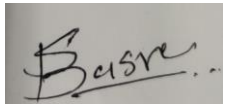
MONTH: September

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting III, piecemeal distribution of cash	Treatment of secured liabilities, treatment of preferential liabilities	1		Online lectures, Google Slides, Google Sheets, Google Classroom,
	Practical problems	3		Google Forms

MONTH: October



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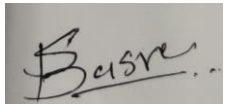
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting III, Accounting of transaction of foreign currency	Introduction, meaning and purpose.	1		Online lectures, Google Slides, Google Sheets, Google Classroom,
	Journal entries in relation to the purchase and sale of goods and services, assets and loans and credit transactions.	1		Google Forms
	Format of FEF A/C, computation of exchange rate difference, basic problems	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07



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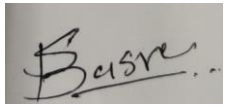
MONTH: October

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting III, accounting of Transactions of foreign currency	Practical problems based on journal entries and FEF A/C	4		Online lectures, Google Slides, Google Sheets, Google Classroom,
				Google Forms



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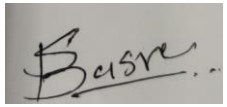
MONTH: Nov-Dec

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting III, Partnership Final Accounts	Simple Practical questions of Partnership Final A/cs	1		Online lectures, Google Slides, Google Sheets, Google Classroom,
	Meaning, Definition of Partnership Act,1932	1		Google Forms
	Allocation of gross profit prior and after admission/ retirement/ death when stock on the date of admission is not given apportionment of other expenses on the basis of Time/ sales/ other given basis.	2		
	Apportionment of other expenses on the basis of Time/ sales/ other given basis.	1		
	Practical Problems on Retirement/ death	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07



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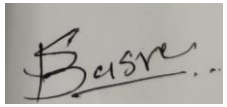

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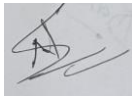
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF NAZIA SAJID SHAIKH. DEPARTMENT: . CLASS: SYBAF SEMESTER: IV MONTH: NOV TO FEB. ACADEMIC YEAR: 2018-19 SUB: RESEARCH METHODOLOGY.

LEARNING OBJECTIVE/S:
The learners will be able to : Understand Research, Types of research, Review of literature, Data collection and Processing , Sampling,Data presentation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1. INTRODUCTION TO RESEARCH.	***Research:** Meaning, Objectives, Importance of research in Accounting and finance . Types of research. ***Formulation of research problem:** Meaning and Selection of research problem. ***Review of literature.**	**15**	**Research Methodology: Methods & Techniques M.Y.khan**	**Chalk and Duster.**
MODULE 3. DATA COLLECTION AND PROCESSING	***Data Collection:** Meaning, types of data, ***Primary Data:** Observation, Experimentation, interview, Schedule, Survey, Questionnaire, Advantages and Limitations of Primary Data. ***Secondary Data:** Sources and limitations, factors affecting the	**15**		



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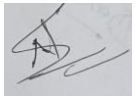
	choice of Methods of data collection. ***Sampling:** Significance, methods, Factors determining Sample size ***Data Presentation**			



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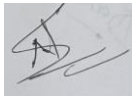

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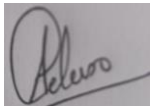
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. AUDRIN COLACO SUBJECT: DIRECT TAXATION- II DEPARTMENT: ____ CLASS: ____SYBAF___ SEMESTER: IV_ MONTH: __DEC - MARCH__ ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:

- To understand clubbing of income.
- To acquire knowledge about set off and carry forward of losses.
- To understand return of income under section 139.
- To acquire knowledge about DTAA U/S 90 and 91.
- To know about tax planning and ethics in taxation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Clubbing of Income	Clubbing of Income - Section 60 to 65	05	Students Guide to Income Tax	Chalk and Board
Set Off & Carry Forward of Losses	Sec: 70 – Set off Loss from one Source against Income from another Source under the Same Head of Income Sec: 71 – Set Off Loss from One Head against Income of another Head Sec: 71B – Carry Forward & Set off Losses from House Property Sec: 72 – Carry Forward & Set Off of Losses of Business Losses Sec: 73- Losses in	05	Students Guide to Income Tax	Chalk and Board

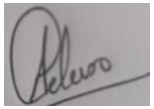


TEACHER

HEAD OF DEPARTMENT

	Speculation Business Sec: 74- Loss under the head Capital Gains			
Return of Income – Sec 139	Return of Income – Sec 139	05	Students Guide to Income Tax	Chalk and Board
Tax Planning & Ethics in Taxation	Basic Concept	05	Students Guide to Income Tax	Chalk and Board
DTAA U/S 90 & 91	DTAA U/S 90 & 91	05	Students Guide to Income Tax	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __25__



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **B.COM ACCOUNTING FINANCE** CLASS**: S.Y.B.A.F** SEMESTER: **4th** MONTH: **NOVEMBER** ACADEMIC YEAR: **2018-19**

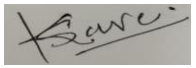
LEARNING OBJECTIVE/S:

The learners will be able to:

1. How to compute tax liability of Individual and H.U.F.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Computation of Tax liability of Individual & HUF	Tax Slab Rate, Rebate, surcharges, Round off etc. Practical Questions	05	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **B.COM ACCOUNTING FINANCE** CLASS**: S.Y.B.A.F** SEMESTER: **4th** MONTH:

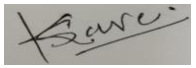
DEC. - JANUARY

ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. How to compute tax liability of Partnership Firm

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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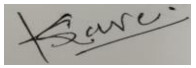
Computation of Income of Partnership Firm	Computation of Income of Partnership Firm in Relation to Sec: 40(b) & Tax Thereon With Applicable Rate of Tax Practical Questions	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **B.COM ACCOUNTING FINANCE** CLASS**: S.Y.B.A.F** SEMESTER: **4th** MONTH: **FEBRUARY -MARCH**



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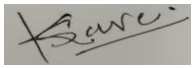
ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are provision of Tax Deducted at Source(TDS)
2. What is Advance Tax and Provision of Advance Tax
3. What are the impact if not paying Advance Tax (Interest Payable u/s 234A,234B,234C)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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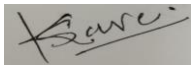
• **Tax Deduction at Source** • **Advance Tax** • **Interest Payable U/S 234A, 234B, 234C**	**Basic Aspects of Deduction of Taxes at Source** Sec: 192 - TDS on Salary Sec: 194A - TDS on Interest Sec: 194C-TDS on Contractor Sec: 194H - TDS on Commission Sec: 1941-TDS on Rent Sec: 194) - TDS on Professional Fees **Advance Tax U/S 207, 208, 209, 210 & 211** Sec: 207-Income Liable to Advance Tax Sec: 208 -Liability of Advance Tax Sec: 209 - Computation of Advance Tax Sec: 210 - Payment of Advance Tax by Assessee on His Own Account Sec: 211 - Due Dates of Payment of Advance Tax **Interest Payable U/S 234A, 234B, 234C** Sec: 234A - Interest for default in furnishing return of income Sec: 234B - Interest for default in payment of advance tax Sec: 234C - Interest for deferment of advance tax	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT:B.COM ACCOUNTING AND FINANCE

CLASS: SYBAF (A,B & C) SEMESTER: IV MONTH: DECEMBER TO MARCH ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand management and its various aspects including selection, recruitment, E-selection, controlling, Coordinating etc
- Get insight on the 14 principles of management along with the levels f management which will help students the working level in an organization.
- Know the types of interview which can be used to understand the process of interview.
- Interpret different styles of leadership which will help them become a good leader.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Unit-1 Introduction to Basic Management Concepts	INTRODUCTION TO MANAGEMENT: Definition of Management Nature of Management Objectives of Management ADMINISTRATION VS MANAGEMENT LEVELS OF MANAGEMENT PRINCIPLES OF MANAGEMENT	6	Essentials of management by Koontz H & W Published by McGraw hill.	Chalk, Board and Duster
Unit-4- Staffing	RECRUITMENT: Meaning and its sources SELECTION procedure distinction between recruitment and selection EMPLOYMENT TESTS TYPES OF INTERVIEW	4		Chalk, Board and Duster
Unit-5 Directing and Controlling	DIRECTING : Meaning and Importance of directing Principles of Directing LEADERSHIP trails and Styles MOTIVATION – Importance and Factors CO-ORDINATION – Meaning, features and Importance	10		Chalk, Board and Duster

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	CONTROLLING : Meaning and steps in controlling Essentials of a good control system			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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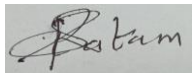
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan D. Satam DEPARTMENT: B.COM ACCOUNTING AND FINANCE

CLASS: SYBAF SEMESTER:IV MONTH: December2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: Learning about cost accounting of the product and services.
The learners will be able to : Students will be able to learn practical imposition of cost and calculation in different processes and by different methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting IV	**1.Preparation of Final Accounts of Companies** Relevant provisions of Companies Act related to preparation of Final Account (excluding cash flow statement) Preparation of financial statements as per Companies Act. (excluding cash flow statement) AS 1 in relation to final accounts of companies (disclosure of accounting policies)	15	Manan and Seth publication	Chalk - Board
	2. **Ascertainment and Treatment of Profit Prior to Incorporation** Principles for ascertainment Preparation of separate, combined and columnar Profit and Loss Account including different basis of allocation of expenses/	10	Manan and Seth publication	Chalk - Board



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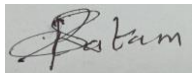
	incomes			
	3. Redemption of Preference Share Provision of the Companies Act for redemption of Preference Shares (Sec 55 of the Companies Act, 2013), Companies (Share and Debentures) Rules. Methods of Redemption of fully paid up Preference Shares as per Companies Act, 2013: The proceed of a fresh issue of shares, the capitalisation of undistributed profits and a combination of both, calculation of minimum fresh issue to provide the fund for redemption, (Question on entries and/or Balance Sheet)	10	Manan and Seth publication	Chalk - Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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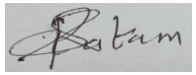

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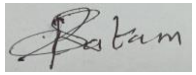

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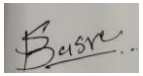
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT : B.COM ACCOUNTING AND FINANCE CLASS: SYBaf SEMESTER: IV MONTH: January ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : journal entries to be passed in case of redemption of debentures and its effect on capital structure and balance sheet of the company. Translation of foreign currency transactions and financial statements into the native currency.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting IV, redemption of debentures	Introduction, provision of companies act 2013, creation and investment of DRR including companies rules	2		Lecture method, blackboard and chalk
	Journal entries, methods of writing off discount/ loss on issue of debentures	1		
	Methods of redemption of debentures: buy payment in lump sum and by payment in installments, basic problems	5		



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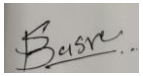
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

MONTH: February

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting IV, redemption of debentures	Practical problems on journal entries and balance sheet	8		Lecture method, blackboard and chalk



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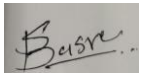
MONTH: March

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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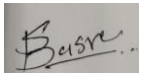
Financial accounting IV, foreign branch	Introduction, computation and conversion as per accounting standard 11	1		
	Conversion of trial balance, preparation of financial statements in the books of branch and head office	2		
	Practical problems	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Prof. Jinal Chohan_____ DEPARTMENT: ____B.COM ACCOUNTING AND FINANCE_____ CLASS: ___S.Y BAF____ SEMESTER: ___IV_____ MONTH: __Nov- Feb_____ ACADEMIC YEAR:_2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to : Gain the knowledge about different accounting software's used in an organization for accounting process and different types of computerized audit techniques carried in an organization

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit2 Computerised Accounting System	Introduction and meaning, Uses and benefits, Role, Need and requirements, Basic requirements, Limitations, Understanding the development and design of computerised accounting system	5	Manan Prakashan, Vipul Prakashan	Chalk- Board
	Accounting Software- Introduction and meaning, Uses, Various	5	Manan Prakashan, Vipul Prakashan	Chalk- Board
	Accounting Software TALLY- Accounting reports	5	Manan Prakashan, Vipul Prakashan	Chalk- Board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4 IT And Auditing	Need and importance of IT in Auditing	4	Manan Prakashan, Vipul Prakashan	Chalk- Board
	Auditing in IT environment	4	Manan Prakashan, Vipul Prakashan	Chalk- Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____08___

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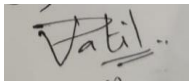
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VAIKHARI PATIL DEPARTMENT: B.COM ACCOUNTING AND FINANCE

CLASS: SYBAF SEMESTER: IV MONTH: NOV 2018 TO MARCH 2019 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: Learn Software of different business processes

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, III	Introduction, Definition and Meaning of business process Flow of business process for accounting, purchase, sales and finance Classification of business processes, Introduction, Definition and Meaning of Business Process Management, Principles and practices of Business Process Management ,Business Process Management life cycle, Theories of Business Management Process	2*(3 Divisions)	E-books, Vipul publications, Seth publication	
	Implementation of Business process Management – need, key factors and importance Automation of business Processes – benefits, risks, challenges ,Accounting systems automation, IT and Business Process Management, Information systems – Meaning, Use of IT in accounacy	2*(3 Divisions)		
	Introduction, Concept of MIS, Need for MIS, Characteristic of MIS Outputs of MIS, Role of MIS, Guidelines for Developing MIS reports	2*(3 Divisions)		



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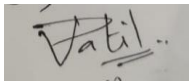
	Functional Aspects of the MIS: Problems in MIS Knowledge required for studying MIS, MIS and Computer			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: COMMERCE

CLASS: B.COM ACCOUNTING AND FINANCE SEMESTER: IV MONTH: DECEMBER, JANUARY ACADEMIC YEAR: 2018 – 2019

LEARNING OBJECTIVE/S:

The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 CASH FLOW ANALYSIS	Introduction, Aspects (Cash and Flow)	1	COST AND MANAGEMENT ACCOUNTING BY SAXENA & VASHIST	• Chalk • Board • Discussion • Examples
	Classification of Cash Flow	3		
	Cash generated from operations & Ascertainment of Missing figure	2		
	Importance & Utility	1		

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	Practical Illustrations	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 4: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: COMMERCE

CLASS: SYBAF SEMESTER: IV MONTH: JANUARY, FEBRUARY ACADEMIC YEAR: 2018 – 2019

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 WORKING CAPITAL MANAGEMENT	Introduction, Meaning, Nature, Planning , Types of Working Capital	2	COST AND MANAGEMENT ACCOUNTING BY SAXENA & VASHIST	• Chalk • Board • Discussion • Examples
	Factors, Advantages, Limitation, Estimation of Working Capital	2		
	Operating Cycle, Provision for Contingencies / Margin of Safety	1		
	Practical Illustrations	7		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 5: 12

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TEACHING PLAN (UNIT PLAN)

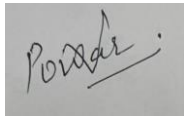
NAME OF THE STAFF: Mr. VISHWANATH V. PAWAR SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: COMMERCE

CLASS: B.COM ACCOUNTING AND FINANCE SEMESTER: IV MONTH: DECEMBER, TO MARCH ACADEMIC YEAR: 2018 – 2019

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	ANALYSIS & INTERPRETATION OF A\C: vertical forms of balance sheet and profit and loss account, introduction, advantages of trend analysis, comparative statement and common size statement. Practical: Q1&2 on vertical st, Q3 & 4 on trend analysis, Q5 & 6 on common size, Q7 & 8 on comparative st.	10	Manan Prakashan	• Chalk • Board • Discussion • Examples
UNIT 2	Balance sheet Ratios:- current ratio, liquid ratio, stock working capital ratio, proprietory ratio, debt equity ratio, capital gearing ratio.	09	Manan Prakashan	• Chalk • Board • Discussion



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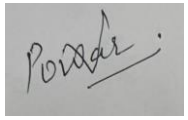
	Revenue Ratio:- Gros profit ratio, expenses ratio, operating ratio, net profit ratio, net operating profit ratio, Stock turnover ratio. Combined Ratio:- Return on capital employed, Return on proprietors fund, Return on equity capital,			• Examples

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : _____



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TEACHING PLAN (UNIT PLAN)

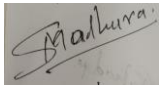
NAME OF THE STAFF: Madhura **Surve** DEPARTMENT: Commerce CLASS: B.COM ACCOUNTING AND FINANCE SEMESTER: IV

MONTH: NOVEMBER - DECEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to : Learn basic things related to Research Methodology which will help him in higher studies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Research Methodology in Accounting and Finance	**2. Research Design in Accounting and Finance**			
	Meaning of Introduction, Need, and Good Research design. Hypothesis : Formulation, Sources, Importance and Types Different Research designs	15	Research Methodology Methods and Techniques C. R. Kothari	Chalk and Duster
	4. Interpretation and Report Writing . Meaning and Techniques of Interpretation, Research Report	15	Research Methodology Methods and	Chalk and Duster



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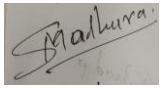
	Writing : Importance, Essentials, Structure/Layout, Types		Techniques C. R. Kothari	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita Almeida DEPARTMENT: SELF-FINANCE CLASS: TYBAF SEMESTER: V MONTH: JULY- AUGUST

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: After studying this unit students will be able to:- learn the provisions of Companies Act regarding underwriting of shares; Determine the liability of underwriters whether shares are fully underwritten or partially underwritten; Journal Entries.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
01. Underwriting of Shares & Debentures.	Introduction, Underwriting, Underwriting Commission, Provision of Companies Act with respect to payment of underwriting commission. Underwriters, Sub-underwriters, Brokers & Manager to issues.	01	Book by Manan Prakashan And Book by Sheth Publications.	Online Platform:- Google Meet, Google Classroom (Test & Assignments), Google sheets, PPT, Group Discussions.
	Types of underwriting commission, Marked, Unmarked & Firm Underwriting application, Liability of underwriters in respect of underwriting contract. Journal Entries	01		
	Practical Sums along with journal entries Benefit of Firm UW given and Benefit of Firm UW not given. Total Sums taken in all (9)	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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Month: SEPTEMBER- OCTOBER

LEARNING OBJECTIVE/S: After studying this chapter students will be able to know various meanings of the terms-Amalgamation, Absorption and External Reconstruction; Knowing the accounting problems relating to amalgamation, Compute Purchase consideration by applying any of the three methods, record transactions & understand the methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
03 AS-14 Amalgamation, Absorption and External Reconstruction (Excluding Inter-Company Holding)	Introduction, In the nature of merger & purchase with corresponding accounting treatments of pooling of interests & purchase method respectively. Meaning & Computation of Purchase Consideration	01	Book by Manan Prakashan And Book by Sheth Publications.	Online Platform:- Google Meet, Google Classroom (Test & Assignments), Google sheets, PPT, Group Discussions, Quiz
	Journal Entries in the books of Vendor Company using Realization Method. Problems Based on Purchase Method Only. Leger Postings	02		
	Practical Problems (8)	08		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM ACCOUNTING AND FINANCE

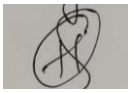
CLASS: T.Y.BAF SEMESTER: V MONTH: July- Nov ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVES:

The learners will be able to study the meaning and basic concepts of GST.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.INTRODUCTION TO INDIRECT TAX AND GST	FESTURES OF INDIRECT TAX,ADVANTAGES AND DISADVANTAGES,AUTHORITY OF TAXES IN INDIA	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	PowerPoint presentation & MS excel
	GENESIS OF GST IN INDIA,POWER TO TAX GST,MEANING & DEFINITION OF GST	01		
	CONCEPTS- CGST,IGST,SGST,UTGST	01		
	EXPORT OF GOODS AND SERVICES,IMPORT OF GOODS AND SERVICES	01		
	GST COUNCIL AND GST NETWORK	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM ACCOUNTING AND FINANCE

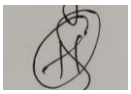
CLASS: T.Y.BAF SEMESTER: V MONTH: July-Nov ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:

The learners will be able to understand levy and collection of GST and concepts of supply as well.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
2.LEVY AND COLLECTION OF GST	LEVY AND COLLECTION OF GST,	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	PowerPoint presentation & MS excel
	COMPOSITE AND MIXED SUPPLY	02		
	POWER TO GRANT EXEMPTION,NEGATIVE LIST OF GST	01		
	GST RATE SCHEDULE FOR GOODS AND SERVICES	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06



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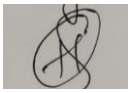

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT B.COM ACCOUNTING AND FINANCE

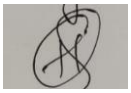
CLASS: T.Y.BAF SEMESTER: V MONTH: July-Nov ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:

The learners will be able to study the place and time concept of supply and computation of value of supply as well.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
3.CONCEPTS OF SUPPLY	TAXABLE EVENT SUPPLY	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	PowerPoint presentation & MS excel
	PLACE OF SUPPLY	02		
	TIME OF SUPPLY	02		
	VALUE OF SUPPLY	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM ACCOUNTING AND FINANCE

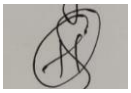
CLASS: T.Y.BAF SEMESTER: V MONTH: July-Nov ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:

The learners will be able to study the preparation to tax invoices and debit &credit notes.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
4.DOCUMENTATION	TAX INVOICES	02	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	PowerPoint presentation & MS excel
	DEBIT AND CREDIT NOTES	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04



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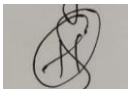

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TEACHING PLAN (UNIT PLAN)

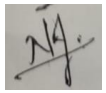
NAME OF THE STAFF: **Jagruti Naukudkar**_____ DEPARTMENT: : B.COM ACCOUNTING AND FINANCE_____ CLASS: **_TYBAF_A, B & C_____** SEMESTER: **Sem V_____** MONTH**: _July to Nov_____**

ACADEMIC YEAR : **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) Solve practical problems on Operating Costing
3) Solve practical problems on Process Costing and Inter Process Profit

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost Accounting	Unit 3 : Operating Costing	16		Online platform – Google Meet PPT, Videos, Spreadsheets, Quiz Flip Book, Google Classroom,



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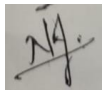
				Group discussion.
	1) Meaning of operating costing; Determination of per unit cost ; Pricing of services 2) Collection of costing data			
	Unit 4 : Process Costing – Equivalent units of Production and Inter Process Profit	16		Online platform – Google Meet PPT, Videos, Spreadsheets, Quiz Flip Book, Google Classroom, Group discussion.
	1) Valuation of Work in progress and Equivalent production (FIFO Method and 2) Weighted Average Method)) 3) Inter Process transfer at Profit 4) Practical problems			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _32_____



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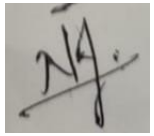
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar**_____ DEPARTMENT: **B.COM ACCOUNTING AND FINANCE** CLASS: **_TYBAF_A, B & C_____** SEMESTER: **Sem V_____** MONTH**: _July to Nov_____** ACADEMIC YEAR : **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) Valuation of Goodwill and Shares using different methods
3) Statutory provisions and preparation of accounts for Limited Liability Partnership

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Finncial Accounting – VI	Unit 4 : Valuation of Goodwill and Shares	16		Online platform – Google Meet PPT, Videos, Spreadsheets, Quiz Flip Book, Google Classroom, Group discussion.
	1) Valuation of Goodwill 2) Valuation of Shares			



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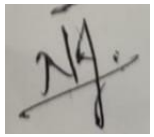
	Unit 5 : Accounting for Limited Liability Partnership	16		Online platform – Google Meet PPT, Videos, Spreadsheets, Quiz Flip Book, Google Classroom, Group discussion.
	1) Statutory provisions 2) Conversion of partnership business into Limited Liability Partnership 3) Final accounts			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __32_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Karishma Vijay Kale DEPARTMENT:B.COM ACCOUNTING AND FINANCE CLASS: TYBAF

SEMESTER:V MONTH: July- September ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Understand Financial Management concepts and understand the practical scenario of future decision making regarding financial investments.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Chapter 2- Capital Budgeting	Payback period	1	Sheth Publication	Online teaching- Excel and Table top method
	Payback profitability	1	Sheth Publication	Online teaching- Excel and Table top method
	Average rate of return	1	Sheth Publication	Online teaching- Excel and Table top method
	Discounted pay back period	1	Sheth Publication	Online teaching- Excel and Table top method
	Net present value	1	Sheth Publication	Online teaching- Excel and Table top method

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	Profitability Index	1	Sheth Publication	Online teaching- Excel and Table top method
	IRR		Sheth Publication	Online teaching- Excel and Table top method
	Decision tree analysis	1	Sheth Publication	Table top method & PPT

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Chapter 3- Capital Rationing	Divisible project & Indivisible project	1	Sheth Publication	Table top method & PPT
Chapter 4- Capital Structure Decision	Weighted Average Cost of Capital	1	Sheth Publication	Table top method & PPT
	Net Operating Income	1	Sheth Publication	Table top method & PPT
	Net Operating Income approach		Sheth Publication	Table top method & PPT
	MM approach		Sheth Publication	Table top method & PPT
Chapter 5 - Dividend Decision	Walter Model	1	Sheth Publication	Table top method & PPT
	Gordon model		Sheth Publication	Table top method & PPT
	MM model		Sheth Publication	Table top method & PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _11_____

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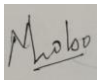
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. DR (CA) MABEL LOBO DEPARTMENT: B.COM ACCOUNTING AND FINANCE CLASS:TYBAF

SEMESTER: V MONTH: July to October 2020 ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to :Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit I Introduction and Basic Terms	Registration Under GST	18	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet Microsoft excel, Google classroom
	Input Tax Credit	18	Manan Prakashan, Self maintained	Online teaching i.e. Google meet Microsoft excel, Google Classroom



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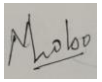
			notes, ICAI study material	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6 per Division



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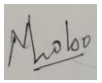
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. DR (CA) MABEL LOBO DEPARTMENT: B.COM ACCOUNTING AND FINANCE CLASS:TYAF

SEMESTER: V MONTH: August to December 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax Practical	Calculation of Tax – practical problems	6	Manan Prakashan,	Online teaching i.e. Google meet Microsoft excel, Google Classroom



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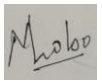
Questions on GST			Self maintained notes, ICAI study material	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3 per Division



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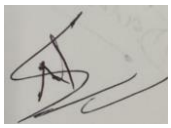
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Nilambari Yogesh Shidhaye Department: -B.COM ACCOUNTING AND FINANCE

Class: - TYBAF (A, B, C) SEM: - V MONTH-: OCT YEAR: -2021/22

LEARNINIG OBJECTIVES: The learner will be able to learn through online teaching, Marketing management and production management very well.

PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED
Management Applications.	Chapter no 1 Marketing Management. Meaning and definition of marketing. Nature and features of Marketing. 4Ps of marketing :-(Meaning, features, elements of Marketing-mix) Product management: - (product concept, Product development strategies, Product line, product life cycle, Meaning and factors of branding) Price Management: - (Meaning and objectives of pricing, factors influencing pricing, Pricing Strategies, Skimming and penetration pricing.)	15 Lectures	Philip Kotler	Google meet, online PPT presentation.
	Place (distribution) Management:-(Meaning of Physical distribution, Factors governing distribution decision) Chapter No 4 Production Management	15 Lectures	Philip Kotler	Google meet, Online PPT presentation.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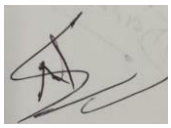
	Meaning and definition of production management, scope and steps in production planning and control, meaning of productivity, measurement of productivity, productivity movement in India, Meaning and definition of Quality management: - TQM-Quality circles-ISO9000/14000 certification, Inventory management- meaning and methods.			



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CO-ORDINATOR SIGNATURE

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TEACHING PLAN (UNIT PLAN)

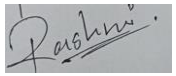
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Management Applications DEPARTMENT: B.COM ACCOUNTING AND FINANCE

CLASS:TYBAF SEMESTER:V MONTH: July-August ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Human Resource Management	HRM- feature , functions , HRP – Meaning and Process of HRP	3	Marketing Management By Philip ,Kotlar	Google meet,google class room,ppt presentation
	HRD- Methods of HRD, Performance appraisal - Concept, Traditional and Modern Methods	3		
	Employee Retention- Techniques	3		



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	Leadership- traits , Styles Motivation – factors and theories	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

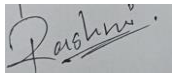
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Management Applications DEPARTMENT: B.COM ACCOUNTING AND FINANCE

CLASS:TYBAF SEMESTER:V MONTH: September-OCT ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT,	SUBTOPICS	NO OF	REFERENCE/S	TEACHING METHOD/ ICT



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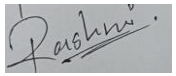
TITLE		LECTURES ALLOTED		TOOLS USED
UNIT IV Financial Management	Financial Management –Concepts, Functions , Features	3	Marketing Management By Philip ,Kotlar	Google meet,google class room,ppt presentation
	Capital Budgeting- Introduction , Importance and Process	2		
	Capital Structure – Meaning , Factor affecting	2		
	Capital Market- Meaning, Constituents, Functions	2		
	Fundamental and Technical Analysis, Venture Capital	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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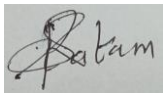
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan D. Satam DEPARTMENT: B.COM ACCOUNTING AND FINANCE CLASS: TYBAF SEMESTER:V MONTH: July - Nov 2021 ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: Learning about cost accounting of the product and services.
The learners will be able to : Students will be able to learn practical imposition of cost and calculation in different processes and by different methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost Accounting III	**1.Uniform Costing and Inter –Firm Comparison** Uniform costing Meaning of and need for Uniform costing Essentials for success of Uniform costing Advantages and limitations of Uniform costing Areas of Uniformity, Uniform cost manual Inter Firm Comparison Pre-requisites of inter firm comparison; Advantages and limitations	02	Manan and Seth publication	Google meet, PPT and MS Excel
	2. **Integrated System and Non- integrated System of Account:** **A) Integrated System** : Meaning; Features, Advantages and Disadvantages Journal Entries and Preparing	18	Manan and Seth publication	Google meet, PPT and MS Excel



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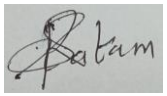
	Integrated Ledgers. Practical problems B) **Non-Integrated system**: Meaning; Features, Advantages and disadvantages Journal entries and Preparing Cost Control Accounts Practical problems			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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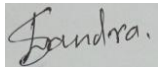
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mrs. Sandra Almeida**_____ DEPARTMENT: B.COM ACCOUNTING AND FINANCE

_____ CLASS: **_TYBAF_A, B & C_____** SEMESTER: **Sem V_____** MONTH**: _July to Nov_____** ACADEMIC YEAR : **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) The learners will be able to learn various aspects about Strategic Financial Management, Need and Importance of Strategy, Financial Planning, Role of Financial Manager, Concept, Types, Advantages and Ethics in Mutual Funds, Concepts of Debentures and Bonds, Details of Receivables Management.
2) Finance is the Lifeblood and Backbone of business.
3) This subject is helpful to develop Financial & Management skills among learners.



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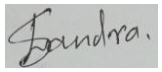
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Management -II	**MODULE I : STRATEGIC FINANCIAL MANAGEMENT** • Strategic Financial Management - Need and Importance • Corporate, Business and Functional Strategy • Financial Planning – Need and Importance • Profit Maximization • Wealth Maximization • Interface of Financial Policy and Strategic Management • Relationship of Finance to Economics and Accounting • Role of Financial Manager. **MODULE IV : Mutual Funds and Bond Valuation.**	05	**Strategic Financial Management by CA G.Sekar & CA B. Saravana Prasath** **Financial Management (Theory and Practice by Prasanna Chandra)** **Financial Management**	Google Meet, Google Class room, Power Point Presentations, Word & Table Top Method of teaching, Google forms for evaluation & Group discussion. Google Meet, Google Class room, Power Point Presentations, Word,



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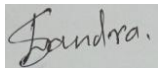
	●Introduction to Mutual Fund - History & Origin, Definition, Meaning, Characteristics, Advantages, Disadvantages, Limitations of Mutual Funds. ●Ethics in Mutual Fund ●Entities Involved – Sponsor, Trust, Trustee, Asset Management Company, Registrar and Transfer Agent (RTA) and Fund Houses in India. ●Classification of Mutual Fund – Functional/ Operational – Open ended, Close ended, Interval Portfolio-Income, Growth, Balanced, MMF, Geographical/Location-Domestic and Offshore, Tax Saving Funds, Exchange Traded Funds, Balanced Funds, Fixed Term Plan, Debt Funds and SIP. ●Calculations of NAV, Entry Load & Exit Load. ●Bond Valuation – Meaning, Measuring Bond Returns – Yield To Maturity, Yield To Call & Bond Pricing. Bond Pricing Theorems, Bond Risks and Bond Duration. ● (Practical Problems on YTM & Bond Duration.)	15	**Principles and Applications by Sheridan Titman, Arthur Known, John D Martin** **Financial Management by S.P. Gupta**	Excel & Table Top Method of teaching, Google forms for evaluation & Group discussion.
	MODULE V : Credit Management	10		Google Meet,



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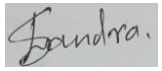
	●Credit Management-Terms of Payment, Credit Policy Variables, Credit Evaluation, Credit Granting Decision, Control of Accounts Receivables i.e. Receivables Management, Ageing Schedule and Credit Management in India.		**Financial Management by Rajeev Bansal**	Google Class room, Power Point Presentations, Word, Excel & Table Top Method of teaching, Google forms for evaluation & Group discussion.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __30_____



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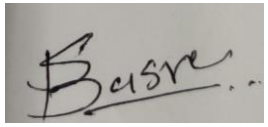
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare. DEPARTMENT: B.COM ACCOUNTING AND FINANCE CLASS: TyBaf SEMESTER: V MONTH: August ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Buyback of shares- legal provision and laws regarding buyback, reasons for buyback and journal entries and its effect on capital structure of the company. Internal reconstruction- legal provisions, reasons for internal reconstruction, journal entries and its effect on capital structure and financial position of the company.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting V, Buyback of shares	Introduction and meaning of buyback, legal provisions for buyback of shares, sources of buyback	1		Online lectures, Google Slides, Google Sheets, Google Classroom,
	Conditions for buyback of shares, methods for buyback, accounting and journal entries for buyback of shares	1		Google Forms
	Practical problems based on journal entries	1		



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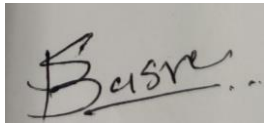
	Practical problems based on journal entries and balance sheet	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

MONTH: September

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting V, Internal reconstruction	Introduction and meaning of internal reconstruction, necessity, and accounting treatment	1		Online lectures, Google Slides, Google Sheets, Google Classroom,
	Journal entries for internal reconstruction, Proforma of capital reduction account	1		Google Forms



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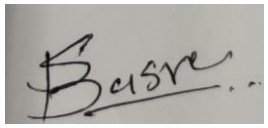
	Methods of alteration of share capital, variation of shareholders right consolidation subdivision comma surrender and re issue and and solution and legal provisions. Basic problems.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

MONTH: October

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting V,	Practical problems based on journal entries	2		Online lectures, Google Slides, Google Sheets, Google Classroom,
	Practical problems based on journal entries with a balance sheet.	4		Google Forms



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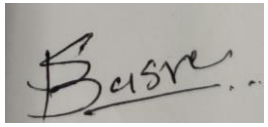
internal reconstruction				

MONTH: Nov-Dec

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting V,	Meaning of Liquidation or Winding-up	1		Online lectures, Google Slides, Google Sheets, Google Classroom,
	Preferential Payments, Over-riding preferential payments,	1		Google Forms



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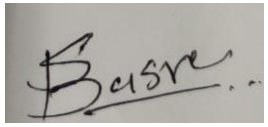
Liquidation of Companies	Preparation of statement of affairs, deficit/ surplus account	1		
	Liquidator's Final Statement of Account	1		
	Practical Problems	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06



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TEACHING PLAN (UNIT PLAN)

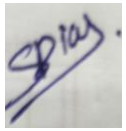
NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL ACCOUNTING VI DEPARTMENT: B.COM ACCOUNTING AND FINANCE

CLASS: TYBAF SEMESTER: V MONTH: JULY - AUGUST ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 FINAL ACCOUNTS OF BANKING COMPANY	Legal provision in Banking Regulation Act, 1949 relating to Accounts, Statutory reserves including Cash Reserve and Statutory Liquidity Ratio.	1	FINANCIAL ACCOUNTING BY R L GUPTA	• Google Meet • PowerPoint • Excel • Google Classroom
	Bill purchase and discounted, rebate of bill discounted, Non–performing assets and Income from non–performing assets.	1		
	Classification of Advances, standard, sub–standard, doubtful and provisioning requirement.	1		
	Final Accounts in prescribed form	1		
	Capital Adequacy	1		



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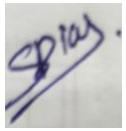
	Practical Illustrations	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 08



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL ACCOUNTING VI DEPARTMENT: COMMERCE

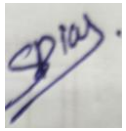
CLASS: TYBAF SEMESTER: V MONTH: AUGUST - SEPTEMBER ACADEMIC YEAR: 2021- 2022

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 FINAL ACCOUNTS OF INSURANCE COMPANY	General Insurance – Various types of insurance, like fire, marine, Miscellaneous, Special terms like premium, claims, commission, Management expenses, Reserve for unexpired risk, reinsurance	2	FINANCIAL ACCOUNTING BY R L GUPTA	• Google Meet • PowerPoint • Excel • Google classroom
	Final Accounts in a prescribed form. Revenue Statement – Form B – Revenue Account, Profit / Loss Account – Form B – Profit & Loss and Balance Sheet Form B – BS	1		
	Practical Illustrations	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 07



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Ankita A. Almeida** DEPARTMENT:B.COM ACCOUNTING AND FINANCE : **TYBAF A, B & C** SEMESTER: **Sem VI**

MONTH: Jan to March ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. To understand the concept of the below given topics
2. To solve numerical problems.
3. To prepare students to attempt MCQ based examinations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting – VII	Unit 2 : Final Account for Co-operative Society (Co-operative Housing Society and Consumer Co-operative Society)	6		Lecture method using Excel Sheet, Group discussion, PPT, Videos Via Google meet
	1) Provisions of Maharashtra State Co-operative societies act and rules. 2) Format of Final Accounts- Form N			

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	3) Simple Practical problems on preparation of Final Accounts of a co-operative housing society & consumer co-operative society.			
	Unit 3: Investment Accounting			
	1. For Shares (Variable Income Bearing Securities) 2. For Debentures / Preference Shares (Fixed Income Bearing Securities) 3. Accounting for transactions of purchase and sale of investments with ex and cum interest prices and finding cost of investment sold and carrying cost as per Weighted Average Method (Excl. Brokerage) Columnar format for investment account.	6		Lecture method using Excel Sheet, Group discussion, PPT, Videos Via Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

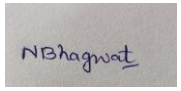
NAME OF THE STAFF: Dr. NILIMA BHAGWAT DEPARTMENT: B.COM ACCOUNTING AND FINANCE

CLASS: T.Y.B.A.F

SEMESTER: VI MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVES:
The Learner/Students will be able to under the concept of Indian economy in terms of classification of various sector such as primary, secondary and tertiary sector and their contribution towards the development of Indian Economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indian Economy-III Unit IV	Unit IV: Money and Banking ● Money market and its features ● Monetary Policy of RBI ● Progress of Commercial Banking in India ● Development of Capital Markets ● SEBI and Its Functions	15	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	POWERPOINT PRESENTATION, GOOGLE MEET



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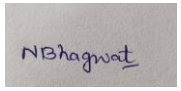
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT:B.COM ACCOUNTING AND FINANCE

CLASS: T.Y.BAF SEMESTER: VI MONTH: JAN ACADEMIC YEAR: 2020-21

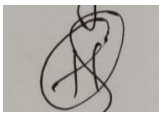
LEARNING OBJECTIVES:

The learners will be able to study the payment and return of taxes under GST as well as interest payment and refunds.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.PAYMENT OF TAX &REFUNDS	PAYMENT OF TAX,INTEREST AMOUNT,	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	Google meet
	TDS, TCS	01		
	REFUND OF TAX	02		
	INTEREST ON DELAYED REFUNDS	02		
	INETREST ON DELAYED PAYMENTS	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

TEACHING PLAN (UNIT PLAN)



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NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: :B.COM ACCOUNTING AND FINANCE

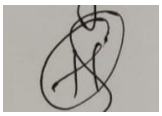
CLASS: T.Y.BAF SEMESTER: VI MONTH: JAN -FEB ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES:

The learners will be able to understand audit and assessment procedures and E-WAY Bill.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
3.ACCOUNTS, AUDIT, ASSESSMENT & RECORDS	ELECTRONIC WAY BILL,SELFASSESSMENT	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	Google Meet
	SCRUTINY OF RETURNS, NON-FILER OF RETURNS			
	ASSESSMENT OF UNREGISTERED PERSON, ASSESSMENT IN SPECIAL CASES,	01		
	AUDIT BY TAX AUDITORS	01		
	SPECIAL AUDIT	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: :B.COM ACCOUNTING AND FINANCE

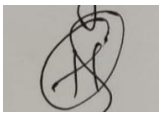
CLASS: T.Y.BAF SEMESTER: VI MONTH: FEB ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES:

The learners will be able to understand customs laws along with the valuation of imported and exported goods.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
4.CUSTOM ACT- I	INTRODUCTION TO CUSTOM LAWS	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	Google Meet
	EXEMPTION FROM CUSTOM DUTY, TAXABLE EVENT	01		
	CHARGES OF CUSTOM DUTY	01		
	TYPES OF CUSTOM DUTIES	02		
	VALUATION OF IMPORTED & EXPORTED GOODS			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: :B.COM ACCOUNTING AND FINANCE

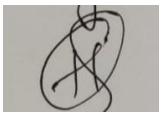
CLASS: T.Y.BAF SEMESTER: VI MONTH: FEB-MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES:

The learners will be able to compute custom duty under different provisions like Baggage Rules, postal goods and duty Drawback.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
5.CUSTOM ACT-II	ALL IMPORT &EXPOER PROCEDURES	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	Google meet
	PROCEDURE RELATED TO BAGGAGE	01		
	GOODS IMPORTED & EXPORTED BY POST & STORES	03		
	PROVISIONS RELATING TO COASTAL GOODS	1		
	WAREHOUSING & DRAWBACK	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7



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TEAC HING PLAN (UNIT PLAN)

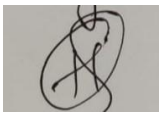
NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: :B.COM ACCOUNTING AND FINANCE

CLASS: T.Y.BAF SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES:

The learners will be able to study Foreign Trade Policy and current FTP 2015-20

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
6.FOREIGN TRADE POLICY	INTRODUCTION,LEGISLATION& FEATURES OF FTP, FTP2015-20	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	Google meet
	ADMINISTRATION,CONTENT & SCOP	01		
	EXEMPTION &REMISSION SCHEMES,DUTY FREE IMPORT AUTHORIZATION SCHEME	01		
	REWARD SCHEME, EOU,STP	01		
	BTP AND EHTP SCHEME	01		



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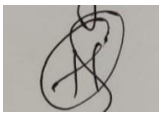
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5



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TEACHING PLAN (UNIT PLAN)

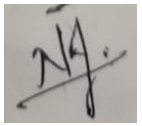
NAME OF THE STAFF: Ms. Jagruti Naukudkar SUBJECT: Cost Accounting DEPARTMENT: B.COM ACCOUNTING AND FINANCE

CLASS: TYBAF A, B & C SEMESTER: VI MONTH: November to March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

1. Knowledge based & Conceptual learning to get acquainted with objective type test.
2. Solve practical problems on Budgeting.
3. Solve practical problems on Marginal Costing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 BUDGETING AND	Introduction. Meaning, Objectives, Advantages and Limitations of Budgets Functional Budget, Fixed and Flexible Budgets Zero based Budgeting , Performance Budgeting, Budgetory Control	16	COST AND MANAGEMENT ACCOUNTING	Online platform – Google Meet, PPT, Videos, Spreadsheets, Quiz Flip



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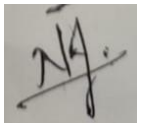
BUDGETING CONTROL	Practical Problems			Book, Google Classroom, Group discussion.
UNIT 2 ABSORPTION COSTING AND MARGINAL COSTING	Introduction to Marginal Costing, Meaning of Absorption Costing, Difference between Marginal costing and Marginal costing. Features, Assumptions, Advantages, Limitations of Marginal costing Marginal Cost, Marginal cost equations, CVP Analysis Break even analysis meaning and graphic presentation, MOS, Key factor Practical illustration	16	COST AND MANAGEMENT ACCOUNTING	Online platform – Google Meet, PPT, Videos, Spreadsheets, Quiz Flip Book, Google Classroom, Group discussion.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 32



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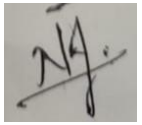

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Karishma Vijay Kale DEPARTMENT: :B.COM ACCOUNTING AND FINANCE CLASS: TYBAF

SEMESTER:VI

MONTH: November- March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Understand Financial Management concepts and understand the practical scenario of financial working.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Chapter 1- Business Valuation	Theory	1	Sheth Publication	Online teaching- Excel and Table top method
	Sum on Net Asset method	1	Vipul Publication	Online teaching- Excel and Table top method
	Sum on Yield method	1	Vipul Publication	Online teaching- Excel and Table top method
	Sum on Income based approach	1	Sheth Publication	Online teaching- Excel and Table top method

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	Sums on Valuation of Goodwill	1	Sheth Publication	Online teaching- Excel and Table top method
	Sum on Super profit	1	Sheth Publication	Online teaching- Excel and Table top method
	Sum on NRR	1	Sheth Publication	Online teaching- Excel and Table top method
Chapter 5- Lease Financing	Introduction (Theory)	1	Sheth Publication	Classroom
	Sum (calculation of cash outflow)	1	Sheth Publication	Classroom
	Sum (Calculation of ALR)	1	Sheth Publication	Classroom
	Sum (Cash Inflow)	1	Sheth Publication	Classroom
	Sums (2)	1	Sheth Publication	Classroom
Chapter 6- Hire Purchase Financing	Introduction (Theory)	1	Sheth Publication	Classroom

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	Sum on Annual installment	1	Sheth Publication	Classroom
	Sums (2)	1	Sheth Publication	Classroom
	Sums(2)	1	Sheth Publication	Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _16_____

Karishma Vijay Kale

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: B.COM ACCOUNTING AND FINANCE ____ CLASS: T.Y.B.A.F

SEMESTER: VI MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVES:
The Learner/Students will be able to under the concept of Indian economy in terms of classification of various sector such as primary, secondary and tertiary sector and their contribution towards the development of Indian Economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indian Economy-III Unit I, II & III	Unit I: Introduction to Agricultural Sector Demographic features, Urbanization and its effects, agricultural sector – institution, reforms, technology, pricing, finance, marketing and National Agricultural Policy.	15	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	PowerPoint Presentation and Google Meet Lectures

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	Unit II: Industrial Sector Growth & pattern of industrialisation, Industrial Policy of 1991, Public sector and Disinvestment, small scale sector problems and prospects.	15	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	PowerPoint Presentation and Google Meet Lectures
	Unit III: Service Sector and External Sector Nature, scope, trends in banking-insurance-healthcare-tourism industry, external sector, structure and direction of foreign trade, BOP since 1991, FDI and Foreign capital in India with transition, SAARC, ASEAN &WTO role and Impact.	15	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	PowerPoint Presentation and Google Meet Lectures

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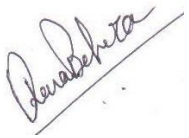
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____45____



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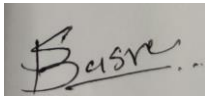
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Shruti Basare** DEPARTMENT: _B.COM ACCOUNTING AND FINANCE_____ CLASS: **_TYBAF_A, B & C_____** SEMESTER: **Sem VI_____** MONTH**: _Jan to March_____** ACADEMIC YEAR : **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To understand the concept of the below given topics
2. To solve numerical problems.
3. To prepare students to attempt MCQ based examinations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting – VII	Unit 1 : Final Account for Electricity Company	5		Lecture method using Excel Sheet, Group discussion, PPT, Videos Via Google meet
	1) Final Accounts as per Double Account System Final Accounts as per Electricity Rules Receipt & Expenditure on Capital Account			



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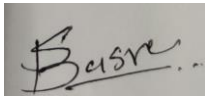
	General Balance Sheet Contingency Reserve 2) Disposal of Surplus (As per Electricity Rules): Norms regarding Disposal of Surplus 3) Replacement of Assets			
	Unit 4: Mutual Funds			
	1. Introduction, historical background , SEBI guidelines, NAV scheme , types of mutual fund schemes, FOF schemes, Load or non load scheme 2. Investment valuation norms, pricing of units, contents of balance sheet and revenue account, evaluation of mutual funds, disposal of investments, recognition of income, accounting policies and entries	5		Lecture method using Excel Sheet, Group discussion, PPT, Videos Via Google meet
	Unit 5 : Introduction to IFRS	2		Lecture methodt, Group discussion, PPT, Videos Via Google meet
	1) Accounting standards 2) Indian Accounting standards (Ind AS) 3) Comparison of Ind AS, IFRS and AS			



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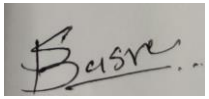
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __12_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYEME SEM : I MONTH : Aug- Dec YEAR : 2021-22

LEARNINGOBJECTIVE/S : The learners will be able to learn various aspects about management. Management is very essential part of business. This subject is helpful to develop managerial skills among learners

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	Module III : ORGANISING Organising concept, nature and significance, Authority and responsibility relationships, centralisation & decentralisation, departmentation, organisation structure forms, staffing importance, sources of recruitment, selection process	10		Google Meet

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TEACHING PLAN (UNIT PLAN)

Principles of Management	**Module IV : DIRECTING** Directing meaning, steps in direction, motivation concept, theories Maslow, Herzberg, McGregor. • Leadership : concepts, styles and traits • Control : concept, process, effective control system, control techniques Coordination : concept, definition and importance	10		Google Meet

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. SHIVAPRIYA S ACHARI DEPARTMENT: COMMERCE

CLASS: FY.EME SEMESTER: 1 MONTH: OCTOBER ACADEMIC YEAR : **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to : Teaching online with the help of PPT

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 1,2,3,4	1.Fundamental of communication. Definition, meaning, Types, Process, Importance			
	2.Effective communication, concept and practice of effect. Communication , Barriers to effective communication, Methods of improve communication skills	8	Manan publication	Online lectures, PPT shown
	3.Written communication skills. Report written, letter writing, Preparation of promotional material with special reference to banks, insurance companies and joint stock companies.			
	4.Oral communication skills, understanding audience, use of language, use of tone, understanding body language			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:8

Ashivapriya
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NIKITA SUNIL JOGLE DEPARTMENT: COMMERCE

CLASS: FYEME SEMESTER: I SUBJECT: FINANCIAL ACCOUNTING. MONTH: OCTOBER - DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: learn about basic book keeping & accounting concepts, accounting transactions, accounting standards, classification between types of expenditure, receipts & profit & loss & methods of depreciation

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	A. Meaning & Scope of Accounting – Need, development & definition, book-keeping & accounting, persons interested in accounting, disclosures, branches of accounting, objectives of accounting B. Accounting Transactions – Accounting cycle, journal, journal proper, opening & closing entries, relationship between journal & ledger, rules	9	Text book Wikipedia	Google meet, Power Point Presentation

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TEACHING PLAN (UNIT PLAN)

1.	regarding posting, trial balance, subsidiary books, bank reconciliation statement C. Accounting Standards – • AS 1: Disclosure of Accounting Policies – Meaning, purpose, different policies, areas of policies, disclosure of policies, disclosure of change in policies, simple illustrations • AS 6: Depreciation Accounting – Meaning, definitions, importance, factors, useful life of a depreciable asset, estimating useful life, additions, residual value, methods, disclosure of surplus, change in method, simple illustrations • AS 9 – Revenue Recognition – Meaning & scope, transactions excluded, sale of goods, rendering of services, effect of			

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TEACHING PLAN (UNIT PLAN)

2	uncertainties, disclosure, simple illustrations • AS 10: Accounting for Fixed Assets – Meaning, definitions, importance, cost of fixed assets, self-constructed fixed assets, non-monetary consideration, improvements, repairs, additions & extensions, revaluation, sale or retirement, valuation of fixed assets in special cases, special types of fixed assets, disclosure			
	A. 1. Expenditure – Classification of expenditure – capital, revenue & deferred revenue expenditure, unusual expenses. 2. Receipts – Capital receipt, revenue receipt	6	Text book Wikipedia	Google meet, Power Point Presentation

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	3. Profit or Loss – Revenue profit or loss, capital profit or loss B. Depreciation Accounting – practical problems based on accounting treatment by provision for depreciation using SLM & RBM methods			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

Nikita

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA SINGH DEPARTMENT: _COMMERCE CLASS : FYEME POM SSEMESTER: **I** MONTH: OCTOBER DECEMBER ACADEMIC YEAR : 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : The learners will be able to understand the Indian financial system and it's different components

PAPER, UNIT, TITLE	**SUBTOPICS**	**NO OF LECTURES ALLOTED**	**REFERENCE/S**	**ACHING METHOD/ ICT TOOLS USED**
Unit 1 Introduction to Management	Introduction to management, nature, significances of Management, Evolution of Management thoughts	5		Online platform Google meet
Unit 2 Management Functions	Planning Organising Staffing Directing Planning importance steps and Decision making process with its nature and process	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_ 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti Pramod Patil DEPARTMENT: Commerce CLASS: F.Y.E.M.E SEMESTER: I MONTH: October to December ACADEMIC YEAR: 2021-22 Subject: Introduction to Environmental Management

LEARNING OBJECTIVES:

The learners will be able to understand current environmental problems in the society. The learners will be able to understand about the concepts of Environmental audit, EIA and Environmental Legislation in India.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Environmental Degradation	1. Meaning, causes : Degradation of urban land, Forest and Agricultural land due to natural causes and human interference : Global Warming	2	1.Environmental science: R. Shantnu 2. Perspectives in environmental studies: A. Kaushik	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Problems of non-degradable Waste. Electronic Devices, Plastic and Man-made fibres	1		

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TEACHING PLAN (UNIT PLAN)

	3. Environmental Impact Assessments (EIA). Environmental Auditing, Environmental Legislation in India, Carbon Bank	2		
	1. Disaster Management meaning need and planning with reference to Flood, Storms, Tsunami, Cyclones and Earthquakes in India.	2	Perspectives in environmental studies: A. Kaushik	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation

Total Number of lectures allocated to the Unit : 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Snehal Jadhav DEPARTMENT: Commerce CLASS: FY EME SEMESTER: 1 Subject : IEM

MONTH: July ACADEMIC YEAR 2021-22

LEARNING OBJECTIVE/S: The learners will be able equipped which will build knowledge ,skills motivation to address complex environmental challenges. The learner will understand different aspects in environment with issues and their management techniques

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Paper1 GLOBAL WARMING & CLIMATE CHANGE	UNIT II- Temperature profile of the atmosphere – Lapse rates – Temperature inversion effects of inversion on pollution dispersion	5	Environment alManageme nt byH.V.Jadhav	Powerpoint presentation
	UNIT IV Mitigation Measures – Alternative fuel measures	03	Environmental Managementby H.V.Jadhav. Environmental	(Powerpoint PPT)

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TEACHING PLAN (UNIT PLAN)

			ManagementbyN.K. Uberoi	
	UNIT V Kyoto Protcol – Intergovernmental Panel on climate change (IPCC)	05	Environmental ManagementbyN.K. Uberoi	Powerpoint PPT)

Snehal Jadhav

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNITHA CHANDRASHEKHAR NAIR DEPARTMENT: COMMERCE

CLASS F.Y.E.M.E. SEMESTER: I MONTH: NOVEMBER - DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: To make the students learn managerial economics and its application to business .

The learners will be able to :to understand the decision making process of business .

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Managerial Economics –I **Unit I, II, III & IV.**	**Module I – Introduction**			
	1.Meaning and scope of managerial economics. 2. Relationship to economic theory 3. Relationship to decision theory. 4. Role of managerial economics 5. Objectives and Constraints of the firm 6. Introduction to Risk, Asymmetric information and Game theory.	10	**Managerial economics (Dean Joel)**	**Online lectures** 1. PPT Presentation 2 Quiz 3.Discussion
	Module II- Demand Analysis **1.**Meaning of demand , market demantd function, demand curve and factors affecting demand curve.2. Variation and increase/decrease in demand. 3.	15	**Managerial economics (Dean Joel)**	**Online lectures** 1. PPT Presentation 2 Quiz 3.Discussion

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	Elasticity of demand 4. Estimation of Demand –numerical problems for measurement of elasticity.			
	Module III – Production and Costs 1.Meaning and types of production function , importance of production function in managerial decision making and applications of production function in productive sectors.2. Economies of scale and scope	10	**Managerial economics (H. L. Ahuja)**	**Online lectures** 1. PPT Presentation 2 Quiz 3.Discussion
	Module IV- Market Structure A.Perfect competition and Monopoly B. Oligopoly and Monopolistic Competition.	15	**Managerial economics (H. L. Ahuja)**	1.Chalk and Black Board Method 2 Quiz method 3.Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 .

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Vasanthi Shenoy DEPARTMENT: Commerce CLASS: FY EME SEMESTER:I MONTH: DECEMBER

ACADEMIC YEAR: 2021-22 SUBJECT : Organizational Behavior

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Organizational behaviour	Fundamentals of ,individual difference in people ,role of hereditary in Environment ,pre natal and post natal env	2		Online classes. mobile phone and lap top
	Learning , intelligence .group test , motivational cycles	2		
	Leadership style , performance appraisal ,empowerment	2		
	Different types of group , conflict resolution strategies	2		
	Organizational culture ,resistance to change , stress ,time management	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _ _10_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashlesha Maurya DEPARTMENT: EME CLASS: FYEME

SEMESTER: II MONTH: JAN TO APRIL ACADEMIC YEAR: 2021-2022

SUBJECT: ECOLOGY AND ENVIRONMENT

LEARNING OBJECTIVES:
The learners will be able to:

- To understand the importance of ecology, biodiversity conservation, and the impact of human activities on natural systems.
- To learn about environmental ethics and its protection.
- To enhance the student's knowledge in various environment components like Atmosphere, Lithosphere and Hydrosphere.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I	Ecology and Biodiversity conservation Ecology – Meaning, Scope & Ecology Today, Subdivisions of Ecology, Fundamental Concepts of Ecology, Environmental Pollution - Air, Water, Noise, Soil, Chemical and Radioactive pollution, Global Warming, Ozone layer depletion and Acid Rain	10		Online and Offline lectures (Google Meet, PPT)
	Biodiversity- Types of biodiversity- Value of biodiversity - Biodiversity hotspot in India- Loss of biodiversity- Conservation of biodiversity			Online and Offline lectures (Google Meet, PPT)

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TEACHING PLAN (UNIT PLAN)

Lithosphere UNIT III	Zonal Structure of the Earth, Soil Types, Soil Classification, Types of Rocks and Minerals, Soil profile	05		Online and Offline lectures (Google Meet, PPT)
	Soil Erosion in India, Soil Conservation, Biota of the Soil	05		Online and Offline lectures (Google Meet, PPT)

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: EME CLASS: FYEME SEMESTER: II MONTH: JAN-MARCH

ACADEMIC YEAR:2021-22 SUBJECT: HRM

LEARNING OBJECTIVE/S: To develop the understanding of the concept of **human resource management** and to understand its relevance in organizations. To know necessary skill set for application of various HR issues. To analyse the strategic issues and strategies required to select and develop manpower resources..

The learners will be able to :

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Introduction to HRM Human Resource Planning Job Analysis, Job Design and Job Evaluation	Definition, Features, Scope/Functions of HRM, Definition of Personnel Management. Evolution of HRM/ Trends in HRM, Difference between HRM and PM , Challenges before the HR manager,	1	***K. Aswathappa**, "Human Resources & Personnel Management- Text And Cases – Fourth Edition", Tata Mc Graw Hill*	MS-Power Point, Google Meet, Google classroom

Kalpita Vartak
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TEACHING PLAN (UNIT PLAN)

	Role of HR Manager, Traits/Characteristics of the workforce, Personnel Philosophy, Personnel Manual.	1	***Jayashree Sadri, Sorabh Sadri "****A Strategic Approach to Human Resources Management".* *Jaico Publishing House, Mumbai*	Same as above
	Definition of HRP Process of HRP along with brief coverage of personnel demand and supply forecasting techniques Factors affecting HRP Human Resource Information System (HRIS),	2	Same as above	Same as above
	VRS, Outsourcing, Pink slip/ termination/ retrenchment/ downsizing/ separation Contracting and Sub- contracting Promotions and Transfers	1	Same as above	Same as above

Kalpita Vartak
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TEACHING PLAN (UNIT PLAN)

	Job Analysis – Definition, methods of collecting job data, merits and demerits/limitations	1	Same as above	Same as above
	Job Design – Definition, Factors affecting Job Design, Approaches to Job Design	1	Same as above	Same as above
	Job Evaluation – Definition, methods of job evaluation, process of Job Evaluation	1	Same as above	Same as above
Recruitment, Selection and Induction	Recruitment – Definition, sources of recruitment , merits and demerits Selection – Definition, process of selection, types of selection tests, types of interviews	2	Same as above	Same as above
	Induction/Orientation – definition, methods, process Placement	1	Same as above	Same as above
Training and Development	Definition of Training and Development, Methods of training managers, Process/ procedure of conducting training programme,	1	Same as above	Same as above

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _

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TEACHING PLAN (UNIT PLAN)

	How to evaluate effectiveness of training programmes, Advantages of T&D	1	Same as above	Same as above
Performance Appraisal	Definition of Performance Appraisal, Methods of Appraisal for managers – traditional and modern	1	Same as above	Same as above
	Process / procedure of conducting performance appraisal Advantages of performance appraisal Limitations of Appraisal	1	Same as above	Same as above
Compensation Management	Definition of compensation, Components of Salary / Salary slip, Fringe Benefits – definition and types,	1	Same as above	Same as above
	Performance linked incentives/ incentives- definition, advantages and disadvantages	1	Same as above	Same as above
Career Planning And Development	Definition of Career Planning and Career Development, Process/ Procedure of Career Planning,	1	Same as above	Same as above

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TEACHING PLAN (UNIT PLAN)

	Career Stages/ Career Life Cycle and how to handle personnel at each stage, Essentials to make career planning successful	1	Same as above	Same as above
	Career Counselling, Employee Retention techniques, Succession planning	1	Same as above	Same as above
Participative Management	Definition of Participative Management, Levels of participation Trends in Participative Management	1	Same as above	Same as above
	Factors essential for successful participative management Forms of participation Participation through Quality Circles Empowered Teams	2	Same as above	Same as above

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TEACHING PLAN (UNIT PLAN)

Industrial Relations	Definition of Industrial Relations, Features of Industrial Relations, Importance of Industrial Relations,	2	Same as above	Same as above
	Approaches to Industrial Relations, Parties to Industrial Relations	1	Same as above	Same as above
Trade Unions	Definition of Trade Union, Features of Trade unions, Trade union movement in India/ Trends in the Trade Union	1	Same as above	Same as above

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: EME CLASS: FYEME SEMESTER: II MONTH: JAN-MARCH

ACADEMIC YEAR:2021-22 SUBJECT: PRODUCTION MANAGEMENT AND MATERIAL MANAGEMENT

LEARNING OBJECTIVE/S: understanding of **production** as a process of converting or transforming resources into products; an understanding of the manager's concern in planning, organizing, directing, and controlling productive **operations** to meet organizational **objectives**

The learners will be able to :

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 1	Introduction to the concept of operations and Operation Management	1	Principles of operation management by jay heizer	MS-Power Point, Google Meet, Google classroom, google form
	Development of Production Function. Relation of Production with other Functions like design function, purchase function, plant layout, maintenance etc.	2	The Toyota product development by james m morgan	Same as above
	Production classification, product selection (steps in identifying the product for manufacturing), Product development (market pull, technology push, inter functional approach).	2	Same as above	Same as above
	Brief description/importance of research development and design of a product	1	Same as above	Same as above

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TEACHING PLAN (UNIT PLAN)

	Facilities planning (how much to produce, level of automation, facilities required for manufacturing , where to produce, arranging required facilities, how to produce etc.) production systems	2	Same as above	Same as above
	Plant layout: difference between various types of layout (Product layout, process layout, Cellular layout, static layout etc)	2	Same as above	Same as above
	Various types of material Handling systems: their guidelines/principles, distinguishing features, uses	1	Production and inventory control	Same as above
UNIT – III	Importance of materials management (corporate policy, organisation, research, planning, source selection)	1	Same as above	Same as above
	Value Analysis and Value Engineering	1	Same as above	Same as above
	Purchase Management, importance of purchasing, various R's of Purchasing, purchasing systems	2	Same as above	Same as above
	Need for forecasting price/policy on seasonal commodities and capital equipments. Simple problems on various types of forecasting including exponential smoothing	2	Same as above	Same as above
	Inventory management, its prime importance in our country today. Inventory control techniques- ABC, FSN, GOLF, VED, SOS, HML	3	Same as above	Same as above
	Make or Buy Decisions: Problems on inventory Management			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _

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TEACHING PLAN (UNIT PLAN)

UNIT – IV	Warehousing and stored management- centralised and de-centralised stores. Brief introduction to various methods of stores accounting.	2	Same as above	Same as above
	Need for stock verification	1	Same as above	Same as above
	Management of scrap, waste, surplus, obsolete materials.	1	Same as above	Same as above
	JIT, KANBAN, KAIZEN, Push vs. Pull concept, MRP	2	Same as above	Same as above
	Explanation of EOQ – its advantages and disadvantages. Types of inventory systems (PSystems and – Systems). Need for safety stock/reserve stock. Simple problems on these topics.	1	Same as above	Same as above
	SQC – techniques, Control Charts, X- Bar chart, R- chart, P- chart, C-chart. Graphical representation. Direct problems on these topics	2	Same as above	Same as above

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Madhu dharma DEPARTMENT: Mathematics (Statistics) CLASS: FY.EME SEMESTER: II MONTH: December to February ACADEMIC YEAR:2021-22
LEARNING OBJECTIVE/S: To make students comfortable with data analysis in real life.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Paper-1 :Unit1: Types of Data and Tabulation	• Introduction: Functions/Scope, Importance, Limitations • Data: Relevance of Data(Current Scenario), Type of data(Primary & Secondary), • Primary(Census vs Samples, Method of Collection (In Brief), Secondary(Merits, Limitations, Sources) (In Brief) • Presentation Of Data: Classification – Frequency Distribution – Discrete & Continuous, Tabulation, Graph(Frequency, Bar Diagram, Pie Chart, Histogram, Ogives) • Measures Of Central Tendency: Mean(A.M, Weighted,	15	**V.K. S.C. Fun da stati s**	

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TEACHING PLAN (UNIT PLAN)

	Combined), • Median(Calculation and graphical using Ogives), Mode(Calculation and Graphical using Histogram), Comparative analysis of all measures of Central Tendency			
Unit-2 measure of dispersion , correlatio n & regression	Measures Of Dispersion: Range with C.R(Co-Efficient Of Range), Quartiles & Quartile deviation with CQ (Co-Efficient Of Quartile), Mean Deviation from mean with CMD (Co-Efficient Of Mean Deviation), Standard deviation with CV(Co-Efficient Of Variance), Skewness& Kurtosis (Only concept) • Co-Relation: Karl Pearson, Rank Co-Relation • Linear Regression: Least Square Method	10		

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TEACHING PLAN (UNIT PLAN)

Unit- 3 time series & index numbers Unit-4 Probability & random variable Unit-5	• Time Series: Least Square Method, Moving Average Method, Determination of Season • Index Number: Simple(unweighted) Aggregate Method, Weighted Aggregate Method, Simple Average of Price Relatives, Weighted Average of Price Relatives, Chain Base Index Numbers, Base Shifting, Splicing and Deflating, Cost of Living Index Number Probability: Concept of Sample space, Concept of Event, Definition of Probability, Addition & Multiplication laws of Probability, Conditional Probability, Bayes' Theorem(Concept only), Expectation & Variance, Concept of Probability Distribution(Only Concept)	5		

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TEACHING PLAN (UNIT PLAN)

Elementary topics on Estimation and Testing of hypothesis				
	• Sample from a distribution : Concept of a statistic estimate and its sampling distribution. Parameter and it's estimator. Concept of bias and standard error of an estimator. • Central Limit theorem (statement only). Sampling distribution of sample mean and sample proportion. (For large sample only) • Standard errors of sample mean and sample proportion. Concept of hypothesis	15 lectures for Unit 4 / 5		

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TEACHING PLAN (UNIT PLAN)

	Null and alternate hypothesis, • Types of errors, Critical region, Level of significance. • Large sample tests (using central limit theorem, if necessary) • For testing specified value of population mean • For testing specified value in difference of two means • For testing specified value of population proportion • For testing specified value of difference of population proportion (Development of critical region is not expected.)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_ 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: COMMERCE CLASS: FYEME

SEMESTER: II MONTH: NOVEMBER - MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES: The Learners will be able to understand the old school and contemporary method and theories utilized to understand the terms of trade and exchange along with the legalities of trading relations under the policy brackets to cater the smooth international trade between nations.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
II, II & V	Unit I: Determination of income and employment Overview of classical and Keynes theory Business cycle features, causes and measures IS-LM market	(01 Lectures) Per	M.L. Jhingan: International Economics Dominick Salvatore: International	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _

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TEACHING PLAN (UNIT PLAN)

			Economics Trade and Finance	
	Unit II: Policy Environment Role of state Theory of economic policy Monetary policy Fiscal policy Economic stabilization Structural policy Commercial Trade Policy: Free Trade & Protection , Pros & Cons	(01 Lectures) Per Per week	Paul Krugman: International Economics Theory and Policy. Desai and Bhalerao: International Economics	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST
	Unit V: GLOBALIZATION Meaning, effects, gains, problems, role of IMF and world bank; Concept of global recession and effects	(01 Lectures) Per Per week	M.L. Jhingan:	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST

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TEACHING PLAN (UNIT PLAN)

	WTO: concept, agreement, implications, issues and dispute settlement		International Economics Dominick Salvatore: International Economics Trade and Finance	

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Sandara Almeida DEPARTMENT: _Commerce CLASSFY EME SEMESTER II

MONTH Dec - Mar ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to learn the various aspects about costing

This subject is helpful to develop Cost Accounting skills among learners

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	Unit 1 Introduction and importance to cost Accounting	8	C S Rayadu	Google meet , google classroom, PPT
	Unit 2 Elements of cost Bases of cost classification	8	M N Aurora	Google meet , google classroom, PPT
	Unit 3 Reconciliation between cost and financial records	8	Maheshwari S N	Google meet , google classroom, PPT
	Unit 4 Elementary principles of Marginal costing	8		Google meet , google classroom, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SMITA KHAIRE (JADHAV)

DEPARTMENT: Commerce CLASS: FYEME SEMESTER: II

MONTH: Jan to Apr ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to acquire a basic understanding and knowledge about the Environment and its components. Learner will be able to acquire an attitude of concern for protection of Environment.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Ecology and Environment	**Module II:** Origin of **Atmosphere**- Vertical structure of atmosphere- Ecological significance of air- Horizontal motion of atmosphere, Vertical movement- upper air circulation (Jet stream) Air masses- Important properties of the atmosphere- Acid rain.	03	Essential of Ecology and Environmental Science by S.V.S Rana	PowerPoint Presentation
	Module IV: Hydrologic- Water Budget- Fresh water environment Lakes – Eutrophication of lake - Reservoir- Running water- The open sea- physico-chemical aspects of	04	Essential of Ecology and	PowerPoint Presentation

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TEACHING PLAN (UNIT PLAN)

	Marine Environment Wetland and coastal environment- Antarctica research programme – Coral Reef – Exclusive Economic Zone(EEZ)- Estuaries- Biosphere- Introduction- concept of Biome- Evolution and Diversity in Biomes- major Biomes of Earth- Landforms. **Module VI**: **Resource** cycle- mineral resources- marine resources Mineral resources of Antarctica, Energy resources- Renewable sources of energy- energy from biomass- Geothermal energy, ocean thermal energy- Non-renewable sources of energy- Nuclear energy- Energy for the future- Forest resource- deforestation Water a vital resource- India's water budget.	04	Environment by S.V.S Rana Environmental Science by Santra S.C	PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Sunitha C. Nair _____ DEPARTMENT: _Commerce __ _____ CLASS: _____F.Y.E.M.E _ __ SEMESTER: _ II_ MONTH: _____January - April _ ___ACADEMIC YEAR: 2021-22_

LEARNING OBJECTIVE/S:

The learners will be able to :

_To make the students understand Macroeconomics and International trade and its application to environmental business .

The learners will be able to understand the decision making process of business .

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
I	**Macro economic aggregates and concepts**- Circular flow of income, National income and related concepts, Human Development Index, Supply of money, Demand for money, price level, Inflation and Stagflation.	02	Advance Macro Economics (H.L. Ahuja)	Power point presentation and Discussion method
	International Trade -Overview of International trade, Basis of trade, Balance of Payments and Mechanism for International Payments.	02	Advance Economic	Power point presentation and Discussion method

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TEACHING PLAN (UNIT PLAN)

II			**Theory (M.L. Jhingan)**	
IV	**Globalisation** - Meaning, effects, Role of IMF and World Bank, Concept of Global recession with contagion effects	**02**	**Advance Economic Theory (M.L. Jhingan)**	**Power point presentation and Discussion method**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 6

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MEZBIN LALANI DEPARTMENT: COMMERCE CLASS: SYEME SEM III MONTH: SEPT-DEC 2021 ACADEMIC YEAR: 2021-22 SUBJECT: FINANCIAL MANAGEMENT

LEARNING OBJECTIVE/S: To understand basics of financial management

The learners will be able to : understand various important techniques used in financial management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Introduction to financial management, its need and importance , advantages to a company. introduction to various sources of funds available to a company, long term and short term sources of finance.	15	Financial Management by Khan & Jain	Google classroom, Google meet, power point presentation, pdf,etc
UNIT 2	Working capital management: its meaning and importance, factors affecting working capital, types of working capital, operating cycle, computation of working capital, practical illustrations	15	Financial Management by Khan & Jain	Google classroom, Google meet, power point presentation, pdf,etc

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TEACHING PLAN (UNIT PLAN)

UNIT 3	Cost of Capital: meaning, importance to a company, types of capital and its costs, cost of debt, cost of equity share capital, cost of debt, cost of reserves, computation of WACC, practical illustrations.	15	Financial Management by Khan & Jain	Google classroom, Google meet, power point presentation, pdf,etc
UNIT 4	Receivables management: Its meaning, features and aspects of receivables management, types of costs involved in management of receivables, credit policy, steps in credit analysis, control of receivables management.	15	Financial Management by Khan & Jain	Google classroom, Google meet, power point presentation, pdf,etc

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH **DEPARTMENT: COMMERCE**

CLASS: SYEME SEMESTER: III MONTH: OCTOBER TO DECEMBER ACADEMIC YEAR: 2021-22 SUBJECT: Marketing Management

LEARNING OBJECTIVES: The learners will be able to:

- Understand the concept of marketing in detail and will be acquaint with various marketing strategies carried out by the marketers.
- Get an insight on digital marketing, Social marketing and relationship marketing.
- Understand ethics related to marketing and unethical practice.
- Draw out the meaning of various pricing methods and strategies followed by the marketer.

Relate to various methods of brand promotion and its integration.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit1- Introduction to Marketing	(a) The 4 Ps and 3Cs of Marketing (b) Marketing as an activity, function, and philosophy (c) Needs, wants and demands; transactions, transfers & exchanges (d)Orientation of a firm: Production concept;	7	Marketing management by Phillip Kotler	Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible

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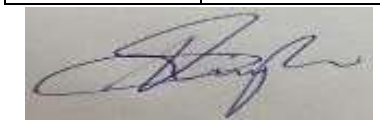
TEACHING PLAN (UNIT PLAN)

	product concept; selling concept; and marketing concept. New Trends in Marketing: E-Marketing, Internet Marketing, and Marketing using social networks Societal Marketing/Relationship Marketing, Marketing Research; MIS; & Consumer Behaviour The micro environment of business (management structure; marketing channels: markets in which a firm operates; competitors and stakeholders. Macro Environment: political factors; economic factors; sociocultural factors; technological factors (pest analysis)		And Marketing management Ramaswamy & Kumari Nama	
Unit-2Marketing Research:	Importance of Marketing Research Types of Marketing Research: Product research; sales research; consumer/customer research; promotion research	2		Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible
Unit 5-Pricing Decisions	Pricing objectives; factors influencing pricing decisions, Types of pricing: Mark up/cost plus pricing; perceived value pricing; value pricing; geographic pricing; etc. Responding to competitors Action through price and non price variables. Impact of the products: stage in the PLC on pricing decisions.	3		Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible
Unit 7-Integrated Marketing	Definition of target audience; determining communication objectives; designing communication and selection of channels	2		Testmoz, Google form, Google meet, PPT presentation, Jam Board,



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TEACHING PLAN (UNIT PLAN)

Communication :				Incredible
Unit 8Marketing Services	Characteristics of services; ways of improving services, delivery, managing service maturity.	2		Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible
Unit 9- Ethics in Marketing	Advertising Standards Council of India code of ethics in advertising; promotion to children; unfair practices in marketing	2		Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dilip Jain DEPARTMENT: Commerce CLASS: SY EME SEMESTER : III

ACADEMIC YEAR: 2021-22

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
2	**Product and Brand Management** • Products: core, tangible and augmented products • Product mixed decisions: product line decisions; strategic filling, line modernization decisions • New product development process • Product life cycle	7		
3	**Brand Management** • Brand equity; branding decisions; brand extensions; brand portfolios • Segmentation, Targeting and Positioning (STP) • Pricing Decisions, Channel Decisions; Promotion Mix; Types of pricing Channel Decisions Retailing Advertising	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

Dilip J

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE CLASS: SYEME

SEMESTER: **III** MONTH: Aug to Dec ACADEMIC YEAR :2021-22

LEARNING OBJECTIVE/S:
The learners will be able to Learn different types of finances ,Meaning of leverage & its types, preparation of cash budget, Meaning and calculation of various capital budgeting techniques.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
FINANCIAL MANAGEMENT	1**] Types of Finances –**Meaning, Need & sources of finance like long term sources of finance, short term sources & long term sources of finance.	03	**Financial Management:** Inamdar, S. M.	Google meet, Google slide, Microsoft word, Spreadsheet
	2] **Leverage**-Introduction, Meaning, Types of leverages, Degree of various leverages , Practical sums	07	**Financial Management:** Kishore, R. M	Google meet, Google slide, Microsoft word, Spreadsheet

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TEACHING PLAN (UNIT PLAN)

	3] **Cash Management** – Introduction, Features of cash management, Motives for holding cash, Objectives of cash management, Importance of cash management, Proforma of Cash budget	10		Google meet, Google slide, Microsoft word, Spreadsheet
	4**] Capital Budgeting**-Introduction, Classification of capital budgeting projects, process. Capitalbudgeting techniques – Payback period,accounting Rate of Return, Net present value, Profitability index & Discounted payback. Practical problems.	10		Google meet, Google slide, Microsoft word, Spreadsheet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 30_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: LEJESH KELOTH DEPARTMENT: SELF -FINANCE CLASS: SYEME SEMESTER: III MONTH: SEPT- DEC ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the correlation between economic and its interrelation ship between society and its impact which is also an important element in making our surrounding economy stable and long term benefits.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
ENVIRONMEAL ECONOMIC – MODULE -1	**Introduction to micro –economic theory**	10	Research paper Manan Prakash	
	Supply And Demand			PPT AND PDF WITH VIRTUAL CLASSROOM METHOD
	Price Formulation			
	Environmental economic theories			

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TEACHING PLAN (UNIT PLAN)

ENVIRONMENTAL ECONOMIC –I MODULE -2 MODULE -3	Political means of control			
	Valuation Method	5	Research paper Manan Prakash	
	Political means of control and their applicability			PPT AND PDF WITH VIRTUAL CLASSROOM METHOD
	Natural resources economic	5	Research paper Manan Prakash	
	Renewable and non-renewable resources and its management regimes		Research paper Manan Prakash	
	Ecological economics	10		Ppt And Pdf With Virtual Classroom Method
	The ecological system		Research paper	

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TEACHING PLAN (UNIT PLAN)

			Manan Prakash	
	International trade and the environment	10		
	Economic growth and the environment			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Research methods in business DEPARTMENT: Commerce

CLASS: SYEME SEMESTER:III MONTH: Sep-oct ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	Research – meaning , Obectives ,Significance ,Significance.	2	Research Methodology by C.R.Kothari	Google meet , ppt presentation , google forms , testmoz
	Types of Research – Basic ,Applied , Descriptive ,Historical , Exploratory , Experimental , ex-post facto , Case Study method	4		
	Approaches to research – Quantitative & Qualititative research	2		
	Importance of research in management decision			
	Marketing research , Government policies and economic system	1		
	Social relationship , planning and operational problem s of research in business.	1		

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TEACHING PLAN (UNIT PLAN)

Unit IV Sources and Methods of Data collection	Primary sources – Observation , Interview	2	Research Methodology by C.R.Kothari	Google meet , ppt presentation , google forms , testmoz
	Questionnaire , Interview Scedules	2		
	Secondary Sources - Internal , External	2		
	Data processing , Tabulation , Data Analysis and Interpretation	2		
	Report Writing – Layout of research report	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Mrs. Smita S. Khaire_

DEPARTMENT: _ Commerce_ CLASS: _ SYEME_ SEMESTER: _ III_ MONTH: _September-December_

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVES:

The learners will be able to acquire the knowledge about Environment.

It will be helps to acquire concern towards Environment protection

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Natural Resources and Management	Unit 3: Water resources, Hydrological cycle. Surface water, Ground water, Dams-uses and impact on environment, Marine resources: Biotic and Abiotic resources	5	Environmental science by Santra S.C	PowerPoint Presentation
	Unit 4: Living Resources-Agriculture-types of cultivation, high yielding varieties, HYV chemicals fertilizer and their impact	2	Ecology and Environment by Odum	PowerPoint Presentation

Smita K
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TEACHING PLAN (UNIT PLAN)

	Unit 5: Forest and Mineral resources. Forest product, food, fodder, fuelwood, timber. Mineral- metals and non-metals resources, Non-conventional resources	5		PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

Smita K
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Mrs. Smita S. Khaire DEPARTMENT: _ Commerce CLASS: _ SYEME_ SEMESTER: _ III

MONTH: _September-December ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to acquire the knowledge about Environment.

It will be helps to acquire concern towards Environment protection.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Global Warming and Climate Change	Unit 1: Role of ozone in environment, ozone layer, ozone depleting gases- Green House Effect	5	Environmental science by Santra S.C	PowerPoint Presentation
	Unit-3: Causes of Climate change: change of temperature in the environment, melting of ice pole, sea level rise, role of fossil fuels	5	Ecology and Environment by Odum	PowerPoint Presentation
	Unit-4: Mitigation measures-cleaner production	2		PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SmitaK

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHALS.JADHAV DEPARTMENT: COMMERCE CLASS:S.Y.EME SEMESTER: III
MONTH: July-OCTOBER ACADEMIC YEAR : 2021-22
LEARNING OBJECTIVE/S:
The learners will be able equipped which will build knowledge, skills motivation to address complex environmental challenges. The learner will understand different aspects in environment with issues and their management techniques

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Paper1 GLOBAL WARMING & CLIMATE CHANGE	UNITII- Temperature profile of the atmosphere – Lapse rates – Temperature inversion effects of inversion on pollution dispersion	5	Environmenta lManagement byH.V.Jadhav	Powerpoint presentation
	UNIT IV Mitigation Measures – Alternative fuel measures	03	Environmental Managementby H.V.Jadhav. Environmental	(Powerpoint PPT)

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TEACHING PLAN (UNIT PLAN)

			ManagementbyN.K. Uberoi	
	UNIT V Kyoto Protcol – Intergovernmental Panel on climate change (IPCC)	05	Environmental ManagementbyN.K. Uberoi	Powerpoint PPT)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SNEHALS.JADHAV DEPARTMENT:COMMERCE CLASS:S.Y.EME SEMESTER:III
MONTH: July-OCTOBER ACADEMIC YEAR : 2021-22
LEARNING OBJECTIVE/S:
The learners will be able equipped which will build knowledge ,skills motivation to address complex environmental challenges. The learner will understand different aspects in environment with issues and their management techniques

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	ACHING METHOD/ ICT TOOLS USED
Paper 5 Natural Resources Mangement	Unit I Introduction to Natural Resources – Classification of Natural Resources- list of natural resources, values of natural resources,Demands on natural resources, Population lifestyle and natural resources, impact of poor natural resource management.	05	Environment alManageme nt byH.V.Jadhav	Powerpoint presentation / Google Meet
	Unit II Land resources – land definition , land use pattern in India, waste land ; types , desertification, definition causes and impacts.	05	Environmental Management by.V.Jadhav. Environmental Management by NK.Uberoi	(Powerpoint Ppt) / Google Meet

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TEACHING PLAN (UNIT PLAN)

	Unit 4 Microbes useful and harmful bacteria in soil, water, air, fungi, beneficial & harmful.	03	Environmental Management by.V. Jadhav. Environmental Management byN.K.Uberoi	(Powerpoint Ppt) / Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Veronika B Barla **DEPARTMENT**: Commerce **CLASS**: S.Y.EME **DIVISION:** A, **SEMESTER**: III

MONTH: _ **SUBJECT**: Research Methods in Business **ACADEMIC YEAR**: 2021-22

LEARNING OBJECTIVE/S:
1. Help to understand RESEARCH PROCESS
2. Helps understand the FORMULATION, TESTING OF HYPOTHENOUS

The learners will be able to: 1. Helps to understand research process and hypothesis

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Module III Research process	■ Selecting the topic, defining the research problem, objectives of research, literature survey, sample design, data collection, execution of project, analysis of data and hypothesis testing, generalization and interpretation and preparation of research report.	5	Research methodology C.R. KOTHARI	Online teaching using google meet, PPT jamboard

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TEACHING PLAN (UNIT PLAN)

UNIT III **Hypothesis**	■ **Research design** – Meaning, need, features of good research design, types of research design –	2	"	"
	■ a) For exploratory research b) For descriptive research ■ b) For causal research studies	3	"	"
	■ Meaning, importance and types. Formulation of hypothesis and testing of hypothesis.	2	"	"
	■ Chi-square test, Correlation Co-efficient, Regression analysis.	2	"	"
	■ **Sampling: -** ■ Meaning , Sample and sampling, essentials of good sample. Sample size, methods of sampling: - ■	3	"	"

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 12

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TEACHING PLAN (UNIT PLAN)

	■ a) Probability sampling – cluster sampling, stratified sampling, multi stage sampling. ■ b) Non-probability sampling: - Purposive sampling, Quota sampling, Convenience sampling. ■	2	"	"

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ARJUN P. VISHWAKARMA DEPARTMENT: COMMERCE CLASS: SYEME SEMESTER: SEM IV MONTH: JAN-MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to : The learners will be able to learn various aspects about Occupational Health And Safety . This subject is helpful to develop Occupational Health And Safety skills among learners.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Chapter 1	**Health And Safety Foundations, Policy, Positive Health And Safety Culture**	**04**	**Introduction To Health And Safety At work**	**Online lectures on Google meet**
Chapter 3	**Movement of People and Vehicles, Hazards and Controls, Handling Hazards and Control**	**04**		**Online lectures on Google meet**
				Online lectures on Google meet
Chapter 4	**Work Equipment Hazards and Control, Electrical Hazard And Control**	**04**		**Online lectures on Google meet**

ArjunV
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TEACHING PLAN (UNIT PLAN)

Chapter 6	**Physical And Psychological Health Hazard And Control**	**04**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: EME CLASS: SYEME SEMESTER: IV MONTH: JAN-MARCH
ACADEMIC YEAR:2021-22 SUBJECT: MIS

LEARNING OBJECTIVE/S: To understand the role of information technology and decision support systems in business and record the current issues with those of the firm to solve business problems

The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	Determining Information Needs for an Organisation/Individual Manager	2	MIS a Conceptual Framework by Davis and Olson	MS-Power Point, Google Meet, Google classroom, google form
	Overview of use of data flow method, analysis of information for decision processes etc.	2	Same as above	Same as above
UNIT –5	Information Security	3	Same as above	Same as above

Kalpita Vartak

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TEACHING PLAN (UNIT PLAN)

	Sensitize students to the need for information security	2	Same as above	Same as above
	Concepts such as confidentiality, Integrity and Availability. Types of threats and risk, overview of some of the manual, procedural and automated controls in real life IT environments.	2	Production and inventory control	Same as above
UNIT – 6	Case studies	2	Case Studies : Case on ABC Industrial Gases – Author : Prof Pradeep Pendse Mrs Fields Cookies – Harvard Case Study	Same as above

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

Kalpita Vartak

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: LEJESH KELOTH DEPARTMENT: COMMERCE CLASS: SYEME SEMESTER: SEM IV
MONTH: JAN-MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: The learners will be able to learn various aspects about Environment Economic its impact on social life, its essential in our economic sector . This subject is helpful to develop positive mind set towards environmental studies among learners.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
MODULE 1	Marginal condition for Pareto optimum- (efficiency in exchange, efficiency in production), SOCIAL THEOREM, (Classical welfare function, Pareto welfare function, Rawlsian function)Bergson & Samuelson Function (consumer & production surplus, cost Benefit Analysis)	05	ENVIRONMENTAL ECONOMIC BY STEVEN C, HACKETT ENVIRONMENTAL ECONOMIC BY Barry C Field & Martha K Field	Online lectures on Google meet

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TEACHING PLAN (UNIT PLAN)

	CONCEPT MARKET FAILURE, meaning, causes, externalities and its types, public goods and public bads, Lindahl pricing model 7 free ride problem, Private verse Public goods, Cost benefit ana:	05		Online lectures on Google meet
	Module 3 Hedonic price method Household production Defensive expenditure Travel expenditure State preference via contingent valuation Wage regression & value of statistical.	05		Online lectures on Google meet
	Module 4 Use verse nonuse value Willingness to pay verse Willingness to accept Module 5 Price verse quantity	05 05		Online lectures on Google meet Online lectures on Google Meet

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TEACHING PLAN (UNIT PLAN)

	Coase theorem & allocation of property rights			
	Module 6 Command & Control verses environmental taxes. Trade verse liability Pigouvian fees Single polluter multiple damage. Fees verse subsidies Fees verse imperfect competition. Types of imperfect competition.	07		Online lectures on Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 32

Rajesh
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TEACHING PLAN (UNIT PLAN)

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF - MADHURA SURVE DEPARTMENT: COMMERCE CLASS: SYEME: SEMESTER: IV MONTH: JANUARY-MARCH
ACADEMIC YEAR: _ __2021-22
LEARNING OBJECTIVE/S:
The learners will be able to : know about customers buying behaviour and help to know how to maintain a good relationship with customers in today's competitive world which leads to customer retention

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit I, II V	MODULE I Changing Nature of Marketing and Customer Service-Marketing-An Introduction - The Marketing Orientation-Factors Necessitating a Re-look at Marketing Methods-Changing Social Trends-Lesser Government Controls Rising Income Levels-Threats from New Forms-Characteristics of the Empowered Customer-Increased Demand-Easy Access to Information - Emerging Trends in Marketing-Shorter Product Life Cycles.	10	Customers Relationship Management " by FRANCIS BUTTLE, Internet	Online lecture through Google Meet
	Emergence of Permission Marketing-Experimental Marketing-Offering Complete Solution-Rewarding Loyal Customers-Disruptive Innovations-The Changing Nature of Customer Service-Challenges In Modern Day Customer Service Emerging Trends in Services Marketing Mix -Customer Experience -The New Differentiator- Managing Service Better-Emergence of CRM-Economics of Building Customer Relationship-Customer Lifetime Value-Benefits of Customer Loyalty-Benefits of Choosing The Right Customers - Customer Value and	10	Relationship Management " by FRANCIS BUTTLE, Internet	Online lecture through Google Meet

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TEACHING PLAN (UNIT PLAN)

	Customer Satisfaction: Precursors to CRM-Customer Value.			
	MODULE V The Technology Orientation - A Strategic FSrame work for CRM-Planning for Success - Change Management-Selling Change-Training-Role of IT and Tools for CRM-CRM Strategy and Technology-Capturing Data-Steps in Preparing the IT Systems for CRM Choosing The CRM Tool-Using IT Systems for Better CRM-Isuses for Consideration In CRM Tools Selection-Tools for CRM-e CRM-Basic Concepts of e CRM-Benefits of e CRM	6	Customers Relationship Management " by FRANCIS BUTTLE, Internet	Online lecture through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_ 26

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TEACHING PLAN (UNIT PLAN)

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manjushri S. Oak DEPARTMENT: _Commerce CLASS:SYEME SEMESTER: IV MONTH: January - April_
ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to :

To make the students learn Environmental Pollution and Management and its effect on environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environmental Pollution and Management Sem IV				
UNIT-II	Air pollution –structure and composition of atmosphere – classification, sources & effects of air pollution – Acid rain –green house effect – global warming – Ozone depletion	**02**	**https://en.m.Wikipedia.org, www.nationalgeographic.org, www.epa.gov, envirmental science book**	**Power point presentation and Discussion method**

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TEACHING PLAN (UNIT PLAN)

UNIT-III	Prevention and control of air pollution particulate control – settling chamber, scrubber, bag filter, cyclones electrostatic precipitators. Gaseous emission control methods. Air pollution prevention and control Act 1981.	**02**	**https://en.m.Wikipedia.org, www.who.int, www.britannica.com, envirmental science book**	**Power point presentation and Discussion method**
UNIT-IV	Soil Pollution – soil pollutants – types – sources, effects & Control.	**02**	**www.envirnmentalpollutioncenters.org, https://en.m.Wikipedia.org**	**Power point presentation and Discussion method**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAZIA SAJID SHAIKH DEPARTMENT: COMMERCE CLASS: SYEME SEMESTER: SEM IV
MONTH: JAN-MARCH ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to : _Basic information concepts and need for information system in an organisation.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1 , 2	*Basic information Concepts and Definition. *Need for information and Information System (IS) in an organisation. *Characteristics of Information and Organisation with respect to organisation form ,structure,philosophy,hierarchy etc.	06	MIS a concept Framework by Davis and Olson	Online lectures on Google meet
	Types of IS-Transaction. *Operational Control *Management Control *Decision Support *Executive information system	06		Online lectures on Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEELAM RATHORE DEPARTMENT: Commerce CLASS: S.Y.E.M.E SEMESTER: IV

MONTH: January – April ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVES:-

To make the students learn about the Health, Safety of Environment

The learners will be able to understand and can manage the different issues of environment with respect to safety and Health

PAPER, UNIT TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 , 2, 3	Definition: - need for good health, Factors affecting health, Types of Diseases (deficiency, infection, pollution diseases). Personal hygiene – food (balanced diet). Food Habits & cleanliness, Food Adulterants, Avoiding smoking, Drugs & alcohols.	4	Environmental Health By:- M.H.Jackson	PowerPoint Presentation, Discussion method
	Public Health:- Communicable diseases , mode of transmission(epidemic and endemic diseases), Management of Hygiene in public places (railway stations, Bus stands and other public places)	4	Environmental Sanitation By:-KVSG Murali Krishna	PowerPoint Presentation, Discussion method

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TEACHING PLAN (UNIT PLAN)

	Occupational Diseases :- Prevention and control.	2	Fundamental Principals of Occupational Health and Safety. By:-Benjamin O.ALLI	PowerPoint Presentation, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti Pramod Patil DEPARTMENT: Commerce CLASS: S.Y.E.M.E SEMESTER: IV

MONTH: January to March ACADEMIC YEAR: 2021-22 Subject: Environmental Safety, health and Management

LEARNING OBJECTIVES:
The learners will be able to understand occupational health and safety. The learners will be able to understand about physical, chemical and biological hazards.

UNIT 3	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Occupational health and safety	1. Occupational health and safety	2	1. Fundamentals of Occupational safety and health : F. Mark and K. James 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Occupational health and hazards-physical-chemical and biological	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVES:

The learners will be able to understand the meaning and need of industrial safety & management techniques. The learners will be able to understand about industrial accidents and their prevention.

UNIT 4	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Industrial safety	1. Industrial safety and management techniques	2	1. Fundamentals of Occupational safety and health : F. Mark and K. James 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Industrial safety standards and regulations	2		
	3. Accidents-definitions-prevention and control	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVES:

The learners will be able to understand the meaning and need of Safety management system. The learners will be able to understand about the concepts of EMS, ISO. They will be able to learn about OSHA, Public liability insurance act and mining act.

UNIT 5	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Safety management system	1. Safety management system- concepts of safety management systems	2	1. Environmental studies: P.G. Shinde 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. EMS, ISO 14000 and 14001	2		
	3. OSHA, Public liability insurance act and mining act.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Smita Khaire (Jadhav) DEPARTMENT: _Commerce CLASS: _SYEME SEMESTER: IV

MONTH: JAN-MAR ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to: The learners will be able to acquire a basic understanding and knowledge about the Environment and it's problems. It will help to create awareness about preserving the Environment

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Environmental Pollution and Management	**Unit I-** Water pollution-sources and types of water pollution – physical, chemical and biological-effects of water pollution. Drinking water quality standards wastewater treatment-primary, secondary, tertiary - water pollution prevention and control Act-1974.	**3**	Environmental Science by Santra S.C Essential of Ecology and Environment by S.V.S Rana.	PowerPoint Presentation
	Unit IV- Noise pollution-sources effects and control	**1.5**	Environmental Science by Santra	PowerPoint Presentation

Smita K
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TEACHING PLAN (UNIT PLAN)

	Unit V- Government Agencies and Programs- The Tiwari committee- creation of NCEPC, Department of Environment and forest- Functions of State Pollution Control Board.	**2.5**	S.C	PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

Smita K
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Snehal Jadhav DEPARTMENT: Environmental Management & Economics (EME)
CLASS: S.Y.EME SEMESTER:_IV_ MONTH: January - March ACADEMIC YEAR: _ 2021 – 2022 Sub- OHS
LEARNING OBJECTIVE/S:
The learners will be able to :
The learners will be equipped with knowledge, skills & motivation to address complex environmental challenges.
The learner will Understand different aspects in the environment with issues and their management technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	Risk Assessment , Principals of Control, Incident Investigation, Recording and Reporting	3 4	Scoot, R.M .1997, Basic concept of Industrial hygiene, Lewis Publication, New York. Handbook of Occupational Safety and Health https://www.osha.gov/OshDoc/Directive_pdf/ADM_04-00-001.pd	Power Point Presentation

Snehal Jadhav
SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

	Chemical And Biological Health Hazrads and control			
	Construction Activities - Hazards and Control	3	Handbook of Occupational Safety and Health http://www.ilocis.org/documents/chpt93e.htm	Power Point Presentation
	Monitoring , Review and Audit	3	Scoot, R.M .1997, Basic concept of Industrial hygiene, Lewis Publication, New York. http://www.ilocis.org/documents/chpt93e.htm	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

Snehal Jadhav
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Smita S. Khaire____ _____DEPARTMENT: ___ COMMERCE_____ CLASS: _____TYEME_____ SEMESTER: ____V_____ MONTH: ____AUGUST TO OCTOBER_____ ACADEMIC YEAR: _____2021 -2022_____

LEARNING OBJECTIVE/S:

The learners will be able to understand the importance of Environment Management and Sustainable development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TEACHING PLAN (UNIT PLAN)

Environmental Impact Assessment	Unit I- EIA-Introduction-Concept of EIA-Scope and Objective of EIA-Organization responsible for EIA-Site selection and area classification-Sitting and setting Criteria for EIA projects.	5	Environmental science by Santra S.C	PowerPoint Presentation
	Unit II- Description of environmental setting- Inclusion or Exclusion of environmental items.	2	Online Resources	PowerPoint Presentation
	Unit III- Various steps of EIA- Content of EIA- Assessment methodology- Ad-hoc, Overlay, Network, Matrix and Checklist, Cost benefit analysis- Case studies: Hydroelectric projects, Mining, Power plant, Roads and Airport.	5	Environmental Chemistry and Pollution Control by S.S. DARA	PowerPoint Presentation

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _5_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: varada katle DEPARTMENT: COMMERECE CLAS TY EME MONTH: JULY -OCTOBER ACADEMIC YEAR: 21-22

SUBJECT : EM

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Unit -3	Factors influencing EDP Role of culture in entrepreneurs Development ,EDP	5	VIPUL PRAKASHAN	ONLINE . TOOLS MOBILE PHONE AND LABTOP
	Problem faced by Entrepreneurs	5		
	SHG, option available to ANCILLARISATION. Franchise,			
	Take over ,merger ,acquisition, social entrepreneurship			

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	Idea generation, SWOT analysis Different types of appraisal Project formulation project report			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURE PER UNIT

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Aaradhana Singh DEPARTMENT: EME CLAS TY EME MONTH: JULY -OCTOBER ACADEMIC YEAR: 21-22
SUBJECT : EM
LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to UNDERSTAND THE Entrepreneurship skills and Management.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	**Concept, meaning and definition of entrepreneur and entrepreneurship.** **Importance and significance of growth of entrepreneurial activity.** **Concept of intrapreneur.**	4	Online Resource	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

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TEACHING PLAN (UNIT PLAN)

	Characteristics and qualities of entrepreneurs Classification and types of entrepreneurs. **Women entrepreneurs** **Theories of entrepreneurship Contribution of Mc Clelland and Joseph Schumpeter**			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 LECTURE PER UNIT

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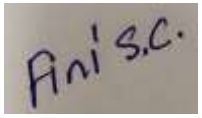
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE_ CLASS: T.Y.EME SEMESTER: V MONTH: JULY OCT 2021 ACADEMIC YEAR: 2021-2022 (**PROJECT MANAGEMENT**)

LEARNING OBJECTIVE/S: To make students understand the concepts of Project Management for planning to execution of projects.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II, III,	MODULE II - Functional Manager v/s Project Manger, Project responsibilities, Demands on Project Manager, Project Manager selection, Cultural and the Project impact of institutional environment, Need for multicultural Communication.	5		Google Meet, Google Classroom, PPT.
	MODULE III - Project organization, Pure Project organization, Matrix, Mixed Organizational system, Choosing a firm, Risk Management, Project Management Office, The Project team, Human factors and the Project team, Sources of conflicts.	5		Google Meet, Google Classroom, PPT.



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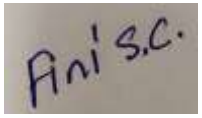
TEACHING PLAN (UNIT PLAN)

	MODULE V - Network Techniques PERT and CPM, Precedence Programming, Resource loading, Leveling, Goldratt's critical chain, Monitoring system design, Reporting process, Project Management Information System (PMIS).	5		Google Meet, Google Classroom, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____



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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

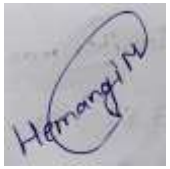
NAME OF THE STAFF: HEMANGI VIJAY MEHTA DEPARTMENT: COMMERCE

CLASS: T.Y.EME SEMESTER:V MONTH:JULY – OCT 2021 ACADEMIC YEAR:2021-2022 (PROJECT MANAGEMENT)

LEARNING OBJECTIVE/S:

The learners will be able to: To make students understand the concept of project management for planning and to execution of projects.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, IV, VI,	Module I : Project Definition, Project Life Cycle, Project Objectives, Purpose of project mang., Project mang. Maturity, Project selection and choice, Types of Project, Selection models, Analysis Under Uncertainty and Rise, Project portfolio process.	5		Google Meet, PPT



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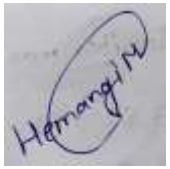
TEACHING PLAN (UNIT PLAN)

	Module IV : Project Planning and Coordination, Systems Integration, Action Plan, Work breakdown structure, Partnering, Chartering, Categories of conflict, Principle of Negotitation, Top down and Bottom up Budgeting, Activity v/s Program Budgeting.	5		Google Meet, PPT
	Module VI : Project Control, Purposes, Types, Post control, Critical Ratio and Control Chats, Balance in Control systems, Project Auditing, Purpose of Evaluation, Use of audit Report Product Audit life cycle, Measurement varieties of Project Termination.	5		Google Meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : TYEME SEM : V MONTH : July-October YEAR : 2021-22

LEARNINGOBJECTIVE/S : The learners will be able to learn various aspects of strategies. It is very essential part of management. This subject is helpful to develop strategic management skills among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TEACHING PLAN (UNIT PLAN)

Strategic Management	**MODULE I : INTRODUCTION TO STRATEGIC MANAGEMENT** ● Introduction ●Definition and concept of company, business and management levels ●Nature, importance, benefits of strategic management ●Management models and guidelines for effective strategic management ●Overview of strategic management process	10	Strategic management by McGraw Hill Education, 12th edition	Google meet, PPT

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TEACHING PLAN (UNIT PLAN)

	MODULE III : STRATEGY IMPLEMENTATION ●Implementation of strategy to fundamental areas i) Production ii)Operation iii)Marketing iv)Finance v)HRM vi)Other	10	Strategic management by McGraw Hill Education, 12th edition	Google meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: varada katle DEPARTMENT: COMMERECE CLASS: TY EME SEMESTER **V** MONTH: JULY-OCTOBER 2021 ACADEMIC YEAR: 21-22 SUBJECT : SM
LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT -2 UNIT -4	STRATEGY FORMULATION: vision ,mission, goals. SWOT	5	Mnanan PRAKASHAN	ONLINE . TOOLS MOBILE PHONE AND LABTOP
	Entrepreneurial model ,planning model, adaptive model	5		
	Types of strategy			

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	Strategy evaluation			
	Review ,feedback, control, effective evaluation, contingency planing			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURE PER UNIT

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NAME OF THE STAFF: Shruti Pramod Patil DEPARTMENT: Commerce CLASS: T.Y.E.M.E SEMESTER: V

MONTH: July to October ACADEMIC YEAR: 2021-2022 Subject: Environmental Impact Assessment

LEARNING OBJECTIVES:
The learners will be able to understand EIA procedures.

UNIT 2	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environmental Impact Assessment	1. Some suggested approaches for developing a list of environmental Factors	2	1. Environmental Assessment in Practice: D.Owen Harrop and J.Ashley Nixon 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Informational Sources for Environmental factors.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

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LEARNING OBJECTIVES:

The learners will be able to learn details of Environmental Impact Assessment Notification (1994).

UNIT 4	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environmental Impact Assessment Notification	1. Environmental Impact Assessment Notification (1994): Procedure for Environmental Clearance, List of the projects requiring Environmental Clearance, Composition of Expert Committee for Impact Assessment, Public hearing Committee, Procedure for public hearing - Project clearance.	05	1. EIA notification 1994 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVES:

The learners will be able to understand the detailed content of EIS.

UNIT 5	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EIS	1. Detailed content of EIS	2	1. Environmental Assessment in Practice: D.Owen Harrop and J.Ashley Nixon 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Use of visual display methods, Statement documentation, general writing suggestion.	2		

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHAL JADHAV DEPARTMENT: EME CLASS: TYEME SEMESTER: V MONTH: June to October

ACADEMIC YEAR: 2021-22

SUBJECT- ENVIRONMENTAL LEGISLATION

LEARNING OBJECTIVE/S:
The learners will be able:

1. To identify and understand the benefits, challenges, and gaps under the current scenarios of Environmental laws
2. To explain various environmental issues, pollution, and control measures
3. To analyze environmental laws along with the norms prevailing at international and national level.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TEACHING PLAN (UNIT PLAN)

		ALLOTTED		
UNIT- 1	Constitutional Provisions for Environmental Protection:	10	ONLINE RESOURCES	Chalk and board
	Specific Provisions for Environmental Protection in the Constitution of India		ONLINE RESOURCES	Chalk and board
	Provisions in the Directive Principlesof State Policy.		ONLINE RESOURCES	Chalk and board

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-2	1. Environmental Acts, Rules, and Notifications: The following environmental Acts/Rules will be discussed in details; the rest of the acts, rulesand notifications will be referred to: a) Water (Prevention & Control of Pollution) Act and the corresponding Rule	10	ONLINE RESOURCES	Chalk and board
	Water (Prevention & Control of Pollution) Cess Act and the corresponding Rule		ONLINE RESOURCES	Chalk and board

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	b) Air (Prevention & Control of Pollution) Act and the corresponding Rule		ONLINE RESOURCES	Chalk and board
	c) Environment (Protection) Act and Rule		ONLINE RESOURCES	Chalk and board

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TEACHING PLAN (UNIT PLAN)

UNIT- 3 & 4	Public Liability Insurance Act and Rule	10	ONLINE RESOURCES	Chalk and board
	Forest Conservation Act 1980		ONLINE RESOURCES	Chalk and board
	Wildlife Protection Act 1972		ONLINE RESOURCES	Chalk and board
	Green Benches (National Green Tribunal Act 2010		ONLINE RESOURCES	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

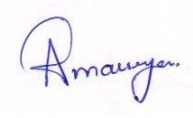
NAME OF THE STAFF: Ashlesha Maurya DEPARTMENT: COMMERCE-EME CLASS: TYEME

SEMESTER: VI MONTH: JAN TO APRIL ACADEMIC YEAR: 2021-2022

SUBJECT: Disaster Management

LEARNING OBJECTIVES:
The learners will be able to:

- To Identify and explain major types of disasters and the appropriate mitigation strategies
- To examine the importance of effective disaster preparedness, planning and operations in ensuring reduction in damage
- To evaluate the different Medical and Psycho-Social Preparedness to disasters



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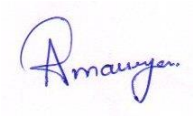
TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II	Natural disaster -Landslides	02		Online and Offline lectures (Google Meet, PPT)
	Earth quake	02		Online and Offline lectures (Google Meet, PPT)



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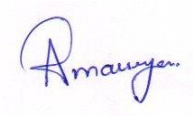
TEACHING PLAN (UNIT PLAN)

UNIT IV	Medical Management of disaster – Disaster Impacts and response – Identification of dead – Search rescue –first and relief phase – Vaccination, basic sanitation and personal hygiene.	08		Online and Offline lectures (Google Meet, PPT)
UNIT V	Environmental Disaster – Assessment, Planning – mitigation program – preparedness – resettlement	08		Online and Offline lectures



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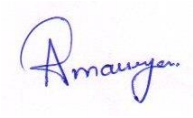
	rehabilitation – role of NGOS, Gos (relief camp), Psychotherapy – simplified yoga and meditation, stress management.			(Google Meet, PPT)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashlesha Maurya DEPARTMENT: EME CLASS: TYEME

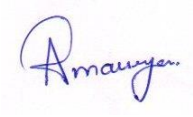
SEMESTER: VI MONTH: JAN TO APRIL ACADEMIC YEAR: 2021-2022

SUBJECT: **Environment and Ecotourism**

LEARNING OBJECTIVES:
The learners will be able :

1. To identify and understand concepts related to management and planning of ecotourism
2. To determine environmental and social consequences of ecotourism
3. To analyze sustainable tourism with focus on national and international destinations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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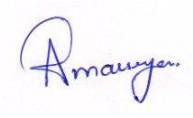
TEACHING PLAN (UNIT PLAN)

UNIT-IV	Principles of Ecotourism – Types of Ecotourism – Concepts of Ecotourism –	03		Online and Offline lectures (Google Meet, PPT)
	Objectives of Ecotourism – benefits of Ecotourism – trends affecting ecotourism.	02		Online and Offline lectures (Google Meet, PPT)



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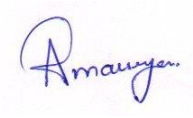
TEACHING PLAN (UNIT PLAN)

UNIT-V	Impact of Ecotourism – Economic impacts (fiscal impacts, concepts & Methods) – Types and degree of impacts from Ecotourism activities –	05		Online and Offline lectures (Google Meet, PPT)
	Socio cultural impacts – Eco tourism related organization – Ecotourism Research disasters & Ecotourism.	05		Online and Offline lectures



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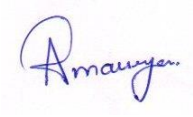
				(Google Meet, PPT)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashlesha Maurya DEPARTMENT: EME CLASS: TYEME SEMESTER: **VI** MONTH: JAN TO APRIL
ACADEMIC YEAR-2021-22
SUBJECT: Environmental Problems hazards and mitigation
LEARNING OBJECTIVES:

1. To identify and understand about pollution and environmental degradation
2. To examine best practices of urban and rural environmental management
3. To analyze environmental elements and importance of biodiversity

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2: Global and Regional Environmental Issues:	GreenHouse effect – causes and associated hazards,	2	Environment- shankar IAS Academy	Chalk and Board
	Ozone layer depletion – causes and associated hazards,	2	Environment- shankar IAS Academy	Chalk and Board
	Acid rain, Deforestation and loss of biodiversity;	3	Environment- shankar IAS Academy	Chalk and Board

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TEACHING PLAN (UNIT PLAN)

	Major environmental problems in India	3	Environment- shankar IAS Academy	Chalk and Board

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4: Problems of Rural Environment	Drinking water, Domestic fuel, Food and Fodder, Sanitation, Health, and Hygiene,	2	Environment- shankar IAS Academy	Chalk and Board
	Land degradation	3	Environment- shankar IAS Academy	Chalk and Board

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 5: Environmental problems related to forest and wetlands:	Human intervention, Degradation, encroachment,	2	Environment- shankar IAS Academy	Chalk and Board
	loss of habitats and biodiversity	3	Environment- shankar IAS Academy	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED : __40_____

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VARADA KATLE DEPARTMENT: COMMERCE CLASS: TY EME

SEMESTER: VI MONTH: OCTOBER ACADEMIC YEAR: 2022

SUBJECT: corporate Governance

LEARNING OBJECTIVES: To share knowledge
The learners will be able to: Understand the Topic

➢

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TEACHING PLAN (UNIT PLAN)

UNIT 1, 2	CORPORATE GOVERNANCE MEANING AND REPORTS		VIPUL PRAKASHAN	ONLINE AS WELL AS OFF LINE
	ROLE OF AGENCY THEORY ROLE OF CEO AND SENIOR EXECUTIVES			
	ROLE OF INVESTOR AND SHAREHOLDER			

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH SUB: CORPORATE GOVERNANCE DEPARTMENT: SELF FINANCE

CLASS: TYEME SEMESTER: VI MONTH: OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the meaning of corporate governance.
- Get knowledge of rights of various stakeholders.
- Interpret the corporate governance and corporate ethics.
- Know in detail about various committees of CG.

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit – 3	• Rights of CEO • Rights of BOD • Rights of Senior Executives • Rights of other stake holders • Rights of employees	08	Jack R. Meredith and Samuel J. Mantel Jr.- "Project management, A managerial approach"	Chalk Board, Discussion, and Test

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TEACHING PLAN (UNIT PLAN)

Unit 4	• Functional manager v/s project manager • Financial regulations • Corporate governance and corporate ethics • Scope of CG • Scope of Financial Regulations • Need for multicultural communities	08	Jack R. Meredith and Samuel J. Mantel Jr.- "Project management, A managerial approach"	Chalk Board, Discussion, and Test
Unit 5	• Cadbury committee • Birla committee • Narayan Murthy committee • Kumar Mangalam committee	08	Jack R. Meredith and Samuel J. Mantel Jr.- "Project management, A managerial approach"	Chalk Board, Discussion, and Test

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : TYEME SEM : VI MONTH : Jan-April YEAR : 2021-22

LEARNINGOBJECTIVE/S : The learners will be able to learn various aspects about corporate social responsibility. It is very essential part of business. This subject is helpful to create awareness about social responsibilities of business among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Module I: Building blocks of CSR/sustainability Overview, Tripple-bottom line approach, environmental issues, social issues, labour issues, ethical and government issues, human rights-UN charter.	10	Business ethics and CSR, Manan prakashan	Google Meet, PPT, chalk and boar

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TEACHING PLAN (UNIT PLAN)

Corporate Social Responsibility	**MODULE III: Engaging the stakeholder** Global Reporting Initiative G-3, NGO and CSR, programmes for the neighbourhood.	05	Business ethics and CSR, Manan prakashan	Chalk and board

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TEACHING PLAN (UNIT PLAN)

	MODULE IV: Cases and papers	05	Business ethics and CSR, Manan prakashan	Chalk and board, PPT

Total lectures allotted to units: 20

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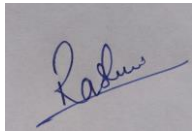
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Rashmi Gurunani DEPARTMENT : Commerce

CLASS : TYEME SEM : VI MONTH : Jan-April YEAR : 2021-22

LEARNINGOBJECTIVE/S : The learners will be able to learn various aspects about corporate social responsibility. It is very essential part of business. This subject is helpful to create awareness about social responsibilities of business among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Corporate Social Responsibility	**MODULE II. Standards and Codes** 1. ISO – 14001 2. OHSAS – 18001 3. SA – 8000 4. OECD Guidelines for Multinational Companies 5. Global Compact 6. AA – 1000 7. BS / ISO Guideline on CSR Management (ISO-26000) .	15	Business ethics and CSR, Manan prakashan	Google Meet, PPT, chalk and board



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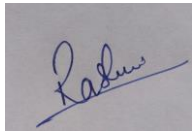
TEACHING PLAN (UNIT PLAN)

	MODULE III: Engaging the stakeholder Markets at the BOP Communication Dilemmas Dow Jones Sustainability Index / FTSE4GOOD Index	07	Business ethics and CSR, Manan prakashan	Google Meet, PPT, chalk and board



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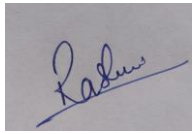
TEACHING PLAN (UNIT PLAN)

	MODULE IV: Cases and papers	08	Business ethics and CSR, Manan prakashan	Google Meet, PPT, chalk and board

Total lectures allotted to units: 30



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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti P. DEPARTMENT: EME CLASS: TYEME

SEMESTER: VI MONTH: Nov- April ACADEMIC YEAR: 2021 - 2022

SUBJECT: Environment & Ecotourism

LEARNING OBJECTIVES:
The learners will be able to: understand the importance of ecotourism.
b) describe the link between ecotourism and reduction in poverty levels.
c) explain the human factors that have an impact on ecotourism.

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I,II	Agriculture-ContributiontoEconomicdevelopment-foodproblem			
	landreformsinIndia,Bhoodanmovement-Greenrevolution-			
	PanchayatRaj-CommunitydevelopmentProjects -Co-Operativemovement.	12		

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	Ruralsocialstructure-caste system,jointfamily-religioncaste,culturalsocial &psychologicalbarrierstoeconomicdevelopmen			
	overcoming-resistancetochange			
UNIT III	ConceptsofTourism-Classification-Religioustourism	8		

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	Culturaltourism-Heritagetourism-Monumentaltourism			
	Adventuretourism-Marstourism-Sustainabletourism			
	Consumptive&nonconsumptivetourism PrinciplesofEcotourism-TypesofEcotourism-ConceptsofEcotourism			

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Snehal Jadhav DEPARTMENT: Environmental Management & Economics CLASS: TYEME

SEMESTER: VI MONTH: Nov -April ACADEMIC YEAR:2021 - 2022

SUBJECT: Environmental Problems Hazards & Mitigation

LEARNING OBJECTIVES:
The learners will be able to:

- To identify and understand about pollution and environmental degradation
- To examine best practices of urban and rural environmental management

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Natural and Man made Environmental Problems:	Environmental problems associated with urbanization,	3	Online Resource	Chalk and Board
	Environmental problems associated with industrialization	3	Online Resource	

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TEACHING PLAN (UNIT PLAN)

	Environmental problems associated with modernization of agriculture	4	Online Resource	Chalk and Board
Unit 2: Global and Regional Environmental Issues:	GreenHouse effect – causes and associated hazards,	2	Environmental Chemistry -S.S Dara	Chalk and Board
	Ozone layer depletion – causes and associated hazards,	2	Environmental Chemistry -S.S Dara	Chalk and Board

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	Acid rain, Deforestation and loss of biodiversity;	3	Environmental Chemistry -S.S Dara	Chalk and Board
	Major environmental problems in India	3	Environmental Chemistry -S.S Dara	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

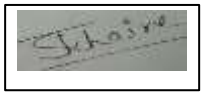
NAME OF THE STAFF: _Smita S. Khaire_____DEPARTMENT: ___ COMMERCE_____

CLASS: _____TYEME_____ SEMESTER: ____VI_____ MONTH: ____January to April_____ ACADEMIC YEAR: _____2021 -2022_____

LEARNING OBJECTIVE/S:

The learners will be able to understand the different types of Solid Waste and Importance of Solid & Hazardous Waste Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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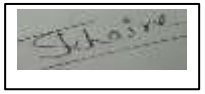
TEACHING PLAN (UNIT PLAN)

Solid & Hazardous Waste Management	UNIT I SOLID WASTE: Definition of solid wastes – types of solid wastes – Sources - Industrial, mining, agricultural and domestic – Characteristics. Solid waste Problems - impact on environmental health – Concepts of waste reduction, recycling and reuse	4	Environmental Chemistry and Pollution Control by S.S. DARA	PowerPoint Presentation
	UNIT II COLLECTION, SEGREGATION AND TRANSPORT OF MUNICIPAL SOLID WASTES: Handling and segregation of wastes at source. Collection and storage of municipal solid wastes; analysis of Collection systems. Transfer stations – labeling and handling of hazardous wastes	4	Online Resources	PowerPoint Presentation



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TEACHING PLAN (UNIT PLAN)

	UNIT III MUNICIPAL SOLID WASTE MANAGEMENT: Solid waste processing technologies. Mechanical and thermal volume reduction. Biological and chemical techniques for energy and other resource recovery: composting, vermicomposting, Termigradation, fermentation. Incineration of solid wastes.	5	Environmental science by Santra S.C	Chalk- Board Method

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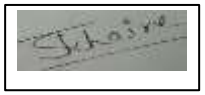

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	Disposal in landfills: site selection, design, and operation of sanitary landfills; Leachate and landfill gas management; landfill closure and post-closure environmental monitoring; landfill remediation. Regulatory aspects of municipal solid waste management.			
	UNIT VII RADIOACTIVE WASTE MANAGEMENT: Radioactive waste: Definition, Sources, Low level and high level radioactive wastes and their management, Radiation standard by ICRP and AERB	3	Online Resources	Chalk- Board Method

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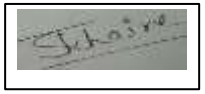
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Snehal Jadhav DEPARTMENT: Environmental Management & Economics CLASS: TYEME

SEMESTER: VI MONTH: October - April ACADEMIC YEAR: 2021 -222

SUBJECT: Solod Hazardous & Waste Management

LEARNING OBJECTIVES:
The learners will be able to:he learners will be able to understand the different types of Solid Waste and Importance of Solid & Hazardous Waste Management.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S
Solid & Hazardous Waste Management	UNIT II COLLECTION, SEGREGATION AND TRANSPORT OF MUNICIPAL SOLID WASTES: Handling and segregation of wastes at source. Collection and storage of municipal solid	4	Online Resources

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	wastes; analysis of Collection systems. Transfer stations – labeling and handling of hazardous wastes		
	UNIT III MUNICIPAL SOLID WASTE MANAGEMENT: Solid waste processing technologies. Mechanical and thermal volume reduction. Biological and chemical techniques for energy and other resource recovery: composting, vermicomposting, Termigradation, fermentation. Incineration of solid wastes. Disposal in landfills: site selection, design, and operation of sanitary landfills; Leachate and landfill gas management; landfill closure and post-closure environmental monitoring; landfill remediation. Regulatory aspects of municipal solid waste management.	5	Environmental science by Santra S.C

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	UNIT IV HAZARDOUS WASTES: Hazardous waste definition. Physical and biological routes of transport of hazardous substances – sources and characterization categories and control. Sampling and analysis of hazardous wastes – analytical approach for hazardous waste characterization – proximate analysis – survey analysis – directed analysis – analytical methods.	4	Environmental science by Santra S.C
	UNIT V HAZARDOUS WASTES MANAGEMENT: Sources and characteristics: handling, collection, storage and transport, TSDF concept. Hazardous waste treatment technologies - Physical, chemical and thermal treatment of hazardous waste: solidification, chemical fixation, encapsulation, pyrolysis and incineration. Hazardous waste land fills - Site selections, design and operation. HW reduction, recycling and reuse, Regulatory aspects of HWM.		
	UNIT VI BIOMEDICAL WASTE MANAGEMENT: Biomedical waste: Definition, sources, classification, collection, segregation Treatment and disposal.	4	online Resources

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4

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NAME OF THE STAFF: _Smita S. Khaire_____DEPARTMENT: ____

COMMERCE_____

CLASS:_____TYEME_____ SEMESTER:____VI_____ MONTH:____January to April_____

ACADEMIC YEAR:_____2021 -2022_____

LEARNING OBJECTIVE/S:
The learners will be able to understand the different types of disaster and importance of Disaster Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Disaster Management	UNIT 1 Disaster – Introduction –Types of natural calamities, major and minor calamities – impact of calamities.	5	Environmental Chemistry and Pollution Control by S.S. DARA	Chalk- Board Method
	UNIT II-Natural disaster – cyclone – Tsunami – flood	3	Online Resources	Chalk- Board Method
	UNIT III Manmade disaster – Wars – Biological war (introduction of pathogens) – misuse of atomic bombs –major accidents from industries e.g., Bhopal. Lov canal disaster – London Smog.	5	Environmental science by Santra S.C	PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Sunitha C. Nair _____ DEPARTMENT: _Commerce __ _____ CLASS: _____F.Y.E.M.E _ __ SEMESTER: _ II_ MONTH: _____January - April _ ___ACADEMIC YEAR: 2021-22_

LEARNING OBJECTIVE/S:

The learners will be able to :

_To make the students understand Macroeconomics and International trade and its application to environmental business .

The learners will be able to understand the decision making process of business .

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
I	**Macro economic aggregates and concepts**- Circular flow of income, National income and related concepts, Human Development Index, Supply of money, Demand for money, price level, Inflation and Stagflation.	02	Advance Macro Economics (H.L. Ahuja)	Power point presentation and Discussion method
	International Trade -Overview of International trade, Basis of trade, Balance of Payments and Mechanism for International Payments.	02	Advance Economic	Power point presentation and Discussion method

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TEACHING PLAN (UNIT PLAN)

II			**Theory (M.L. Jhingan)**	
IV	**Globalisation** - Meaning, effects, Role of IMF and World Bank, Concept of Global recession with contagion effects	**02**	**Advance Economic Theory (M.L. Jhingan)**	**Power point presentation and Discussion method**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 6

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SMITA KHAIRE (JADHAV)

DEPARTMENT: Commerce CLASS: FYEME SEMESTER: II

MONTH: Jan to Apr ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to acquire a basic understanding and knowledge about the Environment and its components. Learner will be able to acquire an attitude of concern for protection of Environment.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Ecology and Environment	**Module II:** Origin of **Atmosphere**- Vertical structure of atmosphere- Ecological significance of air- Horizontal motion of atmosphere, Vertical movement- upper air circulation (Jet stream) Air masses- Important properties of the atmosphere- Acid rain.	03	Essential of Ecology and Environmental Science by S.V.S Rana	PowerPoint Presentation
	Module IV: Hydrologic- Water Budget- Fresh water environment Lakes – Eutrophication of lake - Reservoir- Running water- The open sea- physico-chemical aspects of	04	Essential of Ecology and	PowerPoint Presentation

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TEACHING PLAN (UNIT PLAN)

	Marine Environment Wetland and coastal environment- Antarctica research programme – Coral Reef – Exclusive Economic Zone(EEZ)- Estuaries- Biosphere- Introduction- concept of Biome- Evolution and Diversity in Biomes- major Biomes of Earth- Landforms. **Module VI**: **Resource** cycle- mineral resources- marine resources Mineral resources of Antarctica, Energy resources- Renewable sources of energy- energy from biomass- Geothermal energy, ocean thermal energy- Non-renewable sources of energy- Nuclear energy- Energy for the future- Forest resource- deforestation Water a vital resource- India's water budget.	04	Environment by S.V.S Rana Environmental Science by Santra S.C	PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Sandara Almeida DEPARTMENT: _Commerce CLASSFY EME SEMESTER II

MONTH Dec - Mar ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to learn the various aspects about costing

This subject is helpful to develop Cost Accounting skills among learners

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	Unit 1 Introduction and importance to cost Accounting	8	C S Rayadu	Google meet , google classroom, PPT
	Unit 2 Elements of cost Bases of cost classification	8	M N Aurora	Google meet , google classroom, PPT
	Unit 3 Reconciliation between cost and financial records	8	Maheshwari S N	Google meet , google classroom, PPT
	Unit 4 Elementary principles of Marginal costing	8		Google meet , google classroom, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: EME CLASS: FYEME SEMESTER: II MONTH: JAN-MARCH

ACADEMIC YEAR:2021-22 SUBJECT: PRODUCTION MANAGEMENT AND MATERIAL MANAGEMENT

LEARNING OBJECTIVE/S: understanding of **production** as a process of converting or transforming resources into products; an understanding of the manager's concern in planning, organizing, directing, and controlling productive **operations** to meet organizational **objectives**

The learners will be able to :

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 1	Introduction to the concept of operations and Operation Management	1	Principles of operation management by jay heizer	MS-Power Point, Google Meet, Google classroom, google form
	Development of Production Function. Relation of Production with other Functions like design function, purchase function, plant layout, maintenance etc.	2	The Toyota product development by james m morgan	Same as above
	Production classification, product selection (steps in identifying the product for manufacturing), Product development (market pull, technology push, inter functional approach).	2	Same as above	Same as above
	Brief description/importance of research development and design of a product	1	Same as above	Same as above

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	Facilities planning (how much to produce, level of automation, facilities required for manufacturing , where to produce, arranging required facilities, how to produce etc.) production systems	2	Same as above	Same as above
	Plant layout: difference between various types of layout (Product layout, process layout, Cellular layout, static layout etc)	2	Same as above	Same as above
	Various types of material Handling systems: their guidelines/principles, distinguishing features, uses	1	Production and inventory control	Same as above
UNIT – III	Importance of materials management (corporate policy, organisation, research, planning, source selection)	1	Same as above	Same as above
	Value Analysis and Value Engineering	1	Same as above	Same as above
	Purchase Management, importance of purchasing, various R's of Purchasing, purchasing systems	2	Same as above	Same as above
	Need for forecasting price/policy on seasonal commodities and capital equipments. Simple problems on various types of forecasting including exponential smoothing	2	Same as above	Same as above
	Inventory management, its prime importance in our country today. Inventory control techniques- ABC, FSN, GOLF, VED, SOS, HML	3	Same as above	Same as above
	Make or Buy Decisions: Problems on inventory Management			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _

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TEACHING PLAN (UNIT PLAN)

UNIT – IV	Warehousing and stored management- centralised and de-centralised stores. Brief introduction to various methods of stores accounting.	2	Same as above	Same as above
	Need for stock verification	1	Same as above	Same as above
	Management of scrap, waste, surplus, obsolete materials.	1	Same as above	Same as above
	JIT, KANBAN, KAIZEN, Push vs. Pull concept, MRP	2	Same as above	Same as above
	Explanation of EOQ – its advantages and disadvantages. Types of inventory systems (PSystems and – Systems). Need for safety stock/reserve stock. Simple problems on these topics.	1	Same as above	Same as above
	SQC – techniques, Control Charts, X- Bar chart, R- chart, P- chart, C-chart. Graphical representation. Direct problems on these topics	2	Same as above	Same as above

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: COMMERCE CLASS: FYEME

SEMESTER: II MONTH: NOVEMBER - MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES: The Learners will be able to understand the old school and contemporary method and theories utilized to understand the terms of trade and exchange along with the legalities of trading relations under the policy brackets to cater the smooth international trade between nations.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
II, II & V	Unit I: Determination of income and employment Overview of classical and Keynes theory Business cycle features, causes and measures IS-LM market	(01 Lectures) Per	M.L. Jhingan: International Economics Dominick Salvatore: International	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _

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TEACHING PLAN (UNIT PLAN)

			Economics Trade and Finance	
	Unit II: Policy Environment Role of state Theory of economic policy Monetary policy Fiscal policy Economic stabilization Structural policy Commercial Trade Policy: Free Trade & Protection , Pros & Cons	(01 Lectures) Per Per week	Paul Krugman: International Economics Theory and Policy. Desai and Bhalerao: International Economics	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST
	Unit V: GLOBALIZATION Meaning, effects, gains, problems, role of IMF and world bank; Concept of global recession and effects	(01 Lectures) Per Per week	M.L. Jhingan:	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST

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TEACHING PLAN (UNIT PLAN)

	WTO: concept, agreement, implications, issues and dispute settlement		International Economics Dominick Salvatore: International Economics Trade and Finance	

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Madhu dharma DEPARTMENT: Mathematics (Statistics) CLASS: FY.EME SEMESTER: II MONTH: December to February ACADEMIC YEAR:2021-22
LEARNING OBJECTIVE/S: To make students comfortable with data analysis in real life.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Paper-1 :Unit1: Types of Data and Tabulation	• Introduction: Functions/Scope, Importance, Limitations • Data: Relevance of Data(Current Scenario), Type of data(Primary & Secondary), • Primary(Census vs Samples, Method of Collection (In Brief), Secondary(Merits, Limitations, Sources) (In Brief) • Presentation Of Data: Classification – Frequency Distribution – Discrete & Continuous, Tabulation, Graph(Frequency, Bar Diagram, Pie Chart, Histogram, Ogives) • Measures Of Central Tendency: Mean(A.M, Weighted,	15	**V.K. S.C. Fun da stati s**	

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TEACHING PLAN (UNIT PLAN)

	Combined), • Median(Calculation and graphical using Ogives), Mode(Calculation and Graphical using Histogram), Comparative analysis of all measures of Central Tendency			
Unit-2 measure of dispersion , correlatio n & regression	Measures Of Dispersion: Range with C.R(Co-Efficient Of Range), Quartiles & Quartile deviation with CQ (Co-Efficient Of Quartile), Mean Deviation from mean with CMD (Co-Efficient Of Mean Deviation), Standard deviation with CV(Co-Efficient Of Variance), Skewness& Kurtosis (Only concept) • Co-Relation: Karl Pearson, Rank Co-Relation • Linear Regression: Least Square Method	10		

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TEACHING PLAN (UNIT PLAN)

Unit- 3 time series & index numbers Unit-4 Probability & random variable Unit-5	• Time Series: Least Square Method, Moving Average Method, Determination of Season • Index Number: Simple(unweighted) Aggregate Method, Weighted Aggregate Method, Simple Average of Price Relatives, Weighted Average of Price Relatives, Chain Base Index Numbers, Base Shifting, Splicing and Deflating, Cost of Living Index Number Probability: Concept of Sample space, Concept of Event, Definition of Probability, Addition & Multiplication laws of Probability, Conditional Probability, Bayes' Theorem(Concept only), Expectation & Variance, Concept of Probability Distribution(Only Concept)	5		

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TEACHING PLAN (UNIT PLAN)

Elementary topics on Estimation and Testing of hypothesis				
	• Sample from a distribution : Concept of a statistic estimate and its sampling distribution. Parameter and it's estimator. Concept of bias and standard error of an estimator. • Central Limit theorem (statement only). Sampling distribution of sample mean and sample proportion. (For large sample only) • Standard errors of sample mean and sample proportion. Concept of hypothesis	15 lectures for Unit 4 / 5		

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TEACHING PLAN (UNIT PLAN)

	Null and alternate hypothesis, • Types of errors, Critical region, Level of significance. • Large sample tests (using central limit theorem, if necessary) • For testing specified value of population mean • For testing specified value in difference of two means • For testing specified value of population proportion • For testing specified value of difference of population proportion (Development of critical region is not expected.)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_ 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashlesha Maurya DEPARTMENT: EME CLASS: FYEME

SEMESTER: II MONTH: JAN TO APRIL ACADEMIC YEAR: 2021-2022

SUBJECT: ECOLOGY AND ENVIRONMENT

LEARNING OBJECTIVES:
The learners will be able to:

- To understand the importance of ecology, biodiversity conservation, and the impact of human activities on natural systems.
- To learn about environmental ethics and its protection.
- To enhance the student's knowledge in various environment components like Atmosphere, Lithosphere and Hydrosphere.

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I	Ecology and Biodiversity conservation Ecology – Meaning, Scope & Ecology Today, Subdivisions of Ecology, Fundamental Concepts of Ecology, Environmental Pollution - Air, Water, Noise, Soil, Chemical and Radioactive pollution, Global Warming, Ozone layer depletion and Acid Rain	10		Online and Offline lectures (Google Meet, PPT)
	Biodiversity- Types of biodiversity- Value of biodiversity - Biodiversity hotspot in India- Loss of biodiversity- Conservation of biodiversity			Online and Offline lectures (Google Meet, PPT)

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TEACHING PLAN (UNIT PLAN)

Lithosphere UNIT III	Zonal Structure of the Earth, Soil Types, Soil Classification, Types of Rocks and Minerals, Soil profile	05		Online and Offline lectures (Google Meet, PPT)
	Soil Erosion in India, Soil Conservation, Biota of the Soil	05		Online and Offline lectures (Google Meet, PPT)

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: EME CLASS: FYEME SEMESTER: II MONTH: JAN-MARCH

ACADEMIC YEAR:2021-22 SUBJECT: HRM

LEARNING OBJECTIVE/S: To develop the understanding of the concept of **human resource management** and to understand its relevance in organizations. To know necessary skill set for application of various HR issues. To analyse the strategic issues and strategies required to select and develop manpower resources..

The learners will be able to :

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Introduction to HRM Human Resource Planning Job Analysis, Job Design and Job Evaluation	Definition, Features, Scope/Functions of HRM, Definition of Personnel Management. Evolution of HRM/ Trends in HRM, Difference between HRM and PM , Challenges before the HR manager,	1	***K. Aswathappa**, "Human Resources & Personnel Management- Text And Cases – Fourth Edition", Tata Mc Graw Hill*	MS-Power Point, Google Meet, Google classroom

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TEACHING PLAN (UNIT PLAN)

	Role of HR Manager, Traits/Characteristics of the workforce, Personnel Philosophy, Personnel Manual.	1	***Jayashree Sadri, Sorabh Sadri "****A Strategic Approach to Human Resources Management".* *Jaico Publishing House, Mumbai*	Same as above
	Definition of HRP Process of HRP along with brief coverage of personnel demand and supply forecasting techniques Factors affecting HRP Human Resource Information System (HRIS),	2	Same as above	Same as above
	VRS, Outsourcing, Pink slip/ termination/ retrenchment/ downsizing/ separation Contracting and Sub- contracting Promotions and Transfers	1	Same as above	Same as above

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TEACHING PLAN (UNIT PLAN)

	Job Analysis – Definition, methods of collecting job data, merits and demerits/limitations	1	Same as above	Same as above
	Job Design – Definition, Factors affecting Job Design, Approaches to Job Design	1	Same as above	Same as above
	Job Evaluation – Definition, methods of job evaluation, process of Job Evaluation	1	Same as above	Same as above
Recruitment, Selection and Induction	Recruitment – Definition, sources of recruitment , merits and demerits Selection – Definition, process of selection, types of selection tests, types of interviews	2	Same as above	Same as above
	Induction/Orientation – definition, methods, process Placement	1	Same as above	Same as above
Training and Development	Definition of Training and Development, Methods of training managers, Process/ procedure of conducting training programme,	1	Same as above	Same as above

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _

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TEACHING PLAN (UNIT PLAN)

	How to evaluate effectiveness of training programmes, Advantages of T&D	1	Same as above	Same as above
Performance Appraisal	Definition of Performance Appraisal, Methods of Appraisal for managers – traditional and modern	1	Same as above	Same as above
	Process / procedure of conducting performance appraisal Advantages of performance appraisal Limitations of Appraisal	1	Same as above	Same as above
Compensation Management	Definition of compensation, Components of Salary / Salary slip, Fringe Benefits – definition and types,	1	Same as above	Same as above
	Performance linked incentives/ incentives- definition, advantages and disadvantages	1	Same as above	Same as above
Career Planning And Development	Definition of Career Planning and Career Development, Process/ Procedure of Career Planning,	1	Same as above	Same as above

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TEACHING PLAN (UNIT PLAN)

	Career Stages/ Career Life Cycle and how to handle personnel at each stage, Essentials to make career planning successful	1	Same as above	Same as above
	Career Counselling, Employee Retention techniques, Succession planning	1	Same as above	Same as above
Participative Management	Definition of Participative Management, Levels of participation Trends in Participative Management	1	Same as above	Same as above
	Factors essential for successful participative management Forms of participation Participation through Quality Circles Empowered Teams	2	Same as above	Same as above

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TEACHING PLAN (UNIT PLAN)

Industrial Relations	Definition of Industrial Relations, Features of Industrial Relations, Importance of Industrial Relations,	2	Same as above	Same as above
	Approaches to Industrial Relations, Parties to Industrial Relations	1	Same as above	Same as above
Trade Unions	Definition of Trade Union, Features of Trade unions, Trade union movement in India/ Trends in the Trade Union	1	Same as above	Same as above

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Veronika B Barla **DEPARTMENT**: Commerce **CLASS**: S.Y.EME **DIVISION:** A, **SEMESTER**: III

MONTH: _ **SUBJECT**: Research Methods in Business **ACADEMIC YEAR**: 2021-22

LEARNING OBJECTIVE/S:
1. Help to understand RESEARCH PROCESS
2. Helps understand the FORMULATION, TESTING OF HYPOTHENOUS

The learners will be able to: 1. Helps to understand research process and hypothesis

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Module III Research process	■ Selecting the topic, defining the research problem, objectives of research, literature survey, sample design, data collection, execution of project, analysis of data and hypothesis testing, generalization and interpretation and preparation of research report.	5	Research methodology C.R. KOTHARI	Online teaching using google meet, PPT jamboard

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TEACHING PLAN (UNIT PLAN)

UNIT III **Hypothesis**	■ **Research design** – Meaning, need, features of good research design, types of research design –	2	"	"
	■ a) For exploratory research b) For descriptive research ■ b) For causal research studies	3	"	"
	■ Meaning, importance and types. Formulation of hypothesis and testing of hypothesis.	2	"	"
	■ Chi-square test, Correlation Co-efficient, Regression analysis.	2	"	"
	■ **Sampling: -** ■ Meaning , Sample and sampling, essentials of good sample. Sample size, methods of sampling: - ■	3	"	"

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 12

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TEACHING PLAN (UNIT PLAN)

	■ a) Probability sampling – cluster sampling, stratified sampling, multi stage sampling. ■ b) Non-probability sampling: - Purposive sampling, Quota sampling, Convenience sampling. ■	2	"	"

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHALS.JADHAV DEPARTMENT: COMMERCE CLASS:S.Y.EME SEMESTER: III
MONTH: July-OCTOBER ACADEMIC YEAR : 2021-22
LEARNING OBJECTIVE/S:
The learners will be able equipped which will build knowledge, skills motivation to address complex environmental challenges. The learner will understand different aspects in environment with issues and their management techniques

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Paper1 GLOBAL WARMING & CLIMATE CHANGE	UNITII- Temperature profile of the atmosphere – Lapse rates – Temperature inversion effects of inversion on pollution dispersion	5	Environmenta lManagement byH.V.Jadhav	Powerpoint presentation
	UNIT IV Mitigation Measures – Alternative fuel measures	03	Environmental Managementby H.V.Jadhav. Environmental	(Powerpoint PPT)

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TEACHING PLAN (UNIT PLAN)

			ManagementbyN.K. Uberoi	
	UNIT V Kyoto Protcol – Intergovernmental Panel on climate change (IPCC)	05	Environmental ManagementbyN.K. Uberoi	Powerpoint PPT)

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Mrs. Smita S. Khaire DEPARTMENT: _ Commerce CLASS: _ SYEME_ SEMESTER: _ III

MONTH: _September-December ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to acquire the knowledge about Environment.

It will be helps to acquire concern towards Environment protection.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Global Warming and Climate Change	Unit 1: Role of ozone in environment, ozone layer, ozone depleting gases- Green House Effect	5	Environmental science by Santra S.C	PowerPoint Presentation
	Unit-3: Causes of Climate change: change of temperature in the environment, melting of ice pole, sea level rise, role of fossil fuels	5	Ecology and Environment by Odum	PowerPoint Presentation
	Unit-4: Mitigation measures-cleaner production	2		PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SNEHALS.JADHAV DEPARTMENT:COMMERCE CLASS:S.Y.EME SEMESTER:III
MONTH: July-OCTOBER ACADEMIC YEAR : 2021-22
LEARNING OBJECTIVE/S:
The learners will be able equipped which will build knowledge ,skills motivation to address complex environmental challenges. The learner will understand different aspects in environment with issues and their management techniques

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	ACHING METHOD/ ICT TOOLS USED
Paper 5 Natural Resources Mangement	Unit I Introduction to Natural Resources – Classification of Natural Resources- list of natural resources, values of natural resources,Demands on natural resources, Population lifestyle and natural resources, impact of poor natural resource management.	05	Environment alManageme nt byH.V.Jadhav	Powerpoint presentation / Google Meet
	Unit II Land resources – land definition , land use pattern in India, waste land ; types , desertification, definition causes and impacts.	05	Environmental Management by.V.Jadhav. Environmental Management by NK.Uberoi	(Powerpoint Ppt) / Google Meet

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TEACHING PLAN (UNIT PLAN)

	Unit 4 Microbes useful and harmful bacteria in soil, water, air, fungi, beneficial & harmful.	03	Environmental Management by.V. Jadhav. Environmental Management byN.K.Uberoi	(Powerpoint Ppt) / Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Mrs. Smita S. Khaire_

DEPARTMENT: _ Commerce_ CLASS: _ SYEME_ SEMESTER: _ III_ MONTH: _September-December_

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVES:

The learners will be able to acquire the knowledge about Environment.

It will be helps to acquire concern towards Environment protection

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Natural Resources and Management	Unit 3: Water resources, Hydrological cycle. Surface water, Ground water, Dams-uses and impact on environment, Marine resources: Biotic and Abiotic resources	5	Environmental science by Santra S.C	PowerPoint Presentation
	Unit 4: Living Resources-Agriculture-types of cultivation, high yielding varieties, HYV chemicals fertilizer and their impact	2	Ecology and Environment by Odum	PowerPoint Presentation

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TEACHING PLAN (UNIT PLAN)

	Unit 5: Forest and Mineral resources. Forest product, food, fodder, fuelwood, timber. Mineral- metals and non-metals resources, Non-conventional resources	5		PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Research methods in business DEPARTMENT: Commerce

CLASS: SYEME SEMESTER:III MONTH: Sep-oct ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	Research – meaning , Obectives ,Significance ,Significance.	2	Research Methodology by C.R.Kothari	Google meet , ppt presentation , google forms , testmoz
	Types of Research – Basic ,Applied , Descriptive ,Historical , Exploratory , Experimental , ex-post facto , Case Study method	4		
	Approaches to research – Quantitative & Qualititative research	2		
	Importance of research in management decision			
	Marketing research , Government policies and economic system	1		
	Social relationship , planning and operational problem s of research in business.	1		

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Unit IV Sources and Methods of Data collection	Primary sources – Observation , Interview	2	Research Methodology by C.R.Kothari	Google meet , ppt presentation , google forms , testmoz
	Questionnaire , Interview Scedules	2		
	Secondary Sources - Internal , External	2		
	Data processing , Tabulation , Data Analysis and Interpretation	2		
	Report Writing – Layout of research report	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: LEJESH KELOTH DEPARTMENT: SELF -FINANCE CLASS: SYEME SEMESTER: III MONTH: SEPT- DEC ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the correlation between economic and its interrelation ship between society and its impact which is also an important element in making our surrounding economy stable and long term benefits.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
ENVIRONMEAL ECONOMIC – MODULE -1	**Introduction to micro –economic theory**	10	Research paper Manan Prakash	
	Supply And Demand			PPT AND PDF WITH VIRTUAL CLASSROOM METHOD
	Price Formulation			
	Environmental economic theories			

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TEACHING PLAN (UNIT PLAN)

ENVIRONMENTAL ECONOMIC –I MODULE -2 MODULE -3	Political means of control			
	Valuation Method	5	Research paper Manan Prakash	
	Political means of control and their applicability			PPT AND PDF WITH VIRTUAL CLASSROOM METHOD
	Natural resources economic	5	Research paper Manan Prakash	
	Renewable and non-renewable resources and its management regimes		Research paper Manan Prakash	
	Ecological economics	10		Ppt And Pdf With Virtual Classroom Method
	The ecological system		Research paper	

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TEACHING PLAN (UNIT PLAN)

			Manan Prakash	
	International trade and the environment	10		
	Economic growth and the environment			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE CLASS: SYEME

SEMESTER: **III** MONTH: Aug to Dec ACADEMIC YEAR :2021-22

LEARNING OBJECTIVE/S:
The learners will be able to Learn different types of finances ,Meaning of leverage & its types, preparation of cash budget, Meaning and calculation of various capital budgeting techniques.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
FINANCIAL MANAGEMENT	1**] Types of Finances –**Meaning, Need & sources of finance like long term sources of finance, short term sources & long term sources of finance.	03	**Financial Management:** Inamdar, S. M.	Google meet, Google slide, Microsoft word, Spreadsheet
	2] **Leverage**-Introduction, Meaning, Types of leverages, Degree of various leverages , Practical sums	07	**Financial Management:** Kishore, R. M	Google meet, Google slide, Microsoft word, Spreadsheet

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TEACHING PLAN (UNIT PLAN)

	3] **Cash Management** – Introduction, Features of cash management, Motives for holding cash, Objectives of cash management, Importance of cash management, Proforma of Cash budget	10		Google meet, Google slide, Microsoft word, Spreadsheet
	4**] Capital Budgeting**-Introduction, Classification of capital budgeting projects, process. Capitalbudgeting techniques – Payback period,accounting Rate of Return, Net present value, Profitability index & Discounted payback. Practical problems.	10		Google meet, Google slide, Microsoft word, Spreadsheet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 30_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dilip Jain DEPARTMENT: Commerce CLASS: SY EME SEMESTER : III

ACADEMIC YEAR: 2021-22

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
2	**Product and Brand Management** • Products: core, tangible and augmented products • Product mixed decisions: product line decisions; strategic filling, line modernization decisions • New product development process • Product life cycle	7		
3	**Brand Management** • Brand equity; branding decisions; brand extensions; brand portfolios • Segmentation, Targeting and Positioning (STP) • Pricing Decisions, Channel Decisions; Promotion Mix; Types of pricing Channel Decisions Retailing Advertising	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

Dilip J

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH **DEPARTMENT: COMMERCE**

CLASS: SYEME SEMESTER: III MONTH: OCTOBER TO DECEMBER ACADEMIC YEAR: 2021-22 SUBJECT: Marketing Management

LEARNING OBJECTIVES: The learners will be able to:

- Understand the concept of marketing in detail and will be acquaint with various marketing strategies carried out by the marketers.
- Get an insight on digital marketing, Social marketing and relationship marketing.
- Understand ethics related to marketing and unethical practice.
- Draw out the meaning of various pricing methods and strategies followed by the marketer.

Relate to various methods of brand promotion and its integration.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit1- Introduction to Marketing	(a) The 4 Ps and 3Cs of Marketing (b) Marketing as an activity, function, and philosophy (c) Needs, wants and demands; transactions, transfers & exchanges (d)Orientation of a firm: Production concept;	7	Marketing management by Phillip Kotler	Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible

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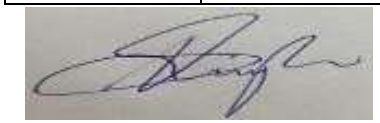
TEACHING PLAN (UNIT PLAN)

	product concept; selling concept; and marketing concept. New Trends in Marketing: E-Marketing, Internet Marketing, and Marketing using social networks Societal Marketing/Relationship Marketing, Marketing Research; MIS; & Consumer Behaviour The micro environment of business (management structure; marketing channels: markets in which a firm operates; competitors and stakeholders. Macro Environment: political factors; economic factors; sociocultural factors; technological factors (pest analysis)		And Marketing management Ramaswamy & Kumari Nama	
Unit-2Marketing Research:	Importance of Marketing Research Types of Marketing Research: Product research; sales research; consumer/customer research; promotion research	2		Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible
Unit 5-Pricing Decisions	Pricing objectives; factors influencing pricing decisions, Types of pricing: Mark up/cost plus pricing; perceived value pricing; value pricing; geographic pricing; etc. Responding to competitors Action through price and non price variables. Impact of the products: stage in the PLC on pricing decisions.	3		Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible
Unit 7-Integrated Marketing	Definition of target audience; determining communication objectives; designing communication and selection of channels	2		Testmoz, Google form, Google meet, PPT presentation, Jam Board,



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TEACHING PLAN (UNIT PLAN)

Communication :				Incredible
Unit 8Marketing Services	Characteristics of services; ways of improving services, delivery, managing service maturity.	2		Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible
Unit 9- Ethics in Marketing	Advertising Standards Council of India code of ethics in advertising; promotion to children; unfair practices in marketing	2		Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MEZBIN LALANI DEPARTMENT: COMMERCE CLASS: SYEME SEM III MONTH: SEPT-DEC 2021 ACADEMIC YEAR: 2021-22 SUBJECT: FINANCIAL MANAGEMENT

LEARNING OBJECTIVE/S: To understand basics of financial management

The learners will be able to : understand various important techniques used in financial management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Introduction to financial management, its need and importance , advantages to a company. introduction to various sources of funds available to a company, long term and short term sources of finance.	15	Financial Management by Khan & Jain	Google classroom, Google meet, power point presentation, pdf,etc
UNIT 2	Working capital management: its meaning and importance, factors affecting working capital, types of working capital, operating cycle, computation of working capital, practical illustrations	15	Financial Management by Khan & Jain	Google classroom, Google meet, power point presentation, pdf,etc

Mezbin L
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TEACHING PLAN (UNIT PLAN)

UNIT 3	Cost of Capital: meaning, importance to a company, types of capital and its costs, cost of debt, cost of equity share capital, cost of debt, cost of reserves, computation of WACC, practical illustrations.	15	Financial Management by Khan & Jain	Google classroom, Google meet, power point presentation, pdf,etc
UNIT 4	Receivables management: Its meaning, features and aspects of receivables management, types of costs involved in management of receivables, credit policy, steps in credit analysis, control of receivables management.	15	Financial Management by Khan & Jain	Google classroom, Google meet, power point presentation, pdf,etc

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ARJUN P. VISHWAKARMA DEPARTMENT: COMMERCE CLASS: SYEME SEMESTER: SEM IV MONTH: JAN-MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to : The learners will be able to learn various aspects about Occupational Health And Safety . This subject is helpful to develop Occupational Health And Safety skills among learners.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Chapter 1	**Health And Safety Foundations, Policy, Positive Health And Safety Culture**	**04**	**Introduction To Health And Safety At work**	**Online lectures on Google meet**
Chapter 3	**Movement of People and Vehicles, Hazards and Controls, Handling Hazards and Control**	**04**		**Online lectures on Google meet**
				Online lectures on Google meet
Chapter 4	**Work Equipment Hazards and Control, Electrical Hazard And Control**	**04**		**Online lectures on Google meet**

ArjunV
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TEACHING PLAN (UNIT PLAN)

Chapter 6	**Physical And Psychological Health Hazard And Control**	**04**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Snehal Jadhav DEPARTMENT: Environmental Management & Economics (EME)
CLASS: S.Y.EME SEMESTER:_IV_ MONTH: January - March ACADEMIC YEAR: _ 2021 – 2022 Sub- OHS
LEARNING OBJECTIVE/S:
The learners will be able to :
The learners will be equipped with knowledge, skills & motivation to address complex environmental challenges.
The learner will Understand different aspects in the environment with issues and their management technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	Risk Assessment , Principals of Control, Incident Investigation, Recording and Reporting	3 4	Scoot, R.M .1997, Basic concept of Industrial hygiene, Lewis Publication, New York. Handbook of Occupational Safety and Health https://www.osha.gov/OshDoc/Directive_pdf/ADM_04-00-001.pd	Power Point Presentation

Snehal Jadhav
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TEACHING PLAN (UNIT PLAN)

	Chemical And Biological Health Hazrads and control			
	Construction Activities - Hazards and Control	3	Handbook of Occupational Safety and Health http://www.ilocis.org/documents/chpt93e.htm	Power Point Presentation
	Monitoring , Review and Audit	3	Scoot, R.M .1997, Basic concept of Industrial hygiene, Lewis Publication, New York. http://www.ilocis.org/documents/chpt93e.htm	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Smita Khaire (Jadhav) DEPARTMENT: _Commerce CLASS: _SYEME SEMESTER: IV

MONTH: JAN-MAR ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to: The learners will be able to acquire a basic understanding and knowledge about the Environment and it's problems. It will help to create awareness about preserving the Environment

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Environmental Pollution and Management	**Unit I-** Water pollution-sources and types of water pollution – physical, chemical and biological-effects of water pollution. Drinking water quality standards wastewater treatment-primary, secondary, tertiary - water pollution prevention and control Act-1974.	**3**	Environmental Science by Santra S.C Essential of Ecology and Environment by S.V.S Rana.	PowerPoint Presentation
	Unit IV- Noise pollution-sources effects and control	**1.5**	Environmental Science by Santra	PowerPoint Presentation

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TEACHING PLAN (UNIT PLAN)

	Unit V- Government Agencies and Programs- The Tiwari committee- creation of NCEPC, Department of Environment and forest- Functions of State Pollution Control Board.	**2.5**	S.C	PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti Pramod Patil DEPARTMENT: Commerce CLASS: S.Y.E.M.E SEMESTER: IV

MONTH: January to March ACADEMIC YEAR: 2021-22 Subject: Environmental Safety, health and Management

LEARNING OBJECTIVES:
The learners will be able to understand occupational health and safety. The learners will be able to understand about physical, chemical and biological hazards.

UNIT 3	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Occupational health and safety	1. Occupational health and safety	2	1. Fundamentals of Occupational safety and health : F. Mark and K. James 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Occupational health and hazards-physical-chemical and biological	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVES:

The learners will be able to understand the meaning and need of industrial safety & management techniques. The learners will be able to understand about industrial accidents and their prevention.

UNIT 4	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Industrial safety	1. Industrial safety and management techniques	2	1. Fundamentals of Occupational safety and health : F. Mark and K. James 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Industrial safety standards and regulations	2		
	3. Accidents-definitions-prevention and control	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVES:

The learners will be able to understand the meaning and need of Safety management system. The learners will be able to understand about the concepts of EMS, ISO. They will be able to learn about OSHA, Public liability insurance act and mining act.

UNIT 5	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Safety management system	1. Safety management system- concepts of safety management systems	2	1. Environmental studies: P.G. Shinde 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. EMS, ISO 14000 and 14001	2		
	3. OSHA, Public liability insurance act and mining act.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEELAM RATHORE DEPARTMENT: Commerce CLASS: S.Y.E.M.E SEMESTER: IV

MONTH: January – April ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVES:-

To make the students learn about the Health, Safety of Environment

The learners will be able to understand and can manage the different issues of environment with respect to safety and Health

PAPER, UNIT TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 , 2, 3	Definition: - need for good health, Factors affecting health, Types of Diseases (deficiency, infection, pollution diseases). Personal hygiene – food (balanced diet). Food Habits & cleanliness, Food Adulterants, Avoiding smoking, Drugs & alcohols.	4	Environmental Health By:- M.H.Jackson	PowerPoint Presentation, Discussion method
	Public Health:- Communicable diseases , mode of transmission(epidemic and endemic diseases), Management of Hygiene in public places (railway stations, Bus stands and other public places)	4	Environmental Sanitation By:-KVSG Murali Krishna	PowerPoint Presentation, Discussion method

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TEACHING PLAN (UNIT PLAN)

	Occupational Diseases :- Prevention and control.	2	Fundamental Principals of Occupational Health and Safety. By:-Benjamin O.ALLI	PowerPoint Presentation, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAZIA SAJID SHAIKH DEPARTMENT: COMMERCE CLASS: SYEME SEMESTER: SEM IV
MONTH: JAN-MARCH ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to : _Basic information concepts and need for information system in an organisation.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1 , 2	*Basic information Concepts and Definition. *Need for information and Information System (IS) in an organisation. *Characteristics of Information and Organisation with respect to organisation form ,structure,philosophy,hierarchy etc.	06	MIS a concept Framework by Davis and Olson	Online lectures on Google meet
	Types of IS-Transaction. *Operational Control *Management Control *Decision Support *Executive information system	06		Online lectures on Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manjushri S. Oak DEPARTMENT: _Commerce CLASS:SYEME SEMESTER: IV MONTH: January - April_
ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to :

To make the students learn Environmental Pollution and Management and its effect on environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environmental Pollution and Management Sem IV				
UNIT-II	Air pollution –structure and composition of atmosphere – classification, sources & effects of air pollution – Acid rain –green house effect – global warming – Ozone depletion	**02**	**https://en.m.Wikipedia.org, www.nationalgeographic.org, www.epa.gov, envirmental science book**	**Power point presentation and Discussion method**

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TEACHING PLAN (UNIT PLAN)

UNIT-III	Prevention and control of air pollution particulate control – settling chamber, scrubber, bag filter, cyclones electrostatic precipitators. Gaseous emission control methods. Air pollution prevention and control Act 1981.	**02**	**https://en.m.Wikipedia.org, www.who.int, www.britannica.com, envirmental science book**	**Power point presentation and Discussion method**
UNIT-IV	Soil Pollution – soil pollutants – types – sources, effects & Control.	**02**	**www.envirnmentalpollutioncenters.org, https://en.m.Wikipedia.org**	**Power point presentation and Discussion method**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF - MADHURA SURVE DEPARTMENT: COMMERCE CLASS: SYEME: SEMESTER: IV MONTH: JANUARY-MARCH
ACADEMIC YEAR: _ __2021-22
LEARNING OBJECTIVE/S:
The learners will be able to : know about customers buying behaviour and help to know how to maintain a good relationship with customers in today's competitive world which leads to customer retention

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit I, II V	MODULE I Changing Nature of Marketing and Customer Service-Marketing-An Introduction - The Marketing Orientation-Factors Necessitating a Re-look at Marketing Methods-Changing Social Trends-Lesser Government Controls Rising Income Levels-Threats from New Forms-Characteristics of the Empowered Customer-Increased Demand-Easy Access to Information - Emerging Trends in Marketing-Shorter Product Life Cycles.	10	Customers Relationship Management " by FRANCIS BUTTLE, Internet	Online lecture through Google Meet
	Emergence of Permission Marketing-Experimental Marketing-Offering Complete Solution-Rewarding Loyal Customers-Disruptive Innovations-The Changing Nature of Customer Service-Challenges In Modern Day Customer Service Emerging Trends in Services Marketing Mix -Customer Experience -The New Differentiator- Managing Service Better-Emergence of CRM-Economics of Building Customer Relationship-Customer Lifetime Value-Benefits of Customer Loyalty-Benefits of Choosing The Right Customers - Customer Value and	10	Relationship Management " by FRANCIS BUTTLE, Internet	Online lecture through Google Meet

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TEACHING PLAN (UNIT PLAN)

	Customer Satisfaction: Precursors to CRM-Customer Value.			
	MODULE V The Technology Orientation - A Strategic FSrame work for CRM-Planning for Success - Change Management-Selling Change-Training-Role of IT and Tools for CRM-CRM Strategy and Technology-Capturing Data-Steps in Preparing the IT Systems for CRM Choosing The CRM Tool-Using IT Systems for Better CRM-Isuses for Consideration In CRM Tools Selection-Tools for CRM-e CRM-Basic Concepts of e CRM-Benefits of e CRM	6	Customers Relationship Management " by FRANCIS BUTTLE, Internet	Online lecture through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_ 26

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: EME CLASS: SYEME SEMESTER: IV MONTH: JAN-MARCH
ACADEMIC YEAR:2021-22 SUBJECT: MIS

LEARNING OBJECTIVE/S: To understand the role of information technology and decision support systems in business and record the current issues with those of the firm to solve business problems

The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	Determining Information Needs for an Organisation/Individual Manager	2	MIS a Conceptual Framework by Davis and Olson	MS-Power Point, Google Meet, Google classroom, google form
	Overview of use of data flow method, analysis of information for decision processes etc.	2	Same as above	Same as above
UNIT –5	Information Security	3	Same as above	Same as above

Kalpita Vartak

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TEACHING PLAN (UNIT PLAN)

	Sensitize students to the need for information security	2	Same as above	Same as above
	Concepts such as confidentiality, Integrity and Availability. Types of threats and risk, overview of some of the manual, procedural and automated controls in real life IT environments.	2	Production and inventory control	Same as above
UNIT – 6	Case studies	2	Case Studies : Case on ABC Industrial Gases – Author : Prof Pradeep Pendse Mrs Fields Cookies – Harvard Case Study	Same as above

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: LEJESH KELOTH DEPARTMENT: COMMERCE CLASS: SYEME SEMESTER: SEM IV
MONTH: JAN-MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: The learners will be able to learn various aspects about Environment Economic its impact on social life, its essential in our economic sector . This subject is helpful to develop positive mind set towards environmental studies among learners.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
MODULE 1	Marginal condition for Pareto optimum- (efficiency in exchange, efficiency in production), SOCIAL THEOREM, (Classical welfare function, Pareto welfare function, Rawlsian function)Bergson & Samuelson Function (consumer & production surplus, cost Benefit Analysis)	05	ENVIRONMENTAL ECONOMIC BY STEVEN C, HACKETT ENVIRONMENTAL ECONOMIC BY Barry C Field & Martha K Field	Online lectures on Google meet

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TEACHING PLAN (UNIT PLAN)

	CONCEPT MARKET FAILURE, meaning, causes, externalities and its types, public goods and public bads, Lindahl pricing model 7 free ride problem, Private verse Public goods, Cost benefit ana:	05		Online lectures on Google meet
	Module 3 Hedonic price method Household production Defensive expenditure Travel expenditure State preference via contingent valuation Wage regression & value of statistical.	05		Online lectures on Google meet
	Module 4 Use verse nonuse value Willingness to pay verse Willingness to accept Module 5 Price verse quantity	05 05		Online lectures on Google meet Online lectures on Google Meet

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TEACHING PLAN (UNIT PLAN)

	Coase theorem & allocation of property rights			
	Module 6 Command & Control verses environmental taxes. Trade verse liability Pigouvian fees Single polluter multiple damage. Fees verse subsidies Fees verse imperfect competition. Types of imperfect competition.	07		Online lectures on Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 32

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHAL JADHAV DEPARTMENT: EME CLASS: TYEME SEMESTER: V MONTH: June to October

ACADEMIC YEAR: 2021-22

SUBJECT- ENVIRONMENTAL LEGISLATION

LEARNING OBJECTIVE/S:
The learners will be able:

1. To identify and understand the benefits, challenges, and gaps under the current scenarios of Environmental laws
2. To explain various environmental issues, pollution, and control measures
3. To analyze environmental laws along with the norms prevailing at international and national level.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TEACHING PLAN (UNIT PLAN)

		ALLOTTED		
UNIT- 1	Constitutional Provisions for Environmental Protection:	10	ONLINE RESOURCES	Chalk and board
	Specific Provisions for Environmental Protection in the Constitution of India		ONLINE RESOURCES	Chalk and board
	Provisions in the Directive Principlesof State Policy.		ONLINE RESOURCES	Chalk and board

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-2	1. Environmental Acts, Rules, and Notifications: The following environmental Acts/Rules will be discussed in details; the rest of the acts, rulesand notifications will be referred to: a) Water (Prevention & Control of Pollution) Act and the corresponding Rule	10	ONLINE RESOURCES	Chalk and board
	Water (Prevention & Control of Pollution) Cess Act and the corresponding Rule		ONLINE RESOURCES	Chalk and board

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	b) Air (Prevention & Control of Pollution) Act and the corresponding Rule		ONLINE RESOURCES	Chalk and board
	c) Environment (Protection) Act and Rule		ONLINE RESOURCES	Chalk and board

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TEACHING PLAN (UNIT PLAN)

UNIT- 3 & 4	Public Liability Insurance Act and Rule	10	ONLINE RESOURCES	Chalk and board
	Forest Conservation Act 1980		ONLINE RESOURCES	Chalk and board
	Wildlife Protection Act 1972		ONLINE RESOURCES	Chalk and board
	Green Benches (National Green Tribunal Act 2010		ONLINE RESOURCES	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: varada katle DEPARTMENT: COMMERECE CLASS: TY EME SEMESTER **V** MONTH: JULY-OCTOBER 2021 ACADEMIC YEAR: 21-22 SUBJECT : SM
LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT -2 UNIT -4	STRATEGY FORMULATION: vision ,mission, goals. SWOT	5	Mnanan PRAKASHAN	ONLINE . TOOLS MOBILE PHONE AND LABTOP
	Entrepreneurial model ,planning model, adaptive model	5		
	Types of strategy			

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	Strategy evaluation			
	Review ,feedback, control, effective evaluation, contingency planing			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURE PER UNIT

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

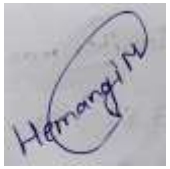
NAME OF THE STAFF: HEMANGI VIJAY MEHTA DEPARTMENT: COMMERCE

CLASS: T.Y.EME SEMESTER:V MONTH:JULY – OCT 2021 ACADEMIC YEAR:2021-2022 (PROJECT MANAGEMENT)

LEARNING OBJECTIVE/S:

The learners will be able to: To make students understand the concept of project management for planning and to execution of projects.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, IV, VI,	Module I : Project Definition, Project Life Cycle, Project Objectives, Purpose of project mang., Project mang. Maturity, Project selection and choice, Types of Project, Selection models, Analysis Under Uncertainty and Rise, Project portfolio process.	5		Google Meet, PPT



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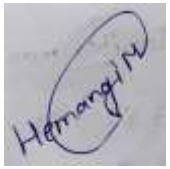
TEACHING PLAN (UNIT PLAN)

	Module IV : Project Planning and Coordination, Systems Integration, Action Plan, Work breakdown structure, Partnering, Chartering, Categories of conflict, Principle of Negotitation, Top down and Bottom up Budgeting, Activity v/s Program Budgeting.	5		Google Meet, PPT
	Module VI : Project Control, Purposes, Types, Post control, Critical Ratio and Control Chats, Balance in Control systems, Project Auditing, Purpose of Evaluation, Use of audit Report Product Audit life cycle, Measurement varieties of Project Termination.	5		Google Meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : TYEME SEM : V MONTH : July-October YEAR : 2021-22

LEARNINGOBJECTIVE/S : The learners will be able to learn various aspects of strategies. It is very essential part of management. This subject is helpful to develop strategic management skills among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TEACHING PLAN (UNIT PLAN)

Strategic Management	**MODULE I : INTRODUCTION TO STRATEGIC MANAGEMENT** ● Introduction ●Definition and concept of company, business and management levels ●Nature, importance, benefits of strategic management ●Management models and guidelines for effective strategic management ●Overview of strategic management process	10	Strategic management by McGraw Hill Education, 12th edition	Google meet, PPT

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TEACHING PLAN (UNIT PLAN)

	MODULE III : STRATEGY IMPLEMENTATION ●Implementation of strategy to fundamental areas i) Production ii)Operation iii)Marketing iv)Finance v)HRM vi)Other	10	Strategic management by McGraw Hill Education, 12th edition	Google meet, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Aaradhana Singh DEPARTMENT: EME CLAS TY EME MONTH: JULY -OCTOBER ACADEMIC YEAR: 21-22
SUBJECT : EM
LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to UNDERSTAND THE Entrepreneurship skills and Management.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I	**Concept, meaning and definition of entrepreneur and entrepreneurship.** **Importance and significance of growth of entrepreneurial activity.** **Concept of intrapreneur.**	4	Online Resource	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

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TEACHING PLAN (UNIT PLAN)

	Characteristics and qualities of entrepreneurs Classification and types of entrepreneurs. **Women entrepreneurs** **Theories of entrepreneurship Contribution of Mc Clelland and Joseph Schumpeter**			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 LECTURE PER UNIT

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TEACHING PLAN (UNIT PLAN)

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Smita S. Khaire____ _____DEPARTMENT: ___ COMMERCE_____ CLASS: _____TYEME_____ SEMESTER: ____V_____ MONTH: ____AUGUST TO OCTOBER_____ ACADEMIC YEAR: _____2021 -2022_____

LEARNING OBJECTIVE/S:

The learners will be able to understand the importance of Environment Management and Sustainable development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TEACHING PLAN (UNIT PLAN)

Environmental Impact Assessment	Unit I- EIA-Introduction-Concept of EIA-Scope and Objective of EIA-Organization responsible for EIA-Site selection and area classification-Sitting and setting Criteria for EIA projects.	5	Environmental science by Santra S.C	PowerPoint Presentation
	Unit II- Description of environmental setting- Inclusion or Exclusion of environmental items.	2	Online Resources	PowerPoint Presentation
	Unit III- Various steps of EIA- Content of EIA- Assessment methodology- Ad-hoc, Overlay, Network, Matrix and Checklist, Cost benefit analysis- Case studies: Hydroelectric projects, Mining, Power plant, Roads and Airport.	5	Environmental Chemistry and Pollution Control by S.S. DARA	PowerPoint Presentation

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TEACHING PLAN (UNIT PLAN)

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _5_____

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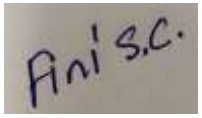
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE_ CLASS: T.Y.EME SEMESTER: V MONTH: JULY OCT 2021 ACADEMIC YEAR: 2021-2022 (**PROJECT MANAGEMENT**)

LEARNING OBJECTIVE/S: To make students understand the concepts of Project Management for planning to execution of projects.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II, III,	MODULE II - Functional Manager v/s Project Manger, Project responsibilities, Demands on Project Manager, Project Manager selection, Cultural and the Project impact of institutional environment, Need for multicultural Communication.	5		Google Meet, Google Classroom, PPT.
	MODULE III - Project organization, Pure Project organization, Matrix, Mixed Organizational system, Choosing a firm, Risk Management, Project Management Office, The Project team, Human factors and the Project team, Sources of conflicts.	5		Google Meet, Google Classroom, PPT.



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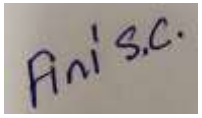
TEACHING PLAN (UNIT PLAN)

	MODULE V - Network Techniques PERT and CPM, Precedence Programming, Resource loading, Leveling, Goldratt's critical chain, Monitoring system design, Reporting process, Project Management Information System (PMIS).	5		Google Meet, Google Classroom, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____



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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Business Ethics DEPARTMENT: Commerce
CLASS:TYEME SEMESTER:V MONTH:August ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I Introduction to Business Ethics	Normative Ethics, Prescriptive Ethics ,Applied Ethics	2	An Introduction to Ethics by William Lillie	Google meet, PPT Presentation
	Ethics Morality and Legality, Concept of Right and Duty	2		
	Perspective and Scope Relevance in Social Changes	2		

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TEACHING PLAN (UNIT PLAN)

	Ethical Organism and Corporate Code of Conduct	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Business Ethics DEPARTMENT: Commerce
CLASS:TYEME SEMESTER:V MONTH: September ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TEACHING PLAN (UNIT PLAN)

		ALLOTED		
Unit II Business Ethics: Conceptual Background UNIT III Indian Perspective of Ethics	Conceptual approaches to business ethics ,Egoism vs Altruism	2	An Introduction to Ethics by William Lillie	Google meet, PPT Presentation
	Entrepreneur and manager: Role and Responsibilities	2		
	Responsibilities towards stake holders, Profit Making	2		
	Purushartha : Dharma, artha , Kaam Moksh ,Concept of dharma	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Business Ethics DEPARTMENT: Commerce
CLASS:TYEME SEMESTER:V MONTH: OCT ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit IV A Global Perspective	Ethics in global marketing and advertising	2	An Introduction to Ethics by William Lillie	Google meet, PPT Presentation

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	Ethical Perspective in Employment , Ethics and IT	2		
	Environmental Ethics, Ethics and Cross Culture influences	2		
	Ethical issues and functional aspects of business	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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NAME OF THE STAFF: Shruti Pramod Patil DEPARTMENT: Commerce CLASS: T.Y.E.M.E SEMESTER: V

MONTH: July to October ACADEMIC YEAR: 2021-2022 Subject: Environmental Impact Assessment

LEARNING OBJECTIVES:
The learners will be able to understand EIA procedures.

UNIT 2	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environmental Impact Assessment	1. Some suggested approaches for developing a list of environmental Factors	2	1. Environmental Assessment in Practice: D.Owen Harrop and J.Ashley Nixon 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Informational Sources for Environmental factors.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

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LEARNING OBJECTIVES:

The learners will be able to learn details of Environmental Impact Assessment Notification (1994).

UNIT 4	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environmental Impact Assessment Notification	1. Environmental Impact Assessment Notification (1994): Procedure for Environmental Clearance, List of the projects requiring Environmental Clearance, Composition of Expert Committee for Impact Assessment, Public hearing Committee, Procedure for public hearing - Project clearance.	05	1. EIA notification 1994 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVES:

The learners will be able to understand the detailed content of EIS.

UNIT 5	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EIS	1. Detailed content of EIS	2	1. Environmental Assessment in Practice: D.Owen Harrop and J.Ashley Nixon 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Use of visual display methods, Statement documentation, general writing suggestion.	2		

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

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NAME OF THE STAFF: _Smita S. Khaire_____DEPARTMENT: ____

COMMERCE_____

CLASS:_____TYEME_____ SEMESTER:____VI_____ MONTH:____January to April_____

ACADEMIC YEAR:_____2021 -2022_____

LEARNING OBJECTIVE/S:
The learners will be able to understand the different types of disaster and importance of Disaster Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Disaster Management	UNIT 1 Disaster – Introduction –Types of natural calamities, major and minor calamities – impact of calamities.	5	Environmental Chemistry and Pollution Control by S.S. DARA	Chalk- Board Method
	UNIT II-Natural disaster – cyclone – Tsunami – flood	3	Online Resources	Chalk- Board Method
	UNIT III Manmade disaster – Wars – Biological war (introduction of pathogens) – misuse of atomic bombs –major accidents from industries e.g., Bhopal. Lov canal disaster – London Smog.	5	Environmental science by Santra S.C	PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Snehal Jadhav DEPARTMENT: Environmental Management & Economics CLASS: TYEME

SEMESTER: VI MONTH: October - April ACADEMIC YEAR: 2021 -222

SUBJECT: Solod Hazardous & Waste Management

LEARNING OBJECTIVES:
The learners will be able to:he learners will be able to understand the different types of Solid Waste and Importance of Solid & Hazardous Waste Management.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S
Solid & Hazardous Waste Management	UNIT II COLLECTION, SEGREGATION AND TRANSPORT OF MUNICIPAL SOLID WASTES: Handling and segregation of wastes at source. Collection and storage of municipal solid	4	Online Resources

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	wastes; analysis of Collection systems. Transfer stations – labeling and handling of hazardous wastes		
	UNIT III MUNICIPAL SOLID WASTE MANAGEMENT: Solid waste processing technologies. Mechanical and thermal volume reduction. Biological and chemical techniques for energy and other resource recovery: composting, vermicomposting, Termigradation, fermentation. Incineration of solid wastes. Disposal in landfills: site selection, design, and operation of sanitary landfills; Leachate and landfill gas management; landfill closure and post-closure environmental monitoring; landfill remediation. Regulatory aspects of municipal solid waste management.	5	Environmental science by Santra S.C

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	UNIT IV HAZARDOUS WASTES: Hazardous waste definition. Physical and biological routes of transport of hazardous substances – sources and characterization categories and control. Sampling and analysis of hazardous wastes – analytical approach for hazardous waste characterization – proximate analysis – survey analysis – directed analysis – analytical methods.	4	Environmental science by Santra S.C
	UNIT V HAZARDOUS WASTES MANAGEMENT: Sources and characteristics: handling, collection, storage and transport, TSDF concept. Hazardous waste treatment technologies - Physical, chemical and thermal treatment of hazardous waste: solidification, chemical fixation, encapsulation, pyrolysis and incineration. Hazardous waste land fills - Site selections, design and operation. HW reduction, recycling and reuse, Regulatory aspects of HWM.		
	UNIT VI BIOMEDICAL WASTE MANAGEMENT: Biomedical waste: Definition, sources, classification, collection, segregation Treatment and disposal.	4	online Resources

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Snehal Jadhav DEPARTMENT: Environmental Management & Economics CLASS: TYEME

SEMESTER: VI MONTH: Nov -April ACADEMIC YEAR:2021 - 2022

SUBJECT: Environmental Problems Hazards & Mitigation

LEARNING OBJECTIVES:
The learners will be able to:

- To identify and understand about pollution and environmental degradation
- To examine best practices of urban and rural environmental management

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Natural and Man made Environmental Problems:	Environmental problems associated with urbanization,	3	Online Resource	Chalk and Board
	Environmental problems associated with industrialization	3	Online Resource	

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TEACHING PLAN (UNIT PLAN)

	Environmental problems associated with modernization of agriculture	4	Online Resource	Chalk and Board
Unit 2: Global and Regional Environmental Issues:	GreenHouse effect – causes and associated hazards,	2	Environmental Chemistry -S.S Dara	Chalk and Board
	Ozone layer depletion – causes and associated hazards,	2	Environmental Chemistry -S.S Dara	Chalk and Board

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	Acid rain, Deforestation and loss of biodiversity;	3	Environmental Chemistry -S.S Dara	Chalk and Board
	Major environmental problems in India	3	Environmental Chemistry -S.S Dara	Chalk and Board

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TEACHING PLAN (UNIT PLAN)

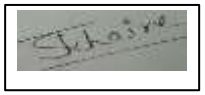
NAME OF THE STAFF: _Smita S. Khaire_____DEPARTMENT: ___ COMMERCE_____

CLASS: _____TYEME_____ SEMESTER: ____VI_____ MONTH: ____January to April_____ ACADEMIC YEAR: _____2021 -2022_____

LEARNING OBJECTIVE/S:

The learners will be able to understand the different types of Solid Waste and Importance of Solid & Hazardous Waste Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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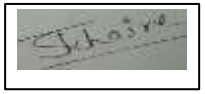
TEACHING PLAN (UNIT PLAN)

Solid & Hazardous Waste Management	UNIT I SOLID WASTE: Definition of solid wastes – types of solid wastes – Sources - Industrial, mining, agricultural and domestic – Characteristics. Solid waste Problems - impact on environmental health – Concepts of waste reduction, recycling and reuse	4	Environmental Chemistry and Pollution Control by S.S. DARA	PowerPoint Presentation
	UNIT II COLLECTION, SEGREGATION AND TRANSPORT OF MUNICIPAL SOLID WASTES: Handling and segregation of wastes at source. Collection and storage of municipal solid wastes; analysis of Collection systems. Transfer stations – labeling and handling of hazardous wastes	4	Online Resources	PowerPoint Presentation



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TEACHING PLAN (UNIT PLAN)

	UNIT III MUNICIPAL SOLID WASTE MANAGEMENT: Solid waste processing technologies. Mechanical and thermal volume reduction. Biological and chemical techniques for energy and other resource recovery: composting, vermicomposting, Termigradation, fermentation. Incineration of solid wastes.	5	Environmental science by Santra S.C	Chalk- Board Method

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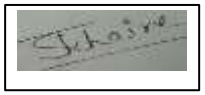

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	Disposal in landfills: site selection, design, and operation of sanitary landfills; Leachate and landfill gas management; landfill closure and post-closure environmental monitoring; landfill remediation. Regulatory aspects of municipal solid waste management.			
	UNIT VII RADIOACTIVE WASTE MANAGEMENT: Radioactive waste: Definition, Sources, Low level and high level radioactive wastes and their management, Radiation standard by ICRP and AERB	3	Online Resources	Chalk- Board Method

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TEACHING PLAN (UNIT PLAN)

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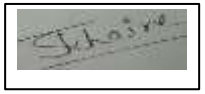

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti P. DEPARTMENT: EME CLASS: TYEME

SEMESTER: VI MONTH: Nov- April ACADEMIC YEAR: 2021 - 2022

SUBJECT: Environment & Ecotourism

LEARNING OBJECTIVES:
The learners will be able to: understand the importance of ecotourism.
b) describe the link between ecotourism and reduction in poverty levels.
c) explain the human factors that have an impact on ecotourism.

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I,II	Agriculture-ContributiontoEconomicdevelopment-foodproblem			
	landreformsinIndia,Bhoodanmovement-Greenrevolution-			
	PanchayatRaj-CommunitydevelopmentProjects -Co-Operativemovement.	12		

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	Ruralsocialstructure-caste system,jointfamily-religioncaste,culturalsocial &psychologicalbarrierstoeconomicdevelopmen			
	overcoming-resistancetochange			
UNIT III	ConceptsofTourism-Classification-Religioustourism	8		

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	Culturaltourism-Heritagetourism-Monumentaltourism			
	Adventuretourism-Marstourism-Sustainabletourism			
	Consumptive&nonconsumptivetourism PrinciplesofEcotourism-TypesofEcotourism-ConceptsofEcotourism			

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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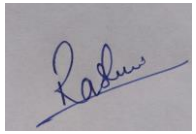
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Rashmi Gurunani DEPARTMENT : Commerce

CLASS : TYEME SEM : VI MONTH : Jan-April YEAR : 2021-22

LEARNINGOBJECTIVE/S : The learners will be able to learn various aspects about corporate social responsibility. It is very essential part of business. This subject is helpful to create awareness about social responsibilities of business among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Corporate Social Responsibility	**MODULE II. Standards and Codes** 1. ISO – 14001 2. OHSAS – 18001 3. SA – 8000 4. OECD Guidelines for Multinational Companies 5. Global Compact 6. AA – 1000 7. BS / ISO Guideline on CSR Management (ISO-26000) .	15	Business ethics and CSR, Manan prakashan	Google Meet, PPT, chalk and board



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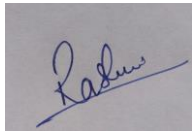
TEACHING PLAN (UNIT PLAN)

	MODULE III: Engaging the stakeholder Markets at the BOP Communication Dilemmas Dow Jones Sustainability Index / FTSE4GOOD Index	07	Business ethics and CSR, Manan prakashan	Google Meet, PPT, chalk and board



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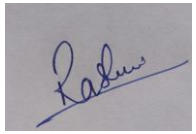
TEACHING PLAN (UNIT PLAN)

	MODULE IV: Cases and papers	08	Business ethics and CSR, Manan prakashan	Google Meet, PPT, chalk and board

Total lectures allotted to units: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : TYEME SEM : VI MONTH : Jan-April YEAR : 2021-22

LEARNINGOBJECTIVE/S : The learners will be able to learn various aspects about corporate social responsibility. It is very essential part of business. This subject is helpful to create awareness about social responsibilities of business among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Module I: Building blocks of CSR/sustainability Overview, Tripple-bottom line approach, environmental issues, social issues, labour issues, ethical and government issues, human rights-UN charter.	10	Business ethics and CSR, Manan prakashan	Google Meet, PPT, chalk and boar

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TEACHING PLAN (UNIT PLAN)

Corporate Social Responsibility	**MODULE III: Engaging the stakeholder** Global Reporting Initiative G-3, NGO and CSR, programmes for the neighbourhood.	05	Business ethics and CSR, Manan prakashan	Chalk and board

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TEACHING PLAN (UNIT PLAN)

	MODULE IV: Cases and papers	05	Business ethics and CSR, Manan prakashan	Chalk and board, PPT

Total lectures allotted to units: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashlesha Maurya DEPARTMENT: EME CLASS: TYEME SEMESTER: **VI** MONTH: JAN TO APRIL
ACADEMIC YEAR-2021-22
SUBJECT: Environmental Problems hazards and mitigation
LEARNING OBJECTIVES:

1. To identify and understand about pollution and environmental degradation
2. To examine best practices of urban and rural environmental management
3. To analyze environmental elements and importance of biodiversity

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2: Global and Regional Environmental Issues:	GreenHouse effect – causes and associated hazards,	2	Environment- shankar IAS Academy	Chalk and Board
	Ozone layer depletion – causes and associated hazards,	2	Environment- shankar IAS Academy	Chalk and Board
	Acid rain, Deforestation and loss of biodiversity;	3	Environment- shankar IAS Academy	Chalk and Board

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TEACHING PLAN (UNIT PLAN)

	Major environmental problems in India	3	Environment- shankar IAS Academy	Chalk and Board

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4: Problems of Rural Environment	Drinking water, Domestic fuel, Food and Fodder, Sanitation, Health, and Hygiene,	2	Environment- shankar IAS Academy	Chalk and Board
	Land degradation	3	Environment- shankar IAS Academy	Chalk and Board

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 5: Environmental problems related to forest and wetlands:	Human intervention, Degradation, encroachment,	2	Environment- shankar IAS Academy	Chalk and Board
	loss of habitats and biodiversity	3	Environment- shankar IAS Academy	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED : __40_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashlesha Maurya DEPARTMENT: EME CLASS: TYEME

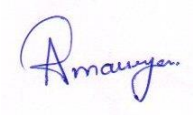
SEMESTER: VI MONTH: JAN TO APRIL ACADEMIC YEAR: 2021-2022

SUBJECT: **Environment and Ecotourism**

LEARNING OBJECTIVES:
The learners will be able :

1. To identify and understand concepts related to management and planning of ecotourism
2. To determine environmental and social consequences of ecotourism
3. To analyze sustainable tourism with focus on national and international destinations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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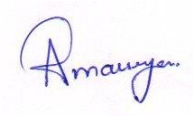
TEACHING PLAN (UNIT PLAN)

UNIT-IV	Principles of Ecotourism – Types of Ecotourism – Concepts of Ecotourism –	03		Online and Offline lectures (Google Meet, PPT)
	Objectives of Ecotourism – benefits of Ecotourism – trends affecting ecotourism.	02		Online and Offline lectures (Google Meet, PPT)



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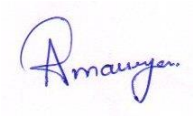
TEACHING PLAN (UNIT PLAN)

UNIT-V	Impact of Ecotourism – Economic impacts (fiscal impacts, concepts & Methods) – Types and degree of impacts from Ecotourism activities –	05		Online and Offline lectures (Google Meet, PPT)
	Socio cultural impacts – Eco tourism related organization – Ecotourism Research disasters & Ecotourism.	05		Online and Offline lectures



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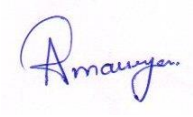
				(Google Meet, PPT)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VARADA KATLE DEPARTMENT: COMMERCE CLASS: TY EME

SEMESTER: VI MONTH: OCTOBER ACADEMIC YEAR: 2022

SUBJECT: corporate Governance

LEARNING OBJECTIVES: To share knowledge
The learners will be able to: Understand the Topic

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TEACHING PLAN (UNIT PLAN)

UNIT 1, 2	CORPORATE GOVERNANCE MEANING AND REPORTS		VIPUL PRAKASHAN	ONLINE AS WELL AS OFF LINE
	ROLE OF AGENCY THEORY ROLE OF CEO AND SENIOR EXECUTIVES			
	ROLE OF INVESTOR AND SHAREHOLDER			

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TEACHING PLAN (UNIT PLAN)

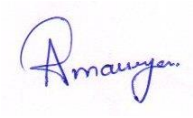
NAME OF THE STAFF: Ashlesha Maurya DEPARTMENT: COMMERCE-EME CLASS: TYEME

SEMESTER: VI MONTH: JAN TO APRIL ACADEMIC YEAR: 2021-2022

SUBJECT: Disaster Management

LEARNING OBJECTIVES:
The learners will be able to:

- To Identify and explain major types of disasters and the appropriate mitigation strategies
- To examine the importance of effective disaster preparedness, planning and operations in ensuring reduction in damage
- To evaluate the different Medical and Psycho-Social Preparedness to disasters



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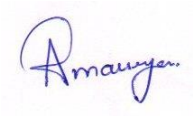
TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II	Natural disaster -Landslides	02		Online and Offline lectures (Google Meet, PPT)
	Earth quake	02		Online and Offline lectures (Google Meet, PPT)



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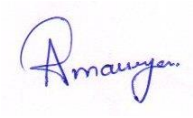
TEACHING PLAN (UNIT PLAN)

UNIT IV	Medical Management of disaster – Disaster Impacts and response – Identification of dead – Search rescue –first and relief phase – Vaccination, basic sanitation and personal hygiene.	08		Online and Offline lectures (Google Meet, PPT)
UNIT V	Environmental Disaster – Assessment, Planning – mitigation program – preparedness – resettlement	08		Online and Offline lectures



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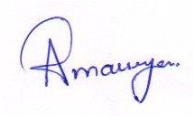
	rehabilitation – role of NGOS, Gos (relief camp), Psychotherapy – simplified yoga and meditation, stress management.			(Google Meet, PPT)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH SUB: CORPORATE GOVERNANCE DEPARTMENT: SELF FINANCE

CLASS: TYEME SEMESTER: VI MONTH: OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the meaning of corporate governance.
- Get knowledge of rights of various stakeholders.
- Interpret the corporate governance and corporate ethics.
- Know in detail about various committees of CG.

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit – 3	• Rights of CEO • Rights of BOD • Rights of Senior Executives • Rights of other stake holders • Rights of employees	08	Jack R. Meredith and Samuel J. Mantel Jr.- "Project management, A managerial approach"	Chalk Board, Discussion, and Test

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TEACHING PLAN (UNIT PLAN)

Unit 4	• Functional manager v/s project manager • Financial regulations • Corporate governance and corporate ethics • Scope of CG • Scope of Financial Regulations • Need for multicultural communities	08	Jack R. Meredith and Samuel J. Mantel Jr.- "Project management, A managerial approach"	Chalk Board, Discussion, and Test
Unit 5	• Cadbury committee • Birla committee • Narayan Murthy committee • Kumar Mangalam committee	08	Jack R. Meredith and Samuel J. Mantel Jr.- "Project management, A managerial approach"	Chalk Board, Discussion, and Test

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: SELF FINANCE CLASS: FYBFM

SUBJECT: FOUNDATION COURSE. SEMESTER: 1 MONTH: AUGUST ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: Understand overview of Indian society with various concept of disparity & the Indian constitution with significant aspects of political processes, guidance for growing problems in social India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3 Concept of Disparity- 2	Examine the inequalities manifested due to the caste system and inter-group conflicts arising thereof;	10	Foundation Course by Michael Vaz & Vipul's Publications	Chalk Board, Flow Chart, Diagrams .
	Understand inter-group conflicts arising out of communalism;			
	Examine the causes and effects of conflicts arising out of regionalism and linguistic differences.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: SELF FINANCE CLASS: FY.BFM

SUBJECT: FOUNDATION COURSE. SEMESTER: 1 MONTH: SEPTEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: Understand overview of Indian society with various concept of disparity & the Indian constitution with significant aspects of political processes, guidance for growing problems in social India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4 The Indian Constitution	Philosophy of the Constitution as set out in the preamble;	11	Foundation Course by Michael Vaz & Vipul's Publications	Chalk Board, Flow Chart, Diagrams .
	The structure of the Constitution -the Preamble, main body and schedules;			
	Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society;			
	Basic features of the Constitution.			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: SELF FINANCE CLASS: FY.BFM

SUBJECT: FOUNDATION COURSE. SEMESTER: 1 MONTH: SEPTEMBER-OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to: Understand overview of Indian society with various concept of disparity & the Indian constitution with significant aspects of political processes, guidance for growing problems in social India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 5 The Indian Constitution	The party system politics;	10	Foundation Course by Michael Vaz & Vipul's Publications	Chalk Board, Flow Chart, Diagrams .
	Local self-government in urban and rural areas;			
	The 73rd and 74th Amendments and their implications for inclusive politics;			
	Role and significance of women in politics.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mrs.Sivapriya Achari DEPARTMENT: Commerce CLASS: FYBFM. SEMESTER: I MONTH: August ACADEMIC YEAR: 2020/ 2021

LEARNING OBJECTIVE/S:

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to

Preparing resumes to attending interviews, convenig meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

Tomake students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED	
1) Theory of Communication	1) Concept of Communication- Meaning, Definition, Process, Need, Feedback. Emergence of communication as akey concept in the Corporate and Global World Impact of technological advancements on communication 2) Channels and Objectives of Communication:	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	

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	Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine				

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	Objectives of Communication: Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Moral of Employees 3) Methods and Modes of Communication: Methods: Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette Modes: Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing				

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2) Obstacles to Communication in Business World	1) Problems in Communication /Barriers to Communication: Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	

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	2) Listening: Importance of Listening Skills, Cultivating good Listening Skills – 4 3) Introduction to Business Ethics: Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility Teachers can adopt a case study approach and address issues such as the following so as to orient and sensitize the student community to actual business practices: Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour				
3) Business Correspondence	1)Theory of Business Letter Writing: Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation [Letter of Appointment, Promotion and Termination, Letter of Recommendation (to be taught but not to be tested in the examination)]	15	Manan Publication, Sheth Publication, Vipul Publication	Online	

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4) Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing	15		Online	

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	an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities ⇨ Listening Comprehension ⇨ Remedial Teaching ⇨ Speaking Skills: Presenting a News Item, Dialogue and Speeches ⇨ Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. ⇨ Reading Comprehension: Analysis of texts from the fields of Commerce and Management		Manan Publication, Sheth Publication, Vipul Publication		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **JINAL CHOUHAN** DEPARTMENT: **COMMERCE** CLASS: **FYBFM** SEMESTER: **I** MONTH: **JULY** – **SEPTEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able to : Understand some basic knowledge about financial market, about reguk

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
MODULE 3	Financial Regulators: Meaning and features of financial regulators, Role and functions of financial regulators, Kinds of financial regulators, markets regulated by each regulator	**15**	**Banking and financial services. Mukund Sharma. (Himalaya Publication)**	**Chalk and Duster**	
MODULE 4	Financial Instruments:	**15**			

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	Meaning and classification of financial instruments (multiple ways of classifying financial instruments) Types of financial instruments, Evaluation of financial instruments (risk return trade-off), Characteristics of financial instruments, New financial instruments				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Lejesh keloth** DEPARTMENT: COMMERCE (SELF- FINANCE) CLASS: F.Y.B.F.M (A & B)

SEMESTER: I MONTH: SEPTEMBER - NOVEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVES: The Learners will be able to understand the aspects business economics in terms of demand, supply and production which is the base in the growth and development of the country to have better understanding about the country's economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
IV & V	Unit 4; **Market structure Perfect competition and monopoly and pricing and output Decision under Imperfect Competition** Short run and long run equilibrium of a competitive firm and of industry –monopoly – short run and long run equilibrium of a firm under Monopoly. **Monopolistic Competition**: Equilibrium of a firm under monopolistic competition, debate over role of advertising. **Oligopolistic Market**: Key attribute of oligopoly – Collusion and non-collusive oligopoly market – Price rigidity – Cartels and	(01 Lectures) Per (DIV:A& B) Per week	H.L AHUJA ADVANCED ECONOMIC THEORY H.L.AHUJA MODERN ECONOMICS	GOOGLE MEET LECTURE, DISCUSSION, TEST, PPT, GOOGLE CLASSROOM, QUIZ, CASE STUDY

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	price leadership model.		MANKIW PRINCIPLES OF ECONOMICS	
	Unit 5 ;Pricing Practices Cost oriented price method ; cost –plus price , marginal cost pricing , Mark up pricing , discriminating price,multiple- product pricing – transfer pricing.	(01 Lectures) Per (DIV:A& B) Per week		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: <u>01 Lectures per Week</u>

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: BFM CLASS:FYBFM SUBJECT: BUSINESS ENVIRONMENT -I

SEMESTER: I MONTH: JULY 2020- DECEMBER 2020 ACADEMIC YEAR:2020 -21

LEARNING OBJECTIVE/S:
The learners will be able to :

TO IDENTIFY BUSINESS OPPORTUNITIES, IMPROVING PERFORMANCE. TO KNOW HOW BUSINESS ENVIRONMENT IS ESSENTIAL FOR THE EFFECTIVENESS OF THE ORGANIZATIONAL OBJECTIVES.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1.BUSINESS AND ITS ENVIRONMENT	5	SHETH , VIPUL PRAKASHAN	GOOGLE MEET, EXCEL, PPT, WORD, WHITE BOARD
	- BUSINESS OBJECTIVES	4		
	- ENVIRONMENTAL ANALYSIS	6		

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	2.BUSINESS AND SOCIETY	6		
	- BUSINESS ETHICS,DEVELOPMENT OF BUSINESS ENTERPRENEURSHIP - CONSUMERISM AND CONSUMER PROTECTION	9		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:GAURI YADAV DEPARTMENT: COMMERCE CLASS: FY.FM SEMESTER: I MONTH: August-December ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

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The learners will be able to : learn the basic accounting rules and concepts. Understand various accounting standards . Recognize Capital and Revenue . Will know to framework the final accouts of Sole trader and partnership firm

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. NATURE & PURPOSE OF				

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ACCOUNTIN G 2.BOOKS OF ACCOUNTS 3.Introduction	Meaning and scope of Accounting: Need, development & Definition of Accounting, persons interest in Accounting disclosure, branches of accounting Accounting concepts and Accounting Standards	10	Sheth publication	PPT, , Word Google meet
	Journals, ledger, subsidiary books Trial Balance, Financial Accounting framework . Sums solved Q.1 to Q.6	15	Sheth publications,Mana n prakashan	PPT, Word, Excel to solve sums, Google meet

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to Financial Statements 4.Preparation of Final Accounts	Bank Reconciliation statements Treatment of Capital & Revenue Depreciation Accounting; methods of recording depreciation and methods of providing depreciation as per AS-4	15	Sheth publications, vipul	PPT, Excel, Google Meet
	Final Accounts of Sole Traders- Manufacturing Account, Trading, Profit & Loss Account and Balancesheet Final Accounts of Partnership Firm, Manufacturing Account, Trading, Profit & Loss Account and Balancesheet	20	Manan prakashan,sheth publications	PPT, Excel, Google meet

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: COMMERCE (SELF- FINANCE) CLASS: F.Y.B.F.M

SEMESTER: I MONTH: SEPTEMBER - NOVEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVES: The Learners will be able to understand the aspects business economics in terms of demand, supply and production which is the base in the growth and development of the country to have better understanding about the country's economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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I, II & II	Unit 1 Introduction Scope and Importance of Business Economics - basic tools- Opportunity Cost principle- Incremental and Marginal Concepts. Basic economic relations - functional relations: equations- Total, Average and Marginal relations- use of Marginal analysis in decision making, The basics of market demand, market supply and equilibrium price- shifts in the demand and supply curves and equilibrium Unit 2 Demand Analysis Demand Function - nature of demand curve under different markets Meaning, significance, types and measurement of elasticity of demand (Price, income cross and promotional)- relationship between elasticity of demand and revenue concepts Demand estimation and forecasting: Meaning and significance - methods of demand estimation: survey and statistical methods (numerical illustrations on trend analysis and simple linear regression) Unit 3 Supply and Production Decisions and Cost of Production Production function: short run analysis with Law of Variable Proportions- Production function with two variable inputs-	(01 Lectures) Per (DIV: B) Per week	H.L AHUJA ADVANCED ECONOMIC THEORY H.L.AHUJA MODERN ECONOMICS DOMINIC SALVATORE MANAGERIAL ECONOMICS MANKIW PRINCIPLES OF ECONOMICS	GOOGLE MEET LECTURE, DISCUSSION, TEST, PPT, GOOGLE CLASSROOM, QUIZ, JAM BOARD.

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	isoquants, ridge lines and least cost combination of inputs- Long run production function and Laws of Returns to Scale - expansion path - Economies and diseconomies of Scale.			

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: <u>01 Lectures per Week</u>

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VAIKHARI PATIL DEPARTMENT: COMMERCE (SELF-FINANCE) CLASS: F.Y.B.F.M
SEMESTER: I MONTH: SEPTEMBER - NOVEMBER ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVES: The students will be able to understand the aspects business economics that contributes in the growth and development of the country.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I, II & II	Unit 1 Introduction Scope and Importance of Business Economics - basic tools- Opportunity Cost principle- Incremental and Marginal Concepts. Basic economic relations - functional relations: equations- Total, Average and Marginal relations- use of Marginal analysis in decision making, The basics of market demand, market supply and equilibrium price- shifts in the demand and supply curves and equilibrium Unit 2 Demand Analysis Demand Function - nature	(01 Lectures) Per (DIV: B) Per week	H.L AHUJA ADVANCED ECONOMIC THEORY H.L.AHUJA MODERN ECONOMICS DOMINIC SALVATORE MANAGERIAL ECONOMICS MANKIW PRINCIPLES OF ECONOMICS	GOOGLE MEET LECTURE, DISCUSSION, TEST, PPT, GOOGLE CLASSROOM, QUIZ, JAM BOARD.

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	of demand curve under different markets Meaning, significance, types and measurement of elasticity of demand (Price, income cross and promotional)- relationship between elasticity of demand and revenue concepts Demand estimation and forecasting: Meaning and significance - methods of demand estimation: survey and statistical methods (numerical illustrations on trend analysis and simple linear regression) Unit 3 Supply and Production Decisions and Cost of Production Production function: short run analysis with Law of Variable Proportions- Production function with two variable inputs- isoquants, ridge lines and least cost combination of inputs- Long run production function and Laws of Returns to Scale - expansion path - Economies and diseconomies of Scale.			

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: <u>01 Lectures per Week</u>

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Vasanthi Shenoy DEPARTMENT: commerce CLASS: FY BFM SEMESTER:I MONTH: DECEMBER

ACADEMIC YEAR:_2021-22 SUBJECT :Business Environment

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Environment	Corporate Governance : Meaning ,scope ,gestures ,importance	2		Online classes . mobile phone and lab top
	Social responsibility : meaning ,area ,Advantages ,Ecology ,relation with Business ,measures ,environmental pollution,	2		

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	Adverse effect ,carbon credit ,MNC meaning ,features importance	2		
	WTO establishment ,principles ,achievements	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____8_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI CHERRIYAN DEPARTMENT: COMMERCE CLASS: FY BFM SEMESTER: II MONTH: DECEMBER

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to understand the concept of Liberalization, Privatization and Globalization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE UNIT 1 GLOBALISATION AND INDIAN SOCIETY	Understanding the concept of liberalization, privatization and globalization, Growth of information technology and communication and its impact manifested in everyday life, impact of globalization on industry: changes in employment and increasing migration, Changes in agrarian sector due to globalization, rise in corporate farming, and increase in farmers suicides.	07	Text book	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: FYBFM SEMESTER: II MONTH: JANUARY

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to get knowledge about Human Rights.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 HUMAN RIGHTS	Concept of human rights, Origin and evolution of the concept, The universal declaration of Human Rights.	05	Text book	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: FYBFM SEMESTER: II MONTH: FEBRUARY

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to know the importance of Ecology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 ECOLOGY	Importance of environmental studies in the current developmental context, Understanding concept of environment, ecology, and their inter-connectedness	05	Text book	Chalk and board
	Environment as a natural capital and connection to quality of human life, Environmental Degradation- causes and the impact on human life, Sustainable development- Concept and Components, poverty and environment	05	Text book	Calk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Fini Cherriyan DEPARTMENT : Commerce

CLASS : FYBFM (A,B) SEM : II MONTH : NOV-DEC YEAR : 2021 - 2022

LEARNING OBJECTIVE/S : Learner will be able to learn the concept of organising, departmentation & leadership.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
PRINCIPLES OF MANAGEMENT	Fundamentals of organising	02	Seth publication	Chalk and board
	Bases of departmentation	02	Seth publication	Chalk and board
UNIT III	Distribution of authority	02	Seth publication	Chalk and board
	Co ordination	02	Seth publication	Chalk and board
ORGANISING	Organisation structure & design	02	Seth publication	Chalk and board
	Leadership- nature & significance, leadership styles, leadership theories	05	Seth publication	Chalk and board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBFM (A,B) SEM : II MONTH : JAN-FEB YEAR : 2019-20

LEARNING OBJECTIVE/S : Learner will be able to learn concept of controlling, its types and techniques.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
PRINCIPLES OF MANAGEMENT	Nature & purpose and process of controlling	02	Seth publication	Chalk and board
	Kinds of control system	02	Seth publication	Chalk and board
UNIT IV	Prerequisites of effective control system	01	Seth publication	Chalk and board
	Resistance to control	01	Seth publication	Chalk and board
MANAGEMENT CONTROL	Controlling techniques	02	Seth publication	Chalk and board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI YADAV DEPARTMENT: _COMMERCE_ CLASS: _FYFM SEMESTER: ___II__

MONTH: _____NOVEMBER - MARCH_ ACADEMIC YEAR: 2021 - 2022

LEARNING OBJECTIVE/S:
The learners will be able to : __Meaning of shares , types of shares , process of issue of shares, forfeiture of shares , surrender of shares , journal entries for issue of shares , meaning of debentures , types of debentures ,features of debentures , issue of debentures issue redemption of debentures._

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting	1. Introduction to company accounts. : Issue of shares , types of shares , forefeiture of shares , surrender of shares , journal entries on issue of shares 2. Meaning of debentures , features of debentures , types of debentures , issue of debentures , redemption of debentures.	13 12	Manan publication	Blackboard

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JINAL CHOUHAN DEPARTMENT: COMMERCE CLASS: FY BFM SEMESTER: 2

MONTH: NOV-DEC ACADEMIC YEAR: 2021-2022 SUBJECT: FOUNDATION COURSE

LEARNING OBJECTIVES:

The learners will be able to : Socially aware of the societal problems and their personality.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 UNDERSTANDING STRESS AND CONFLICTS	Causes of stress and conflicts in individuals and society. Agents of Socialization and the role played by them in developing the individual. Significance of values, ethics and prejudices. Stereotyping and prejudice as significant factors in causing conflicts in society. Aggression and violence as the public expression of	10	Foundation Course by Michael Vaz Foundation course by Rashmi Karanath	Chalk board

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	conflict.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT I PLAN)

NAME OF THE STAFF: Khan Parveen Saba DEPARTMENT: Commerce CLASS:FYBAF SEMESTER: II

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to : (1) Define Ratio, Continued Ratio, and Inverse Ratio and solve the questions based on these terms.

(2) Understand the concept of Proportion, Continued Proportion, Direct Proportion and Inverse Proportion.

(3) Solve the questions based on different types of Proportion and relate the situations in day to day life.

(4) Understand the concept of Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation.

(5) Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	(1) Define Ratio,Continued Ratio	04	BUSINESS MATHEMATICS :	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT.

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Ratio, Proportion & Percentage Unit I			D.C.Sancheti, V.K.Kapoor	TEACHING AIDS : Blackboard, Chalk & Duster
	(2) Inverse Ratio	02	J.K Singh	
	(3) Proportipon its types	03		
	(4) Problem solvingon ratio and proportion	03		
	(5) computation of percentage.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

TEACHING PLAN (UNIT II PLAN)

NAME OF THE STAFF: Khan Parveen Saba DEPARTMENT: Commerce CLASS:FYBAF SEMESTER: II

ACADEMIC YEAR: 2016-17

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LEARNING OBJECTIVE/S:
The learners will be able to : (1) Define Trade discount, cash discount, cost price & net selling price etc.

(2) Learn about Commission and Brokerage

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS Profit & Loss Unit II	(1) Trade discount and cash discount with sums	03	BUSINESS MATHEMATICS: D.C.Sancheti, V.K.Kapoor	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster
	(2) Cost price and selling price with sums	03		
	(3) Listed price and Invoice price with sums	03		

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	(4) Introduction on commission & brokerage	02		
	(6) Problems on Commission & Brokerage	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

TEACHING PLAN (UNIT III PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: Commerce CLASS:FYBAF SEMESTER: II

ACADEMIC YEAR: 2016-17

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) understand the concept of interest

(2) learn the basic concept of Annuity and EMI

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT

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		ALLOTED		TOOLS USED
BUSINESS MATHEMATICS Interest and Annuity Unit III	(1) simple interest with example	04	BUSINESS MATHEMATICS: D.C.Sancheti, V.K.Kapoor	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster
	(2) compound interest with example future and present value also	04		
	(3) Annuity immediate and its Present value and future value	05		
	(4) EMI equated monthly installment	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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TEACHING PLAN (UNIT IV PLAN)

NAME OF THE STAFF: Khan Parveen saba DEPARTMENT: Commerce CLASS: FYBAF SEMESTER: II

ACADEMIC YEAR: 2016-17

LEARNING OBJECTIVE/S:
The learners will be able to : (1) understand the concept of shares ,face value, market value ,dividend, equity shares

(2) learn the different type of shares

(3) learn what is Mutual Fund with the basis of Net Asset ValueValu

(4) understand how to use systematic investment plan

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS 1)Shares 2) mutual fund	(1) concept of shares, face value ,market value ,dividend, equity shares	03	BUSINESS MATHEMATICS: D.C.Sancheti,	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard,

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Unit IV			V.K.Kapoor	Chalk & Duster
	(2) Preference shares, bonus shares with simple example	03		
	(3) mutual fund simple problem on calculation of Net income after considering entry load	03		
	(4) dividend change in net asset value and exit load	03		
	(5) systematic investment plan	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____Muriel Rumao_____DEPARTMENT:___Commerce___CLASS: FYBCOM BFM A

SEMESTER:_____II_____MONTH: December- March ACADEMIC YEAR:___2021-2022__

LEARNING OBJECTIVE/S:
The learners will be able to . write business letters.

understand the concept of business reports.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3	Inquiry letter	3	Manan / Vipul	Blackboard and practice
	Complaint	2	Manan	Blackboard and practice
	Adjustment	3	Manan	Blackboard and practice
	Sales letter	3	Manan	Blackboard

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	Consumer grievance	2	Manan	Blackboard
	RTI	1	Manan	Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____14____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4	Report writing	2	Manan	Blackboard
	Summary	1	Manan	Discussion

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_____3___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Khan Parveen Saba DEPARTMENT: Commerce CLASS: FYBFM SEMESTER: II

MONTH: DECEMBER ACADEMIC YEAR: 2021 - 2022

LEARNING OBJECTIVE/S:
The learners will be able to : (1) Understand the concept of statistics

(2) learn about the Graph(Histogram, polygon) etc

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS Population and Sample Unit I	(1) Definition of Statistics, Scope of Statistics, financial market, concept of population and sample	02	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks

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	(2) Method of Sampling	01		
	(3) Data Condensation and Graphical method	03		
	(4) Attributes and Variables	03		
	(5) Graphs(Histogram and frequency)	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 Lectures

TEACHING PLAN (UNIT II PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYBFM SEMESTER: II

MONTH: January ACADEMIC YEAR: 2019-20

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LEARNING OBJECTIVE/S:
The learners will be able to :

(1) concept of measure of Central tendency with examples

(2) understand the concept of Mean,Median and Mode

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATIATICS Measure of Central tendency Unit II	(1) definition of average and type of averages	02	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) mean, median, mode with sums	04		

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	(3)Quartiles and Percentile	02		
	(4) Decile	02		
	(5) Combine mean	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

TEACHING PLAN (UNIT III PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYBFM SEMESTER: II

MONTH: JAN-FEB ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) understand the concept of measure of dispersion

(2) Learn whar are the absolute and relative measure of dispersion

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATIATICS Measure of dispersion Unit III	(1) Concept of measure of dispersion	01	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) Various measures of Dispersion	02		
	(2) Quartile deviation	03		
	(4) Mean deviation, Standard deviation	03		
	(5) Variance and Combined variance	03		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

TEACHING PLAN (UNIT IV PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYBFM SEMESTER: II

MONTH: FEB-MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) understand the different different concept of correlation analysis

(2) learn about regression analysis

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

BUSINESS STATISTICS Correlation & Regression Unit IV	(1) meaning and type of correlation	01	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) determination of correlation: scatter diagram ,Karl Pearson correlation coefficient	02		
	(3) meaning and concept of regression	03		
	(4) slope of regression line ,regression coefficient	03		
	(5) regression line by method of least square	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

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TEACHING PLAN (UNIT V PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYBFM SEMESTER:I I

MONTH: MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: (1) Understand the use of Graphs

(2) concept of linear programming problem

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS Linear Programming Problems	(1) Concept of LPP	01	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,

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	(2) Formulation of LPP	02		
	(3) Sums based on formulation of LPP	04		
	(4) Graphically Method	02		
	(5) sums based on Graphically method	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Plemia DEPARTMENT: Self Finance CLASS: F.Y.BFM (Division A B) SEMESTER: II

MONTH: January, February ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand and remember concept of economic activities and its pattern- primary, secondary and tertiary.

2) Predict environmental problems associated with economic activities and identify measures to solve to problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3- Environment and Economic Activities	Economic activities-nature and pattern- primary,secondary and tertiary	02	Book by Vipul publications/ Internet	Chalkboard
	Environmental problems associated with economic activities	03	Book by Vipul publications/ Internet	Chalkboard

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	Case studies with reference to India	02	Book by Vipul publications/ Internet	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Shivpriya Achari** DEPARTMENT: **SELF FINANCE**

CLASS: **FY BFM B** SEMESTER: **II** MONTH: **DECEMBER TO MARCH** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
To improve students presentation skill and make enable them to write appropriately for organization / industry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Presentation: principles of effective presentation, effective use of OHP, How to make a powerpoint presentation.	15	Textbook	Chalk & Blackboard

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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2	Group Communication: i. Interviews ii. Meeting iii. Conference iv. Public relations	15	Textbook	Chalk & Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti DEPARTMENT: Self Finance CLASS: F.Y.BFM (Division A B) SEMESTER: II

MONTH: December, January ACADEMIC YEAR: 2021 - 2022

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand the concept of environment and its structure; ecosystem and its structure.

2) Understand and predict the threats to Biodiversity; identify the measures to preserve biodiversity.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1- Environment : An overview	Environment- structure, components and typology	03	Book by vipul publications/ Internet	Chalkboard
	Ecosystem as part of environment- Functioning and levels of organisation	03	Book by vipul publications/ Internet	Chalkboard

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	Biodiversity- Classification, value, threats to biodiversity	04	Book by vipul publications/ Internet	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:. PROF. Vaikhari DEPARTMENT:. COMMERCE CLASS:. F.Y.B.F.M SEMESTER: II

MONTH: January to April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: Financial Accounting-II
The learners will be able to : Understand Meaning , importance and types of Accounting System ,it's Advantages and Disadvantages

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CHAPTER 1. Issue of Shares and Debentures	What is a Company?, Public Company Vs. Private Company, Principle of Limited Liability, Essential Characteristics of a Company, why a Company? , Incorporation of a Company, Shares , share capital, Issue of Shares, Issue of Debentures, Related illustratios and Exercise	15		PPT/MS WORD /MS EXCEL
CHAPTER 6. Redemption of				PPT/MS WORD/ MS EXCEL

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Debentures and Purchase of Shares Chapter 7. Investment Accounting Chapter 8 and 9 Indian Accounting Standards	Introduction, What is a Debenture? , Shares Vs. Debenturs , Issue of Debentures , Debentures can also be issued , Redemption of Debentures, Discount/ Loss on Issue / Redemption of Debentures and its write off, Interest on Debentures, Statutory Provisions, Redemption out of capital, Redemption out of Profits , Redemption by conversion of Debentures, Conversion of Debentures into shares when Debentures are issued at Discount, Purchase of own Debentures, Cum- interest and Ex- Interest Transactions, Excercise.	15		PPT/ MS WORD/MS EXCEL
	What is Personal Investment Accounting? , Accounting for Investments, Definitions, Classification of Investments, Cost of Investments, Adjustments to cost of Investments on Balance Sheet Date, Sale or Disposal of Investments, Reclassification of Investments, Disclosures in Financial Statements for Investments,Investment Register,Exercise	08	PPT	

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	Accounting Standards, Generally Accepted Accounting Principles, and their impact on Income Statement and Balance Sheet Latest Development: Computerization of Accounting and Accounting Softwares.	07	PPT	

ITOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce

CLASS: S Y BF M SEMESTER: III MONTH: JULY-OCTOBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to :

Know about the relationship of the risk & return and how risk should be measured to bring about a return according to the expectation of investor and portfolio management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Portfolio Management	**Introduction to portfolio management** Investment process, Investment categories, defining investment goals and objectives, Investment constraints Process of asset allocation, different approaches to allocation decision, overview of allocation techniques	15	Portfolio Management : A Strategic approach, Ginger Levin, John Wyzalek: CRC Press Security Analysis and Portfolio Management, Prasanna Chandra, Tata McGraw Hill	GOOGLE MEET FOR ONLINE TEACHING, GOOGLE CLASSROOM DESKTOP AND LAPTOP, Group Discussion, PPT
	Portfolio Management Strategies Active strategy, passive strategy, semi active strategy, duration shift and immunization, efficient market hypotheses, top down and bottoms up	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____SYBFM____ SEMESTER: _____III_____ MONTH: __JULY __ ACADEMIC YEAR: _____2021-22___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Management Accounting	Meaning and Definition of Management Accounting, Nature and Frame work	1	Management Accounting By I.M Pandey	• Google meet • Microsoft Power point
	Functions of Management Accounting, Decision Making Process	1		
	Information of Decision making (Information, Strategic, tactical and operational information)	1		

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	Financial Accounting v/s Management Accounting , Qualities of Management Accounting	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____5____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____SYBFM____ SEMESTER: _____III_____ MONTH: __JULY- AUGUST __ ACADEMIC YEAR: _____2021-22

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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UNIT 2 Analysis and Interpretation of Accounts	Introduction and importance of Financial statements, Vertical form of Balance sheet and Profit and loss Account suitable for analysis	3	Management Accounting By I.M Pandey	• Google meet • Excel • Microsoft Power point
	Simple sums based on Analysis of Financial Statement	3		
	Format and Calculation Tricks of Trend Analysis Comparative Statement Common size Statement Practical Illustration	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____SYBFM____ SEMESTER: _____III_____ MONTH: __AUGUST__ ACADEMIC YEAR: _____2021-22

LEARNING OBJECTIVE/S:

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The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 Ratio Analysis and Interpretation based on Vertical Financial Statements	Introduction and Meaning of Financial statement analysis, Steps, objectives , Types of Analysis, simple sums on financial statement	3	Management Accounting By I.M Pandey	• Google meet • Excel • Microsoft Power point
	Ratio Analysis- Meaning, Classification , DU Pont chart, Advantages and limitations.	2		
	Balance sheet ratio, Revenue statement Ratio and Combined Ratio (Applications of formulas)	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____8____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____SYBFM____ SEMESTER: _____III_____ MONTH: __SEPTEMBER __ ACADEMIC YEAR: _____2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 Cash Flow Statement	Preparation of cash flow statements with reference to Accounting Standard No 3 –Indirect Method Only Meaning – Importance – Difference between cash flow statement and fund flow statement	2	Management Accounting By I.M Pandey	• Google meet • Excel • Microsoft Power point
	Cash flows from operating, investing and Financing activities – Utility of cash flow statement, Importance of	3		

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	cash flow statement – Format of Cash flow statement			
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____10____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____SYBFM____ SEMESTER: _____III_____ MONTH: __SEPTEMBER - OCTOBER __ ACADEMIC YEAR: _____2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : The learners will be able to Learn what is working capital, its types and how to estimate working capital requirement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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UNIT 5 Working Capital	Introduction, Meaning, Types of Working Capital	1	Management Accounting By I.M Pandey	• Google meet • Excel • Microsoft Power point
	Factors, Advantages, Limitation, Estimation of Working Capital Operating Cycle, Provision for Contingencies / Margin of Safety,	1		
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____7____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manoj Sharma DEPARTMENT: commerce CLASS: SY BFM

SEMESTER:I **IV** MONTH: DECEMBER

ACADEMIC YEAR:_2021-22SUBJECT :Business Law

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to : UNDERSTAND THE TOPIC

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Law	Sale of goods Act 1930 Definition , Types of goods	2		Online classes . mobile phone and lab top
	Essential of Contract of sale	2		
	Condition and warranty	2		
	Transfer of property , rights of unpaid seller	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____8_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DILIP MAHENDRA JAIN DEPARTMENT: FINANCIAL MARKETS

CLASS: TYBFM SEMESTER: III MONTH: JULY TO NOVEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The Learner Will Understand the Conceptual part of Marketing of Financial Service, Segmentation, Issues to Sell Service Based Product.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MARKETING OF FINANCIAL SERVICES	MODULE 1 **Foundation of Services Marketing** Introduction: ➢ The services concept Nature of Service, Characteristics of Services, Classification of Services ➢ Importance of Services Marketing – The Growth in Financial Services ➢ Distinctive Characteristics of Services & Four I's of Services ➢ Managing Service Encounters.	15	VIPUL PUBLICATION	PPT, PDF, GOOGLE CLASSROOM, GOOGLE MEET, POWERPOINT PRESENTATION

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	MODULE 2 **Services Market Segmentation** ➢ Services Market Segmentation, ➢ Positioning ➢ Differentiation of Services, ➢ Promotion and Communication ➢ Service Quality and Productivity ➢ Customer Relationship Management ➢ Customer Loyalty.	15	VIPUL PUBLICATION	PPT, PDF, GOOGLE CLASSROOM, GOOGLE MEET ONLINE LECTURES POWER POINT PRESENTATIONS
	MODULE 3 **Issues in Marketing of Services** ➢ Issues in Marketing of Services: Extended Services Marketing Mix ➢ Service Delivery Process ➢ Service Blueprints ➢ Distribution Strategies of Services & Challenges in Distribution of Services. ➢ Personal Selling – Advertising and Sales Promotion in Service Industry	15	VIPUL PUBLICATION	ONLINE LECTURES POWER POINT PRESENTATIONS

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	MODULE 4 **Customer Satisfaction & Service Quality in Service Marketing** ➢ Service Encounter ➢ Role of HR & Internal Marketing ➢ GAP Model – Handling complaints effectively ➢ Service Failure – Recovery, Use of Internet in Service Marketing ➢ Ethics in Marketing, New trends in marketing, Marketing in 21st Century.	15	VIPUL PUBLICATION	ONLINE LECTURES POWER POINT PRESENTATIONS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE SUBJECT:60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Mezbin Lalani DEPARTMENT: COMMERCE_ CLASS: S.Y.BFM SEMESTER: III MONTH: July-Oct 2021

ACADEMIC YEAR: 2021-2022 (**PORTFOLIO MANAGEMENT**)

LEARNING OBJECTIVE/S: to make students understand the basics of portfolio management.
The learners will be able to : understand various investment alternatives, making of portfolio, techniques of portfolio evaluation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Portfolio analysis				
	Portfolio management, risk and its types, Beta and types,			PPT, PDF, google classroom, google meet
2. Portfolio Revision and performance management	Diversification, risk and return, single index model, sharpe model, beta, various models.	15	Security analysis and portfolio management (prassanna Chandra)	
	Techniques of portfolio revision,Calculation of rate of return, sharpe, treynor ,Jensen performance measures,	15		

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	factors affecting portfolio measures.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA VAIBHAV TAMBE DEPARTMENT: Commerce CLASS: S.Y.BFM
SUBJECT: FOUNDATION COURSE III- MONEY MARKET SEMESTER: III MONTH: August-December ACADEMIC YEAR: 2021-2022

A teaching plan is a document that outlines the structure and details of a single session. A good teaching plan is a comprehensive write-up of the step-by-step teaching methods, the estimated duration of each segment of teaching, and the materials and resources needed for the session.

LEARNING OBJECTIVE/S:

By the end of the session Students will be able to:

Understand the concept of Money markets, Regulatory framework of money markets, Markets instruments, and recent development in money markets.

(For a detailed description of each component see Appendix A).

APPENDIX {A}

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT1 Introduction to money market	a] Meaning of money market features of money market	01	Book by Manan publications/Internet	Online
	b]Importance of money market	01	Book by Manan publications/Internet	Online
	c] Role of primary deals in money market	01	Book by Manan publications/Internet	Online

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	d] development of trade and industry & capital market	01	Book by Manan publications/Internet	Online
	e] Smooth functions of commercial Bank	01	Book by Manan publications/Internet	Online

Total no of lecture 05

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Regulatory framework of money market	a] Regulatory framework of RBI	01	Book by Manan publications/Internet	Online
	b]Fixed income, money market and Derivatives Associations (F I M M D A)	02	Book by Manan publications/Internet	Online
	c] foreign exchange dealers association of India (F E D A I)	02	Book by Manan publications/Internet	Online
	d] conDS	02	Book by Manan publication/internet	Online

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	e] NDS-OM	01	Book by Manan publication/ internet	Online

Total no of lecture 08

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 Money Market	Part a] conversation treasury bills call loan market commercial bills promissory notes in the bill market	03	Book by Manan publications/Internet	Online

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Instruments	Part b] modern-: commercial papers certificate of deposit interbank participation certificate repo instrument bankers acceptance	03	Book by Manan, vipul publications/Internet	Online
	Part c] money market mutual fund meaning advantage and disadvantage regulatory framework for money market mutual fund various money market funds operational in india	03	Book by vipul publications/Internet	Online

Total no of lecture 09

UNIT TITLE	COMPONENTS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Unit 4 Recent developments in money market	a] Integration of unorganized sector with the organized sector	01	Book by Manan publications/Internet	Online
	b] widening of call money market	01	Book by Manan publications/Internet	Online
	c] introduction to innovative instruments	01	Book by Manan publications/Internet	Online
	d] offering of market rates of interest	01	Book by Vipul publication/internet	Online
	e] promotion of bill culture	01	Book by Vipul publication/ internet	Online
	f] entry of money market mutual fund	01	Book by Vipul publication/internet	Online
	g] credit rating agencies	01	Book by Vipul publication/internet	Online
	h] adoption of suitable monetary policy	01	Book by Vipul publication/internet	Online
	i] establishment of DHFL	01	Book by Vipul publication/internet	Online
	j] setting up of security trading corporation of India ltd. (STCI)	01	Book by Vipul publication/internet	Online

Total no of lecture 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Priyanka Devnath_Rajput DEPARTMENT: Commerce CLASS: S.Y.B.F.M

SEMESTER: III MONTH: August - December ACADEMIC YEAR: 2021- 2022 SUBJECT: Computer Skills - II

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of Ms_Excel, Data Base Management System, Different system of E-Business Software and Online Banking.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Advanced Spreadsheet	Pivot Table.	01	Computer Skills - II By Rimple Sanchla And www.Guru99.com https://www.guru99.com/excel-tutorials.html	Power Point Presentation, Google Meet, Google Meet Attendance, PDF And Computer (MS- Excel Software)
	Advanced formulae.	03		
	Lookups.	02		
	Macros.	02		
	Working with other programs.	02		
	Inserting a spreadsheet sheet in word document.	01		
	Modifying an inserted spreadsheet.	01		
	Inserting a linked chart in a Word Document.	01		
	Inserting graphic in a spreadsheet.	02		

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	Practical: Pivot, Advance Formulae, Lookups, Macros, Inserting linked chart in a word document	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Data Base Management System	Concepts.	01	Computer Skills - II By Rimple Sanchla And www.Guru99.com https://www.guru99.com/dbms-tutorial.html	Power Point Presentation, Google Meet, Google Meet Attendance, PDF And Computer Software
	Tables.	02		
	Fields.	02		
	Datatypes.	03		
	RDBMS.	03		
	Primary Key.	02		
	Foreign Key.	02		
	Practical: - Create Table, Primary Key, Foreign Key, Insert Data, Delete table.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Modern E Business Software Systems	Introduction.	01	Computer Skills - II By Rimple Sanchla And www.wikipedia.com	Power Point Presentation, Google Meet, Google Meet Attendance, PDF And Computer Software
	Enterprise Resource Planning – ERP.	03		
	Supply chain Management- SCM.	02		
	Customer Relationship Management- CRM.	02		
	Sales Force Automation- SFA.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV Other Emerging Technologies	Other emerging technologies	03	Computer Skills - II By Rimple Sanchla And	Power Point Presentation, Google Meet,
	Net-banking	03		

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	Online banking software	04	www.wikipedia.com	Google Meet Attendance, PDF And Computer Software

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __varada katle DEPARTMENT: COMMERECE CLASS: SY BFM SEMESTER MONTH: December 23, 2020ACADEMIC YEAR: 20-21 SUBJECT : COMMODOTIES MARKET

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMODITIES MARKET	FUNCTION AND ROLE ,TRADING AND CLEARING METHOD ,COMMODITY FUTURE ,	5	VIPUL PRAKASHAN	ONLINE . TOOLS MOBILE PHONE AND LABTOP
COMMODITY EXCHANGE STRENGTHENING COMMODITY MARKET IN	COMMODITY SPECIFIC EXCHANGE V/S MULTY COMMODITY EXCHANGE	5		
	ROLE OF GOVERNMENT ,ROLE OF COMMODITY EXCHANGE ,OTHER INSTITUTION	5		
	TRAINING AND DEVELOPMENT OF DEALER	5		

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INDIA				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURE PER UNIT

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: Self Finance CLASS: S.Y.BFM SEMESTER: III

MONTH: September to October ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & remember the concept of securities markets.
2) Understand & remember the need for strengthening Equity markets
3) Understand & remember the types of Investments and Investors in Euity

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4- Importance of Equity Markets in a Developing Country like India	Need for attracting more investors towards equity	02	Book by Vipul publications/Internet	Google Meet, PPT, YouTube
	Need for strengthening secondary markets	02	Book by Vipul publications/Internet	Google Meet, PPT, YouTube
	Link between Primary & Secondary markets	02	Book by Vipul publications/Internet	Google Meet, PPT, YouTube

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VARADA KATLE DEPARTMENT:commerce CLASS: sy Bfm SEMESTER:III MONTH: JUNE -18

ACADEMIC YEAR: 2021-2022 SUBJECT : COMMODITIES MARKET

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Commodities market	Unit -1 Introduction to commodity market Emergence of commodity mkt ,Dynamic of global commodity mkt	5	Vipul publication	Chalk and duster method
	Unit II commodity mkt in India Commodity exchange in India ,role of information Technology Linkage between equity mkt and commodity mkt	5		
	Unit III commodity exchanges : Function &role , trading &clearing method commodity future	5		
	Unit IV Strengthening commodity market in India Role of government ,role of commodity exchange training and	5		

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	development of dealer			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__20_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce

CLASS: S Y BF M SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to :

To help business in capital formation by providing services of standby credit, underwriting of securities that are generally backed by the guarantees. Identify the common methods of debt financing for firms. Identify the common methods of equity financing

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Merchant Banking	UNIT- 3 **Issue of DRs, ADRs, CPs** **Types and Process of Issuing of Depository Receipts (DRs) - American Depository Receipts (ADRs), Global Depository Receipts (GDRs), European Depository Receipts (EDRs), Indian Depository Receipts (IDRs), ADR structure and norms, Indian Depository Receipts (IDRs) and Guidelines; Procedure for issue of Commercial Paper – Credit Rating, Redemption process**	12	A Manual of Merchant Banking: J.C.Verma : Bharath Publishing House, New Delhi, Merchant Banking: H R Machiraju : New Age International Publishers	GOOGLE MEET FOR ONLINE TEACHING, GOOGLE CLASSROOM DESKTOP AND LAPTOP, Group Discussion,
	UNIT - 4 **Issue of Bond and debenture** **Procedure for Issue of Bond and Debentures, Foreign currency convertible bonds**	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: CORPORATE FINANCE DEPARTMENT: ____COMMERCE___

CLASS: ____SYBFM____ SEMESTER: _____IV_____ MONTH: __NOVEMBER - DECEMBER ACADEMIC YEAR: ____2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : To understand the basic concept of Corporate Finance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Corporate Finance and overview	Meaning, Features, Need and Importance of Corporate Finance, Functions of Finance in a Business Enterprise	2	Corporate Finance By John Wiley	Google meet, Microsoft Power point
	Scope and Objectives of Financial Management, Emergence of Corporate Finance as an integral part of business finance	2		
	Need for professional approach in managing corporate finance, Financial Management Objectives	2		
	Role and Functions of Corporate Finance Manager	2		

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	Requirement of an efficient corporate finance manager, Types of Risk	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____10_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: CORPORATE FINANCE DEPARTMENT: ____COMMERCE___

CLASS: ____SYBFM____ SEMESTER: _____IV_____ MONTH: __JANUARY - FEBRUARY_ ACADEMIC YEAR: ____2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those costing techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Planning the Corporate	A) Cost of Capital Meaning and utility of Cost of capital, Component of Cost of capital and Formulas	2	Corporate Finance By John Wiley	Google meet, Excel, Microsoft Power point

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Financial Activities	Practical Illustrations	5		
	B) Marginal Costing and Break-Even Analysis Meaning, Features and Advantages of Marginal Costing, Proforma and Formulas of Marginal Costing, Break Even Analysis	3		
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: CORPORATE FINANCE DEPARTMENT: ____COMMERCE___

CLASS: ____SYBFM____ SEMESTER: _____IV_____ MONTH: __ FEBRUARY- MARCH_ ACADEMIC YEAR: ____2021-2022___

LEARNING OBJECTIVE/S:
The learners will be able to : To understand the concept role and impact of investment policy, capital structure and dividend policy.

PAPER, UNIT,	SUBTOPICS	NO OF	REFERENCE/S	TEACHING METHOD/ ICT

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TITLE		LECTURES ALLOTED		TOOLS USED
UNIT 3 Capital Structure	A) Capitalisation and Capital structure Meaning and Definition of Capital structure, Financial (Capital) plan – Basic Principles, Overcapitalization, Undercapitalization and Watered Capital	2	Corporate Finance By John Wiley	Google meet, Excel, Microsoft Power point
	Factors affecting capital structure- Trading on Equity, Theories of Capital Structure, Proforma of Evaluation of alternative capital plan	3		
	Practical Illustrations	3		
	B) Capital Budgeting Meaning and Definition of Capital Budgeting, Features of Capital Expenditure decision, Techniques of Capital Budgeting, Formulas of Payback Period, ARR, NPV, IRR, DCF Technique	3		
	Practical Illustrations	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: CORPORATE FINANCE DEPARTMENT: ____COMMERCE___

CLASS: ____SYBFM____ SEMESTER: _____IV_____ MONTH: __MARCH - APRIL _ ACADEMIC YEAR: ____2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Learners are able to understand the various available sources of finance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 Sources and Methods of Raising Corporate Finance	Types and Features of Corporate securities currently available	3	Corporate Finance By John Wiley	Google meet, Excel, Microsoft Power point
	Management of New issues, including pricing securities	4		
	Role of Commercial Banks and Investment Banks in Financing the corporate sector	4		
	Leasing as Method of Corporate Finance	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. LEJESH KELOTH**

DEPARTMENT**: COMMERCE** CLASS: **S.Y.BFM** SEMESTER: **IV**

MONTH: **NOVEMBER TO MARCH** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S : Understand, observe, inflation, Monetary Policy its working etc.

The learners will be able to : basic concepts of macro-economics, understand the economy whole.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Macro-Economics Paper- II	**MODULE – 1: Introduction to Micro-economics:** Macroeconomics, circular flow of income, measures of national product, trade cycle, theory effective demand, consumption function, investment function and theory of multiplier.	15	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication,	Black Board Method
Macro-Economics Paper- II	**MODULE – 2: Money, Inflation and Monetary Policy:** Money supply, Demand for money and theory of interest, Money and Price, Inflation and Monetary policy.	15	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan,	Black Board Method
Macro-Economics Paper- II	**MODULE – 3: Constituents of Fiscal Policy:**	10	H.L. Ahuja, Dr. J.P. Mishra,	Black Board Method

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	Role of the government, Fiscal policy, Instrument of fiscal policy, Public expenditure, Public death and Union budget, structures.		Manan Prakashan,	
Macro-Economics Paper- II	**MODULE – 4: open economy theory and issue of international trade: T**rade theories, Terms of trade and gain from trade, Free trade vs Protection, Foreign investment**, B**alance of payment disequilibrium and corrective measures and foreign exchange market and exchange rate.	10	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan,	Black Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 50

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manoj Sharma DEPARTMENT: commerce CLASS: SY BFM

SEMESTER:I **IV** MONTH: DECEMBER

ACADEMIC YEAR:_2021-22SUBJECT :Business Law

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to : UNDERSTAND THE TOPIC

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Law	Sale of goods Act 1930 Definition , Types of goods	2		Online classes . mobile phone and lab top
	Essential of Contract of sale	2		
	Condition and warranty	2		
	Transfer of property , rights of unpaid seller	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____8_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MEZBIN LALANI DEPARTMENT: COMMERCE CLASS: SYBFM SEMESTER: IV MONTH: NOV-APRIL 2022

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: To enable the learner to understand merchant banking and the other services offered by them.
The learners will be able to : Know who a merchant banker is, their services, role and functions in issue management and other activities of the company

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	INTRODUCTION TO MERCHANT BANKING: Meaning, need, functions, merchant banking services, reasons for the growth of merchant banking in India, regulatory framework for merchant bankers in India, Classification of merchant bankers by SEBI, Commercial banking and merchant banking. ISSUE MANAGEMENT: Methods of raising funds from capital market, Issue management, functions of merchant bankers related to Issue management, pre issue and post	15	Merchant banking & financial services by Dr. Ravichandran, SEBI bare act.	Power point presentations, PDF's, Google classroom, Google meet, etc

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UNIT 2	issue activities			
	INITIAL PUBLIC OFFER: objectives of capital issues, meaning of IPO, IPO procedure, benefits of IPO, book building and fixed price method, book building process in detail, difference between book building and fixed price method, IPO grading, its process and scale, meaning of offer document, red herring prospectus, pre and post issue activities in issue management.	15	Merchant banking & financial services by Dr. Ravichandran, SEBI bare act.	Power point presentations, PDF's, Google classroom, Google meet, etc
	RIGHTS ISSUE AND LISTING: Meaning of rights issue, difference between rights and bonus issue, listing of securities, objectives of listing, listing procedure, advantages of listing, delisting and its types, types of investors in an IPO.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30_

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MEZBIN LALANI

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA VAIBHAV TAMBE DEPARTMENT:- COMMERCE

CLASS S.Y.BFM SEMESTER: IV MONTH: DECEMBER-APRIL ACADEMIC YEAR: 2021 -2022

LEARNING OBJECTIVE/S: To develop the understanding of foreign exchange market among the students.
The learners will be able to understand the Forex market and their various and its important.

The Learners will able to understand the Forex system in our country.

The Learners will be aware about the various type of risk available in the market.

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit:-1 Foreign Exchange Market - An Introduction:	**Foreign Exchange Market - An Introduction**:			
	. FOREX trading volume, FOREX trading locations, Details about major traded currencies, Evolution of foreign exchange, Market and Foreign Exchange System. Market Participants: Banks and Financial Institutions, Merchants, other customers, speculators and hedgers, Central Bank	6	- Text book - International Economics:- M.L.Jhingan - Internet	- Google Meet - Power point presentation.

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	Forex dealers and market makers and brokers, FOREX trading and SWIFT Robots.			
Unit:2 Introduction to Indian Foreign Exchange Market:	FOREX market in India: A historical perspective FERA Vs. FEMA, Pre-liberalization Exchange Rate Regime in India and Hawala market, Brief introduction to currency convertibility in current and Capital account.	6	- Text book - International Economics:- M.L.Jhinga - Internet	- Google Meet - Power point presentation
Unit:3	**Operational aspects of foreign exchange market and foreign exchange contracts:** **A)** Floating Rate, Currency Boards and Currency Basket Systems, Brief review on various exchange rate regime, Advantages of free and Fixed Exchange Rate regime, Pros and Cons of managed floating exchange rate regime, Prevalence of Currency Boards Regime, Practice of Currency Basket Regime. **B)** Foreign Exchange Contracts: Spot and Forward Contracts Cash, Spot trading Trade Date, Settlement PR date Spot trading roll over mechanism. Foreign Exchange Forward contracts, Fixed Maturity Contract, Partially Optional Contract, Fully Optional Contract, Non-Delivery Forward Contracts, Foreign Exchange Futures Contract, Different Dimensions of Foreign Exchange Future, Contract	8	- Text book - International Economics:- M.L.Jhingan - Internet	- Google Meet - Power point presentation

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	specification trading at National Stock Exchange of India.			
Unit:-4	**Foreign Exchange Arithmetic and Risk Management**: Types of Exchange Rates. Direct Rate, Indirect Rate and Cross Rate. Arbitrage - Geographical and triangular. Interest Rate - spot Contracts, forward contracts and SWAP Points. Risk Management in Foreign Exchange Market - Need and importance of foreign exchange management methods adopted (Spot and forward, arbitrage, cross currency deals, SWAPS, options and futures.	8	- Text book - International Economics:- M.L.Jhingan - Internet	- Google Meet - Power point presentation

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __varada katle DEPARTMENT: COMMERECE CLASS: SY FM SEMESTER **IV** ACADEMIC YEAR: 21-22

SUBJECT : COMMODOTIES DERIVATIVES

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COMMODITIES DERIVATIVES	FUNCTION AND ROLE ,TRADING AND CLEARING METHOD ,COMMODITY FUTURE ,	5	VIPUL PRAKASHAN	ONLINE . TOOLS MOBILE PHONE AND LABTOP
COMMODITY EXCHANGE STRENGTHENING COMMODITY MARKET IN	COMMODITY SPECIFIC EXCHANGE V/S MULTY COMMODITY EXCHANGE	5		
	ROLE OF GOVERNMENT ,ROLE OF COMMODITY EXCHANGE ,OTHER INSTITUTION	5		
	TRAINING AND DEVELOPMENT OF DEALER	5		

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INDIA	COMMODITY DERIVATIVE :TYPES ,PRODUCT ,PARTICIPANTS ,PRICING AND TRADING IN COMMODITY MARKET			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 LECTURE PER UNIT

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VARADA KATLE DEPARTMENT:COMMERCE CLASS: SY BFM SEMESTER:IV MONTH: December 19

ACADEMIC YEAR : 2021- 2022 SUBJECT : EQUITY MARKET II

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Equity market II	Unit I Development in the Indian equity market Domestic saving ,disinvestment ,FDI ,FII, role of retail investor Share price ,Role of Sebi	5	Vipul publication	Online teaching ,lab top and mobile
	Unit IV dealing in stock Exchange	5		

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	Role of broker ,stock mkt quotations ,BOLT ,`clearing and settlement			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT ___ 10

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VASANTHY SHENOY DEPARTMENT:COMMERCE CLASS: SY BFM SEMESTER:IV MONTH: JAN 2022 ACADEMIC YEAR: 21-22 SUBJECT : Commodities Derivatives

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Commodities derivatives	Unit I Introduction to derivatives :derivative definition , types , participation ,exchange traded vs OTC traded ,kabra committee report ,cropping and growth patterns ,factors that influence price	5	Vipul publication	Chock and duster method
	Unit II Pricing commodity derivatives : investment assets vs consumption the cost of carry ,future basics , concept of hedging	5		
	Unit III Trading : basic concept such as margins ,circuit filter ,delivery norms ,types of commodity ,settlement price ,fund shortages ,delivery shortage	5		
	Unit IV regulatory framework :Rules governing commodity derivatives ,derivative exchange ,investor grievance ,arbitration rules	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DILIP MAHENDRA JAIN DEPARTMENT: FINANCIAL MARKETS

CLASS: TYBFM SEMESTER: III MONTH: JULY TO NOVEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The Learner Will Understand the Conceptual part of Marketing of Financial Service, Segmentation, Issues to Sell Service Based Product.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MARKETING OF FINANCIAL SERVICES	MODULE 1 **Foundation of Services Marketing** Introduction: ➢ The services concept Nature of Service, Characteristics of Services, Classification of Services ➢ Importance of Services Marketing – The Growth in Financial Services ➢ Distinctive Characteristics of Services & Four I's of Services ➢ Managing Service Encounters.	15	VIPUL PUBLICATION	PPT, PDF, GOOGLE CLASSROOM, GOOGLE MEET, POWERPOINT PRESENTATION

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	MODULE 2 **Services Market Segmentation** ➢ Services Market Segmentation, ➢ Positioning ➢ Differentiation of Services, ➢ Promotion and Communication ➢ Service Quality and Productivity ➢ Customer Relationship Management ➢ Customer Loyalty.	15	VIPUL PUBLICATION	PPT, PDF, GOOGLE CLASSROOM, GOOGLE MEET ONLINE LECTURES POWER POINT PRESENTATIONS
	MODULE 3 **Issues in Marketing of Services** ➢ Issues in Marketing of Services: Extended Services Marketing Mix ➢ Service Delivery Process ➢ Service Blueprints ➢ Distribution Strategies of Services & Challenges in Distribution of Services. ➢ Personal Selling – Advertising and Sales Promotion in Service Industry	15	VIPUL PUBLICATION	ONLINE LECTURES POWER POINT PRESENTATIONS

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	MODULE 4 **Customer Satisfaction & Service Quality in Service Marketing** ➢ Service Encounter ➢ Role of HR & Internal Marketing ➢ GAP Model – Handling complaints effectively ➢ Service Failure – Recovery, Use of Internet in Service Marketing ➢ Ethics in Marketing, New trends in marketing, Marketing in 21st Century.	15	VIPUL PUBLICATION	ONLINE LECTURES POWER POINT PRESENTATIONS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE SUBJECT:60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Mezbin Lalani DEPARTMENT: Commerce CLASS: T.Y.BFM SEMESTER: V MONTH July-Oct2021

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: to understand about the basics of business valuation
The learners will be able to : learn business valuation and its methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Basics of valuation 2. Valuation models 3.valuation of select tangible assets				
	Introduction, price v/s value, purpose, bias, uncertainties, role of valuation.	15	Business valuation taxmann	PPT,PDF, GOOGLE CLASSROOM, GOOGLE MEET
	Asset based approach, income based approach, discounted cash flow, free cash flow.	15		
	Valuation of fixed assets, related cost, self constructed assets, assets in exchange, valuation of shares.	15		

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4. Valuation of Intangible assets	Valuation of Goodwill, brand, trademarks, patents	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: COMMERCE CLASS:TYBFM SEMESTER: V

SUBJECT : BSINESS ETHICS AND CORPORATE GOVERNANCE MONTH: JULY 2021- DECEMBER 2021 ACADEMIC YEAR:2021 -22

LEARNING OBJECTIVE/S:
The learners will be able to :

TO PROMOTE UNDERSTANDING OF THE IMPORTANCE FOR BUSINESS AND THE COMMUNITY OF ETHICAL CONDUCT , ENHANCE AWARENESS AND CRITICAL SELF EXAMINATION OF ONE'S OWN VALUES AND TO APPRECIATE THE RELEVANCE OF PERSONAL VALUES IN THE BUSINESS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1. BUSINESS ETHICS -INTRODUCTION TO BUSINESS ETHICS -BOARD OF DIRECTORS	14	VIPUL PRAKASHAN, NOTES FROM INTERNET	GOOGLE MEET, PPT, EXCEL, WHITE BOARD.

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	-ORGANIZATIONAL ETHICAL CLIMATE -ETHICAL ILEMMA -CODE OF CONDUCT/ETHICS -ETHICS TRAINING -INTEGRITY PACT			
	2. CORPORATE GOVERNANCE- CONCEPTUAL FRAMEWORK - INTRODUCTION TO CORPORATE GOVERNANCE - RECOMMENDATIONS OF VARIOUS COMMITTEES SET UP FOR CORPORATE GOVERNANCE - EVOLUTION AND DEVELOPMENT OF CORPORATE GOVERNANCE IN INDIA - THEORIES AND MODELS OF CORPORATE GOVERNANCE - GOOD CORPORATE GOVERNANCE	16		

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	3. CORPORATE GOVERNANCE AND SHAREHOLDERS RIGHTS - SHAREHOLDES RIGHTS - INSTITUTIONAL INVESTORS IN CORPORATR GOVERNANCE - RELATED PARTY TRANSACTION AND CORPORATE GOVERNANCE	15		
	4. CORPORATE GOVERNANCE FORUMS AND LEGISLATIVE FRAMEWOR - NATIONAL FOUNDATION FOR CORPORATE GOVERNANCE - GLOBAL CORPORATE GOVERNANCE FORUM - DISCLOSURE NORMS - ROLE OF SEBI IN CORPORATE GOVERNANCE - CORPORATE GOVERNANCE UNDER COMPANIES ACT,2013.	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 60

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan D. Satam DEPARTMENT: Commerce (Self Finance)

CLASS: TYBFM SEMESTER:V MONTH: July-Nov 2021 ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: Learning about Technical analysis in Financial markets.
The learners will be able to : Students will be able to learn techniques and its applications of analysis of market securities.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Technical Analysis	**1. Introduction to Technical Analysis** Technical analysis, Basic assumptions, Strengths and Weakness, Charts, Candlestick charts analysis with one two and three candles like hammer, hanging man, shooting star, bearish and bullish harami; Pattern Study - Support and resistance, Head and shoulders, Double top and double bottom and Gap theory.	10	Vipul and Seth publication	Google meet, PPT and Online trading sites
	2. **Major Indicators and Oscillators** Stochastic, RSI, Williams %R, MFI, Bollinger bands, Moving Averages, MACD	08	Vipul and Seth publication	Google meet, PPT and Online trading sites

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	3. Major Theories in Technical Analysis □ Dow Theory and Eliot Wave Theory	08	Vipul and Seth publication	Google meet, PPT and Online trading sites
	4. **Risk Management, Trading Psychology and Trading Strategies** □ Risk Management – Need, techniques, uses of stop loss, qualities of successful traders, golden rules of traders, do's and don'ts in trading, Rules to stop losing money, Choosing the right market to trade, Importance of discipline in trading; Day trading, Advantages of day trading, Risks associated with trading, Strategies for day trading, Momentum trading strategies.	06	Vipul and Seth publication	Google meet, PPT.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Rohan Satam DEPARTMENT: ACCOUNTANCY CLASS: TYBFM

SEMESTER: V MONTH: JUNE-NOV ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : __.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Introduction to technical Analysis Technical analysis, Basic assumptions, strengths and weakness charts, candlestick chart analysis, one two and three candlesticks pattern, support and resistance, Head and shoulders, double & triple top & bottom, Gap Theory	15	Vipul Prakashan Internet	Chalk & Duster Internet
2	Major Indicators and Oscillators Stochastic, RSI, Williams %R, MFI, Bollinger bands, Moving Averages, MACD	10	Vipul Prakashan Internet	Chalk & Duster Internet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SONAL RAUT DEPARTMENT: COMMERCE

CLASS: TYBFM SEMESTER: V MONTH: JUNE,JULY,AUG & SEP ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

Comprehension based Learning to Esemplastic into Objective type Exams. To Understand What is Research And Research Methodology. To Gain Knowledge about Equity Research and Fundamentals of Research. And to Learn Various Concepts of Company Analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Unit 1 : Introduction to Research and Research Methodology Introduction Meaning & Objective of Research Features And Importance of Research in Financial Market Objective And Types of Research	15	DUN AND	Google Meet, Google Slides,

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	Formulation of Research Problem Meaning & Needs of Good Research Design Data Collection & it's Types		BRADSTREET	Microsoft Excel
	Unit 2 : Equity Research – An Overview Meaning & Goals of Equity Research Elements, Types & Process of Equity Research Classification of Stock, Market Participants, Role & Different approach of Equity Research in Capital Market Role, Qualities & Responsibilities of Research Analyst Basic Principles of Interaction with Clints / Companies.	15	DUN AND BRADSTREET	Google Meet, Google Slides, Microsoft Excel
	Unit 3 : Fundamentals of Research A) Fundamentals of Research Key points considered before Investing Research on Business & Stocks Technical & Behavioural Finance	15	DUN AND	Google Meet, Google Slides,

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	B) Economic Analysis □ Principles of Micro & Macro Economics □ Key Economic Variables, Sources / Data of Information C) Industry Analysis □ Michael Porter's Five Force Model □ PESTLE Analysis, □ BCG Analysis, SCP Analysis □ Key Industry drivers / Sources of information		BRADSTREET	Microsoft Excel
	Unit 4: Company Analysis A) Qualitative Dimensions □ Business and Business Models □ Company's SWOT Analysis □ Management Quality & it's Governance □ Pricing Power & Sustainability Power □ Sources of Information B) Quantitative Analysis □ History v/s Future of Business □ Reading Financial Statement □ Peer Comparison, Dividend & Earning History	15	DUN AND BRADSTREET	Google Meet, Google Slides, Microsoft Excel

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	Role of Corporate Actions Sources of Information			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____60_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: COMMERCE

CLASS: T.Y.BFM SEMESTER: V MONTH: AUG-NOV ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVES:

The learners will be able to study in depth about global and Indian Derivative Market

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.INTRODUCTION TO DERIVATIVES	DEFINITION,TYPES PARTICIPANTS,FUNCTIONS	01	TEXT BOOK (VIPUL PRAKASHAN & SHETH PUBLICATION)	POWEPOINT PRESENTATION AND MS EXCEL
	DEVELOPMENT OF EXCHANDE TRADED DERIVATIVES,GLOBAL DERIVATIVE MARKET,	01		
	EXCHANGE TRADED vsOTC	01		
	L.C GUPTA &J.R VERMA COMMITTEE	01		
	REQUIREMNET OF SUCCESSFUL DERIVATIVE MARKET	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: COMMERCE

CLASS: T.Y.BFM SEMESTER: V MONTH: AUG-NOV ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVES:

The learners will be able to understand future contracts and future trading strategies.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
2.INTRODUCTION TO FUTURES	INTRODUCTION,TERMINOLOGY,FEATURES OF FUTURE CONTRA CT	01	TEXT BOOK (VIPUL PRAKASHAN & SHETH PUBLICATION)	PowerPoint presentation & MS excel
	FUTURE VS FORWARD,PAYOFF FUTURES,	01		
	EQUITY FUTURES IN INDIA	01		
	INDEX FUTURE,DTOCK FUTURES,	01		
	HEDGING,ARBITRAGE, SPECULATION	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: COMMERCE

CLASS: T.Y.BFM SEMESTER: V MONTH: AUG-NOV ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVES:

The learners will be able to clearing and settlement procedures in Future and Option Contracts.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
4.CLEARING AND SETTLEMENT OF OPTIONS & FUTURES	FUTURES AND OPTIONS TRADING SYSTEM, TRADE WORK STATIONS	02	TEXT BOOK (VIPUL PRAKASHAN & SHETH PUBLICATION)	PowerPoint presentation & MS excel
	SPECIFICATION FOR STOCK & INDEX ELIGIBILITY FOR TRADING CHARGES	02		
	CLEARING MECHNISM, OPTION-OPEN POSITION CALCULATION	02		
	MARGINING &SETTLEMENT MECHANISM, RISK MANAGEMENT	02		
	MECHNICS OF SPAN,PORTFOLIO MARGIN REQUIREMENTS	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN

NAME OF THE STAFF: DILIP MAHENDRA JAIN DEPARTMENT: FINANCIAL MARKETS

CLASS: TYBFM SEMESTER: VI MONTH: DECEMBER TO APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The Learner Will Understand the Conceptual part of Corporate Restructuring and Different Aspects Of Mergers and Acquisition.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Corporate Restructuring	MODULE 1 Mergers and Acquisitions - Introduction • Introduction to Mergers and Acquisitions, • Mergers and Acquisitions • Various Forms of Corporate Restructuring- Restructuring • Merger Movements in the US- Trends of • Mergers and Acquisitions in India • Hostile Takeovers	15	VIPUL PUBLICATION	PPT, PDF, GOOGLE CLASSROOM, GOOGLE MEET, POWERPOINT PRESENTATION

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	MODULE 2 • Mergers and acquisition- Strategic aspect • Maximization of Organization Value and Mergers & Acquisitions, • Definition of Strategy- Process of Strategic Planning- Alternative Strategy Methodologies- Approaches to • Strategy Formulation – Formulating a Competitive • Strategy- Diversification Strategy- Internal Vs External Growth.	15	VIPUL PUBLICATION	PPT, PDF, GOOGLE CLASSROOM, GOOGLE MEET ONLINE LECTURES POWER POINT PRESENTATIONS
	MODULE 3 Theories and process of mergers and acquisitions • Theories of Mergers, Efficiency Theories • Types of M&A, Mergers and Acquisitions • Different forms and Various Types of Mergers • M&A Process, Merger and Acquisition Process • Reasons for Failure of Mergers and Acquisitions	15	VIPUL PUBLICATION	ONLINE LECTURES POWER POINT PRESENTATIONS
	MODULE 4 Takeovers and leverages buyouts • Takeover Defences, Friendly vs. Hostile Takeovers- Alternative Takeover Tactics- Preventive Anti- takeover Measures- Active Anti- takeover	15	VIPUL PUBLICATION	ONLINE LECTURES POWER POINT PRESENTATIONS

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	• Going Private Transactions, Methods of Going Private. • Leveraged Buy-outs • Forms of LOB Financing • Sources of Gains in LBOs- Management Buyouts- Management Buy ins- Leverage cash outs.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE SUBJECT:60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: COMMERCE

CLASS: T.Y.BFM SEMESTER: VI MONTH: DEC-JAN ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVES:

The learners will be able to understand different types of risk and risk management process.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.INTRODUCTION TO RISK MANAGEMENT	CONCEPT ANDIDENTIFICATION OF RISK,RISK AND UNCERTAINTY	01	TEXT BOOK (VIPUL PRAKASHAN & SHETH PUBLICATION)	Google meet,G,-Slides,G-Docs
	STRATEGIC &OPERATIONAL RISK	01		
	DYNAMIC NATURE OF RISK,FINANCIAL RISK	01		
	BUSINESS RISK	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

SIGNATURE OF THE STAFF SIGNATURE OF THE H.O.D

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: COMMERCE

CLASS: T.Y.BFM SEMESTER: VI MONTH: JAN-FEB ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVES:

The learners will be able to study Risk Measurement, Financial Risk, Country Risk & technological Risk as well.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
2.EVALUATION OF RISK	RISK MEASUREMENT,SOURCES &IMPACT OF COMMON BUSINESS RISK,MARKET ,CREDIT,LIQUIDITY,	01	TEXT BOOK (VIPUL PRAKASHAN & SHETH PUBLICATION)	Google meet,G,-Slides,G-Docs
	TECHNOLOGICAL,LEGAL,ENVIROMENTAL REPUTATION & COUNTRY RISK	01		
	IMPACT UPON THE STAKEHOLDERS,NATURE &IMPORTANCE OF FINANCIAL RISK	01		
	EVALUATION OF FINANCIAL RISK,ALTERNATIVE RISK MANAGEMENT TOOLS,	02		
	ROLE OF RISK MANAGER & RISK COMMITTEE IN MANAGING RISK	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: COMMERCE

CLASS: T.Y.BFM SEMESTER: VI MONTH: FEB-MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVES:

The learners will be able to understand the computation of interest rate risk and Bond mathematics.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
4.EXCHANGE RATE RISK	INTEREST RATE MARKET	02	TEXT BOOK (VIPUL PRAKASHAN & SHETH PUBLICATION)	Google meet,G,-Slides,G-Docs
	MATHEMATICS	04		
	IDENTIFYING INTEREST RATE RISK	01		
	ANALYSING INTEREST RATE RISK	02		
	MEASURING INTEREAT RATE RISK	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: COMMERCE CLASS:TYBFM. SEMESTER: VI

SUBJECT : VENTURE CAPITAL AND PRIVATE EQUITY MONTH: DECEMBER 2021 - APRIL 2022 ACADEMIC YEAR:2021 -22

LEARNING OBJECTIVE/S:
The learners will be able to :

Students of Entrepreneurship should know how to raise finance for their new venture.**Entrepreneur or manager in raising finance** from different sources and safeguard them and the cost of capital and the challenges of these sources of finance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1. Conceptual understanding of Venture Capital and Private Equity. i) Venture Capital –Over View of Venture Capital- Definition- Features- Types – Roles Concept of PE and its characteristics- Definition- Difference between PE,VC and	12	VIPUL PRAKASHAN, ICAI STUDY MATEIAL, ONLINE MATERIAL.	GOOGLE MEET, PPT, EXCEL, WHITE BOARD.

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	ii)Hedge Funds- Nature of PE Firm- Players in the PE market– Benefit of PE Finance PE Fund –Legal structure and terms- Private Equity Investments and FinancingPrivate Equity Multiples and Prices- Private Equity Funds and Private Equity. iii) Firms- Investment Feature and Consideration			
	2. Structure and Valuation approaches Structure and Regulation of Venture Capital and Private Equity- Business Cycle• of PE –Structure of VC/PE firms- Limited Liability Partnerships- Routes of VC/PE investments in India- Regulatory Aspects of VC/PE investments Valuation approaches- Risk and Returns- Analysis of Funds- Conventional• Method- Revenue Multiplier Method	16		
	3. Strategies of Private Equity Leverage Buyout, Growth Capital, Mezzanine Capital-• Distressed Debt, other Strategies• Due Diligence- Procedure and Challenges- Due Diligence in Emerging PE• Market-Investing in Developing Market- Past Performance and Strategy	15		
	4. Exit strategies for Private Equity Modes of exits in Indian Context and Challenges involved-• IPO, Promoter Buyback ,Sale to Other PE funds, Sale to other strategic• Investors, Stake Swap, M & A's, Open Market-, Secondary Market	17		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 60

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan D. Satam

DEPARTMENT: Commerce (Self Finance) CLASS: TYBFM SEMESTER:VI

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: Learning about Mutual Funds organisation, products, calculation, etc.
The learners will be able to : Students will be able to learn theory and practical of Mutual fund related topics .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mutual Fund Management	**1. Mutual Fund Organization and Management** Introduction: Meaning of Mutual Fund, Structure in India, Sponsors, Trust, Role of AMC, NFOs , Registrars, Agents, Types of Mutual Fund schemes Objectives of AMFI, Advantage of Mutual Funds, Systematic Investment Plan (SIP), Systematic Transfer Plan (STP), Systematic Withdrawal Plan (SWP)	15	Vipul and Seth publication	Google meet, PPT and Websites.
	2. **Mutual Fund Products**	15	Vipul and Seth publication	Google meet, PPT and Websites.

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	Mutual Fund Products and Features: Equity funds: Definition, Features of Equity Funds, Index Fund, Large Cap Funds, Mid Cap Funds, Sectoral Funds, Types of Equity Schemes, Arbitrage funds, Multi-cap Funds, Quant funds, P / E Ratio funds, International Equities Fund, Growth Schemes. Gold Exchange Trade Funds (ETFs): Introduction, Features, Working of ETFs, Market Making with ETFs, Creation Units, Portfolio Deposit and Cash Component Debt Fund: Features, Interest Rate Risk, Credit Risk, Pricing of Debt Instrument Schemes, Fixed Maturity Plans, Capital Protection Funds, Gilt Funds, Balanced Funds, MIPs ,Child Benefit Plans. Liquid funds: Features, Floating rate scheme, Portfolio of liquids funds.			
	3. Investment and Performance Measurement Fund Performance, Measuring Return, Measuring Risk, Risk adjusted return, Comparing Fund Performance with a reference, various standardized performance systems, Limitations of Performance measurement and evaluation.	15	Vipul and Seth publication	Google meet, PPT and Websites.
	4. Accounting and Taxation of Mutual Funds Accounting: Net Asset Value (NAV)-Meaning-Computation- Factors affecting NAV-Pricing of Units-Fees and Expenses- Investment Management and	15	Vipul and Seth publication	Google meet, PPT and Websites.

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	Advisory Fees –Initial Expenses- Recurring Expenses- Total expenses- Accounting policies. □ Valuation-: Valuation of thinly traded securities- Valuation of Non trade securities-Valuation and disclosure of illiquid securities. □ Taxation: Dividends- Capital Gains- Tax Rebate- Restrictions on Dividends Stripping.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Yashvant Keshav Patil College of Commerce
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EACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SONAL RAUT DEPARTMENT: COMMERCE

CLASS: TYBFM SEMESTER: VI MONTH: DEC,JAN.FEB & MAR ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

Comprehension based Learning to Esemplastic into Subjective type Exams. To Understand What is Strategic Corporate Finance. To Gain Knowledge about Fund Raising and Credit Risk Management. And to Learn Various Concepts of Company Valuation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II & III.	Unit II:- Fund Raising ▪ Issue Of Stock Liquidity and Illiquidity ▪ Determining Capital Structure, Cost of Capital & Cost of Saving Strategies ▪ Production of Business Plan ▪ Financial Forecasts to enable potential Funders to assess the Proposition ▪ Solved Questions on the Same	15	Stephen A. Ross Ram Kumar Kulkarni	Google Meet, Google Slides, Microsoft Excel
	Unit III:- Company Valuation ▪ Finance due Diligence for both Purchase and Financial Institutions.	15	Stephen A. Ross Ram Kumar	Google Meet, Google Slides, Microsoft Excel

	▪ An Overview, Key Financial & Commercial Factors Affecting Business ▪ Link Between Valuation And Corporate Finance ▪ Valuation of Company & Goodwill ▪ Solved Questions on the Same		Kulkarni	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: STRATEGIC CORPORATE FINANCE DEPARTMENT: COMMERCE

CLASS: TYBFM SEMESTER: VI MONTH: DECEMBER - JANUARY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 STRATEGIC CORPORATE FINANCE	Strategy Vs. Planning, Significance of Strategy in Financial Decisions,	1		• Google Meet • Excel • PowerPoint
	Different Types of Financial Strategy for Shareholders, Wealth Maximization, Overall Corporate Value Addition and Economics Value Addition.	2		
	Traditional Costing Vs. Strategic Costing, Relevant costs Vs Irrelevant costs,	1		

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	Different Types of Strategic costing and their relevanceTraditional Costing Vs Activity Based Costing, Target Costing, Life Cycle Costing,	1		
	Quality Costing, Zero Based Budgeting, Strategic Cost' Reduction Techniques and value chain analysis.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: _____07_____

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: STRATEGIC CORPORATE FINANCE DEPARTMENT: COMMERCE

CLASS: TYBFM SEMESTER: VI MONTH: FEBRUARY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2	Need for long term and short term financing, Classification of sources of finance,	1		• Google Meet • Excel • PowerPoint
FUND RAISING	Classification according to period, Ownership, and source of generation.	1		
	Security financing, internal financing, loan financing.	3		

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	Venture capital, Hybrid financing, Private equity funds.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 06

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VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: STRATEGIC CORPORATE FINANCE DEPARTMENT: COMMERCE

CLASS: TYBFM SEMESTER: VI MONTH: FEBRUARY - MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	Infrastructure financing, Public Private Partnership, Establishing feasibility of the buy-out, Negotiating the main terms of the transaction with the vendor including price and structure,	2		• Google Meet • Excel • PowerPoint

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MANAGEMENT BUYOUT AND BUT IN & CREDIT RISK MANAGEMENT	developing the business plan funders, negotiations with potential funders so that the most appropriate funding offers are selected. Management Buy-in/Buy-outs, Vendor-initiated buy-outs/buy-ins.	2		
	Quantitative methodologies, Expected and unexpected risk loss, Credit VaR, Counterparty	1		
	Risk management choices, such as efforts, process control control financial, physical, and operational hedging, value based management	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 5: 07

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE **CLASS:** FY IMG

SUBJECT – BUSSINESS COMMUNICATION **SEMESTER:** I **MONTH:** OCTOBER **ACADEMIC YEAR:**2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Theory of Communication	**1) Concept of Communication**- Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World Impact of technological advancements on communication **2) Channels and Objectives of Communication:**	15	Textbook of Manan Publication & PPTs	Online Lectures on Google Meet

	Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine **Objectives of Communication:** Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Moral of Employees **3) Methods and Modes of Communication:** **Methods:** Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette **Modes:** Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY IMG

SUBJECT – BUSSINESS COMMUNICATION **SEMESTER:** I **MONTH:** NOVEMBER **ACADEMIC YEAR:**2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Obstacles to Communication in Business World	**1) Problems in Communication /Barriers to Communication:** Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers 2**) Listening:** Importance of Listening Skills, Cultivating good Listening Skills – **3) Introduction to Business Ethics:** Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility Teachers can adopt a case study approach and address issues such as the following so as to orient and sensitize the student community to actual business practices: Surrogate Advertising, Patents and Intellectual Property Rights,	15	Textbook of Manan Publication & PPTs	Online Lectures on Google Meet

	Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

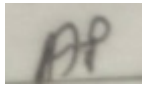
NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY IMG

SUBJECT – BUSSINESS COMMUNICATION **SEMESTER:** I **MONTH:** DECEMBER **ACADEMIC YEAR:**2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3) Business Correspondence	**1)Theory of Business Letter Writing:** Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation [Letter of Appointment, Promotion and Termination, Letter of Recommendation (to be taught but not to be tested in the examination)]	15	Textbook of Manan Publication & PPTs	Online Lectures on Google Meet
4) Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities □ Listening Comprehension □ Remedial Teaching □ Speaking Skills: Presenting a News Item, Dialogue and Speeches □	15	Textbook of Manan Publication & PPTs	Online Lectures on Google Meet

	Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. □ Reading Comprehension: Analysis of texts from the fields of Commerce and Management			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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Yashvant Keshav Patil College of Commerce
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: COMMERCE CLASS: FY INVESTMENT MANAGEMENT (FC)

SEMESTER: I MONTH: SEPTEMBER TO DECEMBER ACADEMIC YEAR: 2021 -2022

LEARNING OBJECTIVE/S: The learners will be able to understand overview of Indian society, philosophy of Indian Constitution, Fundamental duties, Party System in Indian Politics etc

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Overview of Indian Society	UNIT 1 - Understand the multi-cultural diversity of Indian society through its demographic composition: population distribution according to religion, caste, and gender; Appreciate the concept of linguistic diversity in relation to the Indian situation; Understand regional variations according to rural, urban and tribal characteristics; Understanding the concept of diversity as difference	5	Urbanisation in India: Challenges, Opportunities & the way forward, I J Ahluwalia, Ravi Kanbur, P K Mohanty, SAGE Pub (2014)	POWER POINT PRESENTATIONS
UNIT-2 Concept of disparity-1	UNIT 2 – Understand the concept of disparity arising out of stratification and inequality ,explore the disparity arising out of gender with special reference to violence against women, female foeticide and portrayal of women in media Appreciate the inequalities faced by people with physical and mental disabilities.	10		POWER POINT PRESENTATIONS
UNIT -3 Concept of disparity - 2	UNIT 3- Examine inequalities manifested due to the caste system and inter group conflicts, understand inter group conflicts arising out of communalism, examine the causes and effects of conflicts arising out of regionalism and language differences	10		POWER POINT PRESENTATIONS
UNIT 4 The Indian Constitution	UNIT 4 - Philosophy of the Constitution as set out in the Preamble; The structure of the Constitution-the Preamble, Main Body and Schedules; Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution	10	The Constitution of India, P M Bakshi 2011	POWER POINT PRESENTATIONS

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UNIT 5 Significant Aspects of Political Processes	UNIT 5 - The party system in Indian politics; Local self-government in urban and rural areas; the 73rd and 74th Amendments and their implications for inclusive politics; Role and significance of women in politics	10	Politics in India: structure, Process and Policy SubrataMitra, Rouutlege Pub	POWER POINT PRESENTATIONS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE- SUBJECT: BIWC
CLASS: FYIM SEMESTER: I MONTH: OCTOBER-DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to: Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: General Principles Of Investing	1.Introduction to Investment, Savings Vs. Investment, Investing Vs. Speculation, Investing Vs. Borrowing, Why is investment necessary, When to Start Investing	2	Investment Analysis and Portfolio Management & Wealth management TYBMS- Rishab Publication/ Internet	Presentation method with chat, Google Meet
	2. What is meant by interest Rate,Factors determining interest rates, Simple Interest and Compound Interest, Investment Objectives – Setting SMART Goals,	2		Presentation method with chat, Google Meet
	3. Asset Classes available for investments – Financial Assets Vs. Non-Financial Assets, Important attributes of Various asset classes – Safety (Risk), Liquidity, Yield. Co-relation between various asset classes	3		Presentation method with chat, Google Meet
	4.Debt Management - Purpose, Need and responsibilities, Short Term Debt Vs. Long Term Debt, Fixed Rate Vs. Variable Rate Mortgages, Consumer Loans, Refinancing, Hire Purchase Credit Cards, Leasing	3		Presentation method with chat, Google Meet
	5.Personal Financial Statement Analysis-Cash inflows and cash outflows, income and Expenditure statement, Budgeting and forecasting, Monitoring budgets and provisions for savings, Personal Balance Sheet	3		Presentation method with chat, Google Meet
	6.Forms Of Business Ownership-Sole Proprietorship; Partnership Firm; Limited Liability Partnership; Limited Liability Companies; Trusts; Foundations/Exempt Organizations; Co-operative Societies	2	Internet	Presentation method with chat, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Financial Mathematics - I	1.Time Value Of Money Present Value; Net Present Value; Future Value; Annuities – Immediate and Deferred; Growing Annuities and Inflation adjusted Annuities	7	**Vipul's** BBI series- Financial Management-1/ Internet	Presentation method with chat, Google Meet
	2.Calculation of returns Nominal Rate of Return, Effective Rate of Return, Internal Rate of Return, Holding Period Return (HPR), Compounded Annual rate of Return (CAGR), Real Rate of Return after adjusting for Inflation, Rate of Return after adjusting taxes	8	Investment Analysis and Portfolio Management & Wealth management TYBMS- Rishab Publication/ Internet	Presentation method with chat, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3- Financial Mathematics – II	1.Total Assets – Net Worth and Financial Ratios Net worth and its components, Liquidity Ratios, Debt to income Ratio, debt to financial assets, debt to total assets, savings Ratio	7	Introduction to Management Accounting- SYBCOM SEM 3- Manan Prakashan/ Internet	Presentation method with chat, Google Meet
	2.Loan Calculations EMI Calculation; Loan restructuring – Present Value of future payments; Loan repayment schedules; Loan repayments with varying interest rates; Amortization; Home Equity; Refinancing cost; Fixed EMI Vs. Fixed Tenure.	8	Elementary Business Mathematics- II – Vipul Prakashan/ Internet	Presentation method with chat, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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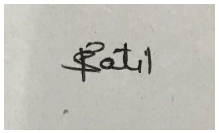
Unit 4: Risk Profiling of Products and Investors – Asset Allocation	1.Types of Investment Risk -Market Risk – Systematic and unsystematic, Inflation Risk, Interest Rate Risk, Credit Risk, Maturity Risk, Liquidity Risk, reinvestment risk, Exchange Rate Risk. Regulatory Risk, Investment Manager (Alpha) Risk, Business Risk	1	Investment Analysis and Portfolio Management & Wealth management TYBMS- Rishab Publication/ Internet	Presentation method with chat, Google Meet,
	2.Product Profiling in terms of Risk and Tenure-Short Term Products – Low Returns with Capital Protection, Medium Term Products – Inflation beating with adequate Capital protection, Long Term Products – Managed Risk for wealth creation in the long term	2		Presentation method with chat, Google Meet
	3.Risk Profiling of Investor-Understanding Investor's investment psychology and investment behaviour; Riskbased on investor'slifestage; Risk based on investors earnings, income generation and assets; Risk Tolerance – risk capacity and risk appetite; classifying investors as per their risk profile; matching products to investors risk profile and tenure of goals	4		Presentation method with chat, Google Meet
	4.Asset Allocation-Asset Allocation – Base of Investment Planning; Asset Classes – Equity, Debt, Cash. Precious metals; Expected rate of return; Goal Specific Asset Allocation; Change of asset allocation while approaching goals; Selection of asset mix as per clients goals	3		Presentation method with chat, Google Meet,
	5.Types of Asset Allocation Strategies-Strategic, Tactical and Life Stage asset allocation	1		Presentation method with chat, Google Meet
	6.Wealth Creation – Factors and Principles -Income and Savings Ratio; Allocation of savings to asset classes; Consistency in savings and monitoring; Taking advantage of opportunities in various asset classes; Overall effective yield and tax aspects; Wealth protection and wealth erosion	4		Presentation method with chat, Google Meet,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHAKHA SANE DEPARTMENT: COMMERCE CLASS: FYBIM(BUSINESS ECONOMICS) SEMESTER: 1 MONTH: NOV ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1,2,3	1.SCOPE AND IMPORTANCE OF BUSINESS ECONOMICS Basic tools,opportunity cost principle-increamental cost-functional relationship,the basic of market demand,market supply and equilibrium conditions.	10	ADVANCE ECONOMIC THEORY H L AHUJA	PPT
	2.DEMAND ANALYSIS- DEMAND FUNCTION AND DEMAND ESTIMATION AND FORECASTING-Nature of demandcurve under different market. meaning significant,types and measurement of elasticity of demand. meaning and significant method of demand forecasting.	10		
	3.SUPPLY AND PROUCTION DECISIONS- PRODUCTION FUNCTION-short run analysis with Law of variable proportion, Long run production function,Law of return to scale.	15		

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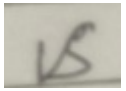
	4. Market structure ,types of market ,need to analyse the market structure. Perfect competition meaning and features ,short run equilibrium of the firm, long run equilibrium of the firm, equilibrium of industry and firm.	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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TEACHING PLAN (UNIT PLAN) (SUB: INTRODUCTION TO ACCOUNTS)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: F.Y.B.I.M** SEMESTER: **1th** MONTH: **OCTOBER**

ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Accounting Transaction and Accounting Cycle
2. What is Journal & its Rules of Debit & Credit & Journal Entries
3. What is Ledger & its Rules regarding Posting
4. What is Trial Balance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Classification Of Income and Expenses and Accounting Standards (Continue…..)	1. Accounting Transaction and Accounting Cycle 2. Journal: Rules of Debit & Credit ,Journal Entries 3. Ledger : Rules regarding Posting 4. Trial Balance	05	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: F.Y.B.I.M.** SEMESTER: **1th** MONTH: **NOVEMBER**

ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are the Classification of Income ,Classification of Expenditure
2. What is Accounting Concept of Income and Sources Of Documents
3. What is Bank Reconciliation Statement

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Classification Of Income and Expenses and Accounting Standards (Continue…..)	1. Capital & Revenue : Classification of Income ,Classification of Expenditure 2. Accounting Concept of Income and Sources Of Documents 3. Bank Reconciliation Statement	05	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: F.Y.B.I.M** SEMESTER: **1th** MONTH: **DECEMBER**

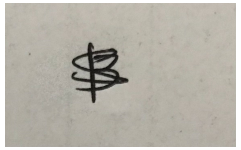
ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Final Accounts i.e. Manufacturing Account, Trading Account, Profit & Loss Accounts, Balance Sheet
2. What are the Adjustment Entries

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Final Accounts	3. Final Accounts : Manufacturing Account, Trading Account, Profit & Loss Accounts, Balance Sheet 4. Adjustment Entries	10	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA SINGH DEPARTMENT: COMMERCE CLASS: FYBIM SEMESTER: I SUBJECT:

INTRODUCTION TO FINANCIAL SYSTEM MONTH: OCTOBER TO DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will able to understand the Indian financial system of our country it's structure and how it operates.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 An introduction to Financial system	Overview of financial system, functions of financial system, evolution of financial system structure, financial system in India compared with other countries. Constitutes of financial system.	10	Indian financial system M.Y . Khan	PPT presentation
Unit 3 Financial institutions and financial services	Kinds of financial institutions, intermediaries and non intermediaries of financial institutions, features and role of each institutions, size structure and participants. Financial services features scope types fund and fees based	10	Indian financial system M.Y . Khan	PPT presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE
CLASS: FYIM SEMESTER: I MONTH:OCTOBER- NOVEMBER ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVES:

The learners will be able to:

- Learn what does statistic exactly mean its scope in financial and of population and sample with illustration and also the different methods of sampling
- Become friendly with graphical methods like raw data, attributes and variables, frequency distribution
- Learn plotting of histogram and frequency polygon.
- Learn different types of diagrams like multiple bar, pie bar and subdivided bar.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS-I	Introduction Organisation and Presentation of data.	Unit1	▪ Define Statistics and its scope. Methods of Sampling, importance of Statistic, its functions and limitations. Graphical methods like raw data, attributes and variables, frequency distribution. ▪ Study of Histogram and Frequency polygon Study of multiple bars, sub divided, Pie diagrams.		Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 2

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TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

CLASS: FYIM SEMESTER: I MONTH: OCTOBER- NOVEMBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVES:

The learners will be able to:

- Understand the concept of Correlation deeply and also its types like positive and negative correlation with examples related to day to day life.
- Calculate the value of coefficient of correlation by Karl Pearson's formula.
- Understand the concept of Regression deeply and how to solve two regression equations.
- Lean to find regression coefficients and study its properties.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS-I	Correlation and regression	Unit 3	▪ Concept of Correlation and its types. Karl pearsons coefficient of correlation. ▪ Meaning of regression How to solve two regression equations ▪ Find its coefficient • Study its properties.	1 1 1 1	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

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TEACHING PLAN (UNIT 6 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

CLASS: FYIM SEMESTER: I MONTH: OCTOBER- NOVEMBER ACADEMIC YEAR: 2021-2022

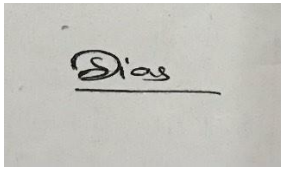
LEARNING OBJECTIVES:

The learners will be able to:

- Define and understand the concept of real functions
- Understand the different formula of derivative for different function
- Learning different types of rules of differentiation
- To know where is derivative concept applied in our day to day life

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS-I	Functions, Derivative and its application	Unit 6	Define function and its types Problem solving on functions Derivative concept and its formula and Problem solving on it Application of derivatives	1 1 1 1	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04



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TEACHING PLAN (UNIT II PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYIMG SEMESTER: I

MONTH: August ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) concept of measure of Central tendency with examples

(2) understand the concept of Mean,Median and Mode

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Quantitative Techniques Average Unit II	(1) definition of average and type of averages	02	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) mean, median, mode with sums	02		
	(3)Quartiles and Percentile	02		

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	(4) Decile	02		
	(5) Combine mean	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 lectures

TEACHING PLAN (UNIT III PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYIMG SEMESTER: I

MONTH: August ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) understand the concept of measure of dispersion

(2) Learn whar are the absolute and relative measure of dispersion

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Quantitative Techniques Measure of dispersion Unit III	(1) Concept of measure of dispersion	02	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,

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	(2) Various measures of Dispersion	02		
	(2) Quartile deviation	02		
	(4) Mean deviation, Standard deviation	02		
	(5) Variance and Combined variance	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 lectures

TEACHING PLAN (UNIT IV PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS: FYIMG SEMESTER: I

MONTH: September ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) understand the concept of interest

(2) learn the basic concept of Annuity and EMI

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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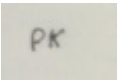
Quantitative Techniques Interest and Annuity Unit 2	(1) simple interest with example	04	Business mathematics and statistics(S.L Agarwal, Ane book pvt limited) Business statistics by SG Gupta	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) compound interest with example future and present value also	02		
	(3) Annuity immediate and its Present value and future value	02		
	(4) EMI equated monthly installment	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 lectures



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: FYBIM

SUBJECT: FOUNDATION COURSE. SEMESTER: 2 MONTH: SEPTEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the cause of stress and conflict in society role played by agents signifying the value, ethics, prejudging causing in society expression of aggression, violence in public.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4 Understanding Stress and Conflict	Causes of stress and conflict in individuals and society;	10	Foundation course by Michael Vaz and Vipul's publications	Chalk Board, Flow Chart, Diagrams .
	Agents of socialization and the role played by them in developing the individual;			
	Significance of values, ethics and prejudices in developing the individual;			
	Stereotyping and prejudice as significant factors in causing conflicts in society;			
	Aggression and violence as the public expression of conflict.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: FYBIM

SUBJECT: FOUNDATION COURSE. SEMESTER: 2 MONTH: OCTOBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: Understand types of conflicts against individual stress. Maslow's theory with different methods to resolve and building peace and harmony in society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 5 Managing Stress and Conflict in Contemporary Society	Types of conflicts and use of coping mechanisms for managing individual stress;	08	Foundation course by Michael Vaz and Vipul's publications	Chalk Board, Flow Chart, Diagrams .
	Maslow's theory of self-actualisation;			
	Different methods of responding to conflicts in society;			
	Conflict-resolution and efforts towards building peace and harmony in society.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: FYBIM

SUBJECT: FOUNDATION COURSE. SEMESTER: 2 MONTH: JULY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:

The learners will be able to: Understand the concepts of Human Rights with the universal study declaring constitutes with special references of fundamental rights states and constitution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Human Rights	Concepts of Human Rights; origin and evolution of the concept;	10	Foundation course by Michael Vaz and Vipul's publications	Chalk Board, Flow Chart, Diagrams .
	The Universal Declaration of Human Rights;			
	Human Rights constitutes with special reference of Fundamental Rights stated in the Constitution.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: FYBIM

SUBJECT: FOUNDATION COURSE. SEMESTER: 2 MONTH: AUGUST ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the importance and concept of environment ecology with natural capital connection of human life equality, causing impact on human life's with poverty and environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3 Ecology	Importance of Environment Studies in the current developmental context;	10	Foundation course by Michael Vaz and Vipul's publications	Chalk Board, Flow Chart, Diagrams .
	Understanding concept of Environment, Ecology and their inter-connectedness;			
	Environmental as natural capital and connection to equality of human life;			
	Environmental Degradation- Causes and impact on human life;			
	Sustainable Development – Concept and components; poverty and environment.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

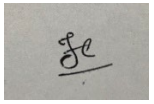
NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: FYBIM

SUBJECT: FOUNDATION COURSE SEMESTER: 2 MONTH: JUNE ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concept of liberalization, privatization and globalization, growth of information technology and communication and its impact.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Globalisation and Indian Society	Understanding the concept of liberalization, privatization and globalisation;	07	Foundation course by Michael Vaz and Vipul's publications	Chalk Board, Flow Chart, Diagrams .
	Growth of information technology and communication and its impact manifested in everyday life;			
	Impact of globalization on industry: changes in employment and increasing migration			
	Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers suicides.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. LEJESH KELOTH** DEPARTMENT**: COMMERCE (SELF -FINANCE**

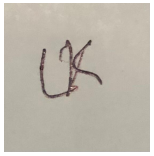
CLASS: **F.Y.B I M** SEMESTER: **II** MONTH: **JANUARY TO MARCH** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S : To understand the working of a Investment sectors and its benefits for individual who want to secure their future through financial security.

The learners will be able to : Able to understand basic principles of Indian money market, application through case studies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module -1	MODULE – 1: INTRODUCTION OF INVESTMENT BANKING Investment its meaning and scope, Type of assets classes, Assets Allocation, Creating portfolio and process of portfolio management.	10	INVESTMENT MANAGEMENT (BMS, BMM) SHETH PUBLICATION, REFERENCE JOURNALS	PPT, WHITE BOARD, SLIDES, VERBAL COMMUNICATION
Module -2	MODULE –2: CONCEPT OF INVESTEMNT BANKING Investment banking concept. Private placement method, Role of venture capital. Firm in raising funds Due diligence method.	10	INVESTMENT MANAGEMENT (BMS, BMM) SHETH PUBLICATION, REFERENCE JOURNALS	PPT, WHITE BOARD, SLIDES, VERBAL COMMUNICATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY. IMG

SUBJECT – BUSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** JANUARY 2022 **ACADEMIC YEAR:** 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	4 Principles of Effective Presentation Effective use of OHP Effective use of Transparencies How to make a Power-Point Presentation	15	Textbook of Manan Publication & PPTs	Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY. IMG

SUBJECT – BUSINESS COMMUNICATION **-** II **SEMESTER:** II **MONTH:** FEBRUARY 2022 **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Interviews:** Group Discussion, Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit **Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics, Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **Conference:** Meaning and Importance of Conference, Organizing a Conference **Modern Methods:** Video and Tele – Conferencing	12	Textbook of Manan Publication & PPTs	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY. IMG

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** MARCH 2022 **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	03	Textbook of Manan Publication & PPTs	Online Lectures through Google Meet
3) Business Correspondence	Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters, Promotional Leaflets and Fliers, Consumer Grievance Letters, Letters under Right to Information (RTI) Act	15	Textbook of Manan Publication & PPTs	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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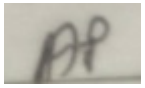
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY. IMG

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** APRIL 2022 **ACADEMIC YEAR:** 2021-2022

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4) Language and Writing Skills	**Reports:** Parts, **Types** - Feasibility Reports, Investigative Reports **Summarisation:** Identification of main and supporting/sub points, Presenting these in a cohesive manner	15	Textbook of Manan Publication & PPTs	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: FYBCOM (INVESTMENT MANAGEMENT) SEMESTER II

MONTH: January- March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Accounting-II Unit-1 Investment Accounting	Introduction . For shares and Debentures bonds etc	1	Introduction to accountancy by T.S Gerwal	Online Method, Google Meet
	Accounting for transactions of purchase and sales of investments with Ex and Cum interest prices	1		
	Finding cost of investment sold and carrying cost as per weighted average method	1		
	Practical Problems	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6

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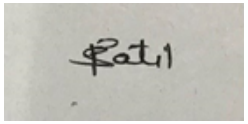
NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: FYBCOM (INVESTMENT MANAGEMENT)SEMESTER: II

MONTH: January - March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Accounting-II Unit-4 Issue of shares and Debentures , Redemption of Preference shares	Introduction of issue of shares and journal entries	1	Introduction to accountancy by T.S Gerwal	Online Method, Google Meet
	Issue of Debentures and its journal entries	1		
	Redemption of preference shares and its journal entries	1		
	Practical problems	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: COMMERCE CLASS: FYBIM SEMESTER: II MONTH: JANUARY TO APRIL SUBJECT: INTRODUCTION TO FINANCIAL INTERMEDIARIES ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the meaning of financial Intermediaries.
- Get knowledge of various financial Intermediaries working in India.
- Interpret various schemes available under mutual funds.
- Know in detail about NBFC and its functioning.
- Apply the knowledge gained in personal life and understand the market better.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit1- Taxonomy of Financial Intermediaries	Meaning and classification of **Financial Intermediaries** **Commercial banks, Credit union, Insurance companies, Pension Fund, Mutual Fund** (Role and investment schemes), Financial advisors **Non Banking Financial companies: IDFC, IL&FS, Power Financial Company, SIDBI, NABARD** **Credit rating agencies-** meaning, rating methodologies, credit symbols, role.and benefits of ratings to company and investors, **Credit rating agencies in India.**	9	**FYIM- FINANCIAL INTERMEDIARIES BY VIPUL PUBLICATION FYFM-Rishab publication and Vipul prakashan**	Google meet, Google forms, PPT, Inkcredible, Testmoz, Youtube

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UNIT – 4 Future Trends	**Challenges faced by financial Intermediaries:** Challenges faced by Mutual Funds in India Challenges faced by Banking Sector in India Challenges faced by Insurance companies **Future prospects of financial Intermediaries:** Future prospects of Insurance industry in India Future prospects of commercial banking in India Future prospects of mutual funds in India	6	**FYIM- FINANCIAL INTERMEDIARIES BY VIPUL PUBLICATION**	Google meet, Google forms, PPT, Inkcredible, Testmoz,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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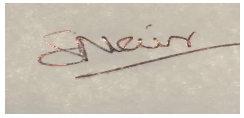
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNITHA CHANDRASHEKHAR NAIR DEPARTMENT: COM MERCE
CLASS F.Y.B.I.M.. SEMESTER: II MONTH: January - May ACADEMIC YEAR: 2021 -2022
LEARNING OBJECTIVE/S: To show how corporate governance , ethics and legal considerations factor into investment banking deals
The learners will be able to :to learn various investment banking skills .

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Investment Banking – Unit II & IV	**Module III – Risk and Return**			
	1.Risk and return concepts 2. Types of Risk and its Applications 3.ASBA 4.IPO and FPO 5. SEBI disclosures and other regulators	15	**1. Investment Management(V.K.Bhalla)** **2. The business of Venture Capital (Wiley)**	1.Online lectures 2 Quiz method 3.Discussion method
	Module IV- Investment Banking Activities			
	1.Industry analysis 2. Role of IPO in value unlocking 3.Recent Trends and Developments 4. Investment banking activities	15	**1.Investment Management(V.K.Bhalla)** **2.Portfolio Management (S.Kevin)**	1.Online lecture 2 Quiz method 3.Discussion method
		.		.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

SIGNATURE OF THE STAFF  **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE-SELF FINANCE SUBJECT: Introduction to Wealth Management
CLASS: FYIMG SEMESTER: II MONTH: January- March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The learners will be able to : Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Overview of Wealth management	1.**Introduction to Wealth management-**Definition of Wealth management; understanding wealth management; wealth management process; phases in wealth management process; wealth management market in India	4	Wealth Management- TYBMS- Rishab Publication/ Internet	Presentation method with chat, Google Meet
	2.**Holistic Planning Framework-**Sources of wealth; human Capital; Financial Capital; Financial Life Cycle; Working Life – Pre-family independence; Family; Pre-retirement; Retirement – Active retirement; Passive Retirement; Elderly Care; Retirement related risk – risk identification; Market Risk, Asset Allocation Risk, Interest Rate Risk, Inflation Risk, Health/liquidity risk, Longevity Risk	4	Research Paper: A Holistic Framework for Lifecycle Financial Planning	Presentation method with chat, Google Meet.
	3.**The Financial Planning process-**Establish and define the relationship with the client; Personal Fact Finding; Analyze Client's financial status, Risk profile and determine financial goals; Develop financial planning recommendation and present it to client; Implement client's financial planning recommendations; Monitor and review the client's situation	4	Wealth Management- TYBMS- Rishab Publication	Presentation method with chat, Google Meet
	4.**Asset Classes-** Debt as an asset class; Role of debt in wealth management; risk of investing in debt securities; Equity as an asset class – investing in stocks	3	Wealth Management- TYBMS- Rishab Publication/Internet	Presentation method with chat, Google Meet
Unit 3: Retirement Planning	1.Employee Benefits and Superannuation Benefits-Employee Benefits – Salary and Bonus; Reimbursement of expenses; Health Benefits; Group Insurance; LTA, TA, Concessional Loans; Defined Benefit Plans and	4	Wealth Management- TYBMS- Rishab Publication/Internet	Presentation method with chat, Google Meet

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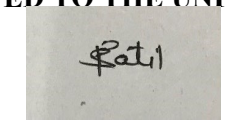
	Limitations – Characteristics of DB Plans, Types of Defined Benefit Plans, their Features, Applicability and withdrawal norms, Taxability; Defined Contribution Plans and Limitations – Characteristics of DC Plans, Types of Defined contribution Plans, their features, Applicability. And withdrawal norms, taxability; Superannuation benefits and schemes –Trust Funds, Private Fund Managers, and Insurance Companies, Benefits - on retirement, Voluntary retirement and Death			
	2.Retirement Needs and Factors in retirement Planning-Introduction to retirement planning - Significance of retirement planning; Purpose and need of retirement planning; Role of Wealth planner in retirement planning; Importance of starting early; Analysis of Client's Life Cycle – Early earning stage and established earning stage; stability and visibility of earnings; Accumulation and Distribution phase; Life Expectancy Vs. Retirement age; Early Vs. Delayed retirement; Risk of living longer than expected; Factors considered in retirement planning – Nature of Income; salaried, bonus and self-employed; standard of living; time horizon; inflation in accumulation and distribution phase; profile of assets sustainable till retirement; income generating potential of fixed assets; liquidity aspects of fixed and other assets; Profile of financial and other liabilities nearing retirement; Analysis of client's retirement needs – Estimating household expenses on retirement; Corpus estimated to meet post retirement needs; Alternate arrangements for supplementing retirement corpus; cost of escalation of medical expenses in post-retirement; charitable activities and social work	4	Wealth Management- TYBMS- Rishab Publication/Internet	Presentation method with chat, Google Meet
	3.Retirement Planning Process	3	Wealth Management- TYBMS- Rishab Publication/Internet	Presentation method with chat, Google Meet
	4.Income Streams during Retirement – Employer Provided superannuation plans; Provident Fund; Public Provident Fund; Small Savings Schemes; NPS; Pension Plans from MF's and Insurance Companies; Reverse Mortgage to supplement post retirement expenses.	4	Wealth Management- TYBMS- Rishab Publication/Internet	Presentation method with chat, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1 & 3 : 30

SIGNATURE OF THE STAFF  **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ALMEIDA DEPARTMENT: COMMERCE SUBJECT: Introduction to Wealth Management
CLASS: FYIMG SEMESTER: II MONTH: DECEMBER -APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The learners will be able to : Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2: Role of Insurance in Wealth Management	1.Analysis of Live Cover, Strategies and Products Assessment and identification of Risk Cover – Gathering data on current Life Insurance Cover; Identifying clients life insurance needs	1	Wealth Management- TYBMS- Rishab Publication/ Internet	Lecture method, discussion method
	2. Analysis of Life Insurance Needs – Economic Value of human life; Replacement of the future income of the insured; Replacement of the expenses and financial liabilities of the insured; provision in the life cover of certain financial goals and financial liabilities; Review of coverage for changes in income, assets and financial liabilities	2	Wealth Management- TYBMS- Rishab Publication/ Internet	Lecture method.
	3.Life Insurance Types of Life Insurance Policies - Term Insurance; Whole Life Insurance: Endowment Policy; Investment Linked Insurance (ULIP); Insurance Linked annuities; Life insurance Policy riders Calculation of Claim amount and other benefits – Types of Bonus; Maturity Claim; Death Claim; Surrender Value; Return on Savings Component; Taxation aspect of various insurance Policies	2	Wealth Management- TYBMS- Rishab Publication/ Internet	Lecture method.
	4.General Insurance-Health Insurance and Accident Insurance – Individual Vs. Family floater Policy; Critical Illness policy; Group health Insurance; Personal and group accident Insurance; Personal Disability Insurance – Permanent and Temporary, Partial and total; Scope of benefits – long term and short term disability; Property and Liability Insurance – basis of property cover – Reinstatement, Book or Market Value; Insuring House, Household items,	4	Wealth Management- TYBMS- Rishab Publication/Internet	Lecture method, discussion method

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ALMEIDA DEPARTMENT: COMMERCE SUBJECT: Introduction to Wealth Management
CLASS: FYIMG SEMESTER: II MONTH: DECEMBER-APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The learners will be able to : Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4: Estate Planning	1. Estate Planning Overview–The concept of Estate Planning; Purpose and Need of Estate Planning; Risks and Drawbacks involved in Estate Planning; Hindu and Indian Succession Act; Succession-Testate and Intestate	2	Wealth Management- TYBMS-Rishab Publication/ Internet	Lecture method, discussion method
	2.Estate Planning Process-Collect comprehensive information and examine circumstances to set Estate planning goals ; Determine value of client's estate and liquidity aspects; Estimate cost of transfer and other expenses; Develop a plan of transfer; Implement plan and review periodically.	1	Wealth Management- TYBMS-Rishab Publication/ Internet	Lecture method.
	3.Methods of Estate Planning - Will; Trust; Insurance; Gift; Power of Attorney; Transfer of property and partition.	1	Wealth Management- TYBMS-Rishab Publication/ Internet	Lecture method.
	4.Will –Characteristics and Contents of a Will; Types of Will-Unprivileged, Privileged, Joint, Mutual and Conditional; Legal requirements and Testamentary capacity; Modifying or revoking Will; Probate Process	2	Wealth Management- TYBMS-Rishab Publication/Internet	Lecture method, discussion method
	5.Powers of Attorney – Use and purpose; Types-General and Special; Revocation; Role of the executor.	1	Wealth Management- TYBMS-Rishab Publication/Internet	Lecture method,
	6.Trust - Classification of Trust – Revocable and Irrevocable, Characteristics of Trust– Discretionary and Determinate; Different types of a family trust; Family trust V/s Will; Parties to Trust; Rules relating to perpetuities; Other Provisions	3	Wealth Management- TYBMS-Rishab Publication/Internet	Lecture method, discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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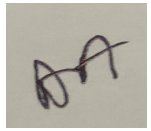
	business unit, plant and machinery; personal Umbrella Policy; miscellaneous oversees travel insurance; Motor Insurance – Comprehensive and Mandatory Third party coverage; No claim Bonus and claims			
	5.Other business specific Insurance – professional Indemnity Insurance; Keyman Insurance; Marine Insurance, Cargo and Hull Insurance; Inland Transit Insurance	1	Wealth Management- TYBMS- Rishab Publication/ Internet	Lecture method.
	6.Introduction to the following Acts Insurance Regulatory and Development Authority(IRDA)Act-1999; TheInsuranceAct-1938; PublicLiabilityInsuranceAct-1991; MotorVehicleAct-1988 EmployeeStateInsuranceAct-1948	2	Internet	Lecture method.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

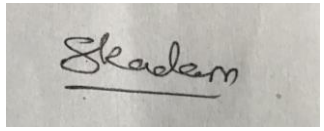
NAME OF THE STAFF: Prof. Sachin A ,Kadam DEPARTMENT: COMMERCE

CLASS: SYBIMG SEMESTER: III MONTH: OCT ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1	Chapter 1 Introduction to Cost Accounting Meaning, define, scope, advantage and disadvantages, difference between Cost Accounting and Financial accounting, Elements, Components	7 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	printed notes, chalk and duster
Unit 5	Chapter 5 Classification of costs and cost sheet Meaning, classification, format, practical problems, Small calculations, Practical problems	7 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	printed notes, chalk and duster
Unit 6	Chapter 6 Reconciliation of Cost and Financial Accounts Brief, Introduction, Format, small calculations, Practical problems	l7 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	printed notes, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _21_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: SYBIM

SEMESTER: 3 MONTH: JUNE -JULY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: FOUNDATION COURSE (Overview of Investment Management)
The learners will be able to Understand security contract Act regarding stock exchange.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Security Contract Act	Security Contract Act – Important terms, Objectives, Types of Contract, Stock Exchange Recognition, Refusal of Recognition, Listing and Delisting of Security, Byelaws, Functions, Appellate Authority, Cancellation, Fines and Penalties.	10	Banking Law & Practice By M.L Tannan	Chalk Board, Flow Chart, Diagrams .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

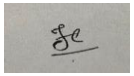
NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: SYBIM

SEMESTER: 3 MONTH: AUGUST ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: FOUNDATION COURSE (An overview of Investment Management)
The learners will be able to: Overcome the possible risk in future contribution with the allies for the better and firm growth of GDP with the strong hold and public example for all.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Risk Management	Risk Management: concept of Risk, Type of Risk – systematic risk unsystematic risk, Risk Management process, Risk identification, Risk evaluation, Risk handling.	13	Risk Management by; Rishabh Publications & other trusted reliableZsources.	Chalk Board, Flow Chart, Diagrams .
	Risk Governance: Importance and Scope of Risk Governance, Risk and Three Lines of Defence, Risk Management and Corporate Governance.			
	Risk Assurance: Purpose and Sources of Risk Assurance, Nature of Risk Assurance Reports and Challenges of Risk.			
	Risk and Stakeholders Expectations: Identifying the range of stakeholders and responding to stakeholders' expectations.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT:COMMERCE CLASS: SYBIM

SEMESTER: 3 MONTH: SEPTEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: FOUNDATION COURSE (Overview of Investment Management)
The learners will be able to: Understand introduction of finance literacy, system instruction regarding RBI and recognize the importance of cost and tax.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4 Financial Literacy and Individual Investing	Introduction to Financial Literacy: Meaning, need and importance of financial literacy, Components of financial literacy, Individual economic system, personal finance planning, RBI Initiatives in financial literacy.	11	Financial Inclusion By Deepali Joshi & K.G Karmakar	Chalk Board, Flow Chart, Diagrams .
	Individual Investing – getting ready to invest – Saving versus investing – Getting started – discipline and planning are key – Define your goals and investment time frame – Decide if you need income, growth or both – Understand the risks – Diversify to minimize risk – Recognize the importance of cost and tax.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Sachin A Kadam DEPARTMENT: COMMERCE

CLASS: SYBIMG SEMESTER: III MONTH: JUNE -OCT ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1	**Introduction of Finance and Financial Management** **A) Introduction to Finance** • Meaning and definition of finance • Importance of finance • Types of Finance: Public and Private • Sources of finance Long term Sources : Term Loans, Debentures, Bonds, Zero Coupon bonds, Convertible Bonds, Equity shares, Preference shares, CD, CP, Public Deposits Short Term sources**:** Bank Finance, Trade Credit ,Other Short Term Sources Venture Capital and Hybrid Financing B) Financial Management • Meaning and Importance of Financial Management • Scope of Financial Management • Functions and Objectives of Financial Management • Primary Objective of Corporate Management • Agency Problem	10 lec	Vipul Prakashan SYBBI sem III	printed notes, chalk and duster

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	• Organization of Finance Function Emerging role of Finance Managers in India C) Objectives of the Firm • Profit Maximization and Shareholders Wealth Maximization • Profit V/s Value Maximization			
Unit 2	**Financial Goal Setting & Time value of Money** **A) Financial Goal Setting** • Introduction • Financial Forecasting – Meaning, Techniques, Benefits • Approaches to Financial Planning • Economic Value Added (EVA)– Measurement & Components • Free Cash Flow (FCF) **B) Time Value of Money** • Concept • Present Value • Annuity • Techniques of Discounting • Techniques of Compounding.	3 lec	Vipul Prakashan SYBBI sem III	printed notes, chalk and duster
Unit 3	**Investment Decisions**: **Capital Budgeting** **A) Capital Budgeting** • Nature of Capital Budgeting • Purpose of Capital Budgeting • Capital Budgeting Process • Types of Capital Investment • Basic Principle of Measuring Project Cash Flows • Increment Principle, Long Term Funds Principle, Exclusion of Financial Cost Principle, Post Tax Principle	10 lec	Vipul Prakashan SYBBI sem III	printed notes, chalk and duster

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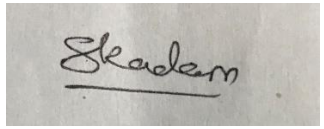
	• Probability technique for measurement of cash flow • Capital Budgeting Techniques: Net Present Value Profitability Index and Discounted Pay Back Method. • A Comparison; Project Selection Under Capital Rationing (Note: Problems on computation of cash flow, ranking of projects on various			
Unit 4	**Financial decisions** **A) Cost of Capital :** • Introduction and Definition of Cost of Capital • Measurement of Cost of Capital • Measurement of WACC using book value and market value method. • Measuring Marginal Cost of Capital **B) Capital Structure Decisions:** • Meaning and Choice of Capital Structure • Importance of Optimal Capital Structure • EBIT -EPS Analysis • Capital Structure Theories • Dividend Policies (Walter & Gordon)	7 lec	Vipul Prakashan SYBBI sem III	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _30_____



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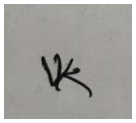
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VARADA KATLE DEPARTMENT:COMMERCE CLASS: SY BIMSEMESTER:III MONTH: JUNE -20ACADEMIC YEAR: 2021-22 SUBJECT :CM

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CM	Unit III :introduction to collective investment scheme: Introduction to sebi , overview ,application ,grant of security obligation of collective investment ,restriction on business activity ,CIMC ,submission of information ,trusteeship ,unit certificate ,transfer of unit ,listing scheme ,and winding up of scheme	5	Vipul publication	Chalk and duster method
	Unit IV resource mobilisation in international market DR ,ADR ,GDR ,FCCB ,FCEB ,Issue of foreign currency exchangeable bonds difference between FCCB and FCEB , external commercial borrowings forms and features	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __20_



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TEACHING PLAN (UNIT PLAN)

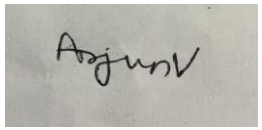
NAME OF THE STAFF: Arjun Vishwakarma DEPARTMENT: Commerce CLASS: SYBIM SEMESTER: III MONTH: October

ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : The learner will be able to use basic computer software and some financial software

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2,3,4	DBMS: Concept, Tables, Fields, Datatype, RDBMS, Primary key and Foreign key	4	Computer Skills-2 and Wikipedia	PowerPoint Presentation, Laptop
	ERP, SCM, CRM, SFA	4	Computer Skills-2	PowerPoint Presentation, Laptop
	Online Trading Software, Net Banking, Online Banking Software	4	Computer Skills-2	PowerPoint Presentation, Laptop

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: MUTUAL FUND MANAGEMENT DEPARTMENT: COMMERCE

CLASS: SYBIM SEMESTER: III MONTH: AUGUST, SEPTEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 INTRODUCTION TO MUTUAL FUND	History, Origin, Definition, Meaning of Mutual Fund	1		• Google Meet • PowerPoint • Discussion
	Characteristics, Advantages, Disadvantages of Mutual Fund, Ethics	1		
	Entities involved – Sponsors, Trust, Trustee, AMC, Registrar &Transfer Agent and Fund Houses in India	3		
	Legal Framework, Role of Regulatory agencies – SEBI, RBI, AMFI, Ministry of Finance, SRO, Company Law Board, Registrar of Companies	3		
	Mutual Fund guidelines on advertisement, accounting, taxation, valuation norms, purchase mutual fund, investor protection	3		
	Mutual Fund regulation and grievances mechanism	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: MUTUAL FUND MANAGEMENT DEPARTMENT: COMMERCE

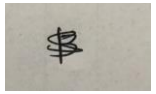
CLASS: SYBIM SEMESTER: III MONTH: SEPTEMBER, OCTOBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 CLASSIFICATION OF MUTUAL FUND	A) Types of Mutual Fund			• Google Meet • Excel • PowerPoint • Discussion
	Functional / Operational – Open ended, Close ended, Interval	2		
	Portfolio – Income, Growth, Balanced, MMMF	2		
	Geographical / Location – Domestic, Off-shore	2		
	Miscellaneous – Tax saving fund, exchange traded fund, balanced fund, fixed term plan, debt funds, SIP, STP	2		
	B) Portfolio Maturity, Calculation of NAV, Entry Load, Exit Load	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 11



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: MUTUAL FUND MANAGEMENT DEPARTMENT: COMMERCE

CLASS: SYBIM SEMESTER: III MONTH: OCTOBER, NOVEMBER, DECEMBER ACADEMIC YEAR:2021-22

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 FUND SELECTION CRITERIA	Need, Importance, Basis of Rating	2		• Google Meet • PowerPoint • Discussion
	Interpretation of Fund Rating by CRISIL, ICRA, CARE (Selection Criteria)	3		
	Performance measurement – rolling return and benchmarking	2		
UNIT 4 FINANCIAL PLANNING AND MUTUAL FUND	A) Basics of Financial Planning – Steps, Life Cycle, Wealth Cycle, risk profiling, asset allocation, contingencies funds	2		
	B) Investor guides towards Financial planning – Eligibility for investment in mutual fund, KYC, Long bond fund, Short bond fund, Ultra Short bond fund, Need for financial advisors, colour coding mutual fund, difference between advisors and distributor, FD and mutual fund, dividend and growth option	3		
	C) Developing model portfolio for Investors – meaning, step by step approach of building model portfolio	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 3 & 4: 13

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TEACHING PLAN (UNIT PLAN)

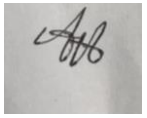
NAME OF THE STAFF: Ankita Almeida DEPARTMENT: Commerce CLASS:SY-BIM SEMESTER: III MONTH: August-December

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of effective learning , formal and informal communication , leadership skills and self-improvement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Portfolio Management- An Introduction	A} **Investment-** Meaning, Characteristics, Objectives, Investment VS Speculation, Investment Vs Gambling and types of investors. B} **Portfolio Management-** Meaning, Evolution, Phases, Role of portfolio managers, Advantages of portfolio management. C**}Investment Environment-** Investment Environment in India and factors conducive for Investment in India.	02	Vipul Prakashan	Online /PPT
2. Portfolio Analysis and Selection	A} **Portfolio Analysis-** Meaning and its components, calculation of expected return and risk, calculation of covariance, Risk- Return trade off. B**} Portfolio Selection-**Meaning, Feasible Set of portfolios, Efficient set of portfolios, selection of optimal portfolio, Markowitz Model, Limitations Markowitz Model, Measuring Security Return And Portfolio Return, Risk under Single Index Model and Multi Index Model.	05 02	Vipul Prakashan	Online /PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09



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TEACHING PLAN (UNIT PLAN)

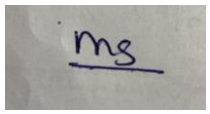
NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:SYBIM SEMESTER: IV

MONTH: December to March 2021 ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit I Introduction and Basic Terms	Introduction to Income Tax : Introduction of Tax i.e. Direct and Indirect, Basic information about what is Direct Tax	1	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests
	BASIC TERMS : 1.Assessee 2.Assessment 3.Assessment Year 4.Capital Assets 5.Income 8.Person 6.Previous Year 7.Transfer Practical questions	3	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 per Division



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TEACHING PLAN (UNIT PLAN)

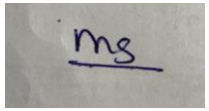
NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:SYBIM SEMESTER: IV

MONTH: December to March 2021 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit II Scope of Total Income	Residential Status Basic Conditions, Exceptions, Additional Conditions R & OR, R but NOR, NRI Practical problems	3	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests
	Scope of Total Income Related to R & OR, R but NOR, NRI	1	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8 per Division



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:SYBIM SEMESTER: IV

MONTH: December to March 2021 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit III Heads of Income	Income From Salary Concept of Salary, Perquisites, Allowances, Exemptions Practical Questions	3	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests
	Income From House Property Concept of House Property and its Types Practical Questions	3	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests
	Income From Business and Profession Incomes taxable under the head Business and Profession Expenses allowable and not allowable Practical Questions	3	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests
	Capital Gains Concept of Capital Asset, Transfer, Types of Capital Gains, Exempt Transfers, Exemptions, Practical Problems	3	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests
	Income from Other Sources Income taxable and deductions deductible under this head Exempt Incomes, Practical Problems	2	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14 per Division

TEACHING PLAN (UNIT PLAN)

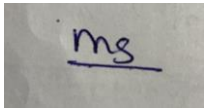
NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:SYBIM SEMESTER: IV

MONTH: December to March 2021 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit IV Deductions U/C VI/A	Deductions u/s 80C, 80CCC, 80CCD, 80D, 80DD, 80E, 80TTA, 80U	2	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 2 per Division



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TEACHING PLAN (UNIT PLAN)

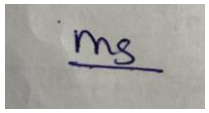
NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:SYBIM SEMESTER: IV

MONTH: December to March 2021 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit V Computation of Total Income for Individual	Computation of total income by combining two or more heads of incomes – practical problems	3	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3 per Division



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHAKHA SANE DEPARTMENT: COMMERCE CLASS: SYIM(BUSINESS ECONOMICS II) SEMESTER: lV

MONTH: JAN ACADEMIC YEAR 2021-22

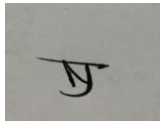
LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1,2,3 AND 4	1. Introduction to Macroeconomic data and theory: Macroeconomics:meaning,scope and importance Circular flow of income and expenditure:Closed and open economy. The measurements of national product:Meaning and importance,concepts Short run economic fluctuation:features and phases of trade cycle. Keynesian principle of effective demand.	15	MACRO ECONOMIC THEORY H L AHUJA	PPT
	2. Money inflation and Monetary policy: Money supply:Determinants of Money supply-Factor influencing velocity of circular flow of money. Demand for Money:Classical and Keynesian approach Money and Prices:Quantitative theory of money	15		

SIGNATURE OF THE STAFF VISHAKHA SANE **SIGNATURE OF THE H.O.D.**

	Inflation:Demand pull and Cost push inflation Monetary Policy:Meaning objective and instruments.			
	3. Constituents of fiscal policy: Role of Government:Principles of sound and functional finance. Fiscal Policy:Meaning and objectives Instrument of fiscal policy Union Budget	15		
	4. Open economy:Theory and issues of international Trade Basis of Foreign Investment Foreign Investment Balance of Payments	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___



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TEACHING PLAN (UNIT PLAN

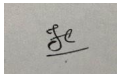
NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: SYBIM

SEMESTER: 4 MONTH: NOVEMBER-DECEMBER. ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: FOUNDATION COURSE (Overview of Risk Management)
The learners will be able to: Understand the meaning of banking and banking sector introduction to insurance sector with various types significant and roll with advantages and disadvantages.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Introduction to Banking Sector	Introduction to Banking Sector- Meaning of Banking Companies, primary and secondary functions of banks, banking system in India, Overview of RBI, Public, Private, Co-operative, Payment Bank and Regional Rural Banks.	11	Insurance &Banking sector By Rishabh Publications	Chalk Board, Flow Chart, Diagrams .
	Introduction to Insurance Sector- Meaning of Insurance Companies, Functions, Principles, Types of Insurance policies and their advantages & disadvantages.			
	Significance and Role of Banking and Insurance in mobilizing savings, investments, wealth accumulation and economic growth			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN

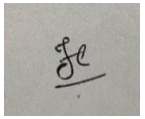
NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: SYBIM

SEMESTER: 4 MONTH:JANUARY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: FOUNDATION COURSE (Overview of Banking and Insurance)
The learners will be able to: Understand Banking regulations regarding Act (Amendments) payment settlements, insurance under IRDA Act and RBI activities.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Regulatory and Developmental Framework governing Banking & Insurance sector	Overview of Regulatory Architecture – Banking Regulation Act 1949, Banking Regulation Act (Amendment 2015), Payment and Settlement Act 2007, Negotiable Instrument Act 1881	11	Banking and Insurance By Vipul Publications	Chalk Board, Flow Chart, Diagrams .
	Overview of Regulatory Architecture relating to Insurance – Introduction to Insurance Act 1938, IRDA Act 1999 and The Insurance Laws (Amendment) Act, 2015			
	Developmental Activities of RBI and IRDA			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11



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TEACHING PLAN (UNIT PLAN)

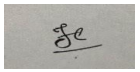
NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT:COMMERCE CLASS: SYBIM

SEMESTER: 4 MONTH: FEBRUARY ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: FOUNDATION COURSE (Overview of Banking and Insurance)
The learners will be able to: Understand importance of Microfinance playing role profitable securitization schemes in various sectors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4 Microfinance & Financial Inclusion	Microfinance – Introduction, Need and Code of Conduct for Microfinance Institutions in India, Advantages, Purpose, Limitations and Models of SHG – Bank Linkage Program, Role of NABARD and SIDBI, Portfolio Securitization, SHG-2, NRLM and SRLM, Priority Sector and its Classification	11	Investment management Banking & Insurance By Vipul Publications	Chalk Board, Flow Chart, Diagrams .
	Financial Inclusion – Need & Extent, RBI Committee Report of Medium-Term Path on Financial Inclusion 2015, NISM Report 2015(Only Brief Extracts relating to bank account holdings and credit taken), Features & Procedures of Pradhan Mantri Jan Dhan Yojana, and PM Mudra Yojana, Features, procedures and significance of Stand-up India Scheme for Green Field.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11



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TEACHING PLAN (UNIT PLAN)

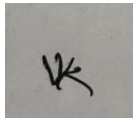
NAME OF THE STAFF: VARADA KATLE DEPARTMENT:commerce CLASS: SY BIMSEMESTER:IV MONTH: Nov -21ACADEMIC YEAR: 21-22

SUBJECT :EM

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EM	Unit I introduction to equity mkt :meaning and definition of equity shares ,growth of corporate sector ,trade of between ownership and management ,development of equity culture in India	5	Vipul publication	Chalk and duster method
	Unit II components of equity mkt :basics of primary market :IPO ,book building red g\herring prospectus ,right share Market for equity :secondary market ,stock exchange ,functions , NSE ,BSE , OTCEI ,stock mkt indices	5		
	Unit III law relating to issue of share: listing of securities ,issue of capital disclosure ,ESOP , recent development in stock exchange .issue of listing of securities	5		
	Unit IV evolving role of equity mkt: need for attracting more investors for equity ,link between primary mkt and secondary mkt Development in equity market ,FDI ,FII ,retail investor , role of SEBI	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __20_



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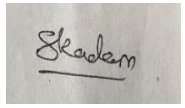
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. SACHIN ARJUN KADAM DEPARTMENT: COMMERCE CLASS: SYBIM SEMESTER: IV MONTH: DEC-MARCH ACADEMIC YEAR: 2021-22_____

LEARNING OBJECTIVE/S: The learners will be able to: Creating, Evaluating, Analysing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1	Working Capital Management Management of Working Capital in India • Estimating working capital needs • Operating or working capital cycle • Working Capital Financing: Trade Credit; Bank Credit; Commercial Papers; Certificate of Deposits (CDs); Financing.	15 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	Chalk, duster, notes printed
Unit 2	Management of Components of Working Capital Management of Cash and Marketable Securities: Motives for Holding Cash; Objectives of Cash Management; Factors Determining Cash Needs; Basic Strategies of Cash Management; Cash Management Techniques / Processes; Marketable Securities; and Cash Management Practices in India. • Receivables Management: Objectives; Credit Policies; Credit Terms; and Collection Policies. • Inventory Management: Objectives; and Techniques.	15 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	Chalk,duster,notes printed

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _30_____



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TEACHING PLAN (UNIT PLAN)

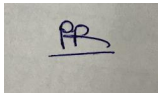
NAME OF THE STAFF: Ms. Priyanka Devnath_Rajput DEPARTMENT: Commerce CLASS: S.Y.B.I.M

SEMESTER: IV MONTH: JANUARY-APRIL ACADEMIC YEAR: 2021-22 SUBJECT: I.T in Investment Management- II

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of E-Commerce, MIS, ERP, CRM, and Different types of E-Payment, MS Word and MS PowerPoint & Outlook Express.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I E-Business	A) Introduction, E-Commerce – Definition, History of E-commerce, types of E-Commerce B to B etc. Comparison of traditional commerce and ecommerce.	03	E- Commerce -By Marriappa M. and www.wikipedia.com	Google meet, PDF File, MS-WORD What's App, Google Calendar, Google Meet Attendance etc.
	B) E-Commerce business models – major B2B model, B2C model, C2C model, C2B model, Peer-to-Peer (P2P) model and Advantages/ Disadvantages of e-commerce.	04		
	C) Web auctions, Virtual communities, Portals, E-business revenue models.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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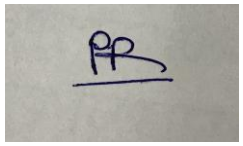
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Security for E-Business	A) Security threats– An overview, Implementing E-commerce security, Encryption – Decryption, Cryptography methods, SSL protocol, Firewalls.	05	An Overview of Cyber Crime & security By - Akash Kamal Mishra and www.wikipedia.com	Google meet, PDF File, MS-WORD What's App, Google Calendar, Google Meet Attendance etc.
	B) Threat Hunting: Definition of Threat hunting, Threat Hunting vs. Threat detection, Benefits and challenges of threat hunting.	05		
	C) Best Practices for threat hunting, Considerations for threat hunting and threat detection, Threat hunting/detection software.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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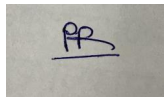
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Cyber Law and Security	A) Cyber Crimes - Various threats and attacks, Phishing, Key Loggers, Identity Theft, Call & SMS forging.	03	An Overview of Cyber Crime & security By - Akash Kamal Mishra and www.wikipedia.com	Google meet, PDF File, MS-WORD What's App, Google Calendar, Google Meet Attendance etc.
	B) E-mail related crimes, Denial of Service Attacks, Hacking, Online shopping frauds, Credit card frauds, Cyber Stalking.	05		
	C) Cyber Security - Computer Security, E-Security, Password Security and Reporting internet fraud.	03		
	D) Cyber Law - Need of Cyber Law, History of Cyber Law in India, Legal Aspects of E-Business, and Information Technology Act 2000 - salient features.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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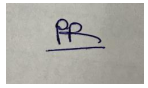
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV MS-Office: Packages for Institutional Automation	A) MS-PowerPoint presentation: - Internal links between slides, hyperlinks, embedding multimedia content onto the slides, slide animation, timer, creating new presentation by existing theme, import online themes, creating a template of presentation, save and run the slide show.	04	Microsoft Office Professional2013 By - Beth Melton and www.wikipedia.com	Google meet, PDF File, MS-WORD What's App, GMAIL, Outlook Express Software, Google Calendar, Google Meet Attendance and Computer for Practical (MS-PowerPoint Software)
	B) Applications of Internet: - Introduction to e-mail, writing professional emails, creating digitally signed documents.	03		
	C) Google drive: - usage of Google drive in storing the Google documents, excel sheets, presentations and PDF files..	03		
	D) Use of outlook express: Configuring outlook express, Creating and managing profile in outlook, Sending and receiving e-mails via outlook express, Emailing the merged documents, Boomerang facility of email.	05		
	Practical: - creating new presentation, creating a template of presentation, hyperlinks, slide animation, writing professional emails.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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TEACHING PLAN (UNIT PLAN)

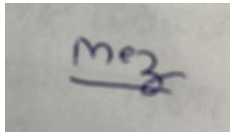
NAME OF THE STAFF: Prof Mezbin lalani DEPARTMENT: COMMERCE CLASS: S.Y.BCOM(Investment management)

SEMESTER: IV **(SAPM)** MONTH: January to April ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: understand portfolio management.
The learners will be able to : know the various investment aternatives and portfolio management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1..Fundamental analysis	Economy, industry and company analysis,	15	Investment analysis and management Mcgraw	Google meet, Google classroom, power point presentation, pdf file, etc
2.technical analysis	technical analysis :charts and patterns, efficient market hypothsis	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30__



SIGNATURE OF THE STAFF

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Vidhya Dayanand Patil College of Arts VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce
CLASS: T Y B Com (IM) SEMESTER: V MONTH: DECEMBER ACADEMIC YEAR: 2021-22
LEARNING OBJECTIVE/S:
The learners will be able to :
Understand a variety of techniques to identify, access, manage & monitor risk. The learners will able to understand the importance of planning and implementing identified risk management action.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Risk Management	**Foundations of Risk Management** Basic Risk Types The Role of Risk Management Enterprise Risk Management (ERM) History of Financial Disasters and Risk Management Failures 2007 Financial Crisis	15	Risk Management : M/s Macmillan India Limited *Risk Management : Insurance and Derivatives Dr G Kotreshwar- Himalaya Publishing House*	GOOGLE MEET FOR ONLINE TEACHING, GOOGLE CLASSROOM DESKTOP AND LAPTOP ,Group Discussion,
	Capital Market Risk Management Equity, Currencies &Commodities Markets in India Introduction to Derivatives Forward, Future and Option Contracts Hedging through Derivatives Contract Fixed-income Securities Fixed-income Risk management through Derivatives Rating Agencies	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

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TEACHING PLAN (UNIT PLAN)

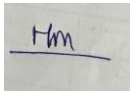
NAME OF THE STAFF: HEMANGI VIJAY MEHTA DEPARTMENT: COMMERCE CLASS: TY.BIM

SEMESTER: V DIV:- MONTH: OCT- DEC 2021 ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : The objective of this subject is to make the students gain knowledge about the business and its ethics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 INTRODUCTION TO BUSINESS ETHICS UNIT 2 APPLICATION OF ETHICAL THEORIES IN BUSINESS	Definition, Meaning, Nature of Ethics, Moral and Ethics, Types of ethics, Importance of ethics	3	Manan Prakashan, Vipul	Online Lecture, PPT
	Meaning, Nature of Business ethics, Importance, Areas of business ethics	3	Manan Prakashan, Vipul	Online Lecture, PPT
	Meaning of Functional Ethics, Types of ethics, Ethics relating to free and perfect competitive market	3	Manan Prakashan, Vipul	Online Lecture, PPT
	Ethical Decision making, Utlitarianism, Deontology	2	Manan Prakashan, Vipul	Online Lecture, PPT
	Gandhian approach in management and Trusteeship, Importance and relevance	3		
	Ethical issues in functional area of business Ethics in Advertising, Ethical issues in finance	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09



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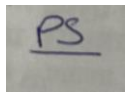
NAME OF THE STAFF: PRIYANKA SINGH DEPARTMENT: COMMERCE CLASS: TYBIM SEMESTER: V SUBJECT: BUSINESS ETHICS MONTH: AUGUST TO DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : understand the ethics of business and how to carry the business activities ethically.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3 Organisational Ethics	Professional ethics , Individual ethics , corporate ethics, ethical behaviour, ten commandments of ethical behaviour, golden parachute, green mail, whistle blowing , ethical practices in HR Finance, Marketing Insider trading	10	Ethics and virtues by Peter Singer	PPT presentation Google meet
Unit 4 Ethics and social responsibility Unit 5	Meaning of CSR Evolution of CSR in India , concept of. Charity , corporate philanthropy, argument in favour of CSR argument against CSR Benefits of CSR towards various stakeholders. Concept of ethics in business development and recent changes, role of business ethics in building civilized society.	05 05	Ethics and virtues by Peter Singer	PPT presentation Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN) (SUB: CORPORATE ACCOUNTING)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.I.M** SEMESTER: **5th** MONTH: **AUG-SEPT**

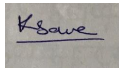
ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Share
2. What are the types of Shares
3. Share as a means of Investments
4. What are the Importance of Share

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Valuation of Shares (Continue…..)	**1.** Meaning of Shares **2.** Types of Shares **3.** Share as a means of Investments **4.** Importance of Shares	05	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee M. Hanif.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.I.M.** SEMESTER: **5th** MONTH: **SEPTEMBER**

ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are the Method of Valuation Of Shares
2. What is Intrinsic Value of Share
3. What is Yield Value Of Shares
4. What is Fair Value of Shares

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Valuation of Shares	1. Valuation of Shares in case of Merger and Acquisition of Shares 2. Intrinsic Value of Share 3. Yield Value Of Shares 4. Fair Value of Sharee	10	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee M. Hanif.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.I.M** SEMESTER: **5th** MONTH: **OCTOBER**

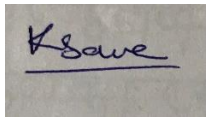
ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Investment and investment Accounting
2. What are the types of Securities
3. How to calculate Ex Interest and Cum Interest Prices

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INVESTMENT ACCOUNTING	**1.** For Shares (variable income bearing securities) **2.** For Debentures/Preference Shares (fixed income bearing securities) **3.** Accounting for Transactions of Purchase and Sale of Investments with ex and cum interest prices and finding cost of investment sold and carrying cost as per weighted average method (Excl. brokerage).	05	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.I.M** SEMESTER: **5th** MONTH: **NOV-DEC.**

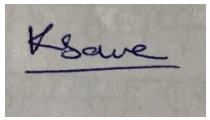
ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. How to draw Columnar Format for Investment Account
2. How to solved Problems on investment Accounting

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INVESTMENT ACCOUNTING	**3.** Columnar Format for Investment Account. **4.** MCQ on investment Accounting (Shares, Debentures)	05	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: COMMERCE (SELF-FINANCE) CLASS: T.Y.B.I.M

SEMESTER: V MONTH: JUNE TO NOVEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVES:
The Learner/Students will be able to under the concept of Indian economy in terms of classification of various sector such as primary, secondary and tertiary sector and their contribution towards the development of Indian Economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL FINANCE UNIT I	**GLOBAL FIANCIAL ENVIRONMENT** • Introduction to International Finance • Challenges • Finance function in global context • Financial market • Cost of capital • Financial structure • Intra company transfers • Capital budgeting • Financial management & imperfections in financial markets • International integration • Diversification • Mergers and Acquisition- definition, classification, cross border merger and acquisition • Changes in policy and regulatory environment	15	INTERNATIONAL ECONOMICS BY KRUGMAN P. R. & OBSTFELD M. INTERNATIONAL ECONOMICS BY LEVI MAURICE D. INTERNATIONAL ECONOMICS BY SALVATORE DOMINICK	POWERPOINT PRESENTATION AND GOOGLE MEET

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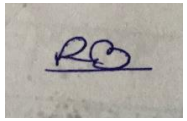
	• Trends and features of cross border mergers and acquisition.			
INTERNATIONAL FINANCE UNIT II	**INTERNATIONAL MONEY AND EQUITY MARKET** • Introduction and role • Instruments and returns on it • Major stock market in the world • Emerging stock market • International equity trading • Multiple listing • Credit rating agencies and their role • ADR, GDR, IDR types and characteristics	15	INTERNATIONAL ECONOMICS BY KRUGMAN P. R. & OBSTFELD M. INTERNATIONAL ECONOMICS BY LEVI MAURICE D. INTERNATIONAL ECONOMICS BY SALVATORE DOMINICK	POWERPOINT PRESENTATION AND GOOGLE MEET
INTERNATIONAL FINANCE UNIT III	**EURO CURRENCY MARKETS AND INTERNATIONAL BONDS MARKETS** • Introduction • Reasons for growth • Euro dollar market its operations and its functions • Bond market • Participants, risk domestic and foreign bond • Euro currency bond types and issue • Currency convertibility	15	INTERNATIONAL ECONOMICS BY KRUGMAN P. R. & OBSTFELD M. INTERNATIONAL ECONOMICS BY	POWERPOINT PRESENTATION AND GOOGLE MEET

	• Participatory notes		LEVI MAURICE D. INTERNATIONAL ECONOMICS BY SALVATORE DOMINICK	
INTERNATIONAL FINANCE UNIT IV	**OBSTACLES TO INTERNATIONAL INVESTMENT** • Information barrier • Foreign exchange risk • Political risk • Market risk • Taxation • Other regulatory barriers	15	INTERNATIONAL ECONOMICS BY KRUGMAN P. R. & OBSTFELD M.	POWERPOINT PRESENTATION AND GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Abhishek Madaye DEPARTMENT: COMMERCE CLASS: TY.BIM

SEMESTER: V DIV:- MONTH: OCT- DEC 2021 ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : The objective of this subject is to make the students gain knowledge about the business and its ethics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
OPEM,UNIT 1, A OVERVIEW OF THE INDIAN EQUITY MARKET	Meaning and definition of equity shares-growth of corporate sector and simultaneous growth of in number of equity shareholders,separation of ownership and management in the company,development of equity culture in india and current position,Security market-an overview,market terminology and investment procedure in the primary and secondary market	15	Reference books and internet	PPT,WORD
UNIT 4,TRADING SYSTEM AND STRATEGIES	Trading system in stock exchange ,introduction ,NEAT and BOLT ,Screen based trading system(SBTS),market phases,order management,trade management,market window operation and auction.Trading strategies: long v/s short and brief introduction to hedging,daily settlement and margin.	15	Reference books and internet	PPT,WORD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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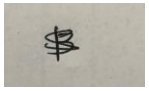
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: COMMERCE CLASS: TyBIM SEMESTER: 5 MONTH: Oct-Dec ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : understand how the primary and secondary markets function and instruments of primary and secondary markets. Valuation of equities- methods and techniques used compute the value of equities, videos models, analysis and market related factors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Operations in equity markets, primary and secondary markets.	Introduction and meaning of primary market, initial public offer, methods.	2		Online Lectures, Google slides
	Book building, offer for sale, role of merchant bankers in fixing the price.	2		
	Red herring prospectus, ASBA, green shoe option, sweat equity.	2		
	ESOP, right issue of shares, ADR, GDR, IDR	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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MONTH: August

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Operations in equity markets, primary and secondary markets.	Definition and functions of Secondary market, evolution and growth	1		Online Lectures, Google slides
	NSE, BSE, SME exchanges and overseas stock exchange	2		
	Recent developments, merger of SEBI with FOMC, stock market indices	2		

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Operations in equity markets, valuation of equities	Factors affecting share prices, balance sheet valuation, dividend discount model.	2		Online Lectures, Google slides
	Price earning model, fundamental analysis.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Operation in equity markets, valuation of equities	Macroeconomic factors and market related factors	1		Online Lectures, Google slides
	Role of brokers, stock market quotations.	2		
	Procedure for buying and selling, BOLT online trading	3		
	NEAT, clearing and settlement, order matching.	2		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JINAL CHOHAN DEPARTMENT: COMMERCE CLASS: TY.BIM

SEMESTER: V DIV:- MONTH: OCT- DEC 2021 ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : The objective of this subject is to make the students gain knowledge about the business and its ethics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Research	Meaning, Objectives and Importance o f Research Types of Research Research Process	5	Vipul Prakashan	Online/ Presentation
	Characteristics of Good Research Hypothesis-Meaning, Nature, Significance, Types and Sources. Research Design– Meaning, Definition, Need and Importance, Steps,	5	Vipul Prakashan	Online/ Presentation
	Scope and Essentials of a Good Research Design. Sampling– a) Meaning of Sample and Sampling, b)Methods of Sampling i) Non-Probability Sampling–Convenient, Judgment, Quota, Snow ball ii) Probability– Simple Random, Stratified, Cluster, Multi Stage.	3	Vipul Prakashan	Online/ Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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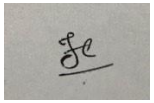
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Data Collection and Processing	Types of Data and Sources-Primary and Secondary Data Sources	3	Vipul Prakashan	Online/ Presentation
	Methods of Collection of Primary data a. Observation- i) structured and unstructured, ii) disguised and undisguised, iii)mechanical observations (use of gadgets) b. Experimental i)Field ii) Laboratory	4	Vipul Prakashan	Online/ Presentation
	c. Interview – i) Personal Interview ii) focused group, iii) in-depth interviews Method d. Survey– Telephonic survey, Mail, E-mail, Internet survey, Social media, and Media listening. e. Survey instrument– i) Questionnaire designing.	4	Vipul Prakashan	Online/ Presentation
	a. Types of questions–i) structured/close ended and ii) unstructured/ open ended, iii) Dichotomous, iv) Multiple Choice Questions. b. Scaling techniques- i)Likert scale, ii) Semantic Differential scale.	4	Vipul Prakashan	Online/ Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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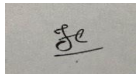
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Research Report	Report writing – i) Meaning, Importance, Structure, Types, Process and Essentials of a Good Repor	5	Vipul Prakashan	Online/ Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYIM SEMESTER: V

MONTH: August to December 2020 ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: To let students understand what is Risk and how it affects in practical life
The learners will be able to : Understand the concept of Risk and how it is to be managed

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Risk Management Unit III	**7. Credit Market Risk Management** 1. Credit Risk Definition 2. Types of Credit Risk 3. Evaluation of Credit Risk 4. Procedure for Credit Risk Management 5. Credit Lifecycle 6. Loan Review Mechanism 7. Lehman Brothers Crisis	4	Vipul Prakashan, Self maintained notes	Online teaching i.e. Google meet White board Microsoft excel
	8. **RBI Guidelines on Credit Rating Framework in Banks** Background 2. End Use of Risk-Ratings made on the CRF 3. Basic Architecture of Calibration of Credit Risk 4. Grading System for Calibration of Credit Risk 5. Operating Design of the CRF 6. CRFs and aggregation of Credit Risk 7. Flow and Stock Approach	4	Vipul Prakashan, Self maintained notes	Online teaching i.e. Google meet White board Microsoft excel

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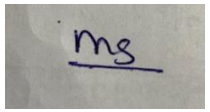
	9. Introduction of Basel Norms and Calculation of Capital Adequacy Ratio Introduction to Basel Norms BASEL I BASEL II BASEL III Capital Adequacy Ratio ICAAP ALCO	4	Vipul Prakashan, Self-maintained notes	Online teaching i.e. Google meet White board Microsoft excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 per Division

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Risk Management Unit IV	10. Risk Measurement Need and importance, volatilities, computation of standard deviation, beta, variance, RAROC, Gap Analysis Option terminologies etc. and practical sums	5	Vipul Prakashan, Self maintained notes	Online teaching i.e. Google meet White board Microsoft excel
	11. Risk Measurement through Derivatives Definition Basis risk, Hedge Ratio, hedging stratagies	3	Vipul Prakashan, Self maintained notes	Online teaching i.e. Google meet White board Microsoft excel
	12. Interest rates and measures of interest rate sensitivity Measuring interest rate risk, sensitivity analysis of bonds	3	Vipul Prakashan, Self maintained notes	Online teaching i.e. Google meet White board Microsoft excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 per Division



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF Prof. Abhishek Madaye DEPARTMENT: Commerce CLASS: T.Y.BCOM(investment management)

SEMESTER:**)** MONTH: January to April ACADEMIC YEAR 2021-22

LEARNING OBJECTIVE/S: The learners will be able to: concept of auditing ,techniques,methods,types,documentations etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AUDITING,UNIT 1,Introduction to Auditing	**Basics–Financial Statements, Users of Information, Definition of Auditing, Objectives of Auditing –Primary and Secondary, Expression of opinion, Detection of Frauds and Errors, Inherent limitations of Audit. Difference between Accounting and Auditing, Investigation and Auditing. Errors & Frauds–Definitions, Reasons and Circumstances, Types of Error – Commission, Omission, Compensating error. Types of frauds, Risk of fraud and Error in Audit, Auditors Duties and Responsibilities in case of fraud.Principles Of Audit–Integrity, Objectivity, Independence, Skills, Competence, Work performed by others, Documentation, Planning, Audi Evidence, Accounting System and Internal Control, Audit Conclusions and Reporting.Types of Audit–Meaning, Advantages, Disadvantages of Balance sheet Audit, Interim Audit, Continuous Audit, Concurrent Audit and Annual Audit.**	**15**	**Reference books and internet**	**PPT,WORD**

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UNIT 2, Audit Planning, Procedures and Documentation	Audit Planning–Meaning, Objectives, Factors to be considered, Sources of obtaining information, Discussion with Client, Overall Audit Approach.Audit Program–Meaning, Factors, Advantages and Disadvantages, Overcoming Disadvantages, Methods of Work , Instruction before commencing Work, Overall Audit Approach.Audit Working Papers-Meaning, importance, Factors determining Form and Contents, Main Functions / Importance, Features, Contents of Permanent Audit File, Temporary Audit File, Ownership, Custody, Access of Other Parties to Audit Working Papers, Auditors Lien on Working Papers, Auditors Lien on Client's BooksAudit Notebook–Meaning, Structure, Contents, General Information, Current Information, Importance.	15	Reference books and internet	PPT,WORD
UNIT 3,Auditing Techniques and Internal Audit Introduction	Test Check-Test Checking Vs Routing Checking, Test Check meaning, features, factors to be considered, when Test Checks can be used, advantages disadvantages precautions. Audit Sampling-Audit Sampling, Meaning, Purpose, Factors in determining SampleSize -Sampling Risk, Tolerable Error and Expected Error, Methods of Selecting,Sample Items,Evaluation of Sample Results,Auditors Liability in Conducting Audit Based on SampleInternal Control-Meaning and Purpose, Review of Internal Control, Advantages, Auditors Duties, Review of Internal Control, Inherent Limitations of Internal Control, internal Control Samples for Sales and Debtors, Purchases and Creditors, Wages and Salaries. Internal Checks Vs Internal Control, Internal Checks Vs Test ChecksInternal Audit-Meaning, Basic Principles of Establishing Internal Audit, Objectives, Evaluation of Internal Audit by Statutory Auditor, Usefulness of Internal Audit, Internal Audit Vs External Audit,, Internal Checks Vs Internal Audit	15	Reference books and internet	PPT,WORD

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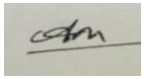
UNIT 4,New Areas of Auditing and Professional Ethics	New Areas of Auditing Introduction to Cost Audit, Human Resource Audit, Management Audit, Operational Audit, Forecast Audit, Social Audit, Tax Audit, Forensic Audit and Environmental (Green) Audit, Audit Committee. Audit in an EDP Environment-Introduction, General Approach toEDP based Audit and Special Techniques for Auditing in an EDP Environment.Professional Ethics and MisconductIntroduction, Meaning of Professional Ethics Meaning of Professional Misconduct, Schedules to the Chartered Accountants Act,1949 Relating to Professional Misconduct, Enquiry into Charges of Misconduct of Chartered Accountants	15	Reference books and internet	PPT,WORD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

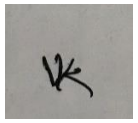
NAME OF THE STAFF: VARADA KATLE DEPARTMENT:COMMERCE CLASS: TY BFM SEMESTER:VI MONTH: December 21 ACADEMIC YEAR: 2021-22

SUBJECT : Commodities Derivatives

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Commodities derivatives	Unit I Introduction to commodities market : emergence of commodities mkt , derivatives :derivative definition , types , participation ,exchange traded vs OTC traded ,kabra committee report ,cropping and growth patterns ,factors that influence price	5	Vipul publication	Chock and duster method
	Unit II commodities exchange .functions and role Pricing commodity derivatives : investment assets vs consumption the cost of carry ,future basics , concept of hedging	5		
	Unit III commodities derivatives derivative definition , types , participation ,exchange traded v Trading : basic concept such as margins ,circuit filter ,delivery norms ,types of commodity ,settlement price ,fund shortages ,delivery shortage	5		
	Unit IV Pricing and trading in trading commodities derivative s:cost of carry model ,pricing ,future contract, regulatory framework :Rules governing commodity derivatives ,derivative exchange ,investor grievance ,arbitration rules	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __20



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: BIM CLASS: TYBIM SEMESTER: VI MONTH: JAN-APRIL

ACADEMIC YEAR:2020-21 SUBJECT: CORPORATE GOVERNANCE

LEARNING OBJECTIVE/S: To understand strategic leadership and corporate governance are phenomena relevant to organizations of varying size, business activity and geographic location. The module covers a fast growing area of consulting-related work and the basic objective is to understand the theory and practice of corporate governance and its role in the strategic management of the modern corporation.

The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Corporate Governance	Definition & Conceptual Framework of Corporate Governance, Business Ethics – an important dimension to Corporate Governance, Fair and Unfair Business Practices.	3	Corporate Governance in India *By Arindam Das*	MS-Power Point, Google Meet, Google classroom
	Theoretical Basis of Corporate Governance, Mechanism-Corporate Governance Systems, Indian Model of Governance, Good Corporate Governance, Obligations Towards Society and Stake holders.	3	Corporate Governance: Principles and Practices By Sandeep Goel	Same as above
	Theories underlying Corporate Governance (Stake holder's theory and Stewardship theory, Agency theory, Separation of Ownership and Control,	2	Same as above	
	Corporate Governance Mechanism: Process, Indian	2	Same as above	

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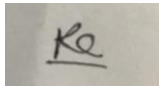
	Model, OECD, and Emphasis on Corporate Governance, (Transparency Accountability and Empowerment).			
Genesis of Corporate Governance in India	Introduction, Principles – Arthashastra and Good Governance in Ancient India, Protection of Interest of Customer and Investors, Historical Perspective of Corporate Governance and Issues in Corporate Governance.	2	Same as above	Same as above
	Values: Meaning, Types, Teaching from Scriptures Like Gita, Quran, Bible value systems in Business.	2	Same as above	Same as above

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM (Investment Management) CLASS: T.Y.B.I.M.

SEMESTER:6TH MONTH: December -March ACADEMIC YEAR: 2021-22 SUBJECT: CORPORATE GOVERNANCE

LEARNING OBJECTIVE/S:
The learners will be able to:

1. To introduce learners about theories and processes implementation of corporate governance.
2. To acquaint students with knowledge of the importance of corporate governance in the globalised economy.
3. To understand the professional approach in conducting family business.
4. To understand the role of MRTP Act and MRTP Commission in reduction of corruption.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 3: Evolution of Corporate Governance	The Cadbury Committee-Code of best principles –Indian Experience of Corporate Governance – The C II Code- SEBI initiative. The Kumar Mangalam Birla Committee Report	5	1. The Essential Book of Corporate Governance- G. N. Bajpai 2. Corporate Governance and Social Responsibilities-	1.Lecture and discussion. 2. google meet 3. PPTs
	Corporate Governance in Globalized Economy – MNCs/TNCs and Business Ethics. Relationship between Business Ethics-Corporate Governance and Ethical Leadership; Kohlberg's Six Stages of Moral Development	5		
MODULE 4:	Role of Board of Directors and Board Structure, Role of the Non-executive Director, Role of Auditors, SEBI Growth of Corporate Governance	4		

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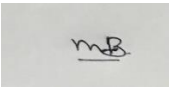
Implementation of Corporate Governance	Role of Government, Corporate Governance in India. Accounting Standards and Accounting disclosures. Finance Reporting and Corporate Governance, Non Accounting Regulations in Corporate Governance, Corporate Governance & CSR,	3	V.Balchandran 3. Corporate Governance - Archana Prabhudesai	
	Family Owned Business Background, family businesses in India, Need for Professionalization and Transparency in Family Business.	3		
MODULE 5; Corporate Governance and Issues Related to Scams Corruption	Meaning, Causes, Effects. Frauds and scams in Banks, Insurance Companies, Financial Institutions, Measures to Overcome Fraud and Corruption	4		
	Zero Tolerance of Corruption. MRTP Act and MRTP commission	2		
	Competition Act, Ethical Approach in IPR with respect to Designs, Patents and copyrights, Ethics and IT	2		
	Case study, future of corporate Governance.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____CHETAN PRAKASH VARMA _____ DEPARTMENT: ___COMMERCE ___ CLASS: __TYIMG ___

SEMESTER: ___VI___ MONTH: _____JAN- APRIL _____ ACADEMIC YEAR: ____2021-22_____

LEARNING OBJECTIVE/S:
The learners will be able to : To make aware of International finance concepts and teaching its practical applicability and relevance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL FINANCE-II	Meaning and Scope of International Finance-Balance of Payment- ComponentsDeficit in Balance of Payment-Concept of Currency Convertibility International Monetary System- Gold Standard-Features-Bretton Wood SystemBackground and Features-Reasons for its Failure-Smithsonian Agreement-SDRsEuropean Monetary system Current Exchange Rate Systems – Fixed and Flexible Exchange rate- Merits Demerits-Types of Fixed Exchange Rate- Hard Pegs and Soft Pegs- Types of Flexible Exchange Rate- Managed and Free Float.	08	Bhalla .V.K. international Financial Management-S.Chand Publishing.	ONLINE METHOD-GOOGLE MEET YOUTUBE LINKS
	Introduction- Market and Market Participants- Structure of Forex Markets-The Mechanics of Currency Trading-Types of Transactions and Settlement DatesExchange Rate Quotations and Arbitrage(Geographical, Triangular and Interest Rate)-Short Date and Broken Date Forward Contracts- Borrowing and Investment Decisions-Determinants of Exchange Rate – Purchasing Power and Interest rate Parity Foreign Exchange Management in India- Retail and Whole Sale Component of	07	Apte P.G. International Finance – A Business Perspective, New Delhi, TATA McGraw Hill , McGraw Hill	

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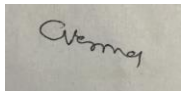
	Indian Foreign Exchange Market- Role of FEDAI- FEMA and Regulatory framework-Dealing Room Operations		Education; 2 edition	
	Introduction: Currency Futures-Future Contract-Futures Forward ContractCurrency Futures Quotes-How to Read Currency Futures Quotes-Market Operations-Clearing House and Clearing Margins- Hedging with Currency Futures and Contracts	06		
	Introduction-Options-Market Structure-Currency Option Quotes-Currency Option Pricing-Fischer Black's Option Pricing Model-Currency Call Options-Currency Put Options-Hedging Currency Positions with Foreign Currency Options	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____26___



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Mezbin Lalani DEPARTMENT: Commerce CLASS: T.Y.BCOM(investment management)

SEMESTER: V **(PROJECT MANAGEMENT)** MONTH: January to April ACADEMIC YEAR 2021-22

LEARNING OBJECTIVE/S: to understand the basics of project management
The learners will be able to : understand the need and the requirements of project management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Basics of project management 2. Project selection and evaluation.				
	Introduction, need, knowledge areas, project life cycle, project manager, philosophy.	15	Inroduction of Project management Mcgraw hill	Google meet, Google classroom, power point presentation, pdf file, etc
	Identification process, feasibility studies, break even point, need of project planning, WBS, organisational structure, project manager and line manager, leadership styles, team management, change management	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: B.Com (Financial Management)

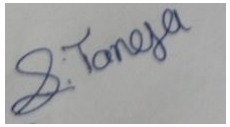
CLASS: FY FMG SEMESTER: I MONTH: OCTOBER/NOVEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to :

- To define profit and loss and solve questions based on it.
- To define types of discount and solve questions based on it
- To define commission and brokerage and solve questions based on them.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Mathematics Profit, loss, discount, commission, brokerage (Unit 2)	➢ Profit and loss ➢ Discount ➢ Commission ➢ Brokerage	1 2 1 1	Business Mathematics (V.K Kapoor)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS :whiteboard, Chalk & Duster, PPTs

sTOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5



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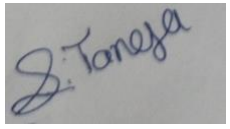
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Mathematics Interest & Annuity (Unit 3)	➢ Simple interest with examples ➢ Compound interest with examples ➢ Annuity (Present & Future value) ➢ EMI (Reducing balance and Flat interest rate method)	1 2 1 1	Business Mathematics (V.K Kapoor)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS :PPT, white board, Marker & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5



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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS

DEPARTMENT: B. Com (Financial Management) CLASS: FYFMG SEMESTER: I

ACADEMIC YEAR: 2021-2022 MONTH: OCTOBER/NOVEMBERR

LEARNING OBJECTIVES: The learners will be able to:

- Define Ratio, Continued Ratio, and Inverse Ratio and solve the questions based on these terms.
- Understand the concept of Proportion, Continued Proportion, Direct Proportion and Inverse Proportion.
- Solve the questions based on different types of Proportion and relate the situations in day to day life.
- Understand the concept of Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation.
- Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Ratio, Proportion & Percentage	Unit1	▪ Define Ratio, Continued Ratio, Inverse Ratio ▪ Problem solving on ratio ▪ Define Proportion its types. ▪ Problem solving on proportion	1 1 1 1 1	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

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			▪ Explanation on concept of percentage and computation of percentage.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

TEACHING PLAN (UNIT 4 PLAN)

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PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Shares and Mutual Funds	Unit4	▪ Concept of Shares, Face value, market value, dividend. ▪ Explanation of types of Shares. ▪ Sums based on Shares ▪ Concept of Mutual Funds and its types ▪ Calculation of net income after considering entry load and exit load	1 1 1 1	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

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			▪ Change in net asset value and problems based on it. ▪ Concept of SIP and sums based on it.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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TEACHING PLAN (UNIT PLAN)

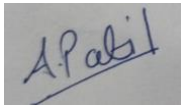
NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: B.Com.(Financial Management) CLASS: FYBCOM SEMESTER I

MONTH: November- December ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit – 2 Depreciation	Meaning, Causes	1	Financial Accounting by R Narayanswamy	Online Method, Google Meet
	Types- Straight Line Method, Written Down Method	2		
	Insurance claims, Average Clause	1		
	Practical Problems	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7



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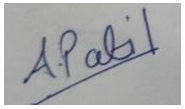
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit – 4 Final Accounts of a Sole Trader	Meaning, Preparation of final accounts of a sole trading concern	1	Financial Accounting by R Narayanswamy	Online Method, Google Meet
	Adjustments- Closing Stock, Outstanding and prepaid expenses, Depreciation	1		
	Provision for Bad Debts, Provision for discount on Debtors, Interest on Capital & Drawings	1		
	Practical Problems	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6



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TEACHING PLAN (UNIT PLAN)

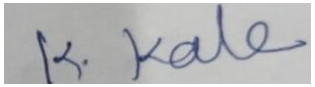
NAME OF THE STAFF: Karishma Vijay Kale DEPARTMENT: B.Com (Financial Management) CLASS:FYFMG

SEMESTER: I MONTH: December - March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Indian Financial System

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II	Reserve Bank of India	2	Vipul Prakashan	Online teaching- PPT
	Commercial Bank	2	Vipul Prakashan	Online teaching- PPT
	Development Bank	2	Vipul Prakashan	Online teaching- PPT
Unit III	Introduction to NBFCs	1	Vipul Prakashan	Online teaching- PPT
	NABARD	1	Vipul Prakashan	Online teaching- PPT
	Securities Exchange Board of India	1	Vipul Prakashan	Online teaching- PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____9_____



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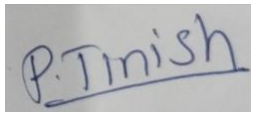
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: B.Com (Financial Management) PLANLASS: FYFMG (INDIAN FINANCIAL SYSTEM)

SEMESTER: I MONTH: SEPTEMBER TO DECEMBER ACADEMIC YEAR: 21-22

LEARNING OBJECTIVE/S:
The learners will be able to : understand how Indian financial system functions, its role

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1: FINANCIAL SYSTEM UNIT 4:	Chapter 1: Introduction to financial system Meaning, nature, structure, role, flow of funds in financial system, financial systems and economic developments, over view of financial system Chapter 2: financial system and economic development Financial development, economic development, indicators, economic policies, functions of financial system, financial sector in economic growth Chapter 3: Indian financial system, transformation of financial sector, driving force to its growth	15	Ahamad Khan Masood (1992) Banking in India, Anmol Publications,	POWER POINT PRESENTATIONS



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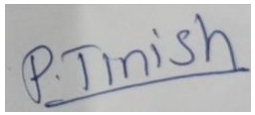
FINANCE COMPANIES	Chapter 10: Introduction to finance companies Its meaning, its purpose, functions of finance companies, sources of finance companies, uses of funds in finance companies, uses, risk in finance companies Chapter 11: Evolution of finance companies Origin and development, history, types of finance e companies, finance vs commercial banks, importance, challenges ,advantages, limitations Chapter 12: Micro finance and its importance Meaning and definition, origin and development, features, objectives, principles ,advantages, MFI,SHG, NABARD,micro finance companies	07	Ahamad Khan Masood (1992) Banking in India, Anmol Publications,	POWER POINT PRESENTATIONS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Bristi Gourgopal Biswas DEPARTMENT: B.Com (Financial Management) CLASS: F.Y.FMG SEMESTER: I (Subject : Business Economics I)

MONTH: AUGUST ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: To understand the application of microeconomics at corporate level .

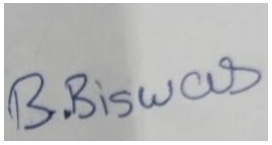
The learners will be able to : observe microeconomics in the real world and to understand and make business decisions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I **Introduction to business economics**	Introduction ,Business Economics ,basic concepts for business economic analysis ,functional relations and tool for economic analysis. Introduction to market demand and supply, demand supply ,market equilibrium, changes in market equilibrium.	10		Chalk and board
Module II **Demand Analysis**	Meaning of demand,law of demand,determinants of demand, demand function, price, income and substitution effects, nature of demand curve under different markets.	10		

	Meaning of elasticity, price elasticity of demand , income elasticity of demand , cross elasticity of demand,promotional elasticity of demand, importance of elasticity of demand , relationship between price elasticity of demand and revenue concept. Significance of demand forecasting ,types of demand forecasting, steps in demand forecasting ,methods of demand forecasting.			Chalk and board
Module III **Supply and production decisions and cost of production**	Concept of production, production function, isoquants ,ridge lines least cost combination of inputs ,expansion path. Types of production function ,law of variable proportions, laws of returns to scale. Meaning of economies and diseconomies of scale, Internal economies and diseconomies of scale, external economies and diseconomies of scale. Cost concepts: money cost, accounting cost and economic cost, fixed , variable and total cost , total , average and marginal cost. Cost function, short run cost output ,relationship between AC, AFC ,AVC and MC, relationship between AC and MC ,short run average cost and output, long run cost output, long run average cost curve ,long run marginal cost curve ,learning curve, long run AC and output. Concept of break even point ,variables influencing the break even point ,business application of break even analysis ,limitations of break even analysis.	12		Chalk and board
Module IV **Market structure perfect competition and monopoly** **and pricing and output decisions under imperfect competition**	Market structure ,types of market ,need to analyse the market structure. Perfect competition meaning and features ,short run equilibrium of the firm, long run equilibrium of the firm, equilibrium of industry and firm. Features of monopoly ,sources of monopoly power, equilibrium of monopoly firm ,comparison between perfect competition and monopoly. Features of monopolistic competition, short run equilibrium of the firm, long run equilibrium of the firm ,selling cost and its effects, role of advertisement.	12		

	Meaning of oligopoly ,characteristics of oligopoly ,collusive and non collusive oligopoly ,price rigidity ,collusive oligopoly, price leadership.			Chalk and board
Module V **Pricing practices**	Meaning of pricing practices, degrees of price discrimination, conditions for price discrimination, conditions for profitable price discrimination, equilibrium of price discriminating monopolist ,dumping. Introduction to pricing practices part II, marginal cost pricing ,cost plus pricing ,multi product pricing Transfer pricing.	10		Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 54



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI VIJAY MEHTA DEPARTMENT: B.com.in Financial Management CLASS: F.Y.FMG

SEMESTER: I DIV:- MONTH: OCT-DEC 2020 ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

The objective of this subject the students gain knowledge about how business environment is important to become successful businessman or business manager.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 BUSINESS AND ITS ENVIRONMENT	Business objectives Dynamic of business and its environment , types of business environment.	5	Business Environment by Manan Prakashan	Online Lecture, PPT
UNIT 2	Environmental Analysis Importance, factors, PESTEL Analysis, SWOT Analysis	5	Business Environment by Manan Prakashan	Online Lecture, PPT

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BUSINESS AND SOCIETY	Business Ethics Nature,Scope, ethical dilemmas, corporate culture and ethical climate Development of business Entrepreneurship and Economic development ,MSMED Act 2006, Entrepreneurship as a career option	10	Business Environment by Manan Prakashan	Online Lecture, PPT
UNIT 3 CONTEMPORARY ISSUES	Consumerism and Consumer Protection Act CSR And corporate Governance , CSR of business, Ecology and Business, Carbon credit Social Audit Evolution of Social Audit, benefits of Social audit, Social Audit V/s Commercial Audit	10	Business Environment by Manan Prakashan	Online Lecture, PPT
UNIT 4 INTERNATIONAL ENVIRONMENT	Strategies for going global:- MNCs, TNCs, WTO	3	Business Environment by Manan Prakashan	Online Lecture, PPT

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	Foreign trade in India Balance of trade FDI Flows and implications for Indian Industries	2	Business Environment by Manan Prakashan	Online Lecture, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

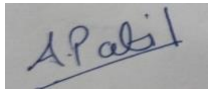
NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: B.Com (FINANCIAL MANAGEMENT) CLASS: FYBCOMSEMESTER II

MONTH: January- March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Financial Accounting Unit-1 Accounting for Hire purchase	Meaning , calculation of interest	1	Introduction to accountancy by T.S Gerwal	Online Method, Google Meet
	Accounting for hire purchase transaction by asset purchase method based on full cash price	1		
	Journal entries , ledger accounts and disclosure of balance sheet for hirer and vendor	1		
	Practical problems	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5



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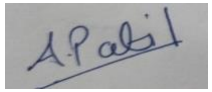
NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: FYBCOM (FINANCIAL MANAGEMENT)SEMESTER: II

MONTH: January- March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Financial Accounting Unit-2 Departmental Accounts	Introduction to Departmental Accounting	1	Introduction to accountancy by T.S Gerwal	Online Method, Google Meet
	Interdepartmental Transfers, Allocation of Expenses	1		
	Interdepartmental Transfers at cost, Interdepartmental Transfers at selling price	1		
	Practical problems	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5



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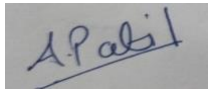

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TEACHING PLAN (UNIT II PLAN)

NAME OF THE STAFF: Shreya Taneja DEPARTMENT: : B.Com (Financial Management) CLASS:FY FMG
SEMESTER: II

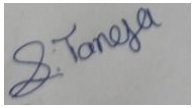
MONTH: January/Febrauary ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) concept of measure of Central tendency with examples

(2) understand the concept of Mean,Median and Mode

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	(1) definition of average and type of averages	01	S.L agarwal	Whiteboard , marker and Duster, powerpoint presentation



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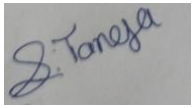
BUSINESS STATIATICS Measure of Central tendency			for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Discussion, Problem solving Homeworks,
Unit II	(2) mean, median, mode, combined mean with sums	02		
	(3)Quartiles and Percentile and Deciles	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5 lectures

	(1) Concept of measure of dispersion	01	S.L agarwal	Whiteboard , marker and Duster, powerpoint presentation



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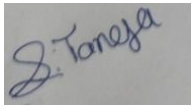
BUSINESS STATIATICS Measure of dispersion			for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Discussion, Problem solving
Unit III	(2) Range and Quartile deviation	01		
	(4) Mean deviation, Standard deviation	02		
	(5) Variance and Combined variance	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5 lectures



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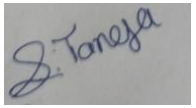
BUSINESS STATISTICS Correlation & Regression Unit IV	(1) meaning and type of correlation	01	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Whiteboard , marker and Duster, powerpoint presentationDiscussion, Problem solving Homeworks,
	(2) determination of correlation: scatter diagram ,Karl Pearson correlation coefficient	02		
	(3) meaning and concept of regression	02		
	(4) slope of regression line, least square method, regression coefficient	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7s lectures



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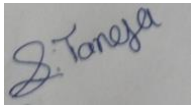
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS Population and Sample Unit I	(1) Definition of Statistics, Scope of Statistics, financial market, concept of population and sample	01	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Whiteboard , marker and Duster, powerpoint presentation Discussion, Problem solving Homeworks
	(2) Method of Sampling	01		



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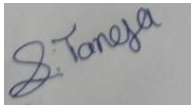
	(3) Data Condensation and Graphical method	01		
	(4) Attributes and Variables	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 lectures



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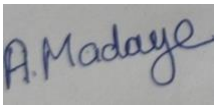
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. ABHISHEK MADAYE MONTH: JAN -APR

DEPARTMENT: B.Com (Financial Management)

CLASS: FYFMG SEMESTER:II ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:The learners will be able to: Understand the meaning of finance ,financial planning, its functions,internal and external sources of finance,capital structure and capitalization.



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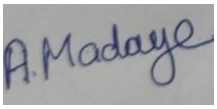
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTU RES ALLOT TED	REFERENC E/S	TEACHING METHOD/ ICT TOOLS USED
POF,UNIT 1,Introduction to Finance and Financial Planning	Finance, Definition, Nature and scope of Finance functionFinancial Management: Meaning, scope and objectivesOrganisational framework of financial management- Relationship of finance department with other departments- Role of Finance Manager Financial Planning: Concept-objectives-typessteps-significance- basic considerations-limitations	15	VIPUL PUBLICATI ON'S BOOK AND INTERNET	PPT,WORD
UNIT 2,Capital Structure and Capitalisation	Meaning of Capital Structure-Criteria of determining capital structure-factors influencing capital structureMeaning of Capitalisation, narrower and broader interpretation Overcapitalization- Meaning, causes, consequences, remedies Undercapitalization- Meaning, causes, consequences, remedies	15	VIPUL PUBLICATI ON'S BOOK AND INTERNET	PPT,WORD



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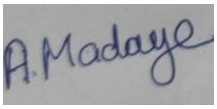
UNIT 3,External Sources of Finance	Shares-Meaning, types, advantages, limitationsDebentures- Meaning, types, advantages, limitationsPublic Deposits- Meaning, advantages, limitationsBorrowing from bankstypes of loans, advantages, limitations	15	VIPUL PUBLICATI ON'S BOOK AND INTERNET	PPT,WORD
UNIT 4 Internal Sources of Finance	Reserves and surplus, bonus shares, retained earnings, Dividend policy, Role of Depreciation, Importance, advantages and limitations of these sources	15	VIPUL PUBLICATI ON'S BOOK AND INTERNET	PPT,WORD



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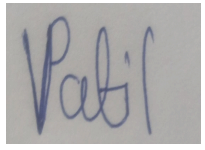
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VAIKHARI PATIL DEPARTMENT: B.Com (Financial Management)

CLASS: FYBCOM SEMESTER: II MONTH: Jan 2021- April 2022 ACADEMIC YEAR: 2021 -2022

LEARNING OBJECTIVE/S:
The learners will be able to: Learn Introduction to computer system

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, II, III, IV, V	Personal Computers- identification/demonstration of different storage Devices like CD and CD drive, hard disk- HDD, storing and retrieving data from various storage devices, identification of various input and output devices. Primary memory, RAM and ROM- Processor- CPU, it's speed- machine cycle, ports, computer buses, Different types of printers. Introduction to trouble shooting of personal computers.	7 lectures		
	Introduction, features, various versions of windows, My computer, my documents, recycle bin, network neighbourhood, start menu, taskbar, file and folder operation (creating, copying, moving, deleting), system tools, creating shortcuts	7 lectures		
	What is internet, most popular internet services , functions of internet like email,WWW, FTP, usenet, Instant messaging,	7 lectures		



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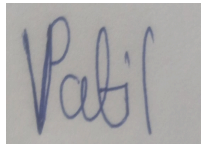
	internet telephony, using address book,working with task list, scheduling appointments, reminders, events			
	Getting started, The Word window, New documents, Document navigation,Editing text, Working with text, Undo and Redo commands, Cut, copy, and paste,Find and replace Text formatting, Character formatting, Tab settings, Paragraph formatting, Paragraph spacing and indents Tables, Creating tables, Working with table content, Changing the table structure Page layout, Headers and footers, Page setup Graphics, Adding graphics and clip art, Working with graphics Proofing, printing, and exporting, Spelling and grammar, AutoCorrect, Printing and exporting documents	7 lectures		
	Fundamentals of Excel, Cut, Copy, Insert, Delete, Paste Special, Custom Formatting , Undo, Redo, Excel Formulas – Basic, Useful functions and Paste Function, Calc, Comments, Drawing toolbar, Edit, Replace, Delete, Clear, Essential Printing, Data Sorting, Hiding, AutoFormats, Protection, Basic Charts, Basic Formatting, If Function	7 lectures		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35



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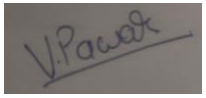
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . VISHWANATH V. PAWAR DEPARTMENT: B.Com (Financial Management) CLASS: F.Y.B.COM (FMG) SEMESTER: II

MONTH: JAN to March 2021-22 ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to : To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**ENVIRONMENT ;- AN OVERVIEW** Environment :- Structure, components & Typology Ecosystem as part of Environment :- Functioning & Level of Organisation Biodiversity :- Classification, Value, threats to Biodiversity	03	**Dr. Sachin Pendse**	**Google meet**
UNIT 2	**NATURAL RESOURCES :-** **Definition, Importance & Classification of natural resources** **Utilisation & Conservation of water, forest, soil and energy resources** **Issues associated with natural resources**	04		
UNIT 3	**ENVIRONMENT & ECONOMIC ACTIVITIES :-** **Economic activities – Nature and patterns – Primary, Secondary, Tertiary. Case study with reference to india**	04		



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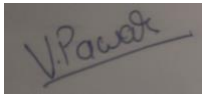
UNIT 4	**ENVIRONMENT MANAGEMENT :-** **Concept, Need & relevance of environement education** **Environmental impact Assessment, Environment Audit** **] Role of technology in Environment Management :- GIS, GPS, Remote sensing as tools**	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **B.Com (Financial Management)** CLASS**: S.Y.F.M.G**. SEMESTER: **3th** MONTH: **AUG-SEPT.**

ACADEMIC YEAR: **2021-22**
LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Income Tax and its basic term(Definitions)
2. What is Residential status and which income is taxable and nontaxable in India (Scope of Total Income)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

K. Save

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DEFINITIONS AND RESIDENTIAL STATUS	**Definitions U/S 2:** Section 2-Assessee, Assessment Year, Assessment, Annual value, Business, Capital asset, Income, Person, Previous Year, Transfer **Basis of Charge :Section 3 to 9** Previous Year, Residential Status, Scope Of Total Income, Deemed Income	10	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: S.Y.F.M.G**. SEMESTER: **3th** MONTH: **OCTOBER**

K. Save

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ACADEMIC YEAR: **2020-21**
LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Business as per section 2
2. What are provision of Profits & Gains from Business & Profession, Vocation under Income Tax Act, 1961

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME	**Profits & Gains From Business & Profession, Vocation** Section 28 to 32, 36, 37, 40, 40A, 43B, 44AD, 44ADA & 44AE Including.: Section 2 - Business	05	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM.

K. Sawe

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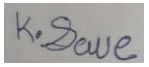
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: S.Y.F.M.G**. SEMESTER: **3th** MONTH: **NOVEMBER**
ACADEMIC YEAR: **2020-21**
LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Annual Value of House Property as per section 2



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2. What are provision of Income From House Property under Income Tax Act, 1961

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME	**Income From House Property:** Section 22 to 27, Including Section 2 - Annual Value MCQ Question	05	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

K. Sawe

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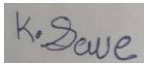
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: S.Y.F.M.G**. SEMESTER: **3th** MONTH: **DECEMBER.**
ACADEMIC YEAR: **2020-21**
LEARNING OBJECTIVE/S:
The learners will be able to:

1. How to Compute Taxable income of Individual and HUF.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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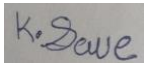
COMPUTATION OF TOTAL INCOME	Computation of Total Income of Individual and HUF with respect to above heads and deductions (MCQ Questions)	05	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:05



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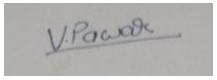
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____VISHWANATH V. PAWAR__SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: B.Com (Financial Management) CLASS: ____SYFMG____ SEMESTER: _____III_____ MONTH: __NOV - DEC__ ACADEMIC YEAR: ____2021-2022___

LEARNING OBJECTIVE/S:
The learners will be able to : The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Management Accounting	Meaning and Definition of Management Accounting, Nature and Frame work	2	**Management Accounting By I.M Pandey**	**GOOGLE MEET**
	Functions of Management Accounting, Decision Making Process	2		



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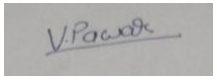
	Information of Decision making (Information, Strategic, tactical and operational information)	3		
	Financial Accounting v/s Management Accounting , Qualities of Management Accounting	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____VISHWANATH V. PAWAR ____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____COMMERCE___ CLASS: ____SYFMG___ SEMESTER: _____III _____ MONTH: __NOV - DEC __ ACADEMIC YEAR: ____2020-2021___

LEARNING OBJECTIVE/S:



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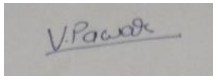
The learners will be able to : To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Financial Statement Analysis	Introduction and Meaning of Financial statement analysis, Steps, objectives , Types of Analysis, simple sums on financial statement	2	Management Accounting By I.M Pandey	Chalk Board And Discussion Method
	Ratio Analysis- Meaning, Classification , DU Pont chart, Advantages and limitations.	2		
	Balance sheet ratio, Revenue statement Ratio and Combined Ratio (Applications of formulas)	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07



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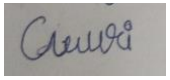
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI YADAV. DEPARTMENT: B.Com (Financial Management) CLASS: SYFMG SEMESTER: III.

MONTH:. AUG- DEC ACADEMIC YEAR:. 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : The different heads of income and slabs of taxation. Understand and learn the sections along with deductions. Tax slabs for income tax. And various scope of income calucations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Heads of Income Income from salary	Meaning and scope of various heads of income.		Manan Prakashan	PPT, Google Meet, Excel
	Meaning and Definition of Salary.			
	Salary Income: Section 15 – 17, Including Section 10 relating to House Rent Allowance, Travel Concession, Special Allowance, Gratuity, Pension – Commutation, Leave Encashment,	10	Manan Prakashan	



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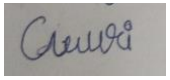
2.Deduction under chapter VIA	Compensation, Voluntary Retirement, Payment from Provident Fund Sums Q.1 to Q.6			
	Capital Gains : Section 45, 48, 49, 50, 54 and 55 Income from Other Sources: Section 56 – 59 Sums solved on capital gain and other sources	10	Manan Prakashan	PPT, Google Meet, Excel
3. Deduction under chapter VIA	Deduction under chapter VIA 80 A- Restriction on claim in Chapter VI- A. deductions 80 C – Payment of LIC/PF and other eligible investments 80CCC – Contribution to certain Pension Fund 80D – Medical Insurance Premium 80 DD- Maintenance and medical treatment of handicapped dependent 80E – Interest on Educational Loan 80 TTA- Interest on Saving Bank account 80U – Deduction in the case of totally blind or physically handicapped or mentally retarded resident person	10 08	Manan Prakashan Manan Prakashan	PPT, Google Meet, Excel PPT, Google Meet, Excel



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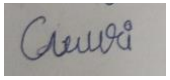
	Computation of Total Income of Individual with respect to above heads and deductions			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 38



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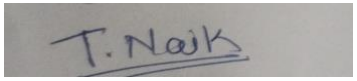
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TEJASWINI NAIK DEPARTMENT: B. Com (Financial Management) CLASS: SYFMG SEMESTER: III MONTH: JUNE TO SEPT. ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: Identify different types of cost, calculate labour cost, stock valuation
The learners will be able to : identify different types of cost ,valuation of stock, how to calculate labour cost by different methods, allocation of overheads, economic order quantity , tabular format to find out EOQ.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1.Classification of cost: Direct cost, indirect cost, fixed cost, variable cost,administrative cost, factory cost,sistribution cost,research and development cost. **2.stock valuation: fifo method, weighted average method, economic order quantity.** **3.Labou cost: labour turn over, methods to calculate labour cost-effective Merrick, Gant's task, Taylor, Rowen and Haynes method,cost per hour format., Time method, piece method** **4.Overheads: allocation of overheads, calculation of machine hours, basis for allocation of overheads , difference in allocation and attribution of overheads.**	**10 lectures for each topic**	**Maheahwaei**	**Black board**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40



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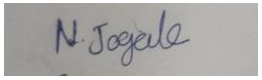
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NIKITA SUNIL JOGLE DEPARTMENT: B.Com (Financial Management) CLASS: SYFMG SEMESTER: III

MONTH: AUGUST - DECEMBER ACADEMIC YEAR: 2021 -2022

LEARNING OBJECTIVE/S:
The learners will be able to : understand the adjustments & distribution carried out between partners in different accounting circumstances.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2 – Piecemeal Distribution of Cash	Excess capital method, asset taken over by partner, treatment of past profits/past losses in the balance sheet, contingent liabilities/realization expenses/amount kept aside for expenses & adjustment of actual treatment of secured liabilities, treatment of preferential liabilities like govt. dues/labour dues etc.	10	Text book	Google Meet, Powerpoint, Excel



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4 - Conversion/Sale of a Partnership Firm into a Limited Company	Realisation method, calculation of new purchase consideration, journal/ledger accounts of old firms, preparing balance sheet of new company	4	Text book	Google Meet, Powerpoint, Excel
1 – Partnership Final Accounts based on Adjustment of Admission/Retirement/Death of a Partner during the year	Simple final accounts questions to demonstrate the effect on final accounts when a partner is admitted during the year or when partner retires/dies during the year, allocation of gross profit prior to and after admission/retirement/death when stock on the date of admission/retirement is not given & apportionment of other expenses based on time/sales/other given basis, ascertainment of gross profit prior to & after admission/retirement/death when stock on the date of admission/retirement is given & apportionment of other expenses based on time/sales/other given basis.	7	Text book	Google Meet, Powerpoint, Excel
3 – Amalgamation of Firms	Realization method, calculation of purchase consideration, journal/ledger accounts of old firms, preparing balance sheet of new firm, adjustment of goodwill in the new firm, realignment of capitals in the	6	Text book	Google Meet, Powerpoint, Excel

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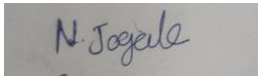
	new firm by current accounts/cash or a combination thereof.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASHWINI DATTATRAY BHOIR DEPARTMENT: B.Com (Financial Management) CLASS: SYFMG SEMESTER: III

MONTH: AUGUST - DECEMBER ACADEMIC YEAR: 2021 -2022 SUBJECT - BUSINESS LAW -I

LEARNING OBJECTIVE/S:

The learners will be able to know the meaning of the terms Agreement and contract and note the Distinction between the two.

The learners will be able to know the Concept of Indemnity & Guarantee, Bailment,Agency, Difference between contract of indemnity and contract of Guarantee.

The learners will be able to know the Concepts of sale and agreement to sell, Definitions, Conditions and Warranty, and Rights of an unpaid seller.

The learners will be able to know the History of negotiable instrument and its types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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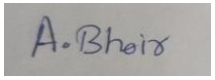
Module I Indian Contract Act-1872 part -I	Chapter :I-Contract- Definition of Contract and Agreement, Essentials of Valid Contract, Classification of contracts. Chapter :II- Offer and Acceptance - Rules of valid offer and acceptance, Counter offer, standing or open offer, distinguish between offer and invitation to offer.Concept of Communication and Revocation of offer and acceptance. Chapter : III- Capacity to Contract - Minor, Unsound Mind, Disqualified persons. Chapter :IV- Consideration - Concept and Importance of Consideration, Legal rules of Consideration, Exceptions to the rule, 'No Consideration No Contract' Unlawful Consideration.	2 2 2 2	The Indian Contract Act,1872 -Avtar singh Business Law- kapoor N. D. Business law- I, Kalaivani Venkataraman, Vipul prakashan	1) Lecture and Discussion 2) Online teaching learning tools (Google meet, Google form, PPTs)
Module No.II Indian Contract Act- 1872 Part II	Chapter :I- Consent - Agreements in which consent is not free- Coercion, undue Influence, Misrepresentation Fraud, Mistake. Chapter: II - Void Agreements - Concept, Void Agreement under Indian Contract Act.	2 2 2		



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Module No. III Special Contracts.	Chapter : III - Contingent Contract, Quasi Contract, Concept of E-Contract & Legal Issues in formation and discharge of E- Contract. Concept of performance of contract. Chapter : IV- Modes of Discharge of Contract, Remedies on breach of Contract.	2		
	Chapter :I- Law of Indemnity & Guarantee - Concept, Essentials elements of Indemnity and Guarantee, Contract of Indemnity vs. Guarantee, modes of Discharge of Surety. Chapter : II- Law of Bailment - Concept, Essentials of Bailment, Kinds of Bailment, Rights and Duties of Bailor and Bailee. Chapter - III Law of Pledge - Concept, Essentials of valid Pledge, Lien- Concept, Difference Between Pledge and Lien, Rights of Pawnor and Pawnee Chapter IV - Law of Agency - Concept, Modes of Creation of Agency, Modes of Termination of Agency, Rights and Duties of Principal and Agent.	2 2 2 2		

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Module IV The Sale of Goods Act-1930	Contract of sale- concept, Essentials elements of contract of sale, Distinction between sale and agreement to sell.Distinguish between sale and Hire purchase agreement, types of goods. Effects of destruction of goods Conditions and Warranties- concept, Distinguish between conditions and warranties, Implied Conditions and Warranties, Concept of Doctrine of Caveat emptor - Exceptions. Property - Concept, rules of transfer of property Unpaid seller - Concept, rights of an unpaid Seller, Remedies for breach of contract of sale, Auction Sale - Concept, Legal provisions.	4		
Module V The Negotiable instruments Act 2015	Negotiable instruments - Concept, Characteristics, Classification of Negotiable instruments Maturity of instruments. Promissory Note and Bill of Exchange Concept, Essentials of promissory Note, Bill of Exchange, Essentials features of promissory note and bill of exchange, kinds promissory note bill of exchange, cheque concept, types & Crossing of cheque,			

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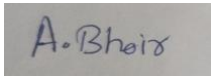
	Distinguish between bill of exchange & cheque, Dishonour of cheque - concept & penalties. Miscellaneous provisions - parties to Negotiable instruments Holder, Holder in due course, Rights & Privileges of holder in due course, payment in due course, noting & protest.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32



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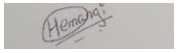
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT: B.Com (Financial Management) CLASS: SY FMG

SEMESTER: III MONTH: SEPT to MARCH ACADEMIC YEAR: 2021-2022 SUBJECT: ENTREPRENEURIAL DEVELOPMENT

LEARNING OBJECTIVES:The learners will be able to : understand about the entrepreneurs who organizes and put to use capital, labour and technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I,II,III,IV.	**Importance and significance of growth of entrepreneurial activity. Concept of entrepreneur. Concept of entrepreneur.** **Characteristics and qualities of entrepreneurs. Classification and types of entrepreneur.** **Idea generation- sources and methods . Identification and classification of ideas. Environmental Scanning and SWOT analysis. Preparation of project plan.** **Cultural and Environmental Issues in setting up of business enterprise with respect to-** **Sole trading firm, Limited liabilities Partnership, limited company, public company , Private company, NGO.**	60	Entrepreneurial Development by Romeo. S. Mascarenhas	Chalk board Flow Chart



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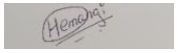
	SME, SHG with special reference to microfinance and woman entrepreneur. Definition of risk, types of risk, risk management strategies .			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA SUBJECT: Office Management DEPARTMENT: B Com (Financial Management)

CLASS: SYFMG SEMESTER:IV MONTH:Jan-feb ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & II Office accommodation and environment & Office automation	Office building , size , layout, safety and security measures, reception , importance shape size control.	6	Office Management by R.K.Chopra and Priyanka Gouri	Chalk board method, discussion, YouTube video, debates
	Communication –features, classification , barriers Arrangements and adjustment –furniture , chamber, cabin , rooms	6		
	Uses and abuses of labor saving appliances, kind of office machines.	6		
	Objective and advantages of various machines, use of machine, manual charts.	6		
	Kind of reports, report preparation, enquires.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA SUBJECT: Office Management DEPARTMENT: Commerce (SFC)

CLASS: SYFMG SEMESTER:IV MONTH: March-April ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III & IV HRM for office management & Planning and scheduling office work	Recruitment , selection training and development of office staff Office supervision	6	Office Management by R.K.Chopra and Priyanka Gouri	Chalk board method, discussion, YouTube video, debates
	Motivation – financial and non-financial incentive to subordinate Discipline, work control ,work distribution	6		
	Office routine, flow of work, office manual, control over stationary	6		
	Routine of handling mail, importance of correspondence	6		
	Various forms of correspondence, forms and supplies.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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(Commerce)

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TEACHING PLAN (UNIT PLAN)

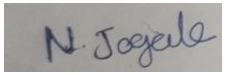
NAME OF THE STAFF: NIKITA SUNIL JOGLE DEPARTMENT: B.Com (Financial Management) CLASS: SYFMG SEMESTER: IV

MONTH: JANUARY - APRIL ACADEMIC YEAR: 2021 - 2022

LEARNING OBJECTIVE/S:
The learners will be able to: understand the concept of company accounts, provisions & adjustments to be made in the various accounts & balance sheet during & after redemption of shares & debentures & adjustments after incorporation.

SUBJECT – CORPORATE ACCOUNTS II

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
4 – Ascertainment & Treatment of Profit Prior to Incorporation	• Principles for ascertainment Preparation of separate, combined & columnar Profit & Loss Account including different basis of allocation of expenses/incomes.	7	Text book	Google Meet, Powerpoint, Excel
1 – Preparation of Final		5	Text book	Google Meet, Powerpoint, Excel



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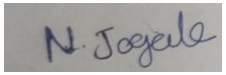
Accounts of Companies	• Relevant provisions of Companies Act related to preparation of final account (excluding cash flow statement) • Preparation of financial statements as per Companies Act. (excluding cash flow statement) AS 1 in relation to final accounts of companies (disclosure of accounting policies) • Provisions of the Companies Act for redemption of Preference Shares (Sec 55 of the Companies Act 2013), Companies (Shares & Debentures) Rules. • Methods of Redemption of fully paid up preference shares as per companies act 2013 : The proceed of a fresh issue of shares , the capitalisation of undistributed profits & a combination of both, calculation of minimum fresh issue to provide the fund for redemption , (Question on entries &/or Balance Sheet)			
2 – Redemption of Preference Shares		6	Text book	Google Meet, Powerpoint, Excel
3- Redemption of Debentures		4	Text book	Google Meet, Powerpoint, Excel



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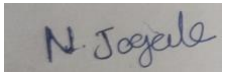
	• Introduction – Provisions of Section 71(1) & (4) of the Companies Act, 2013 , Creation & investment of DRR including the companies (Share Capital & Debentures) Rules, 2014, the methods of writing of discounts/loss on issue of debentures; Terms of issue of debentures • Methods of redemption of debentures: By payment in lumpsum & by payment in instalments (excluding from by purchase in open market), Conversion. (Question on entries, ledgers &/or Balance Sheet &/or redemption of preference shares.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22



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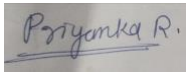
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Priyanka Devnath Rajput DEPARTMENT: B.Com (Financial Management) CLASS: S.Y.F.Mg

SEMESTER: IV MONTH: JANUARY - APRIL ACADEMIC YEAR: 2021- 2022 SUBJECT: Information Technology in Management

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of Business Process Management, E-Commerce, MIS and Tally accounting software.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Business Process	A) Introduction, Definition and Meaning of business process Flow of business process for accounting, purchase, sales and finance Classification of business processes.	03	Information Technology in Management By- Rimple Sanchla and www.wikipedia.com	Google meet, Google Classroom, power point presentation, PDF File,
	B) Introduction, Definition and Meaning of Business Process Management Principles and practices of Business Process Management Business Process Management life cycle.	04		



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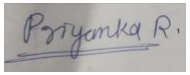
	C) Theories of Business Management Process Implementation of Business process Management - need, key factors and importance Automation of business Processes - benefits, risks, challenges.	05		What's App,Google Calender,Google Meet Attendance etc
	D) Accounting systems automation IT and Business Process Management Information systems - Meaning, Use of IT in Management.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Electronic Commerce	A) Meaning, Advantages and Limitations of E Commerce, The role of Strategy in E-Commerce, Value chains in E Commerce.	03	Information Technology in Management By - Rimple Sanchla and www.wikipedia.com	Google meet, Google Classroom, power point presentation, PDF File, What's
	B) Infrastructure for Electronic Commerce Web Based Tools for Electronic Commerce, Electronic Commerce software, Security Threats to electronic Commerce.	04		
	C) Implementing Security for Electronic Commerce, Electronic Payment Systems, and Strategies for Marketing.	03		



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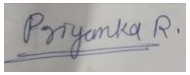
	D) Sales & Promotion Strategies for Purchasing Logistics & Support Activities, Electronic Markets & Communities, Business Plans for Implementing Electronic Commerce.	05		App,Google Calender,Google Meet Attendance etc

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Concept of MIS Reports in Computer Environment	A) Introduction, Concept of MIS, Need for MIS	03	Information Technology in Management By - Rimple Sanchla and www.wikipedia.com	Google meet, Google Classroom, power point presentation, PDF File, What's App,Google Calender,Google Meet Attendance etc
	B) Characteristic of MIS, Outputs of MIS, Role of MIS.	03		
	C) Guidelines for Developing MIS reports, Functional Aspects of the MIS, Problems in MIS.	05		
	D) Knowledge required for studying MIS, MIS and Computer.	04		



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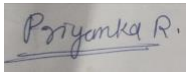
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV Computerized accounting system and Auditing	A) Role & Need and requirements of computerized accounting Basic requirements of computerized accounting system Limitations of computerized accounting system.	03	Information Technology in Management By - Rimple Sanchla and www.wikipedia.com	Google meet, Google Classroom, power point presentation, PDF File, What's App,Google Calender,Google Meet Attendance etc
	B) Understand the development and design of a computerized accounting system, determining how the accounting data will be processed.	03		
	C) Introduction of accounting software, Advantages, uses and various types of accounting software Accounting software TALLY - Accounting and reports.	05		
	D) Need and importance of IT in auditing, auditing in IT environment.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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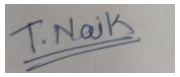
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Tejaswini Yogesh Naik DEPARTMENT: B.Com (Financial Management) CLASS: SYFMG SEMESTER: IV MONTH: NOV- MARCH ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: Calculate total cost for different types of industries.
The learners will be able to : calculate total cost for contract, processing and uniform goods making industry. Reasons of differences in cost and financial profit

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting	1.COST Sheet : different types of cost, format of cost sheet, items excluded from cost sheet, need of cost sheet. 2. Reconciliation statement : need of reconciliation statement, reasons of differences in costing and financial profit, items appears only in cost sheet, items appear only in financial accounting, format , questions. 3. Process costing : applicable in paper, chemical industry , format, how to calculate unit cost, normal loss, abnormal loss, abnormal gain	12 lecture s for each topic	Maheahwari	Blackboard



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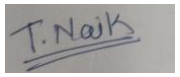
	4. Contract costing: to find out cost in construction industry, format, questions., Transfer of profit to profit and loss account, work certified, uncertified, sun contract, escalation clause, contract price, cash received.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF. MEZBIN LALANI DEPARTMENT: COMMERCE CLASS: S.Y.BCOM (Financial management) SEMESTER: IV

Month : January to April 2021 (sub: CORPORATE LAW) ACADEMIC YEAR21-2022

LEARNING OBJECTIVE/S: To make students learn about the framework of the corporate laws.
The learners will be able to : understand provisions applicable for the companies..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Indian companies act,2013				
	Features of companies, promotors, preincorporation contracts, public and private companies, memorandum and articles of association, ultra vires.indoor management, members, directors, prospectus, meetings	15	Company law (G.K Kapoor)	GOOGLE MEET, GOOGLE CLASSROOM, POWEE POINT PRESENTATION, PDFS,ETC
. 2.Indian partnership act,1932				
	Meaning. Types, test of partnership, duties and rights ,dissolution,	15	Partnership act.	

M. Lalani

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3. Consumer protection act, 1986	Concept, reason, need, definitions, redressal agencies, competition act	15	Consumer protection law and practice	
4.Intectual property rights	IPR, trademark act, patent act, copyright act	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Mezbin Lalani DEPARTMENT: B.Com (Financial Management) CLASS: SYBCOM

SEMESTER: IV **(CORPORATE FINANCE)** MONTH : JANUARY TO APRIL ACADEMIC YEAR 2021-2022

LEARNING OBJECTIVE/S: to understand the various techniques used by corporates in financial management.
The learners will be able to : study corporate financial management methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Introduction to corporate finance.				
	Functions and needs of corporate finanace.	15	Prasanna Chandra : financial management	Google meet, Google classroom, power point presentation, pdf file, etc
2.Cost of capital & capital structure				
	Calculation of cost of different capitals for the company, capital structure theories and practical sums.	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

M. Lalani

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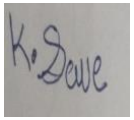
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: **B Com (Financial Management)** CLASS**: S.Y.F.M.G**. SEMESTER: **4th**
MONTH:**JANUARY** ACADEMIC YEAR: **2021-22**
LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are provision of Clubbing of Income under Income Tax Act, 1961
2. How the loss under Income Heads is adjusted (Provision regarding Set off and Carry forward)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Clubbing of Income	Clubbing of Income - Section 60 to 65	05	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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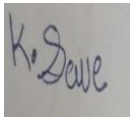
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2.Set Off & Carry Forward of Losses	Sec: 70 - Set off Loss from one Source against Income from another Source under the Same Head of Income Sec: 71 - Set Off Loss from One Head against Income of another Head Sec: 71B - Carry Forward & Set off Losses from House Property Sec: 72 - Carry Forward & Set Off of Losses of Business Losses Sec: 73- Losses in Speculation Business Sec: 74- Loss under the head Capital Gains	08	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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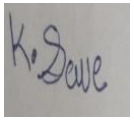
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
E3. **Computation of Tax liability of Individual & HUF**	Tax Slab Rate, Rebate, surcharges etc.	08	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM
4.Computation of Income of Partnership Firm	Computation of Income of Partnership Firm in Relation to Sec: 40(b) & Tax Thereon With Applicable Rate of Tax	08	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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NAME OF THE STAFF: **HEMANGI MEHTA** DEPARTMENT: **B.Com (Financial Management)** CLASS: **TYFMG** SEMESTER: **V** Subject : **(BUSINESS ETHICS)**MONTH: **JUNE TO AUG** ACADEMIC YEAR: **2021 - 2022**

LEARNING OBJECTIVE/S: **Understand Ethics and CSR.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1. Introduction To Ethics And Area Of Business Ethics	Ethics: Meaning, Objectives, important of ethics, Theories of Ethics, Business Ethics, -Nature and Characteristics, types, Causes of unethical behaviour, Factor Business Ethics: Meaning, Importance, Types ,factors Corporate Ethics: Meaning, Importance, Steps, Gandhian Philosophy of ethical behaviour Ethical Challenges for managers in the 21st century	10	MANAN PRAKASHAN	Online lecture, PPT
MODULE 2. Corporate Social Responsibility	• Concept of Globalization and Various CSR of Business. • Relationship between CSR and Business ethics. • Business ethics and Environmental Protection. • Business Ethics and Consumer protection. • Business Ethics and Social justice. • Arguments for and against CSR	10	MANAN PRAKASHAN	Online lecture, PPT

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Unit-3 Business Ethics in Golbal Economy	• Global business network • Relationship among business, business ethics and business development • Developing business ethics in global economy • Marketing ethics in foreign trade • Role of business ethics in business • Ethical issues in E-commerce • Measure to prevent unethical practices in e-commerce	10	MANAN PRAKASHAN	Online lecture, PPT
Unit-4 Functional Ethics	**1. Meaning of functional ethics** **2. Types of ethics according to functions of business** (marketing, HRM and finance) **3. Intellectual Property Rights** • Patent • Copy-right • Trade Marks **4. Ethical issues:** • Patent • Copt right Trade mark	10	MANAN PRAKASHAN	Online lecture, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.Com (Financial Management)
CLASS: T.Y.FMG SEMESTER: V MONTH: Aug-Dec ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVES:
The learners will be able to study legal provisions & accounting procedure of banking companies

PAPER,UNIT, TITLE	SUBTOPICS		NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.FINAL ACCOUNTS OF BANKING COMPANY		LEGAL PROVISIONS IN BANKING COMPANIES ACT1949 RELATIONG TO ACCOUNTS		TEXT BOOK (MANAN PRAKASHAN & SHETH PUBLICATION)	Power point presentation and Ms Excel
		STATUTORY RESERVE AND STATUTORY LIQUIDITY RATIO	01		
		BILL PURCHASED AND DISCOUNTED,REBATE OF BILL DISCOUNTED	02		
		FINAL ACCOUNTS IN PRESCRIBES FORM	02		
		CLASSIFICAION OF ADVANCES,DTANDARD,SUBSTANDARD AND DOUBTFUL ASSESTS	02		
			02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
2.FINAL ACCOUNTS OF INSURANCE COMPANY	MEANING OF GENERAL INSURANCE,FIRE INSURANCE ,MARINE INSURANCE SPECIAL TERMS LIKE PREMIUM CLAIMS,COMMISSION,RESERVE FOR UNEXPIREDRISK,REINSURANCE FINAL ACCOUNTS &REVENUE STATEMENT, P/L A/C.	01 02 05	TEXT BOOK MANAN PRAKASHAN & SHETH PUBLICATION)	Power point presentation and Ms Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
3.INVESTMENT ACCOUNTING	INVESTMENT ACCOUNTING FOR SHARES INVESTMENT ACCOUNTING FOR DEBENTURES PURCHASE AND SALE OF EX & CUM INTEREST	02 02 02	TEXT BOOK (MANAN PRAKASHAN & SHETH PUBLICATION)	Power point presentation and Ms Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
4.ACCOUNTING FOR FOREIGN CURRENCY TRANSACTION	PURCHASE AND SALE OF GOODS AND SERVICES,LOAN &CREDITVTRANSACTION COMPUTATION AND TREATMENT	02 06	TEXT BOOK (MANAN PRAKASHAN & SHETH PUBLICATION)	Power point presentation and Ms Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

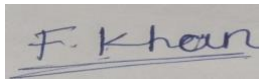
NAME OF THE STAFF: **MR. FIROZKHAN KHURSHIT KHAN** DEPARTMENT**: B.Com (Financial Management)**

CLASS: **T.Y.F.M.G** SEMESTER: **V** MONTH: **NOVEMBER** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: To inculcate the practical knowledge of Research Methodology.
The learners will be able to : Develop unique Skills to carry on Research work smoothly.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Data Analysis and Interpretation	**UNIT-3: Data Analysis and Interpretation** Processing of Data: Meaning and Essential of Editing, Coding and Tabulation, Analysis of Data: Meaning Purpose and Types, Interpretation of Data and Testing of Hypothesis.	15	Howell, K. E. Katsicas, Sokratis C.R. Kothari	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet
Advance Statistical Techniques	**UNIT-4: Advance Statistical Techniques** Introduction, characteristics and Application of Correlation and Regression Analysis, Factor Analysis, Cluster Analysis, Discriminate Analysis, Multidimensional Scaling.	15	Howell, K. E. Katsicas, Sokratis C.R. Kothari	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet
Research Report	**UNIT-5: Research Report** Report writing: Meaning, Importance, Structure, Types, Process and Essential of a Good Report.	05	Howell, K. E. Katsicas, Sokratis C.R. Kothari	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: B.Com (Financial Management) CLASS: TYFMG

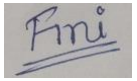
SEMESTER: 5 MONTH: NOVEMBER - DECEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: FINANCIAL MANAGEMENT

The learners will be able to: base of FM

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 & 3	**Introduction to Financial Management:-** Introduction, Meaning, Importance, Scope and Objectives, Profit v/s Value Maximization	15	Financial Management by Arvind A. Dhond	Google Meet, PPT, SlideShare and Kiwi Browser, Google form and Google Classroom .
	Sources of Finance:- Introduction,Needs of Finance and Sources: Long Term, Medium Term, Short Term.	15		
	Long Term Sources of Finance			
	Short Term of Sources of Finance			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM (FINANCIAL MANAGEMENT) SEMESTER: V MONTH: AUG 2021

ACADEMIC YEAR: 2021-22

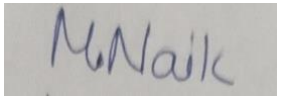
LEARNING OBJECTIVE/S:
The learners will be able to : TO ENHANCE THE ABILITIES OF LEARNER TO DEVELOP THE CONCEPT OF FINANCIAL MANAGEMENT AND ITS SIGNIFICANCE IN THE BUSINESS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INVESTMENT DECISIONS	INTODUCTION , PURPOSE OF CAPITAL BUDGETING, CAPITAL BUDGETING PROCESS, TYPES OF CAPITAL INVESTMENT DECISIONS, PROJECT CASH FLOW & NET PROFIT APPROVALS BASIC PRINICPLES OF MEASURING PROJECT CASH FLOW CAPITAL BUDGETING TECHNIQUEES NPV, PI, IRR, DOSCOUNTED PAYBACK CAPITAL RATIONING	12	FUNDAMENTAL OF FINANCIAL MGMT- PRASANNA CHANDRA PRINCIPLES OF CORPORATE FINANCE- R.A.BREALYS & S.C. MYRES.	Google meet, Google slide, Microsoft word, Spreadsheet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
TYPES OF FINANCING	INTRODUCTION, NEEDS OF FINANCE AND SOURCES : LONG TERM ,SHORT TERM , MEDIUM TERM LONG TERM SOURCE OF FINANCESHORT TERM SOURCES OF FINANCE	09	FUNDAMENTAL OF FINANCIAL MGMT- PRASANNA CHANDRA	Google meet, Google slide, Microsoft word, Spreadsheet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09



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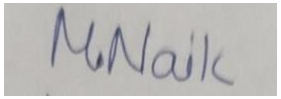
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST OF CAPITAL	INTRODUCTION DEFINATION & IMPORTANCE OF COST OF CAPITAL MEASUREMENT OF COST OF CAPITAL WACC	12	FUNDAMENTAL OF FINANCIAL MGMT- PRASANNA CHANDRA PRINCIPLES OF CORPORATE FINANCE- R.A.BREALYS & S.C. MYRES.	Google meet, Google slide, Microsoft word, Spreadsheet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST OF CAPITAL	INTRODUCTION DEFINATION & IMPORTANCE OF COST OF CAPITAL MEASUREMENT OF COST OF CAPITAL WACC	12	FUNDAMENTAL OF FINANCIAL MGMT- PRASANNA CHANDRA PRINCIPLES OF CORPORATE FINANCE- R.A.BREALYS & S.C. MYRES.	Google meet, Google slide, Microsoft word, Spreadsheet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

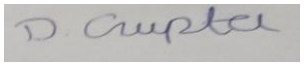
NAME OF THE STAFF: **Deepakkumar Gupta** DEPARTMENT: **B.Com (Financial Management)** CLASS: **TYFMG**

SEMESTER: **V** MONTH: Aug **to Dec** ACADEMIC YEAR: **2021 - 22**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) To learn Concepts of Leverage
3) Solve practical questions using concepts
4) To learn Concepts of sales variance
5) Solve practical questions using concepts
6) To learn Concepts merger and its types

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial analysis and business valuation	Unit 1 : leverages	16		Online platform – Google Meet PPT, Videos
	1) Introduction and meaning leverages 2) Types of leverages to be explained 3) Formula different types of leverages 4) Practical problems			



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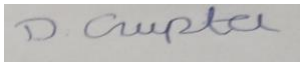
	Unit 2 : Sales variance	10		Online platform – Google Meet PPT, Videos
	1) Introduction & Meaning of variances 2) Formula of sales variance 3) Practical problems on lases variances			
	Unit 3 : merger and acquisition	6		Online platform – Google Meet PPT, Videos
	1) Introduction & Meaning merger and acquisition 2) Types of merger 3) Difference between merger and amalgamation			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____32_____



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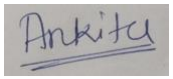
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita Almeida DEPARTMENT: B.Com (Financial Management) CLASS: TYFMG SEMESTER: V MONTH: August – December ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : understand the concept of effective learning, Formal and informal communication, leadership skills and self - improvement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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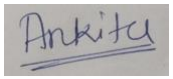
1. Introduction to Auditing	**Basics:** financial statements, uses of financial information, definition of auditing, objectives of auditing- primary and secondary, expression of opinion, detection of frauds and errors, inherent limitations of audit.		Book By Manan Prakashan	Online /PPT
	Errors and Frauds: concepts, reasons and circumstances, types of errors- commission, omission, principle and compensating, types of frogs, risk of fraud and error in audit, auditors duties and responsibilities in respect of fraud.	03	Book by Manan Prakashan	Online/PPT
	Principles of Audit: Integrity, objectivity , independence, confidentiality, skills and competence, materiality and work performed by others, documentation, planning, audit evidence audit conclusions and reporting.		Book by Manan Prakashan	Online/PPT
	Types of Audit: meaning advantages and disadvantages off balance sheet audit , continuous audit, concurrent audit , annual audit.	02		



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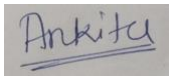
2. Audit Planning, Procedures And Documentation	**Miscellaneous:** advantages https://classroom.google.com/c/NjE2MTU1NTAxNDYx?cjc=n76a7uo independent audit, Qualities of auditors, auditing Vs accounting, Auditing Vs Investigation, the concept of true and fair view Accounting concepts relevant to auditing: materiality, Going concern. **Audit Planning**: Meaning, objectives, factors to be considered, sources of obtaining information, discussions with client, overall audit plan. **Audit Programme**: meaning, factors to be considered, advantages , disadvantages, methods of work, instruction before commencing work, overall audit approach. **Audit working papers**: meaning, importance, factors determining form and contents, main functions , features, contents of permanent audit file , temporary audit file, ownership, custody , access of other parties to audit walking papers , Auditors Lien on working papers, auditor's Lien on clients book.		Book by Manan Prakashan Book by Manan Prakashan	Online /PPT Online /PPT
			Book By Manan Prakashan	Online /PPT



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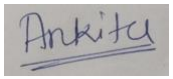
3. Auditing Techniques 4. Internal Audit	**Audit Notebook:** meaning, structure, content, general information current information importance **Test Check**: Test Checking Vs Routine Checking, Test Check Meaning, Features, Factors to be considered, When test check can be used, Advantages, Disadvantages and Precautions. **Audit Sampling**: Audit Sampling Meaning, Purpose, factors in determining Sample Size-Sample Risk, Tolerable Error and Expected Error, Methods of Selecting Sample items, Evaluation of Sample resulting Auditors Liability in conducting Audit based on sample. **Internal Control**: Meaning and purpose, Review of internal control, Advantages, Auditors Duties, Review of Internal Control, Inherent Limitations of Internal Control, Internal Control Samples for Sales and Debtors, Purchases and Creditors, Wages & Salaries. Internal Checks Vs Internal Control, Internal Checks Vs Test Checks	03	Book By Manan Prakashan Book By Manan Prakashan	Online /PPT Online /PPT



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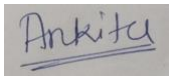
	Meaning , Basic Principles of Establishing Internal Audit, objectives, Evaluation of Internal Audit by Statutory Audtitor, Usefulness of Internal Audit. Internal Audit Vs External Audit, Internal Checks Vs Internal Audit..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13



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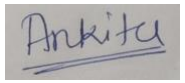
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita A. Almeida DEPARTMENT: B. Com (Financial Management) CLASS: TYFMG SEMESTER: V MONTH: November- December ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The learners will be able to : Understand the concept of effective learning, leadership skills and self-improvement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
02. Data Collection and Processing	Types of Data & Sources- Primary and Secondary Data Sources.			
	Methods of Collection of Primary Data A} Observation: - i) Structured & Unstructured ii) Disguised & Undisguised iii) Mechanical Observations (Use of gadgets)	01	Vipul Prakashan	Online / PPT
	B} Experimental: - i) Field ii) Laboratory C} Interview: - i) Personal Interview ii) Focused Group iii) In-Depth Interview Method	02	Vipul Prakashan	Online / PPT



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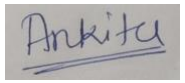
	D} Survey Method: - Telephonic Survey, Mail, E-mail, Internet Survey, Social Media & Media Listening.	02	Vipul Prakashan	Online / PPT
	E} Survey Instrument: - Questionnaire Designing a) Types of Questions: - i) Structured / Close Ended ii) Unstructured / Open Ended iii) Dichotomous iv) Multiple Choice Questions. b) Scaling Techniques: - i) Likert Scale ii) Semantic Differential Scale	02 02	Vipul Prakashan	Online / PPT Online / PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09



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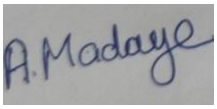
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. ABHISHEK MADAYE DEPARTMENT: B.Com (Financial Management) SEMESTER:VI MONTH: JAN-APR ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: The learners will be able to understand the consolidated financial statements,internal reconstruction,external reconstruction,amalgamation absorption with practical problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CORPORATE A/C,UNIT 1,Consolidated Financial Statement	Meaning, Stand Alone Financial StatementsConsolidated Financial statements – Applicability, Advantages & DisadvantagesProcedure of Consolidation of Balance-sheet & Profit & Loss Account (Excluding cross holding, Chain Holding & Foreign Subsidiary). Practical Problem on Preparation of Consolidated Balance sheet)	15	Reference books and internet	PPT,WORD



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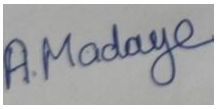
UNIT 2, Internal Reconstruction	**Need for reconstruction and company law provisionsMethods including alteration of share capital, variation of shareholder rights, subdivision, consolidation, surrender and reissue / cancellation, reduction of share capital with relevant legal provisions and accounting treatment for same.Practical Problem on Internal Reconstruction, Journal entry, preparation of Capital Reduction A/C and Preparation of Balance sheet in vertical form**	**15**	**Reference books and internet**	**PPT,WORD**
UNIT 3, AS –14 - Amalgamation, Absorption (excluding inter –company holding)	**In the nature of merger and purchase with corresponding accounting treatments ofpooling of interests and purchase method respectively.Meaning and Computation of purchase consideration.Inter-company debtors, creditors, loan, bills, loading in stock.Practical Problem on Amalgamation**	**15**	**Reference books and internet**	**PPT,WORD**



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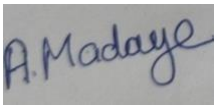
	and Absorption (only Purchase Method			
UNIT 4 ,External Reconstruction	Meaning of External Reconstruction, Distinction between internal and external reconstructions.Practical Problem related to Journal entry and preparation of ledger account, calculation of Purchase consideration, Journal entry in New company, and Preparation of Balancesheet in vertical form for new company as per AS-14	15	Reference books and internet	PPT,WORD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___60_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Organizational Behavior DEPARTMENT: B.Com (Financial Management)

CLASS:TYFMG SEMESTER:VI MONTH: Jan-feb ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Understanding Others – Interpersonal Relationships	Conflict Mgmt. - Nature ,levels, sources ,effects of Conflict Process & stages of Conflict, Conflict handling orientation Power and Organizational Politics, Political power Negotiation strategies, change and its effect Transformational Leadership and change, three stage model of change process	3 3 2 2 2	Organizational Behaviour By Fred Luthans	Google meet , Google forms , PPT
UNIT III Group Behaviour and Team Behaviour	Group Behaviour- Informal group, group dynamics, types of group Formal groups, Potential outcome of informal group process , Role of Informal leader Team & Team Building, Modern Organization Team work, task team , life cycle of teams Team Building – need, process & skills useful in team building	3 3 2 2 2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

R. Gurunani

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TEACHING PLAN (UNIT PLAN)

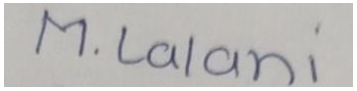
NAME OF THE STAFF: Prof Mezbin lalani DEPARTMENT: B.Com (financial management) CLASS: T.Y.BCOM

SEMESTER: VI **(SAPM)** MONTH: January to April ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: understand portfolio management.
The learners will be able to : know the various investment alternatives and portfolio management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Portfolio management	Introduction and process			
		15		
2.Fundamentaland technical analysis	Economy, industry and company analysis, technical analysis :charts and patterns, efficient market hypotheses	15	Investment analysis and management Mcgraw	GOOGLE MEET, GOOGLE CLASSROOM, POWER POINT PRESENTATION, PDFS, ETC

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30



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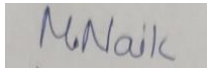
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. DEPARTMENT: B.Com (Financial Management) CLASS: T.Y.B.COM SEMESTER: VI **MONTH: DEC TO APRIL** **ACADEMIC YEAR: 2021-22**

LEARNING OBJECTIVE/S: The learners will be able to : TO ENHANCE THE ABILITIES OF LEARNER TO DEVELOP THE CONCEPT OF FINANCIAL MANAGEMENT AND ITS SIGNIFICANCE IN THE BUSINESS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RISK & RETURN	INTRODUCTION , MEANING OF RETURN, TYPES OF RETURN, HOLDING PERIOD RETRUN, ANNUALIZED RETURN, EXPECTED RETURN, MEANING OF RISK TYPES OF RISK – BUSINESS RISK , FINANCIAL RISK, INTEREST RATE RISK MARKET RISK AND LIQUIDITY RISK (INCLUDING PRATICAL PROBLEMS	10	FUNDAMENTAL OF FINANCIAL MGMT- PRASANNA CHANDRA	GOOGLE MEET, PPT, MICROSOFT EXCEL
CAPITAL STRUCTURE THEORIES	MEANING, CHOICE OF CAPITAL STRUCTURE, IMPORTANCE, OPTIMAL CAPITAL STRUCTURE, INSTRUTION TO LEVERAGES TYPES OF LEVERAGES : OPERATING LEVERAGES, FINANCIAL LEVERAGES, & COMPOSITE LEVERAGES, RELATIONSHIP BETWEEN OPERATING LEVERAGES & FINACIAL LEVERAGES COST OF CAPITAL , EBIT-EPS ANALYSIS, & MARKET PRICE SHARE CAPITAL STRUCTURE THEORIES, CAPITAL STRUCTURE DIVIDEND POLICY- PAYOUT RATIO (INCLUDING PRATICAL PROBLEMS	20	PRINCIPLES OF CORPORATE FINANCE- R.A.BREALYS & S.C. MYRES.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: B.Com (Financial Management) CLASS: TyFMG SEMESTER: VI MONTH: JAN-MAR

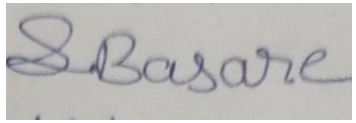
ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : vouch income and expenditure and verify assets and liabilities of the company. Gain knowledge of accounting standards.

Qualifications and disqualifications, rights and duties of an auditor.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing II, vouching	Meaning and definition of vouching, audit of income: revenue from sales and services	2	Ainapure, Manan Prakashan	Online Lectures, Google slides
	Royalty income, interest and dividend income, rental income, recovery of bad debts written off, commission received	4		
	Audit of expenditure: purchases, salaries and wages	4		
	Rent, insurance premium, telephone expenses, petty cash payments, advertisement, travelling salesman commission	4		
	Freight carriage and custom duties.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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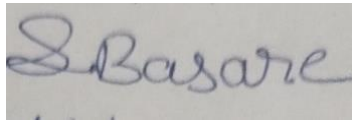
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing II, verification	Meaning and definition of verification, Audit of assets: plant and machinery, furniture and fixture	3	Ainapure- Manan Prakashan	Online Lectures, Google slides
	Account receivable, investments, inventory, Goodwill, patent rights	4		
	Audit of liabilities: outstanding expenses, accounts payable, secured loans	4		
	Unsecured loans, contingent liabilities, public deposits	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing II, auditing standards	Meaning and procedure of issuing Auditing standards, brief overview of auditing standards, scope of SAs	2	Ainapure-Manan Prakashan	Online Lectures, Google slides
	Significance of auditing standards, responsibilities of auditor	4		
	Understanding SA 200, 210, 230, 240, 250, 300, 315, 320, 505	9		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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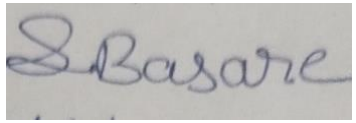
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing II, audit of companies	Introduction, qualifications and disqualifications of an auditor Appointment of an auditor, reappointment of an auditor Removal of auditors, special auditor, branch auditor Rights and duties of company auditor	3	Ainapure-Manan Prakashan	Online Lectures, Google slides
		4		
		4		
		4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

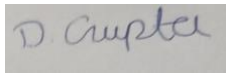
NAME OF THE STAFF: **Deepakkumar Gupta** DEPARTMENT: **B.Com (Financial Management)** CLASS: **TYFMG** SEMESTER**: VI**

MONTH: Jan to march ACADEMIC YEAR: **2021- 22**

LEARNING OBJECTIVE/S: The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) To learn Concepts of Leverage
3) Solve practical questions using concepts
4) To learn Concepts of sales variance
5) Solve practical questions using concepts
6) To learn Concepts merger and its types

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Management	Unit 1 : leverages	10	FUNDAMENTAL OF FINANCIAL MGMT- PRASANNA CHANDRA	Chalk and talk method
	1) Introduction and meaning leverages 2) Types of leverages to be explained 3) Formula different types of leverages			



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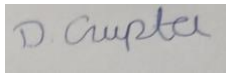
	4) Practical problems			
	Unit 2 : Cash Management	10	FUNDAMENTAL OF FINANCIAL MGMT-PRASANNA CHANDRA	Chalk and talk method
	1) Introduction & Meaning of Cash Management 2) Format of cash management 3) Practical problems on cash management			
	Unit 3 : Receivables Management	12	FUNDAMENTAL OF FINANCIAL MGMT-PRASANNA CHANDRA	Chalk and talk method
	1) Introduction & Meaning Receivables Management 2) Format of receivables management 3) Practical problems on cash management			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____32_____



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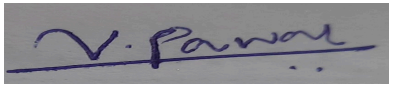
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____VISHWANATH V. PAWAR____ SUBJECT: AUDITING II DEPARTMENT: B.COM (BANKING AND INSURANCE)

CLASS: ____TYBBI____ SEMESTER: _____VI____ MONTH: __DEC- MARCH__ ACADEMIC YEAR: ____2020-2021___

LEARNING OBJECTIVE/S:
The learners will be able to : To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**Audit of Limited Companies** Qualifications, Disqualifications, Appointment, Removal, Remuneration of Auditors, Audit Ceiling, Status, Power, Duties and Liabilities of Auditors, Branch Audit, Joint Audit, Special Audit. Maintenance of Books of Account –Related Party Disclosures, Segment Reporting, Divisible Profit, Dividend and Depreciation , Types of Reports/Opinion.	4	SACHIN BHANDARKAR & SANDEEP GUPTA	Google Meet
	Audit of Banking Companies Introduction of Banking Companies, Form and Content of Financial Statements, Qualifications of Auditor,	3	SACHIN BHANDARKAR &	Google Meet



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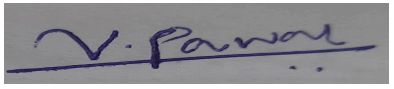
UNIT 2	Appointment of Auditor, Remuneration of Auditor, Power of Auditor, Auditor's Report, Format of Audit Report, Long Form Audit Report, Conducting an Audit, Initial Consideration by Statutory Audit, Internal Control System, Verifications of Assets and Balances		SANDEEP GUPTA	
UNIT 3	**Audit of Insurance Companies** Audit of Companies carrying General Insurance Business, Audit of Companies carrying Life Insurance Business, Applicability of Accounting Standards (AS 3, 4,9,13,17), Books and Registers to be maintained, Submission of Reports and Returns, Audit of Accounts, Preparation of Audit and Internal Controls	3	SACHIN BHANDARKAR & SANDEEP GUPTA	Google Meet
UNIT 4	**New Areas of Auditing** Introduction to Cost Audit, Human Resource Audit, Management Audit, Operational Audit, Forecast Audit, Social Audit, Tax Audit, Forensic Audit and Environmental (Green) Audit. Audit in an EDP Environment, Introduction, General Approach to EDP Based Audit and Special Techniques for Auditing in an EDP Environment	2	SACHIN BHANDARKAR & SANDEEP GUPTA	Google Meet



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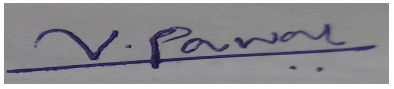
UNIT 5	**Professional Ethics and Misconduct** Introduction, Meaning of Professional Ethics Meaning of Professional Misconduct, Schedules to the Chartered Accountants Act, 1949 Relating to Professional Misconduct, Enquiry into Charges of Misconduct of Chartered Accountants.	2		Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita Almeida DEPARTMENT: B.COM (BANKING AND INSURANCE) CLASS: TYBBI (A, B) SEMESTER: VI

MONTH: JANUARY- MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of effective learning, leadership skills and self- improvement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. An Overview of Central Banking. 5.	**Overview :** Concept of Central Banking, Institutional Growth of Central Banking, the changing face of Central Banking. **Role of Central Banks:** Determination of Goals, Inflation Targeting, Exchange Rate Targeting, Money Supply Targeting, Money Growth Targeting, Viable Alternatives to Central Bank, Central Banking in India. **Contemporary Issues:** Autonomy and Independence, Creditability, Accountability and Transparency of a Central Bank.	08	Vipul Prakashan	Google Meet, PPT, Wikipedia

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Central Banking in Cyber World	E-Banking, E-Money, IT Induced Changes and Monetary Policy, E-Payments, Risk in New IT Era, Impact of IT, Globalization and Central Banks.	08	Vipul Prakashan	Google Meet, PPT, Wikipedia

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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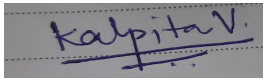
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: B.COM (BANKING AND INSURANCE)I CLASS: TYBBI SEMESTER: VI MONTH: JAN-APRIL ACADEMIC YEAR:2020-21 SUBJECT: HRM

LEARNING OBJECTIVE/S: To develop the understanding of the concept of **human resource management** and to understand its relevance in organizations. To know necessary skill set for application of various HR issues. To analyse the strategic issues and strategies required to select and develop manpower resources..
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Training and Development	Definition of Training and Development, Methods of training managers, Process/ procedure of conducting training programme,	2	***K. Aswathappa,*** *"Human Resources & Personnel Management- Text And Cases – Fourth Edition", Tata Mc Graw Hill*	MS-Power Point, Google Meet, Google classroom
	How to evaluate effectiveness of training programmes, Advantages of T&D	2	Same as above	Same as above
Performance Appraisal	Definition of Performance Appraisal, Methods of Appraisal for managers – traditional and modern	2	***Jayashree Sadri, Sorabh Sadri*** *"A Strategic Approach to*	Same as above



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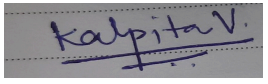
			Human Resources Management". Jaico Publishing House, Mumbai	
	Process / procedure of conducting performance appraisal Advantages of performance appraisal Limitations of Appraisal	2	Same as above	Same as above
Compensation Management	Definition of compensation, Components of Salary / Salary slip, Fringe Benefits – definition and types,	2	Same as above	Same as above
	Performance linked incentives/ incentives- definition, advantages and disadvantages	2	Same as above	Same as above
Participative Management	Definition of Participative Management, Levels of participation Trends in Participative Management	2	Same as above	Same as above
	Factors essential for successful participative management Forms of participation Participation through Quality Circles Empowered Teams	2	Same as above	Same as above

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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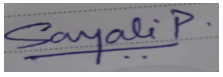
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: B.COM (BANKING AND INSURANCE) SUBJECT: HUMAN RESOURCE MANAGEMENT CLASS: TYBBI (A & B) SEMESTER: VI MONTH: January-March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: The learners will be able to: To impart knowledge or information regarding the unit taught within the time frame with examples which students will be able to understand, thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 1: Framework of Human Resource Management	1. Introduction to HRM, Nature of HRM, Scope of HRM, Functions and Objectives of HRM, HRM Policies and Practices, Role and Functions of HR Manager (in Banking and Insurance Sector)	10	HRM-Vipul Prakashan, Seth Publication	Presentation method with chat, Google Meet
	2. HRM and Strategies: Strategic function of HRM, Understanding and Implementing Global Competitiveness and HR, strategic HR, Linkages of Organizational and HR Strategies.	5	HRM-Vipul Prakashan, Seth Publication	Presentation method with chat, Google Meet
Module 2: HR Procurement	1. Job Analysis and Design- Job Analysis, Introduction, Importance, Purpose, Benefits, Job Evaluation, Competency Based Job Analysis	5	HRM-Vipul Prakashan, Seth Publication	Presentation method with chat, Google Meet
	2. Job Design- Introduction, Characteristics, Factor Affecting Job Design, Job Satisfaction.	5	HRM-Vipul Prakashan, Seth Publication	Presentation method with chat, Google Meet
Module 3: HR Planning	1.Definition, Objectives, Need and Importance of HR Planning, Preparing Manpower Inventory. Promotions and Transfers.	5	HRM-Vipul Prakashan, Seth Publication	Presentation method with chat, Google Meet



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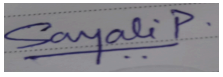
and Recruitment	2. Recruitment- Strategic Approach to Recruitment, Recruitment Source; Internal and External, Selection Procedure.	5	HRM-Vipul Prakashan, Seth Publication	Presentation method with chat, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35



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TEACHING PLAN (UNIT PLAN)

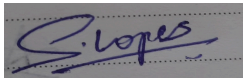
NAME OF THE STAFF : Sandra Shamir Almeida DEPARTMENT : B.COM (BANKING AND INSURANCE)

CLASS : TYBBI (A & B) SEM : VI MONTH : DEC – MAR YEAR : 2020-21

LEARNING OBJECTIVE/S :

- The learners will be able to learn various aspects about Business, Leadership and how to handle industrial sickness
- This subject is helpful to develop Turn around Management skills among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED		REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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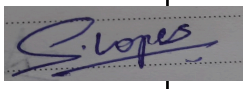
TURN ARROUND MANAGEMENT	**MODULE I : INTRODUCTION TO BUSINESS** ● Meaning,Definition, Importance,features,symptoms,types of Business Organaisation ● Different approaches for growth and survival: ● Internal and External ● External strategies ● Survival Strategies	10		**TURNAROUND MANAGEMENT -TOM LENAHAN**	Google Meet, Google Class room, Power Point Presentations, Word, Excel & Table Top Method of teaching.



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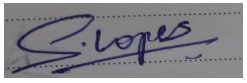
	MODULE II : INDUSTRIAL SICKNESS ●Meaning and Internal/External reasons of Industrial sickness. ● Symptoms of Industrial sickness. ● Measures to overcome sickness by government and stake holders. ● Roll of BIFR in sick industry	15		**THE TURNAROUND MANAGER'S HANDBOOK -RICHARD'S SLOMS**	Google Meet, Google Class room, Power Point Presentations, Word, Excel & Table Top Method of teaching.



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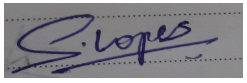
	MODULE V : LEADERSHIP AND TURNAROUND MANAGEMENT ●Out fitting the management team, the management team personal characteristic, focusing on present operations, focus on needs in turnaround management as a skill.	**08**		**TURNAROUND MANAGEMENT JOURNAL -1ST ISSUE 2011**	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 33



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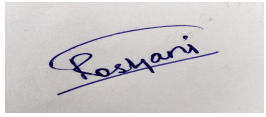
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Dr Roshani Nagar DEPARTMENT : B.COM (BANKING AND INSURANCE) CLASS : TYBBI (A & B)
SEM : VI MONTH : DEC – MAR YEAR : 2020-2021

LEARNING OBJECTIVE/S :

- The learners will be able to learn various aspects about Business, Leadership and how to handle industrial sickness
- This subject is helpful to develop Turn around Management skills among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
TURN ARROUND MANAGEMENT	Turnaround – Meaning, Definition, Indicators of Successful Turnaround • TQM and Restructuring. • Selling of a sick unit • BPR - Meaning, Definition, Elements, Need, Implications	08	**TURNAROUND MANAGEMENT -TOM LENAHAN**	Online lecture and ppt presentation



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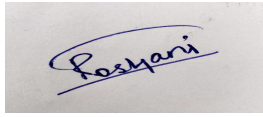
3 Turnaround Management Strategies	-			
	Approaches (Reengineering Team, BPR Leader, Process Owner, Kaizen, Flow Chart, 5S principles, Process Mapping)	10	**THE TURNAROUND MANAGER'S HANDBOOK -RICHARD'S SLOMS**	CHALK & DUSTER



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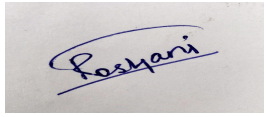
4 Business Scenario	Features, Advantages, Disadvantages, Types and Present Status of: • Outsourcing • Networking • Franchising • Free lancing • Self-Financing • Start up	**08**	**TURNAROUND MANAGEMENT JOURNAL -1ST ISSUE 2011**	CHALK & DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 26



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TEACHING PLAN (UNIT PLAN)

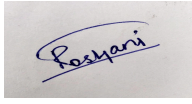
NAME OF THE STAFF: Roshani Nagar DEPARTMENT: B.COM (BANKING AND INSURANCE) CLASS: TYBBI (A,B) SEMESTER: VI

MONTH:Dec-April

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of effective learning, leadership skills and self- improvement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Supervisory Role of RBI **4 Central Bank in other Countries**	Regulation and Supervision: Need for Regulation and Supervision, Banking Regulation Act, 1949, Banking Regulation and Supervision, Functions of the Department of Supervisory, Regulations Review Authority, Unified Regulator v/s Multiple Regulators. RBI – On-site Inspection and Off-site Monitoring and Surveillance: The Core Principles for Effective Supervision – On-site Examination – Off-site Surveillance	08	Vipul Prakashan	ONLINE LECTURES, PPT PRESENTATION



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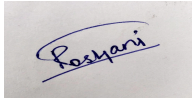
	– On-site Inspection and Off-site Monitoring in India – Off-site Monitoring in Different Countries – Computerized Off-site Monitoring and Surveillance (OSMOS). RBI and Financial System, Introduction, Functions,			
	Characteristics of Financial System, Role of RBI in Regulating Financial System and Financial Sector Reforms. Federal Reserve System – Bank of England – The European Central Banking, Bank of Japan, Peoples Bank of China Interconnectivity of Central Banks with Other International Financial Institutions, ADB, IMF, World Bank, and BIS,(Objectives, Role and Functions)	08	Vipul Prakashan	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Mezbin Lalani DEPARTMENT: B.COM (BANKING AND INSURANCE) CLASS: T.Y.Bcom(BBI)

SEMESTER: VI (SAPM) MONTH: Dec-April 2021 ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: to understand about management of portfolio.
The learners will be able to : understand various investment alternatives and the management of portfolios.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Fundamental Analysis	Economy, industry,company analysis, various important ratios for the company and investors concept of leverages and its types, practical sums on ratios & leverages	12	Investment analysis and management Mcgraw	Google Meet, google classroom, power point presentations, pdf, etc
2.Technical analysis	Meaning of Technical analysis, types of charts and chart patterns, Dow theory, Elliot wave theory, Mathematical indicators, oscillators & relative strength index	12	Investment analysis and management Mcgraw	Google Meet, google classroom, power point presentations, pdf, etc
3.Efficient market theory	Random walk theory, efficient market theory and its forms	06	Investment analysis and management Mcgraw	Google Meet, google classroom, power point presentations, pdf, etc

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30_

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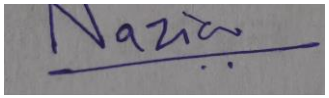
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF NAZIA SAJID SHAIKH_ DEPARTMENT: BCOM(BANKING AND INSURANCE). CLASS: TYBBI SEMESTER: SEM V MONTH: AUG-DEC ACADEMIC YEAR: 2020-21 SUB: RESEARCH METHODOLOGY.

LEARNING OBJECTIVE/S:
The learners will be able to: Understand Research , Types of Research, Hypothesis , Research Design, Sampling, Data collection and processing, Survey Instrument.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
***MODULE 1. INTRODUCTION TO RESEARCH.**	***Research:** Meaning, Objectives, important of research, Research process, Characteristics of Good Research. ***Hypothesis :** Meaning, Importance, Types and Sources. ***Research Design:** Meaning, Importance, Steps, Scope & Essential of Good research. ***Sampling :** Meaning , Methods of Sampling.: Probability Sampling Non-Probability Method.	**10**	**Regression Modelling Strategies: Frank Harell.**	**Online Lectures on Google Meet**
MODULE 2.DATA COLLECTION	***Types of Data and Sources:** Primary and Secondary Data Sources. ***Methods of collection of Primary Data:** Observation , Experiment, Interview , Survey.	**10**		



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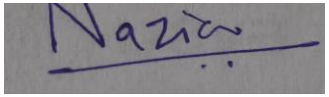
AND PROCESSING	***Survey Instrument:** Questionnaire : Types of questions , Scaling techniques.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH SUBJECT: STRATEGIC MANAGEMENT

DEPARTMENT:BCOM(BANKING AND INSURANCE) CLASS: TYBBI (A & B) SEMESTER: V MONTH: JUNE TO DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES:
The learners will be able to:

- Understand Strategic management and its various aspects including levels & Process of Strategic Management plus principles of good strategy
- Get insight on how to frame good strategies for a business
- Interpret different business environments that affect strategies

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-1 Strategic	STRATEGIC MANAGEMENT: Definitions, Strategic Decision Making, Levels of Strategic Management, Process of Strategic Management	08	Strategic planning formulation of	Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible

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Management an Overview	PRINCIPLES OF GOOD STRATEGY-elements of strategic management MODELS OF STRATEGIC MANAGEMENT.		corporate strategy by Ramaswamy	
Unit 3-Levels of Strategies and Analysis Corporate Level Strategies	LEVELS OF STRATEGIES AND ANALYSIS Corporate Level Strategies- Concentration, Integration and Diversification, Internationalization, Digitization. PROCESS OF STRATEGIC CHOICE FACTORS OF STRATEGIC CHOICE STRATEGIC ANALYSIS.	08		Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible
Unit 5-Strategic Evaluation and Control Standards	STRATEGIC CONTROL- Setting Standards, Comparison, Control Process, Systems, Approaches, Techniques of Evaluation and Control. ROLE OF INFORMATION SYSTEM.	04		Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

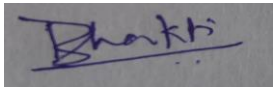
NAME OF THE STAFF: BHAKTI VILAS PURANDARE DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: TYBBI

SEMESTER: V SUBJECT: RESEARCH AND METHODOLOGY MONTH: JUNE TO NOVEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand data processing and analysis, hypothesis, correlation and regression, and writing of research report with essentials.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Data Analysis and interpretation:	* processing of data – editing coding tabulations, * analysis of data. * Essentials importance of data interpretation. * testing of hypothesis – one sample, T test, ANOVA, F test, chi square test.	20		Google meet
Advanced statistical techniques:	* Introduction characteristics and applications of – correlation and regression, factor analysis, cluster analysis, discriminant analysis, multidimensional scaling.	20	Regression modelling strategies- Frank Harrell	Google meet
Research report:	* report writing - meaning, importance, structure, types, process and essentials of good report.	05		Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __45_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Claretta Elias Lopes DEPARTMENT: BCOM(BANKING AND INSURANCE)

CLASS T.Y.BBI SEMESTER: V MONTH :-August-December ACADEMIC YEAR: 2020-2021

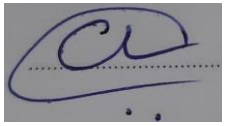
LEARNING OBJECTIVES:-
The learners will be able to: to understand the financial services and its importance.

The learners will be able to: to understand the securitization of debts and its benefits available to banks and its customer.

The learners will be able to: to understand the merchant banking and commercial banking services available in India.

The learners will be able to: to understand the difference between pledge, hypothecation and mortgage and its uses for the purpose of banking transactions.

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial service management – Unit I, III, and V	**Unit I:- Introduction to Financial Services** **Financial Services** Meaning - Classification - Scope - Fund Based Activities - Non-Fund based Activities -Morden Activities - Sources of Revenue - Need for Financial innovation - w Financial Products and Services Innovative Financial instruments - Challenges Facing the Financial Sector **Merchant Banking**:	12	Text Book Internet	Google Meet Power point presentation.



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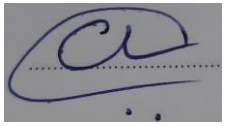
	Definition - Origin - Merchant Banking in India - Merchant Banks and Commercial Banks - Services of Merchant Banks - Qualities of Merchant Bankers in Market Making Process - Progress of Merchant Banking in India - Problems - Scope of Merchant Banking in India.			
	Unit III:- Securitisation of Debts and Derivatives **<u>Securitisation of Debt</u>** Meaning and Definition of Securitization - Securitization v/s Factoring - Modus Operandi - Role of Merchant Bankers - Role of other Parties - Securitization Structure - Securitisable Assets, Benefits of Securitization - Conditions for successful Securitization - Securitization Abroad - Securitization in India - Reasons for Non popularity of Securitization - Future Prospects of Securitization. **<u>Derivatives:</u>** Meaning - Types of Financial Derivatives - Options - Futures Forwards - Swaps - Futures and Options Trading System - Clearing Entities and their Role.	12	**Text book**	Google Meet Power point presentation.



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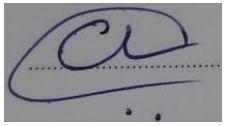
	Unit V – Depositor and pledge **<u>Pledge and Hypothecation:</u>** Pledge and Hypothecation - Procedure for Pledge / Hypothecation- Procedure of Confirmation of Creation of Pledge / Hypothecation by Pledgee - Closure of Pledge / Hypothecation by Pledgor - Invocation of Pledge by Pledgee.	6	**Text book**	. Google Meet Power point presentation.



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NAME OF THE STAFF Jinal Chohan_____

DEPARTMENT: _BCOM(BANKING AND INSURANCE)_

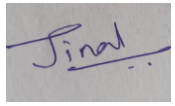
SEMESTER: _____5_____

MONTH: ___july to december___

ACADEMIC YEAR: _____2020-21____

LEARNING OBJECTIVE/S:
The learners will be able to : _learn regarding the different financial services in details.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
TYBBI FSM SEM 5	2. Mutual funds and factoring and forfeiting Mutual funds - introduction, structure, classification of mutual funds , AMFI objectives, advantages and disadvantage of mutual funds , NAV calculation and pricing of	6	Vipul Prakashan	Online teaching, Presentation and PDF



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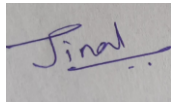
	mutual funds, mutual funds abroad , mutual funds in India Factoring and forfeiting- Meaning, terms and conditions, modus operandi,types , cost , factoring vs forfeiting, factoring in India , international factoring,working , benefits, edi factoring			
	4. Housing finance and consumer finance Housing Finance- introduction, housing finance industry, housing finance policy, sources of funds , market for housing finance in India,growth finance , housing finance institutions, national housing bank Consumer finance - introduction, sources ,types consumer finance, mechanics , terms,pricing, marketing, consumer credit	7	Vipul Prakashan	Online teaching, Presentation and PDF



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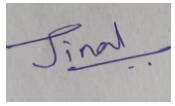
	1. Depositories and pledge Depositories- overview, key features , Depository,bank analogy ,legal framework, eligibility criteria, agreement, rights and obligations, record to be maintained by depositories	3	Vipul Prakashan	Online teaching, Presentation and PDF

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____16_



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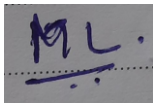
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___MEZBIN LALANI DEPARTMENT:BCOM(BANKING AND INSURANCE) CLASS: TYBBI SEMESTER: V MONTH: AUGUST-DECEMBER 2020 ACADEMIC YEAR: 2020-2021 SUBJECT : FINANCIAL REPORTING & ANALYSIS

LEARNING OBJECTIVE/S: To understand the financial reporting requirement for banking, insurance, companies
The learners will be able to : to know the formats of presentations of final accounts of different types of companies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	Corporate final accounts: Financial reporting and financial statements, objectives of financial reporting, Schedule III part I and Part II of The companies Act, 2013, Format of Balance sheet and profit & loss account and various schedules , practical illustrations.	15	Taxmann's Financial accounting	Google classroom, ,Google meet, Power point presentations, pdfs,etc
UNIT 4	Cash flow Statement: Meaning and requirement as per AS 3, meaning of cash inflow and cash outflow,meaning of cash and cash equivalents, classification of activities as investing, financing, operating for cash flow statement, format of cash flow statement, practical illustrations. Ethical behaviour & implication for accountants: Meaning of ethics, ethical behaviour, meaning of corporate governance and corporate social responsibility,	15	Financial Management by Khan & Jain	Google classroom, ,Google meet, Power point presentations, pdfs,etc



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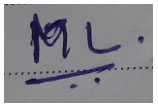
	fundamental principles for accountants to follow, responsibility towards various stakeholders, whistle blowing & whistle blowing.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30(total)



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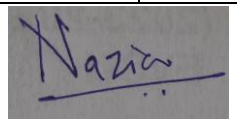
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF NAZIA SAJID SHAIKH_ DEPARTMENT: BCOM(BANKING AND INSURANCE) . CLASS: TYBBI SEMESTER: SEM V MONTH: AUG-DEC ACADEMIC YEAR: 2020-21 SUB: RESEARCH METHODOLOGY.

LEARNING OBJECTIVE/S:
The learners will be able to: Understand Research , Types of Research, Hypothesis , Research Design, Sampling, Data collection and processing, Survey Instrument.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
***MODULE 1. INTRODUCTION TO RESEARCH.**	***Research:** Meaning, Objectives, important of research, Research process, Characteristics of Good Research. ***Hypothesis :** Meaning, Importance, Types and Sources. ***Research Design:** Meaning, Importance, Steps, Scope & Essential of Good research. ***Sampling :** Meaning , Methods of Sampling.: Probability Sampling Non-Probability Method.	**10**	**Regression Modelling Strategies: Frank Harell.**	**Online Lectures on Google Meet**
MODULE 2.DATA COLLECTION	***Types of Data and Sources:** Primary and Secondary Data Sources. ***Methods of collection of Primary Data:** Observation , Experiment, Interview , Survey.	**10**		



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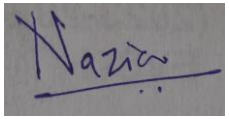
AND PROCESSING	***Survey Instrument:** Questionnaire : Types of questions , Scaling techniques.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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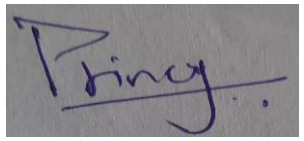
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: COMMERC CLASS: TY(BANKING AND INSURANCE) (IBF)

SEMESTER: V MONTH:AUGUST TO DECEMBER ACADEMIC YEAR: 2020 -2021

LEARNING OBJECTIVE/S: The learners will be able to understand fundamentals of international finance, international capital markets, foreign exchange markets concepts features and international banking operations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	UNIT 2 - Types of Capital Flows, FDI, FPI, FII Euro Currency Markets, Origin and Reasons of growth, a Brief Understanding of Eurocurrency Deposit, Loans Bonds and Notes Market ,Concept of Offshore Banking. International Equity Markets, Concept of Depository Receipts, GDR, Characteristics, Mechanism of Issue, Participants Involved, ADR, Types and Characteristics, Concept of IDR. International Bond Market, Concepts of Domestic Bond, Concept and Types of	12		GOOGLE MEET, POWER POINT PRESENTATIONS



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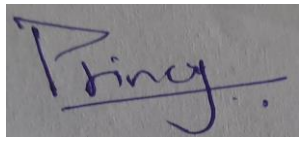
	Foreign Bonds, Concept and Types of Euro Currency Bonds, Concepts of Foreign Currency Convertible and Foreign Currency Exchangeable Bonds, Participatory Notes.			
	UNIT 3 - Introduction, Market and Market Participants, Foreign Exchange Management in India, Retail and Whole Sale Component of Indian Foreign Exchange Market, Role of FEDAI, FEMA and Regulatory Framework, Dealing Room Operations.	12	International Banking Operations- IIBF- MacMillan Publishers, 2007	GOOGLE MEET, POWER POINT PRESENTATIONS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36



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TEACHING PLAN (UNIT PLAN)

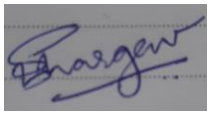
NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL REPORTING & ANALYSIS DEPARTMENT: BCOM(BANKING AND INSURANCE)

CLASS: TYBBI SEMESTER: V MONTH: SEPTMBER, OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 FINAL ACCOUNTS OF BANKING COMPANY	Legal provision in Banking Regulation Act, 1949 relating to Accounts, Statutory reserves including Cash Reserve and Statutory Liquidity Ratio.	2	FINANCIAL ACCOUNTING BY R L GUPTA	• Google Meet • Excel • PowerPoint
	Bill purchase and discounted, rebate of bill discounted, Non–performing assets and Income from non–performing assets.	3		
	Classification of Advances, standard, sub–standard, doubtful and provisioning requirement.	2		
	Final Accounts in prescribed form	1		
	Practical Illustrations	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL REPORTING & ANALYSIS DEPARTMENT: COMMERCE

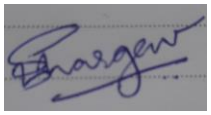
CLASS: TYBBI SEMESTER: V MONTH: OCTOBER, NOVEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 FINAL ACCOUNTS OF INSURANCE COMPANY	Preparation and Presentation of Corporate Final Accounts for Insurance Companies	3	FINANCIAL ACCOUNTING BY R L GUPTA	• Google Meet • Excel • PowerPoint
	Final Accounts in accordance with Insurance Legislation	1		
	Study of Accounting Policies from Annual Reports of Listed Insurance Companies	2		
	Practical Illustrations	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 10



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL REPORTING & ANALYSIS DEPARTMENT: COMMERCE

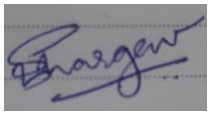
CLASS: TYBBI SEMESTER: V MONTH: NOVEMBER, DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 INTRODUCTION TO IFRS	Introduction to IFRS, List of Accounting Standards in India, List Of IFRS	1	FINANCIAL ACCOUNTING BY R L GUPTA	• Google Meet • Excel • PowerPoint
	IFRS 1 – Objective, Scope, definition, recognition and measurement, reconciliation, interim financial report, Use of deemed cost and exceptions to retrospective application of other IFRS	2		
	IFRS 2 - Objective, Scope, definition, recognition, equity settle are based transaction, treatment of vesting condition, determining fair value of equity instruments, cash settled share based transaction, disclosures	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 5: 05



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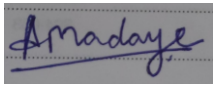
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Abhishek Madaye DEPARTMENT:BCOM(BANKING AND INSURANCE) CLASS: F.Y.B.B.I
SEMESTER: V MONTH: August to December ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concepts of Accounting and standards and treatment.

Module /Unit	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I	**Introduction to Accounting:** Meaning,scope,objectives,need,importance and limitations,basic accounting terminology,branches of accounting,accounting concepts,Double entry system,classification of Accounts,Rules of debit And credit,Writing Journal Entries and ledger,Sub division of Journal And Trial Balance	12	Text Books and Reference material from Internet	PPT, Excel



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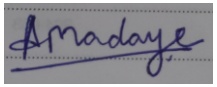
IV	**Final Accounts: Trading Account, Profit and Loss Account,Balance sheet,adjustment entries,manufacturing Accounts**	12	Text Books and Reference material	Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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TEACHING PLAN (UNIT PLAN)

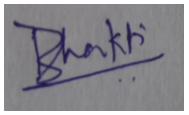
NAME OF THE STAFF: BHAKTI VILAS PURANDARE DEPARTMENT: BCOM(BANKING AND INSURANCE). CLASS: TYBBI

SEMESTER: V MONTH: JUNE TO NOVEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : _____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1. Data Analysis and interpretation: * processing of data – editing coding tabulations, * analysis of data. * Essentials importance of data interpretation. * testing of hypothesis – one sample, T test, ANOVA, F test, chi square test.	20		Chalk and board
	2. Advanced statistical techniques: * introduction characteristics and applications of – correlation and regression, factor analysis, cluster analysis, discriminant analysis, multidimensional scaling.	20	Regression modelling strategies- Frank Harrell	Chalk and board
	3. Research report: * report writing - meaning, importance, structure, types, process and essentials of good report.	05		Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

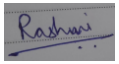
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Strategic Management DEPARTMENT: BCOM(BANKING AND INSURANCE)

CLASS:TYBBI SEMESTER:V MONTH: aug-seps ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Strategic Management Environment	Importance of Politics in Strategic Management, Social ,Political And Technological Forces	3	Management Policy and Strategic Management (Concepts, Skills and Practices) , R.M.Shrivastava	Google meet , ppt presentation , google forms , testmoz
	National and Global Business Environment	3		
	Components of Environment, Environmental Scanning,	2		
	Analysis of Strategies and Choice of Best Strategy, SWOT	2		
	Ethics, Social Responsibility, Impact of Legal Factor in SM	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

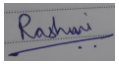
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Strategic Management DEPARTMENT:BCOM(BANKING AND INSURANCE)

CLASS:TYBBI SEMESTER:V MONTH: oct-nov-dec ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV & V Activating Strategy Implementation	Process and Nature of Strategy implementation	3	Management Policy and Strategic Management (Concepts, Skills and Practices) , R.M.Shrivastava	Google meet , ppt presentation , google forms , testmoz
	Barriers of Strategy implementation	3		
	Models of Strategy implementation	2		
	Standard, Benchmarking , Gap Analysis	2		
	Features, importance , barriers and type of evolution	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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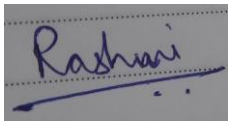
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Rashmi Mehbubani DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: T.Y.B.B.I

SEMESTER: V MONTH: August to December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concepts of Auditing and different methods of Auditing and understanding types of Audit

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I- Introduction to Auditing	**Basics:** Financial Statements, Users of Information, Definition of Auditing, Objectives of Auditing- Primary and Secondary, Expression of Opinion, Detection of Frauds and Errors, Inherent limitations of Audit. Difference between Accounting and Investigation, Investigation and Auditing. **Errors and Fraud**: Definitions, Reasons and Circumstances, Types of Error- Commission, Omission, Compensating error. Types of frauds, Risk of fraud and Error in Audit, Auditors Duties and Responsibilities in Case of Fraud. **Principles of Audit**: Integrity, Objectivity, Independence, Skills, Competence, Work performed by others, Documentation,	15	Text Books and Reference material from Internet	PPT



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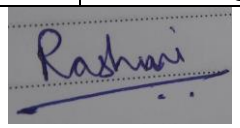
	Planning, Audit Evidence, Accounting System and Internal Control, Audit Conclusions and planning. **Types of Audit:** Meaning, Advantages, Disadvantages of Balance Sheet Audit, Interim Audit, Continuous Audit, Concurrent Audit and Annual Audit.			
II- Audit Planning, Procedures and Documentation	**Audit Planning**- Meaning, Objectives, Factors to be Considered, Sources of Obtaining Information, Discussion with Client, Overall Audit Approach. **Audit Program**: Meaning, Factors, Advantages and Disadvantages, Overcoming Disadvantages, Methods of Work, Instruction before Commencing Work, Overall Audit Approach. **Audit Working** Papers: Meaning, Importance, Factors Determining Form and Contents, Main Functions/ Importance, Features, Contents of Permanent Audit File, Ownership, Custody, Access of Other Parties to Audit Working Papers, Auditors Lien on Working papers, Auditors Lien on Client's Books.	15	Text Books and Reference material from Internet	PPT
III- Auditing techniques and Internal Audit Introduction	Test Check- Test Checking VS Routine Checking, Test Check Meaning, Features, Factors to be considered, when Test Checks can be used, Advantages, Disadvantages, Precautions. Audit Sampling- Audit Sampling, Meaning, Purpose, Factors in determining sample size- Sampling Risk, Tolerable error and	08	Text Books and Reference material from Internet	PPT



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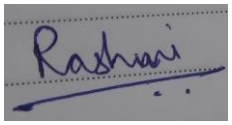
	Expected Error, Methods of selecting Sample Items, Evaluation of Sample Results, Auditors liability in conducting audit based on sample.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __38_____



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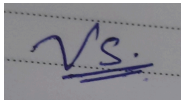
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHAKHA SANE DEPARTMENT: B.COM (BANKING AND INSURANCE) CLASS: SYBBI(BUSINESS ECONOMICS II) SEMESTER: IV MONTH: NOV ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1,2,3 AND 4	1. Introduction to Macroeconomic data and theory: Macroeconomics:meaning,scope and importance Circular flow of income and expenditure:Closed and open economy. The measurements of national product:Meaning and importance,concepts Short run economic fluctuation:features and phases of trade cycle. Keynesian principle of effective demand.	15	MANAN PRAKASH	PPT
	2. Money inflation and Monetary policy:	15		



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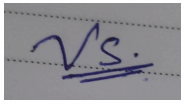
	Money supply:Determinants of Money supply-Factor influencing velocity of circular flow of money. Demand for Money:Classical and Keynesian approach Money and Prices:Quantitative theory of money Inflation:Demand pull and Cost push inflation Monetary Policy:Meaning objective and instruments.			
	3. Constituents of fiscal policy: Role of Government:Principles of sound and functional finance. Fiscal Policy:Meaning and objectives Instrument of fiscal policy Union Budget	15		
	4. Open economy:Theory and issues of international Trade Basis of Foreign Investment Foreign Investment Balance of Payments	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _60__



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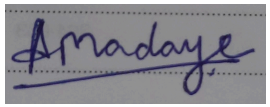
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ABHISHEK VITTHAL MADAYE DEPARTMENT:B.COM (BANKING AND INSURANCE)

CLASS: SYBBI SEMESTER: IV MONTH: DEC-MAR ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : know and understand the application of standard costing and Marginal costing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3, **Standard Costing**	Various types of standards, setting of standards, Basic concepts of, Labour and Overhead (Fixed and Variable) variance analysis.	5	Vipul Prakashan Manan Prakashan	PPT Ms Word Ms Excel Google Meet Google Sheet n Docs
UNIT 4 **Introduction to Marginal Costing**	Marginal costing meaning, application, advantages, limitations, Contribution, Breakeven analysis and profit volume graph.	5	Vipul Prakashan Manan Prakashan	PPT Ms Word Ms Excel Google Meet Google Sheet n Docs



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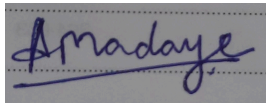
	Note:- Practical problems based on Marginal Costing excluding decision making			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

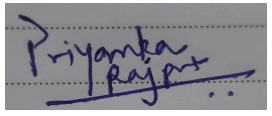
NAME OF THE STAFF: Ms. Priyanka Devnath_Rajput DEPARTMENT:BCOM(BANKING AND INSURANCE) CLASS: S.Y.B.B.I (DIV: A and B)

SEMESTER: IV MONTH: JANUARY- MARCH ACADEMIC YEAR: 2020- 2021 SUBJECT: I.T.in Banking & Insurance-II

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of Online Banking, Technical innovations in Banking sector like Credit Score, Banking software, Clearing settlement, Application of Internet & MS-PowerPoint.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I E-banking Business Models	A) Various models- home banking, office banking.	05	Information Technology in Banking And Insurance -II By - Rimple Sanchla and www.wikipedia.com	Google Meet, MS-Word, PDF, Google Meet Attendance
	B) online banking, internet banking, Mobile banking	05		
	C) SMS banking- models of electronic payments, other business models.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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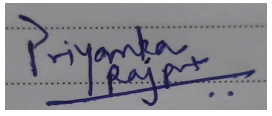
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Induction of Techno-Management	A) Development Life Cycle, Project Management, Building Data Centers, Role of DBMS in Banking, Data Warehousing and Data Mining, RDBMS Tools.	02	Information Technology in Banking And Insurance -II By - Rimple Sanchla and www.wikipedia.com	Google Meet, MS-Word, PDF, Google Meet Attendance
	B) Technological Changes in Indian Banking Industry, Trends in Banking and Information Technology, Technology in Banking, Lead Role of Reserve Bank of India, New Horizons for Banking based IT, Automated Clearing House Operations	04		
	C) Electronic Wholesale Banking Credit Transfer, Credit Information Bureau (I) Ltd., Credit Information Company Regulation Bill- 2004, Automation in Indian Banks, Cheque clearing using MICR technology.	04		
	D) Innovations, Products and Services, Core-Banking Solutions (CBS), Human Resource Development (HRD)-The Road Ahead.	02		
	E) Technology in Banking Industry, Teleconferencing, Internet Banking, Digital Signature in Banking, MICR Facility for 'paper-based' clearing, Cheque Truncation.	03		
	F) Dealing with Fraudulent transactions under CTS, Efficient customer service, smart quill computer pen, Institute for Development & Research in Banking & Technology (IDRBT).	03		
	G) E-Checks-Protocols and Standards, Problems on mechanization, e-Banking-RBI Regulations & Supervision, Technology Diffusion.	02		



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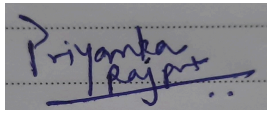
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III E-banking Business Models	A) Objectives, Electronic Commerce and Banking.	02	Information Technology in Banking And Insurance -II By - Rimple Sanchla and www.wikipedia.com	Google Meet, MS-Word, PDF, Google Meet Attendance
	B) Banking Software, Electronic Clearing and Settlement Systems, Plastic Money.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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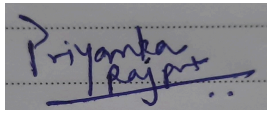
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV MS-Office: Packages for Institutional Automation	A) MS-PowerPoint presentation: Internal links between slides, hyperlinks, embedding multimedia content onto the slides, slide animation.	03	Information Technology in Banking And Insurance -II By - Rimple Sanchla and www.wikipedia.com	Google Meet, MS-Word, PDF, Google Meet Attendance MS-PowerPoint Software
	B) Timer, creating new presentation by existing theme, import online themes, creating a template of presentation, saves and run the slide show.	03		
	C) Applications of Internet: Introduction to e-mail, writing professional emails, creating digitally signed documents, use of outlook express configuring outlook express, creating and managing profile in outlook.	04		
	D) sending and receiving e-mails via outlook express, Emailing the merged documents, boomerang facility of email, Google drive: usage of Google drive in storing the Google documents, excel sheets, presentations and PDF files.	05		
	Practical: - creating new presentation, creating a template of presentation, hyperlinks, slide animation, writing professional emails.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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TEACHING PLAN (UNIT PLAN)

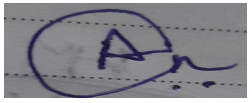
NAME OF THE STAFF: Amol Vaze DEPARTMENT: B.COM (BANKING AND INSURANCE) CLASS: SYBBI

SEMESTER: IV MONTH: December - January ACADEMIC YEAR: 2019-2020.

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 MANAGEMENT OF COMPONENTS OF WORKING CAPITAL	Motives of holding cash, Objectives of cash management, Factors determining cash needs, Strategies of cash management, Cash management techniques, Cash Management practices in India.	3		ONLINE LECTURES AND PPT PRESENTATION
	Receivables Management:- Objectives, Credit Policies and Collection Policies and credit terms.	1		
	Inventory Valuation:- Objectives and Techniques	1		
	Practical illustration	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

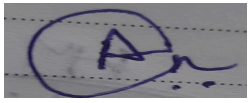
NAME OF THE STAFF: Amol Vaze DEPARTMENT: B.COM (BANKING AND INSURANCE) CLASS: SYBBI

SEMESTER: IV MONTH: January – February ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : _____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 FINANCIAL POLICY AND CORPORATE STRATEGY	Meaning of strategic financial management Strategic Financial Decision Making Functions of Strategic Financial Management	2		• Chalk • Board • Discussion
	Business Risk and Financial Risk :-			
	Introduction , meaning, Debt v/s equity financing	1		
	Types of leverages Investment objective, criteria for individuals	2		
	Practical Illustrations	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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TEACHING PLAN (UNIT PLAN)

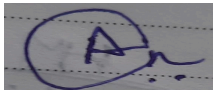
NAME OF THE STAFF: ANKITA ARUN RAUT DEPARTMENT: B.COM (BANKING AND INSURANCE)

CLASS: SYBBI SEMESTER: IV MONTH: DEC-MAR ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Classify the cost on the different basis, prepare cost sheet and reconciliation statement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	1. CLASSIFICATION OF COST : Classification of cost on the basis of behaviour, function, element, traceability, etc. Cost center, Cost Unit, Profit center, 2. COST SHEET : Introduction of cost sheet, Format of cost sheet, Practical Questions including Basic cost sheet, Cost sheet in detail, Estimated cost sheet. 3. RECONCILLATION STATEMENT : Introduction, format of reconciliation statement. Practical Questions including basic preparation of reconciliation statement and reconciliation statement with P&L A\C & Cost Sheet.	3 Lectures 08 06	Vipul Prakashan Manan Prakashan	PPT Ms Word Ms Excel Google Meet Google Sheet n Docs

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17



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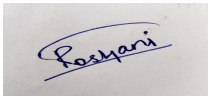
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Roshani Nagar Department: - Commerce
Class: - S.Y.BBI (A, B,) SEM: - IV MONTH-: Dec-Feb YEAR: -2020-2021

LEARNINIG OBJECTIVES: The learner will be able to know the life insurance policies & their various types. To know how does the insurance policies are beneficial to everyday life.

PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHO
Foundation Course: - IV (An overview of Insurance Sector)	MODULE:-I AN INTRODUCTION TO LIFE INSURANCE: - Life insurance of business, Principle pf risk pooling, Determination of risk pooling. Product of LIC, Traditional life insurance policy, Endowment Assurance, Riders in plan, On non-traditional life insurance product. MODULE: -II AN INTRODUCTION TO HEALTH INSURANCE: - **Health insurance:** -IRDA regulations, determination of health insurance, Health insurance market in India and determination of Risk premium. **SBI & ICICI health insurance plan: -** Introduction & forms & procedures of hospitalization, Indemnity Products, top up covers, Cashless insurance,	15 Lectures 10 Lectures		ONLINE LECTURES



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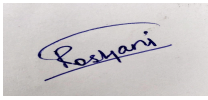
	Senior citizen plans, critical illness plans & micro insurance.			

TOTAL LECTURES 25



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TEACHING PLAN (UNIT PLAN)

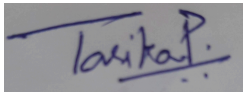
NAME OF THE STAFF:____TARIKA PATEL____ SUBJECT: FINANCIAL MANGEMENT DEPARTMENT: B.COM (BANKING AND INSURANCE)

CLASS: ____SYBBI____ SEMESTER: _____IV_____ MONTH: __DECEMBER- JANUARY__ ACADEMIC YEAR: ____2020-21__

LEARNING OBJECTIVE/S:
The learners will be able to : The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1 Working Capital Management	Introduction, Meaning and Elements of Working Capital, Types of Working Capital	2	Financial Management By Ravi M Kishore	Google meet, Microsoft Power point
	Estimating Working Capital needs, Operating / Working capital Cycle, Factors affecting working capital, Statement of working capital	2		
	Practical Illustrations	2		
	Woking Capital Financing Trade credit, Bank Credit, Commercial Papers, Certificate of deposits, Financing	2		
	Practical Illustrations	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10__



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FINANCIAL MANGEMENT DEPARTMENT: B.COM (BANKING AND INSURANCE)

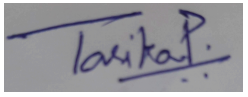
CLASS: ____SYBBI____ SEMESTER: _____IV_____ MONTH: __FEBRUARY__ ACADEMIC YEAR: ____2020-21___

LEARNING OBJECTIVE/S:
The learners will be able to : The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Management of Components of Working Capital	A) Management of Cash and Marketable Securities Motives for holding cash, Objectives of Cash Management, Factors Determining cash needs	1	Financial Management By Ravi M Kishore	Google meet, Microsoft Power point
	Basic Strategies of cash management, Cash Management Techniques, Marketable securities and Cash management practices in India, Format of Cash Budget	2		
	Practical Illustrations	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __6_____

TEACHING PLAN (UNIT PLAN)



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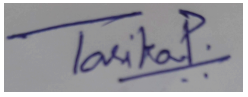
NAME OF THE STAFF: TARIKA PATEL SUBJECT: FINANCIAL MANGEMENT DEPARTMENT: B.COM (BANKING AND INSURANCE)

CLASS: SYBBI SEMESTER: IV MONTH: MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 3 Financial Planning	Introduction of Financial Planning, Meaning and Essentials of Budget, Objectives and Advantages & steps of Budgetary control	2	Financial Management By Ravi M Kishore	Google meet, Microsoft Power point
	Types of Budget Sales Budget (Practical Illustrations)	1		
	Flexible Budget (Practical Illustrations)	1		
	1) Production Budget (Practical Illustrations), 2) Manpower Budget (Practical Illustrations), 3) Purchase Budget (Practical Illustrations), Combined Budget (Practical Illustrations),	3		
	Other Types of Budget	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8



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TEACHING PLAN (UNIT PLAN)

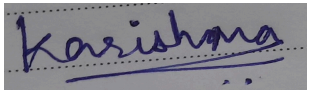
NAME OF THE STAFF: Karishma VijayKale

DEPARTMENT:B.COM (BANKING AND INSURANCE) CLASS:SyBBI - A,B SEMESTER: IV

MONTH:March ACADEMIC YEAR:2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Know about emerging method of Entrepreneur, entrepreneurship skills and abilities required for an successful entrepreneur.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Chapter 1 The Entrepreneur	Entrepreneur : Meaning, nature, origin and development of entrepreneurship in India, Need and importance, core elements, principle, essential, types, function, concept of entrepreneurship management, motives behind being an entrepreneur, entrepreneurial process	7	Vipul Prakashan	Online Teaching- Google meet app and PPT
	Theories of Entrepreneurship : Innovation theory of Schumpeter, need for achievement theory of McClelland, risk bearing theory knight, hagenstheory of entrepreneurship, economic theory of entrepreneurship			
	Entrepreneur values and attitude, dominant characteristics of successful entrepreneur, internal and external factors for entrepreneurial motivation			



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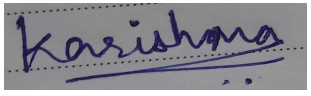
	Entrepreneurial skills, identifying business opportunity, role of creativity in entrepreneurship, the creative process, the innovation process, types of innovation, sources of innovation, principles of innovation, sources of business ideas.			
Chapter 3 Key areas of New Ventures	Marketing : New product development & its stages, marketing strategy for new venture, branding strategies, Characteristics of good brand name, Direct and indirect Marketing channel strategies, factors influencing distribution strategies, pricing strategies, promotion strategies for new venture, Finance : Sources of long term and short term finance, debt fund and equity fund:meaning , merits and limitations, Human resources : Functions of Personnel/ HR Management	7	Vipul Prakashan	Online Teaching- Google meet app and PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___14_____



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TEACHING PLAN (UNIT PLAN)

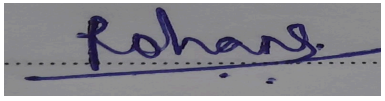
NAME OF THE STAFF: Rohan D. Satam

DEPARTMENT: B.COM (BANKING AND INSURANCE) CLASS: SYBBI SEMESTER:IV MONTH: December 2020

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: Learning about Insurance sector.
The learners will be able to : Students will be able to learn about insurance sector in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course – IV (An Overview of Insurance Sector)	**1.An Introduction to Home and Motor Insurance** A) Home Insurance - SBI and ICICI Plans – Introduction, Forms and Procedures, Inclusions and Exclusions in policies, Determinants of Risk Premium and Impact of Catastrophes on Home Insurance. B) Vehicle Insurance- SBI and ICICI Plans-Introduction, Forms and Procedures, Determinants of Risk Premium, Inclusions and Exclusions.	10	Vipul and Seth publication	Google meet, PPT and Websites
	2. **Role of Insurance in Logistic** A) Role of Insurance in Logistic - Meaning &Importance, Hazards, Protection, Social Security – Type of Risks and Accidents.	10	Vipul and Seth publication	Google meet, PPT and Websites



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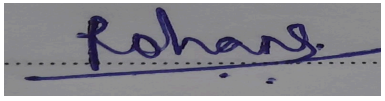
	B) B) Fire Insurance – SBI and ICICI Plans – Introduction, Forms and Procedures, Standard Fire and Special Perils Policy, Tariff system and special policies.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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TEACHING PLAN (UNIT PLAN)

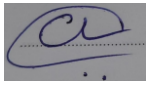
NAME OF THE STAFF: Claretta Elias Lopes DEPARTMENT: BCOM(BANKING AND INSURANCE)

CLASS S.Y.BBI SEMESTER:III MONTH :-August-December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES: -
The learners will be able to: to understand the behavior to be followed in organization

The learners will be able to: to understand the organizational structure that is been followed in banking and insurance sector

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Organisational Behaviour Unit II , III, and IV	**Unit II the Group Dynamics** **C) Negotiations: -** Meaning, Process, Strategies, Negotiations, Crises Negotiations. **D) Transactional Analysis Model: -** Types Of Transaction, Life Positions, E) **Virtual Teams**: - Meaning and structure, Types, Stages of Management of Virtual Teams F) **Group Cohesiveness**: - Meaning, Features, Factors Affecting, Effects, Consequences, Impact of group cohesion G) **Group Decision-Making: -**	10	Text Book Internet	Google Meet Power point presentation.



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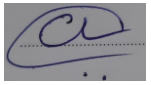
	Unit III:- Organisational Dynamics **A) Organisation Structure** :- Meaning, Centralisation, Decentralisation, Span Of Control, Departmentation **B) Common Organizational Designs:- Simple Structure, Bureaucratic Structure, Matrix Structure** C) **New Design Options:-** Team Structure, Virtual Organisations, Boundaryless Organisations **D) Organisation Structure Differentiation** **E) Need And Importance of organisational designs** **F) Organisational Climate:-** Managing Rewards, Impact of Rewards Punishments, Job Frustration , Meaning and importance of QWL	15	**Text book**	Google Meet Power point presentation.
	Unit IV: Organisation Behaviour in Banking and Insurance Sector Concept and Definitions of OB, Practices of Ob in Banking and Insurance Company, Personality and OB, Perception and OB, Unethical Practices by Banking Employees, Issue of Organisation Behaviour In Banks	5	**Text book**	. Google Meet Power point presentation.



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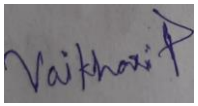
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VAIKHARI PATIL DEPARTMENT: BCOM(BANKING AND INSURANCE)

CLASS: SYBCOM (Banking and Insurance) SEMESTER: III MONTH: August- December2020 ACADEMIC YEAR: 2020 -2021

LEARNING OBJECTIVE/S:
The learners will be able to: Learn Introduction to computer system and Web

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, II, III, IV	A) E-Commerce Framework, E-Commerce and media convergence, anatomy of E-Commerce Applications, E-Commerce Consumer and Organization Applications B) The network Infrastructure for Electronic Commerce - Market forces influencing the I-way, Components of I-way, Network Access Equipment C) E-Commerce and World Wide Web- Architectural framework of ECommerce, WWW and its architecture, hypertext publishing, Technology behind the web, Security and the Web	30*(2 Divisions)	E-books, Vipul publications, Seth publication	Projector
	A) Meaning, definition, features, advantages and limitations- core banking, the evolution of e-banking in India, Legal framework for e-banking. B) Electronic Payment System Types of Electronic Payment Systems, Digital Token-based EPS, Smart Card EPS, Credit Card EPS, Risk in EPS, Designing a EPS			
	A) Ms-Word: Usage of smart art tools, bookmark, cross-reference, hyperlink, mail merge utility and converting word as			



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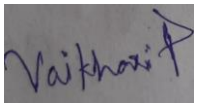
	PDF files. B) Ms-Excel: Manipulating data, Working with charts, Working with PIVOT table and what-if analysis; Advanced excel functions-AVERAGE(), MIN(), MAX(), COUNT(),COUNTA(), ROUND(), INT(), nested functions, name, cells/ranges/constants,relative			
	A) Need of Cyber Law, History of Cyber Law in India B) Cyber Crimes: Various threats and attacks, Phishing, Key Loggers, Identity Theft, Call & SMS forging, e-mail related crimes, Denial of Service Attacks, Hacking, Online shopping frauds, Credit card frauds, Cyber Stalking C) Cyber Security: Computer Security, E-Security, Password Security and Reporting internet fraud			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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NAME OF THE STAFF Jinal Chohan_____

DEPARTMENT:BCOM(BANKING AND INSURANCE)____ SUBJECT- FINANCIAL MARKET

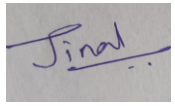
SEMESTER: _____3_____

MONTH: ___july to december___

ACADEMIC YEAR: _____2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : _Understand the basics of the markets, learn the meaning of various terms used in stock market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Markets S.Y BBI SEM 3	2. Financial markets in India- Indian money market- meaning, features and functions, importance , defects , participant,components of organised and unorganised markts and reforms	9	Vipul Prakashan	Online teaching, Presentation and PDF



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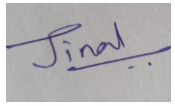
	Indian capital market - meaning, features, functions and importance , participant, instruments Indian stock market- meaning and functions of stock exchange, NSE BSE Equity market- primary market , IPO , book building, role of merchant bankers , ASBA , Green shoe options , issue of bonus shares, right shares, sweat equity, ESOP Indian debt market - market instruments,listing, primary and secondary			
	3. Commodity markets Introduction, meaning, history, origin ,types of commodity markets , structure, participants, commodity exchange in India and abroad	3	Vipul Prakashan	Online teaching, Presentation and PDF



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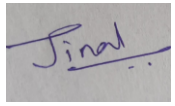
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____12_____



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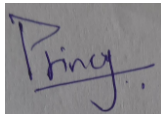
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: SYBBI (OVER VIEW OF BANKING)

SEMESTER: III MONTH: SEPTEMBER TO DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : the banking sector in detail, how technology has changed the course of banking services in India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3: TECHNOLOGY IN BANKING SECTOR	Chapter 6: features, norms and limitations of E- banking, mobile banking, internet banking, RTGS, POS terminal, NEFT,IMPS, brown label ATM, White, NUUP, AEPS, APBS,CBS,CTS,digital signature, M wallets, opening bank accounts, savings, current,credit cards loan, KYC norms	07	Ahamad Khan Masood (1992) Banking in India, Anmol Publications,	GOOGLE MEET, POWER POINT PRESENTATIONS
UNIT 4: MICRO FINANCE AND	Chapter 7: Introduction, need and code of conduct for micro finance institution in India, advantages, purpose , limitations and models of SHG, Role of NABARD, SIDBI, portfolio	07	Ahamad Khan Masood (1992) Banking in India,	GOOGLE MEET, POWER POINT PRESENTATIONS



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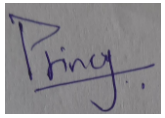
FINANCIAL INCLUSION	securitization, SHG 2, NRLM, SRLM, priority sector and classifications		Anmol Publications,	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14



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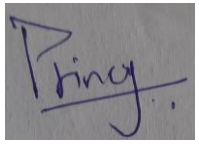
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: SYBBI (ORGANIZATIONAL BEHAVIOR) SEMESTER: III MONTH: SEPTEMBER TO DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: understand people better which in turn will help them manage people better. It will also lead more satisfying and fulfilling professional as well as personal life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1: The individual behavior	Chapter 4: Meaning of emotions, cognitive dissonance, emotional dissonance, managing emotions at work- 6 universal emotions. Meaning and types of values, sources of value systems, value across cultures, values and ethical behaviour Chapter 5: Individual decision making , decision making process, decisional styles, models of decisions	07	Organizational Behaviour by Stephen P. Robbins	GOOGLE MEET, POWER POINT PRESENTATIONS



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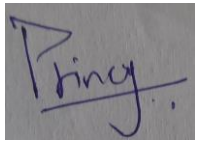
UNIT 2: The group dynamics	Chapter 6: Group communication, importance , corporate communication, need, importance and techniques of corporate communication, types of communication in detail Chapter 7: Power and politics Meaning, bases of power, power tactics, organizational politics, reasons for organizational politics, managing politics, importance of handling politics	07	Organizational Behaviour by Stephen P. Robbins	GOOGLE MEET, POWER POINT PRESENTATIONS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14



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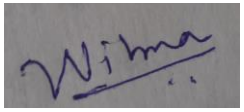
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: SYBBI SEMESTER: III MONTH: OCTOBER-NOVEMBER ACADEMIC YEAR: 2020

LEARNING OBJECTIVE/S: The learners will be able to know about Indian Financial system.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Indian Financial System	**(A)** Introduction. Meaning. Functional financial system. Indian financial system from financial neutrality to financial activism and from to financial volatility to financial stability. Role of government in financial development over we were faces of. Indian financial system since independence. Monitoring framework for financial conglomerates.	8	Text Book	PPT
	(B) Structure of Indian financial system. Banking and non banking financial institutions. Organized and unorganized financial markets. Financial assets. Instruments Fund based and fee based financial services.	7	Text Book	PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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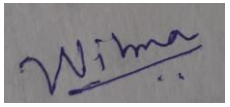
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: SYBBI SEMESTER: III MONTH: NOVEMBER ACADEMIC YEAR: 2020

LEARNING OBJECTIVE/S:
The learners will be able to know financial markets in India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2. Financial Markets In India	Indian money market: meaning, features, functions, importance, defects, participants, components of organized and unorganized market and reforms.	5	Text Book	PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5



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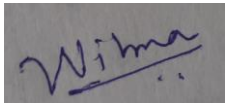
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: SYBBI SEMESTER: III MONTH: DECEMBER ACADEMIC YEAR: 2020

LEARNING OBJECTIVE/S:
The learners will be able to understand about Derivatives Market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4. Derivatives Market	• Introduction to derivatives market. Meaning, history and origin. • Elements of derivative contract. • Factors driving growth of derivatives market. Types of derivatives. • Types of underlying assets. Participants in derivative market. Advantages and disadvantages of trading in derivative market. • Current volume of derivative trading India. • Difference between forwards and futures.	15	Text Book	PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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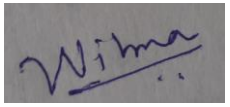

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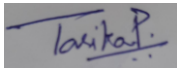
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: BCOM(BANKING AND INSURANCE)___ CLASS: ____SYBBI____ SEMESTER: _____III_____ MONTH: __AUGUST - DECEMBER __ ACADEMIC YEAR: _____2020-21___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Management Accounting	Meaning and Definition of Management Accounting, Nature and Frame work	2	Management Accounting By I.M Pandey	Google meet, Microsoft Power point
	Functions of Management Accounting, Decision Making Process	2		
	Information of Decision making (Information, Strategic, tactical and operational information)	2		



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	Financial Accounting v/s Management Accounting , Qualities of Management Accounting	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____8_____

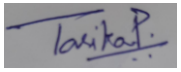
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____SYBBI____ SEMESTER: _____III_____ MONTH: __AUGUST - DECEMBER __ ACADEMIC YEAR: ____2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Financial Statement Analysis	Introduction and Meaning of corporate financial statement, Uses of Financial statement, users of financial Statement, format of financial statement	2	Management Accounting By I.M Pandey	Google meet, Excel, Microsoft Power point



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	Introduction and Meaning of Financial statement analysis, Steps, objectives , Types of Analysis, simple sums on financial statement	2		
	Ratio Analysis- Meaning, Classification , DU Pont chart, Advantages and limitations.	1		
	Balance sheet ratio, Revenue statement Ratio and Combined Ratio (Applications of formulas)	1		
	Practical Illustrations	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____8_____

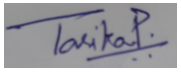
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____SYBBI____ SEMESTER: _____III_____ MONTH: __AUGUST - DECEMBER __ ACADEMIC YEAR: ____2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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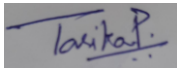
UNIT 3 WORKING CAPITAL MANAGEMENT	Introduction, Meaning, Types of Working Capital	2	Management Accounting By I.M Pandey	Google meet, Microsoft Power point
	Factors, Advantages, Limitation, Estimation of Working Capital	2		
	Operating Cycle, Provision for Contingencies / Margin of Safety, Format of Working Capital Management	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : _____6_____



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TEACHING PLAN (UNIT PLAN)

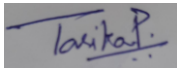
NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____SYBBI____ SEMESTER: _____III_____ MONTH: AUGUST - DECEMBER __ ACADEMIC YEAR: _____2020-21___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 Management of Profit / Dividend Policy	Meaning, Types, Factors affecting dividend policy, Forms of Dividend	2	Management Accounting By I.M Pandey	Google meet, Excel, Microsoft Power point
	Determinants of dividend policy, Factors, dividend policy in India, Bonus Share (Stock dividend), Stock Split	3		
	Legal, Procedural and Tax aspects associated with dividend decision	2		
	Dividend Policy Theories – Walter Model, Gordon's Model, MM Model, Factors influencing dividend policy	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____10___



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TEACHING PLAN (UNIT PLAN)

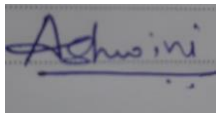
NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: S.Y.BBI (Division A B) SEMESTER: III MONTH: November, December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & Remember- Concept of Financial Forecasting, EVA, free cash flow

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Financial Goal Setting & Time Value of Money	Financial Goal setting Financial Forecasting	01	Book by Manan publications/Internet	Google Meet, Google Classroom, PPT, Excel
	Economic Value added, Free cash flow	01	Book by Manan publications/Internet	Google Meet, Google Classroom, PPT, Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 02



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TEACHING PLAN (UNIT PLAN)

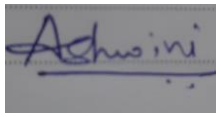
NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: S.Y.BBI (Division A B) SEMESTER: III MONTH: November, December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & Remember- Concept & calculation of Cost of Capital, capital structure decisions,

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4- Financial Decisions	Definition & measurement of cost of capital (equity, retained earnings)	03	Book by Manan publications/Internet	Google Meet, Google Classroom, PPT, Excel
	Capital structure decisions EBIT-EPS analysis	02	Book by Manan publications/Internet	Google Meet, Google Classroom, PPT, Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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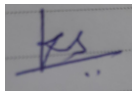
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS**: S.Y.B.B.I** SEMESTER: **3th** MONTH: **AUG-SEPT** ACADEMIC YEAR: **2020-21** LEARNING OBJECTIVE/S:The learners will be able to:

1. What is Income Tax and its basic term(Definitions)
2. What is Residential status and which income is taxable and nontaxable in India (Scope of Total Income)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEFINITIONS AND RESIDENTIAL STATUS	**Definitions U/S 2:** Section 2-Assessee, Assessment Year, Assessment, Annual value, Business, Capital asset, Income, Person, Previous Year, Transfer **Basis of Charge :Section 3 to 9** Previous Year, Residential Status, Scope Of Total Income, Deemed Income	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

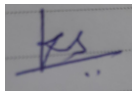
NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS**: S.Y.B.B.I** SEMESTER: **3th** MONTH: **SEPT.** ACADEMIC YEAR: **2020-21** LEARNING OBJECTIVE/S: The learners will be able to:

1. What are the Provision regarding Income from Salary under Income Tax Act, 1961.
2. What are the Provision regarding Income from House Property under Income Tax Act, 1961.
3. What are the Provision regarding Income from Business and Profession under Income Tax Act, 1961.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME-1	**Salary Income: Section 15 – 17** Including Section 10 relating to House Rent Allowance, Travel Concession, Special Allowance, Gratuity, Pension ,Commutation, Leave Encashment, Compensation, Voluntary Retirement, Payment from Provident Fund	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM.
	Income From House Property: Section 22 to 27, Including Section 2 - Annual Value Practical Question			
	Profits & Gains From Business & Profession, Vocation Section 28 to 32, 36, 37, 40, 40A, 43B, 44AD, 44ADA & 44AE Including.: Section 2 - Business			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)



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NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: S.Y.B.B.I** SEMESTER: **3th** MONTH: **OCTOBER**

ACADEMIC YEAR: **2020-21**

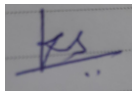
LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are provision of Income from Capital Gain under Income Tax Act, 1961
2. What are provision of Income from Other Sources under Income Tax Act, 1961

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME-2	**Income from Capital Gains :** Section 45, 48, 49, 50, 54 and 55	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM.
	Income from Other Sources: Section 56 to 59			
	Exemption U/s 10 Related to income from other sources			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)



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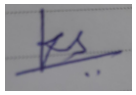
NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS**: S.Y.B.B.I** SEMESTER: **3th** MONTH: **NOV-DEC.**ACADEMIC YEAR: **2020-21** LEARNING OBJECTIVE/S: The learners will be able to:

1. What are provision of Deductions under Chapter VI - A under Income Tax Act, 1961
2. How to Compute Taxable income of Individual and HUF.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Deductions under Chapter VI – A AND COMPUTATION OF TOTAL INCOME	**80 A**-Restriction on claim in Chapter VI- A deductions **80 C**- Payment of LIC/PF and other eligible investments **80CCC** - Contribution to certain Pension Fund **80D** - Medical Insurance Premium **80 DD**- Maintenance and medical treatment of handicapped dependent **80E** - Interest on Educational Loan **80 TTA**-Interest on Saving Bank account **80D** - Deduction in the case of totally blind or physically handicapped or mentally retarded resident person	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM
	Computation of Total Income of Individual and HUF with respect to above heads and deductions			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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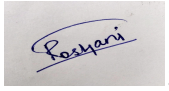
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ROSHANI NAGAR DEPARTMENT: B.COM (BANKING AND INSURANCE) CLASS: FY BCOM (BANKING AND INSURANCE) (OB) SEMESTER: II MONTH: NOV TO MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to understand the importance of organizational behavior, various theories relating to OB, Individual Behavior, Group Dynamics, Culture and Change Management and Importance of Organizational Development

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 ORGANIZATIONAL CULTURE AND CHANGE MANAGEMENT	UNIT 3 – WORK CULTURE, WORK CONFLICTS, ORGANIZATIONAL CHANGE, EFFECTS OF RESISTANCE TO CHANGE AND WAYS TO OVERCOME IT, TIME AND STRESS MANAGEMENT	15		ONLINE,PPT PRESENTATION
	UNIT 4 – MEANING AND NATURE OF OD, TECHNIQUES OF OD, IMPORTANCE OF OD	15	JAMES HUNT, RICHARD OSBORN (OB)	ONLINE,PPT PRESENTATION
UNIT 4 ORGANIZATIONAL DEVELOPMENT				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI YADAV SUBJECT: PRINCIPLES AND PRACTICES OF BANKING & INSURANCE DEPARTMENT: B.COM (BANKING AND INSURANCE) CLASS: FYBBI SEMESTER: II MONTH: NOV- MAR ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Learn basic banking concepts its meaning , definition, importance, need of banking ,various operations in banking sector.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Introduction to Banking	Basic Concepts: Origin, Need, Types, Scope and Functions of Banking - Need for Regulation and Supervision	15	VIPUL PRAKASHAN	POWER POINT PRESENTATION EXPLANATION DISCUSSION EXAMPLES
2.Banking Scenario in India	Banking Operations -Types of accounts - Banking Services - Current Scenario, Financial Inclusion and Banking Regulations & Role of RBI.	15	VIPUL PRAKASHAN	POWER POINT PRESENTATION VIDEOS DISCUSSION EXAMPLES

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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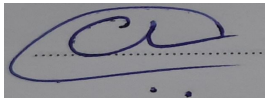
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Claretta Elias Lopes_____DEPARTMENT: B.COM (BANKING AND INSURANCE)_____

CLASS __F.Y.BBI SEMESTER: II_____MONTH: _JUNE -SEPTEMBER ACADEMIC YEAR: __2020 -2021_____

LEARNING OBJECTIVE/S: To make the students socially aware of the societal problem and their personality.
The learners will be able to: to understand the overall stratification of the society.

PAPER, UNIT, TITLE	SUB TOPICS			NO. OF LECTURES ALLOTED	REFERENCE/S



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Foundation Course–II U and V	Unit 1: Globalisation and Indian Society Understanding the concepts of liberalization, privatization and globalization Growth of information technology and communication and its impact manifested in everyday life: Impact of globalization on industry: changes in employment and increasing Changes in agrarian sector due to globalization; rise in corporate farming migration; and increase in farmers' suicides.				**Text book**

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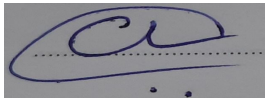
	Unit 4: Understanding Stress and Conflict Causes of stress and conflict in individuals and society: Agents of socialization and the role played by them in developing the individual Significance of values, ethics and prejudices in developing the individual Stereotyping and prejudice as significant factors in causing conflicts in society Aggression and violence as the public expression of conflict.			**6**	**Text book**
	Unit 5: Managing Stress and Conflict in Contemporary Societ Types of conflicts and use of coping mechanisms for managing individua stress;			5	**Text book**



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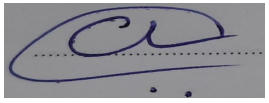
	Maslow's theory of self-actualisation, Different methods of responding to conflicts in society: Contlict-resolution and efforts towards building peace and harmony in society				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT: B.COM (BANKING AND INSURANCE) CLASS: FY BBI SEMESTER: 2

MONTH: MARCH- APRIL ACADEMIC YEAR: 2020-2021 SUBJECT: PPBI

LEARNING OBJECTIVES:

The learners will be able to : gain knowledge related to banking and insurance, types of accounts, kinds of business risk, Insurance , Role.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 INSURANCE BUSINESS ENVIRONMENT IN INDIA	Insurance Sector : Indian Perspective. Forms of Insurance Organisation. Insurance players in India. Growth of Insurance Business in India. Actuary Life Insurance Act 1956 IRDA Act 1999	08	Principles and Practices of Banking and Insurance	PPT FLOWCHART

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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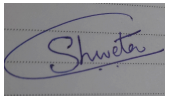
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT:BCOM (BANKING & INSURANCE) CLASS: FYBBI (A, B) SEMESTER: II

MONTH: June to Nov. ACADEMIC YEAR: 2020- 2021 LEARNING OBJECTIVE/S: Business Law

The learners will be able to : Introduction, Understand Meaning, Rules and regulations, section, important act details with related case study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I Introduction of law. Module II Indian Contract Act, 1872 Part 1	Introduction of law related Meaning, features, Types, classification of court. Chapter I Definitions, Kinds of agreements, Kinds of contracts, distinction between agreement and contract Chapter II Proposal, kinds of proposal -specific, offer to a class of persons, general offer, counter offer, invitation to offer, standing offer, express proposal, implied offer, requirements of a valid offer section 3 & 5 Acceptance, requirements of a valid acceptance,	03 04 03	Indian contract act 1872 Avtar singh Pollak and mulla D.D basu	GOOGLE MEET PPT presentation (ONLINE)



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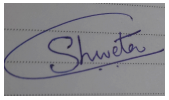
Module II Indian Contract Act, 1872 Part II	Rules of communication of proposal, acceptance and revocation of proposal/acceptance Chapter III Capacity to contract, minor, unsound mind, Disqualified person. Section 10-12 Chapter IV Consideration, agreements without consideration, unlawful consideration, inadequacy of consideration Agreements expressly declared to be void section 2- 25			
Module III Special Contrac Sale of goods Act Module IV Constitution law. Module V	Chapter I consent and free consent, coercion, undue influence, fraud, misrepresentationMistake Chapter II Void agreement section 24 to 30 Chapter III section 31 and 68 -72 Contingent contract, quasi-contracts, e-contract, Privity of contracts with exceptions Chapter IV Section 73 - 75 Discharge of contracts, Remedies available on breach of contracts Chapter I	02 03 02		



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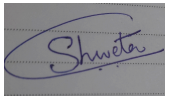
Information Technology Act. Module VI Negoshable Instrument Act	Law of Indemnity and guarantee related essential, discharge of surety, distriction between, section 124 - 125, 126 - 129, 132 - 147 Chapter III Bailment and Pladge realted essential, Types, different and other detailes. Chapter IV Agency relted Types, creation, Right and duties, Termination. Condition and warranty related essential sale and purchase difference between, types, Cavet Emptor, concept, definition, sale and hire purchase difference between, property, unpaid seller, Auction sale, right and duties related all data clear.			
	Constitution law related Natural justice, special leave appeal, features, fundamental Right, writs details clear.	01		
	Information Technology Act related object, scheme, digital signature, authorization, E- governance, digital certificate, Cyber, Certifying Authorities.	01		
	Types, Essential, different, definition, evidence, features. Promissory Note, bill of exchange and cheque realted types, essential, definition and difference, letter of credit and Draft , maturity Instrument, holder and holder in due course, payment in due course, Noting, Protect all are detailes clear	02		



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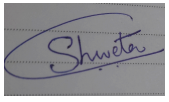
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12*4= 48



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TEACHING PLAN (UNIT PLAN) (SUB: Financial A/c)

NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT:B.COM (BANKING AND INSURANCE) CLASS**: F.Y.B.B.I**.SEMESTER: **2th** MONTH: **JANUARY** ACADEMIC YEAR: **2020-21**

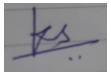
LEARNING OBJECTIVE/S:

The learners will be able to:

1. What is Redemption of Preference Shares ?
2. What is the legal Provision of Redemption of Preference Shares?
3. What are divisible profits and non-divisible Profits? And what is CRR ?

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
REDEMPTION OF PREFERENCE SHARES **(Continue….)**	1. Company Law / Legal Provisions for redemption of preference shares in Companies Act. 2. Sources of redemption including divisible profits and proceeds of fresh issue of shares Premium on redemption from security premium and profits of company 3. Capital Redemption Reserve Account - creation and use	05	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

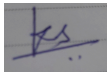
NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: B.COM (BANKING AND INSURANCE) CLASS**: F.Y.B.B.I** SEMESTER: **2th** MONTH: **FEBRUARY**

ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are Journal Entries regarding redemption of preference shares
2. How to Prepare Balance sheet of Company as per Sch-3 of Company Act 2013.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
REDEMPTION OF PREFERENCE SHARES	1. Procedure of redemption of preference shares(Journal Entries and Balance sheet of company) 2. Practical Question based on redemption of preference shares	10	Advance Accounts by Shukla & Grewal Indian Accounting Standards by	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM



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			Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN)

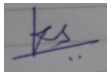
NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT: B.COM (BANKING AND INSURANCE) CLASS**: F.Y.B.B.I** SEMESTER: **2th**

MONTH:**MARCH**

ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Buy-Back of Shares
2. What are the legal Provision of Buy-Back of Shares?
3. What is divisible profits and non-divisible Profits? And what is CRR ?



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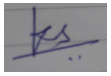
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Buy-Back of Equity Shares **(Continue….)**	1. Company Law/Legal Provision (Including related restriction ,Power, transfer to Capital Redemption Reserve account and Prohibitions) 2. Compliance of Condition including Sources, Maximum Limits and debts-Equity Ratio.	07	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07



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TEACHING PLAN (UNIT PLAN)

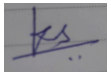
NAME OF THE STAFF**: KAUSHIK N. SAVE** DEPARTMENT:B.COM (BANKING AND INSURANCE) CLASS**: F.Y.B.B.I** SEMESTER: **2th** MONTH: **MARCH-APRIL.**

ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are Journal Entries regarding Buy-Back of shares ?
2. What is the Condition of Buy-Back of Shares ?
3. How to Prepare Balance sheet of Company as per Sch-3 of Company Act 2013.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Buy-Back of Equity Shares	3. Procedure of Buy-Back of Equity shares(Journal Entries and Balance sheet of company) 4. Practical Question based on buy-Back Of Equity shares	08	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM



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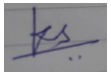
			M.Mukherjee &M. Hanif.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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TEACHING PLAN (UNIT PLAN)

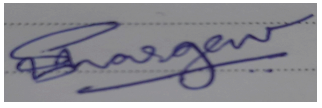
NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL ACCOUNTING II DEPARTMENT:B.COM (BANKING AND INSURANCE

CLASS: FYBBI SEMESTER: II MONTH: JANUARY, FEBRUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 VALUATION OF GOODWILL AND SHARES	A) Valuation of Goodwill			• Google Meet • Excel • PowerPoint
	Meaning, Nature, Features, Classes, Elements, Types of Goodwill	1		
	Factors of Goodwill Valuation and Methods of goodwill valuation	1		
	Practical Illustration	2		
	B) Valuation of Shares			



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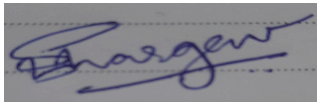
	Meaning, Need, Importance, of valuation of shares, Factors affecting valuation of shares, Methods of valuation of shares.	1		
	Practical Illustrations	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 07



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL ACCOUNTING II DEPARTMENT: B.COM (BANKING AND INSURANCE)

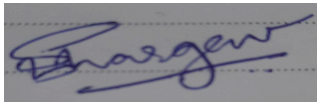
CLASS: FYBBI SEMESTER: II MONTH: FEBRUARY, MARCH ACADEMIC YEAR:2020 - 2021

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 REDEMPTION OF DEBENTURES	Meaning, Objectives, Redemption of Debentures, Payment of sources.	1		• Google Meet • Excel • PowerPoint
	Debenture redemption sinking fund, Redemption by conversion into new class of shares or Debentures with options – including At par, Premium and Discount.	2		
	Practical Illustrations	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 4: 05



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TEACHING PLAN (UNIT PLAN)

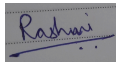
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Organizational Behavior DEPARTMENT: B.COM (BANKING AND INSURANCE)

CLASS:FYBBI SEMESTER:II MONTH: Jan- feb ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I Introduction to Organizational Behavior	Meaning, Nature, scope and Model of OB	3	Human Behaviour at Work By Newstorm,J.W.	Google meet , Google forms , PPT
	Theories of Motivation – Need hierarchy theory ,ERG theory, Expectancy theory, etc	3		
	Applications of Motivational Theories	2		
	Motivational techniques in Banking & insurance industry	2		
	Scope of organizational behaviour – challenges and opportunities	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

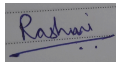
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Organizational Behavior DEPARTMENT: B.COM (BANKING AND INSURANCE)

CLASS:FYBBI SEMESTER:I **I** MONTH:Feb - March- april ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Group Dynamics	Basics of Individuals behaviour (IQ,EQ,SQ)	2	Human Behaviour at Work By Newstorm,J.W.	Google meet , Google forms , PPT
	Group & Group Dynamics –types of groups, stages of group development , properties of a group	3		
	Team Building & Development –types of teams , creating a team , useful skills for team building	3		
	Interpersonal Skills – assertiveness ,Leadership , Goal Setting	2		
	Cross cultural skills	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: BCOM (BANKING AND INSURANCE) **CLASS:** FYBBI (DIV- A, B)

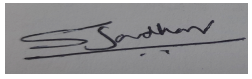
SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** January 2021 **ACADEMIC YEAR :** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	4 Principles of Effective Presentation Effective use of OHP Effective use of Transparencies How to make a Power-Point Presentation	15	PPT	Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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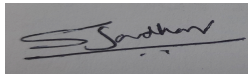
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: B.COM (BANKING AND INSURANCE) **CLASS:** FYBBI (DIV- A, B)

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** February 2021 **ACADEMIC YEAR :** 2020-2021

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Interviews:** Group Discussion, Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit **Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics, Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **Conference:** Meaning and Importance of Conference, Organizing a Conference **Modern Methods:** Video and Tele – Conferencing	12	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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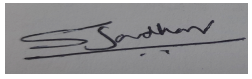
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: B.COM (BANKING AND INSURANCE) **CLASS:** FYBBI (DIV- A, B)

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** March 2021 **ACADEMIC YEAR :** 2020-2021

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	03	PPT	Online Lectures through Google Meet
3) Business Correspondence	Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters, Promotional Leaflets and Fliers, Consumer Grievance Letters, Letters under Right to Information (RTI) Act	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18



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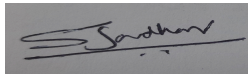
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**:B.COM (BANKING AND INSURANCE) **CLASS:** FYBBI (DIV- A, B)

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** April 2021 **ACADEMIC YEAR :** 2020-2021

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4) Language and Writing Skills	**Reports:** Parts, **Types** - Feasibility Reports, Investigative Reports **Summarisation:** Identification of main and supporting/sub points, Presenting these in a cohesive manner	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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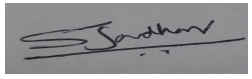

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: B.COM (BANKING AND INSURANCE) CLASS: F.Y.BBI (Division A B)

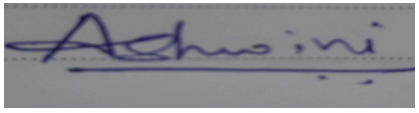
SEMESTER: II

MONTH: January, February ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand and remember the concept of Human rights.
2) Understand and remember Human Rights constituents with special reference to Fundamental Rights stated in the Constitution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Human Rights	Concept of Human Rights; origin and evolution of the concept	02	Book by Manan publications/Internet	Google Meet, PPT, Google Classroom
	The Universal Declaration of Human Rights	02	Book by Manan publications/Internet	Google Meet, PPT, Google Classroom
	Human Rights constituents with special reference to Fundamental Rights stated in the Constitution	03	Book by Manan publications/Internet	Google Meet, PPT, Google Classroom



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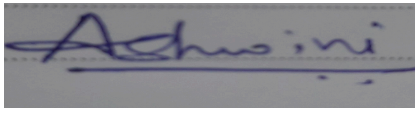
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: B.COM (BANKING AND INSURANCE) CLASS: F.Y.BBI (Division A B)

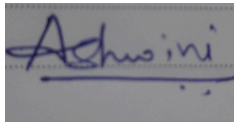
SEMESTER: II

MONTH: February ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Identify the importance of Environmental studies.
2) Understand Ecology and their interconnectedness.
3) Identify the uses of environmental products.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- 3 Ecology	Importance of Environment Studies in the current developmental context	02	Book by Manan publications/Internet	Google Meet, PPT, Google Classroom
	Understanding concepts of Environment	01	Book by Manan publications/Internet	Google Meet, PPT, Google Classroom
	Ecology and their interconnectedness; Environment as natural capital and connection to quality of human life	02	Book by Manan publications/Internet	Google Meet, PPT, Google Classroom



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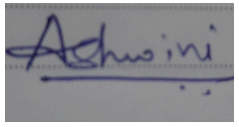
	Environmental Degradation; Forms & Causes of Environmental Degradation; Impact	03	Book by Manan publications/Internet	Google Meet, PPT, Google Classroom
	Sustainable Development; Principles & Guidelines	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

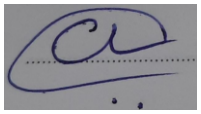
NAME OF THE STAFF: Claretta Elias Lopes DEPARTMENT: BCOM(BANKING AND INSURANCE

CLASS F.Y.BBI SEMESTER: I MONTH: SEPTEMBER-December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: The learners will able to understand the management process
The learners will be able to: to understand the functions that are required in banking and insurance organization

The learners will be able to: to understand the organizational structure that is been followed in banking and insurance sector

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Principles of management Unit II and III,	**Unit II Management process and practices** Features Nature of Management Process Management by Objectives **Management Process:-** Planning, Organising, Staffing, Directing, Leading, Coordinating, Communication, Motivating, Budgeting, Reporting, Controlling A) Functions Of Management Related to Banking B) Functions Of Banking Related to Insurance	10	Text Book Internet	Google Meet Power point presentation.
	Unit II Organisation structure	10	**Text book**	Google Meet Power point presentation.



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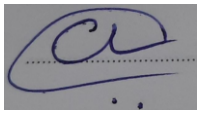
	A) Organisation Structure of Banking Companies :- General Organisation, Planning Organisation, Functional Organisation, Operational Organisation, Full-Fledged Organisation **B) Organisation Structure of Insurance Companies :-** Centralised Organisation, Decentralised Organisation, Regional Organisation ● Centralised v/s Decentralised Organisation			



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TEACHING PLAN (UNIT PLAN)

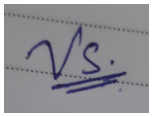
NAME OF THE STAFF: ____CHETAN PRAKASH VARMA_____ DEPARTMENT: BCOM(BANKING AND INSURANCE)

CLASS: ____FYBBI_____ SEMESTER: _____I_____ MONTH: ___SEPT- DECEMBER_____ ACADEMIC YEAR: ____2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to :

To make student understand the concepts of business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics-I	**Introduction** **Scope and Importance of Business Economics** - basic tools- Opportunity Cost principle- Incremental and Marginal Concepts. Basic economic relations - functional relations: equations- Total, Average and Marginal relations- use of Marginal analysis in decision making.	2	*Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases (S. Chand & Sons, N. Delhi, 2000)* • *Salvatore, D.: Managerial*	Google meet, kahoot, quizzes, YouTube Channel Links



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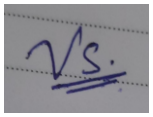
			Economics in a global economy (Thomson South Western Singapore, 2001)	
	The basics of market demand, market supply and equilibrium price- shifts in the demand and supply curves and equilibrium	2	• *Frank Robert.H ,Bernanke. Ben S., Principles of Economics (Tata McGraw Hill (ed.3)*	
	Market structure: Perfect competition and Monopoly and Pricing and Output Decisions under Imperfect Competition Short run and long run equilibrium of a competitive firm and of industry - monopoly - short run and long- run equilibrium of a firm under Monopoly	3	• *Gregory Mankiw., Principles of Economics, Thomson South western (2002 reprint)*	
	Monopolistic competition: Equilibrium of a firm under monopolistic competition, debate over role of advertising.	4	• *Samuelson &Nordhas.: Economics (Tata*	



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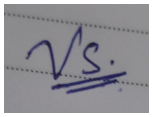
	(topics to be taught using case studies from real life examples) **Oligopolistic markets:** key attributes of oligopoly - Collusive and non-collusive oligopoly market - Price rigidity - Cartels and price leadership models *(with practical examples)*		*McGraw Hills, New Delhi, 2002*	
	Pricing Practices Cost oriented pricing methods: cost – plus (full cost) pricing, marginal cost pricing, Mark up pricing, discriminating pricing, multiple – product pricing - transfer pricing *(case studies on how pricing methods are used in business world)*	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____14_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: F.Y.BBI- A,B

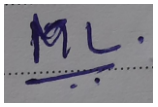
SEMESTER: 1ST

MONTH: October-December ACADEMIC YEAR: 2020-2021 SUBJECT : EMFS

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To introduce learners the importance of Bank and Insurance Companies in economic development of country.
2. To acquaint students with knowledge about risk management and legal aspects of functioning of baking and Insurance Companies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 2: PHASES OF DEVELOPMENT OF BANKING AND INSURANCE	• Significance and Role of Banking and Insurance in Mobilizing Savings, Investment, Accumulation and Economic Growth.	9	Banking in India S .G. Panandikar Indian Financial System – M.Y.Khan LIC Act 1956	1. Lecture and discussion. 2. Institutional Structures. 3. Flow charts. 4. Online Teaching and learning tools like Google meet, Google forms, PPTS.
	• Functions and Working of Banking and Insurance Companies.	6		



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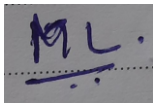
MODULE 3 : MANAGEMENT, REGULATION AND DEVELOPMENT	• Risk Management within the Organisations of Bank and Insurance Companies.	5	IRDA 1999 Management of Financial Institutions – R.N.Shrivastava	
	• Asset- Liability Management in Banking and Insurance.	5		
	• Organisational Structure and Management.	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30 ×2 div = 60



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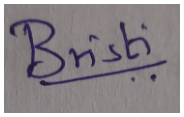
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BRISTI BISWAS DEPARTMENT:BCOM(BANKING AND INSURANCE) CLASS: FYBBI (A,B)

SEMESTER: I MONTH: AUGUST-DECEMBER ACADEMIC YEAR: 2020-2021

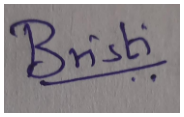
LEARNING OBJECTIVE/S: To understand the application of microeconomics at corporate level.
The learners will be able to: observe micro economics in the real world and to understand and make business decisions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module II **Demand Analysis**	Meaning of demand, law of demand, determinants of demand, demand function, price, income and substitution effects, nature of demand curve under different markets. Meaning of elasticity, price elasticity of demand , income elasticity of demand , cross elasticity of demand,promotional elasticity of demand, importance of elasticity of demand , relationship between price elasticity of demand and revenue concept.			ONLINE



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Significance of demand forecasting ,types of demand forecasting, steps in demand forecasting ,methods of demand forecasting.			
Module III **Supply and production decisions and cost of production**	Concept of production, production function, isoquants ,ridge lines least cost combination of inputs ,expansion path. Types of production function ,law of variable proportions, laws of returns to scale. Meaning of economies and diseconomies of scale, Internal economies and diseconomies of scale, external economies and diseconomies of scale. Cost concepts: money cost, accounting cost and economic cost, fixed , variable and total cost , total , average and marginal cost. Cost function, short run cost output ,relationship between AC, AFC ,AVC and MC, relationship between AC and MC ,short run average cost and output, long run cost output, long run average cost curve ,long run marginal cost curve ,learning curve, long run AC and output.			ONLINE



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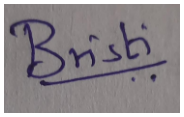
	Concept of break even point ,variables influencing the break even point ,business application of break even analysis ,limitations of break even analysis.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

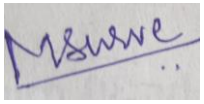
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Madhura Surve. DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: F.Y.BBI SEMESTER: I

MONTH: October – December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Ethics in Business, Management and Growth of business.

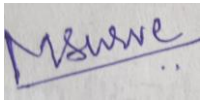
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1, Unit 3 & Unit 4	Ch. 1 – Introduction to Management – Meaning definition, nature, role, function of levels of mgmt., 6Ms of mgmt.,	15		Online lectures through Google meet
	Mgmt. as an Art, Science and Profession, mgmt. Of banking and Insurance. Ch. 2- Tradition and contemporary Management - distinguish between traditional vs contemporary, TQM, Contribution of contemporary writer- Henry fayol, F. W. Taylor, Peter Drucker, C.K prahlad, Vijay Govinrajan. CH 5 – Organisation Structure – I – Meaning, Definition, Steps, Types, Departmentation, bases of Departmentation, centralisation – Meaning advantages and disadvantages, Formal organisationa vs Informal organization	15	Principle of management text& cases	



SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Ch 7 Business leaders, J. R. D. Tata, Ratan Tata, Mr. DhirubaivAmbani, leaders in banking and Insurance Ch 8. Indian leaders K. V. Kamath, Deepak Parekh, Chanda Kochar., Hinduja, Godrej, Narayan Murthy, Governor of RBI Ch. 9 International leaders			
	President of world bank President of Asian Development Bank President of Federal Reserve President of International Monetary Fund.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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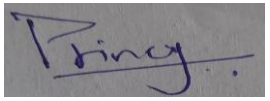
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: FYBBI(ENVIRONMENT AND MANAGEMENT OF FINACIAL SERVICES)

SEMESTER: I MONTH: SEPTEMBER TO DECEMBER ACADEMIC YEAR: 20-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand how Indian financial services and its management go hand in hand

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1: INRODUCTION TO FINANCIAL SYSTEM	Chapter 1: Financial system Institutional set up, marketing structure, over view of different kinds of financial services, meaning, definition and scope of banking and insurance Chapter 2: banking and insurance What is banking, functions, advantages, types of banks, insurance, its types	15	Indian Financial System Pearson Paperback	GOOGLE MEET, POWER POINT PRESENTATIONS



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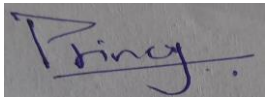
UNIT 4: REGULATORY AND DEVELOPMENT FRAME WORK OF BANKING AND INSURANCE	Chapter 8: banking companies and RBI acts and legal frame work governing the insurance, development activities of RBI and IRDA, mechanism of supervision and regulation, prudential norms	15	Indian Financial System Pearson Paperback	GOOGLE MEET, POWER POINT PRESENTATIONS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

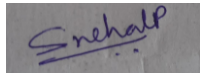
NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: BCOM(BANKING AND INSURANCE) **CLASS:** FYBBI (DIV- A, B)

SUBJECT – BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** OCTOBER **ACADEMIC YEAR:**2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Theory of Communication	**1) Concept of Communication**- Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World Impact of technological advancements on communication **2) Channels and Objectives of Communication:** **Channels :** Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine	15	PPT	Online Lectures on Google Meet



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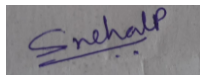
	Objectives of Communication: Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Moral of Employees **3) Methods and Modes of Communication:** **Methods:** Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette **Modes:** Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)



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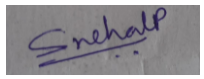
NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: BCOM(BANKING AND INSURANCE) **CLASS:** FYBBI (DIV- A, B)

SUBJECT – BUSSINESS COMMUNICATION **SEMESTER:** I **MONTH:** NOVEMBER **ACADEMIC YEAR:**2020-2021

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Obstacles to Communication in Business World	**1) Problems in Communication /Barriers to Communication:** Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers 2**) Listening:** Importance of Listening Skills, Cultivating good Listening Skills – **3) Introduction to Business Ethics:** Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility Teachers can adopt a case study approach and address issues such as the following so as to orient and sensitize the student community to actual business practices: Surrogate Advertising, Patents and Intellectual Property Rights,	15	PPT	Online Lectures on Google Meet Online Lectures on Google Meet



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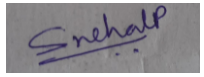
	Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)



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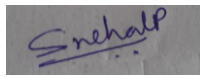
NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: BCOM(BANKING AND INSURANCE) **CLASS:** FYBBI (DIV- A, B)

SUBJECT – BUSSINESS COMMUNICATION **SEMESTER:** I **MONTH:** DECEMBER **ACADEMIC YEAR:**2020-2021

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3) Business Correspondence	**1)Theory of Business Letter Writing:** Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation [Letter of Appointment, Promotion and Termination, Letter of Recommendation (to be taught but not to be tested in the examination)]	15	PPT	Online Lectures on Google Meet
4) Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities Listening Comprehension Remedial Teaching Speaking Skills: Presenting a News Item, Dialogue and Speeches Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. Reading	15	PPT	Online Lectures on Google Meet



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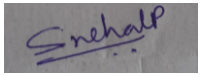
	Comprehension: Analysis of texts from the fields of Commerce and Management			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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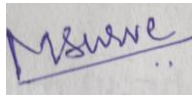
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Madhura Surve. DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: F.Y.BBI SEMESTER: I

MONTH: October – December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Ethics in Business, Management and Growth of business.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1, Unit 3 & Unit 4	Ch. 1 – Introduction to Management – Meaning definition, nature, role, function of levels of mgmt., 6Ms of mgmt.,	15		Online lectures through Google meet
	Mgmt. as an Art, Science and Profession, mgmt. Of banking and Insurance. Ch. 2- Tradition and contemporary Management - distinguish between traditional vs contemporary, TQM, Contribution of contemporary writer- Henry fayol, F. W. Taylor, Peter Drucker, C.K prahlad, Vijay Govinrajan. CH 5 – Organisation Structure – I – Meaning, Definition, Steps, Types, Departmentation, bases of Departmentation, centralisation – Meaning advantages and disadvantages, Formal organisationa vs Informal organization	15	Principle of management text& cases	



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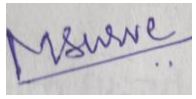
	Ch 7 Business leaders, J. R. D. Tata, Ratan Tata, Mr. DhirubaivAmbani, leaders in banking and Insurance Ch 8. Indian leaders K. V. Kamath, Deepak Parekh, Chanda Kochar., Hinduja, Godrej, Narayan Murthy, Governor of RBI Ch. 9 International leaders			
	President of world bank President of Asian Development Bank President of Federal Reserve President of International Monetary Fund.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

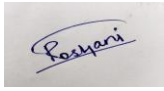
NAME OF THE STAFF: Dr.Roshani Nagar DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: FYBBI A and B SEMESTER : SEM I

MONTH: NOV AND DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : To focus on the importanat aspects of preamble and study about the indian constitutions.

To study about the political process in India perspective.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4. Indian Constitution	Philosophy of the Constitution as set out in the Preamble; The structure of the Constitution-the Preamble, Main Body and Schedules;	3	Rashmi , deepa and reshma Parab	PPT presentation
	Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution.4	3		PPT presentation
	The party system in Indian politics; Local self-government in urban and rural areas.	3		PPT presentation



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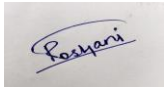
5. Significant Aspects of Political Process	73rd and 74th Amendments and their implications for inclusive politics; Role and significance of women in politics	3		PPT presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12CHING PLAN (UNIT PLAN)



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Roshani Nagar DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: SYBBI A and B SEMESTER : SEM III MONTH: OCT, NOV AND DEC ACADEMIC YEAR: 2020-2021OBJECTIVE/S:

The learners will be able to : To study about the banking functions and services in detail, regulatory norms.

To study the role of government in financial inclusion.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 1. Introduction to Banking. 2. Banking Industry. 3. Banking legisation .	Introduction, features , functions, principles and structure of the Banking system.	4	N. Lakshmi kavitha	PPT presentation
	Types of banks. And RRBs, History of Banks, Banking Crisis and failures. History of Banks, Banking Crisis and failures.	3		PPT presentation
UNIT 4 8. Financial Inclusion	Challenges and current developments in Banks.	2		PPT presentation
	Banking Regulation Act, 1949, PSS act , 2007, Negotiable Act, 1881, Basel Norms I,II,III	4		PPT presentation

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	Financial inclusion, PMMY, PMJDY, KCC and green field project	3		PPT presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Roshani Nagar DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: TYBBI A and B SEMESTER : SEM V MONTH: OCT, NOV AND DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : To study international Banking, crypto currency.

To study NRI and NRE account and LIBOR

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4. International Banking Operations.	Introduction, Definition, Features of International Banking, Reasons for Growth of International Banking, Recent Trends in International Banking,	3	Chandra Iy er	PPT presentation
	Emergence of Crypto currency - Overview, Brief Overview of Bitcoin and other Crypto, Currencies, Note on Mining and Crypto Currency Exchanges, Advantages, Disadvantages of Crypto Currency.	3		PPT presentation
	Functions of International Banking, Correspondent Banking, International	4		PPT presentation

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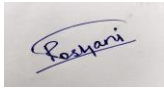
	Payment Systems, NRI accounts, Export Finance, Import Finance, International. Merchant Banking, Financing Project Exports, Derivative Offering, Remittances.			
	International Lending Operation, Loan Syndication, Parties Involved, Phases /Stages in Loan Syndication, Types of Syndication, Role of LIBOR	4		PPT presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14



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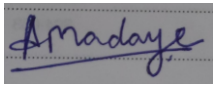
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Abhishek Madaye DEPARTMENT:BCOM(BANKING AND INSURANCE) CLASS: F.Y.B.B.I
SEMESTER: V MONTH: August to December ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concepts of Accounting and standards and treatment.

Module /Unit	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I	**Introduction to Accounting:** Meaning,scope,objectives,need,importance and limitations,basic accounting terminology,branches of accounting,accounting concepts,Double entry system,classification of Accounts,Rules of debit And credit,Writing Journal Entries and ledger,Sub division of Journal And Trial Balance	12	Text Books and Reference material from Internet	PPT, Excel



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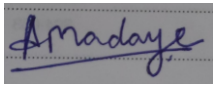
IV	**Final Accounts: Trading Account, Profit and Loss Account,Balance sheet,adjustment entries,manufacturing Accounts**	12	Text Books and Reference material	Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

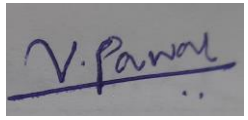
NAME OF THE STAFF: MR. VISHWANATH PAWAR **DEPARTMENT**: BCOM(BANKING AND INSURANCE) **CLASS:** FYBBI (DIV-A, B) **SUBJECT –** FINANCIAL ACCOUNTING **SEMESTER:** I **MONTH:** OCTOBER **ACADEMIC YEAR:**2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) The main Objectives of Financial Accounting is to accurately prepare an organisation's Financial accounts for Financial statement

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FINANCIAL ACCOUNTING	FINANCIAL STATEMENT	10	KHAN & JAIN	Online Lectures on Google Meet, KAHOOT, JAMBOARD, WHITE BOARD, EXCEL SHEET.
	STOCK VALUATION	05	KHAN & JAIN	
	CLASSIFICATION OF REVENUE RECEIPTS, CAPITAL RECEIPT AND EXPENDITURE	05	KHAN & JAIN	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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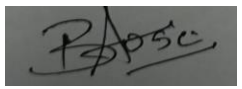
TEACHING PLAN

NAME OF THE STAFF: AKRUTI BOSE DEPARTMENT: B.Com (Accounting & Finance)
CLASS: FYBAF A,B,C. SEMESTER: I MONTH:NOVEMBER/JANUARY ACADEMIC YEAR: 2020-21
LEARNING OBJECTIVE/S: Mobile and PPT

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS 1 UNIT 3,4,5.	Chapter 9- Cost Concepts Chapter 10 – Cost-output relationships		Micro Economics by H.L. AHUJA.	Online Lectures on Mobile Phones.
	Chapter 11 – Break Even Analysis Chapter 12 – Market structure			Preparing PPT for different chapters and drawing diagrams on Paint.
	Chapter 13 – Perfect Competition Chapter 14 – Monopoly			
	Chapter 15 – Monopolistic Competition Chapter 16 - Oligopoly			
	Chapter 17 – Pricing Practices I Chapter 18 – Pricing Practices II			

The learners will be able to : Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.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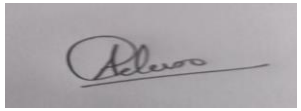
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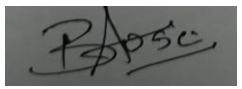
TEACHING PLAN

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3 Lectures.



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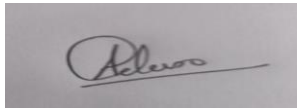

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TEACHING PLAN (UNIT PLAN)

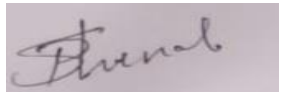
NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: B.Com(Accounting & finance) **CLASS:** FYBAF (DIV- A, B, C)

SUBJECT – BUSSINESS COMMUNICATION **SEMESTER:** I **MONTH:** OCTOBER-DECEMBER **ACADEMIC YEAR:**2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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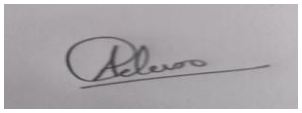

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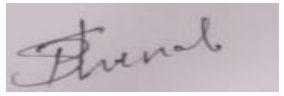
1) Theory of Communication	**1) Concept of Communication-** Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World Impact of technological advancements on communication **2) Channels and Objectives of Communication:**	15	PPT	Online Lectures on Google Meet



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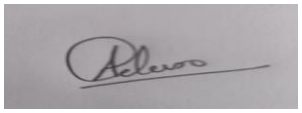

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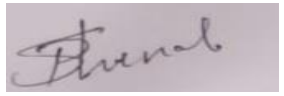
	Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine **Objectives of Communication:** Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Moral of Employees **3) Methods and Modes of Communication:** **Methods:** Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette **Modes:** Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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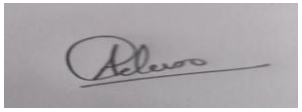

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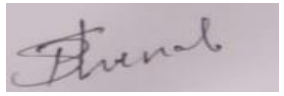
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
				Online Lectures on Google Meet



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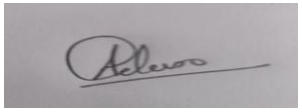

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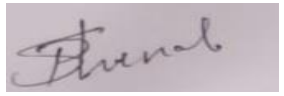
2) Obstacles to Communication in Business World	**1) Problems in Communication /Barriers to Communication:** Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers **2) Listening:** Importance of Listening Skills, Cultivating good Listening Skills – **3) Introduction to Business Ethics:** Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility Teachers can adopt a case study approach and address issues such as the following so as to orient and sensitize the student community to actual business practices: Surrogate Advertising, Patents and Intellectual Property Rights,	15	PPT	Online Lectures on Google Meet



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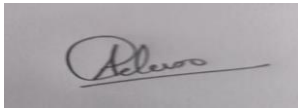

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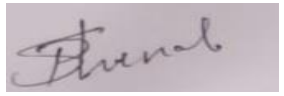
	Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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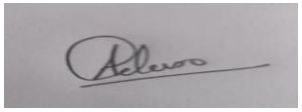

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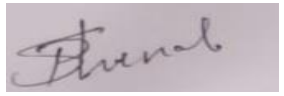
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBAF (DIV- A, B, C)

SUBJECT – BUSSINESS COMMUNICATION **SEMESTER:** I **MONTH:** DECEMBER **ACADEMIC YEAR:**2020-2021

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3) Business Correspondence	**1)Theory of Business Letter Writing:** Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation [Letter of Appointment, Promotion and Termination, Letter of Recommendation (to be taught but not to be tested in the examination)]	15	PPT	Online Lectures on Google Meet



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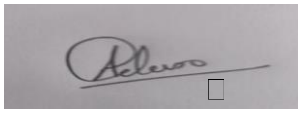

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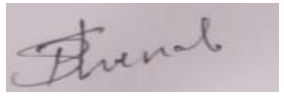
4) Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities Listening Comprehension Remedial Teaching Speaking Skills:	15	PPT	Online Lectures on Google Meet



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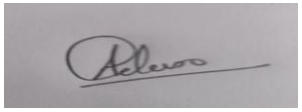

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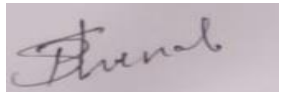
	Presenting a News Item, Dialogue and Speeches Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. Reading Comprehension: Analysis of texts from the fields of Commerce and Management			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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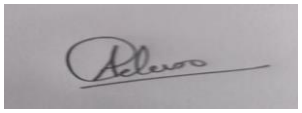

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH SUB: BUSINESS ENVIRONMENT DEPARTMENT: B.Com(Accounting & Finance)
CLASS: FYBAF (A,B & C) SEMESTER: I MONTH: JUNE TO DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the meaning of business and different types of business environments.
- Get knowledge of environmental analysis through PESTEL Analysis, SWOT Analysis
- Interpret foreign trade in India, Balance of Trade, FDI Investment Flows and its Implication for Indian Industries.
- Know in detail about WTO, MNC's and TNC's.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit2-Business Ethics	(a) Business Ethics: Nature and Scope of Ethics, Ethical Dilemmas, Corporate Culture and Ethical Climate (b) Development of Business Entrepreneurship: Entrepreneurship and Economic Development, Micro, Small and Medium Enterprises Development (MSMED) Act, 2006, Entrepreneurship as a Career Option	10	Global Economy and business environment by Francis Cherunilam	Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible

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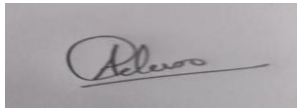

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Unit-4International Environment	(c) Consumerism and Consumer Protection: Consumerism in India, Consumer Protection Act 1986			
	STRATEGIES FOR GOING GLOBAL: MNCs and TNCs, WTO FOREIGN TRADE IN INDIA- Balance of Trade, FDI Investment Flows and its Implication for Indian Industries.	08		Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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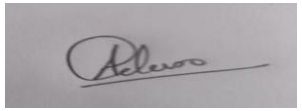

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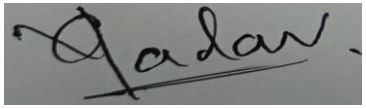
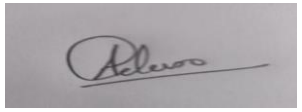
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI YADAV. DEPARTMENT:B.Com (Accounting & Finance) CLASS: FYBAF SEMESTER: I

MONTH: AUGUST-DECEMBER. ACADEMIC YEAR: 20-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand and learn Cost accounting. To learn material costing with different methods. Learn to analyze labour costing and calculate it's remuneration with different methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Material Costing	Concept of Material Cost, Material control Procedure, Documentation required.Various stock Ledger , Bin card , Different Stock levels, Economic Order Quantity. Format of FIFO and Weighted Average Method. Sums on EOQ ,. Stock levels, FIFO and Weighted method Q.1 to Q.6	15	Manan Prakashan	Google Meet, PPT, Excel to solve sums.
2. Labour Cost				
	Meaning & concept of labour cost. Composition of Labour cost. Labour cost records. Overtime/Idle time / Incentive Schemes	15	Manan Prakashan	Google Meet, PPT, Eclxcel to solve sums

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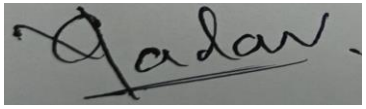
	Sums solved on various methods...			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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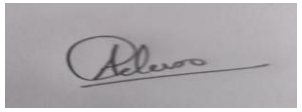

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TEACHING PLAN (UNIT PLAN)

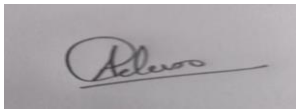
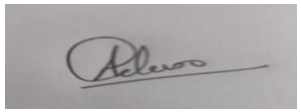
NAME OF THE STAFF: DR. AUDRIN ANTHONY COLACO DEPARTMENT:B.Com (Accounting & Finance) CLASS: FYBAF

SEMESTER: I MONTH: OCT - DEC ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

- To gain knowledge about cost accountancy.
- To understand material costing with different techniques.
- To Analyse labour costing and its methods for remuneration.
- To acquire knowledge about overheads costings and techniques of allocation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost Accounting – Introduction and Elements of Cost				

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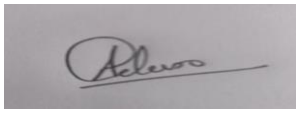
Introduction to Cost Accounts	Evolution Objectives and Scope of Cost Accounting Importance and Advantages of Cost Accounting Difference between Cost Accounting and Financial Accounting Limitations of Financial Accounting Definitions: Cost, Costing and Cost Accounting Classification of Cost on Different Bases Cost Allocation and Apportionment Coding System Essentials of Good Costing System 2	15	Cost Accounting Theory and Practice by B.K. Bhar, Tata Mc. Grow Hill and Co. Ltd., Mumbai	Online/ Google Meet / PPT
Overheads	Overheads: The Concept Classification of overheads on different bases Apportionment and Absorption of Overheads	15	Cost Accounting by S.P. Jain and K.L. Narang, Kalyani Publishers, Ludhiana	Online/ Google Meet / PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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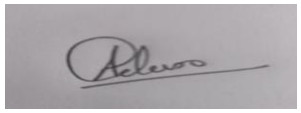

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHAKTI VILAS PURANDARE DEPARTMENT: B.Com (Accounting and Finance) CLASS:FYBAF SEMESTER: I

SUBJECT: FINANCIAL ACCOUNTING MONTH: August to December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Recognition of statement whether it is capital or revenue expenses and income, calculation of stock by FIFO and weighted average method and calculation of hire purchase price and cash price.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Capital Revenue Income and Expenses	Characteristics of Capital Expenditure, Characteristics of Revenue Expenditure, Characteristics of Capital Receipts, Characteristics of Revenue Receipts. Questions on the same.	15	Manan prakashan	Google Meet
Inventory valuation	Concept of inventory valuation, format of FIFO and Weighted average method of inventory valuation. Q1 to Q6 on inventory valuation with both methods.	15	Manan prakashan	Google Meet
Hire purchase system	Meaning of hire purchase, journal entry in the books of hire vendor and hire purchaser. Calculation of interest. Calculation of depreciation. Q1 to Q6 on hire purchase system in the books of both vendor and purchaser.	15	Manan Prakashan	Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__45__

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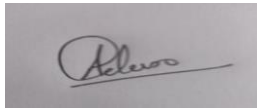

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita Almeida DEPARTMENT: B.Com(Accounting & finance) CLASS: FYBAF (A,B,C) SEMESTER: I Month: October-December ACADEMIC YEAR:2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of effective learning, leadership skills and self-improvement

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Accounting Standards	AS-1 Disclosure of Accounting Polices, AS-2 Valuation of Inventories (Stock), AS-9 Revenue Recognition	03	Book by Manan Prakashan	Online / PPT
3. Final Accounts of Manufacturing Concern	Final Accounts of Manufacturing concern:- Introduction, Practical Sums 01	03	Book by Manan Prakashan	Online / Excel

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4. Departmental Accounts	Departmental Accounts:- Introduction, Basis for Allocation, Format Practical Sums 01	03	Book by Manan Prakashan	Online / Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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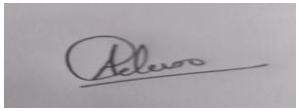

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TEACHING PLAN (UNIT PLAN)

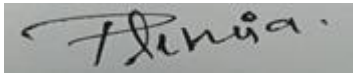
NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: B.Com(Accounting & finance) CLASS:FYBAF . SEMESTER: I

SUBJECT : FINANCIAL MANAGEMENT MONTH: JUNE 2020- DECEMBER 2020 ACADEMIC YEAR:2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

TO KNOW THE DIVERSITY OF DEMAND FOR FINANCIAL SERVICES AND TO IDENTIFY AND EXPLOIT NICHE IN THE MARKET WITH A NEW OR MODIFIED SERVICE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FINANCIAL MANAGEMENT	1. INTRODUCTION TO FINANCIAL MANAGEMENT	5	SHETH , VIPUL,MANAN PRAKASHAN	ONLINE
	2. CONCEPTS IN VALUATION -TIME VALUE OF MONEY, BOND RETURNS,	7		
	-ANNUITY, TECHNIQUE OF DISCOUNTING AND COMPOUNDING	6		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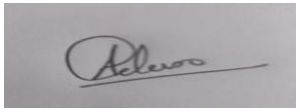
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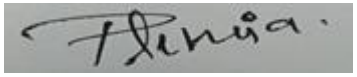
	3. LEVERAGES	10		
	4. TYPES OF FINANCING	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 36



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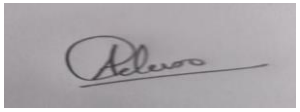

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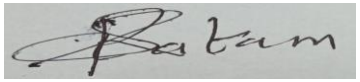
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan D. Satam

DEPARTMENT:B.Com(Accounting & finance) CLASS: FYBAF SEMESTER:I MONTH: Oct-Dec 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: Learning about Foundation of Indian society, culture, constitution.
The learners will be able to : Students will be able to learn about Indian society, history of Indian society, values, culture, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation course -I	**1.Overview of Indian Society** Understand the multi-cultural diversity of Indian society through its demographic composition: population distribution according to religion, caste, and gender; Appreciate the concept of linguistic diversity in relation to the Indian situation; Understand regional variations according to rural, urban and tribal characteristics; Understanding the concept of diversity as difference	5	Manan and Vipul publication	Google meet, PPT and Wikipedia



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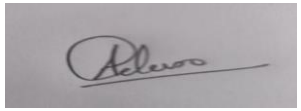

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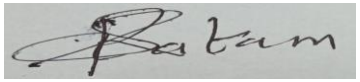
	The Indian Constitution Philosophy of the Constitution as set out in the Preamble; The structure of the Constitution-the Preamble, Main Body and Schedules; Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution	5	Manan and Vipul publication	Google meet, PPT and Wikipedia
	Significant Aspect of political processes The party system in Indian politics, Local self-government in urban and rural areas, The 73rd and 74th amendments and their implications for inclusive politics, Role and significance of women in politics.	2	Manan and Vipul publication	Google meet, PPT and Wikipedia

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:12



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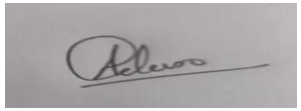

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA VAIBHAV TAMBE **DEPARTMENT:** B.Com(Accounting & finance) **CLASS: F.Y.BAF** **SUBJECT: FOUNDATION COURSE I** **SEMESTER: I** **MONTH: October to December**
ACADEMIC YEAR: 2020-2021

A teaching plan is a document that outlines the structure and details of a single session. A good teaching plan is a comprehensive write-up of the step-by-step teaching methods, the estimated duration of each segment of teaching, and the materials and resources needed for the session.

LEARNING OBJECTIVE/S:

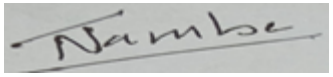
By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

(For a detailed description of each component see Appendix A).

APPENDIX {A}

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT1 Concept of Disparity 1	a] Concept of disparity as arising out of stratification and inequalities.	03	Book by Manan publications/Internet	Online
	b]gender disparities with special references to violence against women.	02	Book by Manan publications/Internet	Online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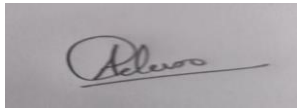
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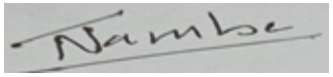
	c] Female Foeticide & Declining gender ratio	02	Book by Manan publications/Internet	Online
	d] inequalities faced by people with disabilities.	02	Book by Manan publications/Internet	Online
	e] Understand the issues of people with physical & mental disabilities. Special provisions and facilities for disabled personalities.	01	Book by Manan publications/Internet	Online

Total no of lecture 10

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Concept of Disparity 2	a] Inequalities manifested due to caste system	01	Book by Manan publications/Internet	Online
	b]different types of conflicts arising out of caste system, inter- group conflict, cultural differences, lingual differences.	01	Book by Manan publications/Internet	Online
	c] Inter-group conflict arising out of communalism and its effects on society.	01	Book by Manan publications/Internet	Online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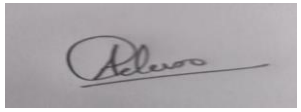
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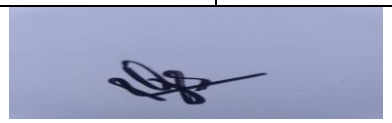
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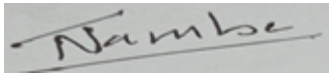
	d] Causes and Effects of conflicts arising out of regionalism.	01	Book by Vipul publication/internet	Online
	e] Causes and Effects of conflicts arising out of linguistic differences.	01	Book by Vipul, Manan publication/ internet	Online

Total no of lecture 05



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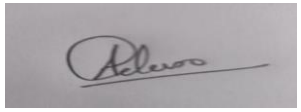

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA SINGH DEPARTMENT: B.Com(Accounting & finance) CLASS : FYBAF SEMESTER: I MONTH: OCTOBER -DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand the environment and it's impact on Business and its activities.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Business and Environment	Business objectives, dynamics of business objectives types of Business objectives, business environment components of business environment, Environmental analysis, Environmental scanning ,PESTLE Analysis SWOT Analysis	5	Business Environment by Justin Paul	PPT presentation online platform Google meet
Unit 3 Contemporary Issues				
	CSR, Corporate Governance, Social Responsibility of Business, Ecology, Carbon Credit , Social Audit , Benefits of Social Audit v/s Commercial Audit.	5		

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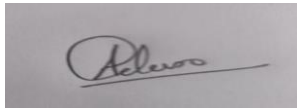

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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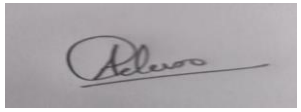

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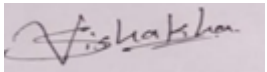
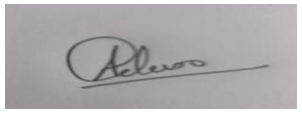
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHAKHA SANE DEPARTMENT: B.Com(Accounting & finance) CLASS: FYBAF(BUSINESS ECONOMICS

SEMESTER: I MONTH: OCTOBER -DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1,2,3	1.SCOPE AND IMPORTANCE OF BUSINESS ECONOMICSOpportunity cost principle-Incremental and Marginal Concepts.Basic economic relation,Basic of market demand,Market supply,Shifts in demand and supply.	10	ADVANCE ECONOMIC THEORY H L AHUJA	ICT
	2.DEMAND ANALYSIS- DEMAND FUNCTION AND DEMAND ESTIMATION AND FORECASTING:Nature of demand curve in different market, Meaning,Significance,types of elasticity of demand.Demand estimation and forecasting	10		
	3.SUPPLY AND PRODUCTION DECISIONS- PRODUCTION FUNCTION:shot run and long run analysis in law of variable proportion,Isoquant.Cost concepts.	15		

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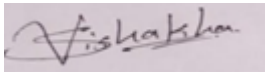
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

NAAC accredited "B" Grade, 2.69 CGPA

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____35____



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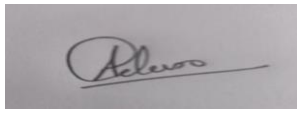

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita Almeida DEPARTMENT: B.Com (Accounting and Finance) CLASS:FYBAF SEMESTER: II MONTH: December to MarcH ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand the concept of effective learning, Formal and informal communication, leadership skills and self improvement

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Introduction to Auditing	Basics: financial statements, uses of financial information, definition of auditing, objectives of auditing- primary and secondary, expression of opinion, detection of frauds and errors , inherent limitations of audit.	03	Book By Manan Prakashan	Chalkboard

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	Errors and Frauds: concepts, reasons and circumstances, types of errors- commission, omission, principle and compensating, types of frogs, risk of fraud and error in audit, auditors duties and responsibilities in respect of fraud	04	Book by Manan Prakashan	Chalkboard
	Principles of audit: integrity, objectivity , independence, confidentiality, skills and competence, materiality and work performed by others, documentation, planning, audit evidence audit conclusions and reporting	02	Book by Manan Prakashan	Chalkboard
	Types of Audit: meaning advantages and disadvantages off balance sheet audit , continuous audit, concurrent audit , annual audit.	04	Book by Manan Prakashan	Chalkboard
	Miscellaneous: advantages of independent audit, Qualities of auditors, auditing Vs accounting, Auditing Vs Investigation, the concept of true and fair view Accounting concepts relevant to auditing: materiality,	04	Book by Manan Prakashan	Chalkboard

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2. Audit Planning, Procedures And Documentation	Going concern **Audit Planning**: Meaning, objectives, factors to be considered, sources of obtaining information, discussions with client, overall audit plan. **Audit Programme**: meaning, factors to be considered, advantages , disadvantages, methods of work, instruction before commencing work, overall audit approach.	03	Book by Manan Prakashan	Chalkboard
	Audit working papers: meaning, importance, factors determining form and contents, main functions , features, contents of permanent audit file , temporary audit file, ownership, custody , access of other parties to audit walking papers , Auditors Lien on working papers, auditor's Lien on clients book.	05	Book by Manan Prakashan	Chalkboard
	Audit Notebook: meaning, structure, content, general information current information importance	02	Book by Manan Prakashan	Chalkboard

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

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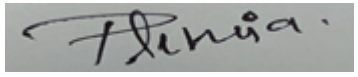
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Plemia Rebello DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF SEMESTER:II

MONTH: August-december ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: Learning about Auditing.
The learners will be able to : Students will be able to learn about Auditing guidelines

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing	**3. Auditing Techniques** • Test Check Test Checking Vs Routing Checking, Test Check Meaning, Features, Factors to be Considered, When Test Checks can be Used, Advantages, Disadvantages and Precautions. • Audit Sampling Audit Sampling, Meaning, Purpose, Factors in Determining Sample Size Sampling Risk, Tolerable Error and Expected Error, Methods of Selecting Sample Items Evaluation of Sample Results Auditors Liability in Conducting Audit based on Sample • Internal Control Meaning and Purpose,	15	Manan and Vipul publication	Chalk - Board



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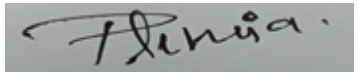
	Review of Internal Control, Advantages, Auditors Duties, Review of Internal Control, Inherent Limitations of Internal Control, Internal Control Samples for Sales and Debtors, Purchases and Creditors, Wages and Salaries • Internal Checks Vs Internal Control, Internal Checks Vs Test Checks			
	4. Internal Audit Meaning, Basic Principles of Establishing Internal Audit, Objectives, Evaluation of Internal Audit by Statutory Auditor, Usefulness of Internal Audit Internal Audit Vs External Audit, Internal Checks Vs Internal Audit	15	Manan and Vipul publication	Chalk - Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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TEACHING PLAN (UNIT PLAN)

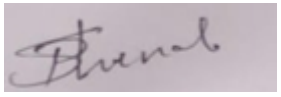
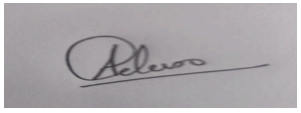
NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: B.Com (Accounting & Finance) **CLASS:** FYBAF (DIV- A, B, C)

SUBJECT – BUSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** January 2021 **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	Principles of Effective Presentation Effective use of OHP Effective use of Transparencies How to make a Power-Point Presentation	15	PPT	Online Lectures on Google Meet

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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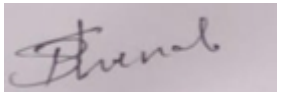
PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Interviews:** Group Discussion, Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit **Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics, Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **Conference:** Meaning and Importance of Conference, Organizing a Conference **Modern Methods:** Video and Tele – Conferencing	12	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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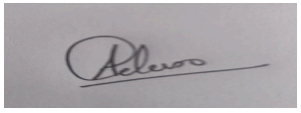

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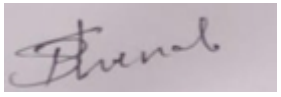
TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	03	PPT	Online Lectures through Google Meet
3) Business Correspondence	Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters, Promotional Leaflets and Fliers, Consumer Grievance Letters, Letters under Right to Information (RTI) Act	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18



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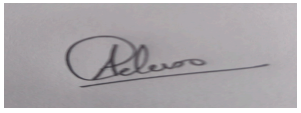

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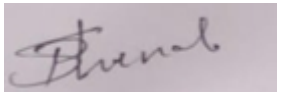
TEACHING PLAN (UNIT PLAN)

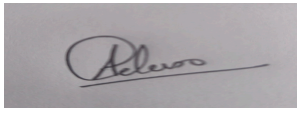
NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBAF (DIV- A, B, C)

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** April 2021 **ACADEMIC YEAR:**2020-2021

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4) Language and Writing Skills	**Reports:** Parts, **Types** - Feasibility Reports, Investigative Reports **Summarisation:** Identification of main and supporting/sub points, Presenting these in a cohesive manner	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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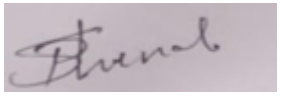

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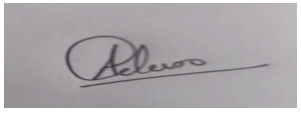

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TEACHING PLAN (UNIT PLAN)

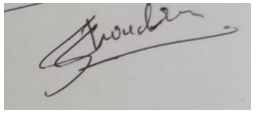
NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT: B.Com (Accounting and Finance)

CLASS: SYBAF (A,B,C) SEMESTER:II MONTH: June to Oct.

ACADEMICYEAR: 2020-21 LEARNING OBJECTIVE/S: Business Regulatory Framework (Law)

The learners will be able to: Introduction, Understand Meaning, Rules and Regulations, Section, Important Act Details with Related Case Study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METH



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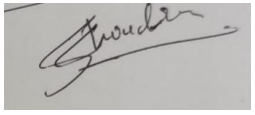
				OD/ ICT TOOLS USED
ModuleI:IndianContractAct,1872 Part 1	Chapter I Definitions, Kinds of agreements, Kinds of contracts, distinction between agreement and contract Chapter II Proposal, kinds of proposal -specific, offer to a class of persons, general offer, counter offer, invitation to offer, standing offer, express proposal, implied offer, requirements of a valid offer section 3 & 5 Acceptance, requirements of a valid acceptance,	03 04 02	Indian contract act 1872 Avtar singh Pollak and mulla D.D basu	Chalk And Duster



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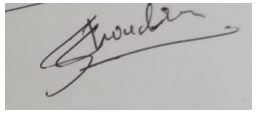
Module II Indian Contract Act, 1872 Part II Module III Special Contract	Rules of communication of proposal, acceptance and revocation of proposal/acceptance Chapter III Capacity to contract, minor, unsound mind, Disqualified person. Section 10-12 Chapter IV Consideration, agreements without consideration, unlawful consideration, inadequacy of consideration Agreements expressly declared to be void section 2- 25	03		
	Chapter I consentandfreeconsent,coercion,undueinfluence,fraud, misrepresentationMistake Chapter II	04 02 03		



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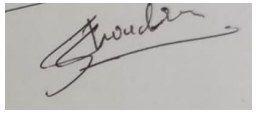
Consumer protection Act 1986	Void agreement section 24 to 30 Chapter III section 31 and 68 -72 Contingent contract, quasi-contracts, e-contract, Privity of contracts with exceptions Chapter IV Section 73 - 75 Discharge of contracts, Remedies available on breach of contracts Chapter I Law of Indemnity and guarantee related essential, discharge of surety, distriction between, section 124 - 125, 126 - 129, 132 - 147	03 03		
	Consumer protection Act 1986 related Definition, Salient Features, Deficiency in service & Goods.	02		



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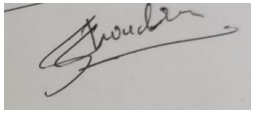
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27 × 4 = 216



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TEACHING PLAN (UNIT PLAN)

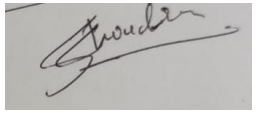
NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT: B.Com (Accounting and Finance)

CLASS: SYBAF (A,B,C) SEMESTER:II MONTH: June to Oct.

ACADEMICYEAR: 2020-21 LEARNING OBJECTIVE/S: Business Regulatory Framework (Law)

The learners will be able to: Introduction, Understand Meaning, Rules and Regulations, Section, Important Act Details with Related Case Study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METH



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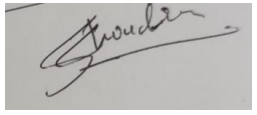
				OD/ ICT TOOLS USED
ModuleI:IndianContractAct,1872 Part 1	Chapter I Definitions, Kinds of agreements, Kinds of contracts, distinction between agreement and contract Chapter II Proposal, kinds of proposal -specific, offer to a class of persons, general offer, counter offer, invitation to offer, standing offer, express proposal, implied offer, requirements of a valid offer section 3 & 5 Acceptance, requirements of a valid acceptance,	03 04 02	Indian contract act 1872 Avtar singh Pollak and mulla D.D basu	Chalk And Duster



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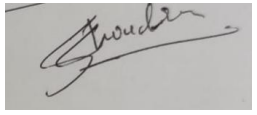
	Chapter I consentandfreeconsent,coercion,undueinfluence,fraud, misrepresentationMistake Chapter II	04 02 03		



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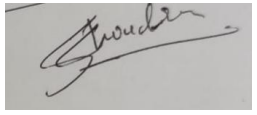
Consumer protection Act 1986	Void agreement section 24 to 30 Chapter III section 31 and 68 -72 Contingent contract, quasi-contracts, e-contract, Privity of contracts with exceptions Chapter IV Section 73 - 75 Discharge of contracts, Remedies available on breach of contracts Chapter I Law of Indemnity and guarantee related essential, discharge of surety, distriction between, section 124 - 125, 126 - 129, 132 - 147	03 03		
	Consumer protection Act 1986 related Definition, Salient Features, Deficiency in service & Goods.	02		



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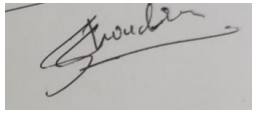
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27 × 4 = 216



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPASHREE PARAG VARTAK_____DEPARTMENT: B.Com (Accounting and Finance)CLASS: FYBAF _____

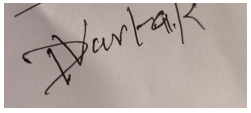
SEMESTER: II_____MONTH: DECEMBER TO MARCH _____ ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

- The learners will be able to : understand the concept of interest and annuity.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Mathematics, UNIT III INTEREST AND ANNUITY	Simple interest, compound interest	4	BUSINESS MATHEMATICS BY KAPOOR	BLACKBOARD CHALK AND DUSTER
	Equated monthly instalments, reducing balance and flat rate of interest	4		Explanation, Discussion, Problem solving assignments
	Annuity immediate- present value and future value	5		
	Stated annual rate and effective annual rate	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____



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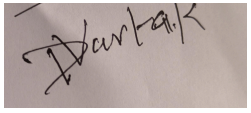

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHAKTI VILAS PURANDARE DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF SEMESTER: II

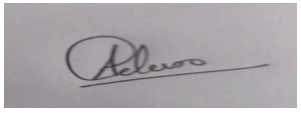
SUBJECT: FINANCIAL ACCOUNTING MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: prepare consignment A/c for consignor and consignee, branch account for dependent branch and make accounting from incomplete records.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accounting from incomplete records	• Steps for preparing final accounts from incomplete records. • Difference between single entry system and double entry system. • Format of various accounts to prepare for working notes. • Q1 to Q7 on incomplete records.	15		Google meet
Fire insurance claim	• Methods of calculation of stock destroy by fire. • Steps for calculating claim with GPR. • Q1 to Q8 on fire insurance claim.	15		Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHAKTI VILAS PURANDARE DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF SEMESTER: II

SUBJECT: FINANCIAL ACCOUNTING MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: prepare consignment A/c for consignor and consignee, branch account for dependent branch and make accounting from incomplete records.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Consignment account	• Meaning of consignment, concepts of consignor and consignee. • Del credere commission. • Journal and ledger of consignor and consignee.	15		Google meet
Branch account	• Concept of branch, format of dependent branch by debtors and stock & debtors method. • Q1 to Q8 on branch account by both method.	15		Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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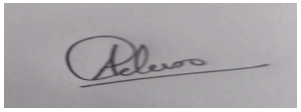

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TEACHING PLAN [UNIT PLAN]

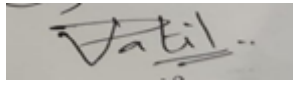
NAME OF STAFF : Juita A. Patil DEPARTMENT:B.Com (Accounting and Finance) CLASS:FYBAF SEMESTER: II

MONTH: JANUARY- MARCH ACADEMIC YEAR:2020 -2021

LEARNING OBJECTIVE/S:
The learners will be able to : To familiarize the fundamental aspects of various issues associated with various financial services.

To introduce basic concept, functions, process , techniques & role of financial services.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INNOVATIVE FINACIAL SERVICES UNIT -2 UNIT -4	Unit -2 1] Issue management & intermediaries : Introduction, merchant bankers, underwriters,banker to issue 2] Stock broking : Introduction , stock broker, sub brokers, foreign broker, derivative trading , stock trading 3] Securitization: Definition, Features, pass through certificates, securitisable assets, Benefits of Securitization	15	Vipul Prakashan Seth publication	Google meet, Microsoft word, PPT, wikipedia
	Units -4	15	Vipul Prakashan Seth publication	Google meet, Microsoft word, PPT, wikipedia



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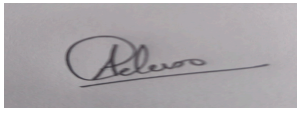

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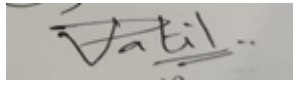
	1] Consumer finance – Introduction, sources, types of products, consumer finance, pricing, consumer credit scoring etc. 2] Plastic money : Growth , types of plastic money, benefits of credit cards, dangers of debit cards, prevention of fraud, consumer protection, smart card 3] Credit rating : Meaning , origin ,features, advantages of rating, Regulatory framework, credit rating process, limitation of rating			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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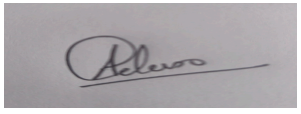

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TEACHING PLAN (UNIT PLAN)

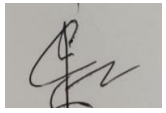
NAME OF THE STAFF: Nilambari Yogesh Shidhaye DEPARTMENT:B.Com (Accounting and Finance)

CLASS: FYBAF SEMESTER: ___II_____ MONTH: January – March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Know the concept of Human rights and its origin, value of human rights to all the humans and fundamental rights. They will get the knowledge of environment around us and how it overall effects the living beings on the Earth

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Human Rights	Concept of Human Rights, Origin And evolution of the concept	3	Vipul Prakashan,Manan Prakashan	Chalk- Board
	The Universal Declaration of Human Rights	1	Vipul Prakashan,Manan Prakashan	Chalk- Board
	Human Rights Constituents with special reference to Fundamental Rights stated in the Constitution	5	Vipul Prakashan,Manan Prakashan	Chalk- Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____09__



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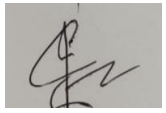
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3 Ecology	Importance of Environmental Studies in current development, Understanding concept of Environment, Ecology and their interconnectedness	3	Vipul Prakashan,Manan Prakashan	Chalk- Board
	Environment as natural capital and connection to quality of human life	2	Vipul Prakashan,Manan Prakashan	Chalk- Board
	Environment Degradation- Causes and impact on Human Life	2	Vipul Prakashan,Manan Prakashan	Chalk- Board
	Sustainable Development- Concept and components, Poverty and environment	3	Vipul Prakashan,Manan Prakashan	Chalk- Board
UNIT 5 – MANAGING STRESS AND CONCEPT IN CONTEMPORARY SOCIETY	TYPES OF CONFLICTS, USE OF COPING MECHANISMS FOR MANAGING INDIVIDUAL STRESS, MASLOW THEORY, DIFFERENT METHODS OF RESPONDING TO CONFLICTS, CONFLICT RESOLUTION AND EFFORTS TOWARDS BUILDING PEACE AND HARMONY IN SOCIETY	3	Vipul Prakashan,Manan Prakashan	Chalk- Board



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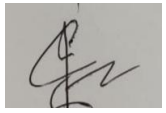
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____17_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita Almeida DEPARTMENT: B.Com (Accounting and Finance) CLASS:FYBAF SEMESTER: II MONTH: December to MarcH ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand the concept of effective learning, Formal and informal communication, leadership skills and self improvement

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Introduction to Auditing	Basics: financial statements, uses of financial information, definition of auditing, objectives of auditing- primary and secondary, expression of opinion, detection of frauds and errors , inherent limitations of audit.	03	Book By Manan Prakashan	Chalkboard

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	Errors and Frauds: concepts, reasons and circumstances, types of errors- commission, omission, principle and compensating, types of frogs, risk of fraud and error in audit, auditors duties and responsibilities in respect of fraud	04	Book by Manan Prakashan	Chalkboard
	Principles of audit: integrity, objectivity , independence, confidentiality, skills and competence, materiality and work performed by others, documentation, planning, audit evidence audit conclusions and reporting	02	Book by Manan Prakashan	Chalkboard
	Types of Audit: meaning advantages and disadvantages off balance sheet audit , continuous audit, concurrent audit , annual audit.	04	Book by Manan Prakashan	Chalkboard
	Miscellaneous: advantages of independent audit, Qualities of auditors, auditing Vs accounting, Auditing Vs Investigation, the concept of true and fair view Accounting concepts relevant to auditing: materiality,	04	Book by Manan Prakashan	Chalkboard

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2. Audit Planning, Procedures And Documentation	Going concern **Audit Planning**: Meaning, objectives, factors to be considered, sources of obtaining information, discussions with client, overall audit plan. **Audit Programme**: meaning, factors to be considered, advantages , disadvantages, methods of work, instruction before commencing work, overall audit approach.	03	Book by Manan Prakashan	Chalkboard
	Audit working papers: meaning, importance, factors determining form and contents, main functions , features, contents of permanent audit file , temporary audit file, ownership, custody , access of other parties to audit walking papers , Auditors Lien on working papers, auditor's Lien on clients book.	05	Book by Manan Prakashan	Chalkboard
	Audit Notebook: meaning, structure, content, general information current information importance	02	Book by Manan Prakashan	Chalkboard

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

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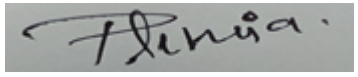
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Plemia Rebello DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF SEMESTER:II

MONTH: August-december ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: Learning about Auditing.
The learners will be able to : Students will be able to learn about Auditing guidelines

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing	**3. Auditing Techniques** • Test Check Test Checking Vs Routing Checking, Test Check Meaning, Features, Factors to be Considered, When Test Checks can be Used, Advantages, Disadvantages and Precautions. • Audit Sampling Audit Sampling, Meaning, Purpose, Factors in Determining Sample Size Sampling Risk, Tolerable Error and Expected Error, Methods of Selecting Sample Items Evaluation of Sample Results Auditors Liability in Conducting Audit based on Sample • Internal Control Meaning and Purpose,	15	Manan and Vipul publication	Chalk - Board



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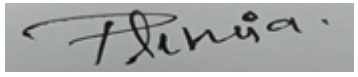
	Review of Internal Control, Advantages, Auditors Duties, Review of Internal Control, Inherent Limitations of Internal Control, Internal Control Samples for Sales and Debtors, Purchases and Creditors, Wages and Salaries • Internal Checks Vs Internal Control, Internal Checks Vs Test Checks			
	4. Internal Audit Meaning, Basic Principles of Establishing Internal Audit, Objectives, Evaluation of Internal Audit by Statutory Auditor, Usefulness of Internal Audit Internal Audit Vs External Audit, Internal Checks Vs Internal Audit	15	Manan and Vipul publication	Chalk - Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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TEACHING PLAN (UNIT PLAN)

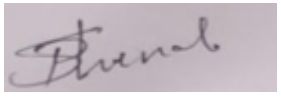
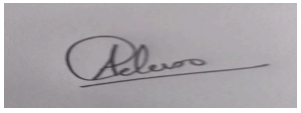
NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: B.Com (Accounting & Finance) **CLASS:** FYBAF (DIV- A, B, C)

SUBJECT – BUSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** January 2021 **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	Principles of Effective Presentation Effective use of OHP Effective use of Transparencies How to make a Power-Point Presentation	15	PPT	Online Lectures on Google Meet

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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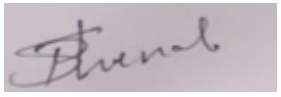
PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Interviews:** Group Discussion, Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit **Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics, Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **Conference:** Meaning and Importance of Conference, Organizing a Conference **Modern Methods:** Video and Tele – Conferencing	12	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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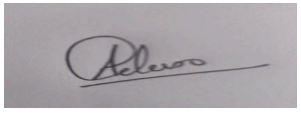

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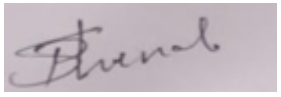
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

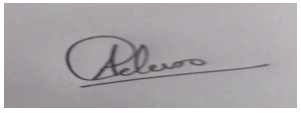
TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	03	PPT	Online Lectures through Google Meet
3) Business Correspondence	Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters, Promotional Leaflets and Fliers, Consumer Grievance Letters, Letters under Right to Information (RTI) Act	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18



SIGNATURE OF THE STAFF



SIGNATURE OF THE CO-ORDINATOR

SIGNATURE OF THE H.O.D.

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

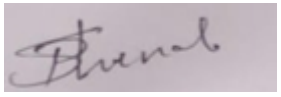
TEACHING PLAN (UNIT PLAN)

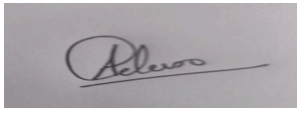
NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYBAF (DIV- A, B, C)

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** April 2021 **ACADEMIC YEAR:**2020-2021

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4) Language and Writing Skills	**Reports:** Parts, **Types** - Feasibility Reports, Investigative Reports **Summarisation:** Identification of main and supporting/sub points, Presenting these in a cohesive manner	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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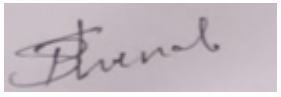

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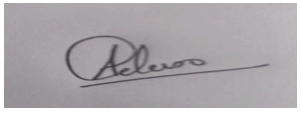

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TEACHING PLAN (UNIT PLAN)

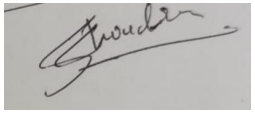
NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT: B.Com (Accounting and Finance)

CLASS: SYBAF (A,B,C) SEMESTER:II MONTH: June to Oct.

ACADEMICYEAR: 2020-21 LEARNING OBJECTIVE/S: Business Regulatory Framework (Law)

The learners will be able to: Introduction, Understand Meaning, Rules and Regulations, Section, Important Act Details with Related Case Study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METH



SIGNATURE OF THE STAFF

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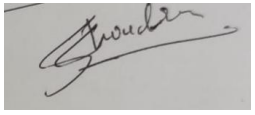
SIGNATURE OF THE H.O.D.

				OD/ ICT TOOLS USED
ModuleI:IndianContractAct,1872 Part 1	Chapter I Definitions, Kinds of agreements, Kinds of contracts, distinction between agreement and contract Chapter II Proposal, kinds of proposal -specific, offer to a class of persons, general offer, counter offer, invitation to offer, standing offer, express proposal, implied offer, requirements of a valid offer section 3 & 5 Acceptance, requirements of a valid acceptance,	03 04 02	Indian contract act 1872 Avtar singh Pollak and mulla D.D basu	Chalk And Duster



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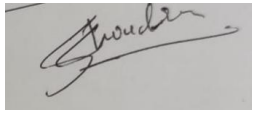
Module II Indian Contract Act, 1872 Part II Module III Special Contract	Rules of communication of proposal, acceptance and revocation of proposal/acceptance Chapter III Capacity to contract, minor, unsound mind, Disqualified person. Section 10-12 Chapter IV Consideration, agreements without consideration, unlawful consideration, inadequacy of consideration Agreements expressly declared to be void section 2- 25	03		
	Chapter I consentandfreeconsent,coercion,undueinfluence,fraud, misrepresentationMistake Chapter II	04 02 03		



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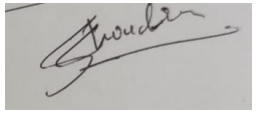
Consumer protection Act 1986	Void agreement section 24 to 30 Chapter III section 31 and 68 -72 Contingent contract, quasi-contracts, e-contract, Privity of contracts with exceptions Chapter IV Section 73 - 75 Discharge of contracts, Remedies available on breach of contracts Chapter I Law of Indemnity and guarantee related essential, discharge of surety, distriction between, section 124 - 125, 126 - 129, 132 - 147	03 03		
	Consumer protection Act 1986 related Definition, Salient Features, Deficiency in service & Goods.	02		



SIGNATURE OF THE STAFF

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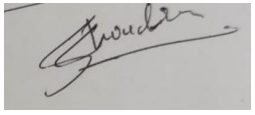
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27 × 4 = 216



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TEACHING PLAN (UNIT PLAN)

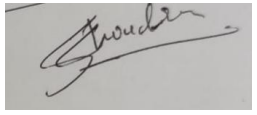
NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT: B.Com (Accounting and Finance)

CLASS: SYBAF (A,B,C) SEMESTER:II MONTH: June to Oct.

ACADEMICYEAR: 2020-21 LEARNING OBJECTIVE/S: Business Regulatory Framework (Law)

The learners will be able to: Introduction, Understand Meaning, Rules and Regulations, Section, Important Act Details with Related Case Study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METH



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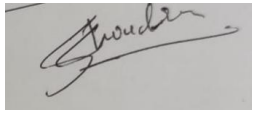
				OD/ ICT TOOLS USED
ModuleI:IndianContractAct,1872 Part 1	Chapter I Definitions, Kinds of agreements, Kinds of contracts, distinction between agreement and contract Chapter II Proposal, kinds of proposal -specific, offer to a class of persons, general offer, counter offer, invitation to offer, standing offer, express proposal, implied offer, requirements of a valid offer section 3 & 5 Acceptance, requirements of a valid acceptance,	03 04 02	Indian contract act 1872 Avtar singh Pollak and mulla D.D basu	Chalk And Duster



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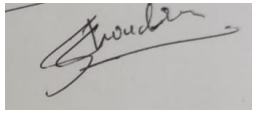
Module II Indian Contract Act, 1872 Part II Module III Special Contract	Rules of communication of proposal, acceptance and revocation of proposal/acceptance Chapter III Capacity to contract, minor, unsound mind, Disqualified person. Section 10-12 Chapter IV Consideration, agreements without consideration, unlawful consideration, inadequacy of consideration Agreements expressly declared to be void section 2- 25	03		
	Chapter I consentandfreeconsent,coercion,undueinfluence,fraud, misrepresentationMistake Chapter II	04 02 03		



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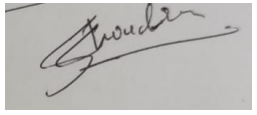
Consumer protection Act 1986	Void agreement section 24 to 30 Chapter III section 31 and 68 -72 Contingent contract, quasi-contracts, e-contract, Privity of contracts with exceptions Chapter IV Section 73 - 75 Discharge of contracts, Remedies available on breach of contracts Chapter I Law of Indemnity and guarantee related essential, discharge of surety, distriction between, section 124 - 125, 126 - 129, 132 - 147	03 03		
	Consumer protection Act 1986 related Definition, Salient Features, Deficiency in service & Goods.	02		



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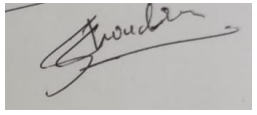
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27 × 4 = 216



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPASHREE PARAG VARTAK_____DEPARTMENT: B.Com (Accounting and Finance)CLASS: FYBAF _____

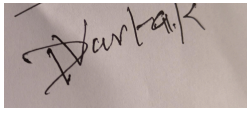
SEMESTER: II_____MONTH: DECEMBER TO MARCH _____ ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

- The learners will be able to : understand the concept of interest and annuity.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Mathematics, UNIT III INTEREST AND ANNUITY	Simple interest, compound interest	4	BUSINESS MATHEMATICS BY KAPOOR	BLACKBOARD CHALK AND DUSTER
	Equated monthly instalments, reducing balance and flat rate of interest	4		Explanation, Discussion, Problem solving assignments
	Annuity immediate- present value and future value	5		
	Stated annual rate and effective annual rate	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____



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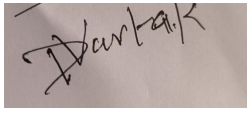

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHAKTI VILAS PURANDARE DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF SEMESTER: II

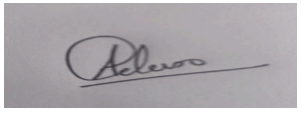
SUBJECT: FINANCIAL ACCOUNTING MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: prepare consignment A/c for consignor and consignee, branch account for dependent branch and make accounting from incomplete records.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accounting from incomplete records	• Steps for preparing final accounts from incomplete records. • Difference between single entry system and double entry system. • Format of various accounts to prepare for working notes. • Q1 to Q7 on incomplete records.	15		Google meet
Fire insurance claim	• Methods of calculation of stock destroy by fire. • Steps for calculating claim with GPR. • Q1 to Q8 on fire insurance claim.	15		Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

SIGNATURE OF THE STAFF



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHAKTI VILAS PURANDARE DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF SEMESTER: II

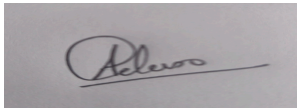
SUBJECT: FINANCIAL ACCOUNTING MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: prepare consignment A/c for consignor and consignee, branch account for dependent branch and make accounting from incomplete records.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Consignment account	• Meaning of consignment, concepts of consignor and consignee. • Del credere commission. • Journal and ledger of consignor and consignee.	15		Google meet
Branch account	• Concept of branch, format of dependent branch by debtors and stock & debtors method. • Q1 to Q8 on branch account by both method.	15		Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

SIGNATURE OF THE STAFF



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TEACHING PLAN [UNIT PLAN]

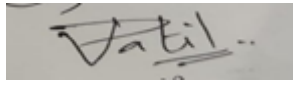
NAME OF STAFF : Juita A. Patil DEPARTMENT:B.Com (Accounting and Finance) CLASS:FYBAF SEMESTER: II

MONTH: JANUARY- MARCH ACADEMIC YEAR:2020 -2021

LEARNING OBJECTIVE/S:
The learners will be able to : To familiarize the fundamental aspects of various issues associated with various financial services.

To introduce basic concept, functions, process , techniques & role of financial services.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INNOVATIVE FINACIAL SERVICES UNIT -2 UNIT -4	Unit -2 1] Issue management & intermediaries : Introduction, merchant bankers, underwriters,banker to issue 2] Stock broking : Introduction , stock broker, sub brokers, foreign broker, derivative trading , stock trading 3] Securitization: Definition, Features, pass through certificates, securitisable assets, Benefits of Securitization	15	Vipul Prakashan Seth publication	Google meet, Microsoft word, PPT, wikipedia
	Units -4	15	Vipul Prakashan Seth publication	Google meet, Microsoft word, PPT, wikipedia



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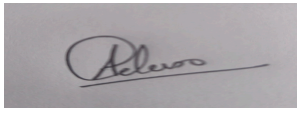

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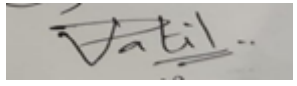
SIGNATURE OF THE H.O.D.

	1] Consumer finance – Introduction, sources, types of products, consumer finance, pricing, consumer credit scoring etc. 2] Plastic money : Growth , types of plastic money, benefits of credit cards, dangers of debit cards, prevention of fraud, consumer protection, smart card 3] Credit rating : Meaning , origin ,features, advantages of rating, Regulatory framework, credit rating process, limitation of rating			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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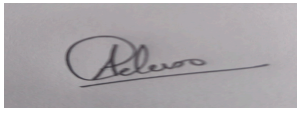

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TEACHING PLAN (UNIT PLAN)

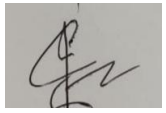
NAME OF THE STAFF: Nilambari Yogesh Shidhaye DEPARTMENT:B.Com (Accounting and Finance)

CLASS: FYBAF SEMESTER: ___II_____ MONTH: January – March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Know the concept of Human rights and its origin, value of human rights to all the humans and fundamental rights. They will get the knowledge of environment around us and how it overall effects the living beings on the Earth

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Human Rights	Concept of Human Rights, Origin And evolution of the concept	3	Vipul Prakashan,Manan Prakashan	Chalk- Board
	The Universal Declaration of Human Rights	1	Vipul Prakashan,Manan Prakashan	Chalk- Board
	Human Rights Constituents with special reference to Fundamental Rights stated in the Constitution	5	Vipul Prakashan,Manan Prakashan	Chalk- Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____09__



SIGNATURE OF THE STAFF

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Late Shri. Vishnu Waman Thakur Charitable Trust
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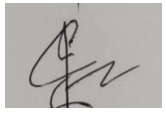
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3 Ecology	Importance of Environmental Studies in current development, Understanding concept of Environment, Ecology and their interconnectedness	3	Vipul Prakashan,Manan Prakashan	Chalk- Board
	Environment as natural capital and connection to quality of human life	2	Vipul Prakashan,Manan Prakashan	Chalk- Board
	Environment Degradation- Causes and impact on Human Life	2	Vipul Prakashan,Manan Prakashan	Chalk- Board
	Sustainable Development- Concept and components, Poverty and environment	3	Vipul Prakashan,Manan Prakashan	Chalk- Board
UNIT 5 – MANAGING STRESS AND CONCEPT IN CONTEMPORARY SOCIETY	TYPES OF CONFLICTS, USE OF COPING MECHANISMS FOR MANAGING INDIVIDUAL STRESS, MASLOW THEORY, DIFFERENT METHODS OF RESPONDING TO CONFLICTS, CONFLICT RESOLUTION AND EFFORTS TOWARDS BUILDING PEACE AND HARMONY IN SOCIETY	3	Vipul Prakashan,Manan Prakashan	Chalk- Board



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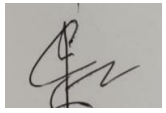
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____17_____



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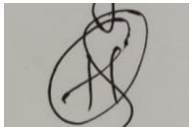
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Heena Qureshi DEPARTMENT: B.COM (Accounting & Finance)
CLASS: SYBAF SEMESTER: IV MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2020-21 SUBJECT – Direct Tax-II
LEARNING OBJECTIVE/S:
The learners will be able to understand the computation of tax liability of individual & HUF.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3.COMPUTATION OF TAX LIABILITY OF INDIVIDUAL &HUF. 4.COMPUTATION OF INCOME OF PARTNERSHIP FIRM	INTRODUCTION OF TAX LIABILITY, COMPUTATION OF TAX LIABILITY OF INDIVIDUAL, COMPUTATION OF TAX LIABILITY OF HUF	05	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION	Chalk & board
	COMPUTATION OF P.F IN RELATION TO SEC 40(b) AND APPLICABLE RATE OF TAX	10		
	COMPULSORY FILING OFRETURN OF INCOME,ETURN TO EMPLOYER, I.T RETURN THROUGH COMPUTER,PERSON EXEMPT FROM FILING RETURN, RETURN OF LOSS,BELATED RETURN, REVISED RETURN,PARTICLARS FURNISHED WITH RETURN PARTICULARES OF BUSINSS WITH RETURN	05		



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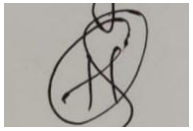
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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TEACHING PLAN (UNIT PLAN)

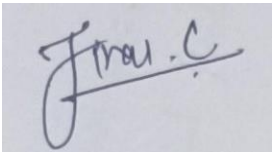
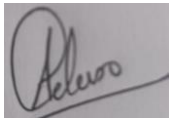
NAME OF THE STAFF:_____Prof. Jinal Chohan_____ DEPARTMENTB.COM (Accounting & Finance)

CLASS:____S.Y BAF_____ SEMESTER:____IV_____ MONTH: __Nov- Feb_____ACADEMIC YEAR:2020-21**TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05**

LEARNING OBJECTIVE/S:
The learners will be able to : The learners will be able to : Gain the knowledge about different accounting software's used in an organization for accounting process and different types of computerized audit techniques carried in an organization

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit2 Computerised Accounting System	Introduction and meaning, Uses and benefits, Role, Need and requirements, Basic requirements, Limitations, Understanding the development and design of computerised accounting system	5	Manan Prakashan, Vipul Prakashan	
	Accounting Software- Introduction and meaning, Uses, Various	5	Manan Prakashan, Vipul Prakashan	
	Accounting Software TALLY- Accounting reports	5	Manan Prakashan, Vipul Prakashan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__15_____

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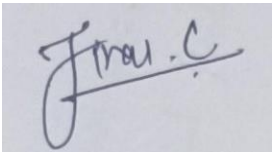
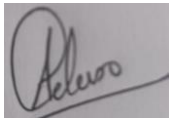
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4 IT And Auditing	Need and importance of IT in Auditing	4	Manan Prakashan, Vipul Prakashan	
	Auditing in IT environment	4	Manan Prakashan, Vipul Prakashan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____08___





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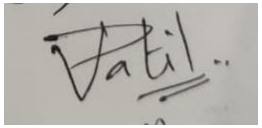
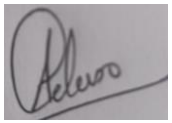
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VAIKHARI PATIL DEPARTMENT:B.COM (Accounting & Finance)
CLASS: SYBCOM (Acoounts and finance) SEMESTER: IV MONTH: Nov - March ACADEMIC YEAR: 2020-21
LEARNING OBJECTIVE/S:
The learners will be able to: Learn Different business process software.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, III	Introduction, Definition and Meaning of business process Flow of business process for accounting, purchase, sales and finance Classification of business processes, Introduction, Definition and Meaning of Business Process Management, Principles and practices of Business Process Management ,Business Process Management life cycle, Theories of Business Management Process	2*(3 Divisions)		
	Implementation of Business process Management – need, key factors and importance Automation of business Processes – benefits, risks, challenges ,Accounting systems automation, IT and Business Process Management, Information systems – Meaning, Use of IT in accounacy			

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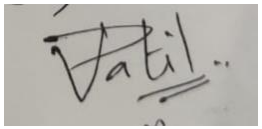
	Introduction, Concept of MIS, Need for MIS, Characteristic of MIS Outputs of MIS, Role of MIS, Guidelines for Developing MIS reports Functional Aspects of the MIS: Problems in MIS Knowledge required for studying MIS, MIS and Computer			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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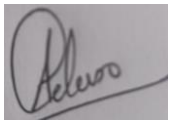

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TEACHINGPLAN(UNITPLAN)

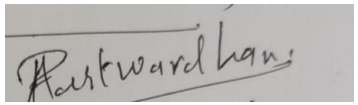
NAMEOFTHESTAFF: Ambari S. Patwardhan DEPARTMENT:B.Com (Accounting & Finance) CLASS:S.Y.BAF(A,B,C)

SEMESTER:IV MONTH: DecembertoApril ACADEMICYEAR:2020-21

LEARNINGOBJECTIVE/S:BusinessLaw(CompanyLawIII)

Thelearnerswillbeableto:ThePupilswilllearnhowacompanycanofferitsshares.WhatarethetypesofShares.RulesRegardingofferof SharestoPrivate&PublicCompany.Proceduretobefollowedforsuchissue.Differentwaystooffersuchshare,Restrictionsonofferandissue ofsuchshares

PAPER,UNIT, TITLE	SUBTOPICS	NOOF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLS USED
Companies Act,2013	ChapterIII-PublicOffer -Section23:PublicOffer -Secton25to28:Definition,Types&ContainsofProspectus - Section33:IssueofApplicationFormsforSecurities - Section35:Mis-statementinProspectus&Liability - Section39:AllotmentOfSecuritiesByCompany	07	1Introduction toCompany Law:Dr.Avtar Singh 2Guideto CompaniesAct :RamaiyaA	Board,ChalkandDuster



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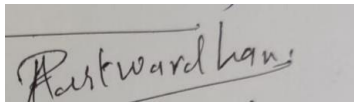
	ChapterIV-PrivatePlacement -Section42:MeaningofPrivatePlacement,Rules& Procedure.	04	1Introduction toCompany Law:Dr.Avtar Singh	Board,ChalkandDuster

			2Guideto CompaniesAct :RamaiyaA	



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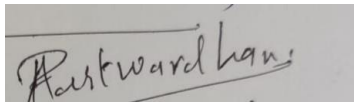
	ChapterV-ShareCapital&Debentures -Section43:KindsofShareCapital -Section44:Shares&DebenturesasamoveableProperty - Section45:DistinctNumberofShares -Section46:Certificateofshares -Section52to56: Applicationofpremiumsreceivedonissueof shares Prohibitiononissueofsharesatdiscount IssueofSweatEquityshares IssueandRedemptionofPreferenceshares TransferAndTransmissionOfSecurities -Section61to72: PowerofLimitedCompanytoAlterit'ssharecapitalFurtherissueofsharecapital NoticetoRegistrarregardingalteration Reductionofsharecapital Restrictionsonpurchasebycompany Powerohthecompanytopurchaseitsown Securities	09	1Introduction toCompany Law:Dr.Avtar Singh 2Guideto CompaniesAct :RamaiyaA	Board,ChalkandDuster



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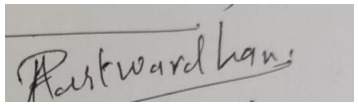
	CapitalRedemptionReserveAccount ProhibitiononBuy-Back Debentures&PowertoNominate			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:20.



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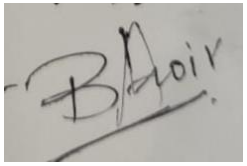
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASHWINI DATTATRAY BHOIR DEPARTMENT: B.COM (Accounting & Finance)
CLASS: SYBAF A,B,C. SEMESTER: IV MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2020-21 SUBJECT - COMPANY LAW
LEARNING OBJECTIVE/S:
The learners will be able to know types and features of company and know the principle of Corporate Personality.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Company Act, Definitions Incorporation of Company	Chapter - I -Section 2 Clause (2) Accounting Standard, Clause (7) Auditing Standard, Clause (13) Books of Accounts, Clause (31) Deposit, Clause (41) Financial Year, Clause (42) Foreign Company, Clause (47) Independent Director, Clause (48) Indian Depository Receipts, Clause (62) One Person Company,Clause (85) Small Company.	3	Company Act, 2013 by Ravi Puliani, Bharat Publication	Lecture Method, Case Study, Structure Black Board, Chalk & Duster
	Chapter II - Characteristics of a company or Advantages of incorporation, Disadvantages of incorporation, Lifting of corporate veil, formation of a company, Promoters, Role of Promoters,Rights, Duties and Liabilities of the Promoter,Registration, Consequence of Non-Registration	6	Company Law - Avtar Singh	



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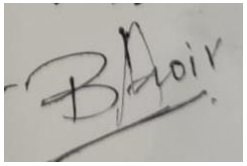
	Chapter- III - Definitions and Contents of Memorandum of Association, Alteration of Memorandum of Association, Object Clause and The Doctrine of Ultra Vires, Articles of Association, Alteration Article of Association, Distinction Between Memorandum of Association and Articles of Association. Effects of Memorandum and Articles. Doctrine of Constructive Notice, Doctrine of Indoor Management.	6		



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita Almeida DEPARTMENT: B.Com (Accounting & Finance) CLASS: SYBAF (A, B, C) SEMESTER: IV

MONTH: JANUARY- MARCH ACADEMIC YEAR:2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of effective learning, leadership skills and self- improvement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Introduction to Management Accounting 3.Financial Statement Analysis: Ratio Analysis	Meaning , features , scope, importance, functions, role of management, accounting, management accounting framework, tools, management accounting and financial accounting.	03	Book by Manan Prakashan	Google Meet, PPT

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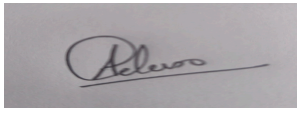
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4.Working Capital Management	**Balance sheet Ratios: -** current ratio, liquid ratio, stock working capital ratio, proprietary ratio, debt equity ratio, capital gearing ratio. Practical Sums:-03 **Revenue Ratio: -** Gros profit ratio, expenses ratio, operating ratio, net profit ratio, net operating profit ratio, Stock turnover ratio. Practical Sums:-03 **Combined Ratio: -** Return on capital employed, Return on proprietors fund, Return on equity capital, Dividend payout ratio, debt service ratio, debtors turnover ratio, Creditors turnover ratio. Practical Sums:-03	11	Book by Manan Prakashan	Google Meet, PPT
	A. Concept, Nature of working capital. B. Estimation of working capital requirement. C. Operating cycle practical problems -08	09	Book by Manan Prakashan	Google Meet, PPT

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 23

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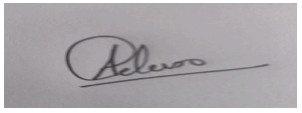

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TEACHING PLAN (UNIT PLAN)

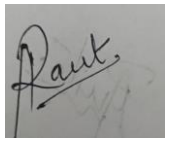
NAME OF THE STAFF: ANKITA ARUN RAUT DEPARTMENT: B.COM (Accounting & Finance)

CLASS: SYBAF SEMESTER: IV MONTH: DEC-MAR ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	ANALYSIS & INTERPRETATION OF A\C: vertical forms of balance sheet and profit and loss account, introduction, advantages of trend analysis, comparative statement and common size statement. Practical: Q1&2 on vertical st, Q3 & 4 on trend analysis, Q5 & 6 on common size, Q7 & 8 on comparative st.	10	Manan Prakashan	Chalk & Duster
2	CASH FLOW STATEMENT: introduction of cash flow, format of cash flow statement (indirect method) Practical Q1 – Q8 on cash flow st.	15	Manan Prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25



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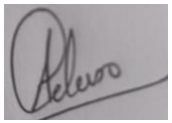

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TEACHING PLAN (UNIT PLAN)

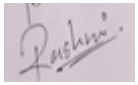
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: FC in Mgmt DEPARTMENT: B.Com (Accounting & Finance)

CLASS:SYBAF SEMESTER:IV MONTH: jan - feb ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Planning	Nature , Feature & importance of Planning	3	Management by Peter Drucker	Google meet , Google forms , PPT
	Limitations and process of Planning	3		
	Feature and Process of decision making	2		
	Techniques of decision making	2		
	Feature and process of decision Making	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12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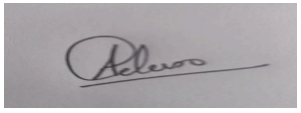
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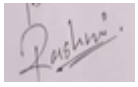
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: FC in Mgmt DEPARTMENT: Commerce

CLASS:SYBAF SEMESTER:IV MONTH: March-april ACADEMIC YEAR: 2020- 21

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV & V Staffing & Directive	Staffing – Meaning , importance ,sources of recruitment	3	Management by Peter Drucker	Google meet , Google forms , PPT
	Selection Procedure ,Employment test	3		
	Interview , types of interview,	2		
	Importance and principles of directive	2		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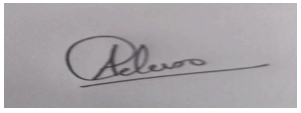
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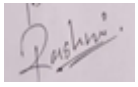
	Leadership traits and style	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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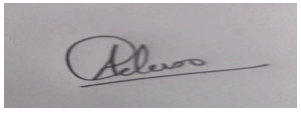

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TEACHING PLAN (UNIT PLAN)

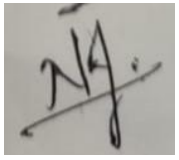
NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: B.COM (Accounting & Finance)

CLASS: **SYBAF A, B & C** SEMESTER: **Sem IV** MONTH: **Dec to March** ACADEMIC YEAR : **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand the methods of primary and secondary data collection
2) Sampling techniques
3) Process data into various stages
4) Basic introduction to Research Statistical Tools
5) Understand techniques of interpretation

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Research Methodology in Accounting and Finance	Unit 3 : Data Collection and Processing	13	Kothari	Lecture method, Group discussion
	1) Data Collection: Introduction and meaning, types of data			



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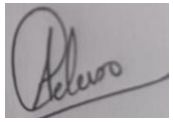

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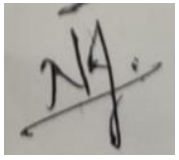
	2) Primary data: Observation, Experimentation, Interview, Schedules, Survey, 3) Questionnaires, Limitations of Primary data 4) Secondary data: Sources and Limitations 5) Factors affecting the choice of method of data collection. 6) Sampling: Significance, Methods, Factors determining sample size 7) Data Presentation: Significance in Research, Stages in Data Processing: Editing, 8) Coding, Classification, Tabulation, Graphic Presentation 9) Statistical Analysis: Tools and Techniques, Measures of Central Tendency, 10) Measures of Dispersion, Correlation Analysis and Regression Analysis. 11) Use of computer and internet in data collection and processing			



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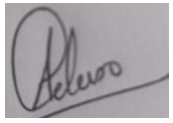

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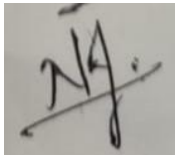

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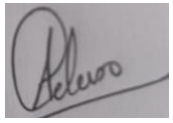

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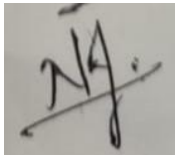
	Unit 4 : Interpretation and Report Writing	3		Lecture method, Group discussion
	1) Meaning and techniques of interpretation			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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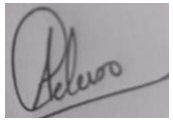

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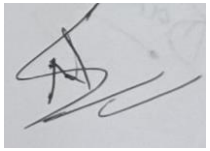
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF NAZIA SAJID SHAIKH. DEPARTMENT: B.COM (Accounting & Finance)

. CLASS: SYBAF SEMESTER: IV MONTH: NOV TO FEB. ACADEMIC YEAR: 2020-21SUB: RESEARCH METHODOLOGY.

LEARNING OBJECTIVE/S:
The learners will be able to : Understand Research, Types of research, Review of literature, Data collection and Processing , Sampling,Data presentation.



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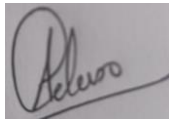

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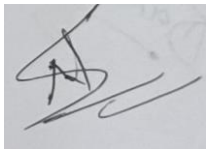
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1. INTRODUCTION TO RESEARCH.	***Research:** Meaning, Objectives, Importance of research in Accounting and finance . Types of research. ***Formulation of research problem:** Meaning and Selection of research problem. ***Review of literature.**	**15**	**Research Methodology: Methods & Techniques M.Y.khan**	**Chalk and Duster.**



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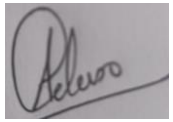

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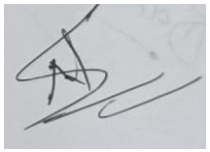
MODULE 3. DATA COLLECTION AND PROCESSING	***Data Collection:** Meaning, types of data, ***Primary Data:** Observation, Experimentation, interview, Schedule, Survey, Questionnaire, Advantages and Limitations of Primary Data. ***Secondary Data:** Sources and limitations, factors affecting the choice of Methods of data collection. ***Sampling:** Significance, methods, Factors determining Sample size ***Data Presentation**	**15**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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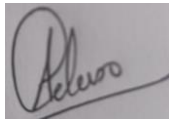

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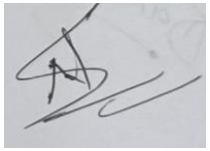

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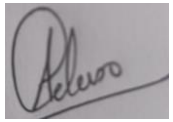

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TEACHING PLAN (UNIT PLAN)

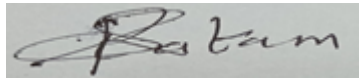
NAME OF THE STAFF: Rohan D. Satam

DEPARTMENT:B.Com (Accounting & Finance) CLASS: SYBAF SEMESTER:IV MONTH: December2020

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: Learning about cost accounting of the product and services.
The learners will be able to : Students will be able to learn practical imposition of cost and calculation in different processes and by different methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting IV	**1.Preparation of Final Accounts of Companies** Relevant provisions of Companies Act related to preparation of Final Account (excluding cash flow statement) Preparation of financial statements as per Companies Act. (excluding cash flow statement) AS 1 in relation to final accounts of companies (disclosure of accounting policies)	15	Manan and Seth publication	Power point presentation and MS-Excel



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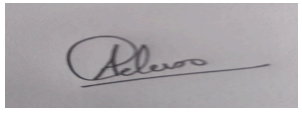

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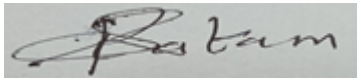
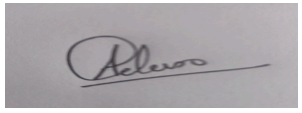
	2. **Ascertainment and Treatment of Profit Prior to Incorporation** Principles for ascertainment Preparation of separate, combined and columnar Profit and Loss Account including different basis of allocation of expenses/ incomes	15	Manan and Seth publication	Power point presentation and MS-Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sandra Almeida DEPARTMENT: B.Com (Accounting & Finance) CLASS:FYBAF . SEMESTER: I

SUBJECT : FINANCIAL MANAGEMENT MONTH: August 2020 - October 2020 ACADEMIC YEAR:2020 - 21

LEARNING OBJECTIVE/S:

The learners will be able to:

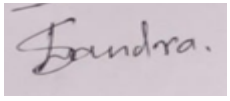
Understand the meaning of business and different types of business environments.

Get knowledge of environmental analysis through PESTEL Analysis, SWOT Analysis

Interpret foreign trade in India, Balance of Trade, FDI Investment Flows and its Implication for Indian Industries.

Know in detail about WTO, MNC's and TNC's.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ENVIRONMENT	Unit1-Business and its Environment BUSINESS- Business Objectives, Dynamics of Business and its Environment, Types of Business Environment	12	Global Economy and business environment by Francis Cherunilam	CHALK & DUSTER



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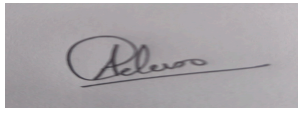

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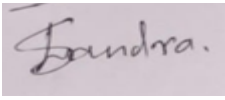
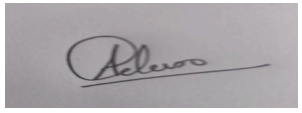
	ENVIRONMENTAL ANALYSIS: Importance, Factors, PESTEL Analysis, SWOT Analysis			
	Unit4- International Environment STRATEGIES FOR GOING GLOBAL: MNCs and TNCs, WTO FOREIGN TRADE IN INDIA- Balance of Trade, FDI Investment Flows and its Implication for Indian Industries	12	Global Economy and business environment by Francis Cherunilam	CHALK & DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 24





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TEACHING PLAN (UNIT PLAN)

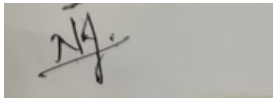
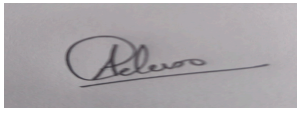
NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: **B.Com (Accounting & Finance)** CLASS: **_TYBAF_A, B & C_** SEMESTER: **Sem V_**

MONTH**: _Aug to Dec_** ACADEMIC YEAR : **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) Valuation of Goodwill and Shares using different methods
3) Statutory provisions and preparation of accounts for Limited Liability Partnership

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Finncial Accounting – VI	Unit 4 : Valuation of Goodwill and Shares	16		Online platform – Google Meet PPT, Videos
	1) Valuation of Goodwill 2) Valuation of Shares			
	Unit 5 : Accounting for Limited Liability Partnership	16		Online platform – Google Meet PPT, Videos
	1) Statutory provisions 2) Conversion of partnership business into Limited Liability Partnership 3) Final accounts			

SIGNATURE OF THE STAFF **SIGNATURE OF THE CO-ORDINATOR** **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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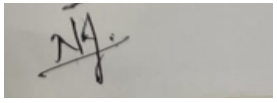
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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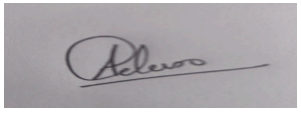

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TEACHING PLAN (UNIT PLAN)

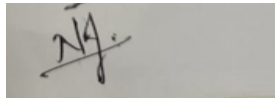
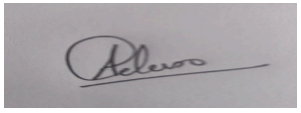
NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: **B.Com (Accounting & Finance)** CLASS: **_TYBAF_A, B & C** SEMESTER: **Sem V**

MONTH**: _Aug to Dec** ACADEMIC YEAR : **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) Solve practical problems on Operating Costing
3) Solve practical problems on Process Costing and Inter Process Profit

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost Accounting	Unit 3 : Operating Costing	16		Online platform – Google Meet PPT, Videos
	1) Meaning of operating costing; Determination of per unit cost ; Pricing of services 2) Collection of costing data			
	Unit 4 : Process Costing – Equivalent units of Production and Inter Process Profit	16		Online platform – Google Meet PPT, Videos
	1) Valuation of Work in progress and Equivalent production (FIFO Method and			

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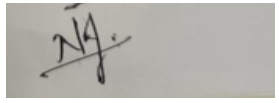
	2) Weighted Average Method)) 3) Inter Process transfer at Profit 4) Practical problems			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _32_____



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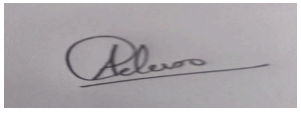

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TEACHING PLAN (UNIT PLAN)

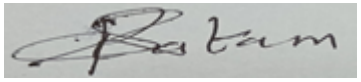
NAME OF THE STAFF: Rohan D. Satam

DEPARTMENT: B.Com (Accounting & Finance) CLASS: TYBAF SEMESTER:V MONTH: Aug - Dec

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: Learning about cost accounting of the product and services.
The learners will be able to : Students will be able to learn practical imposition of cost and calculation in different processes and by different methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost Accounting III	**1.Uniform Costing and Inter –Firm Comparison** Uniform costing Meaning of and need for Uniform costing Essentials for success of Uniform costing Advantages and limitations of Uniform costing Areas of Uniformity, Uniform cost manual Inter Firm Comparison Pre-requisites of inter firm comparison; Advantages and limitations	02	Manan and Seth publication	Google meet, PPT and MS Excel



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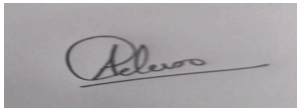

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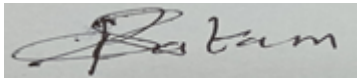
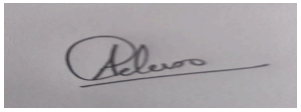
	2. **Integrated System and Non- integrated System of Account:** **A) Integrated System** : Meaning; Features, Advantages and Disadvantages Journal Entries and Preparing Integrated Ledgers. Practical problems B) **Non-Integrated system**: Meaning; Features, Advantages and disadvantages Journal entries and Preparing Cost Control Accounts Practical problems	12	Manan and Seth publication	Google meet, PPT and MS Excel
	3. Activity Based Costing System: Activity Based Costing – Introduction, Advantages, Limitations, Identification of cost drivers	02	Manan and Seth publication	Google meet, PPT and MS Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16





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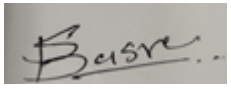
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare. DEPARTMENT: B.Com (Accounting & Finance) CLASS: TyBaf SEMESTER: V MONTH: August ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Buyback of shares- legal provision and laws regarding buyback, reasons for buyback and journal entries and its effect on capital structure of the company. Internal reconstruction- legal provisions, reasons for internal reconstruction, journal entries and its effect on capital structure and financial position of the company.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting V, Buy back of shares	Introduction and meaning of buyback, legal provisions for buyback of shares, sources of buyback	1		Lecture method, black board and chalk
	Conditions for buyback of shares, methods for buyback, accounting and journal entries for buyback of shares	1		
	Practical problems based on journal entries	1		
	Practical problems based on journal entries and balance sheet	4		



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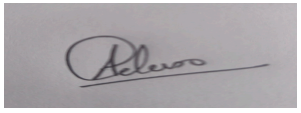

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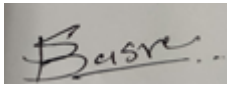
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

MONTH: September

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting V, internal reconstruction	Introduction and meaning of internal reconstruction, necessity, and accounting treatment	1		Online lectures, PPT, Google Sheets
	Journal entries for internal reconstruction, Proforma of capital reduction account	1		
	methods of alteration of share capital, variation of shareholders right consolidation subdivision comma surrender and re issue and and solution and legal provisions. Basic problems.	1		



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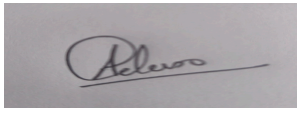

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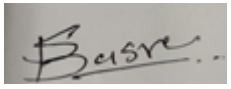
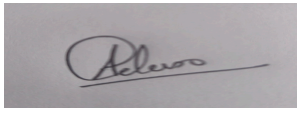
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

MONTH: October

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting V, internal reconstruction	Practical problems based on journal entries	2		Online lectures, PPT, Google Sheets
	Practical problems based on journal entries with balance sheet.	4		





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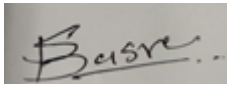
MONTH: Nov-Dec



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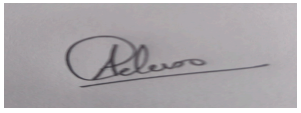

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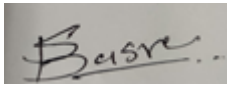
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting V, Liquidation of Companies	Meaning of Liquidation or Winding-up	1		Online lectures, PPT, Google Sheets
	Preferential Payments, Over-riding preferential payments,	1		
	Preparation of statement of affairs, deficit/ surplus account	1		
	Liquidator's Final Statement of Account	1		
	Practical Problems	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06



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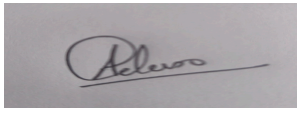

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL ACCOUNTING VI DEPARTMENT: B.Com (Accounting & Finance)

CLASS: TYBAF SEMESTER: V MONTH: SEPTEMBER, OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 FINAL ACCOUNTS OF BANKING COMPANY	Legal provision in Banking Regulation Act, 1949 relating to Accounts, Statutory reserves including Cash Reserve and Statutory Liquidity Ratio.	2	FINANCIAL ACCOUNTING BY R L GUPTA	• Google Meet • PowerPoint • Excel
	Bill purchase and discounted, rebate of bill discounted, Non–performing assets and Income from non–performing assets.	2		
	Classification of Advances, standard, sub–standard, doubtful and provisioning requirement.	1		
	Final Accounts in prescribed form	1		

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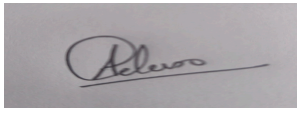

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	Capital Adequacy	1		
	Practical Illustrations	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 10

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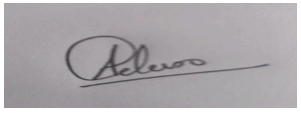

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL ACCOUNTING VI DEPARTMENT: COMMERCE

CLASS: TYBAF SEMESTER: V MONTH: NOVEMBER, DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 FINAL ACCOUNTS OF INSURANCE COMPANY	General Insurance – Various types of insurance, like fire, marine, Miscellaneous, Special terms like premium, claims, commission, Management expenses, Reserve for unexpired risk, reinsurance	4	FINANCIAL ACCOUNTING BY R L GUPTA	• Google Meet • PowerPoint • Excel
	Final Accounts in a prescribed form. Revenue Statement – Form B – Revenue Account, Profit / Loss Account – Form B – Profit & Loss and Balance Sheet Form B – BS	3		
	Practical Illustrations	5		

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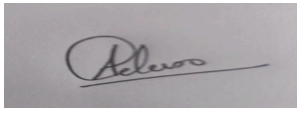

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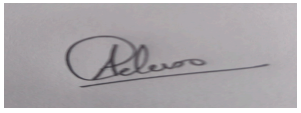
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 12

SIGNATURE OF THE STAFF



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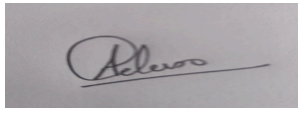
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita Almeida DEPARTMENT: B.Com (Accounting & Finance) CLASS: TY BAF (A/B/C) SEMESTER: V MONTH: August-December

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concept of effective learning; formal and informal communication; leadership skills and self- improvement

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Underwriting of Shares and Debentures	Introduction, Underwriting commission as per provision of companies act 2013, Types of commission	01	Book by Sheth publication	Online/PPT
	Negative adjustment, format- calculation of Net Liability, Practical Problem -02	02	Book by Manan Prakashan	Online/ Excel
	Practical Problems- 03 [Benefit of firm UW given]	03	Book by Manan Prakashan	Online/ Excel
3. As-14- Amalgamation,	Practical Problems -02 [Benefit of firm UW Not given]	02	Book by Manan Prakashan	Online/ Excel



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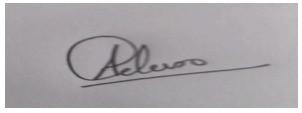
Absorption And External Reconstruction	Introduction, types of amalgamation, accounting standard and accounting treatment (in the books of vendor company and in the books of purchasing company)	02	Book by Manan Prakashan	Online/PPT
	Journal entries in the books of vendor company using realisation method, and in Purchasing company using purchase method. Computation of Purchase consideration	03	Book by Manan Prakashan	Online/PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13



SIGNATURE OF THE STAFF **SIGNATURE OF THE CO-ORDINATOR** **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

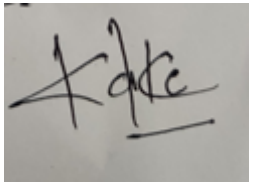
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Karishma Vijay Kale DEPARTMENT:B.Com (Accounting & Finance) CLASS: TYBAF

SEMESTER: V MONTH: December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Understand Financial Management concepts and understand the practical scenario of future decision making regarding finance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Chapter 2- Capital Budgeting	Payback period	1	Sheth Publication	Online teaching- Excel and Table top method
	Payback profitability	1	Sheth Publication	Online teaching- Excel and Table top method
	Average rate of return	1	Sheth Publication	Online teaching- Excel and Table top method
	Discounted pay back period	1	Sheth Publication	Online teaching- Excel and Table top method
	Net present value	1	Sheth Publication	Online teaching- Excel and Table top method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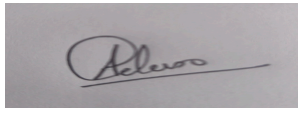
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	Profitability Index	1	Sheth Publication	Online teaching- Excel and Table top method
	IRR		Sheth Publication	Online teaching- Excel and Table top method
	Decision tree analysis	1	Sheth Publication	Table top method & PPT
Chapter 3- Capital Rationing	Divisible project & Indivisible project	1	Sheth Publication	Table top method & PPT
Chapter 4- Capital Structure Decision	Weighted Average Cost of Capital	1	Sheth Publication	Table top method & PPT
	Net Operating Income	1	Sheth Publication	Table top method & PPT
	Net Operating Income approach		Sheth Publication	Table top method & PPT
	MM approach		Sheth Publication	Table top method & PPT
Chapter 5 - Dividend Decision	Walter Model	1	Sheth Publication	Table top method & PPT
	Gordon model		Sheth Publication	Table top method & PPT
	MM model		Sheth Publication	Table top method & PPT

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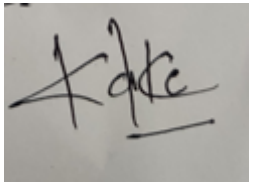
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _11_____

Karishma Vijay Kale



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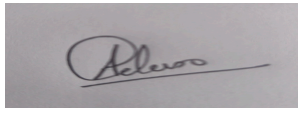

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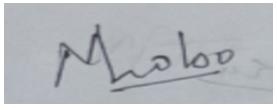
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. DR (CA) MABEL LOBO DEPARTMENT: B.Com (Accounting & Finance) CLASS:TYBAF SEMESTER: V MONTH: August to December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit I Introduction and Basic Terms	Registration Under GST	18	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel
	Input Tax Credit	18	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6 per Division



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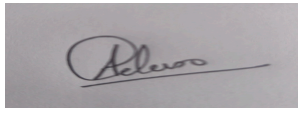

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. DR (CA) MABEL LOBO DEPARTMENT: Commerce CLASS:TYAF SEMESTER: V MONTH: August to December 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
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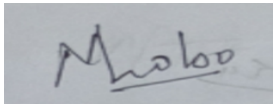
PAPER, UNIT,	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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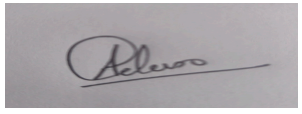

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TITLE		ALLOTED		
Direct Tax Unit V Computation of Total Income for Individual	Calculation of Tax – practical problems	6	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3 per Division

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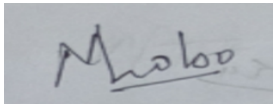

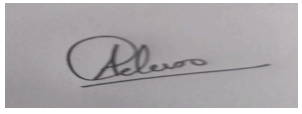

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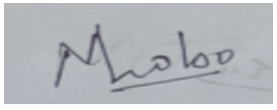

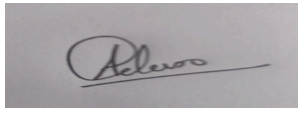

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. DR (CA) MABEL LOBO DEPARTMENT: B.Com (Accounting & Finance) CLASS:TYBAF SEMESTER: V MONTH: August to December ACADEMIC YEAR: 2020-21

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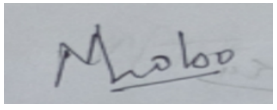
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6 per Division



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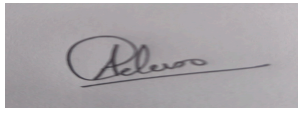

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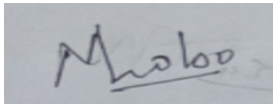
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. DR (CA) MABEL LOBO DEPARTMENT: Commerce CLASS:TYAF SEMESTER: V MONTH: August to December 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT,	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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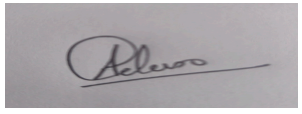

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TITLE		ALLOTED		
Direct Tax Unit V Computation of Total Income for Individual	Calculation of Tax – practical problems	6	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3 per Division

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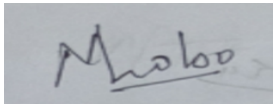

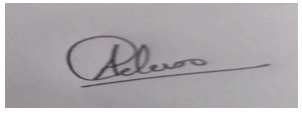

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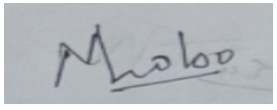

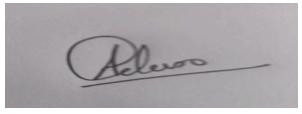

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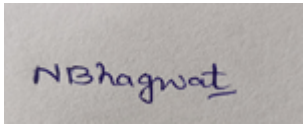
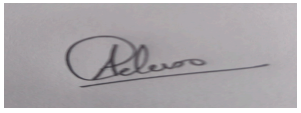
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. NILIMA BHAGWAT DEPARTMENT: B.Com (Accounting & Finance) CLASS: T.Y.B.A.F

SEMESTER: VI MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:
The Learner/Students will be able to under the concept of Indian economy in terms of classification of various sector such as primary, secondary and tertiary sector and their contribution towards the development of Indian Economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indian Economy-III Unit IV	Unit I: Money and Banking ● Money market and its features ● Monetary Policy of RBI ● Progress of Commercial Banking in India ● Development of Capital Markets ● SEBI and Its Functions	15	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	POWERPOINT PRESENTATION, GOOGLE MEET

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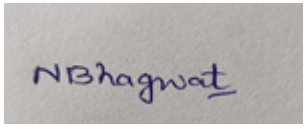
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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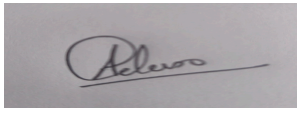

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: B.Com (Accounting & Finance) SUBJECT : FINANCIAL MANAGEMENT

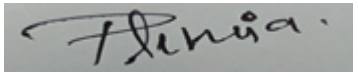
CLASS:TY BAF SEMESTER: VI MONTH: DEC 2020 – APRIL 2021

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

TO ENSURE REGULAR AND ADEQUATE SUPPLY OF FUNDS TO THE CONCERN AND GIVE ADEQUATE RETURNS TO THE SHAREHOLDERS. .AND TO ENSURE OPTIMUM UTILIZATION OF FUNDS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FINANCIAL MANAGEMENT	1. BUSINESS VALUATION	10	MANAN ,SHETH PRAKASHAN	ONLINE METHOD,GOOGLE MEET, GOOGLE CLASSROOM, POWERPOINT PRESENTATION, EXCEL.
	2. MERGERS AND ACQUISITIONS	10		
	3. ASSETS AND LIABILITIES RESTRUCTURING	06		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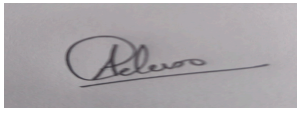
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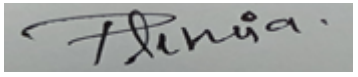
	4. LEASE AND HIRE PURCHASE FINANCING	9		
	5. WORKING CAPITAL FINANCING	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 47



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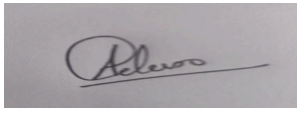

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT:B.Com (Accounting & Finance) CLASS: T.Y.B.A.F

SEMESTER: VI MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES:
The Learner/Students will be able to under the concept of Indian economy in terms of classification of various sector such as primary, secondary and tertiary sector and their contribution towards the development of Indian Economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indian Economy-III Unit I, II & III	Unit I: Introduction to Agricultural Sector Demographic features, Urbanization and its effects, agricultural sector – institution, reforms, technology, pricing, finance, marketing and National Agricultural Policy.	15	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	PowerPoint Presentation and Google Meet Lectures

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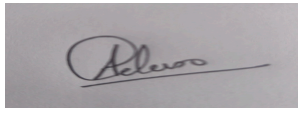
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	Unit II: Industrial Sector Growth & pattern of industrialisation, Industrial Policy of 1991, Public sector and Disinvestment, small scale sector problems and prospects.	15	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	PowerPoint Presentation and Google Meet Lectures
	Unit III: Service Sector and External Sector Nature, scope, trends in banking-insurance-healthcare-tourism industry, external sector, structure and direction of foreign trade, BOP since 1991, FDI and Foreign capital in India with transition, SAARC, ASEAN &WTO role and Impact.	15	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	PowerPoint Presentation and Google Meet Lectures

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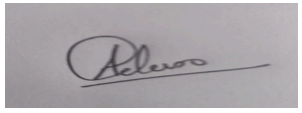

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____45____

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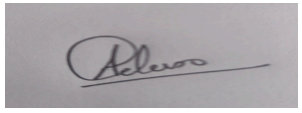

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: COST ACCOUNTING DEPARTMENT: B.Com (Accounting & Finance)

CLASS: TYBAF SEMESTER: VI MONTH: JANUARY, FEBRUARY ACADEMIC YEAR: 2020- 2021

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 BUDGETING AND BUDGETING CONTROL	Introduction. Meaning, Objectives, Advantages and Limitations of Budgets	1	COST AND MANAGEMENT ACCOUNTING BY SAXENA & VASHIST	• Google Meet • Excel • Google Meet
	Functional Budget, Fixed and Flexible Budgets	1		
	Zero based Budgeting, Performance Budgeting, Budgetary Control	1		
	Practical illustration	3		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: _____06_____

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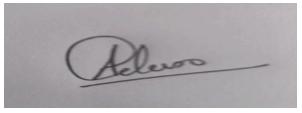

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: COST ACCOUNTING DEPARTMENT: COMMERCE

CLASS: TYBAF SEMESTER: VI MONTH: FEBRUARY, MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 ABSORPTION COSTING AND MARGINAL COSTING	Introduction to Marginal Costing, Meaning of Absorption Costing, Difference between Marginal costing and Marginal costing.	1	COST AND MANAGEMENT ACCOUNTING BY SAXENA & VASHIST	• Google Meet • Excel • Google Meet
	Features, Assumptions, Advantages, Limitations of Marginal costing	1		
	Marginal Cost, Marginal cost equations, CVP Analysis Break even analysis meaning and graphic presentation, MOS, Key factor	1		
	Practical illustration	3		

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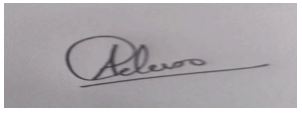
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: _____06_____



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TEACHING PLAN (UNIT PLAN)

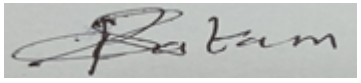
NAME OF THE STAFF: Rohan D. Satam

DEPARTMENT:B.Com (Accounting & Finance) CLASS: TYBAF SEMESTER:VI MONTH: December 2020

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: Learning about cost accounting of the product and services.
The learners will be able to : Students will be able to learn practical imposition of cost and calculation in different processes and by different methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost Accounting IV	1. **Standard Costing and Variance Analysis :** Preliminaries in installing of a standard cost system, Material Cost, variance Labour cost, variance Variable overhead variances, Fixed Overhead variances, Sales variances, Profit variances, Practical problems	15	Manan and Seth publication	Power point presentation and MS-Excel
	2. **Managerial Decision Making:** Make or buy, Sales mix decisions ,Exploring new markets, Plant shut down decision, Practical problem	15	Manan and Seth publication	Power point presentation and MS-Excel



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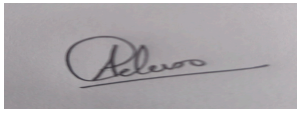

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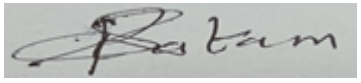
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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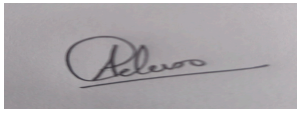

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA SINGH DEPARTMENT: _COMMERCE CLASS : FYEME POM SSEMESTER: **I** MONTH: OCTOBER DECEMBER ACADEMIC YEAR : 2020 2021

LEARNING OBJECTIVE/S:
The learners will be able to : The learners will be able to understand the Indian financial system and it's different components

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1 Introduction to Management	Introduction to management, nature, significances of Management, Evolution of Management thoughts	5		Online platform Google meet
Unit 2 Management Functions	Planning Organising Staffing Directing Planning importance steps and Decision making process with its nature and process	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_ 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MRS. SHIVAPRIYA S ACHARI DEPARTMENT: COMMERCE

CLASS: FY.EME SEMESTER: 1 MONTH: OCTOBER ACADEMIC YEAR : **2020 / 2021**

LEARNING OBJECTIVE/S:
The learners will be able to : Teaching online with the help of PPT

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 1,2,3,4	1.Fundamental of communication. Definition, meaning, Types, Process, Importance			
	2.Effective communication, concept and practice of effect. Communication , Barriers to effective communication, Methods of improve communication skills	8	Manan publication	Online lectures, PPT shown
	3.Written communication skills. Report written, letter writing, Preparation of promotional material with special reference to banks, insurance companies and joint stock companies.			
	4.Oral communication skills, understanding audience, use of language, use of tone, understanding body language			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:8

Ashivapriya
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti Pramod Patil DEPARTMENT: Commerce CLASS: F.Y.E.M.E SEMESTER: I MONTH: October to December ACADEMIC YEAR: 2020-2021 Subject: Introduction to Environmental Management

LEARNING OBJECTIVES:

The learners will be able to understand current environmental problems in the society. The learners will be able to understand about the concepts of Environmental audit, EIA and Environmental Legislation in India.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Environmental Degradation	1. Meaning, causes : Degradation of urban land, Forest and Agricultural land due to natural causes and human interference : Global Warming	2	1.Environmental science: R. Shantnu 2. Perspectives in environmental studies: A. Kaushik	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Problems of non-degradable Waste. Electronic Devices, Plastic and Man-made fibres	1		

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TEACHING PLAN (UNIT PLAN)

	3. Environmental Impact Assessments (EIA). Environmental Auditing, Environmental Legislation in India, Carbon Bank	2		
	1. Disaster Management meaning need and planning with reference to Flood, Storms, Tsunami, Cyclones and Earthquakes in India.	2	Perspectives in environmental studies: A. Kaushik	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation

Total Number of lectures allocated to the Unit : 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Snehal Jadhav DEPARTMENT: Commerce CLASS: FY EME SEMESTER: 1 Subject : IEM

MONTH: July ACADEMIC YEAR 2020-2021

LEARNING OBJECTIVE/S: The learners will be able equipped which will build knowledge ,skills motivation to address complex environmental challenges. The learner will understand different aspects in environment with issues and their management techniques

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Paper1 GLOBAL WARMING & CLIMATE CHANGE	UNIT II- Temperature profile of the atmosphere – Lapse rates – Temperature inversion effects of inversion on pollution dispersion	5	Environment alManageme nt byH.V.Jadhav	Powerpoint presentation
	UNIT IV Mitigation Measures – Alternative fuel measures	03	Environmental Managementby H.V.Jadhav. Environmental	(Powerpoint PPT)

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TEACHING PLAN (UNIT PLAN)

			ManagementbyN.K. Uberoi	
	UNIT V Kyoto Protcol – Intergovernmental Panel on climate change (IPCC)	05	Environmental ManagementbyN.K. Uberoi	Powerpoint PPT)

Snehal Jadhav

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNITHA CHANDRASHEKHAR NAIR DEPARTMENT: COMMERCE

CLASS F.Y.E.M.E. SEMESTER: I MONTH: NOVEMBER - DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To make the students learn managerial economics and its application to business .

The learners will be able to :to understand the decision making process of business .

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Managerial Economics –I **Unit I, II, III & IV.**	**Module I – Introduction**			
	1.Meaning and scope of managerial economics. 2. Relationship to economic theory 3. Relationship to decision theory. 4. Role of managerial economics 5. Objectives and Constraints of the firm 6. Introduction to Risk, Asymmetric information and Game theory.	10	**Managerial economics (Dean Joel)**	**Online lectures** 1. PPT Presentation 2 Quiz 3.Discussion
	Module II- Demand Analysis **1.**Meaning of demand , market demantd function, demand curve and factors affecting demand curve.2. Variation and increase/decrease in demand. 3. Elasticity of demand 4. Estimation of Demand –numerical problems for measurement of elasticity.	15	**Managerial economics (Dean Joel)**	**Online lectures** 1. PPT Presentation 2 Quiz 3.Discussion

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	Module III – Production and Costs 1.Meaning and types of production function , importance of production function in managerial decision making and applications of production function in productive sectors.2. Economies of scale and scope	10	**Managerial economics (H. L. Ahuja)**	**Online lectures** 1. PPT Presentation 2 Quiz 3.Discussion
	Module IV- Market Structure A.Perfect competition and Monopoly B. Oligopoly and Monopolistic Competition.	15	**Managerial economics (H. L. Ahuja)**	1.Chalk and Black Board Method 2 Quiz method 3.Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 .

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Vasanthi *Shenoy* DEPARTMENT: Commerce CLASS: FY EME SEMESTER:I MONTH: DECEMBER

ACADEMIC YEAR: 2020-2021 SUBJECT : Organizational Behavior

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Organizational behaviour	Fundamentals of ,individual difference in people ,role of hereditary in Environment ,pre natal and post natal env	2		Online classes. mobile phone and lap top
	Learning , intelligence .group test , motivational cycles	2		
	Leadership style , performance appraisal ,empowerment	2		
	Different types of group , conflict resolution strategies	2		
	Organizational culture ,resistance to change , stress ,time management	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____10___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYEME SEM : I MONTH : Aug- Dec YEAR : 2020-21

LEARNINGOBJECTIVE/S : The learners will be able to learn various aspects about management. Management is very essential part of business. This subject is helpful to develop managerial skills among learners

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	Module III : ORGANISING Organising concept, nature and significance, Authority and responsibility relationships, centralisation & decentralisation, departmentation, organisation structure forms, staffing importance, sources of recruitment, selection process	10		Google Meet

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Principles of Management	**Module IV : <u>DIRECTING</u>** • Directing meaning, steps in direction, motivation concept, theories Maslow, Herzberg, McGregor. • Leadership : concepts, styles and traits • Control : concept, process, effective control system, control techniques Coordination : concept, definition and importance	10		Google Meet

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NIKITA SUNIL JOGLE DEPARTMENT: COMMERCE

CLASS: FYEME SEMESTER: I SUBJECT: FINANCIAL ACCOUNTING. MONTH: OCTOBER - DECEMBER ACADEMIC YEAR: 2020 - 2021

LEARNING OBJECTIVE/S:
The learners will be able to: learn about basic book keeping & accounting concepts, accounting transactions, accounting standards, classification between types of expenditure, receipts & profit & loss & methods of depreciation

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	A. Meaning & Scope of Accounting – Need, development & definition, book-keeping & accounting, persons interested in accounting, disclosures, branches of accounting, objectives of accounting B. Accounting Transactions – Accounting cycle, journal, journal proper, opening & closing entries, relationship between journal & ledger, rules	9	Text book Wikipedia	Google meet, Power Point Presentation

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TEACHING PLAN (UNIT PLAN)

1.	regarding posting, trial balance, subsidiary books, bank reconciliation statement C. Accounting Standards – ● AS 1: Disclosure of Accounting Policies – Meaning, purpose, different policies, areas of policies, disclosure of policies, disclosure of change in policies, simple illustrations ● AS 6: Depreciation Accounting – Meaning, definitions, importance, factors, useful life of a depreciable asset, estimating useful life, additions, residual value, methods, disclosure of surplus, change in method, simple illustrations ● AS 9 – Revenue Recognition – Meaning & scope, transactions excluded, sale of goods, rendering of services, effect of			

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2	uncertainties, disclosure, simple illustrations ● AS 10: Accounting for Fixed Assets – Meaning, definitions, importance, cost of fixed assets, self-constructed fixed assets, non-monetary consideration, improvements, repairs, additions & extensions, revaluation, sale or retirement, valuation of fixed assets in special cases, special types of fixed assets, disclosure			
	A. 1. Expenditure – Classification of expenditure – capital, revenue & deferred revenue expenditure, unusual expenses. 2. Receipts – Capital receipt, revenue receipt	6	Text book Wikipedia	Google meet, Power Point Presentation

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TEACHING PLAN (UNIT PLAN)

	3. Profit or Loss – Revenue profit or loss, capital profit or loss B. Depreciation Accounting – practical problems based on accounting treatment by provision for depreciation using SLM & RBM methods			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

Nikita

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: COMMERCE CLASS: FYEME

SEMESTER: II MONTH: NOVEMBER - MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES: The Learners will be able to understand the old school and contemporary method and theories utilized to understand the terms of trade and exchange along with the legalities of trading relations under the policy brackets to cater the smooth international trade between nations.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
II, II & V	Unit I: Determination of income and employment Overview of classical and Keynes theory Business cycle features, causes and measures IS-LM market	(01 Lectures) Per	M.L. Jhingan: International Economics Dominick Salvatore: International	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____

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TEACHING PLAN (UNIT PLAN)

			Economics Trade and Finance	
	Unit II: Policy Environment Role of state Theory of economic policy Monetary policy Fiscal policy Economic stabilization Structural policy Commercial Trade Policy: Free Trade & Protection , Pros & Cons	(01 Lectures) Per Per week	Paul Krugman: International Economics Theory and Policy. Desai and Bhalerao: International Economics	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST
	Unit V: GLOBALIZATION Meaning, effects, gains, problems, role of IMF and world bank;	(01 Lectures) Per	M.L. Jhingan:	PPT, GOOGLE MEET, DIGITAL BOARD, GOOGLE FORM CLASS TEST

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TEACHING PLAN (UNIT PLAN)

	Concept of global recession and effects WTO: concept, agreement, implications, issues and dispute settlement	Per week	International Economics Dominick Salvatore: International Economics Trade and Finance	

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TEACHING PLAN (UNIT PLAN)

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Sandara Almeida DEPARTMENT: _Commerce CLASSFY EME SEMESTER II

MONTH Dec - Mar ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to learn the various aspects about costing

This subject is helpful to develop Cost Accounting skills among learners

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	Unit 1 Introduction and importance to cost Accounting	8	C S Rayadu	Google meet , google classroom, PPT
	Unit 2 Elements of cost Bases of cost classification	8	M N Aurora	Google meet , google classroom, PPT
	Unit 3 Reconciliation between cost and financial records	8	Maheshwari S N	Google meet , google classroom, PPT
	Unit 4 Elementary principles of Marginal costing	8		Google meet , google classroom, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____SMITA KHAIRE (JADHAV)__DEPARTMENT: Commerce CLASS: FYEME__SEMESTER: II

MONTH: Jan to Apr_____ ACADEMIC YEAR: ____2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to acquire a basic understanding and knowledge about the Environment and its components. Learner will be able to acquire an attitude of concern for protection of Environment.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Ecology and Environment	**Module II:** Origin of **Atmosphere**- Vertical structure of atmosphere- Ecological significance of air- Horizontal motion of atmosphere, Vertical movement- upper air circulation (Jet stream) Air masses- Important properties of the atmosphere- Acid rain.	03	Essential of Ecology and Environmental Science by S.V.S Rana	PowerPoint Presentation
	Module IV: Hydrologic- Water Budget- Fresh water environment Lakes – Eutrophication of lake - Reservoir- Running water- The open sea- physico-chemical aspects of Marine Environment Wetland and coastal environment-	04	Essential of Ecology and Environment by	PowerPoint Presentation

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TEACHING PLAN (UNIT PLAN)

	Antarctica research programme – Coral Reef – Exclusive Economic Zone(EEZ)- Estuaries- Biosphere- Introduction- concept of Biome- Evolution and Diversity in Biomes- major Biomes of Earth- Landforms. **Module VI**: **Resource** cycle- mineral resources- marine resources Mineral resources of Antarctica, Energy resources- Renewable sources of energy- energy from biomass- Geothermal energy, ocean thermal energy- Non-renewable sources of energy- Nuclear energy- Energy for the future- Forest resource- deforestation Water a vital resource- India's water budget.	04	S.V.S Rana Environmental Science by Santra S.C	PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____

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TEACHING PLAN (UNIT PLAN)

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Snehal Jadhav_____ DEPARTMENT: _____Environmental Management & Economics (EME)_____ CLASS: ____F.Y.EME_____ SEMESTER: _____II_____ MONTH: _____Janauary - March__ ACADEMIC YEAR: _____2021 -2022_____

LEARNING OBJECTIVE/S:

The learners will be able to :

The learners will be able equipped which will build knowledge, skills & motivation address complex environmental challenges.The learner will Understand different aspects in environment with issues and their management technique.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Paper1 Ecology And Environment.	UNITIEcology 1)Meaning-EnvironmentalScience–HistoryEcology–EcologyToday–ScopeofEcology. 2)TheSubdivisionsofEcology. 3)ModelsinEcology–FundamentalConcepts Environmentalism. 4)ConservationEthics–Airpollution-Waterpollution-Noisepollution,Radioactivepollution-Solidwaste pollution-Landpollution.	5	Environmental Managementby H.V.Jadhav Singh,Savindra,2011: Environmental Geography,Prayag PustakBhavan, Allahabad,India	Power Point Presentation

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TEACHING PLAN (UNIT PLAN)

	UNITIIlStructureoftheEarth. 1)ZonalStructureoftheEarthTheGeologicCycle–MineralsandRocks–Soil. 2)Pedogenesis–SoilTypes–SoilClassification–TypesofRocksandMinerals–Soilprofile. 3)SoilErosioninIndia–SoilConservation–Biotaof theSoil–SoilAdaptationsinAnimals.	5	Environmental ManagementbyH.V. Jadhav. Environmental ManagementbyN.K. Uberoi S.V.S.Rana–EssentialsofEcology andEnvironmental Science–Prentice HallofIndia–Third Edition–2007	Power Point Presentation
	UNITVBiodiversity 1)EcosystemDiversity,SpeciesDiversity–Genetic Diversity–GlobalDiversity. 2)TheValueofBiodiversity–Biodiversityand Ecosystemfunction. 3)Biodiversity–HotSpots.	4	BharuchaE.,ATex t Bookof Environmental Studies,Universit	Power Point Presentation

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	4)Bio-wealth–BioticImpoverishment–Biodiversity conservation–Biotechnology. 5)Biodiversity–MilestonesofConventionof Biodiversity(CBD)–MainPlayersinCBD		ies Press,Hyderabad. S.V.S.Rana–EssentialsofEcology andEnvironmental Science–Prentice–HallofIndia–Third Edition–2007	

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __Sunitha C. Nair__ DEPARTMENT: _Commerce__ CLASS: _____F.Y.E.M.E___ SEMESTER: ___II___MONTH: _____January - April_ ___ACADEMIC YEAR: ____2020-21_

LEARNING OBJECTIVE/S:

The learners will be able to :

_To make the students understand Macroeconomics and International trade and its application to environmental business .

The learners will be able to understand the decision making process of business .

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
I	**Macro economic aggregates and concepts**- Circular flow of income, National income and related concepts, Human Development Index, Supply of money, Demand for money, price level, Inflation and Stagflation.	02	Advance Macro Economics (H.L. Ahuja)	Power point presentation and Discussion method
	International Trade -Overview of International trade, Basis of trade,	02	Advance Economic	Power point presentation and Discussion method

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TEACHING PLAN (UNIT PLAN)

II	**Balance of Payments and Mechanism for International Payments.**		**Theory (M.L. Jhingan)**	
IV	**Globalisation -** Meaning, effects, Role of IMF and World Bank, Concept of Global recession with contagion effects	**02**	**Advance Economic Theory (M.L. Jhingan)**	**Power point presentation and Discussion method**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 6

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: EME CLASS: FYEME SEMESTER: II MONTH: JAN-MARCH

ACADEMIC YEAR:2020-21 SUBJECT: HRM

LEARNING OBJECTIVE/S: To develop the understanding of the concept of **human resource management** and to understand its relevance in organizations. To know necessary skill set for application of various HR issues. To analyse the strategic issues and strategies required to select and develop manpower resources..
The learners will be able to :

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Introduction to HRM Human Resource Planning Job Analysis, Job Design and Job Evaluation	Definition, Features, Scope/Functions of HRM, Definition of Personnel Management. Evolution of HRM/ Trends in HRM, Difference between HRM and PM , Challenges before the HR manager,	1	***K. Aswathappa,*** *"Human Resources & Personnel Management- Text And Cases – Fourth Edition", Tata Mc Graw Hill*	MS-Power Point, Google Meet, Google classroom

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TEACHING PLAN (UNIT PLAN)

	Role of HR Manager, Traits/Characteristics of the workforce, Personnel Philosophy, Personnel Manual.	1	***Jayashree Sadri, Sorabh Sadri "****A Strategic Approach to Human Resources Management".* *Jaico Publishing House, Mumbai*	Same as above
	Definition of HRP Process of HRP along with brief coverage of personnel demand and supply forecasting techniques Factors affecting HRP Human Resource Information System (HRIS),	2	Same as above	Same as above
	VRS, Outsourcing, Pink slip/ termination/ retrenchment/ downsizing/	1	Same as above	Same as above

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TEACHING PLAN (UNIT PLAN)

	separation Contracting and Sub- contracting Promotions and Transfers			
	Job Analysis – Definition, methods of collecting job data, merits and demerits/limitations	1	Same as above	Same as above
	Job Design – Definition, Factors affecting Job Design, Approaches to Job Design	1	Same as above	Same as above
	Job Evaluation – Definition, methods of job evaluation, process of Job Evaluation	1	Same as above	Same as above
Recruitment, Selection and Induction	Recruitment – Definition, sources of recruitment , merits and demerits Selection – Definition, process of selection, types of selection tests, types of interviews	2	Same as above	Same as above
	Induction/Orientation – definition, methods, process Placement	1	Same as above	Same as above

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TEACHING PLAN (UNIT PLAN)

Training and Development	Definition of Training and Development, Methods of training managers, Process/ procedure of conducting training programme,	1	Same as above	Same as above
	How to evaluate effectiveness of training programmes, Advantages of T&D	1	Same as above	Same as above
Performance Appraisal	Definition of Performance Appraisal, Methods of Appraisal for managers – traditional and modern	1	Same as above	Same as above
	Process / procedure of conducting performance appraisal Advantages of performance appraisal Limitations of Appraisal	1	Same as above	Same as above
Compensation Management	Definition of compensation, Components of Salary / Salary slip, Fringe Benefits – definition and types,	1	Same as above	Same as above

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TEACHING PLAN (UNIT PLAN)

	Performance linked incentives/ incentives- definition, advantages and disadvantages	1	Same as above	Same as above
Career Planning And Development	Definition of Career Planning and Career Development, Process/ Procedure of Career Planning,	1	Same as above	Same as above
	Career Stages/ Career Life Cycle and how to handle personnel at each stage, Essentials to make career planning successful	1	Same as above	Same as above
	Career Counselling, Employee Retention techniques, Succession planning	1	Same as above	Same as above
Participative Management	Definition of Participative Management, Levels of participation Trends in Participative Management	1	Same as above	Same as above

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TEACHING PLAN (UNIT PLAN)

	Factors essential for successful participative management Forms of participation Participation through Quality Circles Empowered Teams	2	Same as above	Same as above
Industrial Relations	Definition of Industrial Relations, Features of Industrial Relations, Importance of Industrial Relations,	2	Same as above	Same as above
	Approaches to Industrial Relations, Parties to Industrial Relations	1	Same as above	Same as above
Trade Unions	Definition of Trade Union, Features of Trade unions, Trade union movement in India/ Trends in the Trade Union	1	Same as above	Same as above

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: EME CLASS: FYEME SEMESTER: II MONTH: JAN-MARCH

ACADEMIC YEAR:2020-21 SUBJECT: PRODUCTION MANAGEMENT AND MATERIAL MANAGEMENT

LEARNING OBJECTIVE/S: understanding of **production** as a process of converting or transforming resources into products; an understanding of the manager's concern in planning, organizing, directing, and controlling productive **operations** to meet organizational **objectives**

The learners will be able to :

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 1	Introduction to the concept of operations and Operation Management	1	Principles of operation management by jay heizer	MS-Power Point, Google Meet, Google classroom, google form
	Development of Production Function. Relation of Production with other Functions like design function, purchase function, plant layout, maintenance etc.	2	The Toyota product development by james m morgan	Same as above
	Production classification, product selection (steps in identifying the product for manufacturing), Product development (market pull, technology push, inter functional approach).	2	Same as above	Same as above
	Brief description/importance of research development and design of a product	1	Same as above	Same as above

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TEACHING PLAN (UNIT PLAN)

	Facilities planning (how much to produce, level of automation, facilities required for manufacturing , where to produce, arranging required facilities, how to produce etc.) production systems	2	Same as above	Same as above
	Plant layout: difference between various types of layout (Product layout, process layout, Cellular layout, static layout etc)	2	Same as above	Same as above
	Various types of material Handling systems: their guidelines/principles, distinguishing features, uses	1	Production and inventory control	Same as above
UNIT – III	Importance of materials management (corporate policy, organisation, research, planning, source selection)	1	Same as above	Same as above
	Value Analysis and Value Engineering	1	Same as above	Same as above
	Purchase Management, importance of purchasing, various R's of Purchasing, purchasing systems	2	Same as above	Same as above
	Need for forecasting price/policy on seasonal commodities and capital equipments. Simple problems on various types of forecasting including exponential smoothing	2	Same as above	Same as above
	Inventory management, its prime importance in our country today. Inventory control techniques- ABC, FSN, GOLF, VED, SOS, HML	3	Same as above	Same as above
	Make or Buy Decisions: Problems on inventory Management			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:____

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TEACHING PLAN (UNIT PLAN)

UNIT – IV	Warehousing and stored management- centralised and de-centralised stores. Brief introduction to various methods of stores accounting.	2	Same as above	Same as above
	Need for stock verification	1	Same as above	Same as above
	Management of scrap, waste, surplus, obsolete materials.	1	Same as above	Same as above
	JIT, KANBAN, KAIZEN, Push vs. Pull concept, MRP	2	Same as above	Same as above
	Explanation of EOQ – its advantages and disadvantages. Types of inventory systems (PSystems and – Systems). Need for safety stock/reserve stock. Simple problems on these topics.	1	Same as above	Same as above
	SQC – techniques, Control Charts, X- Bar chart, R- chart, P- chart, C-chart. Graphical representation. Direct problems on these topics	2	Same as above	Same as above

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Madhu dharma DEPARTMENT: Mathematics (Statistics) CLASS: FY.EME SEMESTER: II MONTH: December to February ACADEMIC YEAR:2020-21
LEARNING OBJECTIVE/S: To make students comfortable with data analysis in real life.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Paper-1 :Unit1: Types of Data and Tabulation	• Introduction: Functions/Scope, Importance, Limitations • Data: Relevance of Data(Current Scenario), Type of data(Primary & Secondary), • Primary(Census vs Samples, Method of Collection (In Brief), Secondary(Merits, Limitations, Sources) (In Brief) • Presentation Of Data: Classification – Frequency Distribution – Discrete & Continuous, Tabulation, Graph(Frequency, Bar Diagram, Pie Chart, Histogram, Ogives) • Measures Of Central Tendency: Mean(A.M, Weighted,	15	**V.K. S.C. Fun da stati s**	

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TEACHING PLAN (UNIT PLAN)

	Combined), • Median(Calculation and graphical using Ogives), Mode(Calculation and Graphical using Histogram), Comparative analysis of all measures of Central Tendency			
Unit-2 measure of dispersion , correlatio n & regression	Measures Of Dispersion: Range with C.R(Co-Efficient Of Range), Quartiles & Quartile deviation with CQ (Co-Efficient Of Quartile), Mean Deviation from mean with CMD (Co-Efficient Of Mean Deviation), Standard deviation with CV(Co-Efficient Of Variance), Skewness& Kurtosis (Only concept) • Co-Relation: Karl Pearson, Rank Co-Relation • Linear Regression: Least Square Method	10		

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TEACHING PLAN (UNIT PLAN)

Unit- 3 time series & index numbers Unit-4 Probability & random variable Unit-5	• Time Series: Least Square Method, Moving Average Method, Determination of Season • Index Number: Simple(unweighted) Aggregate Method, Weighted Aggregate Method, Simple Average of Price Relatives, Weighted Average of Price Relatives, Chain Base Index Numbers, Base Shifting, Splicing and Deflating, Cost of Living Index Number Probability: Concept of Sample space, Concept of Event, Definition of Probability, Addition & Multiplication laws of Probability, Conditional Probability, Bayes' Theorem(Concept only), Expectation & Variance, Concept of Probability Distribution(Only Concept)	5		

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TEACHING PLAN (UNIT PLAN)

Elementary topics on Estimation and Testing of hypothesis				
	• Sample from a distribution : Concept of a statistic estimate and its sampling distribution. Parameter and it's estimator. Concept of bias and standard error of an estimator. • Central Limit theorem (statement only). Sampling distribution of sample mean and sample proportion. (For large sample only) • Standard errors of sample mean and sample proportion.	15 lectures for Unit 4 / 5		

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TEACHING PLAN (UNIT PLAN)

	Concept of hypothesis Null and alternate hypothesis, • Types of errors, Critical region, Level of significance. • Large sample tests (using central limit theorem, if necessary) • For testing specified value of population mean • For testing specified value in difference of two means • For testing specified value of population proportion • For testing specified value of difference of population proportion (Development of critical region is not expected.)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_ 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE CLASS: SYEME

SEMESTER: **III** MONTH: Aug,2020 to Dec,2020 ACADEMIC YEAR :2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to Learn different types of finances ,Meaning of leverage & its types, preparation of cash budget, Meaning and calculation of various capital budgeting techniques.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
FINANCIAL MANAGEMENT	1] **Types of Finances** –Meaning, Need & sources of finance like long term sources of finance, short term sources & long term sources of finance.	03	**Financial Management:** Inamdar, S. M.	Google meet, Google slide, Microsoft word, Spreadsheet
	2] **Leverage**-Introduction, Meaning, Types of leverages, Degree of various leverages , Practical sums	07	**Financial Management:** Kishore, R. M	Google meet, Google slide, Microsoft word, Spreadsheet

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TEACHING PLAN (UNIT PLAN)

	3] **Cash Management** – Introduction, Features of cash management, Motives for holding cash, Objectives of cash management, Importance of cash management, Proforma of Cash budget	10		Google meet, Google slide, Microsoft word, Spreadsheet
	4**] Capital Budgeting**-Introduction, Classification of capital budgeting projects, process. Capitalbudgeting techniques – Payback period,accounting Rate of Return, Net present value, Profitability index & Discounted payback. Practical problems.	10		Google meet, Google slide, Microsoft word, Spreadsheet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 30_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: LEJESH KELOTH DEPARTMENT: SELF -FINANCE CLASS: SYEME SEMESTER: III MONTH: SEPT- DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the correlation between economic and its interrelation ship between society and its impact which is also an important element in making our surrounding economy stable and long term benefits.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
ENVIRONMEAL ECONOMIC –I MODULE -1	**Introduction to micro –economic theory**	10	Research paper Manan Prakash	
	Supply And Demand			PPT AND PDF WITH VIRTUAL CLASSROOM METHOD
	Price Formulation			

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TEACHING PLAN (UNIT PLAN)

ENVIRONMENTAL ECONOMIC –I MODULE -2 MODULE -3	Environmental economic theories			
	Political means of control			
	Valuation Method	5	Research paper Manan Prakash	
	Political means of control and their applicability			PPT AND PDF WITH VIRTUAL CLASSROOM METHOD
	Natural resources economic	5	Research paper Manan Prakash	
	Renewable and non-renewable resources and its management regimes		Research paper Manan Prakash	
	Ecological economics	10		Ppt And Pdf With Virtual Classroom Method

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TEACHING PLAN (UNIT PLAN)

	The ecological system		Research paper Manan Prakash	
	International trade and the environment	10		
	Economic growth and the environment			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MEZBIN LALANI DEPARTMENT: COMMERCE CLASS: SYEME SEM III MONTH: SEPT-DEC 2020 ACADEMIC YEAR: 2020-2021 SUBJECT: FINANCIAL MANAGEMENT

LEARNING OBJECTIVE/S: To understand basics of financial management

The learners will be able to : understand various important techniques used in financial management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Introduction to financial management, its need and importance , advantages to a company. introduction to various sources of funds available to a company, long term and short term sources of finance.	15	Financial Management by Khan & Jain	Google classroom, Google meet, power point presentation, pdf,etc
UNIT 2	Working capital management: its meaning and importance, factors affecting working capital, types of working capital, operating cycle, computation of working capital, practical illustrations	15	Financial Management by Khan & Jain	Google classroom, Google meet, power point presentation, pdf,etc

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TEACHING PLAN (UNIT PLAN)

UNIT 3	Cost of Capital: meaning, importance to a company, types of capital and its costs, cost of debt, cost of equity share capital, cost of debt, cost of reserves, computation of WACC, practical illustrations.	15	Financial Management by Khan & Jain	Google classroom, Google meet, power point presentation, pdf,etc
UNIT 4	Receivables management: Its meaning, features and aspects of receivables management, types of costs involved in management of receivables, credit policy, steps in credit analysis, control of receivables management.	15	Financial Management by Khan & Jain	Google classroom, Google meet, power point presentation, pdf,etc

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Research methods in business DEPARTMENT: Commerce

CLASS: SYEME SEMESTER:III MONTH: sep-oct ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	Research – meaning , Obectives ,Significance ,Significance.	2	Research Methodology by C.R.Kothari	Google meet , ppt presentation , google forms , testmoz
	Types of Research – Basic ,Applied , Descriptive ,Historical , Exploratory , Experimental , ex-post facto , Case Study method	4		
	Approaches to research – Quantitative & Qualititative research	2		
	Importance of research in management decision			
	Marketing research , Government policies and economic system	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

	Social relationship , planning and operational problem s of research in business.	1		
Unit IV Sources and Methods of Data collection	Primary sources – Observation , Interview	2	Research Methodology by C.R.Kothari	Google meet , ppt presentation , google forms , testmoz
	Questionnaire , Interview Scedules	2		
	Secondary Sources - Internal , External	2		
	Data processing , Tabulation , Data Analysis and Interpretation	2		
	Report Writing – Layout of research report	2		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Mrs. Smita S. Khaire DEPARTMENT: __Commerce_____ CLASS: __SYEME__SEMESTER: ___III_____

MONTH: _September-December_____ ACADEMIC YEAR: 2020-20121

LEARNING OBJECTIVE/S:

The learners will be able to acquire the knowledge about Environment.

It will be helps to acquire concern towards Environment protection

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Natural Resources and Management	Unit 3: Water resources, Hydrological cycle. Surface water, Ground water, Dams-uses and impact on environment, Marine resources: Biotic and Abiotic resources	5	Environmental science by Santra S.C	PowerPoint Presentation
	Unit 4: Living Resources-Agriculture-types of cultivation, high yielding varieties, HYV chemicals fertilizer and their impact	2	Ecology and Environment by Odum	PowerPoint Presentation
	Unit 5: Forest and Mineral resources. Forest product, food, fodder, fuelwood, timber. Mineral- metals and non-metals resources, Non-conventional resources	5		PowerPoint Presentation

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Mrs. Smita S. Khaire DEPARTMENT: __Commerce CLASS: __SYEME__SEMESTER: ___III

MONTH: _September-December ACADEMIC YEAR: 2020-20121

LEARNING OBJECTIVE/S:

The learners will be able to acquire the knowledge about Environment.

It will be helps to acquire concern towards Environment protection.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Global Warming and Climate Change	Unit 1: Role of ozone in environment, ozone layer, ozone depleting gases- Green House Effect	5	Environmental science by Santra S.C	PowerPoint Presentation
	Unit-3: Causes of Climate change: change of temperature in the environment, melting of ice pole, sea level rise, role of fossil fuels	5	Ecology and Environment by Odum	PowerPoint Presentation
	Unit-4: Mitigation measures-cleaner production	2		PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SNEHALS.JADHAV DEPARTMENT:COMMERCE CLASS:S.Y.EME SEMESTER:III
MONTH: July-OCTOBER ACADEMIC YEAR : 2020 -2021.
LEARNING OBJECTIVE/S:
The learners will be able equipped which will build knowledge ,skills motivation to address complex environmental challenges. The learner will understand different aspects in environment with issues and their management techniques

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Paper1 GLOBAL WARMING & CLIMATE CHANGE	UNITII- Temperature profile of the atmosphere – Lapse rates – Temperature inversion effects of inversion on pollution dispersion	5	Environmenta lManagement byH.V.Jadhav	Powerpoint presentation
	UNIT IV Mitigation Measures – Alternative fuel measures	03	Environmental Managementby H.V.Jadhav. Environmental	(Powerpoint PPT)

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TEACHING PLAN (UNIT PLAN)

			ManagementbyN.K. Uberoi	
	UNIT V Kyoto Protcol – Intergovernmental Panel on climate change (IPCC)	05	Environmental ManagementbyN.K. Uberoi	Powerpoint PPT)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SNEHALS.JADHAV DEPARTMENT:COMMERCE CLASS:S.Y.EME SEMESTER:III
MONTH: July-OCTOBER ACADEMIC YEAR : 2020 -2021.
LEARNING OBJECTIVE/S:
The learners will be able equipped which will build knowledge ,skills motivation to address complex environmental challenges. The learner will understand different aspects in environment with issues and their management techniques

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	ACHING METHOD/ ICT TOOLS USED
Paper 5 Natural Resources Mangement	Unit I Introduction to Natural Resources – Classification of Natural Resources- list of natural resources, values of natural resources,Demands on natural resources, Population lifestyle and natural resources, impact of poor natural resource management.	05	Environment alManageme nt byH.V.Jadhav	Powerpoint presentation / Google Meet
	Unit II Land resources – land definition , land use pattern in India, waste land ; types , desertification, definition causes and impacts.	05	Environmental Management by.V.Jadhav. Environmental Management by NK.Uberoi	(Powerpoint Ppt) / Google Meet

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TEACHING PLAN (UNIT PLAN)

	Unit 4 Microbes useful and harmful bacteria in soil, water, air, fungi, beneficial & harmful.	03	Environmental Management by.V. Jadhav. Environmental Management byN.K.Uberoi	(Powerpoint Ppt) / Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Veronika B Barla **DEPARTMENT**: Commerce **CLASS**: S.Y.EME **DIVISION:** A, **SEMESTER**: III

MONTH: _____ **SUBJECT**: Research Methods in Business **ACADEMIC YEAR**: 2020-21

LEARNING OBJECTIVE/S:
1. Help to understand RESEARCH PROCESS
2. Helps understand the FORMULATION, TESTING OF HYPOTHENOUS

The learners will be able to: 1. Helps to understand research process and hypothesis

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Module III Research process	■ Selecting the topic, defining the research problem, objectives of research, literature survey, sample design, data collection, execution of project, analysis of data and hypothesis testing, generalization and interpretation and preparation of research report.	5	Research methodology C.R. KOTHARI	Online teaching using google meet, PPT jamboard

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TEACHING PLAN (UNIT PLAN)

UNIT III **Hypothesis**	■ **Research design** – Meaning, need, features of good research design, types of research design –	2	"	"
	■ a) For exploratory research b) For descriptive research ■ b) For causal research studies	3	"	"
	■ Meaning, importance and types. Formulation of hypothesis and testing of hypothesis.	2	"	"
	■ Chi-square test, Correlation Co-efficient, Regression analysis.	2	"	"
	■ **Sampling: -** ■ Meaning , Sample and sampling, essentials of good sample. Sample size, methods of sampling: - ■	3	"	"

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TEACHING PLAN (UNIT PLAN)

	■ a) Probability sampling – cluster sampling, stratified sampling, multi stage sampling. ■ b) Non-probability sampling: - Purposive sampling, Quota sampling, Convenience sampling. ■	2	"	"

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH **DEPARTMENT: COMMERCE**

CLASS: SYEME SEMESTER: III MONTH: OCTOBER TO DECEMBER ACADEMIC YEAR: 2020-21 SUBJECT: Marketing Management

LEARNING OBJECTIVES: The learners will be able to:

- Understand the concept of marketing in detail and will be acquaint with various marketing strategies carried out by the marketers.
- Get an insight on digital marketing, Social marketing and relationship marketing.
- Understand ethics related to marketing and unethical practice.
- Draw out the meaning of various pricing methods and strategies followed by the marketer.

Relate to various methods of brand promotion and its integration.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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TEACHING PLAN (UNIT PLAN)

Unit1-Introduction to Marketing	(a) The 4 Ps and 3Cs of Marketing (b) Marketing as an activity, function, and philosophy (c) Needs, wants and demands; transactions, transfers & exchanges (d)Orientation of a firm: Production concept; product concept; selling concept; and marketing concept. New Trends in Marketing: E-Marketing, Internet Marketing, and Marketing using social networks Societal Marketing/Relationship Marketing, Marketing Research; MIS; & Consumer Behaviour The micro environment of business (management structure; marketing channels: markets in which a firm operates; competitors and stakeholders. Macro Environment: political factors; economic factors; sociocultural factors; technological factors (pest analysis)	7	Marketing management by Phillip Kotler And Marketing managemen t Ramaswam y & Kumari Nama	Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible
Unit-2Marketing Research:	Importance of Marketing Research Types of Marketing Research: Product research; sales research; consumer/customer research; promotion research	2		Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible
Unit 5-Pricing Decisions	Pricing objectives; factors influencing pricing decisions, Types of pricing: Mark up/cost plus pricing; perceived value pricing; value	3		Testmoz, Google form, Google meet, PPT presentation, Jam Board,

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TEACHING PLAN (UNIT PLAN)

	pricing; geographic pricing; etc. Responding to competitors Action through price and non price variables. Impact of the products: stage in the PLC on pricing decisions.			Incredible
Unit 7- Integrated Marketing Communication :	Definition of target audience; determining communication objectives; designing communication and selection of channels	2		Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible
Unit 8Marketing Services	Characteristics of services; ways of improving services, delivery, managing service maturity.	2		Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible
Unit 9- Ethics in Marketing	Advertising Standards Council of India code of ethics in advertising; promotion to children; unfair practices in marketing	2		Testmoz, Google form, Google meet, PPT presentation, Jam Board, Incredible

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dilip Jain DEPARTMENT: Commerce CLASS: SY EME SEMESTER : III

ACADEMIC YEAR: 2020-2021

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
2	**Product and Brand Management** • Products: core, tangible and augmented products • Product mixed decisions: product line decisions; strategic filling, line modernization decisions • New product development process • Product life cycle	7		
3	**Brand Management** • Brand equity; branding decisions; brand extensions; brand portfolios • Segmentation, Targeting and Positioning (STP) • Pricing Decisions, Channel Decisions; Promotion Mix; Types of pricing Channel Decisions Retailing Advertising	6		

Dilip J

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

Dilip J
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF - MADHURA SURVE DEPARTMENT: COMMERCE CLASS: SYEME: SEMESTER: IV MONTH: JANUARY-MARCH
ACADEMIC YEAR: ____2020-21_
LEARNING OBJECTIVE/S:
The learners will be able to : know about customers buying behaviour and help to know how to maintain a good relationship with customers in todays competitive world which leads to customer retention

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit I, II V	MODULE I Changing Nature of Marketing and Customer Service-Marketing-An Introduction - The Marketing Orientation-Factors Necessitating a Re-look at Marketing Methods-Changing Social Trends-Lesser Government Controls Rising Income Levels-Threats from New Forms-Characteristics of the Empowered Customer-Increased Demand-Easy Access to Information - Emerging Trends in Marketing-Shorter Product Life Cycles.	10	Customers Relationship Management " by FRANCIS BUTTLE, Internet	Online lecture through Google Meet
	Emergence of Permission Marketing-Experimental Marketing-Offering Complete Solution-Rewarding Loyal Customers-Disruptive Innovations-The Changing Nature of Customer Service-Challenges In Modern Day Customer Service Emerging Trends in Services Marketing Mix -Customer Experience -The New Differentiator- Managing Service Better-Emergence of CRM-Economics of Building Customer Relationship-Customer Lifetime Value-Benefits of Customer Loyalty-	10	Relationship Management " by FRANCIS BUTTLE, Internet	Online lecture through Google Meet

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TEACHING PLAN (UNIT PLAN)

	Benefits of Choosing The Right Customers - Customer Value and Customer Satisfaction: Precursors to CRM-Customer Value.			
	MODULE V The Technology Orientation - A Strategic FSrame work for CRM-Planning for Success - Change Management-Selling Change-Training-Role of IT and Tools for CRM-CRM Strategy and Technology-Capturing Data-Steps in Preparing the IT Systems for CRM Choosing The CRM Tool-Using IT Systems for Better CRM-Isuses for Consideration In CRM Tools Selection-Tools for CRM-e CRM-Basic Concepts of e CRM-Benefits of e CRM	6	Customers Relationship Management " by FRANCIS BUTTLE, Internet	Online lecture through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:_ 26

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TEACHING PLAN (UNIT PLAN)

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Manjushri S. Oak DEPARTMENT: _Commerce CLASS:SYEME SEMESTER: IV MONTH: January - April_
ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to :

To make the students learn Environmental Pollution and Management and its effect on environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environmental Pollution and Management Sem IV				
UNIT-II	Air pollution –structure and composition of atmosphere – classification, sources & effects of air pollution – Acid rain –green house effect – global warming – Ozone depletion	**02**	**https://en.m.Wikipedia.org, www.nationalgeographic.org, www.epa.gov, envirmental science book**	**Power point presentation and Discussion method**

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TEACHING PLAN (UNIT PLAN)

UNIT-III	Prevention and control of air pollution particulate control – settling chamber, scrubber, bag filter, cyclones electrostatic precipitators. Gaseous emission control methods. Air pollution prevention and control Act 1981.	**02**	**https://en.m.Wikipedia.org, www.who.int, www.britannica.com, envirmental science book**	**Power point presentation and Discussion method**
UNIT-IV	Soil Pollution – soil pollutants – types – sources, effects & Control.	**02**	**www.envirnmentalpollutioncenters.org, https://en.m.Wikipedia.org**	**Power point presentation and Discussion method**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAZIA SAJID SHAIKH DEPARTMENT: COMMERCE CLASS: SYEME SEMESTER: SEM IV
MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S:
The learners will be able to : _Basic information concepts and need for information system in an organisation.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1 , 2	*Basic information Concepts and Definition. *Need for information and Information System (IS) in an organisation. *Characteristics of Information and Organisation with respect to organisation form ,structure,philosophy,hierarchy etc.	06	MIS a concept Framework by Davis and Olson	Online lectures on Google meet
	Types of IS-Transaction. *Operational Control *Management Control *Decision Support *Executive information system	06		Online lectures on Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEELAM RATHORE DEPARTMENT: Commerce CLASS: S.Y.E.M.E SEMESTER: IV

MONTH: January – April ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:-

To make the students learn about the Health, Safety of Environment

The learners will be able to understand and can manage the different issues of environment with respect to safety and Health

PAPER, UNIT TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 , 2, 3	Definition: - need for good health, Factors affecting health, Types of Diseases (deficiency, infection, pollution diseases). Personal hygiene – food (balanced diet). Food Habits & cleanliness, Food Adulterants, Avoiding smoking, Drugs & alcohols.	4	Environmental Health By:- M.H.Jackson	PowerPoint Presentation, Discussion method
	Public Health:- Communicable diseases , mode of transmission(epidemic and endemic diseases), Management of Hygiene in public places (railway stations, Bus stands and other public places)	4	Environmental Sanitation By:-KVSG Murali Krishna	PowerPoint Presentation, Discussion method

RNeelam
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TEACHING PLAN (UNIT PLAN)

	Occupational Diseases :- Prevention and control.	2	Fundamental Principals of Occupational Health and Safety. By:-Benjamin O.ALLI	PowerPoint Presentation, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

RNeelam
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti Pramod Patil DEPARTMENT: Commerce CLASS: S.Y.E.M.E SEMESTER: IV

MONTH: January to March ACADEMIC YEAR: 2020-2021 Subject: Environmental Safety, health and Management

LEARNING OBJECTIVES:
The learners will be able to understand occupational health and safety. The learners will be able to understand about physical, chemical and biological hazards.

UNIT 3	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Occupational health and safety	1. Occupational health and safety	2	1. Fundamentals of Occupational safety and health : F. Mark and K. James 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Occupational health and hazards-physical-chemical and biological	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

SPatil
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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVES:

The learners will be able to understand the meaning and need of industrial safety & management techniques. The learners will be able to understand about industrial accidents and their prevention.

UNIT 4	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Industrial safety	1. Industrial safety and management techniques	2	1. Fundamentals of Occupational safety and health : F. Mark and K. James 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. Industrial safety standards and regulations	2		
	3. Accidents-definitions-prevention and control	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

SCPatil
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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVES:

The learners will be able to understand the meaning and need of Safety management system. The learners will be able to understand about the concepts of EMS, ISO. They will be able to learn about OSHA, Public liability insurance act and mining act.

UNIT 5	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Safety management system	1. Safety management system- concepts of safety management systems	2	1. Environmental studies: P.G. Shinde 2. Online resources	Teaching Method: 1. lecture method 2.discussion method Teaching aid: Google meet, Google forms, Power point presentation
	2. EMS, ISO 14000 and 14001	2		
	3. OSHA, Public liability insurance act and mining act.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Smita Khaire (Jadhav) DEPARTMENT: _Commerce CLASS: _SYEME SEMESTER: IV

MONTH: JAN-MAR ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to: The learners will be able to acquire a basic understanding and knowledge about the Environment and it's problems. It will help to create awareness about preserving the Environment

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Environmental Pollution and Management	**Unit I-** Water pollution-sources and types of water pollution – physical, chemical and biological-effects of water pollution. Drinking water quality standards wastewater treatment-primary, secondary, tertiary - water pollution prevention and control Act-1974.	**3**	Environmental Science by Santra S.C Essential of Ecology and Environment by S.V.S Rana.	PowerPoint Presentation
	Unit IV- Noise pollution-sources effects and control	**1.5**	Environmental Science by Santra	PowerPoint Presentation

Smita K
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TEACHING PLAN (UNIT PLAN)

	Unit V- Government Agencies and Programs- The Tiwari committee- creation of NCEPC, Department of Environment and forest- Functions of State Pollution Control Board.	**2.5**	S.C	PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

Smita K
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Snehal Jadhav DEPARTMENT: Environmental Management & Economics (EME)
CLASS: S.Y.EME SEMESTER:_IV_ MONTH: January - March ACADEMIC YEAR: ___2021 - 2022
LEARNING OBJECTIVE/S:
The learners will be able to :
The learners will be equipped with knowledge, skills & motivation to address complex environmental challenges.
The learner will Understand different aspects in the environment with issues and their management technique.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
	Risk Assessment , Principals of Control, Incident Investigation, Recording and Reporting	3 4	Scoot, R.M .1997, Basic concept of Industrial hygiene, Lewis Publication, New York. Handbook of Occupational Safety and Health https://www.osha.gov/OshDoc/Directive_pdf/ADM_04-00-	Power Point Presentation

Snehal Jadhav
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TEACHING PLAN (UNIT PLAN)

	Chemical And Biological Health Hazrads and control		001.pd	
	Construction Activities - Hazards and Control	3	Handbook of Occupational Safety and Health http://www.ilocis.org/documents/chpt93e.htm	Power Point Presentation
	Monitoring , Review and Audit	3	Scoot, R.M .1997, Basic concept of Industrial hygiene, Lewis Publication, New York. http://www.ilocis.org/documents/chpt93e.htm	Power Point Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

Snehal Jadhav
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ARJUN P. VISHWAKARMA DEPARTMENT: COMMERCE CLASS: SYEME SEMESTER: SEM IV MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: The learners will be able to : The learners will be able to learn various aspects about Occupational Health And Safety . This subject is helpful to develop Occupational Health And Safety skills among learners.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Chapter 1	**Health And Safety Foundations, Policy, Positive Health And Safety Culture**	**04**	**Introduction To Health And Safety At work**	**Online lectures on Google meet**
Chapter 3	**Movement of People and Vehicles, Hazards and Controls, Handling Hazards and Control**	**04**		**Online lectures on Google meet**
				Online lectures on Google meet
Chapter 4	**Work Equipment Hazards and Control, Electrical Hazard And Control**	**04**		**Online lectures on Google meet**

Arjun V
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TEACHING PLAN (UNIT PLAN)

Chapter 6	**Physical And Psychological Health Hazard And Control**	**04**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 16

Arjun V
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: EME CLASS: SYEME SEMESTER: IV MONTH: JAN-MARCH

ACADEMIC YEAR:2020-21 SUBJECT: MIS

LEARNING OBJECTIVE/S: To understand the role of information technology and decision support systems in business and record the current issues with those of the firm to solve business problems

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3	Determining Information Needs for an Organisation/Individual Manager	2	MIS a Conceptual Framework by Davis and Olson	MS-Power Point, Google Meet, Google classroom, google form
	Overview of use of data flow method, analysis of information for decision processes etc.	2	Same as above	Same as above

Kalpita Vartak

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TEACHING PLAN (UNIT PLAN)

UNIT –5	Information Security	3	Same as above	Same as above
	Sensitize students to the need for information security	2	Same as above	Same as above
	Concepts such as confidentiality, Integrity and Availability. Types of threats and risk, overview of some of the manual, procedural and automated controls in real life IT environments.	2	Production and inventory control	Same as above
UNIT – 6	Case studies	2	Case Studies : Case on ABC Industrial Gases – Author : Prof Pradeep Pendse Mrs Fields Cookies – Harvard Case Study	Same as above

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

Kalpita Vartak

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: LEJESH KELOTH DEPARTMENT: COMMERCE CLASS: SYEME SEMESTER: SEM IV
MONTH: JAN-MARCH ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: The learners will be able to learn various aspects about Environment Economic its impact on social life, its essential in our economic sector . This subject is helpful to develop positive mind set towards environmental studies among learners.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
MODULE 1	Marginal condition for Pareto optimum- (efficiency in exchange, efficiency in production), SOCIAL THEOREM, (Classical welfare function, Pareto welfare function, Rawlsian function)Bergson & Samuelson Function (consumer & production surplus, cost Benefit Analysis)	05	ENVIRONMENTAL ECONOMIC BY STEVEN C, HACKETT ENVIRONMENTAL ECONOMIC BY Barry C Field & Martha K Field	Online lectures on Google meet

Lejesh
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TEACHING PLAN (UNIT PLAN)

	CONCEPT MARKET FAILURE, meaning, causes, externalities and its types, public goods and public bads, Lindahl pricing model 7 free ride problem, Private verse Public goods, Cost benefit ana:	05		Online lectures on Google meet
	Module 3 Hedonic price method Household production Defensive expenditure Travel expenditure State preference via contingent valuation Wage regression & value of statistical.	05		Online lectures on Google meet
	Module 4 Use verse nonuse value Willingness to pay verse Willingness to accept Module 5 Price verse quantity	05 05		Online lectures on Google meet Online lectures on Google Meet

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TEACHING PLAN (UNIT PLAN)

	Coase theorem & allocation of property rights			
	Module 6 Command & Control verses environmental taxes. Trade verse liability Pigouvian fees Single polluter multiple damage. Fees verse subsidies Fees verse imperfect competition. Types of imperfect competition.	07		Online lectures on Google meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 32

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TEACHING PLAN (UNIT PLAN)

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Bristi Gourgopal Biswas DEPARTMENT: Commerce CLASS: F.Y.FM SEMESTER: I (Subject: Business Economics I)

MONTH: August onwards ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: To understand the application of microeconomics at the corporate level.

The learners will be able to: observe microeconomics in the real world and understand and make business decisions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I **Introduction to business economics**	Introduction, Business Economics ,basic concepts for business economic analysis functional relations and tool for economic analysis. Introduction to market demand and supply, demand-supply, market equilibrium, changes in market equilibrium.	10		Chalk and board

Module II **Demand Analysis**	Meaning of demand, the law of demand, determinants of demand, demand function, price, income and substitution effects, nature of demand curve under different markets. Meaning of elasticity, price elasticity of demand, income elasticity of demand , cross elasticity of demand, promotional elasticity of demand, importance of elasticity of demand, and the relationship between price elasticity of demand and revenue concept. Significance of demand forecasting ,types of demand forecasting, steps in demand forecasting ,methods of demand forecasting.	10.		Chalk and board
Module III **Supply and production decisions and cost of production**	Concept of production, production function, isoquants ,ridge lines least cost combination of inputs ,expansion path. Types of production function ,law of variable proportions, laws of returns to scale. Meaning of economies and diseconomies of scale, Internal economies and diseconomies of scale, external economies and diseconomies of scale. Cost concepts: money cost, accounting cost and economic cost, fixed , variable and total cost , total , average and marginal cost. Cost function, short run cost output ,relationship between AC, AFC ,AVC and MC, relationship between AC and MC ,short run average cost and output, long run cost output, long run average cost curve ,long run marginal cost curve ,learning curve, long run AC and output. Concept of break even point ,variables influencing the break even point ,business application of break even analysis ,limitations of break even analysis.	12		Chalk and board
Module IV **Market structure perfect competition and monopoly**	Market structure ,types of market ,need to analyse the market structure. Perfect competition meaning and features ,short run equilibrium of the firm, long run equilibrium of the firm, equilibrium of industry and firm.	12		

and pricing and output decisions under imperfect competition	Features of monopoly ,sources of monopoly power, equilibrium of monopoly firm ,comparison between perfect competition and monopoly. Features of monopolistic competition, short run equilibrium of the firm, long run equilibrium of the firm ,selling cost and its effects, role of advertisement. Meaning of oligopoly ,characteristics of oligopoly ,collusive and non collusive oligopoly ,price rigidity ,collusive oligopoly, price leadership.			Chalk and board
Module V **Pricing practices**	Meaning of pricing practices, degrees of price discrimination, conditions for price discrimination, conditions for profitable price discrimination, equilibrium of price discriminating monopolist ,dumping. Introduction to pricing practices part II, marginal cost pricing ,cost plus pricing ,multi product pricing Transfer pricing.	10		Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **DEEPA PRADEEP DALVI** DEPARTMENT: COMMERCE CLASS: FY BFM

SUBJECT: INTRODUCTION TO FINANCIAL SYSTEM SEMESTER: I MONTH: AUGUST TO OCTOBER ACADEMIC YEAR: 2020-21 .

LEARNING OBJECTIVE/S:
The learners will be able to : To understand and gain the knowledge of Financial system

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I – Overview of Financial System	**Introduction to Financial System -** Overview, Meaning, Functions, Evolution of Financial System , Financial System in India compared in those with developed nations and developing nations, constitution of financial system and interrelationship between various components.	**15**	Indian Financial System – M Y Khan	CHALK AND TALK METHOD
UNIT III – Financial Regulators	Meaning and features of Financial regulators, Role and Functions , Types of financial regulators , Market regulated by each regulator.	15	Indian Financial System – Bharati Pathak	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

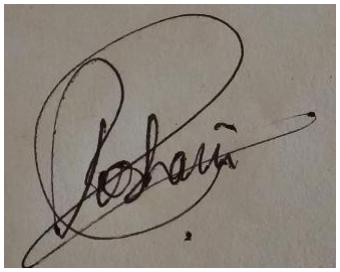
NAME OF THE STAFF: Dr.Roshani Nagar DEPARTMENT: Commerce CLASS: FYBFM SEMESTER : SEM I MONTH: Aug,Sep,Oct

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : To focus on the importanat aspects of preamble and study about the indian constitutions.

To study about the political process in India perspective.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4. Indian Constitution	Philosophy of the Constitution as set out in the Preamble; The structure of the Constitution-the Preamble, Main Body and Schedules;	10	Rashmi , deepa and reshma Parab	Chalk and Duster method
	Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution.4			
5. Significant	The party system in Indian politics; Local self-government in urban and rural areas.	10		



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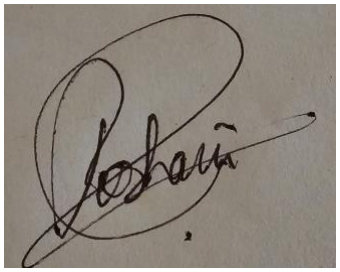
Aspects of Political Process	73rd and 74th Amendments and their implications for inclusive politics; Role and significance of women in politics			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Sivapriya Achari DEPARTMENT: Commerce CLASS: FYBFM

SEMESTER: I MONTH: July - November ACADEMIC YEAR: 2020- 2021 SUBJECT: Business Communication

LEARNING OBJECTIVE/S: To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills. The learners will be able to Preparing resumes to attending interviews, convening meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills. To make students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
Unit1. Theory of Communication	1) Concept of Communication- Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World Impact of technological advancements on communication 2) Channels and Objectives of Communication: Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board

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	Objectives of Communication: Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Moral of Employees 3) Methods and Modes of Communication: Methods: Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette Modes: Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing			
Unit 2 - Obstacles to Communication in Business World	1) Problems in Communication /Barriers to Communication: Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board

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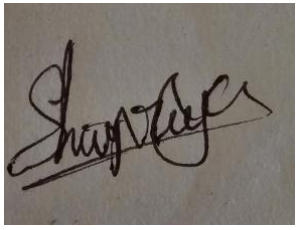
	2) Listening: Importance of Listening Skills, Cultivating good Listening Skills – 4 3) Introduction to Business Ethics: Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility Teachers can adopt a case study approach and address issues such as the following so as to orient and sensitize the student community to actual business practices: Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour			
Unit 3 : Business Correspondence	1)Theory of Business Letter Writing: Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation [Letter of Appointment, Promotion and Termination, Letter of Recommendation (to be taught but not to be tested in the examination)]	15	Manan Publication, Sheth Publication, Vipul Publication	Online

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Unit 4 : Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities ⚗ Listening Comprehension ⚗ Remedial Teaching ⚗ Speaking Skills: Presenting a News Item, Dialogue and Speeches ⚗ Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. ⚗ Reading Comprehension: Analysis of texts from the fields of Commerce and Management	15	Manan Publication, Sheth Publication, Vipul Publication	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Sivapriya Achari DEPARTMENT: Commerce CLASS: FYBFM

SEMESTER: I MONTH: July - November ACADEMIC YEAR: 2020- 2021 SUBJECT: Business Communication

LEARNING OBJECTIVE/S: To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills. The learners will be able to Preparing resumes to attending interviews, convening meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills. To make students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
Unit1. Theory of Communication	1) Concept of Communication- Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World Impact of technological advancements on communication 2) Channels and Objectives of Communication: Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board

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	Objectives of Communication: Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Moral of Employees 3) Methods and Modes of Communication: Methods: Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette Modes: Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing			
Unit 2 - Obstacles to Communication in Business World	1) Problems in Communication /Barriers to Communication: Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board

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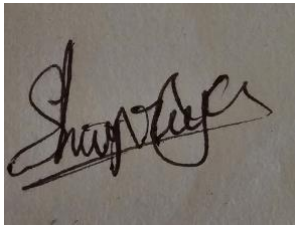
	2) Listening: Importance of Listening Skills, Cultivating good Listening Skills – 4 3) Introduction to Business Ethics: Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility Teachers can adopt a case study approach and address issues such as the following so as to orient and sensitize the student community to actual business practices: Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour			
Unit 3 : Business Correspondence	1)Theory of Business Letter Writing: Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation [Letter of Appointment, Promotion and Termination, Letter of Recommendation (to be taught but not to be tested in the examination)]	15	Manan Publication, Sheth Publication, Vipul Publication	Online

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Unit 4 : Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities ⇨ Listening Comprehension ⇨ Remedial Teaching ⇨ Speaking Skills: Presenting a News Item, Dialogue and Speeches ⇨ Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. ⇨ Reading Comprehension: Analysis of texts from the fields of Commerce and Management	15	Manan Publication, Sheth Publication, Vipul Publication	Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: SELF-FINANCE CLASS: FYFM

SEMESTER: I MONTH: AUGUST-NOVEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:

The learners will be able to:

- Define Ratio, Continued Ratio, and Inverse Ratio and solve the questions based on these terms.
- Understand the concept of Proportion, Continued Proportion, Direct Proportion and Inverse Proportion.
- Solve the questions based on different types of Proportion and relate the situations in day to day life.
- Understand the concept of Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation.
- Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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BUSINESS MATHEMATICS	Ratio, Proportion & Percentage	Unit1	▪ Define Ratio, Continued Ratio, Inverse Ratio ▪ Problem solving on ratio ▪ Define Proportion its types. ▪ Problem solving on proportion ▪ Explanation on concept of percentage and computation of percentage.	1 1 1 1 1	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: SELF-FINANCE

CLASS: FYFM SEMESTER: I MONTH: AUGUST-NOVEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVES:

The learners will be able to:

- Define Profit and Loss and terms related to it.
- Understand the formula of Trade discount and cash discount.
- Learn and understand the concept of Commission and Brokerage.
- Focus on how to use these terms in day to day life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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				ALLOTED		
BUSINESS MATHEMATICS	Profit and Loss	Unit2	▪ Introduction to formula of Profit, Loss, %profit ,%loss ▪ Solve problems based on the above formulas ▪ Introduction to terms like trade discount, cash discount. ▪ Exercise based on cost price, selling price, trade discount, cash discount. ▪ Introduction to terms like Commission and brokerage. Solving problems based on commission and brokerage	1 2 1 2 1	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: SELF-FINANCE

CLASS: FYFM SEMESTER: I MONTH: AUGUST-NOVEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVES:

The learners will be able to:

- Define Simple and Compound interest and its formula.
- Understand the concept of this topic and learn how to use in day to day life.
- Learn meaning of EMI, annuity and its types, also calculation of present and future value.

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PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Interest and Annuity	Unit3	▪ Introduction to the formula of Simple interest and sums based on it. Introduction to the formula of Compound interest and sums based on it monthly, quarterly, .half yearly and yearly. ▪ Introduction and sums based on EMI, reducing balance and flat rate of interest. ▪ Introduction to annuity and its types, calculation of present value and future value by using its formula.	2 2 2	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

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			▪ Concept on Stated annual rate and effective annual rate and solving sums based on it.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

TEACHING PLAN (UNIT 4 PLAN)

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NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: SELF-FINANCE

CLASS: FYFM SEMESTER: I MONTH: AUGUST-NOVEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVES:

The learners will be able to:

- Learn the concept of face value, market value, dividend, equity shares, bonus shares, preference shares.
- Solve the questions based on buying and selling of shares with and without brokerage.
- Define net asset value of mutual funds, entry/exit load
- Understand the concept of Systematic Investment Plan (SIP).
- Solve simple problems on calculation of net income after considering entry load and exit load change in net asset value and SIP.
- Focus and how to apply this knowledge in day to day life

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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				ALLOTED		
BUSINESS MATHEMATICS	Shares and Mutual Funds	Unit4	▪ Concept of Shares, Face value, market value, dividend. Explanation of types of Shares. ▪ Sums based on Shares ▪ Concept of Mutual Funds and its types Calculation of net income after considering entry load and exit load ▪ Change in net asset value and problems based on it. ▪ Concept of SIP and sums based on it.	2 3 1 2 2	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:GAURI YADAV. DEPARTMENT: COMMERCE CLASS:. FYFM SEMESTER: I.

MONTH: AUG - DEC ACADEMIC YEAR : 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. NATURE & PURPOSE OF ACCOUNTIN G 2.BOOKS OF				
	Meaning and scope of Accounting: Need, development & Definition of Accounting, persons interest in Accounting disclosure, branches of accounting Accounting concepts and Accounting Standards	10	Sheth publication	Chalk & Duster

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AC	Journals, ledger, subsidiary books Trial Balance, Financial Accounting framework . Sums solved Q.1 to Q.6	20	Sheth publications,Manan prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)7

NAME OF THE STAFF: PRIYANKA SINGH DEPARTMENT: COMMERCE CLASS : FYBAF SEMESTER: I MONTH : JULY SEPTEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand the environment and its impact on Business and its activities. This helps the students to meticulously know about the functioning of the Business and its environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Unit 1 Business and Environment	Business objectives, dynamics of business objectives types of Business objectives, business environment components of business environment, Environmental analysis, Environmental scanning ,PESTLE Analysis SWOT Analysis	15	Business Environment by Justin Paul	Chalk and Duster
Unit 2 Business and Society	Business Ethics Nature and scope of ethics, Ethical dilemmas,Corporate Culture,Ethical climate Development of Business Entrepreneurship Entrepreneurship and business development, MSMED Act 2006, Entrepreneurship as career option Consumerism and Consumer Protection Consumerism in India and Consumer Protection Act 1986	15	Business Environment by Justin Paul	Chalk and Duster

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Unit 3 Contemporary issues	Corporate Social responsibility, Responsibility towards Business and Society, Ecology, Carbon Credit, Kyoto Protocol Social Audit, Social Audit v/s Commercial Audit	15	VEENA KESHAV PAILWAR-BUSINESS ENVIRONMENT	Chalk and Duster
Unit 4 International Environment	Strategies for going global MNC's , TNC's and WTO Foreign Trade in India BOT, FDI, its implications	15	VEENA KESHAV PAILWAR-BUSINESS ENVIRONMENT	Chalk and Duster

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Janhavi V. Raut DEPARTMENT: Commerce (SFC) CLASS: F.Y.B.F.M SEMESTER: II

MONTH: November - March ACADEMIC YEAR: 2020- 2021 SUBJECT: Environmental Science

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge about Environment and its Science & Environmental Management System . Even create better understanding about the Environmental Science.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Environment : An Overview	A) Environment : structure, components and typology	04	Book by Sheth publication & Vipul publications	Board , Chalk and Duster & interactive method
	B) Ecosystem as part of environment	04		

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	C) Biodiversity	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Natural	A) Natural Resources: Definition, Importance & classification	03	Book by Sheth publication & Vipul	Board , Chalk and Duster &

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Resources	B) Utilization & conservation of natural resources C) Natural Resources & Associated problems	04 03	publications	Interactive method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Environment & Economic Activities	A) Nature of economic activities	04	Book by Sheth publication & Vipul publications	Board , Chalk and Duster & Interactive method
	B) Environmental & Economic Activities and associated problems	02		
	C) case studies on impact of human activities on environment	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – IV Environment Management	A) Environmental Management – concept & Need	03	Book by Sheth publication & Vipul publications	Board , Chalk, Duster And Interactive method
	B) Tool of Environmental Management, Environmental Impact Assessment, Environmental Audit	04		
	C) Role of technology in Environment management – GIS, GPS, Remote sensing as tools	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Priyanka Rajput DEPARTMENT: Commerce (SFC) CLASS: F.Y.B.F.M SEMESTER: II

MONTH: November - March ACADEMIC YEAR: 2020- 2021 SUBJECT: Computer Skills- I

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of Computer Hardware, Windows Operating System, Application of Internet, MS Word and MS Excel.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Computer Hardware	A) Personal Computers- identification/demonstration of different storage Devices like CD and CD drive, hard disk- HDD, storing and retrieving data from various storage devices.	04	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Identification of various input and output devices. Primary memory, RAM and ROM- Processor- CPU, its speed- machine cycle, ports, computer buses, Different types of printers.	04		

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	C) Introduction to trouble shooting of personal computers.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Windows	A) Introduction, features, various versions of windows, My computer, my documents, recycle bin, network neighborhood.	05	Computer Skills - I By Rimple Sanchla	Board , Chalk and Duster

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	B) Start menu, taskbar, file and folder operation (creating, copying, moving, deleting), system tools, creating shortcuts.	05	and www.wikipedia.com	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Internet	A) What is internet, most popular internet services, functions of internet like email, WWW, FTP, UseNet, Instant messaging.	05	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Internet telephony, using address book, working with task list, scheduling appointments, reminders, events.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV Word – 2013	A) Getting started, The Word window, New documents, Document navigation, Editing text, Working with text, Undo and Redo commands, Cut, copy, and paste, Find and replace Text formatting,.	03	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk, Duster And Computer (MS-Word Software)
	B) Character formatting, Tab settings, Paragraph formatting, Paragraph spacing and indents Tables, Creating tables, Working with table content, Changing the table structure Page layout, Headers and footers.	04		
	C) Page setup Graphics, Adding graphics and clip art, Working with graphics Proofing, printing, and exporting, Spelling and grammar, AutoCorrect, Printing and exporting documents.	03		
	Practical: - Create Window- Cut, Copy, Paste, Find & Replace Text Formatting, Header & Footers, Adding graphics and clip art, Spelling and grammar in Word - 2013.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - V Excel- 2013	A) Fundamentals of Excel, Cut, Copy, Insert, Delete, Paste Special, Custom Formatting, Undo, Redo.	03	Computer Skills - I By Rimple Sanchla and	Board , Chalk, Duster And Computer (MS- Excel
	B) Excel Formulas – Basic, Useful functions and Paste Function, Calc, Comments, Drawing toolbar, Edit, Replace, Delete, Clear.	03		

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	C) Essential Printing, Data Sorting, Hiding, AutoFormats, Protection, Basic Charts, Basic Formatting, If Function.	04	www.wikipedia.com	software)
	Practical: - Create Spreadsheet in Excel - 2013, Create Table- Insert & Delete Records, Basic Excel Formulae, Cut, Copy, Paste & Basic Charts in Excel-2013.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pranali Gurav** DEPARTMENT: **Commerce**

CLASS: **FYBFM_A** SEMESTER: **Sem II** MONTH: **Nov to April** ACADEMIC YEAR : **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Preparation of Financial Statements as per Companies Act.
2) Cash Flow Analysis as per AS 3
3) Introduction to IFRS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Unit : 1 SHARES AND DEBENTURES:	15	Manan & Vipul Publication	Chalk Board.
	1. Issue of Shares and Debentures. 2. Types of Shares and Debentures (in India). 3. Accounting Treatments for Issue of Shares and Debentures with New Market and SEBI			

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Financial Accounting II	Unit 2 : CORPORATE ACCOUNTING:	15	Manan & Vipul Publication	Chalk Board.
	1. Capitalisation of Reserves and Issue of Bonus Shares. 2. Preparation of Corporate Financial Statements in Vertical Form.			
	Unit 3 : SHARE VALUATION:	15	Manan & Vipul Publication	Chalk Board.

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	1. Valuation of Shares. 2. Buyback of Shares and Own Debentures? 3. Investment Accounting.			
	Unit 4 : INDIAN ACCOUNTING STANDARDS:	15	Manan & Vipul Publication	Chalk Board.
	1. AS, GAAP and their Impact on Income Statement and Balance Sheet. 2. Latest Development: Computerization of Accounting and Softwares.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:__60____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYFM (DIV- A)

SUBJECT – BUSSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** January -april **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	4 Principles of Effective Presentation Effective use of OHP Effective use of Transparencies How to make a Power-Point Presentation	15	PPT	Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYFM (DIV- A)

SUBJCT – BUSSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** February 2023 **ACADEMIC YEAR:**2022-2023

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Interviews:** Group Discussion, Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit **Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics, Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **Conference:** Meaning and Importance of Conference, Organizing a Conference **Modern Methods:** Video and Tele – Conferencing	12	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYFM (DIV- A)

SUBJECT – BUSSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** March 2023 **ACADEMIC YEAR:** 2022-2023

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	03	PPT	Online Lectures through Google Meet
3) Business Correspondence	Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters,	15		Online Lectures through Google Meet

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	Promotional Leaflets and Fliers, Consumer Grievance Letters, Letters under Right to Information (RTI) Act		PPT	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

NAME OF THE STAFF: MR. SNEHAL S PATIL **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYFM (DIV- A

SUBJECT – BUSSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** April 2023 **ACADEMIC YEAR:** 2022-2023

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4) Language and Writing Skills	**Reports:** Parts, **Types** - Feasibility Reports, Investigative Reports **Summarisation:** Identification of main and supporting/sub points, Presenting these in a cohesive manner	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pournima Sachin Khanapure DEPARTMENT: Mathematics CLASS: FYFM

SEMESTER: SEM II MONTH: Jan-April ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

BUSINESS STATISTICS UNIT II MEASURES OF CENTRAL TENDENCY	Criteria for Good Measures of Central Tendency, Arithmetic Mean, Median, Mode for Grouped and Ungrouped Data, Combined Mean	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pournima Sachin Khanapure DEPARTMENT: Mathematics CLASS: FYFM

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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VIVA COLLEGE, Virar (W)

SEMESTER: SEM II MONTH: Jan-April ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS UNIT III MEASURES OF DISPERSION	Concept of Dispersion, Absolute and Relative Measures of Dispersion, Range Variance, Standard Deviation, Coefficient of Variation, Quartile Deviation, Coefficient of Quartile Deviation	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pournima Sachin Khanapure DEPARTMENT: Mathematics CLASS: FYFM

SEMESTER: SEM II MONTH: Jan-April ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

BUSINESS STATISTICS UNIT IV CORRELATION AND REGRESSION	Concept of Correlation, Positive and Negative Correlation, Karl Pearson's Coefficient of Correlation, Meaning of Regression, Two Regression Equations, Regression Coefficients and Properties.	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Pournima Sachin Khanapure DEPARTMENT: Mathematics CLASS: FYFM

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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SEMESTER: SEM II MONTH: Jan-April ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS UNIT V LINEAR PROGRAMMING PROBLEM	Meaning of LPP Formulation of LPP, Solving LPP graphically.	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ARUN RAUT DEPARTMENT: ACCOUNTANCY

CLASS: SYBFM SEMESTER: III MONTH: JUNE-NOV ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Learn meaning of Portfolio Management, Investment process, Process of asset allocation, portfolio Mang. Strategies, etc .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	**Introduction To Portfolio Management** Investment process, Investment Categories, defining investment goals and objectives, investment constraints. Process of asset allocation, different approaches to allocation decision, overview of allocation techniques.	12	Vipul Prakashan Internet	Chalk & Duster Internet

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2	**Portfolio Management Strategies** Active Strategy, passive strategy, semi active strategy, duration shift and immunization, efficient market hypotheses, top down and bottoms up.	12	Vipul Prakashan Internet	Chalk & Duster Internet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____24_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Priyanka Bangera DEPARTMENT: Commerce SFC CLASS: SYBFM SEMESTER: III (Subject : Commodity Market)

MONTH: June to October ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to : SCOPE OF COMMODITY MARKETS IN INDIA

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1- Introduction to Commodity Market	• Emergency of Commodity Market • Dynamic of Global Commodity Market.	12	Vipul Commodity Market -S.P Das	CHALK AND BOARD
UNIT 2 - COMMODITY MARKETS IN INDIA	• Commodity Exchange in India • Role of Information in commodity Market • Linkages between Equity and commodity Market.	15	Vipul Commodity Market -S.P Das	CHALK AND BOARD

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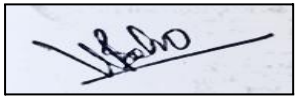

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TEACHING PLAN (UNIT PLAN)

	• Commodity Market -Logistics and warehouse.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

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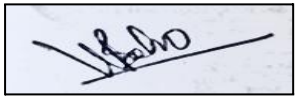

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(Commerce)

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Priyanka Bangera DEPARTMENT: Commerce SFC CLASS: SYBFM SEMESTER: III (Subject : Equity Market)

MONTH: June to October ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to : The learners will be able to : SCOPE OF EQUITY MARKET

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2- Primary Market	• IPO - Methods followed, Book Building, Offer for sale • Role of Merchant bankers in fixing the price • Red – Herring Prospectus – it's unique features • ASBA and its features • Green Shoe option • Sweat equity, ESOP	15	Vipul Equity Market -Jia Makhija	CHALK AND BOARD

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TEACHING PLAN (UNIT PLAN)

	• Rights issue of shares, Non voting shares ,ADR, GDR,IDR			
UNIT 4- Importance of Equity Markets in developing country like India	• Need for attracting more investors towards equity • Need for strengthening secondary markets • Link between Primary Market and Secondary Market.	15	Vipul Equity Market -Jia Makhija	CHALK AND BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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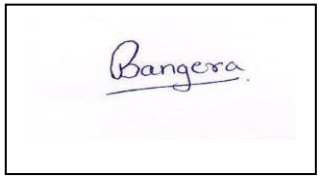
TEACHING PLAN (UNIT PLAN)



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Priyanka Devnath_Rajput DEPARTMENT: Commerce (Self – Finance) CLASS: S.Y.B.F.M (DIV A & B)

SEMESTER: III MONTH: July - October ACADEMIC YEAR: 2020- 2021 SUBJECT: Computer Skills - II

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of Excel, Data Base Management System, Different system of E-Business Software and Online Banking.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Advanced Spreadsheet	Pivot Table.	01	Computer Skills - II By Rimple Sanchla And www.Guru99.com https://www.guru99.com/excel-tutorials.html	Board, Chalk, Duster And Computer (MS- Excel Software)
	Advanced formulae.	03		
	Lookups.	02		
	Macros.	02		
	Working with other programs.	02		
	Inserting a spreadsheet sheet in word document.	01		
	Modifying an inserted spreadsheet.	01		
	Inserting a linked chart in a Word	01		

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	Document.			
	Inserting graphic in a spreadsheet.	02		
	Practical: Pivot, Advance Formulae, Lookups, Macros, Inserting linked chart in a word document	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Data Base Management System	Concepts.	01	Computer Skills - II By Rimple Sanchla And	Board , Chalk, Duster and Computer Software
	Tables.	02		
	Fields.	02		
	Datatypes.	03		
	RDBMS.	03		
	Primary Key.	02		

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	Foreign Key.	02	www.Guru99.com https://www.guru99.com/dbms-tutorial.html	
	Practical: - Create Table, Primary Key, Foreign Key, Insert Data, Delete table.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Modern E Business Software Systems	Introduction.	01	Computer Skills - II By Rimple Sanchla And www.wikipedia.com	Board , Chalk and Duster
	Enterprise Resource Planning – ERP.	03		
	Supply chain Management- SCM.	02		
	Customer Relationship Management- CRM.	02		
	Sales Force Automation- SFA.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV Other Emerging Technologies	Other emerging technologies	03	Computer Skills - II By Rimple Sanchla And www.wikipedia.com	Board , Chalk and Duster
	Net-banking	03		
	Online banking software	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. SEEMA SIHANA** DEPARTMENT: **SELF FINANCE** CLASS:- SYBFM SEMESTER: **III**

SUBJECT: MONEY MARKET **MONTH**: JUNE-OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The subject of Money Market is very important as it provides vital information about opportunities for investment as well as capital formation to investors, job seekers and to the students. It helps to transform from traditional savers to smart investors.

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MONEY MARKET	**Module I- Introduction to Money Markets** **Meaning of money market, Features of money market, Importance of money market, Role of Primary dealers, Development of trade and industry, Development of capital market, Smooth functioning of commercial banks, Effective Central Bank Control, Formulation of suitable monetary policy, Source of finance to government**	**15**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**
	Module II- Regulatory Framework of Money Markets **Regulatory framework of RBI, FIMMDA (Fixed Income, Money Market and Derivatives Association) and FEDAI (Foreign Exchange Dealers Association of India), NDS-OM**	**15**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**

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	Web.			
	. **Module III- Money Market Instruments** **Conventional:- Treasury bills, Money at call and Short Notice in the Call Loan market, Commercial bills, Promissory notes in the bill market.** **Modern:- Commercial papers, Certificate of Deposit, Inter-bank Participation Certificates, Repo instrument, Banker's Acceptance.** **Money Market Mutual Fund:- Meaning, advantages, disadvantages, Regulatory framework for money market mutual funds, various money market funds operational in Indian market.**	15	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**
	Module IV- Recent Developments in Money Market **Integration of Unorganised sector with the Organised sector, Widening of call money market, Introduction of Innovative Instrument, Offering of market rates of interest, Promotion of**	**15**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**

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	bill culture, Entry of money market mutual funds, Setting up of credit rating agencies, Adoption of suitable monetary policy, Establishment of DFHI, Setting up of Security Trading Corporation of India Ltd (STCI).			

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Bhakti Vilas Purandare DEPARTMENT: Self Finance CLASS: S.Y.BFM SEMESTER: III MONTH: June to October

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Understand & remember the concept of Ratio Analysis, Understand & remember the concept of Working Capital Management

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3 – **Cash flow statement**				
	Meaning of cash inflow and cash outflow Operating activities with examples	04	Book by Manan publications/Internet	Chalk and Board
	Financial activities with examples Investment activities with examples	04	Book by Manan publications/Internet	

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	Question on cash flow Management	04		
		01	Book by Manan publications/Internet	
Unit 5- **Working Capital Management**	Concept, Nature of Working Capital , Planning of Working Capital	01	Book by Manan publications/Internet	Chalk and Board
	Estimation / Projection of Working Capital Requirement in case of Trading and Manufacturing Organization	01	Book by Manan publications/Internet	
	Operating Cycle Practical Problems	02	Book by Manan publications/Internet	Chalk and Board
	Sums	02	Book by Manan publications/Internet	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMBARI PATWARDHAN DEPARTMENT: COMMERCE CLASS: SYBFM

SEMESTER: III MONTH: JUNE - OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: Business Law
The learners will be able to: The Pupils Will be able to understand the concept of Contract , its types and essentials , concept of goods, it's types, contract of sale, and other related provisions, As well as they will be able to understand the concept of negotiable instrument ,it's types, and other related provisions and specific contracts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indian Contract Act 1872	Definitions :- Agreement, types of agreement, Contract, types of contract , valid, void, voidable, contingent, and quasi contract and e-contract. Difference between agreement and contract.	**08**	Indian Contract Act 1872 by Dr.Avtar Singh	Chalk , Board and Duster
	Offer definition, election of valid proposal or offer, counter offer, standing or open offer, difference berween offer and invitation to offer	**04**	Indian Contract Act 1872 by	Chalk , Board and Duster

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	acceptance- definition, essentials of valid contract, promise, communication of offer and acceptance and revocation		Dr.Avtar Singh	
	Capacity to contract, consent and free consent, consideration and void agreement	**03**	Indian Contract Act 1872 by Dr.Avtar Singh	Chalk , Board and Duster
Specific contract Act	Law of Indemnity and Grarantee Law of Bailment and Plegde Law of Agency	**04**	Indian Contract Act 1872 by Dr.Avtar Singh	Chalk , Board and Duster
The Sale of Goods Act, 1930	Chapter I Introduction, definitions, formalities of contract of sale, Distinguish between sale and agreement to sell Hire Purchase agreement.	04	Principles of law Of sale of goods Dr Avatar Sing	Chalk , Board and Duster
	Chapter II Conditions and Warranties, Doctrine of Caveat Emptor	03		Chalk , Board and Duster
	Chapter III Transfer of property in goods-meaning and rules governing The same, transfer of risk	03	Chalk	Board and Duster

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	Chapter IV Meaning of the term unpaid seller and rights of an unpaid seller, auction sale	03		Chalk , Board and Duster
The Negotiable Instruments Act,1881	Chapter I Meaning and characteristics of Negotiable Instruments, Classification of Negotiable Instruments	03		Chalk , Board and Duster
	Chapter II Promissory Note and Bill of Exchange, essential elements, Distinguish between Promissory note and bill of exchange, Acceptance and acceptor, absolute and Qualified acceptance, Drawer, drawee in case of need, payee, dishonor	04		Chalk , Board and Duster

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	Chapter III Cheques, crossing of cheques, distinguish between Bill of Exchange and cheque, penalties in case of dishonour of cheques	03		Chalk , Board and Duster
	Chapter IV Miscellaneous provisions(sections8-10,22,99-102,118-122,134-137)Holder and Holder in due course, Rights and Privileges of a holder in due course ,Payment in Due course ,maturity of an instrument ,Bill in sets	03		Chalk , Board and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. SEEMA SIHANA** DEPARTMENT: **SELF FINANCE** CLASS **SYBFM** SEMESTER: **IV**

SUBJECT: EQUITY MARKETS II **MONTH**: NOVEMBER TO MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: **Gives insight to students about working and importance of equity and debt market in depth.**

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EQUITY MARKETS II	Module I- Developments in Indian Equity Market:- Domestic Savings and Investments. Disinvestments, FDI and Foreign Portfolio Investment (FPI). Role of Retail Investors. Share Price and Share Price Volatility. Role of SEBI.	15	Text book and Internet	1 Chalk and Black Board Method 2 Example 3 Discussion
	Module II- Valuation of Equities:-	15	Text book and Internet	
	Factors affecting Share Prices. Balance Sheet Valuation. Dividend Discount model (Zero growth, constant growth and Multiple growth)			1 Chalk and Black Board Method 2 Example 3 Discussion

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	Module III- Statistical Analysis of Share Price Movement:- **Efficient Market Hypothesis.** **Stochastic Models.** **Brownian Motion.** **BETA**	**15**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**
	Module IV- Dealings in Stock Exchanges:- **Role of Brokers.** **Stock Market Quotations.** **Procedure for Buying and Selling.** **BOLT - Online Trading/ NEAT System.** **Clearing and Settlement.** **Order Matching.**	**15**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE-SELF FINANCE SUBJECT: FOREIGN EXCHANGE (FC)
CLASS: SYBFM SEMESTER: IV MONTH: October- March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to: Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Foreign Exchange Market:	An Introduction FOREX trading volume, FOREX trading locations, Details about major traded currencies, Evolution of foreign exchange ,Market and Foreign Exchange System Market Participants: Banks and Financial Institutions, Merchants, other customers, speculators and hedgers, Central Bank, Forex dealers and market makers and brokers, FOREX – trading and SWIFT Robots	15	Vipul Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Unit 2: Introduction to Indian Foreign Exchange Market	FOREX market in India: A historical perspective FERA Vs. FEMA, Pre-liberalization Exchange Rate Regime in India and Hawala market	12	Vipul Publications	Lecture method, Discussion method
	Brief introduction to currency convertibility in current and Capital account.	3	Vipul Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3: Operational aspects of foreign exchange market and foreign exchange contracts	a) Floating Rate, Currency Boards &Currency Basket Systems, Brief review on various exchange rate regime, Advantages of free and Fixed Exchange Rate regime, Pros & Cons of managed floating exchange rate regime, Prevalence of Currency Boards Regime, Practice of Currency Basket Regime.	8	Vipul Publications	Lecture method, Discussion method
	b) Foreign Exchange Contracts: Spot and Forward Contracts Cash, Spot trading Trade Date, Settlement PR date Spot trading roll over mechanism. Foreign Exchange Forward contracts, Fixed Maturity Contract, Partially Optional Contract, Fully Optional Contract, Non-Delivery Forward Contracts, Foreign Exchange Futures Contract, Different Dimensions of Foreign Exchange Future, Contract specification trading at National Stock Exchange of India.	7	Vipul Publications	Lecture method, Discussion method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4: Foreign Exchange Arithmetic and Risk Management	Types of Exchange Rates Direct Rate, Indirect Rate and Cross Rate Arbitrage- Geographical and triangular Interest Rate- spot Contracts, forward contracts and SWAP Points Risk Management in Foreign Exchange Market- Need and importance of foreign exchange management methods adopted (Spot and forward, arbitrage, cross currency deals, SWAPS, options and futures	15	Vipul Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE-SELF FINANCE SUBJECT: MERCHANT BANKING
CLASS: SYBFM SEMESTER: IV MONTH: October- March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to: Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Introduction to Merchant Banking	Introduction to Merchant banking, Importance, need, functions, Merchant banking services - Project counselling, Loan syndication and Corporate counselling; Pre-issue merchant banking activities - Obtaining stock exchange approvals, action as per SEBI guide lines, Finalizing the appointments with - manager/advisers, Underwriters, Brokers, Bankers, Advertising agency, Drafting and approval of prospectus; Post-issue merchant banking activities – Issue subscription, Allotment of shares, Refunds, Periodical reports to SEBI.	15	Vipul Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Initial Public Offering (IPO)	Initial Public Offering - Issuance Process, Role of registrar, SEBI guidelines for IPO eligibility, IPO grading, Draft Red Herring Prospectus (DRHP), Listing agreement, Pricing the issue, Book building process, Allotment; SEBI Guidelines in Drafting the Offer Document; Pre and Post launch activities in IPO, SEBI Guidelines on QIP,	12	Vipul Publications	Lecture method, Discussion method
	Rights and Bond Issues	3	Vipul Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3- Issue of DRs, ADRs and CPs	Types and Process of Issuing of Depository Receipts (DRs) - American Depository Receipts (ADRs), Global Depository Receipts (GDRs), European Depository Receipts (EDRs), Indian Depository Receipts (IDRs), ADR structure and norms, Indian Depository Receipts (IDRs) and Guidelines	12	Vipul Publications	Lecture method, Discussion method
	Procedure for issue of Commercial Paper – Credit Rating, Redemption process.	3	Vipul Publications	Lecture method, Discussion method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4: Issue of Bond and Debentures	Procedure for Issue of Bond and Debentures, Foreign currency convertible bonds	15	Vipul Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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NAME OF THE STAFF: LEJESH KELOTH DEPARTMENT: COMMERCE (SELF-FINANCE) CLASS: SYBIM
SEMESTER: III MONTH: NOV-MARCH ACADEMIC YEAR: 2020 – 21

LEARNING OBJECTIVES:
The learners will be able to understand the concept of using macroeconomics for the growth of the economy by developing a core understanding regarding income, expenditure, measurement, and trade cycles, demand and supply of money and levels of inflation for the development of the economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics – II Macro Economics Unit: I, II & III IV,V	Unit I: Overview of Macro Economics - Circular flow of income in open an closed economy - Measurement of National Product , Green GNP and NNP - Trade cycle: features and phases - Say's Law of Market	3	H.L.Ahuja Modern Economics	PPT LECTURE VIA GOOGLE MEET, Google classroom, quiz, test, online discussion
	Unit II: Money, Prices and Inflation - Money supply determinants and factors - Demand for money, classical and Keynes approach and also Friedman approach - Money & Prices Fisher and Cambridge equation - Inflation: types, nature, Policy Measures	4	D.N.Diwedi Macro Economics	

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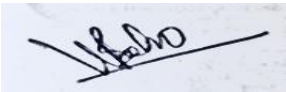
	Unit III: Introduction to Public Finance - Meaning, Scope and Major Fiscal Functions			
	UNIT 3; **Public revenue, Public Expenditure and Debt Sources of Public Revenue:** tax and non-tax revenues Objectives of taxation - Canons of taxation - Types of taxes: direct and indirect - Tax Base and Rates of taxation: proportional, progressive and regressive taxation Shifting of tax burden: **Impact and incidence of taxation** - Processes- factors influencing incidence of taxation Economic Effects of taxation: on Income and Wealth, Consumption, Savings, Investments and Production. Redistributive and Anti – Inflationary nature of taxation and their implications **Public Expenditure**: Canons - classification - economic effects of public spending - on production, consumption, distribution, employment and stabilization – Theories of Public Expenditure: Wagner's Hypothesis and Wiseman Peacock Hypothesis - Causes for Public Expenditure Growth. Significance of Public Expenditure: Social security contributions- Low Income Support and Social Insurance Programmes. **Public Debt** : Classification - Burden of Debt Finance : Internal and External Public Debt and Fiscal Solvency	4	AHUJA .H.L, MODERN	PPT LECTURE VIA GOOGLE MEET, Google classroom, quiz, test, online discussion

		4	ECONOMIC BHATIA H.L PUBLIC GINANCE	
	UNIT 4			
	Fiscal Management and Financial Administration Fiscal Policy: Meaning, Objectives, constituents and Limitations. Contra cyclical Fiscal Policy and Discretionary Fiscal Policy : **Principles of Sound and Functional Finance Budget**- Meaning objectives and types - Structure of Union budget - Deficit concepts- **Fiscal Responsibility and Budget Management Act.** Intergovernmental Fiscal Relations : fiscal federalism and fiscal decentralization - central-state financial relations – 14th Finance Commission recommendations	5		PPT LECTURE VIA GOOGLE MEET, Google classroom, quiz, test, online discussion



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ambari Patwardhan DEPARTMENT: SFC CLASS: SYBFM SEMESTER: IV MONTH: December to April

ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Business Law
The learners will be able to : The pupils will be able to learn about theformation of various entities like compant partnership and LLP Act, where they will learn the concept of IPR, essentials and types and rules regarding the such entities

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Companies Act 2013	Definition, advantages – disadvantages of company , types	4	The Companies Act by Cr. Avatar singh	Black board, chalk
	Lifting of corporate Veil, Documents and procedure for incorporation of company, Effect of Incorporation	3		
	Membership of company	2	The Companies Act by Cr. Avatar singh	Black board, chalk

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	Memorandum of association and Article of association	2		
	Prospectus , Meaning, contents, types and legal framework	2	The Companies Act by Cr. Avatar singh	Black board, chalk
	Directors, types, DIN , legal position. Advantages and disadvantages , women directors , managing directors	2		Black board, chalk
	Meetings , types e-voting	2	The Companies Act by Cr. Avatar singh	
IPR	IPR rights in India and types, Patents- meaning, features, conditions, opposition to grant patents , expiration of Patent, remedies available	2		Black board, chalk
	Copyright- Meaning, registration, term of copy right, what works are protected infringement and remedies.	2	The Companies Act by Cr. Avatar singh	
	Trademarks – Meaning, types, registration process, infringement	2		Black board, chalk

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	and remedies, passing off, services marks			
Indian Partnership Act	Definition, types, test of partnership, partnership deed, property of the firm dissolution of partnership	3		
LLP 2008	Definition, body corporate, salient features, Nature , difference between LLP and partnership, conversion, winding up and dissolution of LLP	3		
Securities Contract Act	Securities- terms of listing, - delisting , Appellate tribunal, recognition, bye-laws, types of contracts, securitaization-reconstruction of financial assets	4		
SEBI	SEBI – objectives, establishment, powers and functions , accounts audit, penalties, registration Issues of disclosure investors protection guidelines.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KALPANA JAIN** DEPARTMENT**:** ACCOUNTANCY CLASS: **T.Y.B.F.M.**

SEMESTER: **V** MONTH: June - September ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S : To explain the concepts of Financial Derivatives.

The learners will be able to :understand the concepts in simple way which will help them to understand the trading in stock market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II FUTURES	***Introduction,Future Terminology** ***Key Features of Future Cont racts** ***Future v/s Forwards** ***Equity Futures** ***Equity Futures in India** ***Index Futures** ***Stock Futures** ***Future Trading Strategies** ***Hedging with example** ***Speculation with example** ***Arbitrage** ***Spread Trading** ***Practical problems**	01 01 01 01 01 01 01 01 01 01 01 01 03	Financial Derivatives – C.S.Divyesh Patel	Chalk-Board Method
Unit III Options and Pricing Options	*Introduction, Option terminology *Types, Options Payoff *Index Options, Stock Options * Option trading Strategies	01 01 01 01	Options,Futures and Other	Chalk-Board Method

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	*Straddle,Strangles *Strips and Straps-Spread trading *Factors affecting Options Pricing *Option Pricing Models * Binomial Pricing Model with practical problems *The Black Scholes model *Pricing of Index Option *Sensitivity of Option Premia: Delta,Gamma,Lambda,Theta,Rho.	01 01 01 01 03 01 01 02	Derivatives – John C Hull Sankarshan Basu	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNITS: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _ANKITA ARUN RAUT_____ DEPARTMENT: ___ACCOUNTANCY_____

CLASS: ____TYBFM_____ SEMESTER: __V_____ MONTH: __JUNE-NOV___ ACADEMIC YEAR: __2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : __.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Introduction to technical Analysis Technical analysis, Basic assumptions, strengths and weakness charts, candlestick chart analysis, one two and three candlesticks pattern, support and resistance, Head and shoulders, double & triple top & bottom, Gap Theory	15	Vipul Prakashan Internet	Chalk & Duster Internet

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2	Major Indicators and Oscillators Stochastic, RSI, Williams %R, MFI, Bollinger bands, Moving Averages, MACD	10	Vipul Prakashan Internet	Chalk & Duster Internet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____25_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: Self Finance CLASS: T.Y.BFM SEMESTER: V MONTH: June to September ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & Remember- the meaning of Fundamental Research, Technical analysis, Economy Analysis, Industry Analysis
2) Understand and remember Company analysis; Qualitative Dimensions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3- Fundamentals of Research	Fundamentals of Research	03	Book by Seth publications/Internet	Google Classroom, Chalk and duster
	Economy Analysis	03	Book by Seth publications/Internet	Google Classroom, chalk and duster

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Unit 4- Company Analysis	Industry Analysis	03	Book by Seth publications/Internet	Google Classroom, chalk and duster
	Qualitative Dimensions	04	Book by Seth publication/Internet	Google classroom, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Vasanthi Shenoy SUBJECT: Business Ethics & Corporate Governance DEPARTMENT: Commerce (SFC)

CLASS: TYBFM SEMESTER:V MONTH: June-Oct ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I Business Ethics UNIT 2	Role of Board of Directors, Organization climate and structure ethics Addressing ethical dilemmas Code of ethics; ethics committee, ethics training, integrity pact	5	Manuel G. Velasquez	Chalk & Board, Discussion Google Classroom You Tube Videos
	Corporate Governance- Conceptual Framework Introduction, need and scope	9		

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Corporate Governance- Conceptual Framework UNIT 3	Evolution of Corporate Governance Developments in India Elements of Good Corporate Governance, ESG- Environment Social Governance- Tata Steel Various scams (Sahara,, Enron, Kingfisher, Worldcom, Harshad Mehta, PNB, HSBC, Satyam)			
Corporate Governance Forums and Legislative Framework of Corporate Governance in India	Corporate Governance Forums and Legislative Framework of Corporate Governance in India National Foundation of Corporate Governance Global Corporate Governance forum Listing agreements SEBI Guidelines Companies Act	9		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Heena ObaidQureshi DEPARTMENT:Commerce CLASS:TYBFM SEMESTER: V (Subject : Business Valuation)

MONTH: June-Sept ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVES: To understand about the basics of business valuationThe learners will be able to learn business valuation and its methods

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1.Basics of valuation	Introduction, price v/s value, purpose, bias, uncertainties, role of valuation.	15	Vipul Prakashan, Taxmann	Chalk- Board
2. Valuation models	Asset based approach, income based approach, discounted cash flow, free cash flow.	20		

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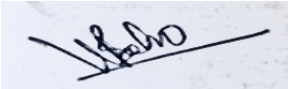

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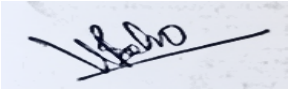

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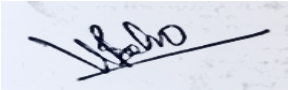
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Heena Obaid Qureshi DEPARTMENT: Commerce CLASS: TYBFM SEMESTER: VI (Subject : Financial Derivatives)

MONTH: June-Sept ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to study in depth about global and Indian Derivative Market.

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1.INTRODUCTION TO DERIVATIVES 4.CLEARING AND SETTLEMENT OF OPTIONS & FUTURES	The learners will be able to study in depth about global and Indian Derivative Market, EXCHANGE TRADED vs OTC DEVELOPMENT OF EXCHANDE TRADED DERIVATIVES,GLOBAL DERIVATIVE MARKET,	15	Manan pralashan and Vipul Prakashan	Chalk-Board



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TEACHING PLAN (UNIT PLAN)

	EXCHANGE TRADED vs OTC, L.C GUPTA &J.R VERMA COMMITTEE			
	FUTURES AND OPTIONS TRADING SYSTEM, TRADE WORK STATIONS, SPECIFICATION FOR STOCK & INDEX ELIGIBILITY FOR TRADING CHARGES, CLEARING MECHNISM, OPTION-OPEN POSITION CALCULATION MARGINING &SETTLEMENT MECHANISM, RISK MANAGEMENT	20		

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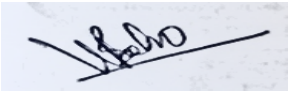
TEACHING PLAN (UNIT PLAN)

	MECHNICS OF SPAN,PORTFOLIO MARGIN REQUIREMENTS			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:35



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Vasanthi Shenoy SUBJECT: Marketing of Financial Services DEPARTMENT: Commerce (SFC)

CLASS: TYBFM SEMESTER:V MONTH: June-Oct ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I Service Marketing UNIT 2	Foundation of services marketing – Introduction – The services concept – Service Industry – Nature of Service, Characteristics of Services, Classification of Services – Importance of Services Marketing – The Growth in Services – Global and Indian Scenario, Retail Financial Services: Investment Services – Insurance Services, Credit Services – Dimensions and drivers, Institutional Financial Service, Distinctive	9	Arthur Meidam: Macmillan	Chalk & Board, Discussion Google Classroom You Tube Videos

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Issues in Service Marking	Characteristics of Services _ Four I's of Services – Intangibility, Inconsistency, Inseparability and Inventory, Managing Service Encounters.			
UNIT 3 Customer Satisfaction	Issues in Marketing of Services – Extended Services Marketing Mix : Going Beyond the 4 Ps. (7Ps of Services Marketing). Service Delivery Process – Service Blueprints - Service Mapping – Managing Employees for service orientation. Distribution Strategies of Services – Challenges in Distribution of Services. Personal Selling – Advertising and Sales Promotion in Service	7		
	Customer Satisfaction & Service Quality in Service Marketing – Service Encounter – Role of HR & Internal Marketing – Monitoring and Measuring customer satisfaction, GAP Model – Handling complaints effectively – Service Failure – Recovery, Use of Internet in Service Marketing, Role of IT in marketing Financial Services, Ethics in	5		

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	Marketing, New trends in marketing, Marketing in 21st Century, Marketing through social networking			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 21

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _lejesh keloth DEPARTMENT:FYBIM CLASS: _A SEMESTER: IV (Subject : _Business economic-II)

MONTH: JUNE TO OCT ACADEMIC YEAR: 20-21

LEARNING OBJECTIVE/S: Enable the students to pursue further studies in this discipline understanding the functioning of Domestic as well as global economy

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Macro-economics Paper-II	**Module 1- Scope importance of Macro Economics:** Macroeconomics : Meaning, Scope and Importance ♦ Circular Flow of Aggregate Income and Expenditure : Closed and Open Economy Models ♦ The Measurement of National Product : Meaning and Importance – Conventional and Green GNP and NNP Concepts – Relationship Between National Income and Economic Welfare ♦ Short run Economic Fluctuations : Features and Phases of Trade Cycles ♦ The Keynesian Principle of Effective Demand : Aggregate Demand and Aggregate Supply – Consumption Function – Investment Function – Effects of Investment Multiplier on Changes in Income and Output	15	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method

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TEACHING PLAN (UNIT PLAN)

MAcro-economics Paper-II	**Module 2-Money flow:** Money Supply : Determinants of Money Supply – Factor influencing Velocity of Circulation of Money ♦ Demand For Money : Classical and Keynesian Approaches and Keynes' Liquidity Preference Theory of Interest ♦ Money and Prices : Quantity Theory of Money – Fisher's Equation of Exchange – Cambridge Cash Balance Approach ♦ Inflation : Demand Pull Inflation and Cost Push Inflation – Effects of Inflation – Nature of Inflation in a Developing Economy ♦ Monetary Policy : Meaning, Objectives and Instruments, Inflation Targeting	15	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method
Macro-economics Paper-II	**Module 4** ; OPEN ECONOMIC THEORY AND ISSUES OF INTERNATIONAL TRADE; .		H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method
	The Basis of International Trade : Ricardo's Theory of Comparative Cost Advantage – The Hecksher-Ohlin Theory of Factor Endowments – Terms of Trade – Meaning and Types – Factors Determining Terms of Trade – Gains from Trade – Free Trade versus Protection	10	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication	Black Board Method

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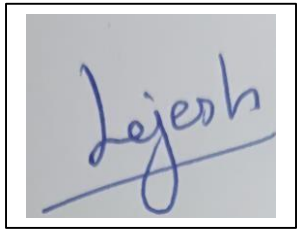
	♦ Foreign Investment : Foreign Portfolio Investment – Benefits of Portfolio Capital Flows – Foreign Direct Investment – Merits of Foreign Direct Investment – Role of Multinational Corporations ♦ Balance of Payments : Structure – Types of Disequilibrium – Measures to Correct Disequilibrium in BOP ♦ Foreign Exchange and Foreign Exchange Market : Spot and Forward Rate of Exchange – Hedging, Speculation and Arbitrage – Fixed and Flexible Exchange Rates – Managed Flexibility			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:40



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Heena Obaid Qureshi DEPARTMENT: _Commerce CLASS: TYBFM SEMESTER: _V (Subject : Risk Management)

MONTH: ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: _____

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
1.INTRODUCTION TO RISK MANAGEMENT	CONCEPT AND DEFINITION OF RISK,RISK AND UNCERTAINTY, STRATEGIC &OPERATIONAL RISK, DYNAMIC NATURE OF RISK,FINANCIAL RISK, BUSINESS RISK	10	Text book	Chalk-Board
2.	RISK MEASUREMENT,SOURCES &IMPACT OF COMMON BUSINESS RISK,MARKET ,CREDIT,LIQUIDITY, IMPACT UPON THE STAKEHOLDERS,NATURE &IMPORTANCE OF FINANCIAL RISK,	10		

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TEACHING PLAN (UNIT PLAN)

	EVALUATION OF FINANCIAL RISK,ALTERNATIVE RISK MANAGEMENT TOOLS, ROLE OF RISK MANAGER & RISK COMMITTEE IN MANAGING RISK			
	INTEREST RATE MARKET, IDENTIFYING INTEREST RATE RISK MEASURING INTEREAT RATE RISK	08		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Pranali Gurav** DEPARTMENT: **Commerce**

CLASS: **TYBFM A** SEMESTER: **Sem VI** MONTH: **December to April** ACADEMIC YEAR : **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Preparation of Financial Statements as per Companies Act.
2) Cash Flow Analysis as per AS 3
3) Introduction to IFRS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Corporate Restructuring	Unit : 1 Introduction and Concepts:	15	Manan & Vipul Publication	Chalk Board.
	1. Meaning of Corporate Restructuring. 2. Need, Scope and Modes of Restructuring 3. Historical Background. 4. Emerging Trends. 5. Planning, Formulation and Execution of Various Corporate Restructuring Strategies - Mergers, Acquisitions, Takeovers, Disinvestments and Strategic Alliances, Demerger and Hiving off. 6. Expanding Role of Professionals.			

	Unit 2 : Merger and Amalgamation, Corporate Demerger and Reverse Merger::	15	Manan & Vipul Publication	Chalk Board.
	1. Introduction to Merger and Amalgamation, Corporate Demerger and Reverse Merger. 2. Legal, Procedural, Economic, Accounting, Taxation and Financial Aspects of Mergers and Amalgamat ionsincluding Stamp Duty and Allied Matters. 3. Interest of Small Investors. 4. Merger Aspects under Competition Law. 5. Cross Border Acquisition and Merger. 6. Concept of Demerger; Modes of Demerger - by Agreement, under Scheme of Arrangement. 7. Demerger and Voluntary Winding Up. 8. Legal and Procedural Aspects; Tax Aspects and Reliefs. 9. Reverse Mergers Procedural Aspects and Tax Implications. 10. Meaning and Concept of Takeover. 11. Types of Takeovers; Legal Aspects - SEBI Takeover Regulations. 12. Disclosure and Open Offer Requirements. 13. Bail Out Takeovers and Takeover of Sick Units. 14. Takeover Defenses. 15. Cross Border Takeovers.			
	Unit 3 : Funding of Merger and Takeover and Financial Restructuring	15	Manan & Vipul Publication	Chalk Board.
	1. Financial Alternatives; Merits and Demerits. 2. Funding through various Types of Financial Instruments including Equity and Preference Shares, Debentures, Securities with Differential			

	Rights, Swaps, Stock Options; ECBS, Funding through Financial Institutions and Banks. 3. Rehabilitation Finance. 4. Management Buyouts/Leveraged Buyouts. 5. Reduction of Capital. 6. Reorganization of Share Capital. 7. Buy-Back of Shares - Concept and Necessity. 8. Procedure for Buy-Back of Shares by Listed and UnlistedCompanies.			
	Unit 4 : Post-Merger Reorganization:	15	Manan & Vipul Publication	Chalk Board.
	1. Factors involved in Post - Merger Reorganization. 2. Integration of Businesses and Operations. 3. Assessing Accomplishment of Post-Merger Objectives; Measuring Post Merger Efficiency.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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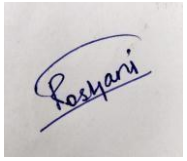
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _Dr.Roshani Nagar DEPARTMENT: SFC CLASS: TYEME SEMESTER: SEM SEM VI Subject : VENTURE CAPITALAND PRIVATE EQUITY

MONTH: JAN TO MAR ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: Venture capital and equity in detail

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
Unit 1,2,3,4	1. Conceptual understanding of Venture Capital and Private Equity Venture Capital –Over View of Venture Capital- Definition- Features- Types –Roles • Concept of PE and its characteristics- Definition- Difference between PE,VC and Hedge Funds- Nature of PE Firm- Players in the PE market– Benefit of PE Finance • PE Fund –Legal structure and terms- Private Equity Investments and Financing-Private Equity Multiples and Prices- Private Equity Funds and Private Equity Firms- Investment Feature and	10 per unit	J C Verma	Chalk and board method



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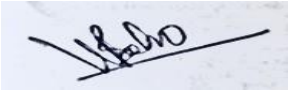

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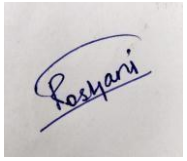
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)

TEACHING PLAN (UNIT PLAN)

	Consideration **2 Structure and Valuation approaches** • Structure and Regulation of Venture Capital and Private Equity- Business Cycle of PE –Structure of VC/PE firms- Limited Liability Partnerships- Routes of VC/PE investments in India- Regulatory Aspects of VC/PE investments • Valuation approaches- Risk and Returns- Analysis of Funds- Conventional Method- Revenue Multiplier Method **3 Strategies of Private Equity** • Leverage Buyout, Growth Capital, Mezzanine Capital- • Distressed Debt, other Strategies • Due Diligence- Procedure and Challenges- Due Diligence in Emerging PE Market-Investing in Developing Market- Past Performance and Strategy			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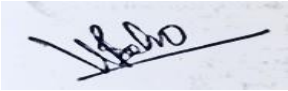

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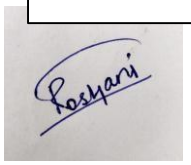
TEACHING PLAN (UNIT PLAN)

	4 Exit strategies for Private Equity • Modes of exits in Indian Context and Challenges involved- • IPO, Promoter Buyback ,Sale to Other PE funds, Sale to other strategic Investors, Stake Swap, M & A's, Open Market-, Secondary Market			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40



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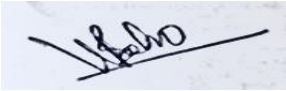

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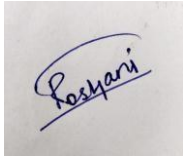
TEACHING PLAN (UNIT PLAN)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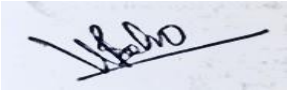

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TEACHING PLAN (UNIT PLAN)

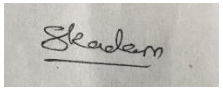
NAME OF THE STAFF: Prof. Sachin A ,Kadam DEPARTMENT: COMMERCE

CLASS: SYBIMG SEMESTER: III MONTH: OCT ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1	Chapter 1 Introduction to Cost Accounting Meaning, define, scope, advantage and disadvantages, difference between Cost Accounting and Financial accounting, Elements, Components	7 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	printed notes, chalk and duster
Unit 5	Chapter 5 Classification of costs and cost sheet Meaning, classification, format, practical problems, Small calculations, Practical problems	7 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	printed notes, chalk and duster
Unit 6	Chapter 6 Reconciliation of Cost and Financial Accounts Brief, Introduction, Format, small calculations, Practical problems	l7 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	printed notes, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _21_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: SYBIM

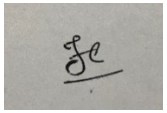
SEMESTER: 3 MONTH: JUNE-JULY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: FOUNDATION COURSE (An overview of Investment Management)

The learners will be able to: Overcome the possible risk in future contribution with the allies for the better and firm growth of GDP with the strong hold and public example for all.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Risk Management	Risk Management: concept of Risk, Type of Risk – systematic risk unsystematic risk, Risk Management process, Risk identification, Risk evaluation, Risk handling.	13	Risk Management by; Rishabh Publications & other trusted reliable sources.	Chalk Board, Flow Chart, Diagrams .
	Risk Governance: Importance and Scope of Risk Governance, Risk and Three Lines of Defence, Risk Management and Corporate Governance.			
	Risk Assurance: Purpose and Sources of Risk Assurance, Nature of Risk Assurance Reports and Challenges of Risk.			
	Risk and Stakeholders Expectations: Identifying the range of stakeholders and responding to stakeholders' expectations.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE CLASS: SYIMG

SEMESTER: **III** MONTH: August, 2020 To Dec, 2020 ACADEMIC YEAR :2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to understand introduction of cost accounting, preparation of cost sheet & Reconciliation statement, Process costing accounts, Introduction of marginal & standard costing along with practical problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST ACCOUNTING	1] **Unit costing & Reconciliation of cost & Financial Accounts**. Introduction to costing - Meaning, Objective, scope of cost accounting. Importance & Advantages of cost Accounting. Difference between Cost Accounting & Financial Accounting. Advantages & Limitations of cost Accounting. Classification of cost. Installation of cost accounting system. Cost sheet & Reconciliation of cost accounting & financial accounting. Practical problems based on preparation of cost sheet & Reconciliation of cost & Financial accounts.	05	S.N. Maheshwari B.K.Bhar	Google meet, MS Excel ,MS word
	2] **Job costing & Process costing**-Job cost cards &database, collecting direct cost of each job, Attributing overheads cost to job. Application of Job costing. Process costing- Introduction, Meaning,Scope,Objectives of process account , process loss, Abnormal Gain/ Loss, Joint	05		Google meet,MS Excel

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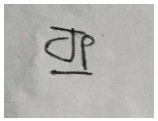
	product & By product, Process stock account. Practical problems.			
	3] **Introduction to marginal costing**- Meaning, application, Advantages, limitations, Contribution, Break even analysis, &profit volume graph, Margin of safety. Practical problems	04		Google meet, MS excel
	4] Standard Costing- Setting of standards, Basic concept of Material, labour, Sales, overheads [Fixed & Variable] variance analysis. Including mix & yield variance. Calculations of variances.	04		Google meet, ms excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE CLASS: SYBIM

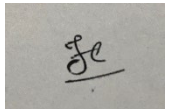
SEMESTER: 3 MONTH: JUNE-JULY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: FOUNDATION COURSE (An overview of Investment Management)

The learners will be able to: Overcome the possible risk in future contribution with the allies for the better and firm growth of GDP with the strong hold and public example for all.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4 Financial Literacy and Individual Investing	Introduction to Financial Literacy: Meaning, need and importance of financial literacy, Components of financial literacy, Individual economic system, personal finance planning, RBI Initiatives in financial literacy.	11	Financial Inclusion By Deepali Joshi & K.G Karmakar	Chalk Board, Flow Chart, Diagrams .
	Individual Investing – getting ready to invest – Saving versus investing – Getting started – discipline and planning are key – Define your goals and investment time frame – Decide if you need income, growth or both – Understand the risks – Diversify to minimize risk – Recognize the importance of cost and tax.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11



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TEACHING PLAN

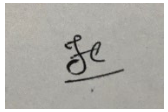
NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: : COMMERCE SELF-FINANCE CLASS: SYBIM

SUBJECT: FOUNDATION COURSE (Overview of Investment Management) SEMESTER: 3 MONTH: AUG-SEP ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the Fundamentals of investments and taxes benefits with banks credit bonds stocks funds shares demand supply and currency.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
Unit 3 Fundamentals of Investments and its Avenues	Fundamentals of Investments: Meaning & Definition, Need and importance, objectives, Elements of investments, Investment avenues, Taxes & investments, Place of liquidity in investment decisions, importance of investment management.	12	Reliable sources	Chalk Board, Flow Chart, Diagrams, presentations.
	Sources and Avenues of Investments: Bank products, Banks & credit unions, Bonds, Stocks, Investment funds, Annuities. Features of equity share, preference share & Debenture, Valuation of Equity and shares & Debentures and its techniques, Valuation of bullion gold and silver, Characteristics & Important features of Investment in Bullion Market & its Operations, Factor influencing demand and supply of bullion, Gold ETF, Linkage with foreign exchange & currency.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita Almeida DEPARTMENT: Commerce CLASS:SY-BIM SEMESTER: III MONTH: August-December

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of effective learning , formal and informal communication , leadership skills and self-improvement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Portfolio Management- An Introduction	A} **Investment-** Meaning, Characteristics, Objectives, Investment VS Speculation, Investment Vs Gambling and types of investors. B} **Portfolio Management-** Meaning, Evolution, Phases, Role of portfolio managers, Advantages of portfolio management. C}**Investment Environment**- Investment Environment in India and factors conducive for Investment in India.	02	Vipul Prakashan	Online /PPT
2. Portfolio Analysis and Selection	A} **Portfolio Analysis-** Meaning and its components, calculation of expected return and risk, calculation of covariance, Risk-Return trade off. B} **Portfolio Selection-**Meaning, Feasible Set of portfolios, Efficient set of portfolios, selection of optimal portfolio, Markowitz Model, Limitations Markowitz Model,	05 02	Vipul Prakashan	Online /PPT

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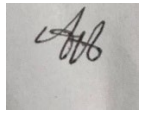
	Measuring Security Return And Portfolio Return, Risk under Single Index Model and Multi Index Model.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: MUTUAL FUND MANAGEMENT DEPARTMENT: COMMERCE

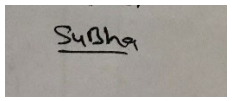
CLASS: SYBIM SEMESTER: III MONTH: AUGUST, SEPTEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 INTRODUCTION TO MUTUAL FUND	History, Origin, Definition, Meaning of Mutual Fund	1		• Google Meet • PowerPoint • Discussion
	Characteristics, Advantages, Disadvantages of Mutual Fund, Ethics	1		
	Entities involved – Sponsors, Trust, Trustee, AMC, Registrar &Transfer Agent and Fund Houses in India	3		
	Legal Framework, Role of Regulatory agencies – SEBI, RBI, AMFI, Ministry of Finance, SRO, Company Law Board, Registrar of Companies	3		
	Mutual Fund guidelines on advertisement, accounting, taxation, valuation norms, purchase mutual fund, investor protection	3		
	Mutual Fund regulation and grievances mechanism	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 13



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: MUTUAL FUND MANAGEMENT DEPARTMENT: COMMERCE

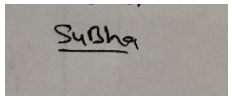
CLASS: SYBIM SEMESTER: III MONTH: SEPTEMBER, OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 CLASSIFICATION OF MUTUAL FUND	A) Types of Mutual Fund			• Google Meet • Excel • PowerPoint • Discussion
	Functional / Operational – Open ended, Close ended, Interval	2		
	Portfolio – Income, Growth, Balanced, MMMF	2		
	Geographical / Location – Domestic, Off-shore	2		
	Miscellaneous – Tax saving fund, exchange traded fund, balanced fund, fixed term plan, debt funds, SIP, STP	2		
	B) Portfolio Maturity, Calculation of NAV, Entry Load, Exit Load	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 11



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: MUTUAL FUND MANAGEMENT DEPARTMENT: COMMERCE

CLASS: SYBIM SEMESTER: III MONTH: OCTOBER, NOVEMBER, DECEMBER ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 FUND SELECTION CRITERIA	Need, Importance, Basis of Rating	2		• Google Meet • PowerPoint • Discussion
	Interpretation of Fund Rating by CRISIL, ICRA, CARE (Selection Criteria)	3		
	Performance measurement – rolling return and benchmarking	2		
UNIT 4	A) Basics of Financial Planning – Steps, Life Cycle, Wealth Cycle, risk profiling, asset allocation, contingencies funds	2		
	B) Investor guides towards Financial planning – Eligibility for investment in mutual fund, KYC, Long bond fund, Short bond fund, Ultra Short bond fund, Need for financial advisors, colour coding mutual fund, difference	3		

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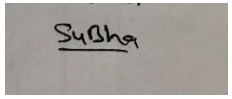
FINANCIAL PLANNING AND MUTUAL FUND	between advisors and distributor, FD and mutual fund, dividend and growth option			
	C) Developing model portfolio for Investors – meaning, step by step approach of building model portfolio	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 3 & 4: 13



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TEACHING PLAN (UNIT PLAN)

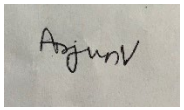
NAME OF THE STAFF: Arjun Vishwakarma DEPARTMENT: Commerce CLASS: SYBIM SEMESTER: III MONTH: October

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : The learner will be able to use basic computer software and some financial software

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2,3,4	DBMS: Concept, Tables, Fields, Datatype, RDBMS, Primary key and Foreign key	4	Computer Skills-2 and Wikipedia	PowerPoint Presentation, Laptop
	ERP, SCM, CRM, SFA	4	Computer Skills-2	PowerPoint Presentation, Laptop
	Online Trading Software, Net Banking, Online Banking Software	4	Computer Skills-2	PowerPoint Presentation, Laptop

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. SACHIN KADAM _____ DEPARTMENT: COMMERCE _____ CLASS: SYBIM_____ SEMESTER: III_____ MONTH: DEC _____ ACADEMIC YEAR: 2020-2021_____

LEARNING OBJECTIVE/S:
The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1	Unit – I: Introduction to Finance and Financial Management Introduction to Finance: • Meaning and definition of finance • Importance finance • Types of Finance: Public and Private • Sources of finance 1.Long Term Sources : Term Loans, Debentures, Bonds, Zero Coupon bonds, Convertible Bonds, Equity shares, Preference shares, CD, CP, Public Deposits 2.Short Term sources: Bank Finance, Trade Credit ,Other Short Term Sources 3.Venture Capital and Hybrid Financing. Financial Management • Meaning and Importance of Financial Management • Scope of Financial Management • Functions and Objectives of Financial Management • Primary Objective of Corporate Management • Agency Problem • Organization of Finance Function • Emerging role of Finance Managers in India Objectives of the Firm • Profit Maximization and Shareholders Wealth Maximization, • Profit V/s Value Maximization	8 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	CHALK, DUSTER, PRINTED NOTES

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Unit 2	Financial Management • Meaning and Importance of Financial Management • Scope of Financial Management • Functions and Objectives of Financial Management • Primary Objective of Corporate Management • Agency Problem • Organization of Finance Function • Emerging role of Finance Managers in India	8 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	PPT, slideshare, YouTube, word and excel file for practical problems
Unit 3	Unit – II: Financial Goal Setting & Time value of Money Financial Goal Setting • Introduction • Financial Forecasting – Meaning, Techniques, Benefits • Approaches to Financial Planning • Economic Value Added (EVA)– Measurement & Components • Free Cash Flow (FCF) Time Value of Money • Concept • Present Value • Annuity Techniques of Discounting • Techniques of Compounding	8 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	PPT, slideshare, YouTube, word and excel file for practical problems
Unit 4	Unit – III: Investment Decisions: Capital Budgeting Capital Budgeting • Nature of Capital Budgeting • Purpose of Capital Budgeting • Capital Budgeting Process • Types of Capital Investment • Basic Principle of Measuring Project Cash Flows • Increment Principle, Long Term Funds Principle, Exclusion of Financial Cost Principle, Post Tax Principle • Probability technique for measurement of cash flow • Capital Budgeting Techniques: Net Present Value Profitability Index and Discounted Pay Back Method. • A Comparison; Project Selection Under Capital Rationing (Note: Problems on computation of cash flow, ranking of projects on various techniques, selection and analysis with / without capital rationing)	8 LEC		

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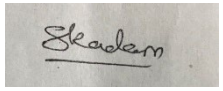
	Unit – IV: Financial Decisions Cost of Capital : • Introduction and Definition of Cost of Capital • Measurement of Cost of Capital • Measurement of WACC using book value and market value method. • Measuring Marginal Cost of Capital Capital Structure Decisions: • Meaning and Choice of Capital Structure • Importance of Optimal Capital Structure • EBIT -EPS Analysis • Capital Structure Theories • Dividend Policies (Walter & Gordon)	8 LEC		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _32_____



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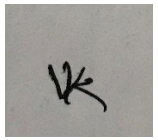
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VARADA KATLE DEPARTMENT:commerce CLASS: SY BIMSEMESTER:III MONTH: JUNE-SEPT ACADEMIC YEAR: 20-21 SUBJECT :CM

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CM	Unit III :introduction to collective investment scheme: Introduction to sebi , overview ,application ,grant of security obligation of collective investment ,restriction on business activity ,CIMC ,submission of information ,trusteeship ,unit certificate ,transfer of unit ,listing scheme ,and winding up of scheme	5	Vipul publication	Chalk and duster method
	Unit IV resource mobilisation in international market DR ,ADR ,GDR ,FCCB ,FCEB ,Issue of foreign currency exchangeable bonds difference between FCCB and FCEB , external commercial borrowings forms and features	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __20_



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:SYBIM SEMESTER: IV

MONTH: December to March 2021 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit I Introduction and Basic Terms	Introduction to Income Tax : Introduction of Tax i.e. Direct and Indirect, Basic information about what is Direct Tax	1	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests
	BASIC TERMS : 1.Assessee 2.Assessment 3.Assessment Year 4.Capital Assets 5.Income 8.Person 6.Previous Year 7.Transfer Practical questions	3	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:SYBIM SEMESTER: IV

MONTH: December to March 2021 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit II Scope of Total Income	Residential Status Basic Conditions, Exceptions, Additional Conditions R & OR, R but NOR, NRI Practical problems	3	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests
	Scope of Total Income Related to R & OR, R but NOR, NRI	1	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:SYBIM SEMESTER: IV

MONTH: December to March 2021 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit III Heads of Income	Income From Salary Concept of Salary, Perquisites, Allowances, Exemptions Practical Questions	3	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests
	Income From House Property Concept of House Property and its Types Practical Questions	3	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests
	Income From Business and Profession Incomes taxable under the head Business and Profession Expenses allowable and not allowable Practical Questions	3	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests
	Capital Gains Concept of Capital Asset, Transfer, Types of Capital Gains, Exempt Transfers, Exemptions, Practical Problems	3	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests
	Income from Other Sources Income taxable and deductions deductible under this head Exempt Incomes, Practical Problems	2	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14 per Division

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:SYBIM SEMESTER: IV

MONTH: December to March 2021 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit IV Deductions U/C VI/A	Deductions u/s 80C, 80CCC, 80CCD, 80D, 80DD, 80E, 80TTA, 80U	2	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 2 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:SYBIM SEMESTER: IV

MONTH: December to March 2021 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Direct Tax Unit V Computation of Total Income for Individual	Computation of total income by combining two or more heads of incomes – practical problems	3	Manan Prakashan, Self-maintained notes, ICAI study material	Google Meet, PPTs, Online Tests

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Sachin A Kadam DEPARTMENT: COMMERCE

CLASS: SYBIMG SEMESTER: IV MONTH: OCT ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1	**Financial Planning** **Introduction to Budgetary Control** - Meaning and Essentials of Budget, Types of Budget, Advantages of Budgeting, Zero Based Budgeting and Master Budget. **B)** Introduction to Sales Budget, Production Budget, Material Budget, Cash Budget and Flexible Budget, Practical problems	12 lec	**Vipul prakashan SYBBI sem IV**	printed notes, chalk and duster
Unit 2	**Financial Policy and Corporate Strategy** **A) Introduction to Strategic Financial Management** - Meaning of Strategic Financial Management, Strategic financial decision making framework and Functions of Strategic financial management **B) Business Risk and Financial Risk** - Introduction, Debt v/s Equity Financing , Types of Leverages, Investment Objective/Criteria for Individuals/Non-business Purpose	6 lec	**Vipul prakashan SYBBI sem IV**	printed notes, chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _21_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE (SELF-FINANCE) CLASS: SYBIM

SEMESTER: 4 MONTH: NOVEMBER-DECEMBER. ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: FOUNDATION COURSE (Overview of Risk Management)
The learners will be able to: Understand the meaning of banking and banking sector introduction to insurance sector with various types significant and roll with advantages and disadvantages.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Introduction to Banking Sector	Introduction to Banking Sector- Meaning of Banking Companies, primary and secondary functions of banks, banking system in India, Overview of RBI, Public, Private, Co-operative, Payment Bank and Regional Rural Banks.	11	Insurance &Banking sector By Rishabh Publications	Chalk Board, Flow Chart, Diagrams
	Introduction to Insurance Sector- Meaning of Insurance Companies, Functions, Principles, Types of Insurance policies and their advantages & disadvantages.			
	Significance and Role of Banking and Insurance in mobilizing savings, investments, wealth accumulation and economic growth.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE (SELF-FINANCE) CLASS: SYBIM

SEMESTER: 4 MONTH:DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: FOUNDATION COURSE (Overview of Banking and Insurance)
The learners will be able to: Understand Banking regulations regarding Act (Amendments) payment settlements, insurance under IRDA Act and RBI activities.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Regulatory and Developmental Framework governing Banking & Insurance sector	Overview of Regulatory Architecture – Banking Regulation Act 1949, Banking Regulation Act (Amendment 2015), Payment and Settlement Act 2007, Negotiable Instrument Act 1881	11	Banking and Insurance By Vipul Publications	Chalk Board, Flow Chart, Diagrams .
	Overview of Regulatory Architecture relating to Insurance – Introduction to Insurance Act 1938, IRDA Act 1999 and The Insurance Laws (Amendment) Act, 2015			
	Developmental Activities of RBI and IRDA			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE (SELF-FINANCE) CLASS: SYBIM

SEMESTER: 4 MONTH:JANUARY-FEBRUARY. ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: FOUNDATION COURSE (Overview of Banking & Insurance)
The learners will be able to: Understand the business and value of life insurance with health insurance with IRDA regulations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3 Introduction to Life and Health Insurance	Life Insurance Business – Components, Human Life Value Approach, Mutuality, Principle of risk pooling, Life Insurance Contract, Determinants of risk premium.	11	Health Insurance & Banking By Rishabh Publications & Vipul Publications	Chalk Board, Flow Chart, Diagrams .
	Health Insurance – Meaning, IRDA regulations, Determinants of health insurance, Health Insurance Market in India and Determinants of risk premium.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE (SELF-FINANCE) CLASS: SYBIM

SEMESTER: 4 MONTH: FEBRUARY ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: FOUNDATION COURSE (Overview of Banking and Insurance)
The learners will be able to: Understand importance of Microfinance playing role profitable securitization schemes in various sectors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4 Microfinance & Financial Inclusion	Microfinance – Introduction, Need and Code of Conduct for Microfinance Institutions in India, Advantages, Purpose, Limitations and Models of SHG – Bank Linkage Program, Role of NABARD and SIDBI, Portfolio Securitization, SHG-2, NRLM and SRLM, Priority Sector and its Classification	11	Investment management Banking & Insurance By Vipul Publications	Chalk Board, Flow Chart, Diagrams .
	Financial Inclusion – Need & Extent, RBI Committee Report of Medium-Term Path on Financial Inclusion 2015, NISM Report 2015(Only Brief Extracts relating to bank account holdings and credit taken), Features & Procedures of Pradhan Mantri Jan Dhan Yojana, and PM Mudra Yojana, Features, procedures and significance of Stand-up India Scheme for Green Field.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Mezbin lalani DEPARTMENT: COMMERCE CLASS: S.Y.BCOM(Investment management)

SEMESTER: IV **(SAPM)** MONTH: January to April ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: understand portfolio management.
The learners will be able to : know the various investment aternatives and portfolio management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1..Fundamental analysis	Economy, industry and company analysis,	15	Investment analysis and management Mcgraw	Google meet, Google classroom, power point presentation, pdf file, etc
2.technical analysis	technical analysis :charts and patterns, efficient market hypothsis	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30__

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Priyanka Devnath_Rajput DEPARTMENT: Commerce CLASS: S.Y.B.I.M

SEMESTER: IV MONTH: JANUARY-APRIL ACADEMIC YEAR: 2020- 2021 SUBJECT: I.T in Investment Management- II

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of E-Commerce, MIS, ERP, CRM, and Different types of E-Payment, MS Word and MS PowerPoint & Outlook Express.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I E-Business	A) Introduction, E-Commerce – Definition, History of E-commerce, types of E-Commerce B to B etc. Comparison of traditional commerce and ecommerce.	03	E- Commerce -By Marriappa M. and www.wikipedia.com	Google meet, PDF File, MS-WORD What's App, Google Calendar, Google Meet Attendance etc.
	B) E-Commerce business models – major B2B model, B2C model, C2C model, C2B model, Peer-to-Peer (P2P) model and Advantages/ Disadvantages of e-commerce.	04		
	C) Web auctions, Virtual communities, Portals, E-business revenue models.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Security for E-Business	A) Security threats– An overview, Implementing E-commerce security, Encryption – Decryption, Cryptography methods, SSL protocol, Firewalls.	05	An Overview of Cyber Crime & security By - Akash Kamal Mishra and www.wikipedia.com	Google meet, PDF File, MS-WORD What's App, Google Calendar, Google Meet Attendance etc.
	B) Threat Hunting: Definition of Threat hunting, Threat Hunting vs. Threat detection, Benefits and challenges of threat hunting.	05		
	C) Best Practices for threat hunting, Considerations for threat hunting and threat detection, Threat hunting/detection software.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Cyber Law and Security	A) Cyber Crimes - Various threats and attacks, Phishing, Key Loggers, Identity Theft, Call & SMS forging.	03	An Overview of Cyber Crime & security By - Akash Kamal Mishra and www.wikipedia.com	Google meet, PDF File, MS-WORD What's App, Google Calendar, Google Meet Attendance etc.
	B) E-mail related crimes, Denial of Service Attacks, Hacking, Online shopping frauds, Credit card frauds, Cyber Stalking.	05		
	C) Cyber Security - Computer Security, E-Security, Password Security and Reporting internet fraud.	03		
	D) Cyber Law - Need of Cyber Law, History of Cyber Law in India, Legal Aspects of E-Business, and Information Technology Act 2000 - salient features.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV MS-Office: Packages for Institutional Automation	A) MS-PowerPoint presentation: - Internal links between slides, hyperlinks, embedding multimedia content onto the slides, slide animation, timer, creating new presentation by existing theme, import online themes, creating a template of presentation, save and run the slide show.	04	Microsoft Office Professional2013 By - Beth Melton and www.wikipedia.com	Google meet, PDF File, MS-WORD What's App, GMAIL, Outlook Express Software, Google Calendar, Google Meet Attendance and Computer for Practical (MS-PowerPoint Software)
	B) Applications of Internet: - Introduction to e-mail, writing professional emails, creating digitally signed documents.	03		
	C) Google drive: - usage of Google drive in storing the Google documents, excel sheets, presentations and PDF files..	03		
	D) Use of outlook express: Configuring outlook express, Creating and managing profile in outlook, Sending and receiving e-mails via outlook express, Emailing the merged documents, Boomerang facility of email.	05		
	Practical: - creating new presentation, creating a template of presentation, hyperlinks, slide animation, writing professional emails.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: COMMEERCE CLASS: SYIM SEMESTER: IV MONTH: Jan - Feb ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand meaning, importance and methods of managing working capital requirements. Managing cash and marketable securities, and also manage account receivables.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial management II, Unit 3: Financial Planning-Budgeting	A. Introduction, Meaning and Essentials of Budget, Features of Budget	1	Vipul Prakashan	Google Meet, Google Sheets & Google Slides
	Types of Budget, Advantages of Budget, Zero Based Budgeting	1		
	Master budget, Sales budget, Production budget, Material budget, Cash budget & Flexible budget.	3		
	B. Practical sums- 2 sums for each type of budget.	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
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MONTH: March

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial management II, Unit 4: Financial Policy & Corporate strategy- Strategic Financial Management	A. Meaning & Features of Strategic Financial Management	1	Vipul Prakashan	Google Meet, Google Sheets & Google Slides
	Strategic Financial Decision Making Framework	2		
	Functions of Strategic Financial Management	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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MONTH: April

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial management II, Unit 4: Financial Policy & Corporate strategy- Leverages	B. Introduction, Business risk & Financial Risk Meaning & Difference	2	Vipul Prakashan	Google Meet, Google Sheets & Google Slides
	Types of Leverages, Formulae & Format	2		
	Practical problems	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. SACHIN ARJUN KADAM _ DEPARTMENT: COMMERCE CLASS: SYBIM SEMESTER: IV MONTH: April _____

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Creating, Evaluating, Analysing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1	Working Capital Management Management of Working Capital in India • Estimating working capital needs • Operating or working capital cycle • Working Capital Financing: Trade Credit; Bank Credit; Commercial Papers; Certificate of Deposits (CDs); Financing.	15 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	Chalk, duster, notes printed
Unit 2	Management of Components of Working Capital Management of Cash and Marketable Securities: Motives for Holding Cash; Objectives of Cash Management; Factors Determining Cash Needs; Basic Strategies of Cash Management; Cash Management Techniques / Processes; Marketable Securities; and Cash Management Practices in India. • Receivables Management: Objectives; Credit Policies; Credit Terms; and Collection Policies. • Inventory Management: Objectives; and Techniques.	15 lec	Manan prakashan, Google, Dr. Saxena(Advance accounting)	Chalk,duster,notes printed

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _30_____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHAKHA SANE DEPARTMENT: COMMERCE CLASS: SYIM(BUSINESS ECONOMICS II) SEMESTER: lV

MONTH: JAN ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1,2,3 AND 4	1. Introduction to Macroeconomic data and theory: Macroeconomics:meaning,scope and importance Circular flow of income and expenditure:Closed and open economy. The measurements of national product:Meaning and importance,concepts Short run economic fluctuation:features and phases of trade cycle. Keynesian principle of effective demand.	15	MACRO ECONOMIC THEORY H L AHUJA	PPT
	2. Money inflation and Monetary policy:	15		

SIGNATURE OF THE STAFF VISHAKHA SANE **SIGNATURE OF THE H.O.D.**

	Money supply:Determinants of Money supply-Factor influencing velocity of circular flow of money. Demand for Money:Classical and Keynesian approach Money and Prices:Quantitative theory of money Inflation:Demand pull and Cost push inflation Monetary Policy:Meaning objective and instruments.			
	3. Constituents of fiscal policy: Role of Government:Principles of sound and functional finance. Fiscal Policy:Meaning and objectives Instrument of fiscal policy Union Budget	15		
	4. Open economy:Theory and issues of international Trade Basis of Foreign Investment Foreign Investment Balance of Payments	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___

SIGNATURE OF THE STAFF **VISHAKHA SANE** **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VARADA KATLE DEPARTMENT: COMMERCE CLASS: SY BIMSEMESTER:IV MONTH: NOV TO FEB ACADEMIC YEAR: 20-21 SUBJECT :EM

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EM	Unit I introduction to equity mkt :meaning and definition of equity shares ,growth of corporate sector ,trade of between ownership and management ,development of equity culture in India	5	Vipul publication	Chalk and duster method
	Unit II components of equity mkt :basics of primary market :IPO ,book building red g\herring prospectus ,right share Market for equity :secondary market ,stock exchange ,functions , NSE ,BSE , OTCEI ,stock mkt indices	5		
	Unit III law relating to issue of share: listing of securities ,issue of capital disclosure ,ESOP , recent development in stock exchange .issue of listing of securities	5		
	Unit IV evolving role of equity mkt: need for attracting more investors for equity ,link between primary mkt and secondary mkt Development in equity market ,FDI ,FII ,retail investor , role of SEBI	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __20_

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce
CLASS: T Y B Com (IM) SEMESTER: V MONTH: DECEMBER ACADEMIC YEAR: 2020-21
LEARNING OBJECTIVE/S:
The learners will be able to :
Understand a variety of techniques to identify, access, manage & monitor risk. The learners will able to understand the importance of planning and implementing identified risk management action.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Risk Management	**Foundations of Risk Management** Basic Risk Types The Role of Risk Management Enterprise Risk Management (ERM) History of Financial Disasters and Risk Management Failures 2007 Financial Crisis	15	Risk Management : M/s Macmillan India Limited *Risk Management : Insurance and Derivatives Dr G Kotreshwar- Himalaya Publishing House*	GOOGLE MEET FOR ONLINE TEACHING, GOOGLE CLASSROOM DESKTOP AND LAPTOP ,Group Discussion,
	Capital Market Risk Management Equity, Currencies &Commodities Markets in India Introduction to Derivatives Forward, Future and Option Contracts Hedging through Derivatives Contract Fixed-income Securities Fixed-income Risk management through Derivatives Rating Agencies	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI VIJAY MEHTA DEPARTMENT: COMMERCE CLASS: TY.BIM

SEMESTER: V DIV:- MONTH: OCT- DEC 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

The objective of this subject is to make the students gain knowledge about the business and its ethics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 INTRODUCTION TO BUSINESS ETHICS	Definition, Meaning, Nature of Ethics, Moral and Ethics, Types of ethics, Importance of ethics	3	Manan Prakashan, Vipul	Online Lecture, PPT
	Meaning, Nature of Business ethics, Importance, Areas of business ethics	3	Manan Prakashan, Vipul	Online Lecture, PPT
	Meaning of Functional Ethics, Types of ethics, Ethics relating to free and perfect competitive market	3	Manan Prakashan, Vipul	Online Lecture, PPT
			Manan Prakashan, Vipul	Online Lecture, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI VIJAY MEHTA DEPARTMENT: COMMERCE CLASS: TY.BIM

SEMESTER: V DIV:- MONTH: OCT- DEC 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

The objective of this subject is to make the students gain knowledge about the business and its ethics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 APPLICATION OF ETHICAL THEORIES IN BUSINESS	Ethical Decision making, Utlitarianism, Deontology	2	Manan Prakashan, Vipul	Online Lecture, PPT
	Gandhian approach in management and Trusteeship, Importance and relevance	3	Manan Prakashan, Vipul	Online Lecture, PPT
	Ethical issues in functional area of business Ethics in Advertising, Ethical issues in finance	3	Manan Prakashan, Vipul	Online Lecture, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYIM SEMESTER: V

MONTH: August to December 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Risk and how it affects in practical life
The learners will be able to : Understand the concept of Risk and how it is to be managed

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Risk Management Unit III	**7. Credit Market Risk Management** 1. Credit Risk Definition 2. Types of Credit Risk 3. Evaluation of Credit Risk 4. Procedure for Credit Risk Management 5. Credit Lifecycle 6. Loan Review Mechanism 7. Lehman Brothers Crisis	4	Vipul Prakashan, Self maintained notes	Online teaching i.e. Google meet White board Microsoft excel
	8. **RBI Guidelines on Credit Rating Framework in Banks** Background 2. End Use of Risk-Ratings made on the CRF 3. Basic Architecture of Calibration of Credit Risk 4. Grading System for Calibration of Credit Risk 5. Operating Design of the CRF 6. CRFs and aggregation of Credit Risk 7. Flow and Stock Approach	4	Vipul Prakashan, Self maintained notes	Online teaching i.e. Google meet White board Microsoft excel

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	9. Introduction of Basel Norms and Calculation of Capital Adequacy Ratio • Introduction to Basel Norms • BASEL I • BASEL II • BASEL III • Capital Adequacy Ratio • ICAAP • ALCO	4	Vipul Prakashan, Self-maintained notes	Online teaching i.e. Google meet White board Microsoft excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 per Division

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAME OF THE STAFF: Prof. CA Monali Sankhe DEPARTMENT: Commerce CLASS:TYIM SEMESTER: V

MONTH: August to December 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To let students understand what is Risk and how it affects in practical life
The learners will be able to : Understand the concept of Risk and how it is to be managed

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Risk Management Unit IV	1. Risk Measurement Need and importance, volatilities, computation of standard deviation, beta, variance, RAROC, Gap Analysis Option terminologies etc. and practical sums	5	Vipul Prakashan, Self maintained notes	Online teaching i.e. Google meet White board Microsoft excel
	2. Risk Measurement through Derivatives Definition Basis risk, Hedge Ratio, hedging stratagies	3	Vipul Prakashan, Self maintained notes	Online teaching i.e. Google meet White board Microsoft excel
	3. Interest rates and measures of interest rate sensitivity Measuring interest rate risk, sensitivity analysis of bonds	3	Vipul Prakashan, Self maintained notes	Online teaching i.e. Google meet White board Microsoft excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 11 per Division

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN) (SUB: CORPORATE ACCOUNTING)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.I.M** SEMESTER: **5th** MONTH: **AUG-SEPT**

ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Share
2. What are the types of Shares
3. Share as a means of Investments
4. What are the Importance of Share

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Valuation of Shares (Continue…..)	**1.** Meaning of Shares **2.** Types of Shares **3.** Share as a means of Investments **4.** Importance of Share	05	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.I.M.** SEMESTER: **5th** MONTH: **SEPTEMBER**

ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are the Method of Valuation Of Shares
2. What is Intrinsic Value of Share
3. What is Yield Value Of Shares
4. What is Fair Value of Shares

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Valuation of Shares	1. Valuation of Shares in case of Merger and Acquisition of Shares 2. Intrinsic Value of Share 3. Yield Value Of Shares 4. Fair Value of Shares	10	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.I.M** SEMESTER: **5th** MONTH: **OCTOBER**

ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Investment and investment Accounting
2. What are the types of Securities
3. How to calculate Ex Interest and Cum Interest Prices

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INVESTMENT ACCOUNTING	**1.** For Shares (variable income bearing securities) **2.** For Debentures/Preference Shares (fixed income bearing securities) **3.** Accounting for Transactions of Purchase and Sale of Investments with ex and cum interest prices and finding cost of investment sold and carrying cost as per weighted average method (Excl. brokerage).	05	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: T.Y.B.I.M** SEMESTER: **5th** MONTH: **NOV-DEC.**

ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. How to draw Columnar Format for Investment Account
2. How to solved Problems on investment Accounting

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INVESTMENT ACCOUNTING	**3.** Columnar Format for Investment Account. **4.** MCQ on investment Accounting (Shares, Debentures)	05	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. FIROZKHAN KHURSHIT KHAN** DEPARTMENT**: COMMERCE**

CLASS: **T.Y.I.M.G** SEMESTER: **V** MONTH: **NOVEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To inculcate the practical knowledge of Research Methodology.

The learners will be able to : Develop unique Skills to carry on Research work smoothly.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Data Analysis and Interpretation	**UNIT-3: Data Analysis and Interpretation** Processing of Data: Meaning and Essential of Editing, Coding and Tabulation, Analysis of Data: Meaning Purpose and Types, Interpretation of Data and Testing of Hypothesis.	15	Howell, K. E. Katsicas, Sokratis C.R. Kothari	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet
Advance Statistical Techniques	**UNIT-4: Advance Statistical Techniques** Introduction, characteristics and Application of Correlation and Regression Analysis, Factor Analysis, Cluster Analysis, Discriminate Analysis, Multidimensional Scaling.	15	Howell, K. E. Katsicas, Sokratis C.R. Kothari	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet
Research Report	**UNIT-5: Research Report** Report writing: Meaning, Importance, Structure, Types, Process and Essential of a Good Report.	05	Howell, K. E. Katsicas, Sokratis C.R. Kothari	Online Lecture Conducted on Google Meet, equipment used- Pen-tablet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: COMMERCE CLASS: TyBIM SEMESTER: 5 MONTH:June to oct ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand how the primary and secondary markets function and instruments of primary and secondary markets. Valuation of equities- methods and techniques used compute the value of equities, videos models, analysis and market related factors.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Operations in equity markets, primary and secondary markets.	Introduction and meaning of primary market, initial public offer, methods.	2		Online Lectures, Google slides
	Book building, offer for sale, role of merchant bankers in fixing the price.	2		
	Red herring prospectus, ASBA, green shoe option, sweat equity.	2		
	ESOP, right issue of shares, ADR, GDR, IDR	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Operations in equity markets, primary and secondary markets.	Definition and functions of Secondary market, evolution and growth	1		Online Lectures, Google slides
	NSE, BSE, SME exchanges and overseas stock exchange	2		
	Recent developments, merger of SEBI with FOMC, stock market indices	2		

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Operations in equity markets, valuation of equities	Factors affecting share prices, balance sheet valuation, dividend discount model.	2		Online Lectures, Google slides
	Price earning model, fundamental analysis.	2		

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Operation in equity markets, valuation of equities	Macroeconomic factors and market related factors	1		Online Lectures, Google slides
	Role of brokers, stock market quotations.	2		
	Procedure for buying and selling, BOLT online trading	3		
	NEAT, clearing and settlement, order matching.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: COMMERCE (SELF-FINANCE) CLASS: T.Y.B.I.M

SEMESTER: V MONTH: JUNE TO NOVEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:
The Learner/Students will be able to under the concept of Indian economy in terms of classification of various sector such as primary, secondary and tertiary sector and their contribution towards the development of Indian Economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL FINANCE UNIT I	**GLOBAL FIANCIAL ENVIRONMENT** • Introduction to International Finance • Challenges • Finance function in global context • Financial market • Cost of capital • Financial structure • Intra company transfers • Capital budgeting • Financial management & imperfections in financial markets • International integration • Diversification • Mergers and Acquisition- definition, classification, cross border merger and acquisition • Changes in policy and regulatory environment • Trends and features of cross border mergers and	15	INTERNATIONAL ECONOMICS BY KRUGMAN P. R. & OBSTFELD M. INTERNATIONAL ECONOMICS BY LEVI MAURICE D. INTERNATIONAL ECONOMICS BY SALVATORE DOMINICK	POWERPOINT PRESENTATION AND GOOGLE MEET

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	acquisition.			
INTERNATIONAL FINANCE UNIT II	**INTERNATIONAL MONEY AND EQUITY MARKET** • Introduction and role • Instruments and returns on it • Major stock market in the world • Emerging stock market • International equity trading • Multiple listing • Credit rating agencies and their role • ADR, GDR, IDR types and characteristics	15	INTERNATIONAL ECONOMICS BY KRUGMAN P. R. & OBSTFELD M. INTERNATIONAL ECONOMICS BY LEVI MAURICE D. INTERNATIONAL ECONOMICS BY SALVATORE DOMINICK	POWERPOINT PRESENTATION AND GOOGLE MEET
INTERNATIONAL FINANCE UNIT III	**EURO CURRENCY MARKETS AND INTERNATIONAL BONDS MARKETS** • Introduction • Reasons for growth • Euro dollar market its operations and its functions • Bond market • Participants, risk domestic and foreign bond • Euro currency bond types and issue • Currency convertibility	15	INTERNATIONAL ECONOMICS BY KRUGMAN P. R. & OBSTFELD M. INTERNATIONAL ECONOMICS BY	POWERPOINT PRESENTATION AND GOOGLE MEET

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	• Participatory notes		LEVI MAURICE D. INTERNATIONAL ECONOMICS BY SALVATORE DOMINICK	
INTERNATIONAL FINANCE UNIT IV	**OBSTACLES TO INTERNATIONAL INVESTMENT** • Information barrier • Foreign exchange risk • Political risk • Market risk • Taxation • Other regulatory barriers	15	INTERNATIONAL ECONOMICS BY KRUGMAN P. R. & OBSTFELD M. INTERNATIONAL ECONOMICS BY LEVI MAURICE D. INTERNATIONAL ECONOMICS BY SALVATORE DOMINICK	POWERPOINT PRESENTATION AND GOOGLE MEET

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JINAL CHOHAN DEPARTMENT: COMMERCE

CLASS: TY.BIM

SEMESTER: V DIV:- MONTH: JUNE- DEC 2020

ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand how research is carried out. The steps involved in Research work.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Research	Meaning, Objectives and Importance o f Research Types of Research Research Process	5	Vipul Prakashan	Online/ Presentation
	Characteristics of Good Research Hypothesis- Meaning, Nature, Significance, Types and Sources. Research Design– Meaning, Definition, Need and Importance, Steps,	5	Vipul Prakashan	Online/ Presentation
	Scope and Essentials of a Good Research Design. Sampling– a) Meaning of Sample and Sampling, b)Methods of Sampling i) Non-Probability Sampling– Convenient, Judgment, Quota, Snow ball ii) Probability–	3	Vipul Prakashan	Online/ Presentation

	Simple Random, Stratified, Cluster, Multi Stage.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Data Collection and Processing	Types of Data and Sources- Primary and Secondary Data Sources	3	Vipul Prakashan	Online/ Presentation
	Methods of Collection of Primary data a. Observation- i) structured and unstructured, ii) disguised and undisguised, iii)mechanical observations (use of gadgets) b. Experimental i)Field ii) Laboratory	4	Vipul Prakashan	Online/ Presentation
	c. Interview – i) Personal Interview ii) focused group, iii) in- depth interviews Method d. Survey– Telephonic survey, Mail, E-mail, Internet survey, Social media, and Media listening. e. Survey instrument– i) Questionnaire designing.	4	Vipul Prakashan	Online/ Presentation
	a. Types of questions–i) structured/close ended and ii) unstructured/ open ended, iii) Dichotomous, iv) Multiple Choice Questions. b. Scaling techniques- i)Likert scale, ii) Semantic Differential scale.	4	Vipul Prakashan	Online/ Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Research Report	Report writing – i) Meaning, Importance, Structure, Types, Process and Essentials of a Good Repor	5	Vipul Prakashan	Online/ Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Abhishek Madaye DEPARTMENT: Commerce CLASS: TYBIM

SEMESTER:VI MONTH: JAN-APRIL ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to: concept of auditing ,techniques,methods,types,documentations etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AUDITING,UNIT 1,Introduction to Auditing	Basics–Financial Statements, Users of Information, Definition of Auditing, Objectives of Auditing –Primary and Secondary, Expression of opinion, Detection of Frauds and Errors, Inherent limitations of Audit. Difference between Accounting and Auditing, Investigation and Auditing. Errors & Frauds–Definitions, Reasons and Circumstances, Types of Error – Commission, Omission, Compensating error. Types of frauds, Risk of fraud and Error in Audit, Auditors Duties and Responsibilities in case of fraud.Principles Of Audit–Integrity, Objectivity, Independence, Skills, Competence, Work performed by others, Documentation, Planning, Audi Evidence, Accounting System and Internal Control, Audit Conclusions and Reporting.Types of Audit–Meaning, Advantages, Disadvantages of Balance sheet Audit, Interim Audit, Continuous Audit, Concurrent Audit and Annual Audit.	15	Reference books and internet	PPT,WORD
UNIT 2, Audit Planning, Procedures and Documentation	Audit Planning–Meaning, Objectives, Factors to be considered, Sources of obtaining information, Discussion with Client, Overall Audit Approach.Audit Program–Meaning, Factors, Advantages and Disadvantages, Overcoming Disadvantages, Methods of Work , Instruction before commencing Work, Overall Audit Approach.Audit Working Papers-Meaning, importance, Factors determining Form and Contents, Main Functions /	15	Reference books and internet	PPT,WORD

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	Importance, Features, Contents of Permanent Audit File, Temporary Audit File, Ownership, Custody, Access of Other Parties to Audit Working Papers, Auditors Lien on Working Papers, Auditors Lien on Client's BooksAudit Notebook–Meaning, Structure, Contents, General Information, Current Information, Importance.			
UNIT 3,Auditing Techniques and Internal Audit Introduction	Test Check-Test Checking Vs Routing Checking, Test Check meaning, features, factors to be considered, when Test Checks can be used, advantages disadvantages precautions. Audit Sampling-Audit Sampling, Meaning, Purpose, Factors in determining SampleSize -Sampling Risk, Tolerable Error and Expected Error, Methods of Selecting,Sample Items,Evaluation of Sample Results,Auditors Liability in Conducting Audit Based on SampleInternal Control-Meaning and Purpose, Review of Internal Control, Advantages, Auditors Duties, Review of Internal Control, Inherent Limitations of Internal Control, internal Control Samples for Sales and Debtors, Purchases and Creditors, Wages and Salaries. Internal Checks Vs Internal Control, Internal Checks Vs Test ChecksInternal Audit-Meaning, Basic Principles of Establishing Internal Audit, Objectives, Evaluation of Internal Audit by Statutory Auditor, Usefulness of Internal Audit, Internal Audit Vs External Audit,, Internal Checks Vs Internal Audit	15	Reference books and internet	PPT,WORD
UNIT 4,New Areas of Auditing and Professional Ethics	New Areas of Auditing Introduction to Cost Audit, Human Resource Audit, Management Audit, Operational Audit, Forecast Audit, Social Audit, Tax Audit, Forensic Audit and Environmental (Green) Audit, Audit Committee. Audit in an EDP Environment-Introduction, General Approach toEDP based Audit and Special Techniques for Auditing in an EDP Environment.Professional Ethics and MisconductIntroduction, Meaning of Professional Ethics Meaning of Professional Misconduct, Schedules to the Chartered Accountants Act,1949 Relating to Professional Misconduct, Enquiry into Charges of Misconduct of Chartered Accountants	15	Reference books and internet	PPT,WORD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___60_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____CHETAN PRAKASH VARMA _____ DEPARTMENT: ___COMMERCE ___ CLASS: __TYIMG ___

SEMESTER: ___VI___ MONTH: _____JAN- APRIL _____ ACADEMIC YEAR: ____2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : To make aware of International finance concepts and teaching its practical applicability and relevance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INTERNATIONAL FINANCE-II	Meaning and Scope of International Finance-Balance of Payment- ComponentsDeficit in Balance of Payment-Concept of Currency Convertibility International Monetary System- Gold Standard-Features-Bretton Wood SystemBackground and Features-Reasons for its Failure-Smithsonian Agreement-SDRsEuropean Monetary system Current Exchange Rate Systems – Fixed and Flexible Exchange rate- Merits Demerits-Types of Fixed Exchange Rate- Hard Pegs and Soft Pegs- Types of Flexible Exchange Rate- Managed and Free Float.	08	Bhalla .V.K. international Financial Management-S.Chand Publishing.	ONLINE METHOD-GOOGLE MEET YOUTUBE LINKS
	Introduction- Market and Market Participants- Structure of Forex Markets-The Mechanics of Currency Trading-Types of Transactions and Settlement DatesExchange Rate Quotations and Arbitrage(Geographical, Triangular and Interest Rate)-Short Date and Broken Date Forward Contracts- Borrowing and Investment Decisions-Determinants of Exchange Rate – Purchasing Power and Interest rate Parity Foreign Exchange Management in India- Retail and Whole Sale Component of	07	Apte P.G. International Finance – A Business Perspective, New Delhi, TATA McGraw Hill , McGraw Hill	

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	Indian Foreign Exchange Market- Role of FEDAI- FEMA and Regulatory framework-Dealing Room Operations		Education; 2 edition	
	Introduction: Currency Futures-Future Contract-Futures Forward ContractCurrency Futures Quotes-How to Read Currency Futures Quotes-Market Operations-Clearing House and Clearing Margins- Hedging with Currency Futures and Contracts	06		
	Introduction-Options-Market Structure-Currency Option Quotes-Currency Option Pricing-Fischer Black's Option Pricing Model-Currency Call Options-Currency Put Options-Hedging Currency Positions with Foreign Currency Options	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____26___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: COMMERCE CLASS: TYBIM SEMESTER: VI MONTH: JAN-APRIL

ACADEMIC YEAR:2020-21 SUBJECT: CORPORATE GOVERNANCE

LEARNING OBJECTIVE/S: To understand strategic leadership and corporate governance are phenomena relevant to organizations of varying size, business activity and geographic location. The module covers a fast growing area of consulting-related work and the basic objective is to understand the theory and practice of corporate governance and its role in the strategic management of the modern corporation.

The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Corporate Governance	Definition & Conceptual Framework of Corporate Governance, Business Ethics – an important dimension to Corporate Governance, Fair and Unfair Business Practices.	3	Corporate Governance in India *By Arindam Das*	MS-Power Point, Google Meet, Google classroom
	Theoretical Basis of Corporate Governance, Mechanism-Corporate Governance Systems, Indian Model of Governance, Good Corporate Governance, Obligations Towards Society and Stake holders.	3	Corporate Governance: Principles and Practices By Sandeep Goel	Same as above
	Theories underlying Corporate Governance (Stake holder's theory and Stewardship theory, Agency theory, Separation of Ownership and Control,	2	Same as above	
	Corporate Governance Mechanism: Process, Indian Model, OECD, and Emphasis on Corporate Governance,	2	Same as above	

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	(Transparency Accountability and Empowerment).			
Genesis of Corporate Governance in India	Introduction, Principles – Arthashastra and Good Governance in Ancient India, Protection of Interest of Customer and Investors, Historical Perspective of Corporate Governance and Issues in Corporate Governance.	2	Same as above	Same as above
	Values: Meaning, Types, Teaching from Scriptures Like Gita, Quran, Bible value systems in Business.	2	Same as above	Same as above

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: COMMERCE (Investment Management) CLASS: T.Y.B.I.M.

SEMESTER:6TH MONTH: December -March ACADEMIC YEAR: 2020- 2021 SUBJECT: CORPORATE GOVERNANCE

LEARNING OBJECTIVE/S:
The learners will be able to:

1. To introduce learners about theories and processes implementation of corporate governance.
2. To acquaint students with knowledge of the importance of corporate governance in the globalised economy.
3. To understand the professional approach in conducting family business.
4. To understand the role of MRTP Act and MRTP Commission in reduction of corruption.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 3: Evolution of Corporate Governance	The Cadbury Committee-Code of best principles –Indian Experience of Corporate Governance – The C II Code- SEBI initiative. The Kumar Mangalam Birla Committee Report	5	1. The Essential Book of Corporate Governance- G. N. Bajpai 2. Corporate Governance and Social Responsibilities-	1.Lecture and discussion. 2. google meet 3. PPTs
	Corporate Governance in Globalized Economy – MNCs/TNCs and Business Ethics. Relationship between Business Ethics-Corporate Governance and Ethical Leadership; Kohlberg's Six Stages of Moral Development	5		
MODULE 4:	Role of Board of Directors and Board Structure, Role of the Non-executive Director, Role of Auditors, SEBI Growth of Corporate Governance	4		

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Implementation of Corporate Governance	Role of Government, Corporate Governance in India. Accounting Standards and Accounting disclosures. Finance Reporting and Corporate Governance, Non Accounting Regulations in Corporate Governance, Corporate Governance & CSR,	3	V.Balchandran 3. Corporate Governance - Archana Prabhudesai	
	Family Owned Business Background, family businesses in India, Need for Professionalization and Transparency in Family Business.	3		
MODULE 5; Corporate Governance and Issues Related to Scams Corruption	Meaning, Causes, Effects. Frauds and scams in Banks, Insurance Companies, Financial Institutions, Measures to Overcome Fraud and Corruption	4		
	Zero Tolerance of Corruption. MRTP Act and MRTP commission	2		
	Competition Act, Ethical Approach in IPR with respect to Designs, Patents and copyrights, Ethics and IT	2		
	Case study, future of corporate Governance.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Mezbin Lalani DEPARTMENT: Commerce CLASS: COMMERCE (investment management)

SEMESTER: V **(PROJECT MANAGEMENT)** MONTH: January to April ACADEMIC YEAR 2020-2021

LEARNING OBJECTIVE/S: to understand the basics of project management
The learners will be able to : understand the need and the requirements of project management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Basics of project management 2. Project selection and evaluation.				
	Introduction, need, knowledge areas, project life cycle, project manager, philosophy.	15	Inroduction of Project management Mcgraw hill	Google meet, Google classroom, power point presentation, pdf file, etc
	Identification process, feasibility studies, break even point, need of project planning, WBS, organisational structure, project manager and line manager, leadership styles, team management, change management	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VARADA KATLE DEPARTMENT:COMMERCE CLASS: TY BFM SEMESTER:VI MONTH: December 20 ACADEMIC YEAR: 20-21

SUBJECT : Commodities Derivatives

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Commodities derivatives	Unit I Introduction to commodities market : emergence of commodities mkt , derivatives :derivative definition , types , participation ,exchange traded vs OTC traded ,kabra committee report ,cropping and growth patterns ,factors that influence price	5	Vipul publication	Chock and duster method
	Unit II commodities exchange .functions and role Pricing commodity derivatives : investment assets vs consumption the cost of carry ,future basics , concept of hedging	5		
	Unit III commodities derivatives derivative definition , types , participation ,exchange traded v Trading : basic concept such as margins ,circuit filter ,delivery norms ,types of commodity ,settlement price ,fund shortages ,delivery shortage	5		
	Unit IV Pricing and trading in trading commodities derivative s:cost of carry model ,pricing ,future contract, regulatory framework :Rules governing commodity derivatives ,derivative exchange ,investor grievance ,arbitration rules	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY IMG **SUBJECT –** BUSSINESS COMMUNICATION **SEMESTER:** I **MONTH:** OCTOBER

ACADEMIC YEAR:2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Theory of Communication	**1) Concept of Communication-** Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World Impact of technological advancements on communication **2) Channels and Objectives of Communication:** **Channels :** Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine **Objectives of Communication:** Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Moral of Employees **3) Methods and Modes of Communication:**	15	Textbook of Manan Publication & PPTs	Online Lectures on Google Meet

	Methods: Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette **Modes:** Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E-communication Video and Satellite Conferencing			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

MONTH: NOVEMBER **ACADEMIC YEAR:**2020-2021

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Obstacles to Communication in Business World	**1) Problems in Communication /Barriers to Communication:** Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers 2**) Listening:** Importance of Listening Skills, Cultivating good Listening Skills – **3) Introduction to Business Ethics:** Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility Teachers can adopt a case study approach and address issues such as the following so as to orient and sensitize the student community to actual business practices: Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour	15	Textbook of Manan Publication & PPTs	Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

MONTH: DECEMBER **ACADEMIC YEAR:**2020-2021

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3) Business Correspondence	**1)Theory of Business Letter Writing:** Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation [Letter of Appointment, Promotion and Termination, Letter of Recommendation (to be taught but not to be tested in the examination)	15		Online Lectures on Google Meet

			Textbook of Manan Publication & PPTs	
4) Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities Listening Comprehension Remedial Teaching Speaking Skills: Presenting a News Item, Dialogue and Speeches Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. Reading Comprehension: Analysis of texts from the fields of Commerce and Management	15	Textbook of Manan Publication & PPTs	Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN) (SUB: INTRODUCTION TO ACCOUNTS)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: F.Y.B.I.M** SEMESTER: **1th** MONTH: **OCTOBER**

ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Accounting Transaction and Accounting Cycle
2. What is Journal & its Rules of Debit & Credit & Journal Entries
3. What is Ledger & its Rules regarding Posting
4. What is Trial Balance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Classification Of Income and Expenses and Accounting Standards (Continue…..)	1. Accounting Transaction and Accounting Cycle 2. Journal: Rules of Debit & Credit ,Journal Entries 3. Ledger : Rules regarding Posting 4. Trial Balance	05	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: F.Y.B.I.M.** SEMESTER: **1th** MONTH: **NOVEMBER**

ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are the Classification of Income ,Classification of Expenditure
2. What is Accounting Concept of Income and Sources Of Documents
3. What is Bank Reconciliation Statement

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Classification Of Income and Expenses and Accounting Standards (Continue…..)	1. Capital & Revenue : Classification of Income ,Classification of Expenditure 2. Accounting Concept of Income and Sources Of Documents 3. Bank Reconciliation Statement	05	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by .Mukherjee &M. Hanif.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: F.Y.B.I.M** SEMESTER: **1th** MONTH: **DECEMBER**

ACADEMIC YEAR: **2020-21**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Final Accounts i.e. Manufacturing Account, Trading Account, Profit & Loss Accounts, Balance Sheet
2. What are the Adjustment Entries

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Final Accounts	3. Final Accounts : Manufacturing Account, Trading Account, Profit & Loss Accounts, Balance Sheet 4. Adjustment Entries	10	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____VISHAKHA SANE_____ DEPARTMENT: COMMERCE CLASS: FYBIM(BUSINESS ECONOMICS) SEMESTER: ___1____ MONTH: __NOV____ ACADEMIC YEAR: __2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : LEARN SCOPE & IMPORTANCE OF BUSINESS ECO.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1,2,3	1.SCOPE AND IMPORTANCE OF BUSINESS ECONOMICS Basic tools,opportunity cost principle-increamental cost-functional relationship,the basic of market demand,market supply and equilibrium conditions.	10	ADVANCE ECONOMIC THEORY H L AHUJA	PPT
	2.DEMAND ANALYSIS- DEMAND FUNCTION AND DEMAND ESTIMATION AND FORECASTING-Nature of demandcurve under different market. meaning significant,types and measurement of elasticity of demand.meaning and significant method of demand forecasting.	10		
	3.SUPPLY AND PROUCTION DECISIONS- PRODUCTION FUNCTION-short run analysis with Law of variable proportion, Long run production function,Law of return to scale.	15		
	4. Market structure ,types of market ,need to analyse the market structure. Perfect competition meaning and features ,short run equilibrium of the firm, long run equilibrium of the firm, equilibrium of industry and firm.	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___45_____

SIGNATURE OF THE STAFF VISHAKHA SANE **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT II PLAN)
NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce (self finance) CLASS:FYIMG SEMESTER: I
MONTH: August ACADEMIC YEAR: 2020-21
LEARNING OBJECTIVE/S:
The learners will be able to :

(1) concept of measure of Central tendency with examples

(2) understand the concept of Mean,Median and Mode

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Quantitative Techniques Average Unit II	(1) definition of average and type of averages	02	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) mean, median, mode with sums	02		
	(3)Quartiles and Percentile	02		
	(4) Decile	02		
	(5) Combine mean	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 lectures

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MONTH: August ACADEMIC YEAR: 2020-21
LEARNING OBJECTIVE/S:
The learners will be able to :

(1) understand the concept of measure of dispersion

(2) Learn whar are the absolute and relative measure of dispersion

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Quantitative Techniques Measure of dispersion Unit III	(1) Concept of measure of dispersion	02	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) Various measures of Dispersion	02		
	(2) Quartile deviation	02		
	(4) Mean deviation, Standard deviation	02		
	(5) Variance and Combined variance	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 lectures

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MONTH: September ACADEMIC YEAR: 2020-21
LEARNING OBJECTIVE/S:
The learners will be able to :

(1) understand the concept of interest

(2) learn the basic concept of Annuity and EMI

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Quantitative Techniques Interest and Annuity Unit 2	(1) simple interest with example	04	Business mathematics and statistics(S.L Agarwal, Ane book pvt limited) Business statistics by SG Gupta	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) compound interest with example future and present value also	02		
	(3) Annuity immediate and its Present value and future value	02		
	(4) EMI equated monthly installment	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: COMMERCE CLASS: FY INVESTMENT MANAGEMENT (FC)

SEMESTER: I MONTH: SEPTEMBER TO DECEMBER ACADEMIC YEAR: 2020 -2021

LEARNING OBJECTIVE/S: The learners will be able to understand overview of Indian society, philosophy of Indian Constitution, Fundamental duties, Party System in Indian Politics etc

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Overview of Indian Society	UNIT 1 - Understand the multi-cultural diversity of Indian society through its demographic composition: population distribution according to religion, caste, and gender; Appreciate the concept of linguistic diversity in relation to the Indian situation; Understand regional variations according to rural, urban and tribal characteristics; Understanding the concept of diversity as difference	5	Urbanisation in India: Challenges, Opportunities & the way forward, I J Ahluwalia, Ravi Kanbur, P K Mohanty, SAGE Pub (2014)	POWER POINT PRESENTATIONS
UNIT-2 Concept of disparity-1	UNIT 2 – Understand the concept of disparity arising out of stratification and inequality ,explore the disparity arising out of gender with special reference to violence against women, female foeticide and portrayal of women in media Appreciate the inequalities faced by people with physical and mental disabilities.	10		POWER POINT PRESENTATIONS
UNIT -3 Concept of disparity - 2	UNIT 3- Examine inequalities manifested due to the caste system and inter group conflicts, understand inter group conflicts arising out of communalism, examine the causes and effects of conflicts arising out of regionalism and language differences	10		POWER POINT PRESENTATIONS
UNIT 4 The Indian Constitution	UNIT 4 - Philosophy of the Constitution as set out in the Preamble; The structure of the Constitution-the Preamble, Main Body and Schedules; Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution	10	The Constitution of India, P M Bakshi 2011	POWER POINT PRESENTATIONS

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UNIT 5 Significant Aspects of Political Processes	UNIT 5 - The party system in Indian politics; Local self-government in urban and rural areas; the 73rd and 74th Amendments and their implications for inclusive politics; Role and significance of women in politics	10	Politics in India: structure, Process and Policy SubrataMitra, Rouutlege Pub	POWER POINT PRESENTATIONS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA SINGH DEPARTMENT: COMMERCE CLASS: FYBIM SEMESTER: I SUBJECT:

INTRODUCTION TO FINANCIAL SYSTEM MONTH: OCTOBER TO DECEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will able to understand the Indian financial system of our country it's structure and how it operates.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 An introduction to Financial system	Overview of financial system, functions of financial system, evolution of financial system structure, financial system in India compared with other countries. Constitutes of financial system.	10	Indian financial system M.Y . Khan	PPT presentation
Unit 3 Financial institutions and financial services	Kinds of financial institutions, intermediaries and non intermediaries of financial institutions, features and role of each institutions, size structure and participants. Financial services features scope types fund and fees based	10	Indian financial system M.Y . Khan	PPT presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE(self finance) CLASS: FYIM SEMESTER: I MONTH: OCTOBER- NOVEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:

The learners will be able to:

- Learn what does statistic exactly mean its scope in financial and of population and sample with illustration and also the different methods of sampling
- Become friendly with graphical methods like raw data, attributes and variables, frequency distribution
- Learn plotting of histogram and frequency polygon.
- Learn different types of diagrams like multiple bar, pie bar and subdivided bar.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS-I	Introduction Organisation and Presentation of data.	Unit1	▪ Define Statistics and its scope. Methods of Sampling, importance of Statistic, its functions and limitations. Graphical methods like raw data, attributes and variables, frequency distribution. ▪ Study of Histogram and Frequency polygon Study of multiple bars, sub divided, Pie diagrams.	1 1	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 2

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TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE(self finance) CLASS: FYIM SEMESTER: I MONTH: OCTOBER- NOVEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:

The learners will be able to:

- Understand the concept of Correlation deeply and also its types like positive and negative correlation with examples related to day to day life.
- Calculate the value of coefficient of correlation by Karl Pearson's formula.
- Understand the concept of Regression deeply and how to solve two regression equations.
- Lean to find regression coefficients and study its properties.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS-I	Correlation and regression	Unit 3	▪ Concept of Correlation and its types. Karl pearsons coefficient of correlation. ▪ Meaning of regression How to solve two regression equations ▪ Find its coefficient ▪ Study its properties.	1 1 1 1	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

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TEACHING PLAN (UNIT 6 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE(self finance) CLASS: FYIM SEMESTER: I MONTH: OCTOBER- NOVEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:

The learners will be able to:

- Define and understand the concept of real functions
- Understand the different formula of derivative for different function
- Learning different types of rules of differentiation
- To know where is derivative concept applied in our day to day life

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS-I	Functions, Derivative and its application	Unit 6	Define function and its types Problem solving on functions Derivative concept and its formula and Problem solving on it Application of derivatives	1 1 1 1	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: COMMERCE(self finance) CLASS: FY INVESTMENT MANAGEMENT (FC)

SEMESTER: I MONTH: SEPTEMBER TO DECEMBER ACADEMIC YEAR: 2020 -2021

LEARNING OBJECTIVE/S: The learners will be able to understand overview of Indian society, philosophy of Indian Constitution, Fundamental duties, Party System in Indian Politics etc

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Overview of Indian Society	UNIT 1 - Understand the multi-cultural diversity of Indian society through its demographic composition: population distribution according to religion, caste, and gender; Appreciate the concept of linguistic diversity in relation to the Indian situation; Understand regional variations according to rural, urban and tribal characteristics; Understanding the concept of diversity as difference	5	Urbanisation in India: Challenges, Opportunities & the way forward, I J Ahluwalia, Ravi Kanbur, P K Mohanty, SAGE Pub (2014)	POWER POINT PRESENTATIONS
UNIT-2 Concept of disparity-1	UNIT 2 – Understand the concept of disparity arising out of stratification and inequality ,explore the disparity arising out of gender with special reference to violence against women, female foeticide and portrayal of women in media Appreciate the inequalities faced by people with physical and mental disabilities.	10		POWER POINT PRESENTATIONS
UNIT -3 Concept of disparity - 2	UNIT 3- Examine inequalities manifested due to the caste system and inter group conflicts, understand inter group conflicts arising out of communalism, examine the causes and effects of conflicts arising out of regionalism and language differences	10		POWER POINT PRESENTATIONS
UNIT 4 The Indian Constitution	UNIT 4 - Philosophy of the Constitution as set out in the Preamble; The structure of the Constitution-the Preamble, Main Body and Schedules; Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution	10	The Constitution of India, P M Bakshi 2011	POWER POINT PRESENTATIONS

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

UNIT 5 Significant Aspects of Political Processes	UNIT 5 - The party system in Indian politics; Local self-government in urban and rural areas; the 73rd and 74th Amendments and their implications for inclusive politics; Role and significance of women in politics	10	Politics in India: structure, Process and Policy SubrataMitra, Rouutlege Pub	POWER POINT PRESENTATIONS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: FYBCOM (INVESTMENT MANAGEMENT) SEMESTER I

MONTH: November - December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Financial Accounting Unit-1 Accounting for Hire purchase	Meaning , calculation of interest	1	Introduction to accountancy by T.S Gerwal	Online Method, Google Meet
	Accounting for hire purchase transaction by asset purchase method based on full cash price	1		
	Journal entries , ledger accounts and disclosure of balance sheet for hirer and vendor	1		
	Practical problems	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: FYBCOM (INVESTMENT MANAGEMENT)SEMESTER: I

MONTH: November-December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Financial Accounting Unit-3 Introduction to Accounting	Meaning and scope of accounting, accounting policies	1	Introduction to accountancy by T.S Gerwal	Online Method, Google Meet
	Meaning and definition of inventory	1		
	Expaination of types: FIFO method, LIFO method and Weighted Average method	1		
	Practical problems	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _SAYLI VAIBHAV PATIL_ DEPARTMENT: COMMERCE-SELF FINANCE SUBJECT: BIWC
CLASS: FYIM SEMESTER: I MONTH: OCTOBER-DECEMBER ACADEMIC YEAR: 2020-21LEARNING OBJECTIVE/S: The learners will be able to: Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: General Principles Of Investing	1.Introduction to Investment, Savings Vs. Investment, Investing Vs. Speculation, Investing Vs. Borrowing, Why is investment necessary, When to Start Investing	2	Investment Analysis and Portfolio Management & Wealth management TYBMS- Rishab Publication/ Internet	Presentation method with chat, Google Meet
	2. What is meant by interest Rate,Factors determining interest rates, Simple Interest and Compound Interest, Investment Objectives – Setting SMART Goals,	2		Presentation method with chat, Google Meet
	3. Asset Classes available for investments – Financial Assets Vs. Non-Financial Assets, Important attributes of Various asset classes – Safety (Risk), Liquidity, Yield. Co-relation between various asset classes	3		Presentation method with chat, Google Meet
	4.Debt Management - Purpose, Need and responsibilities, Short Term Debt Vs. Long Term Debt, Fixed Rate Vs. Variable Rate Mortgages, Consumer Loans, Refinancing, Hire Purchase Credit Cards, Leasing	3		Presentation method with chat, Google Meet
	5.Personal Financial Statement Analysis-Cash inflows and cash outflows, income and Expenditure statement, Budgeting and forecasting, Monitoring budgets and provisions for savings, Personal Balance Sheet	3		Presentation method with chat, Google Meet
	6.Forms Of Business Ownership-Sole Proprietorship; Partnership Firm; Limited Liability Partnership; Limited Liability Companies; Trusts; Foundations/Exempt Organizations; Co-operative Societies	2	Internet	Presentation method with chat, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Financial Mathematics - I	1.Time Value Of Money Present Value; Net Present Value; Future Value; Annuities – Immediate and Deferred; Growing Annuities and Inflation adjusted Annuities	7	**Vipul's** BBI series- Financial Management-1/ Internet	Presentation method with chat, Google Meet
	2.Calculation of returns Nominal Rate of Return, Effective Rate of Return, Internal Rate of Return, Holding Period Return (HPR), Compounded Annual rate of Return (CAGR), Real Rate of Return after adjusting for Inflation, Rate of Return after adjusting taxes	8	Investment Analysis and Portfolio Management & Wealth management TYBMS- Rishab Publication/ Internet	Presentation method with chat, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3- Financial Mathematics – II	1.Total Assets – Net Worth and Financial Ratios Net worth and its components, Liquidity Ratios, Debt to income Ratio, debt to financial assets, debt to total assets, savings Ratio	7	Introduction to Management Accounting- SYBCOM SEM 3- Manan Prakashan/ Internet	Presentation method with chat, Google Meet
	2.Loan Calculations EMI Calculation; Loan restructuring – Present Value of future payments; Loan repayment schedules; Loan repayments with varying interest rates; Amortization; Home Equity; Refinancing cost; Fixed EMI Vs. Fixed Tenure.	8	Elementary Business Mathematics- II – Vipul Prakashan/ Internet	Presentation method with chat, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4: Risk Profiling of Products and Investors – Asset Allocation	1.Types of Investment Risk -Market Risk – Systematic and unsystematic, Inflation Risk, Interest Rate Risk, Credit Risk, Maturity Risk, Liquidity Risk, reinvestment risk, Exchange Rate Risk. Regulatory Risk, Investment Manager (Alpha) Risk, Business Risk	1	Investment Analysis and Portfolio Management & Wealth management TYBMS- Rishab Publication/ Internet	Presentation method with chat, Google Meet,
	2.Product Profiling in terms of Risk and Tenure-Short Term Products – Low Returns with Capital Protection, Medium Term Products – Inflation beating with adequate Capital protection, Long Term Products – Managed Risk for wealth creation in the long term	2		Presentation method with chat, Google Meet
	3.Risk Profiling of Investor-Understanding Investor's investment psychology and investment behaviour; Riskbased on investor'slifestage; Risk based on investors earnings, income generation and assets; Risk Tolerance – risk capacity and risk appetite; classifying investors as per their risk profile; matching products to investors risk profile and tenure of goals	4		Presentation method with chat, Google Meet
	4.Asset Allocation-Asset Allocation – Base of Investment Planning; Asset Classes – Equity, Debt, Cash. Precious metals; Expected rate of return; Goal Specific Asset Allocation; Change of asset allocation while approaching goals; Selection of asset mix as per clients goals	3		Presentation method with chat, Google Meet,
	5.Types of Asset Allocation Strategies-Strategic, Tactical and Life Stage asset allocation	1		Presentation method with chat, Google Meet
	6.Wealth Creation – Factors and Principles -Income and Savings Ratio; Allocation of savings to asset classes; Consistency in savings and monitoring; Taking advantage of opportunities in various asset classes; Overall effective yield and tax aspects; Wealth protection and wealth erosion	4		Presentation method with chat, Google Meet,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: COMMERCE CLASS: FYBIM SEMESTER: II MONTH: JANUARY TO APRIL SUBJECT: INTRODUCTION TO FINANCIAL INTERMEDIARIES ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the meaning of financial Intermediaries.
- Get knowledge of various financial Intermediaries working in India.
- Interpret various schemes available under mutual funds.
- Know in detail about NBFC and its functioning.
- Apply the knowledge gained in personal life and understand the market better.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit1- Taxonomy of Financial Intermediaries	Meaning and classification of **Financial Intermediaries** **Commercial banks, Credit union, Insurance companies, Pension Fund, Mutual Fund** (Role and investment schemes), Financial advisors **Non Banking Financial companies: IDFC, IL&FS, Power Financial Company, SIDBI, NABARD** **Credit rating agencies-** meaning, rating methodologies, credit symbols, role.and benefits of ratings to company and investors, **Credit rating agencies in India.**	9	**FYIM- FINANCIAL INTERMEDIARIES BY VIPUL PUBLICATION FYFM-Rishab publication and Vipul prakashan**	Google meet, Google forms, PPT, Inkcredible, Testmoz, Youtube

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UNIT – 4 Future Trends	**Challenges faced by financial Intermediaries:** Challenges faced by Mutual Funds in India Challenges faced by Banking Sector in India Challenges faced by Insurance companies **Future prospects of financial Intermediaries:** Future prospects of Insurance industry in India Future prospects of commercial banking in India Future prospects of mutual funds in India	6	**FYIM- FINANCIAL INTERMEDIARIES BY VIPUL PUBLICATION**	Google meet, Google forms, PPT, Inkcredible, Testmoz,

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ALMEIDA DEPARTMENT: COMMERCE SUBJECT: Introduction to Wealth Management
CLASS: FYIMG SEMESTER: II MONTH: DECEMBER -APRIL ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: The learners will be able to : Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2: Role of Insurance in Wealth Management	1.Analysis of Live Cover, Strategies and Products Assessment and identification of Risk Cover – Gathering data on current Life Insurance Cover; Identifying clients life insurance needs	1	Wealth Management- TYBMS- Rishab Publication/ Internet	Lecture method, discussion method
	2. Analysis of Life Insurance Needs – Economic Value of human life; Replacement of the future income of the insured; Replacement of the expenses and financial liabilities of the insured; provision in the life cover of certain financial goals and financial liabilities; Review of coverage for changes in income, assets and financial liabilities	2	Wealth Management- TYBMS- Rishab Publication/ Internet	Lecture method.
	3.Life Insurance Types of Life Insurance Policies - Term Insurance; Whole Life Insurance: Endowment Policy; Investment Linked Insurance (ULIP); Insurance Linked annuities; Life insurance Policy riders Calculation of Claim amount and other benefits – Types of Bonus; Maturity Claim; Death Claim; Surrender Value; Return on Savings Component; Taxation aspect of various insurance Policies	2	Wealth Management- TYBMS- Rishab Publication/ Internet	Lecture method.
	4.General Insurance-Health Insurance and Accident Insurance – Individual Vs. Family floater Policy; Critical Illness policy; Group health Insurance; Personal and group accident Insurance; Personal Disability Insurance – Permanent and Temporary, Partial and total; Scope of benefits – long term and short term disability; Property and Liability Insurance – basis of property cover – Reinstatement, Book or Market Value; Insuring House, Household items,	4	Wealth Management- TYBMS- Rishab Publication/Internet	Lecture method, discussion method

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	business unit, plant and machinery; personal Umbrella Policy; miscellaneous oversees travel insurance; Motor Insurance – Comprehensive and Mandatory Third party coverage; No claim Bonus and claims			
	5.Other business specific Insurance – professional Indemnity Insurance; Keyman Insurance; Marine Insurance, Cargo and Hull Insurance; Inland Transit Insurance	1	Wealth Management- TYBMS- Rishab Publication/ Internet	Lecture method.
	6.Introduction to the following Acts Insurance Regulatory and Development Authority(IRDA)Act-1999; TheInsuranceAct-1938; PublicLiabilityInsuranceAct-1991; MotorVehicleAct-1988 EmployeeStateInsuranceAct-1948	2	Internet	Lecture method.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ALMEIDA DEPARTMENT: COMMERCE SUBJECT: Introduction to Wealth Management
CLASS: FYIMG SEMESTER: II MONTH: DECEMBER-APRIL ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: The learners will be able to : Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4: Estate Planning	1. Estate Planning Overview–The concept of Estate Planning; Purpose and Need of Estate Planning; Risks and Drawbacks involved in Estate Planning; Hindu and Indian Succession Act; Succession-Testate and Intestate	2	Wealth Management- TYBMS- Rishab Publication/ Internet	Lecture method, discussion method
	2.Estate Planning Process-Collect comprehensive information and examine circumstances to set Estate planning goals ; Determine value of client's estate and liquidity aspects; Estimate cost of transfer and other expenses; Develop a plan of transfer; Implement plan and review periodically.	1	Wealth Management- TYBMS- Rishab Publication/ Internet	Lecture method.
	3.Methods of Estate Planning - Will; Trust; Insurance; Gift; Power of Attorney; Transfer of property and partition.	1	Wealth Management- TYBMS- Rishab Publication/ Internet	Lecture method.
	4.Will –Characteristics and Contents of a Will; Types of Will-Unprivileged, Privileged, Joint, Mutual and Conditional; Legal requirements and Testamentary capacity; Modifying or revoking Will; Probate Process	2	Wealth Management- TYBMS- Rishab Publication/Internet	Lecture method, discussion method
	5.Powers of Attorney – Use and purpose; Types-General and Special; Revocation; Role of the executor.	1	Wealth Management- TYBMS- Rishab Publication/Internet	Lecture method,
	6.Trust - Classification of Trust – Revocable and Irrevocable, Characteristics of Trust– Discretionary and Determinate; Different types of a family trust; Family trust V/s Will; Parties to Trust; Rules relating to perpetuities; Other Provisions	3	Wealth Management- TYBMS- Rishab Publication/Internet	Lecture method, discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 1

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY. IMG

SUBJECT – BUSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** JANUARY 2021 **ACADEMIC YEAR:** 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	4 Principles of Effective Presentation Effective use of OHP Effective use of Transparencies How to make a Power-Point Presentation	15	Textbook of Manan Publication & PPTs	Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY. IMG

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** FEBRUARY 2021 **ACADEMIC YEAR:** 2020-2021

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Interviews:** Group Discussion, Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit **Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics, Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **Conference:** Meaning and Importance of Conference, Organizing a Conference **Modern Methods:** Video and Tele – Conferencing	12	Textbook of Manan Publication & PPTs	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY. IMG

SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** MARCH 2021 **ACADEMIC YEAR:** 2020-2021

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	03	Textbook of Manan Publication & PPTs	Online Lectures through Google Meet
3) Business Correspondence	Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters, Promotional Leaflets and Fliers, Consumer Grievance Letters, Letters under Right to Information (RTI) Act	15	Textbook of Manan Publication & PPTs	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY. IMG
SUBJECT – BUSINESS COMMUNICATION - II **SEMESTER:** II **MONTH:** APRIL 2021 **ACADEMIC YEAR:** 2020-2021

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4) Language and Writing Skills	**Reports:** Parts, **Types** - Feasibility Reports, Investigative Reports **Summarisation:** Identification of main and supporting/sub points, Presenting these in a cohesive manner	15	Textbook of Manan Publication & PPTs	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE SELF-FINANCE CLASS: FYBIM

SUBJECT: FOUNDATION COURSE. SEMESTER: 2 MONTH:DEC TO MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the importance and concept of environment ecology with natural capital connection of human life equality, causing impact on human life's with poverty and environment.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3 Ecology	Importance of Environment Studies in the current developmental context;	10	Foundation course by Michael Vaz and Vipul's publications	Chalk Board, Flow Chart, Diagrams .
	Understanding concept of Environment, Ecology and their inter-connectedness;			
	Environmental as natural capital and connection to equality of human life;			
	Environmental Degradation- Causes and impact on human life;			
	Sustainable Development – Concept and components; poverty and environment.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE SELF-FINANCE CLASS: FYBIM

SUBJECT: FOUNDATION COURSE. SEMESTER: 2 MONTH:DEC TO MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the cause of stress and conflict in society role played by agents signifying the value, ethics, prejudging causing in society expression of aggression, violence in public.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4 Understanding Stress and Conflict	Causes of stress and conflict in individuals and society;	10	Foundation course by Michael Vaz and Vipul's publications	Chalk Board, Flow Chart, Diagrams .
	Agents of socialization and the role played by them in developing the individual;			
	Significance of values, ethics and prejudices in developing the individual;			
	Stereotyping and prejudice as significant factors in causing conflicts in society;			
	Aggression and violence as the public expression of conflict.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE SELF-FINANCE CLASS: FYBIM

SUBJECT: FOUNDATION COURSE. SEMESTER: 2 MONTH:DEC TO MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Understand types of conflicts against individual stress. Maslow's theory with different methods to resolve and building peace and harmony in society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 5 Managing Stress and Conflict in Contemporary Society	Types of conflicts and use of coping mechanisms for managing individual stress;	08	Foundation course by Michael Vaz and Vipul's publications	Chalk Board, Flow Chart, Diagrams .
	Maslow's theory of self-actualisation;			
	Different methods of responding to conflicts in society;			
	Conflict-resolution and efforts towards building peace and harmony in society.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT: COMMERCE SELF-FINANCE CLASS: FYBIM

SUBJECT: FOUNDATION COURSE. SEMESTER: 2 MONTH:DEC TO MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concepts of Human Rights with the universal study declaring constitutes with special references of fundamental rights states and constitution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Human Rights	Concepts of Human Rights; origin and evolution of the concept;	10	Foundation course by Michael Vaz and Vipul's publications	Chalk Board, Flow Chart, Diagrams .
	The Universal Declaration of Human Rights;			
	Human Rights constitutes with special reference of Fundamental Rights stated in the Constitution.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. LEJESH KELOTH** DEPARTMENT**: COMMERCE (SELF -FINANCE**

CLASS: **F.Y.B I M** SEMESTER: **II** MONTH: **JANUARY TO MARCH** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S : To understand the working of a Investment sectors and its benefits for individual who want to secure their future through financial security.

The learners will be able to : Able to understand basic principles of Indian money market, application through case studies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module -1	**MODULE – 1:** **INTRODUCTION OF INVESTMENT BANKING** **Investment its meaning and scope,** **Type of assets classes,** **Assets Allocation,** **Creating portfolio and process of portfolio management.**	10	**INVESTMENT MANAGEMENT (BMS, BMM) SHETH PUBLICATION, REFERENCE JOURNALS**	**PPT, WHITE BOARD, SLIDES, VERBAL COMMUNICATION**
Module -2	**MODULE –2:** **CONCEPT OF INVESTEMNT BANKING** **Investment banking concept**. **Private placement method,** **Role of venture capital.** **Firm in raising funds** **Due diligence method.**	10	**INVESTMENT MANAGEMENT (BMS, BMM) SHETH PUBLICATION, REFERENCE JOURNALS**	**PPT, WHITE BOARD, SLIDES, VERBAL COMMUNICATION**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE-SELF FINANCE SUBJECT: Introduction to Wealth Management
CLASS: FYIMG SEMESTER: II MONTH: January- March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: The learners will be able to : Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Overview of Wealth management	1.**Introduction to Wealth management-**Definition of Wealth management; understanding wealth management; wealth management process; phases in wealth management process; wealth management market in India	4	Wealth Management- TYBMS- Rishab Publication/ Internet	Presentation method with chat, Google Meet
	2.**Holistic Planning Framework-**Sources of wealth; human Capital; Financial Capital; Financial Life Cycle; Working Life – Pre-family independence; Family; Pre-retirement; Retirement – Active retirement; Passive Retirement; Elderly Care; Retirement related risk – risk identification; Market Risk, Asset Allocation Risk, Interest Rate Risk, Inflation Risk, Health/liquidity risk, Longevity Risk	4	Research Paper: A Holistic Framework for Lifecycle Financial Planning	Presentation method with chat, Google Meet.
	3.**The Financial Planning process-**Establish and define the relationship with the client; Personal Fact Finding; Analyze Client's financial status, Risk profile and determine financial goals; Develop financial planning recommendation and present it to client; Implement client's financial planning recommendations; Monitor and review the client's situation	4	Wealth Management- TYBMS- Rishab Publication	Presentation method with chat, Google Meet
	4.**Asset Classes-** Debt as an asset class; Role of debt in wealth management; risk of investing in debt securities; Equity as an asset class – investing in stocks	3	Wealth Management- TYBMS- Rishab Publication/Internet	Presentation method with chat, Google Meet
Unit 3: Retirement Planning	1.Employee Benefits and Superannuation Benefits-Employee Benefits – Salary and Bonus; Reimbursement of expenses; Health Benefits; Group Insurance; LTA, TA, Concessional Loans; Defined Benefit Plans and	4	Wealth Management- TYBMS- Rishab Publication/Internet	Presentation method with chat, Google Meet

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	Limitations – Characteristics of DB Plans, Types of Defined Benefit Plans, their Features, Applicability and withdrawal norms, Taxability; Defined Contribution Plans and Limitations – Characteristics of DC Plans, Types of Defined contribution Plans, their features, Applicability. And withdrawal norms, taxability; Superannuation benefits and schemes –Trust Funds, Private Fund Managers, and Insurance Companies, Benefits - on retirement, Voluntary retirement and Death			
	2.Retirement Needs and Factors in retirement Planning-Introduction to retirement planning - Significance of retirement planning; Purpose and need of retirement planning; Role of Wealth planner in retirement planning; Importance of starting early; Analysis of Client's Life Cycle – Early earning stage and established earning stage; stability and visibility of earnings; Accumulation and Distribution phase; Life Expectancy Vs. Retirement age; Early Vs. Delayed retirement; Risk of living longer than expected; Factors considered in retirement planning – Nature of Income; salaried, bonus and self-employed; standard of living; time horizon; inflation in accumulation and distribution phase; profile of assets sustainable till retirement; income generating potential of fixed assets; liquidity aspects of fixed and other assets; Profile of financial and other liabilities nearing retirement; Analysis of client's retirement needs – Estimating household expenses on retirement; Corpus estimated to meet post retirement needs; Alternate arrangements for supplementing retirement corpus; cost of escalation of medical expenses in post-retirement; charitable activities and social work	4	Wealth Management- TYBMS- Rishab Publication/Internet	Presentation method with chat, Google Meet
	3.Retirement Planning Process	3	Wealth Management- TYBMS- Rishab Publication/Internet	Presentation method with chat, Google Meet
	4.Income Streams during Retirement – Employer Provided superannuation plans; Provident Fund; Public Provident Fund; Small Savings Schemes; NPS; Pension Plans from MF's and Insurance Companies; Reverse Mortgage to supplement post retirement expenses.	4	Wealth Management- TYBMS- Rishab Publication/Internet	Presentation method with chat, Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1 & 3 : 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUNITHA CHANDRASHEKHAR NAIR DEPARTMENT: COMMERCE
CLASS F.Y.B.I.M.. SEMESTER: II MONTH: January - May ACADEMIC YEAR: 2020 -2021
LEARNING OBJECTIVE/S: To show how corporate governance , ethics and legal considerations factor into investment banking deals
The learners will be able to :to learn various investment banking skills .

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Investment Banking – Unit II & IV	**Module III – Risk and Return**			
	1.Risk and return concepts 2. Types of Risk and its Applications 3.ASBA 4.IPO and FPO 5. SEBI disclosures and other regulators	15	**1. Investment Management(V.K.Bhalla)** **2. The business of Venture Capital (Wiley)**	1.Online lectures 2 Quiz method 3.Discussion method
	Module IV- Investment Banking Activities			
	1.Industry analysis 2. Role of IPO in value unlocking 3.Recent Trends and Developments 4. Investment banking activities	15	**1.Investment Management(V.K.Bhalla)** **2.Portfolio Management (S.Kevin)**	1.Online lecture 2 Quiz method 3.Discussion method
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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: FYBCOM (INVESTMENT MANAGEMENT) SEMESTER II

MONTH: January- March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Accounting-II Unit-1 Investment Accounting	Introduction . For shares and Debentures bonds etc	1	Introduction to accountancy by T.S Gerwal	Online Method, Google Meet
	Accounting for transactions of purchase and sales of investments with Ex and Cum interest prices	1		
	Finding cost of investment sold and carrying cost as per weighted average method	1		
	Practical Problems	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6

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NAME OF THE STAFF: Prof Amita Rakesh Patil DEPARTMENT: Commerce CLASS: FYBCOM (INVESTMENT MANAGEMENT)SEMESTER: II

MONTH: January - March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Accounting-II Unit-4 Issue of shares and Debentures , Redemption of Preference shares	Introduction of issue of shares and journal entries	1	Introduction to accountancy by T.S Gerwal	Online Method, Google Meet
	Issue of Debentures and its journal entries	1		
	Redemption of preference shares and its journal entries	1		
	Practical problems	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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TEACHING PLAN (UNIT PLAN)

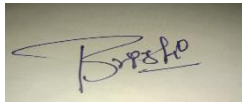
NAME OF THE STAFF: Bristi Gourgopal Biswas SUBJECT: Business Economics DEPARTMENT: B. Com (Financial management)

CLASS: FYFMG SEMESTER I MONTH: November- December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: To understand the application of microeconomics at corporate level.

The learners will be able to: observe microeconomics in the real world and to understand and make business decisions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE	TEACHING METHOD/ ICT TOOLS USED
Module I **Introduction to business economics**	Introduction, Business Economics, basic concepts for business economic analysis, functional relations and tool for economic analysis. Introduction to market demand and supply, demand supply, market equilibrium, changes in market equilibrium.	10		Chalk and board



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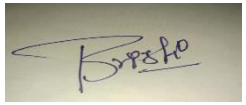
Module II **Demand Analysis**	Meaning of demand, law of demand, determinants of demand, demand function, price, income and substitution effects, nature of demand curve under different markets. Meaning of elasticity, price elasticity of demand, income elasticity of demand, cross elasticity of demand, promotional elasticity of demand, importance of elasticity of demand, relationship between price elasticity of demand and revenue concept. Significance of demand forecasting, types of demand forecasting, steps in demand forecasting, methods of demand forecasting.	10		Chalk and board



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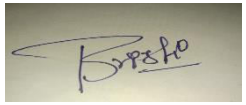
Module III **Supply and production decisions and cost of production**	Concept of production, production function, isoquants, ridge lines least cost combination of inputs, expansion path. Types of production function, law of variable proportions, laws of returns to scale. Meaning of economies and diseconomies of scale, Internal economies and diseconomies of scale, external economies and diseconomies of scale. Cost concepts: money cost, accounting cost and economic cost, fixed, variable and total cost, total, average and marginal cost. Cost function, short run cost output, relationship between AC, AFC, AVC and MC, relationship between AC and MC, short run average cost and output, long run cost output, long run average cost curve, long run marginal cost curve, learning curve, long run AC and output. Concept of breakeven point, variables influencing the breakeven point, business application of breakeven analysis, limitations of breakeven analysis.	12		Chalk and board
Module IV **Market structure perfect competition and monopoly**	Market structure, types of market, need to analyse the market structure. Perfect competition meaning and features, short run equilibrium of the firm, long run equilibrium of the firm, equilibrium of industry and firm.	12		



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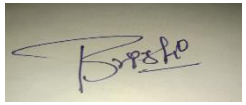
and pricing and output decisions under imperfect competition	Features of monopoly ,sources of monopoly power, equilibrium of monopoly firm ,comparison between perfect competition and monopoly. Features of monopolistic competition, short run equilibrium of the firm, long run equilibrium of the firm ,selling cost and its effects, role of advertisement. Meaning of oligopoly ,characteristics of oligopoly ,collusive and non collusive oligopoly ,price rigidity ,collusive oligopoly, price leadership.			Chalk and board
Module V **Pricing practices**	Meaning of pricing practices, degrees of price discrimination, conditions for price discrimination, conditions for profitable price discrimination, equilibrium of price discriminating monopolist ,dumping. Introduction to pricing practices part II, marginal cost pricing ,cost plus pricing ,multi product pricing Transfer pricing.	10		Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 54



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TEACHING PLAN (UNIT PLAN)

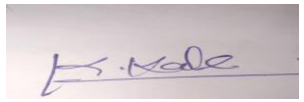
NAME OF THE STAFF: Karishma Vijay Kale SUBJECT: Indian Financial System DEPARTMENT: B. Com (Financial management)

CLASS: FYFMG SEMESTER I MONTH: November- December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to :
Understand the Indian Financial System

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II	Reserve Bank of India	2	Vipul Prakashan	Online teaching- PPT
	Commercial Bank	2	Vipul Prakashan	Online teaching- PPT
	Development Bank	2	Vipul Prakashan	Online teaching- PPT
Unit III	Introduction to NBFCs	1	Vipul Prakashan	Online teaching- PPT
	NABARD	1	Vipul Prakashan	Online teaching- PPT
	Securities Exchange Board of India	1	Vipul Prakashan	Online teaching- PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 9



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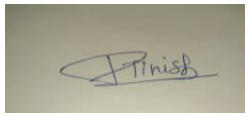
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH SUBJECT: Indian Financial System DEPARTMENT: B. Com (Financial management)

CLASS: FYFMG SEMESTER I MONTH: November- December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand how Indian financial system functions, its role

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1: FINANCIAL SYSTEM UNIT 4:	Chapter 1: Introduction to financial system Meaning, nature, structure, role, flow of funds in financial system, financial systems and economic developments, over view of financial system Chapter 2: financial system and economic development Financial development, economic development, indicators, economic policies, functions of financial system, financial sector in economic growth Chapter 3: Indian financial system, transformation of financial sector, driving force to its growth	15	Ahamad Khan Masood (1992) Banking in India, Anmol Publications,	POWER POINT PRESENTATIONS



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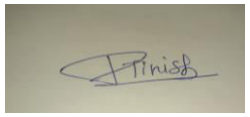
FINANCE COMPANIES	Chapter 10: Introduction to finance companies Its meaning, its purpose, functions of finance companies, sources of finance companies, uses of funds in finance companies, uses, risk in finance companies Chapter 11: Evolution of finance companies Origin and development, history, types of finance e companies, finance vs commercial banks, importance, challenges ,advantages, limitations Chapter 12: Micro finance and its importance Meaning and definition, origin and development, features, objectives, principles ,advantages, MFI,SHG, NABARD,micro finance companies	07	Ahamad Khan Masood (1992) Banking in India, Anmol Publications,	POWER POINT PRESENTATIONS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14



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TEACHING PLAN (UNIT PLAN)

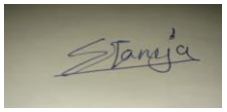
NAME OF THE STAFF: SHREYA TANEJA SUBJECT: Business mathematics DEPARTMENT: B. Com (Financial management)
CLASS: FYFMG SEMESTER I MONTH: October - December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES:
The learners will be able to:

- To define profit and loss and solve questions based on it.
- To define types of discount and solve questions based on it
- To define commission and brokerage and solve questions based on them.

PAPER, UNIT, T	SUBTOPICS	NO OF LECT ALLOTE	REFERENCE/	TEACHING METHOD/ ICT T USED
Business Mathematic loss, discount, comm brokerage (Unit 2)	Profit and loss	1	Business Mathematics Kapoor)	LECTUREMETHOD, DISCUSSION METHOD, PROBL SOLVING METHOD TEACHING AIDS :whiteboard, Ch Duster, PPTs
	Discount	2		
	Commission	1		
	Brokerage	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5



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TEACHING PLAN (UNIT PLAN)

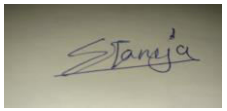
NAME OF THE STAFF: SHREYA TANEJA SUBJECT: Business mathematics DEPARTMENT: B. Com (Financial management)
CLASS: FYFMG SEMESTER I MONTH: October - December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand the concept of simple interest, compound interest, annuity and EMI.
- Solve the questions related to simple interest, compound interest, annuity and EMI.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Mathematics Interest & Annuity (Unit 3)	Simple interest with examples Compound interest with examples Annuity (Present & Future value) EMI (Reducing balance and Flat interest rate method)	1 2 1 1	Business Mathematics (V.K Kapoor)	LECTUREMETHOD, DISCUSSION METHOD, PROBLEM SOLVING METHOD TEACHING AIDS :PPT, white board, Marker & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5



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TEACHING PLAN (UNIT 1 PLAN)

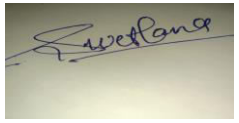
NAME OF THE STAFF: SWETLANA G DIAS SUBJECT: Business mathematics DEPARTMENT: B. Com (Financial management)
CLASS: FYFMG SEMESTER I MONTH: October - December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES: The learners will be able to:

- Define Ratio, Continued Ratio, and Inverse Ratio and solve the questions based on these terms.
- Understand the concept of Proportion, Continued Proportion, Direct Proportion and Inverse Proportion.
- Solve the questions based on different types of Proportion and relate the situations in day to day life.
- Understand the concept of Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation.
- Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Ratio, Proportion & Percentage	Unit1	▪ Define Ratio, Continued Ratio, Inverse Ratio ▪ Problem solving on ratio ▪ Define Proportion its types. ▪ Problem solving on proportion ▪ Explanation on concept of percentage and computation of percentage.	1 1 1 1 1	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION, PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS: whiteboard, Duster, PPT's

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5



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TEACHING PLAN (UNIT 4 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS SUBJECT: Business mathematics DEPARTMENT: B. Com (Financial management)

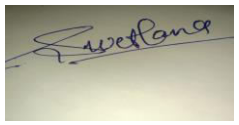
CLASS: FYFMG SEMESTER I MONTH: October - December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVES: The learners will be able to:

- Learn the concept of face value, market value, dividend, equity shares, bonus shares, preference shares.
- Solve the questions based on buying and selling of shares with and without brokerage.
- Define net asset value of mutual funds, entry/exit load
- Understand the concept of Systematic Investment Plan (SIP).
- Solve simple problems on calculation of net income after considering entry load and exit load change in net asset value and SIP.
- Focus and how to apply this knowledge in day to day life

.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Shares and Mutual Funds	Unit4	▪ Concept of Shares, Face value, market value, dividend. ▪ Explanation of types of Shares. ▪ Sums based on Shares ▪ Concept of Mutual Funds and its types ▪ Calculation of net income after	1 1 1 1	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's



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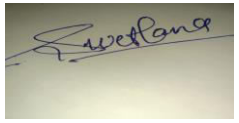
			considering entry load and exit load ▪ Change in net asset value and problems based on it. ▪ Concept of SIP and sums based on it.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil SUBJECT: financial Accounting DEPARTMENT: B. Com (Financial management)

CLASS: FYFMG SEMESTER I MONTH: November- December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVS:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit – 2 Depreciation	Meaning, Causes	1	Financial Accounting by R Narayanswamy	Online Method, Google Meet
	Types- Straight Line Method, Written Down Method	2		
	Insurance claims, Average Clause	1		
	Practical Problems	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Amita Rakesh Patil SUBJECT: financial Accounting DEPARTMENT: B. Com (Financial management)

CLASS: FYFMG SEMESTER I MONTH: November- December ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting Unit – 4 Final Accounts of a Sole Trader	Meaning, Preparation of final accounts of a sole trading concern	1	Financial Accounting by R Narayanswamy	Online Method, Google Meet
	Adjustments- Closing Stock, Outstanding and prepaid expenses, Depreciation	1		
	Provision for Bad Debts, Provision for discount on Debtors, Interest on Capital & Drawings	1		
	Practical Problems	3		

The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 6

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. ABHISHEK MADAYE SUBJECT: Principle of Finance DEPARTMENT: B. Com (Financial management)

CLASS: FYFMG SEMESTER II MONTH: January - April ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Learn Introduction to computer system

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTU RES ALLOT TED	REFERENC S	TEACHING METHOD/ ICT TOOLS USED
POF,UNIT 1,Introduction to Finance and Financial Planning	Finance, Definition, Nature and scope of Finance functionFinancial Management: Meaning, scope and objectivesOrganisational framework of financial management- Relationship of finance department with other departments- Role of Finance Manager Financial Planning: Concept-objectives-types-steps-significance- basic considerations-limitations	15	VIPUL PUBLICATI ON'S BOOK AND INTERNET	PPT,WORD
UNIT 2,Capital Structure and	Meaning of Capital Structure-Criteria of determining capital	15	VIPUL PUBLICATI	PPT,WORD

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Capitalisation	structure-factors influencing capital structureMeaning of Capitalisation, narrower and broader interpretation Overcapitalization- Meaning, causes, consequences, remedies Undercapitalization- Meaning, causes, consequences, remedies		ON'S BOOK AND INTERNET	
UNIT 3,External Sources of Finance	Shares-Meaning, types, advantages, limitationsDebentures- Meaning, types, advantages, limitationsPublic Deposits- Meaning, advantages, limitationsBorrowing from banks- types of loans, advantages, limitations	15	VIPUL PUBLICATI ON'S BOOK AND INTERNET	PPT,WORD
UNIT 4 Internal Sources of Finance	Reserves and surplus, bonus shares, retained earnings, Dividend policy, Role of Depreciation, Importance, advantages and limitations of these sources	15	VIPUL PUBLICATI ON'S BOOK AND INTERNE	PPT,WORD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35

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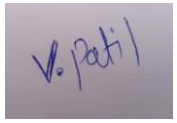
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VAIKHARI PATIL SUBJECT: computer skills DEPARTMENT: B. Com (Financial management)

CLASS: FYFMG SEMESTER II MONTH: January - April ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: Learn Introduction to computer system

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, II, III, IV, V	Personal Computers- identification/demonstration of different storage Devices like CD and CD drive, hard disk- HDD, storing and retrieving data from various storage devices, identification of various input and output devices. Primary memory, RAM and ROM- Processor- CPU, it's speed- machine cycle, ports, computer buses, Different types of printers. Introduction to trouble shooting of personal computers.	7 lectures		
	Introduction, features, various versions of windows, My computer, my documents, recycle bin, network neighbourhood, start menu, taskbar, file and folder operation (creating, copying, moving, deleting), system tools, creating shortcuts	7 lectures		
	What is internet, most popular internet services , functions of internet like email,WWW, FTP, usenet, Instant messaging, internet telephony, using address book,working with task list,	7 lectures		



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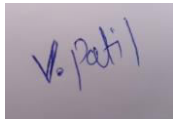
	scheduling appointments, reminders, events			
	Getting started, The Word window, New documents, Document navigation,Editing text, Working with text, Undo and Redo commands, Cut, copy, and paste,Find and replace Text formatting, Character formatting, Tab settings, Paragraph formatting, Paragraph spacing and indents Tables, Creating tables, Working with table content, Changing the table structure Page layout, Headers and footers, Page setup Graphics, Adding graphics and clip art, Working with graphics Proofing, printing, and exporting, Spelling and grammar, AutoCorrect, Printing and exporting documents	7 lectures		
	Fundamentals of Excel, Cut, Copy, Insert, Delete, Paste Special, Custom Formatting , Undo, Redo, Excel Formulas – Basic, Useful functions and Paste Function, Calc, Comments, Drawing toolbar, Edit, Replace, Delete, Clear, Essential Printing, Data Sorting, Hiding, AutoFormats, Protection, Basic Charts, Basic Formatting, If Function	7 lectures		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35



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TEACHING PLAN (UNIT II PLAN)

NAME OF THE STAFF: Shreya Taneja SUBJECT: Business Statistics DEPARTMENT: B. Com (Financial management)

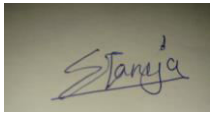
CLASS: FYFMG SEMESTER II MONTH: January - February ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) concept of measure of Central tendency with examples

(2) understand the concept of Mean,Median and Mode

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATIATICS Measure of Central tendency	(1) definition of average and type of averages	01	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard	Whiteboard , marker and Duster, powerpoint presentation Discussion, Problem solving Homeworks,



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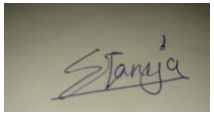
Unit II			and David	
	(2) mean, median, mode, combined mean with sums	02		
	(3)Quartiles and Percentile and Deciles	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5 lectures



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TEACHING PLAN (UNIT III PLAN)

NAME OF THE STAFF: Shreya Taneja SUBJECT: Business Statistics DEPARTMENT: B. Com (Financial management)

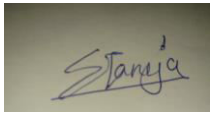
CLASS: FYFMG SEMESTER II MONTH: January - February ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) understand the concept of measure of dispersion

(2) Learn whar are the absolute and relative measure of dispersion

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATIATICS Measure of	(1) Concept of measure of dispersion	01	S.L agarwal for Business statistics BUSINESS STATISTICS	Whiteboard , marker and Duster, powerpoint presentation Discussion, Problem solving



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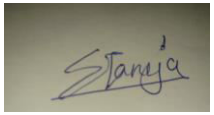
dispersion			Gupta, Richard and David	
Unit III	(2) Range and Quartile deviation	01		
	(4) Mean deviation, Standard deviation	02		
	(5) Variance and Combined variance	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5 lectures



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TEACHING PLAN (UNIT IV PLAN)

NAME OF THE STAFF: Shreya Taneja SUBJECT: Business Statistics DEPARTMENT: B. Com (Financial management)

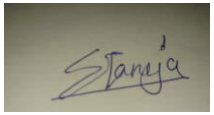
CLASS: FYFMG SEMESTER II MONTH: January - February ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) understand the different different concept of correlation analysis

(2) learn about regression analysis

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS Correlation &	(1) meaning and type of correlation	01	S.L agarwal for Business statistics BUSINESS	Whiteboard , marker and Duster, powerpoint presentationDiscussion, Problem solving Homeworks,



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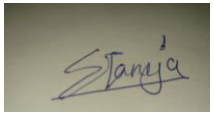
Regression			STATISTICS Gupta, Richard and David	
Unit IV	(2) determination of correlation: scatter diagram ,Karl Pearson correlation coefficient	02		
	(3) meaning and concept of regression	02		
	(4) slope of regression line, least square method, regression coefficient	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7s lectures



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TEACHING PLAN (UNIT PLAN)

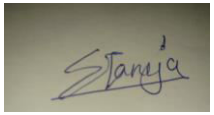
NAME OF THE STAFF: Shreya Taneja SUBJECT: Business Statistics DEPARTMENT: B. Com (Financial management)

CLASS: FYFMG SEMESTER II MONTH: January - February ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : (1) Understand the concept of statistics

(2) learn about the Graph(Histogram, polygon) etc

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS Population and Sample Unit I	(1) Definition of Statistics, Scope of Statistics, financial market, concept of population and sample	01	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard	Whiteboard , marker and Duster, powerpoint presentation Discussion, Problem solving Homeworks



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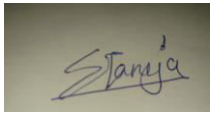
			and David	
	(2) Method of Sampling	01		
	(3) Data Condensation and Graphical method	01		
	(4) Attributes and Variables	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4 lectures



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TEACHING PLAN (UNIT PLAN)

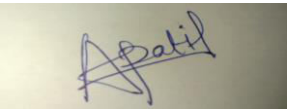
NAME OF THE STAFF: Prof Amita Rakesh Patil SUBJECT: financial Accounting DEPARTMENT: B. Com (Financial management)

CLASS: FYFMG SEMESTER II MONTH: january- march ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Financial Accounting Unit-1 Accounting for Hire purchase	Meaning , calculation of interest	1	Introduction to accountancy by T.S Gerwal	Online Method, Google Meet
	Accounting for hire purchase transaction by asset purchase method based on full cash price	1		
	Journal entries , ledger accounts and disclosure of balance sheet for hirer and vendor	1		
	Practical problems	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5



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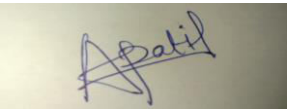
NAME OF THE STAFF: Prof Amita Rakesh Patil SUBJECT: financial Accounting DEPARTMENT: B. Com (Financial management)

CLASS: FYFMG SEMESTER II MONTH: january- march ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able : understand the accounting concepts which will help learners to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Financial Accounting Unit-2 Departmental Accounts	Introduction to Departmental Accounting	1	Introduction to accountancy by T.S Gerwal	Online Method, Google Meet
	Interdepartmental Transfers, Allocation of Expenses	1		
	Interdepartmental Transfers at cost, Interdepartmental Transfers at selling price	1		
	Practical problems	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5



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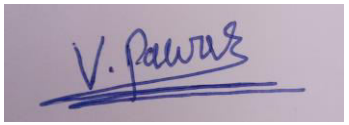
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF. VISHWANATH V. PAWAR SUBJECT: Environmental Science DEPARTMENT: B. Com (Financial management)

CLASS: FYFMG SEMESTER II MONTH: January - march ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be able to : To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**ENVIRONMENT ;- AN OVERVIEW** Environment :- Structure, components & Typology Ecosystem as part of Environment :- Functioning & Level of Organisation Biodiversity :- Classification, Value, threats to Biodiversity	03 04	**Dr. Sachin Pendse**	**Google meet**
UNIT 2	**NATURAL RESOURCES :-** **Definition, Importance & Classification of natural resources** **Utilisation & Conservation of water, forest, soil and energy resources**	04		



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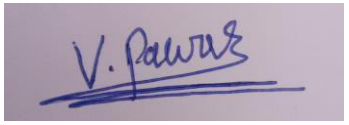
	Issues associated with natural resources			
UNIT 3	ENVIRONMENT & ECONOMIC ACTIVITIES :- Economic activities – Nature and patterns – Primary, Secondary, Tertiary. Case study with reference to india			
UNIT 4	ENVIRONMENT MANAGEMENT :- Concept, Need & relevance of environement education Environmental impact Assessment, Environment Audit Role of technology in Environment Management :- GIS, GPS, Remote sensing as] tools	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASHWINI DATTATRAY BHOIR SUBJECT: Business Law DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER III MONTH: August - December ACADEMIC YEAR: 2020-2021

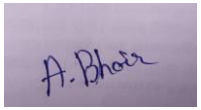
LEARNING OBJECTIVE/S:
The learners will be able to know the meaning of the terms Agreement and contract and note the Distinction between the two.

The learners will be able to know the Concept of Indemnity & Guarantee, Bailment,Agency, Difference between contract of indemnity and contract of Guarantee.

The learners will be able to know the Concepts of sale and agreement to sell, Definitions, Conditions and Warranty, and Rights of an unpaid seller.

The learners will be able to know the History of negotiable instrument and its types.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I Indian Contract Act-1872 part -I	Chapter :I-Contract- Definition of Contract and Agreement, Essentials of Valid Contract, Classification of contracts. Chapter :II- Offer and Acceptance - Rules of valid offer and acceptance, Counter offer, standing or open offer, distinguish between offer and invitation to offer.Concept of Communication and Revocation of offer and acceptance.	2 2	The Indian Contract Act,1872 -Avtar singh Business Law-kapoor N. D.	1) Lecture and Discussion 2) Online teaching learning tools (Google meet, Google form, PPTs)



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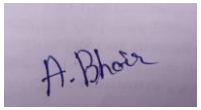
Module No.II Indian Contract Act- 1872 Part II	Chapter : III- Capacity to Contract - Minor, Unsound Mind, Disqualified persons. Chapter :IV- Consideration - Concept and Importance of Consideration, Legal rules of Consideration, Exceptions to the rule, 'No Consideration No Contract' Unlawful Consideration.	2 2	Business law- I, Kalaivani Venkataraman, Vipul prakashan	
	Chapter :I- Consent - Agreements in which consent is not free- Coercion, undue Influence, Misrepresentation Fraud, Mistake. Chapter: II - Void Agreements - Concept, Void Agreement under Indian Contract Act. Chapter : III - Contingent Contract, Quasi Contract, Concept of E- Contract & Legal Issues in formation and discharge of E- Contract. Concept of performance of contract. Chapter : IV- Modes of Discharge of Contract, Remedies on breach of Contract.	2 2 2 2		
Module No. III Special Contracts.	Chapter :I- Law of Indemnity & Guarantee - Concept, Essentials elements of Indemnity and Guarantee, Contract of Indemnity vs. Guarantee, modes of Discharge of Surety. Chapter : II- Law of Bailment - Concept, Essentials of Bailment,	2 2		



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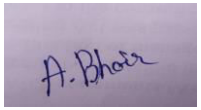
	Kinds of Bailment, Rights and Duties of Bailor and Bailee.			
	Chapter - III Law of Pledge - Concept, Essentials of valid Pledge, Lien- Concept, Difference Between Pledge and Lien, Rights of Pawnor and Pawnee	2		
	Chapter IV - Law of Agency - Concept, Modes of Creation of Agency, Modes of Termination of Agency, Rights and Duties of Principal and Agent.	2		
Module IV The Sale of Goods Act-1930	Contract of sale- concept, Essentials elements of contract of sale, Distinction between sale and agreement to sell.Distinguish between sale and Hire purchase agreement, types of goods. Effects of destruction of goods Conditions and Warranties- concept, Distinguish between conditions and warranties, Implied Conditions and Warranties, Concept of Doctrine of Caveat emptor - Exceptions. Property - Concept, rules of transfer of property Unpaid seller - Concept, rights of an unpaid Seller, Remedies for breach of contract of sale, Auction Sale - Concept, Legal provisions. Negotiable instruments - Concept, Characteristics, Classification	4		



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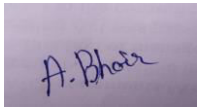
Module V The Negotiable instruments Act 2015	of Negotiable instruments Maturity of instruments. Promissory Note and Bill of Exchange Concept, Essentials of promissory Note, Bill of Exchange, Essentials features of promissory note and bill of exchange, kinds promissory note bill of exchange, cheque concept, types & Crossing of cheque, Distinguish between bill of exchange & cheque, Dishonour of cheque - concept & penalties. Miscellaneous provisions - parties to Negotiable instruments Holder, Holder in due course, Rights & Privileges of holder in due course, payment in due course, noting & protest.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KAUSHK N. SAVE** SUBJECT: Direct Tax DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER III MONTH: August - October ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Income Tax and its basic term(Definitions)
2. What is Residential status and which income is taxable and nontaxable in India (Scope of Total Income)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEFINITIONS AND RESIDENTIAL STATUS	**Definitions U/S 2:** Section 2-Assessee, Assessment Year, Assessment, Annual value, Business, Capital asset, Income, Person, Previous Year, Transfer **Basis of Charge :Section 3 to 9** Previous Year, Residential Status, Scope Of Total Income, Deemed Income	10	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KAUSHK N. SAVE** SUBJECT: Direct Tax DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER III MONTH: August - October ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Business as per section 2
2. What are provision of Profits & Gains from Business & Profession, Vocation under Income Tax Act, 1961

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME	**Profits & Gains From Business & Profession, Vocation** Section 28 to 32, 36, 37, 40, 40A, 43B, 44AD, 44ADA & 44AE Including.: Section 2 - Business	05	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KAUSHK N. SAVE** SUBJECT: Direct Tax DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER III MONTH: November ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Annual Value of House Property as per section 2
2. What are provision of Income From House Property under Income Tax Act, 1961

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME	**Income From House Property:** Section 22 to 27, Including Section 2 - Annual Value MCQ Question	05	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM.

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			Ahuja & Gupta 3. Student guidance to Income Tax.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KAUSHK N. SAVE** SUBJECT: Direct Tax DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER III MONTH: December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

1. How to Compute Taxable income of Individual and HUF.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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COMPUTATION OF TOTAL INCOME	Computation of Total Income of Individual and HUF with respect to above heads and deductions (MCQ Questions)	05	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:05

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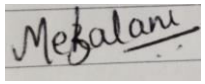
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MEZBIN LALANI SUBJECT: BUSINESS REGULATORY FRAMEWORK DEPARTMENT: B. Com (Financial management)

CLASS: SYFMG SEMESTER III MONTH: August - December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To know the laws governing the employers and employees working in industries
The learners will be able to : To understand the laws within which the employers and the employees of factories and other industrial establishments are bound by.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	The Industrial Dispute Act, 1947: The objectives of the Act, machinery given by the act for settlement of industrial disputes, strikes: its meaning and types, lay offs, lock outs, retrenchments, closure. The Trade Union Act, 1926: Meaning of trade union, registration process of trade union, dissolution and amalgamation of trade union, powers of registrar, general fund and political fund, rights and privileges of a registered trade union	15	Bare acts	Google classroom, google meet, power point presentations, pdf,etc



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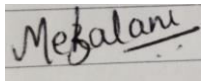
UNIT 2	The Factories Act, 1948: meaning and various definitions of the act, notice by occupier, general duties of the occupier, powers of inspectors, provisions regarding health, safety and welfare of the workers, safety officers, site appraisal committee, inquiry committee.	15	Bare acts	Google classroom, google meet, power point presentations, pdf,etc
UNIT 3	The Employees State Insurance Act, 1948: Rules regarding the contribution, various benefits to insured person, sickness benefit, maternity benefit, disablement benefit, dependants benefits, medical benefits, funeral expenses, general rules regarding benefits, obligations of employers & employees. The Employees provident fund and miscellaneous provision act, 1952: provisions regarding provident fund scheme, pension fund scheme, deposit linked insurance scheme	15	Bare acts	Google classroom, google meet, power point presentations, pdf,etc
UNIT 4	The Payment of Gratuity Act, 1972: meaning of gratuity, definitions, provisions of the act for payment of gratuity, procedure for obtaining gratuity, forfeiture of gratuity, compulsory insurance, obligations of employers and employees, nomination rules under the Act, recovery of	15	Bare acts	Google classroom, google meet, power point presentations, pdf,etc



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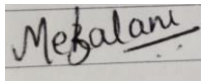
	gratuity The Payment of Bonus Act, 1965: Meaning of bonus, eligibility of bonus, maximum and minimum bonus, allocable and available surplus, customary bonus, recovery of bonus due, time limit for bonus, set on and set off The Payment of Wages act, 1936: Applicability and objects of the act, persons responsible for the payment of wages, time period for payment of wages, mode of payment of wages, deductions from wages, registers and records under the act, authorities under the act, payment provisions in case of death of the employed persons..			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____60(total)_____



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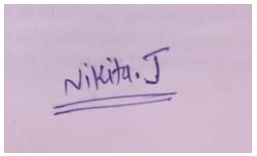
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NIKITA SUNIL JOGLE SUBJECT: Corporate Acciunting DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER III MONTH: AUGUST - DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : understand the adjustments & distribution carried out between partners in different accounting circumstances.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2 – Piecemeal Distribution of Cash	Excess capital method, asset taken over by partner, treatment of past profits/past losses in the balance sheet, contingent liabilities/realization expenses/amount kept aside for expenses & adjustment of actual treatment of secured liabilities, treatment of preferential liabilities like govt. dues/labour dues etc.	10	Text book	Google Meet, Powerpoint, Excel
4 - Conversion/Sale of a Partnership Firm into a Limited Company	Realisation method, calculation of new purchase consideration, journal/ledger accounts of old firms, preparing balance sheet of new company	4	Text book	Google Meet, Powerpoint, Excel
1 – Partnership Final Accounts based on Adjustment of	Simple final accounts questions to demonstrate the effect on final accounts when a partner is admitted	7	Text book	Google Meet, Powerpoint, Excel



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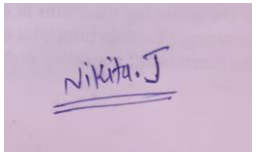
Admission/Retirement/Death of a Partner during the year	during the year or when partner retires/dies during the year, allocation of gross profit prior to and after admission/retirement/death when stock on the date of admission/retirement is not given & apportionment of other expenses based on time/sales/other given basis, ascertainment of gross profit prior to & after admission/retirement/death when stock on the date of admission/retirement is given & apportionment of other expenses based on time/sales/other given basis.			
3 – Amalgamation of Firms	Realization method, calculation of purchase consideration, journal/ledger accounts of old firms, preparing balance sheet of new firm, adjustment of goodwill in the new firm, realignment of capitals in the new firm by current accounts/cash or a combination thereof.	6	Text book	Google Meet, Powerpoint, Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27



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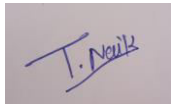
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TEJASWINI NAIK SUBJECT: Cost Accounting DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER III MONTH: JUNE TO SEPT ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: Identify different types of cost, calculate labour cost, stock valuation
The learners will be able to : identify different types of cost ,valuation of stock, how to calculate labour cost by different methods, allocation of overheads, economic order quantity , tabular format to find out EOQ.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1.Classification of cost: Direct cost, indirect cost, fixed cost, variable cost,administrative cost, factory cost,sistribution cost,research and development cost. **2.stock valuation: fifo method, weighted average method, economic order quantity.** **3.Labou cost: labour turn over, methods to calculate labour cost-effective Merrick, Gant's task, Taylor, Rowen and Haynes method,cost per hour format., Time method, piece method** **4.Overheads: allocation of overheads, calculation of machine hours, basis for allocation of overheads , difference in allocation and attribution of overheads.**	**10 lectures for each topic**	**Maheahwaei**	**Black board**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 50



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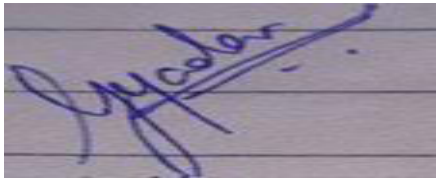
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI YADAV SUBJECT: Direct Tax DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER III MONTH: AUGUST - DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : The different heads of income and slabs of taxation. Understand and learn the sections along with deductions. Tax slabs for income tax. And various scope of income calucations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Heads of Income Income from salary	Meaning and scope of various heads of income.		Manan Prakashan	PPT, Google Meet, Excel
	Meaning and Definition of Salary.			
2.Deduction under chapter VIA	Salary Income: Section 15 – 17, Including Section 10 relating to House Rent Allowance, Travel Concession, Special Allowance, Gratuity, Pension – Commutation, Leave Encashment, Compensation, Voluntary Retirement, Payment from Provident Fund Sums Q.1 to Q.6	10	Manan Prakashan	
	Capital Gains : Section 45, 48, 49, 50, 54 and 55 Income from Other Sources: Section 56 – 59	10		PPT, Google Meet, Excel



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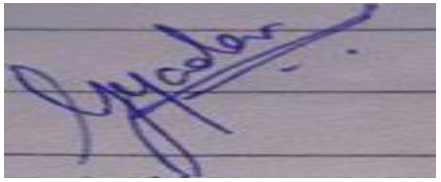
3. Deduction under chapter VIA	Sums solved on capital gain and other sources		Manan Prakashan	
	Deduction under chapter VIA 80 A- Restriction on claim in Chapter VI- A. deductions 80 C – Payment of LIC/PF and other eligible investments 80CCC – Contribution to certain Pension Fund 80D – Medical Insurance Premium 80 DD- Maintenance and medical treatment of handicapped dependent 80E – Interest on Educational Loan 80 TTA- Interest on Saving Bank account 80U – Deduction in the case of totally blind or physically handicapped or mentally retarded resident person	10	Manan Prakashan	PPT, Google Meet, Excel
	Computation of Total Income of Individual with respect to above heads and deductions	08	Manan Prakashan	PPT, Google Meet, Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 38



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TEACHING PLAN (UNIT PLAN)

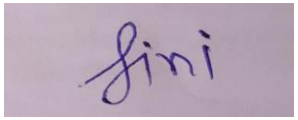
NAME OF THE STAFF: FINI SUNNY CHERIYAN DEPARTMENT:B.com(Financial Management) CLASS: SYBCOM

SEMESTER: III MONTH: AUGUST - SEPTEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: FINANCIAL MANAGEMENT
The learners will be able to:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Introduction to Financial Management	Introduction, Meaning, Importance, Scope and Objectives, Profit v/s Value Maximization	06	Financial Management by Arvind A. Dhond	Google Meet, PPT, SlideShare and Kiwi Browser, Google form and Google Classroom .

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06



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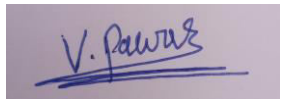
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHWANATH V. PAWAR SUBJECT: Management Accounting DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER III MONTH: AUGUST - DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Management Accounting	Meaning and Definition of Management Accounting, Nature and Frame work	2	**Management Accounting By I.M Pandey**	**GOOGLE MEET**
	Functions of Management Accounting, Decision Making Process	2		
	Information of Decision making (Information, Strategic, tactical and operational information)	3		
	Financial Accounting v/s Management Accounting , Qualities of Management Accounting	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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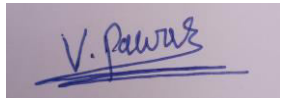
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHWANATH V. PAWAR SUBJECT: Management Accounting DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER III MONTH: AUGUST - DECEMBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Financial Statement Analysis	Introduction and Meaning of Financial statement analysis, Steps, objectives , Types of Analysis, simple sums on financial statement	2	Management Accounting By I.M Pandey	Chalk Board And Discussion Method
	Ratio Analysis- Meaning, Classification , DU Pont chart, Advantages and limitations.	2		
	Balance sheet ratio, Revenue statement Ratio and Combined Ratio (Applications of formulas)	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KAUSHIK N. SAVE** SUBJECT: Direct Tax- II DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER IV MONTH: January - March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are provision of Clubbing of Income under Income Tax Act, 1961
2. How the loss under Income Heads is adjusted (Provision regarding Set off and Carry forward)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Clubbing of Income	Clubbing of Income - Section 60 to 65	05	1.Direct Taxes Law & Practice by V.K Singhania- TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KAUSHIK N. SAVE** SUBJECT: Direct Tax- II DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER IV MONTH: January - March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

1. How the loss under Income Heads is adjusted (Provision regarding Set off and Carry forward)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2.Set Off & Carry Forward of Losses	Sec: 70 - Set off Loss from one Source against Income from another Source under the Same Head of Income Sec: 71 - Set Off Loss from One Head against Income of another Head Sec: 71B - Carry Forward & Set off Losses from House Property Sec: 72 - Carry Forward & Set Off of Losses of Business Losses Sec: 73- Losses in Speculation Business Sec: 74- Loss under the head Capital Gains	08	1.Direct Taxes Law & Practice by V.K Singhania- TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KAUSHIK N. SAVE** SUBJECT: Direct Tax- II DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER IV MONTH: January - March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

1. How to compute tax liability of Individual and H.U.F.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3. **Computation of Tax liability of Individual & HUF**	Tax Slab Rate, Rebate, surcharges etc.	08	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KAUSHIK N. SAVE** SUBJECT: Direct Tax- II DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER IV MONTH: January - March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

1. How to compute tax liability of Partnership Firm

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4.**Computation of Income of Partnership Firm**	Computation of Income of Partnership Firm in Relation to Sec: 40(b) & Tax Thereon With Applicable Rate of Tax	08	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	ONLINE TEACHING PPT, GOOGLE MEET, GOOGLE FORM, GOOGLE CLASS ROOM

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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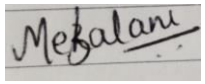
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Mezbin Lalani SUBJECT: CORPORATE FINANCE DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER IV MONTH: January - April ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: to understand the various techniques used by corporates in financial management.
The learners will be able to : study corporate financial management methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Introduction to corporate finance.				
	Functions and needs of corporate finanace.	15	Prasanna Chandra : financial management	Google meet, Google classroom, power point presentation, pdf file, etc
2.Cost of capital & capital structure				
	Calculation of cost of different capitals for the company, capital structure theories and practical sums.	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __30_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA SUBJECT: office management DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER IV MONTH: January - March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:

The learners will be able to : Gain the knowledge of how the office is been managed ,things to be arranged in office, reports to be prepared, also able to know about how the selection process is done, duties and responsibilities, of supervisors,planning, Scheduling of office work, stationaries, various forms of correspondence, handling of mails, machines.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 OFFICE AUTOMATION	Uses and abuses of labour saving appliance. Kinds of office machines (typewriter, calculator ,word processor) Objectives and advantages of office manuals charts, preparation and play of manuals and charts. Kinds of Reports, report preparation, enquiries.	15	Office Management by Dr. Rajesh Mankani by Vipul Prakashan	Chalk board Presentation Charts

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

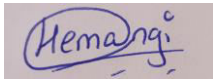
NAME OF THE STAFF: HEMANGI MEHTA SUBJECT: office management DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER IV MONTH: January - March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:

The learners will be able to : Gain the knowledge of how the office is been managed ,things to be arranged in office, reports to be prepared, also able to know about how the selection process is done, duties and responsibilities, of supervisors,planning, Scheduling of office work, stationaries, various forms of correspondence, handling of mails, machines.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 HRM FOR OFFICE MANAGEMENT	Recruitment, selection, training and development of office staff. Office supervision – Importance, span, duties and responsibilities of supervisory staff. Motivation – Financial and Non-Financial incentives to subordinates. Discipline: Importance and manner of office control, work control and work distribution.	15	Office Management by Dr. Rajesh Mankani by Vipul Prakashan	Chalk board Presentation Flow charts

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA SUBJECT: office management DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER IV MONTH: January - March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:

The learners will be able to : Gain the knowledge of how the office is been managed ,things to be arranged in office, reports to be prepared, also able to know about how the selection process is done, duties and responsibilities, of supervisors, planning, Scheduling of office work, stationaries, various forms of correspondence, handling of mails, machines.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT4 PLANNING AND SCHEDULING OFFICE WORK	Office routine, flow of work and office manual. Control over stationery, forms of supplies. Routine of handling mail. Importance of correspondence in business and Government offices. Essentials of good business and official correspondence. Various forms of correspondence.	15	Office Management by Dr. Rajesh Mankani by Vipul Prakashan	Chalk board Presentation Flow charts

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA SUBJECT: office management DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER IV MONTH: January - March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:

The learners will be able to : Gain the knowledge of how the office is been managed ,things to be arranged in office, reports to be prepared , able to know about how the selection process is done , duties and responsibilities of supervisor, planning, Scheduling office work, stationaries, Various forms of Correspondence ,handling of mails, machines.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 OFFICE ACCOMODATION AND ENVIRONMENT	Office building : Size, layout, safety and security measures Reception : Importance, Shape and size , Control. Communication : Features, Classification, barriers . Arrangement and adjustment : allotment of seats, chambers, cabins rooms.	15	Office Management by Dr. Rajesh Mankani by Vipul Prakashan	Chalk board Presentation Charts

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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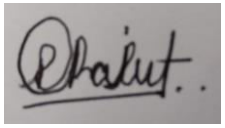
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Priyanka Devnath_Rajput SUBJECT: IT in Management DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER IV MONTH: January - March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of Business Process Management, E-Commerce, MIS and Tally accounting software.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Business Process	A) Introduction, Definition and Meaning of business process Flow of business process for accounting, purchase, sales and finance Classification of business processes.	03	Information Technology in Management By- Rimple Sanchla and www.wikipedia.com	Google meet, Google Classroom, power point presentation, PDF File, What's App,Google Calender,Google Meet Attendance etc
	B) Introduction, Definition and Meaning of Business Process Management Principles and practices of Business Process Management Business Process Management life cycle.	04		
	C) Theories of Business Management Process Implementation of Business process Management - need, key factors and importance Automation of business Processes - benefits, risks, challenges.	05		
	D) Accounting systems automation IT and Business Process Management Information systems - Meaning, Use of IT in Management.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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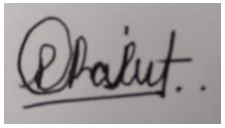
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Electronic Commerce	A) Meaning, Advantages and Limitations of E Commerce, The role of Strategy in E-Commerce, Value chains in E Commerce.	03	Information Technology in Management By - Rimple Sanchla and www.wikipedia.com	Google meet, Google Classroom, power point presentation, PDF File, What's App,Google Calender,Google Meet Attendance etc
	B) Infrastructure for Electronic Commerce Web Based Tools for Electronic Commerce, Electronic Commerce software, Security Threats to electronic Commerce.	04		
	C) Implementing Security for Electronic Commerce, Electronic Payment Systems, and Strategies for Marketing.	03		
	D) Sales & Promotion Strategies for Purchasing Logistics & Support Activities, Electronic Markets & Communities, Business Plans for Implementing Electronic Commerce.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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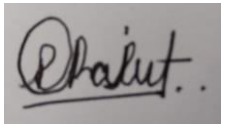
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Concept of MIS Reports in Computer Environment	A) Introduction, Concept of MIS, Need for MIS	03	Information Technology in Management By - Rimple Sanchla and www.wikipedia.com	Google meet, Google Classroom, power point presentation, PDF File, What's App,Google Calender,Google Meet Attendance etc
	B) Characteristic of MIS, Outputs of MIS, Role of MIS.	03		
	C) Guidelines for Developing MIS reports, Functional Aspects of the MIS, Problems in MIS.	05		
	D) Knowledge required for studying MIS, MIS and Computer.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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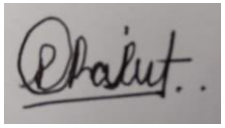
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV Computerized accounting system and Auditing	A) Role & Need and requirements of computerized accounting Basic requirements of computerized accounting system Limitations of computerized accounting system.	03	Information Technology in Management By - Rimple Sanchla and www.wikipedia.com	Google meet, Google Classroom, power point presentation, PDF File, What's App,Google Calender,Google Meet Attendance etc
	B) Understand the development and design of a computerized accounting system, determining how the accounting data will be processed.	03		
	C) Introduction of accounting software, Advantages, uses and various types of accounting software Accounting software TALLY - Accounting and reports.	05		
	D) Need and importance of IT in auditing, auditing in IT environment.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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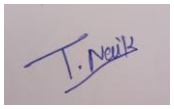
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Tejaswini Yogesh Naik SUBJECT: Cost Accounting II DEPARTMENT: B. Com (Financial management)
CLASS: SYFMG SEMESTER IV MONTH: January - March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: Calculate total cost for different types of industries.
The learners will be able to : calculate total cost for contract, processing and uniform goods making industry. Reasons of differences in cost and financial profit

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost accounting	1.COST Sheet : different types of cost, format of cost sheet, items excluded from cost sheet, need of cost sheet. 2. Reconciliation statement : need of reconciliation statement, reasons of differences in costing and financial profit, items appears only in cost sheet, items appear only in financial accounting, format , questions. 3. Process costing : applicable in paper, chemical industry , format, how to calculate unit cost, normal loss, abnormal loss, abnormal gain 4. Contract costing: to find out cost in construction industry, format, questions., Transfer of profit to profit and loss account, work certified, uncertified, sun contract, escalation clause, contract price, cash received.	12 lecture s for each topic	Maheahwari	Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 48



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita Almeida SUBJECT: Auditing-I DEPARTMENT: B. Com (Financial management)
CLASS: TYFMG SEMESTER V MONTH: august - December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : understand the concept of effective learning, Formal and informal communication, leadership skills and self -improvement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Introduction to Auditing	**Basics:** financial statements, uses of financial information, definition of auditing, objectives of auditing- primary and secondary, expression of opinion, detection of frauds and errors, inherent limitations of audit.		Book By Manan Prakashan	Online /PPT
	Errors and Frauds: concepts, reasons and circumstances, types of errors- commission, omission, principle and compensating, types of frogs, risk of fraud and error in audit, auditors duties and responsibilities in respect of fraud.	03	Book by Manan Prakashan	Online/PPT
	Principles of Audit: Integrity, objectivity , independence, confidentiality, skills and competence, materiality and work performed by others, documentation, planning, audit evidence audit conclusions and reporting.		Book by Manan Prakashan	Online/PPT
	Types of Audit: meaning advantages and disadvantages off balance sheet audit , continuous audit, concurrent audit , annual			

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	audit. **Miscellaneous:** advantages of independent audit, Qualities of auditors, auditing Vs accounting, Auditing Vs Investigation, the concept of true and fair view Accounting concepts relevant to auditing: materiality, Going concern.	02	Book by Manan Prakashan Book by Manan Prakashan	Online /PPT Online /PPT
2. Audit Planning, Procedures And Documentation	**Audit Planning**: Meaning, objectives, factors to be considered, sources of obtaining information, discussions with client, overall audit plan. **Audit Programme**: meaning, factors to be considered, advantages , disadvantages, methods of work, instruction before commencing work, overall audit approach.		Book By Manan Prakashan	Online /PPT

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3. Auditing Techniques	**Audit working papers**: meaning, importance, factors determining form and contents, main functions , features, contents of permanent audit file , temporary audit file, ownership, custody , access of other parties to audit walking papers , Auditors Lien on working papers, auditor's Lien on clients book. **Audit Notebook:** meaning, structure, content, general information current information importance	03	Book By Manan Prakashan Book By Manan Prakashan	Online /PPT Online /PPT
	Test Check: Test Checking Vs Routine Checking, Test Check Meaning, Features, Factors to be considered, When test check can be used, Advantages, Disadvantages and Precautions. **Audit Sampling**: Audit Sampling Meaning, Purpose, factors in determining Sample Size-Sample Risk, Tolerable Error and Expected Error, Methods of Selecting Sample items, Evaluation of Sample resulting Auditors Liability in conducting Audit based on sample. **Internal Control**: Meaning and purpose, Review of internal control, Advantages, Auditors Duties, Review of Internal Control, Inherent Limitations of Internal Control, Internal Control Samples for Sales and Debtors,	03	Book By Manan Prakashan	Online /PPT

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4. Internal Audit	Purchases and Creditors, Wages & Salaries. Internal Checks Vs Internal Control, Internal Checks Vs Test Checks Meaning , Basic Principles of Establishing Internal Audit, objectives, Evaluation of Internal Audit by Statutory Audtitor, Usefulness of Internal Audit. Internal Audit Vs External Audit, Internal Checks Vs Internal Audit..	02	Book By Manan Prakashan	Online /PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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TEACHING PLAN (UNIT PLAN)

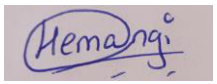
NAME OF THE STAFF: HEMANGI VIJAY MEHTA SUBJECT: Business Ethics DEPARTMENT: B. Com (Financial management)
CLASS: TYFMG SEMESTER V MONTH: august - December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

The objective of this subject is to make the students gain knowledge about how business environment is important to become successful businessman or business manager.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 BUSINESS AND SOCIETY	Business Ethics Nature and scope of ethics, ethical dilemmas, Corporate Culture and Ethical Climate	3	Business Environment by Manan Prakashan	Online Lecture, PPT
	Development of business Entrepreneurship Entrepreneurship and Economic development, MSMED Act 2006, Entrepreneurship as a Career option	3	Business Environment by Manan Prakashan	Online Lecture, PPT
	Consumerism and Consumer protection Consumerism in Indi, Consumer Protection Act 1986	3	Manan Prakashan	Online Lecture, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI VIJAY MEHTA SUBJECT: Business Ethics DEPARTMENT: B. Com (Financial management)
CLASS: TYFMG SEMESTER V MONTH: august - December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to:

The objective of this subject is to make the students gain knowledge about the business and its ethics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 BUISNESS ETHICS IN GLOBAL ECONOMY	Concept of Globalization, Global Business Network	3	Manan Prakashan, Vipul	Online Lecture, PPT
	Relationship among Business, Business Ethics and Business Development, Developing Business ethics in Global Economy	3	Manan Prakashan, Vipul	Online Lecture, PPT
	Marketing ethics in foreign trade, Role of Business Ethics in business,	2	Manan Prakashan, Vipul	Online Lecture, PPT
	E – Commerce, Ethical issues in E- Commerce	1	Manan Prakashan, Vipul	Online Lecture, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI VIJAY MEHTA SUBJECT: Business Ethics DEPARTMENT: B. Com (Financial management)
CLASS: TYFMG SEMESTER V MONTH: august - December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

The objective of this subject is to make the students gain knowledge about the business and its ethics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 CORPORATE SOCIAL RESPONSIBILITY	Concept of CSR, Various CSR of business	3	Manan Prakashan, Vipul	Online Lecture, PPT
	Relationship between CSR and Business Ethics	2	Manan Prakashan, Vipul	Online Lecture, PPT
	Business Ethics and Environment Protection, Business Ethics and Consumer Protection, Business ethics and Social Justice	3	Manan Prakashan, Vipul	Online Lecture, PPT
	Arguments For and Against CSR	1	Manan Prakashan, Vipul	Online Lecture, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI VIJAY MEHTA SUBJECT: Business Ethics DEPARTMENT: B. Com (Financial management)
CLASS: TYFMG SEMESTER V MONTH: august - December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

The objective of this subject is to make the students gain knowledge about the business and its ethics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 FUNCTIONAL ETHICS	Meaning of Functional Ethics, Types of ethics	2	Manan Prakashan, Vipul	Online Lecture, PPT
	Copyrights, Patents, Trademarks, Intellectual property Rights	3	Manan Prakashan, Vipul	Online Lecture, PPT
	Ethical Issues in Patents, Copyrights, IPR and Trademark	3	Manan Prakashan, Vipul	Online Lecture, PPT
			Manan Prakashan, Vipul	Online Lecture, PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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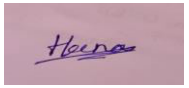
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID SUBJECT: Corporate Accounting DEPARTMENT: B. Com (Financial management)
CLASS: TYFMG SEMESTER V MONTH: august - December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concept of effective learning, leadership skills and self-improvement.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.FINAL ACCOUNTS OF BANKING COMPANY	LEGAL PROVISIONS IN BANKING COMPANIES ACT1949 RELATIONG TO ACCOUNTS	01	TEXT BOOK (MANAN PRAKASHAN & SHETH PUBLICATION)	Power point presentation and Ms Excel
	STATUTORY RESERVE AND STATUTORY LIQUIDITY RATIO	02		
	BILL PURCHASED AND DISCOUNTED,REBATE OF BILL DISCOUNTED	02		
	FINAL ACCOUNTS IN PRESCRIBES FORM	02		
	CLASSIFICAION OF	02		



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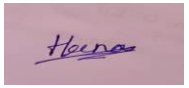
	ADVANCES,DTANDARD,SUBSTANDARD AND DOUBTFUL ASSESTS			

TEACHING PLAN (UNIT PLAN)



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NAME OF THE STAFF: QURESHI HEENA OBAID SUBJECT: Corporate Accounting DEPARTMENT: B. Com (Financial management)

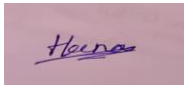
CLASS: TYFMG SEMESTER V MONTH: august - December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to: Understand the concept of effective learning, leadership skills and self-improvement.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
2.FINAL ACCOUNTS OF INSURANCE COMPANY	MEANING OF GENERAL INSURANCE,FIRE INSURANCE ,MARINE INSURANCE	01	TEXT BOOK MANAN PRAKASHAN & SHETH PUBLICATION)	Power point presentation and Ms Excel
	SPECIAL TERMS LIKE PREMIUM CLAIMS,COMMISSION,RESERVE FOR UNEXPIREDRISK,REINSURANCE	02		
	FINAL ACCOUNTS &REVENUE STATEMENT, P/L A/C.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



SIGNATURE OF THE STAFF

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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID SUBJECT: Corporate Accounting DEPARTMENT: B. Com (Financial management)

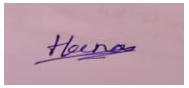
CLASS: TYFMG SEMESTER V MONTH: august - December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:

The learners will be able to understand the computation of investment accounting for Shares and Debentures.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
3.INVESTMENT ACCOUNTING	INVESTMENT ACCOUNTING FOR SHARES	02	TEXT BOOK (MANAN PRAKASHAN & SHETH PUBLICATION)	Power point presentation and Ms Excel
	INVESTMENT ACCOUNTING FOR DEBENTURES	02		
	PURCHASE AND SALE OF EX & CUM INTEREST	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID SUBJECT: Corporate Accounting DEPARTMENT: B. Com (Financial management)

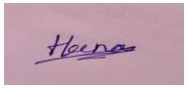
CLASS: TYFMG SEMESTER V MONTH: august - December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVES:

The learners will be able tounderstand sale and purchase transaction in foreign currency and its accounting treatment as well.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
4.ACCOUNTING FOR FOREIGN CURRENCY TRANSACTION	PURCHASE AND SALE OF GOODS AND SERVICES,LOAN &CREDITVTRANSACTION	02	TEXT BOOK (MANAN PRAKASHAN & SHETH PUBLICATION)	Power point presentation and Ms Excel
	COMPUTATION AND TREATMENT	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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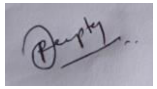
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Deepakkumar Gupta** SUBJECT: FABV DEPARTMENT: B. Com (Financial management)
CLASS: TYFMG SEMESTER V MONTH: august - December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) To learn Concepts of Leverage
3) Solve practical questions using concepts
4) To learn Concepts of sales variance
5) Solve practical questions using concepts
6) To learn Concepts merger and its types

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial analysis and business valuation	Unit 1 : leverages	16		Online platform – Google Meet PPT, Videos
	1) Introduction and meaning leverages 2) Types of leverages to be explained 3) Formula different types of leverages 4) Practical problems			



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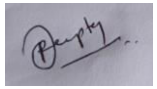
	Unit 2 : Sales variance	10		Online platform – Google Meet PPT, Videos
	1) Introduction & Meaning of variances 2) Formula of sales variance 3) Practical problems on lases variances			
	Unit 3 : merger and acquisition	6		Online platform – Google Meet PPT, Videos
	1) Introduction & Meaning merger and acquisition 2) Types of merger 3) Difference between merger and amalgamation			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____32_____



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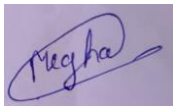
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MEGHA NAIK SUBJECT: Financial Management DEPARTMENT: B. Com (Financial management)
CLASS: TYFMG SEMESTER V MONTH: august - December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : TO ENHANCE THE ABILITIES OF LEARNER TO DEVELOP THE CONCEPT OF FINANCIAL MANAGEMENT AND ITS SIGNIFICANCE IN THE BUSINESS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INVESTMENT DECISIONS	INTODUCTION , PURPOSE OF CAPITAL BUDGETING, CAPITAL BUDGETING PROCESS, TYPES OF CAPITAL INVESTMENT DECISIONS, PROJECT CASH FLOW & NET PROFIT APPROVALS	12	FUNDAMENTAL OF FINANCIAL MGMT- PRASANNA CHANDRA	Google meet, Google slide, Microsoft word, Spreadsheet
	BASIC PRINICPLES OF MEASURING PROJECT CASH FLOW CAPITAL BUDGETING TECHNIQUEES NPV, PI, IRR, DOSCOUNTED PAYBACK CAPITAL RATIONING		PRINCIPLES OF CORPORATE FINANCE- R.A.BREALYS & S.C. MYRES.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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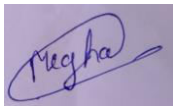
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF. MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM (FINANCIAL MANAGEMENT) SEMESTER: V MONTH: SEPT. 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: TO ENHANCE THE ABILITIES OF LEARNER TO DEVELOP THE CONCEPT OF FINANCIAL MANAGEMENT AND ITS SIGNIFICANCE IN THE BUSINESS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
TYPES OF FINANCING	INTRODUCTION, NEEDS OF FINANCE AND SOURCES : LONG TERM ,SHORT TERM , MEDIUM TERM	09	FUNDAMENTAL OF FINANCIAL MGMT- PRASANNA CHANDRA	Google meet, Google slide, Microsoft word, Spreadsheet
	LONG TERM SOURCE OF FINANCE SHORT TERM SOURCES OF FINANCE		PRINCIPLES OF CORPORATE FINANCE- R.A.BREALYS & S.C. MYRES.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09



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TEACHING PLAN (UNIT PLAN)

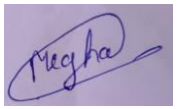
NAME OF THE STAFF: PROF. MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM (FINANCIAL MANAGEMENT) SEMESTER: V MONTH: OCT 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:

The learners will be able to: TO ENHANCE THE ABILITIES OF LEARNER TO DEVELOP THE CONCEPT OF FINANCIAL MANAGEMENT AND ITS SIGNIFICANCE IN THE BUSINESS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST OF CAPITAL	INTRODUCTION DEFINATION & IMPORTANCE OF COST OF CAPITAL	12	FUNDAMENTAL OF FINANCIAL MGMT- PRASANNA CHANDRA	Google meet, Google slide, Microsoft word, Spreadsheet
	MEASUREMENT OF COST OF CAPITAL WACC		PRINCIPLES OF CORPORATE FINANCE- R.A.BREALYS & S.C. MYRES.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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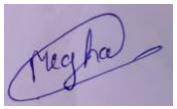
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF. MEGHA NAIK. DEPARTMENT: COMMERCE CLASS: T.Y.B.COM (FINANCIAL MANAGEMENT) SEMESTER: V MONTH: NOV 2020 ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to: TO ENHANCE THE ABILITIES OF LEARNER TO DEVELOP THE CONCEPT OF FINANCIAL MANAGEMENT AND ITS SIGNIFICANCE IN THE BUSINESS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST OF CAPITAL	INTRODUCTION DEFINATION & IMPORTANCE OF COST OF CAPITAL	12	FUNDAMENTAL OF FINANCIAL MGMT- PRASANNA CHANDRA	Google meet, Google slide, Microsoft word, Spreadsheet
	MEASUREMENT OF COST OF CAPITAL WACC		PRINCIPLES OF CORPORATE FINANCE- R.A.BREALYS & S.C. MYRES.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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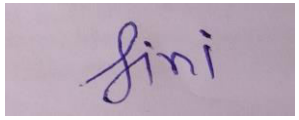
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI SUNNY CHERIYAN SUBJECT: Financial Management DEPARTMENT: B. Com (Financial management)
CLASS: TYFMG SEMESTER V MONTH: August - December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: FINANCIAL MANAGEMENT
The learners will be able to:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 & 3	**Introduction to Financial Management:-** Introduction, Meaning, Importance, Scope and Objectives, Profit v/s Value Maximization	15	Financial Management by Arvind A. Dhond	Google Meet, PPT, SlideShare and Kiwi Browser, Google form and Google Classroom .
	Sources of Finance:- Introduction,Needs of Finance and Sources: Long Term, Medium Term, Short Term.	15		
	Long Term Sources of Finance			
	Short Term of Sources of Finance			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita A. Almeida SUBJECT: Research Methodology DEPARTMENT: B. Com (Financial management)
CLASS: TYFMG SEMESTER V MONTH: august - December ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concept of effective learning, leadership skills and self-improvement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
02. Data Collection and Processing	Types of Data & Sources- Primary and Secondary Data Sources.			
	Methods of Collection of Primary Data A} Observation: - i) Structured & Unstructured ii) Disguised & Undisguised iii) Mechanical Observations (Use of gadgets)	01	Vipul Prakashan	Online / PPT
	B} Experimental: - i) Field ii) Laboratory C} Interview: - i) Personal Interview ii) Focused Group iii) In-Depth Interview Method	02	Vipul Prakashan	Online / PPT

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	D} Survey Method: - Telephonic Survey, Mail, E-mail, Internet Survey, Social Media & Media Listening.	02	Vipul Prakashan	Online / PPT
	E} Survey Instrument: - Questionnaire Designing a) Types of Questions: - i) Structured / Close Ended ii) Unstructured / Open Ended iii) Dichotomous iv) Multiple Choice Questions. b) Scaling Techniques: - i) Likert Scale ii) Semantic Differential Scale	02 02	Vipul Prakashan	Online / PPT Online / PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare SUBJECT: Auditing DEPARTMENT: B. Com (Financial management)

CLASS: TYFMG SEMESTER VI MONTH: January -march ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to : vouch income and expenditure and verify assets and liabilities of the company. Gain knowledge of accounting standards.

Qualifications and disqualifications, rights and duties of an auditor.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing II, vouching	Meaning and definition of vouching, audit of income: revenue from sales and services	2	Ainapure, Manan Prakashan	Online Lectures, Google slides
	Royalty income, interest and dividend income, rental income, recovery of bad debts written off, commission received	4		
	Audit of expenditure: purchases, salaries and wages	4		
	Rent, insurance premium, telephone expenses, petty cash payments, advertisement, travelling salesman commission	4		
	Freight carriage and custom duties.	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare SUBJECT: Auditing DEPARTMENT: B. Com (Financial management)

CLASS: TYFMG SEMESTER VI MONTH: January -march ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to : vouch income and expenditure and verify assets and liabilities of the company. Gain knowledge of accounting standards.

Qualifications and disqualifications, rights and duties of an auditor.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing II, verification	Meaning and definition of verification, Audit of assets: plant and machinery, furniture and fixture	3	Ainapure- Manan Prakashan	Online Lectures, Google slides
	Account receivable, investments, inventory, Goodwill, patent rights	4		
	Audit of liabilities: outstanding expenses, accounts payable, secured loans	4		
	Unsecured loans, contingent liabilities, public deposits	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: Shruti B. Basare SUBJECT: Auditing DEPARTMENT: B. Com (Financial management)

CLASS: TYFMG SEMESTER VI MONTH: January -march ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to : vouch income and expenditure and verify assets and liabilities of the company. Gain knowledge of accounting standards.

Qualifications and disqualifications, rights and duties of an auditor.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing II, auditing standards	Meaning and procedure of issuing Auditing standards, brief overview of auditing standards, scope of SAs	2	Ainapure-Manan Prakashan	Online Lectures, Google slides
	Significance of auditing standards, responsibilities of auditor	4		
	Understanding SA 200, 210, 230, 240, 250, 300, 315, 320, 505	9		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare SUBJECT: Auditing DEPARTMENT: B. Com (Financial management)

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CLASS: TYFMG SEMESTER VI MONTH: January -march ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

The learners will be able to : vouch income and expenditure and verify assets and liabilities of the company. Gain knowledge of accounting standards.

Qualifications and disqualifications, rights and duties of an auditor.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing II, audit of companies	Introduction, qualifications and disqualifications of an auditor	3	Ainapure-Manan Prakashan	Online Lectures, Google slides
	Appointment of an auditor, reappointment of an auditor	4		
	Removal of auditors, special auditor, branch auditor	4		
	Rights and duties of company auditor	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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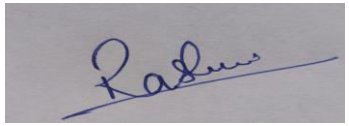
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. ABHISHEK MADAYE SUBJECT: Corporate Accounting DEPARTMENT: B. Com(Financial Management)

CLASS: TYFMG SEMESTER:VI MONTH: Jan-feb ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1, Consolidated Financial Statement	Meaning, Stand Alone Financial Statements Consolidated Financial statements –Applicability, Advantages & Disadvantages Procedure of Consolidation of Balance-sheet & Profit & Loss Account (Excluding cross holding, Chain Holding & Foreign Subsidiary). Practical Problem on Preparation of Consolidated Balance sheet)	15	Reference books and internet	PPT, WORD
UNIT 2, Internal Reconstructi on	Need for reconstruction and company law provisions Methods including alteration of share capital, variation of shareholder rights, subdivision, consolidation, surrender and reissue / cancellation, reduction of share capital with relevant legal provisions and	15	Reference books and internet	PPT,WORD



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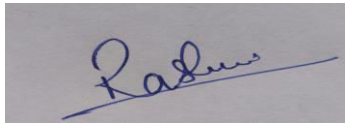
	accounting treatment for same. Practical Problem on Internal Reconstruction, Journal entry, preparation of Capital Reduction A/C and Preparation of Balance sheet in vertical form			
UNIT 3, AS –14 -Amalgamation, Absorption (excluding inter –company holding)	Merger and purchase with corresponding accounting treatments of pooling of interests and purchase method respectively. Meaning and Computation of purchase consideration. Inter-company debtors, creditors, loan, bills, loading in stock. Practical Problem on Amalgamation and Absorption (only Purchase Method	15	Reference books and internet	PPT, WORD



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TEACHING PLAN (UNIT PLAN)

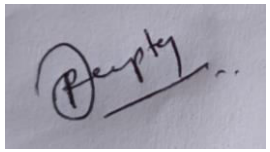
NAME OF THE STAFF: **Deepakkumar Gupta** SUBJECT: Financial Management DEPARTMENT: B. Com (Financial management)

CLASS: TYFMG SEMESTER VI MONTH: January -march ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) To learn Concepts of Leverage
3) Solve practical questions using concepts
4) To learn Concepts of sales variance
5) Solve practical questions using concepts
6) To learn Concepts merger and its types

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Management	Unit 1 : leverages	10	FUNDAMENTAL OF FINANCIAL MGMT- PRASANNA CHANDRA	Chalk and talk method



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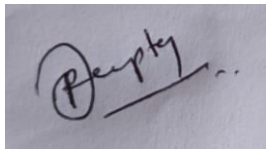
	1) Introduction and meaning leverages 2) Types of leverages to be explained 3) Formula different types of leverages 4) Practical problems			
	Unit 2 : Cash Management	10	FUNDAMENTAL OF FINANCIAL MGMT-PRASANNA CHANDRA	Chalk and talk method
	1) Introduction & Meaning of Cash Management 2) Format of cash management 3) Practical problems on cash management			
	Unit 3 : Receivables Management	12	FUNDAMENTAL OF FINANCIAL MGMT-PRASANNA CHANDRA	Chalk and talk method
	1) Introduction & Meaning Receivables Management 2) Format of receivables management 3) Practical problems on cash management			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____32_____



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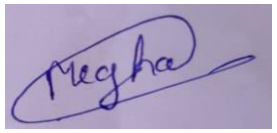
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF . MEGHA NAIK. SUBJECT: Financial management DEPARTMENT: B. Com (Financial management)

CLASS: TYFMG SEMESTER VI MONTH: January -march ACADEMIC YEAR: 2020-2021

The learners will be able to : TO ENHANCE THE ABILITIES OF LEARNER TO DEVELOP THE CONCEPT OF FINANCIAL MANAGEMENT AND ITS SIGNIFICANCE IN THE BUSINESS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RISK & RETURN CAPITAL STRUCTURE THEORIES	INTRODUCTION , MEANING OF RETURN, TYPES OF RETURN, HOLDING PERIOD RETRUN, ANNUALIZED RETURN, EXPECTED RETURN, MEANING OF RISK TYPES OF RISK – BUSINESS RISK , FINANCIAL RISK, INTEREST RATE RISK MARKET RISK AND LIQUIDITY RISK (INCLUDING PRATICAL PROBLEMS	10 20	FUNDAMENTAL OF FINANCIAL MGMT- PRASANNA CHANDRA	GOOGLE MEET, PPT, MICROSOFT EXCEL
	MEANING, CHOICE OF CAPITAL STRUCTURE, IMPORTANCE, OPTIMAL CAPITAL STRUCTURE,		PRINCIPLES OF	



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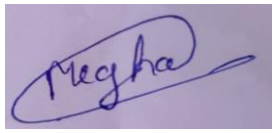
	INSTRUTION TO LEVERAGES TYPES OF LEVERAGES : OPERATING LEVERAGES, FINANCIAL LEVERAGES, & COMPOSITE LEVERAGES, RELATIONSHIP BETWEEN OPERATING LEVERAGES & FINACIAL LEVERAGES COST OF CAPITAL , EBIT-EPS ANALYSIS, & MARKET PRICE SHARE CAPITAL STRUCTURE THEORIES, CAPITAL STRUCTURE DIVIDEND POLICY- PAYOUT RATIO (INCLUDING PRATICAL PROBLEMS		CORPORATE FINANCE- R.A.BREALYS & S.C. MYRES.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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NAME OF THE STAFF: Prof Mezbin Lalani SUBJECT: SAPM DEPARTMENT: B. Com (Financial management)

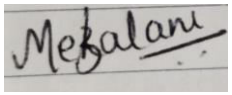
CLASS: TYFMG SEMESTER VI MONTH: January -march ACADEMIC YEAR: 2020-2021

TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S: understand portfolio management.
The learners will be able to : know the various investment alternatives and portfolio management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Portfolio management 2.Fundamentaland technical analysis	Introduction and process	15	Investment analysis and management Mcgraw	GOOGLE MEET, GOOGLE CLASSROOM, POWER POINT PRESENTATION, PDFS, ETC
	Economy, industry and company analysis, technical analysis :charts and patterns, efficient market hypotheses	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

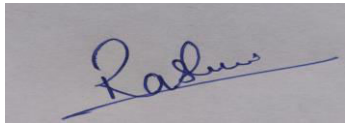
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Organizational Behavior DEPARTMENT:B.Com(Financial Management)

CLASS:TYFMG SEMESTER:VI MONTH: Jan-feb ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Understanding Others – Interpersonal Relationships	Conflict Mgmt. - Nature ,levels, sources ,effects of Conflict	3	Organizational Behaviour By Fred Luthans	Google meet , Google forms , PPT
	Process & stages of Conflict, Conflict handling orientation	3		
	Power and Organizational Politics, Political power	2		
	Negotiation strategies, change and its effect	2		
	Transformational Leadership and change, three stage model of change process	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

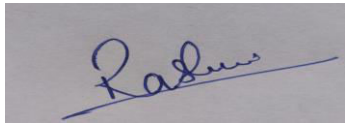
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Organizational Behavior DEPARTMENT: B.Com(Financial Management)

CLASS:TYFMG SEMESTER:VI MONTH: march - april ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Group Behaviour and Team Behaviour	Group Behaviour- Informal group, group dynamics, types of group	3	Organizational Behaviour By Fred Luthans	Google meet, Google forms , PPT
	Formal groups, Potential outcome of informal group process , Role of Informal leader	3		
	Team & Team Building, Modern Organization	2		
	Team work, task team , life cycle of teams	2		
	Team Building – need, process & skills useful in team building	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHWANATH V. PAWAR DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: FYBBI (B & I) SEMESTER: I

MONTH: August -November ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S: The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT NO :- 2	Characteristics of capital expenditure, revenue expenditure, capital receipt and revenue receipt. Practical Sums -(22)	03	Vipul Prakashan	Chalkboard
	Bank Reconciliation statement and errors and their rectification. Practical Sum -(08)	06	Vipul Prakashan	Chalkboard
UNIT NO :- 3	AS- 1,2,9,10. Short note- IFRS	02	Vipul Prakashan	Chalkboard

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	Introduction to issue of shares Stock valuation (FIFO & Weighted Average Method) Practical Problems-07 Hire Purchase- calculation of interest, journal entry, Practical problems-(07) Introduction to Depreciation :- Fixed Installment Methods , WDV Method, Change of method. Valuation of Goodwill.	02 07 07 03 02	Vipul Prakashan Vipul Prakashan Vipul Prakashan	Chalkboard Chalkboard Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 32

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPASHREE PARAG VARTAK DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: FYBBI

SEMESTER: I MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concept of Ratio, Proportion, Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation. Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS II UNIT IV CO-VARIANCE CO-RELATION REGRESSION	Meaning, Definition and Application of Covariance	1	Basic Statistics by Agrawal	BLACKBOARD CHALK AND DUSTER
	Concept of correlation, Rank correlation	2		Explanation, Discussion, Problem solving assignments
	Regression concept, Relationship with correlation	3		
	Assumptions in Simple Regression, Fitting of straight Line	1		
	Method of Least Square, Construction of Characteristic Line / Estimation Line	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10_____

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TEACHING PLAN (UNIT PLAN)

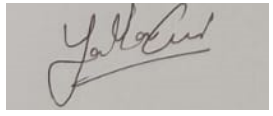
NAME OF THE STAFF: DIPASHREE PARAG VARTAK DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: FYBBI SEMESTER: I MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concept of Ratio, Proportion, Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation. Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS II UNIT V PROBABILITY PROBABILITY-DISTRIBUTION DECISION-THEORY	Concept of Probability Venn diagrams	1	Basic Statistics by Agrawal	BLACKBOARD CHALK AND DUSTER
	Rules of Probability conditional and unconditional probability	2		Explanation, Discussion, Problem solving assignments
	Bayes' Theorem and sums based on this theorem	2		
	Discrete and continuous variable. Expected value of variable	2		
	Decision Theory Normal Distribution	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10_____



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TEACHING PLAN (UNIT PLAN)

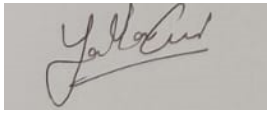
NAME OF THE STAFF: DIPASHREE PARAG VARTAK DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: FYBBI SEMESTER: I MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concept of Ratio, Proportion, Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation. Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS II UNIT VI INDEX NUMBERS	Concept and usage of Index Numbers. Construction of Index Numbers.	1	Basic Statistics by Agrawal	BLACKBOARD CHALK AND DUSTER
	Aggregate and Relative Method of constructing Index Numbers.	2		Explanation, Discussion, Problem solving assignments
	Chain base index numbers. Test of consistency: time reversal factor reversal and circular test	1		
	Quantity and value index numbers for agricultural, industrial production, retail prices, consumer price index numbers for security prices, etc.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __06_____



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TEACHING PLAN (UNIT PLAN)

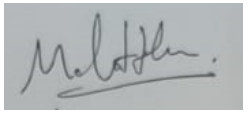
NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: BCOM(BANKING AND INSURANCE) _ CLASS: F.Y.BBI- A,B

SEMESTER: 1ST MONTH: July -October ACADEMIC YEAR: 2019-2020 SUBJECT : EMFS

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To introduce learners the importance of Bank and Insurance Companies in economic development of country.
2. To acquaint students with knowledge about risk management and legal aspects of functioning of baking and Insurance Companies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 2: PHASES OF DEVELOPMENT OF BANKING AND INSURANCE	• Significance and Role of Banking and Insurance in Mobilizing Savings, Investment, Accumulation and Economic Growth.	9	Banking in India S .G. Panandikar Indian Financial System – M.Y.Khan LIC Act 1956 IRDA 1999 Management of Financial	1. Lecture and discussion. 2. Institutional Structures. 3. Flow charts.
	• Functions and Working of Banking and Insurance Companies.	6		



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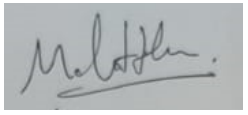
MODULE 3 : MANAGEMENT, REGULATION AND DEVELOPMENT	• Risk Management within the Organisations of Bank and Insurance Companies.	5	Institutions – R.N.Shrivastava	
	• Asset- Liability Management in Banking and Insurance.	5		
	• Organisational Structure and Management.	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30 ×2 div = 60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Roshani Nagar DEPARTMENT:BCOM(BANKING AND INSURANCE) CLASS: FYBBI A and B SEMESTER : SEM I

MONTH: NOV AND DEC ACADEMIC YEAR: 2019-2020

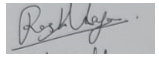
LEARNING OBJECTIVES:

The learners will be able to : To focus on the importanat aspects of preamble and study about the indian constitutions.

To study about the political process in India perspective.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4. Indian Constitution	Philosophy of the Constitution as set out in the Preamble; The structure of the Constitution-the Preamble, Main Body and Schedules;	3	Rashmi , deepa and reshma Parab	chalk and board method
	Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution.4	3		chalk and board method
5. Significant Aspects of Political Process	The party system in Indian politics; Local self-government in urban and rural areas.	3		chalk and board method
	73rd and 74th Amendments and their implications for inclusive politics; Role and significance of women in politics	3		chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

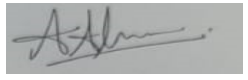
NAME OF THE STAFF: AMBUJAM KURUP DEPARTMENT:BCOM(BANKING AND INSURANCE) CLASS: FYBBI(ENVIRONMENT AND MANAGEMENT OF FINACIAL SERVICES)

SEMESTER: I MONTH: SEPTEMBER TO DECEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : understand how Indian financial services and its management go hand in hand

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1: INRODUCTION TO FINANCIAL SYSTEM UNIT 4: REGULATORY AND DEVELOPMENT FRAME WORK OF BANKING AND INSURANCE	Chapter 1: Financial system Institutional set up, marketing structure, over view of different kinds of financial services, meaning, definition and scope of banking and insurance Chapter 2: banking and insurance What is banking, functions, advantages, types of banks, insurance, its types	15	Indian Financial System Pearson Paperback	POWER POINT PRESENTATIONS
	Chapter 8: banking companies and RBI acts and legal frame work governing the insurance, development activities of RBI and IRDA, mechanism of supervision and regulation, prudential norms	15	Indian Financial System Pearson Paperback	POWER POINT PRESENTATIONS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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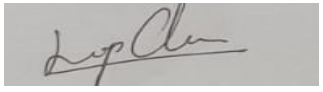
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: BCOM (Banking and Insurance)
CLASS: FYB.B.I. The learners will be able to: MONTH: June-Oct ACADEMIC YEAR: 2019-20
LEARNING OBJECTIVE/S: SEMESTER: I

Build a familiarity with the basic tools of consumer and producer theory in an economic context

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –I Unit 4 Market structure Perfect competition and Monopoly and Pricing and Output Decisions under Imperfect Competition	Perfect competition Monopoly Monopolistic competition oligopoly	15	Salvatore, D.:Managerial Economics in a global economy	Chalk and Talk Discussion Case studies
	Cost plus pricing Marginal cost pricing Mark up pricing discriminatory pricing multiple product pricing	10	Mehta, P.L.: ManagerialEconomics – Analysis,Problem and Cases	Chalk and talk Discussion Case studies
Unit 5 Pricing Practices Supply and production decisions				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA VAIBHAV TAMBE **DEPARTMENT: BCOM (BANKING AND INSURANCE)**
CLASS: F.Y.BBI **SUBJECT: FOUNDATION COURSE I** **SEMESTER: I** **MONTH: August, September**
ACADEMIC YEAR: 2019-2020

A teaching plan is a document that outlines the structure and details of a single session. A good teaching plan is a comprehensive write-up of the step-by-step teaching methods, the estimated duration of each segment of teaching, and the materials and resources needed for the session.

LEARNING OBJECTIVE/S:

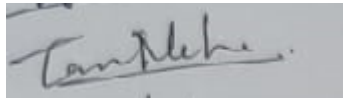
By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

(For a detailed description of each component see Appendix A).

APPENDIX {A}

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Concept of Disparity 1	a] Concept of disparity as arising out of stratification and inequalities.	02	Book by Manan publications/Internet	Chalkboard
	b]gender disparities with special references to violence against women.	02	Book by Manan publications/Internet	Chalkboard
	c] Female Foeticide & Declining gender ratio	02	Book by Manan publications/Internet	Chalkboard
	d] inequalities faced by people with disabilities.	02	Book by Manan publications/Internet	Chalkboard



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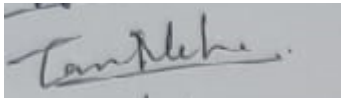
	e] Understand the issues of people with physical & mental disabilities. Special provisions and facilities for disabled personalities.	02	Book by Manan publications/Internet	Chalkboard

Total no of lecture 10

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 Concept of Disparity 2	a] Inequalities manifested due to caste system	01	Book by Manan publications/Internet	Chalkboard
	b]different types of conflicts arising out of caste system, inter- group conflict, cultural differences, lingual differences.	03	Book by Manan publications/Internet	Chalkboard
	c] Inter-group conflict arising out of communalism and its effects on society.	02	Book by Manan publications/Internet	Chalkboard
	d] Causes and Effects of conflicts arising out of regionalism.	02	Book by Vipul publication/internet	Chalkboard
	e] Causes and Effects of conflicts arising out of linguistic differences.	02	Book by Vipul, Manan publication/ internet	Chalkboard

Total no of lecture 10



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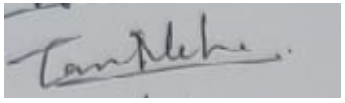
UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 Significant aspect of political processes	a] Local self governance in urban and rural areas.	02	Book by Manan publications/Internet	Chalkboard
	b]the 73rd and 74th amendments and their implications for inclusive politics.	02	Book by Manan publications/Internet	Chalkboard
	c] Role andsignificance of women in politics.	02	Book by Manan publications/Internet	Chalkboard

Total no of lecture 06



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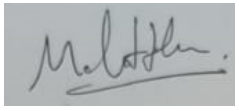
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Madhura Surve. DEPARTMENT: BCOM (BANKING AND INSURANCE). CLASS: F.Y.BBI SEMESTER: I

MONTH: July -September ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Ethics in Business, Management and Growth of business.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1, Unit 3 & Unit 4	Ch. 1 – Introduction to Management – Meaning definition, nature, role, function of levels of mgmt., 6Ms of mgmt.,	15		Chalk and Duster Method
	Mgmt. as an Art, Science and Profession, mgmt. Of banking and Insurance. Ch. 2- Tradition and contemporary Management - distinguish between traditional vs contemporary, TQM, Contribution of contemporary writer- Henry fayol, F. W. Taylor, Peter Drucker, C.K prahlad, Vijay Govinrajan. CH 5 – Organisation Structure – I – Meaning, Definition, Steps, Types, Departmentation, bases of Departmentation, centralisation – Meaning advantages and disadvantages, Formal organisationa vs Informal organization	15	The Principal of Scientific Management (Frederick Taylor)	



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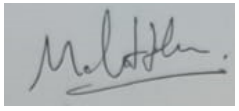
	Ch 7 Business leaders, J. R. D. Tata, Ratan Tata, Mr. DhirubaivAmbani, leaders in banking and Insurance Ch 8. Indian leaders K. V. Kamath, Deepak Parekh, Chanda Kochar., Hinduja, Godrej, Narayan Murthy, Governor of RBI Ch. 9 International leaders			
	President of world bank President of Asian Development Bank President of Federal Reserve President of International Monetary Fund.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT 1 PLAN)

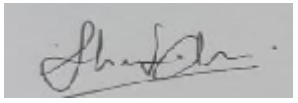
NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: BCOM(BANING AND INSURANCE) CLASS: FYBBI SEMESTER: I MONTH: JULY- NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to:

- Learn what does statistic exactly mean its scope in financial and of population and sample with illustration and also the different methods of sampling
- Become friendly with graphical methods like raw data, attributes and variables, frequency distribution
- Learn plotting of histogram and frequency polygon.
- Learn different types of diagrams like multiple bar, pie bar and subdivided bar.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS-I	Introduction Organisation and Presentation of data.	Unit1	▪ Define Statistics and its scope. ▪ Methods of Sampling, importance of Statistic, its functions and limitations. ▪ Graphical methods like raw data, attributes and variables, frequency distribution. ▪ Study of Histogram and Frequency polygon	1 1 3 2 3	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster



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			▪ Study of multiple bars, sub divided, Pie diagrams.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

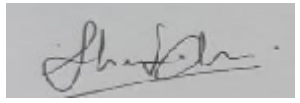
CLASS: FYBBI SEMESTER: I MONTH: JULY- NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to:

- Define different measures of central tendency like, mean, median, mode etc.
- Find median, quartiles and mode graphically using ogives and histogram.
- Find mean, combined and weighted mean, median, mode, quartiles, deciles, percentiles using required formula.
- Focus and how to apply this knowledge in day to day life.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS-I	Measures of Central Tendency	Unit 2	▪ Criteria for good measures of central tendency. ▪ Calculation of arithmetic mean	1 2 3	Business Mathematics	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT.



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			▪ Median, quartiles, deciles and percentile. ▪ Mode for grouped and ungrouped data. ▪ Calculation of combined mean and merits and demerits of mean, median and mode.	2 2	(Manan ,Vipul , Sheth Publications)	TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT 3 PLAN)

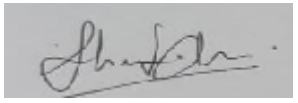
NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

CLASS: FYBBI SEMESTER: I MONTH: JULY- NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to:

- Define different measures of dispersion like range, quartile deviation, variance etc.
- Find range, quartile deviation
- Calculate mean deviation, variance, standard deviation
- Study of combined standard deviation.



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PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS-I	Measures of Dispersion	Unit 3	▪ Concept of dispersion and its scope. ▪ Calculation of Range, Variance ▪ Calculation of Standard deviation. ▪ Calculation of Coefficient of Variation, Quartile deviation and coefficient of quartile deviation.	1 2 2 3	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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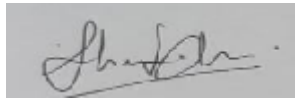
TEACHING PLAN (UNIT 6 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

CLASS: FYBBI SEMESTER: I MONTH: JULY-NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:
The learners will be able to:

- Learn the concept and usage of Index numbers.
- Find how far the cost of living has gone up in the last ten years.



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- Learn its application that it is the only tool with which the movements of all prices can be measured.
- Focus and how to apply this knowledge in day to day life

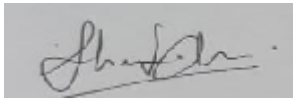
PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS-I	Index Numbers	Unit6	▪ Introduction to index number and its uses ▪ Exercise on Simple average and weighted average of relative method. ▪ Sums based on Laspeyre's ,Paasche's and Fishers formula and comparison between them. ▪ Test of Consistency: Time reversal, factor reversal and Circular test. ▪ Quantity and Value Index numbers.	1 1 2 1 1	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT 7 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

CLASS: FYBBI SEMESTER: I MONTH: JULY-NOVEMBER ACADEMIC YEAR: 2019-2020



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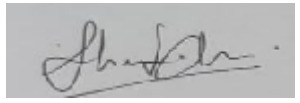
LEARNING OBJECTIVES:

The learners will be able to:

- Understand the meaning of Insurance and its objective .
- Understand the fundamentals of Insurance
- Know how to claim and calculate the insurance
- Focus and how to apply this knowledge in day to day life

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS-II	Insurance	Unit7	▪ Meaning, Objective, Purpose and Need for Insurance. ▪ Fundamentals of insurance ▪ Exercise on calculation of age, Premiums, Bonus, Paid up value of a policy, maturity value of the policy. ▪ Claim calculation and Surrender value.	1 1 2 2	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06



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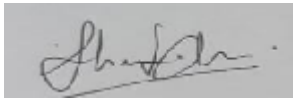

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Neeta Rath_____DEPARTMENT: BCOM (BANKING AND INSURANCE)_____

CLASS __F.Y.BBI SEMESTER: I_____MONTH: _July to October ACADEMIC YEAR: __2019-20_____

LEARNING OBJECTIVE/S: The learners will able to understand the management process
The learners will be able to: to understand the functions that are required in banking and insurance organization

The learners will be able to: to understand the organizational structure that is been followed in banking and insurance sector

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Principles of management Unit II and III,	**Unit II Management process and practices** Features Nature of Management Process Management by Objectives **Management Process:-** Planning, Organising, Staffing, Directing, Leading, Coordinating, Communication, Motivating, Budgeting, Reporting, Controlling A) Functions Of Management Related to Banking B) Functions Of Banking Related to Insurance	10	Text Book Internet	Blackboard and chalk system

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	Unit II Organisation structure A) **Organisation Structure of Banking Companies :-** General Organisation, Planning Organisation, Functional Organisation, Operational Organisation, Full-Fledged Organisation **B) Organisation Structure of Insurance Companies :-** Centralised Organisation, Decentralised Organisation, Regional Organisation ● Centralised v/s Decentralised Organisation	10	**Text book**	Blackboard and chalk system

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Snehal S Patil. **DEPARTMENT:BCOM(Banking and Insurance)** **CLASS:** FYBBI (A, B)

SEMESTER: I **MONTH**: July to Dec. **ACADEMIC YEAR:** 2019 -20

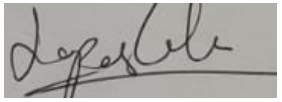
LEARNING OBJECTIVES:

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to prepare resumes to attending interviews, convenig meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills.

To make students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED	
1) Theory of Communication	**1) Concept of Communication-** Meaning, Definition, Process, Need, Feedback. Emergence of communication as akey concept in the Corporate and Global World, Impact of technological advancements on communication **2) Channels and Objectives of Communication:** **Channels** : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	



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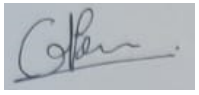
	Objectives of Communication: Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Moral of Employees **3) Methods and Modes of Communication: Methods:** Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette **Mode**s: Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing				
2) Obstacles to Communication in Business World	**1) Problems in Communication /Barriers to Communication:** Physical, Semantic/Language, Socio-Cultural, Psychological Barriers, Ways to Overcome these Barriers **2) Listening:** Importance of Listening Skills, Cultivating good Listening Skills **3) Introduction to Business Ethics:** Concept and Interpretation,	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	



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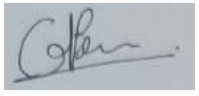
	Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility **Sensitize actual business practices:** Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour				
3) Business Correspondence	**1)Theory of Business Letter Writing:** Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, **Personnel Correspondence:** Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	
4) Language and Writing Skills	Commercial Terms used in Business Communication **Paragraph Writing:** Developing an idea, using appropriate linking	15	Manan	Chalk	



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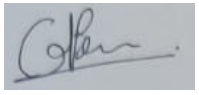
	devices, etc Cohesion and Coherence, self- editing, etc		Publication, Sheth Publication, Vipul Publication		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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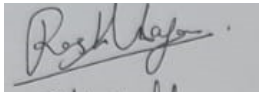
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: FY BCOM (BANKING AND INSURANCE) (OB) SEMESTER: II MONTH: NOV TO MARCH ACADEMIC YEAR: 2018 -2019

LEARNING OBJECTIVE/S:
The learners will be able to understand the importance of organizational behavior, various theories relating to OB, Individual Behavior, Group Dynamics, Culture and Change Management and Importance of Organizational Development

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 ORGANIZATIONAL CULTURE AND CHANGE MANAGEMENT				
	UNIT 3 – WORK CULTURE, WORK CONFLICTS, ORGANIZATIONAL CHANGE, EFFECTS OF RESISTANCE TO CHANGE AND WAYS TO OVERCOME IT, TIME AND STRESS MANAGEMENT	15		LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS
UNIT 4 ORGANIZATIONAL DEVELOPMENT	UNIT 4 – MEANING AND NATURE OF OD, TECHNIQUES OF OD, IMPORTANCE OF OD	15	JAMES HUNT, RICHARD OSBORN (OB)	LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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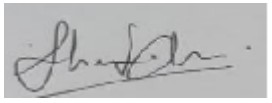
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT: Commerce CLASS: FYBBI (A, B) SEMESTER: II

MONTH: June to Nov. ACADEMIC YEAR: 2019- 2020 LEARNING OBJECTIVE/S: Business Law

The learners will be able to : Introduction, Understand Meaning, Rules and regulations, section, important act details with related case study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I: Indian Contract Act, 1872 Part 1	Chapter I Definitions, Kinds of agreements, Kinds of contracts, distinction between agreement and contract	03	Indian contract act 1872 Avtar singh Pollak and mulla D.D basu	Chalk and Duster
	Chapter II Proposal, kinds of proposal -specific, offer to a class of persons, general offer, counter offer, invitation to offer, standing offer, express proposal, implied offer, requirements of a valid offer section 3 & 5	04		
	Acceptance, requirements of a valid acceptance, Rules of communication of proposal, acceptance and revocation of proposal/acceptance	02		
		03		



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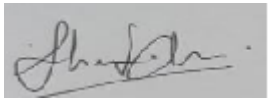
Module II Indian Contract Act, 1872 Part II	Chapter III Capacity to contract, minor, unsound mind, Disqualified person. Section 10-12 Chapter IV Consideration, agreements without consideration, unlawful consideration, inadequacy of consideration Agreements expressly declared to be void section 2- 25			
Module III Special Contract	Chapter I consent and free consent, coercion, undue influence, fraud, misrepresentationMistake Chapter II Void agreement section 24 to 30 Chapter III section 31 and 68 -72 Contingent contract, quasi-contracts, e-contract, Privity of contracts with exceptions Chapter IV Section 73 - 75 Discharge of contracts, Remedies available on breach of contracts Chapter I	04 02 03 03		
Information Technology Act				



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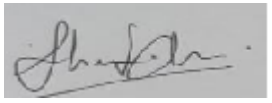
	Law of Indemnity and guarantee related essential, discharge of surety, distriction between, section 124 - 125, 126 - 129, 132 - 147			
	Agency meaning, feature, types, position, Rectification, termination, liability, mode of creation Sale of goods act : introduction, meaning, feature terms goods, classification, difference between, condition and warranty	03		
	Object scheme digital signature government certificate authorities Digital Certificate cyber	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27 × 4 = 216



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TEACHING PLAN (UNIT PLAN)

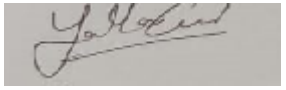
NAME OF THE STAFF: Vasanti Shenoy DEPARTMENT: BCOM(BANKING AND INSURANCE)) CLASS: FYBBI (A, B) SEMESTER: II

MONTH: June to Nov. ACADEMIC YEAR: 2019- 2020 LEARNING OBJECTIVE/S: Business Law

The learners will be able to : Introduction, Understand Meaning, Rules and regulations, section, important act details with related case study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I: Introduction of Law Module II Indian constitution Module III Negotiable instrument act	Meaning, Definition, feature, types, sources and classification. Natural justice, special leave appeal, features, Writs, fundamental rights. feature, promissory note, bill of exchange, cheque, Distinguish Bill of Exchange and promissory note, Bill of extension and cheque, types of cheque, Holders, Holder in course, payment in due cours, types of instrument, Dishonour of cheque, penalties for Dishonour Endorsement.	03 03 03 03 03	Indian constitution Act D. D. Basu, Negotiable instrument act, Dr. R. K. Bangia. Avtar Singh	Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 × 4= 72



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TEACHING PLAN (UNIT PLAN) (SUB: Financial A/c)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **BCOM (BANKING AND INSURANCE)** CLASS**: F.Y.B.B.I**.SEMESTER: **2th** MONTH: **NOVEMBER** ACADEMIC YEAR: **2019-20**

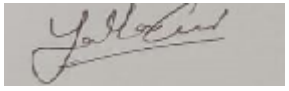
LEARNING OBJECTIVE/S:

The learners will be able to:

1. What is Redemption of Preference Shares
2. What are the legal Provision of Redemption of Preference Shares.
3. What is divisible profits and non-divisible Profits. And what is CRR.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
REDEMPTION OF PREFERENCE SHARES **(Continue….)**	1. Company Law / Legal Provisions for redemption of preference shares in Companies Act. 2. Sources of redemption including divisible profits and proceeds of fresh issue of shares Premium on redemption from security premium and profits of company 3. Capital Redemption Reserve Account - creation and use	05	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: F.Y.B.B.I** SEMESTER: **2th** MONTH: **DEC. - JANUARY**

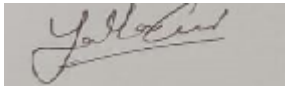
ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are Journal Entries regarding redemption of preference shares
2. How to Prepared Balance sheet of Company as per Sch-3 of Company Act 2013.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
REDEMPTION OF PREFERENCE SHARES	1. Procedure of redemption of preference shares(Journal Entries and Balance sheet of company) 2. Practical Question base on redemption of preference shares	10	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: F.Y.B.B.I** SEMESTER: **2th** MONTH: **FEBRUARY**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

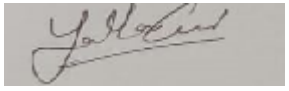
1. What is Redemption of debentures 2. What are the legal Provision of Redemption of debentures

   3. What is Debenture redemption reserve

   4. How the Redemption of debentures done by using Ddebenture redemption sinking fund method.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
REDEMPTION OF DEBENTURES (Continue….)	1. Redemption of debentures by payment from sources including out of capital and /or out of profits. 2. Debenture redemption reserve and 3. Debenture redemption sinking fund excluding insurance policy. 4. Journal Entries and Ledger Posting (Practical Questions base on sinking fund method.	07	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: F.Y.B.B.I** SEMESTER: **2th** MONTH: **FEBRUARY -MARCH**

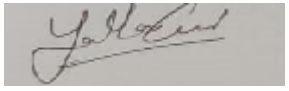
ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. How the Redemption of debentures done by Redemption of debentures by conversion using method.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
REDEMPTION OF DEBENTURES	1. Redemption of debentures by conversion into new class of shares or debentures with options including at par, premium and discount 2. Journal Entries and Ledger Posting (Practical Questions base on sinking fund method.	08	Advance Accounts by Shukla & Grewal Indian Accounting Standards by Ashish Bhattacharya Financial Accounting by M.Mukherjee &M. Hanif.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPASHREE PARAG VARTAK DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: FYBBI

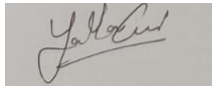
SEMESTER: II MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concept of Ratio, Proportion, Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation. Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHOD UNIT II LINEAR PROGRAMMING TECHNIQUES	Meaning, advantages, limitations	1	BUSINESS MATHEMATICS BY KAPOOR	BLACKBOARD CHALK AND DUSTER
	Basic applications, basic terminologies. Formulation of linear programming problems	2		Explanation, Discussion, Problem solving assignments
	Graphical method of solving linear programming problems	3		
	Simplex method up to three variables with maximization and minimization	3		
	Duality in linear programming concept	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPASHREE PARAG VARTAK DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: FYBB_

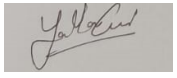
SEMESTER: II MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concept of Ratio, Proportion, Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation. Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHOD UNIT IV RATIO, PROPORTION AND PERCENTAGE	Define Ratio, Continued Ratio, Inverse Ratio, Problem solving on ratio	3	BUSINESS MATHEMATICS BY KAPOOR	BLACKBOARD CHALK AND DUSTER
	Define Proportion its types. Problem solving on proportion	3		Explanation, Discussion, Problem solving assignments
	Define Variation and its types	1		
	Explain concept of percentage and computation of percentage.	3		
Profit and Loss	Concept of profit and loss and problems soving on profit and loss.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10_____



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TEACHING PLAN (UNIT PLAN)

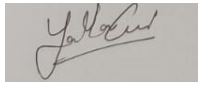
NAME OF THE STAFF: DIPASHREE PARAG VARTAK DEPARTMENT: BCOM (BANKING AND INSURANCE CLASS: FYBBI SEMESTER: II MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concept of Ratio, Proportion, Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation. Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Testing of hypothesis:	Concept of hypothesis Null and alternate hypothesis,	3	STATISTICS FOR TESTIG OF HYPOTHESIS BY KAPOOR	BLACKBOARD CHALK AND DUSTER
	• Types of errors, Critical region, Level of significance. • Large sample tests (using central limit theorem, if necessary) • For testing specified value of population mean	3		Explanation, Discussion, Problem solving assignments
	• For testing specified value in difference of two means	3		
	• For testing specified value of population proportion	3		
	• For testing specified value of difference of population proportion (Development of critical region is not expected.)	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____



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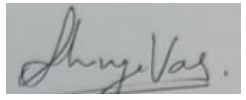
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI YADAV SUBJECT: PRINCIPLES AND PRACTICES OF BANKING & INSURANCE DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: FYBBI SEMESTER: II MONTH: NOV- MAR ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Learn basic banking concepts its meaning , definition, importance, need of banking ,various operations in banking sector.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Introduction to Banking				
	Basic Concepts: Origin, Need, Types, Scope and Functions of Banking - Need for Regulation and Supervision	15	VIPUL PRAKASHAN	CHALK & DUSTER DISCUSSION EXAMPLES
2.Banking Scenario in India	Banking Operations -Types of accounts - Banking Services - Current Scenario, Financial Inclusion and Banking Regulations & Role of RBI.	15	VIPUL PRAKASHAN	CHALK & DUSTER DISCUSSION EXAMPLES

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: FY BBI

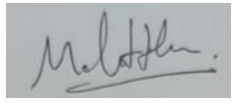
SEMESTER: 2 MONTH: NOV-DEC ACADEMIC YEAR: 2019-2020 SUBJECT: PPBI

LEARNING OBJECTIVES:

The learners will be able to : gain knowledge related to banking and insurance, types of accounts, kinds of business risk, Insurance , Role.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 INTRODUCTION TO INSURANCE	Understanding Risk, Kinds of business risk. Need and scope of Insurance Evolution of Insurance. Principles of Insurance. Types of Insurance and policies. Risk and return relationship.	15	Principles and Practices of Banking and Insurance	Chalk board Flow Chart Daigram

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT:BCOM (BANKING AND INSURANCE) CLASS: FY BBI

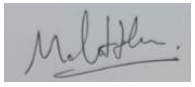
SEMESTER: 2 MONTH: JAN-FEB ACADEMIC YEAR: 2019-2020 SUBJECT: PPBI

LEARNING OBJECTIVES:

The learners will be able to : gain knowledge related to banking and insurance, types of accounts, kinds of business risk, Insurance , Role.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 INSURANCE BUSINESS ENVIRONMENT IN INDIA	Insurance Sector : Indian Perspective. Forms of Insurance Organisation. Insurance players in India. Growth of Insurance Business in India. Actuary Life Insurance Act 1956 IRDA Act 1999	15	Principles and Practices of Banking and Insurance	Chalk board Flow Chart Diagram

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL ACCOUNTING II DEPARTMENT: BCOM(BANING AND INSURANCE)

CLASS: FYBBI SEMESTER: II MONTH: DECEMBER, JANUARY ACADEMIC YEAR: 2019 - 2020

LEARNING OBJECTIVE/S: The learners will be able to :
Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 VALUATION OF GOODWILL AND SHARES	A) Valuation of Goodwill			• Chalk • Board • Discussion • Examples
	Meaning, Nature, Features, Classes, Elements, Types of Goodwill	1		
	Factors of Goodwill Valuation and Methods of goodwill valuation	2		
	Practical Illustration	5		
	B) Valuation of Shares			
	Meaning, Need, Importance, of valuation of shares, Factors affecting valuation of shares, Methods of valuation of shares.	2		
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL ACCOUNTING II DEPARTMENT: COMMERCE

CLASS: FYBBI SEMESTER: II MONTH: JANUARY, FEBRUARY ACADEMIC YEAR: 2019 - 2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 BUY-BACK OF EQUITY SHARES	Meaning, Effect, Objectives, Benefits, Drawbacks of Buy back	1		• Chalk • Board • Discussion • Examples
	Company law/Legal Provision (including related restrictions, Power, Transfer to CRR, and Prohibitions)	2		
	Compliance to conditions including Sources, Maximum Limit and Debt Equity Ratio	2		
	Practical Illustrations	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 12

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TEACHING PLAN (UNIT PLAN)

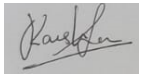
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Organizational Behavior DEPARTMENT: BCOM (BANKING AND INSURANCE)

CLASS:FYBBI SEMESTER:II MONTH: Dec- Jan ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I Introduction to Organizational Behavior	Meaning, Nature, scope and Model of OB	3	Human Behaviour at Work By Newstorm,J.W.	Chalk & Board, Discussion
	Theories of Motivation – Need hierarchy theory ,ERG theory, Expectancy theory, etc	3		
	Applications of Motivational Theories	2		
	Motivational techniques in Banking & insurance industry	2		
	Scope of organizational behaviour – challenges and opportunities	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

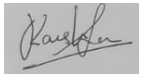
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Organizational Behavior DEPARTMENT: Commerce

CLASS:FYBBI SEMESTER:I **I** MONTH:Feb - March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Group Dynamics	Basics of Individuals behaviour (IQ,EQ,SQ)	2	Human Behaviour at Work By Newstorm,J.W.	Chalk & Board, Discussion
	Group & Group Dynamics –types of groups, stages of group development , properties of a group	3		
	Team Building & Development –types of teams , creating a team , useful skills for team building	3		
	Interpersonal Skills – assertiveness ,Leadership , Goal Setting	2		
	Cross cultural skills	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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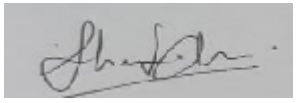
TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: BCOM(BANKING AND INSURANCE)) CLASS: FYBBI SEMESTER: II MONTH: DECEMBER- MARCH
ACADEMIC YEAR: 2019-2020
LEARNING OBJECTIVES:
The learners will be able to:

- Learn what is testing of hypothesis and relate it in our day to day life
- Become friendly with concept of population and sample with illustration and also the different methods of sampling.
- Calculate null hypothesis, alternate hypothesis and study if Type I or Type II error based on level of significance.
- Test based on large sample for Means and Proportion.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS-II	Testing of Hypothesis	Unit1	▪ Define Hypothesis and its scope. ▪ Define null hypothesis, alternative hypothesis, decision criterion, critical region, Type I and Type II error, level of significance. ▪ Study of sampling distribution of a Statistic. ▪ Exercise on testing of hypothesis.	1 2 2 3 2	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster



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			▪ Estimation ▪ Theory explanation based on hypothesis			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

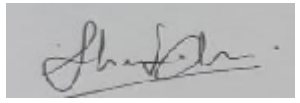
CLASS: FYBBI SEMESTER: II MONTH: DECEMBER- MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to:

- Definition of Matrix and its types like transpose, addition, multiplication, subtraction etc.
- Find determinant, inverse of a matrix by pivotal reduction method, ad joint method and row / column transformation.
- Application of matrices and determinants to business and economics.
- Focus and how to apply this knowledge in day to day life

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS-II	Matrices and Determinants	Unit3	▪ Define Matrix and its types like transpose, addition, multiplication subtraction.	1 4	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT.



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			▪ Sums based on finding determinant, inverse of a matrix by pivotal reduction method, ad joint method and row / column transformation ▪ Sums based on inverse of a non-singular matrix ▪ Exercise on solution to simultaneous linear equations. ▪ Theory explanation on its application.	2 2 1		TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT 4 PLAN)

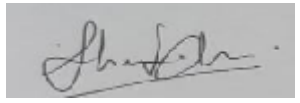
NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

CLASS: FYBBI SEMESTER: II MONTH: DECEMBER- MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to:

- Define Ratio, Continued Ratio, and Inverse Ratio and solve the questions based on these terms.
- Understand the concept of Proportion, Continued Proportion, Direct Proportion and Inverse Proportion.
- Solve the questions based on different types of Proportion and relate the situations in day to day life.



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- Understand the concept of Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation.
- Learn the meaning of Percentage and computation of Percentage

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS-II	Ratio, Proportion & Percentage	Unit4	▪ Define Ratio, Continued Ratio, Inverse Ratio ▪ Problem solving on ratio ▪ Define Proportion its types. ▪ Problem solving on proportion ▪ Explanation on concept of percentage and computation of percentage.	2 4 2 4 3	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster

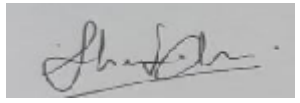
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

TEACHING PLAN (UNIT 6 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

CLASS: FYBBI SEMESTER: II MONTH: DECEMBER- MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:



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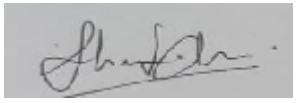
The learners will be able to:

- Understand the concept of GDP, real growth in GDP, price level inflation rate.
- Learn the indicators for money supply, index for agricultural production and index for industrial production.
- Understand trade balance, capital account balance and external debt and debt service ratio.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS-II	Economic Indicators.	Unit 6	▪ Introduction to GDP,GNP, NDP, NNP, national income and real growth in GDP ▪ Problems in estimating the GDP of india, Indices of agricultural and industrial production. ▪ Study of electricity generation and other infrastructure, price level inflation ▪ Indicators of money supply,annual bugget, external debt and debt service ratio.	1 2 1 1	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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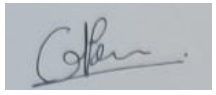
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Claretta Elias Lopes DEPARTMENT: BCOM (BANKING AND INSURANCE)

CLASS F.Y.BBI SEMESTER: II MONTH: JUNE -SEPTEMBER ACADEMIC YEAR: 2019 -2020

LEARNING OBJECTIVE/S: To make the students socially aware of the societal problem and their personality.
The learners will be able to: to understand the overall stratification of the society.

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course–II Unit I, IV, and V	Unit 1: Globalisation and Indian Society Understanding the concepts of liberalization, privatization and globalization Growth of information technology and communication and its impact manifested in everyday life: Impact of globalization on industry: changes in employment and increasing Changes in agrarian sector due to globalization; rise in corporate farming migration;	6	**Text book**	1.Chalk and Black Board Method 2 Example 3 Discussion



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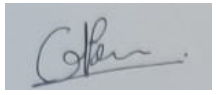
	and increase in farmers' suicides.			
	<u>Unit 4: Understanding Stress and Conflict</u> Causes of stress and conflict in individuals and society: Agents of socialization and the role played by them in developing the individual Significance of values, ethics and prejudices in developing the individual Stereotyping and prejudice as significant factors in causing conflicts in society Aggression and violence as the public expression of conflict.	**6**	**Text book**	1.Chalk and Black Board Method 2 Example 3 Discussion
	<u>Unit 5: Managing Stress and Conflict in Contemporary Societ</u> Types of conflicts and use of coping mechanisms for managing individual stress; Maslow's theory of self-actualisation, Different methods of responding to conflicts in society: Contlict-resolution and efforts towards building peace and harmony in society	5	**Text book**	1.Chalk and Black Board Method 2 Example 3 Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: BCOM (Banking and Insurance) CLASS: F.Y.BBI (Division A B)

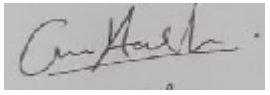
SEMESTER: II

MONTH: December, January ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand and remember the concept of liberalization, privatization and globalization; information technology and communication and its impact.
2) Understand impact of globalization on industry, employment; impact of migration.
3) Understand changes agrarian sector due to globalization; rise in corporate farming; identify reasons for increase in farmers' suicides.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1- Globalisation and Indian Society	Concepts of liberalization, privatization and globalization	03	Book by Manan publications/Internet	Chalkboard
	Growth of information technology and communication and its impact manifested in everyday life	01	Book by Manan publications/Internet	Chalkboard
	Impact of globalization on industry: changes in employment and increasing migration	01	Book by Manan publications/Internet	Chalkboard



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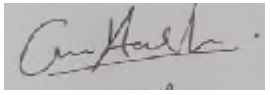
	Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides.	02	Book by Manan publications/Internet	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: F.Y.BBI (Division A B)

SEMESTER: II

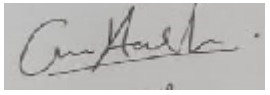
MONTH: January, February ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand and remember the concept of Human rights.
2) Understand and remember Human Rights constituents with special reference to Fundamental Rights stated in the Constitution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Human Rights	Concept of Human Rights; origin and evolution of the concept	02	Book by Manan publications/Internet	Chalkboard
	The Universal Declaration of Human Rights	02	Book by Manan publications/Internet	Chalkboard
	Human Rights constituents with special reference to Fundamental Rights stated in the Constitution	03	Book by Manan publications/Internet	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: BCOM (BANING AND INSURANCE) CLASS: F.Y.BBI (Division A B)

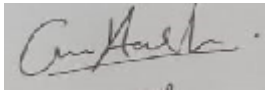
SEMESTER: II

MONTH: February ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Identify the importance of Environmental studies.
2) Understand Ecology and their interconnectedness.
3) Identify the uses of environmental products.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit- 3 Ecology	Importance of Environment Studies in the current developmental context	02	Book by Manan publications/Internet	Chalkboard
	Understanding concepts of Environment	01	Book by Manan publications/Internet	Chalkboard
	Ecology and their interconnectedness	01	Book by Manan publications/Internet	Chalkboard
	Environment as natural capital and connection to quality of human life.	01	Book by Manan publications/Internet	Chalkboard



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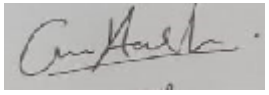
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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TEACHING PLAN (UNIT PLAN)

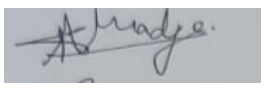
NAME OF THE STAFF: BIJOYA SARMA DEPARTMENT: BCOM (BANKING AND INSURANCE)

CLASS: FYBBI SEMESTER: II MONTH: DECEMBER- MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : understand how to deal with LPP

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER – Quantative Method II UNIT II Linear Programming Techniques	Meaning, Advantages, limitations, business applications, basic terminology,	2	Textbook of Vipul Publication	Blackboard
	Formulation of linear Programming Problems	2		
	Graphical Method of solving Linear Programming Problems,	2		
	Simplex method (upto 3 variables) with Maximisation and Minimisation.	3		
	Duality in Linear Programming (concept only)	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAKKUMAR GUPTA SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: SYBBI SEMESTER: III MONTH: JUNE to SEP ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 2	A. Introduction to Corporate Financial Statement -Understanding the Balance Sheet and Revenue Statement with heading and sub heading, -Uses of financial Statement	2	Management Accounting By I.M Pandey	Chalk Board And Discussion Method
Module 3	Working Capital Management -concep, nature of Working capital management -Planning of Working capital -Practical Problems on working capital management	8	Management Accounting By I.M Pandey	Chalk Board And Discussion Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **BCOM (BANKING AND INSURANCE)** CLASS**: S.Y.B.B.I** SEMESTER: **3th** MONTH: **JUNE**

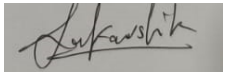
ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Income Tax and its basic term(Definitions)
2. What is Residential status and which income is taxable and nontaxable in India (Scope of Total Income)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEFINITIONS AND RESIDENTIAL STATUS	**Definitions U/S 2:** Section 2-Assessee, Assessment Year, Assessment, Annual value, Business, Capital asset, Income, Person, Previous Year, Transfer **Basis of Charge :Section 3 to 9** Previous Year, Residential Status, Scope Of Total Income, Deemed Income	15	1.Direct Taxes Law & Practice by V.K Singhania-TAX MAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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Late Shri. Vishnu Waman Thakur Charitable Trust
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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: S.Y.B.B.I** SEMESTER: **3th** MONTH: **JULY**

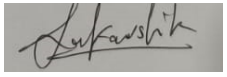
ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are the Provision regarding Income from Salary under Income Tax Act, 1961.
2. What are the Provision regarding Income from House Property under Income Tax Act, 1961.
3. What are the Provision regarding Income from Business and Profession under Income Tax Act, 1961.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME-1	**Salary Income: Section 15 – 17** Including Section 10 relating to House Rent Allowance, Travel Concession, Special Allowance, Gratuity, Pension ,Commutation, Leave Encashment, Compensation, Voluntary Retirement, Payment from Provident Fund	15	1.Direct Taxes Law & Practice by V.K Singhania-TAX MAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method
	Income From House Property: Section 22 to 27, Including Section 2 - Annual Value Practical Question			
	Profits & Gains From Business & Profession, Vocation Section 28 to 32, 36, 37, 40, 40A, 43B, 44AD, 44ADA & 44AE Including.: Section 2 - Business			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

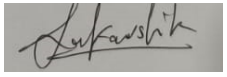
NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: S.Y.B.B.I** SEMESTER: **3th** MONTH: **AUGUST**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are provision of Income from Capital Gain under Income Tax Act, 1961
2. What are provision of Income from Other Sources under Income Tax Act, 1961

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME-2	**Income from Capital Gains :** Section 45, 48, 49, 50, 54 and 55	15	1.Direct Taxes Law & Practice by V.K Singhania-TAX MAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta	Lecture Method
	Income from Other Sources: Section 56 to 59			



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	Exemption U/s 10 Related to income from other sources		3. Student guidance to Income Tax.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

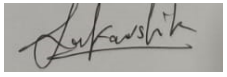
NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **COMMERCE** CLASS**: S.Y.B.B.I** SEMESTER: **3th** MONTH: **SEPT-OCT**

ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are provision of Deductions under Chapter VI - A under Income Tax Act, 1961
2. How to Compute Taxable income of Individual and HUF.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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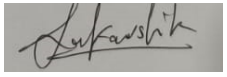
Deductions under Chapter VI – A AND COMPUTATION OF TOTAL INCOME	**80 A**-Restriction on claim in Chapter VI- A deductions **80 C**- Payment of LIC/PF and other eligible investments **80CCC** - Contribution to certain Pension Fund **80D** - Medical Insurance Premium **80 DD**- Maintenance and medical treatment of handicapped dependent **80E** - Interest on Educational Loan **80 TTA**-Interest on Saving Bank account **80D** - Deduction in the case of totally blind or physically handicapped or mentally retarded resident person	15	1.Direct Taxes Law & Practice by V.K Singhania-TAX MAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method
	Computation of Total Income of Individual and HUF with respect to above heads and deductions (Practical Questions)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

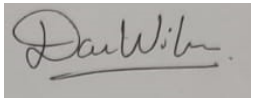
NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT:BCOM (BANKING AND INSURANCE) CLASS: SYBBI SEMESTER: III

MONTH: JUNE, JULY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to understand about Commodity Market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FINANCIAL MARKET UNIT: 3 COMMODITY MARKET	Introduction to commodities market: meaning, history and origin, Types of commodities traded, structure of commodities market in India. Participants in commodities market, Trading in commodities in India. Commodity exchanges in India and abroad. Reasons for investing in commodities.	15	Text book	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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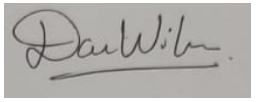
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: SYBBI SEMESTER: III MONTH: AUGUST, SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to get knowledge of Derivatives Market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 DERIVATIVES MARKET	Introduction to Derivatives market: Meaning, History, and origin. Elements of a Derivative contract. Factors driving growth of derivatives market. Types of Derivatives, of Underlying assets, Participants in Derivatives market, Advantages and Disadvantages of Trading in Derivatives market. Current volumes of Derivative Trade in India. Difference between Forward and Futures.	15	Text book	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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NAME OF THE STAFF Jinal Chohan_____

DEPARTMENT: BCOM (BANKING AND INSURANCE)_____ SUBJECT- FINANCIAL MARKET

SEMESTER: _____3_____

MONTH: ___july to december___

ACADEMIC YEAR: _____2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : _Understand the basics of the markets, learn the meaning of various terms used in stock market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2. Financial markets in India-	meaning, features and functions, importance , defects ,	3	Vipul Prakashan	Chalk and Board
	defects , participant,components of organised and unorganised markts and reforms	3	Vipul Prakashan	Chalk and Board
	Indian capital market - meaning, features, functions and importance , participant, instruments	3	Vipul Prakashan	Chalk and Board

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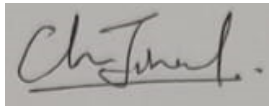
	Indian stock market- meaning and functions of stock exchange, NSE BSE Equity market- primary market , IPO , book building, role of merchant bankers , ASBA , Green shoe options , issue of bonus shares, right shares, sweat equity, ESOP	3	Vipul Prakashan	Chalk and Board
	Indian debt market - market instruments,listing, primary and secondary	3	Vipul Prakashan	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3. Commodity m	Introduction, meaning,	3	Vipul Prakashan	Chalk and Board
	history, origin ,types of commodity markets ,	3	Vipul Prakashan	Chalk and Board
	structure, participants, commodity exchange in India and abroad	3	Vipul Prakashan	Chalk and Board



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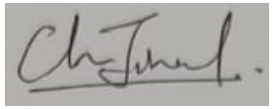

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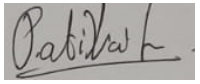
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VAIKHARI PATIL DEPARTMENT: BCOM (BANKING AND INSURANCE)

CLASS: SYBCOM (Banking and Insurance) SEMESTER: III MONTH: JUNE TO OCT 2019 ACADEMIC YEAR: 2019 -2020

LEARNING OBJECTIVE/S:
The learners will be able to: Learn Introduction to computer system and Web

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, II, III, IV	A) E-Commerce Framework, E-Commerce and media convergence, anatomy of E-Commerce Applications, E-Commerce Consumer and Organization Applications B) The network Infrastructure for Electronic Commerce - Market forces influencing the I-way, Components of I-way, Network Access Equipment C) E-Commerce and World Wide Web- Architectural framework of ECommerce, WWW and its architecture, hypertext publishing, Technology behind the web, Security and the Web	30*(2 Divisions)	E-books, Vipul publications, Seth publication	Projector
	A) Meaning, definition, features, advantages and limitations- core banking, the evolution of e-banking in India, Legal framework for e-banking. B) Electronic Payment System Types of Electronic Payment Systems, Digital Token-based EPS, Smart Card EPS, Credit Card EPS, Risk in EPS, Designing a EPS			
	A) Ms-Word: Usage of smart art tools, bookmark, cross-reference, hyperlink, mail merge utility and converting word as PDF files. B) Ms-Excel: Manipulating data, Working			



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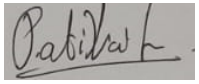
	with charts, Working with PIVOT table and what-if analysis; Advanced excel functions-Vlookup (), hlookup(),PV(), FV(),average(),goal seek(),AVERAGE(), MIN(), MAX(), COUNT(),COUNTA(), ROUND(), INT(), nested functions, name, cells/ranges/constants,relative, absolute &mixed cell references, >			
	A) Need of Cyber Law, History of Cyber Law in India B) Cyber Crimes: Various threats and attacks, Phishing, Key Loggers, Identity Theft, Call & SMS forging, e-mail related crimes, Denial of Service Attacks, Hacking, Online shopping frauds, Credit card frauds, Cyber Stalking C) Cyber Security: Computer Security, E-Security, Password Security and Reporting internet fraud			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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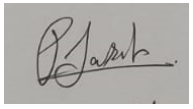
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____BCOM (BANKING AND INSURANCE)___ CLASS: ____SYBBI____ SEMESTER: _____III_____ MONTH: __JUNE__ ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:
The learners will be able to : The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Management Accounting	Meaning and Definition of Management Accounting, Nature and Frame work	2	Management Accounting By I.M Pandey	Chalk Board And Discussion Method
	Functions of Management Accounting, Decision Making Process	2		
	Information of Decision making (Information, Strategic, tactical and operational information)	3		
	Financial Accounting v/s Management Accounting , Qualities of Management Accounting	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____10_____



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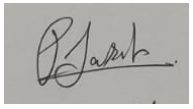
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____COMMERCE___ CLASS: ____SYBBI____ SEMESTER: _____III_____ MONTH: __JULY -AUGUST__ ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:
The learners will be able to :The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Financial Statement Analysis	Introduction and Meaning of Financial statement analysis, Steps, objectives , Types of Analysis, simple sums on financial statement	2	Management Accounting By I.M Pandey	Chalk Board And Discussion Method
	Ratio Analysis- Meaning, Classification , DU Pont chart, Advantages and limitations.	2		
	Balance sheet ratio, Revenue statement Ratio and Combined Ratio (Applications of formulas)	3		
	Solved Illustration	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____12_____



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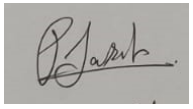
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: COMMERCE CLASS: SYBBI SEMESTER: III MONTH: SEPTEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 Management of Profit / Dividend Policy	Meaning, Types, Factors affecting dividend policy, Forms of Dividend	2	Management Accounting By I.M Pandey	Chalk Board And Discussion Method
	Determinants of dividend policy, Factors, dividend policy in India, Bonus Share (Stock dividend)	3		
	Stock splits, Practical Illustrations on Revised share capital and Stock splits	3		
	Legal, Procedural and Tax aspects associated with dividend decision	2		
	Dividend Policy Theories – Walter Model, Gordon's Model, MM Model, Factors influencing dividend policy	3		



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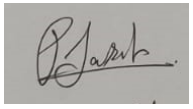
	Practical Illustrations	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____



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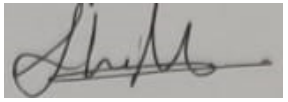
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF. NAZIA SAJID SHAIKH. DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: SYBBI SEMESTER: SEM III MONTH: JUNE TO OCT. ACADEMIC YEAR: 2019-2020. SUB:FC -III (OVERVIEW OF BANKING SECTOR)

LEARNING OBJECTIVE/S:
The learners will be able to: Understand an Overview of Banking industry, Emerging trends of Banking, Regulatory Architecture, Bank crisis in india, Commercial Banking and Customers..

PAPER, UNIT, TITLE	SUB TOPIC	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1. AN OVERVIEW OF BANKING SECTOR.	***Banking system in India:** Definition of Bank, RBI, Types of Banks, ***Emerging trends of Banking:** Universal Bank, Electronic Bank, Globalisation of Banking. ***History of Banking sector reforms from 1991-2000 & Current Development. *Bank crisis in India.** ***Regulatory Architecture:** Overview of Banking regulations Act,1949, Critical Evaluation of Banking industry.	**10**	**Indian Banking: Desai Vasant. Himalaya publication.**	Chalk and Duster.
MODULE 2.	***Commercial Banking:** Definition, Functions, Services offered by Central Banking, Evolution of Central Banking in India. ***Retail Banking.** ***Corporate Banking.** ***Rural Banking.**	**10**		Chalk and Duster.



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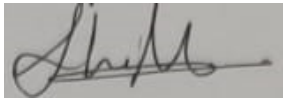
COMMERCIAL BANKING AND CUSTOMERS	*Banking Ombudsman.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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TEACHING PLAN (UNIT PLAN)

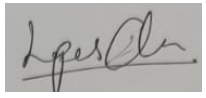
NAME OF THE STAFF: Claretta Elias Lopes DEPARTMENT: BCOM (BANKING AND INSURANCE)

CLASS S.Y.BBI SEMESTER: III MONTH :- July to October ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES: -
The learners will be able to: to understand What is Banking and how bank functions in Our India

The Learners will come to know about the types of Banking that works in Our India

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Subject:-An Overview 0f Banking Sector **MODULE-1**	**MODULE -! An Overview of Banking Industry:** Definition of Banks, Types of Banks, Principles of Banking Banking System in India, Overview of RBI, Public, Private, Co-operative, Payment Bank, Regional Rural Banks Emerging trends of banking - Universal banking, electronic banking, globalization of banking. Brief history of banking sector reforms from 1991-2000 and Current developments in banking sector.	8	**Text book**	. .Chalk and Black Board Method 2 Example 3 Discussion



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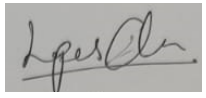
An Overview of Banking Industry:	Regulatory Architecture Overview of Banking Regulation Act 1949, Banking Regulation Act (Amendment 2015), Payment and Settlement Act 2007, Negotiable Instrument Act 1881, BIS, Basel I, II and III. Bank Crises in India. Critical Evaluation of Banking Industry in India			
MODULE 2-Microfinance and Financial Inclusion:	**MODULE 2-Microfinance and Financial Inclusion:** (A) Microfinance: Introduction, Need and Code of Conduct for Microfinance Institutions in India, Advantages, Purpose, Limitations and Models of SHG Bank Linkage Program. Role of NABARD and SIDBI, Portfolio Securitization, SHG-2, NRLM and SRLM, Priority Sector and its Classification (B) Financial Inclusion:	8	**Text book**	1)Chalk and Black Board Method 2) Example 3)Discussion



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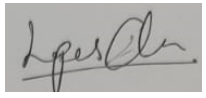
	Need and Extent RBI Committee Report of Medium Term Path on Financial Inclusion 2015, World Findex Report 2015, NISM Report 2015, (Only Brief Extracts relating to bank account holdings and credit taken and contrast between developing and developed nations.) Features and Procedures of Pradhan Mantri Jan Dhan Yojana, and PM Mudra Yojana. Features, procedures and significance of Stand up India Scheme for Green Field.			



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TEACHING PLAN (UNIT PLAN)

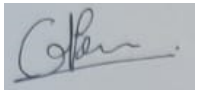
NAME OF THE STAFF: _Claretta Elias Lopes_____DEPARTMENT: BCOM (BANKING AND INSURANCE)_____

CLASS __S.Y.BBI SEMESTER:III_____MONTH :-July to October ACADEMIC YEAR: __2019-20__

LEARNING OBJECTIVES: -
The learners will be able to: to understand the behavior to be followed in organization

The learners will be able to: to understand the organizational structure that is been followed in banking and insurance sector

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Organisational Behaviour Unit II , III, and IV	**Unit II the Group Dynamics** **C) Negotiations: -** Meaning, Process, Strategies, Negotiations, Crises Negotiations. **D) Transactional Analysis Model: -** Types Of Transaction, Life Positions, E) **Virtual Teams**: - Meaning and structure, Types, Stages of Management of Virtual Teams F) **Group Cohesiveness**: - Meaning, Features, Factors Affecting, Effects, Consequences, Impact of group cohesion G) **Group Decision-Making: -**	10	Text Book Internet	.Chalk and Black Board Method 2 Example 3 Discussion



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	Unit III:- Organisational Dynamics A) **Organisation Structure** :- Meaning, Centralisation, Decentralisation, Span Of Control, Departmentation B) **Common Organizational Designs:- Simple Structure, Bureaucratic Structure, Matrix Structure** C) **New Design Options:-** Team Structure, Virtual Organisations, Boundaryless Organisations D) **Organisation Structure Differentiation** E) **Need And Importance of organisational designs** F) **Organisational Climate:-** Managing Rewards, Impact of Rewards Punishments, Job Frustration , Meaning and importance of QWL	15	**Text book**	1)Chalk and Black Board Method 2 Example 3 Discussion
	Unit IV: Organisation Behaviour in Banking and Insurance Sector Concept and Definitions of OB, Practices of Ob in Banking and Insurance Company, Personality and OB, Perception and OB, Unethical Practices by Banking Employees, Issue of Organisation Behaviour In Banks	5	**Text book**	. 1)Chalk and Black Board Method 2 Example 3 Discussion

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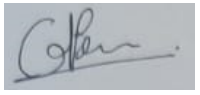

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA VAIBHAV TAMBE **DEPARTMENT: BCOM(BANKING AND INSURANCE)**
CLASS: S.Y.BBI A & B div. **SUBJECT: ORGANISATION BEHAVIOUR** **SEMESTER: III** **MONTH: JULY TO SEPT.** **ACADEMIC YEAR: 2019-2020**

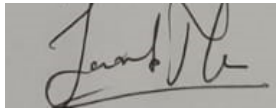
A teaching plan is a document that outlines the structure and details of a single session. A good teaching plan is a comprehensive write-up of the step-by-step teaching methods, the estimated duration of each segment of teaching, and the materials and resources needed for the session.

LEARNING OBJECTIVE/S: By the end of the session Students will be able to: This course teaches different aspects of organization behavior & students understand human behavior in organization and ability to lead people.

(For a detailed description of each component see Appendix A).

APPENDIX {A}

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 The Individual Behaviour	**a] Personality** – Meaning, Determinants of Personality, Major Personality Traits influencing OB, The big Five Model, Trait Theory of Personality, Psychoanalytic Theory of Personality, Freud Stage of personality Development, Locus of control, Self-Monitoring.	03	Book by Manan publications/Internet	Chalkboard
	b] Learning- Meaning and Definition of Learning - the Learning Process , Principles of learning, Theories of Learning- Classical Conditioning, Operant Conditioning, Social Learning theory, Learning through Reinforcement, Learning by observing, Learning through Experience.	03	Book by Manan publications/Internet	Chalkboard



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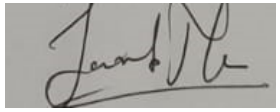
	c] Perception- Meaning , Factors Influencing Perception, Attribution Theory , Improving Perception- Johari Window , Empathy	03	Book by Manan publications/Internet	Chalkboard
	d] Work Place Emotions, Values & Ethics- Meaning of Emotions, Cognitive Dissonance, Emotional Dissonance, Managing Emotions at work (Emotional Labour)- The six universal Emotions. Meaning and type of values, Sources of value system, Values across cultures, Values and ethical behavior.	03	Book by Manan publications/Internet	Chalkboard
	e**] Individual Decision Making**- How are decision made in origination, Decision making process, Decision styles.	03	Book by Manan publications/Internet	Chalkboard

Total no of lecture 15

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 Origination Behaviour in Banking and Insurance Sector.	a] practices of Ob in Banks and Insurance	03	Book by Manan publications/Internet	Chalkboard
	b]Issue of organization behavior in Banks	04	Book by Manan publications/Internet	Chalkboard



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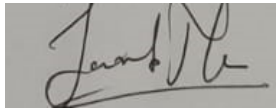
	c] Strategies to manage issues of organization behaviour in banks	04	Book by Manan publications/Internet	Chalkboard
	d] Case Studies - Transfer, Promotion, Separation	03	Book by Vipul , Manan, publication/internet	Chalkboard

Total no of lecture 15

a



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. VISHAL SAWANT** DEPARTMENT**: BCOM (BANKING AND INSURANCE)**

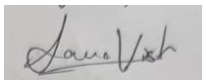
CLASS: **S.Y.B.B.I.** SEMESTER: **IV** MONTH: **DECEMBER- MARCH** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: To impart the practical knowledgeof Accountancy & Financial Management.

The learners will be able to : Develop unique Skills to solve practical problems of Accountancy & Financial Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Standard Costing	**UNIT-3: Introduction to Standard Costing** Various Types of Standards, setting of Standards, Basic Concepts of Material and Labour Variance Analysis	10	Manan Prakashan	Chalk-Board Method
Introduction to Marginal Costing	**UNIT-4: Introduction to Marginal Costing** Marginal Costing Meaning, Applications, advantages, limitations, Contribution, Breakeven analysis, Margin of Safety and Profit Valume Grapgh	10	Manan Prakashan	Chalk-Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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TEACHING PLAN (UNIT PLAN)

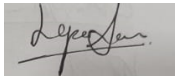
NAME OF THE STAFF : Sandra Shamir Almeida DEPARTMENT : BCOM(BANKING AND INSURANCE)

CLASS : SYBBI SEM : IV MONTH : DEC – MAR YEAR : 2019-20

LEARNING OBJECTIVE/S :

- The learners will be able to learn various aspects about Entrepreneurship Management and Business Planning.
- This subject is helpful to develop ENTRENERSHIP skills among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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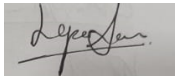
ENTREPRENEUR SHIP MANAGEMENT	**Module II :** **Business planning** ● Forms of entrepreneurial structures. ● Critical Factors for starting a new enterprise. ● Business plan	15	**INDUSTRIAL MANAGEMENT AND ENTREPRENEUR SHIP DEVELOPMENT -A.P. VERMA**	CHALK & DUSTER
	Module IV : **Evolving concepts in entrepreneurship** ● Social entrepreneurship ● Barriers to entrepreneurship ● Intrapreneurship ● Ethics and entrepreneurship ● Institutional support to entrepreneurs	15	**ENTREPRENEUR SHIP DEVELOPMENT -SANGEETA SHARMA**	CHALK & DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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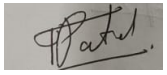
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL____ SUBJECT: FINANCIAL MANGEMENT DEPARTMENT: _BCOM (BANKING AND INSURANCE)__ CLASS: ____SYBBI____ SEMESTER: IV MONTH: __DECEMBER- JANUARY_ACADEMIC YEAR: ____2019-2020___

LEARNING OBJECTIVE/S:
The learners will be able to : The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1 Working Capital Management	Introduction, Meaning and Elements of Working Capital, Types of Working Capital	2	Financial Management By Ravi M Kishore	Chalk Board And Discussion Method
	Estimating Working Capital needs, Operating / Working capital Cycle, Factors affecting working capital, Statement of working capital	3		
	Practical Illustrations	5		
	Woking Capital Financing Trade credit, Bank Credit, Commercial Papers, Certificate of deposits, Financing	2		
	Practical Illustrations	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15__



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TEACHING PLAN (UNIT PLAN)

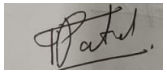
NAME OF THE STAFF:____TARIKA PATEL____ SUBJECT: FINANCIAL MANGEMENT DEPARTMENT: ____COMMERCE___

CLASS: ____SYBBI____ SEMESTER: _____IV_____ MONTH: __JANUARY__ ACADEMIC YEAR: ____2019-2020___

LEARNING OBJECTIVE/S:
The learners will be able to : The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Management of Components of Working Capital	A) Management of Cash and Marketable Securities Motives for holding cash, Objectives of Cash Management, Factors Determining cash needs	1	Financial Management By Ravi M Kishore	Chalk Board And Discussion Method
	Basic Strategies of cash management, Cash Management Techniques, Marketable securities and Cash management practices in India, Format of Cash Budget	2		
	Practical Illustrations	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __6_____



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TEACHING PLAN (UNIT PLAN)

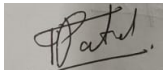
NAME OF THE STAFF:____TARIKA PATEL____ SUBJECT: FINANCIAL MANGEMENT DEPARTMENT: ____COMMERCE___

CLASS: ____SYBBI____ SEMESTER: _____IV_____ MONTH: __FEBRUARY_____ ACADEMIC YEAR: ____2019-2020___

LEARNING OBJECTIVE/S:
The learners will be able to : The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 3 Financial Planning	Introduction of Financial Planning, Meaning and Essentials of Budget, Objectives and Advantages & steps of Budgetary control	1	Financial Management By Ravi M Kishore	Chalk Board And Discussion Method
	Types of Budget Sales Budget (Practical Illustrations)	4		
	Flexible Budget (Practical Illustrations)	4		
	1) Production Budget (Practical Illustrations), 2) Manpower Budget (Practical Illustrations), 3) Purchase Budget (Practical Illustrations), Combined Budget (Practical Illustrations),	5		
	Other Types of Budget	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15___



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TEACHING PLAN (UNIT PLAN)

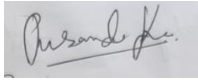
NAME OF THE STAFF: KAVITA VILAS PURANDARE DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: SYBBI

SEMESTER: IV SUBJECT: Corporate and Security law MONTH: November to March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Student will clear from the contemporary events happening in the commercial world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 : Company Law- An overview	• Development of company law in India • Doctrines governing corporates • Application of company law to banking and insurance	15	Why nation Fail – Daron Acemoglu and James Robinson	Board and chalk
UNIT 4 : The Depositories Act 1996	• Depository – Meaning, Benefits, Models, Functions participants • Depository Act 1996 – objective, elegibility condition • BSDA and single registration for depository participants	15	The Indian Constitutions – Granville Austin	Board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __30_____



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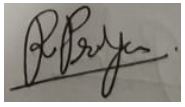
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Priyanka Devnath_Rajput DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: S.Y.B.B.I (DIV: A and B) SEMESTER: IV MONTH: NOVEMBER - MARCH ACADEMIC YEAR: 2019- 2020 SUBJECT: I.T.in Banking & Insurance-II

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of Online Banking, Technical innovations in Banking sector like Credit Score, Banking software, Clearing settlement, Application of Internet & MS-PowerPoint.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I E-banking Business Models	A) Various models- home banking, office banking.	05	Information Technology in Banking And Insurance -II By - Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) online banking, internet banking, Mobile banking	05		
	C) SMS banking- models of electronic payments, other business models.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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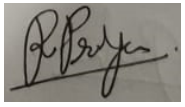
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Induction of Techno-Management	A) Development Life Cycle, Project Management, Building Data Centers, Role of DBMS in Banking, Data Warehousing and Data Mining, RDBMS Tools.	02	Information Technology in Banking And Insurance -II By - Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Technological Changes in Indian Banking Industry, Trends in Banking and Information Technology, Technology in Banking, Lead Role of Reserve Bank of India, New Horizons for Banking based IT, Automated Clearing House Operations	04		
	C) Electronic Wholesale Banking Credit Transfer, Credit Information Bureau (I) Ltd., Credit Information Company Regulation Bill- 2004, Automation in Indian Banks, Cheque clearing using MICR technology.	04		
	D) Innovations, Products and Services, Core-Banking Solutions (CBS), Human Resource Development (HRD)-The Road Ahead.	02		
	E) Technology in Banking Industry, Teleconferencing, Internet Banking, Digital Signature in Banking, MICR Facility for 'paper-based' clearing, Cheque Truncation.	03		
	F) Dealing with Fraudulent transactions under CTS, Efficient customer service, smart quill computer pen, Institute for Development & Research in Banking & Technology (IDRBT).	03		
	G) E-Checks-Protocols and Standards, Problems on mechanization, e-Banking-RBI Regulations & Supervision, Technology Diffusion.	02		



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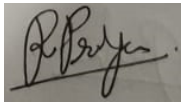
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III E-banking Business Models	A) Objectives, Electronic Commerce and Banking.	02	Information Technology in Banking And Insurance -II By - Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Banking Software, Electronic Clearing and Settlement Systems, Plastic Money.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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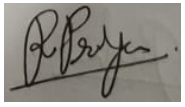
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV MS-Office: Packages for Institutional Automation	A) MS-PowerPoint presentation: Internal links between slides, hyperlinks, embedding multimedia content onto the slides, slide animation.	03	Information Technology in Banking And Insurance -II By - Rimple Sanchla and www.wikipedia.com	Board , Chalk, Duster and Computer (Ms-PowerPoint Software)
	B) Timer, creating new presentation by existing theme, import online themes, creating a template of presentation, saves and run the slide show.	03		
	C) Applications of Internet: Introduction to e-mail, writing professional emails, creating digitally signed documents, use of outlook express configuring outlook express, creating and managing profile in outlook.	04		
	D) sending and receiving e-mails via outlook express, Emailing the merged documents, boomerang facility of email, Google drive: usage of Google drive in storing the Google documents, excel sheets, presentations and PDF files.	05		
	Practical: - creating new presentation, creating a template of presentation, hyperlinks, slide animation, writing professional emails.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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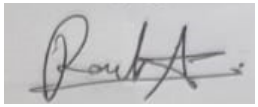
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ARUN RAUT DEPARTMENT: BCOM(BANKING AND INSURANCE) CLASS: SYBBI SEMESTER: IV MONTH: DEC-MAR ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Classify the cost on the different basis, prepare cost sheet and reconciliation statement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	1. CLASSIFICATION OF COST : Classification of cost on the basis of behaviour, function, element, traceability, etc. Cost center, Cost Unit, Profit center, 2. COST SHEET : Introduction of cost sheet, Format of cost sheet, Practical : Q. 1 & 2 Basic cost sheet, Q. 3 to 5 Cost sheet in detail, Q. 6 to 8 Estimated cost sheet. 3. RECONCILLATION STATEMENT : Introduction, format of reconciliation statement. Practical: Q1 – Q6 preparation of reconciliation statement., Q7- Q8 reconciliation statement with P&L A\C & Cost Sheet.	5 Lectures 12 12	Vipul Prakashan	CHALK & DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 29



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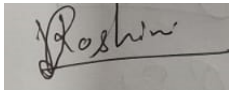
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Roshani Nagar Department: - BCOM (BANKING AND INSURANCE)
Class: - S.Y.BBI (A, B,) SEM: - IV MONTH-: Dec-Feb YEAR: -2019-2020

LEARNINIG OBJECTIVES: The learner will be able to know the life insurance policies & their various types. To know how does the insurance policies are beneficial to everyday life.

PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED
	MODULE:-I AN INTRODUCTION TO LIFE INSURANCE: - Life insurance of business, Principle pf risk pooling, Determination of risk pooling. Product of LIC, Traditional life insurance policy, Endowment Assurance, Riders in plan, On non-traditional life insurance product.	15 Lectures		Chalk & duster



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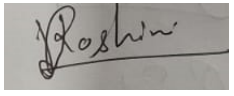
Foundation Course: -IV (An overview of Insurance Sector)	MODULE: -II AN INTRODUCTION TO HEALTH INSURANCE: - **Health insurance:** -IRDA regulations, determination of health insurance, Health insurance market in India and determination of Risk premium. **SBI & ICICI health insurance plan: -** Introduction & forms & procedures of hospitalization, Indemnity Products, top up covers, Cashless insurance, Senior citizen plans, critical illness plans & micro insurance.	10 Lectures		Chalk & duster



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Karishma Vijay Kale

DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: SyBbi- A, B SEMESTER: IV

MONTH: March ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Know about emerging method of Entrepreneur.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Chapter 1 The Entrepreneur	Entrepreneur : Meaning, nature, origin and development of entrepreneurship in India, Need and importance, core elements, principle, essential, types, function, concept of entrepreneurship management, motives behind being an entrepreneur, entrepreneurial process	7	Vipul Prakashan	Verbal and blackboard
	Theories of Entrepreneurship : Innovation theory of Schumpeter, need for achievement theory of McClelland, risk bearing theory knight, hagens theory of entrepreneurship, economic theory of entrepreneurship			
	Entrepreneur values and attitude, dominant characteristics of successful entrepreneur, internal and external factors for entrepreneurial motivation			

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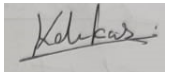
	Entrepreneurial skills, identifying business opportunity, role of creativity in entrepreneurship, the creative process, the innovation process, types of innovation, sources of innovation, principles of innovation, sources of business ideas.			
Chapter 3 Key areas of New Ventures	Marketing : New product development, marketing strategy for new venture, branding strategies, distribution strategies, pricing strategies, promotion strategies for new venture, concept of marketing mix and market segmentation, marketing plan. Operation : Size and location of enterprise, layout, inventory control, quality control Finance : Sources of long term and short term finance, debt fund and equity fund: meaning , merits and limitations, concept of break-even analysis, venture capital : meaning, merits and limitations, criteria for evaluating new venture proposal by venture capitalist Human resources : Personnel function, important labor laws: industrial dispute act, factories act, provident fund act, employee state insurance act, payment of wages act, minimum wages act, payment of gratuity act, other related acts and role of HRD in new ventures.	7	Vipul Prakashan	Verbal and blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___14_____



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TEACHING PLAN (UNIT PLAN)

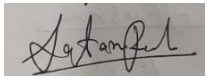
NAME OF THE STAFF: Rohan D. Satam

DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: SYBBI SEMESTER:IV MONTH: December 2019

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: Learning about Security Analysis and Portfolio Management
The learners will be able to : Students will be able to learn theory and practical of Security Analysis and Portfolio Management

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course – IV	**1. An Introduction to Home and Motor Insurance** 🎬 A) Home Insurance - SBI and ICICI Plans – Introduction, Forms and Procedures, Inclusions and Exclusions in policies, Determinants of Risk Premium and Impact of Catastrophes on Home Insurance. B) Vehicle Insurance- SBI and ICICI Plans-Introduction, Forms and Procedures, Determinants of Risk Premium, Inclusions and Exclusions	10	Vipul and Seth publication	Chalk - Board.
	2. **Role of Insurance in Logistic** 🎬A) Role of Insurance in Logistic - Meaning &Importance, Hazards, Protection, Social Security – Type of Risks and Accidents. B) Fire Insurance – SBI and ICICI Plans – Introduction, Forms and Procedures,	10	Vipul and Seth publication	Chalk - Board



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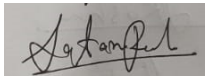
	Standard Fire and Special Perils Policy, Tariff system and special policies.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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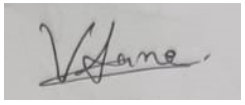
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHAKHA SANE DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: SYBBI(BUSINESS ECONOMICS II) SEMESTER: IV MONTH: NOV ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1,2,3 AND 4	1. Introduction to Macroeconomic data and theory: Macroeconomics:meaning,scope and importance Circular flow of income and expenditure:Closed and open economy. The measurements of national product:Meaning and importance,concepts Short run economic fluctuation:features and phases of trade cycle. Keynesian principle of effective demand.	15	MACRO ECONOMICS BY H.L AHUJA MODERN ECONOMICS BY H.L.AHUJA	CHALK AND DUSTER
	2. Money inflation and Monetary policy: Money supply:Determinants of Money supply-Factor influencing velocity of circular flow of money.	15		



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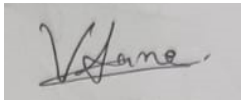
	Demand for Money:Classical and Keynesian approach Money and Prices:Quantitative theory of money Inflation:Demand pull and Cost push inflation Monetary Policy:Meaning objective and instruments.			
	3. Constituents of fiscal policy: Role of Government:Principles of sound and functional finance. Fiscal Policy:Meaning and objectives Instrument of fiscal policy Union Budget	15		
	4. Open economy:Theory and issues of international Trade Basis of Foreign Investment Foreign Investment Balance of Payments	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___



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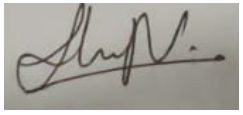
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF NAZIA SAJID SHAIKH_ DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: TYBBI SEMESTER: SEM V MONTH: JUNE TO OCT ACADEMIC YEAR: 2019-2020. SUB: RESEARCH METHODOLOGY.

LEARNING OBJECTIVE/S: The learners will be able to: Understand Research , Types of Research, Hypothesis , Research Design, Sampling, Data collection and processing, Survey Instrument.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
***MODULE 1. INTRODUCTION TO RESEARCH.**	***Research:** Meaning, Objectives, important of research, Research process, Characteristics of Good Research. ***Hypothesis :** Meaning, Importance, Types and Sources. ***Research Design:** Meaning, Importance, Steps, Scope & Essential of Good research. ***Sampling :** Meaning , Methods of Sampling.: Probability Sampling Non-Probability Method.	**10**	**Regression Modelling Strategies: Frank Harell.**	**Chalk and Duster**
MODULE 2.DATA COLLECTION AND PROCESSING	***Types of Data and Sources:** Primary and Secondary Data Sources. ***Methods of collection of Primary Data:** Observation , Experiment, Interview , Survey. ***Survey Instrument:** Questionnaire : Types of questions , Scaling techniques.	**15**		



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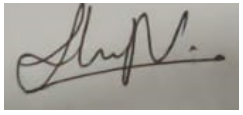
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___25_____



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TEACHING PLAN (UNIT PLAN)

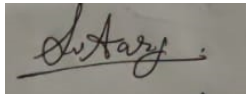
NAME OF THE STAFF: AARADHANA R SINGH SUB: STRATEGIC MANAGEMENT DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: TYBBI (A & B) SEMESTER: V MONTH: JUNE TO DECEMBER

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES:
The learners will be able to:

- Understand Strategic management and its various aspects including levels & Process of Strategic Management plus principles of good strategy
- Get insight on how to frame good strategies for a business
- Interpret different business environments that affect strategies

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-1 Strategic Management an Overview	STRATEGIC MANAGEMENT: Definitions, Strategic Decision Making, Levels of Strategic Management, Process of Strategic Management PRINCIPLES OF GOOD STRATEGY-elements of strategic management MODELS OF STRATEGIC MANAGEMENT.	08	Strategic planning formulation of corporate strategy by Ramaswamy	Chalk, Board and Discussions



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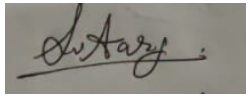
Unit 3-Levels of Strategies and Analysis Corporate Level Strategies	LEVELS OF STRATEGIES AND ANALYSIS Corporate Level Strategies- Concentration, Integration and Diversification, Internationalization, Digitization. PROCESS OF STRATEGIC CHOICE FACTORS OF STRATEGIC CHOICE STRATEGIC ANALYSIS.	10		Chalk, Board and Discussions
Unit 5- Strategic Evaluation and Control Standards	STRATEGIC CONTROL- Setting Standards, Comparison, Control Process, Systems, Approaches, Techniques of Evaluation and Control. ROLE OF INFORMATION SYSTEM.	05		Chalk, Board and Discussions

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 23



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TEACHING PLAN (UNIT PLAN)

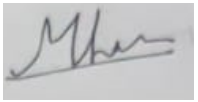
NAME OF THE STAFF:Prof Mezbin Lalani DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: T.Y.Bcom(BBI)

SEMESTER: V (Financial Reporting and analysis) MONTH: June-Sept ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: to understand the need of analysis of financial statements
The learners will be able to : understand the cash flow statement and know the ethical behaviour of accountants.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Cash flow statement and ethical behaviour and implications for accountants.				
	Cash flow statement as per AS3 ,ethical behaviour,,importance of ethics in accounting profession.	12	Management accounting (khan & jain)	Chalk duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____12__



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TEACHING PLAN (UNIT PLAN)

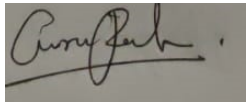
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Strategic Management DEPARTMENT: BCOM(BANKING AND INSURANCE)

CLASS:TYBBI SEMESTER:V MONTH: June-July ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Strategic Management Environment	Importance of Politics in Strategic Management, Social ,Political And Technological Forces	3	Management Policy and Strategic Management (Concepts, Skills and Practices) , R.M.Shrivastava	Chalk and Board,Discussion
	National and Global Business Environment	3		
	Components of Environment, Environmental Scanning,	2		
	Analysis of Strategies and Choice of Best Strategy, SWOT	2		
	Ethics, Social Responsibility, Impact of Legal Factor in SM	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

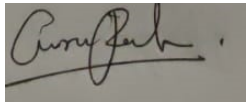
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Strategic Management DEPARTMENT: Commerce

CLASS:TYBBI SEMESTER:V MONTH: August -Sept ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV & V Activating Strategy Implementation	Process and Nature of Strategy implementation	3	Management Policy and Strategic Management (Concepts, Skills and Practices) , R.M.Shrivastava	Chalk and Board ,Discussion
	Barriers of Strategy implementation	3		
	Models of Strategy implementation	2		
	Standard, Benchmarking , Gap Analysis	2		
	Features, importance , barriers and type of evolution	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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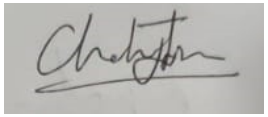
NAME OF THE STAFF Jinal Chohan_____ DEPARTMENT: _BCOM((BANKING AND INSURANCE)____

SEMESTER: _____5_____ MONTH: ___july to december___ ACADEMIC YEAR: _____2019-20____

LEARNING OBJECTIVE/S:
The learners will be able to : _learn regarding the different financial services in details.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2. Mutual funds and factoring and forfeiting	Mutual funds - introduction, structure, classification of mutual funds , AMFI objectives, advantages and disadvantage of mutual funds , NAV calculation and pricing of mutual funds, mutual funds abroad , mutual funds in India	6	Vipul Prakashan	Chalk and Board
	Factoring and forfeiting- Meaning, terms and conditions, modus operandi,types , cost , factoring vs forfeiting, factoring in India , international factoring,working , benefits, edi factoring	6	Vipul Prakashan	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____12_



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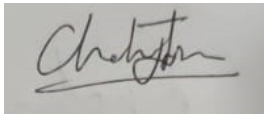
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4. Housing finance and consumer finance	Housing Finance- introduction, housing finance industry, housing finance policy, sources of funds , market for housing finance in India,growth finance , housing finance institutions, national housing bank	6	Vipul Prakashan	Chalk and Board
	Consumer finance - introduction, sources ,types consumer finance, mechanics , terms,pricing, marketing, consumer credit	6	Vipul Prakashan	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____12



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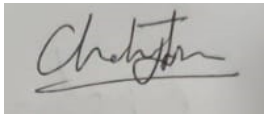
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
DEPOISTERS	overview, key features , Depository,bank analogy ,legal framework, eligibility criteria, agreement, rights and obligations, record to be maintained by depositories	7	Vipul Prakashan	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____07_



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Claretta Elias Lopes DEPARTMENT: BCOM (BANKING AND INSURANCE)

CLASS T.Y.BBI SEMESTER: V MONTH :July to october ACADEMIC YEAR: 2019-20

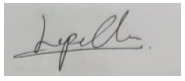
LEARNING OBJECTIVES:-
The learners will be able to: to understand the financial services and its importance.

The learners will be able to: to understand the securitization of debts and its benefits available to banks and its customer.

The learners will be able to: to understand the merchant banking and commercial banking services available in India.

The learners will be able to: to understand the difference between pledge, hypothecation and mortgage and its uses for the purpose of banking transactions.

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial service management – Unit I, III, and V	**Unit I:- Introduction to Financial Services** **Financial Services** Meaning - Classification - Scope - Fund Based Activities - Non-Fund based Activities -Morden Activities - Sources of Revenue - Need for Financial innovation - w Financial Products and Services Innovative Financial instruments - Challenges Facing the Financial Sector	12	Text Book Internet	Chalk and Blackboard system



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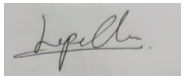
	Merchant Banking: Definition - Origin - Merchant Banking in India - Merchant Banks and Commercial Banks - Services of Merchant Banks - Qualities of Merchant Bankers in Market Making Process - Progress of Merchant Banking in India - Problems - Scope of Merchant Banking in India.			
	Unit III:- Securitisation of Debts and Derivatives **Securitisation of Debt** Meaning and Definition of Securitization - Securitization v/s Factoring - Modus Operandi - Role of Merchant Bankers - Role of other Parties - Securitization Structure - Securitisable Assets, Benefits of Securitization - Conditions for successful Securitization - Securitization Abroad - Securitization in India - Reasons for Non popularity of Securitization - Future Prospects of Securitization. **Derivatives:** Meaning - Types of Financial Derivatives - Options - Futures Forwards - Swaps - Futures and Options Trading System - Clearing Entities and their Role.	12	**Text book**	Chalk and Blackboard system



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	Unit V – Depositor and pledge **<u>Pledge and Hypothecation:</u>** Pledge and Hypothecation - Procedure for Pledge / Hypothecation- Procedure of Confirmation of Creation of Pledge / Hypothecation by Pledgee - Closure of Pledge / Hypothecation by Pledgor - Invocation of Pledge by Pledgee.	6	**Text book**	Chalk and Blackboard system

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TEACHING PLAN (UNIT PLAN)

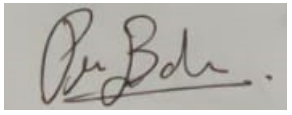
NAME OF THE STAFF: BHAKTI VILAS PURANDARE DEPARTMENT: BCOM(Banking & Insurance) CLASS: TYBBI SEMESTER: V

SUBJECT: RESEARCH AND METHODOLOGY MONTH: JUNE TO NOVEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : understand data processing and analysis, hypothesis, correlation and regression, and writing of research report with essentials.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Data Analysis and interpretation:	* processing of data – editing coding tabulations, * analysis of data. * Essentials importance of data interpretation. * testing of hypothesis – one sample, T test, ANOVA, F test, chi square test.	20		Chalk and board
Advanced statistical techniques:	* Introduction characteristics and applications of – correlation and regression, factor analysis, cluster analysis, discriminant analysis, multidimensional scaling.	20	Regression modelling strategies- Frank Harrell	Chalk and board
Research report:	* report writing - meaning, importance, structure, types, process and essentials of good report.	05		Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___45_____



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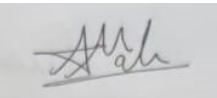
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Abhishek Madaye DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: T.Y.B.B.I
SEMESTER: V MONTH: OCT TO DEC ACADEMIC YEAR: 2019-2020
LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concepts of Auditing and different auditing techniques i.e: Vouching and Verification

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
III- Auditing techniques and Internal Audit Introduction	**Internal control:** meaning and purposes, review of internal control,advantages, auditors duties, inherent limitations of internal control, internal control samples for sales and debtors,purchases and creditors,wages and salaries.internal checks Vs internal control,internal checks v/s test checks Internal Audit: meaning, basic principles of establishing internal Audit, objectives,evaluation of internal audit by statutory auditor,usefulness of internal audit,internal Audit V/S external Audit,internal checks V/S internal Audit	08	TextBooks and Reference material from Internet	PPT, WORD



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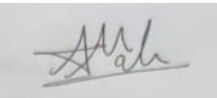
IV	**Audit of Income:** Cash Sales , sale on approval, consignment sales , sales return recovery bad debts written off,rental receipts, interest and dividends received,royalties received. **Audit of Expenditure: Purchases, purchases return, salaries and wages,rent, insurance premium,telephone expenses,postage and couriers,petty cash expenses,travelling commission,advertisement,interest expenses**	15	TextBooks and Reference material from InterneT	PPT, WORD
V	**Audit of Assets Book debts/debtors,stocks:** **Auditors general duties,patterns,dies and loose tool,spare parts,empties and containers,quoted investments and unquoted investments,trademarks copyrights,patents,know-how,plant and machinery,land and building,furniture and fixture** **Audit of liabilities: outstanding expenses,bills payable,secured loans,unsecured loans,contingent liabilities.**	15	Text Books and Reference material from Internet	PPT, WORD



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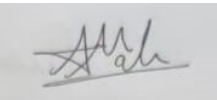
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___38_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL REPORTING & ANALYSIS

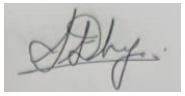
DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: TYBBI SEMESTER: V MONTH: JUNE, JULY

ACADEMIC YEAR: 2019-2020 LEARNING OBJECTIVE/S:

The learners will be able to : Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 FINAL ACCOUNTS OF BANKING COMPANY	Legal provision in Banking Regulation Act, 1949 relating to Accounts, Statutory reserves including Cash Reserve and Statutory Liquidity Ratio.	2	FINANCIAL ACCOUNTING BY R L GUPTA	• Chalk • Board • Discussion • Examples
	Bill purchase and discounted, rebate of bill discounted, Non–performing assets and Income from non–performing assets.	4		
	Classification of Advances, standard, sub–standard, doubtful and provisioning requirement.	2		
	Final Accounts in prescribed form	1		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL REPORTING & ANALYSIS DEPARTMENT: COMMERCE

CLASS: TYBBI SEMESTER: V MONTH: JULY, AUGUST ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 FINAL ACCOUNTS OF INSURANCE COMPANY	Preparation and Presentation of Corporate Final Accounts for Insurance Companies	3	FINANCIAL ACCOUNTING BY R L GUPTA	• Chalk • Board • Discussion • Examples
	Final Accounts in accordance with Insurance Legislation	1		
	Study of Accounting Policies from Annual Reports of Listed Insurance Companies	2		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 12

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TEACHING PLAN (UNIT PLAN)

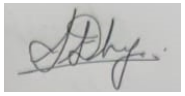
NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL REPORTING & ANALYSIS DEPARTMENT: COMMERCE

CLASS: TYBBI SEMESTER: V MONTH: JULY, AUGUST ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 PREPARATION OF FINAL ACCOUNTS OF COMPANIES	Relevant Provisions of Companies Act related to Preparation of Final Account (excluding cash flow statement)	2	FINANCIAL ACCOUNTING BY R L GUPTA	• Chalk • Board • Discussion • Examples
	Preparation of Financial Statements as per Companies Act. (excluding cash flow statement)	3		
	AS 1 in Relation to Final Accounts of Companies (Disclosure of Accounting Policies)	1		
	Practical Illustrations	6		
UNIT 5 INTRODUCTION TO IFRS	Introduction to IFRS, List of Accounting Standards in India, List Of IFRS	1		
	IFRS 1 – Objective, Scope, definition, recognition and measurement, reconciliation, interim financial report, Use of deemed cost and exceptions to retrospective application of other IFRS	4		
	IFRS 2 - Objective, Scope, definition, recognition, equity settled share based transaction, treatment of vesting condition, determining fair value of equity instruments, cash settled share based transaction, disclosures	3		



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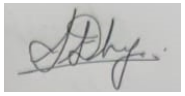
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 3 & UNIT 5: 20



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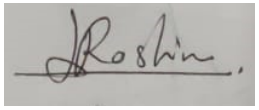
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Roshani Nagar DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: TYBBI A and B SEMESTER : SEM V

MONTH: OCT, NOV AND DEC ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : To study international Banking, crypto currency. To study NRI and NRE account and LIBOR

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. International Banking Operations.	Introduction, Definition, Features of International Banking, Reasons for Growth of International Banking, Recent Trends in International Banking,	3	Chandra Iy er	Chalk and board method
	Emergence of Crypto currency - Overview, Brief Overview of Bitcoin and other Crypto, Currencies, Note on Mining and Crypto Currency Exchanges, Advantages, Disadvantages of Crypto Currency.	3		Chalk and board method
	Functions of International Banking, Correspondent Banking, International Payment Systems, NRI accounts, Export Finance, Import Finance, International. Merchant Banking, Financing Project Exports, Derivative Offering, Remittances.	4		Chalk and board method



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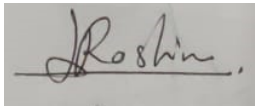
	International Lending Operation, Loan Syndication, Parties Involved, Phases /Stages in Loan Syndication, Types of Syndication, Role of LIBOR	4		Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14



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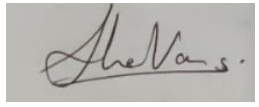
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: vasanthi shenoy DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: TY(BANKING AND INSURANCE) (IBF) SEMESTER: V MONTH:AUGUST TO DECEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: The learners will be able to understand fundamentals of international finance, international capital markets, foreign exchange markets concepts features and international banking operations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	UNIT 2 - Types of Capital Flows, FDI, FPI, FII Euro Currency Markets, Origin and Reasons of growth, a Brief Understanding of Eurocurrency Deposit, Loans Bonds and Notes Market ,Concept of Offshore Banking. International Equity Markets, Concept of Depository Receipts, GDR, Characteristics, Mechanism of Issue, Participants Involved, ADR, Types and Characteristics, Concept of IDR. International Bond Market, Concepts of Domestic Bond, Concept and Types of Foreign Bonds, Concept and Types of Euro Currency Bonds, Concepts of Foreign	12		Chalk and board method



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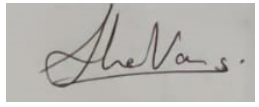
	Currency Convertible and Foreign Currency Exchangeable Bonds, Participatory Notes.			
	UNIT 3 - Introduction, Market and Market Participants, Foreign Exchange Management in India, Retail and Whole Sale Component of Indian Foreign Exchange Market, Role of FEDAI, FEMA and Regulatory Framework, Dealing Room Operations.	12	International Banking Operations- IIBF- MacMillan Publishers, 2007	Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36



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TEACHING PLAN (UNIT PLAN)

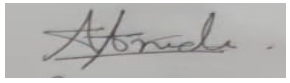
NAME OF THE STAFF: Ankita Almeida DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: TYBBI (A,B) SEMESTER: VI

MONTH:Dec-April

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of effective learning, leadership skills and self- improvement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. An Overview of Central Banking. 2.	**Overview :** Concept of Central Banking, Institutional Growth of Central Banking, the changing face of Central Banking. **Role of Central Banks:** Determination of Goals, Inflation Targeting, Exchange Rate Targetting, Money Supply Targetting, Money Growth Targetting, Viable Alternatives to Central Bank, Central Banking in India. Contemporary Issues, Autonomy and Independence, Creditibility, Accountability and Transparency of a Central Bank.	08	Vipul Prakashan	Chalkboard



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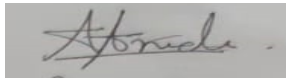
RBI as the Central Bank of India.	**Policy Framework for RBI:** Organizational Framework, **Operational Framework**- Role as a Central Banker, Promotional Role of RBI, Regulatory Role of RBI. RBI and Monetary Policy. **Macroeconomics Policies**: Meaning and Objectives. **Monetary Policies**: Meaning and Objectives. **Monetary Policy in India**: Goals, Targets, and Instruments. A brief overview of Fiscal Policy, striking balance between inflation and growth through Monetary and Fiscal policies.	08	Vipul Prakashan	Chalkboard
5. Central Banking in Cyber World				
	E-Banking, E-Money, IT Induced Changes and Monetary Policy, E-Payments, Risk in New IT Era, Impact of IT, Globalization and Central Banks.	04	Vipul Prakashan	Chalkboard



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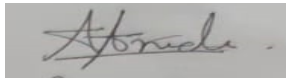
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH Sub: HUMAN RESOURCE MANAGEMENT

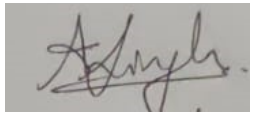
DEPARTMENT: BCOM (Banking and Insurance)CLASS: TYBBI(B) SEMESTER: VI MONTH: DECEMBER TO MARCH

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES:
The learners will be able to:

- Understand Human resource management and its various aspects including selection, recruitment, E-selection etc
- Get insight on how human resource planning, job analysis and job design is done in big MNC's.
- Interpret the difference between transfer and promotion and the benefits of performance evaluation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-1 Framework of Human Resource Management	INTRODUCTION TO HRM- Nature of HRM, Scope of HRM, Functions and Objectives of HRM HRM POLICIES AND PRACTICES ROLE AND FUNCTIONS OF HR MANAGER (in Banking and Insurance Sector) HRM AND STRATEGIES STRATEGIC FUNCTION OF HRM	05	Human resource management by Gary Dessler	Chalk, Board and Discussions



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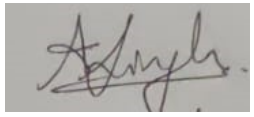
Unit-2- HR Procurement Job Analysis and Design	UNDERSTANDING AND IMPLEMENTING GLOBAL COMPETITIVENESS AND HR- strategic HR, Linkages of Organizational and HR Strategies.			
	JOB ANALYSIS-Introduction, Importance, Purpose , Benefits JOB EVALUATION COMPETENCY BASED JOB ANALYSIS JOB DESIGN-Introduction, Characteristics, Factor Affecting Job Design JOB SATISFACTION.	10		Chalk, Board and Discussions
Unit 3-HR Planning and Recruitment	HR PLANNING-Definition, Objectives, Need and Importance of HR Planning, PREPARING MANPOWER INVENTORY. PROMOTIONS AND TRANSFERS. RECRUITMENT- Strategic Approach to Recruitment, Recruitment Source; Internal and External SELECTION PROCEDURE.	08		Chalk, Board and Discussions

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 23



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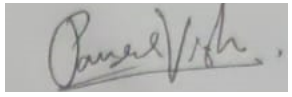
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____VISHWANATH V. PAWAR____ SUBJECT: AUDITING II DEPARTMENT: __BCOM (BANKING AND INSURANCE)_

CLASS: ____TYBBI____ SEMESTER: _____VI____ MONTH: __DEC- APRIL__ ACADEMIC YEAR: ____2019-2020___

LEARNING OBJECTIVE/S:
The learners will be able to : To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	**Audit of Limited Companies** Qualifications, Disqualifications, Appointment, Removal, Remuneration of Auditors, Audit Ceiling, Status, Power, Duties and Liabilities of Auditors, Branch Audit, Joint Audit, Special Audit. Maintenance of Books of Account –Related Party Disclosures, Segment Reporting, Divisible Profit, Dividend and Depreciation , Types of Reports/Opinion.	5	SACHIN BHANDARKAR & SANDEEP GUPTA	Chalk Board And Discussion Method
UNIT 2	**Audit of Banking Companies**	5	SACHIN BHANDARKAR &	Chalk Board And Discussion Method



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UNIT 3	Introduction of Banking Companies, Form and Content of Financial Statements, Qualifications of Auditor, Appointment of Auditor, Remuneration of Auditor, Power of Auditor, Auditor's Report, Format of Audit Report, Long Form Audit Report, Conducting an Audit, Initial Consideration by Statutory Audit, Internal Control System, Verifications of Assets and Balances		SANDEEP GUPTA	
UNIT 4	**Audit of Insurance Companies** Audit of Companies carrying General Insurance Business, Audit of Companies carrying Life Insurance Business, Applicability of Accounting Standards (AS 3, 4,9,13,17), Books and Registers to be maintained, Submission of Reports and Returns, Audit of Accounts, Preparation of Audit and Internal Controls	7	SACHIN BHANDARKAR & SANDEEP GUPTA	Chalk Board And Discussion Method
UNIT 5	**New Areas of Auditing** Introduction to Cost Audit, Human Resource Audit, Management Audit, Operational Audit, Forecast Audit, Social Audit, Tax Audit, Forensic Audit and Environmental (Green) Audit. Audit in an EDP Environment, Introduction, General Approach to EDP Based Audit and Special Techniques for Auditing in an EDP Environment	3	SACHIN BHANDARKAR & SANDEEP GUPTA	Chalk Board And Discussion Method

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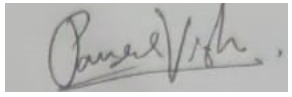
	Professional Ethics and Misconduct Introduction, Meaning of Professional Ethics Meaning of Professional Misconduct, Schedules to the Chartered Accountants Act, 1949 Relating to Professional Misconduct, Enquiry into Charges of Misconduct of Chartered Accountants.	4		Chalk Board And Discussion Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___24



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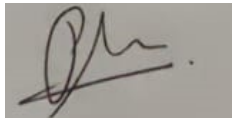
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: BCOM (Banking and Insurance) CLASS:TYBBI SUBJECT: SECURITIES ANALYSIS AND PORTFOLIO MANAGEMENT SEMESTER: VI MONTH: DECEMBER 2019- APRIL 2020 ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE/S: The learners will be able to :
TO MEASURE THE RISK AND RETURN OF THE PORTFOLIO OF A COMPANY AND TO SELECT AN OPTIMUM PORTFOLIO.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
SECURITIES ANALYSIS AND PORTFOLIO MANAGEMENT	1. PORTFOLIO MANAGEMENT- AN INTRODUCTION AND PROCESS	12	SHETH , VIPUL PRAKASHAN	CHALK AND BLACKBOARD, GROUP DISCUSSION
	2. PORFOLIO MANAGEMENT VALUATION -PORFOLIO REVISION, BOND VALUATION	7		
	- PORTFOLIO EVALUATION	5		
	3. EFFICIENT MARKET THEORY	6		
	- CAPM	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 36



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TEACHING PLAN (UNIT PLAN)

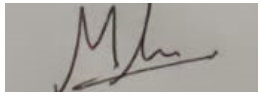
NAME OF THE STAFF: Prof Mezbin Lalani DEPARTMENT: Commerce CLASS: T.Y.Bcom(BBI)

SEMESTER: VI (SAPM) MONTH: Dec-April2020 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: to understand about management of portfolio.
The learners will be able to : understand various investment alternatives and the management of portfolios.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Fundamental Analysis				
2.Technical analysis	Economy, industry,company analysis, various important ratios for the company and investors, practical sums	12	Investment analysis and management Mcgraw	Chalk and duster
3.Efficient market theory	Meaning, types of charts and chart patterns,technical theories	12		
	Random walk theory, efficicient market theory	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30_



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: BCOM (banking and Insurance) SUBJECT: HUMAN RESOURCE MANAGEMENT CLASS: TYBBI (A) SEMESTER: VI MONTH: December-February ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: The learners will be able to : Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 1: Framework of Human Resource Management	1. Introduction to HRM, Nature of HRM, Scope of HRM, Functions and Objectives of HRM, HRM Policies and Practices, Role and Functions of HR Manager (in Banking and Insurance Sector)	10	HRM-Vipul Prakashan, Seth Publication	Lecture method, Discussion method, participation method
	2. HRM and Strategies: Strategic function of HRM, Understanding and Implementing Global Competitiveness and HR, strategic HR, Linkages of Organizational and HR Strategies.	5	HRM-Vipul Prakashan, Seth Publication	Lecture method, Discussion method, participation method
Module 2: HR Procurement	1. Job Analysis and Design- Job Analysis, Introduction, Importance, Purpose , Benefits, Job Evaluation, Competency Based Job Analysis	5	HRM-Vipul Prakashan, Seth Publication	Lecture method, Discussion method, participation method
	2. Job Design- Introduction, Characteristics, Factor Affecting Job Design, Job Satisfaction.	5	HRM-Vipul Prakashan, Seth Publication	Lecture method, Discussion method, participation method
Module 3: HR Planning and Recruitment	1.Definition, Objectives, Need and Importance of HR Planning, Preparing Manpower Inventory. Promotions and Transfers.	5	HRM-Vipul Prakashan, Seth Publication	Lecture method, Discussion method, participation method
	2. Recruitment- Strategic Approach to Recruitment, Recruitment Source; Internal and External, Selection Procedure.	5	HRM-Vipul Prakashan, Seth Publication	Lecture method, Discussion method, participation method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35

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TEACHING PLAN (UNIT PLAN)

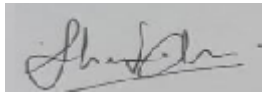
NAME OF THE STAFF : Sandra Shamir Almeida DEPARTMENT : BCOM (Banking and Insurance)

CLASS : TYBBI (A & B) SEM : VI MONTH : DEC – MAR YEAR : 2019-20

LEARNING OBJECTIVE/S :

- The learners will be able to learn various aspects about Business, Leadership and how to handle industrial sickness
- This subject is helpful to develop Turn around Management skills among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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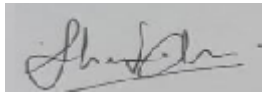
TURN ARROUND MANAGEMENT	**MODULE I : INTRODUCTION TO BUSINESS** ● Meaning,Definition,Importance,features,symptoms,types of Business Organaisation ● Different approaches for growth and survival: ● Internal and External ● External strategies ● Survival Strategies	10	**TURNAROUND MANAGEMENT -TOM LENAHAN**	CHALK & DUSTER



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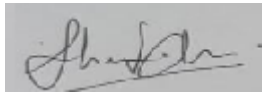
	MODULE II : INDUSTRIAL SICKNESS ●Meaning and Internal/External reasons of Industrial sickness. ● Symptoms of Industrial sickness. ● Measures to overcome sickness by government and stake holders. ● Roll of BIFR in sick industry	15	**THE TURNAROUND MANAGER'S HANDBOOK -RICHARD'S SLOMS**	CHALK & DUSTER



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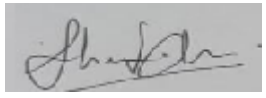
	MODULE V : LEADERSHIP AND TURNAROUND MANAGEMENT ●Out fitting the management team, the management team personal characteristic, focusing on present operations, focus on needs in turnaround management as a skill.	**08**	**TURNAROUND MANAGEMENT JOURNAL -1ST ISSUE 2011**	CHALK & DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 33



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NAME OF THE STAFF Jinal Chohan_____

DEPARTMENT: BCOM (Banking and Insurance)____

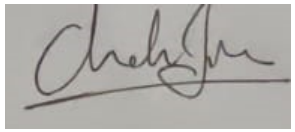
SEMESTER: _____6____ **SUBJECT - HRM**

MONTH: ___DECEMBER TO APRIL___

ACADEMIC YEAR: _____2020-21_____

LEARNING OBJECTIVE/S:
The learners will be able to : _Understand the topic , learn about the things in detail, making the subject easy to understand .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HRM SEM VI TYBBI	3 HR Planning and Recruitment Definition, Objectives, Need and Importance of HR Planning, Preparing Manpower Inventory. Promotions and Transfers. Recruitment- Strategic Approach to Recruitment, Recruitment Source;	8	Vipul Prakashan	Blackboard and Chalk



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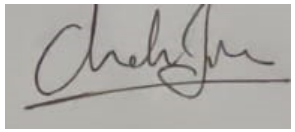
	Internal and External, Selection Procedure.			
	4 Training and Development Employee Training and Development - Nature and Process of Training, Training methods, On the job, Off the job. Management Development Program, Performance Appraisal -Definition, Methods. Advantages and Limitations of Appraisal.	8	Vipul Prakashan	Blackboard and Chalk
	5 Compensation Meaning, Need and Importance, Current Trends in Compensation, Team Based Incentives, Pension Schemes with Reference to Banking and Insurance, Fringe Benefits, Perquisites, Allowances and other Non – Monetary Benefits Voluntary Retirement Scheme - Concept, Types, Needs, Effects with reference to Banking and Insurance Participative Management Meaning, Levels, Types, Employee Welfare, Comparative Study of Working	8	Vipul Prakashan	Blackboard and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____24_____



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TEACHING PLAN (UNIT PLAN)

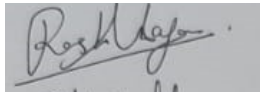
NAME OF THE STAFF : Dr Roshani Nagar DEPARTMENT : BCOM (Banking and Insurance)

CLASS : TYBBI (A & B) SEM : VI MONTH : DEC – MAR YEAR : 2019-20

LEARNING OBJECTIVE/S :

- The learners will be able to learn various aspects about Business, Leadership and how to handle industrial sickness
- This subject is helpful to develop Turn around Management skills among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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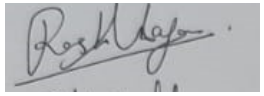
TURN ARROUND MANAGEMENT **3 Turnaround Management Strategies**	Turnaround – Meaning, Definition, Indicators of Successful Turnaround • TQM and Restructuring. • Selling of a sick unit • BPR - Meaning, Definition, Elements, Need, Implications -	08	**TURNAROUND MANAGEMENT -TOM LENAHAN**	CHALK & DUSTER
	Approaches (Reengineering Team, BPR Leader, Process Owner, Kaizen, Flow Chart, 5S principles, Process Mapping)	10	**THE TURNAROUND MANAGER'S HANDBOOK -RICHARD'S SLOMS**	CHALK & DUSTER



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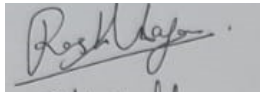
4 Business Scenario	Features, Advantages, Disadvantages, Types and Present Status of: • Outsourcing • Networking • Franchising • Free lancing • Self-Financing • Start up	**08**	**TURNAROUND MANAGEMENT JOURNAL -1ST ISSUE 2011**	CHALK & DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 26



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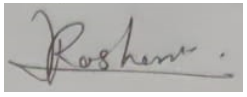
CV B
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Roshani Nagar DEPARTMENT: BCOM (BANKING AND INSURANCE) CLASS: TYBBI (A,B) SEMESTER: VI

MONTH:Dec-April ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of effective learning, leadership skills and self- improvement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Supervisory Role of RBI **4 Central Bank in other Countries**	Regulation and Supervision: Need for Regulation and Supervision, Banking Regulation Act, 1949, Banking Regulation and Supervision, Functions of the Department of Supervisory, Regulations Review Authority, Unified Regulator v/s Multiple Regulators. RBI – On-site Inspection and Off-site Monitoring and Surveillance: The Core Principles for Effective Supervision – On-site Examination – Off-site Surveillance – On-site Inspection and Off-site Monitoring in India – Off-site Monitoring in Different Countries – Computerized Off-site Monitoring and Surveillance	08	Vipul Prakashan	Chalkboard



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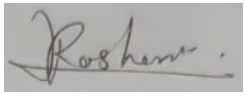
	(OSMOS). RBI and Financial System, Introduction, Functions,			
	Characteristics of Financial System, Role of RBI in Regulating Financial System and Financial Sector Reforms. Federal Reserve System – Bank of England – The European Central Banking, Bank of Japan, Peoples Bank of China Interconnectivity of Central Banks with Other International Financial Institutions, ADB, IMF, World Bank, and BIS,(Objectives, Role and Functions)	08	Vipul Prakashan	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: B.COM(Accounting&Finance) CLASS: FYBAF (A,B & C)
SEMESTER: I MONTH: JUNE TO DECEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the meaning of business and different types of business environments.
- Get knowledge of environmental analysis through PESTEL Analysis, SWOT Analysis
- Interpret foreign trade in India, Balance of Trade, FDI Investment Flows and its Implication for Indian Industries.
- Know in detail about WTO, MNC's and TNC's.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit1-Business and its Environment	BUSINESS- Business Objectives, Dynamics of Business and its Environment, Types of Business Environment ENVIRONMENTAL ANALYSIS: Importance, Factors, PESTEL Analysis, SWOT Analysis	12	Global Economy and business environment by Francis Cherunilam	Chalk, Board and Duster

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Unit-4International Environment	STRATEGIES FOR GOING GLOBAL: MNCs and TNCs, WTO FOREIGN TRADE IN INDIA- Balance of Trade, FDI Investment Flows and its Implication for Indian Industries.	12		Chalk, Board and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

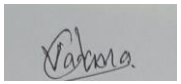
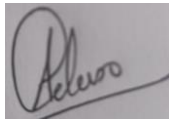
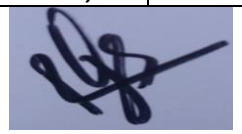
NAME OF THE STAFF: CHETAN PRAKASH VARMA DEPARTMENT: B.COM(Accounting & Finance) CLASS: FYBAF DIVISION C

SEMESTER: I MONTH: AUG- DECEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

To make student understand the concepts of business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics -I	**Introduction** **Scope and Importance of Business Economics** - basic tools- Opportunity Cost principle- Incremental and Marginal Concepts. Basic economic relations - functional relations: equations- Total, Average and Marginal relations- use of Marginal analysis in decision making.	2	*Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases (S. Chand & Sons, N. Delhi, 2000)* • *Salvatore, D.: Managerial Economics in a global economy*	CHALK AND BLACK BOARD

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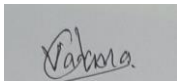
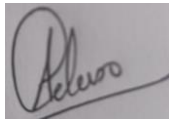
			(Thomson South Western Singapore, 2001)	
	The basics of market demand, market supply and equilibrium price- shifts in the demand and supply curves and equilibrium	2	• *Frank Robert.H ,Bernanke. Ben S., Principles of Economics (Tata McGraw Hill (ed.3)*	
	Market structure: Perfect competition and Monopoly and Pricing and Output Decisions under Imperfect Competition Short run and long run equilibrium of a competitive firm and of industry - monopoly - short run and long- run equilibrium of a firm under Monopoly	4	• *Gregory Mankiw., Principles of Economics, Thomson South western (2002 reprint)*	
	Monopolistic competition: Equilibrium of a firm under monopolistic competition, debate over role of advertising. *(topics to be taught using case studies from real life examples)* **Oligopolistic markets:** key attributes of oligopoly - Collusive and non-collusive oligopoly market - Price rigidity - Cartels and price leadership models *(with practical examples)*	5	• *Samuelson &Nordhas.: Economics (Tata McGraw Hills, New Delhi, 2002*	

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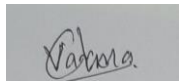
	Pricing Practices Cost oriented pricing methods: cost – plus (full cost) pricing, marginal cost pricing, Mark up pricing, discriminating pricing, multiple – product pricing - transfer pricing *(case studies on how pricing methods are used in business world)*	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____16_____



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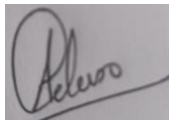

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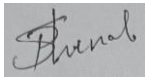
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Snehal S Patil. **DEPARTMENT:** B.COM (Accounting & Finance) **CLASS:** FYBAF(A, B, C) **SEMESTER:** I

MONTH: July to Dec. 2019 **ACADEMIC YEAR:** 2019 -20

LEARNING OBJECTIVES:
To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.
The learners will be able to prepare resumes to attend interviews, convening meetings, planning strategies, making presentations, drafting reports etc,.
To Make students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED	
1) Theory of Communication	**1) Concept of Communication-** Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World,	15	Manan Publication, Sheth Publication,	Chalk - Board	



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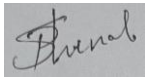
	Impact of technological advancements on communication **2) Channels and Objectives of Communication:** **Channels :** Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine **Objectives of Communication:** Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Morale of Employees **3) Methods and Modes of Communication:** **Methods**: Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette **Modes:** Telephone and SMS Communication (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and		Vipul Publication		



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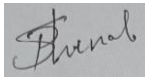
	E- communication Video and Satellite Conferencing				
2) Obstacles to Communication in Business World	**1) Problems in Communication /Barriers to Communication:** Physical, Semantic/Language, Socio-Cultural, Psychological Barriers, Ways to Overcome these Barriers	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	



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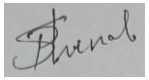
	2) Listening: Importance of Listening Skills, Cultivating good Listening Skills **3) Introduction to Business Ethics:** Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility **Sensitization the student to actual business practices:** Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour				



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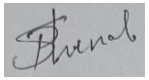
3) Business Correspondence	**1)Theory of Business Letter Writing:** Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, **Personal Correspondence:** Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board	
4) Language and Writing Skills	**Commercial Terms used in Business** **Communication Paragraph Writing:** Developing an idea, using appropriate linking	15	Manan Publication, Sheth Publication,	Chalk	



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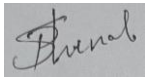
	devices, etc Cohesion and Coherence, self-editing, etc		Vipul Publication		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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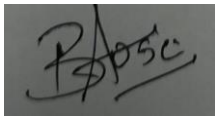
TEACHING PLAN

NAME OF THE STAFF: AKRUTI BOSE DEPARTMENT: B.COM (Accounting & Finance)
CLASS: FYBAF A,B,C. SEMESTER: I MONTH: JULY/OCTOBER ACADEMIC YEAR: 2019-20
LEARNING OBJECTIVE/S: Board and Chalk

The learners will be able to : Learn and understand the basic concepts of Economics and how to imply Economics in their day to day life. As well as what are the various economic indicators in various economy and their purposes.



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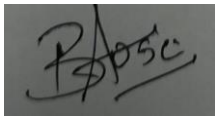
TEACHING PLAN

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMICS 1	Chapter 9- Cost Concepts Chapter 10 – Cost-output relationships		Micro Economics by H.L. AHUJA.	Board, Chalk and duster
	Chapter 11 – Break Even Analysis Chapter 12 – Market structure			
UNIT 3,4,5.	Chapter 13 – Perfect Competition Chapter 14 – Monopoly			



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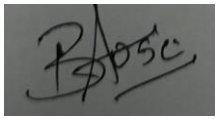
TEACHING PLAN

	Chapter 15 – Monopolistic Competition Chapter 16 - Oligopoly			
	Chapter 17 – Pricing Practices I Chapter 18 – Pricing Practices II			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 3 Lectures.



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita Almeida DEPARTMENT: B.COM (Accounting & Finance) CLASS: FYBAF (A/B/C) SEMESTER: I

Month: - July-OctoberACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of effective learning, leadership skills and self-improvement

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Accounting Standards	AS-1 Disclosure of Accounting Polices, AS-2 Valuation of Inventories (Stock), AS-9 Revenue Recognition	05	Book by Manan Prakashan	Chalk &Board

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. 3. Final Accounts of Manufacturing Concern	Final Accounts of Manufacturing Concern: - Introduction to Manufacturing A/c, Format of Manufacturing A/c. Practical Sums: Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8	15	Book by Manan Prakashan	Online / Excel
4. Departmental Accounts	Departmental Accounts: - Introduction, Basis for Allocation, Format Practical Sums: - Q1, Q2, Q3, Q4, Q5, Q6, Q7	15	Book by Manan Prakashan	Online / Excel

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NEHA VAIBHAV TAMBE **DEPARTMENT:** B.COM (Accounting & Finance) **CLASS: F.Y.BAF**

SUBJECT: FOUNDATION COURSE I **SEMESTER: I** **MONTH: August, September** **ACADEMIC YEAR: 2019-2020**

A teaching plan is a document that outlines the structure and details of a single session. A good teaching plan is a comprehensive write-up of the step-by-step teaching methods, the estimated duration of each segment of teaching, and the materials and resources needed for the session.

LEARNING OBJECTIVE/S:

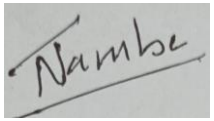
By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected context so they can contribute to making life better for others, themselves and the larger world.

(For a detailed description of each component see Appendix A).

APPENDIX {A}

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT1 Concept of Disparity 1	a] Concept of disparity as arising out of stratification and inequalities.	02	Book by Manan publications/Internet	Chalkboard
	b]gender disparities with special references to violence against women.	02	Book by Manan publications/Internet	Chalkboard



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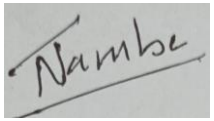
	c] Female Foeticide & Declining gender ratio	02	Book by Manan publications/Internet	Chalkboard
	d] inequalities faced by people with disabilities.	02	Book by Manan publications/Internet	Chalkboard
	e] Understand the issues of people with physical & mental disabilities. Special provisions and facilities for disabled personalities.	02	Book by Manan publications/Internet	Chalkboard

Total no of lecture 10

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Concept of Disparity 2	a] Inequalities manifested due to caste system	01	Book by Manan publications/Internet	Chalkboard
	b]different types of conflicts arising out of caste system, inter- group conflict, cultural differences, lingual differences.	03	Book by Manan publications/Internet	Chalkboard
	c] Inter-group conflict arising out of communalism and its effects on society.	02	Book by Manan publications/Internet	Chalkboard



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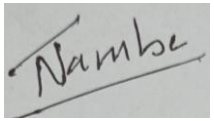
	d] Causes and Effects of conflicts arising out of regionalism.	02	Book by Vipul publication/internet	Chalkboard
	e] Causes and Effects of conflicts arising out of linguistic differences.	02	Book by Vipul, Manan publication/ internet	Chalkboard

Total no of lecture 10



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TEACHING PLAN (UNIT PLAN)

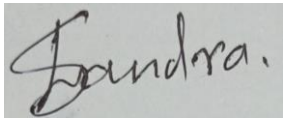
NAME OF THE STAFF : Sandra Shamir Almeida DEPARTMENT : B.COM (Accounting & Finance)

CLASS : FYBAF SEM : I MONTH : AUG - OCT YEAR : 2019-20

LEARNING OBJECTIVE/S :

- The learners will be able to learn various aspects about Financial Management and Cost of Capital in detail.
- Management is very essential part of business.
- Finance is the Lifeblood and Backbone of business.
- This subject is helpful to develop Financial & Management skills among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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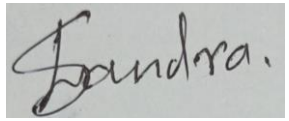
FINANCIAL MANAGEMENT- I	**Module I : INTRODUCTION TO FINANCIAL MANAGEMENT** ● Introduction ● Meaning ● Importance ● Scope and Objectives ● Profit v/s Value Maximisation	12	**Financial Management by S.P. Gupta**	CHALK & DUSTER
	Module IV : COST OF CAPITAL ● Introduction ● Definition & Importance of Cost Of Capital ● Measurement of Cost of Capital WACC (Including	12	**Financial Management by S.P. Gupta**	CHALK & DUSTER



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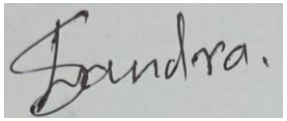
	Practical Problems)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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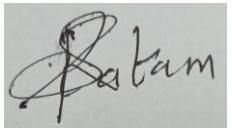
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan D. Satam ACADEMIC YEAR: 2019-20
DEPARTMENT: B.COM (Accounting & Finance)) CLASS: FYBAF SEMESTER:I MONTH: June 2019
LEARNING OBJECTIVE/S: Learning about Foundation of India.
The learners will be able to : Students will be able to learn about Foundation, culture, constitution, heritage, system of India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course	**1. Overview of Indian Society** •Understand the multi-cultural diversity of Indian society through its demographic composition: population distribution according to religion, caste, and gender; Appreciate the concept of linguistic diversity in relation to the Indian situation; Understand regional variations according to rural, urban and tribal characteristics; Understanding the concept of diversity as difference	10	Manan and Vipul publication	Chalk - Board
	2. The Indian Constitution	10	Manan and Vipul publication	Chalk - Board



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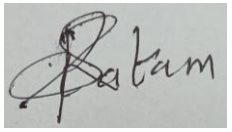
	Philosophy of the Constitution as set out in the Preamble; The structure of the Constitution-the Preamble, Main Body and Schedules; Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution			
	3. Significant Aspects of Political Processes The party system in Indian politics; Local self-government in urban and rural areas; the 73rd and 74th Amendments and their implications for inclusive politics; Role and significance of women in politics	10	Manan and Vipul publication	Chalk - Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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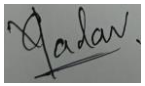
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI YADAV. DEPARTMENT: B.COM (Accounting & Finance) CLASS: FYBAF SEMESTER: I

MONTH: AUGUST-DECEMBER. ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : understand and learn Cost accounting. To learn material costing with different methods. Learn to analyze labour costing and calculate it's remuneration with different methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Material Costing 2. Labour Cost	Concept of Material Cost, Material control Procedure, Documentation required.Various stock Ledger , Bin card , Different Stock levels, Economic Order Quantity. Format of FIFO and Weighted Average Method. Sums on EOQ ,. Stock levels, FIFO and Weighted method Q.1 to Q.6	15	Manan Prakashan	Chalk & Duster



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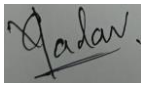
	Meaning & concept of labour cost. Composition of Labour cost. Labour cost records. Overtime/Idle time / Incentive Schemes Sums solved on various methods...	15	Manan Prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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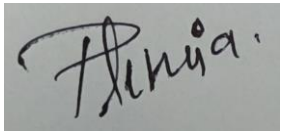
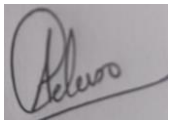
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: B.COM (Accounting & Finance) CLASS:FYBAF . SEMESTER: I
SUBJECT : FINANCIAL MANAGEMENT MONTH: JULY 2019- OCTOBER 2019 ACADEMIC YEAR:2019-2020
LEARNING OBJECTIVE/S:
The learners will be able to : TO KNOW THE DIVERSITY OF DEMAND FOR FINANCIAL SERVICES AND TO IDENTIFY AND EXPLOIT NICHE IN THE MARKET WITH A NEW OR MODIFIED SERVICE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FINANCIAL MANAGEMENT	1. INTRODUCTION TO FINANCIAL MANAGEMENT	11	SHETH , VIPUL,MANAN PRAKASHAN	CHALK AND BLACKBOARD, GROUP DISCUSSION
	2. CONCEPTS IN VALUATION -TIME VALUE OF MONEY, BOND RETURNS,	7		
	-ANNUITY, TECHNIQUE OF DISCOUNTING AND COMPOUNDING	6		

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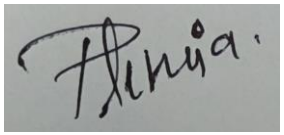
	3. LEVERAGES	13		
	4. TYPES OF FINANCING	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 47



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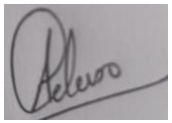

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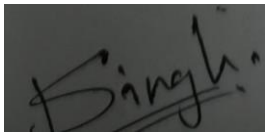
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA SINGH DEPARTMENT: B.COM (Accounting & Finance) CLASS: FYBAF SEMESTER: I SUBJECT: BUSINESS ENVIRONMENT MONTH: JUNE TO OCTOBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Business and Environment	Business objectives, dynamics of business objectives types of Business objectives, business environment components of business environment, Environmental analysis, Environmental scanning ,PESTLE Analysis SWOT Analysis.	11	BUSINESS ENVIRONMENT BY JUSTIN PAUL	Chalk and board
Unit 3 Contemporary Issues	CSR, Corporate Governance, Social Responsibility of Business, Ecology, Carbon Credit , Social Audit , Benefits of Social Audit v/s Commercial Audi	11	BUSINESS ENVIRONMENT BY JUSTIN PAUL	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22



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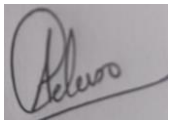

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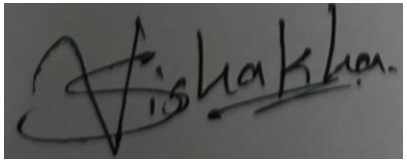
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHAKHA SANE DEPARTMENT B.COM (Accounting & Finance) CLASS: __FYBAF(BUSINESS ECONOMICS)__
SEMESTER: ___1____ MONTH: __NOV____ ACADEMIC YEAR: __2019-20_____

LEARNING OBJECTIVE/S: The learners will be able to : _____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1,2,3	1.SCOPE AND IMPORTANCE OF BUSINESS ECONOMICSOpportunity cost principle-Incremental and Marginal Concepts.Basic economic relation,Basic of market demand,Market supply,Shifts in demand and supply.	10	ADVANCE ECONOMIC THEORY H L AHUJA	Black board, Calk and Duster
	2.DEMAND ANALYSIS- DEMAND FUNCTION AND DEMAND ESTIMATION AND FORECASTING:Nature of demand curve in different market, Meaning,Significance,types of elasticity of demand.Demand estimation and forecasting	10		
		15		



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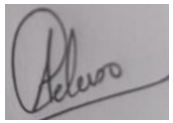

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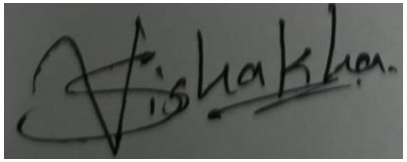
	3.SUPPLY AND PRODUCTION DECISIONS- PRODUCTION FUNCTION:shot run and long run analysis in law of variable proportion,Isoquant.Cost concepts.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____35____



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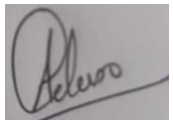

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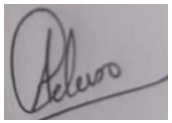
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita Almeida DEPARTMENT: B.COM (Accounting & Finance) CLASS: FYBAF (A,B,C) SEMESTER: II

MONTH: Dec-April ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : understand the concept of effective learning, Formal and informal communication, leadership skills and self improvement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3. Auditing Techniques	**Test Check**: Test Checking Vs Routine Checking, Test Check Meaning, Features, Factors to be considered, When test check can be used, Advantages, Disadvantages and Precautions. **Audit Sampling**: Audit Sampling Meaning, Purpose , factors in determing Sample Size-Sample Risk, Tolerable Error and Expected Error, Methods of Selecting Sample items, Evaluation of Sample resulting Auditors Liability in conducting Audit based on sample.	15	Book by Manan Prakashan	Chalkboard



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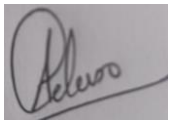
	Internal Control: Meaning and purpose,Review of internal control, Advantages, Auditors Duties, Review of Internal Control, Inherent Limitations of Internal Control, Internal Control Samples for Sales and Debtors, Purchases and Creditors, Wages & Salaries. Internal Checks Vs Internal Control, Internal Checks Vs Test Checks.			
4. Internal Audit	Meaning , Basic Principles of Establishing Internal Audit, objectives, Evaluation of Internal Audit by Statutory Audtitor, Usefulness of Internal Audit. Internal Audit Vs External Audit, Internal Checks Vs Internal Audit.	05	Book by Manan Prakashan	Chalkboard
2.	**Audit working papers**: meaning, importance, factors determining form and contents, main functions , features, contents of permanent audit file , temporary	02		Chalkboard



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Audit Documentation	audit file, ownership, custody , access of other parties to audit walking papers , Auditors Lien on working papers, auditor's Lien on clients book. **Audit Notebook:** meaning, structure, content, general information current information importance.		Book by Manan Prakashan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 22

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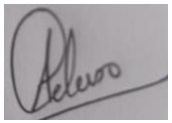

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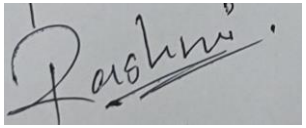
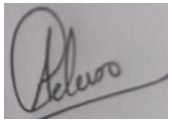
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:. PROF.Rashmi Mehbubani. DEPARTMENT:.B.COM (Accounting & Finance) CLASS:. FYBAF

SEMESTER: II MONTH: DECEMBER TO APRIL ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: Introduction to Auditing
The learners will be able to : Understand Meaning , importance and Types be of Auditing ,it's Advantages and Disadvantages,learnng Principles of Auditing .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1. Introduction to Auditing	**Basics** Financial statements,users of financial information, Definition of Auditing, Objectives of Auditing- Primary and Secondary, Expression of Opinion, Detection of Frauds and Errors, Inherent Limitations of Audit. **Errors and Frauds** Concepts, Reasons and Circumstances, Types of Errors- Commission, Omission , Principle and Compensating , Types of Frauds, Risk of Error and Fraud in Audit, Auditors Duties and Responsibilities in Respect of Fraud			PPT Google Meet

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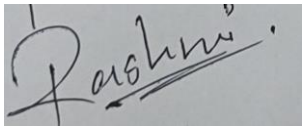
MODULE 2. Audit Planning,Procedures And Documentation	**Principls of Audit** Integrity,Objectivity, Independence, Confidentiality, Skills and Competamce , Materiality and Work Perfored by others , Documentation , Planning , Audit Evidence, Accounting System and Internal Control , Audit Conclusions and Reporting **Types of Audit** Meaning , Advantages and Disadvantages of Balance Sheet Audit, Interim Audit, Continuous Audit,Concurrent Audit, Annual Audit Miscellaneous Advantages of Independent Audit, Qualities of Auditors, Accounting vs Auditing , Auditing vs Investigation, the Concept of True and Fair View. **Accounting concepts Relevent to Auditing** Materiality, Going Concern			
	Total number of lectures for module 1	15		
	• **Audit Planning**	08		



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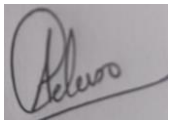

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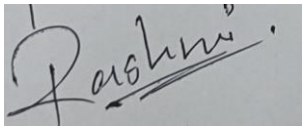
	Meaning, Objectives ,Factors to be considered, Sources of Obtaining Information, Discussion with Client,Overall Audit Approach • **Audit Programme** Meaning, Factors to be considered, Advantages,Disadvantages, Overcoming Disadvantages, Methods of Work, Instruction before Commencing Works of Audit,			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 23_____



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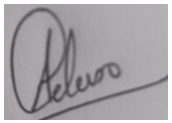

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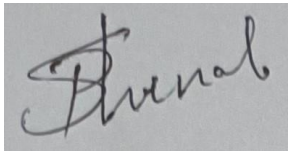
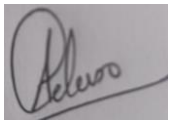
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Snehal S Patil. **DEPARTMENT:** B.COM (Accounting & Finance) **CLASS:** FYBAF (A, B, C) **SEMESTER:** II

MONTH: December to April **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVES:
To help students understand the various aspects of Group Communication
The learners will be able to : It introduces students to the process of making effective presentations and moves on to the various group Communications, where individual and team work is equally important.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	**Presentations:** Principles of Effective Presentation Effective use of OHP Effective use of Transparencies How to make a Power-Point Presentation	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board
2) Group Communication	**1) Interviews:** Group Discussion Preparing for an Interview, **Types of Interviews –** Selection, Appraisal, Grievance, Exit	15	Manan Publication Sheth Publication Vipul Publication	Chalk - Board

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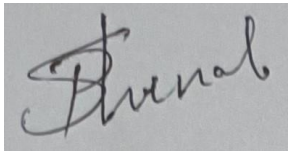
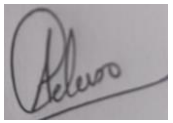
	2) Meetings: Need and Importance of Meetings, Conduct of Meeting and Group Dynamics Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **3) Conference:**Meaning and Importance of Conference Organizing a Conference **Modern Methods:** Video and Tele – Conferencing **4) Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR			
3) Business Correspondence	**1) Trade Letters:** Letters of Inquiry, Letters of Complaints, Claims, Adjustments, Sales Letters, Promotional leaflets and fliers Consumer Grievance Letters, Letters under Right to Information (RTI) Act.	15	Manan Publication Sheth Publication Vipul Publication	Chalk - Board
4) Language and Writing Skills	**Reports**: Parts, Types, Feasibility Reports, Investigative Reports	15	Manan Publication Sheth Publication Vipul Publication	





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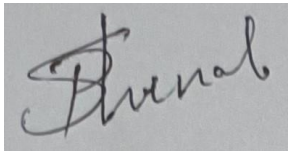
	Summarisation: Identification of main and supporting/sub points Presenting these in a cohesive manner			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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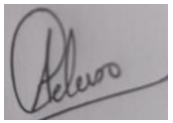

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

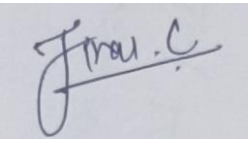
NAME OF THE STAFF: _____Jinal Chohan_____ DEPARTMENT: B.COM (Accounting & Finance)

CLASS: ___F.Y BAF____ SEMESTER: ___II_____ MONTH: __Dec- Feb_____ ACADEMIC YEAR:_2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to : Know the concept of Human rights and its origin, value of human rights to all the humans and fundamental rights. They will get the knowledge of environment around us and how it overall effects the living beings on the Earth

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Human Rights	Concept of Human Rights, Origin And evolution of the concept	3	Vipul Prakashan,Manan Prakashan	Chalk- Board
	The Universal Declaration of Human Rights	1	Vipul Prakashan,Manan Prakashan	Chalk- Board
	Human Rights Constituents with special reference to Fundamental Rights stated in the Constitution	5	Vipul Prakashan,Manan Prakashan	Chalk- Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____09_



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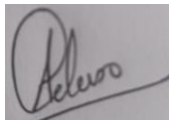

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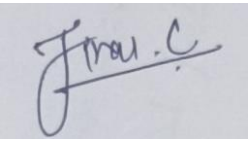
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3 Ecology	Importance of Environmental Studies in current development, Understanding concept of Environment, Ecology and their interconnectedness	3	Vipul Prakashan,Manan Prakashan	Chalk- Board
	Environment as natural capital and connection to quality of human life	2	Vipul Prakashan,Manan Prakashan	Chalk- Board
	Environment Degradation- Causes and impact on Human Life	2	Vipul Prakashan,Manan Prakashan	Chalk- Board
	Sustainable Development- Concept and components, Poverty and environment	3	Vipul Prakashan,Manan Prakashan	Chalk- Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____10_____



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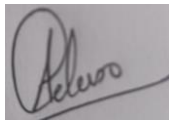

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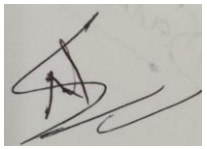
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Nilambari Yogesh Shidhaye
Department: -B.COM (Accounting & Finance)
Class: - F.Y.BAF (A, B, C) SEM: - II MONTH-: Dec-Feb YEAR: -2019/20
LEARNINIG OBJECTIVES: The learner will be able to know overall knowledge of Indian society which include causes of migration, IT & communication, impact of globalisation on industry, reasons to increases farmer's suicide. The learner will be able to handle the stress & conflict within & outside the organisation.

PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED



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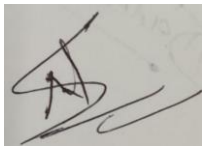
FOUNDATION COURSE: -II	MODULE: I GLOBALISATION & INDIAN SOCIETY: - liberalisation, privatisation, globalisation Migration, IT & communication, impact of globalisation on industry, changes in employment opportunities, changes in agrarian sector due to globalisation, increase in corporate farming, causes of farmer's suicides.	07 Lectures 10 Lectures		Chalk & duster Chalk & duster



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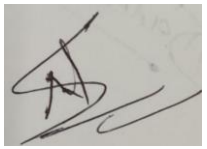
	MODULE: IV UNDERSTANDING STRESS AND CONFLICT: - causes of stress and conflicts, significance of values, ethics, prejudice & sterotyping, meaning of aggression & violence as the public expression of conflicts. MODULE: V	04 Lectures		Chalk & duster



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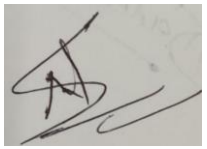
	Managing stress and conflict in contemporary society: - Types of conflicts & Maslow's theory of self-actualization.			



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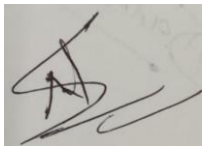

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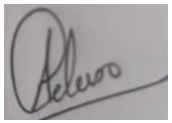
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. AUDRIN ANTHONY COLACO DEPARTMENT: B.COM (Accounting & Finance) CLASS: FYBAF SEMESTER: II SUBJECT: FINANCIAL ACCOUNTING MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: To understand fire insurance claims.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Fire Insurance Claim	• Computation of Loss of Stock by Fire • Ascertainment of Claim as per the Insurance Policy • Exclude: Loss of Profit and Consequential Loss	15	Financial Accounting by V. Rajasekaran, Pearson Publications, New Delhi	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____



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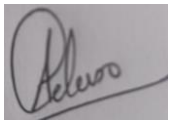

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHAKTI VILAS PURANDARE DEPARTMENT: B.COM (Accounting & Finance) CLASS: FYBAF SEMESTER: II

SUBJECT: FINANCIAL ACCOUNTING MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: prepare consignment A/c for consignor and consignee, branch account for dependent branch and make accounting from incomplete records.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accounting from incomplete records	• Steps for preparing final accounts from incomplete records. • Difference between single entry system and double entry system. • Format of various accounts to prepare for working notes. • Q1 to Q7 on incomplete records.	15		Chalk and board

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Consignment account	• Meaning of consignment, concepts of consignor and consignee. • Del credere commission. • Journal and ledger of consignor and consignee. • Q1 to Q6 on consignment in the books of both the parties.	15		Chalk and board
Branch account	• Concept of branch, format of dependent branch by debtors and stock & debtors method. • Q1 to Q8 on branch account by both method.	15		Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __45_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPASHREE PARAG VARTAK_____DEPARTMENT: B.COM (Accounting & Finance) CLASS: FYBAF _____

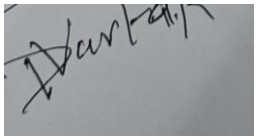
SEMESTER: II_____MONTH: DECEMBER TO MARCH _____ ACADEMIC YEAR:_2019-2020_____

LEARNING OBJECTIVE/S:

- The learners will be able to : understand the concept of interest and annuity.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Mathematics, UNIT III INTEREST AND ANNUITY	Simple interest, compound interest	4	BUSINESS MATHEMATICS BY KAPOOR	BLACKBOARD CHALK AND DUSTER
	Equated monthly instalments, reducing balance and flat rate of interest	4		Explanation, Discussion, Problem solving assignments
	Annuity immediate- present value and future value	5		
	Stated annual rate and effective annual rate	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____



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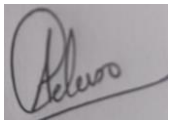

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TEACHING PLAN (UNIT PLAN)

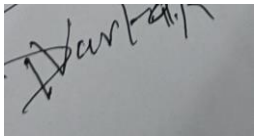
NAME OF THE STAFF: DIPASHREE PARAG VARTAK_____DEPARTMENT: B.COM (Accounting & Finance) CLASS: FYBAF_____

SEMESTER: II_____MONTH: DECEMBER TO MARCH _____ ACADEMIC YEAR:_2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to : understand concept of Trade discount, cash discount, cost price, net selling price, Commission and Brokerage

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS UNIT II PROFIT AND LOSS	Concept of profit and loss with example	2	BUSINESS MATHEMATICS BY KAPOOR	BLACKBOARD CHALK AND DUSTER
	Terms and formulae, Trade discount and cash discount with sums	4		Explanation, Discussion, Problem solving assignments
	Problems involving Cost price and selling price	3		
	Listed price, Invoice price and net selling price with sums	2		
	Introduction of commission and brokerage Problems on Commission and Brokerage	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____



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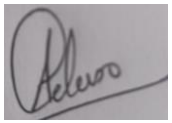

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TEACHING PLAN (UNIT PLAN)

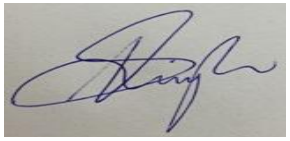
NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: B.COM (Accounting & Finance) CLASS: FYBAF (A,B & C)

SEMESTER: II MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the meaning and types of lease and its legal aspect.
- Get insight on different sources of funds or housing finance. The students will be able to differentiate between leasing, hire purchase and venture capital.
- Get knowledge of different types of products of consumer finance and its sources.
- Understand the different card facilities available in the market and the uses and precautions of using it.
- Interpret different credit rating agencies available in India and its uses.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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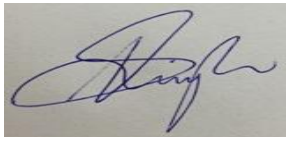
Unit-3 Innovative Financial Services and its Mechanism	LEASE AND HIRE-PURCHASE: Meaning, Types of Lease - Finance Lease, Operating Lease, Advantages and Disadvantages of Leasing, Leasing in India, Legal Aspects of Leasing. HIRE PURCHASE: Definition, Hire Purchase and Installment Sale Characteristics, Hire Purchase and Leasing, Advantages of Hire Purchase, Problems of Hire Purchase. HOUSING FINANCE: Introduction, Housing Finance Industry, Housing Finance Policy Aspect, Sources of Funds, Market of Housing Finance, Housing Finance in India- Major Issues, Housing Finance in India – Growth Factors, Housing Finance Institutions in India, National Housing Bank (NHB), Guidelines for Asset Liability Management System in HFC, Fair Trade Practice Code for HFC's, Housing Finance Agencies VENTURE CAPITAL: Introduction, Features of Venture Capital, Types of Venture Capital Financing Stages, Disinvestment mechanisms, Venture Capital Investment process, Indian Scenario	12	Financial market and Services by E Gordon and k Natrajan.	Chalk, Board and Duster
Unit-4 Consumer Finance and Credit Rating	CONSUMER FINANCE: Introduction, Sources, Types of Products, Consumer Finance Practice in India, Mechanics of Consumer Finance, Terms, Pricing, Marketing and Insurance of Consumer Finance, Consumer Credit Scoring, Case for and against Consumer Finance PLASTIC MONEY: Growth of Plastic Money Services in India, Types of Plastic Cards- Credit card Debit Card- Smart card- Add-on Cards, Performance of Credit Cards and Debit Cards, Benefits	12		Chalk, Board and Duster



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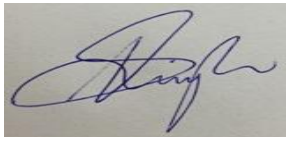
	of Credit Cards, Dangers of Debit Cards, Prevention of Frauds and Misuse, Consumer Protection. Indian Scenario. Smart Cards-Features, Types, Security Features and Financial Applications CREDIT RATING: Meaning, Origin, Features, Advantages of Rating, Regulatory Framework, Credit Rating Agencies, Credit Rating Process, Credit Rating Symbols. Credit Rating Agencies in India, Limitations of Rating			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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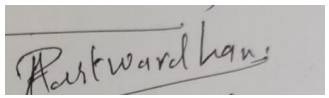
TEACHINGPLAN(UNITPLAN)

NAMEOFTHESTAFF: Ambari S Patwardhan DEPARTMENT:B.COM (Accounting & Finance) CLASS:FYBAF(A,B,C)

SEMESTER: II MONTH: DecembertoApril ACADEMICYEAR:2019-20

LEARNINGOBJECTIVE/S:BusinessLaw
Thelearnerswillbeableto:ThePupilswillbeabletounderstandtheconceptandtypesofNegotiableInstruments,theirusages,Rules regardingthem.Similarlytheywillbeabletounderstandtheconceptofgoods,contractofsaleandrulesgoverningsuchcontract,aswellas theywillunderstandtheconceptofconsumer.

PAPER,UNIT, TITLE	SUBTOPICS	NOOF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLS USED



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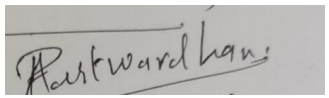
SaleofGoods Act1930	a)formationofcontractofsale b)Goodsandtheirclassifications c)Price,ConditionsAndWarranties d)Transferofpropertyingoods e)Performanceofcontractofsales f)Unpaidseller&hisrights g)salebyAuction h)HirePurchaseAgreement	08	Saleofgoods Act:Mulla Principlesoflaw ofsaleofgoods andHire Purchase:Avat arSingh	Board,ChalkandDuster
Negotiable Instrumen t Act1881	a)DefinationofNegotiableInstrument b)FeaturesofNegotiableInstrument c)PromissoryNote	08	Negotiable instrumentsAct :Mulla	Board,ChalkandDuster

	d)BillofExchangeandCheque e)HolderandHolderinduecourse f)CrossingofCheque g)TypesofCrossing h)Dishonour&DischargeofNegotiableInstruments		Introductiont o Negotiable Instruments:D r AvatarSingh	



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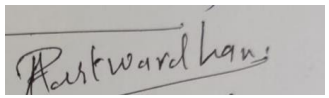
Consumer Protection Act1986	a)salientFeatures b)DefinationofConsumer c)Deficiencyinservice d)DefectsinGoods	04	Consumer ProtectionAct: Dr.J.N. Barowalia	Board,ChalkandDuster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:20



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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

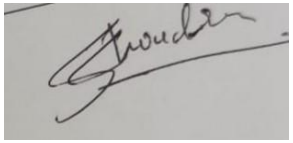
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT: B.COM (Accounting & Finance) CLASS: FYBAF (A, B,C) SEMESTER: II

MONTH: December to April ACADEMIC YEAR: 2019 - 2020 LEARNING OBJECTIVE/S: Business Regulatary Framework

The learners will be able to : Introduction, Understand Meaning, Rules and regulations, section, important act details with related case study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module I: Indian Contract Act, 1872 Part 1	Chapter I Definitions, Kinds of agreements, Kinds of contracts, distinction between agreement and contract Chapter II Proposal, kinds of proposal -specific, offer to a class of persons, general offer, counter offer, invitation to offer, standing offer, express proposal, implied offer,	03 04 02	Indian contract act 1872 Avtar singh Pollak and mulla D.D. Basu	Chalk And Duster



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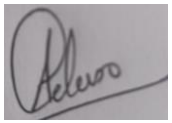

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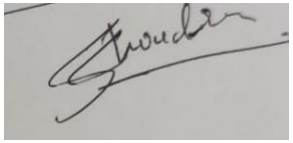
Module II Indian Contract Act, 1872 Part II	requirements of a valid offer section 3 & 5 Acceptance, requirements of a valid acceptance, Rules of communication of proposal, acceptance and revocation of proposal/acceptance Chapter III Capacity to contract, minor, unsound mind, Disqualified person. Section 10-12 Chapter IV Consideration, agreements without consideration, unlawful consideration, inadequacy of consideration Agreements expressly declared to be void section 2- 25	03		
Module III Special Contract	Chapter I consent and free consent, coercion, undue influence, fraud, misrepresentationMistake Chapter II Void agreement section 24 to 30 Chapter III section 31 and 68 -72	04 02 03		



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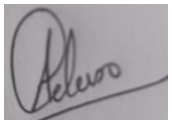

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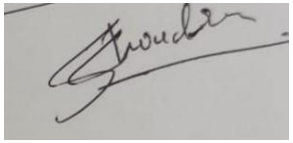
	Contingent contract, quasi-contracts, e-contract, Privity of contracts with exceptions Chapter IV Section 73 - 75 Discharge of contracts, Remedies available on breach of contracts Chapter I Law of Indemnity and guarantee related essential, discharge of surety, distriction between, section 124 - 125, 126 - 129, 132 - 147 Chapter II Law of bailment and pledge, Essential, Types, Right and Duties of bailor and bailee, Difference, pledge and lien, pownor and pawnee. Section 148, 152-154, 162, 172, 173, 174, 177, 178, 178A, 179.	03 03 03 03 03		



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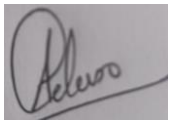

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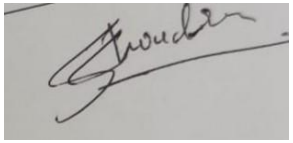
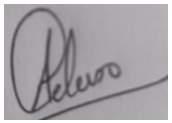
	Chapter III Law of Agency : Creation, Termination, Rights and duties. Section 182-185, 201- 209.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA M. SINGH

DEPARTMENT: B.COM (Accounting & Finance)

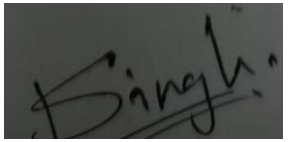
CLASS: FYBAF

SEMESTER: II MONTH: NOVEMBER – MARCH

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Understand recent trends in the Financial sector and will learn about various innovative financial products.

Unit	Sub Topics	No. Of lectures	Reference	Teaching method/ ITC
1.Introduction to traditional services	Financial services it's scope, types, Factoring, Forfeiting, bill discounting	11	Financial market and services by E Gordan and K Natrajan	Chalk and Duster



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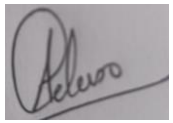

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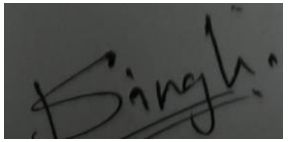
2. Issue management and Securitization	Issue Management and Financial Intermediaries Merchant Bankers,Stock broker, stock trading, Securitization of NPA	11	Financial Market and Services by E Gordon and K Natrajan	Chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _22



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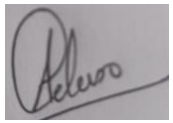

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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: B.COM (Accounting & Finance)

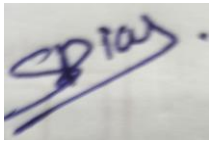
CLASS: FYBAF SEMESTER: II MONTH: DECEMBER- MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to:

- Define Ratio, Continued Ratio, and Inverse Ratio and solve the questions based on these terms.
- Understand the concept of Proportion, Continued Proportion, Direct Proportion and Inverse Proportion.
- Solve the questions based on different types of Proportion and relate the situations in day to day life.
- Understand the concept of Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation.
- Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Ratio, Proportion & Percentage	Unit1	▪ Define Ratio,Continued Ratio, Inverse Ratio	2 4 2 4 3	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT.



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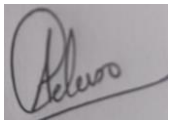

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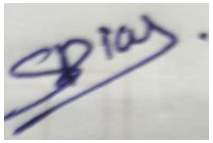
			▪ Problem solvingon ratio ▪ Define Proportipon its types. ▪ Problem solving on proportion ▪ Explaination on cocept of percentage and computation of percentage.			TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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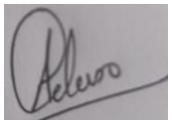

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TEACHING PLAN (UNIT 4 PLAN)

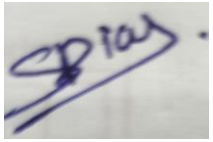
NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: B.COM (Accounting & Finance)

CLASS: FYBAF SEMESTER: II MONTH: DECEMBER- MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to:

- Learn the concept of face value, market value, dividend, equity shares, bonus shares, preference shares.
- Solve the questions based on buying and selling of shares with and without brokerage.
- Define net asset value of mutual funds, entry/exit load
- Understand the concept of Systematic Investment Plan(SIP).
- Solve simple problems on calculation of net income after considering entry load and exit load change in net asset value and SIP.
- Focus and how to apply this knowledge in day to day life



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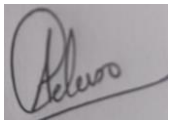

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YashvantKeshavPatil College of Commerce
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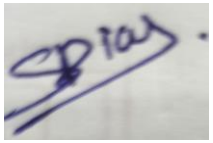
PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Shares and Mutual Funds	Unit4	▪ Concept of Shares, Face value, market value, dividend. ▪ Explanation of types of Shares. ▪ Sums based on Shares ▪ Concept of Mutual Funds and its types ▪ Calculation of net income after considering entry load and exit load ▪ Change in net asset value and problems based on it. ▪ Concept of SIP and sums based on it.	1 2 3 2 3 2 2	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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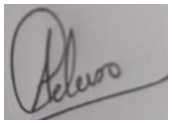

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TEACHING PLAN (UNIT PLAN)

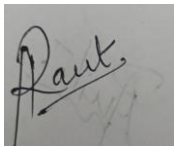
NAME OF THE STAFF: __ANKITA ARUN RAUT_____ DEPARTMENT: _B.COM (Accounting & Finance)

CLASS: __SYBAF__ SEMESTER: ____III_____ MONTH: __JUNE-NOV_____ ACADEMIC YEAR: ___2019-20_____

LEARNING OBJECTIVE/S: The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	CLASSIFICATION OF COST AND COST SHEET: introduction, classification of cost on different basis, format of Cost sheet. PRACTICAL: Q1 & Q2 basic cost sheet, Q3 & Q5 Cost sheet in detail, Q6 – Q8 Estimated cost sheet.	20	Manan Prakashan	Chalk & Duster
2	Reconciliation of Cost & Fin A\C: introduction, format of reconciliation statement. Practical: Q1 – Q6 preparation of reconciliation st., Q7- Q8 reconciliation st with P&L A\C & Cost Sheet.	10	Manan Prakashan	Chalk & Duster
3	CONTRACT COSTING: introduction, retention momey, Accounting for plant used in contract, treatment of profit of incomplete contract, Escalation clause, Entries. Practical: Q1 to Q8 on contract.	15	Manan Prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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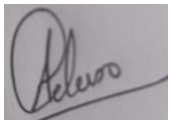

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __DR. AUDRIN ANTHONY COLACO_____ DEPARTMENT: _B.COM (Accounting & Finance)

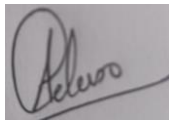
CLASS: __SYBAF__ SEMESTER: ____III_____ MONTH: __JUNE-NOV_____ ACADEMIC YEAR: ___2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to :

- To acquire knowledge of process costing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Process Costing	PROCESS LOSS, ABNORMAL GAINS AND LOSSES, JOINT PRODUCTS AND BY PRODUCTS. EXCLUDING EQUIVALENT UNITS, INTER-PROCESS PROFIT PRACTICAL PROBLEMS PROCESS COSTING AND JOINT AND BY PRODUCTS	15	Advance Cost Accounts - Mahaeshwari	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____



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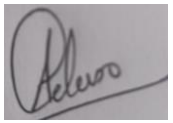

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: B.COM (Accounting & Finance) CLASS: S.Y.BAF (Division A B C)

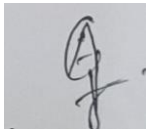
SEMESTER: III MONTH: July, August, September ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand- the meaning of salary; section 10, sections 15-17; calculation of income from salary; various allowances (taxable, partly taxable, non-taxable); perquisities; rules and calculation of Gratuity, Pension, Leave encashment.
2) Understand- the meaning of income from other sources; sections 56-59; calculation of income from other sources.
3) Understand- the meaning of capital gains; Section 45, 48, 49, 50, 54 and 55, calculation of capital gains.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Heads of Income	Income from Salary	08	Book by Manan publications/Internet	Chalkboard
	Income from Other Sources	04	Book by Manan publications/Internet	Chalkboard
	Capital Gains	04	Book by Manan publications/Internet	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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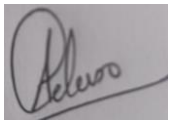

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM (Accounting & Finance)

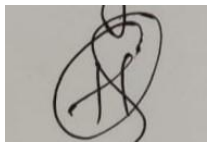
CLASS: S.Y.BAF SEMESTER: III MONTH: JUNE ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to understand the basic concepts and definitions under direct tax.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.DEFINITIONS & BASIS OF CHARGE	DEFINITIONS-ASSESEE, ASSESSEMNT YEAR,ANNUAL VALUE,PERSON.PREVIOUS YEAR	02	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK-BOARD
	BSIS OF CHARGE SECTION 3-9	02		
	EXCLUSIONS UNDER SCTION 10	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM (Accounting & Finance)

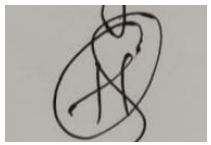
CLASS: S.Y.BAF SEMESTER: III MONTH: JUL ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to study different heads of income and their computation.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
2.HEADS OF INCOME	INCOME FROM HOUSE PROPERTY-SEC22 TO27, ANNUAL VALUE	04	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK-BOARD
	PROFIT & GAIN FROM BUSINESS &PROFESSION	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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TEACHING PLAN (UNIT PLAN)

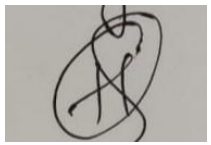
NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM (Accounting & Finance)

CLASS: S.Y.BAF SEMESTER: III MONTH: AUG ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to understand deductions available under chapter VIA

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
3.DEDUCTION UNDER CHAPTER VI A	80A-RESRTICTION ON CLAIMS,80C-PAYMENT OF LIC	01	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK-BOARD
	80CCC-CONTRIBUTION TO PENSION FUND, 80D-MEDICLAIM INSURANCE PREMIUM,	02		
	80DD-MEDICAL TRATMENT OF HANDICAPPED	01		



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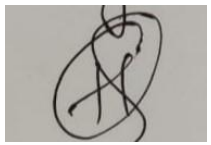
	80E-INTEREST ON EDUCATIONAL LOAN,80TTA-INTEREST ON SAVING BANK ACCOUNT	01		
	80U-HANDICAPED ASSESSEE	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM (Accounting & Finance)

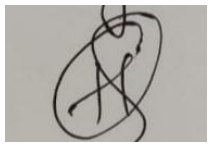
CLASS: S.Y.BAF SEMESTER: III MONTH: SEPT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to compute the total taxable income of assessee for the relevant previous year.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
4.COMPUTATION OF TOTAL INCOME	COMPUTATION OF TOTAL INCOME OF INDIVIDUAL	05	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK-BOARD
	COMPUTATION OF TOTAL INCOME OF HUF AND DEDUCTIONS	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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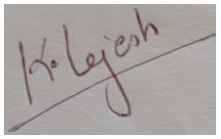
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: LEJESH KELOTH DEPARTMENT:B.COM (Accounting & Finance) CLASS: SYBAF SEMESTER: III MONTH: AUG-DECEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : The learners will be able to understand the concept of using macroeconomics for the growth of the economy by developing a core understanding regarding income, expenditure, measurement, and trade cycles, demand and supply of money and levels of inflation for the development of the economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMIC –II MODULE 3,	**INTRODUCTION TO PUBLIC FINANCE**	10	TEXT BOOKS AND PAPERS	
	MEANING AND SCOPE OF PUBLIC FINANCE		H.L. AHUJA	TEXT REFERENCE
	MAJOR FISCAL FUNCTION			
	PRINCIPAL OF MAXIMUM SOCIAL ADVANTAGE			



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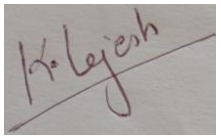
	RELATION BETWEEN EFFICIENCY MARKET AND GOVERNMENT, CONCEPT OF PUBLIC GOODS AND ROL OF GOVERNMENT			

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMIC –II MODULE 4,	**PUBLIC REVENUE ,PUBLIC EXPENDITURE AND DEBT**	20	TEXT BOOKS AND PAPAERS	
	SOURCES OF PUBLIC REVENUE SHIFTING OF TAX BURDEN			TEXT REFERNCE
	ECONOMIC EFFECTS OF TAXATION REDUSTRIBUTIVE AND ANTIINFLATIONARY TAXATION		H.L AHUJA	
	PUBLIC EXPENDITURE			



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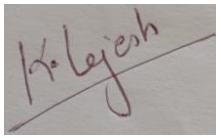
	SIGNIFICANCE OF PUBLIC EXPENDITURE PUBLIC DEBTH			

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMIC –II MODULE 5,	**FISCAL MANAGEMENT AND FINANCIAL ADMINISTRATION**			
	FISCAL POLICY. CONTRA			TEXT REFERENCE
	CONTRA CYCLICAL FISCAL POLICY AND DISCRETIONARY FISCAL POLICY	10	TEXT BOOKS AND PAPERS	
	BUDGET			
	INTERGOVERNMENTAL FISCAL RELATION			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___30_____



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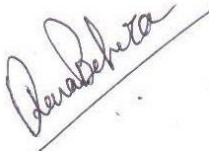
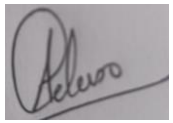
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: B.COM (Accounting & Finance)) CLASS: SYBAF

SEMESTER: III MONTH: JUNE – OCTOBER ACADEMIC YEAR: 2019 – 20

LEARNING OBJECTIVES:
The learners will be able to understand the concept of using macroeconomics for the growth of the economy by developing a core understanding regarding income, expenditure, measurement, and trade cycles, demand and supply of money and levels of inflation for the development of the economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics – II Macro Economics Unit: I & II	Unit I: Overview of Macro Economics - Circular flow of income in open an closed economy - Measurement of National Product , Green GNP and NNP - Trade cycle: features and phases - Say's Law of Market	10	H.L.Ahuja Modern Economics	Lecture, group discussion, test, oral presentation of important topics.
	Unit II: Money, Prices and Inflation - Money supply determinants and factors - Demand for money, classical and Keynes approach and also Friedman approach - Money & Prices Fisher and Cambridge equation	10	D.N.Diwedi Macro Economics	Lecture, group discussion, test, oral presentation of important topics.

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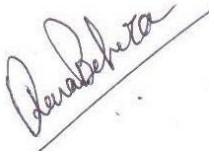
	- Inflation: types, nature, Policy Measures			
	Unit III: Introduction to Public Finance - Meaning, scope and fiscal functions - Dalton and Musgrave principle of Maximum social advantage - The concept of public goods and roe of government	15	G.Ackley Macro-Economic Theory and Policy	Lecture, group discussion, test, oral presentation of important topics.
			H.L.Bhatia Public fianance	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __35_____



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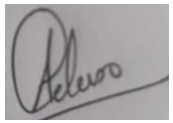

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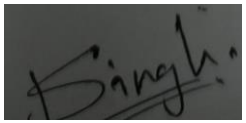
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA SINGH DEPARTMENT: B.COM (Accounting & Finance) CLASS: SYBAF FINANCIAL MARKET OPERATION (FC) SEMESTER: III MONTH: JUNE -SEPTEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : understand the Financial sector in our country. Its various components, services offered by the Financial sector.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit1 An overview of Financial system Unit 3 Financial instruments	Saving and investment of money, inflation and Banking and Non banking Financial Intermediaries	05		Chalk and duster
			Financial services and market E Gordon	
	Types of Financial instruments, liquidity,safety,maturity,repos,TBs, Derivatives	10		
			Financial services and market EGordon	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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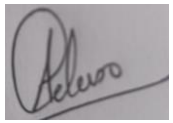

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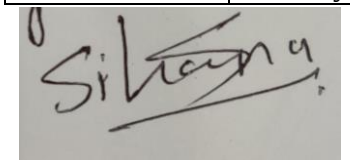
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Seema Sihana Department: - B.COM (Accounting & Finance)
Class: - S.Y.BAF (A, B, C) SEM: - III MONTH-: July-sept YEAR: -2019-20

LEARNINIG OBJECTIVES: The learner will be able to know the financial markets in India. The purpose of primary and secondary market in India. Bonds, debentures, shares how does it works in financial markets. Types of financial instruments & repurchase agreement how does it work.

PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED
	MODULE: II FINANCIAL MARKETS: - structure of financial markets in India, Capital market (Role, Importance, Concept) Evolution of financial markets in India, Primary & secondary market in	15 Lectures		Chalk & duster



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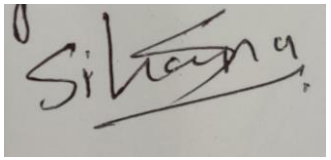
Financial Market Operation (FC-III)	India. Their regulatory framework. Bonds and debt market in India <u>MODULE: -III</u> <u>FINANCIAL INSTRUMENTS: -</u> Meaning & types of financial instruments, Features of financial instruments, liquidity, Maturity, safety Yield, REPO method, TBs, equities (their benefits and importance)	10 Lectures		Chalk & duster



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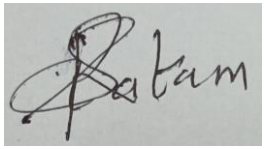
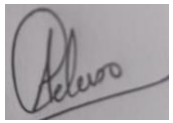
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan D. Satam DEPARTMENT: B.COM (Accounting & Finance) CLASS: SYBAF SEMESTER:III
MONTH: June 2019 ACADEMIC YEAR: 2019-20
LEARNING OBJECTIVE/S: Learning about cost accounting of the product and services.
The learners will be able to : Students will be able to learn practical imposition of cost and calculation in different processes and by different methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting III	**1.Amalgamation of Firms** Realization method only Calculation of purchase consideration Journal/ledger accounts of old firms Preparing Balance sheet of new firm Adjustment of goodwill in the new firm Realignment of capitals in the new firm by current accounts / cash or a combination thereof Excluding : Common transactions between the amalgamating firms	15	Manan and Seth publication	Chalk - Board
	2. **Conversion / Sale of a Partnership Firm into a Ltd. Company** Realisation method only Calculation of New Purchase consideration, Journal / Ledger Accounts of old firms. Preparing Balance sheet of new company	15	Manan and Seth publication	Chalk - Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30





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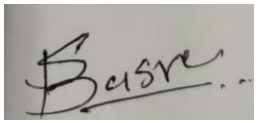
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: B.COM (Accounting & Finance) CLASS: SYBAF SEMESTER: III MONTH: july

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : how the cash left during the dissolution of partnership is to be treated and distributed and in what order. What accounting treatment needs to be given to foreign currency transactions and journal entries.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting III, piecemeal distribution of cash	Introduction and meaning, purpose and significance, order of priority.	1		Lecture method blackboard and chalk
	Excess capital method, format and basic problems	2		
	Asset taken over by the partner, treatment of past losses and profits in the balance sheet	2		
	Contingent liabilities, realisation expenses, amount kept aside for expenses and adjustment of actual capital	1		



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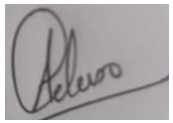

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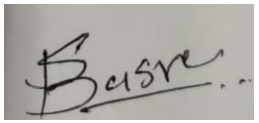
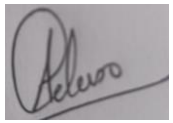
MONTH: August

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting III, piecemeal distribution of cash	Treatment of secured liabilities, treatment of preferential liabilities	1		Lecture method, blackboard and chalk
	Practical problems	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



SIGNATURE OF THE STAFF



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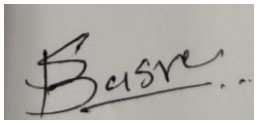
MONTH: August

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting III, Accounting of transaction of foreign currency	Introduction, meaning and purpose.	1		Lecture method, blackboard and chalk
	Journal entries in relation to to purchase and sale of goods and services, assets and loans and credit transactions.	1		
	Format of FEF A/C, computation of exchange rate difference, basic problems	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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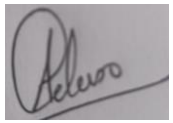

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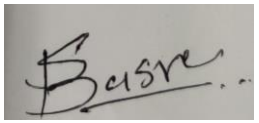
MONTH: September

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting III, accounting of transactions of foreign currency	practical problems based on journal entries and FEF A/C	6		Lecture method, blackboard and chalk



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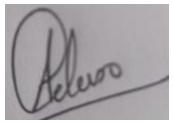

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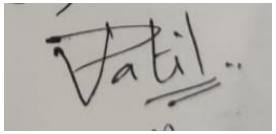
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VAIKHARI PATIL DEPARTMENT: B.COM (Accounting & Finance)

CLASS: SYBAF SEMESTER: III MONTH: JUNE to OCT 2019 ACADEMIC YEAR: 2019 -2020

LEARNING OBJECTIVE/S:
The learners will be able to: Learn Introduction to computer system and Web

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, II, III, IV	History of Computers, Parts of Computers, Hardwares: Specifications and Data Storage Management, Softwares: Concept of System Software and Applications, Networking: Introduction and types of network topologies.	10*(3 DIVISIONS)	E-books, Vipul publications, Seth publication	Projector
	MS Word: Creating, Editing, Formatting and Printing of Documents, Using Tools, Mailmerge and Print Review and Set-up MS Excel: Creating Worksheet, Creating Various Formulae, Creating Charts, Rename and Copy of Worksheets, Using Tools, Printing Review and Set-up Power Point: Create Project Report, Create Slides, Animation, Page Designing, Insert Image, View Page, Print Review and Set-up. Use of Tools In Accounting :– Preparation of vouchers, invoices and reports, Calculation of Interest, Depreciation,TDS, Salary, Taxes, inventory and reconciliation	20*(3 DIVISIONS)	E-books, Vipul publications, Seth publication	



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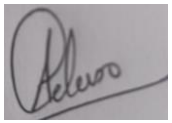

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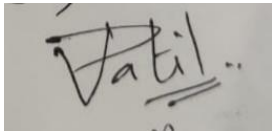
	Use of Various Web Browser,Information Searching Tools,Downloading ,Create New email ID, Sending Data through email Search engine optimisation	10*(3 DIVISIONS)	E-books, Vipul publications, Seth publication	
	Meaning, Advantages and Limitations of E Commerce, The role of Strategy in E-Commerce, Value chains in E Commerce, Infrastructure for Electronic Commerce Web Based Tools for Electronic Commerce, Electronic Commerce software,Security Threats to electronic Commerce , Implementing Security for Electronic Commerce, Electronic Payment Systems, Strategies for Marketing, Sales & Promotion Strategies for Purchasing Logistics & Support Activities, Electronic Markets & Communities, Business Plans for Implementing Electronic Commerce.	10*(3 DIVISIONS)	E-books, Vipul publications, Seth publication	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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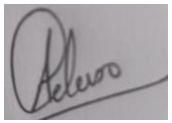

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TEACHINGPLAN(UNITPLAN)

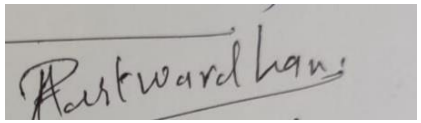
NAME OF THE STAFF: Ambari S Patwardhan. DEPARTMENT:B.COM (Accounting & Finance). CLASS: SYBAF(A,B,C)

SEMESTER:.III MONTH : July to October ACADEMICYEAR:2019-20

LEARNINGOBJECTIVE/S: Business Law (BusinessRegulatoryFramework)-II

Thelearnerswillbeableto:ThePupilswillbeabletounderstandhowthepartnershipcanbecreatedtoconductabusiness,andtheprovisions onwhichtheyhavetocomplywhileconductinganybusinessundertheambitofPartnership.SimilarlytheywillbeintroducedtotheNewTypeof Partnershipintroducedin2008namedLimitedLiabilityPartnership.

PAPER,UNIT, TITLE	SUBTOPICS	NOOF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLS USED



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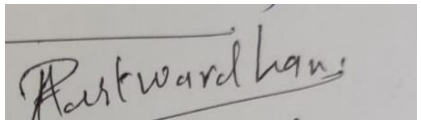
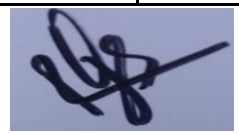
TheIndian Partnership Act-1932	a)ConceptofPartnership -PartnershipandCompany -Testfordeterminationofexistenceforpartnership - Kindsofpartnership	04	Introductionto lawof Partnership: Dr.AvtarSingh PartnershipAct:Pollockand Mulla	Board,Chalk,Duster
	b)Registrationandeffectsofnon-registrationofPartnership	02		

	c)RightsandDutiesofPartners	02		
	d)AuthorityandLiabilityofpartners	03		
	e)Admission,RetirementandExpulsionofPartner	03		
	f)DissolutionofPartnership	03		





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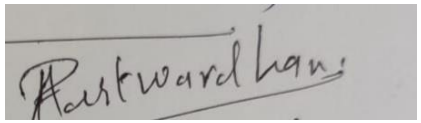
Limited Liability Partnership Act–2008	d)Contributions e)ConversionIntoLimitedLiabilityPartnership f)WindingUpandDissolution	04	Introductiont o lawof Partnership: AvtarSingh PartnershipAct: Pollockand Mulla	Board,Chalk,Duster

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:21



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. AUDRIN COLACO SUBJECT: DIRECT TAXATION- II DEPARTMENT: B.COM (Accounting & Finance)

CLASS: SYBAF SEMESTER: IV MONTH: DEC - MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:

- To understand clubbing of income.
- To acquire knowledge about set off and carry forward of losses.
- To understand return of income under section 139.
- To acquire knowledge about DTAA U/S 90 and 91.
- To know about tax planning and ethics in taxation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Clubbing of Income	Clubbing of Income - Section 60 to 65	05	Students Guide to Income Tax	Chalk and Board
Set Off & Carry	Sec: 70 – Set off Loss from one Source against Income from another Source under the Same Head of Income Sec: 71 – Set Off Loss from One Head against Income of another Head Sec: 71B – Carry Forward & Set off Losses	05	Students Guide to Income Tax	Chalk and Board

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Forward of Losses	from House Property Sec: 72 – Carry Forward & Set Off of Losses of Business Losses Sec: 73- Losses in Speculation Business Sec: 74- Loss under the head Capital Gains			
Advance Tax and Interest Liability	Advance Tax U/S 207, 208, 209, 210 & 211 Sec: 207 – Income Liable to Advance Tax Sec: 208 – Liability of Advance Tax Sec: 209 – Computation of Advance Tax Sec: 210 – Payment of Advance Tax by Assessee on His Own Account Sec: 211 – Due Dates of Payment of Advance Tax Interest Payable U/S 234A, 234B, 234C Sec: 234A – Interest for default in furnishing return of income Sec: 234B – Interest for default in payment of advance tax Sec: 234C – Interest for deferment of advance tax	15	Students Guide to Income Tax	Chalk and Board
DTAA U/S 90 & 91	DTAA U/S 90 & 91	05	Students Guide to Income Tax	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __40__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM (Accounting & Finance)

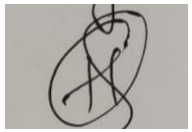
CLASS: S.Y.BAF SEMESTER: IV MONTH: DEC ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to understand the computation of tax liability of individual & HUF.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
3.COMPUTATION OF TAX LIABILITY OF INDIVIDUAL &HUF	INTRODUCTION OF TAX LIABILITY	01	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK-BOARD
	COMPUTATION OF TAX LIABILITY OF INDIVIDUAL	02		
	COMPUTATION OF TAX LIABILITY OF HUF	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM (Accounting & Finance)

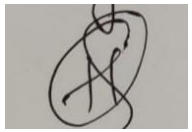
CLASS: S.Y.BAF SEMESTER: IV MONTH: JAN ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able understand the computation of tax liability of partnership firm.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
4.COMPUTATION OF INCOME OF PARTNERSHIP FIRM	COMPUTATION OF P.F IN RELATION TO SEC 40(b) AND APPLICABLE RATE OF TAX	10	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK-BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

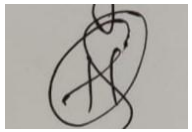
NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM (Accounting & Finance)

CLASS: S.Y.BAF SEMESTER: IV MONTH: JAN-FEB ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to understand different types of RETURN filing under section139.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
5.RETURN OF INCOME-SEC139	COMPULSORY FILING OFRETURN OF INCOME,ETURN TO EMPLOYER,	01	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK-BOARD
	I.T RETURN THROUGH COMPUTER,PERSON EXEMPT FROM FILING RETURN,	01		
	RETURN OF LOSS,BELATED RETURN	01		
	REVISED RETURN,PARTICLARS FURNISHED WITH ETURN	01		



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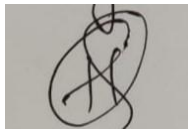
	PARTICULARES OF BUSINSS WITH RETURN	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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TEACHING PLAN (UNIT PLAN)

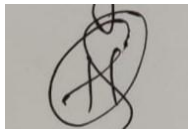
NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT:-B.COM (Accounting & Finance)

CLASS: S.Y.BAF SEMESTER: IV MONTH: FEB -MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to understand computation of TDS and interest for delay and default in payments.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
TAX DEDUCTED AT SOURCE	TDS ON SALARY, INTEREST,COMMISION,RENT,PROFESSIONAL FEES	02	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK-BOARD
	INCOME LIABLE TO ADVANCE TAX,COMPUTATION OF ADVANCE TAX,	03		



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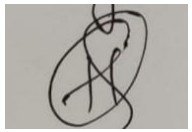
	PAYMENTS AND DUE DATES OF ADVANCE TAX	02		
	INTERRETUNEST FOR DEFAULT IN FURNISHING	01		
	INTEREST FIR DEFERMENT OF ADVANCE TAX	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09



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TEACHING PLAN (UNIT PLAN)

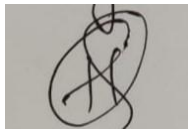
NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM (Accounting & Finance)

CLASS: S.Y.BAF SEMESTER: IV MONTH: MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to study tax planning and ethics in taxation.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
TAX PLANING & ETHICS IN TAXATION	TAX PLANNING,TAX MANAGEMENT,TAX AVOIDANCE, TAX EVASION	01	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK-BOARD
	ETHIC IN TAXATION,IMPORTANCE OF TAX PLANNING,	01		
	TYPES AND AREAS OF TAX PLANNING	01		



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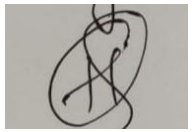
	CORPORATE RESTRUCTURING,FINANCIAL MANAGEMENT DECISIONS,	01		
	TAX PLANNING FOR EMPLOYERS, GOV.MEASURES TO PREVENT TAX AVOIDANCE	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



SIGNATURE OF THE STAFF **SIGNATURE OF THE COORDINATOR** **SIGNATURE OF THE H.O.D**

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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

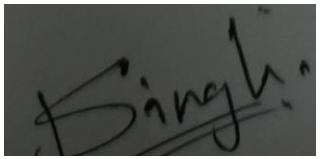
NAME OF THE STAFF: PRIYANKA SINGH DEPARTMENT: B.COM (Accounting & Finance) CLASS : SYBAF

INTRODUCTION TO MANAGEMENT (FC) SEMESTER: IV MONTH: NOVEMBER MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : understand the basics of Management in organization. It's different functions at different levels of Management

PAPER, UNIT,	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Introduction to Basic Management concepts Unit 3 Organizing Unit 5Directing and Controlling	Definition of Management, Nature, Objectives, levels of Management, Principles of Management.	10	The Management guide.	Chalk and duster
	Definition, Nature, Objective, Significance, Process, Formal and Informal Organization, Centralization and Decentralization, Departmentation and Delegation of Authority.	10		
	Importance of Directing, Principles , leadership traits and Styles, Motivation and Factors	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25



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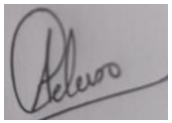

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TEACHING PLAN (UNIT PLAN)

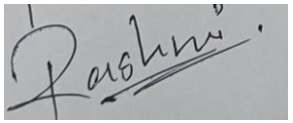
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: FC in Mgmt DEPARTMENT: B.COM (Accounting & Finance)

CLASS:SYBAF SEMESTER:IV MONTH: Dec - Jan ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Planning	Nature , Feature & importance of Planning	3	Management by Peter Drucker	Chalk & Board, Discussion
	Limitations and process of Planning	3		
	Feature and Process of decision making	2		
	Techniques of decision making	2		
	Feature and process of decision Making	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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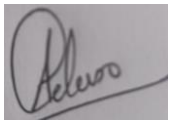

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TEACHING PLAN (UNIT PLAN)

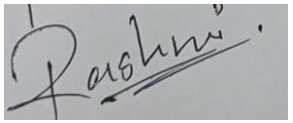
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: FC in Mgmt DEPARTMENT: B.COM (Accounting & Finance)

CLASS:SYBAF SEMESTER:IV MONTH: Feb - March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV & V Staffing & Directive	Staffing – Meaning , importance ,sources of recruitment	3	Management by Peter Drucker	Chalk & Board, Discussion
	Selection Procedure ,Employment test	3		
	Interview , types of interview,	2		
	Importance and principles of directive	2		
	Leadership traits and style	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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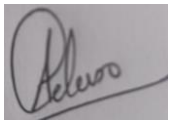

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan D. Satam DEPARTMENT: B.COM (Accounting & Finance) CLASS: SYBAF

SEMESTER:IV MONTH: December2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: Learning about cost accounting of the product and services.
The learners will be able to : Students will be able to learn practical imposition of cost and calculation in different processes and by different methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting IV	**1.Preparation of Final Accounts of Companies** Relevant provisions of Companies Act related to preparation of Final Account (excluding cash flow statement) Preparation of financial statements as per Companies Act. (excluding cash flow statement) AS 1 in relation to final accounts of companies (disclosure of accounting policies)	15	Manan and Seth publication	Chalk - Board
	2. **Ascertainment and Treatment of Profit Prior to Incorporation** Principles for ascertainment Preparation of separate, combined and columnar Profit and Loss Account including different basis of allocation of expenses/ incomes	15	Manan and Seth publication	Chalk - Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

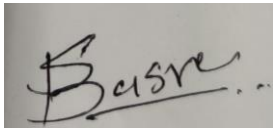
NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: B.COM (Accounting & Finance) CLASS: SYBaf SEMESTER: IV MONTH: January

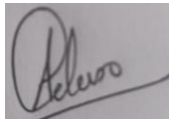
ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : journal entries to be passed in case of redemption of preference shares and debentures and its effect on capital structure and balance sheet of the company. Translation of foreign currency transactions and financial statements into the native currency.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting IV, redemption of preference shares	Introduction, provisions of companies act for redemption of shares, companies rules.	1	Ainapure-Manan Prakashan	Lecture method, blackboard and chalk
	Method of redemption of preference shares, proceeds of fresh issue of shares, capitalisation of undistributed profits	1		
	Calculation of minimum fresh issue to provide the fund for redemption, basic problems	2		
	Practical problems based on entries and balance sheet	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10





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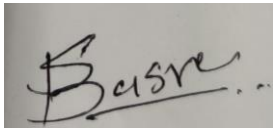
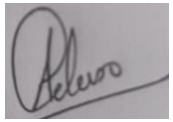
MONTH: February

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting IV, redemption of debentures	Introduction, provision of companies act 2013, creation and investment of DRR including companies rules	2		Lecture method, blackboard and chalk
	Journal entries, methods of writing off discount/ loss on issue of debentures	1		
	Methods of redemption of debentures: buy payment in lump sum and by payment in installments, basic problems	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

MONTH: February





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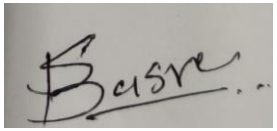
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting IV, redemption of debentures	Practical problems on journal entries and balance sheet	7		Lecture method, blackboard and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

MONTH: March



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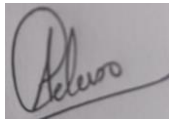

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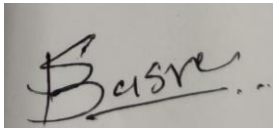
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting IV, foreign branch	Introduction, computation and conversion as per accounting standard 11	1		
	Conversion of trial balance, preparation of financial statements in the books of branch and head office	2		
	Practical problems	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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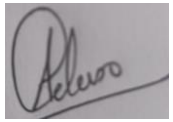

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TEACHING PLAN (UNIT PLAN)

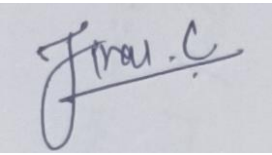
NAME OF THE STAFF: _____Prof. Jinal Chohan_____ DEPARTMENTB.COM (Accounting & Finance)

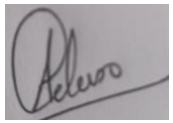
CLASS: ___S.Y BAF____ SEMESTER: ___IV_____ MONTH: __Nov- Feb_____ ACADEMIC YEAR:_2019-2020_____

LEARNING OBJECTIVE/S:
The learners will be able to : The learners will be able to : Gain the knowledge about different accounting software's used in an organization for accounting process and different types of computerized audit techniques carried in an organization

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit2 Computerised Accounting System	Introduction and meaning, Uses and benefits, Role, Need and requirements, Basic requirements, Limitations, Understanding the development and design of computerised accounting system	5	Manan Prakashan, Vipul Prakashan	
	Accounting Software- Introduction and meaning, Uses, Various	5	Manan Prakashan, Vipul Prakashan	
	Accounting Software TALLY- Accounting reports	5	Manan Prakashan, Vipul Prakashan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15____





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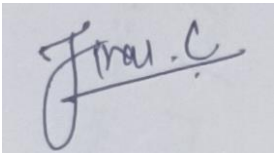
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4 IT And Auditing	Need and importance of IT in Auditing	4	Manan Prakashan, Vipul Prakashan	
	Auditing in IT environment	4	Manan Prakashan, Vipul Prakashan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____08___



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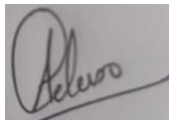

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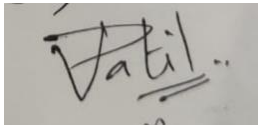
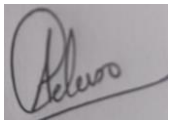
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VAIKHARI PATIL DEPARTMENT:B.COM (Accounting & Finance)
CLASS: SYBAF SEMESTER: IV MONTH: Nov 2019- March 2020 ACADEMIC YEAR: 2019 -2020
LEARNING OBJECTIVE/S:
The learners will be able to: Learn Different business process software.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, III	Introduction, Definition and Meaning of business process Flow of business process for accounting, purchase, sales and finance Classification of business processes, Introduction, Definition and Meaning of Business Process Management, Principles and practices of Business Process Management ,Business Process Management life cycle, Theories of Business Management Process	2*(3 Divisions)		
	Implementation of Business process Management – need, key factors and importance Automation of business Processes – benefits, risks, challenges ,Accounting systems automation, IT and Business Process Management, Information systems – Meaning, Use of IT in accounacy			

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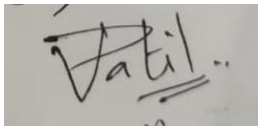
	Introduction, Concept of MIS, Need for MIS, Characteristic of MIS Outputs of MIS, Role of MIS, Guidelines for Developing MIS reports Functional Aspects of the MIS: Problems in MIS Knowledge required for studying MIS, MIS and Computer			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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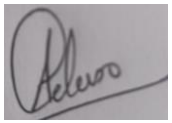

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TEACHINGPLAN(UNITPLAN)

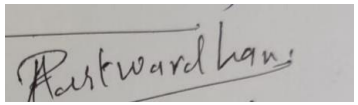
NAMEOFTHESTAFF:AmbariSPatwardhan DEPARTMENT:SelfFinance CLASS:S.Y.BAF(A,B,C)

SEMESTER:IV MONTH:DecembertoApril ACADEMICYEAR:2019-20

LEARNINGOBJECTIVE/S:BusinessLaw(CompanyLawIII)

Thelearnerswillbeableto:ThePupilswilllearnhowacompanycanofferitsshares.WhatarethetypesofShares.RulesRegardingofferof SharestoPrivate&PublicCompany.Proceduretobefollowedforsuchissue.Differentwaystooffersuchshare,Restrictionsonofferandissue ofsuchshares

PAPER,UNIT, TITLE	SUBTOPICS	NOOF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLS USED
Companies Act,2013	ChapterIII-PublicOffer -Section23:PublicOffer -Secton25to28:Definition,Types&ContainsofProspectus - Section33:IssueofApplicationFormsforSecurities - Section35:Mis-statementinProspectus&Liability - Section39:AllotmentOfSecuritiesByCompany	07	1Introduction toCompany Law:Dr.Avtar Singh 2Guideto CompaniesAct :RamaiyaA	Board,ChalkandDuster



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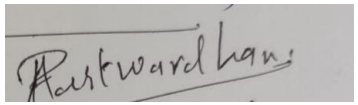
	ChapterIV-PrivatePlacement -Section42:MeaningofPrivatePlacement,Rules& Procedure.	04	1Introduction toCompany Law:Dr.Avtar Singh	Board,ChalkandDuster

			2Guideto CompaniesAct :RamaiyaA	



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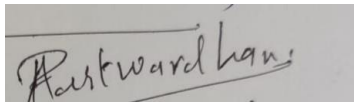
	ChapterV-ShareCapital&Debentures -Section43:KindsofShareCapital -Section44:Shares&DebenturesasamoveableProperty - Section45:DistinctNumberofShares -Section46:Certificateofshares -Section52to56: Applicationofpremiumsreceivedonissueof shares Prohibitiononissueofsharesatdiscount IssueofSweatEquityshares IssueandRedemptionofPreferenceshares TransferAndTransmissionOfSecurities -Section61to72: PowerofLimitedCompanytoAlterit'ssharecapitalFurtherissueofsharecapital NoticetoRegistrarregardingalteration Reductionofsharecapital Restrictionsonpurchasebycompany Powerohthecompanytopurchaseitsown Securities	09	1Introduction toCompany Law:Dr.Avtar Singh 2Guideto CompaniesAct :RamaiyaA	Board,ChalkandDuster



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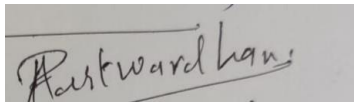
	CapitalRedemptionReserveAccount ProhibitiononBuy-Back Debentures&PowertoNominate			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:20.



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ASHWINI DATTATRAY BHOIR DEPARTMENT: B.COM (Accounting & Finance)

CLASS: SYBAF A,B,C. SEMESTER: IV MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2019 -2020 SUBJECT - COMPANY LAW

LEARNING OBJECTIVE/S:
The learners will be able to know types and features of company and know the principle of Corporate Personality.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Company Act, Definitions Incorporation of Company	Chapter - I -Section 2 Clause (2) Accounting Standard, Clause (7) Auditing Standard, Clause (13) Books of Accounts, Clause (31) Deposit, Clause (41) Financial Year, Clause (42) Foreign Company, Clause (47) Independent Director, Clause (48) Indian Depository Receipts, Clause (62) One Person Company,Clause (85) Small Company.	3	Company Act, 2013 by Ravi Puliani, Bharat Publication	Lecture Method, Case Study, Structure Black Board, Chalk & Duster
	Chapter II - Characteristics of a company or Advantages of incorporation, Disadvantages of incorporation, Lifting of corporate veil, formation of a company, Promoters, Role of Promoters,Rights, Duties and Liabilities of the Promoter,Registration, Consequence of Non-Registration	6	Company Law - Avtar Singh	

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	Chapter- III - Definitions and Contents of Memorandum of Association, Alteration of Memorandum of Association, Object Clause and The Doctrine of Ultra Vires, Articles of Association, Alteration Article of Association, Distinction Between Memorandum of Association and Articles of Association. Effects of Memorandum and Articles. Doctrine of Constructive Notice, Doctrine of Indoor Management.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Ankita Almeida DEPARTMENT: B.COM (Accounting & Finance)

CLASS: SYBAF (A,B,C) SEMESTER: IV MONTH: Dec-April ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of effective learning, leadership skills and self- improvement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Introduction to Management Accounting	Meaning , features , scope, importance, functions, role of management, accounting, management accounting framework, tools, management accounting and financial accounting.	04	Book by Manan Prakashan	Chalkboard

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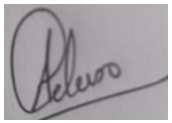

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3.Financial Statement Analysis: Ratio Analysis	**Balancesheet Ratios:-** current ratio, liquid ratio, stock working capital ratio, proprietory ratio, debt equity ratio, capital gearing ratio. **Revenue Ratio:-** Gros profit ratio, expenses ratio, operating ratio, net profit ratio, net operating profit ratio, Stock turnover ratio. **Combined Ratio:-** Return on capital employed, Return on proprietors fund, Return on equity capital, Dividend payout ratio, debt service ratio, debtors turnover ratio, Creditors turnover ratio.	11	Book by Manan Prakashan	Chalkboard
4.Working Capital Management	A. Concept , Nature of working capital,. B. Estimation of working capital requirement C. Operating cycle practical problems -08	10	Book by Manan Prakashan	Chalkboard

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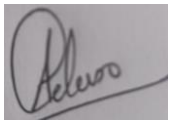

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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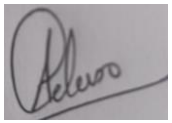

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TEACHING PLAN (UNIT PLAN)

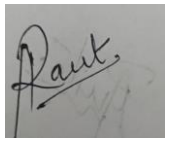
NAME OF THE STAFF: ANKITA ARUN RAUT DEPARTMENT: B.COM (Accounting & Finance)

CLASS: SYBAF SEMESTER: IV MONTH: DEC-MAR ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	ANALYSIS & INTERPRETATION OF A\C: vertical forms of balance sheet and profit and loss account, introduction, advantages of trend analysis, comparative statement and common size statement. Practical: Q1&2 on vertical st, Q3 & 4 on trend analysis, Q5 & 6 on common size, Q7 & 8 on comparative st.	10	Manan Prakashan	Chalk & Duster
2	CASH FLOW STATEMENT: introduction of cash flow, format of cash flow statement (indirect method) Practical Q1 – Q8 on cash flow st.	15	Manan Prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25



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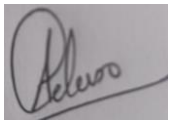

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TEACHING PLAN (UNIT PLAN)

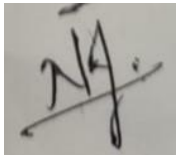
NAME OF THE STAFF: **Jagruti Naukudkar**_____ DEPARTMENT: B.COM (Accounting & Finance)

CLASS: **_SYBAF_A, B & C_____** SEMESTER: **Sem IV_____** MONTH**: _Dec to March_____** ACADEMIC YEAR : **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand the methods of primary and secondary data collection
2) Sampling techniques
3) Process data into various stages
4) Basic introduction to Research Statistical Tools
5) Understand techniques of interpretation

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Research Methodology in Accounting and Finance	Unit 3 : Data Collection and Processing	13	Kothari	Lecture method, Group discussion
	1) Data Collection: Introduction and meaning, types of data 2) Primary data: Observation, Experimentation, Interview, Schedules, Survey,			



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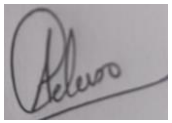

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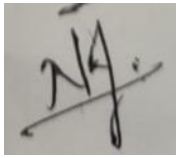
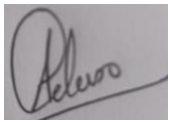
	3) Questionnaires, Limitations of Primary data 4) Secondary data: Sources and Limitations 5) Factors affecting the choice of method of data collection. 6) Sampling: Significance, Methods, Factors determining sample size 7) Data Presentation: Significance in Research, Stages in Data Processing: Editing, 8) Coding, Classification, Tabulation, Graphic Presentation 9) Statistical Analysis: Tools and Techniques, Measures of Central Tendency, 10) Measures of Dispersion, Correlation Analysis and Regression Analysis. 11) Use of computer and internet in data collection and processing			
	Unit 4 : Interpretation and Report Writing	3		Lecture method, Group discussion





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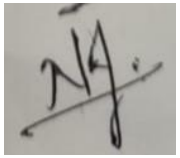
	1) Meaning and techniques of interpretation			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __16_____



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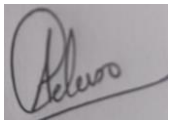

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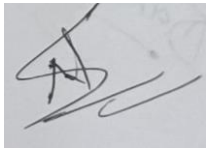
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF NAZIA SAJID SHAIKH. DEPARTMENT: B.COM (Accounting & Finance)

CLASS: SYBAF SEMESTER: IV MONTH: NOV TO FEB. ACADEMIC YEAR: 2019-20 SUB: RESEARCH METHODOLOGY.

LEARNING OBJECTIVE/S:
The learners will be able to : Understand Research, Types of research, Review of literature, Data collection and Processing , Sampling,Data presentation.



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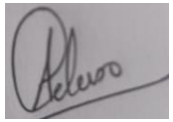

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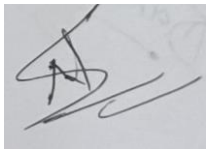
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1. INTRODUCTION TO RESEARCH.	***Research:** Meaning, Objectives, Importance of research in Accounting and finance . Types of research. ***Formulation of research problem:** Meaning and Selection of research problem. ***Review of literature.**	**15**	**Research Methodology: Methods & Techniques M.Y.khan**	**Chalk and Duster.**



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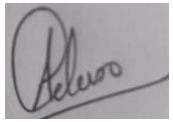

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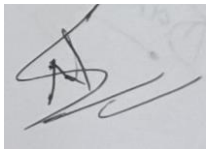
MODULE 3. DATA COLLECTION AND PROCESSING	***Data Collection:** Meaning, types of data, ***Primary Data:** Observation, Experimentation, interview, Schedule, Survey, Questionnaire, Advantages and Limitations of Primary Data. ***Secondary Data:** Sources and limitations, factors affecting the choice of Methods of data collection. ***Sampling:** Significance, methods, Factors determining Sample size ***Data Presentation**	**15**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30____



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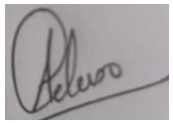

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TEACHING PLAN (UNIT PLAN)

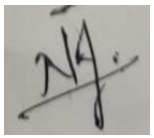
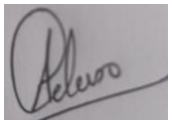
NAME OF THE STAFF: **Jagruti Naukudkar**_____DEPARTMENT:B.COM (Accounting & Finance) CLASS: **_TYBAF_A, B & C_____**

SEMESTER: **Sem V_____** MONTH**: _June to Sep_____** ACADEMIC YEAR : **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Solve practical problems on Operating Costing
2) Solve practical problems on Process Costing and Inter Process Profit

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost Accounting	Unit 3 : Operating Costing	8		Chalk Board
	1) Meaning of operating costing; Determination of per unit cost ; Pricing of services 2) Collection of costing data			
	Unit 4 : Process Costing – Equivalent units of Production and Inter Process Profit	8		Chalk Board

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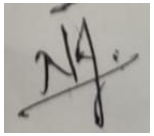
	1. Valuation of Work in progress and Equivalent production (FIFO Method and 2. Weighted Average Method)) 3. Inter Process transfer at Profit Practical problems			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _16_____



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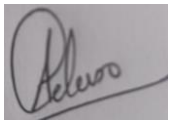

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan D. Satam DEPARTMENT: B.COM (Accounting & Finance) CLASS: TYBAF

SEMESTER:V MONTH: June 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: Learning about cost accounting of the product and services.
The learners will be able to : Students will be able to learn practical imposition of cost and calculation in different processes and by different methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost Accounting III	**1.Uniform Costing and Inter –Firm Comparison** Uniform costing Meaning of and need for Uniform costing Essentials for success of Uniform costing Advantages and limitations of Uniform costing Areas of Uniformity, Uniform cost manual Inter Firm Comparison Pre-requisites of inter firm comparison; Advantages and limitations Practical problems 2	05	Manan and Seth publication	Chalk - Board
	2. **Integrated System and Non- integrated System of Account:** **A) Integrated System** : Meaning; Features, Advantages and Disadvantages Journal Entries and Preparing Integrated Ledgers. Practical problems	15	Manan and Seth publication	Chalk - Board and practical role play in the classroom

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	B) **Non-Integrated system**: Meaning; Features, Advantages and disadvantages Journal entries and Preparing Cost Control Accounts Practical problems			
	3. Activity Based Costing System: Activity Based Costing – Introduction, Advantages, Limitations, Identification of cost drivers, Practical Problems on Traditional V/s Activity Based Costing System	15	Manan and Seth publication	Chalk - Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita Almeida DEPARTMENT: B.COM (Accounting & Finance) CLASS:TY BAF (A) SEMESTER: V

MONTH: August-November ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concept of effective learning; formal and informal communication; leadership skills and self improvement

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Underwriting of Shares and Debentures	Introduction, Underwriting commission as per provision of companies act 2013, Types of commission	01	Book by Sheth publication	Chalkboard
	Negative adjustment, format- calculationon of Net Liability, Practical Problem -03	03	Book by Manan Prakashan	Chalkboard
	Practical Problems- 04 [Benefit of firm UW given]	04	Book by Manan Prakashan	Chalkboard
	Practical Problems -04 [Benefit of firm UW Not given]	04	Book by Manan Prakashan	Chalkboard

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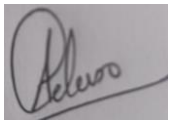
3. As-14-Amalgamation, Absorption And External Reconstruction	Introduction, types of amalgamation, accounting standard and accounting treatment (in the books of vendor company and in the books of purchasing company)	02	Book by Manan Prakashan	Chalkboard
	Journal entries in the books of vendor company using realisation method , and in Purchasing company using purchase method. Computation of Purchase consideration	03	Book by Manan Prakashan	Chalkboard
	Practical Problems 04 (Realisation Method)	06	Book by Manan Prakashan	Chalkboard
	Practical problems 05 (Purchase Method)	07	Book by Manan Prakashan	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

SIGNATURE OF THE STAFF



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Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

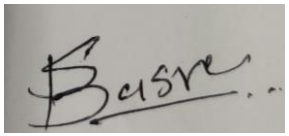
NAME OF THE STAFF: Shruti B. Basare. DEPARTMENT: B.COM (Accounting & Finance) CLASS: TyBaf SEMESTER: V MONTH: July

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Buyback of shares- legal provision and laws regarding buyback, reasons for buyback and journal entries and its effect on capital structure of the company. Internal reconstruction- legal provisions, reasons for internal reconstruction, journal entries and its effect on capital structure and financial position of the company.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting V, Buy back of shares	Introduction and meaning of buyback, legal provisions for buyback of shares, sources of buyback	1		Lecture method, black board and chalk
	Conditions for buyback of shares, methods for buyback, accounting and journal entries for buyback of shares	2		
	Practical problems based on journal entries	4		
	Practical problems based on journal entries and balance sheet	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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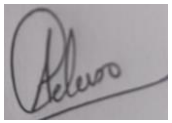

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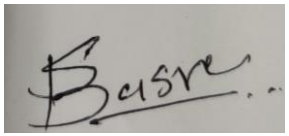
MONTH: August

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting V, internal reconstruction	Introduction and meaning of internal reconstruction, necessity, and accounting treatment	1		Lecture method, black board and chalk
	Journal entries for internal reconstruction, Proforma of capital reduction account	1		
	methods of alteration of share capital, variation of shareholders right consolidation subdivision comma surrender and re issue and and solution and legal provisions. Basic problems.	2		
	Practical problems based on journal entries	3		



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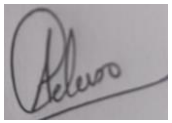

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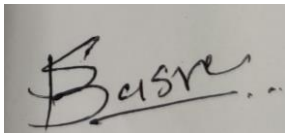
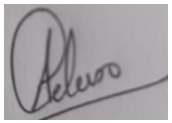
MONTH: September

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting V, internal reconstruction	Practical problems based on journal entries	2		Lecture method, black board and chalk
	Practical problems based on journal entries with balance sheet.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar**_____ DEPARTMENT:B.COM (Accounting & Finance) CLASS: **_TYBAF_A, B & C_____**

SEMESTER: **Sem V_____** MONTH**: _June to Sep_____** ACADEMIC YEAR : **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Valuation of Goodwill and Shares using different methods
2) Statutory provisions and preparation of accounts for Limited Liability Partnership

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Finncial Accounting – VI	Unit 4 : Valuation of Goodwill and Shares	8		Chalk Board
	1) Valuation of Goodwill 2) Valuation of Shares			
	Unit 5 : Accounting for Limited Liability Partnership	8		Chalk Board
	1) Statutory provisions 2) Conversion of partnership business into Limited Liability Partnership 3) Final accounts			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __16_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAVSUBJECT: FINANCIAL ACCOUNTING VI DEPARTMENT: B.COM (Accounting & Finance)

CLASS: TYBAF SEMESTER: V MONTH: JUNE, JULY ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 FINAL ACCOUNTS OF BANKING COMPANY	Legal provision in Banking Regulation Act, 1949 relating to Accounts, Statutory reserves including Cash Reserve and Statutory Liquidity Ratio.	2	FINANCIAL ACCOUNTING BY R L GUPTA	• Chalk • Board • Discussion • Examples
	Bill purchase and discounted, rebate of bill discounted, Non–performing assets and Income from non–performing assets.	3		
	Classification of Advances, standard, sub–standard, doubtful and provisioning requirement.	1		
	Final Accounts in prescribed form	1		
	Capital Adequacy	2		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAVSUBJECT: FINANCIAL ACCOUNTING VI DEPARTMENT: B.COM (Accounting & Finance)

CLASS: TYBAF SEMESTER: V MONTH: AUGUST, SEPTEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 FINAL ACCOUNTS OF INSURANCE COMPANY	General Insurance – Various types of insurance, like fire, marine, Miscellaneous, Special terms like premium, claims, commission, Management expenses, Reserve for unexpired risk, reinsurance	4	FINANCIAL ACCOUNTING BY R L GUPTA	• Chalk • Board • Discussion • Examples
	Final Accounts in a prescribed form. Revenue Statement – Form B – Revenue Account, Profit / Loss Account – Form B – Profit & Loss and Balance Sheet Form B – BS	3		
	Practical Illustrations	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 15

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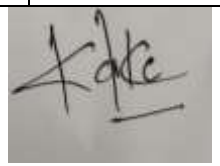
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Karishma Vijay Kale DEPARTMENT: B.COM (Accounting & Finance) CLASS: TyBaf-A,B,C

SEMESTER: V MONTH: October ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Understand Financial management concepts and solve sums related to it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Chapter: 2 Capital Budgeting	Payback period	1	Sheth Publishers	Blackboard
	Payback profitability	1	Sheth Publishers	Blackboard
	Average rate of return	1	Sheth Publishers	Blackboard
	Discounted payback period	1	Sheth Publishers	Blackboard
	Net asset value	1	Sheth Publishers	Blackboard
	Profitability index methods	1	Sheth Publishers	Blackboard
	Standard deviation	1	Sheth Publishers	Blackboard



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	Coefficient of variation method	1	Sheth Publishers	Blackboard
	Decisions tree analysis	1	Sheth Publishers	Blackboard
	Sensitive analysis	1	Sheth Publishers	Blackboard
	Scenario analysis	1	Sheth Publishers	Blackboard
	Financial Break even analysis	1	Sheth Publishers	Blackboard
Chapter 3 Capital Rationing	Divisible projects Indivisible projects	3	Sheth Publishers	Blackboard
Chapter 4 Capital Structure Decision	Weighted average cost of capital Net income approach Net operating income approach Modigliani and Miller theory Modigliani and Miller theory arbitrage Modigliani and Miller theory corporate taxation	4	Sheth publishers	Blackboard
Chapter 5 Dividend decision	Walter model Gordon model	4	Sheth Publishers	Blackboard

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	Graham and Dodd model M. M. Model			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___23_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Sandra Shamir Almeida DEPARTMENT : B.COM(Accounting & finance)

CLASS : TYBAF (A,B, C) SEM : V MONTH : JUNE – SEP YEAR : 2019-20

LEARNING OBJECTIVE/S :

- The learners will be able to learn various aspects about Strategic Financial Management, Need and Importance of Strategy, Financial Planning, Role of Financial Manager, Concept, Types, Advantages and Ethics in Mutual Funds, Concepts of Debentures and Bonds, Details of Receivables Management.
- Finance is the Lifeblood and Backbone of business.
- This subject is helpful to develop Financial & Management skills among learners

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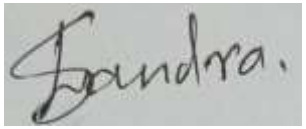
PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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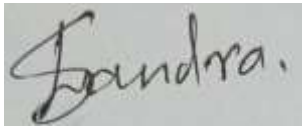
FINANCIAL MANAGEMENT-II	**MODULE I : STRATEGIC FINANCIAL MANAGEMENT** ● Strategic Financial Management - Need and Importance ● Corporate, Business and Functional Strategy ● Financial Planning – Need and Importance ● Profit Maximization ● Wealth Maximization ● Interface of Financial Policy and Strategic Management ● Relationship of Finance to Economics and Accounting ● Role of Financial Manager.	05	**Strategic Financial Management by CA G.Sekar & CA B. Saravana Prasath** **Financial Management (Theory and Practice by Prasanna Chandra)**	CHALK & DUSTER



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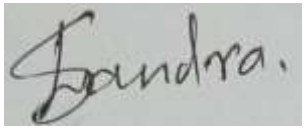
	MODULE IV : Mutual Funds and Bond Valuation. ●Introduction to Mutual Fund - History & Origin, Definition, Meaning, Characteristics, Advantages, Disadvantages, Limitations of Mutual Funds. ●Ethics in Mutual Fund ●Entities Involved – Sponsor, Trust, Trustee, Asset Management Company, Registrar and Transfer Agent (RTA) and Fund Houses in India. ●Classification of Mutual Fund – Functional/ Operational – Open ended, Close ended, Interval Portfolio-Income, Growth, Balanced, MMF, Geographical/Location-Domestic and Offshore, Tax Saving Funds, Exchange Traded Funds, Balanced Funds, Fixed Term Plan, Debt Funds and SIP. ●Calculations of NAV, Entry Load & Exit Load.	10	**Financial Management Principles and Applications by Sheridan Titman, Arthur Known, John D Martin** **Financial Management by S.P. Gupta**	CHALK & DUSTER



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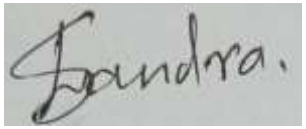
	●Bond Valuation – Meaning, Measuring Bond Returns – Yield To Maturity, Yield To Call & Bond Pricing. Bond Pricing Theorems, Bond Risks and Bond Duration. ● (Practical Problems on YTM & Bond Duration.)			
	MODULE V : Credit Management ●Credit Management-Terms of Payment, Credit Policy Variables, Credit Evaluation, Credit Granting Decision, Control of Accounts Receivables i.e. Receivables Management, Ageing Schedule and Credit Management in India.	**10**	**Financial Management by Rajeev Bansal**	CHALK & DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM(Accounting & finance)

CLASS: T.Y.BAF SEMESTER: V MONTH: JUN ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES: The learners will be able to study the meaning and basic concepts of GST.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LECTURES ALLOTTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.INTRODUCTION TO INDIRECT TAX AND GST	FEATURES OF INDIRECT TAX,ADVANTAGES AND DISADVANTAGES,AUTHORITY OF TAXES IN INDIA	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICATION), ICAI -IPCC BOOKS	CHALK-BOARD
	GENESIS OF GST IN INDIA,POWER TO TAX GST,MEANING & DEFINITION OF GST	01		
	CONCEPTS- CGST,IGST,SGST,UTGST	01		
	EXPORT OF GOODS AND SERVICES,IMPORT OF GOODS AND SERVICES	01		
	GST COUNCIL AND GST NETWORK	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM(Accounting & finance)

CLASS: T.Y.BAF SEMESTER: V MONTH: JUL ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to understand levy and collection of GST and concepts of supply as well.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LECTURES ALLOTTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
2.LEVY AND COLLECTION OF GST	LEVY AND COLLECTION OF GST,	02	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICATION), ICAI -IPCC BOOKS	CHALK-BOARD
	COMPOSITE AND MIXED SUPPLY	02		
	POWER TO GRANT EXEMPTION,NEGATIVE LIST OF GST	02		
	GST RATE SCHEDULE FOR GOODS AND SERVICES	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM(Accounting & finance)

CLASS: T.Y.BAF SEMESTER: V MONTH: AUG-SEPT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to study the place and time concept of supply and computation of value of supply as well.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
3.CONCEPTS OF SUPPLY	TAXABLE EVENT SUPPLY	02	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	CHALK-BOARD
	PLACE OF SUPPLY	03		
	TIME OF SUPPLY	03		
	VALUE OF SUPPLY	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM(Accounting & finance)

CLASS: T.Y.BAF SEMESTER: V MONTH: SEPT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to study the preparation to tax invoices and debit &credit notes.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
4.DOCUMENTATION	TAX INVOICES	02	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	CHALK-BOARD
	DEBIT AND CREDIT NOTES	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04

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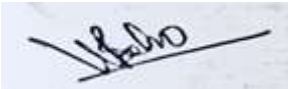
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT: B.COM (Accounting & Finance) CLASS**: T.Y.BAF.** SEMESTER: **5th**
MONTH: **JUNE** ACADEMIC YEAR: **2019-20**
LEARNING OBJECTIVE/S:
The learners will be able to: What is GST and what is the procedure for registration under GST

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
REGISTRATION UNDER GST	**Persons not liable for registration** **Compulsory registration** **Procedure for registration** **Deemed registration** **Cancellation of registration**	15	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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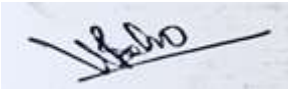
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT: B.COM (Accounting & Finance) CLASS**: T.Y.BAF.** SEMESTER: **5th** MONTH: **JULY**
ACADEMIC YEAR: **2019-20**
LEARNING OBJECTIVE/S:
The learners will be able to:

1. Procedure regarding payment of GST

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAYMENT OF GST	**Procedure and provisions regarding payment of tax under GST**	04	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04



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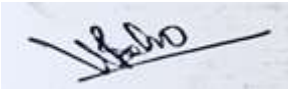
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT:B.COM (Accounting & Finance) CLASS**: T.Y.BAF.** SEMESTER: **5th** MONTH: **AUG**
ACADEMIC YEAR: **2019-20**
LEARNING OBJECTIVE/S:
The learners will be able to:

1. Input Tax Credit and the conditions applicable for availment of ITC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INPUT TAX CREDIT	**Eligibility for taking ITC** **Input tax credit in special circumstances**	15	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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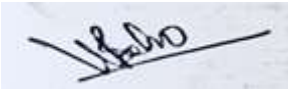
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: MABEL R LOBO** DEPARTMENT: B.COM (Accounting & Finance) CLASS**: T.Y.BAF.** SEMESTER: **5th** MONTH: **SEPT**
ACADEMIC YEAR: **2019-20**
LEARNING OBJECTIVE/S:
The learners will be able to:

1.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
INPUT TAX CREDIT(Contd)	Computation of tax and payment of Tax	09	GST by V.S.Datey,Taxmann GST & Custom Law by K.M.Bansal. Indirect Taxes by V.S.Balchandra,Sultan Chand and Sons.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Nilambari Yogesh Shidhaye Department: - B.COM (Accounting & Finance)
Class: - T.Y.BAF (A, B, C) SEM: - V MONTH-: -July-Sept YEAR: -2019/20
LEARNINIG OBJECTIVES: - The learner will be able to learn 4ps of marketing & integrated marketing communication. He/she will be able to learn the branding and packaging within the industry.to know the importance of production management & various certification declare to the industry for the purity of the product.

PAPER/TITLE/ UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED
	MODULE: I MARKETING MANAGEMENT: - 4ps of marketing, product, price, place and promotion, product life cycle, Branding & packaging, price management, pricing strategies, place distribution management, distribution decisions & types.	15 Lectures		Chalk & duster

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MANAGEMENT APPLICATIONS II	PROMOTION MANAGEMENT: - Promotion strategies, Integrated marketing communication, MODULE: -II PRODUCTION MANAGEMENT: - Meaning, definition, scope & steps. Meaning of productivity, Measures to increase the productivity, productivity movement in India, meaning and definition of quality management, TQM, quality circle, ISO 9000/14000. Inventory management meaning and method of the same.	15 Lectures		Chalk & duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Management Applications DEPARTMENT: B.COM (Accounting & Finance)

CLASS:TYBAF SEMESTER:V MONTH: June-July ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Human Resource Management	HRM- feature , functions , HRP – Meaning and Process of HRP	3	Marketing Management By Philip ,Kotlar	Chalk Board, Discussion
	HRD- Methods of HRD, Performance appraisal - Concept, Traditional and Modern Methods	3		
	Employee Retention- Techniques	3		
	Leadership- traits , Styles	3		
	Motivation – factors and theories	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Management Applications DEPARTMENT: B.COM (Accounting & Finance)

CLASS:TYBAF SEMESTER:V MONTH: August -Sept ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Financial Management	Financial Management –Concepts, Functions , Features	3	Marketing Management By Philip ,Kotlar	Chalk Board ,Discussion
	Capital Budgeting- Introduction , Importance and Process	3		
	Capital Structure – Meaning , Factor affecting	3		
	Capital Market- Meaning, Constituents, Functions	3		
	Fundamental and Technical Analysis, Venture Capital	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan D. Satam DEPARTMENT: B.COM (Accounting & Finance)

CLASS: TYBAF SEMESTER:VI MONTH: December 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: Learning about cost accounting of the product and services.
The learners will be able to : Students will be able to learn practical imposition of cost and calculation in different processes and by different methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost Accounting IV	**1. Standard Costing and Variance Analysis :** Preliminaries in installing of a standard cost system, Material Cost, variance Labour cost, variance Variable overhead variances, Fixed Overhead variances, Sales variances, Profit variances, Practical problems	15	Manan and Seth publication	Chalk - Board
	2. **Managerial Decision Making:** Make or buy, Sales mix decisions ,Exploring new markets, Plant shut down decision, Practical problem	15	Manan and Seth publication	Chalk - Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: COST ACCOUNTING DEPARTMENT: B.COM (Accounting & Finance)

CLASS: TYBAF SEMESTER: VI MONTH: DECEMBER, JANUARY ACADEMIC YEAR: 2019 - 2020

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 BUDGETING AND BUDGETING CONTROL	Introduction. Meaning, Objectives, Advantages and Limitations of Budgets	2	COST AND MANAGEMENT ACCOUNTING BY SAXENA & VASHIST	• Chalk • Board • Discussion • Examples
	Functional Budget, Fixed and Flexible Budgets	3		
	Zero based Budgeting , Performance Budgeting, Budgetory Control	2		
	Practical illustration	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: COST ACCOUNTING DEPARTMENT: B.COM (Accounting & Finance)

CLASS: TYBAF SEMESTER: VI MONTH: JANUARY, FEBRUARY ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 ABSORPTION COSTING AND MARGINAL COSTING	Introduction to Marginal Costing, Meaning of Absorption Costing, Difference between Marginal costing and Marginal costing.	2	COST AND MANAGEMENT ACCOUNTING BY SAXENA & VASHIST	• Chalk • Board • Discussion • Examples
	Features, Assumptions, Advantages, Limitations of Marginal costing	2		
	Marginal Cost, Marginal cost equations, CVP Analysis	3		
	Break even analysis meaning and graphic presentation, MOS, Key factor	2		
	Practical illustration	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 15

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TEACHING PLAN (UNIT PLAN)

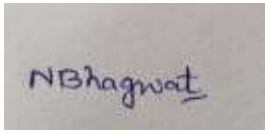
NAME OF THE STAFF: Dr. NILIMA BHAGWAT DEPARTMENT: B.COM (Accounting & Finance) CLASS: T.Y.B.A.F

SEMESTER: VI MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:
The Learner/Students will be able to under the concept of Indian economy in terms of classification of various sector such as primary, secondary and tertiary sector and their contribution towards the development of Indian Economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indian Economy-III Unit IV	Unit I: Money and Banking ● Money market and its features ● Monetary Policy of RBI ● Progress of Commercial Banking in India ● Development of Capital Markets ● SEBI and Its Functions	15	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	Lecture, group discussion, test, oral presentation of important topics.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: B.COM (Accounting & Finance) CLASS: T.Y.B.A.F

SEMESTER: VI MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES:
The Learner/Students will be able to under the concept of Indian economy in terms of classification of various sector such as primary, secondary and tertiary sector and their contribution towards the development of Indian Economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indian Economy-III Unit I, II & III	Unit I: Introduction to Agricultural Sector Demographic features, Urbanization and its effects, agricultural sector – institution, reforms, technology, pricing, finance, marketing and National Agricultural Policy.	15	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	Lecture, group discussion, test, oral presentation of important topics.

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	Unit II: Industrial Sector Growth & pattern of industrialisation, Industrial Policy of 1991, Public sector and Disinvestment, small scale sector problems and prospects.	15	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	Lecture, group discussion, test, oral presentation of important topics.
	Unit III: Service Sector and External Sector Nature, scope, trends in banking-insurance-healthcare-tourism industry, external sector, structure and direction of foreign trade, BOP since 1991, FDI and Foreign capital in India with transition, SAARC, ASEAN &WTO role and Impact.	15	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	Lecture, group discussion, test, oral presentation of important topics.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____45____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar**_____ DEPARTMENT: B.COM (Accounting & Finance)

_ CLASS: **_TYBAF_A, B & C_____** SEMESTER: **Sem VI_____** MONTH**: _Dec to March_____** ACADEMIC YEAR : **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting – VII	Unit 1 : Final Account for Electricity Company	6		Chalk Board
	1) Final Accounts as per Double Account System Final Accounts as per Electricity Rules Receipt & Expenditure on Capital Account General Balance Sheet Contingency Reserve 2) Disposal of Surplus (As per Electricity Rules): Norms regarding Disposal of Surplus 3) Replacement of Assets			

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	Unit 3 : Investment Accounting (w.r.t. Accounting Standard- 13)	6		Chalk Board
	1) For shares (variable income bearing securities) 2) For debentures/Preference. shares (fixed income bearing securities) 3) Accounting for transactions of purchase and sale of investments with ex and cum 4) interest prices and finding cost of investment sold and carrying cost as per 5) weighted average method (Excl. brokerage). 6) Columnar format for investment account.			
	Unit 5 : Introduction to IFRS	4		Chalk Board, class discussion
	1) Accounting standards 2) Indian Accounting standards (Ind AS) 3) Comparison of Ind AS, IFRS and AS			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __16_____

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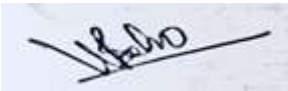
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. DR (CA) MABEL LOBO DEPARTMENT: B.COM (Accounting & Finance) CLASS:TYBAF SEMESTER: VI

MONTH: Dec'2019 to Mar'2020 ACADEMIC YEAR: 2019-2020
LEARNING OBJECTIVE/S: To let students understand what Income Tax is and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting VII- Final Accounts of Co-op. Society	Provisions of Maharashtra State Co-operative societies Act and Rules, Accounting Provisions including appropriation to various funds	27	Manan Prakashan, Self maintained notes,	Chalk and duster
	Format of Final Accounts- Form N Practical problems on preparation of final accounts of co operative housing and consumer society	27	Manan Prakashan, Self maintained notes,	Chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18 per Division



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TEACHING PLAN (UNIT PLAN)

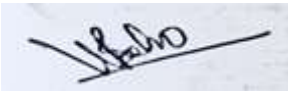
NAME OF THE STAFF: Prof. DR (CA) MABEL LOBO DEPARTMENT: B.COM (Accounting & Finance) CLASS:TYBAF SEMESTER: VI

MONTH: Dec'2019 to Mar'2020 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To let students understand what Income Tax is and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Mutual Funds	Introduction, historical background , SEBI guidelines, NAV schme , types of mutual fund schems, FOF schmes, Load or non load scheme	27	Manan Prakashan, Self maintained notes,	Chalk and duster
	Investment valuation norms, pricing of units, contents of balance sheet and revenue account, evaluation of mutual funds, disposal of investments, recognition of income, accounting policies and entries	27	Manan Prakashan, Self maintained notes,	Chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18 per Division



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TEACHING PLAN (UNIT PLAN)

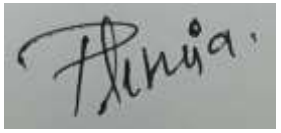
NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: B.COM (Accounting & Finance) SUBJECT : FINANCIAL MANAGEMENT

CLASS:TY BAF SEMESTER: VI MONTH: DEC 2019 – APRIL 2020 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : TO ENSURE REGULAR AND ADEQUATE SUPPLY OF FUNDS TO THE CONCERN AND GIVE ADEQUATE RETURNS TO THE SHAREHOLDERS. .AND TO ENSURE OPTIMUM UTILIZATION OF FUNDS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FINANCIAL MANAGEMENT	1. BUSINESS VALUATION	13	MANAN ,SHETH PRAKASHAN	CHALK AND BLACKBOARD,
	2. MERGERS AND ACQUISITIONS	12		
	3. ASSETS AND LIABILITIES RESTRUCTURING	06		
	4. LEASE AND HIRE PURCHASE FINANCING	14		
	5. WORKING CAPITAL FINANCING	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM (Accounting & Finance)

CLASS: T.Y.BAF SEMESTER: VI MONTH: DEC ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to study the payment and return of taxes under GST as well as interest payment and refunds.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LECTURES ALLOTTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.PAYMENT OF TAX REFUNDS	PAYMENT OF TAX,INTEREST AMOUNT,	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICATION), ICAI -IPCC BOOKS	CHALK-BOARD
	TDS, TCS	01		
	REFUND OF TAX	02		
	INTEREST ON DELAYED REFUNDS	02		
	INTEREST ON DELAYED PAYMENTS	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM (Accounting & Finance)

CLASS: T.Y.BAF SEMESTER: VI MONTH: JAN ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES: The learners will be able to understand audit and assessment procedures and E-WAY Bill.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LECTURES ALLOTTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
3.ACCOUNTS, AUDIT, ASSESSMENT & RECORDS	ELECTRONIC WAY BILL,SELFASSESSMENT	02	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICATION), ICAI -IPCC BOOKS	CHALK-BOARD
	SCRUTINY OF RETURNS, NON-FILER OF RETURNS	02		
	ASSESSMENT OF UNREGISTERED PERSON, ASSESSMENT IN SPECIAL CASES,	02		
	AUDIT BY TAX AUDITORS	01		
	SPECIAL AUDIT	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM (Accounting & Finance)

CLASS: T.Y.BAF SEMESTER: VI MONTH: JAN-FEB ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to understand customs laws along with the valuation of imported and exported goods.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LECTURES ALLOTTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
4.CUSTOM ACT- I	INTRODUCTION TO CUSTOM LAWS	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICATION), ICAI -IPCC BOOKS	CHALK-BOARD
	EXEMPTION FROM CUSTOM DUTY, TAXABLE EVENT	03		
	CHARGES OF CUSTOM DUTY	03		
	TYPES OF CUSTOM DUTIES	02		
	VALUATION OF IMPORTED & EXPORTED GOODS	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF **SIGNATURE OF THE COORDINATOR** **SIGNATURE OF THE H.O.D**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM (Accounting & Finance)

CLASS: T.Y.BAF SEMESTER: VI MONTH: FEB ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to compute custom duty under different provisions like Baggage Rules, postal goods and duty Drawback.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LECTURES ALLOTTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
5.CUSTOM ACT-II	ALL IMPORT EXPORT PROCEDURES	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICATION), ICAI -IPCC BOOKS	CHALK-BOARD
	PROCEDURE RELATED TO BAGGAGE	02		
	GOODS IMPORTED & EXPORTED BY POST & STORES	03		
	PROVISIONS RELATING TO COASTAL GOODS	01		
	WAREHOUSING & DRAWBACK	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

SIGNATURE OF THE STAFF **SIGNATURE OF THE COORDINATOR** **SIGNATURE OF THE H.O.D**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.COM (Accounting & Finance)

CLASS: T.Y.BAF SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES: The learners will be able to study Foreign Trade Policy and current FTP 2015-20

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LECTURES ALLOTTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
6.FOREIGN TRADE POLICY	INTRODUCTION,LEGISLATION& FEATURES OF FTP, FTP2015-20	02	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICATION), ICAI -IPCC BOOKS	CHALK-BOARD
	ADMINISTRATION,CONTENT & SCOP	01		
	EXEMPTION &REMISSION SCHEMES,DUTY FREE IMPORT AUTHORIZATION SCHEME	02		
	REWARD SCHEME, EOU,STP	02		
	BTP AND EHTP SCHEME	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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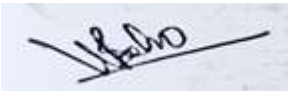
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. DR (CA) MABEL LOBO DEPARTMENT: B.COM (Accounting & Finance) CLASS:TYBAF

SEMESTER: VI MONTH: Dec'2019 to Mar'20 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: To let students understand what is Income Tax and how it is reflected in our practical life.
The learners will be able to : Understand the concept of Income Tax and relate it with their day to day life

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indirect Tax- Returns under GST	Returns under GST - Section 38 - Section 39 - Section 40 - Section 41 - Section 42	18	Manan Prakashan, Self maintained notes, ICAI study material	Online teaching i.e. Google meet White board Microsoft excel
	Returns under GST	18		



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	- Section 43 - Section 44 - Section 45 - Section 46 - Section 47			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 per Division

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SIGNATURE OF THE COORDINATOR

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NAME OF THE STAFF: _Smita S. Khaire_____DEPARTMENT: ____

COMMERCE_____

CLASS:_____TYEME_____ SEMESTER:____VI_____ MONTH:____January to April_____

ACADEMIC YEAR:_____2021 -2022_____

LEARNING OBJECTIVE/S:
The learners will be able to understand the different types of disaster and importance of Disaster Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Disaster Management	UNIT 1 Disaster – Introduction –Types of natural calamities, major and minor calamities – impact of calamities.	5	Environmental Chemistry and Pollution Control by S.S. DARA	Chalk- Board Method
	UNIT II-Natural disaster – cyclone – Tsunami – flood	3	Online Resources	Chalk- Board Method
	UNIT III Manmade disaster – Wars – Biological war (introduction of pathogens) – misuse of atomic bombs –major accidents from industries e.g., Bhopal. Lov canal disaster – London Smog.	5	Environmental science by Santra S.C	PowerPoint Presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Snehal Jadhav DEPARTMENT: Environmental Management & Economics CLASS: TYEME

SEMESTER: VI MONTH: October - April ACADEMIC YEAR: 2021 -222

SUBJECT: Solod Hazardous & Waste Management

LEARNING OBJECTIVES:
The learners will be able to:he learners will be able to understand the different types of Solid Waste and Importance of Solid & Hazardous Waste Management.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S
Solid & Hazardous Waste Management	UNIT II COLLECTION, SEGREGATION AND TRANSPORT OF MUNICIPAL SOLID WASTES: Handling and segregation of wastes at source. Collection and storage of municipal solid	4	Online Resources

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	wastes; analysis of Collection systems. Transfer stations – labeling and handling of hazardous wastes		
	UNIT III MUNICIPAL SOLID WASTE MANAGEMENT: Solid waste processing technologies. Mechanical and thermal volume reduction. Biological and chemical techniques for energy and other resource recovery: composting, vermicomposting, Termigradation, fermentation. Incineration of solid wastes. Disposal in landfills: site selection, design, and operation of sanitary landfills; Leachate and landfill gas management; landfill closure and post-closure environmental monitoring; landfill remediation. Regulatory aspects of municipal solid waste management.	5	Environmental science by Santra S.C

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	UNIT IV HAZARDOUS WASTES: Hazardous waste definition. Physical and biological routes of transport of hazardous substances – sources and characterization categories and control. Sampling and analysis of hazardous wastes – analytical approach for hazardous waste characterization – proximate analysis – survey analysis – directed analysis – analytical methods.	4	Environmental science by Santra S.C
	UNIT V HAZARDOUS WASTES MANAGEMENT: Sources and characteristics: handling, collection, storage and transport, TSDF concept. Hazardous waste treatment technologies - Physical, chemical and thermal treatment of hazardous waste: solidification, chemical fixation, encapsulation, pyrolysis and incineration. Hazardous waste land fills - Site selections, design and operation. HW reduction, recycling and reuse, Regulatory aspects of HWM.		
	UNIT VI BIOMEDICAL WASTE MANAGEMENT: Biomedical waste: Definition, sources, classification, collection, segregation Treatment and disposal.	4	online Resources

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Snehal Jadhav DEPARTMENT: Environmental Management & Economics CLASS: TYEME

SEMESTER: VI MONTH: Nov -April ACADEMIC YEAR:2021 - 2022

SUBJECT: Environmental Problems Hazards & Mitigation

LEARNING OBJECTIVES:
The learners will be able to:

- To identify and understand about pollution and environmental degradation
- To examine best practices of urban and rural environmental management

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Natural and Man made Environmental Problems:	Environmental problems associated with urbanization,	3	Online Resource	Chalk and Board
	Environmental problems associated with industrialization	3	Online Resource	

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TEACHING PLAN (UNIT PLAN)

	Environmental problems associated with modernization of agriculture	4	Online Resource	Chalk and Board
Unit 2: Global and Regional Environmental Issues:	GreenHouse effect – causes and associated hazards,	2	Environmental Chemistry -S.S Dara	Chalk and Board
	Ozone layer depletion – causes and associated hazards,	2	Environmental Chemistry -S.S Dara	Chalk and Board

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	Acid rain, Deforestation and loss of biodiversity;	3	Environmental Chemistry -S.S Dara	Chalk and Board
	Major environmental problems in India	3	Environmental Chemistry -S.S Dara	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

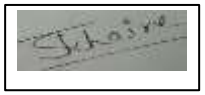
NAME OF THE STAFF: _Smita S. Khaire_____DEPARTMENT: ___ COMMERCE_____

CLASS: _____TYEME_____ SEMESTER: ____VI_____ MONTH: ____January to April_____ ACADEMIC YEAR: _____2021 -2022_____

LEARNING OBJECTIVE/S:

The learners will be able to understand the different types of Solid Waste and Importance of Solid & Hazardous Waste Management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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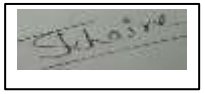
TEACHING PLAN (UNIT PLAN)

Solid & Hazardous Waste Management	UNIT I SOLID WASTE: Definition of solid wastes – types of solid wastes – Sources - Industrial, mining, agricultural and domestic – Characteristics. Solid waste Problems - impact on environmental health – Concepts of waste reduction, recycling and reuse	4	Environmental Chemistry and Pollution Control by S.S. DARA	PowerPoint Presentation
	UNIT II COLLECTION, SEGREGATION AND TRANSPORT OF MUNICIPAL SOLID WASTES: Handling and segregation of wastes at source. Collection and storage of municipal solid wastes; analysis of Collection systems. Transfer stations – labeling and handling of hazardous wastes	4	Online Resources	PowerPoint Presentation



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TEACHING PLAN (UNIT PLAN)

	UNIT III MUNICIPAL SOLID WASTE MANAGEMENT: Solid waste processing technologies. Mechanical and thermal volume reduction. Biological and chemical techniques for energy and other resource recovery: composting, vermicomposting, Termigradation, fermentation. Incineration of solid wastes.	5	Environmental science by Santra S.C	Chalk- Board Method

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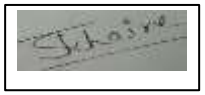

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	Disposal in landfills: site selection, design, and operation of sanitary landfills; Leachate and landfill gas management; landfill closure and post-closure environmental monitoring; landfill remediation. Regulatory aspects of municipal solid waste management.			
	UNIT VII RADIOACTIVE WASTE MANAGEMENT: Radioactive waste: Definition, Sources, Low level and high level radioactive wastes and their management, Radiation standard by ICRP and AERB	3	Online Resources	Chalk- Board Method

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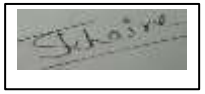
TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 4_____



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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti P. DEPARTMENT: EME CLASS: TYEME

SEMESTER: VI MONTH: Nov- April ACADEMIC YEAR: 2021 - 2022

SUBJECT: Environment & Ecotourism

LEARNING OBJECTIVES:
The learners will be able to: understand the importance of ecotourism.
b) describe the link between ecotourism and reduction in poverty levels.
c) explain the human factors that have an impact on ecotourism.

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I,II	Agriculture-ContributiontoEconomicdevelopment-foodproblem			
	landreformsinIndia,Bhoodanmovement-Greenrevolution-			
	PanchayatRaj-CommunitydevelopmentProjects -Co-Operativemovement.	12		

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	Ruralsocialstructure-caste system,jointfamily-religioncaste,culturalsocial &psychologicalbarrierstoeconomicdevelopmen			
	overcoming-resistancetochange			
UNIT III	ConceptsofTourism-Classification-Religioustourism	8		

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	Culturaltourism-Heritagetourism-Monumentaltourism			
	Adventuretourism-Marstourism-Sustainabletourism			
	Consumptive&nonconsumptivetourism PrinciplesofEcotourism-TypesofEcotourism-ConceptsofEcotourism			

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TEACHING PLAN (UNIT PLAN)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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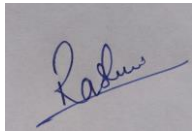
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Rashmi Gurunani DEPARTMENT : Commerce

CLASS : TYEME SEM : VI MONTH : Jan-April YEAR : 2021-22

LEARNINGOBJECTIVE/S : The learners will be able to learn various aspects about corporate social responsibility. It is very essential part of business. This subject is helpful to create awareness about social responsibilities of business among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Corporate Social Responsibility	**MODULE II. Standards and Codes** 1. ISO – 14001 2. OHSAS – 18001 3. SA – 8000 4. OECD Guidelines for Multinational Companies 5. Global Compact 6. AA – 1000 7. BS / ISO Guideline on CSR Management (ISO-26000) .	15	Business ethics and CSR, Manan prakashan	Google Meet, PPT, chalk and board



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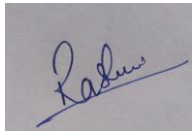
TEACHING PLAN (UNIT PLAN)

	MODULE III: Engaging the stakeholder Markets at the BOP Communication Dilemmas Dow Jones Sustainability Index / FTSE4GOOD Index	07	Business ethics and CSR, Manan prakashan	Google Meet, PPT, chalk and board



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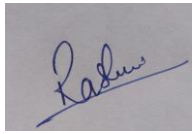
TEACHING PLAN (UNIT PLAN)

	MODULE IV: Cases and papers	08	Business ethics and CSR, Manan prakashan	Google Meet, PPT, chalk and board

Total lectures allotted to units: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : TYEME SEM : VI MONTH : Jan-April YEAR : 2021-22

LEARNINGOBJECTIVE/S : The learners will be able to learn various aspects about corporate social responsibility. It is very essential part of business. This subject is helpful to create awareness about social responsibilities of business among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Module I: Building blocks of CSR/sustainability Overview, Tripple-bottom line approach, environmental issues, social issues, labour issues, ethical and government issues, human rights-UN charter.	10	Business ethics and CSR, Manan prakashan	Google Meet, PPT, chalk and boar

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TEACHING PLAN (UNIT PLAN)

Corporate Social Responsibility	**MODULE III: Engaging the stakeholder** Global Reporting Initiative G-3, NGO and CSR, programmes for the neighbourhood.	05	Business ethics and CSR, Manan prakashan	Chalk and board

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TEACHING PLAN (UNIT PLAN)

	MODULE IV: Cases and papers	05	Business ethics and CSR, Manan prakashan	Chalk and board, PPT

Total lectures allotted to units: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashlesha Maurya DEPARTMENT: EME CLASS: TYEME SEMESTER: **VI** MONTH: JAN TO APRIL
ACADEMIC YEAR-2021-22
SUBJECT: Environmental Problems hazards and mitigation
LEARNING OBJECTIVES:

1. To identify and understand about pollution and environmental degradation
2. To examine best practices of urban and rural environmental management
3. To analyze environmental elements and importance of biodiversity

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2: Global and Regional Environmental Issues:	GreenHouse effect – causes and associated hazards,	2	Environment- shankar IAS Academy	Chalk and Board
	Ozone layer depletion – causes and associated hazards,	2	Environment- shankar IAS Academy	Chalk and Board
	Acid rain, Deforestation and loss of biodiversity;	3	Environment- shankar IAS Academy	Chalk and Board

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TEACHING PLAN (UNIT PLAN)

	Major environmental problems in India	3	Environment- shankar IAS Academy	Chalk and Board

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4: Problems of Rural Environment	Drinking water, Domestic fuel, Food and Fodder, Sanitation, Health, and Hygiene,	2	Environment- shankar IAS Academy	Chalk and Board
	Land degradation	3	Environment- shankar IAS Academy	Chalk and Board

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 5: Environmental problems related to forest and wetlands:	Human intervention, Degradation, encroachment,	2	Environment- shankar IAS Academy	Chalk and Board
	loss of habitats and biodiversity	3	Environment- shankar IAS Academy	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED : __40_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashlesha Maurya DEPARTMENT: EME CLASS: TYEME

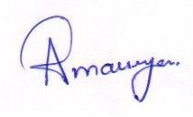
SEMESTER: VI MONTH: JAN TO APRIL ACADEMIC YEAR: 2021-2022

SUBJECT: **Environment and Ecotourism**

LEARNING OBJECTIVES:
The learners will be able :

1. To identify and understand concepts related to management and planning of ecotourism
2. To determine environmental and social consequences of ecotourism
3. To analyze sustainable tourism with focus on national and international destinations

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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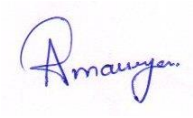
TEACHING PLAN (UNIT PLAN)

UNIT-IV	Principles of Ecotourism – Types of Ecotourism – Concepts of Ecotourism –	03		Online and Offline lectures (Google Meet, PPT)
	Objectives of Ecotourism – benefits of Ecotourism – trends affecting ecotourism.	02		Online and Offline lectures (Google Meet, PPT)



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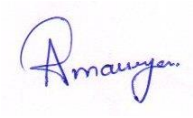
TEACHING PLAN (UNIT PLAN)

UNIT-V	Impact of Ecotourism – Economic impacts (fiscal impacts, concepts & Methods) – Types and degree of impacts from Ecotourism activities –	05		Online and Offline lectures (Google Meet, PPT)
	Socio cultural impacts – Eco tourism related organization – Ecotourism Research disasters & Ecotourism.	05		Online and Offline lectures



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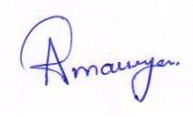
				(Google Meet, PPT)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VARADA KATLE DEPARTMENT: COMMERCE CLASS: TY EME

SEMESTER: VI MONTH: OCTOBER ACADEMIC YEAR: 2022

SUBJECT: corporate Governance

LEARNING OBJECTIVES: To share knowledge
The learners will be able to: Understand the Topic

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TEACHING PLAN (UNIT PLAN)

UNIT 1, 2	CORPORATE GOVERNANCE MEANING AND REPORTS		VIPUL PRAKASHAN	ONLINE AS WELL AS OFF LINE
	ROLE OF AGENCY THEORY ROLE OF CEO AND SENIOR EXECUTIVES			
	ROLE OF INVESTOR AND SHAREHOLDER			

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TEACHING PLAN (UNIT PLAN)

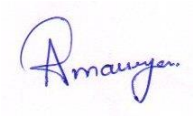
NAME OF THE STAFF: Ashlesha Maurya DEPARTMENT: COMMERCE-EME CLASS: TYEME

SEMESTER: VI MONTH: JAN TO APRIL ACADEMIC YEAR: 2021-2022

SUBJECT: Disaster Management

LEARNING OBJECTIVES:
The learners will be able to:

- To Identify and explain major types of disasters and the appropriate mitigation strategies
- To examine the importance of effective disaster preparedness, planning and operations in ensuring reduction in damage
- To evaluate the different Medical and Psycho-Social Preparedness to disasters



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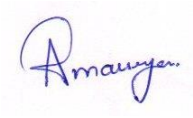
TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II	Natural disaster -Landslides	02		Online and Offline lectures (Google Meet, PPT)
	Earth quake	02		Online and Offline lectures (Google Meet, PPT)



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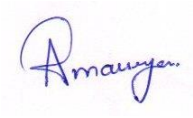
TEACHING PLAN (UNIT PLAN)

UNIT IV	Medical Management of disaster – Disaster Impacts and response – Identification of dead – Search rescue –first and relief phase – Vaccination, basic sanitation and personal hygiene.	08		Online and Offline lectures (Google Meet, PPT)
UNIT V	Environmental Disaster – Assessment, Planning – mitigation program – preparedness – resettlement	08		Online and Offline lectures



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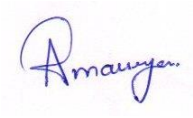
	rehabilitation – role of NGOS, Gos (relief camp), Psychotherapy – simplified yoga and meditation, stress management.			(Google Meet, PPT)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH SUB: CORPORATE GOVERNANCE DEPARTMENT: SELF FINANCE

CLASS: TYEME SEMESTER: VI MONTH: OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the meaning of corporate governance.
- Get knowledge of rights of various stakeholders.
- Interpret the corporate governance and corporate ethics.
- Know in detail about various committees of CG.

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit – 3	• Rights of CEO • Rights of BOD • Rights of Senior Executives • Rights of other stake holders • Rights of employees	08	Jack R. Meredith and Samuel J. Mantel Jr.- "Project management, A managerial approach"	Chalk Board, Discussion, and Test

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TEACHING PLAN (UNIT PLAN)

Unit 4	• Functional manager v/s project manager • Financial regulations • Corporate governance and corporate ethics • Scope of CG • Scope of Financial Regulations • Need for multicultural communities	08	Jack R. Meredith and Samuel J. Mantel Jr.- "Project management, A managerial approach"	Chalk Board, Discussion, and Test
Unit 5	• Cadbury committee • Birla committee • Narayan Murthy committee • Kumar Mangalam committee	08	Jack R. Meredith and Samuel J. Mantel Jr.- "Project management, A managerial approach"	Chalk Board, Discussion, and Test

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____CHETAN PRAKASH VARMA_____ DEPARTMENT: ___COMMERCE_____CLASS: ____FYBFM__DIV C____

SEMESTER: _____I_____ MONTH: ___SEPT- DECEMBER_____ ACADEMIC YEAR: ____2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to :

To make student understand the concepts of business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics-I	**Introduction** **Scope and Importance of Business Economics** - basic tools- Opportunity Cost principle- Incremental and Marginal Concepts. Basic economic relations - functional relations: equations- Total, Average and Marginal relations- use of Marginal analysis in decision making. The basics of market demand, market supply and equilibrium price- shifts in the demand and supply curves and equilibrium	4	*Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases (S. Chand & Sons, N.*	CHALK AND DUSTER

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			Delhi, 2000) • *Salvatore, D.: Managerial Economics in a global economy (Thomson South Western Singapore, 2001)*	
	Market structure: Perfect competition and Monopoly and Pricing and Output Decisions under Imperfect Competition Short run and long run equilibrium of a competitive firm and of industry - monopoly - short run and long- run equilibrium of a firm under Monopoly	3	• *Frank Robert.H ,Bernanke. Ben S., Principles of Economics (Tata McGraw Hill (ed.3)*	
	Monopolistic competition: Equilibrium of a firm under monopolistic competition, debate over role of advertising. *(topics to be taught using case studies from real life examples)* **Oligopolistic markets:** key attributes of oligopoly - Collusive and non-collusive oligopoly market - Price rigidity - Cartels and price leadership models *(with practical examples)*	5	• *Gregory Mankiw., Principles of Economics, Thomson South western (2002 reprint)*	

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	Demand Function - nature of demand curve under different markets Meaning, significance, types and measurement of elasticity of demand (Price, income cross and promotional)- relationship between elasticity of demand and revenue concepts Demand estimation and forecasting: Meaning and significance - methods of demand estimation: survey and statistical methods (numerical illustrations on trend analysis and simple linear regression) Production function: short run analysis with Law of Variable Proportions Production function with two variable inputs- isoquants, ridge lines and least cost combination of inputs- Long run production function and Laws of Returns to Scale - expansion path - Economies	4	• *Samuelson &Nordhas.: Economics (Tata McGraw Hills, New Delhi, 2002*	

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	and diseconomies of Scale. Cost concepts: Accounting cost and economic cost, implicit and explicit cost, fixed and variable cost - total, average and marginal cost - Cost Output Relationship in the Short Run and Long Run (hypothetical numerical problems to be discussed), LAC and Learning curve - Break even analysis (with business applications)			
	Pricing Practices Cost oriented pricing methods: cost – plus (full cost) pricing, marginal cost pricing, Mark up pricing, discriminating pricing, multiple – product pricing - transfer pricing *(case studies on how pricing methods are used in business world)*	10		

TOTAL NUMBER OF LECTURES

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT: COMMERCE CLASS: FY BFM SEMESTER: 2

MONTH: JAN-FEB ACADEMIC YEAR: 2019-2020 SUBJECT: FOUNDATION COURSE

LEARNING OBJECTIVES:

The learners will be able to : Socially aware of the societal problems and their personality.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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UNIT 2 HUMAN RIGHTS	Human Rights constitution with special reference to Fundamental Rights stated in the constitution. -Right to Equality -Right to Freedom. -Right against Exploitation. - Right to Property . -Right to Freedom of Religion.	05	Foundation Course by Michael Vaz Foundation course by Rashmi Karanath	Chalk board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT: COMMERCE CLASS: FY BFM SEMESTER: 2

MONTH: NOV-DEC ACADEMIC YEAR: 2019-2020 SUBJECT: FOUNDATION COURSE

LEARNING OBJECTIVES:

The learners will be able to : Socially aware of the societal problems and their personality.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 UNDERSTANDING STRESS AND CONFLICTS	Causes of stress and conflicts in individuals and society. Agents of Socialization and the role played by them in developing the individual. Significance of values, ethics and prejudices. Stereotyping and prejudice as significant factors in causing conflicts in society. Aggression and violence as the public expression of	10	Foundation Course by Michael Vaz Foundation course by Rashmi Karanath	Chalk board

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	conflict.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:GAURI YADAV. DEPARTMENT: COMMERCE CLASS:. FYFM SEMESTER: I.

MONTH: AUG - DEC ACADEMIC YEAR : 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : learn the basic accounting rules and concepts. Understand various accounting standards . Recognize Capital and Revenue . Will know to framework the final accouts of Sole trader and partnership firm.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. NATURE & PURPOSE OF ACCOUNTING				
	Meaning and scope of Accounting: Need, development & Definition of Accounting, persons interest in Accounting disclosure, branches of accounting Accounting concepts and Accounting Standards	10	Sheth publication	Chalk & Duster
2.BOOKS OF ACCOUNTS	Journals, ledger, subsidiary books Trial Balance, Financial Accounting framework .	15	Sheth publications,Manan prakashan	Chalk & Duster

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3.Introduction to Financial Statements 4.Preparation of Final Accounts	Sums solved Q.1 to Q.6			
	Bank Reconciliation statements Treatment of Capital & Revenue Depreciation Accounting; methods of recording depreciation and methods of providing depreciation as per AS-4 practical problems solved e	15	Sheth publications, vipul	Chalk & Duster
	Final Accounts of Sole Traders- Manufacturing Account, Trading, Profit & Loss Account and Balancesheet Final Accounts of Partnership Firm-Manufacturing Account, Trading, Profit & Loss Account and Balancesheet Practical sums solved 5 on each.	20	Manan prakashan,sheth publications	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

CLASS: FYFM SEMESTER: I MONTH: JULY-NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to:

- Define Ratio, Continued Ratio, and Inverse Ratio and solve the questions based on these terms.
- Understand the concept of Proportion, Continued Proportion, Direct Proportion and Inverse Proportion.
- Solve the questions based on different types of Proportion and relate the situations in day to day life.
- Understand the concept of Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation.
- Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Ratio, Proportion & Percentage	Unit1	▪ Define Ratio, Continued Ratio, Inverse Ratio ▪ Problem solving on ratio	2 4 2 4	Business Mathematics (Manan ,Vipul , Sheth	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT.

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			▪ Define Proportion its types. ▪ Problem solving on proportion ▪ Explanation on concept of percentage and computation of percentage.	3	Publications)	TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

CLASS: FYFM SEMESTER: I MONTH: JULY-NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to:

- Define Profit and Loss and terms related to it.
- Understand the formula of Trade discount and cash discount.
- Learn and understand the concept of Commission and Brokerage.
- Focus on how to use these terms in day to day life.

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PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Profit and Loss	Unit2	▪ Introduction to formula of Profit, Loss, %profit ,%loss ▪ Solve problems based on the above formulas ▪ Introduction to terms like trade discount, cash discount. ▪ Exercise based on cost price, selling price, trade discount, cash discount. ▪ Introduction to terms like Commission and brokerage. ▪ Solving problems based on commission and brokerage	1 3 1 4 2 4	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT 3 PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

CLASS: FYFM SEMESTER: I MONTH: JULY-NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:
The learners will be able to:

- Define Simple and Compound interest and its formula.
- Understand the concept of this topic and learn how to use in day to day life.
- Learn meaning of EMI, annuity and its types, also calculation of present and future value.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Interest and Annuity	Unit3	▪ Introduction to the formula of Simple interest and sums based on it. ▪ Introduction to the formula of Compound interest and sums based on it monthly, quarterly, .half yearly and yearly. ▪ Introduction and sums based on	2 4 4	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster

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			EMI, reducing balance and flat rate of interest. ▪ Introduction to annuity and its types, calculation of present value and future value by using its formula. ▪ Concept on Stated annual rate and effective annual rate and solving sums based on it.	3 2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT 4 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

CLASS: FYFM SEMESTER: I MONTH: JULY-NOVEMBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:
The learners will be able to:

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- Learn the concept of face value, market value, dividend, equity shares, bonus shares, preference shares.
- Solve the questions based on buying and selling of shares with and without brokerage.
- Define net asset value of mutual funds, entry/exit load
- Understand the concept of Systematic Investment Plan (SIP).
- Solve simple problems on calculation of net income after considering entry load and exit load change in net asset value and SIP.
- Focus and how to apply this knowledge in day to day life

.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Shares and Mutual Funds	Unit4	▪ Concept of Shares, Face value, market value, dividend. ▪ Explanation of types of Shares. ▪ Sums based on Shares ▪ Concept of Mutual Funds and its types ▪ Calculation of net income after	1 2 3 2 3	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster

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			considering entry load and exit load ▪ Change in net asset value and problems based on it. ▪ Concept of SIP and sums based on it.	 2 2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT I PLAN)

NAME OF THE STAFF: Khan Parveen Saba DEPARTMENT: Commerce CLASS:FYBFM SEMESTER: I

MONTH: JULY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to : (1) Define Ratio, Continued Ratio, and Inverse Ratio and solve the questions based on these terms.

(2) Understand the concept of Proportion, Continued Proportion, Direct Proportion and Inverse Proportion.

(3) Solve the questions based on different types of Proportion and relate the situations in day to day life.

(4) Understand the concept of Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation.

(5) Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	(1) Define Ratio,Continued Ratio	04	BUSINESS MATHEMATICS:	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING,

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Ratio, Proportion & Percentage Unit I			D.C.Sancheti, V.K.Kapoor	ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster
	(2) Inverse Ratio	02	J.K Singh	
	(3) Proportipon its types	03		
	(4) Problem solvingon ratio and proportion	03		
	(5) computation of percentage.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

TEACHING PLAN (UNIT II PLAN)

NAME OF THE STAFF: Khan Parveen Saba DEPARTMENT: Commerce CLASS:FYBFM SEMESTER: I

MONTH: AUGUST ACADEMIC YEAR: 2019-20

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LEARNING OBJECTIVE/S:
The learners will be able to : (1) Define Trade discount, cash discount, cost price & net selling price etc.

(2) Learn about Commission and Brokerage

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS Profit & Loss Unit II	(1) Trade discount and cash discount with sums	03	BUSINESS MATHEMATICS: D.C.Sancheti, V.K.Kapoor	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster
	(2) Cost price and selling price with sums	03		

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	(3) Listed price and Invoice price with sums	03		
	(4) Introduction on commission & brokerage	02		
	(6) Problems on Commission & Brokerage	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 Lectures

TEACHING PLAN (UNIT III PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYBFM SEMESTER: I

MONTH: SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) understand the concept of interest

(2) learn the basic concept of Annuity and EMI

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	(1) simple interest with example	04	BUSINESS MATHEMATICS: D.C.Sancheti, V.K.Kapoor	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster
Interest and Annuity	(2) compound interest with example future and present value also	04		
Unit III	(3) Annuity immediate and its Present value and future value	05		
	(4) EMI equated monthly installment	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 lectures

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TEACHING PLAN (UNIT IV PLAN)

NAME OF THE STAFF: Khan Parveen saba DEPARTMENT: commerce CLASS: FYBFM SEMESTER: I

MONTH: OCTOBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : (1) understand the concept of shares ,face value, market value ,dividend, equity shares

(2) learn the different type of shares

(3) learn what is Mutual Fund with the basis of Net Asset ValueValu

(4) understand how to use systematic investment plan

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	(1) concept of shares, face value ,market value ,dividend, equity shares	03	BUSINESS MATHEMATICS:	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING,

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1)Shares 2) mutual fund Unit IV			D.C.Sancheti, V.K.Kapoor	ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster
	(2) Preference shares, bonus shares with simple example	03		
	(3) mutual fund simple problem on calculation of Net income after considering entry load	03		
	(4) dividend change in net asset value and exit load	03		
	(5) systematic investment plan	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:. PROF.Rashmi Mehbubani. DEPARTMENT:. COMMERCE CLASS:. F.Y.B.F.M SEMESTER: II

MONTH: January to April ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: Financial Accounting-II
The learners will be able to : Understand Meaning , importance and types of Accounting System ,it's Advantages and Disadvantages

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CHAPTER 1. Issue of Shares and Debentures	What is a Company?, Public Company Vs. Private Company, Principle of Limited Liability, Essential Characteristics of a Company, why a Company? , Incorporation of a Company, Shares , share capital, Issue of Shares, Issue of Debentures, Related illustratios and Exercise	15		PPT/MS WORD /MS EXCEL
CHAPTER 6. Redemption of				PPT/MS WORD/ MS EXCEL

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Debentures and Purchase of Shares Chapter 7. Investment Accounting Chapter 8 and 9 Indian Accounting Standards	Introduction, What is a Debenture? , Shares Vs. Debenturs , Issue of Debentures , Debentures can also be issued , Redemption of Debentures, Discount/ Loss on Issue / Redemption of Debentures and its write off, Interest on Debentures, Statutory Provisions, Redemption out of capital, Redemption out of Profits , Redemption by conversion of Debentures, Conversion of Debentures into shares when Debentures are issued at Discount, Purchase of own Debentures, Cum- interest and Ex- Interest Transactions, Excercise.	15		PPT/ MS WORD/MS EXCEL
	What is Personal Investment Accounting? , Accounting for Investments, Definitions, Classification of Investments, Cost of Investments, Adjustments to cost of Investments on Balance Sheet Date, Sale or Disposal of Investments, Reclassification of Investments, Disclosures in Financial Statements for Investments,Investment Register,Exercise	08	PPT	

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	Accounting Standards, Generally Accepted Accounting Principles, and their impact on Income Statement and Balance Sheet Latest Development: Computerization of Accounting and Accounting Softwares.	07	PPT	

ITOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Karishma Vijay Kale

DEPARTMENT:Commerce CLASS:Fyfm - B Subject: Accounts

SEMESTER: I MONTH: October ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Know the basics of accounts and able to handle accounting techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Introduction to Accounts	1	Manan	Blackboard
	Classification of Accounts	1	Manan	Blackboard
	Application of Golden rules of accounts	1	Manan	Blackboard

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2	Journal Entry	3	Manan	Blackboard
3	Ledger	2	Manan	Blackboard
4	Trial Balance	1	Manan	Blackboard
5	Sums including Journal, ledger and trial balance	4	Manan	Blackboard
6	Partnership Final Account	4	Manan	Blackboard
7	Bank Reconciliation Statement	3	Manan	Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____20_____

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Name of the Department: Commerce

Sr. No	Name of the Staff	Subject Taught/ Unit Taught	Remarks (if any)
1	Veronika B. Barla	Business Economics	

Signature of the HOD

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Veronika B Barla **DEPARTMENT**: Commerce

CLASS: F. Y. BFM **DIVISION:** A, **SEMESTER**: I

MONTH: _____ **SUBJECT**: Business Economics **ACADEMIC YEAR**: 2020-21

LEARNING OBJECTIVE/S:
1. Help to understand contemporary issues.
2. Helps understand the International Environment.

The learners will be able to: 1. Helps to understand Short run analysis with law of variable proportion, Production function with two variable inputs, Isoquants, types, properties, isoquant map,

Ridge lines and least cost combinations of inputs, Law of returns to scale, Expansion path, Cost concepts accounting cost and economic cost, implicit cost and explicit cost, fixed cost and variable cost, total, average, and marginal cost, Cost output relation in short run, Cost output relation in long run LAC and learning curve.

2. It helps to understand Short run equilibrium of competitive firm and industry, long run equilibrium of competitive firm and industry, Equilibrium under monopolistic competition, Selling cost and production cost, effects of selling cost, Role of advertisement, Collusive and non-collusive oligopoly, Price rigidity, Cartels and price leadership model.

3. Cost oriented pricing method: Full cost pricing, Marginal cost pricing, Mark up pricing, Discriminating pricing, Transfer pricing, Multiproduct pricing.

paper, Unit, Title	Subtopics	Number of lectures allotted	References	Teaching Method /ICT tools used

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Business Economics Module III Supply and production decision and cost of production	Short run analysis with law of variable proportion	2	Modern economics by h.l.Ahuja	LECTURE METHOD
	Production function with two variable inputs	2	"	"
	Isoquants, types, properties, isoquant map,	3	"	"
	Ridge lines and least cost combinations of inputs	2	"	"
	Law of returns to scale	1	"	"
	Expansion path	1	"	
	Economies and diseconomies to scale	3	"	"
	Cost concepts : accounting cost and economic cost, implicit cost and explicit cost, fixed cost and variable cost, total, average, and marginal cost,	2		
	Cost output relation in short run	2		
	Cost output relation in long run LAC and learning curve	3		
	Short run equilibrium of competitive firm and industry	2	"	"
	long run equilibrium of competitive firm and industry	2	"	"

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Unit IV Market structure Perfect competition, monopoly and pricing and output decision under imperfect competition	Short run and long run equilibrium of monopoly firm	3	"	"
	Equilibrium under monopolistic competition,	2	"	"
	Selling cost and production cost, effects of selling cost	2	"	"
	Role of advertisement	1	"	"
	Key attributes of oligopoly	1	"	"
	Collusive and non-collusive oligopoly	1	"	"
	Price rigidity	1	"	"
	Cartels and price leadership model	2	"	"
MODULE-V Pricing practices	Pricing practice-I	2	"	"
	Pricing practice-II	3	"	"

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT III, IV AND V: 41 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT: COMMERCE CLASS: FY BFM SEMESTER: 2

MONTH: JAN-FEB ACADEMIC YEAR: 2019-2020 SUBJECT: FOUNDATION COURSE

LEARNING OBJECTIVES:

The learners will be able to : Socially aware of the societal problems and their personality.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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UNIT 2 HUMAN RIGHTS	Human Rights constitution with special reference to Fundamental Rights stated in the constitution. -Right to Equality -Right to Freedom. -Right against Exploitation. - Right to Property . -Right to Freedom of Religion.	05	Foundation Course by Michael Vaz Foundation course by Rashmi Karanath	Chalk board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT: COMMERCE CLASS: FY BFM SEMESTER: 2

MONTH: JAN-FEB ACADEMIC YEAR: 2019-2020 SUBJECT: FOUNDATION COURSE

LEARNING OBJECTIVES:

The learners will be able to : Socially aware of the societal problems and their personality.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 MANAGING STRESS AND CONFLICTS IN CONTEMPORARY SOCIETY	Types of conflicts and use of coping mechanisms for managing individual stress Maslow's theory of self-actualisation. Different methods of responding to conflicts in society. Conflict resolution and efforts towards building peace and harmony in society.	08	Foundation Course by Michael Vaz Foundation course by Rashmi Karanath	Chalk board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT: COMMERCE CLASS: FY BFM SEMESTER: 2

MONTH: NOV-DEC ACADEMIC YEAR: 2019-2020 SUBJECT: FOUNDATION COURSE

LEARNING OBJECTIVES:

The learners will be able to : Socially aware of the societal problems and their personality.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 UNDERSTANDING STRESS AND CONFLICTS	Causes of stress and conflicts in individuals and society. Agents of Socialization and the role played by them in developing the individual. Significance of values, ethics and prejudices. Stereotyping and prejudice as significant factors in causing conflicts in society. Aggression and violence as the public expression of	10	Foundation Course by Michael Vaz Foundation course by Rashmi Karanath	Chalk board

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	conflict.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. AVINASH PAWAR** DEPARTMENT: **SELF FINANCE**

CLASS: **FY BFM A** SEMESTER: **II** MONTH: **DECEMBER TO MARCH** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
To improve students presentation skill and make enable them to write appropriately for organization / industry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

1	Presentation: principles of effective presentation , effective use of OHP, How to make a powerpoint presentation.	15	Textbook	Chalk & Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2	Group Communication: i. Interviews ii. Meeting iii. Conference iv. Public relations	15	Textbook	Chalk & Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. AVINASH PAWAR** DEPARTMENT: **SELF FINANCE**

CLASS: **FY BFM A** SEMESTER: **II** MONTH: **DECEMBER TO MARCH** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
To improve students presentation skill and make enable them to write appropriately for organization / industry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

1	Presentation: principles of effective presentation , effective use of OHP, How to make a powerpoint presentation.	15	Textbook	Chalk & Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2	Group Communication: i. Interviews ii. Meeting iii. Conference iv. Public relations	15	Textbook	Chalk & Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. AVINASH PAWAR** DEPARTMENT: **SELF FINANCE**

CLASS: **FY BFM B** SEMESTER: **II** MONTH: **DECEMBER TO MARCH** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
To improve students presentation skill and make enable them to write appropriately for organization / industry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Presentation: principles of effective presentation, effective use of OHP, How to make a powerpoint presentation.	15	Textbook	Chalk & Blackboard

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Yashvant Keshav Patil College of Commerce
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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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2	Group Communication: i. Interviews ii. Meeting iii. Conference iv. Public relations	15	Textbook	Chalk & Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. AVINASH PAWAR** DEPARTMENT: **SELF FINANCE**

CLASS: **FY BFM B** SEMESTER: **II** MONTH: **DECEMBER TO MARCH** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S:
To improve students presentation skill and make enable them to write appropriately for organization / industry.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Presentation: principles of effective presentation, effective use of OHP, How to make a powerpoint presentation.	15	Textbook	Chalk & Blackboard

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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2	Group Communication: i. Interviews ii. Meeting iii. Conference iv. Public relations	15	Textbook	Chalk & Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: FY BFM SEMESTER: II MONTH: DECEMBER

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to understand the concept of Liberalization, Privatization and Globalization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FOUNDATION COURSE UNIT 1 GLOBALISATION AND INDIAN SOCIETY	Understanding the concept of liberalization, privatization and globalization, Growth of information technology and communication and its impact manifested in everyday life, impact of globalization on industry: changes in employment and increasing migration, Changes in agrarian sector due to globalization, rise in corporate farming, and increase in farmers suicides.	07	Text book	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: FYBFM SEMESTER: II MONTH: JANUARY

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to get knowledge about Human Rights.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 HUMAN RIGHTS	Concept of human rights, Origin and evolution of the concept, The universal declaration of Human Rights.	05	Text book	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: FYBFM SEMESTER: II MONTH: FEBRUARY

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to know the importance of Ecology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 ECOLOGY	Importance of environmental studies in the current developmental context, Understanding concept of environment, ecology, and their inter-connectedness	05	Text book	Chalk and board
	Environment as a natural capital and connection to quality of human life, Environmental Degradation- causes and the impact on human life, Sustainable development- Concept and Components, poverty and environment	05	Text book	Calk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBFM (A,B) SEM : II MONTH : NOV-DEC YEAR : 2019-20

LEARNING OBJECTIVE/S : Learner will be able to learn the concept of organising, departmentation & leadership.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
PRINCIPLES OF MANAGEMENT	Fundamentals of organising	02	Seth publication	Chalk and board
	Bases of departmentation	02	Seth publication	Chalk and board
UNIT III	Distribution of authority	02	Seth publication	Chalk and board
	Co ordination	02	Seth publication	Chalk and board
ORGANISING	Organisation structure & design	02	Seth publication	Chalk and board
	Leadership- nature & significance, leadership styles, leadership theories	05	Seth publication	Chalk and board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBFM (A,B) SEM : II MONTH : JAN-FEB YEAR : 2019-20

LEARNING OBJECTIVE/S : Learner will be able to learn concept of controlling, its types and techniques.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
PRINCIPLES OF MANAGEMENT	Nature & purpose and process of controlling	02	Seth publication	Chalk and board
	Kinds of control system	02	Seth publication	Chalk and board
UNIT IV	Prerequisites of effective control system	01	Seth publication	Chalk and board
	Resistance to control	01	Seth publication	Chalk and board
MANAGEMENT CONTROL	Controlling techniques	02	Seth publication	Chalk and board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 08

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBFM (A,B) SEM : II MONTH : NOV-DEC YEAR : 2019-20

LEARNING OBJECTIVE/S : Learner will be able to learn the concept of organising, departmentation & leadership.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
PRINCIPLES OF MANAGEMENT	Fundamentals of organising	02	Seth publication	Chalk and board
	Bases of departmentation	02	Seth publication	Chalk and board
UNIT III	Distribution of authority	02	Seth publication	Chalk and board
	Co ordination	02	Seth publication	Chalk and board
ORGANISING	Organisation structure & design	02	Seth publication	Chalk and board
	Leadership- nature & significance, leadership styles, leadership theories	05	Seth publication	Chalk and board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : FYBFM (A,B) SEM : II MONTH : JAN-FEB YEAR : 2019-20

LEARNING OBJECTIVE/S : Learner will be able to learn concept of controlling, its types and techniques.

PAPER, UNIT, TITLE	SUBTOICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ICT TOOLS USED
PRINCIPLES OF MANAGEMENT	Nature & purpose and process of controlling	02	Seth publication	Chalk and board
	Kinds of control system	02	Seth publication	Chalk and board
UNIT IV	Prerequisites of effective control system	01	Seth publication	Chalk and board
	Resistance to control	01	Seth publication	Chalk and board
MANAGEMENT CONTROL	Controlling techniques	02	Seth publication	Chalk and board

TOTAL NO. OF LECTURES ALLOCATED TO THE UNIT : 08

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Muriel Rumao_____ DEPARTMENT: ___Commerce___ CLASS: FYBCOM BFM A

SEMESTER: ____II_____MONTH: December- March ACADEMIC YEAR:___2019-20____

LEARNING OBJECTIVE/S:
The learners will be able to . write business letters.

understand the concept of business reports.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3	Inquiry letter	3	Manan / Vipul	Blackboard and practice
	Complaint	2	Manan	Blackboard and practice
	Adjustment	3	Manan	Blackboard and practice
	Sales letter	3	Manan	Blackboard

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	Consumer grievance	2	Manan	Blackboard
	RTI	1	Manan	Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____14____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4	Report writing	2	Manan	Blackboard
	Summary	1	Manan	Discussion

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____3___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Khan Parveen Saba DEPARTMENT: Commerce CLASS: FYBFM SEMESTER: II

MONTH: DECEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : (1) Understand the concept of statistics

(2) learn about the Graph(Histogram, polygon) etc

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS Population and Sample Unit I	(1) Definition of Statistics, Scope of Statistics, financial market, concept of population and sample	02	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks

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	(2) Method of Sampling	01		
	(3) Data Condensation and Graphical method	03		
	(4) Attributes and Variables	03		
	(5) Graphs(Histogram and frequency)	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 Lectures

TEACHING PLAN (UNIT II PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYBFM SEMESTER: II

MONTH: January ACADEMIC YEAR: 2019-20

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LEARNING OBJECTIVE/S:
The learners will be able to :

(1) concept of measure of Central tendency with examples

(2) understand the concept of Mean,Median and Mode

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATIATICS Measure of Central tendency Unit II	(1) definition of average and type of averages	02	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) mean, median, mode with sums	04		

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	(3)Quartiles and Percentile	02		
	(4) Decile	02		
	(5) Combine mean	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

TEACHING PLAN (UNIT III PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYBFM SEMESTER: II

MONTH: JAN-FEB ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) understand the concept of measure of dispersion

(2) Learn whar are the absolute and relative measure of dispersion

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATIATICS Measure of dispersion Unit III	(1) Concept of measure of dispersion	01	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) Various measures of Dispersion	02		
	(2) Quartile deviation	03		
	(4) Mean deviation, Standard deviation	03		
	(5) Variance and Combined variance	03		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

TEACHING PLAN (UNIT IV PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYBFM SEMESTER: II

MONTH: FEB-MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) understand the different different concept of correlation analysis

(2) learn about regression analysis

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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BUSINESS STATISTICS Correlation & Regression Unit IV	(1) meaning and type of correlation	01	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) determination of correlation: scatter diagram ,Karl Pearson correlation coefficient	02		
	(3) meaning and concept of regression	03		
	(4) slope of regression line ,regression coefficient	03		
	(5) regression line by method of least square	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

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TEACHING PLAN (UNIT V PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYBFM SEMESTER:I I

MONTH: MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: (1) Understand the use of Graphs

(2) concept of linear programming problem

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS Linear Programming Problems	(1) Concept of LPP	01	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,

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	(2) Formulation of LPP	02		
	(3) Sums based on formulation of LPP	04		
	(4) Graphically Method	02		
	(5) sums based on Graphically method	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: Self Finance CLASS: F.Y.BFM (Division A B) SEMESTER: II

MONTH: December, January ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand the concept of environment and its structure; ecosystem and its structure.

2) Understand and predict the threats to Biodiversity; identify the measures to preserve biodiversity.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1- Environment : An overview	Environment- structure, components and typology	03	Book by vipul publications/ Internet	Chalkboard
	Ecosystem as part of environment- Functioning and levels of organisation	03	Book by vipul publications/ Internet	Chalkboard

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	Biodiversity- Classification, value, threats to biodiversity	04	Book by vipul publications/ Internet	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: Self Finance CLASS: F.Y.BFM (Division A B) SEMESTER: II

MONTH: January, February ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand and remember concept of economic activities and its pattern- primary, secondary and tertiary.

2) Predict environmental problems associated with economic activities and identify measures to solve to problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3- Environment and Economic Activities	Economic activities-nature and pattern- primary,secondary and tertiary	02	Book by Vipul publications/ Internet	Chalkboard
	Environmental problems associated with economic activities	03	Book by Vipul publications/ Internet	Chalkboard

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	Case studies with reference to India	02	Book by Vipul publications/ Internet	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:. PROF.Rashmi Mehbubani. DEPARTMENT:. COMMERCE CLASS:. F.Y.B.F.M SEMESTER: II

MONTH: January to April ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: Financial Accounting-II
The learners will be able to : Understand Meaning , importance and types of Accounting System ,it's Advantages and Disadvantages

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CHAPTER 1. Issue of Shares and Debentures	What is a Company?, Public Company Vs. Private Company, Principle of Limited Liability, Essential Characteristics of a Company, why a Company? , Incorporation of a Company, Shares , share capital, Issue of Shares, Issue of Debentures, Related illustratios and Exercise	15		PPT/MS WORD /MS EXCEL
CHAPTER 6. Redemption of				PPT/MS WORD/ MS EXCEL

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Debentures and Purchase of Shares Chapter 7. Investment Accounting Chapter 8 and 9 Indian Accounting Standards	Introduction, What is a Debenture? , Shares Vs. Debenturs , Issue of Debentures , Debentures can also be issued , Redemption of Debentures, Discount/ Loss on Issue / Redemption of Debentures and its write off, Interest on Debentures, Statutory Provisions, Redemption out of capital, Redemption out of Profits , Redemption by conversion of Debentures, Conversion of Debentures into shares when Debentures are issued at Discount, Purchase of own Debentures, Cum- interest and Ex- Interest Transactions, Excercise.	15		PPT/ MS WORD/MS EXCEL
	What is Personal Investment Accounting? , Accounting for Investments, Definitions, Classification of Investments, Cost of Investments, Adjustments to cost of Investments on Balance Sheet Date, Sale or Disposal of Investments, Reclassification of Investments, Disclosures in Financial Statements for Investments,Investment Register,Exercise	08	PPT	

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	Accounting Standards, Generally Accepted Accounting Principles, and their impact on Income Statement and Balance Sheet Latest Development: Computerization of Accounting and Accounting Softwares.	07	PPT	

ITOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Karishma Vijay Kale

DEPARTMENT: Commerce CLASS: Fyfm- A, B Subject: Environmental science

SEMESTER: II MONTH: March ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Know the importance of environment management and its conservation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Natural Resources	Definition, Importance and Classification of Natural resources	3	Vipul	Verbal and blackboard
	Utilisation and Conservation of water, forest, soil and Energy resources	4	Vipul	Verbal and blackboard
Unit 4	Issues associated with Natural resources	3	Vipul	Verbal and blackboard

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Environment Management				
	Environment Management - Concept, Need and relevance of environmental education. Environmental impact assessment, environmental audit. Role of technology in environment management- GIS, GPS, Remote sensing as tools.	4	Vipul	Verbal and blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _14_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PLEMIA REBELLO. DEPARTMENT: BFM

CLASS: SYBFM SEMESTER: III MONTH: JULY 2019 –OCTOBER 2019 ACADEMIC YEAR:2019 -2020

SUBJECT: COMMODITIES MARKET

LEARNING OBJECTIVE/S:
The learners will be able to :

TO KNOW ABOUNT THE EXCHANGE WHERE VARIOUS COMMODITIES AND DERIVATIVES PRODUCT ARE TRADED.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1 .INTRODUCTION TO COMMODITY MARKET	15	SHETH PUBLICATION	CHALK AND
	2. COMMODITY MARKET IN INDIA	16		

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	3. COMMODITY EXCHANGE	14		
	4.STRENGTHENING COMMODITY MARKET IN INDIA	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Priyanka Devnath_Rajput DEPARTMENT: Commerce CLASS: S.Y.B.F.M

SEMESTER: III MONTH: June - October ACADEMIC YEAR: 2019- 2020 SUBJECT: Computer Skills - II

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of Excel, Data Base Management System, Different system of E-Business Software and Online Banking.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Advanced Spreadsheet	Pivot Table.	01	Computer Skills - II By Rimple Sanchla And www.Guru99.com https://www.guru99.com/excel-tutorials.html	Board , Chalk, Duster And Computer (MS- Excel Software)
	Advanced formulae.	03		
	Lookups.	02		
	Macros.	02		
	Working with other programs.	02		
	Inserting a spreadsheet sheet in word document.	01		
	Modifying an inserted spreadsheet.	01		
	Inserting a linked chart in a Word	01		

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	Document.			
	Inserting graphic in a spreadsheet.	02		
	Practical: Pivot, Advance Formulae, Lookups, Macros, Inserting linked chart in a word document	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Data Base Management System	Concepts.	01	Computer Skills - II By Rimple Sanchla And www.Guru99.com https://www.guru99.com/dbms-	Board , Chalk, Duster and Computer Software
	Tables.	02		
	Fields.	02		
	Datatypes.	03		
	RDBMS.	03		
	Primary Key.	02		
	Foreign Key.	02		

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	Practical: - Create Table, Primary Key, Foreign Key, Insert Data, Delete table.	05	tutorial.html	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Modern E Business Software Systems	Introduction.	01	Computer Skills - II By Rimple Sanchla And www.wikipedia.com	Board , Chalk and Duster
	Enterprise Resource Planning – ERP.	03		
	Supply chain Management- SCM.	02		
	Customer Relationship Management- CRM.	02		
	Sales Force Automation- SFA.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV Other Emerging Technologies	Other emerging technologies	03	Computer Skills - II By Rimple Sanchla And www.wikipedia.com	Board , Chalk and Duster
	Net-banking	03		
	Online banking software	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____SYBFM____ SEMESTER: _____III_____ MONTH: __JUNE-JULY__ ACADEMIC YEAR: ____2019-2020___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Analysis and Interpretation of Accounts	Introduction and importance of Financial statements, Vertical form of Balance sheet and Profit and loss Account suitable for analysis	3	Management Accounting By I.M Pandey	Chalk Board And Discussion Method
	Simple sums based on Analysis of Financial Statement	3		
	Trend Analysis - Practical Illustrations	3		
	Comparative Statement – Practical Illustrations	3		

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	Common size Statement – Practical Illustrations	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____SYBFM____ SEMESTER: _____III_____ MONTH: __AUGUST - SEPETEMBER__ ACADEMIC YEAR: ____2019-2020___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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UNIT 3 Ratio Analysis and Interpretation based on Vertical Financial Statements	Introduction and Meaning of Financial statement analysis, Steps, objectives , Types of Analysis, simple sums on financial statement	2	Management Accounting By I.M Pandey	Chalk Board And Discussion Method
	Ratio Analysis- Meaning, Classification , DU Pont chart, Advantages and limitations.	3		
	Balance sheet ratio, Revenue statement Ratio and Combined Ratio (Applications of formulas)	3		
	Practical Illustrations	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce

CLASS: S Y F M SEMESTER: III MONTH: July ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :
Know about the relationship of the risk & return and how risk should be measured to bring about a return according to the expectation of investor and portfolio management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Portfolio Management	**Introduction to portfolio management** Investment process, Investment categories, defining investment goals and objectives, Investment constraints Process of asset allocation, different approaches to allocation decision, overview of allocation techniques	15	Portfolio Management : A Strategic approach, Ginger Levin, John Wyzalek: CRC Press Security Analysis and Portfolio Management, Prasanna Chandra, Tata McGraw Hill	Chalk & talk, Black-Board Method, Group Discussion,
	Portfolio Management Strategies Active strategy, passive strategy, semi active strategy, duration shift and immunization, efficient market hypotheses, top down and bottoms up	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

Babli Jha

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: Self Finance CLASS: S.Y.BFM SEMESTER: III

MONTH: July, August ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand the concept of financial markets.
2) Understand the concept of equity market; BSE; NSE.
3) Understand the growth of equity market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1- Equity Markets- Introduction	Meaning and Definition and functions of equity shares	04	Book by Vipul publications/Internet	Chalkboard
	Growth of Corporate Sector and the simultaneous growth in the number of equity shareholders	02	Book by Vipul publications/Internet	Chalkboard

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	Separation of ownership and management in companies	02	Book by Vipul publications/Internet	Chalkboard
	Development of equity culture in India- Current position	02	Book by Vipul publications/Internet	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: Self Finance CLASS: S.Y.BFM SEMESTER: III

MONTH: August, September ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand the concept of primary markets; difference between primary and secondary markets.
2) Understand IPO and its process; Merchant Banking; Types of shares.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Primary Markets	IPO - Methods followed, Book Building, Offer for sale	02	Book by Vipul publications/Internet	Chalkboard
	Role of Merchant bankers in fixing the price	01	Book by Vipul publications/Internet	Chalkboard
	Red – Herring Prospectus – it's unique features	02	Book by Vipul publications/Internet	Chalkboard

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	ASBA and its features; Green Shoe option; Sweat equity, ESOP	02	Book by Vipul publications/Internet	Chalkboard
	Rights issue of shares, Non voting shares ,ADR, GDR,IDR	02	Book by Vipul publications/Internet	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Karishma Vijay Kale

DEPARTMENT:Commerce CLASS:SyBCom- C, D

SEMESTER: III MONTH: October ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Gain knowledge about the concepts of science and technology and improve soft skills and interpersonal communication.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Chapter 3 Science and Technology - I	A) Development of Science - the ancient cultures, Classical era, Middle Ages, renaissance, age of reason and enlightenment	10	Manan	Verbal and blackboard
	B) Nature of science - its principle and characteristics, science as empirical, practical, theoretical, validated knowledge			
	C) Science and Superstition- the role of science in exploding myths, blind beliefs and prejudice, science and scientific temper - scientific temper as a fundamental duty of the Indian citizens			

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	D) Science in everyday life- technology, its meaning and role in development, interrelation and distinction between science and technology			
Chapter 4 Soft skills for effective interpersonal communication	Part A I) Effective listening -Importance and features II) Verbal and non-verbal communication, public speaking and presentation skills III) Barriers to effective communication, importance of self awareness and body language Part B I) Formal and informal communication - purpose and types II) Writing formal application, Statement of purpose and resume III) Preparing for group discussion, interview and presentation. Part C Part I) Leadership skills and self improvement - Characteristics of effective leadership	8	Manan	Verbal and blackboard

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	II) Styles of leadership and team building			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____18_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. LEJESH KELOTH**

DEPARTMENT**: COMMERCE** CLASS: **S.Y.BFM** SEMESTER: **IV**

MONTH: **NOVEMBER TO MARCH** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S : Understand, observe, inflation, Monetary Policy its working etc.

The learners will be able to : basic concepts of macro-economics, understand the economy whole.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Macro-Economics Paper- II	**MODULE – 1: Introduction to Micro-economics:** Macroeconomics, circular flow of income, measures of national product, trade cycle, theory effective demand, consumption function, investment function and theory of multiplier.	15	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication,	Black Board Method
Macro-Economics Paper- II	**MODULE – 2: Money, Inflation and Monetary Policy:** Money supply, Demand for money and theory of interest, Money and Price, Inflation and Monetary policy.	15	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan,	Black Board Method
Macro-Economics Paper- II	**MODULE – 3: Constituents of Fiscal Policy:**	10	H.L. Ahuja, Dr. J.P. Mishra,	Black Board Method

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	Role of the government, Fiscal policy, Instrument of fiscal policy, Public expenditure, Public death and Union budget, structures.		Manan Prakashan,	
Macro-Economics Paper- II	**MODULE – 4: open economy theory and issue of international trade: T**rade theories, Terms of trade and gain from trade, Free trade vs Protection, Foreign investment**, B**alance of payment disequilibrium and corrective measures and foreign exchange market and exchange rate.	10	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan,	Black Board Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 50

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: CORPORATE FINANCE DEPARTMENT: ____COMMERCE___

CLASS: ____SYBFM____ SEMESTER: _____IV_____ MONTH: __DECEMBER __ ACADEMIC YEAR: ____2019-2020___

LEARNING OBJECTIVE/S:
The learners will be able to : To understand the basic concept of Corporate Finance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Corporate Finance and overview	Meaning, Features, Need and Importance of Corporate Finance, Functions of Finance in a Business Enterprise	3	Corporate Finance By John Wiley	Discussion Method And Chalk Board
	Scope and Objectives of Financial Management, Emergence of Corporate Finance as an integral part of business finance	3		
	Need for professional approach in managing corporate finance, Financial Management Objectives	3		

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	Role and Functions of Corporate Finance Manager	3		
	Requirement of an efficient corporate finance manager, Types of Risk	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: CORPORATE FINANCE DEPARTMENT: ____COMMERCE___

CLASS: ____SYBFM____ SEMESTER: _____IV_____ MONTH: __DECEMBER-JANUARY __ ACADEMIC YEAR: ____2019-2020___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those costing techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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UNIT 2 Planning the Corporate Financial Activities	A) Cost of Capital Meaning and utility of Cost of capital, Component of Cost of capital and Formulas	2	Corporate Finance By John Wiley	Discussion Method And Chalk Board
	Practical Illustrations	5		
	B) Marginal Costing and Break-Even Analysis Meaning, Features and Advantages of Marginal Costing, Proforma and Formulas of Marginal Costing, Break Even Analysis	3		
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: CORPORATE FINANCE DEPARTMENT: ____COMMERCE___

CLASS: ____SYBFM____ SEMESTER: _____IV_____ MONTH: __JANUARY-FEBRUARY_ ACADEMIC YEAR: ____2019-2020___

LEARNING OBJECTIVE/S:
The learners will be able to : To understand the concept role and impact of investment policy, capital structure and dividend policy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 Capital Structure	A) Capitalisation and Capital structure Meaning and Definition of Capital structure, Financial (Capital) plan – Basic Principles, Overcapitalization, Undercapitalization and Watered Capital	2	Corporate Finance By John Wiley	Discussion Method And Chalk Board
	Factors affecting capital structure- Trading on Equity, Theories of Capital Structure, Proforma of Evaluation of alternative capital plan	3		
	Practical Illustrations	3		
	B) Capital Budgeting Meaning and Definition of Capital Budgeting, Features of Capital Expenditure decision, Techniques of Capital	3		

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	Budgeting, Formulas of Payback Period, ARR, NPV, IRR, DCF Technique			
	Practical Illustrations	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: CORPORATE FINANCE DEPARTMENT: ____COMMERCE___

CLASS: ____SYBFM____ SEMESTER: _____IV_____ MONTH: __FEBRUARY __ ACADEMIC YEAR: ____2019-2020___

LEARNING OBJECTIVE/S:
The learners will be able to : Learners are able to understand the various available sources of finance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 Sources and Methods of	Types and Features of Corporate securities currently available	3	Corporate Finance By John Wiley	Discussion Method And Chalk Board

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Raising Corporate Finance	Management of New issues, including pricing securities	4		
	Role of Commercial Banks and Investment Banks in Financing the corporate sector	4		
	Leasing as Method of Corporate Finance	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT: Commerce CLASS: SYBFM SEMESTER: IV

MONTH: December to April ACADEMIC YEAR: 2019 - 2020 LEARNING OBJECTIVE/S: Busines Law

The learners will be able to : Introduction, Understand Meaning, Rules and regulations, section, important act details with related case study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 Indian Campanies Act, 2013 Part 1	Chapter I Company and its formation, definition and nature of company, advantages and disadvantages of a company, lifting of corporate veil with cases, promoters, pre-incorporation and preliminary contracts Chapter II Types of companies (meaning and concept only) statutory companies, one person company, Company, limited by shares/guarantee	03 04	1. Company Law : Avtar Singh. 2. Indian Company Law. Authors, Dr. N. S. Kothari, Ramesh Chand Agarwal.	Chalk and Duster

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MODULE 2 Indian Campanies Act, 2013 Part 2	Private company, public company, Producer Company, formation of companies with charitable Objects, holding and subsidiary company, Government, foreign company, small company Procedure for registration of a company, documents to be submitted for registration, Effect of incorporation. Chapter III Memorandum of Association & Articles of Association: meaning, concept, clauses, effect ofRegistration of Memorandum and Articles of Association, Doctrine of Constructive NoticeDoctrine of Ultra Vires, Doctrine of Indoor Management Chapter IV Prospectus- meaning, when to be issued, when not required, kinds of prospectus, contents of prospectus, private placement	03 02		
	Membership of a company	03		

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Module III: Indian Partnership Act, 1932	Who can become a member? Modes of acquiring membership, cessation of membership, rights, liabilities and duties of members Chapter II Classification of Directors, woman director, independent director, small shareholders' director Disqualification of director, Director Identification Number, powers and duties, position of director as key managerial personnel, Manager, Managing Director. Chapter III Meetings, types of meetings of members and Board of directors, convening and conduct of meetings, Postal ballot, meetings through video conferencing, e-voting.	04 03 02		

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	Chapter I Definition, essentials, types of partnership and types of partners, test of partnership Test of Partnership, partnership deed and property of firm Chapter II Reconstitution of partnership firm, dissolution of firms Chapter III Limited Liability Partnership Act, 2008 Definitions, body corporate, business, partner Concept, salient features, nature of LLP, distinction between LLP and firm, LLP and company, Extent and limitation of liability of LLP and its partners, Conversion of LLP, Winding up and Dissolution of LLP	03 03 03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 33

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT: Commerce CLASS: SYBFM SEMESTER: IV

MONTH: December to April ACADEMIC YEAR: 2019 - 2020 LEARNING OBJECTIVE/S: Busines Law

The learners will be able to : Introduction, Understand Meaning, Rules and regulations, section, important act details with related case study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 Indian Campanies Act, 2013 Part 1	Chapter I Company and its formation, definition and nature of company, advantages and disadvantages of a company, lifting of corporate veil with cases, promoters, pre-incorporation and preliminary contracts Chapter II Types of companies (meaning and concept only) statutory companies, one person company, Company, limited by shares/guarantee Private company, public company, Producer Company,	03 04	1. Company Law : Avtar Singh. 2. Indian Company Law. Authors, Dr. N. S. Kothari, Ramesh Chand Agarwal.	Chalk and Duster

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

MODULE 2 Indian Campanies Act, 2013 Part 2	formation of companies with charitable Objects, holding and subsidiary company, Government, foreign company, small company Procedure for registration of a company, documents to be submitted for registration, Effect of incorporation. Chapter III Memorandum of Association & Articles of Association: meaning, concept, clauses, effect ofRegistration of Memorandum and Articles of Association, Doctrine of Constructive NoticeDoctrine of Ultra Vires, Doctrine of Indoor Management Chapter IV Prospectus- meaning, when to be issued, when not required, kinds of prospectus, contents of prospectus, private placement	03 02		
	Membership of a company Who can become a member? Modes of acquiring	03		

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Module III: Indian Partnership Act, 1932	membership, cessation of membership, rights, liabilities and duties of members Chapter II Classification of Directors, woman director, independent director, small shareholders' director Disqualification of director, Director Identification Number, powers and duties, position of director as key managerial personnel, Manager, Managing Director. Chapter III Meetings, types of meetings of members and Board of directors, convening and conduct of meetings, Postal ballot, meetings through video conferencing, e-voting.	04 03 02		
	Chapter I	03		

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	Definition, essentials, types of partnership and types of partners, test of partnership Test of Partnership, partnership deed and property of firm Chapter II Reconstitution of partnership firm, dissolution of firms Chapter III Limited Liability Partnership Act, 2008 Definitions, body corporate, business, partner Concept, salient features, nature of LLP, distinction between LLP and firm, LLP and company, Extent and limitation of liability of LLP and its partners, Conversion of LLP, Winding up and Dissolution of LLP	03 03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 33

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT: Commerce CLASS: SYBFM SEMESTER: IV

MONTH: December to April ACADEMIC YEAR: 2019 - 2020 LEARNING OBJECTIVE/S: Busines Law

The learners will be able to : Introduction, Understand Meaning, Rules and regulations, section, important act details with related case study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1 Indian Campanies Act, 2013 Part 1	Chapter I Company and its formation, definition and nature of company, advantages and disadvantages of a company, lifting of corporate veil with cases, promoters, pre-incorporation and preliminary contracts Chapter II Types of companies (meaning and concept only) statutory companies, one person company, Company, limited by shares/guarantee	03 04	1. Company Law : Avtar Singh. 2. Indian Company Law. Authors, Dr. N. S. Kothari, Ramesh Chand Agarwal.	Chalk and Duster

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MODULE 2 Indian Campanies Act, 2013 Part 2	Private company, public company, Producer Company, formation of companies with charitable Objects, holding and subsidiary company, Government, foreign company, small company Procedure for registration of a company, documents to be submitted for registration, Effect of incorporation. Chapter III Memorandum of Association & Articles of Association: meaning, concept, clauses, effect ofRegistration of Memorandum and Articles of Association, Doctrine of Constructive NoticeDoctrine of Ultra Vires, Doctrine of Indoor Management Chapter IV Prospectus- meaning, when to be issued, when not required, kinds of prospectus, contents of prospectus, private placement	03 02		
	Membership of a company	03		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Module III: Indian Partnership Act, 1932	Who can become a member? Modes of acquiring membership, cessation of membership, rights, liabilities and duties of members Chapter II Classification of Directors, woman director, independent director, small shareholders' director Disqualification of director, Director Identification Number, powers and duties, position of director as key managerial personnel, Manager, Managing Director. Chapter III Meetings, types of meetings of members and Board of directors, convening and conduct of meetings, Postal ballot, meetings through video conferencing, e-voting.	04 03 02		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Chapter I Definition, essentials, types of partnership and types of partners, test of partnership Test of Partnership, partnership deed and property of firm Chapter II Reconstitution of partnership firm, dissolution of firms Chapter III Limited Liability Partnership Act, 2008 Definitions, body corporate, business, partner Concept, salient features, nature of LLP, distinction between LLP and firm, LLP and company, Extent and limitation of liability of LLP and its partners, Conversion of LLP, Winding up and Dissolution of LLP	03 03 03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 33

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VARADA KATLE DEPARTMENT:COMMERCE CLASS: SY BFM SEMESTER:IV MONTH: December 19 ACADEMIC YEAR: 19-20 SUBJECT : Commodities Derivatives

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Commodities derivatives	Unit I Introduction to derivatives :derivative definition , types , participation ,exchange traded vs OTC traded ,kabra committee report ,cropping and growth patterns ,factors that influence price	5	Vipul publication	Chock and duster method
	Unit II Pricing commodity derivatives : investment assets vs consumption the cost of carry ,future basics , concept of hedging	5		

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	Unit III Trading : basic concept such as margins ,circuit filter ,delivery norms ,types of commodity ,settlement price ,fund shortages ,delivery shortage	5		
	Unit IV regulatory framework :Rules governing commodity derivatives ,derivative exchange ,investor grievance ,arbitration rules	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VARADA KATLE DEPARTMENT:COMMERCE CLASS: SY BFM SEMESTER:IV MONTH: December 19 ACADEMIC YEAR: 19-20 SUBJECT : EQUITY MARKET II

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Equity market II	Unit I Development in the Indian equity market Domestic saving ,disinvestment ,FDI ,FII, role of retail investor Share price ,Role of Sebi	5	Vipul publication	Online teaching ,lab top and mobile
	Unit IV dealing in stock Exchange	5		

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	Role of broker ,stock mkt quotations ,BOLT ,`clearing and settlement			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10

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Name of the Department: Commerce

Sr. No	Name of the Staff	Subject Taught/ Unit Taught	Remarks (if any)
1	Veronika B. Barla	Merchant Banking	

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Veronika B Barla **DEPARTMENT**: Commerce

CLASS: S. Y. BFM **DIVISION:** A, **SEMESTER**: IV

MONTH: _____ **SUBJECT**: Marchant Banking **ACADEMIC YEAR**: 2020- 21

LEARNING OBJECTIVE/S:

1. Help to understand merchant banking
2. Help to understand the Initial public offer
3. Help to understand issue of DRs ADRs and GDRs.
4. Help to understand Issue of bond and debentures

The learners will be able to: 1. Helps to understand Introduction to merchant banking, needs, importance, Merchant banking services, project counselling, loan syndication and corporate counselling, Pre issue merchant bank activities, Obtaining stock exchange approval, action as per SEBI guidelines, Drafting and approval of prospectus, Post issue merchant bank activities- issue subscription, allotment of shares, refunds, periodical reports to SEBI.

2. Student able to understand, Initial public offering-issuance process, role of register, SEBI guidelines for IPO eligibility, IPO grading, draft red herring process, prospectus (DRHP), Listing agreement, pricing the issue, book building method, allotments, SEBI guidelines in drafting the offer documents, Pre and post activities in launch of IPO, SEBI guidelines on QIP, rights and bond issue,

3. Student able to understand, Procedure for issue of bond and debenture, Types and process of depository receipts (DRs), ADRs, GDRs, EDRs, IDRs , ADRs and structure and norms, IDRs and guidelines, Prospectus for issue of commercial paper, Credit rating and redemption process.

4. Student able to understand, Procedure for issue of bond and debenture, Foreign currency convertible bonds.

Paper, Unit, Title	Subtopics	Number of lectures allotted	References	Teaching Method /ICT tools used
Marchant Banking Module I Introduction to Merchant Banking	Introduction to merchant banking,	3	1.A manual of merchant banking by J. C. Verma	LECTURE METHOD

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	needs, importance, functions		2.Merchant banking and financial services by J. Guruswamy	USING BLACK BOARD, CHALK
	Merchant banking services, project counselling, loan syndication and corporate counselling	3	"	"
	Pre issue merchant bank activities	4	"	"
	Obtaining stock exchange approval, action as per SEBI guidelines	3	"	"
	Finalizing the appointment with manager / advisor, underwriter, broker, bankers adverting agencies	3	"	"
	Drafting and approval of prospectus	3	"	
	Post issue merchant bank activities- issue subscription, allotment of shares, refunds, periodical reports to SEBI	3	"	"
	Initial public offering- issuance process, role of register, SEBI	3	"	"

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Unit II Initial public offering	guidelines for IPO eligibility			
	IPO grading, draft red herring process, prospectus (DRHP)	3	"	"
	Listing agreement, pricing the issue, book building method, allotments	3	"	"
	SEBI guidelines in drafting the offer documents	2	"	"
	Pre and post activities in launch of IPO	2	"	"
	SEBI guidelines on QIP, rights and bond issue,	2	"	"
Unit III Issue of DRs, ADRs and CPs	Types and process of depository receipts (DRs), ADRs, GDRs, EDRs, IDRs	4	"	"
	ADRs and structure and norms	2	"	"
	IDRs and guidelines	2	"	"
	Prospectus for issue of commercial paper,	3	"	"
	Credit rating and redemption process	1	"	"
Module IV Issue of Bond and debenture	Procedure for issue of bond and debenture	3		
	Foreign currency convertible bonds	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT III, IV AND V: 52 lectures

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ARUN RAUT DEPARTMENT: ACCOUNTANCY

CLASS: TYBFM SEMESTER: V MONTH: JUNE-NOV ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : __.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Introduction to technical Analysis Technical analysis, Basic assumptions, strengths and weakness charts, candlestick chart analysis, one two and three candlesticks pattern, support and resistance, Head and shoulders, double & triple top & bottom, Gap Theory	15	Vipul Prakashan Internet	Chalk & Duster Internet
2	Major Indicators and Oscillators Stochastic, RSI, Williams %R, MFI, Bollinger bands, Moving Averages, MACD	10	Vipul Prakashan Internet	Chalk & Duster Internet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ashwini Dattaram Gurav DEPARTMENT: Self Finance CLASS: T.Y.BFM SEMESTER: V MONTH: June to September ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & Remember- the meaning of Fundamental Research, Technical analysis, Economy Analysis, Industry Analysis
2) Understand and remember Company analysis; Qualitative Dimensions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3- Fundamentals of Research	Fundamentals of Research	03	Book by Seth publications/Internet	Google Classroom, Chalk and duster
	Economy Analysis	03	Book by Seth publications/Internet	Google Classroom, chalk and duster
Unit 4- Company Analysis	Industry Analysis	03	Book by Seth publications/Internet	Google Classroom, chalk and duster
	Qualitative Dimensions	04	Book by Seth publication/Internet	Google classroom, chalk and duster

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Mezbin Lalani DEPARTMENT: Commerce CLASS: T.Y.BFM SEMESTER: V MONTH June-sept 2019

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: to understand about the basics of business valuation
The learners will be able to : learn business valuation and its methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Basics of valuation 2. Valaution models 3.valuation of select tangible assets				
	Introduction, price v/s value, purpose, bias, uncertainities, role of valuation.	15	Business valuation taxmann	Chalk and duster
	Asset based approach, income based approach, discounted cash flow, free cash flow.	15		
	Valuation of fixed assets, related cost, self constructed assets, assets in exchange, valuation of shares.	15		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____45__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PLEMIA REBELLO DEPARTMENT: BFM CLASS:TYBFM . SEMESTER: V

SUBJECT : MARKETING IN FINANCIAL SERVICES MONTH: JULY 2019- OCTOBER 2019 ACADEMIC YEAR:2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

TO KNOW THE DIVERSITY OF DEMAND FOR FINANCIAL SERVICES AND TO IDENTIFY AND EXPLOIT NICHE IN THE MARKET WITH A NEW OR MODIFIED SERVICE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1. FOUNDATION OF SERVICES MARKETING	16	SHETH , VIPUL PRAKASHAN	CHALK AND BLACKBOARD, GROUP DISCUSSION
	2. SERVICES MARKET SEGMENTATION	13		
	3. ISSUES IN MARKETING OF SETVICES - 7 PS OF SERVICE MARKETING, SERVICE	9		

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	DELIVERY PROCESS			
	- SERVICE BLUEPRINTS,SERVICE MAPPING,PERSONAL SELLING	8		
	4. ISSUES IN MARKETING OF SERVICES.	14		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Rashmi Gurunani**_____ DEPARTMENT: **Commerce**_____

CLASS: **_TYBFM_____** SEMESTER: **Sem V_____** MONTH**: _June to Sep_____** ACADEMIC YEAR : **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to :

Importance of Business Ethics and Corporate Governance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Ethics and Corporate Governance	Unit 1 : Business Ethics	8		Chalk Board, Group Discussion
	1) Role of Board of Directors 2) Organisation climate and structure and ethics Addressing ethical dilemmas			

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	3) Code of ethics; ethics committee, ethics training, integrity pact			
	Unit 2 : Corporate Governance- Conceptual Framework	8		Chalk Board, Group Discussion
	1) Introduction, need and scope 2) Evolution of Corporate Governance 3) Developments in India 4) Elements of Good Corporate Governance			
	Unit 3 : Corporate Governance & Shareholders Rights 1) Rights of Shareholders 2) Challenges for exercising Shareholders Rights 3) Corporate Governance & Related Party Transactions 4) Role of Investor Association in Securing Shareholders Rights 5) Role of Institutional Investor in Corporate Governance	8		Chalk Board, Group Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _24_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KALPANA JAIN** DEPARTMENT**:** ACCOUNTANCY CLASS: **T.Y.B.F.M.**

SEMESTER: **V** MONTH: June - September ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S : To explain the concepts of Financial Derivatives.

The learners will be able to :understand the concepts in simple way which will help them to understand the trading in stock market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II FUTURES	***Introduction,Future Terminology** ***Key Features of Future Cont** **racts** ***Future v/s Forwards** ***Equity Futures** ***Equity Futures in India** ***Index Futures** ***Stock Futures** ***Future Trading Strategies** ***Hedging with example** ***Speculation with example** ***Arbitrage** ***Spread Trading** ***Practical problems**	01 01 01 01 01 01 01 01 01 01 01 01 03	Financial Derivatives – C.S.Divyesh Patel	Chalk-Board Method
Unit III	*Introduction, Option terminology *Types, Options Payoff *Index Options, Stock Options	01 01 01	Options,Futures and Other	Chalk-Board

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Options and Pricing Options	* Option trading Strategies *Straddle,Strangles *Strips and Straps-Spread trading *Factors affecting Options Pricing *Option Pricing Models * Binomial Pricing Model with practical problems *The Black Scholes model *Pricing of Index Option *Sensitivity of Option Premia: Delta,Gamma,Lambda,Theta,Rho.	01 01 01 01 01 03 01 01 02	Derivatives – John C Hull Sankarshan Basu	Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNITS: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF.NAZIA SAJID SHAIKH. DEPARTMENT: COMMERCE . CLASS: TYFM SEMESTER: VI.

MONTH: NOV TO FEB ACADEMIC YEAR: 2019-2020 SUB: VENTURE CAPITAL & PRIVATE EQUITY.

LEARNING OBJECTIVE/S:
The learners will be able to : Understand Venture capital and Private Equity. Private a Private Equity fund. Structure and Valuation approach, Strategies of private equity, exit strategies for Private Equity.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE I. VENTURE CAPITAL AND PRIVATE	***Venture Capital:** Overview of Venture Capital: features, types, roles ***Concept of Private Equity & it's Characteristics:** Differences between Venture Capital & Private Equity & Hedge funds, Nature of PE firms, Players in PE markets. Benefits of PE Finance. ***PE Funds:** Legal Structure & terms, PE investment & finance, PE multiple &prices. PE firms &PE Funds.	**12**	**Indian financial system: M.Y.Khan.**	**Chalk &Duster**

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EQUITY.			**Tata McGraw**	
MODULE 2 STRUCTURE AND VALUATION APPROACH.	***Structure and regulations of Venture capital & Private equity:** Business cycle , Limited liability partnership , Regulatory aspects of Venture Capital & Private investment. ***Valuation Approach :** Risk & return, Analysis of funds , Conventional method, Revenue multilpier method.	**10**		
MODULE 3. STRATEGIES OF PRIVATE EQUITY.	*Leverage Buyout, Growth Capital, Mezzanine Capital. *Distressed debt ,other Strategies ***Due diligence:** Procedure and Challenges.	**10**		
MODULE 4.	***Modes of exit in India:** Context & challenges involved. ***IPO Promoters, Buyback , Sales to other , Stategic investors, Stake Swap,**	**12**		

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EXIT STATEGIES	**M& A's, Open market, Secondary market.** _____			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM (F. Market) CLASS: T.Y.B.F.M. SEMESTER:6TH

MONTH: November -February ACADEMIC YEAR: 2019- 2020 SUBJECT :CORPORATE RESTRUCTURING

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To introduce learners about theories and processes of Mergers and Acquisition.
2. To acquaint students with knowledge of types and methods of takeover and Buy-outs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 3: THEORIES AND PROCESS OF MERGERS AND	• Theories of Mergers, Efficiency Theories – Information and Signalling – Agency Problems and Managerialism – free Cash Flow Hypothesis – Market Power -Taxes and their Impact on Merger Decisions- Hubris Hypothesis	5	Mergers, Acquisition and Corporate Restructuring : Prasad G Godbole	1.Lecture and discussion.
	• Types of M&A, Mergers and Acquisition, Different forms and Various Types of Mergers	5		

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ACQUISITION	• M&A Process , Mergers and Acquisition Process – Participants not the Merger and Acquisition process – Post merger Integration -Reasons for Failure of Mergers and Acquisition	5	Mergers /Amalgamations, Takeover, Joint Ventures, LLPS and Corporate Restructure – K.R.Sampath.	
MODULE 4: TAKEOVERS AND LEVERAGES BUYOUTS	• Takeover Defences, Friendly vs. Hostile Takeovers- Alternative Takeover Tactics – Preventive Anti-takeover Measures- Active Anti-takeover	5		
	• Going Private Transaction, Methods of Going Private.	5		
	• Leveraged Buy-outs, Elements of a typical LBO Operation -From of LBO Financing – Characteristis of an ideal Leveraged Buy-out Candidate – Sources of Gains in LBOs- Management Buy-outs – Management Buy ins- Leverage cash outs	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT: COMMERCE CLASS: TY BFM SEMESTER: 6

MONTH: NOV-DEC ACADEMIC YEAR: 2019-2020 SUBJECT: CORPORATE RESTRUCTURING

LEARNING OBJECTIVES:

The learners will be able to : Know how can corporations be restructured to promote growth and reduce excessive debt without placing undue burdens on tax payers, framework needed to promote better corporate governance .rules and regulations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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UNIT 1 INTRODUCTION AND CONCEPTS OF CORPORATE RESTRUCTURING	Meaning of Corporate Restructuring. Need, Scope and Modes of Restructuring. Emerging Trends. Planning, Formulation and Execution of Various Corporate Restructuring Strategies- Mergers, Acquisition, Takeovers, Disinvestment and Strategic Alliances, Demerger. Emerging Trends.	15	Corporate Restructuring by Khan Rameeza Ahmed	Chalk board Flow Chart

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA DEPARTMENT: COMMERCE CLASS: TY BFM SEMESTER: 6

MONTH: NOV-DEC ACADEMIC YEAR: 2019-2020 SUBJECT: CORPORATE RESTRUCTURING

LEARNING OBJECTIVES:

The learners will be able to : Know how can corporations be restructured to promote growth and reduce excessive debt without placing undue burdens on tax payers, framework needed to promote better corporate governance .rules and regulations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 MERGER AND AMALGAMATION, CORPORATE DEMERGER AND REVERSE MERGER	Introduction to Merger and Amalgamation, Corporate Demerger and Reverse Merger. Legal ,Procedural, Economic, Accounting, Taxation and Financial Aspects of Merger and Amalgamation. Merger Aspects under Competition Law. Legal and Procedural Aspects, Tax Aspects and Reliefs. Types of takeovers, legal Aspects- SEBI takeover Regulation.	15	Corporate Restructuring by Khan Rameeza Ahmed	Chalk board Flow Chart

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	Bailout takeovers			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

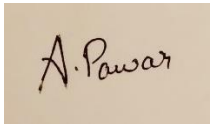
NAME OF THE STAFF: AVINASH PAWAR DEPARTMENT: BCOM (Financial Management) CLASS: FYBFMG

SEMESTER: I MONTH: July - November ACADEMIC YEAR: 2019-20 SUBJECT: Business Communication

LEARNING OBJECTIVE/S: To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills. The learners will be able to prepare resumes to attend interviews, convening meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills. To make students aware of the importance of developing skills.

PAPER, UNIT, TITLE				

Unit1. Theory of Communication	1) Concept of Communication- Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World Impact of technological advancements on communication 2) Channels and Objectives of Communication: Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board



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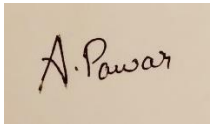
	Objectives of Communication: Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Moral of Employees 3) Methods and Modes of Communication: Methods: Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette Modes: Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing			
Unit 2 - Obstacles to Communication in Business World	1) Problems in Communication /Barriers to Communication: Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board



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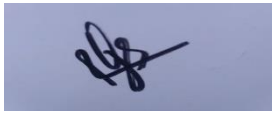

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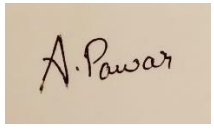
	2) Listening: Importance of Listening Skills, Cultivating good Listening Skills – 4 3) Introduction to Business Ethics: Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility Teachers can adopt a case study approach and address issues such as the following so as to orient and sensitize the student community to actual business practices: Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour			

Unit 3 : Business Correspondence	1)Theory of Business Letter Writing: Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation [Letter of Appointment, Promotion and Termination, Letter of Recommendation (to be taught but not to be tested in the examination)]	15	Manan Publication, Sheth Publication, Vipul Publication	Online



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	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities Listening Comprehension Remedial Teaching Speaking Skills: Presenting a News Item, Dialogue and Speeches Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. Reading Comprehension: Analysis of texts from the fields of Commerce and Management	15		Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA SUB: BUSINESS ENVIRONMENT DEPARTMENT: BCOM (Financial Management)

CLASS: FYFMG SEMESTER: I MONTH: August TO November ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the meaning of business and different types of business environments.
- Get knowledge of environmental analysis through PESTEL Analysis, SWOT Analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit1 & 2 - Business Ethics	A) Business Objectives- meaning, features, importance and core objectives of business B) Dynamics of Business and its Environment C) Types of Business Environment D) ENVIRONMENTAL ANALYSIS- Meaning, Importance, Factors E) PESTEL Analysis F) SWOT Analysis	20	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion , example method and evaluation method

Unit- 3 & 4 Contemporary Issues	A) Corporate social responsibility B) Social responsibility of business C) Ecology and business D) Carbon credit E) Corporate governance	20	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion and example method

	F) Social audit G) Evolution of social audit H) Benefits of social audit I) Social audit v/s commercial audit			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40

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TEACHING PLAN (UNIT PLAN)

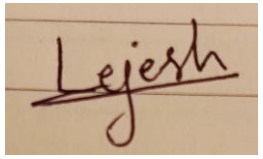
NAME OF THE STAFF: **LEJESH KELOTH** DEPARTMENT**: BCOM (Financial Management)**

CLASS: **F.Y.B.F.M** SEMESTER: **I** MONTH: **JUNE TO OCTOBER** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S : Provide a strong foundation in fundamentals of Economics

The learners will be able to : Enable the students to pursue further studies in this discipline understanding the functioning of Domestic as well as global economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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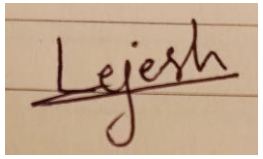
Micro-economics Paper-1	**Module 1- Scope importance of Business Economics:** Basic tools, opportunity cost principles, cost principle, basic economics relation, total average and marginal relation. The basis of market demand market supply equilibrium price-in demand and supply curve and equilibrium	10	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication,	Black Board Method



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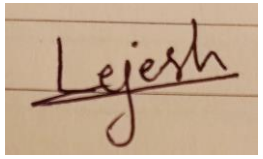
Micro-economics Paper-1	**Module 2- Demand Analysis:** Market, what is competition demand curve, market demand versus individual demand: movement along the demand curve shifts in demand curve supply, market supply and individual supply three steps in the analyzing change in equilibrium, price ceiling and floor taxes and the impact- price elasticity of demand -total revenue and elasticity of demand- impact of price elasticity on revenue. DEMAND ESTIMATION AND FORECASTING; Meaning and significance , method of demand estimation , survey and statistical method.	10	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication,	Black Board Method
Micro-economics Paper-1	**Module 3:SUPPLY AND PRODUCTION COST OF PRODUCTION: Production function short run analysis with the law of variable production function with two variable , ridge lines and least cost combination of input ; long run production function and law of return to Scale ,economic and economics of Scale.** **COST CONCEPT;** Accounting cost and economic cost, implicit and explicit, social cost in private cost , historical cost and replacement cost, sankosh and incremental cost, fixed and variable cost, total average and marginal cost, cost output relation in short run and long run (sums)	10	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication,	Black Board Method



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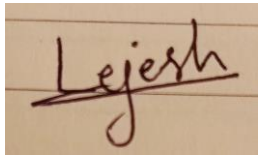
Micro-economics Paper-1	**Module 4** ;MARKET STRUCTURE; Perfect cooperation and monopoly and pricing and output decision under imperfect competition Short run and long run equilibrium of competitive firm and of industry – monopoly –short run n long run equilibrium of a firm under monopoly . Monopolistic competition ;Equilibrium of a firm under monopolistic competition , debate over role of advertising. Oligopolistic market; key attribute of oligopoly collusive and non-collusive market – price rigidity – Cartel and price leadership model	10	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication



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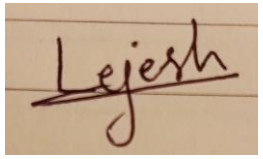
Micro-economics Paper-1	**Module 5 Pricing practices.** **Cost oriented pricing method ; cost – plus (full cost pricing , marginal pricing , mark up pricing , discriminating pricing ,multiple – product pricing – transfer pricing .**	10	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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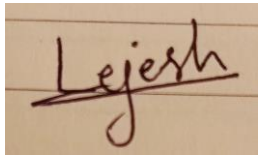

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMOL VAJE\DEEPAK GUPTA DEPARTMENT:BCOM (Financial Management) CLASS: FYFMG SEMESTER: I

MONTH: August to DEC ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & Remember- the concept of financial accounting, solve Final accounts 2) Understand & Remember- the concept of single entry system; solve single entry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1&2- Single Entry	Single Entry	10	Book by Vipul publications/Internet	Google Classroom, Chalk and duster
	Practical Problems	10	Book by Vipul publications/Internet	Google Classroom, chalk and duster
	Trading A/c, Profit & Loss A/c, Balance Sheet	10	Book by Vipul publications/Internet	Google Classroom, chalk and duster
Unit3& 4- Final Accounts	Practical Problems	10	Book by Vipul publication/Internet	Google classroom, chalk and duster

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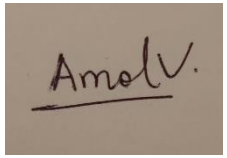
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40



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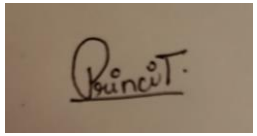
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCI TINISH DEPARTMENT: BCOM (Financial Management)

CLASS: FYFMG SEMESTER: I MONTH: JULY-OCT ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Indian Culture, Politics, Constitution, Rights



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1	**Overview of Indian Society.** Understanding the multi-cultural diversity of Indian society through its demographic composition: population distribution according to religion, caste, and gender; Appreciate the concept of linguistic diversity in relation to the Indian situation;	**5**	**Textbook of Vipul's prakashan & online references**	**Blackboard, Chalk, Google classroom**

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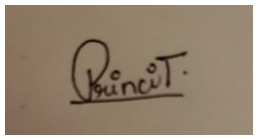
	Understand regional variations according to rural, urban and tribal characteristics; Understanding the concept of diversity as difference			



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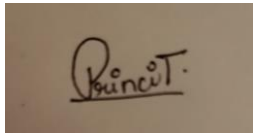
Unit 2	**Concept of Disparity-1** Understanding the concept of disparity as arising out of stratification and inequality; Explore the disparities arising out of gender with special reference to violence against women, female feticide (declining sex ratio),and portrayal of women in media; Appreciate the inequalities faced by people with disabilities and understand the issue of people with physical and mental disabilities	**8**	**Textbook of Vipul's prakashan & online references**	**Blackboard, Chalk, Google classroom**
Unit 3	**Concept of Disparity-2** Examine inequalities manifested due to the caste system and inter-group conflicts arising thereof; Understand inter-group conflicts arising out of regionalism and linguistic differences	**8**	**Textbook of Vipul's prakashan & online references**	**Blackboard, Chalk, Google classroom**
Unit 4	**The Indian Constitution** Philosophy of the Constitution as set out in the preamble; The structure of the Constitution-the Preamble, Main Body and Schedules; Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution	**8**	**Textbook of Vipul's prakashan & online references**	**Blackboard, Chalk, Google classroom**



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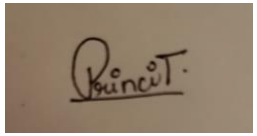
Unit 5	**Significant Aspects of Political Processes** The party system in Indian politics; Local self-government in urban and rural areas; the 73rd and 74th Amendments and their implications for inclusive politics; Role and significance of woman in politics	**8**	**Textbook of Vipul's prakashan & online references**	**Blackboard, Chalk, Google classroom**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 37



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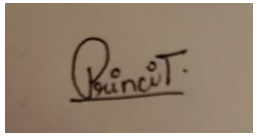

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA SUB: INDIAN FINANCIAL SYSTEM DEPARTMENT: BCOM (Financial Management)

CLASS: FYFMG SEMESTER: I MONTH: August TO November ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES: The learners will be able to:

- Understand the meaning of the Indian financial system and different functions of the financial system.
- Get knowledge of the financial market and its components along with its functionality.
- Interpret the various financial instruments and services offered by financial institutions across the globe.
- Know in detail about commodity markets and various categories of commodities.
- Gain insight on commodity derivatives and various commodity exchanges.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

Unit 1&2 - Financial System	A) Financial System- meaning, nature, importance, role B) Structure if Indian financial system C) Flow of funds in financial system D) Financial system and economic development E) Economic development and economic growth F) Financial development and its effect on economic development G) Indicators of economic development H) Factors influencing financial development in India	20	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion, example method and evaluation method

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Unit- 3 & 4 Non-banking financial institutions	A) NBFCs- meaning, concept, nature, role of NBFCs B) Sources of finance C) RBI guidelines for NBFCs- role and functions D) NABARD- role and functions E) SEBI- role and functions F) SEBI as a regulator	20	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion and example method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40

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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: MADHU SHARMA DEPARTMENT: BCOM (Financial Management) CLASS: FYFMG

SEMESTER: I MONTH: SEPTEMBER-NOVEMBER ACADEMIC YEAR: 2019-20 LEARNING OBJECTIVES:

The learners will be able to:

- Define Ratio, Continued Ratio, and Inverse Ratio and solve the questions based on these terms.
- Understand the concept of Proportion, Continued Proportion, Direct Proportion and Inverse Proportion.
- Solve the questions based on different types of Proportion and relate the situations in day to day life.
- Understand the concept of Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation.
- Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Ratio, Proportion & Percentage	Unit1	▪ Define Ratio, Continued Ratio, Inverse Ratio ▪ Problem solving on ratio ▪ Define Proportion its types. ▪ Problem solving on proportion	1 1 1	Business Mathematics	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT.

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			▪ Explanation on concept of percentage and computation of percentage.	1 1	(Manan ,Vipul , Sheth Publications)	TEACHING AIDS : whiteboard, Duster, PPT's

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5

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TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: MADHU SHARMA DEPARTMENT: SELF-FINANCE

CLASS: FYFMG SEMESTER: I MONTH: SEPTEMBER-NOVEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES:

The learners will be able to:

- Define Profit and Loss and terms related to it.

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- Understand the formula of Trade discount and cash discount.
- Learn and understand the concept of Commission and Brokerage.
- Focus on how to use these terms in day to day life.

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RPAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Profit and Loss	Unit2	▪ Introduction to formula of Profit, Loss, %profit ,%loss ▪ Solve problems based on the above formulas ▪ Introduction to terms like trade discount, cash discount. ▪ Exercise based on cost price, selling price, trade discount, cash discount. ▪ Introduction to terms like Commission and brokerage. Solving ▪ problems based on commission and brokerage	1 2 1 2 1	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07

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TEACHING PLAN (UNIT 3 PLAN)

NAME OF THE STAFF: MADHU SHARMA DEPARTMENT: SELF-FINANCE CLASS: FYFMG

SEMESTER: I MONTH: SEPTEMBER-NOVEMBER ACADEMIC YEAR: 2019-20 LEARNING OBJECTIVES:

The learners will be able to:

- Define Simple and Compound interest and its formula.

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- Understand the concept of this topic and learn how to use in day to day life.
- Learn meaning of EMI, annuity and its types, also calculation of present and future value.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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BUSINESS MATHEMATICS	Interest and Annuity	Unit3	▪ Introduction to the formula of Simple interest and sums based on it. ▪ Introduction to the formula of Compound interest and sums based on it monthly, quarterly, .half yearly and yearly. ▪ Introduction and sums based on EMI, reducing balance and flat rate of interest. ▪ Introduction to annuity and its types, calculation of present value and future value by using its formula. ▪ Concept on Stated annual rate and effective annual rate and solving sums based on it.	2 2 2	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

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TEACHING PLAN (UNIT 4 PLAN)

NAME OF THE STAFF: MADHU SHARMA DEPARTMENT: SELF-FINANCE

CLASS: FYFMG SEMESTER: I MONTH: SEPTEMBER-NOVEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES:

The learners will be able to:

- Learn the concept of face value, market value, dividend, equity shares, bonus shares, preference shares.
- Solve the questions based on buying and selling of shares with and without brokerage.
- Define net asset value of mutual funds, entry/exit load
- Understand the concept of Systematic Investment Plan (SIP).
- Solve simple problems on calculation of net income after considering entry load and exit load change in net asset value and SIP.
- Focus and how to apply this knowledge in day to day life

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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BUSINESS MATHEMATICS	Shares and Mutual Funds	Unit4	Concept of Shares, Face value, market value, dividend. ▪ Explanation of types of Shares. Sums based on Shares ▪ Concept of Mutual Funds and its types ▪ Calculation of net income after considering entry load and exit load Change in net asset value and problems based on it. ▪ Concept of SIP and sums based on it. ▪	2 3 1 2 2	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

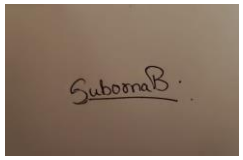
NAME OF THE STAFF: SUBORONA BANARJEE **DEPARTMENT** : BCOM (Financial Management) **CLASS:** FYFMG (DIV- A)

SUBJECT – BUSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** January **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization 3) To enhance students' writing and presentation skills.



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	4 Principles of Effective Presentation Effective use of OHP Effective use of Transparencies How to make a Power-Point Presentation	15	PPT	Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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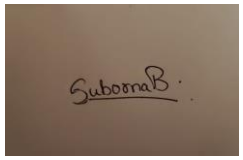

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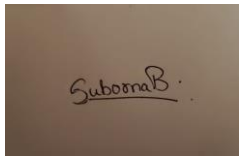
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SUBORONA BANARJEE **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYFMG

SUBJECT – BUSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** FEB **ACADEMIC YEAR:** 2019-20

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Interviews:** Group Discussion, Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit **Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics, Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **Conference:** Meaning and Importance of Conference, Organizing a Conference **Modern Methods:** Video and Tele – Conferencing	12	PPT	Online Lectures through Google Meet



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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Commerce Vidhya Dayanand Patil College of Arts VIVA COLLEGE, Virar (W)

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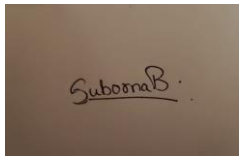
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYFMG

SUBJECT – BUSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** MAR **ACADEMIC YEAR:** 2019-20

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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2) Group Communication	**Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	03	PPT	Online Lectures through Google Meet
3) Business Correspondence	Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters, Promotional Leaflets and Fliers, Consumer Grievance Letters, Letters under Right to Information (RTI) Act	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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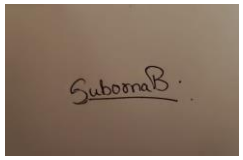

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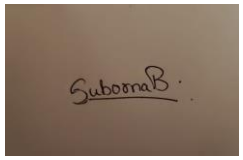
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SUBORONA BANARJEE **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FYFMG
SUBJECT – BUSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** APR **ACADEMIC YEAR:** 2019-20

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4) Language and Writing Skills	**Reports:** Parts, **Types** - Feasibility Reports, Investigative Reports **Summarisation:** Identification of main and supporting/sub points, Presenting these in a cohesive manner	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Madhu Sharma DEPARTMENT: BCOM (Financial Management) CLASS: FYFMG

SEMESTER: II Subject : Business Statistics MONTH: Dec-April ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S: : develop critical and logical thinking and will able to solve various problems

APER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/SICT	TEACHING METHOD/ TOOLS USED
BUSINESS STATISTICS UNIT I POPULATION AND SAMPLE	Definition of Statistics, Scope of Statistics in Management and Financial Markets, Concept of Population and Sample with Illustration. Methods of Sampling: SRSWR, SRSWOR, Stratified, Systematic (Description of Sampling Procedures Only). Data Condensation and Graphical Methods: Raw Data, Attributes and Variables, Classification, Frequency Distribution, Cumulative Frequency Distribution. Graphs: Histogram and Frequency Polygon. Diagrams: Multiple Bar, Pie, Subdivided Bar.	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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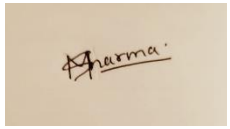
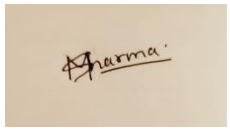
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS UNIT II MEASURES OF CENTRAL TENDENCY	Criteria for Good Measures of Central Tendency, Arithmetic Mean, Median, Mode for Grouped and Ungrouped Data, Combined Mean	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15





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LEARNING OBJECTIVE/S:

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The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS UNIT III MEASURES OF DISPERSION	Concept of Dispersion, Absolute and Relative Measures of Dispersion, Range Variance, Standard Deviation, Coefficient of Variation, Quartile Deviation, Coefficient of Quartile Deviation.	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

LEARNING OBJECTIVE/S:

The learners will be able to: develop critical and logical thinking and will able to solve various problems

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS UNIT IV CORRELATION AND REGRESSION	Concept of Correlation, Positive and Negative Correlation, Karl Pearson's Coefficient of Correlation, Meaning of Regression, Two Regression Equations, Regression Coefficients and Properties.	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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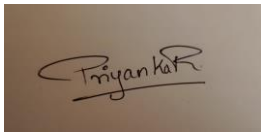
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Priyanka Rajput DEPARTMENT: BCOM (Financial Management) CLASS: F.Y.F.M.G

SEMESTER: II MONTH: November - March ACADEMIC YEAR: 2019-20 SUBJECT: Computer Skills- I

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of Computer Hardware, Windows Operating System, Application of Internet, MS Word and MS Excel.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Computer Hardware	A) Personal Computers- identification/demonstration of different storage Devices like CD and CD drive, hard disk- HDD, storing and retrieving data from various storage devices.	04	Computer Skills - I	Board , Chalk and Duster



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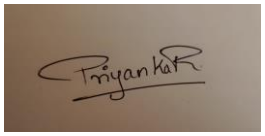
	B) Identification of various input and output devices. Primary memory, RAM and ROM- Processor- CPU, its speed- machine cycle, ports, computer buses, Different types of printers.	04	By Rimple Sanchla and www.wikipedia.com	
	C) Introduction to trouble shooting of personal computers.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Windows	A) Introduction, features, various versions of windows, My computer, my documents, recycle bin, network neighborhood.	05	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Start menu, taskbar, file and folder operation (creating, copying, moving, deleting), system tools, creating shortcuts.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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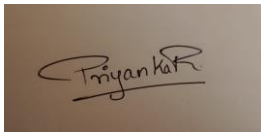

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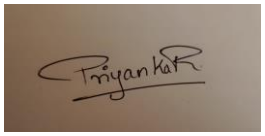
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Internet	A) What is the internet, most popular internet services, functions of internet like email, WWW, FTP, UseNet, Instant messaging.	05	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Internet telephony, using address book, working with task list, scheduling appointments, reminders, events.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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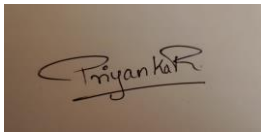
UNIT - IV Word – 2013	A) Getting started, The Word window, New documents, Document navigation, Editing text, Working with text, Undo and Redo commands, Cut, copy, and paste, Find and replace Text formatting,.	03	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk, Duster And Computer (MS-Word Software)
	B) Character formatting, Tab settings, Paragraph formatting, Paragraph spacing and indents Tables, Creating tables, Working with table content, Changing the table structure Page layout, Headers and footers.	04		
	C) Page setup Graphics, Adding graphics and clip art, Working with graphics Proofing, printing, and exporting, Spelling and grammar, AutoCorrect, Printing and exporting documents.	03		
	Practical: - Create Window- Cut, Copy, Paste, Find & Replace Text Formatting, Header & Footers, Adding graphics and clip art, Spelling and grammar in Word - 2013.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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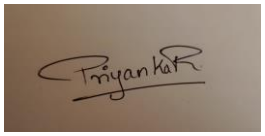
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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UNIT - V Excel- 2013	A) Fundamentals of Excel, Cut, Copy, Insert, Delete, Paste Special, Custom Formatting, Undo, Redo.	03	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk, Duster And Computer (MS- Excel software)
	B) Excel Formulas – Basic, Useful functions and Paste Function, Calc, Comments, Drawing toolbar, Edit, Replace, Delete, Clear.	03		
	C) Essential Printing, Data Sorting, Hiding, AutoFormats, Protection, Basic Charts, Basic Formatting, If Function.	04		
	Practical: - Create Spreadsheet in Excel - 2013, Create Table- Insert & Delete Records, Basic Excel Formulae, Cut, Copy, Paste & Basic Charts in Excel-2013.	05		

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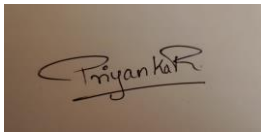
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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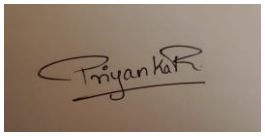

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:HEMANGI MEHTA **DEPARTMENT:** BCOM (Financial Management)

CLASS: F.Y.FMG. **SEMESTER:** II **MONTH: JANUARY ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S: The learners will be able to : ○ Understand key concepts from economic, political, and social analysis as they pertain to the design and evaluation of environmental policies and institutions.

○ Appreciate concepts and methods from ecological and physical sciences and their application in environmental problem solving.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D

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EVS **Modules 1: Environment: an overview**	Environment structure, components and typology Ecosystem as part of environment- Functioning and levels of organization Biodiversity- Classification, value, threats to biodiversity	15	Basics in Environmental Studies, Dr. Pushpendra	CHALK AND DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:HEMANGI MEHTA **DEPARTMENT:** SFC

CLASS: F.Y.FMG. **SEMESTER:** II **MONTH: FEBRUARY** **ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to :

- Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems.
- Reflect critically about their roles and identities as citizens, consumers and environmental actors in a complex, interconnected world.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EVS **Modules 2: Natural Resources**	Definition, importance and classification of natural resources Utilization and conservation of water, forest, soil and energy resources Issues associated with natural resources	15	Environmental Management, Swapan Deb.·	CHALK AND DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:HEMANGI MEHTAL **DEPARTMENT:** SFC

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CLASS: F.Y.FMG. **SEMESTER:** II **MONTH: MARCH ACADEMIC YEAR:** 2019-20

LEARNING OBJECTIVE/S: The learners will be able to :

- Understand core concepts and methods from ecological and physical sciences and their application in environmental problemsolving.
- Appreciate key concepts from economic, political, and social analysis as they pertain to the design and evaluation of environmental policies and institutions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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EVS Modules 3:Economic activities Modules 4:Environment Management	nature and pattern- primary, secondary and tertiary Environmental problems associated with economic activities Case studies with reference to India Environment Management Environment management- Concept, need and relevance of environmental education Environmental Impact Assessment, Environmental audit Role of technology in Environment Management- GIS,GPS, Remote sensing as tools	30	Environment and Sustainable Development, Sundar, I.·	CHALK AND DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SEEMA SIHANA DEPARTMENT BCOM (Financial Management) CLASS: F.Y.BFM
SUBJECT: FOUNDATION COURSE II SEMESTER: II MONTH: December- March ACADEMIC YEAR: 2019-20

A teaching plan is a document that outlines the structure and details of a single session. A good teaching plan is a comprehensive write-up of the step-by-step teaching methods, the estimated duration of each segment of teaching, and the materials and resources needed for the session.

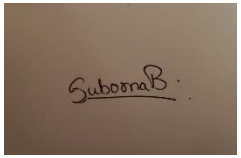
LEARNING OBJECTIVE/S:

By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected contexts so they can contribute to making life better for others, themselves and the larger world.

(For a detailed description of each component see Appendix A).

APPENDIX {A}



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UNIT TITLE	Components	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Globalization & Indian Society	**Concepts of liberalization, privatization and globalization**	2	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

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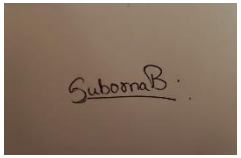
	Growth of information technology and communication and its impact manifested in everyday life	1	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD



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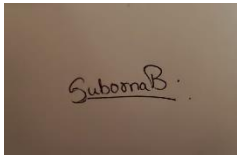
	Impact of globalization on industry: changes in employment and increasing migration	1	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
	Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides.	1	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

Total no of lecture 05

UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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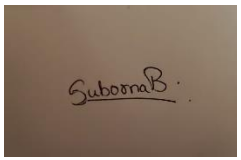
UNIT 2 Human Rights	a]Concept of Human Rights.	01	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
	b] Evolution of Human Rights	02	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
	c] The Universal Declaration of Human Rights	03	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHO
	d] Fundamental Rights in Constitution	04	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • .INTERACTIVE METHOD

Total no of lecture 10



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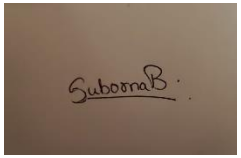
UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 Ecology	a] Concept of environment & ecology	02	Book by Manan publications/Internet	1. CHALK & BLACK BOARD METHOD 2. .INTERACTIVE METHOD
	b] Importance of environmental studies, Environment as a Natural capital & quality of human life	03	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • .INTERACTIVE METHOD



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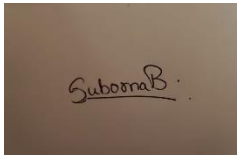
	c] Environmental Degradation. i. Causes ii. Impact on human life	02	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • .INTERACTIVE METHOD
	d] Sustainable Development i. Concept ii. Components	02	Book by Vipul publication/internet	• CHALK & BLACK BOARD METHOD • 2 .INTERACTIVE METHOD
	e] Poverty & Environment	01		• 1.CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

Total no of lecture 10



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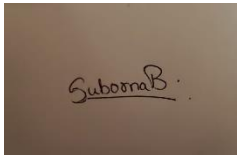
UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 Understanding	**Causes of stress & Conflicts in individual & society,**	1	Book by Manan publications/Internet	Online
Stress & Conflicts	**Agents of Socialization & the role played by them in developing the individual.**	1	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
	Significance of values, ethics & prejudices in developing the individuals.	1	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
	Stereotypying & prejudice as significant factors in causing conflicts in society.	1	Book by Manan publication/internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD



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	Aggression & Violence as the public expression of conflicts.	1	Book by Manan publication/internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

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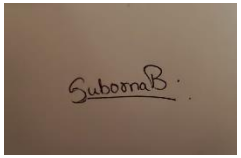
Total no of lecture 05



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UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 Managing stress & conflict in Contemporary Society	**Types of conflicts and use of coping mechanisms for managing individual stress**	1	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
	Maslow's theory of self-actualisation,	1	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

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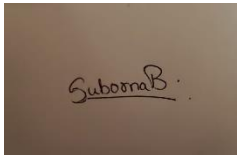

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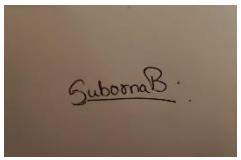
	Different methods of responding to conflicts in society, Conflict Resolution, & Efforts towards building peace & harmony in society.	1	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

Total no of lecture 03



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMOL VAJE. DEPARTMENT: BCOM (Financial Management) CLASS: F.YFMG SEMESTER: VI **MONTH:** DEC TO APRIL **ACADEMIC YEAR: 2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to : TO ENHANCE THE ABILITIES OF LEARNER TO DEVELOP THE CONCEPT OF FINANCIAL ACCOUNTING AND ITS SIGNIFICANCE IN THE BUSINESS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BRANCH ACCOUNTING	MEANING ,CLASSIFICATION OF BRANCHES, ACCOUNTING FOR DEPENDENT BRANCH NOT MAINTAINING FULL BOOKS DEBTORS METHOD , STOCK & DEBTORS METHOD	15		CHALK & DUSTER METHOD PPT , GOOGLE CLASSROOM

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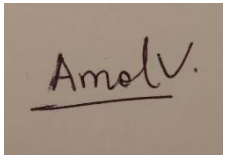
DEPARTMENTAL ACCOUNTS	MEANING , BASIS OF ALLOCATION OF EXPENSES & INCOMES, INTER DEPARTMENTAL TRANSFER AT COST PRICE & INVOICE PRICE, STOCK RESERVE DEPARTMENTAL TRADING P&L ACCOUNT & BALANCE SHEET	15 15		



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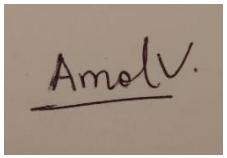
HIRE PURCHASE INSTALLMENT PARTNERSHIP ACCOUNTS	MEANING, CALCULATION OF INTEREST, ACCOUNTING FOR HIRE PURCHASE TRANSACTION , JOURNAL ENTRIES, LEDGER ACCOUNTS DISCLOSURE IN BALANCE SHEET FOR HIRER & VENDOR ADMISSION OF A PARTNER, RETIREMENT OF A PARTNER, DEATH OF A PARTNER, DISSOLUTION OF A PARTNERSHIP , PIECEMEAL DISTRIBUTION	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ABHISHEK MADHAYE DEPARTMENT: BCOM (Financial Management)

CLASS: FYBFMG SEMESTER: II MONTH: OCT- JUNE ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The learners will be able to : Understand the Financial Services and how they work

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1	**Introduction to Finance and Financial Planning** Finance, Definition, Nature and scope of Finance function Financial Management: Meaning, scope and objectives Organisational framework of financial management- Relationship of finance department with other departments- Role of Finance Manager Financial Planning: Concept- objectives-types-stepssignificance- basic considerations- limitations	**8**	**Textbook of Vipul's prakashan & online references**	**Blackboard, Chalk, Google classroom**

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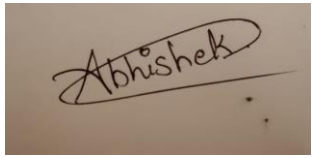
Vidhya Dayanand Patil College of Arts VIVA COLLEGE,
Virar (W)



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Unit 2	**Capital Structure and Capitalisation** Meaning of Capital Structure- Criteria of determining capital structure- factors influencing capital structure Meaning of Capitalisation , narrower and broader interpretation Over capitalization - Meaning, causes, consequences, remedies Under capitalisation- Meaning, causes, consequences, remedies	**7**	**Textbook of Vipul's prakashan & online references**	**Blackboard, Chalk, Google classroom**
Unit 3	**External Sources of Finance** Shares- Meaning, types, advantages, limitations Debentures- Meaning, types, advantages, limitations Public Deposits- Meaning, advantages, limitations Borrowing from banks- types of loans, advantages, limitations	**5**	**Textbook of Vipul's prakashan & online refrenses**	**Blackboard, Chalk, Google classroom**

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Unit 4	**Internal Sources of Finance** Reserves and surplus, bonus shares, retained earnings, Dividend policy, Role of Depreciation, Importance, advantages and limitations of these sources.	**4**	**Textbook of Vipul's prakashan & online refrenses**	**Blackboard, Chalk, Google classroom**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MEZBIN LALANI SUBJECT: Entrepre DEPARTMENT: BCOM (Financial Management)

CLASS:SYBFMG SEMESTER:III MONTH:June-oct ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNITI,II,III& IV Laws related to compensation management	Employee state insurance Act, 1948	12	Business Regularity Framework by Dr. G.K.Vashney & WEB	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Miscellaneous provision Act, 1948	12		
	The payment of wages Act , 1948	12		
	Payment of bonus Act,, 1956	12		
	The payment of gratuity Act, 1972	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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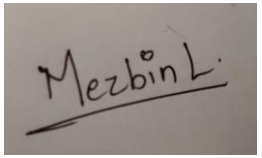

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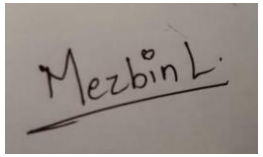

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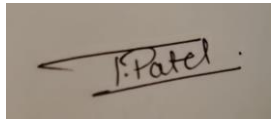
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TARIKA PATEL** DEPARTMENT: BCOM (Financial Management)

CLASS: **SYBFMG Div A** SEMESTER**: III** MONTH: **June To Sep** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) Revise the concepts of Partnership Final Accounts
3) Solve practical questions using concepts
4) Introduction to Accounting with computer.



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Corporate Accounting	Unit 1&2 : Partnership Final Accounts	30	Manan Publication, Vipul Publication	Chalk Board, PPT

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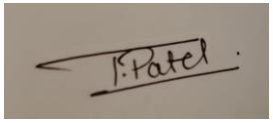

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	1) Concepts - Admission, Retirement & Death 2) Treatment of Goodwill 3) Practical problems		Sheth Publication	
	Unit 3&4 : Accounting with Computers	30	Manan Publication, Vipul Publication	Chalk Board, PPT
	1) Inventory vouchers- stock journal 2) Manufacturing Journal godown management, batch-wise management.		Sheth Publication	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____60_____

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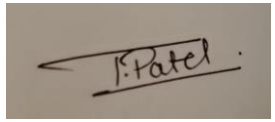

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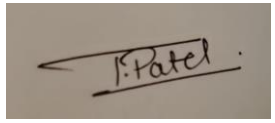
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TEJASWINI PATIL** DEPARTMENT: BCOM (Financial Management) CLASS:**SYFMG** SEMESTER: III

MONTH: June to October ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:



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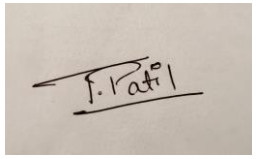
The learners will be able to understand the concept of cost accounting, material labor and overheads cost.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1. Introduction to cost accounting Unit 3. Labour cost	Evolution Objectives and Scope of Cost Accounting Importance and Advantages of Cost Accounting Difference between Cost Accounting and Financial Accounting Limitations of Financial Accounting Definitions: Cost, Costing and Cost Accounting Classification of Cost on Different Bases	15	Manan prakashan Cost Accounting: Principles & Practices Book Reference By M. N. Arora	Chalk, board and duster



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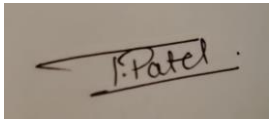

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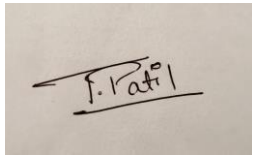
Unit 4. Overheads	Cost Allocation and Apportionment Essentials of Good Costing System, Coding System			
	Labour Cost: The Concept Composition of Labour Cost Labour Cost Records Overtime / Idle Time / Incentive Schemes	15	Manan prakashan Cost Accounting: Principles & Practices Book Reference By M. N. Arora	Chalk, board and duster
	Overheads: The Concept Classification of overheads on different bases Apportionment and Absorption of Overheads	15	Manan prakashan Cost Accounting: Principles & Practices Book Reference By M. N. Arora	Chalk, board and duster



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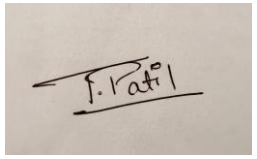
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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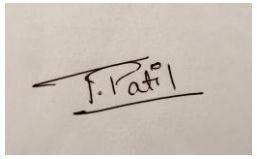

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUREKHA BHARGAV DEPARTMENT: BCOM (Financial Management)

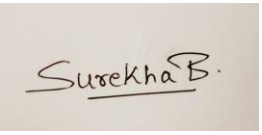
CLASS: S.Y.FMG SEMESTER: III MONTH: June ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES:

The learners will be able to understand the basic concepts and definitions under direct tax.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.DEFINITIONS & BASIS OF CHARGE	DEFINITIONS-ASSESEE, ASSESSEMNT YEAR,ANNUAL VALUE,PERSON.PREVIOUS YEAR	01	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	Chalk-Board
	BSIS OF CHARGE SECTION 3-9	01		
	EXCLUSIONS UNDER SCTION 10	01		
	RESIDENTIAL STATUS	02		
	SCOPE OF TOTAL INCOME	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7



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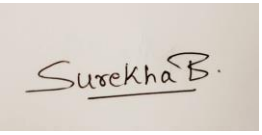

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUREKHA BHARGAV DEPARTMENT: BCOM (Financial Management)

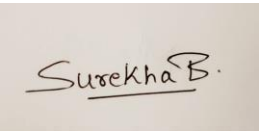
CLASS: S.Y.BAF SEMESTER: III MONTH: July ACADEMIC YEAR: 2019-20 **LEARNING**

OBJECTIVES:

The learners will be able to study different heads of income and their computation.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
2.HEADS OF INCOME	INCOME FROM HOUSE PROPERTY-SEC22 TO27, ANNUAL VALUE	04	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	PowerPoint presentation & MS excel
	PROFIT & GAIN FROM BUSINESS &PROFESSION	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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TEACHING PLAN (UNIT PLAN)

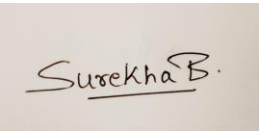
NAME OF THE STAFF: SUREKHA BHARGAV DEPARTMENT: BCOM (Financial Management)

CLASS: S.Y.BAF SEMESTER: III MONTH: AUG ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES:

The learners will be able to understand deductions available under chapter VIA

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
3.DEDUCTION UNDER CHAPTER VI A 4.Incone from Salary	80A-RESRTICTION ON CLAIMS,80C-PAYMENT OF LIC		TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	Chalk-Board I
	80CCC-CONTRIBUTION TO PENSION FUND, 80D-MEDICLAIM INSURANCE PREMIUM,			
	80DD-MEDICAL TRATMENT OF HANDICAPPED			



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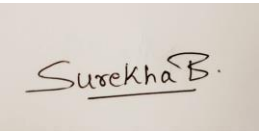
	80E-INTEREST ON EDUCATIONAL LOAN,80TTA-INTEREST ON SAVING BANK ACCOUNT			
	80U-HANDICAPED ASSESSEE Salary	03 06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 09



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SUREKHA BHARGAV DEPARTMENT: BCOM (Financial Management)

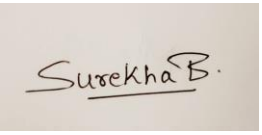
CLASS: S.Y.BAF SEMESTER: III MONTH: AUG-DEC ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES:

The learners will be able to compute the total taxable income of assessee for the relevant previous year.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
4.COMPUTATION OF TOTAL INCOME	COMPUTATION OF TOTAL INCOME OF INDIVIDUAL	2	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	PowerPoint presentation & MS excel
	COMPUTATION OF TOTAL INCOME OF HUF AND DEDUCTIONS	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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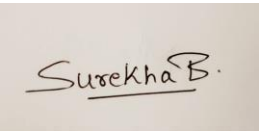

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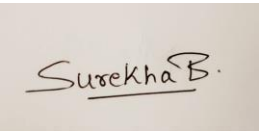

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA SUBJECT: Entrepreneurial Development (ED) DEPARTMENT: BCOM (Financial Management)

CLASS:SYBFMG SEMESTER:III MONTH:June-aug ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I& II Entrepreneurial Project Development	Idea Generation – sources and methods , identification and classification of ideas ,Environment scanning and SWOT analysis .	8	Entrepreneurial Development by Dr.S.S.Khanka & S.Chand	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Preparation of project plan , points to be considered ,components of an ideal business plan	8		

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	Project formulation , project appraisal – aspects and methods	8		
	Technological feasibility – managerial competency	8		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA SUBJECT: Entrepreneurial Development (ED) DEPARTMENT: Commerce (SFC)

CLASS:SYBFMG SEMESTER:III MONTH:sep-oct ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III	Cultural and environmental issues in setting up of business enterprise	4	Entrepreneurial Development by	▪ Chalk – Board method ▪ Discussions
SLEGAL	Sole trading firms , partnership firms	4		▪ Google classroom YouTube videos

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CONSIDERATION FOR DIFFERENT FORMS OF ORGANISATION	Unlimited liability partnership firms , limited company	4	Dr.S.S.Khanka & S.Chand	▪
	Joint stock company , public co. , private co. NGOs	6		
	Quick start methods of business franchising	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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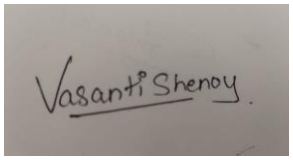
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VASANTI SHENOY DEPARTMENT: BCOM (Financial Management) CLASS: SYFMG SEMESTER
SUBJECT: BUSINESS LAW MONTH: JUNE TO OCTOBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: to provide brief idea about framework of Indian Business Law.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 - Indian Contract Act-1872 Part-1:	Contract Definition of Contract and Agreement, Essentials of Valid Contract, Classification of Contracts, Offer and Acceptance Rules of valid offer and acceptance, Counter offer, standing or open offer, distinguish between offer and invitation to offer. Concept of Communication and Revocation of offer and acceptance (sec. 3,5) Capacity to Contract (S: 10-12)-Minor, Unsound Mind, Disqualified Persons. Consideration (5. 2 & 25)-Concept and Importance of consideration, Legal rules of Consideration, Exceptions to the Rule, 'No Consideration No Contract (Ss. 25) Unlawful Consideration (523)	12		Board and chalk



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UNIT 2 - Indian Contract Act-1872 Part-II:	Consent (Ss.13, 14-18, 39.53, 55, 66)-Agreements in which consent is not free Coercion, Undue Influence, Misrepresentation Fraud, Mistake Void Agreements (S. 24-30)-Concept, Void Agreements under Indian Contract Act Contingent Contract (5. 31), Quasi Contract (5.58-72), Concept of E- Contract& Legal Issues in formation and discharge of E-Contract. Concept of Performance of Contract (537) Modes of Discharge of Contract, Remedies on breach of Contract (73-75)	12		Board and chalk

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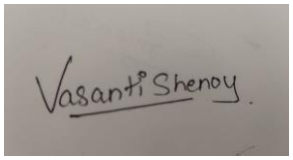
UNIT 3 - Special Contracts:	Law of indemnity & Guarantee (Ss. 124-125, Ss. 126-129, 132-147) Concept, Essentials elements of Indemnity and Guarantee, Contract of Indemnity vs. Guarantee, Modes of Discharge of Surety. Law of Bailment (5, 148, 152-154, 162, 172, 178, 178A, 179)-Concept, Essentials: of Bailment, Kinds of Bailment, Rights and Duties of Bailor and Bailee Law of Pledge Concept, Essentials of valid Pledge, Lien concept. Difference - between Pledge and Lien, Rights of Pawnor & Pawnee (Ss 173, 174, 177) Law of Agency (Ss. 182 185, 201-209) Concept, Modes of creation of Agency. Modes of termination of Agency, Rights& Duties of Principal and Agent.	12		Board and chalk
UNIT 4 - The Sale of Goods Act1930	Contract of Sale Essentials elements of contract of sale, Distinction between Sale and Agreement to sell (5.4) Distinguish between Sale and Hire Purchase Agreement, Types of Goods Effects of destruction of Goods (5-6,7,8), Conditions & Warranties (Ss) 11-25 & 62, 631-Concept. Distinguish between Conditions and Warranties, implied Conditions & Warranties, Concept of Doctrine of Caveat Emptor-Exceptions. Property-Concept, Rules of transfer of property (5s. 18-26) Unpaid Seller (5 45-54, 55 & 56), Concept, Rights of an unpaid seller, Remedies for Breach of contract of Sale (Ss. 55-61) Auction sale - Concept. Legal Provisions (S. 64)	12		Board and chalk



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UNIT 5 - The Negotiable Instruments (Amended) Act 2015:	Negotiable Instruments Concept (513) Characteristics, Classification Negotiable Instruments (S. 11, 12, 17-20, 42, 43, 104,134,135) Maturity of Instruments Promissory Note and Bill of Exchange (Ss. 45, 108-116) Concept, Essentials of Promissory Note, Bill of Exchange S 4,5), Essential features of note and Bill of exchange, Kinds Promissory note and Bill of exchange. Cheque (5.6) Concept, Types & Crossing of Cheque, Distinguish between Bill of Exchange & Cheque, Dishonour of Cheque-Concept & Penalties (5s. 138, 139,142) Miscellaneous Provisions 15. 8-10, 22, 99-102, 118-122, 134 137) -Parties to Negotiable instruments Hoider, Hoider in due course, Rights & Privileges of Holder, in due course Payment in due course, Noting & Protest (99-104A)	12		and

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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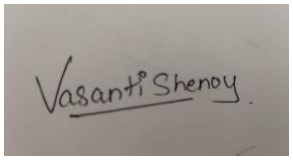

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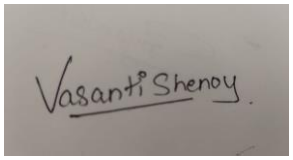

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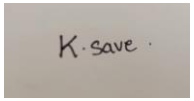
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAUSHIK SAVE SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: BCOM (Financial Management)

CLASS: SYFMG SEMESTER: III MONTH: JUNE ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	Meaning and Definition of Management Accounting, Nature and Frame work	1		



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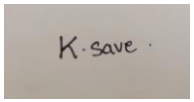
Introduction to Management Accounting	Functions of Management Accounting, Decision Making Process	1	Management Accounting By I.M Pandey	• Chalk • Board • Discussion • Examples
	Information of Decision making (Information, Strategic, tactical and operational information)	1		
	Financial Accounting v/s Management Accounting, Qualities of Management Accounting	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____5_____



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TEACHING PLAN (UNIT PLAN)

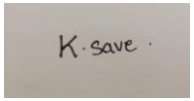
NAME OF THE STAFF: KAUSHIK SAVE____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____ACCOUNTANCY___

CLASS: ____SYFMG SEMESTER: III MONTH: __JUNE ACADEMIC YEAR: __2019-20__

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1& 2	Introduction and importance of financial statements, Vertical form of Balance sheet and Profit and loss Account suitable for analysis	6		• Chalk • Board



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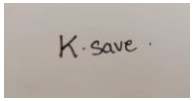
Analysis and Interpretation of Accounts	Simple sums based on Analysis of Financial Statement	6	Management Accounting By I.M Pandey	• Discussion Examples •
	Format and Calculation Tricks of Trend Analysis Comparative Statement Common size Statement Practical Illustration	14		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __26__

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAUSHIK SAVE SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ACCOUNTANCY



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CLASS: ____SYFMG SEMESTER: III MONTH: __JUNE ACADEMIC YEAR: __2019-20__

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

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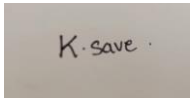
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3& 4 CASH FLOW STATEMENT	Introduction and Meaning Of cash flow statement.	3	Management Accounting	• Chalk • Board • Discussion
	Operating, Investing and financing activities	3		



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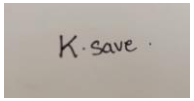
	Format of cash flow statement	4	By I.M Pandey	• Examples
	Practical illustration	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____20___



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MEZBIN LALANI DEPARTMENT: BCOM (Financial Management) CLASS: SYFMG SEMESTER: IV

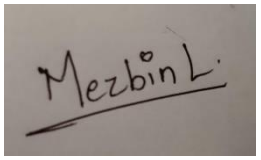
MONTH: NOVEMBER - MARCH ACADEMIC YEAR: 2019-20 SUBJECT - BUSINESS LAW -II

LEARNING OBJECTIVE/S:
The learners will be able to Know Various kinds of companies and features and procedures for incorporating a company.

The learners will be able to Know Partnership Meaning, Procedure for Registration of Partnership, Types of Partner, Rights and Duties of Partner.

The learners will be able to Know Rights of Consumers, forms of its Violation and Consumer Protection Act.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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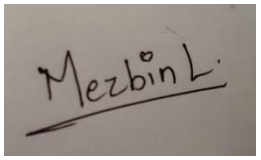
Module. No. 1 Indian companies Act, 2013 Part -1	Chapter I – Company, Features, Role of promoters, Duties and Liabilities of the promoter, effects of pre incorporation contracts, consequences of non- registration, and lifting of corporate veil. Chapter II – Classification of companies, Distinction between Private company and public company, Advantages and		Company Law Avtar singh Indian Partnership Act, 1932- Pollock & Mulla	1) Lecture and Discussion 2) Case Study 3) Black Board, Chalk and Duster



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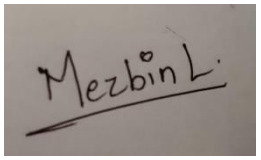
Module. No. 2 Indian companies Act, 2013 Part – 2	disadvantages of Private company and public company, Common Procedure for Incorporation of company. Chapter III – Memorandum of Association and Article of Association – Concept, Clauses of MOA, AOA – Contents, Doctrine of constructive notice, Doctrine of Ultra Vires, Doctrine of Indoor management. Chapter IV - Prospectus : concept, Kinds, Contents, Private Placement Chapter - I Member of a Company: Concept, Who can become a member, Modes of acquiring membership, Cessation of membership, Right and liabilities of members. Chapter – II Director: Qualification and disqualification, Classification, Director Identification number, Legal position of director. Chapter – III Meetings : Types, Legal provisions of statutory meeting, Annual General meeting, Extra-Ordinary meeting.	10 10	Agrawal V.K. Consumer protection Law and practice Vipul Prakashan	



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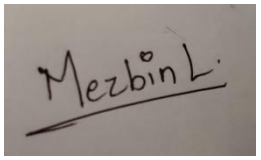

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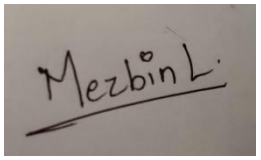
Module. No. 3 Indian Partnership Act, 1932	Chapter I - Partnership: Concept, Essentials, True test of Partnership, Partnership Deed, Types of Partnership, Rights and duties of Partners, Distinguish between Partnership and Hindu Undivided Family. Chapter II - Dissolution: Concept, Modes of Dissolution, Consequences of Dissolution Chapter III - Limited Liability Partnership 2008: Concept, Characteristics, Advantages and Disadvantages, Procedure for Incorporation. Chapter IV - Extent of L.L.P.: Conversation of LLP, Mutual Rights and Duties of Partners, winding up of LLP, Distinction between LLP and Partnership.	10		
Module No. 4				



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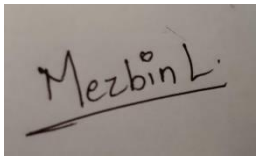
Consumer Protection Act, 1986 and Competition Act 2002.	Chapter - I Concept, Objects, Reasons for enacting the Consumer Protection Act, Definition of Consumer, Consumer Dispute, Complaint, Defect, Deficiency, Unfair Trade Practices, Goods and Services. Chapter - II - Consumer Protection Councils and Redressal Agencies: District, State and National. Chapter - III - Competition Act 2002: Concept, Salient Features, Objectives and Advantages. Chapter IV Abuse of Dominant Position, Competition Commission of India, Anti-Competition Agreements.	10		



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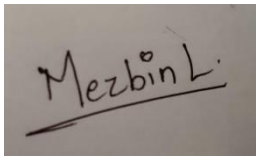
Module No. 5 Intellectual Property Rights	Chapter I – Intellectual Property right: Concept, Nature, Introduction and background of IPR in India. Chapter II – IPR relating to patents, Concepts of Invention and discovery, comparison, Concepts of patents, General principals applicable to working of patented inventions, Terms of patents, Infringement of patent right and remedies.	10		



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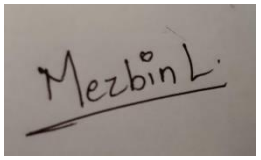
	Chapter III - IPR Relating to Copyrights: Concept of Copyright, Ownership of Copy right, Duration or term of copy right, Original work and fairs use, Rights of copyright holder, Infringement of copyrights and Remedies. Chapter IV - IPR Relating to Trademarks: Concept, Functions, Types, trademarks that cannot be registered, Registration of trademarks and Rights of the Proprietor of Trade Marks. Procedure for registration of TradeMarks., infringement of Trademarks and Remedies.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 50



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK GUPTA SUBJECT: Corporate Accounting DEPARTMENT: BCOM (Financial Management)

CLASS: SYFMG SEMESTER: IV MONTH: Nov – March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES:
The learners will be able to: Imparting an adequate knowledge of the subject matter.

SR.NO.	TOPICS/MODULES/UNITS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	**Preparation final accounts of companies**	15	**Ainapure, Manan Prakashan**	**Chalk and Duster**
2	**Redemption of preference shares**	15		**Chalk and Duster**
3	**Redemption of debenture**	15		**Chalk and Duster**

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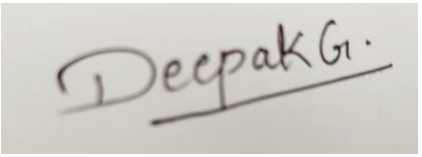
4	**Ascertainment and treatment of profit prior to incorporation**	**15**		**Chalk and Duster**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE SUBJECT: 60



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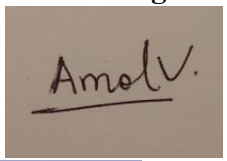

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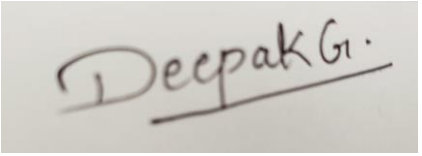

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMOL VAJE/ABHISHEK MADHAYE DEPARTMENT: BCOM (Financial Management)

CLASS:. SYFMG SEMESTER: IV. MONTH: DEC - MAR ACADEMIC YEAR : 2019-20

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Vidhya Dayanand Patil College of Arts COLLEGE,
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LEARNING OBJECTIVE/S:

The learners will be able to : understand the financial problems related to investors, cooperations, and the communication between investors and companies in the capital markets.

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE,
Virar (W)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.CORPORATE FINANCE AN OVERVIEW				
	Functions of finance in business enterprise Emergence of corporate finance as integral part of business finance Need for professional approach in managing corporate finance Requirement of an efficient corporate finance manager	10	Vipul prakashan	Chalk & Duster

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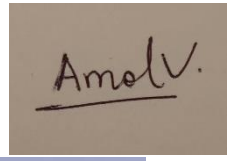

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2. Planning the Corporate Financial Activities	Theories of Capitalisation Owned capital and borrowed capital cost of capital Break even analysis Illustrations Q.1 TO Q.6	15	Vipul prakashan	Chalk & Duster
3. Capital Structure	Meaning and definition Factors affecting capital structure Watered capital, over capitalization, and under capitalization NOV, IRR, DCF analysis and payback period Illustrations Q.1 TO Q.6	15	Vipul prakashann	Chalk & Duster
4.Sources and Methods of raising Corporate Finance	Types and features of corporate securities Management of new issues including pricing of securities Role of commercial banks, investment bank in financing corporate sector Leasing method of corp[orate finance	15	Vipul prakashann	Chalk & Duster

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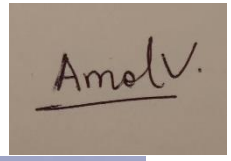
Vidhya Dayanand Patil College of Arts

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 55



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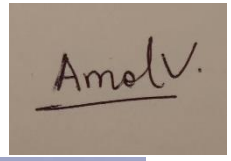
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts



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Late Shri. Vishnu Waman Thakur Charitable Trust Bhaskar Waman Thakur College of Science Yashvant Keshav Patil College of Commerce Vidhya Dayanand Patil College of Arts VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

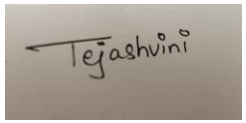
NAME OF THE STAFF: **TEJASWINI NAIK** DEPARTMENT**:** BCOM (Financial Management)

CLASS: **S.Y.F.M.G.** SEMESTER: **IV** MONTH: November- **March** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S : To explain the concepts of Cost Accounting.

The learners will be able to :understand the concepts in simple way which will help them to solve the practical problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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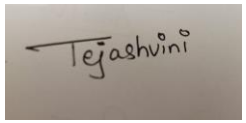
Unit I Classification of Costs and Cost Sheet.	***Classification of Costs** ***Problems on Identification of Costs** *Cost of Sales ***Cost Centre, Cost Unit** ***Profit Centre , Investment Centre** ***Format of Cost Sheet** ***Total cost and Unit Costs concept** ***Different Costs for different purposes with examples *** **Practical problems on Cost Sheet**	02 03 01 02 02 01 01 01 07	Cost and Management Accounting -S Chand Cost Accounting – MC Shukla	Chalk-Board Method

Unit II Reconciliation of Costs and Financial Accounts	*Introduction * Practical problems on Reconciliation of Cost and Financial Accounts.	01 09		Chalk-Board Method



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Unit-III **accredited "B" Grade, 2.69 CGPA**

Contract Costing. Account including simple 01 contract,

multiple contract,and 02 two

consecutive years contract. 01

Unit -IV Process

0

Costing

1 *Introduction and Meaning of

*Introduction *Progress payment, Retention money

Contract Accounts *Accounting for 01

plant used for contract *Treatment of profit on Process Costing * Process or 09

incomplete contract Normal loss *Contractees Account

*Abnormal loss and

*Problems on Contract Abnormal gains **Late Shri. Vishnu Waman Thakur** 01

Charitable Trust Bhaskar Waman *Joint Products and By-

Thakur College of Science Yashvant 01

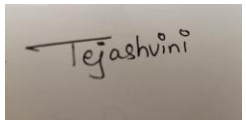
Keshav Patil College of Commerce product

Vidhya Dayanand Patil College of 01

Arts VIVA COLLEGE, Virar (W) *Practical problems on Process

N 01

A Costing including simple



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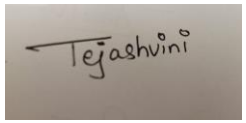
A 09

C process,joint Products and Byproduct



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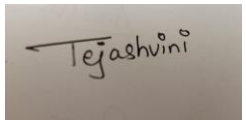
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNITS:60



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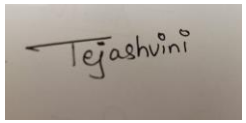
THE H.O.D.



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Vidhya Dayanand Patil College of Arts VIVA COLLEGE,
Virar (W)

NAAC accredited "B" Grade, 2.69 CGPA

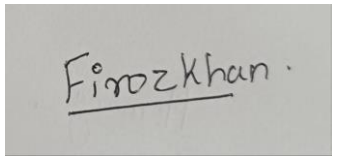
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:FIROZ KHAN____ SUBJECT: DIRECT TAX DEPARTMENT: BCOM (Financial Management)

CLASS: ____SYFMG____ SEMESTER: __IV_____ MONTH: __NOVEMBER __ ACADEMIC YEAR: ____2019-20__

LEARNING OBJECTIVE/S:
The learners will be able to: To Understand the basic principles underlying the Provision of Tax, its procedures and sources.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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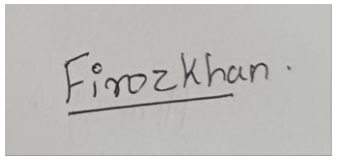
UNIT – 1 Clubbing of Income	Introduction of Clubbing of Income, Section 64(1)(ii), (iv),(vii) – Clubbing provisions relating to spouse Section 64(1) (vi) and (viii) – Clubbing provisions relating to son's wife	3	Income Taxes Law and Practice By Dr.V.K. Singhania	Chalk Board And Discussion Method

	Section 64(1A) – Clubbing provisions relating to Minor child			
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __8__



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____FIROZ KHAN____ SUBJECT: DIRECT TAX DEPARTMENT: ____COMMERCE___

CLASS: ____SYFMG____ SEMESTER: __IV_____ MONTH: __NOVEMBER - DECEMBER __ ACADEMIC YEAR: _____2019-20__

LEARNING OBJECTIVE/S:

The learners will be able to: How the loss under Income Heads is adjusted (Provision regarding Set off and Carry forward)

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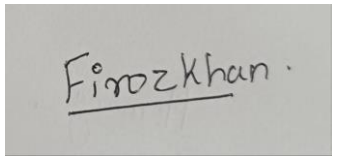

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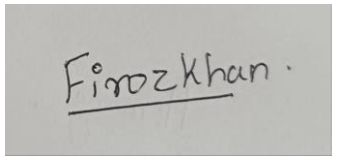
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 2 Setoff & Carry Forward of Losses	Sec: 70 - Set off Loss from one Source against Income from another Source under the Same Head of Income Sec: 71 - Set Off Loss from One Head against Income of another Head Sec: 71B - Carry Forward & Set off Losses from House Property Sec: 72 - Carry Forward & Set Off of Losses of Business Losses Sec: 73- Losses in Speculation Business Sec: 74- Loss under the head Capital Gains	4	Income Taxes Law and Practice By Dr.V.K. Singhania	Chalk Board And Discussion Method
	Practical Illustrations	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8



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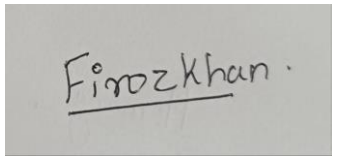
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:FIROZ KHAN___ SUBJECT: DIRECT TAX DEPARTMENT: ____COMMERCE___ CLASS: ____SYFMG____ SEMESTER: __IV_____ MONTH: __NOVEMBER __ ACADEMIC YEAR: ____2019-20___

LEARNING OBJECTIVE/S:
The learners will be able to: To Understand the basic principles underlying the Provision of Tax, its procedures and sources.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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Virar (W)

UNIT – 3 Computation of Tax liability of Individual & HUF	Tax Slab Rate, Rebate, surcharges etc.	3	Income Taxes Law and Practice By Dr.V.K. Singhania	Chalk Board And Discussion Method
	Practical Illustrations	5		

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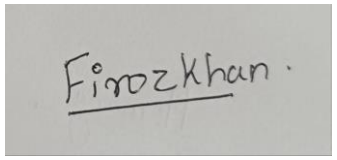
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8



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Vidhya Dayanand Patil College of Arts VIVA COLLEGE,
Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FIROZ KHAN SUBJECT: DIRECT TAX DEPARTMENT: COMMERCE

CLASS: SYFMG SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: To Understand the basic principles underlying the Provision of Tax, its procedures and sources.

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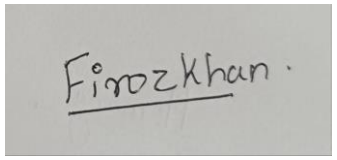
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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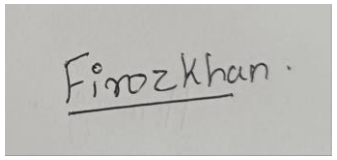
Virar (W)

UNIT – 4 Computation of Income of Partnership Firm	Computation of Income of Partnership Firm in Relation to Sec: 40(b) & Tax Thereon With Applicable Rate of Tax	3	Income Taxes Law and Practice By Dr.V.K. Singhania	Chalk Board And Discussion Method
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __8__

TEACHING PLAN (UNIT PLAN)



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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts VIVA COLLEGE,
Virar (W)

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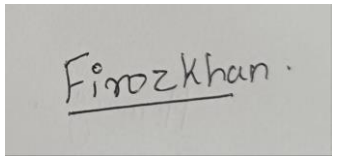
NAME OF THE STAFF:FIROZ KHAN____ SUBJECT: DIRECT TAX DEPARTMENT: ____COMMERCE___ CLASS: ____SYFMG____ SEMESTER: __IV_____ MONTH: __NOVEMBER __ ACADEMIC YEAR: ____2019-20__

LEARNING OBJECTIVE/S:
The learners will be able to : To Understand the basic principles underlying the Provision of Tax, its procedures and sources..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 5 Return of Income	Introduction of Return on Income, Section 139(1) – compulsory filing of return of income Section 139(1A)-Furnishing return to employee	2	Income Taxes Law and Practice By Dr.V.K. Singhania	Chalk Board And Discussion Method
	Section 139(1B)-Income tax return through computer Section 139 (1C) – Persons exempt from filing return	2		



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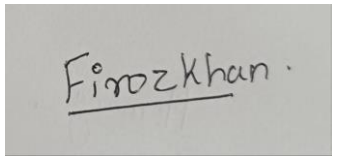
	Section 139 (3) – Return of Loss, Section 139 (4) – Belated Return, Section 139 (5) – Revised Return Section 139 (6) – Particulars furnished with returns	2		

	Section 139 (6A) – Particulars of Business with return Section 139 (9) – Defective Return	1		
	Practical Illustrations	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10__



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Vidhya Dayanand Patil College of Arts VIVA COLLEGE,
Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:FIROZ KHAN____ SUBJECT: DIRECT TAX DEPARTMENT: ____COMMERCE___ CLASS: ____SYFMG____ SEMESTER: __IV_____ MONTH: __NOVEMBER __ ACADEMIC YEAR: ____2019-20___

LEARNING OBJECTIVE/S:
The learners will be able to : To Understand the basic principles underlying the Provision of Tax, its procedures and sources.

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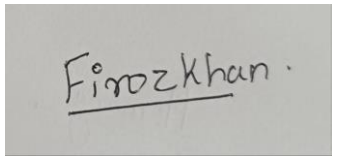

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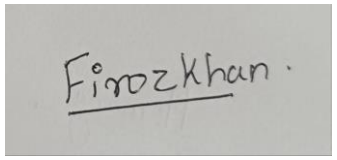
Virar (W)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 6 Tax Deducted at Source Advance Tax Interest Payable	Introduction of Tax Payment and TDS, Section 192- TDS on salary, Section 194A- TDS on Interest, Section 194C- TDS on contractor	2	Income Taxes Law and Practice By Dr.V.K. Singhania	Chalk Board And Discussion Method
	Section 194H- TDS on Commission, Section 194I- TDS on Rent, Section 194J- TDS on Professional Fees	2		
	Advance Tax U/S 207, 208, 209, 210 ,211	4		
	Interest Payable U/S 234(A), 234(B), 234(C)	2		
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15__



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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts VIVA COLLEGE,
Virar (W)

NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

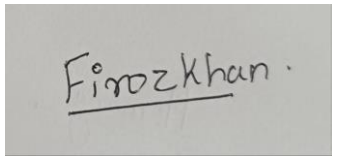
NAME OF THE STAFF: FIROZ KHAN SUBJECT: DIRECT TAX DEPARTMENT: COMMERCE

CLASS: SYFMG SEMESTER: IV MONTH: MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to : To Understand the basic principles underlying the Provision of Tax, its procedures and sources..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 7 DTAA	Introduction to DTAA, Types of Double Taxation Relief, Bilateral Relief Section 90 Unilateral Relief Section 91 Tax Slab Rate	3	Income Taxes Law and Practice By Dr.V.K. Singhania	Chalk Board And Discussion Method



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	Practical Illustrations	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __5__

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TEACHING PLAN (UNIT PLAN)

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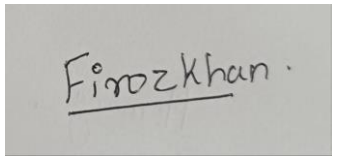

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Virar (W)

LEARNING OBJECTIVE/S:
The learners will be able to : To Understand the basic principles underlying the Provision of Tax, its procedures and sources..

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 8 Tax Planning and Ethics in Taxation	Meaning of Tax Planning, Tax Management, Tax Avoidance Tax Evasion Ethics in Taxation Consequence of Tax Avoidance	5	Income Taxes Law and Practice By Dr.V.K. Singhania	Chalk Board And Discussion Method

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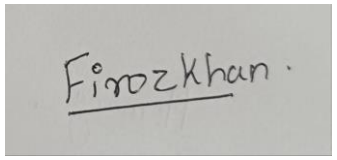

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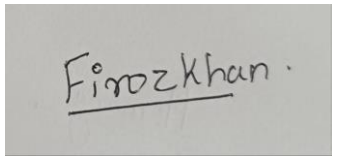
	Difference between Tax Planning, Tax Avoidance, Tax Evasion Objectives, Importance, Essentials of Tax Planning Types and areas of Tax Planning Forms of the Organisation Corporate Structuring Financial Management Decisions Tax Planning for Employees Government Measures to prevent Tax Avoidance, Evasion			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __5__



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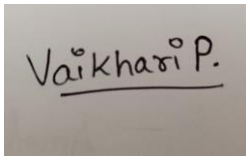
NAAC accredited "B" Grade, 2.69 CGPA **TEACHING PLAN (UNIT PLAN)**

NAME OF THE STAFF: VAIKHARI PATIL__ DEPARTMENT: BCOM (Financial Management) CLASS: S.Y.F.Mg

SEMESTER: IV MONTH: NOVEMBER - MARCH ACADEMIC YEAR: 2019-20 SUBJECT: Information Technology in Management

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of Business Process Management, E-Commerce, MIS and Tally accounting software.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Business Process	A) Introduction, Definition and Meaning of business process Flow of business process for accounting, purchase, sales and finance Classification of business processes.	03	Information Technology in Management By-	Board , Chalk and Duster



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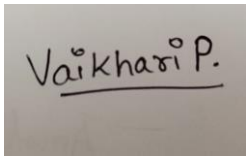
	B) Introduction, Definition and Meaning of Business Process Management Principles and practices of Business Process Management Business Process Management life cycle.	04	Rimple Sanchla and www.wikipedia.com	

	C) Theories of Business Management Process Implementation of Business process Management - need, key factors and importance Automation of business Processes - benefits, risks, challenges.	05		
	D) Accounting systems automation IT and Business Process Management Information systems - Meaning, Use of IT in Management.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Electronic Commerce	A) Meaning, Advantages and Limitations of E Commerce, The role of Strategy in E-Commerce, Value chains in E Commerce.	03	Information Technology in Management By - Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Infrastructure for Electronic Commerce Web Based Tools for Electronic Commerce, Electronic Commerce software, Security Threats to electronic Commerce.	04		
	C) Implementing Security for Electronic Commerce, Electronic Payment Systems, and Strategies for Marketing.	03		

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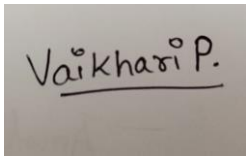

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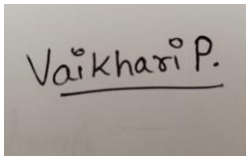
	D) Sales & Promotion Strategies for Purchasing Logistics & Support Activities, Electronic Markets & Communities, Business Plans for Implementing Electronic Commerce.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Concept of MIS Reports in Computer Environment	A) Introduction, Concept of MIS, Need for MIS	03	Information Technology in Management By - Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Characteristics of MIS, Outputs of MIS, Role of MIS.	03		
	C) Guidelines for Developing MIS reports, Functional Aspects of the MIS, Problems in MIS.	05		
	D) Knowledge required for studying MIS, MIS and Computer.	04		



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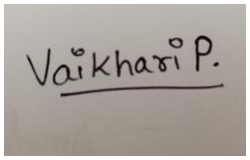
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 **NAAC accredited "B" Grade, 2.69 CGPA**

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV Computerized accounting system and Auditing	A) Role & Need and requirements of computerized accounting Basic requirements of computerized accounting system Limitations of computerized accounting system.	03	Information Technology in Management By - Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Understand the development and design of a computerized accounting system, determining how the accounting data will be processed.	03		
	C) Introduction of accounting software, Advantages, uses and various types of accounting software Accounting software TALLY - Accounting and reports.	05		



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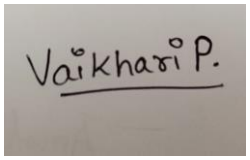
	D) Need and importance of IT in auditing, auditing in IT environment.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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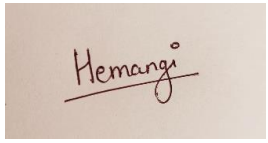
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA SUBJECT: Office Management DEPARTMENT: BCOM (Financial Management)

CLASS: SYFMG SEMESTER:IV MONTH:Jan-feb ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & II Office accommodation and environment	Office building , size , layout, safety and security measures, reception , importance shape size control.	6	Office Management by R.K.Chopra and Priyanka Gouri	Chalk board method, discussion, YouTube video, debates
	Communication –features, classification , barriers Arrangements and adjustment –furniture , chamber, cabin , rooms	6		



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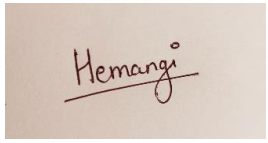
&	Uses and abuses of labor saving appliances, kind of office machines.	6		

Office automation	Objective and advantages of various machines, use of machine, manual charts.	6		
	Kind of reports, report preparation, enquires.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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Virar (W)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA SUBJECT: Office Management DEPARTMENT: Commerce (SFC)

CLASS: SYFMG SEMESTER:IV MONTH: March-April ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

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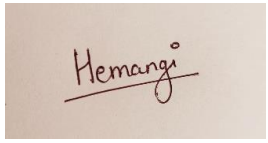
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III & IV HRM for office	Recruitment , selection training and development of office staff Office supervision	6	Office Management by	Chalk board method, discussion, YouTube video, debates



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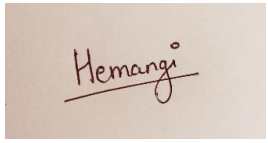
management & Planning and scheduling office work	Motivation – financial and non-financial incentive to subordinate Discipline, work control ,work distribution	6	R.K.Chopra and Priyanka Gouri	
	Office routine, flow of work, office manual, control over stationary	6		
	Routine of handling mail, importance of correspondence	6		
	Various forms of correspondence, forms and supplies.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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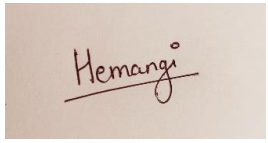

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA/PRIYANKA SINGH **SUB**: BUSINESS ETHICS **DEPARTMENT**: BCOM (Financial Management)

CLASS: TYFMG SEMESTER: V **MONTH**: JUNE TO OCTOBER **ACADEMIC YEAR**: 2019-20

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the meaning of globalization and the world-wide business network.
- Get knowledge of business ethics in marketing and e-commerce.

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➢ Interpret the relationship between business, business ethics and its effect on business development.

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➢ Know in detail about Intellectual property right and its components like patents, copyright and trademark.

➢ Gain insight on ethical issues pertaining to IPR.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1&2- **Business Ethics in Global Economy** • Concept of globalization • Global business network	**Business Ethics in Global** development • Relationship among business, business ethics and business economy • Developing business ethics in foreign trade • Marketing ethics in 25 Global Economy and business environment by • Measure to prevent unethical practices in e-commerce	25	VIPUL, Manan prakashan and Sheth publication	

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• Role of business ethics in • Ethical issues in E-commerce Cherunilam Discussion, and Test business Francis Chalk

Board,

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Unit 3&4- **Functional Ethics** • Patent • Copyright

1. Meaning of functional ethics • Copy-right • Trade mark

2. Types of ethics according to functions of • Trade Marks **4. Ethical** 25 Chalk Board, Discussion, and Test **business** (marketing, HRM and finance) **3. issues:**

Intellectual Property Rights • Patent

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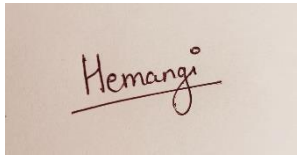

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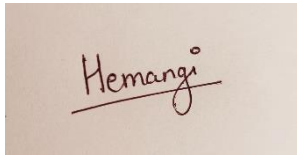

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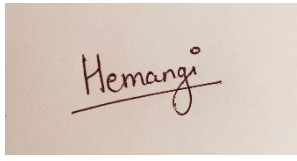

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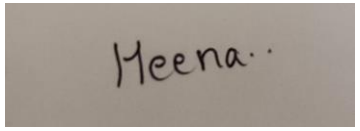
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEENA QUERESHI SUBJECT: Auditing DEPARTMENT: BCOM (Financial Management)

CLASS: TYFMG SEMESTER: V MONTH: June - OCT ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I Introduction to Auditing	Basics of Financial Statements, Users of Financial Statements, Definition of Auditing, Objectives of Auditing, Inherent Limitations of Auditing	04	Auditing by Ainapure, Auditing by Sachin Bhandarkar & Sandeep Gupta	Chalk & Board, Discussion.
	Errors & Frauds- Concept, Reasons & Circumstances. Types of Errors, Types of Frauds, Risk of Fraud & Error in Audit, Auditor's duties & responsibilities in respect of Fraud.	04		



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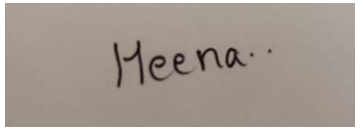
	Principles of Audit	01		
	Types of Audit- Meaning, Advantages & Disadvantages	02		
	Miscellaneous Advantages of Independent Audit, Qualities of Auditor, Auditing vs Accounting, Auditing vs Investigation, View the concept of True & Fair	03		

	Accounting Concepts relevant to Auditing- Materiality, Going Concern	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NLEARNING OBJECTIVE/S:



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The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Audit Planning, Procedures & Documentation	**Audit Planning-** Meaing, Objectives, Factors, Sources of obtaining Information, Discussion with Client, Overall Audit Plan	04	Auditing by Ainapure, Auditing by Sachin Bhandarkar & Sandeep Gupta	Chalk & Board, Discussion.
	Audit Programme- Meaning, Factors, Advantages, Disadvantages, Overcoming Disadvantages, Methods of Work, Pre Commencement Work of Audit, Overall Audit Approach	04		
	Audit Working Papers- Meaning, Importance, Factors, Features, Contents of Permanent Audit File, Contents of	04		

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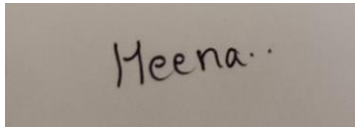
	Temporary Audit File, Ownership Custody & Access of Working Papers, Auditors Lien on Working Papers & Clients' Books			



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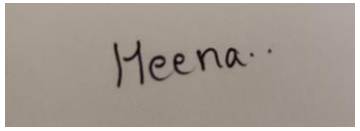
	Audit Notebook- Meaning, Structure, Contents, General Information, Current Information & Importance	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Auditing Techniques	**Test Check-** Test Checking vs Routine Checking, Test Check Meaning, Features, Factors, When Test Checks can be used, Advantages, Disadvantages & Precautions	04	Auditing by Ainapure, Auditing by Sachin	Chalk & Board, Discussion.
	Audit Sampling- Meaning, Purpose, Factors in determining sample size, Methods of selecting sample items, Evaluation of	05		



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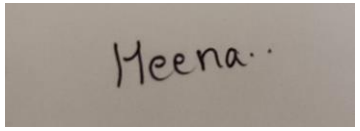
	sample results, Auditors Liability in conducting Audit based on sample.		Bhandarkar & Sandeep Gupta	
	Internal Control- Meaning & Purpose, Review, Advantages, Auditors duties, Inherent Limitations, Internal Control samples for Sales & Debtors, Purchases & Creditors, Wages & Salaries	04		
	Internal Check vs Internal Control, Internal Check vs Test Check	02		



SIGNATURE OF THE STAFF

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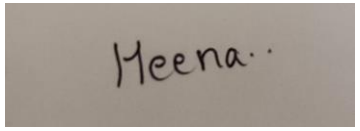
BhaskarWaman Thakur College of Science
YashvantKeshavPatil College of Commerce
VidhyaDayanandPatil College of Arts VIVA COLLEGE,
Virar (W)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Internal Audit	Meaning & Basic Principles of establishing Internal Audit	03	Auditing by Ainapure,	Chalk & Board, Discussion.



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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

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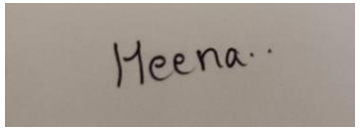
	Objectives of Internal Audit	02	Auditing by Sachin Bhandarkar & Sandeep Gupta	
	Evaluation of Internal Audit by Statutory Auditor	03		
	Usefulness of Internal Audit	03		
	Internal Audit vs External Audit, Internal Check vs Internal Audit	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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VidhyaDayanandPatil College of Arts VIVA COLLEGE,
Virar (W)

NAAC accredited "B" Grade, 2.69 CGPA

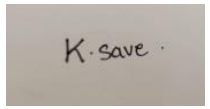
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAUSHIK SAVE / TEJASWINI PATIL SUBJECT: Corporate Accounting DEPARTMENT: BCOM (Financial Management)

CLASS: TYFMG SEMESTER: V MONTH: JUNE-October ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I &II Final Accounts of Insurance Companies(Excl.	General Insurance- Various Types of Insurance	2	Corporate Accounting by Ainapure	Chalk & Board, Discussion.
	Special terms like Premium, Claims, Commission, Management Expenses, Reserve for Unexpired Risk, Reinsurance	4		



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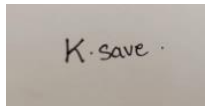
Life Insurance)	Final Accounts in a prescribed Form – **Revenue Statement – Form B – RA (Sums)**	10		
	Profit/Loss Account – Form B – PL (Sums)	6		
	Balance Sheet – Form B – BS (Sums)	8		

	(Including Comprehensive Sums)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III&IV Accounting for Foreign	Accounting of Foreign Currency Transactions in relation to purchase & sale of goods, services & assets and loan & credit transactions. Computation and Treatment of Exchange Rate Differences	30	Corporate Accounting by Ainapure	Chalk & Board, Discussion.

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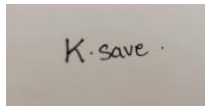

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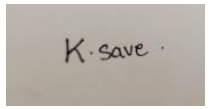
Currency Transactions	**(Sums)**			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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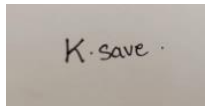

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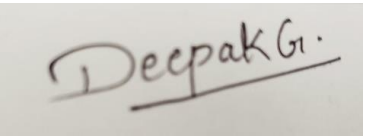
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK GUPTA SUBJECT: Financial Analysis & Business Valuation DEPARTMENT: BCOM (Financial Management)

CLASS: TYFMG SEMESTER: V MONTH: June- July- OCT ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I Analysis of Financial Statements & Statement of Shareholder's	**Financial Analysis-** Meaning, Importance & Types	02	Financial Analysis & Business Valuation by Farhat Fatma Shaikh and	Chalk & Board, Discussion.
	Financial Statement Analysis- Meaning, Importance & Limitations	02		
	Analysis & Interpretation- Benefits, Limitations & Types	03		



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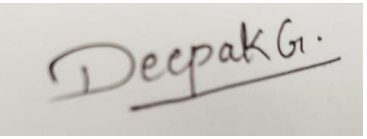
Equity	**Financial Statement Analysis –** Traditional Approach vs Modern Approach	02	Heena Murad Khanche, And Internet	
	Reformulating the statement of Owner's Equity	02		

	Comprehensive Income Reporting **(Sums)**	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NLEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Analysis of Income, Profitability,	Analysis of Changes in Income **(Sums)**	05	Financial Analysis & Business Valuation by	Chalk & Board, Discussion.
	Bond Analysis, Profitability Analysis **(Sums)**	05		

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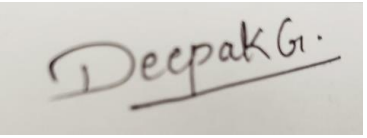
Growth & Sustainable	Growth Analysis	02	Farhat Fatma Shaikh and	



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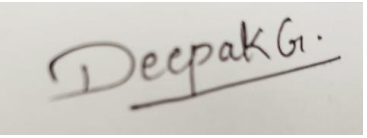
Earning	Analysis of Changes in Profitability & Sustainable Growth	03	Heena Murad Khanche, And Internet	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.



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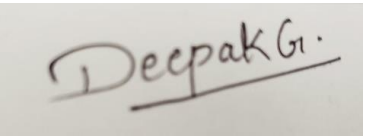
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Business Valuation & Models	Meaning & Principles of Business Valuation	03	Financial Analysis & Business Valuation by Farhat Fatma Shaikh and Heena Murad Khanche, And Internet	Chalk & Board, Discussion.
	Techniques & Role of Business Valuation	03		
	Free Cash Flow Valuation	01		
	Valuation of Firm (CVA & EVA) **(EVA Sums)**	05		
	Contingent Claim Valuation	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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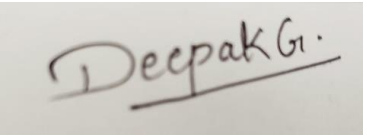
TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Valuation of	Basics of Merger & Acquisition	01	Financial Analysis &	Chalk & Board, Discussion.



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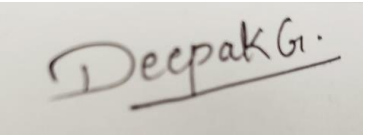
Business for Mergers & Acquisitions and Valuation of Intellectual Property	Approaches to Valuation in case of M & A, Selection of appropriate cost of capital for valuation	02	Business Valuation by Farhat Fatma Shaikh and Heena Murad Khanche, And Internet	
	Forms of Consideration & terms of Acquisition **(Sums)**	03		
	Exchange Ratio based used for Computation **(Sums)**	03		
	Theory of Intellectual Property & Methods of Valuation	01		
	Valuation of Brands **(Sums)**	03		

	Valuation of Real Estates **(Sums)**	03		



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BhaskarWaman Thakur College of Science
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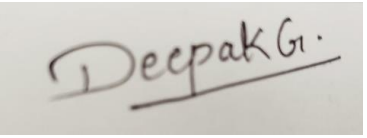
Virar (W)

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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Virar (W)

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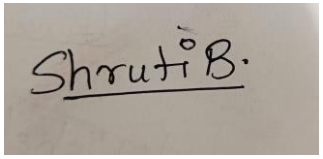
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHRUTI BASARE/AMOL VAJE SUBJECT: Financial Management -I DEPARTMENT: BCOM (Financial Management)

CLASS: TYFMG SEMESTER: V MONTH: June-July-August ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I& II Investment Decisions	Introduction , Purpose of Capital Budgeting	02	Financial Management by Arvind Dhond	Chalk & Board, Discussion.
	Capital Budgeting Process, Types of Capital Investment Decisions	02		



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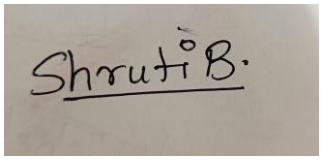
	Project Cash Flows & Net Profit Approval	02		
	Basic Principles of measuring Project Cash Flows	02		
	Capital Budgeting Techniques (Sums)- (Only Time Adjusted/ Discounted Cash Flows)- NPV, PI, IRR, Discounted Pay Back	12		

	Capital Rationing (Sums)	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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VidhyaDayanandPatil College of Arts VIVA COLLEGE,
Virar (W)

TEACHING PLAN (UNIT PLAN)

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III & IV Types of Financing	Introduction	2	Financial Management by Arvind Dhond	Chalk & Board, Discussion.
	Needs of Finance & Sources	6		

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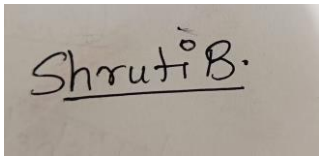
	Long Term Sources of Finance	14		



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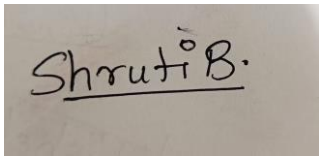
	Short Term Sources of Finance	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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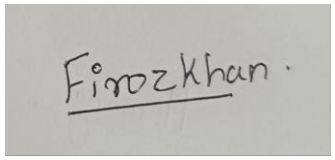
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FIROZ KHAN / JINAL CHOUHAN _ DEPARTMENT: BCOM (Financial Management) . CLASS: TYBFMG
SEMESTER: SEM V MONTH: JUNE TO AUG ACADEMIC YEAR: 2019-20 SUB: RESEARCH METHODOLOGY.

LEARNING OBJECTIVE/S:
The learners will be able to: Understand Research , Types of Research, Hypothesis , Research Design, Sampling, Data collection and processing, Survey Instrument.



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
***MODULE 1&2. INTRODUCTION TO RESEARCH.**	***Research:** Meaning, Objectives, importance of research, Research process, Characteristics of Good Research. ***Hypothesis :** Meaning, Importance, Types and Sources. ***Research Design:** Meaning, Importance, Steps, Scope & Essential of Good research. ***Sampling :** Meaning , Methods of Sampling.: Probability Sampling Non-Probability Method. ***Types of Data and Sources:** Primary and Secondary Data Sources.	**20**	**Regression Modeling Strategies: Frank Harell.**	**Chalk and Duster**

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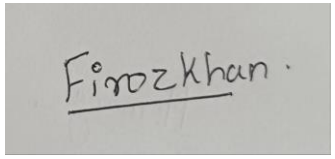

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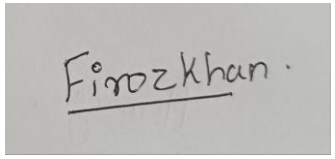
MODULE 3&4.DATA COLLECTION AND PROCESSING	***Methods of collection of Primary Data:** Observation , Experiment, Interview , Survey. ***Survey Instrument:** Questionnaire : Types of questions , Scaling techniques.	**20**		



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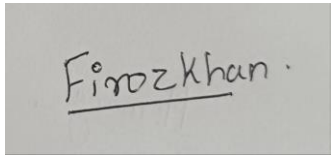
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___40_____



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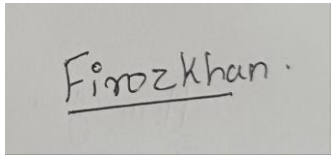

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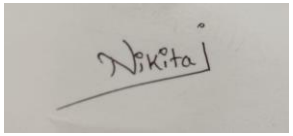
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NIKITA JOGLE DEPARTMENT: BCOM (Financial Management) CLASS:TYFMG . SEMESTER: VI

SUBJECT : AUDITING MONTH: DECEMBER 2022 - FEBRUARY 2023 ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

To give knowledge to students about how to find reliability of financial position and profit and loss statements. The aim is to ensure that the accounts reveal a true and fair face of the business and all of its transactions.



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1.**VOUCHING** Audit of Income Revenue from Sales and Services, Rental Income, Interest & Dividends Income, Royalties Income, Recovery of Bad debts written off, Commission Received 1.2 Audit of Expenditure Purchases, Salaries & Wages,	15	SHETH , VIPUL,MANAN PRAKASHAN	PPT, CHALK AND BOARD

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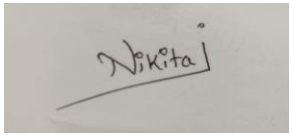

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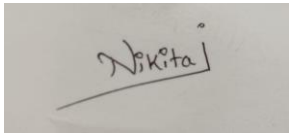
	Rent, Insurance Premium, Telephone expense , Petty cash payment, Advertisement, Travelling Salesmen's Commission, Freight Carriage and Custom Duties			
	2.**VERIFICATION** 2.1 Audit of assets Plant & Machinery, Furniture and fixtures, Accounts Receivable, Investments, Inventory, Goodwill, Patent Rights 2.2 Audit of Liabilities Outstanding Expenses, Accounts Payable, Secured loans, Unsecured Loans, Contingent Liabilities, Public Deposits	15		
	3. **Audit and Assurance Standards** 3.1 Significance of the Audit and Assurance Standards issued by Institute of Chartered Accountants of India. Responsibility of auditor for AAS 3.2 Understanding of following standards SA 200 Basic principles of Governing an Audit SA 200A Objective and scope of the audit of financial statements SA 230 Audit documentation SA 320 Audit materiality SA 570 Going Concern	15		



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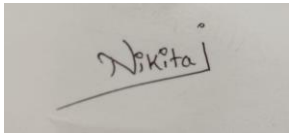
	4**. Audit of Limited Companies** 4.1 Qualifications, Disqualifications, Appointments (First & Subsequent auditor), Reappointment, Removal of auditors.	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 60



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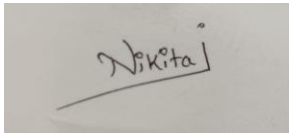

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:AMOL VAJE SUBJECT: Corporate Accounting DEPARTMENT: BCOM (Financial Management)

CLASS: TYFMG SEMESTER: VI MONTH: Dec – MAR ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES:
The learners will be able to: Imparting an adequate knowledge of the subject matter.

SR.NO.	TOPICS/MODULES/UNITS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	**Consolidated financial statement**	15	**Ainapure, Manan Prakashan**	**Chalk and Duster**
2	**Internal reconstruction**	15		**Chalk and Duster**
3	**AS – 14 – amalgamation, absorption**	15		**Chalk and Duster**
4	**External reconstruction**	15		**Chalk and Duster**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE SUBJECT : 60

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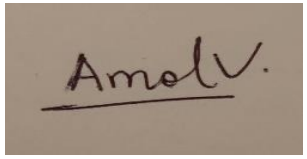

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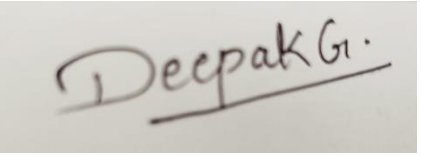

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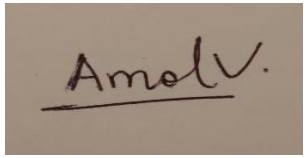

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEEPAK GUPTA DEPARTMENT: BCOM (Financial Management) CLASS: T.Y.B.COM (FINANCIAL MANAGEMENT) SEMESTER: VI **MONTH:** DEC TO APRIL **ACADEMIC YEAR: 2019-20**

LEARNING OBJECTIVE/S:

The learners will be able to : TO ENHANCE THE ABILITIES OF LEARNER TO DEVELOP THE CONCEPT OF FINANCIAL MANAGEMENT AND ITS SIGNIFICANCE IN THE BUSINESS.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RISK & RETURN	INTRODUCTION , MEANING OF RETURN, TYPES OF RETURN, HOLDING PERIOD RETURN, ANNUALIZED RETURN, EXPECTED RETURN, MEANING OF RISK TYPES OF RISK – BUSINESS RISK , FINANCIAL RISK, INTEREST RATE RISK MARKET RISK AND LIQUIDITY RISK (INCLUDING PRACTICAL PROBLEMS	15	FUNDAMENTAL OF FINANCIAL MGMT- PRASANNA CHANDRA	CHALK & DUSTOR MEYTHOD PPT , GOOGLE CLASSROOM
	MEANING, CHOICE OF CAPITAL STRUCTURE, IMPORTANCE, OPTIMAL CAPITAL STRUCTURE, INSTRUCTION TO LEVERAGES		PRINCIPLES OF CORPORATE	

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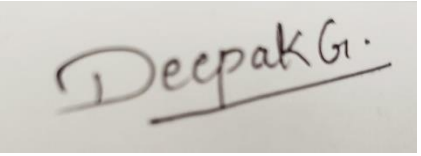

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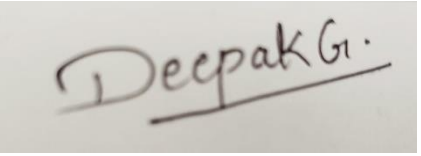

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CAPITAL STRUCTURE THEORIES	TYPES OF LEVERAGES : OPERATING LEVERAGES, FINANCIAL LEVERAGES, & COMPOSITE LEVERAGES, RELATIONSHIP BETWEEN OPERATING LEVERAGES & FINANCIAL LEVERAGES COST OF CAPITAL , EBIT-EPS ANALYSIS, & MARKET PRICE SHARE CAPITAL STRUCTURE THEORIES, CAPITAL STRUCTURE DIVIDEND POLICY- PAYOUT RATIO (INCLUDING PRACTICAL PROBLEMS)	15	FINANCE- R.A.BREALYS & S.C. MYRES.	
CASH MANAGEMENT	MOTIVES FOR HOLDING CASH, OBJECTIVES OF CASH MANAGEMENT, FACTORS DETERMINING CASH NEEDS, BASIC STRATEGIES OF CASH MANAGEMENT, CASH MANAGEMENT TECHNIQUES OR PROCESS, MARKETABLE SECURITES ABD CASH MANAGEMENT PRACTICES IN INDIA INCLUDING PRACTICAL PROBLEMS	15	FUNDAMENTAL OF FINANCIAL MGMT- PRASANNA CHANDRA	
RECEIVABLE MGMT	INTRODUCTION, ASPECTS OF RECEIVABLE MGMT, CREDIT POLICY, CREDIT EVALUATION, CREDIT GRANTING DECISION CONTROL ON ACCOUNTS, RECEIVABLE INCLUDING PRATICAL PROBLEMS	15		

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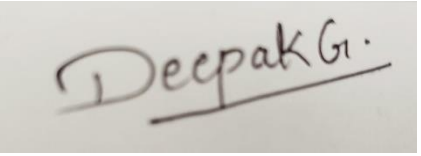

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : HEMANGI MEHTA SUBJECT: Organizational Behavior DEPARTMENT: BCOM (Financial Management)

CLASS: TYFMG SEMESTER:VI MONTH:Jan-feb ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & II Introduction to OB and understanding	Organizational Behavior multidiscipline , different models of OB , perception, personality , value, attitude.	6	Organizational Behavior by Robbins,Stephen , Pearson	Chalkboard method, discussion, YouTube video,debates
	Job satisfaction, motivation, learning.	6		

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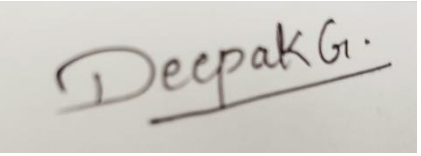

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others : Interpersonal relationships	Conflict management,nature of conflict, level of conflict,source of conflict.	6		
	Effect of conflict,process of conflict,stages of conflict, conflict handling orientation.	6		
	Power and organizational politics, sources of power, organizational politics, political power.	6		

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NAAC accredited "B" Grade, 2.69 CGPA **TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30**

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA SUBJECT:Organizational Behavior DEPARTMENT: Commerce (SFC)

CLASS: TYFMG SEMESTER:VI MONTH: March-April ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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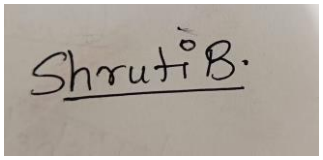
UNIT III & IV	Group behavior, Types of group, identifying and rewarding informal leader,key role of leaders	6	Organizational Behavior by	Chalkboard method, discussion, YouTube video,debates

Group behavior and team behavior & Stress management and change	Team and team building,modern organization,teamwork ,types of teams,skill useful in team building.	6	Robbins,Stephen , Pearson	
	Stress management and counseling, elements of job performance, approaches to stress management	6		
	Counseling, characteristics and types of counseling, change and it's effects	6		
	Response to change, resistance to change, transformational leadership,three stage model of change process.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHRUTI BASARE DEPARTMENT: BCOM (Financial Management) CLASS: TYFMG SEMESTER: VI MONTH: JANUARYMARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

Late Shri. Vishnu Waman Thakur Charitable Trust
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The learners will be able to: Students will be able to explore different avenues of investment, equipped with the knowledge of security analysis, apply the concept of portfolio management for the better investment, invest in less risk & more return securities.

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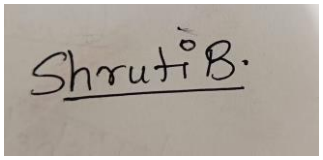

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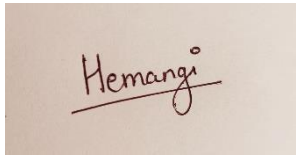
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Portfolio Management- An Introduction	**Investment-** Meaning, Characteristics, Objectives, Investment VS Speculation, Investment Vs Gambling and types of investors. **Portfolio Management-** Meaning, Evolution, Phases, Role of portfolio managers, Advantages of portfolio management. **Investment Environment**- Investment Environment in India and factors conducive for Investment in India.	09	Vipul Prakashan	Chalk & Duster, Group Discussion



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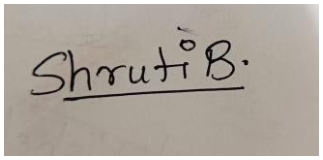
2. Portfolio Analysis and Selection.	**Portfolio Analysis-** Meaning and its components, calculation of expected return and risk, calculation of covariance, Risk- Return trade off. **Portfolio Selection-**Meaning, Feasible Set of portfolios, Efficient set of portfolios, selection of optimal portfolio, Markowitz Model, Limitations Markowitz Model, Measuring Security Return and Portfolio Return, Risk under Single Index Model and Multi Index Model.			
	Portfolio Management- Valuation **Portfolio Revision:** Meaning, need, constraints and strategies. **Portfolio Evaluation: -** Meaning, need, measuring returns (Sharpe, Treynor and Jense Ratios) & Decomposition of performance. **Bond Valuation**: Meaning, Measuring Bond Returns, Yield to Maturity, Yield to call and Bond Pricing. Bond Pricing Theorems, Bond Risks & Bond Duration.	05		
3.	Economy Analysis: Meaning, Economic Analysis, Barometric or Indicator Approach, Econometric Model Building & Opportunistic Model Building.	09	Vipul Prakashan	



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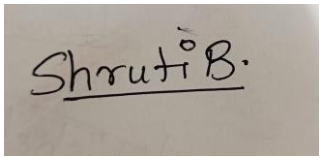
Fundamental Analysis	Industry Analysis: Concept of Analysis, Industry Life Cycle, Industry Characteristics. Company Analysis: Financial Statements, Analysis of Financial Statements Practical Questions on – Debt Equity Ratios,Totall Debt Equity Ratio, Proprietory Ratios, Interest Coverage Ratio, Profitability Ratios related to Sales, Investment & Equity Shares Efficiency or Activity Ratios. Assessment Risk.			
4. Technical Analysis	Dow Theory Meaning and Principles of Technical Analysis, Price Chart, Line Chart, Bar Chart, Japanese Candlestick Chart, Trends & Trend Reversals, Chart Patterns, Support & Resistance, Reversal Patterns, Continuation Patterns & Elliot Wave Theory. **Mathematical Indicators:** Calculation of moving averages, Oscillators & Relative strength index. Market Indicators Fundamental Analysis v/s Technical Analysis	04		



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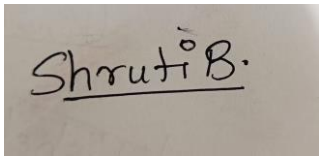
5. Efficient Market Theory and CAPM	Random Walk Theory The Efficient Market Hypothesis Forms of Market Efficiency Competitive Market Hypothesis CAPM Arbitrage Pricing Theory (APT).	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 31



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY IMG

SUBJECT – BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** AUGUST **ACADEMIC YEAR:**2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Theory of Communication	**1) Concept of Communication**- Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World Impact of technological advancements on communication **2) Channels and Objectives of Communication:** **Channels :** Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine	15	Textbook of Manan Publication	Chalk & Blackboard

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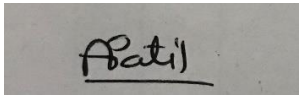
	Objectives of Communication: Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Moral of Employees **3) Methods and Modes of Communication:** **Methods:** Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette **Modes:** Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY IMG

SUBJECT – BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** SEPTEMBER **ACADEMIC YEAR:**2019-20

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Obstacles to Communication in Business World	**1) Problems in Communication /Barriers to Communication:** Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers 2**) Listening:** Importance of Listening Skills, Cultivating good Listening Skills – **3) Introduction to Business Ethics:** Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility Teachers can adopt a case study approach and address issues such as the following so as to orient and sensitize the student community to actual business practices: Surrogate Advertising, Patents and Intellectual Property Rights,	15	Textbook of Manan Publication	Chalk & Blackboard

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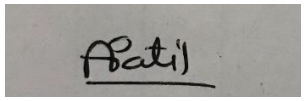
	Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MR. AVINASH PAWAR **DEPARTMENT**: COMMERCE (SELF FINANCE) **CLASS:** FY IMG

SUBJECT – BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** OCTOBER **ACADEMIC YEAR:**2019-20

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3) Business Correspondence	**1)Theory of Business Letter Writing:** Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation [Letter of Appointment, Promotion and Termination, Letter of Recommendation (to be taught but not to be tested in the examination)]	15	Textbook of Manan Publication	Chalk & Blackboard
4) Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities Listening Comprehension Remedial Teaching Speaking Skills: Presenting a News Item, Dialogue and Speeches Paragraph Writing: Preparation of the first draft, Revision	15	Textbook of Manan Publication	Chalk & Blackboard

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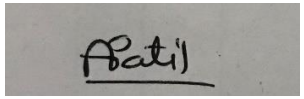
	and Self – Editing, Rules of spelling. □ Reading Comprehension: Analysis of texts from the fields of Commerce and Management			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

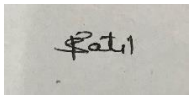
NAME OF THE STAFF: SAYALI PATIL SUBJECT: Basic of Investment & Wealth Creation (BIWC) DEPARTMENT: Commerce (SFC)

CLASS:FYBIM SEMESTER:I MONTH:aug-dec ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I TO IV GENERAL PRINCIPLES OF INVESTING	Introduction to investments – saving , investing , speculation , interest rate , compound interest rate	12	Basic of Investment & Wealth Creation by Kevin D.Peterson	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Investment objectives – SMART GOALs	12		
	Asset classes available for investments	12		
	Debt management ,personal financial statement analysis	06		
	Forms of business ownership	06		

TOTAL NUMBER OF LECTURES ALLOCATED PER UNIT : 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Bristi Biswas** /Vishaka sane SUB: ECONOMICS DEPARTMENT**: COMMERCE** CLASS: **F.Y.B.I.M** SEMESTER: **I** MONTH: **JUNE TO OCTOBER** ACADEMIC YEAR: **2019-20**

LEARNING OBJECTIVE/S : Provide a strong foundation in fundamentals of Economics

The learners will be able to : Enable the students to pursue further studies in this discipline understanding the functioning of Domestic as well as global economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Micro-economics Paper-1	**Module 1- Scope importance of Business Economics:** Basic tools, opportunity cost principles, cost principle, basic economics relation, total average and marginal relation. The basis of market demand market supply equilibrium price-in demand and supply curve and equilibrium	05	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication,	Black Board Method

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Micro-economics Paper-1	**Module 2- Demand Analysis:** Market, what is competition - demand curve, market demand versus individual demand: movement along the demand curve shifts in demand curve supply, market supply and individual supply three steps in the analysing change in equilibrium, price ceiling and floor taxes and the impact- price elasticity of demand -total revenue and elasticity of demand- impact of price elasticity on revenue. DEMAND ESTIMATION AND FORCSTING; Meaning and significance , method of demand estimation , survey and statistical method.	10	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication,	Black Board Method
Micro-economics Paper-1	**Module 3:SUPPLY AND PRODUCTION COSTOF PRODUCTION: Production function short run analysis with the law of variable production function with two variable , ridge lines and least cost combination of input ; long run production function and law of return to Scale ,economic and economics of Scale.** **COST CONCEPT;** Accounting cost and economic cost, implicit and explicit, social cost in private cost , historical cost and replacement cost, sankosh and incremental cost, fixed and variable cost, total average and marginal cost, cost output relation in short run and long run (sums)	05	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication,	Black Board Method
Micro-economics Paper-1	**Module 4** ;MARKET STRUCTURE; Perfect cooperation and monopoly and pricing and output decision under imperfect competition Short run and long run equilibrium of competitive firm and of industry – monopoly –short run n long run equilibrium of a firm under monopoly . Monopolistic competition ;Equilibrium of a firm under monopolistic competition , debate over role of advertising.	05	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication	

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	Oligopolistic market; key attribute of oligopoly collusive and non-collusive market – price rigidity – Cartel and price leadership model		
Micro-economics Paper-1	**Module 5 Pricing practices.** **Cost orientation pricing method ; cost – plus (full cost0 pricing , marginal pricing , mark up pricing , discriminating pricing ,multiple – produt pricing – transfer pricing .**	05	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

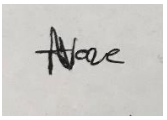
NAME OF THE STAFF: MR AMOL VAJE SUBJECT: Financial Accounting DEPARTMENT: Commerce

CLASS: FYIMG SEMESTER: I MONTH: Aug ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, II Income and expenditure, revenue and capital	Income and expenditure, revenue and capital problems, Features, bank reconciliation statement, AS	30	**Vipul prakashan**	Chalk & Board, Discussion
Unit III,IV Hire purchase	Journals entry, ledger, problems	30		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. FINI CHERIYAN_____DEPARTMENT: COMMERCE_____

CLASS __F.Y.BIM SEMESTER: I___MONTH: JULY-NOVEMBER 2022 ACADEMIC YEAR: __2019-20_____

LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course–I (Money Market) Unit I, II, III,and IV	**Module I- Introduction to Money Markets** Meaning of money market, Features of money market, Importance of money market, Role of Primary dealers, Development of trade and industry, Development of capital market, Smooth functioning of commercial banks, Effective Central Bank Control, Formulation of suitable monetary policy, Source of finance to government.	5	Text Book Internet	1.Chalk and Black Board Method 2 Example 3 Discussion
	Module II- Regulatory Framework of Money Markets	10	**Text book**	
	Regulatory framework of RBI, FIMMDA (Fixed Income, Money Market and Derivatives Association) and FEDAI (Foreign Exchange Dealers Association of India), NDS-OM Web.			1.Chalk and Black Board Method 2 Example 3 Discussion
	. **Module III- Money Market Instruments** **Conventional:- Treasury bills, Money at call and Short Notice in the Call Loan market, Commercial bills, Promissory notes in the bill market.**	10	Text book	1.Chalk and Black Board Method 2 Example 3 Discussion

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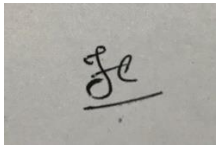
	Modern:- Commercial papers, Certificate of Deposit, Inter-bank Participation Certificates, Repo instrument, Banker's Acceptance. **Money Market Mutual Fund:- Meaning, advantages, disadvantages, Regulatory framework for money market mutual funds, various money market funds operational in Indian market.**			
	Module IV- Recent Developments in Money Market Integration of Unorganised sector with the Organised sector, Widening of call money market, Introduction of Innovative Instrument, Offering of market rates of interest, Promotion of bill culture, Entry of money market mutual funds, Setting up of credit rating agencies, Adoption of suitable monetary policy, Establishment of DFHI, Setting up of Security	10	Text book Internet The Indian constitution	1.Chalk and Black Board Method 2 Example 3 Discussion
		10	Text book Internet	1.Chalk and Black Board Method 2 Example 3 Discussion



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TEACHING PLAN (UNIT PLAN)

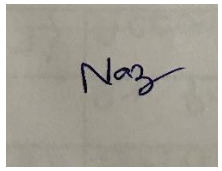
NAME OF THE STAFF: NAZIA SHAIKH SUBJECT: INDIAN FINANCIAL SYSTEM (IFS) DEPARTMENT: Commerce (SFC)

CLASS:FYBIM SEMESTER:I MONTH: aug -dec ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FINANCIAL INSTITUTIONS AND FINANCIAL SERVICES & FINANCIAL REGULATORS AND FINANCIAL INSTRUMENTS	Financial institutions - Kinds of financial institutions ,features , functions , role , size , structure , participants & importance of each kind of institute .	15	INDIAN FINANCIAL SYSTEM by M.Y.Khan	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Financial services – role, function , types of financial services , a table showing the institution and services offered .	15		
	Financial regulators –features , role , functions , types . A table showing the various regulators , the markets they regulate .	15		
	Financial instruments – classification ,types , features New financial instruments .	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNITS : 60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS SWETLANA DIAS DEPARTMENT: COMMERCE CLASS: FYBIM SEMESTER: I MONTH: AUGUST

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Develop and maintain problem-solving skills
2) mathematical ideas to model real-world problems.
3) Translate words into math language, and construct an abstract model that describes the problem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1- Introduction, Organising, Data, Frequency Distribution, Data Representation	Organizing Data, Frequency Distribution, Measure of Central tendency, Org Data, preparation of frequency distribution graphical and diagrammatic representation histogram, frequency polygon and gives. Definition of averages and objective of averages types of average. Arithmetic mean, Geometric, harmonic mean and its usages, mode and medium (using graph also) for both) for grouped as well as ungrouped data	10	VIPUL ,MANAN, RISHABH PUBLICATION	Chalk and Duster Method

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	UNIT -2 Measures of Central Tendencies			
	Concept and idea of dispersion. Various measures Range, quartile deviation, Mean Deviation, Standard Deviation and corresponding relative measure of dispersion. Geographical representation and utility of various is measure of Dispersions 4 Co-variance, Correlation and Regression	10	VIPUL ,MANAN, RISHABH PUBLICATION	Chalk and Duster Method
UNIT 3 - Measures of Dispersion	Concept and idea of dispersion. Various measures Range, quartile deviation, Mean Deviation, Standard Deviation and corresponding relative measure of dispersion. Geographical representation and utility of various is measure of Dispersions	08	VIPUL ,MANAN, RISHABH PUBLICATION	Chalk and Duster Method
UNIT -4 Co-variance, Correlation and Regression	Meaning, definition and Application of covariance, concept of correlation. Rank correlation, regression concept, relationship with correlation, Assumptions in simple Regression, Estimation using Simple Regression: Fitting of straight line, method of least square, construction of characteristic line/estimation line 5 Probability, Probability Distribution	10	VIPUL ,MANAN, RISHABH PUBLICATION	Chalk and Duster Method

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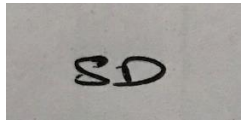
Unit 5 Probability, Probability Distribution and decision	Probability, Probability Distribution and decision Theory Concept of probability yen diagrams, Rules of Probality conditional & unconditional probality, Baye theorem. Discrete and continuous variable. Expected value of the variable, Decision theory normal distribution	10	VIPUL ,MANAN, RISHABH PUBLICATION	Chalk and Duster Method
Unit-6 Index Nos.	Concept and usage of index nos. Construction of index nos. Types of index nos. Aggregate and Relative method of constructing index nos. Chain base index nos. Test of consistency: Time reversal factor reversal and circular test . Quantity and Value index nos for agricultural, industrial production, Retail Prices, Consumer price index nos. for security prices, etc.	06	VIPUL ,MANAN, RISHABH PUBLICATION	Chalk and Duster Method
UNIT 7 Insurance	Insurance Meaning, Objective, Purpose and need for Insurance. Fundamentals of Insurance Calculation of age, Premiums, Bonuses, Paid up value of a policy, Maturity Value of the Policy. Claim Calculation and Surrender Value.	06	VIPUL ,MANAN, RISHABH PUBLICATION	Chalk and Duster Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MRUNAL** DEPARTMENTCOMMERCE_____**SUBJECT: BC**

CLASS __**F.Y.B.I.M** SEMESTER: **II**_____**MONTH**: DECEMBER - APRIL 2023 ACADEMIC YEAR: __**2019-20**_____

LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Theory of Communication	**1) Concept of Communication**- Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World Impact of technological advancements on communication **2) Channels and Objectives of Communication:** **Channels :** Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine **Objectives of Communication:** Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Moral of Employees **3) Methods and Modes of Communication:** **Methods:** Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette	15	Textbook of Manan Publication	Chalk & Blackboard

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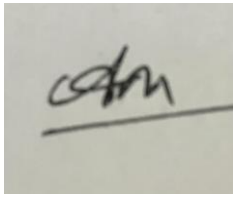
	Modes: Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing			



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TEACHING PLAN (UNIT PLAN)

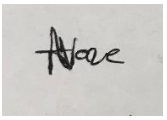
NAME OF THE STAFF: MR AMOL VAJE SUBJECT: Financial Accounting DEPARTMENT: Commerce

CLASS: FYIMG SEMESTER: I**I** MONTH: DEC TO MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, II Income and expenditure, revenue and capital	Income and expenditure, revenue and capital problems, Features, bank reconciliation statement, AS	30	**Vipul prakashan**	Chalk & Board, Discussion
Unit III,IV Hire purchase	Journals entry, ledger, problems	30		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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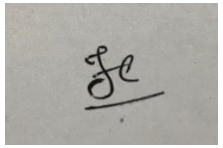
TEACHING PLAN (UNIT PLAN)

Name of the staff : FINI CHERIYAN Department COMMERCE Class : FYBIM Semester : II Academic Year : 2019-20

UNIT	TOPIC	NO.OF LECTURES ALLOTTED	REFERENCE	TEACHING METHOD
1. Human Rights	Concept of Human Rights, Evolution, Universal Declaration of Human Rights etc.	9	Text Book	Board & Chalk
2. Ecology	Concept of Environment & Ecology, Importance of EVS, Environmental Degradation etc.	9	Text Book	Board & Chalk
3. Understanding Stress & Conflict	Meaning & Causes of Stress, Meaning & Causes of Conflicts, Significance of Values, Ethics & Prejudices in developing the Individual etc.	9	Text Book	Board & Chalk
4. Managing Stress & Conflicts in Contemporary Society	Types of Conflicts, Coping with Stress, Maslow's Theory etc.	9	Text Book	Board & Chalk
5. Globalisation & Indian Society	Concepts of Globalisation, Privatisation, Liberalisation, Growth of IT & Communication etc	9	Text Book	Board & Chalk

Total Lectures allotted - 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMITA PATIL DEPARTMENT: COMMERCE CLASS: FYBIM SEMESTER: II (FIN.INT.) MONTH: DECEMBER-FEBRUARY

ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: TO MAKE STUDENTS AWARE ABOUT FINANCIAL SYSTEM.

The learners will be able to: FINANCIAL SYSTEM AND THEIR BENEFIT

ER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
I, II, III	**1. Basics of Financial Intermediaries** Definition of Financial System Meaning of Financial Intermediaries Need for financial intermediation in the Financial System Role and functions of Financial Intermediaries Benefits of Financial intermediaries (w.r. t economies of Scale)	15	VIPUL PRAKASHAN (IFS), INTERNET	1. CHALK & BLACK BOARD METHOD 2. INTERACTIVE METHOD,

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	Implication of financial intermediation (effect on economic development. Hirshliefer Model) Registration of Financial Intermediaries Taxonomy of Financial Intermediaries.			
	Taxonomy of Financial Taxonomy of Financial Intermediaries Banks, Credit Unions, Financial Advisors and Brokers, Insurance Companies, Investment Schemes and Mutual Funds Pension funds, Non Banking Financial Companies Financial Institution IDFC, ILFS, PFC, NABARD, SIDB) Credit Rating Agencies-Role and Importance	15	VIPUL PRAKASHAN (IFS), INTERNET	1. CHALK & BLACK BOARD METHOD 2. INTERACTIVE METHOD
	3.Theories and Management of Financial Intermediation Theories of Financial Intermediation Transaction costs Liquidity insurance Information asymmetry, Management of Financial Intermediaries and Issues pertaining to Performance measurement ALM for liquidity risk • Credit Risk	15	VIPUL PRAKASHAN, (IFS) INTERNET	1. CHALK & BLACK BOARD METHOD 2. INTERACTIVE METHOD

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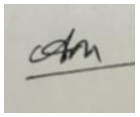
	Interest Rate Risks Regulation of DMAT			
	4.Future Trend Financial intermediaries-Global Perspective Future and Challenges in Financial Intermediaries	10	VIPUL PRAKASHAN (IFS), INTERNET	1. CHALK & BLACK BOARD METHOD 2. INTERACTIVE METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 55



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MS. SNEHAL DESHMUKH**_____DEPARTMENTCOMMERCE_____

CLASS __**F.Y.B.I.M** SEMESTER: **II**_____**MONTH**: DECEMBER - APRIL 2023 ACADEMIC YEAR: __**2019-20**_____

LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Financial Markets	**Module I- An Introduction to the Financial Markets** **Overview of Financial Markets, Structure of Financial Markets, (Multiple ways to classify market functions)** **Capital formation process through markets.**	**5**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**
	Module II- Capital Markets and Money Markets	**10**	**Text book and Internet**	
	Capital Markets:- Meaning, classification and structure, various sub-segments of the market, Role played by the capital market, capital market instruments, participants in these markets, various capital market regulators, advantages and drawbacks. **Money Markets:- Meaning, classification and structure, various sub-markets of the market, Role played by the money market, money market instruments, participants in these markets, various money market regulators, advantages and drawbacks.**			**1 Chalk and Black Board Method** **2 Example** **3 Discussion**

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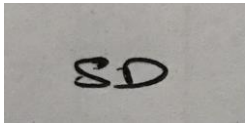
	Module III- Foreign Exchange Markets, Commodity Markets and Derivatives Markets **Foreign Exchange Markets:- Meaning, classification and structure, role played by the foreign exchange markets, foreign exchange market instruments, participants in these markets, various foreign exchange market regulators, advantages and drawbacks, the link between exchange rates, forex markets and the currency reserves of a country.** **Commodity Markets:- Meaning, classification and structure, functions of the commodity market, Debate or commodity market as a financial market, structure and working of the market, regulation of the market, advantages and drawbacks.** **Derivative Markets:- Meaning, classification and structure, functions of the derivative markets, evolution of the derivative market, structure and the working of the market, regulation of the market, advantages and drawbacks.**	**10**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**
	Module IV- Market Exchanges and Market Regulators **Market Exchanges:- Types of exchanges, role played by exchanges, NSE, BSE, MEX, OTCEI.** **Market Regulators:- SEBI**	**10**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SAYALI PATIL SUBJECT: INTRODUCTION TO WEALTH MGMT DEPARTMENT: COMMERCE

CLASS: FYBIM SEMESTER: II MONTH: DECEMBER- MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Overview of Wealth management	1.**Introduction to Wealth management-**Definition of Wealth management; understanding wealth management; wealth management process; phases in wealth management process; wealth management market in India	4	Wealth Management- TYBMS- Rishab Publication/Internet	• Chalk • Board • Discussion • Examples • Google Classroom
	2.**Holistic Planning Framework-**Sources of wealth; human Capital; Financial Capital; Financial Life Cycle; Working Life – Pre-family independence; Family; Pre-retirement; Retirement – Active retirement; Passive Retirement; Elderly Care; Retirement related risk – risk identification; Market Risk, Asset Allocation Risk, Interest Rate Risk, Inflation Risk, Health/liquidity risk, Longevity Risk	4		
	3.**The Financial Planning process-**Establish and define the relationship with the client; Personal Fact Finding; Analyze Client's financial status, Risk profile and determine financial goals; Develop financial planning recommendation and present it to client; Implement client's financial planning recommendations; Monitor and review the client's situation	4		
	4.**Asset Classes-** Debt as an asset class; Role of debt in wealth management; risk of investing in debt securities; Equity as an asset class – investing in stks	3		

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Unit 3: Retirement Planning	1.Employee Benefits and Superannuation Benefits-Employee Benefits – Salary and Bonus; Reimbursement of expenses; Health Benefits; Group Insurance; LTA, TA, Concessional Loans; Defined Benefit Plans and Limitations – Characteristics of DB Plans, Types of Defined Benefit Plans, their Features, Applicability and withdrawal norms, Taxability; Defined Contribution Plans and Limitations – Characteristics of DC Plans, Types of Defined contribution Plans, their features, Applicability. And withdrawal norms, taxability; Superannuation benefits and schemes –Trust Funds, Private Fund Managers, and Insurance Companies, Benefits - on retirement, Voluntary retirement and Death	4		
	2.Retirement Needs and Factors in retirement Planning-Introduction to retirement planning - Significance of retirement planning; Purpose and need of retirement planning; Role of Wealth planner in retirement planning; Importance of starting early; Analysis of Client's Life Cycle – Early earning stage and established earning stage; stability and visibility of earnings; Accumulation and Distribution phase; Life Expectancy Vs. Retirement age; Early Vs. Delayed retirement; Risk of living longer than expected; Factors considered in retirement planning – Nature of Income; salaried, bonus and self-employed; standard of living; time horizon; inflation in accumulation and distribution phase; profile of assets sustainable till retirement; income generating potential of fixed assets; liquidity aspects of fixed and other assets; Profile of financial and other liabilities nearing retirement; Analysis of client's retirement needs – Estimating household expenses on retirement; Corpus estimated to meet post retirement needs; Alternate arrangements for supplementing retirement corpus; cost of escalation of medical expenses in post-retirement; charitable activities and social work	4		
	3.Retirement Planning Process	3	Wealth Management-TYBMS- Rishab Publication/Internet	• Chalk • Board • Discussion

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				• Examples Google Classroom
	4.Income Streams during Retirement – Employer Provided superannuation plans; Provident Fund; Public Provident Fund; Small Savings Schemes; NPS; Pension Plans from MF's and Insurance Companies; Reverse Mortgage to supplement post retirement expenses.	4		
	3.Retirement Planning Process	3		
	4.Income Streams during Retirement – Employer Provided superannuation plans; Provident Fund; Public Provident Fund; Small Savings Schemes; NPS; Pension Plans from MF's and Insurance Companies; Reverse Mortgage to supplement post retirement expenses.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2 & 4: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SAYALI PATIL SUBJECT: INTRODUCTION TO WEALTH MGMT DEPARTMENT: COMMERCE

CLASS: FYBIM SEMESTER: II MONTH: DECEMBER- MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Role of Insurance in Wealth Management	Assessment and identification of Risk Cover – Gathering data on current Life Insurance Cover; Identifying clients life insurance needs	18	Wealth Management- TYBMS- Rishab Publication/Internet	• Chalk • Board • Discussion • Examples • Google classroom
	Analysis of Life Insurance Needs – Economic Value of human life; Replacement of the future income of the insured; Replacement of the expenses and financial liabilities of the insured; provision in the life cover of certain financial goals and financial liabilities; Review of coverage for changes in income, assets and financial liabilities			
	Types of Life Insurance Policies - Term Insurance; Whole Life Insurance: Endowment Policy; Investment Linked Insurance (ULIP); Insurance Linked annuities; Life insurance Policy riders Calculation of Claim amount and other benefits – Types of Bonus; Maturity Claim; Death Claim; Surrender Value; Return on Savings Component; Taxation aspect of various insurance Policies			
	Health Insurance and Accident Insurance – Individual vs. Family floater Policy; Critical Illness policy; Group health Insurance; Personal and group accident Insurance; Personal Disability Insurance – Permanent and Temporary, Partial and Total; Scope of benefits – long term and short term disability			
	Property and Liability Insurance – basis of property cover – Reinstatement, Book or Market Value; Insuring House, Household items, business unit, plant and			

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	machinery; personal Umbrella Policy; miscellaneous oversees travel insurance; Motor Insurance – Comprehensive and Mandatory Third party coverage; No claim Bonus and claims			
	Professional Indemnity Insurance; Keyman Insurance; Marine Insurance, Cargo and Hull Insurance; Inland Transit Insurance			
	Insurance Regulatory and Development Authority (IRDA)Act-1999; TheInsuranceAct-1938; PublicLiabilityInsuranceAct-1991; MotorVehicleAct-1988 EmployeeStateInsuranceAct-1948			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 18

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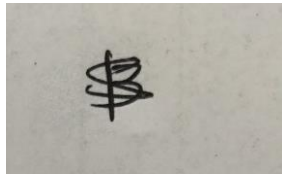
TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 **Estate Planning**	**Estate Planning Overview**– The concept of Estate Planning; Purpose and Need of Estate Planning; Risks and Drawbacks involved in Estate Planning; Hindu and Indian Succession Act; Succession-Testate and Intestate	15	Wealth Management- TYBMS- Rishab Publication/Internet	• Chalk • Board • Discussion • Examples • Google classroom
	Planning Process – Collect comprehensive information and examine circumstances to set Estate planning goals; Determine value of client's estate and liquidity aspects; Estimate cost of transfer and other expenses; Develop a plan of transfer; Implement plan and review periodically			
	Methods of Estate Planning - Will; Trust; Insurance; Gift; Power of Attorney; Transfer of property and partition			
	Will –Characteristics and Contents of a Will; Types of Will-Unprivileged, Privileged, Joint, Mutual and Conditional; Legal requirements and Testamentary capacity; Modifying or revoking Will; Probate Process			
	Powers of Attorney – Use and purpose; Types-General and Special; Revocation; Role of the executor			
	Trust - Classification of Trust – Revocable and Irrevocable Characteristics of Trust– Discretionary and Determinate; Different types of a family trust; Family trust V/s Will; Parties to Trust; Rules relating to perpetuities; Other Provisions			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 4: 1



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAZIA SHAIKH DEPARTMENT: COMMERCE SUB: INVESTMENT BANKING

CLASS: FYBIM SEMESTER: II MONTH: Jan-Mar ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Creating, Evaluating, Analyzing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED		REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
Investment Banking, Unit 1: **Introduction of Investment Banking**	● Investment its meaning and scope, ● types of asset classes, ● asset allocation, creating portfolio andprocess of portfolio management	15 lec			Chalk and Board, Google Classroom
Investment Banking, Unit 2: **Concepts of Investment Banking**	Unit 2: Concepts of Investment Banking ● Investment banking concepts, ● Private placement methods, ● role of venture capital ● firms in raising funds, due diligence methods	15 lec			Chalk and Board, Google Classroom
Investment Banking, Unit 3: **Risk and Return**	Unit 3: Risk and Return Risk and return concepts, types of risk and its application, ASBA, IPO and FPO,	5 lec			Chalk and Board, Google Classroom

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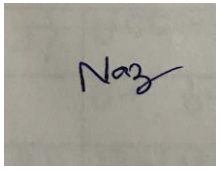
	SEBI disclosures and other regulators				
Investment Banking, Unit 4: **Investment Banking Activities**	Unit 4: Investment Banking Activities ● Industry analysis, ● role of IPO in value unlocking, ● recent trends and developments, ● investments banking activities	6 lec			Chalk and Board, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _45_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMOL VAJE/ SHRUTI BASARE SUBJECT: COST ACCOUNTING DEPARTMENT: COMMERCE

CLASS: SYBIM SEMESTER: III MONTH: JUNE – JULY- AUGUST ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The learners will be able to: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 **UNIT COSTING & RECONCILIATION OF COST & FINANCIAL ACCOUNTS**	Introduction to Costing – Characteristics, objectives, importance, advantages of cost, costing and cost accounting.	2	COST ACCOUNTING BY SAXENA & VASHIST	• Chalk • Board • Discussion • Examples • Google classroom
	Methods of costing, techniques of costing, types of cost.	1		
	Classification of cost into – direct, indirect, factory, administrative, selling, fixed, variable and semi variable.	1		
	Classification of costs, Cost of Sales, Cost Centre, Cost Unit, Profit Centre and Investment Centre	1		
	Cost Sheet, Total Costs and Unit Costs, Different Costs for different purpose	1		
	Format of Cost sheet and calculation of per unit	1		
	Practical Illustrations	6		
	Introduction to reconciliation, meaning, cost accounting and financial accounting.	1		
	Need for reconciliation, rules for reconciliation	1		
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 20

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TEACHING PLAN (UNIT PLAN)

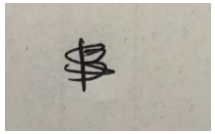
NAME OF THE STAFF:AMOL VAJE / SHRUTI BASARE SUBJECT: COST ACCOUNTING DEPARTMENT: COMMERCE

CLASS: SYBIM SEMESTER: III MONTH: SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 **MARGINAL COSTING**	Introduction to Marginal Costing, Meaning of Absorption Costing, Difference between Marginal costing and Marginal costing.	1	COST ACCOUNTING BY SAXENA & VASHIST	• Chalk • Board • Discussion • Examples • Google classroom
	Features, Assumptions, Advantages, Limitations of Marginal costing	1		
	Marginal Cost, Marginal cost equations, P/V ratio, contribution, Break even analysis meaning and graphic presentation, MOS	2		
	Practical illustration	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 3: 09



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI CHERIYAN SUBJECT: Foundation course (FC) DEPARTMENT: Commerce (SFC)

CLASS:SYBIM SEMESTER:III MONTH:June-july-aug ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Fundamental of Investment and it's Avenues	• Fundamentals of Investments- Meaning and definition, Needsand importance of investment, Investment objective, Elements of investment, Investment avenue, Taxes and investments, Place of liquidity in investment decisions, Importance of Investment management	05	Google, Derivative markets (SYBFM) Book, Equity Markets (SYBFM) -old publication	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	• Sources and Avenue of Investments- Bank products, Bank and credit union, Bonds, stocks, Investment funds, Annuities, Featured of Equity share & Preference share, Feature of Debenture,	04		
	Valuation of Equity share and it's technique, Valuations of Debenture and it's Techniques, Valuations of bullion gold and silver, characteristics and important features of investment in bullion, Bullion market and it's operation,	04		
	Factors influencing demand and supply of bullion, Gold, ETF, Linksge with foreign exchange & currency.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

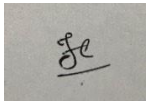
NAME OF THE STAFF: FINI CHERIYAN SUBJECT: Foundation Course (FC) DEPARTMENT: Commerce (SFC)

CLASS:SYBIM SEMESTER:III MONTH: sep-oct ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Financial literacy & Individual Investing	• Introduction to Financit literacy:- Meaning, Needs & Importance of financial literacy, components of financial literacy	04	Introduction to Financial literacy	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Individual economic system, personal finance planning, RBI initiative in financial literacy.	03		
	• Individual Investing:- Getting ready to invest- saving verse investment- Getting started - discipline & planning are key - Define your goal and investment time frame - Decide if you need income growth or bo	04		
	Understand the risk - Diversify to minimize risk - Recognize the importance of cost and tax	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SACHIN KADAM SUB: FINANCIAL MANAGEMENT DEPARTMENT: COMMERCE

CLASS: SYBIM SEMESTER: III MONTH: July-Oct ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Creating, Evaluating, Analyzing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Management, Unit 1 & 2 **Introduction of Finance and Financial Management**	**Introduction of Finance and Financial Management** **A) Introduction to Finance** ● Meaning and definition of finance ● Importance of finance ● Types of Finance: Public and Private ● Sources of finance Long term Sources : Term Loans, Debentures, Bonds, Zero Coupon bonds, Convertible Bonds, Equity shares, Preference shares, CD, CP, Public Deposits Short Term sources**:** Bank Finance, Trade Credit ,Other Short Term Sources Venture Capital and Hybrid Financing B) Financial Management ● Meaning and Importance of Financial Management ● Scope of Financial Management ● Functions and Objectives of Financial Management ● Primary Objective of Corporate Management ● Agency Problem	10 lec	Vipul Prakashan SYBBI sem III	Chalk and Board, Google Classroom

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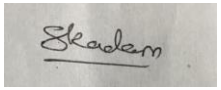
	• Organization of Finance Function Emerging role of Finance Managers in India C) Objectives of the Firm • Profit Maximization and Shareholders Wealth Maximization • Profit V/s Value Maximization			
Financial Management, Unit 3 & 4 **Investment Decisions**	**Investment Decisions**: **Capital Budgeting** **A) Capital Budgeting** • Nature of Capital Budgeting • Purpose of Capital Budgeting • Capital Budgeting Process • Types of Capital Investment • Basic Principle of Measuring Project Cash Flows • Increment Principle, Long Term Funds Principle, Exclusion of Financial Cost Principle, Post Tax Principle • Probability technique for measurement of cash flow • Capital Budgeting Techniques: Net Present Value Profitability Index and Discounted Pay Back Method. • A Comparison; Project Selection Under Capital Rationing (Note: Problems on computation of cash flow, ranking of projects on various)	10 lec	Vipul Prakashan SYBBI sem III	Chalk and Board, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _30_____



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TEACHING PLAN (UNIT PLAN)

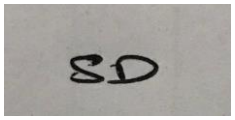
NAME OF THE STAFF: SNEHAL DESHMUKH SUBJECT: Fundamentals of Capital Markets(FOCM) DEPARTMENT: Commerce (SFC)

CLASS:SYBIM SEMESTER:III MONTH:June-july-aug ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & II INTRODUCTION TO CAPITAL MARKET	Overview of Capital market – authorities governing capital market in INDIA , securities market reforms and regularity measures to promote investors confidence	05	CAPITAL MARKET AND INVESTMENT MANAGEMENT BY M.S. KHAN	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Capital market instruments and ratings – equity , debenture , preference shares , nonvoting shares	04		
	Derivatives ,hybrid instruments	03		
	Rating and grading of instruments – concept , scope , factors influencing rating of instruments .	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

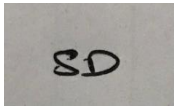
NAME OF THE STAFF: SNEHAL DESHMUKH SUBJECT: Fundamentals of Capital Markets (FOCM) DEPARTMENT: Commerce (SFC)

CLASS:SYBIM SEMESTER:III MONTH: sep-oct ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-III& IV RESOURCE MOBILISATION IN INTERNATIONAL MARKET	Introduction to Global Finance – depository receipt , ADR & GDR , pricing of securities , two way fungibility scheme	04	CAPITAL MARKET AND INVESTMENT MANAGEMENT BY M.S. KHAN	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Provisions of companies act 2013 , issues relating to GDRs , procedure of issuance of GDR/FCCBs	03		
	Foreign Currency Exchangeable Bonds – FCCB & FCEB , issue of FCEB 2008 scheme	04		
	FCCB & ordinary shares scheme 1993 , external commercial borrowings – forms & features	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14



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TEACHING PLAN (UNIT PLAN)

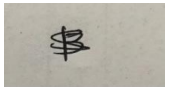
NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: MUTUAL FUND MANAGEMENT DEPARTMENT: COMMERCE

CLASS:SYBIMSEMESTER: III MONTH:JUNE, JULY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The learners will be able to : Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 & 2 INTRODUCTION TO MUTUAL FUND	History, Origin, Definition, Meaning of Mutual Fund	2	MUTUAL FUNDS by R.K.Mohapatra	• Chalk • Board • Discussion • Examples • Google classroom • YouTube videos
	Characteristics, Advantages, Disadvantages of Mutual Fund, Ethics	2		
	Entities involved – Sponsors, Trust, Trustee, AMC, Registrar &Transfer Agent and Fund Houses in India	8		
	Legal Framework, Role of Regulatory agencies – SEBI, RBI, AMFI, Ministry of Finance, SRO, Company Law Board, Registrar of Companies	6		
	Mutual Fund guidelines on advertisement, accounting, taxation, valuation norms, purchase mutual fund, investor protection	8		
	Mutual Fund regulation and grievances mechanism	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 30



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TEACHING PLAN (UNIT PLAN)

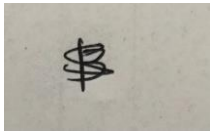
NAME OF THE STAFF: Ms SUREKHA BHARGAV SUBJECT: MUTUAL FUND MANAGEMENT DEPARTMENT: COMMERCE

CLASS: SYBIM SEMESTER: III MONTH: AUGUST, SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The learners will be able to : Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3& 4 FINANCIAL PLANNING AND MUTUAL FUND	A) Basics of Financial Planning – Steps, Life Cycle, Wealth Cycle, risk profiling, asset allocation, contingencies funds	6	MUTUAL FUNDS by R.K.Mohapatra	• Chalk • Board • Discussion • Examples • Google classroom • YouTube videos
	B) Investor guides towards Financial planning – Eligibility for investment in mutual fund, KYC, Long bond fund, Short bond fund, Ultra Short bond fund, Need for financial advisors, colour coding mutual fund, difference between advisors and distributor, FD and mutual fund, dividend and growth option	12		
	C) Developing model portfolio for Investors – meaning, step by step approach of building model portfolio	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 4: 24



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:AMOL VAJE / SHRUTI BASARE SUBJECT:SAPM DEPARTMENT: COMMERCE

CLASS: SYBIM SEMESTER: III MONTH: SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to :

1) Understand & Remember- the concept of portfolio management
2) Understand and remember the concept of portfolio analysis and selection by using several methods

Module no/unit no	contents	No of lectures	Reference used	Medium
Unit 1 & 2 Portfolio Management – An Introduction	A) Investment- Meaning, Characteristics, Objectives, Investment V/s Speculation, Investment V/s Gambling and Types of Investors B) Portfolio Management – Meaning, Evolution, Phases, Role of Portfolio Managers, Advantages of Portfolio Management. C) Investment Environment- Investment Environment in India and factors conducive for investment in India.	22	Vipul publication	Board,Chalk

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Unit 3 &4 .Portfolio Analysis and Selection	A) Portfolio Analysis – Meaning and its Components, Calculation of Expected Return and Risk, Calculation of Covariance, Risk – Return Trade off. B) Portfolio Selection – Meaning, Feasible Set of Portfolios, Efficient Set of Portfolios, Selection of Optimal Portfolio, Markowitz Model, Limitations of Markowitz Model, Measuring Security Return and Portfolio Return, Risk under Single Index Model and Multi Index Model.	23	Vipul publication	Board,Chalk

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHAKHA SANE DEPARTMENT: COMMERCE (SELF-FINANCE) CLASS: SYBIM

SEMESTER: III MONTH: NOV-MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVES: TO KNOW STUDENTS ABOUT SCOPE & OVERVIEW OF BUSINESS & MACRO ECONOMICS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics – II Macro Economics Unit: I, II & III IV,V	Unit I: Overview of Macro Economics - Circular flow of income in open an closed economy - Measurement of National Product , Green GNP and NNP - Trade cycle: features and phases - Say's Law of Market	15	AHUJA .H.L, MODERN ECONOMIC BHATIA H.L PUBLIC GINANCE H.L.Ahuja Modern Economics	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Unit II: Money, Prices and Inflation - Money supply determinants and factors - Demand for money, classical and Keynes approach and also Friedman approach - Money & Prices Fisher and Cambridge equation Inflation: types, nature, Policy Measures Unit III: Introduction to Public Finance - Meaning, Scope and Major Fiscal Functions	30		

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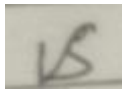
	Public Revenue: tax and non-tax revenues Objectives of taxation - Canons of taxation - Types of taxes: direct and indirect - Tax Base and Rates of taxation: proportional, progressive and regressive taxation Shifting of tax burden: **Impact and incidence of taxation** - Processes- factors influencing incidence of taxation Economic Effects of taxation: on Income and Wealth, Consumption, Savings, Investments and Production. Redistributive and Anti – Inflationary nature of taxation and their implications **Public Expenditure**: Canons - classification - economic effects of public spending - on production, consumption, distribution, employment and stabilization – Theories of Public Expenditure: Wagner's Hypothesis and Wiseman Peacock Hypothesis - Causes for Public Expenditure Growth. Significance of Public Expenditure: Social security contributions- Low Income Support and Social Insurance Programmes. **Public Debt** : Classification - Burden of Debt Finance : Internal and External Public Debt and Fiscal Solvency			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI CHERIYAN SUBJECT: FOUNDATION COURSE III DEPARTMENT: Commerce (SFC)

CLASS:SYBIM SEMESTER:IV MONTH: December to February ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I- Introduction to Banking Sector	A. Introduction to Banking Sector: Meaning of Banking Companies, Primary and Secondary Functions of Banks, Banking Systems in India, Overview of RBI, Public, Private, Co-operative, Payment Bank and Regional Rural Banks. B. Introduction to Insurance Sector: Meaning of Insurance Companies, Functions, Principles, Types of Insurance Policies and their advantages and Disadvantages. C. Significance and Role of Banking and Insurance in Mobilizing Savings, Investment, Wealth Accumulation and Economic Growth.	10	An overview of Banking and Insurance – Vipul Prakashan	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
Unit-II Regulatory and Developmental Framework governing	A. Overview of Regulatory Architecture: Banking Regulation Act, 1949, Banking Regulation Act(Amendment),2017, Payment and Settlement Act, 2007, Negotiable Instrument Act, 1881. B. Overview of Regulatory Architecture relating to Insurance Sector: Introduction to Insurance Act 1938, IRDA Act, 1999 and The Insurance Laws (Amendment) Act, 2015	10	An overview of Banking and Insurance – Vipul Prakashan	

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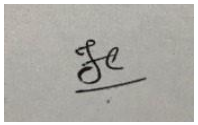
Banking and Insurance Sector	Developmental activities of RBI and IRDA			
Unit-III Introduction to Life and Health Insurance	A. Life Insurance Business: Components, Human Life Value Approach, Mutuality, Principle of Risk Pooling, Life Insurance Contract, Determinants of Risk Premium. B. Health insurance: Meaning, IRDA Regulations, Determinants of Health Insurance, Health Insurance Market in India and determinants of Risk Premium.	10	An overview of Banking and Insurance – Vipul Prakashan	
Unit-IV Microfinance and Financial Inclusion	A. Microfinance: Introduction, Need and Code of Conduct for Microfinance Institutions in India, Advantages, Purpose, Limitations and Models of SHG- Bank Linkage Program, Role of NABARD and SIDBI, Portfolio Securitization, SHG-2,NRLM and SRLM, Priority Sector ad its Classification. B. Financial Inclusion: Need and Extent, RBI Committee Report of Medium Term Path on Financial Inclusion 2015, World Findex Report 2017, Features and Procedures of Pradhan Mantri Jan Dhan Yojna and PM Mudra Yojna, Features, Procedures and Significance of Stand up India Scheme for Green Field.	15	An overview of Banking and Insurance – Vipul Prakashan	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VARADA KATLE DEPARTMENT: commerce CLASS: F.Y FMG (FC) SEMESTER: IV

MONTH: January - March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand and remember the concept of liberalization, privatization and globalization; information technology and communication and its impact.
2) Understand impact of globalization on industry, employment; impact of migration.
3) Understand changes agrarian sector due to globalization; rise in corporate farming; identify reasons for increase in farmers' suicides.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1- INTRODUCTION TO EQUITY MARKET	Meaning and definition of Equity shares, growth of corporate sector and simultaneous growth of equity shareholders, tradeoff between ownership and management	10	Book by Manan publications/Internet	
	In companies. Development equity culture in india		Book by Manan publications/Internet	
			Book by Manan publications/Internet	

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Unit 2- COMPONENTS OF EQUITY MARKET	A) Basics of Primary Market IPO, Book building, Red-Herring Prospectus -it's unique features. Green Shoe option, Sweat equity, ESOP Right issue of shares. Non-voting shares and Role of merchant bankers in fixing the price B) Market For Equity Secondary Markets Definition and functions ofStock Exchanges. Evolution and Growth of Stock Exchanges. Stock Exchanges in India, NSE, BSE, OTCEI and Overseas Stock Exchanges. Recent Development in Stock Exchanges and Stock Market Indices. C) Dealings in Stock Exchanges - Role of Brokers, Stock Market Quotations Procedure for buying & selling shares. BOLT - On Line Trading/ NEAT System, Clearing & Settlement system	20	Book by Manan publications/Internet	Google meet and Google slide
Unit 3: LAW RELATING TO ISSUE OF SHARES	Issue and listing of securities A) Meaning and Definition of equity shares, Growth of corporate sector the simultaneous growth of equity shareholders. Trade-off	15	Book by Manan publications/Internet	Google meet and Google slide
Unit 4: EVOLVING ROLE OF EQUITY MARKET	A) Issue and Listing of Securities Listing of Securities, Issue of Capital and Disclosure Requirements (ICDR), Procedure for issue of various types of shares and debentures, Employee Stock Option Scheme and Employee Stock Purchase Scheme, Delisting of Securities. Evolving Role of Equity Market A) Role of Equity Markets in economic development Need for attracting	15	Book by Manan publications/Internet	Google meet and Google slide

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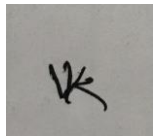
	more investors towards equity. Need for strengthening secondary markets, Link between primary Market and secondary market. B) Developments in the indian Equity Market, Channelizing domestic savings & investments, Role of FDI & Foreign Institution Investment, Role of Retail Investors and Role of SEBI in promoting equity markets Board of Studies in Banking & Finance, University of Mu			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ABHISHEK MADHAYE \GAURI VARTAK SUB: FINANCIAL MGMT. DEPARTMENT: COMMERCE

CLASS: SYBIM SEMESTER: IV MONTH: Jan-Mar ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to : Creating, Evaluating, Analyzing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Management, Unit 1: **Working Capital Management:**	• Management of Working Capital in India. • Estimating Working Capital Needs. • Operating or Working Capital Cycle. • Working Capital Financing: Trade Credit; Bank Credit; Commercial Papers; Certificate of Deposits (CDs); Financing.	6 lec	Vipul Prakashan SYBBI sem IV	Chalk and Board, Google Classroom

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Financial Management, Unit 2: **Management of Components of Working Capital**	Unit 2: **Management of Components of Working Capital:** ● Management of Cash and Marketable Securities: Motives for Holding Cash; Objectives of Cash Management; Factors Determining Cash Needs; Basic Strategies of Cash Management; Cash Management Techniques / Processes; Marketable Securities; and Cash Management Practices in India. ● Receivables Management: Objectives; Credit Policies; Credit Terms; and Collection Policies. Inventory Management: Objectives; and Techniques.	6 lec	Vipul Prakashan SYBBI sem IV	Chalk and Board, Google Classroom

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Financial Management, Unit 3: **Financial Planning**	(3) Financial Planning: ● Introduction. ● Meaning and Essentials of Budget. ● Types of Budget. ● Advantages of Budgeting. ● Zero Based Budgeting. ● Master Budget. ● Sales Budget, Production Budget, Material Budget, Cash Budget and Flexible Budget.	7		Chalk and Board, Google Classroom

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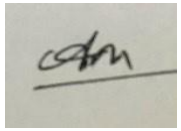
Financial Management, Unit 4: **Financial Planning**	(4) Financial Policy and Corporate Strategy: ● Meaning of Strategic Financial Management. ● Strategic Financial Decision Making Framework. ● Functions of Strategic Financial Management. **Business Risk and Financial Risk:** ● Introduction. ● Debt v/s Equity Financing. ● Types of Leverage. ● Investment Objective/Criteria for Individuals/Non-Business Purpose. ● Practical Sums	6		Chalk and Board, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _25_____



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TEACHING PLAN (UNIT PLAN)

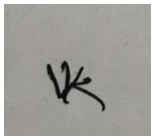
NAME OF THE STAFF:ARJUN V. SUBJECT: Information Technology DEPARTMENT: Commerce (SFC)

CLASS: SYBIM SEMESTER:VI MONTH:Jan-feb ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & II E Business & Security for E-Business	What is **E-Commerce,** History of E-Commerce ,types of E-commerce, comparison of traditional & E-commerce,E-commerce business model, advantage and disadvantages of E-commerce.	6	Internet source, Wikipedia .	Chalk board method, discussion, debates
	Web auctions, virtual communities, portals, E-business revenue models.	6		
	Security Threats-Overview, Implementing E-Commerce Security,Encryption - Decryption ,Cryptography methods,SSL protocol, Firewalls,.	6		
	Threat Hunting -Definition, Threat hunting threat detection, advantages of threat hunting & threat detection , Best practice for threat hunting, considerations of threat hunting, Threat hunting /detection software'	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ARJUN V. SUBJECT:Information Technology DEPARTMENT: Commerce (SFC)

CLASS: SYBIM SEMESTER:VI MONTH: March-April ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III & IV Cyber Law & Security. Ms -Office : Package for Institutional Automation	**Cyber crime-**Various threat & attacks,phishing,key loggers, Identity Theft, Call & SMS forging, e-mail elated crimes,denial of service attack,Hacking, Online shopping frauds, credit card frauds. Cyber Stalking.	6	Internet source, Wikipedia.	Chalk board method, discussion, YouTube video,debates,Particle explanation on Computer
	Cyber Security- Computer security,E-security,Password Security, Reporting Internet fraud.	4		
	Cyber Law- Need of Cyber law, Its History, Legal aspect of E-Business, IT Act 2000 & its silent features.	4		
	Ms -Office- Ms power point Inter link between slides, hyperlinks,adding multiple content onto one slide,(video, audio, text etc), slide animation, adding time, using existing theme in new presentation, import online themes, creating template of presentation, save and run the slide show	6		
	Application of internet- introduction to email, writing professional e mails, creating digitally signed document, google drive:use of it in storing documents,sheets,presentation & PDF files.	4		

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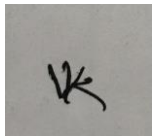
	Use of outlook express- Configuring outlook express, creating & managing profile in outlook, Sending and receiving e-mail via outlook , emailing merged document, boomerang facility of email.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMOL VAJE/ ANKITA ALMEDA DEPARTMENT: COMMERCE CLASS: SYBIM SEMESTER: IV

MONTH: JANUARY-MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Students will be able to explore different avenues of investment, equipped with the knowledge of security analysis, apply the concept of portfolio management for the better investment, invest in less risk & more return securities.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Fundamental Analysis	**Economy Analysis:** Meaning, Economic Analysis, Barometric or Indicator Approach, Econometric Model Building & Opportunistic Model Building. **Industry Analysis:** Concept of Analysis, Industry Life Cycle, Industry Characteristics. **Company Analysis:** Financial Statements, Analysis of Financial Statements Practical Questions on – Debt Equity Ratios,Totall Debt Equity Ratio, Proprietory Ratios, Interest Coverage Ratio, Profitability Ratios related to Sales, Investment & Equity Shares Efficiency or Activity Ratios. Assessment Risk.	09	Vipul Prakashan	Chalk & Duster, Group Discussion
	Dow Theory Meaning and Principles of Technical Analysis, Price Chart, Line Chart, Bar Chart, Japanese Candlestick Chart, Trends & Trend Reversals, Chart Patterns,	04		

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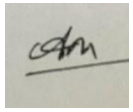
2. Technical Analysis	Support & Resistance, Reversal Patterns, Continuation Patterns & Elliot Wave Theory. **Mathematical Indicators:** Calculation of moving averages, Oscillators & Relative strength index. Market Indicators Fundamental Analysis v/s Technical Analysis			
3. Efficient Market Theory	A) Random Walk Theory B) The Efficient Market Hypothesis C) Forms of Market Efficiency D) Competitive Market Hypothesis	05	Vipul Prakashan	
4. Capital Asset Pricing Model	CAPM- Fundamental Notions of Portfolio Theory, Assumptions of CAPM, Efficient Frontier with Riskless Lending & Borrowing, Capital Market Line, Security Market Line & Pricing of Securities with CAPM.Arbitrage Pricing Theory (APT)- The Return generating model, factors affecting stock return, Expected return on stock, APT V/s CAPM.	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL DEPARTMENT: COMMERCE CLASS: S.Y.BIM SEMESTER: IV MONTH: January to March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & Remember- the meaning of salary; section 10, sections 15-17; calculation of income from salary; various allowances (taxable, partly taxable, non-taxable); perquisities; rules and calculation of Gratuity, Pension, Leave encashment.
2) Understand & Remember- the meaning of income from other sources; sections 56-59; calculation of income from other sources.
3) Understand & Remember- the meaning of capital gains; Section 45, 48, 49, 50, 54 and 55, calculation of capital gains.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 - Definitions Unit 2- Heads of Income	Definitions Residential Status Scope of Income	10	Book by Manan publications/Internet	Chalk & Board
	Salary Income from House Property Capital Gains Business & Profession Other sources	25	Book by Manan publications/Internet	Chalk & Board

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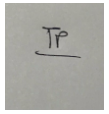
Unit 3 - Deduction under chapter Vl A	80A, 80C, 80CCC, 80D, 80E, 80TTA, 80U	05	Book by Manan publications/Internet	Chalk & Board
Unit 4- Computation of Total Income	Practical Sums on Total Income	05	Book by Manan publications/Internet	Chalk & Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

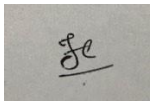
NAME OF THE STAFF: FINI SUNNY CHERIYAN /PRIYANKA SINGH DEPARTMENT: COMMERCE CLASS: TYBIM

SEMESTER: 5 MONTH: AUGUST-SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: BUSINESS ETHICS
The learners will be able to: Understand ethics in terms of ten commandments with finance, HR and various in depth of work rights.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1&2 Organizational Ethics & **Unit3& 4** Ethics and Social Responsibility	Ethical decision making: Decision Making (Normal Dilemmas and Problems): i) Utilitarianism, J. Bentham and J.S. Mill, Deontology (I. Kant) Virtue Ethics (Aristotle)	60	Business Ethics By Vipul publications	Chalk Board, Flow Chart, Diagrams .
	Gandhian Approach in Management and Trusteeship, Importance and Relevance of Trusteeship Principle in Modern Business. Ethical issues in Functional areas of Business, Ethics in Advertising (Truth in Advertising). Ethical issues in Finance.			
	Meaning and Definition of CSR, History & Evolution of CSR, Concept of Charity, Corporate Philanthropy, Ethics Relating to Environment Protection, Ethics Relating to Consumer Protection- Social Responsibility & Business Ethics Arguments for and against Social Responsibility. CSR through Tripple Bottom Line and Sustainable Business, Relation between Corporate Responsibility & Business Ethi			

TOTAL NUMBER F LECTURES ALLOCATED TO THE UNIT: 22



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL/AMOL VAJE SUBJECT: CORPORATE ACCOUNTING DEPARTMENT: COMMERCE

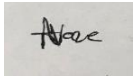
CLASS: TYBIM SEMESTER: V MONTH: JUNE, JULY ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 & 2 INTRODUCTION TO CORPORATE ACCOUNTING	Meaning of Company, Requirement of Accounting for Companies, Procedures of Accounting for Companies, Importance of Corporate Accounting, Use of Accounting Standards in Corporate Accounting, Issue of Shares, Issue of Debentures, Issue of Bonds, Recent Trends in Corporate Accounting	30	Dr. S.M.Shukla Dr. K.L.Gupta	• Chalk • Board • Discussion • Examples

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL/AMOL VAJE SUBJECT: CORPORATE ACCOUNTING DEPARTMENT: COMMERCE

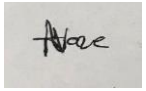
CLASS: TYBIM SEMESTER: V MONTH: AUGUST, SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3&4 INVESTMENT ACCOUNTING	For Shares (Variable income bearing securities) For Debentures (fixed income bearing securities)	6	Dr. S.M.Shukla Dr. K.L.Gupta	• Chalk • Board • Discussion • Examples
	Accounting for Transactions of Purchase and Sale of Investments with ex and cum interest and finding cost of investment sold and carrying cost as per weighted average method (Excl. brokerage) Format for Investment Accounting	10		
	Practical Illustrations	14		

TOTAL NUMBR OF LECTURES ALLOCATED TO THE UNIT 4: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH SUB: INTERNATIONAL FINANCE DEPARTMENT: COMMERCE-SELF FINANCE

CLASS: TYBIM SEMESTER: V MONTH: JUNE TO OCTOBER ACADEMIC YEAR: 2019-20

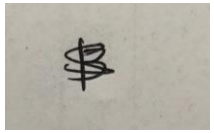
LEARNING OBJECTIVES:

The learners will be able to: ➢Understand the meaning of international finance and challenges and mechanisms of the same.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit – 1 & 2 **Global financial environment**	• Introduction to international finance • The challenges of international finance • The finance function in global context-global financial market • Cost of capital • Structure intra company transfers • Capital budgeting • International financial management and imperfections in financial markets • Growing international integrations-diversification, benefits of global	30	Global Economy and business environment by Francis Cherunilam VIPUL, Manan prakashan and Sheth publication	Chalk Board, Discussion, and Test

	investments • International mergers and acquisitions- definition, classification, reasons for cross border mergers and acquisitions • Changes in policy and regulations environment • Trends in cross border mergers and acquisitions			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

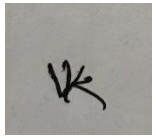
NAME OF THE STAFF: VARDA KATLE SUBJECT: Operations in Equity Market DEPARTMENT: Commerce

CLASS: TYBIM SEMESTER: V MONTH: June-July ACADEMIC YEAR: 209-20

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I An Overview of Indian Equity Market	Meaning & Definition of Equity Shares, Growth of Corporate Sector & simultaneous growth in number of Equity Shareholders	04	Equity Markets by Jia Makhija	Chalk & Board, Discussion.
	Separation of Ownership & Management in the Company	02		
	Development of Equity Culture in India & Current Position	03		
	Security Market- An Overview	03		
	Market Terminology & Investment Procedure in Primary & Secondary Market	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

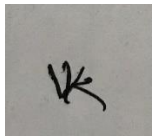
NAME OF THE STAFF: VARADA KATLE SUBJECT: Operations in Equity Market DEPARTMENT: Commerce

CLASS: TYBIM SEMESTER: V MONTH: July- August ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Primary & Secondary Markets	Primary Market- IPO, Methods Followed, Book Building, Offer for Sale	02	Equity Markets by Jia Makhija	Chalk & Board, Discussion.
	Role of Merchant Bankers in fixing the Price, Red Herring Prospectus, ASBA	02		
	Green Shoe Option, Sweat Equity, ESOP, Right Issue of Shares	02		
	ADR, GDR, IDR	01		
	Secondary Market- Definition , Functions, Evolution & Growth	02		
	NSE, BSE, SME Exchanges & Overseas Stock Exchanges, Recent Developments	03		
	Merger of SEBI with FOMC, Stock Market Indices	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

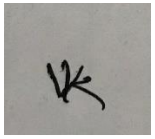
NAME OF THE STAFF: VARADA KATLE SUBJECT: Operations in Equity Market DEPARTMENT: Commerce

CLASS: TYBIM SEMESTER: V MONTH: September ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Valuation of Equities	Factors affecting Share Prices	02	Equity Markets by Jia Makhija	Chalk & Board, Discussion.
	Balance Sheet Valuation	02		
	Dividend Discount Model, Price Earning Model	02		
	Fundamental Analysis- Macroeconomic factors, Market related factors	03		
	Role of Brokers, Stock Market Quotations	02		
	Procedure for Buying & Selling, BOLT online trading	02		
	NEAT Clearing & Settlement, Order Matching	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

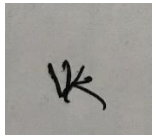
NAME OF THE STAFF: VARADA KATLE SUBJECT: Operations in Equity Market DEPARTMENT: Commerce

CLASS: TYBIM SEMESTER: V MONTH: October ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Trading Systems & Strategies	Trading System in Stock Exchange- Introduction, NEAT & BOLT, Screen Based Trading System	03	Equity Markets by Jia Makhija	Chalk & Board, Discussion.
	Market Phases, Order Management, Trade Management	03		
	Market Window Operations & Auction	03		
	Trading Strategies- Long vs Short, Brief Introduction to Hedging	04		
	Daily Settlement & Market Margins	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRAJAKTA PARANJAPE DEPARTMENT: COMMERCE CLASS: TY BIM SEMESTER: 5 MONTH: JUN-AUG ACADEMIC YEAR: 2019-20 SUBJECT: RESEARCH METHODOLOGY

LEARNING OBJECTIVES:

The learners will be able to : Imparting and adequate knowledge of the subject matter

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1- Introduction to Research UNIT 2- Data Collection and Processing	Meaning objectives and importance of research- Types of research-research Process-Characteristics of good Research-Hypothesis-Meaning, nature, significance, types and sources-research design-meaning, definition, need and importance,steps, scope and essentials of a good research design-Sampling-meaning of sample and sampling- methods of sampling-non probability sampling-convenience, judgment, quota, snow ball-Probability-simple Random, stratified, cluster, multi stage. Types of data and sources- Primary and Secondary Data Sources-Methods of collection of Primary data-Observation-structured and unstructured-disguised and undisguised-mechanical observations-Experimental- field -laboratory- interview-personal interview-focused group-in depth interviews method-Survey instrument-Questionnaire designing-types of questions-structured/close ended, unstructured/open ended, Dichotomous, Multiple choice Questions-Scaling techniques- Likert scale, semantic Differential scale.	30	Research Methodology by Vipul Publication	Chalk Board Flow Chart

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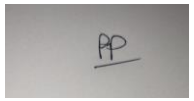
UNIT 4- Advanced Statistical Techniques	Introduction, characteristics and Application of- Correlation and Regression Analysis- Factor Anlysis- Cluster Analysis- Discriminant Analysis- Multidimensional Scaling			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

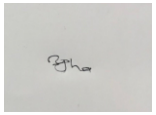
NAME OF THE STAFF: FIROZ KHAN /BABLI JHA SUBJECT: Risk Management DEPARTMENT: Commerce

CLASS: TYBIM SEMESTER: V MONTH: July – Sept ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I&II Credit Market Risk Management	Introduction	**2**	Risk management by Dhaval Parekh	Chalk & Board, Discussion
	Information required for evaluation of credit risk	**4**		
	Procedure for credit risk management	**2**		
	Credit lifecycle	**2**		
	Loan review mechanism	**4**		
	RBI guidelines on credit Rating Framework in Banks	**8**		
	Introduction of Basel Norms and calculation of capital adequacy ratio	**8**		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

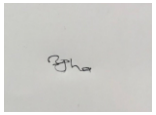
NAME OF THE STAFF: FIROZ KHAN/BABLI JHA SUBJECT: Risk Management DEPARTMENT: Commerce

CLASS: TYBIM SEMESTER: V MONTH: July – Sept ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III & IV Risk Management	Estimation of volatilities and correlations, Monte Carlo simulation.	4	Risk management by Dhaval Parekh	Chalk & Board, Discussion
	Linear value at Risk	4		
	Option Valuation	2		
	Risk- adjusted return on capital & beta calculation	6		
	Risk management of derivatives	8		
	Interest rates and measure of interest rate sensitivity	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: AUDITING DEPARTMENT: COMMERCE

CLASS: TYBIM SEMESTER: VI MONTH: JANUARY- MARCH ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1,Introduction to Auditing	**Basics–Financial Statements, Users of Information, Definition of Auditing, Objectives of Auditing –Primary and Secondary, Expression of opinion, Detection of Frauds and Errors, Inherent limitations of Audit. Difference between Accounting and Auditing, Investigation and Auditing.**	15	R.L. GUPTA	• Chalk • Board • Discussion • Examples
	Errors & Frauds–Definitions, Reasons and Circumstances, Types of Error – Commission, Omission, Compensating error. Types of frauds, Risk of fraud and Error in Audit, Auditors Duties and Responsibilities in case of fraud.Principles Of Audit–Integrity, Objectivity, Independence, Skills, Competence, Work performed by others, Documentation, Planning, Audi Evidence, Accounting System and Internal Control, Audit Conclusions and Reporting.			
	.Types of Audit–Meaning, Advantages, Disadvantages of Balance sheet Audit, Interim Audit, Continuous Audit, Concurrent Audit and Annual Audit.			

NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: AUDITING DEPARTMENT: ACCOUNTANCY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2, Audit Planning, Procedures and Documentation	Audit Planning–Meaning, Objectives, Factors to be considered, Sources of obtaining information, Discussion with Client, Overall Audit Approach.	15	R.L. GUPTA	• Chalk • Board • Discussion • Examples
	Audit Program–Meaning, Factors, Advantages and Disadvantages, Overcoming Disadvantages, Methods of Work , Instruction before commencing Work, Overall Audit Approach.			
	Audit Working Papers-Meaning, importance, Factors determining Form and Contents, Main Functions / Importance, Features, Contents of Permanent Audit File, Temporary Audit File, Ownership, Custody, Access of Other Parties to Audit Working Papers,			
	Auditors Lien on Working Papers, Auditors Lien on Client's BooksAudit Notebook–Meaning, Structure, Contents, General Information, Current Information, Importance.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3,Auditing Techniques and Internal Audit Introduction	Test Check-Test Checking Vs Routing Checking, Test Check meaning, features, factors to be considered, when Test Checks can be used, advantages disadvantages precautions.	15	R.L. GUPTA	• Chalk • Board • Discussion • Examples
	Audit Sampling-Audit Sampling, Meaning, Purpose, Factors in determining SampleSize -Sampling Risk, Tolerable Error and Expected Error, Methods of Selecting,Sample Items,Evaluation of Sample Results,			
	Auditors Liability in Conducting Audit Based on SampleInternal Control-Meaning and Purpose, Review of Internal Control, Advantages, Auditors Duties, Review of Internal Control, Inherent Limitations of Internal Control, internal Control Samples for Sales and Debtors, Purchases and Creditors, Wages and Salaries.			
	Internal Checks Vs Internal Control, Internal Checks Vs Test ChecksInternal Audit-Meaning, Basic Principles of Establishing Internal Audit, Objectives, Evaluation of Internal Audit by Statutory Auditor, Usefulness of Internal Audit, Internal Audit Vs External Audit,, Internal Checks Vs Internal Audi			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 3: 15

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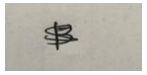
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4, New Areas of Auditing and Professional Ethics	New Areas of Auditing Introduction to Cost Audit, Human Resource Audit, Management Audit, Operational Audit, Forecast Audit, Social Audit, Tax Audit, Forensic Audit and Environmental (Green) Audit,	15	R.L. GUPTA	• Chalk • Board • Discussion • Examples
	Audit Committee. Audit in an EDP Environment-Introduction, General Approach toEDP based Audit and Special Techniques for Auditing in an EDP Environment.Professional Ethics and MisconductIntroduction			
	Meaning of Professional Ethics Meaning of Professional Misconduct, Schedules to the Chartered Accountants Act,1949 Relating to Professional Misconduct, Enquiry into Charges of Misconduct of Chartered Accountants			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 4: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VASANTI SHENOY DEPARTMENT: BIM CLASS:TYBIM . SEMESTER: VI

SUBJECT : COMMODITIES MARKET DERIVATIVES MONTH: DEC- FEB ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S: **The learners will be able to :**

To give knowledge to students about how to promote competitive, efficient, and transparent markets that help protect consumers from fraud and unscrupulous practices

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1.Introduction to Commodity Market • Emergence of Commodity Market • Dynamics of global commodity markets 2 Commodity Market in India • Commodity Exchanges in India • Role of Information in Commodity Markets • Linkages between equity markets and commodity markets • Commodity markets - Logistics and Warehousing	15	SHETH , VIPUL,MANAN PRAKASHAN	PPT, CHALK AND BOARD
	2.Commodity Exchanges • Function & Role • Trading & Clearing methods • Commodity futures • Commodity Specific Exchanges Vs Multi Commodity Exchanges 4 Strengthening commodity markets in India. • Role of Government • Role of Commodity Exchanges • Other Institutions • Training & development of Dealers	15		

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	Regulatory framework: forward market commission: Rules governing commodity derivatives exchange, rules governing intermediaries, investor grievances, arbitration rules – Essential commodity Act- vat – forward contract regulation Act.			
	3**. Commodity Derivatives** Definition, types of derivatives, products, participants and functions, Exchange traded vs OTC derivatives – How commodity derivatives differ from financial derivatives, warehousing, quantity of underlying asset, global commodity exchanges, commodity exchange in India, commodities permitted for trading, KABRA committee report, commodities specific issues, cropping and growth patterns, global domestic demand, supply dynamics, price trends, and factors that influences prices.	15		
	4. **Pricing and trading in commodities derivatives**. Investment assets vs consumption asset, the cost of carry model, pricing futures contract on investment commodities, pricing futures contract on consumption commodities, the futures basic , concept of speculation , hedging, arbitrage, Basic concepts such as margins, circuit filters, delivery norms, contracts specification, trading system, and entities in the trading system, trader workstation, order types and conditions, exposure limits, commodities to be traded, types of commodities, clearing , settlement and risk management	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:MANEESHA BHOSALE SUBJECT: Corporate Governance DEPARTMENT: Commerce (SFC)

CLASS: TYBIM SEMESTER:VI MONTH:Jan-feb ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I ,II & III Introduction to Corporate Governance, Genesis of Corporate Governance in India, Evolution of Corporate Governance	Definition & Conceptual Framework of Corporate Governance, Business Ethics - an,important dimension to Corporate Governance, Fair and Unfair Business Practices,Theoretical Basis of Corporate Governance, Mechanism-Corporate Governance, Systems, Indian Model of Governance, Good Corporate Governance, Obligations, Towards Society and Stakeholders. Theories underlying Corporate Governance (Stakeholders theory and Stewardship theory, Agency theory, Separation of Ownership and Control, Corporate Governance Mechanism: Process, Indian Model, OECD, and Emphasis on Corporate Governance, (Transparency Accountability and Empowerment).	15	Corporate Governance Reference book,Internet	Chalkboard method, discussion, debates.
	Introduction, Principles — Arthashastra and Good Governance in Ancient India, Protection of Interest of Customer and Investors, Historical Perspective of Corporate Governance and Issues in Corporate Governance.Values: Meaning, Types, Teaching from Scriptures Like Gita, Quran, Bible value systems in Business.	20		
	The Cadbury Committee-Code of best principles -Indian Experience of Corporate Governance — The C II Code- SEBI initiative ,The Kumar Mangalam Birla Committee Report, Corporate Governance in Globalized Economy — MNCs/TNCs and Business Ethics. Relationship between Business Ethics-Corporate Governance and Ethical Leadership; Kohlberg's Six Stages of Moral Development			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35

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TEACHING PLAN (UNIT PLAN)

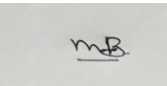
NAME OF THE STAFF:MANEESHA BHOSALE SUBJECT: Corporate Governance DEPARTMENT: Commerce (SFC)

CLASS: TYBIM SEMESTER:VI MONTH: March-April ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV & V Implementation of Corporate Governance ,Corporate Governance and Issues Related to Scams	Role of Board of Directors and Board Structure, Role of the Non- executive, Director, Role of Auditors, SEBI Growth of Corporate Governance. Role of Government, Corporate Governance in India. Accounting Standards and Accounting disclosures. Finance Reporting and Corporate Governance, Non Accounting Regulations in Corporate Governance, Corporate Governance & CSR, Family Owned Business Background, family businesses in India , Need for Professionalization and Transparency in Family Business.	15	Corporate Governance Reference book, Internet source.	Chalkboard method, discussion, debates.
	Corruption: Meaning, Causes, Effects. Frauds and scams in Banks, Insurance, Companies, Financial Institutions, Measures to Overcome Fraud and Corruption,Zero Tolerance of Corruption. MRTP Act and MRTP commission. Competition Act, Ethical Approach in IPR with respect to Designs, Patents and copyrights, Ethics and IT. Case study, future of corporate Governance.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25



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NAAC accredited "B" Grade, 2.69 CGPA TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA SINGH SUBJECT: International Financ

DEPARTMENT: Commerce (SFC) CLASS:TYBIM SEMESTER:VI

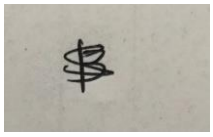
MONTH:January to March ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I Fundamentals of International Finance	Meaning and Scope of International Finance-Balance of Payment-Components- Deficit in Balance of Payment-Concept of Currency Convertibility International Monetary System- Gold Standard-Features-Bretton Wood System- Background and Features-Reasons for its Failure-Smithsonian Agreement-SDRs- European Monetary system Current Exchange Rate Systems – Fixed and Flexible Exchange rate- Merits Demerits- Types of Fixed Exchange Rate-Hard Pegs and Soft Pegs- Types of Flexible Exchange Rate- Managed and Free Float.	10	Internet,vipul Publication	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
Unit II Foreign Exchange Markets	Introduction- Market and Market Participants- Structure of Forex Markets-The Mechanics of Currency Trading-Types of Transactions and Settlement Dates-	10		

	Exchange Rate Quotations and Arbitrage(Geographical, Triangular and Interest Rate)- Short Date and Broken Date Forward Contracts- Borrowing and Investment Decisions-Determinants of Exchange Rate – Purchasing Power and Interest rate Parity Foreign Exchange Management in India-Retail and WholeSale Component of Indian Foreign Exchange Market- Role of FEDAI- FEMA and Regulatory framework-Dealing Room Operations			
Unit- III Currency Futures	Introduction: Currency Futures-Future Contract-Futures Forward Contract- Currency Futures Quotes-How to Read Currency Futures Quotes-Market Operations-Clearing House and Clearing Margins- Hedging with Currency Futures and Contracts	5		
Unit-IV Currency Options and Swaps	Introduction-Options-Market Structure-Currency Option Quotes-Currency Option Pricing-Fischer Black's Option Pricing Model-Currency Call Options-Currency Put Options-Hedging Currency Positions with Foreign Currency Options	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

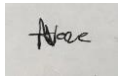
NAME OF THE STAFF: Amol Vaze/ Mezbin Lalani DEPARTMENT: Commerce CLASS: T.Y.BCOM(investment management)

SEMESTER: V **(PROJECT MANAGEMENT)** MONTH: January to April ACADEMIC YEAR 2019-20

LEARNING OBJECTIVE/S: to understand the basics of project management
The learners will be able to : understand the need and the requirements of project management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Basics of project management Project selection and evaluation.				
	Introduction, need, knowledge areas, project life cycle, project manager, philosophy.	30	Inroduction of Project management Mcgraw hill	Google meet, Google classroom, power point presentation, pdf file, etc
	Identification process, feasibility studies, break even point, need of project planning, WBS, organisational structure, project manager and line manager, leadership styles, team management, change management	30		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:60



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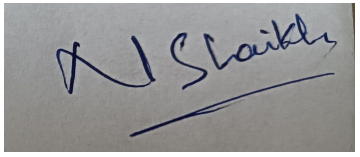
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAZIA SAJID SHAIKH. DEPARTMENT: COMMERCE (Banking & Insurance)._ CLASS: TYBBI SEMESTER: VI

MONTH: NOV TO FEB. ACADEMIC YEAR: 2018-19. SUB: HUMAN RESOURCE MANAGEMENT.

LEARNING OBJECTIVE/S:
The learners will be able to : Understand HR Planning and Recruitment , Training and Development, Management Development Program, Current Trends in Compensation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 3. HR PLANNING AND RECRUITMENT.	***HR Planning:** Meaning, Need and Importance, Preparing Manpower inventory, Promotion and Transfer. ***Recruitment:** Strategic Approach to Recruitment, Recruitment Sources, Selection Procedure.	**12**	**Introduction to HRM: John Stredwick**	**Chalk and Duster.**
MODULE 4. TRAINING AND DEVELOPMENT.	***Employee Training and Development:** Nature and Process of Training, Training Methods: On- the job and off the job. ***Management Development Program:** Performance Appraisal: Meaning, Advantages and Limitations, Methods of PA.	**15**		
MODULE 5.		**15**		



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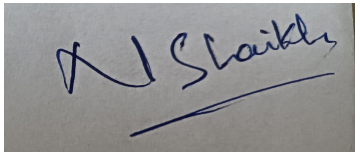
COMPENSATION.	***Compensation:** Need and Importance, Current Trends, Team Based incentives, Pension Schemes with ref. to Banking and Insurance, Fringe benefits perquisites, Allowances and Non monetary benefits. ***Voluntary Retirement Schemes:** Meaning, Types, Needs, Effects with ref. Banking and Insurance.			



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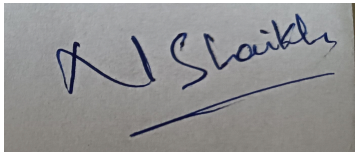
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____42_____



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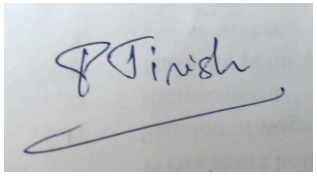
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: COMMERCE CLASS: TY BCOM (BANKING AND INSURANCE) (CENTRAL BANKING) SEMESTER: VI MONTH: NOV TO MARCH ACADEMIC YEAR: 2018 -2019

LEARNING OBJECTIVE/S:
The learners will be able to understand the supervisory role of RBI, its regulations, Federal Reserve System, International Financial Institutions, E-banking, impact of IT, Globalization and Central Banks

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 SUPERVISORY ROLE OF RBI UNIT 4 CENTRAL BANKING IN OTHER COUNTRIES	UNIT 3 – NEED FOR REGULATION SUPERVISION, BANKING REGULATION ACT 1949, RBI – ONSITE AN OFFSITE MONITORING AND SURVEILLANCE, COMPUTERISED OFF SITE MONITORING AND SURVEILLANCE (OSMOS), RBI AND FINANCIAL SYSTEM, INTRODUCTION FUNCTIONS CHARACTERSITICS OF FINACIAL SYSTEM, ROLE OF RBI IN REGULATING FINANCIAL SYSTEM AND FINANCIAL SECTOR REFORMS	12	CENTRAL BANKING – ICFAI PRESS 2008	LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS
UNIT 5	UNIT 4 FEDERAL RESERVE SYSTEM – BANK OF ENGLAND, THE EUROPEAN CENTRAL BANKING, BANK OF JAPAN, PEOPLE'S BANK OF CHINA.	12	CENTRAL BANKING – MH DEKOCK	LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS



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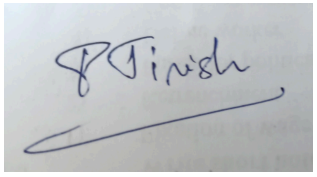
CENTRAL BANKING IN CYBER WORLD	INTERCONNECTIVITY OF CENTRAL BANKS WITH OTHER INTERNATIONAL FINANCIAL INSTITUTIONS, ADB, IMF, WORLD BANK & BIS			
	UNIT 5 - E-BANKING, E-MONEY, E-PAYMENTS, RISKS IN NEW IT ERA, IMPACT OF IT, GLOBALIZATION AND CENTRAL BANKS	12	CENTRAL BANKING – MH DEKOCK	LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 36



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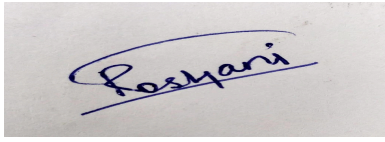
CV B
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Roshani Nagar DEPARTMENT: Commerce (Banking & Insurance) CLASS: TYBBI (A,B)

SEMESTER: VI MONTH:Dec-April ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the concept of effective learning, leadership skills and self- improvement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Supervisory Role of RBI **4 Central Bank in other Countries**	Regulation and Supervision: Need for Regulation and Supervision, Banking Regulation Act, 1949, Banking Regulation and Supervision, Functions of the Department of Supervisory, Regulations Review Authority, Unified Regulator v/s Multiple Regulators. RBI – On-site Inspection and Off-site Monitoring and Surveillance: The Core Principles for Effective Supervision – On-site Examination – Off-site Surveillance	08	Vipul Prakashan	Chalkboard



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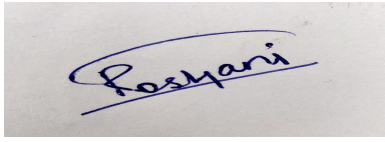
	– On-site Inspection and Off-site Monitoring in India – Off-site Monitoring in Different Countries – Computerized Off-site Monitoring and Surveillance (OSMOS). RBI and Financial System, Introduction, Functions,			
	Characteristics of Financial System, Role of RBI in Regulating Financial System and Financial Sector Reforms. Federal Reserve System – Bank of England – The European Central Banking, Bank of Japan, Peoples Bank of China Interconnectivity of Central Banks with Other International Financial Institutions, ADB, IMF, World Bank, and BIS,(Objectives, Role and Functions)	08	Vipul Prakashan	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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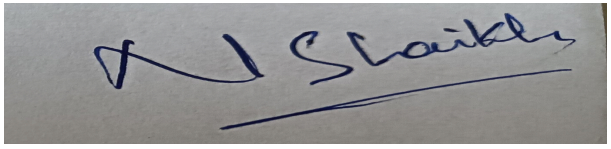
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAZIA SAJID SHAIKH DEPARTMENT: COMMERCE (Banking & Insurance). CLASS: T.Y.BBI SEMESTER: VI

MONTH: July -September ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Ethics in Business, Management and Growth of business.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1, Unit 3 & Unit 4	Ch. 1 – Introduction to Management – Meaning definition, nature, role, function of levels of mgmt., 6Ms of mgmt.,	15		Chalk and Duster Method
	Mgmt. as an Art, Science and Profession, mgmt. Of banking and Insurance. Ch. 2- Tradition and contemporary Management - distinguish between traditional vs contemporary, TQM, Contribution of contemporary writer- Henry fayol, F. W. Taylor, Peter Drucker, C.K prahlad, Vijay Govinrajan. CH 5 – Organisation Structure – I – Meaning, Definition, Steps, Types, Departmentation, bases of Departmentation, centralisation – Meaning advantages and disadvantages, Formal organisationa vs Informal organization	15	The Principal of Scientific Management (Frederick Taylor)	



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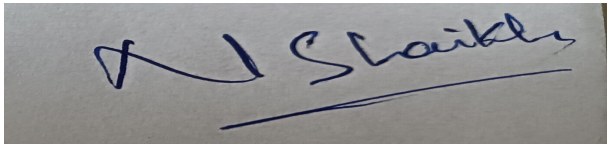
	Ch 7 Business leaders, J. R. D. Tata, Ratan Tata, Mr. DhirubaivAmbani, leaders in banking and Insurance Ch 8. Indian leaders K. V. Kamath, Deepak Parekh, Chanda Kochar., Hinduja, Godrej, Narayan Murthy, Governor of RBI Ch. 9 International leaders			
	President of world bank President of Asian Development Bank President of Federal Reserve President of International Monetary Fund.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __ANKITA ARUN RAUT_____ DEPARTMENT: ___COMMERCE_(Banking & Insurance)_____

CLASS: _TYBBI_____ SEMESTER: ___VI_____ MONTH: ___DEC-APL_____ ACADEMIC YEAR: ___2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : Learn Portfolio management, Economic analysis, industrial analysis, company analysis, and portfolio revision and portfolio evaluation etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	PORTFOLIO MGT: introduction, process & types of investors, portfolio mngt, Portfolio analysis, portfolio selection.	12	Vipul	CHALK & DUSTER
2	FUNDAMENTAL ANALYSIS: Economic Analysis , industrial Analysis, company Analysis – analysis of fin st (practical Q on ratio Analy.) Assessment of Risk (fin, operating & combine leverages)	12	Vipul	CHALK & DUSTER
3	PORTFOLIO MGT VALUATION: Portfolio Revision: meaning need, constraints & strategies. Portfolio Evaluation – meaning, needs, measuring rturns, etc	6	Vipul	CHALK & DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____30_____

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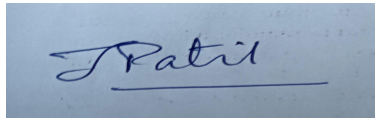
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE (Banking & Insurance) CLASS: TYBBI

SEMESTER: **VI** MONTH: Nov,2018 to Feb,2019 ACADEMIC YEAR :2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to learn Meaning, Features, objectives of investments , Portfolio management & analysis ,its need . Calculation of Yield to Maturity. Fundamentals of CAPM.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Security analysis & Portfolio Management	1] **Portfolio management –An introduction & process**-Investment, Meaning, Features, Objectives, Investment v/s Speculation, Investments v/s Gambling, Types of Investors. Portfolio Management-Meaning, Evolution, Phrases, Role of portfolio Managers, Advantages etc. Investment Environment in India & factors conducive for investment in India. Portfolio analysis –Meaning, Components, Calculation of Expected Return & Risk, Co-variance, Risk – Return trade off.	12	----Vipul prakashan	Chalk & Duster



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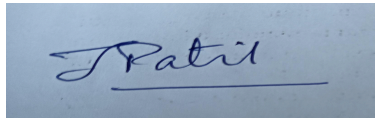
	Portfolio selection – Meaning, Feasible set of portfolio ,Efficient set of portfolio, Markowitz Model, Its limitations, Measuring security returns & portfolio return .			
	2] **Portfolio management- Valuation** Portfolio Revision- Meaning, Need, constraints & strategies. Portfolio Evaluation – Meaning ,Need, Measuring Return[Sharpe Treynor and Jensen Ratio] & Decomposition of performance. Bond Valuation- Meaning, Measuring Bond returns, Yield to Maturity, Yield to call, Bond pricing Theorems, Bond risk & Bond duration	12	----Vipul prakashan	Chalk & Duster
	3]**CAPM** – Assumptions of CAPM ,Pricing of securities with CAPM	06		Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

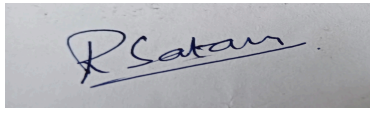
NAME OF THE STAFF: Rohan D. Satam

DEPARTMENT: Commerce (Banking & Insurance) CLASS: TYBBI SEMESTER:VI MONTH: December 2018

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: Learning about Security Analysis and Portfolio Management
The learners will be able to : Students will be able to learn theory and practical of Security Analysis and Portfolio Management

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Security Analysis and Portfolio Management	1. **Technical Analysis** Dow Theory Meaning and Principles of Technical Analysis, Price Chart, Line Chart, Bar Chart, Japanese Candlestick Chart, Trends and Trend Reversals, Chart Patterns, Support and Resistance, Reversal Patterns, Continuation Patterns and Elliot Wave Theory Mathematical Indicators – Calculation of Moving Averages (Simple and Exponential Moving Average), Oscillators and Relative Strength Index Market Indicators Fundamental Analysis V/s Technical Analysis	12	Vipul and Seth publication	Chalk - Board.
	2. **Efficient Market Theory & CAPM**	12	Vipul and Seth publication	Chalk - Board and Websites



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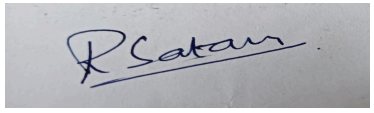
	🎬 Random Walk Theory The Efficient Market Hypothesis Forms of Market Efficiency Competitive Market Hypothesis CAPM – Fundamental Notions of Portfolio Theory, Assumption of CAPM, Efficient Frontier with Riskless Lending and Borrowing, Capital Market Line, Security Market Line and Pricing of Securities with CAPM. Arbitrage Pricing Theory (APT) – The Return Generating Model, Factors Affecting Stock Return, Expected Return on Stock, APT V/s CAPM.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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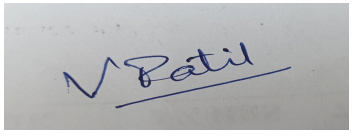
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VAIKHARI PATIL DEPARTMENT: COMMERCE (Banking & Insurance)

CLASS: TYBBI (Banking and Insurance) SEMESTER: IV MONTH: Nov 2018- March 2019 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: Learn concepts of **Turnaround Management**

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, II, III, IV	Meaning, Definition, Features, Importance, Symptoms, Types of Business Organization. Different approaches for Growth and Survival. Internal Strategies, External Strategies, Survival Strategies	30*(2 Divisions)	Vipul Prakashan	Chalk and Board
	Meaning and Internal /External Reasons of Industrial Sickness Symptoms of Industrial Sickness, Measures to Overcome Sickness by Government and Stakeholders, Role of BIFR in Sick Industries			
	Turnaround – Meaning, Definition, Indicators of Successful Turnaround TQM and Restructuring. Selling of a sick unit, BPR Meaning, Definition, Elements, Need, Implications - Approaches (Reengineering Team, BPR Leader, Process Owner, Kaizen, Flow Chart, 5S principles, Process Mapping)			



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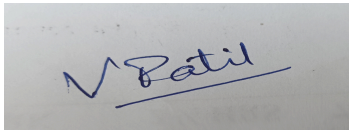
	Features, Advantages, Disadvantages, Types and Present Status of: Outsourcing, Networking, Franchising, Free lancing, Self-Financing, Start up			
	Outfitting the Management Team, Personal Characteristic, Focusing on Present Operations, Focus on Needs in Turnarounds, Styles of Decision Making in the Turnaround Process, Organizational Change. Quality in the Managerial Process, Dilemma of Management, Turnaround Management as a Skill.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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NAME OF THE STAFF Jinal Chohan_____

DEPARTMENT: _Commerce (Banking and Insurance)_____

SEMESTER: _____1_____

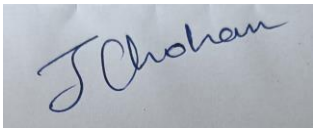
MONTH: ___june to december___

ACADEMIC YEAR: _____2018-19____

LEARNING OBJECTIVE/S:
The learners will be able to : _learn regarding the various banking and insurance function.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3 Management, Regulation and Development	Risk management within the organizations of Banks and Insurance companies	4	Vipul Prakashan	Blackboard and Chalk
	• Asset - Liability Management in Banking and Insurance •	4	Vipul Prakashan	Blackboard and Chalk
	Organisational structure and management	4	Vipul Prakashan	Blackboard and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___12



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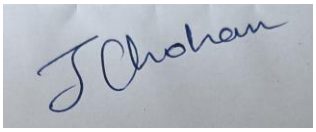
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4 Regulatory and Developmental Framework of Banking & Insurance	• Banking companies and RBI Acts and legal framework governing the insurance	4	Vipul Prakashan	Blackboard and Chalk
	. • Developmental Activities of RBI and IRDA	4	Vipul Prakashan	Blackboard and Chalk
	• Mechanism of supervision	4	Vipul Prakashan	Blackboard and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___12



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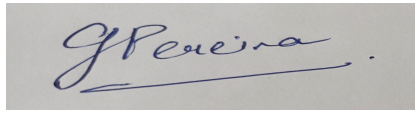
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Glorita Pereira DEPARTMENT: Commerce (Banking & Insurance)
CLASS: FYB.B.I. SEMESTER: I MONTH: June-Oct ACADEMIC YEAR: 2018-19
LEARNING OBJECTIVE/S:

The learners will be able to:
Build a familiarity with the basic tools of consumer and producer theory in an economic context

PAPER, UNIT, TITLE	Subtopics	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics –I Unit 1 Introduction Unit 2 Demand Analysis Unit 3 Supply and production decisions	Scope and importance of business economics The basics of market demand	10	Salvatore, D.:Managerial Economics in a global economy	Chalk and Talk Discussion Case studies
	Demand function Demand estimation and forecasting Subtopics	10	Mehta, P.L.: ManagerialEconomics – Analysis,Problem and Cases	Chalk and talk Discussion
	Production function	7		Chalk and talk Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Gauri Khadapkar DEPARTMENT: Commerce (Banking & Insurance) CLASS: FYBBI A and B

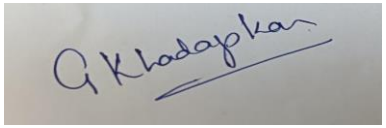
SEMESTER : SEM I MONTH: NOV AND DEC ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : To focus on the importanat aspects of preamble and study about the indian constitutions.

To study about the political process in India perspective.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Indian society	Philosophy of the Constitution as set out in the Preamble; The structure of the Constitution-the Preamble, Main Body and Schedules;	3	Rashmi , deepa and reshma Parab	Chalk and board method
4. Indian Constitution	Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution.4	3		Chalk and board method
	The party system in Indian politics; Local self-government in urban and rural areas.	3		Chalk and board method
5. Significant Aspects of Political Process	73rd and 74th Amendments and their implications for inclusive politics; Role and significance of women in politics	3		Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14



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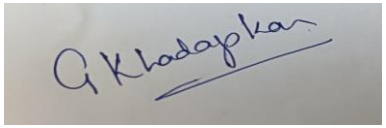

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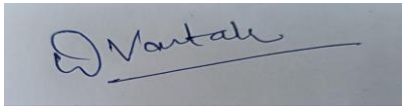
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPASHREE PARAG VARTAK Department: Commerce (Banking &Insurance) Subject: MATHEMATICS CLASS: FYBBI SEMESTER: I MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concept of Ratio, Proportion, Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation. Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS II UNIT V PROBABILITY PROBABILITY-DISTRIBUTION DECISION-THEORY	Concept of Probability Venn diagrams	1	Basic Statistics by Agrawal	BLACKBOARD CHALK AND DUSTER
	Rules of Probability conditional and unconditional probability	2		Explanation, Discussion, Problem solving assignments
	Bayes' Theorem and sums based on this theorem	2		
	Discrete and continuous variable. Expected value of variable	2		
	Decision Theory Normal Distribution	3		



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10_____

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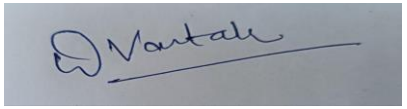

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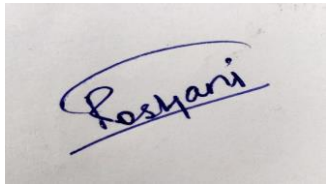
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.Roshani Nagar DEPARTMENT: COMMERCE(Banking and Insurance) CLASS: FYBBI(ENVIRONMENT AND MANAGEMENT OF FINACIAL SERVICES)

SEMESTER: I MONTH: SEPTEMBER TO DECEMBER ACADEMIC YEAR: 18-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand how Indian financial services and its management go hand in hand

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1and 2 INRODUCTION TO FINANCIAL SYSTEM	Chapter 1: Financial system Institutional set up, marketing structure, over view of different kinds of financial services, meaning, definition and scope of banking and insurance Chapter 2: banking and insurance What is banking, functions, advantages, types of banks, insurance, its types	06	Indian Financial System Pearson Paperback	Chalk and board method



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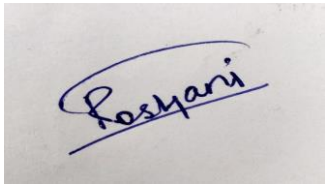
UNIT 4: REGULATORY AND DEVELOPMENT FRAME WORK OF BANKING AND INSURANCE	Chapter 8: banking companies and RBI acts and legal frame work governing the insurance, development activities of RBI and IRDA, mechanism of supervision and regulation, prudential norms	06	Indian Financial System Pearson Paperback	Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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NAME OF THE STAFF Jinal Chohan_____

DEPARTMENT: _commerce (banking & Insurance)____

SEMESTER: _____1_____

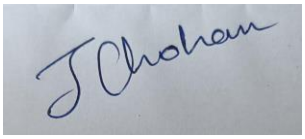
MONTH: ___june to december___

ACADEMIC YEAR: _____2018-19____

LEARNING OBJECTIVE/S:
The learners will be able to : _learn regarding the society and various aspects of societies, various disparities happening in the society.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Concept of Disparity-1	Understand the concept of disparity as arising out of stratification and inequality;.	4	Vipul Prakashan	Blackboard and Chalk
	Explore the disparities arising out of gender with special reference to violence against women, female foeticide (declining sex ratio), and portrayal of women in media;	4	Vipul Prakashan	Blackboard and Chalk
	Appreciate the inequalities faced by people with disabilities and understand the issues of people with physical and mental disabilities	4	Vipul Prakashan	Blackboard and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___12



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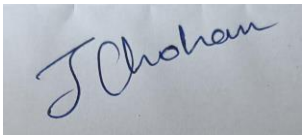
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Concept of Disparity-2	Examine inequalities manifested due to the caste system and inter-group conflicts arising thereof	4	Vipul Prakashan	Blackboard and Chalk
	Understand inter-group conflicts arising out of communalism;	4	Vipul Prakashan	Blackboard and Chalk
	Examine the causes and effects of conflicts arising out of regionalism and linguistic differences	4	Vipul Prakashan	Blackboard and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___12



Signature of Teacher

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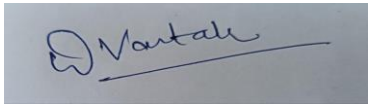
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPASHREE PARAG VARTAK Department: Commerce (Banking &Insurance) Subject: MATHEMATICS CLASS: FYBBI SEMESTER: I MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concept of Ratio, Proportion, Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation. Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS II UNIT VI INDEX NUMBERS	Concept and usage of Index Numbers. Construction of Index Numbers.	1	Basic Statistics by Agrawal	BLACKBOARD CHALK AND DUSTER
	Aggregate and Relative Method of constructing Index Numbers.	2		Explanation, Discussion, Problem solving assignments
	Chain base index numbers. Test of consistency: time reversal factor reversal and circular test	1		
	Quantity and value index numbers for agricultural, industrial production, retail prices, consumer price index numbers for security prices, etc.	2		



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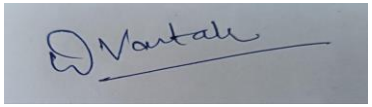
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __06_____
1

1



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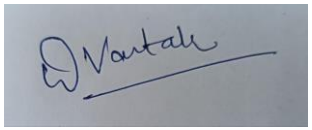
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPASHREE PARAG VARTAK Department: Commerce (Banking &Insurance) Subject: MATHEMATICS CLASS: FYBBI SEMESTER: I MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concept of Ratio, Proportion, Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation. Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHODS II UNIT IV CO-VARIANCE CO-RELATION REGRESSION	Meaning, Definition and Application of Covariance	1	Basic Statistics by Agrawal	BLACKBOARD CHALK AND DUSTER
	Concept of correlation, Rank correlation	2		Explanation, Discussion, Problem solving assignments
	Regression concept, Relationship with correlation	3		
	Assumptions in Simple Regression, Fitting of straight Line	1		
	Method of Least Square, Construction of Characteristic Line / Estimation Line	3		



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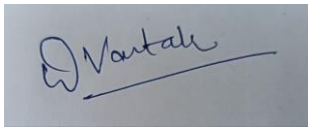
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10_____



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TEACHING PLAN (UNIT PLAN)

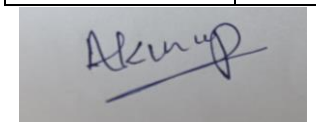
NAME OF THE STAFF: Ambujam Kurup_____DEPARTMENT: COMMERCE (Banking & Insurance)_____

CLASS __F.Y.BBI SEMESTER: I_____MONTH: July to October ACADEMIC YEAR: __2018-19_____

LEARNING OBJECTIVE/S: The learners will able to understand the management process
The learners will be able to: to understand the functions that are required in banking and insurance organization

The learners will be able to: to understand the organizational structure that is been followed in banking and insurance sector

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1, Unit 3 & Unit 4	Ch. 1 – Introduction to Management – Meaning definition, nature, role, function of levels of mgmt., 6Ms of mgmt.,	15		Chalk and Duster Method
	Mgmt. as an Art, Science and Profession, mgmt. Of banking and Insurance. Ch. 2- Tradition and contemporary Management - distinguish between traditional vs contemporary, TQM, Contribution of contemporary writer- Henry fayol, F. W. Taylor, Peter Drucker, C.K prahlad, Vijay Govinrajan. CH 5 – Organisation Structure – I – Meaning, Definition, Steps, Types, Departmentation, bases of Departmentation, centralisation – Meaning advantages and disadvantages, Formal organisationa	15	The Principal of Scientific Management (Frederick Taylor)	



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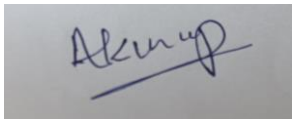
	vs Informal organization Ch 7 Business leaders, J. R. D. Tata, Ratan Tata, Mr. DhirubaivAmbani, leaders in banking and Insurance Ch 8. Indian leaders K. V. Kamath, Deepak Parekh, Chanda Kochar., Hinduja, Godrej, Narayan Murthy, Governor of RBI Ch. 9 International leaders			
	President of world bank President of Asian Development Bank President of Federal Reserve President of International Monetary Fund.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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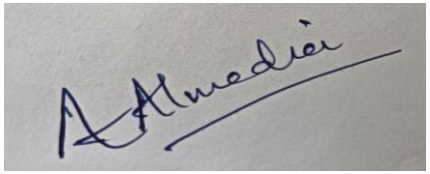
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita Almeida DEPARTMENT: Commerce (Banking & Insurance) CLASS: TYBBI (A & B) SEMESTER: I

MONTH:August -November ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand concept of effective listening, formal and informal communication, leadership skills and self improvement.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Introduction to Accounting	Meaning, scope, objectives, branches of accounting, Accounting concepts, double entry system, classification of accounts, rules of debit and credit, Writing of journal entries and ledger, subdivision of journal and trial balance	03	Vipul prakashan	Chalkboard
2.Classification of Income & Expenses And	Characteristics of capital expenditure, revenue expenditure, capital receipt and revenue receipt.	03	Vipul Prakashan	Chalkboard



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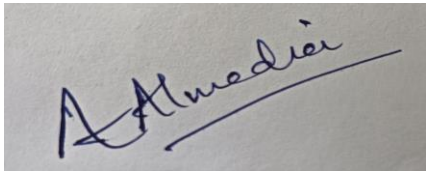
Accounting Standards	Practical Sums -(22)			
	Bank Reconciliation statement and errors and their rectification. Practical Qustz -(08)	06	Vipul Prakashan	Chalkboard
	AS- 1,2,9,10. Short note- IFRS	02	Vipul Prakashan	Chalkboard
3. Issue of Shares, Stock Valuation, And Hire Purchase	Introduction to issue of shares Stock valuation (FIFO & Weighted Average Method) Practical Problems-07 Hire Purchase- calculation of interest, journal entry, Practical problems-(07)	02 07 07	Vipul Prakashan Vipul Prakashan	Chalkboard Chalkboard
4.Final Accounts	Trading account, Profit and Loss account and balance sheet Practical Sums -07 Introduction to accounts of non- profit organisation	07 02	Vipul Prakashan	Chalkboard Chalkboard



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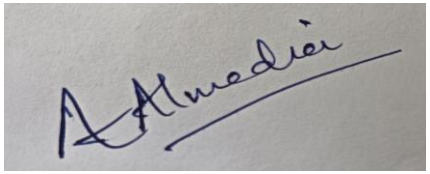
			Vipul Prakashan Vipul Prakashan	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 39



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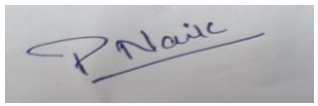
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: : __Pallavi G.Naik_____DEPARTMENT: Commerce (Banking and Insurance) CLASS: ____FYBBI _____

SEMESTER: ___ 1_____ MONTH: ___JUNE TO NOVEMBER_____ ACADEMIC YEAR: 2018-19 _____

LEARNING OBJECTIVE/S:
The learners will be able to : ____Gets a knowledge about economical activities._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FYBBI	Ch.8 cost concepts, accounting cost, economic cost Cost relationship,short run and long run LAC, Learning curve, ch 9 break even analysis Ch 10 Perfect competition short run and long run equilibrium of competitive firm and of industry Ch 11 Monopoly short run and long run equilibrium of a firm under Monopoly Ch 12 Monopolistic competition equilibrium of a firm under Monopolistic competition debate over role of advertising Ch 13 Oligopoly.attributes of oligopoly collusive and non collusive market price rigidity cartels and price leadership	15 10	Vipul prakashan	Blackboard and chalk



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	models Ch 14 Pricing Methods Cost oriented full cost marginal cost pricing mark up pricing discriminating pricing transfer pricing			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____20___
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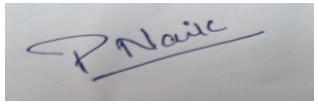
[1]



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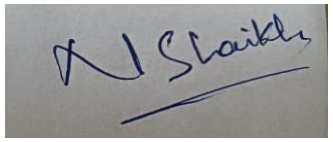
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NAZIA SAJID SHAIKH DEPARTMENT: COMMERCE (Banking & Insurance) CLASS: F.Y.BBI SEMESTER: I

MONTH: July -September ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Ethics in Business, Management and Growth of business.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1, Unit 3 & Unit 4	Ch. 1 – Introduction to Management – Meaning definition, nature, role, function of levels of mgmt., 6Ms of mgmt.,	15		Chalk and Duster Method
	Mgmt. as an Art, Science and Profession, mgmt. Of banking and Insurance. Ch. 2- Tradition and contemporary Management - distinguish between traditional vs contemporary, TQM, Contribution of contemporary writer- Henry fayol, F. W. Taylor, Peter Drucker, C.K prahlad, Vijay Govinrajan. CH 5 – Organisation Structure – I – Meaning, Definition, Steps, Types, Departmentation, bases of Departmentation, centralisation – Meaning advantages and disadvantages, Formal organisationa	15	The Principal of Scientific Management (Frederick Taylor)	



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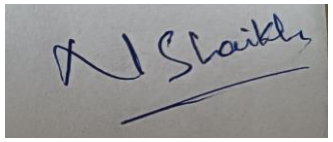
	vs Informal organization Ch 7 Business leaders, J. R. D. Tata, Ratan Tata, Mr. DhirubaivAmbani, leaders in banking and Insurance Ch 8. Indian leaders K. V. Kamath, Deepak Parekh, Chanda Kochar., Hinduja, Godrej, Narayan Murthy, Governor of RBI Ch. 9 International leaders			
	President of world bank President of Asian Development Bank President of Federal Reserve President of International Monetary Fund.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: **Commerce (Banking & Insurance)**

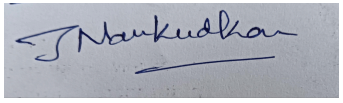
CLASS: **TYBBI A&B** SEMESTER**: V** MONTH: **June top Sep** ACADEMIC YEAR: **2018 -19**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Prepare Final A/C of Banking Company using Banking Regulation Act provisions

2) Introduction to IFRS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Reporting & Analysis(Corporate Banking & Insurance)	Unit 1 : Final Accounts of Banking Company	6		Chalk Board
	1) Legal Provisions in Banking Regulation Act, 1949 relating to Accounts. 2) Statutory Reserves including Cash Reserve and Statutory Liquidity Ratio. 3) Bills Purchase and Discounted, Rebate on Bill Discounted. 4) Final Accounts in Prescribed Form. 5) Non – performing Assets and Income from Non – performing Assets.			



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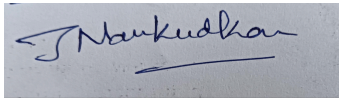
	6) Classification of Advances: Standard, Sub – standard, Doubtful and Provisioning Requirement.			
	Unit 2 : Preparation of Final Accounts of Companies	6		Chalk Board
	Relevant Provisions of Companies Act related to Preparation of Final Account (excluding cash flow statement) Preparation of Financial Statements as per Companies Act. (excluding cash flow statement) AS 1 in Relation to Final Accounts of Companies (Disclosure of Accounting Policies)			
	Unit 5 : Introduction to IFRS	4		Lecture method, Class discussion
	1) IFRS 1- First Time Adoption of International Financial Reporting Standards 2) IFRS 2- Share Based Payment Objective, Scope, Definitions, Recognition			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __16_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. SEHAL DESHMUKH
DEPARTMENT: Commerce (Banking & Insurance) CLASS: T.Y.B.B.I
SEMESTER: V MONTH: OCT TO DEC ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concepts of Auditing and different auditing techniques i.e: Vouching and Verification etc.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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III- Auditing techniques and Internal Audit Introduction	**Internal control:** meaning and purposes, review of internal control,advantages, auditors duties, inherent limitations of internal control, internal control samples for sales and debtors,purchases and creditors,wages and salaries.internal checks Vs internal control,internal checks v/s test checks	08		
	Internal Audit: meaning, basic principles of establishing internal Audit, objectives,evaluation of internal audit by statutory auditor,usefulness of internal audit,internal Audit V/S external Audit,internal checks V/S internal Audit		TextBooks and Reference material from Internet	PPT, WORD
IV				

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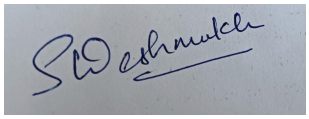

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V	**Audit of Income:** Cash Sales , sale on approval, consignment sales , sales return recovery bad debts written off,rental receipts, interest and dividends received,royalties received. **Audit of Expenditure: Purchases, purchases return, salaries and wages,rent, insurance premium,telephone expenses,postage and couriers,petty cash expenses,travelling commission,advertisement,interest expenses**	15	TextBooks and Reference material from InterneT	PPT, WORD
	Audit of Assets Book debts/debtors,stocks: **Auditors general duties,patterns,dies and loose tool,spare parts,empties and containers,quoted investments and unquoted investments,trademarks copyrights,patents,know-how,plant and machinery,land and building,furniture and fixture** **Audit of liabilities: outstanding expenses,bills payable,secured loans,unsecured loans,contingent liabilities.**	15	Text Books and Reference material from Internet	PPT, WORD

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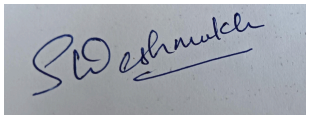

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___38_____

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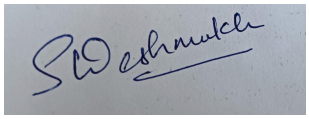

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TEACHING PLAN (UNIT PLAN)

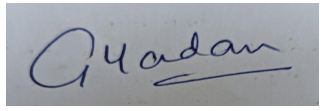
NAME OF THE STAFF: GAURI YADAV SUBJECT : FINANCIAL REPORTING & ANALYSIS

DEPARTMENT: COMMERCE (Banking & Insurance) CLASS: TYBBI SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 FINAL ACCOUNTS OF BANKING COMPANY	Legal provision in Banking Regulation Act, 1949 relating to Accounts, Statutory reserves including Cash Reserve and Statutory Liquidity Ratio.	2	FINANCIAL ACCOUNTING BY R L GUPTA	• Chalk • Board • Examples
	Bill purchase and discounted, rebate of bill discounted, Non–performing assets and Income from non–performing assets.	4		
	Classification of Advances, standard, sub–standard, doubtful and provisioning requirement.	2		
	Final Accounts in prescribed form	1		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

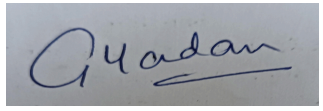
NAME OF THE STAFF: GAURI YADAV SUBJECT: FINANCIAL REPORTING & ANALYSIS DEPARTMENT: COMMERCE (Banking & Insurance) CLASS: TYBBI SEMESTER: V MONTH: JULY, AUGUST ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 FINAL ACCOUNTS OF INSURANCE COMPANY	Preparation and Presentation of Corporate Final Accounts for Insurance Companies	3	FINANCIAL ACCOUNTING BY R L GUPTA	• Chalk • Board • Discussion • Examples
	Final Accounts in accordance with Insurance Legislation	1		
	Study of Accounting Policies from Annual Reports of Listed Insurance Companies	2		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 12



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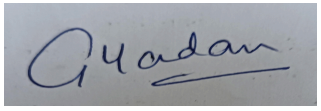

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Nidhi Rai DEPARTMENT: COMMERCE (Banking & Insurance)

CLASS T.Y.BBI SEMESTER: V MONTH :July to october ACADEMIC YEAR: 2018-19

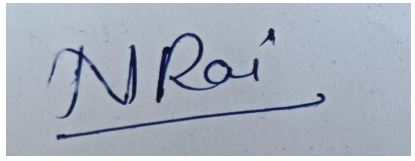
LEARNING OBJECTIVES:-
The learners will be able to: to understand the financial services and its importance.

The learners will be able to: to understand the securitization of debts and its benefits available to banks and its customer.

The learners will be able to: to understand the merchant banking and commercial banking services available in India.

The learners will be able to: to understand the difference between pledge, hypothecation and mortgage and its uses for the purpose of banking transactions.

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial service management – Unit I, III, and V	**Unit I:- Introduction to Financial Services** **Financial Services** Meaning - Classification - Scope - Fund Based Activities - Non-Fund based Activities -Morden Activities - Sources of Revenue - Need for Financial innovation - w Financial Products and Services Innovative Financial instruments - Challenges Facing the Financial Sector	12	Text Book Internet	Chalk and Blackboard system



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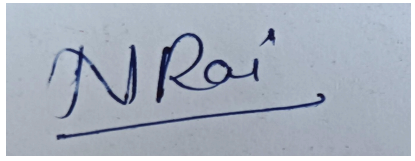
	<u>Merchant Banking</u>: Definition - Origin - Merchant Banking in India - Merchant Banks and Commercial Banks - Services of Merchant Banks - Qualities of Merchant Bankers in Market Making Process - Progress of Merchant Banking in India - Problems - Scope of Merchant Banking in India.			
	Unit III:- Securitisation of Debts and Derivatives **<u>Securitisation of Debt</u>** Meaning and Definition of Securitization - Securitization v/s Factoring - Modus Operandi - Role of Merchant Bankers - Role of other Parties - Securitization Structure - Securitisable Assets, Benefits of Securitization - Conditions for successful Securitization - Securitization Abroad - Securitization in India - Reasons for Non popularity of Securitization - Future Prospects of Securitization. **<u>Derivatives:</u>**	12	**Text book**	Chalk and Blackboard system



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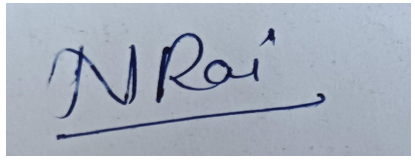
	Meaning - Types of Financial Derivatives - Options - Futures Forwards - Swaps - Futures and Options Trading System - Clearing Entities and their Role.			
	Unit V – Depositor and pledge **<u>Pledge and Hypothecation:</u>** Pledge and Hypothecation - Procedure for Pledge / Hypothecation- Procedure of Confirmation of Creation of Pledge / Hypothecation by Pledgee - Closure of Pledge / Hypothecation by Pledgor - Invocation of Pledge by Pledgee.	6	**Text book**	Chalk and Blackboard system

TOTAL NUMBER OF LECTURES ALLOCATED: <u>30</u>



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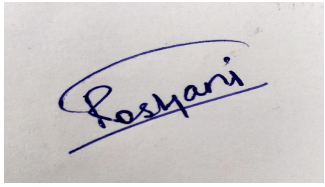
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Roshani Nagar DEPARTMENT: COMMERCE (Banking & Insurance) CLASS T.Y.BBI SEMESTER: V MONTH :July to december ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : learn regarding the different financial services in detail.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
TYBBI FSM SEM 5	2. Mutual funds and factoring and forfeiting Mutual funds - introduction, structure, classification of mutual funds , AMFI objectives, advantages and disadvantage of mutual funds , NAV calculation and pricing of mutual funds, mutual funds abroad , mutual funds in India Factoring and forfeiting- Meaning, terms and conditions, modus operandi,types , cost , factoring vs forfeiting, factoring in India , international factoring,working , benefits, edi factoring	6	Vipul Prakashan	Chalk and board method
	4. Housing finance and consumer finance	7	Vipul Prakashan	Chalk and board method



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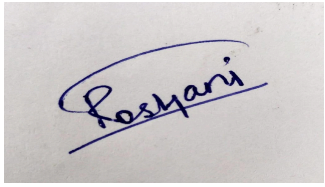
	Housing Finance- introduction, housing finance industry, housing finance policy, sources of funds , market for housing finance in India,growth finance , housing finance institutions, national housing bank Consumer finance - introduction, sources ,types consumer finance, mechanics , terms,pricing, marketing, consumer credit			
	1. Depositories and pledge Depositories- overview, key features , Depository,bank analogy ,legal framework, eligibility criteria, agreement, rights and obligations, record to be maintained by depositories	3	Vipul Prakashan	Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____16_



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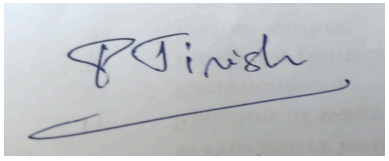
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: COMMERCE (Banking & Insurance) CLASS: TYBBI (BANKING AND INSURANCE) (IBF) SEMESTER: V MONTH: JUNE TO OCT ACADEMIC YEAR: 2018 -2019

LEARNING OBJECTIVE/S: The learners will be able to understand fundamentals of international finance, international capital markets, foreign exchange markets concepts features and international banking operations.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Fundamentals Of International Finance	UNIT 1 - Meaning and Scope of International Finance, Balance of Payment, Components, Deficit in Balance of Payment, Concept of Currency Convertibility. International Monetary System, Gold Standard, Features, Bretton Wood System, Background and Features, Reasons for its Failure, Smithsonian Agreement, SDRs, European Monetary System. Current Exchange Rate Systems - Fixed and Flexible Exchange Rate, Merits Demerits, Types of Fixed Exchange Rate, Hard Pegs and Soft Pegs, Types of	12	Bhalla .V.K. international Financial Management- S.Chand Publishing,	LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS



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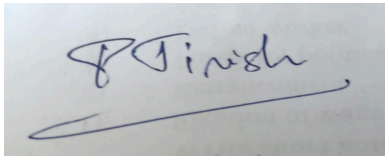
UNIT 2 International Capital Markets	Flexible Exchange Rate, Managed and Free Float.			
	UNIT 2 - Types of Capital Flows, FDI, FPI, FII Euro Currency Markets, Origin and Reasons of growth, a Brief Understanding of Eurocurrency Deposit, Loans Bonds and Notes Market ,Concept of Offshore Banking. International Equity Markets, Concept of Depository Receipts, GDR, Characteristics, Mechanism of Issue, Participants Involved, ADR, Types and Characteristics, Concept of IDR. International Bond Market, Concepts of Domestic Bond, Concept and Types of Foreign Bonds, Concept and Types of Euro Currency Bonds, Concepts of Foreign Currency Convertible and Foreign Currency Exchangeable Bonds, Participatory Notes.	12		LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS
UNIT 3	UNIT 3 - Introduction, Market and Market Participants, Foreign Exchange Management in India, Retail and Whole Sale Component of Indian Foreign Exchange Market, Role	12	International Banking Operations- IIBF- MacMillan Publishers, 2007	LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS



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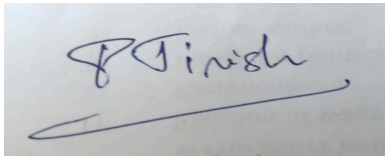
Foreign Exchange Markets	of FEDAI, FEMA and Regulatory Framework, Dealing Room Operations. Foreign Exchange Arithmetic, Exchange Rate Quotations, Direct, Indirect and Cross rate, Percentage Spread, Arbitrage, Geographical, Triangular and Interest Rate (formula method only), Calculation of Forward Rates using Schedule of Swap Points, AFM, Determinants of Exchange Rate – Purchasing Power and Interest Rate Parity.			
UNIT 5 International Banking Operations	UNIT 5 - Introduction, Definition, Features of International Banking, Reasons for Growth of International Banking, Recent Trends in International Banking, Emergence of Crypto currency - Overview, Brief Overview of Bitcoin and other Crypto Currencies, Note on Mining and Crypto Currency Exchanges, Advantages, Disadvantages of Crypto Currency.	12		LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS



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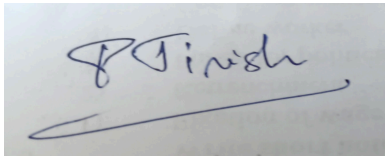
	Functions of International Banking, Correspondent Banking, International Payment Systems, NRI accounts, Export Finance, Import Finance, International Merchant Banking, Financing Project Exports, Derivative Offering, Remittances, Compliance related- Interbank Functions, Internal Functions, Letter of Credit and Bank Guarantees. International Lending Operation, Loan Syndication, Parties Involved, Phases /Stages in Loan Syndication, Types of Syndication, Role of LIBOR, Risk in International Lending, Role of International Credit Rating Agencies.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 48



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TEACHING PLAN (UNIT PLAN)

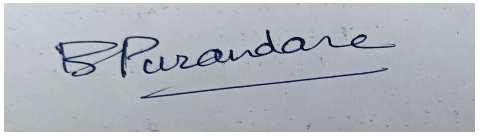
NAME OF THE STAFF: BHAKTI VILAS PURANDARE DEPARTMENT: Commerce (Banking & Insurance) CLASS: TYBBI

SEMESTER: V SUBJECT: RESEARCH AND METHODOLOGY MONTH: JUNE TO NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: understand data processing and analysis, hypothesis, correlation and regression, and writing of research report with essentials.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Data Analysis and interpretation:	* processing of data – editing coding tabulations, * analysis of data. * Essentials importance of data interpretation. * testing of hypothesis – one sample, T test, ANOVA, F test, chi square test.	20		Chalk and board
Advanced statistical techniques:	* Introduction characteristics and applications of – correlation and regression, factor analysis, cluster analysis, discriminant analysis, multidimensional scaling.	20	Regression modelling strategies- Frank Harrell	Chalk and board
Research report:	* report writing - meaning, importance, structure, types, process and essentials of good report.	05		Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____45___



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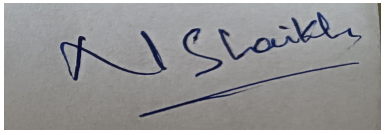
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF NAZIA SAJID SHAIKH_ DEPARTMENT: COMMERCE (Banking & Insurance) . CLASS: TYBBI SEMESTER: SEM V

MONTH: AUG-DEC ACADEMIC YEAR: 2018-19 SUB: RESEARCH METHODOLOGY.

LEARNING OBJECTIVE/S:
The learners will be able to: Understand Research , Types of Research, Hypothesis , Research Design, Sampling, Data collection and processing, Survey Instrument.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
***MODULE 1. INTRODUCTION TO RESEARCH.**	***Research:** Meaning, Objectives, important of research, Research process, Characteristics of Good Research. ***Hypothesis :** Meaning, Importance, Types and Sources. ***Research Design:** Meaning, Importance, Steps, Scope & Essential of Good research. ***Sampling :** Meaning , Methods of Sampling.: Probability Sampling Non-Probability Method.	**10**	**Regression Modelling Strategies: Frank Harell.**	**Online Lectures on Google Meet**
MODULE 2.DATA COLLECTION AND PROCESSING	***Types of Data and Sources:** Primary and Secondary Data Sources. ***Methods of collection of Primary Data:** Observation , Experiment, Interview , Survey. ***Survey Instrument:** Questionnaire : Types of questions , Scaling techniques.	**10**		



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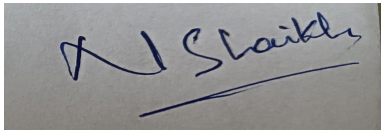
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __20_____



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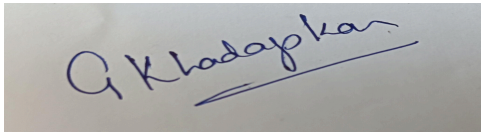
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI KHADAPKAR SUB: STRATEGIC MANAGEMENT DEPARTMENT: COMMERCE(Banking & Insurance) CLASS: TYBBI (A & B) SEMESTER: V MONTH: JUNE TO DECEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:
The learners will be able to:

- Understand Strategic management and its various aspects including levels & Process of Strategic Management plus principles of good strategy
- Get insight on how to frame good strategies for a business
- Interpret different business environments that affect strategies

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-1 Strategic Management an Overview	STRATEGIC MANAGEMENT: Definitions, Strategic Decision Making, Levels of Strategic Management, Process of Strategic Management PRINCIPLES OF GOOD STRATEGY-elements of strategic management MODELS OF STRATEGIC MANAGEMENT.	08	Strategic planning formulation of corporate strategy by Ramaswamy	Chalk, Board and Duster
UNIT II	Importance of Politics in Strategic Management, Social ,Political And Technological Forces National and Global Business Environment	10		Chalk, Board and Duster



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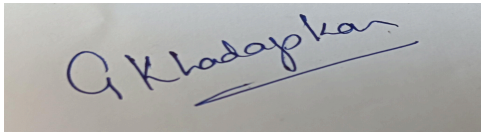
Strategic Management Environment	Components of Environment, Environmental Scanning, Analysis of Strategies and Choice of Best Strategy, SWOT Ethics, Social Responsibility, Impact of Legal Factor in SM			
Unit 3-Levels of Strategies and Analysis Corporate Level Strategies	LEVELS OF STRATEGIES AND ANALYSIS Corporate Level Strategies- Concentration, Integration and Diversification, Internationalization, Digitization. PROCESS OF STRATEGIC CHOICE FACTORS OF STRATEGIC CHOICE STRATEGIC ANALYSIS.	10		Chalk and Board
UNIT IV-Activating Strategy	Process and Nature of Strategy implementation Barriers of Strategy implementation Models of Strategy implementation Standard, Benchmarking , Gap Analysis	08	Management Policy and Strategic Management (Concepts, Skills and Practices) , R.M.Shrivastava	Chalk and Board
Unit 5- Strategic Evaluation and Control Standards	STRATEGIC Evaluation: Features, importance , barriers and type of evolution STRATEGIC CONTROL- Setting Standards, Comparison, Control Process, Systems, Approaches, Techniques of Evaluation and Control. ROLE OF INFORMATION SYSTEM.	08		Chalk, Board and Duster



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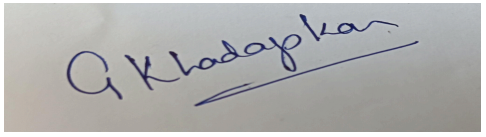
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 44



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TEACHING PLAN (UNIT PLAN)

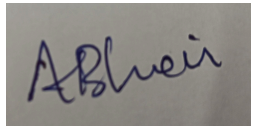
NAME OF THE STAFF :ASHWINI DATTATRAY BHOIR DEPARTMENT: COMMERCE (Banking and Insurance) CLASS: SYBBI A, B. SEMESTER: IV

MONTH: NOVEMBER- FEBRUARY ACADEMIC YEAR: 2018-2019 SUBJECT - CORPORATE & SECURITIES LAW

LEARNING OBJECTIVE/S:
The learners will be able to know types and features of company and know the principle of Corporate Personality.

The Learners will be able to know Concept and Overview of Depository System In India and legal framework and Provisions of Depository Acts, 1996.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit -I Company Law-An Overview.	Chapter I- Development of Company Law In India. Chapter II- Doctrines Governing Corporates: Features of a company, Lifting the Corporate Veil, Types of Companies, Registration of a Company, Memorandum of Association, Contents of Memorandum of Association, Doctrine of Ultra Vires, and Articles of Association, Alteration of Articles, Constructive Notice, Indoor Management, Alter Ego. The Principle of Non Interference Meaning, Advantages, Disadvantages & Exceptions, Majority Rights under Companies Act.	10	D. K.Jain - Company Law Ready Reckoner Company Law - Avtar Singh	Lecture Method, Case Study, Structure Black Board, Chalk & Duster



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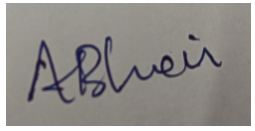
	Chapter III- Application of Company Law to Banking and Insurance Sector: Application of Companies Act to Banking and Insurance Sector Govrned by special acts of Companies Act 2013			
Unit - IV The Depositories Act, 1996	Chapter I-Depository - Meaning , Benefits, Models, Functions Participants Chapter II- The Depository Act. 1996 - Objectives, Eligibility Condition for depository services, Fungibility, Bye laws of depository, Governance of Depository and Internal audit of depository participants. Chapter III- BSDA and single registration for depository participants.	3 4 3	The Depository Act, 1996 - Bare Acts	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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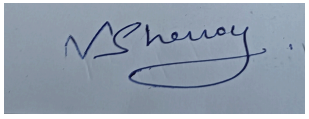
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VASANTHI SHENOY DEPARTMENT: COMMERCE (Banking & Insurance) CLASS: SYBBI A, B. SEMESTER: IV

MONTH: NOVEMBER- FEBRUARY ACADEMIC YEAR: 2018-2019 SUBJECT - CORPORATE & SECURITIES LAW

LEARNING OBJECTIVE/S:
The learners will be able to promote the development of securities market

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Regulatory framework governing Stock Exchanges as per Securities Contracts Regulation Act, 19	Definition of Securities, Spot Delivery Contract, Ready Delivery Contract, Stock Exchange. Corporatisation and demutualisation of Stock Exchange- Meaning, Procedure & Withdrawal. Power of recognised Stock Exchange to make rules restricting voting rights etc. Power of Central Government to Direct Rules or make rules. Power of SEBI to make or amend bye laws of recognised Stock Exchange. Books and Accounts to be maintained by recognized Stock Exchange. Grounds on which Stock Exchange can delist the securities of a company. Section 3 to Section 20	8	SEBI ACT - SUMIT AGRAWAL	Lecture Method, Black Board, Chalk and Duster



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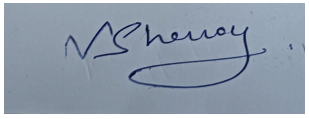
Unit 3 Security Exchange Board of India				
	A) SEBI : Objectives-terms-establishment-power-functions-accounts and audit- penalties- registration. B) Issues of Disclosure Investors Protection Guidelines : Pre & post obligations - conditions for issue-Debt Security -IPO- E-IPO Employee option -right -bonus -preferential allotment intermediary -operational - Promoter lock in period requirement -offer document.	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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TEACHING PLAN (UNIT PLAN)

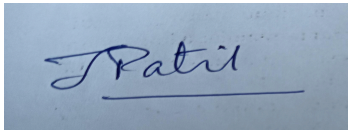
NAME OF THE STAFF: JUITA PATIL DEPARTMENT: COMMERCE (Banking & Finance) CLASS: SYBBI

SEMESTER: **IV** MONTH: Nov,2018 to Feb,2019 ACADEMIC YEAR :2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to learn Standard costing Meaning ,application & calculation as well as meaning of marginal costing and its different formulas.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST ACCOUNTING	1] **Standard Costing-** Setting of standards, Basic concept of Material, labour, Sales , overheads [Fixed & Variable] variance analysis. Including mix & yield variance. Calcualtion of variances.	15	S.N. Maheshwari B.K.Bhar	Chalk & duster
	2] **Introduction to marginal costing-** Meaning ,application, Advantages, limitations ,Contribution, Break even analysis, &profit volume graph, Margin of safety. Practical problems.	15		Chalk & duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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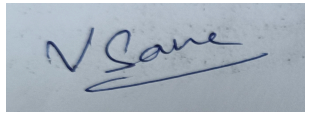
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHAKHA SANE DEPARTMENT: COMMERCE (Banking & Insurance) CLASS: SYBBI(BUSINESS ECONOMICS II)

SEMESTER: II MONTH: NOV ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : Analyze the performance and functioning of government, markets and institutions in the context of social and economic problems.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1,2,3 AND 4	1. Introduction to Macroeconomic data and theory: Macroeconomics:meaning,scope and importance Circular flow of income and expenditure:Closed and open economy. The measurements of national product:Meaning and importance,concepts Short run economic fluctuation:features and phases of trade cycle. Keynesian principle of effective demand.	15	MACRO ECONOMICS BY H.L AHUJA MODERN ECONOMICS BY H.L.AHUJA	CHALK AND DUSTER, GROUP DISCUSSION
	2. Money inflation and Monetary policy:	15		



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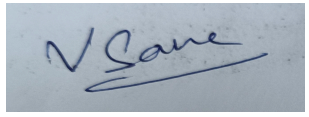
	Money supply:Determinants of Money supply-Factor influencing velocity of circular flow of money. Demand for Money:Classical and Keynesian approach Money and Prices:Quantitative theory of money Inflation:Demand pull and Cost push inflation Monetary Policy:Meaning objective and instruments.			
	3. Constituents of fiscal policy: Role of Government:Principles of sound and functional finance. Fiscal Policy:Meaning and objectives Instrument of fiscal policy Union Budget	15		
	4. Open economy:Theory and issues of international Trade Basis of Foreign Investment Foreign Investment Balance of Payments	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___60



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TEACHING PLAN (UNIT PLAN)

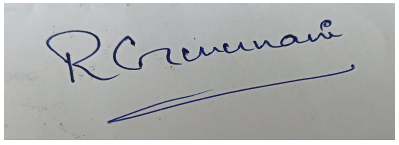
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Entrepreneurship Management DEPARTMENT: Commerce (Banking & Insurance)

CLASS:SYBBI SEMESTER:IV MONTH: Dec- Jan ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I Entrepreneur	Entrepreneur – Origin, nature and development of entrepreneurship ,need , importance, principles	3	Dynamics of Entrepreneurial Development by Vasant Desai	Chalk Board,Discussion
	Entrepreneurship mgmt. & entrepreneurial process	2		
	Theories of entrepreneurship	2		
	Entrepreneurial values & attitude, factor for motivation	2		
	Entrepreneurial skills , Sources of business ideas	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

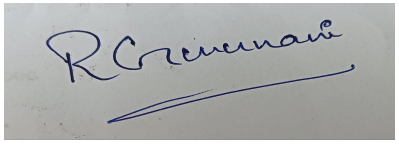
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Entrepreneurship Management DEPARTMENT: Commerce

CLASS:SYBBI SEMESTER:IV MONTH: Feb - March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II Business Planning	Forms of Entrepreunial structure	4	Dynamics of Entrepreneurial Development by Vasant Desai	Chalk Board,Discussion
	Critical factors for starting new Enterprise	4		
	Business plan , environmental scanning , project report preparation	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

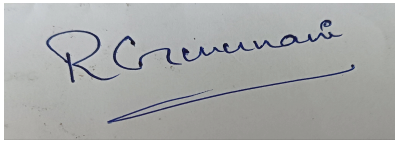
NAME OF THE STAFF: Rashmi Gurunani SUBJECT:I.F.S. DEPARTMENT: Commerce

CLASS:FYBAF SEMESTER:II MONTH: Dec- Jan ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Financial Services & its mechanism	Lease & Higher Purchase	4	Financial Services by Khan M.Y.	Chalk Board,Discussion
	Housing Finance	4		
	Venture Capital	4		



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

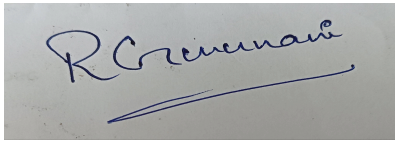
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT:I.F.S. DEPARTMENT: Commerce

CLASS:FYBAF SEMESTER:II MONTH: Feb - March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV	Consumer Finance-Mechanics of Cons. Fin., terms, Pricing, marketing and Insurance	4	Financial Services by Khan M.Y.	Chalk Board,Discussion



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Consumer Finance & Credit Ratings	Plastic Money- Credit cards, Debit cards, smart cards, Indian Scenario	4		
	Credit rating- regulatory framework, credit rating agencies in india	4		

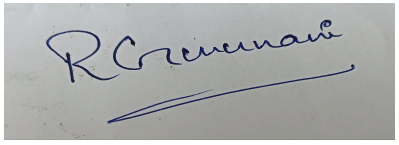
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Organizational Behavior DEPARTMENT: Commerce

CLASS:FYBBI SEMESTER:II MONTH: Dec- Jan ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.



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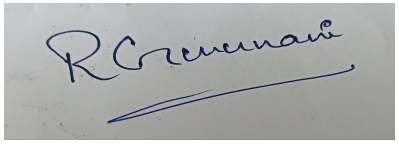
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Organizational culture & Change mgmt	Work Culture , ways for making work culture effectively and lively	3	Human Behaviour at Work By Newstorm,J.W.	Chalk Board,Discussion
	Work Conflicts- Levels of conflicts, sources and effect of conflict	3		
	Organizational change, effect of resistance to change, ways to overcome resistance to change	2		
	Nature , effect, symptoms, causes of stress, Organizational stresses	2		
	Stress mgmt., time mgmt	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Organizational Behavior DEPARTMENT: Commerce



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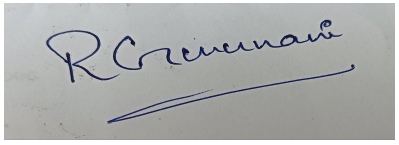
CLASS:FYBBI SEMESTER:I **I** MONTH:Feb - March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Organizational Devlopment	Org. Development- Concepts, essential aspects, characteristics	2	Human Behaviour at Work By Newstorm,J.W.	Chalk Board,Discussion
	OD Process, OD intervention strategies	2		
	OD Culture Change , TQM	2		
	Benefits, limitations of OD	2		
	Techniques and importance of OD	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

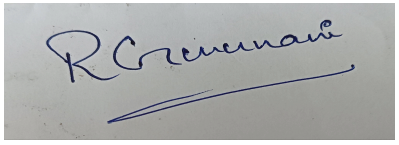
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Venture Capital & P.E DEPARTMENT: Commerce

CLASS:TYBFM SEMESTER:VI MONTH: Dec - Jan ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I Conceptual Understanding of VC&PE	Venture Capital- Definition , features, types , Roles	3	Venture Capital Financing in India by J.C.Verma	Chalk Board,Discussion
	Private Equity, hedge fund , players in PE Market, Benefits of PE Finance	3		
	Private Equity Fund- Legal Structure & terms	2		
	PE investment and Financing, PE multiples and Prices	2		
	P.E Firms – investment features and consideration	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

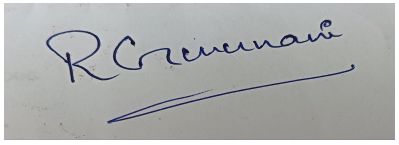
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Venture Capital & P.E DEPARTMENT: Commerce

CLASS:TYBFM SEMESTER:VI MONTH: Dec - Jan ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Private Equity Strategies	Types of private equity strategies- Leverage by out	3	Venture Capital Financing in India by J.C.Verma	Chalk Board,Discussion
	Growth Capital , Mezzanine Capital	3		
	Distressed buyout, Other Strategies	3		
	Due Diligence –Procedure , Check List for Start up Companies	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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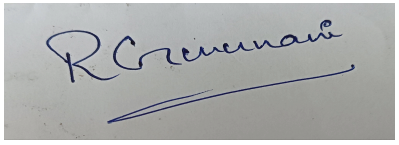
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Commerce VI (HRM) DEPARTMENT: Commerce

CLASS:TYBCOM SEMESTER:VI MONTH: Dec- Jan ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I HRM	HRM – Concept , functions, importance, traditional and Strategic HRM	3	Marketing Management By Philip ,Kotlar	Chalk Board,Discussion
	HRP - Concept, steps in HRP	2		
	Job Analysis – Concept Component, job design –concept , techniques	2		



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	Recruitment- Concept , Sources	2		
	Selection –Concept , Process, techniques of e-selections	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

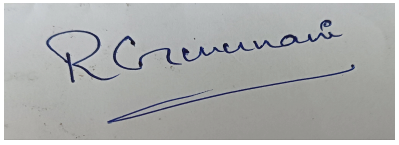
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Commerce VI (HRM) DEPARTMENT: Commerce

CLASS:TYBCOM SEMESTER:VI MONTH: Feb- March ACADEMIC YEAR: 2018-19

The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit II HRD	HRD- Concept Function , Training, Methods of training	3	Marketing Management By	Chalk Board,Discussion



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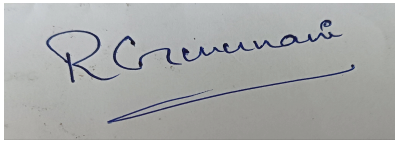
	Evaluating training effectiveness, methods	3	Philip ,Kotlar	
	Performance appraisal , Benefits , limitations methods	3		
	Potential appraisal, carrier planning, Succession planning	3		
	Mentoring , counselling,& techniques			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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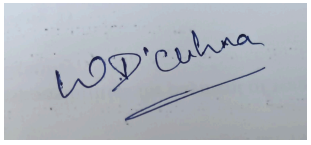
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA **DEPARTMENT**: COMMERCE (Banking & Insurance) CLASS: SYBBI SEMESTER: IV MONTH: AUGUST, SEPTEMBER, OCTOBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to get knowledge about Entrepreneurship.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT:5 Evolving concept of entrepreneurship	**Social Entrepreneurship:** Meaning, Social responsibility of an entrepreneur **Barriers to Entrepreneurship:** Environmental, Economic, Non-economic, personal and entrepreneurship barriers. **Intraprenuership:** Meaning, characteristics, Intrapreneurs activities, Types of corporate entrepreneurs corporate v/s intrapreneurial culture ,climate, fostering intrapreneurial culture, promoting intraprenureship **Ethics and entrepreneurship:** Defining ethics, Approaches to managerial ethics, Ethics and business decisions, Ethical practices and code of conduct, Ethical considerations in corporate Entrepreneurship **Institutional support to Entrepreneurs:** Importance , incentives and facilities, EDI,NSIC,SIDO,NIESBUD, others, key features of National policy on skill Development and Entrepreneurship 2015	15	Text book	Chalk board



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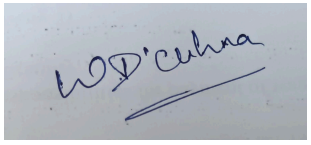
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

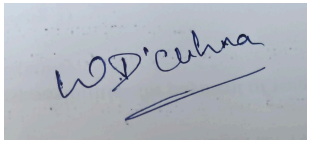
NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: S.Y.BB I SEMESTER: IV MONTH: JUNE, JULY

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to get knowledge about the concept of marketing, operation, finance and human resource.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENTREPRENEURSHIP MANAGEMENT UNIT:3 Key areas of new ventures	**Marketing:** New product development, Marketing strategy for the new venture, Branding strategies, Distribution strategies, pricing strategies, promotion strategies for new venture, concept of marketing mix and market segmentation, marketing plan **Operation:** Size and location of enterprise, layout, Inventory control, Quality control **Finance:** Sources of long term and short-term finance, Debt fund: Meaning merits and limitations, Equity fund: Meaning, merits and limitations Concept of break-even analysis, venture capital: Meaning, merits and limitations, Criteria for evaluating new venture proposals by venture capitalist. **Human resource:** Personnel function, Important labour laws	15	Text book	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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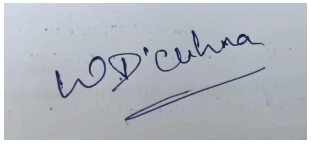

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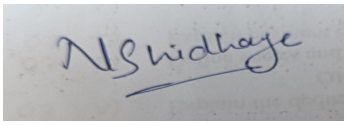
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Nilambari Yogesh Shidhaye Department: Commerce(Banking & Insurance)
Class: - S.Y.BBI (A, B,) SEM: - IV MONTH-: Dec-Feb YEAR: -2018/19

LEARNINIG OBJECTIVES: The learner will be able to know the life insurance policies & their various types. To know how does the insurance policies are beneficial to everyday life.

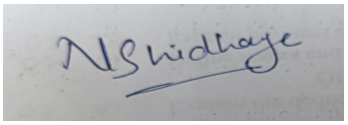
PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED
Foundation Course: - IV (An overview of Insurance Sector)	MODULE:-I AN INTRODUCTION TO LIFE INSURANCE: - Life insurance of business, Principle pf risk pooling, Determination of risk pooling. Product of LIC, Traditional life insurance policy, Endowment Assurance, Riders in plan, On non-traditional life insurance product. MODULE: -II AN INTRODUCTION TO HEALTH INSURANCE: - **Health insurance:** -IRDA regulations, determination of health insurance, Health insurance market in India and determination of Risk premium. **SBI & ICICI health insurance plan: -** Introduction & forms & procedures of hospitalization, Indemnity Products, top up covers, Cashless insurance, Senior citizen plans, critical illness plans & micro insurance.	15 Lectures 10 Lectures		Chalk & duster Chalk & duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25



Signature of Teacher

Signature of HOD



Signature of Teacher

Signature of HOD

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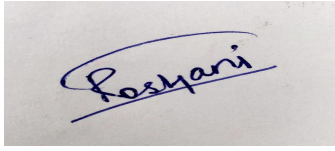
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Roshani Nagar DEPARTMENT: Commerce (Banking & Insurance) CLASS: SYBBI

SEMESTER:IV MONTH: December 2019 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: Learning about Security Analysis and Portfolio Management
The learners will be able to : Students will be able to learn theory and practical of Security Analysis and Portfolio Management

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course – IV	**1. An Introduction to Home and Motor Insurance** 🎬 A) Home Insurance - SBI and ICICI Plans – Introduction, Forms and Procedures, Inclusions and Exclusions in policies, Determinants of Risk Premium and Impact of Catastrophes on Home Insurance. B) Vehicle Insurance- SBI and ICICI Plans-Introduction, Forms and Procedures, Determinants of Risk Premium, Inclusions and Exclusions	10	Vipul and Seth publication	Chalk - Board.
	2. **Role of Insurance in Logistic** 🎬A) Role of Insurance in Logistic - Meaning &Importance, Hazards, Protection, Social Security – Type of Risks and Accidents. B) Fire Insurance – SBI and ICICI Plans – Introduction, Forms and Procedures,	10	Vipul and Seth publication	Chalk - Board



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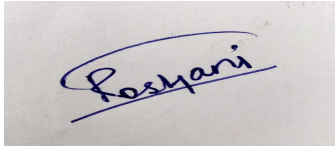
	Standard Fire and Special Perils Policy, Tariff system and special policies.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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TEACHING PLAN (UNIT PLAN)

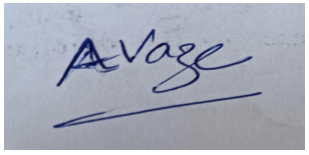
NAME OF THE STAFF: Amol Vaze DEPARTMENT: Commerce (Banking & Insurance) CLASS: SYBBI

SEMESTER: IV MONTH: December - January ACADEMIC YEAR: 2018 - 2019

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 MANAGEMENT OF COMPONENTS OF WORKING CAPITAL	Motives of holding cash, Objectives of cash management, Factors determining cash needs, Strategies of cash management, Cash management techniques, Cash Management practices in India.	3		• Chalk • Board • Discussion
	Receivables Management:- Objectives, Credit Policies and Collection Policies and credit terms.	1		
	Inventory Valuation:- Objectives and Techniques	1		
	Practical illustration	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

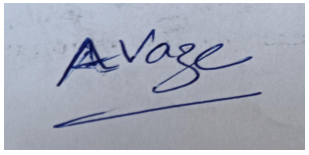
NAME OF THE STAFF: Amol Vaze DEPARTMENT: Commerce (Banking & Insurance) CLASS: SYBBI

SEMESTER: IV MONTH: January – February ACADEMIC YEAR: 2018 - 2019

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 FINANCIAL POLICY AND CORPORATE STRATEGY	Meaning of strategic financial management Strategic Financial Decision Making Functions of Strategic Financial Management	2		• Chalk • Board • Discussion
	Business Risk and Financial Risk :-			
	Introduction , meaning, Debt v/s equity financing	1		
	Types of leverages Investment objective, criteria for individuals	2		
	Practical Illustrations	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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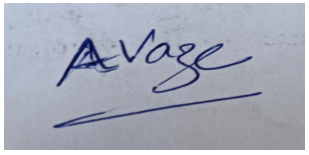

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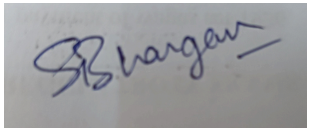
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL MANAGEMENT DEPARTMENT: COMMERCE (banking & Insurance) CLASS: SYBBI SEMESTER: IV MONTH: DECEMBER, JANUARY ACADEMIC YEAR: 2018 – 2019

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 WORKING CAPITAL MANAGEMENT	A) Introduction, Meaning, Elements of Working Capital, Types of Working Capital, Management of Working Capital in India	2	FINANCIAL MANAGEMENT BY RAVI KISHORE	• Chalk • Board • Discussion • Examples
	Estimated Working Capital needs, Operating/Working Capital cycle, Statement of working capital, factors affecting working capital	3		
	Practical Illustration	5		
	B) WORKING CAPITAL FINANCING – Trade credit, Bank credit, Commercial Paper, Certificate of deposits, financing	2		
	Practical illustration	3		



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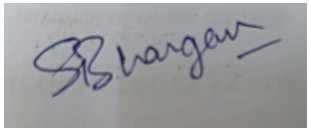
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 15



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TEACHING PLAN (UNIT PLAN)

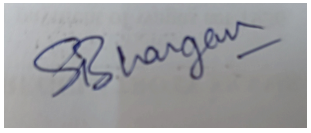
NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL MANAGEMENT DEPARTMENT: COMMERCE (banking & Insurance)

CLASS: SYBBI SEMESTER: IV MONTH: JANUARY, FEBRUARY ACADEMIC YEAR: 2018 – 2019

The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 INTRODUCTION TO FINANCIAL PLANNING	Meaning, Essentials of Budget, Objectives, Advantages & steps of Budgetary Control	1	FINANCIAL MANAGEMENT BY RAVI KISHORE	• Chalk • Board • Discussion • Examples
	Types Of Budget- Sales Budget(Theory & Practical illustration)	4		
	Flexible Budget (Theory & Practical illustration)	4		
	Production Budget (Theory & Practical illustration)	2		
	Manpower Budget	1		
	Purchase Budget	1		



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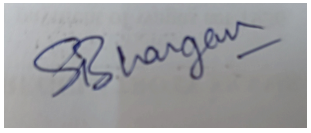
	Combined Budget	1		
	Other Types of Budget	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 3: 15



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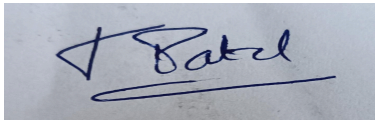
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL SUBJECT: FINANCIAL MANGEMENT DEPARTMENT: COMMERCE (Banking & Insurance)

CLASS: SYBBI SEMESTER: IV MONTH: DECEMBER-JANUARY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 3 Financial Planning	Introduction of Financial Planning, Meaning and Essentials of Budget, Objectives and Advantages & steps of Budgetary control	1	Financial Management By Ravi M Kishore	Chalk Board And Discussion Method
	Types of Budget 1) Sales Budget (Practical Illustrations)	4		
	2) Flexible Budget (Practical Illustrations)	4		
	3) Production Budget (Practical Illustrations), 4) Manpower Budget (Practical Illustrations), 5) Purchase Budget (Practical Illustrations), 6) Combined Budget (Practical Illustrations),	5		



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	Other Types of Budget	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

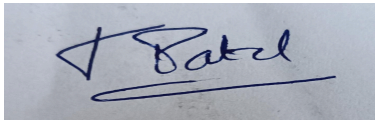
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: TARIKA PATEL SUBJECT: FINANCIAL MANGEMENT DEPARTMENT: COMMERCE

CLASS: SYBBI SEMESTER: IV MONTH: FEBRUARY- MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : The main objectives is to help students to acquire and develop skill to take rational decisions in Business Financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1 Working Capital Management	Introduction, Meaning and Elements of Working Capital, Types of Working Capital	2	Financial Management By Ravi M Kishore	Chalk Board And Discussion Method



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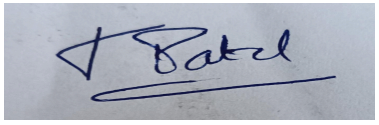
	Estimating Working Capital needs, Operating / Working capital Cycle, Factors affecting working capital, Statement of working capital	3		
	Practical Illustrations	5		
	Woking Capital Financing Trade credit, Bank Credit, Commercial Papers, Certificate of deposits, Financing	2		
	Practical Illustrations	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15__



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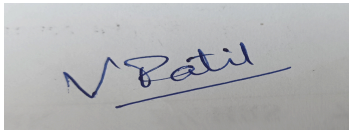
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VAIKHARI PATIL DEPARTMENT: COMMERCE (Banking & Insurance)

CLASS: SYBCOM (Banking and Insurance) SEMESTER: IV MONTH: Nov 2018- March 2019 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to: Learn Banking tools in Information Technology

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, II, III, IV	Various models- home banking, office banking, online banking, internet banking, mobile banking, SMS banking,- models of electronic payments, other business models	30*(2 Divisions)		
	Development Life Cycle, Project Management, Building Data Centres, Role of DBMS in Banking, Data Warehousing and Data Mining, RDBMS Tools Technological Changes in Indian Banking Industry,Trends in Banking and Information Technology, Technology in Banking, Lead Role of Reserve Bank of India, New Horizons for Banking based IT, Automated Clearing House Operations, Electronic Wholesale Banking Credit Transfer, Credit Information Bureau (I) Ltd., Credit Information Company			



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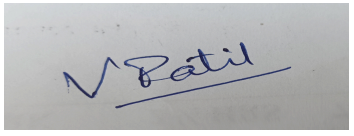
	Regulation Bill- 2004, Automation in Indian Banks, Cheque clearing using MICR technology, Innovations, Products and Services, Core-Banking Solutions(CBS), Human Resource Development(HRD)-The Road Ahead, Technology in Banking Industry, Teleconferencing, Internet Banking, Digital Signature in Banking, MICRFacility for 'paper-based' clearing, Cheque Truncation Dealing with Fraudulent transactions under CTS,Efficient customer service, smart quill computer pen, Institute for Development & Research in Banking & Technology (IDRBT). E-Checks-Protocols and Standards, Problems on mechanization, e-Banking-RBI Regulations & Supervision, Technology Diffusion. 3 IT Applications and Banking Objectives, Electronic Commerce and Banking, Banking Software, Electronic Clearing and Settlement Systems, Plastic Money 4 MS-Office: Packages for Institutional Automation MS-PowerPoint presentation: Internal links between slides, hyperlinks,embedding multimedia content onto the slides (video/audio/stylish text), slide animation, timer, creating new presentation by existing theme, import online themes, creating a template of presentation, save and run the slide show(.ppsx) Applications of Internet: Introduction to e-mail, writing professional emails, creating digitally signed documents, use of outlook express:· configuring outlook express, creating and managing profile in outlook,			



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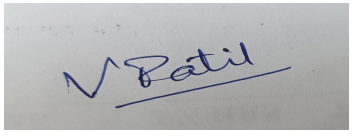
	sending and receiving e-mails via outlook express, Emailing the merged documents, boomerang facility of email, Google drive: usage of Google drive in storing the Google documents, excel sheets, presentations and PDF files.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

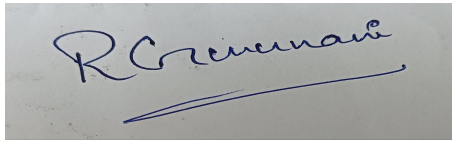
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Organizational Behavior DEPARTMENT: Commerce (Banking & Insurance)

CLASS:SYBBI SEMESTER:III MONTH:June-July ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I	Personality – Big Five Model , Locus of control, self-monitoring	3	Human Behaviour at Work By Newstorm,J.W.	Chalk & Board, Discussion
	Learning- Process, principles ,theories , Learning through reinforcement	3		
	Perception –Factors influencing Theories , Johari window empathy	2		
	Work Place Emotion ,values & ethics – Cognitive dissonance , Emotional dissonance	2		
	Individual Decision making	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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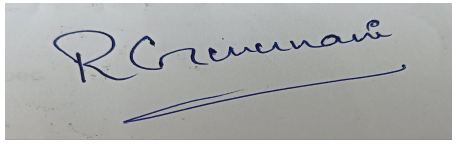
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Organizational Behavior DEPARTMENT: Commerce

CLASS:SYBBI SEMESTER:III MONTH: Aug -Sep ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II	Group Communication , Corporate Communication	3	Human Behaviour at Work By Newstorm,J.W.	Chalk & Board, Discussion
	Power & Politics- Organizational Politics, power tactics	3		
	Negotiations –Process Strategies , Crises Negotiation, Third Party Negotiations	2		
	Transactional Analysis Model , Elaboration of Transactional Style	2		
	Virtual Teams and Group Cohesiveness , Structure, types , stages	2		



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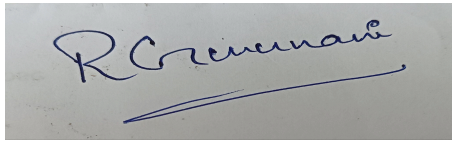
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

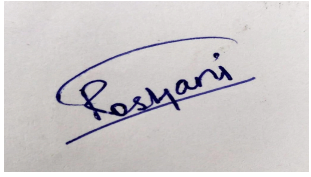
NAME OF THE STAFF: Roshani Nagar DEPARTMENT: COMMERCE (Banking & Insurance)

CLASS S.Y.BBI SEMESTER:III MONTH :-July to October ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES: -
The learners will be able to: to understand the behavior to be followed in organization

The learners will be able to: to understand the organizational structure that is been followed in banking and insurance sector

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Organisational Behaviour Unit II , III, and IV	**Unit II the Group Dynamics** **C) Negotiations: -** Meaning, Process, Strategies, Negotiations, Crises Negotiations. **D) Transactional Analysis Model: -** Types Of Transaction, Life Positions, E) **Virtual Teams**: - Meaning and structure, Types, Stages of Management of Virtual Teams	10	Text Book Internet	.Chalk and Black Board Method 2 Example 3 Discussion



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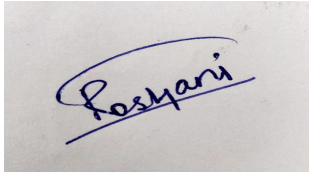
	F) **Group Cohesiveness**: - Meaning, Features, Factors Affecting, Effects, Consequences, Impact of group cohesion G) **Group Decision-Making: -**			
	Unit III:- Organisational Dynamics **A) Organisation Structure** :- Meaning, Centralisation, Decentralisation, Span Of Control, Departmentation **B) Common Organizational Designs:- Simple Structure, Bureaucratic Structure, Matrix Structure** C) **New Design Options:-** Team Structure, Virtual Organisations, Boundaryless Organisations **D) Organisation Structure Differentiation** **E) Need And Importance of organisational designs**	15	**Text book**	1)Chalk and Black Board Method 2 Example 3 Discussion



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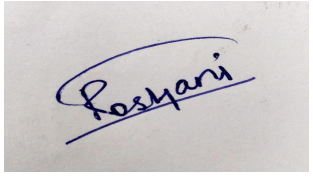
	F) Organisational Climate:- Managing Rewards, Impact of Rewards Punishments, Job Frustration , Meaning and importance of QWL			
	Unit IV: Organisation Behaviour in Banking and Insurance Sector Concept and Definitions of OB, Practices of Ob in Banking and Insurance Company, Personality and OB, Perception and OB, Unethical Practices by Banking Employees, Issue of Organisation Behaviour In Banks	5	**Text book**	. 1)Chalk and Black Board Method 2 Example 3 Discussion



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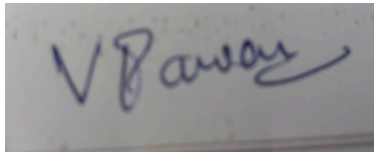
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____VISHWANATH V. PAWAR____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT:_COMMERCE(Self Finance)__ CLASS: ____SYBBI____ SEMESTER: _____III_____ MONTH: __JUNE__ ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:
The learners will be able to : To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Management Accounting	Meaning and Definition of Management Accounting, Nature and Frame work	2	Management Accounting By I.M Pandey	Chalk Board And Discussion Method
	Functions of Management Accounting, Decision Making Process	2		
	Information of Decision making (Information, Strategic, tactical and operational information)	3		



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	Financial Accounting v/s Management Accounting , Qualities of Management Accounting	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____10_____

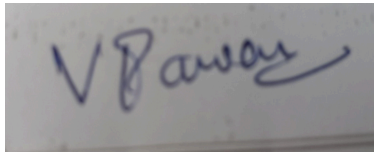
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____VISHWANATH V. PAWAR____ SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____SYBBI____ SEMESTER: _____III_____ MONTH: __JULY -AUGUST__ ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:
The learners will be able to : To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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UNIT 2 Financial Statement Analysis	Introduction and Meaning of Financial statement analysis, Steps, objectives , Types of Analysis, simple sums on financial statement	2	Management Accounting By I.M Pandey	Chalk Board And Discussion Method
	Ratio Analysis- Meaning, Classification , DU Pont chart, Advantages and limitations.	2		
UNIT 3 Working Capital management	Balance sheet ratio, Revenue statement Ratio and Combined Ratio (Applications of formulas)	3		
	Concept Nature of working capital, Planning of working capital, estimation Projection of working capital requirement	5		
	in case of Trading and Manufacturing Organization Operating cycle			

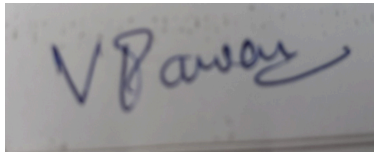
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____12_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHWANATH V. PAWAR SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: ____COMMERCE___

CLASS: ____SYBBI____ SEMESTER: _____III_____ MONTH: __SEPTEMBER__ ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:



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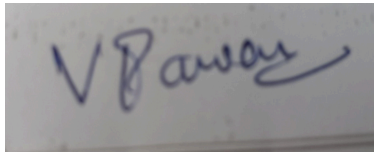
The learners will be able to : To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 Management of Profit / Dividend Policy	Meaning, Types, Factors affecting dividend policy, Forms of Dividend	2	Management Accounting By I.M Pandey	Chalk Board And Discussion Method
	Determinants of dividend policy, Factors, dividend policy in India, Bonus Share (Stock dividend)	3		
	Stock splits, Practical Illustrations on Revised share capital and Stock splits	3		
	Legal, Procedural and Tax aspects associated with dividend decision	2		
	Dividend Policy Theories – Walter Model, Gordon's Model, MM Model, Factors influencing dividend policy	3		
	Practical Illustrations	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____



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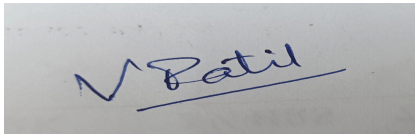
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VAIKHARI PATIL DEPARTMENT: COMMERCE (BANKING & INSURANCE)

CLASS: SYBCOM (Banking and Insurance) SEMESTER: III MONTH: JUNE TO OCT 2018 ACADEMIC YEAR: 2018 -2019

LEARNING OBJECTIVE/S:
The learners will be able to: Learn E-commerce and its system

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, II, III, IV	A) E-Commerce Framework, E-Commerce and media convergence, anatomy of E-Commerce Applications, E-Commerce Consumer and Organization Applications B) The network Infrastructure for Electronic Commerce - Market forces influencing the I-way, Components of I-way, Network Access Equipment C) E-Commerce and World Wide Web- Architectural framework of ECommerce, WWW and its architecture, hypertext publishing, Technology behind the web, Security and the Web	30*(2 Divisions)	E-books, Vipul publications, Seth publication	Projector
	A) Meaning, definition, features, advantages and limitations- core banking, the evolution of e-banking in India, Legal framework for e-banking. B) Electronic Payment System Types of Electronic Payment Systems, Digital Token-based EPS, Smart Card EPS, Credit Card EPS, Risk in EPS, Designing a EPS			



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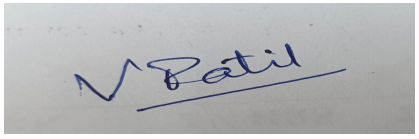
	A) Ms-Word: Usage of smart art tools, bookmark, cross-reference, hyperlink, mail merge utility and converting word as PDF files. B) Ms-Excel: Manipulating data, Working with charts, Working with PIVOT table and what-if analysis; Advanced excel functions-Vlookup (), hlookup(),PV(), FV(),average(),goal seek(),AVERAGE(), MIN(), MAX(), COUNT(),COUNTA(), ROUND(), INT(), nested functions, name, cells/ranges/constants,relative, absolute &mixed cell references, >			
	A) Need of Cyber Law, History of Cyber Law in India B) Cyber Crimes: Various threats and attacks, Phishing, Key Loggers, Identity Theft, Call & SMS forging, e-mail related crimes, Denial of Service Attacks, Hacking, Online shopping frauds, Credit card frauds, Cyber Stalking C) Cyber Security: Computer Security, E-Security, Password Security and Reporting internet fraud			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

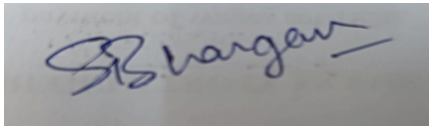
NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL MANAGEMENT DEPARTMENT: COMMERCE

CLASS: SYBBI SEMESTER: III MONTH: JUNE, JULY ACADEMIC YEAR: 2018 – 2019

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 CAPITAL BUDGETING	Meaning, Features, Process of Capital Budgeting	1	FINANCIAL MANAGEMENT BY RAVI KISHORE	• Chalk • Board • Discussion • Examples
	Cash flow and Capital Investment Decision ,Capital Expenditure and Control, Assumptions.	2		
	Techniques of Evolution	3		
	Practical Illustrations	8		



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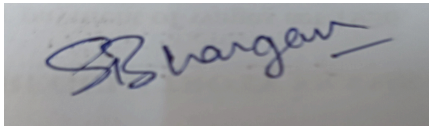
	B) Time value of Money- Concept, Present Value, Annuity, Techniques of Discounting and Compounding	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 3: 16



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TEACHING PLAN (UNIT PLAN)

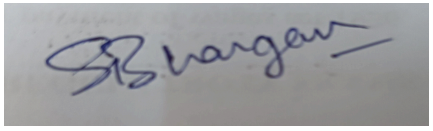
NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL MANAGEMENT DEPARTMENT: COMMERCE

CLASS: SYBBI SEMESTER: III MONTH: AUGUST, SEPTEMBER ACADEMIC YEAR: 2018 – 2019

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 CAPITAL STRUCTURE DECISIONS	Meaning, choice of capital structure	1	FINANCIAL MANAGEMENT BY RAVI KISHORE	• Chalk • Board • Discussion • Examples
	Importance of optimal capital structure, EBIT-EPS Analysis	1		
	Capital Structure Theories	2		
	Dividend Policies (Walter and Gordan)	2		



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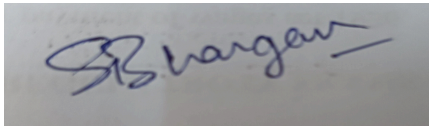
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 4: _____12_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ABHISHEK MADAYE

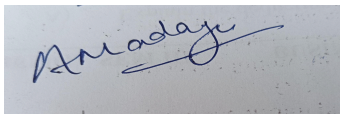
DEPARTMENT: Commerce (Banking & Insurance)

CLASS: S.Y.B.BI SEMESTER: III MONTH: OCT - DEC

ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S: Learner will be able to understand the basic concepts of financial Management and applications of it,and also financial planning approaches, capital structure decisions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FINANCIAL MANAGEMENT, UNIT 1,INTRODUCTION TO FINANCE AND FINANCIAL MANAGEMENT	Introduction to Finance,Long Term Sources ,Short Term Sources,Venture Capital and Hybrid Financing,Financial Management,Objectives of the Firm	15	VIPUL PRAKASHAN AND INTERNET	Chalk and board



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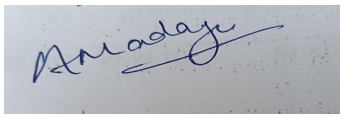
UNIT 2,FINANCIAL GOAL SETTING	Introduction Financial Forecasting – Meaning, Techniques, Benefits Approaches to Financial Planning Economic Value Added (EVA)– Measurement & Components Free Cash Flow (FCF)	**07**	**VIPUL PRAKASHAN AND INTERNET**	**Chalk and board**
UNIT 2,FINANCIAL DECISION	**Capital Structure Decisions**: Meaning and Choice of Capital Structure Importance of Optimal Capital Structure EBIT -EPS Analysis Capital Structure Theories Dividend Policies (Walter & Gordon)	**08**	**VIPUL PRAKASHAN AND INTERNET**	**Chalk and board**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____30_____



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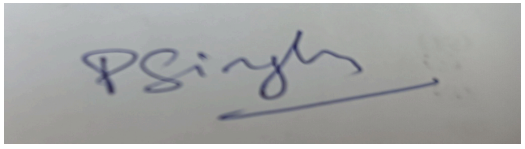
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA SINGH DEPARTMENT COMMERCE (Banking & Insurance) CLASS: SYBBI SEMESTER: III MONTH: JUNE SEPTEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : understand the financial market in India and make them well versed with the Indian financial system

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Introduction to Indian Financial System Unit 4 Derivative Market	Meaning of Indian financial system , Reforms of Indian financial sector, Structure of financial system , banking and non banking sector.	12	Financial Markets & Economy	Chalk and duster
	Introduction to derivatives , derivatives market in India , participants of derivatives market , types of derivatives contract Forwards,futures,options.	12	Financial Markets & Economy	Chalk and duster



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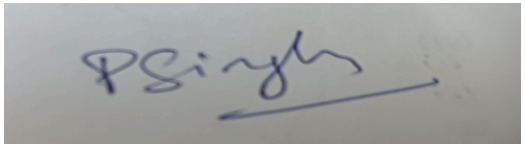
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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NAME OF THE STAFF Jinal Chohan_____

DEPARTMENT: _commerce (banking & Insurance)_____ SUBJECT- FINANCIAL MARKET

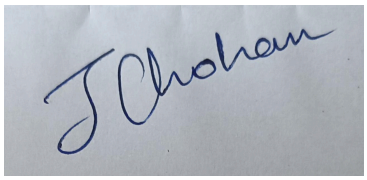
SEMESTER: _____3_____

MONTH: ___july to december___

ACADEMIC YEAR: _____2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : _Understand the basics of the markets, learn the meaning of various terms used in stock market.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2. Financial markets in India-	meaning, features and functions, importance , defects ,	3	Vipul Prakashan	Chalk and Board
	defects , participant,components of organised and unorganised markts and reforms	3	Vipul Prakashan	Chalk and Board
	Indian capital market - meaning, features, functions and importance , participant, instruments	3	Vipul Prakashan	Chalk and Board
	Indian stock market- meaning and functions of stock exchange, NSE BSE Equity market- primary market , IPO , book building, role of merchant bankers , ASBA , Green shoe options , issue of bonus shares, right shares, sweat equity, ESOP	3	Vipul Prakashan	Chalk and Board



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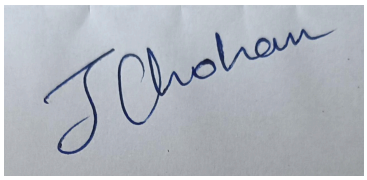
	Indian debt market - market instruments,listing, primary and secondary	3	Vipul Prakashan	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3. Commodity markets	Introduction, meaning,	3	Vipul Prakashan	Chalk and Board
	history, origin ,types of commodity markets ,	3	Vipul Prakashan	Chalk and Board
	structure, participants, commodity exchange in India and abroad	3	Vipul Prakashan	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____09_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA D'CUNHA DEPARTMENT: COMMERCE CLASS: S.Y.BBI SEMESTER: III MONTH: JULY

ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to get knowledge about Banking and Technology.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT:3 Universal banking and technology in banking sector	**Universal banking:** Concept of universal banking, Evolution of Universal banking, Services to govt. Payment and settlement, Merchant banking, Mutual fund, Depository services, Wealth management, Portfolio management, Bancassurance, NRI Remittance.	05	Text Book	Chalk and Board
	Technology in banking: Features, norms and limitations of E-Banking , Mobile Banking, Internet Banking, RTGS, POS Terminal, NEFT, IMPS, Brown label ATM's White label ATM's ,NUUP,AEPS,CBS,CTS, Digital signature, M-Wallets, Online	05	Text book	Chalk and Board

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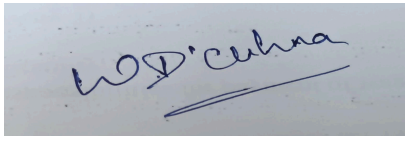

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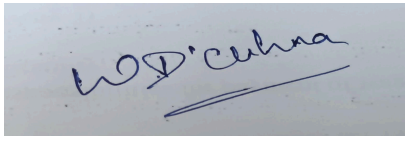
	opening of bank a/c's -Saving and current, and application for credit cards loan, Applicability of KYC norms in banking sector.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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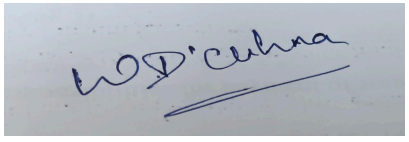
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: WILMA DCUNHA DEPARTMENT: COMMERCE CLASS: S.Y.BBI SEMESTER: III MONTH: AUGUST, SEPTEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to know the concept of Microfinance and about Financial inclusion in India.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT:4 Microfinance and financial inclusion	**Microfinance:** Introduction, Need and code of conducts for Microfinance institution in India Advantages, purpose, limitations and models of SHG-Bank linkage program, Role of NABARD and SIDBI, Portfolio Securitization, SHG-2, NRLM and SRLM, Priority sector and its classification **Financial inclusion:** Need and extent, RBI committee Report of medium term path on financial inclusion 2015, World Findex Report 2015, NISM Report 2015, Features And Procedures of Pradhan Mantri Jan Dhana Yojana ,And PM Mudra Yojana Features ,procedures and significance of stand up India scheme for Green Field	15	Text Book	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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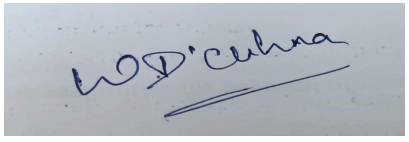

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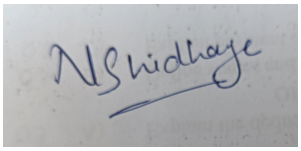
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Nilambari Yogesh Shidhaye Department: - Commerce (Self Finance)
Class: - S.Y.BBI (A, B,) SEM: - III MONTH-: June-sept YEAR: -2018/19

LEARNINIG OBJECTIVES: The learner will be able to know the definition, Types, Principle of banking sector in India.as well as various banking regulations ACT. Will be able to know commercial banking & customer banker Relationship.

PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED
Foundation Course-III (An overview of banking sector)	**MODULE: I** **An overview of Banking Industry: -** Definition of Banks, Types of Banks, Principle of Banking. Various banking system in India, Overview of RBI, Public, Private, Co. operative, Payment Bank, Regional Rural Banks. Emerging trends in the Banking, universal Banking, electronic Banking, globalization of banking. Brief reform of banking sector from 1991-2000.Banking regulation act 1949,2015, Negotiable instrument Act 1881, Basel I,II,III.Bank crisis in India, Critical evaluation of banking sector in India.	10 Lectures		Chalk & duster
	MODULE: II **Commercial Banking and Customer-Banker Relationship: -** Rural Banking: -Meaning, features, Significance and overview. Retail Banking: - Meaning, features, Significance and overview.	10 Lectures		Chalk & dust



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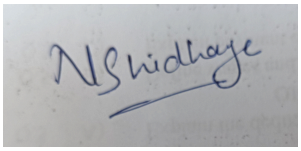
	Corporate Banking: - Meaning, features, Significance and overview. Commercial Banking: - Meaning, features, Significance and overview.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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TEACHING PLAN (UNIT PLAN)

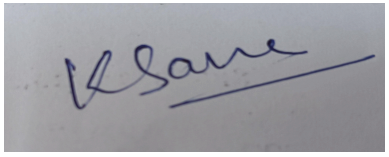
NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT **COMMERCE** (Banking & Insurance):

CLASS**: S.Y.B.B.I** SEMESTER: **3th** MONTH: **JUNE** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What is Income Tax and its basic term(Definitions)
2. What is Residential status and which income is taxable and nontaxable in India (Scope of Total Income)
3. What are the Provision regarding Income from Salary, House Property, Business and Profession,Capital Gain, and Other Sources under Income Tax Act, 1961
4. What are provision of Deductions under Chapter VI - A under Income Tax Act, 1961
5. How to Compute Taxable income of Individual and HUF.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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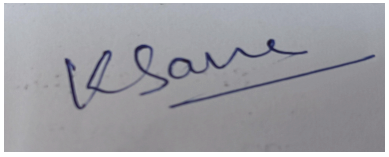
DEFINITIONS AND RESIDENTIAL STATUS	**Definitions U/S 2:** Section 2-Assessee, Assessment Year, Assessment, Annual value, Business, Capital asset, Income, Person, Previous Year, Transfer **Basis of Charge :Section 3 to 9** Previous Year, Residential Status, Scope Of Total Income, Deemed Income	15	1.Direct Taxes Law & Practice by V.K Singhania-TAX MAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

1.

HEADS OF INCOME-1	**Salary Income: Section 15 – 17** Including Section 10 relating to House Rent Allowance, Travel Concession, Special Allowance, Gratuity, Pension ,Commutation, Leave Encashment, Compensation, Voluntary Retirement, Payment from Provident Fund **Income From House Property:** Section 22 to 27, Including Section 2 - Annual Value Practical Question	15	1.Direct Taxes Law & Practice by V.K Singhania-TAX MAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta	Lecture Method



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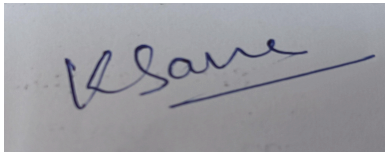
	Profits & Gains From Business & Profession, **Vocation** Section 28 to 32, 36, 37, 40, 40A, 43B, 44AD, 44ADA & 44AE Including.: Section 2 - Business		3. Student guidance to Income Tax.	

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HEADS OF INCOME-2	**Income from Capital Gains :** Section 45, 48, 49, 50, 54 and 55	15	1.Direct Taxes Law & Practice by V.K Singhania-TAX MAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method
	Income from Other Sources: Section 56 to 59			
	Exemption U/s 10 Related to income from other sources			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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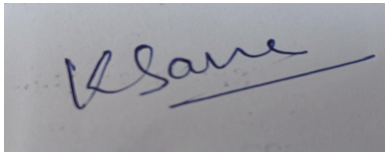
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Deductions under Chapter VI – A AND COMPUTATION OF TOTAL INCOME	**80 A**-Restriction on claim in Chapter VI- A deductions **80 C**- Payment of LIC/PF and other eligible investments **80CCC** - Contribution to certain Pension Fund **80D** - Medical Insurance Premium **80 DD**- Maintenance and medical treatment of handicapped dependent **80E** - Interest on Educational Loan **80 TTA**-Interest on Saving Bank account **80D** - Deduction in the case of totally blind or physically handicapped or mentally retarded resident person	15	1.Direct Taxes Law & Practice by V.K Singhania-TAX MAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method
	Computation of Total Income of Individual and HUF with respect to above heads and deductions (Practical Questions)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

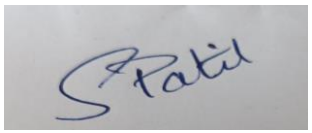
NAME OF THE STAFF: Mr. Snehal S Patil. **DEPARTMENT**: Commerce (Banking & Insurance)) **CLASS:** FYBBI (A, B) **SEMESTER**: II
MONTH: December to April **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVES:

To help students understand the various aspects of Group Communication

The learners will be able to : It introduces students to the process of making effective presentations and moves on to the various group Communications, where individual and team work is equally important.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	**Presentations:** Principles of Effective Presentation Effective use of OHP Effective use of Transparencies How to make a Power-Point Presentation	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board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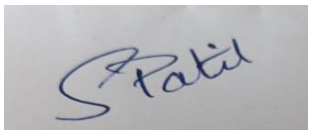
2) Group Communication	**1) Interviews:** Group Discussion Preparing for an Interview, **Types of Interviews –** Selection, Appraisal, Grievance, Exit **2) Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **3) Conference:** Meaning and Importance of Conference Organizing a Conference **Modern Methods:** Video and Tele – Conferencing **4) Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board



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3) Business Correspondence	**1) Trade Letters:** Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters, Promotional Leaflets and fliers Consumer Grievance Letters, Letters under Right to Information (RTI) Act.	15	Manan Publication Sheth Publication Vipul Publication	Chalk - Board
4) Language and Writing	**Reports:** Parts,	15	Manan Publication Sheth Publication	

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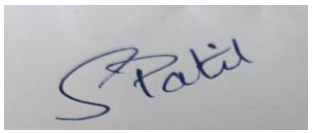
Skills	**Types**, Feasibility Reports, Investigative Reports **Summarisation**: Identification of main and supporting/sub points Presenting these in a cohesive manner		Vipul Publication	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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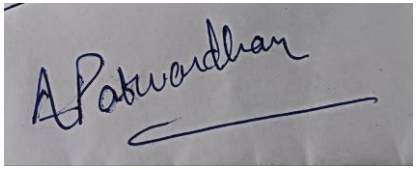
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMBARI PATWARDHAN DEPARTMENT: COMMERCE (Banking & Insurance) CLASS: *FYBBI*

SEMESTER: II MONTH: SEPTEMBER- DECEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: Business Law
The learners will be able to : *ThePupilswillbeabletounderstandhowthepartnershipcanbecreatedtoconductabusiness,andtheprovisions onwhichtheyhavetocomplywhileconductinganybusinessundertheambitofPartnership.SimilarlytheywillbeintroducedtotheNewTypeof Partnershipintroducedin2008namedLimitedLiabilityPartnership*.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to law	*Meaning, Definition, Features, Types, sources and classification*	02	Vipul Prakashan	Chalk and board
Indian constitution	*Natural Justice, Special leave appeal, Features, Writs, Fundamental Rights*	03		
Contract Act	*Meaning, Essentials, Agreement , Offer, Acceptance , Consent, Free consent, Consideration, Capacity of Contract, Kinds and Classification of Contract, Performance, Discharge and termination of contract, Void- Quasi- Contingent- Wager- Minor contracts, Breach and Remedies for the Contract*	12	Vipul Prakashan	Chalk and board



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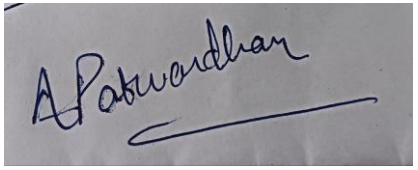
Special Contract	*Indemnity & Guarantee- meaning, features, distinguish, position, surety, discharge of surety* *Bailment- meaning, types, features, position, lien, finder of goods pledge* *Agency- Meaning, Features, types, position, ratification, modes of creation and termination, liabilities* *Sale of goods act Introduction, Meaning, Features, Terms, Goods classification, Sale and Agreement to Sale , Unpaid seller and position conditions and warranty*	08	Vipul Prakashan	Chalk and board
Negotiable Instruments Act	*Features, Promissory note, Bill of exchange, Cheque, Features, Distinguish , Acceptance, Crossing, Dishonour, Position of banker, Holder and Holder in due course, Privileges, Payment in and out of due course types of instruments, Penalties for Dishonour , Endorsement*	06	Vipul Prakashan	Chalk and board
Information Technology Act	*Objectives, Scheme, Digital Signature, Authorization, E-Governance, Certifying Authorities, Digital Certificates, Cyber*	03	Vipul Prakashan	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHWINI DATTATRAY BHOIR DEPARTMENT: COMMERCE (Banking & Insurance) CLASS: FYBBI B. SEMESTER: II

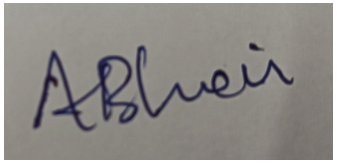
MONTH: NOVEMBER- FEBRUARY ACADEMIC YEAR: 2018-2019 SUBJECT - BUSINESS LAW

LEARNING OBJECTIVE/S:
The learners will be able to know the judiciary structure in india & Role and functions of Supreme Court, High Court and Subordinate courts.

The learners will be able to know importance of Constitution and importance of fundamental Rights and Duties.

The learners will be able to know the meaning of the terms Agreement and contract and note the Distinction between the two.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Introduction of Law, Unit II Indian Constitution Unit III Contract Act	Meaning, Definitions, Features, Types, Sources and Classification.	3	An Introduction of Law - Phil Harris	1. Lecture Method 2. Sections. Articles
	Natural Justice, Special Leave Appeal, Features Writs, Fundamental rights,	4	Introduction to the Constitution of India - Durga Das Basu	3. Case laws 4. Black Board, Chalk and Duster
	Meaning, Essentials, Agreement, Offer, Acceptance, Consent, Free Consent, Consideration, Capacity to Contract, Kinds and	8	Business Law - Kapoor N.D.	



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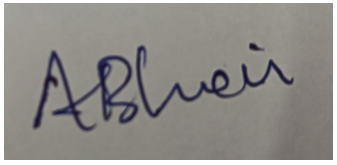
Unit IV Special Contract	Classification of Contract, Performance, Discharge and Termination of Contract, Void - Quasi - Contingent - Wager - Minor Contract, Breach and Remedies for the Contract.		The Indian Contract Act,1872 -Avtar singh	
	Indemnity and Guarantee - Meaning, Features, Distinguish, Position, Surety, Discharge of Surety,	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18



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TEACHING PLAN (UNIT PLAN)

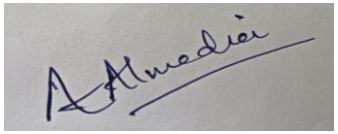
NAME OF THE STAFF: Ankita Almeida. DEPARTMENT: Commerce (Banking & Insurance) CLASS:FYBBI(A&B) SEMESTER: II

MONTH:December-April

ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand the concept of effective learning, formal and informal communication, leadership skills and self improvement

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Valuation of Goodwill and Shares	Valuation of Goodwill: maintainable profit method, super profit method, capitalisation method, Annuity method Practical Sums -08	09	Vipul Prakashan	Chalkboard
	Valuation of shares: Intrinsic value method, Yield method, and Fair value method Practical Sums 04	05	Vipul Prakashan	Chalkboard
2 . Buyback of Equity shares	Introduction, conditions including sources, maximum limits and debt equity ratio , journal entries, balance sheet format	03	Vipul Prakashan	Chalkboard



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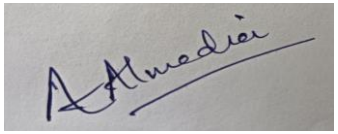
	Practical Sums -09	10	Vipul Prakashan	Chalkboard
3.Redemption of preference shares 4.Redemption of Debentures	Introduction, conditions, journal entries Practical Sums -08 Introduction, types of debentures, journal entries Practical Sums -08	02 08 02 08	Vipul Prakashan Vipul Prakashan	Chalkboard Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 47



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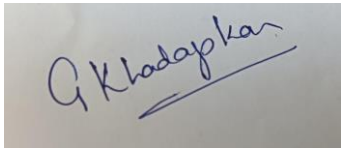
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI . KHADAPKAR_____DEPARTMENT: COM MERCE (Banking & Insurance)_____

CLASS __F.Y.BBI SEMESTER: II_____MONTH: JANUARY TO MARCH ACADEMIC YEAR: __2018 -19_____

LEARNING OBJECTIVE/S: To make the students socially aware of the societal problem and their personality.
The learners will be able to: to understand the overall stratification of the society.

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTTED	REERENCES	TEACHING METHOD	
	Unit 4: Understanding Stress and Conflict Causes of stress and conflict in individuals and society: Agents of socialization and the role played by them in developing the	**10**	**TEXTBOOK BY MANAN PUBLICATIONS**	**chalk and board**	



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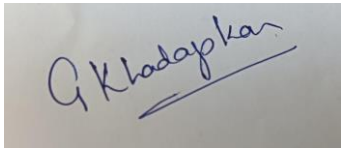
	individual Significance of values, ethics and prejudices in developing the individual Stereotyping and prejudice as significant factors in causing conflicts in society Aggression and violence as the public expression of conflict.				
	<u>Unit 5: Managing Stress and Conflict in Contemporary Societ</u> Types of conflicts and use of coping mechanisms for managing individua stress; Maslow's theory of self-actualisation, Different methods of responding to conflicts in society: Contlict-resolution and efforts towards building peace and	10	TEXTBOOK BY MANAN PUBLICATIONS		



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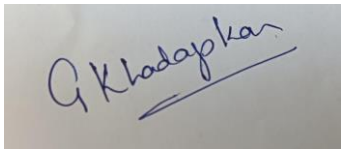
	harmony in society **UNIT 3: ECOLOGY** Importance of Environment Studies in the current developmental context Understanding concepts of Environment Ecology and their interconnectedness Environment as natural capital and connection to quality of human life.	08	**TEXTBOOK BY MANAN PUBLICATIONS**		



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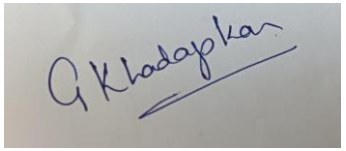
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 28



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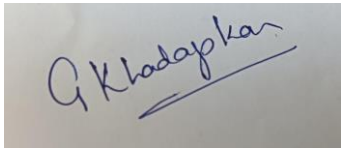

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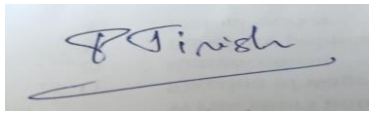
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: COMMERCE (BANKING AND INSURANCE) CLASS: FY BBI

SEMESTER: II MONTH: NOV TO MARCH ACADEMIC YEAR: 2018 -2019

LEARNING OBJECTIVE/S:
The learners will be able to understand concepts of Globalization, its impact, Human Rights, fundamental rights etc

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 GLOBALIZATION AND INDIAN SOCIETY	UNIT 1 – UNDERSTANDING CONCEPTS OF LIBERALIZATION, PRIVATIZATION AND GLOBALIZATION, GROWTH OF IT AND COMMUNCIATION AND ITS IMPACT IN EVERYDAY LIFE, IMPACT OF GLOBALIZATION ON INDUSTRY, CHANGES IN EMPLOYMENT AND INCREASING MIGRATION, CHANGES IN AGRARIAN SECTOR DUE TO GLOBLIZATION, RISE IN CORPORATE FARMING AND INCREASE IN FARMERS SUICIDE	7	ECONOMIES OF DEVELOPMENT BY DWIGHT PERKINS (2006)	LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS
UNIT 2 HUMAN RIGHTS	UNIT 2 – CONCEPT OF HUAN RIGHTS, ORIGIN AND EVOLUTION OF THE CONCEPT, UNIVERSAL DECLARATION OF HR, HR CONSTITUENTS WITH SPECIAL REFERENCE TO FUNDEMENTAL RIGHTS, STATED IN THE CONSTITUTION	10	IMPACT OF POLICIES OF WTO ON INDIAN AGRICULTURE BY S NEHRU (2012)	LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS



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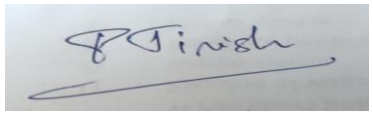
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17



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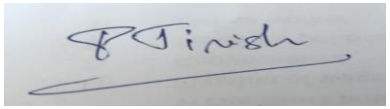
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: COMMERCE (banking & Insurance) CLASS: FY BCOM (BANKING AND INSURANCE) (OB) SEMESTER: II MONTH: NOV TO MARCH ACADEMIC YEAR: 2018 -2019

LEARNING OBJECTIVE/S:
The learners will be able to understand the importance of organizational behavior, various theories relating to OB, Individual Behavior, Group Dynamics, Culture and Change Management and Importance of Organizational Development

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 INTRODUCTION OF ORGANIZATION BEHAVIOUR UNIT 2 GROUP DYNAMICS UNIT 3 ORGANIZATIONAL	UNIT 1 – MEANING, NATURE AND SCOPE OF OB, MODELS OF OB. MASLOW, HERZBERG, Mc GREGOR THEORY X AND Y, WILLIAM OUCHI'S THEORY Z, VICTOR VROOM, ERG THEORY, APPLICATIONS OF THEORY, MOTIVATIONAL TECHNIQUES IN BANKING AND INSURANCE INDUSTRIES	15	STEPHEN ROBBINS (OB)	LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS
	UNIT 2 - INDIVIDUAL BEHAVIOUR (IQ, EQ, SQ), GROUP FORMATION, TEAM BUILDING, TEAM DEVELOPMENT, GOAL SETTING, SOFT SKILLS, INTERPERSONAL SKILLS, MUTICULTURAL SKILLS, CROSS CULTURAL SKILLS, JOHARI WINDOW	15		LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS



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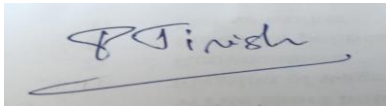
CULTURE AND CHANGE MANAGEMENT UNIT 4 ORGANIZATIONAL DEVELOPMENT				
	UNIT 3 – WORK CULTURE, WORK CONFLICTS, ORGANIZATIONAL CHANGE, EFFECTS OF RESISTANCE TO CHANGE AND WAYS TO OVERCOME IT, TIME AND STRESS MANAGEMENT	15		LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS
	UNIT 4 – MEANING AND NATURE OF OD, TECHNIQUES OF OD, IMPORTANCE OF OD	15	JAMES HUNT, RICHARD OSBORN (OB)	LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

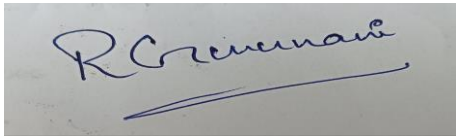
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Organizational Behavior DEPARTMENT: Commerce (Banking & Insurance)

CLASS:FYBBI SEMESTER:II MONTH: Dec- Jan ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Organizational culture & Change mgmt	Work Culture , ways for making work culture effectively and lively	3	Human Behaviour at Work By Newstorm,J.W.	Chalk Board,Discussion
	Work Conflicts- Levels of conflicts, sources and effect of conflict	3		
	Organizational change, effect of resistance to change, ways to overcome resistance to change	2		
	Nature , effect, symptoms, causes of stress, Organizational stresses	2		
	Stress mgmt., time mgmt	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

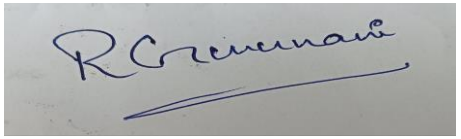
NAME OF THE STAFF: Rashmi Gurunani SUBJECT: Organizational Behavior DEPARTMENT: Commerce

CLASS:FYBBI SEMESTER:I **I** MONTH:Feb - March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Organizational Devlopment	Org. Development- Concepts, essential aspects, characteristics	3	Human Behaviour at Work By Newstorm,J.W.	Chalk Board,Discussion
	OD Process, OD intervention strategies	3		
	OD Culture Change , TQM	2		
	Benefits, limitations of OD	2		
	Techniques and importance of OD	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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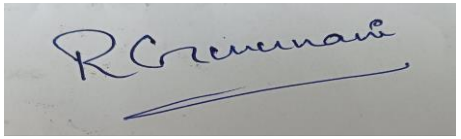

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NAME OF THE STAFF Jinal Chohan_____

DEPARTMENT: _Commerce (Banking & Insurance)_____

SEMESTER: _____2____

MONTH: ___DECEMBER TO APRIL___

ACADEMIC YEAR: _____2018-19____

LEARNING OBJECTIVE/S:
The learners will be able to : _learn regarding the banking and insurance services.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3 Introduction to Insurance	Understanding Risk - Kinds of business risks	5	Vipul Prakashan	Blackboard and Chalk
	Need and Scope of insurance - Evolution of. insurance - Principles of insurance	4	Vipul Prakashan	Blackboard and Chalk
	Types of insurance and policies - Risk and Return relationship	4	Vipul Prakashan	Blackboard and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

1

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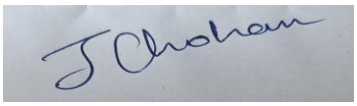


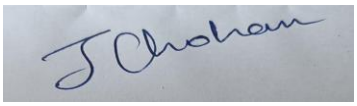
Signature of Teacher

Signature of HOD

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4 Insurance Business Environment in India	Growth of Insurance Business -	5	Vipul Prakashan	Blackboard and Chalk
	Actuarial Role - Claim and Settlement Procedures -	4	Vipul Prakashan	Blackboard and Chalk
	Insurance Regulations Role of IRDA.	3	Vipul Prakashan	Blackboard and Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

Signature of Teacher **Signature of HOD**



Signature of Teacher **Signature of HOD**

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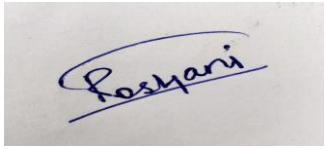
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ROSHANI NAGAR SUBJECT: PRINCIPLES AND PRACTICES OF BANKING & INSURANCE DEPARTMENT: COMMERCE (Banking & Insurance) CLASS: FYBBI SEMESTER: II MONTH: NOV- MAR ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Learn basic banking concepts its meaning , definition, importance, need of banking ,various operations in banking sector.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Introduction to Banking				
	Basic Concepts: Origin, Need, Types, Scope and Functions of Banking - Need for Regulation and Supervision	15	VIPUL PRAKASHAN	CHALK & DUSTER DISCUSSION EXAMPLES
2.Banking Scenario in India	Banking Operations -Types of accounts - Banking Services - Current Scenario, Financial Inclusion and Banking Regulations & Role of RBI.	15	VIPUL PRAKASHAN	CHALK & DUSTER DISCUSSION EXAMPLES



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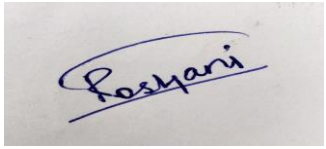
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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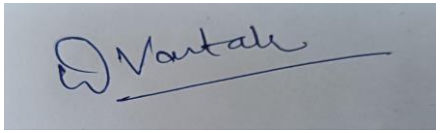
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPASHREE PARAG VARTAK DEPARTMENT: Commerce (Banking & Insurance) Subject: MATHEMATICS CLASS: FYBBI SEMESTER: II MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concept of Ratio, Proportion, Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation. Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHOD UNIT II LINEAR PROGRAMMING TECHNIQUES	Meaning, advantages, limitations	1	BUSINESS MATHEMATICS BY KAPOOR	BLACKBOARD CHALK AND DUSTER
	Basic applications, basic terminologies. Formulation of linear programming problems	2		Explanation, Discussion, Problem solving assignments
	Graphical method of solving linear programming problems	3		
	Simplex method up to three variables with maximization and minimization	3		



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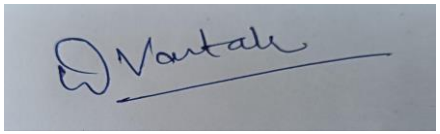
	Duality in linear programming concept	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPASHREE PARAG VARTAK DEPARTMENT: Commerce (Banking & Insurance) Subject: MATHEMATICS CLASS: FYBBI SEMESTER: II MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concept of Ratio, Proportion, Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation. Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHOD UNIT IV RATIO, PROPORTION AND PERCENTAGE	Define Ratio, Continued Ratio, Inverse Ratio, Problem solving on ratio	3	BUSINESS MATHEMATICS BY KAPOOR	BLACKBOARD CHALK AND DUSTER
	Define Proportion its types. Problem solving on proportion	3		Explanation, Discussion, Problem solving assignments
	Define Variation and its types	1		
	Explain concept of percentage and computation of percentage.	3		

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Profit and Loss	Concept of profit and loss and problems soving on profit and loss.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10_____

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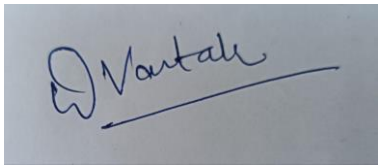
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPASHREE PARAG VARTAK DEPARTMENT: Commerce (Banking & Insurance) Subject: MATHEMATICS CLASS: FYBBI SEMESTER: II MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concept of Ratio, Proportion, Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation. Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Testing of hypothesis:	Concept of hypothesis Null and alternate hypothesis,	3	STATISTICS FOR TESTIG OF HYPOTHESIS BY KAPOOR	BLACKBOARD CHALK AND DUSTER
	• Types of errors, Critical region, Level of significance. • Large sample tests (using central limit theorem, if necessary) • For testing specified value of population mean	3		Explanation, Discussion, Problem solving assignments
	• For testing specified value in difference of two means	3		



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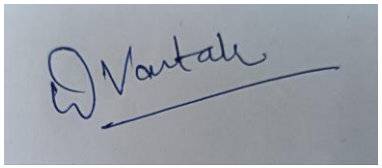
	• For testing specified value of population proportion	3		
	• For testing specified value of difference of population proportion (Development of critical region is not expected.)	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____



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TEACHING PLAN (UNIT III PLAN)

NAME OF THE STAFF: Khan Parveen Saba DEPARTMENT: Commerce (Banking & Insurance) CLASS: FYBBI

SEMESTER: II MONTH: DEC- JAN ACADEMIC YEAR: 2018-19

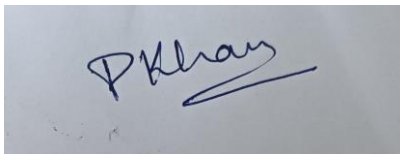
LEARNING OBJECTIVE/S:
The learners will be able to : (1) Understand the concept of matrices and its types

(2) learn about matrix rows and columns

(3) define Determinants

(4) learn about applications of matrices

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHOD- II Matrices and Determinants Unit 3	(1) Matrices and types of matrices	02	Statistical methods- S.G GUPTA Business Mathematics – D C Sancheti & V K Kapoor	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) Addition, subtraction and multiplication matrices and sums	02		



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	(3) Determinants and types of determinants	02		
	(4) Inverse matrix by Reduction and adjoint method	02		
	(5) Application of Matrices	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10 Lectures

TEACHING PLAN (UNIT V PLAN)

NAME OF THE STAFF: Khan Parveen Saba DEPARTMENT: Commerce CLASS: FYBBI SEMESTER: II

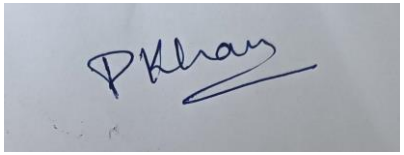
MONTH: JAN -FEB ACADEMIC YEAR: 2018-19

The learners will be able to : (1) Learn Expected return from SHARE

(2) Understand the Measuring total risk from investigator

(3) learn about portfoli

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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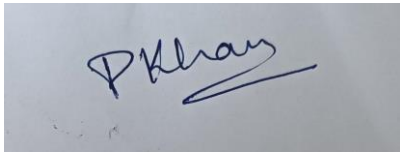
QUANTITATIVE METHOD- II Statistical Application in Investment Management UNIT V	(1) Expected value , Variance , covariance and correlation coefficition	03	Statistical methods- S.G GUPTA Business Mathematics – D C Sancheti & V K Kapoor	Blackboard , chalk and Duster Discussion, Problem solving Homework
	(2) Expected Return from Share	03		
	(3) Measuring total risk from Investing in Shares	03		
	(4) Measuring risk of a Portfolio	03		
	(6) Systematic and unsystematic (PORTFPLIO)	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15 LECTURES

TEACHING PLAN (UNIT VI PLAN)

NAME OF THE STAFF: Khan Parveen Saba DEPARTMENT: Commerce CLASS: FYBBI SEMESTER: II

MONTH: FEB - MARCH ACADEMIC YEAR: 2018-19



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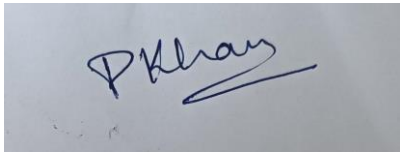
LEARNING OBJECTIVE/S:
The learners will be able to : (1) Define GDP , REAL growth in GDP price level Inflation

(2) Understand INDEX for agricultural production

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
QUANTITATIVE METHOD- II ECONOMIC INDICATORS UNIT VI	(1) Gross Domestic product and related Measures	01	Statistical methods- S.G GUPTA Business Mathematics – D C Sancheti & V K Kapoor	Blackboard , chalk and Duster Discussion, Problem solving Homework
	(2) Real growth in G.D.P	01		
	(3) Indices of agricultural production	01		
	(4) Indicators of MONEY supply	01		
	(5) External Debt and Debt Service ratio	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05 LECTURES



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TEACHING PLAN (UNIT PLAN)

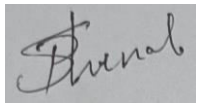
NAME OF THE STAFF: Mr. Snehal S Patil. **DEPARTMENT:** B.Com (Accounting and Finance) **CLASS**: FYBAF (A, B, C) **SEMESTER**: I
MONTH: July to Dec 2018 **ACADEMIC YEAR:** 2018 -19

LEARNING OBJECTIVE/S:

To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills.

The learners will be able to prepare resumes to attend interviews, convening meetings, planning strategies, making presentations, drafting reports etc,.
To make students aware of the importance of developing skills.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1) Theory of Communication	**1) Concept of Communication-** Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World Impact of technological advancements on communication **2) Channels and Objectives of Communication**: **Channels :** Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine **Objectives of Communication:** Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Morale of Employees **3) Methods and Modes of Communication:** **Methods:** Verbal and Nonverbal, Characteristics of Verbal Communication, Characteristics of Non-verbal Communication, Business Etiquette **Modes:** Telephone and SMS Communication 3 (General	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board



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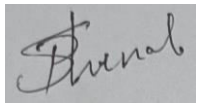
	introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing			
2) Obstacles to Communication in Business World	**1) Problems in Communication /Barriers to Communication:** Physical, Semantic/Language, Socio-Cultural, Psychological Barriers, Ways to Overcome these Barriers **2) Listening:** Importance of Listening Skills, Cultivating good Listening Skills **3) Introduction to Business Ethics:** Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility **Sensitization actual business practices:** Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board
3) Business Correspondence	**1)Theory of Business Letter Writing:** Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, **Personal Correspondence:** Statement of Purpose, Job Application Letter and Resume,	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board



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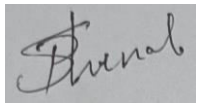
	Letter of Acceptance of Job Offer, Letter of Resignation			
4) Language and Writing Skills	**Commercial Terms used in Business Communication Paragraph Writing:** Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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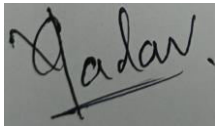
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI YADAV. DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF SEMESTER: I

MONTH: AUGUST-DECEMBER. ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand and learn Cost accounting. To learn material costing with different methods. Learn to analyze labour costing and calculate it's remuneration with different methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Material Costing	Concept of Material Cost, Material control Procedure, Documentation required.Various stock Ledger , Bin card , Different Stock levels, Economic Order Quantity. Format of FIFO and Weighted Average Method. Sums on EOQ ,. Stock levels, FIFO and Weighted method Q.1 to Q.6	15	Manan Prakashan	Chalk & Duster
2. Labour Cost				
	Meaning & concept of labour cost. Composition of Labour cost.	15	Manan Prakashan	Chalk & Duster



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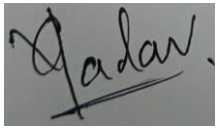
	Labour cost records. Overtime/Idle time / Incentive Schemes Sums solved on various methods...			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

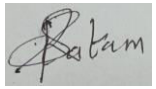
NAME OF THE STAFF: Rohan Satam DEPARTMENT:B.Com (Accounting and Finance) CLASS: FYBAF SEMESTER: I

MONTH: JULY- NOV ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- To gain knowledge about cost accountancy.
- To understand material costing with different techniques.
- To Analyse labour costing and its methods for remuneration.
- To acquire knowledge about overheads costings and techniques of allocation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost Accounting – Introduction and Elements of				



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Cost				
Introduction to Cost Accounts	Evolution Objectives and Scope of Cost Accounting Importance and Advantages of Cost Accounting Difference between Cost Accounting and Financial Accounting Limitations of Financial Accounting Definitions: Cost, Costing and Cost Accounting Classification of Cost on Different Bases Cost Allocation and Apportionment Coding System Essentials of Good Costing System 2	15	Manan Prakashan	Chalk & Duster
Overheads	Overheads: The Concept Classification of overheads on different bases Apportionment and Absorption of Overheads	15	Manan Prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF

SEMESTER: I MONTH: JULY – OCTOBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:
The learners will be able to understand the concept of using micro economics for the growth of the economy by developing a core understanding regarding demand, supply and market condition in terms of revenue and cost and also application of forecasting for the development of the economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics – I Unit: I, II & III	Unit I: Scope and Importance of Business Economics - Tools, Opportunity cost principle, incremental and marginal cost, economic and functional relations with equations, Total average and marginal relations and its usage for decision making - Basics of market demand, supply and equilibrium price, Shifts in demand and supply curve and its equilibrium	10	Managerial Economics by P.L.Mehta, M.Hirchey Dominick Salvatore.	Lecture, group discussion, test, oral presentation of important topics.
	Unit II: Demand Analysis - Demand function: nature, meaning, significance, types,	10	Principles of Economics by	Lecture, group discussion, test, oral presentation of important topics.

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	measurement of elasticity of demand, relationship between elasticity of demand and revenue concepts. - Demand Estimation and Forecasting: Meaning, significance and method.		Gregory Mankiw	
	Unit III: Supply and Production Decision and Cost of Production - Production Function: Short run and long run production function, law of variable proportion, law of returns to scale, isoquants, ridgelines, expansion path, economies and diseconomies of scale. - Cost Concepts: Accounting, economic, total, average, marginal explicit, implicit cost, short run and long run cost, break even analysis.	15	Managerial Economics and Concept by Pal Sumitra	Lecture, group discussion, test, oral presentation of important topics.
			Advanced Economic Theory by H.L.Ahuja	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____35_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: __ANKITA ARUN RAUT_____ DEPARTMENT: __B.Com (Accounting and Finance)

CLASS: ____FYBAF_____ SEMESTER: _____I_____ MONTH: JULY- NOV_____ ACADEMIC YEAR: ___2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	INVENTORY VALUATION: Introduction as per AS2, periodic inventory system & perpetual inventory system. Practical Q: Q1.2.3.4. on fifo & Q5,6,7,8 on weighted Avg method	10	Manan Prakashan	Chalk & Duster
2	DEPARTMENTAL A\C: basis of allocation of Income & expenditure, stock reserve, inter departmental transfer. Practical problems : Q1 to Q8.	15	Manan Prakashan	Chalk & Duster
3	ACCOUNTING FOR HIRE PURCHASE: calculation of interest, Journal entries, Ledger A\C, B\S in the books of vendor & purchaser. Practical Q1 to Q4 in the	15	Manan Prakashan	Chalk & Duster

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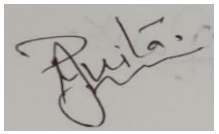
	books of purchaser & Q5 to Q8 in the books of vendor.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___40_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHAKTI VILAS PURANDARE DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF SEMESTER: I SUBJECT: FINANCIAL ACCOUNTING MONTH: JULY TO NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: learn the AS issued by ICAI, recognize the difference between capital and revenue income and expenditure and prepare the manufacturing final account.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Manufacturing Account	Introduction to manufacturing A/c. Format of manufacturing A/c. Q1 on manufacturing A/c. Q2. On Manufacturing and Trading A/c. Q3. On Manufacturing, Trading and P&L. Q4. Q5. Q6. Q7. Q8. On manufacturing final A/c with adjustments.	20	Manan prakashan	Chalk and board
Capital revenue income and expenditure	Characteristics of Capital expenditure and income, Characteristics of Revenue expenditure and income. Questions on capital expenditure and income with reasons.	10	Manan prakashan	Chalk and board

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Accounting standards	Introduction of AS. AS 1: Disclosure of accounting policy AS2: Inventory valuations. AS 9: Revenue recognitions	15	Manan Prakashan	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____45_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL MANAGEMENT (I) DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF SEMESTER: I MONTH: JULY, AUGUST ACADEMIC YEAR: 2018 – 2019

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 INTRODUCTION TO FINANCIAL MANAGEMENT	Introduction & Evolution, Meaning, Scope	2	FINANCIAL MANAGEMENT BY RAVI & KISHORE	• Chalk • Board • Discussion • Examples
	Objectives, Profit vs Value Maximization, Wealth Maximization	2		
	Importance, Managerial Functions, Limitation,	2		
	Tools of Financial Management, Financial Management vs Financial Accounting	2		
UNIT 2	Time Value of Money, Simple Interest, Compound Interest, Present Value	2		

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CONCEPTS IN VALUATION	Effective Rate of Interest, Annuity, Perpetuity, Sinking Fund	2		
	Present value and discounted Cash flow	1		
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: _____8_____ AND **TO THE UNIT 2:** _____10_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: FINANCIAL MANAGEMENT (I) DEPARTMENT B.Com (Accounting and Finance) CLASS: FYBAF SEMESTER: I MONTH: SEPTEMBER ACADEMIC YEAR: 2018 – 2019

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 LEVERAGE	Introduction, Risk and Types of risk, EBIT & EPS Analysis	2	FINANCIAL MANAGEMENT BY RAVI & KISHORE	• Chalk • Board • Discussion • Examples
	Types of Leverages: Operating Leverage, Financial Leverage & Composite Leverage Relationship between Operating Leverage and Financial Leverage	2		
	Practical Illustrations	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 3: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. VISHWANATH V. PAWAR SUBJECT: FINANCIAL MANAGEMENT (I)

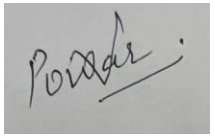
DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF SEMESTER: I

MONTH: JULY, AUGUST ACADEMIC YEAR: 2018 – 2019

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 Types Of Financing	Introduction	1	FINANCIAL MANAGEMENT BY RAVI & KISHORE	• Chalk • Board • Discussion • Examples
	Needs of Finance & Sources :- Long term, Medium Term, Short Term	2		
	Long Term Sources of Finance	2		
	Short Term Sources of Finance	2		
UNIT 5	Introduction	2		
	Definition & Importance of Cost of Capital	2		



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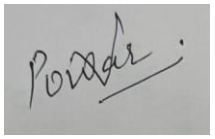
Cost Of Capital	Measurement of Cost of Capital	1		
	WACC (Including Practical Problems)	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE : 17



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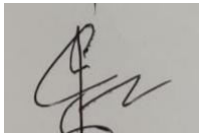
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____Jinal Chohan_____DEPARTMENT: B.Com (Accounting and Finance)

CLASS: _____FYBAF_____ SEMESTER: ___I_____ MONTH: _____June- September____ ACADEMIC YEAR: __2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to: learn about the society in general. The causes and the problems faced by the society are highlighted here. Problems like communalism, regionalism, casteism are discussed that makes the student understand the issues faced by the society

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course Unit 1- Overview of Indian Society	Understand the multi- cultural Diversity of Indian society through its demographic composition	05	Manan Prakashan, Vipul Prakashan	Chalk- Board
	Population distribution according to religion, caste, gender	04	Manan Prakashan, Vipul Prakashan	Chalk- Board
	Appreciate the concept of linguistic diversity in relation to the Indian situation	04	Manan Prakashan, Vipul Prakashan	Chalk- Board



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	Understand regional variations according to urban, rural, tribal characteristics	03	Manan Prakashan, Vipul Prakashan	Chalk- Board
	Understand the concept of diversity as difference	02	Manan Prakashan, Vipul Prakashan	Chalk- Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____17_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Concept of Disparity-1	Understand the concept of disparity as arising out of Stratification and inequality	03	Manan Prakashan, Vipul Prakashan	Chalk- Board
	Explore the disparities arising out of gender with special reference to violence against women,	04	Manan Prakashan, Vipul Prakashan	Chalk- Board
	Female Foeticide and portrayal of women in media	04	Manan Prakashan, Vipul Prakashan	Chalk- Board
	Appreciate the inequalities faced by people with disabilities and understand the issues of people with physical and mental disabilities	04	Manan Prakashan, Vipul Prakashan	Chalk- Board

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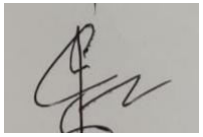
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15___

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3- Concept of Disparity-2	Examine inequalities manifested due to the caste system and inter- group conflicts arising thereof	05	Manan Prakashan, Vipul Prakashan	Chalk- Board
	Understand inter group conflicts arising out of communalism	05	Manan Prakashan, Vipul Prakashan	Chalk- Board
	Examine the causes and effects of conflicts arising out of regionalism and linguistic difference	05	Manan Prakashan, Vipul Prakashan	Chalk- Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15___



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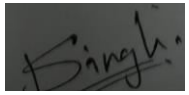
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA SINGH DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF SEMESTER: I

MONTH: JULY-SEPTEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : understand the basic values of the society as well as the heterogeneity of our society, culture and traditions and an overview of our Indian Constitution and how it protects our lives.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Introduction to Indian society.	Introduction to Indian society, caste, caste system Urban, rural, tribal characteristics of society, women empowerment, Major religions in India, Unity in diversity	15	Fundamentals of the society	Chalk and duster
Unit 2 Indian Constitution				
	Indian Constitution it's formation , preamble , schedules,	11	Indian Constitution	Chalk and duster



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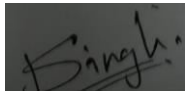
	sections, humans rights,			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 26



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TEACHING PLAN (UNIT PLAN)

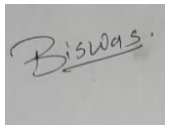
NAME OF THE STAFF: ____BRISTI BISWAS_____ DEPARTMENT: _B.Com (Accounting and Finance)____CLASS: __FYBAF__DIVISION C____

SEMESTER: _____I_____ MONTH: _JULY-OCTOBER_____ ACADEMIC YEAR: ____2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to :

To make student understand the concepts of business economics which will make them to analyse the market factor working, its reward, decision making, production analysis, cost concept, etc._____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics -I	**Introduction** **Scope and Importance of Business Economics** - basic tools- Opportunity Cost principle- Incremental and Marginal Concepts. Basic economic relations - functional relations: equations- Total, Average and Marginal relations- use of Marginal analysis in decision making.	2	*Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases (S. Chand & Sons, N. Delhi, 2000)* • *Salvatore, D.:*	CHALK AND BLACK BOARD



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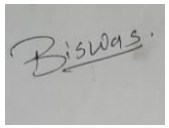
			Managerial Economics in a global economy (Thomson South Western Singapore, 2001)	
	The basics of market demand, market supply and equilibrium price- shifts in the demand and supply curves and equilibrium	2	• *Frank Robert.H ,Bernanke. Ben S., Principles of Economics (Tata McGraw Hill (ed.3)*	
	Market structure: Perfect competition and Monopoly and Pricing and Output Decisions under Imperfect Competition Short run and long run equilibrium of a competitive firm and of industry - monopoly - short run and long- run equilibrium of a firm under Monopoly	4	• *Gregory Mankiw., Principles of Economics, Thomson South western (2002 reprint)*	



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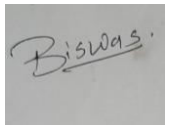
	Monopolistic competition: Equilibrium of a firm under monopolistic competition, debate over role of advertising. *(topics to be taught using case studies from real life examples)* **Oligopolistic markets:** key attributes of oligopoly - Collusive and non-collusive oligopoly market - Price rigidity - Cartels and price leadership models *(with practical examples)*	5	• *Samuelson &Nordhas.: Economics (Tata McGraw Hills, New Delhi, 2002*	
	Pricing Practices Cost oriented pricing methods: cost – plus (full cost) pricing, marginal cost pricing, Mark up pricing, discriminating pricing, multiple – product pricing - transfer pricing *(case studies on how pricing methods are used in business world)*	3		



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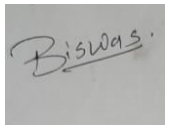
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____16_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: LEJESH KELOTH DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF

SEMESTER: I MONTH: JULY – OCTOBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:
The learners will be able to understand the concept of using micro economics for the growth of the economy by developing a core understanding regarding demand, supply and market condition in terms of revenue and cost and also application of forecasting for the development of the economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics – I Unit: IV & V	UNIT IV- MONOPOLISTIC COMPETITION Competitive and monopolistic elements of monopolistic competition – equilibrium of a firm under monopolistic competition, monopolistic competition versus perfect competition- excess competition and inefficiency – debate over role of advertising	06	Managerial Economics by P.L.Mehta, M.Hirchey Dominick Salvatore.	Lecture, group discussion, test, oral presentation of important topics.
	Oligopolistic Markets: key attributes to oligopoly – collusive and non collusive oligopoly market- Price rigidity – Cartels and price leadership models (with practical examples)	04	Principles of Economics by Gregory Mankiw	Lecture, group discussion, test, oral presentation of important topics.

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	UNIT V- PRICING PRACTICES Cost Oriented Pricing Methods: Cost- plus (full cost) pricing, marginal cost pricing, Mark-up pricing, discriminating pricing, multiple- product pricing- transfer pricing (case studies on how pricing methods are used in business world)	05	Managerial Economics and Concept by Pal Sumitra	Lecture, group discussion, test, oral presentation of important topics.
			Advanced Economic Theory by H.L.Ahuja	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Sandra Almeida DEPARTMENT: B.COM (Accounting and Finance) CLASS:FYBAF . SEMESTER: I

SUBJECT : Business Environment. MONTH: August 2018 - October 2018 ACADEMIC YEAR:2018 - 19

LEARNING OBJECTIVE/S:

The learners will be able to:

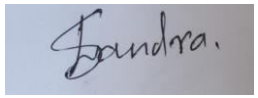
Understand the meaning of business and different types of business environments.

Get knowledge of environmental analysis through PESTEL Analysis, SWOT Analysis

Interpret foreign trade in India, Balance of Trade, FDI Investment Flows and its Implication for Indian Industries.

Know in detail about WTO, MNC's and TNC's.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ENVIRONMENT	Unit1-Business and its Environment BUSINESS- Business Objectives, Dynamics of Business and its Environment, Types of Business Environment ENVIRONMENTAL ANALYSIS: Importance, Factors, PESTEL Analysis, SWOT Analysis	12	Global Economy and business environment by Francis Cherunilam	CHALK & DUSTER



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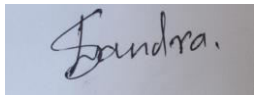
	Unit4- International Environment STRATEGIES FOR GOING GLOBAL: MNCs and TNCs, WTO FOREIGN TRADE IN INDIA- Balance of Trade, FDI Investment Flows and its Implication for Indian Industries	12	Global Economy and business environment by Francis Cherunilam	CHALK & DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 24



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof Veronika B Barla **DEPARTMENT**:B.Com (Accounting and Finance)**CLASS**: F. Y. BAF **DIVISION:** A, B, AND C **SEMESTER**: I

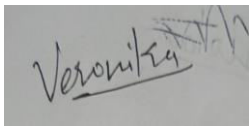
MONTH: _____ **SUBJECT**: Business Environment **ACADEMIC YEAR**: 2018-19

LEARNING OBJECTIVE/S:
1. Help to understand contemporary issues.
2. Helps understand the International Environment.

The learners will be able to: 1. Helps to understand corporate social responsibility and corporate governance, Social responsibility of business, Ecology and business, Carbon credit, Evolution of social audit, Benefit of social audit, Social audit vs commercial audit.

2. Helps to understand international environment: Strategies for going Global: MNCs, TNCs and WTO, Foreign trade in India, Balance of Trade, FDI investment flows and its implication for Indian Industry

paper, Unit, Title	Subtopics	Number of lectures allotted	References	Teaching Method /ICT tools used
Business Environment Module III Contemporary issue	Corporate social responsibility and corporate governance	3	Corporate governance in India, Francis cherunilam, Corporate governance in Indian by j. Sarkar and s. Sarkar	Lecture method
	Social responsibility of business	2	"\\	"



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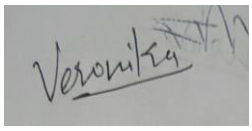
	Ecology and business	2	"	"
	Carbon credit	2	"	"
	Evolution of social audit	2	"	"
	Benefit of social audit	2	"	
	Social audit vs commercial audit	2	"	"
Unit IV International environment	Strategies for going Global: MNCs, TNCs and WTO	6	"	"
	Foreign trade in India	2	"	"
	Balance of Trade	2	"	"
	FDI investment flows and its implication for Indian Industry	5	"	"

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT I and II : 30 Hrs



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TEACHING PLAN (UNIT

NAME OF THE STAFF:ABHISHEK MADAYE DEPARTMENT: B.Com (Accounting and Finance)

CLASS:FYBAFSEMESTER: II (Subject : FOUNDATION COURSE) MONTH: NOV TO MARCH ACADEMIC YEAR: 2018 -2019

LEARNING OBJECTIVE/S: The learners will be able to understand stress management concepts and management of it

PER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	ACHING METHOD/ ICT TOOLS USED
UNIT 4 UNDERSTANDING STRESS AND CONFLICT	UNIT 4 – CAUSES OF STRESS AND CONFLICT IN INDIVIDUAL AND SOCIETY, AGENTS OF SOCIALIZATION, SIGNIFICANCE OF VALUES, ETHICS AND PREJUDICES IN DEVELOPING THE INDIVIDUAL, STEREOTYPING AND PREJUDICE AS SIGNIFICANT FACTORS IN CAUSING CONFLICTS IN SOCIETY, AGGRESSION AND VIOLENCE AS THE PUBLIC EXPRESSION OF CONFLICTS	10	MANAN PUBLICATION ,VIPUL PUBLICATION	CHALK AND BOARD

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TEACHING PLAN (UNIT

UNIT 5 MANAGING STRESS AND CONCEPT IN CONTEMPORARY SOCIETY	UNIT 5 – TYPES OF CONFLICTS, USE OF COPING MECHANISMS FOR MANAGING INDIVIDUAL STRESS, MASLOW THEORY, DIFFERENT METHODS OF RESPONDING TO CONFLICTS, CONFLICT RESOLUTION AND EFFORTS TOWARDS BUILDING PEACE AND HARMONY IN SOCIETY	8	MANAN PUBLICATION ,VIPUL PUBLICATION	CHALK AND BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of
Science Yashvant Keshav Patil College of
Commerce Vidhya Dayanand Patil
College of Arts

TEACHING PLAN (UNIT

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita Almeida DEPARTMENT: B.Com (Accounting and Finance) CLASS:FYBAF SEMESTER: II MONTH: December to March

ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand the concept of effective learning, Formal and informal communication, leadership skills and self improvement

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Introduction to Auditing	Basics: financial statements, uses of financial information, definition of auditing, objectives of auditing- primary and secondary, expression of opinion, detection of frauds and errors , inherent limitations of audit.	03	Book By Manan Prakashan	Chalkboard

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	Errors and Frauds: concepts, reasons and circumstances, types of errors- commission, omission, principle and compensating, types of frogs, risk of fraud and error in audit, auditors duties and responsibilities in respect of fraud	04	Book by Manan Prakashan	Chalkboard
	Principles of audit: integrity, objectivity , independence, confidentiality, skills and competence, materiality and work performed by others, documentation, planning, audit evidence audit conclusions and reporting	02	Book by Manan Prakashan	Chalkboard
	Types of Audit: meaning advantages and disadvantages off balance sheet audit , continuous audit, concurrent audit , annual audit.	04	Book by Manan Prakashan	Chalkboard
	Miscellaneous: advantages of independent audit, Qualities of auditors, auditing Vs accounting, Auditing Vs Investigation, the concept of true and fair view Accounting concepts relevant to auditing: materiality,	04	Book by Manan Prakashan	Chalkboard

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2. Audit Planning, Procedures And Documentation	Going concern **Audit Planning**: Meaning, objectives, factors to be considered, sources of obtaining information, discussions with client, overall audit plan. **Audit Programme**: meaning, factors to be considered, advantages , disadvantages, methods of work, instruction before commencing work, overall audit approach. **Audit working papers**: meaning, importance, factors determining form and contents, main functions , features, contents of permanent audit file , temporary audit file, ownership, custody , access of other parties to audit walking papers , Auditors Lien on working papers, auditor's Lien on clients book. **Audit Notebook:** meaning, structure, content, general information current information importance	03 05 02	Book by Manan Prakashan Book by Manan Prakashan Book by Manan Prakashan	Chalkboard Chalkboard Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27

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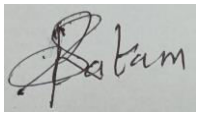
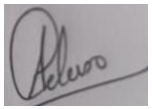
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan D. Satam DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF SEMESTER:II

MONTH: June 2019 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: Learning about Auditing.
The learners will be able to : Students will be able to learn about Auditing guidelines

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Auditing	**3. Auditing Techniques** • Test Check Test Checking Vs Routing Checking, Test Check Meaning, Features, Factors to be Considered, When Test Checks can be Used, Advantages, Disadvantages and Precautions. • Audit Sampling Audit Sampling, Meaning, Purpose, Factors in Determining Sample Size Sampling Risk, Tolerable Error and Expected Error, Methods of Selecting Sample Items Evaluation of Sample Results Auditors Liability in Conducting Audit based on Sample • Internal Control Meaning and Purpose, Review of Internal Control,	15	Manan and Vipul publication	Chalk - Board

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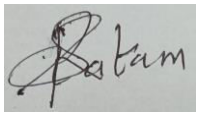
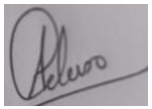
	Advantages, Auditors Duties, Review of Internal Control, Inherent Limitations of Internal Control, Internal Control Samples for Sales and Debtors, Purchases and Creditors, Wages and Salaries • Internal Checks Vs Internal Control, Internal Checks Vs Test Checks			
	4. Internal Audit Meaning, Basic Principles of Establishing Internal Audit, Objectives, Evaluation of Internal Audit by Statutory Auditor, Usefulness of Internal Audit Internal Audit Vs External Audit, Internal Checks Vs Internal Audit	15	Manan and Vipul publication	Chalk - Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. Snehal S Patil. **DEPARTMENT:** B.Com (Accounting and Finance) **CLASS:** FYBAF (A, B, C)

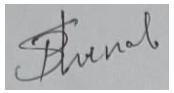
SEMESTER: II **MONTH:** December to April **ACADEMIC YEAR:** 2918-19

LEARNING OBJECTIVES:

To help students understand the various aspects of Group Communication

The learners will be able to : It introduces students to the process of making effective presentations and moves on to the various group Communications, where individual and team work is equally important.

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	**Presentations:** Principles of Effective Presentation, Effective use of OHP, Effective use of Transparencies, How to make a Power-Point Presentation	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board



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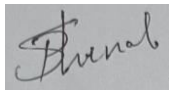
2) Group Communication	**1) Interviews**:Group Discussion Preparing for an Interview, **Types of Interviews –** Selection, Appraisal, Grievance, Exit **2) Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **3) Conference:**Meaning and Importance of Conference Organizing a Conference Modern Methods: Video and Tele – Conferencing **4) Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	15	Manan Publication Sheth Publication Vipul Publication	Chalk - Board



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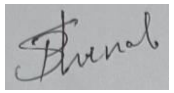
3) Business Correspondence	**1) Trade Letters**: Letters of Inquiry, Letters of Complaints, Claims, Adjustments, Sales Letters, Promotional leaflets and fliers, Consumer Grievance Letters, Letters under Right to Information (RTI) Act.	15	Manan Publication Sheth Publication Vipul Publication	Chalk - Board
4) Language and Writing Skills	**Reports:** Parts, Types, Feasibility Reports, Investigative Reports **Summarisation:** Identification of main and supporting/sub points Presenting these in a cohesive manner	15	Manan Publication Sheth Publication Vipul Publication	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

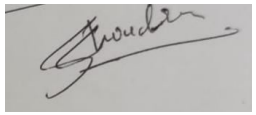
NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT: B.Com (Accounting and Finance)

CLASS: FYBAF (A,B,C) SEMESTER:II MONTH: June to Oct.

ACADEMICYEAR: 2018 -2019 LEARNING OBJECTIVE/S: Business Regulatory Framework (Law)

The learners will be able to: Introduction, Understand Meaning, Rules and Regulations, Section, Important Act Details with Related Case Study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHO



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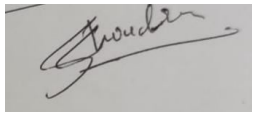
				D/ ICT TOOLS USED
ModuleI:IndianContractAct,1872 Part 1	Chapter I Definitions, Kinds of agreements, Kinds of contracts, distinction between agreement and contract Chapter II Proposal, kinds of proposal -specific, offer to a class of persons, general offer, counter offer, invitation to offer, standing offer, express proposal, implied offer, requirements of a valid offer section 3 & 5 Acceptance, requirements of a valid acceptance, Rules of communication of proposal, acceptance and	03 04 02	Indian contract act 1872 Avtar singh Pollak and mulla D.D basu	Chalk And Duster



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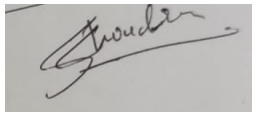
Module II Indian Contract Act, 1872 Part II Module III Special Contract	revocation of proposal/acceptance Chapter III Capacity to contract, minor, unsound mind, Disqualified person. Section 10-12 Chapter IV Consideration, agreements without consideration, unlawful consideration, inadequacy of consideration Agreements expressly declared to be void section 2- 25	03		
	Chapter I consentandfreeconsent,coercion,undueinfluence,fraud, misrepresentationMistake Chapter II Void agreement section 24 to 30 Chapter III	04 02 03		



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Consumer protection Act 1986	section 31 and 68 -72 Contingent contract, quasi-contracts, e-contract, Privity of contracts with exceptions Chapter IV Section 73 - 75 Discharge of contracts, Remedies available on breach of contracts Chapter I Law of Indemnity and guarantee related essential, discharge of surety, distriction between, section 124 - 125, 126 - 129, 132 - 147	03 03		
	Consumer protection Act 1986 related Definition, Salient Features, Deficiency in service & Goods.	02		

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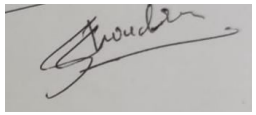
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 27 × 4 = 216



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. AUDRIN ANTHONY COLACO DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF SEMESTER: II

SUBJECT: FINANCIAL ACCOUNTING MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: To understand fire insurance claims.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Fire Insurance Claim	• Computation of Loss of Stock by Fire • Ascertainment of Claim as per the Insurance Policy • Exclude: Loss of Profit and Consequential Loss	15	Financial Accounting by V. Rajasekaran, Pearson Publications, New Delhi	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15___

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHAKTI VILAS PURANDARE DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF SEMESTER: II SUBJECT: FINANCIAL ACCOUNTING MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: prepare consignment A/c for consignor and consignee, branch account for dependent branch and make accounting from incomplete records.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Accounting from incomplete records	• Steps for preparing final accounts from incomplete records. • Difference between single entry system and double entry system. • Format of various accounts to prepare for working notes. • Q1 to Q7 on incomplete records.	15		Chalk and board

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Consignment account	• Meaning of consignment, concepts of consignor and consignee. • Del credere commission. • Journal and ledger of consignor and consignee. • Q1 to Q6 on consignment in the books of both the parties.	15		Chalk and board
Branch account	• Concept of branch, format of dependent branch by debtors and stock & debtors method. • Q1 to Q8 on branch account by both method.	15		Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____45_____

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TEACHING PLAN (UNIT PLAN)

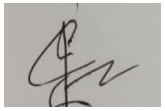
NAME OF THE STAFF: _____Jinal Chohan_____ DEPARTMENT:B.Com (Accounting and Finance)

CLASS: ___F.Y BAF____ SEMESTER: ___II_____ MONTH: __Dec- Feb_____ ACADEMIC YEAR:_2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : Know the concept of Human rights and its origin, value of human rights to all the humans and fundamental rights. They will get the knowledge of environment around us and how it overall effects the living beings on the Earth

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2 Human Rights	Concept of Human Rights, Origin And evolution of the concept	3	Vipul Prakashan,Manan Prakashan	Chalk- Board
	The Universal Declaration of Human Rights	1	Vipul Prakashan,Manan Prakashan	Chalk- Board
	Human Rights Constituents with special reference to Fundamental Rights stated in the Constitution	5	Vipul Prakashan,Manan Prakashan	Chalk- Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____09__



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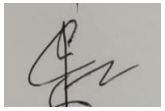
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3 Ecology	Importance of Environmental Studies in current development, Understanding concept of Environment, Ecology and their interconnectedness	3	Vipul Prakashan,Manan Prakashan	Chalk- Board
	Environment as natural capital and connection to quality of human life	2	Vipul Prakashan,Manan Prakashan	Chalk- Board
	Environment Degradation- Causes and impact on Human Life	2	Vipul Prakashan,Manan Prakashan	Chalk- Board
	Sustainable Development- Concept and components, Poverty and environment	3	Vipul Prakashan,Manan Prakashan	Chalk- Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____10_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF SUBJECT: FC

DIVISION A SEMESTER: II MONTH: NOV TO MARCH - ACADEMIC YEAR: 2018 -2019

LEARNING OBJECTIVE/S:
The learners will be able to understand stress management concepts and managing stress in society etc

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 UNDERSTANDING STRESS AND CONFLICT	UNIT 4 – CAUSES OF STRESS AND CONFLICT IN INDIVIDUAL AND SOCIETY, AGENTS OF SOCIALIZATION, SIGNIFICANCE OF VALUES, ETHICS AND PREJUDICES IN DEVELOPING THE INDIVIDUAL, STEREOTYPING AND PREJUDICE AS SIGNICANT FACTORS IN CAUSING CONFLICTS IN SOCIETY, AGGRESSION AND VIOLENCE AS THE PUBLIC EXPRESSION OF CONFLICTS	10	STRESS MANAGEMENT BY DR. TEJMANI SINGH (2011)	LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS
UNIT 5 MANAGING STRESS AND CONCEPT IN CONTEMPORARY SOCIETY	UNIT 5 – TYPES OF CONFLICTS, USE OF COPING MECHANISMS FOR MANAGING INDIVIDUAL STRESS, MASLOW THEORY, DIFFERENT METHODS OF RESPONDING TO CONFLICTS, CONFLICT RESOLUTION AND EFFORTS TOWARDS BUILDING PEACE AND HARMONY IN	8	STRESS MANAGEMENT BY DR. TEJMANI SINGH (2011)	LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS

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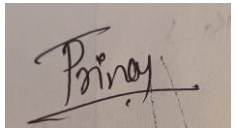
	SOCIETY			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FOUNDATION COURSE DEPARTMENT: B.Com (Accounting and Finance) CLASS: ____FYBAF____ SEMESTER: __II_____ MONTH: __DECEMBER-JANUARY__ ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the importance of Environment, its impact on Human life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III Ecology	Concept of Environment & Ecology, Components of Environment	3		Chalk Board and Discussion methods
	Importance of Environment Studies & Developmental Context, Environment as a natural Capital & Quality of Human life	1		
	Environmental Degradation – Causes & Impact on Human life	3		
	Sustainable development – Concept, Components & Principles	2		
	Poverty & Environment	1		

T.R.Patel

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10_

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FOUNDATION COURSE DEPARTMENT:B.Com (Accounting and Finance) CLASS: ____FYBAF____ SEMESTER: __II_____ MONTH: __FEBRUARY-MARCH__ ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:
The learners will be able to : To make the students socially aware of the societal problems, Managing stress and importance of Ethical principles

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4. Understanding Stress & Conflict	Meaning & causes of Stress and Conflicts	3		Chalk Board and Discussion methods
	Agents of Socialization and the role played by them in developing the individual	1		
	Significance of Values, Ethics & Prejudice in developing the individual.	3		
	Stereotyping & Prejudice as significant factors in causing conflicts in society.	1		

T.R.Patel

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	Aggression & Violence as the public expression of conflict	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10

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TEACHING PLAN (UNIT PLAN)

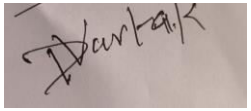
NAME OF THE STAFF: DIPASHREE PARAG VARTAK_____DEPARTMENT: B.Com (Accounting and Finance) CLASS: FYBAF_____

SEMESTER: II_____MONTH: DECEMBER TO MARCH _____ ACADEMIC YEAR:_2018-2019_____

LEARNING OBJECTIVE/S:

The learners will be able to : Understand the concept of Ratio, Proportion, Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation. Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS UNIT I RATIO, PROPORTION AND PERCENTAGE	Define Ratio, Continued Ratio, Inverse Ratio, Problem solving on ratio	5	BUSINESS MATHEMATICS BY KAPOOR	BLACKBOARD CHALK AND DUSTER
	Define Proportion its types. Problem solving on proportion	5		Explanation, Discussion, Problem solving assignments
	Define Variation and its types	1		
	Explain concept of percentage and computation of percentage.	4		



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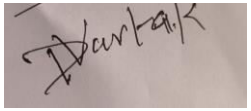
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DIPASHREE PARAG VARTAK_____DEPARTMENT: B.Com (Accounting and Finance)CLASS: FYBAF _____

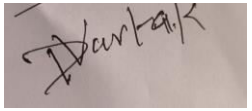
SEMESTER: II_____MONTH: DECEMBER TO MARCH _____ ACADEMIC YEAR:_2018-2019_____

LEARNING OBJECTIVE/S:

- The learners will be able to : understand the concept of interest and annuity.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Mathematics, UNIT III INTEREST AND ANNUITY	Simple interest, compound interest	4	BUSINESS MATHEMATICS BY KAPOOR	BLACKBOARD CHALK AND DUSTER
	Equated monthly instalments, reducing balance and flat rate of interest	4		Explanation, Discussion, Problem solving assignments
	Annuity immediate- present value and future value	5		
	Stated annual rate and effective annual rate	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____



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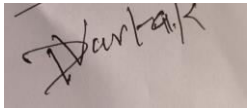

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rashmi Gurunani SUBJECT:I.F.S. DEPARTMENT: B.Com (Accounting and Finance)

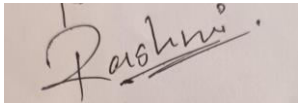
CLASS:FYBAF SEMESTER:II MONTH: Dec- Jan ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Financial Services & its mechanism	Leasing- Types of lease , adv and disadv of lease, Leasing in India	3	Financial Services by Khan M.Y.	Chalk Board,Discussion
	Higher Purchase- Instalment sale , adv. And dis adv. of higher purchase	3		
	Housing finance- Hosing finance industry, policy aspect, sources of funds , Market of housing finance	3		
	Housing finance institutions in India, NHB, guidelines for asset liability mgmt., housing finance agencies	3		
	Venture Capital- features ,types , investment and disinvestment process, Indian Scenario	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

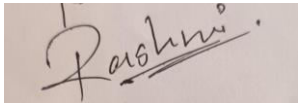
NAME OF THE STAFF: Rashmi Gurunani SUBJECT:I.F.S. DEPARTMENT: B.Com (Accounting and Finance)

CLASS:FYBAF SEMESTER:II MONTH: Feb - March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Consumer Finance & Credit Ratings	Consumer Finance-Mechanics of Cons. Fin., terms, Pricing, marketing and Insurance	3	Financial Services by Khan M.Y.	Chalk Board,Discussion
	Consumer credit scoring, case for and against consumer finance,	3		
	Plastic Money- Credit cards, Debit cards, smart cards, Indian Scenario	3		
	Prevention of frauds and misuse , security feature and financial application of plastic cards	3		
	Credit rating- regulatory framework, credit rating agencies in India, Credit rating process	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYANKA M. SINGH

DEPARTMENT: B.Com (Accounting and Finance)

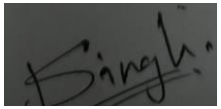
CLASS: FYBAF

SEMESTER: II MONTH: NOVEMBER – MARCH

ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : Understand resent trends in the Financial sector and will learn about various innovative financial products.

Unit	Sub Topics	No. Of lectures	Reference	Teaching method/ ITC
1. Introduction to traditional services	Financial services it's scope, types, Factoring, Forfeiting, bill discounting	11	Financial market and services by E Gordan and K Natrajan	Chalk and Duster



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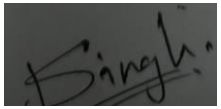
2. Issue Management and Securitization	Issue Management and Financial Intermediaries Merchant Bankers,Stock broker, stock trading, Securitization of NPA	11	Financial Market and Services by E Gordon and K Natrajan	Chalk and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _22



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TEACHING PLAN (UNIT PLAN)

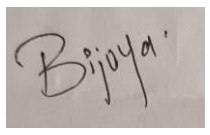
NAME OF THE STAFF: BIJOYA SARMA DEPARTMENT: B.Com (Accounting and Finance)

CLASS: FYBAF SEMESTER: II MONTH: DECEMBER- MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : understand the concept of interest and annuity.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER- Business Mathematics, UNIT III Interest And Annuity	Simple interest, compound interest	4	Textbook of Sheth Publication	Blackboard
	Equated monthly instalments, reducing balance and flat rate of interest	4		
	Annuity immediate- present value and future value	4		
	Stated annual rate and effective annual rate	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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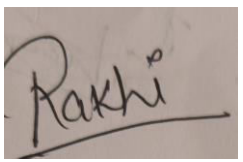
TEACHINGPLAN(UNITPLAN)

NAMEOFTHESTAFF : Rakhi Upadhey. DEPARTMENT:B.Com (Accounting and Finance) CLASS:SYBAF(A,B,C)

SEMESTER:III MONTH:JulytoOctober ACADEMIC YEAR:2018-19

LEARNINGOBJECTIVE/S: BusinessLaw(BusinessRegulatoryFramework)-I
Thelearnerswillbeableto:ThePupilswillbeabletounderstandhowthepartnershipcanbecreatedtoconductabusiness,andtheprovisions onwhichtheyhavetocomplywhileconductinganybusinessundertheambitofPartnership.SimilarlytheywillbeintroducedtotheNewTypeof Partnershipintroducedin2008namedLimitedLiabilityPartnership.

PAPER,UNIT, TITLE	SUBTOPICS	NOOF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOL S USED



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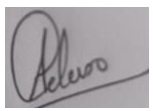

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TheIndian Partnership Act-1932	a)ConceptofPartnership -PartnershipandCompany -Testfordeterminationofexistenceforpartnership -Kindsofpartnership	04	Introductiont o lawof Partnership: Dr.AvtarSing h Partnership A ct:Pollockan d Mulla	Board,Chalk,Duster
	b)Registrationandeffectsofnon-registrationofPartnership	02		

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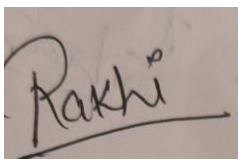
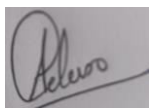
	c)RightsandDutiesofPartners	02		





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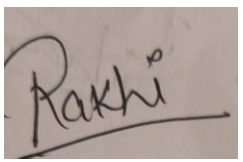
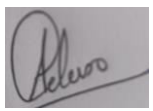
	d)AuthorityandLiabilityofpartners	03		
	e)Admission,RetirementandExpulsionofPartner	03		
	f)DissolutionofPartnership	03		
Limited Liability Partnership Act–2008	d)Contributions e)ConversionIntoLimitedLiabilityPartnership f)WindingUpandDissolution	04	Introductiont o lawof Partnership: AvtarSingh PartnershipAct : Pollockand Mulla	Board,Chalk,Duster

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:21





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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. AUDRIN COLACO SUBJECT: COST ACCOUNTING- II
DEPARTMENT: _B.Com (Accounting and Finance) CLASS: ____SYBAF____ SEMESTER: III MONTH: __JUNE-JULY__
ACADEMIC YEAR: ____2018-2019___
LEARNING OBJECTIVE/S:

- The learners will be able to : To classify the costs and prepare cost sheet.
- To analyse cost accounts, financial accounts and reconcile them.
- To understand contract costing.
- To acquire knowledge of process costing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Reconciliation of Cost and Financial Accounts	Practical problems based on reconciliation of cost and Financial accounts	15	Advance Cost Accounts - Mahasehwari	Chalk and Board

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Process Costing	Process loss, Abnormal gains and losses, Joint products and by products. Excluding Equivalent units, Inter-process profit Practical problems Process Costing and joint and by products	15	Advance Cost Accounts Mahasehwari	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __30__

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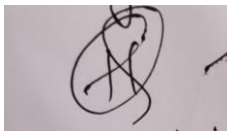
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.Com (Accounting and Finance) CLASS: S.Y.BAF SEMESTER: III
MONTH: JUL ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES: The learners will be able to understand the basic concepts and definitions under direct tax.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.DEFINITIONS & BASIS OF CHARGE	DEFINITIONS-ASSESEE, ASSESSEMNT YEAR,ANNUAL VALUE,PERSON.PREVIOUS YEAR	02	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK-BOARD
	BSIS OF CHARGE SECTION 3-9	01		
	EXCLUSIONS UNDER SCTION 10	01		
	RESIDENTIAL STATUS	03		
	SCOPE OF TOTAL INCOME	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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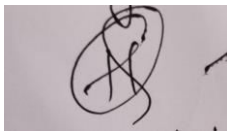
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.Com (Accounting and Finance) CLASS: S.Y.BAF SEMESTER: III
MONTH: JUL-AUG ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES: The learners will be able to study different heads of income and their computation.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
2.HEADS OF INCOME	INCOME FROM HOUSE PROPERTY-SEC22 TO27, ANNUAL VALUE	04	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK-BOARD
	PROFIT & GAIN FROM BUSINESS &PROFESSION	04		
	SALARY INCOME	05		
	CAPITAL GAINS (SEC 45,48,49,50,54 &55)	04		
	INCOME FROM OTHER SOURCES(SEC56-59)	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20



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TEACHING PLAN (UNIT PLAN)

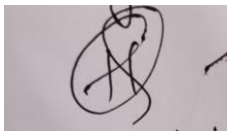
NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.Com (Accounting and Finance) CLASS: S.Y.BAF SEMESTER: III
MONTH: AUG ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES: The learners will be able to understand deductions available under chapter VIA

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
3.DEDUCTION UNDER CHAPTER VI A	80A-RESRTICTION ON CLAIMS,80C-PAYMENT OF LIC	01	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK-BOARD
	80CCC-CONTRIBUTION TO PENSION FUND, 80D-MEDICLAIM INSURANCE PREMIUM,	02		
	80DD-MEDICAL TRATMENT OF HANDICAPPED	01		
	80E-INTEREST ON EDUCATIONAL LOAN,80TTA-INTEREST ON SAVING BANK ACCOUNT	01		
	80U-HANDICAPED ASSESSEE	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)



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Yashwant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.Com (Accounting and Finance)

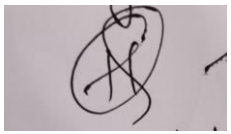
CLASS: S.Y.BAF SEMESTER: III MONTH: SEPT ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:

The learners will be able to compute the total taxable income of assessee for the relevant previous year.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
4.COMPUTATION OF TOTAL INCOME	COMPUTATION OF TOTAL INCOME OF INDIVIDUAL	08	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	CHALK-BOARD
	COMPUTATION OF TOTAL INCOME OF HUF AND DEDUCTIONS	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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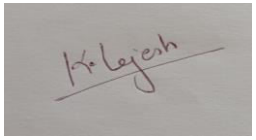
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: LEJESH KELOTH DEPARTMENT: B.Com (Accounting and Finance) CLASS: SYBAF SEMESTER: III

MONTH: AUG-DECEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : The learners will be able to understand the concept of using macroeconomics for the growth of the economy by developing a core understanding regarding income, expenditure, measurement, and trade cycles, demand and supply of money and levels of inflation for the development of the economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMIC –II MODULE 3,	**INTRODUCTION TO PUBLIC FINANCE**	10	TEXT BOOKS AND PAPERS	
	MEANING AND SCOPE OF PUBLIC FINANCE		H.L. AHUJA	TEXT REFERENCE
	MAJOR FISCAL FUNCTION			
	PRINCIPAL OF MAXIMUM SOCIAL ADVANTAGE			



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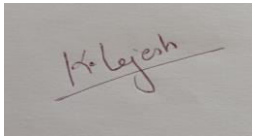
	RELATION BETWEEN EFFICIENCY MARKET AND GOVERNMENT, CONCEPT OF PUBLIC GOODS AND ROL OF GOVERNMENT			

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMIC –II MODULE 4,	**PUBLIC REVENUE ,PUBLIC EXPENDITURE AND DEBT**	20	TEXT BOOKS AND PAPAERS	
	SOURCES OF PUBLIC REVENUE SHIFTING OF TAX BURDEN			TEXT REFERNCE
	ECONOMIC EFFECTS OF TAXATION REDUSTRIBUTIVE AND ANTIINFLATIONARY TAXATION		H.L AHUJA	
	PUBLIC EXPENDITURE			
	SIGNIFICANCE OF PUBLIC EXPENDITURE PUBLIC DEBTH			



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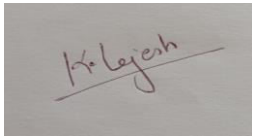
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS ECONOMIC –II MODULE 5,	**FISCAL MANAGEMENT AND FINANCIAL ADMINISTRATION**			
	FISCAL POLICY. CONTRA			TEXT REFERENCE
	CONTRA CYCLICAL FISCAL POLICY AND DISCRETIONARY FISCAL POLICY	10	TEXT BOOKS AND PAPERS	
	BUDGET			
	INTERGOVERNMENTAL FISCAL RELATION			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: B.Com (Accounting and Finance) CLASS: SYBAF

SEMESTER: III MONTH: JUNE – OCTOBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:
The learners will be able to understand the concept of using macroeconomics for the growth of the economy by developing a core understanding regarding income, expenditure, measurement, and trade cycles, demand and supply of money and levels of inflation for the development of the economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics – II Macro Economics Unit: I & II	Unit I: Overview of Macro Economics - Circular flow of income in open an closed economy - Measurement of National Product , Green GNP and NNP - Trade cycle: features and phases - Say's Law of Market	10	H.L.Ahuja Modern Economics	Lecture, group discussion, test, oral presentation of important topics.
	Unit II: Money, Prices and Inflation - Money supply determinants and factors	10	D.N.Diwedi Macro Economics	Lecture, group discussion, test, oral presentation of important topics.

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	- Demand for money, classical and Keynes approach and also Friedman approach - Money & Prices Fisher and Cambridge equation - Inflation: types, nature, Policy Measures			
	Unit III: Introduction to Public Finance - Meaning, scope and fiscal functions - Dalton and Musgrave principle of Maximum social advantage - The concept of public goods and roe of government	15	G.Ackley Macro-Economic Theory and Policy	Lecture, group discussion, test, oral presentation of important topics.
			H.L.Bhatia Public fianance	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __35_____

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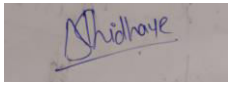
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Nilambari Yogesh Shidhaye Department: - B.Com (Accounting and Finance)
Class: - S.Y.BAF (A, B, C) SEM: - III MONTH-: July-sept YEAR: -2018/19

LEARNINIG OBJECTIVES: The learner will be able to know the financial markets in India. The purpose of primary and secondary market in India. Bonds, debentures, shares how does it works in financial markets. Types of financial instruments & repurchase agreement how does it work.

PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED
	MODULE: II FINANCIAL MARKETS: - structure of financial markets in India, Capital market (Role, Importance, Concept) Evolution of financial markets in India, Primary & secondary market in India. Their regulatory framework. Bonds and	15 Lectures		Chalk & duster



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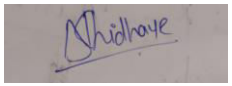
Financial Market Operation (FC-III)	debt market in India MODULE: -III FINANCIAL INSTRUMENTS: - Meaning & types of financial instruments, Features of financial instruments, liquidity, Maturity, safety Yield, REPO method, TBs, equities (their benefits and importance)	10 Lectures		Chalk & duster



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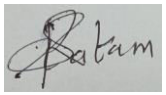
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan D. Satam DEPARTMENT: B.Com (Accounting and Finance) CLASS: SYBAF

SEMESTER:III MONTH: June 2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: Learning about financial accounting of the product and services.
The learners will be able to : Students will be able to learn practical imposition of cost and calculation in different processes and by different methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting III	**1.Piecemeal Distribution of Cash** Excess Capital Method only Asset taken over by a partner Treatment of past profits or past losses in the Balance sheet Contingent liabilities / Realization expenses/amount kept aside for expenses and adjustment of actual Treatment of secured liabilities Treatment of preferential liabilities like Govt. dues / labour dues etc Excluding: Insolvency of partner and Maximum Loss Method	10	Manan and Seth publication	Chalk - Board
	2. **Conversion / Sale of a Partnership Firm into a Ltd. Company** Realisation method only Calculation of New Purchase	10	Manan and Seth publication	Chalk - Board



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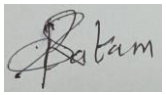
	consideration, Journal / Ledger Accounts of old firms. Preparing Balance sheet of new company			
	3. Accounting of Transactions of Foreign Currency In relation to purchase and sale of goods, services and assets and loan and credit transactions. Computation and treatment of exchange rate differences	10	Manan and Seth publication	Chalk - Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL SUBJECT: FINANCIAL ACCOUNTING- III DEPARTMENT: __B.Com (Accounting and Finance)

CLASS: ____SYBAF____ SEMESTER: III MONTH: __JUNE-JULY__ ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - 1 Partnership final Account Based on Adjustment of Admission or Retirement or Death of a partner during the year	Introduction of Partnership final Account, Methods, Different ways of Reconstitution (a) Admission of partner (Journal entries, Calculation of Ratio, Treatment of goodwill)	4	Financial Accounting By R. Narayanaswamy	Discussion Method and Black Board
	(b) Retirement of partner (Journal entries, Calculation of Ratio, Treatment of goodwill)	3		
	(c) Death of partner (Journal entries, Calculation of Ratio, Treatment of goodwill), Adjustment related to Admission, Death and Retirement of partner)	3		
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15__

T.R.Patel

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TEAC

HING PLAN (UNIT PLAN)

NAME OF THE STAFF:____TARIKA PATEL ____ SUBJECT: FINANCIAL ACCOUNTING- III DEPARTMENT:B.Com (Accounting and Finance) CLASS: ____SYBAF____ SEMESTER: III MONTH: __AUGUST-SEPTEMBER__ ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - 3 Amalgamation of Firm	Meaning and Types of Amalgamation, Difference between Amalgamation, Absorption and External Reconstruction, Realisation Method	3	Financial Accounting By R. Narayanaswamy	Discussion Method and Black Board
	Methods of Purchase Consideration, Journal Entries in the books of old firm, Ledger A/c in the books of old firm.	3		
	Preparing Balance sheet of New firm by current A/c/ Cash or combination thereof.	3		
	Practical Illustrations	6		

T.R.Patel

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15__

T.R.Patel

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: B.Com (Accounting and Finance)CLASS: SYBAF (A,B & C) SEMESTER: III MONTH: JUNE TO DECEMBER ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand importance of saving and investing money wisely keeping in mind the inflation rate and interest rate.
- Get insight on different banking and non banking financial intermediaries.
- Know the dynamic instrument i.e. Derivatives which help them understand the trading pattern.
- Interpret Merchant banking and other financial services like consumer finance, credit & debit cards, mutual funds & commercial paper.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit-1 An Overview of the Financial System	SAVING AND INVESTMENT Money, INFLATION AND INTEREST BANKING AND NON BANKING FINANCIA L INTERMEDIARIES	5		Chalk, Board and Duster

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Unit-3 Financial Instruments	DERIVATIVES: concept, characteristics, Purpose , benefits, criticisms, classifications o equity derivatives, Participants, functions, topes (Option, Swap, Forward and future) terminology used in Options, Growth of derivatives in India.	5		Chalk, Board and Duster
Unit-4 Financial Services	MERCHANT BANKING: Managing of Public Equity / Debenture Issues Mobilizing Fixed Deposits, Arranging Inter-corporate Loans RAISING TERM FINANCE AND LOAN SYNDICATION. OTHER FINANCIAL SERVICES: Consumer Finance, Credit Cards, Mutual Funds and Commercial paper	15		Chalk, Board and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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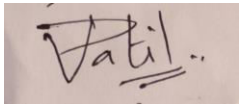
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VAIKHARI PATIL DEPARTMENT: B.Com (Accounting and Finance)

CLASS: SYBCOM (Acoounts and finance) SEMESTER: III MONTH: JUNE to OCT 2019 ACADEMIC YEAR: 2018 -2019

LEARNING OBJECTIVE/S:
The learners will be able to: Learn Introduction to computer system and Web

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, II, III, IV	History of Computers, Parts of Computers, Hardwares: Specifications and Data Storage Management, Softwares: Concept of System Software and Applications, Networking: Introduction and types of network topologies.	10*(3 DIVISIONS)	E-books, Vipul publications, Seth publication	Projector
	MS Word: Creating, Editing, Formatting and Printing of Documents, Using Tools, Mailmerge and Print Review and Set-up MS Excel: Creating Worksheet, Creating Various Formulae, Creating Charts, Rename and Copy of Worksheets, Using Tools, Printing Review and Set-up Power Point: Create Project Report, Create Slides, Animation, Page Designing, Insert Image, View Page, Print Review and Set-up. Use of Tools In Accounting :– Preparation of vouchers, invoices and reports, Calculation of Interest, Depreciation,TDS, Salary, Taxes, inventory and reconciliation	20*(3 DIVISIONS)	E-books, Vipul publications, Seth publication	
	Use of Various Web Browser,Information Searching Tools,Downloading ,Create New email ID, Sending Data through email	10*(3 DIVISIONS)	E-books, Vipul publications,	



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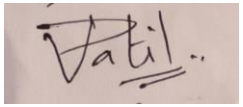
	Search engine optimisation		Seth publication	
	Meaning, Advantages and Limitations of E Commerce, The role of Strategy in E-Commerce, Value chains in E Commerce, Infrastructure for Electronic Commerce Web Based Tools for Electronic Commerce, Electronic Commerce software,Security Threats to electronic Commerce , Implementing Security for Electronic Commerce, Electronic Payment Systems, Strategies for Marketing, Sales & Promotion Strategies for Purchasing Logistics & Support Activities, Electronic Markets & Communities, Business Plans for Implementing Electronic Commerce.	10*(3 DIVISIONS)	E-books, Vipul publications, Seth publication	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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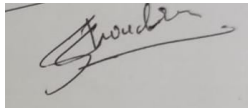
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shweta Bharat Chaudhari DEPARTMENT: B.Com (Accounting and Finance) CLASS: SYBAF (B,C) SEMESTER: III

MONTH: June to Oct ACADEMIC YEAR: 2018 - 2019 LEARNING OBJECTIVE/S: Business Regulateries Framework

The learners will be able to : Introduction, Understand Meaning, Rules and regulations, section, important act details with related case study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Limited Liability Partnership Act – 2008	a)Nature of Limited Liability Partnership b)Incorporation of Limited Liability Partnership c)Extent and Limitation of Liability of Limited Liability Partnership and Partners d)Contributions e)Conversion Into Limited Liability Partnership f)Winding Up and Dissolution	02 02 02 02 02 02	Factories Act 1948 J.P.sharma P.L.mallik BANGIA Law of Partnership	Chalk and duster



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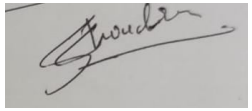
Module III Factories Act – 1948	a) Definitions • Section 2 (k) – Manufacturing Process, • Section2 (l) –Workers • Section 2 (m)– Factory b) Provisions pertaining to i. Health- Section 11 to Section 20 ii. Safety- Section 21 to Section 41 iii. Welfare- Section 42 to Section 49	03 02	(Principles, Practice and Taxation) along with Limited Liability Partnership Act, 2008 by Avtar Singh	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17 × 2 = 34



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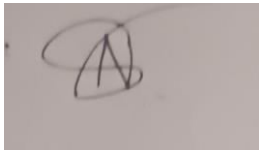
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF NAZIA SAJID SHAIKH. DEPARTMENT: B.Com (Accounting and Finance) CLASS: SYBAF SEMESTER: IV

MONTH: NOV TO FEB. ACADEMIC YEAR: 2018-19 SUB: RESEARCH METHODOLOGY.

LEARNING OBJECTIVE/S:
The learners will be able to : Understand Research, Types of research, Review of literature, Data collection and Processing , Sampling,Data presentation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1. INTRODUCTION TO RESEARCH.	***Research:** Meaning, Objectives, Importance of research in Accounting and finance . Types of research. ***Formulation of research problem:** Meaning and Selection of research problem. ***Review of literature.**	**15**	**Research Methodology: Methods & Techniques M.Y.khan**	**Chalk and Duster.**
MODULE 3. DATA COLLECTION AND PROCESSING	***Data Collection:** Meaning, types of data, ***Primary Data:** Observation, Experimentation, interview, Schedule, Survey, Questionnaire, Advantages and Limitations of Primary Data. ***Secondary Data:** Sources and limitations, factors affecting the choice of Methods of data collection. ***Sampling:** Significance, methods, Factors determining Sample size ***Data Presentation**	**15**		



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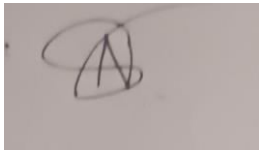
TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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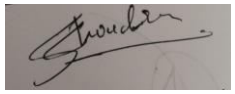
TEACHING PLAN (UNIT PLAN

NAME OF THE STAFF: Shweta Bharat Chaudhari Department : B.Com (Accounting and Finance) CLASS : SYBAF SEMESTER : IV

MONTH: Dec to April ACADEMIC YEAR: 2018 - 2019 LEARNING OBJECTIVE/S: Company Law

The learners will be able to : Introduction, Understand Meaning, Rules and regulations, section, important act details with related case study.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Company Act 2013	Section 2 Definition a)Accounting Standard b) Auditing Standard c) Books of Accounts d) Deposit e) Financial Year f) Foreign Company g) Independent Director h) Indian depository receipts I) one person company	02 02 02 02	1. Company Law : Avtar Singh. 2. Indian Company Law. Authors, Dr. N. S. Kothari, Ramesh Chand Agarwal	Chalk and duster



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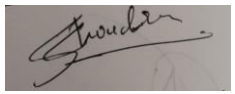
	J) small company	02		
	Incorporation of company related Section 3 to section 20	02		
Module II Incorporation	Chapter I	03		
	Company and its formation, definition and nature of company, advantages and disadvantages of a	02		



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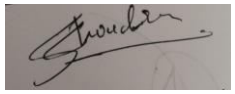

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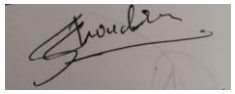
of company	company, lifting of corporate veil with cases, promoters, pre-incorporation and preliminary contracts Chapter II Types of companies (meaning and concept only) statutory companies, one person company, Company, limited by shares/guarantee Private company, public company, Producer Company, formation of companies with charitable Objects, holding and subsidiary company, Government, foreign company, small company Procedure for registration of a company, documents to be Chapter I Company and its formation, definition and nature of company, advantages and disadvantages of a company, lifting of corporate veil with cases, promoters, pre-incorporation and preliminary contracts Chapter II Types of companies (meaning and concept only) statutory companies, one person company, Company, limited by shares/guarantee Private company, public company, Producer Company, formation of companies with charitable Objects, holding and subsidiary company, Government,			



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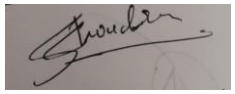
	foreign company, small company Procedure for registration of a company, documents to be submitted for registration,Effect of incorporation. Chapter III Memorandum of Association & Articles of Association:			



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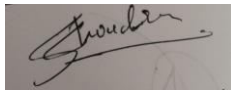
	meaning, concept, clauses, effect ofRegistration of Memorandum and Articles of Association, Doctrine of Constructive NoticeDoctrine of Ultra Vires, Doctrine of Indoor Management Chapter IV Prospectus- meaning, when to be issued, when not required, kinds of prospectus, contents of prospectus, private placement			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 17 × 2 = 34



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. AUDRIN COLACO SUBJECT: DIRECT TAXATION- II DEPARTMENT: B.Com (Accounting and Finance) CLASS: ____SYBAF____ SEMESTER: IV_ MONTH: __DEC - MARCH__

ACADEMIC YEAR: ____2018-2019___

LEARNING OBJECTIVE/S:

- To understand clubbing of income.
- To acquire knowledge about set off and carry forward of losses.
- To understand return of income under section 139.
- To acquire knowledge about DTAA U/S 90 and 91.
- To know about tax planning and ethics in taxation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Clubbing of Income	Clubbing of Income - Section 60 to 65	05	Students Guide to Income Tax	Chalk and Board
Set Off & Carry Forward of Losses	Sec: 70 – Set off Loss from one Source against Income from another Source under the Same Head of Income Sec: 71 – Set Off Loss from One Head against Income of another Head Sec: 71B – Carry Forward & Set off Losses from House Property Sec: 72 – Carry Forward & Set Off of Losses of Business Losses Sec: 73- Losses in Speculation Business Sec: 74- Loss under the head Capital Gains	05	Students Guide to Income Tax	Chalk and Board
Return of Income – Sec 139	Return of Income – Sec 139	05	Students Guide to Income Tax	Chalk and Board
Tax Planning & Ethics in Taxation	Basic Concept	05	Students Guide to Income Tax	Chalk and Board
DTAA U/S 90 & 91	DTAA U/S 90 & 91	05	Students Guide to Income Tax	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __25__

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **B.Com (Accounting and Finance)** CLASS**: S.Y.B.A.F** SEMESTER: **4th** MONTH: **NOVEMBER** ACADEMIC YEAR: **2018-19**

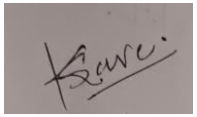
LEARNING OBJECTIVE/S:

The learners will be able to:

1. How to compute tax liability of Individual and H.U.F.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Computation of Tax liability of Individual & HUF	Tax Slab Rate, Rebate, surcharges, Round off etc. Practical Questions	05	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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TEACHING PLAN (UNIT PLAN)

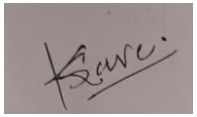
NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **B.Com (Accounting and Finance)** CLASS**: S.Y.B.A.F** SEMESTER: **4th** MONTH: **DEC. - JANUARY**

ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. How to compute tax liability of Partnership Firm

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Computation of Income of Partnership Firm	Computation of Income of Partnership Firm in Relation to Sec: 40(b) & Tax Thereon With Applicable Rate of Tax Practical Questions	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method



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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

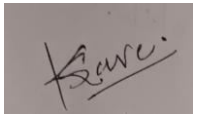
NAME OF THE STAFF**: KAUSHK N. SAVE** DEPARTMENT: **B.Com (Accounting and Finance)** CLASS**: S.Y.B.A.F** SEMESTER: **4th** MONTH: **FEBRUARY -MARCH**

ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to:

1. What are provision of Tax Deducted at Source(TDS)
2. What is Advance Tax and Provision of Advance Tax
3. What are the impact if not paying Advance Tax (Interest Payable u/s 234A,234B,234C)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED



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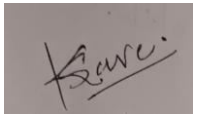
• **Tax Deduction at Source** • **Advance Tax** • **Interest Payable U/S 234A, 234B, 234C**	**Basic Aspects of Deduction of Taxes at Source** Sec: 192 - TDS on Salary Sec: 194A - TDS on Interest Sec: 194C-TDS on Contractor Sec: 194H - TDS on Commission Sec: 1941-TDS on Rent Sec: 194) - TDS on Professional Fees **Advance Tax U/S 207, 208, 209, 210 & 211** Sec: 207-Income Liable to Advance Tax Sec: 208 -Liability of Advance Tax Sec: 209 - Computation of Advance Tax Sec: 210 - Payment of Advance Tax by Assessee on His Own Account Sec: 211 - Due Dates of Payment of Advance Tax **Interest Payable U/S 234A, 234B, 234C** Sec: 234A - Interest for default in furnishing return of income Sec: 234B - Interest for default in payment of advance tax Sec: 234C - Interest for deferment of advance tax	15	1.Direct Taxes Law & Practice by V.K Singhania-TAXMAN 2.Systematic Approach to Direct Tax by Ahuja & Gupta 3. Student guidance to Income Tax.	Lecture Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: B.Com (Accounting and Finance) CLASS: SYBAF (A,B & C) SEMESTER: IV MONTH: DECEMBER TO MARCH ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand management and its various aspects including selection, recruitment, E-selection, controlling, Coordinating etc
- Get insight on the 14 principles of management along with the levels f management which will help students the working level in an organization.
- Know the types of interview which can be used to understand the process of interview.
- Interpret different styles of leadership which will help them become a good leader.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Unit-1 Introduction to Basic Management Concepts	INTRODUCTION TO MANAGEMENT: Definition of Management Nature of Management Objectives of Management ADMINISTRATION VS MANAGEMENT LEVELS OF MANAGEMENT PRINCIPLES OF MANAGEMENT	6	Essentials of management by Koontz H & W Published by McGraw hill.	Chalk, Board and Duster
Unit-4- Staffing	RECRUITMENT: Meaning and its sources SELECTION procedure distinction between recruitment and selection EMPLOYMENT TESTS TYPES OF INTERVIEW	4		Chalk, Board and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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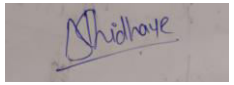
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Nilambari Yogesh Shidhaye Department: - **B.Com (Accounting and Finance)** Class: - S.Y.BAF (A, B, C)
SEM: - IV MONTH-: Dec-Feb YEAR: -2018/19

LEARNINIG OBJECTIVES: learner will be able to know planning, organising, directing, controlling is very much essential for running the business effectively. How does the authorities and responsibilities are distributed within organisation? Various departments come into the picture to fulfils organisational requirements.

PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED
	MODULE: - II PLANNING: - Process, limitations, features, Importance of Planning. MODULE: -III ORGANISING: - nature, significance,	10 Lectures		Chalk & duster



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Foundation Course in Management (FC IV)	process, principles of organising. Formal and informal organisation, features, advantages and disadvantages of the same. Centralisation and decentralisation within an organisation (factors, merits & demerits of the same) meaning of departmentations (advantages & disadvantages) delegation of authority & responsibility within an organisation. <u>MODULE: -IV</u> <u>DIRECTING & CONTROLLING: -</u> Importance & principles of directing, leadership trails.	10 Lectures

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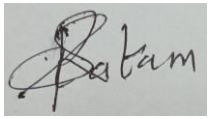
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan D. Satam DEPARTMENT: B.Com (Accounting and Finance)

CLASS: SYBAF SEMESTER:IV MONTH: December2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: Learning about cost accounting of the product and services.
The learners will be able to : Students will be able to learn practical imposition of cost and calculation in different processes and by different methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting IV	**1.Preparation of Final Accounts of Companies** Relevant provisions of Companies Act related to preparation of Final Account (excluding cash flow statement) Preparation of financial statements as per Companies Act. (excluding cash flow statement) AS 1 in relation to final accounts of companies (disclosure of accounting policies)	15	Manan and Seth publication	Chalk - Board
	2. **Ascertainment and Treatment of Profit Prior to Incorporation** Principles for ascertainment Preparation of separate, combined and columnar Profit and Loss Account including different basis of allocation of expenses/ incomes	10	Manan and Seth publication	Chalk - Board



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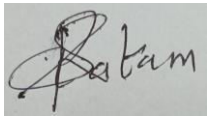
	3. Redemption of Preference Share Provision of the Companies Act for redemption of Preference Shares (Sec 55 of the Companies Act, 2013), Companies (Share and Debentures) Rules. Methods of Redemption of fully paid up Preference Shares as per Companies Act, 2013: The proceed of a fresh issue of shares, the capitalisation of undistributed profits and a combination of both, calculation of minimum fresh issue to provide the fund for redemption, (Question on entries and/or Balance Sheet)	10	Manan and Seth publication	Chalk - Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

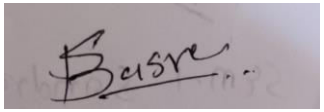
NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: B.Com (Accounting and Finance) CLASS: SYBaf SEMESTER: IV MONTH: January

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : journal entries to be passed in case of redemption of debentures and its effect on capital structure and balance sheet of the company. Translation of foreign currency transactions and financial statements into the native currency.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting IV, redemption of debentures	Introduction, provision of companies act 2013, creation and investment of DRR including companies rules	2		Lecture method, blackboard and chalk
	Journal entries, methods of writing off discount/ loss on issue of debentures	1		
	Methods of redemption of debentures: buy payment in lump sum and by payment in installments, basic problems	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16



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TEACHING PLAN (UNIT PLAN)

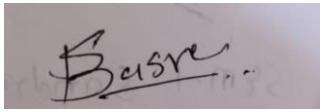
NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: B.Com (Accounting and Finance) CLASS: SYBaf SEMESTER: IV MONTH: February

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : journal entries to be passed in case of redemption of debentures and its effect on capital structure and balance sheet of the company. Translation of foreign currency transactions and financial statements into the native currency.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting IV, redemption of debentures	Practical problems on journal entries and balance sheet	8		Lecture method, blackboard and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8



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TEACHING PLAN (UNIT PLAN)

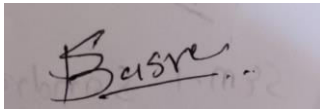
NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: B.Com (Accounting and Finance) CLASS: SYBaf SEMESTER: IV MONTH: March

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : journal entries to be passed in case of redemption of debentures and its effect on capital structure and balance sheet of the company. Translation of foreign currency transactions and financial statements into the native currency.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting IV, foreign branch	Introduction, computation and conversion as per accounting standard 11	1		
	Conversion of trial balance, preparation of financial statements in the books of branch and head office	2		
	Practical problems	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

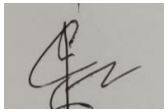
NAME OF THE STAFF: _____Prof. Jinal Chohan_____ DEPARTMENT: _B.Com (Accounting and Finance)

CLASS: ___S.Y BAF____ SEMESTER: ___IV_____ MONTH: __Nov- Feb_____ ACADEMIC YEAR:_2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to : Gain the knowledge about different accounting software's used in an organization for accounting process and different types of computerized audit techniques carried in an organization

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit2 Computerised Accounting System	Introduction and meaning, Uses and benefits, Role, Need and requirements, Basic requirements, Limitations, Understanding the development and design of computerised accounting system	5	Manan Prakashan, Vipul Prakashan	Chalk- Board
	Accounting Software- Introduction and meaning, Uses, Various	5	Manan Prakashan, Vipul Prakashan	Chalk- Board
	Accounting Software TALLY- Accounting reports	5	Manan Prakashan, Vipul Prakashan	Chalk- Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15____



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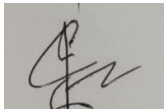
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4 IT And Auditing	Need and importance of IT in Auditing	4	Manan Prakashan, Vipul Prakashan	Chalk- Board
	Auditing in IT environment	4	Manan Prakashan, Vipul Prakashan	Chalk- Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____08___



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TEACHING PLAN (UNIT PLAN)

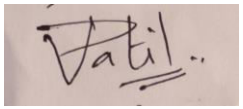
NAME OF THE STAFF: VAIKHARI PATIL DEPARTMENT: B.Com (Accounting and Finance)

CLASS: SYBCOM (Acoounts and finance) SEMESTER: IV MONTH: NOV 2018 TO MARCH 2019 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: The learners will be able to: Learn Software of different business processes

PAPER, UNIT, TITLE	SUB TOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, III	Introduction, Definition and Meaning of business process Flow of business process for accounting, purchase, sales and finance Classification of business processes, Introduction, Definition and Meaning of Business Process Management, Principles and practices of Business Process Management ,Business Process Management life cycle, Theories of Business Management Process	2*(3 Divisions)	E-books, Vipul publications, Seth publication	
	Implementation of Business process Management – need, key factors and importance Automation of business Processes – benefits, risks, challenges ,Accounting systems automation, IT and Business Process Management, Information systems – Meaning, Use of IT in accounacy	2*(3 Divisions)		
	Introduction, Concept of MIS, Need for MIS, Characteristic of MIS Outputs of MIS, Role of MIS, Guidelines for Developing MIS reports Functional Aspects of the MIS: Problems in MIS Knowledge required for studying MIS, MIS and Computer	2*(3 Divisions)		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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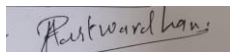
TEACHINGPLAN(UNITPLAN)

NAMEOFTHESTAFF:AmbariSPatwardhan DEPARTMENT:B.Com (Accounting and Finance) CLASS:SYBAF(A,B,C)

SEMESTER:IV MONTH:DecembertoApril ACADEMICYEAR:2018-19

LEARNINGOBJECTIVE/S:BusinessLaw
Thelearnerswillbeableto:ThePupilsWillbeabletounderstandtheconceptofthecompany,it'stypes,procedureforincorporation,Alteration ofdocuments,conversionofcompanyfromonetypetotheother,Doctrines,aswellasconceptofshare,it'stypes,allotmentofshares,

PAPER,UNIT , TITLE	SUBTOPICS	NOOF LECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLS USED



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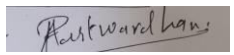
Companies Act,2013	ChapterII -Meaningandformationofcompany -Typesofcompany PrivatecompanyPubliccompany,OnePersoncompany, Governmentcompany,Foreigncompany,Nonprofit makingcompany	06	1Introduction toCompany Law:Dr.Avtar Singh 2Guideto CompaniesAct :RamaiyaA	Board,Chalkandduster
	-Incorporation&Registrationofcompany -MemorandumofAssociation:meaning,contains,binding force,alteration -ArticlesofAssociation:meaning,contains,bindingforce, alteration	07	1Introduction toCompany Law:Dr.Avtar Singh 2Guideto CompaniesAct:	Board,chalkandduster

	-Conversionofcompany -Doctrines:DoctrineofultravotesandDoctrineofindoor management	04		



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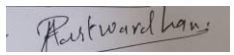
	ChapterIII-PublicOffer -Section23:PublicOffer -Secton25to28:Definition,Types&ContainsofProspectus - Section33:IssueofApplicationFormsforSecurities -Section35:Mis-statementinProspectus&Liability - Section39:AllotmentOfSecuritiesByCompany	06	1Introduction toCompany Law:Dr.Avtar Singh 2Guideto CompaniesAct :RamaiyaA	Boardchalkandduster

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:23



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: B.Com (Accounting and Finance) CLASS: SYBAF SEMESTER: IV MONTH: DECEMBER, JANUARY ACADEMIC YEAR: 2018 – 2019

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 CASH FLOW ANALYSIS	Introduction, Aspects (Cash and Flow)	1	COST AND MANAGEMENT ACCOUNTING BY SAXENA & VASHIST	• Chalk • Board • Discussion • Examples
	Classification of Cash Flow	3		
	Cash generated from operations & Ascertainment of Missing figure	2		
	Importance & Utility	1		
	Practical Illustrations	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 4: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: B.Com (Accounting and Finance) CLASS: SYBAF SEMESTER: IV MONTH: JANUARY, FEBRUARY ACADEMIC YEAR: 2018 – 2019

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 WORKING CAPITAL MANAGEMENT	Introduction, Meaning, Nature, Planning , Types of Working Capital	2	COST AND MANAGEMENT ACCOUNTING BY SAXENA & VASHIST	• Chalk • Board • Discussion • Examples
	Factors, Advantages, Limitation, Estimation of Working Capital	2		
	Operating Cycle, Provision for Contingencies / Margin of Safety	1		
	Practical Illustrations	7		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 5: 12

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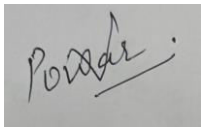
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Mr. VISHWANATH V. PAWAR SUBJECT: MANAGEMENT ACCOUNTING DEPARTMENT: B.Com (Accounting and Finance) CLASS: SYBAF SEMESTER: IV MONTH: DECEMBER, TO MARCH ACADEMIC YEAR: 2018 – 2019

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1	ANALYSIS & INTERPRETATION OF A\C: vertical forms of balance sheet and profit and loss account, introduction, advantages of trend analysis, comparative statement and common size statement. Practical: Q1&2 on vertical st, Q3 & 4 on trend analysis, Q5 & 6 on common size, Q7 & 8 on comparative st.	10	Manan Prakashan	• Chalk • Board • Discussion • Examples
UNIT 2	Balance sheet Ratios:- current ratio, liquid ratio, stock working capital ratio, proprietory ratio, debt equity ratio, capital gearing ratio. Revenue Ratio:- Gros profit ratio, expenses ratio, operating ratio, net profit ratio, net operating profit ratio, Stock turnover ratio. Combined Ratio:- Return on capital employed, Return on proprietors fund, Return on equity capital,	09	Manan Prakashan	• Chalk • Board • Discussion • Examples

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 19



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TEACHING PLAN (UNIT PLAN)

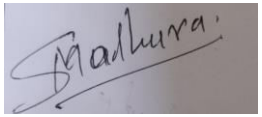
NAME OF THE STAFF: Madhura **Surve** DEPARTMENT: B.Com (Accounting and Finance) CLASS: SYBAF SEMESTER: IV

MONTH: NOVEMBER - DECEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The learners will be able to : Learn basic things related to Research Methodology which will help him in higher studies.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Research Methodology in Accounting and Finance	**2. Research Design in Accounting and Finance**			
	Meaning of Introduction, Need, and Good Research design. Hypothesis : Formulation, Sources, Importance and Types Different Research designs	15	Research Methodology Methods and Techniques C. R. Kothari	Chalk and Duster
	4. Interpretation and Report Writing . Meaning and Techniques of Interpretation, Research Report Writing : Importance, Essentials, Structure/Layout, Types	15	Research Methodology Methods and Techniques C. R. Kothari	Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ABHISHEK MADAYE_____ DEPARTMENT: _____B.COM (Accounting & Finance)

CLASS: _____TYBAF_____ SEMESTER: _____V_____MONTH: ___APRIL TO JULY__ ACADEMIC YEAR: _2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : know and understand theory and practical problems on Operating Costing, Process costing, Activity based Costing System.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
COST ACCOUNTING,UNIT 3,OPERATING COSTING	Meaning,determination per unit cost,pricing of services,collection of costing data,practical problems	10	Seth publication	Chalk & Duster
UNIT 4 PROCESS COSTING	Valuation of WIP and equivalent production(FIFO Method and weighted average method),Inter process transfer service.,practical problems	15	Seth publication	Chalk & Duster
UNIT 5 ACTIVITY BASED COSTING SYSTEM	Introduction.advantages ,limitations,identification of cost drivers, practical problems on	15	Seth publication	Chalk & Duster

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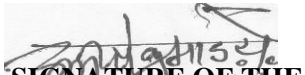
	traditional and activity based costing system			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Dr. Audrin Colaco** DEPARTMENT: B.Com (Accounting and Finance)

CLASS: **TYBAF A, B & C** SEMESTER: **Sem V** MONTH: **June to Sep** ACADEMIC YEAR : **2019-20**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Solve practical problems on Operating Costing
2) Solve practical problems on Process Costing and Inter Process Profit

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Cost Accounting	Unit 3 : Operating Costing	8		Chalk Board
	1) Meaning of operating costing; Determination of per unit cost ; Pricing of services 2) Collection of costing data			
	Unit 4 : Process Costing – Equivalent units of Production and Inter Process Profit	8		Chalk Board
	1) Valuation of Work in progress and Equivalent production (FIFO Method and 2) Weighted Average Method))			

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	3) Inter Process transfer at Profit 4) Practical problems			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ankita Almeida DEPARTMENT: B.Com (Accounting and Finance) CLASS:TY BAF (A) SEMESTER: V MONTH: August-November

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Understand the concept of effective learning; formal and informal communication; leadership skills and self improvement

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Underwriting of Shares and Debentures	Introduction, Underwriting commission as per provision of companies act 2013, Types of commission	01	Book by Sheth publication	Chalkboard
	Negative adjustment, format- calculationon of Net Liability, Practical Problem -03	03	Book by Manan Prakashan	Chalkboard
	Practical Problems- 04 [Benefit of firm UW given]	04	Book by Manan Prakashan	Chalkboard
	Practical Problems -04 [Benefit of firm UW Not given]	04	Book by Manan Prakashan	Chalkboard
3. As-14- Amalgamation, Absorption And External	Introduction, types of amalgamation, accounting standard and accounting treatment (in the books of vendor company and in the books of purchasing company)	02	Book by Manan Prakashan	Chalkboard

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Reconstruction	Journal entries in the books of vendor company using realisation method , and in Purchasing company using purchase method. Computation of Purchase consideration	03	Book by Manan Prakashan	Chalkboard
	Practical Problems 04 (Realisation Method)	06	Book by Manan Prakashan	Chalkboard
	Practical problems 05 (Purchase Method)	07	Book by Manan Prakashan	Chalkboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: B.Com (Accounting and Finance)

CLASS: **TYBAF A,B & C** SEMESTER**: V** MONTH: **June to Sep** ACADEMIC YEAR: **2018 -19**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Introduction, Underwriting, Underwriting Commission

2) Provision of Companies Act with respect to Payment of underwriting commission

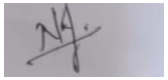
3) Practical problems on Underwriting of Shares

4) Meaning of liquidation or winding up

5) Liquidator's final statement of account

6) Practical problems on Liquidation of Companies

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting - V	Unit 1 : Underwriting of shares & debentures	8		Chalk Board
	1) Introduction, Underwriting, Underwriting Commission 2) Provision of Companies Act with respect to Payment			



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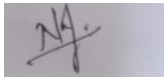
	of underwriting commission 3) Underwriters, Sub-Underwriters, Brokers and Manager to issues 4) Types of underwriting, Abatement Clause 5) Marked, Unmarked and Firm-underwriting applications, 6) Liability of the underwriters in respect of underwriting contract 7) Practical problems			
	Unit 2 : Liquidation of Companies	8		Chalk Board
	1) Meaning of liquidation or winding up 2) Preferential payments 3) Overriding preferential payments 4) Preparation of statement of affairs, deficit / surplus account 5) Liquidator's final statement of account 6) Practical problems			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____16_____



SIGNATURE OF THE STAFF **SIGNATURE OF THE CO-ORDINATOR** **SIGNATURE OF THE H.O.D.**

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NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

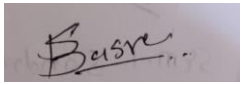
NAME OF THE STAFF: Shruti B. Basare. DEPARTMENT: B.Com (Accounting and Finance) CLASS: TyBaf. SEMESTER: V MONTH: July

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand how to pass journal entries in case of amalgamation or external reconstruction, and what is the effect of these changes on the balance sheet and capital structure of the company.

In case of liquidation of companies, procedure of liquidation, realising assets and discharging liabilities in predetermined order. Preparing liquidators final statement of account and statement of affairs.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting V, Amalgamation (AS-14)	Introduction definition meaning of amalgamation	1	Manan Prakashan	Lecture method/ black board and chalk
	Journal entries under purchase method in the books of old company and New company	2		
	Explanation of lump sum method and payment method, formats, basic practice problems.	1		
	Explanation and format of net asset method, basic practice problems.	2		



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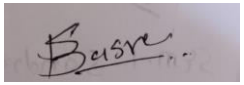
	Discharge of purchase consideration, exchange/ Swap ratio.Basic problems.	1		

MONTH: August

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting V, Amalgamation (AS-14)	Problems based on journal entries in the books of old company	2	Manan Prakashan	Lecture method/ black board and chalk
	Problems based on journal entries in the books of new company and balance sheet	3		
	problems based on journal entries as well as balance sheet in the books of new company	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18



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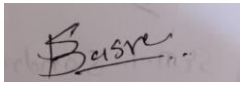
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Accounting V, liquidation of companies	Introduction and meaning of liquidation or winding up	1	Manan Prakashan	Lecture method/ black board and chalk
	Meaning of Preferential payments and overriding preferential payments, order of payments.	1		
	Formats of statement of affairs, deficit / surplus account. Practical problems.	4		
	Format and explanation of liquidators final statement of account, practical problems.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti B. Basare DEPARTMENT: B.Com (Accounting and Finance). CLASS: Tybaf SEMESTER: V MONTH: july

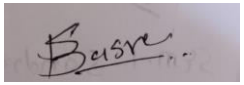
ACADEMIC YEAR: 2018-19.

LEARNING OBJECTIVE/S:
The learners will be able to : to calculate the value of shares and to compute the value of goodwill of the company using different methods and techniques.

Gain knowledge about functions of non banking financial corporation and accounting treatment and methods.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial account VI, valuation of goodwill and shares	Introduction to Goodwill, formula and computation, future maintainable profit method	1		Lecture method , black board and chalk
	Introduction to super profit method, capitalisation method and Annuity method, formula and formats.	2		
	Practical problems based on each method.	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial account VI, valuation of goodwill and shares	Introduction to valuation of shares, intrinsic value method, Formulae and format	1		Lecture method , black board and chalk
	Yield method and fair value method, formula and computation.	1		
	Practical problems debate on all methods	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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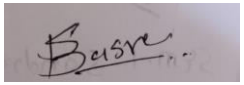
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting VI, Non-banking financial companies	Introduction, definition of nbfc, registration and regulation, classification, accounting of investment.	1		Lecture method , black board and chalk
	Asset classification, non performing assets, capital adequacy, preparation of financial statements	2		
	Practical problems	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:Ankita Almeida DEPARTMENT: B.Com (Accounting and Finance) CLASS:TY BAF (A, B,C) SEMESTER: V

MONTH: August - November ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Understand concept of effective learning, formal and informal communication, leadership skills and self improvement

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Final accounts of banking company	Legal provisions in banking regulation act, 1949 Statutory reserves including cash reserve and statutory liquidity ratio.	02	Book by Manan Prakashan	Chalkboard
	Bill Purchase and Discounted, Rebate of Bill Discounted — Practical Sums 04	02	Book by Manan Prakashan	Chalk board
	Final Accounts in Prescribed form with practical problems — 07	07	Book Manan Prakashan	Chalk board
	Classification of Advances, Standard, sub standard, doubtful and provisioning requirement	01	Book by Manan Prakashan	Chalk board
5. Accounting for Limited	Introduction, statutory provisions,	03	Book by Manan Prakashan	Chalk board

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Liability Partnership	Conversion of partnership business into Limited Liability Partnership Final Accounts— Practical Sums- 08	08	Book by Manan Prakashan	Chalk board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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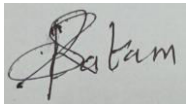
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan D. Satam

DEPARTMENT: B.Com (Accounting and Finance) CLASS: TYBAF SEMESTER:V MONTH: June 2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: Learning about cost accounting of the product and services.
The learners will be able to : Students will be able to learn practical imposition of cost and calculation in different processes and by different methods

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Management	**1. Strategic Financial Management** Strategic Financial Management – Need and Importance Corporate, Business and Functional Strategy Financial Planning - Need and Importance Profit Maximization Wealth Maximization Interface of Financial Policy and Strategic Management Relationship of Finance to Economics and Accounting Role of Financial Manager	05	Seth publication	Chalk - Board
	2. Mutual Fund and Bond Valuation Introduction to Mutual Fund- History & Origin, Definition, Meaning, Characteristics, Advantages, Disadvantages, Limitations of Mutual Funds, Ethics in	15	Seth publication	Chalk - Board



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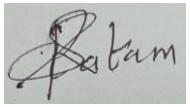
	Mutual Fund. Entities involved – Sponsor, Trust, Trustee, Asset Management Company, Registrar and Transfer Agent (RTA) and Fund Houses in India. Classification of Mutual Fund - Functional/Operational – Open ended, close ended, Interval, Portfolio – Income, Growth, Balanced, MMMF, Geographical/ Location – Domestic and Offshore, Tax Saving Funds, Exchange Traded Funds , Balance Funds , Fixed Term Plan Debt Funds and SIP. Calculations of NAV, Entry Load and Exit Load. Bond Valuation - Meaning, Measuring Bond Returns – Yield to Maturity, Yield to call and Bond Pricing. Bond Pricing Theorems, Bond Risks and Bond Duration. (Practical Problems on YTM and Bond Duration.)			
	3. **Credit Management** Credit Management – Terms of Payment, Credit Policy Variables, Credit Evaluation, Credit Granting Decision, Control of Accounts Receivables ie Receivables Management, Ageing Schedule and Credit Management in India	10	Seth publication	Chalk - Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 35



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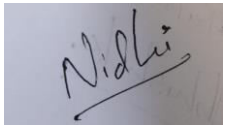
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Nidhi Rai DEPARTMENT: B.Com (Accounting and Finance) CLASS: TYBAF

SEMESTER: V MONTH: December ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : Understand Financial Management concepts and understand the practical scenario of future decision making regarding finance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Chapter 2- Capital Budgeting	Payback period	1	Sheth Publication	Online teaching- Excel and Table top method
	Payback profitability	1	Sheth Publication	Online teaching- Excel and Table top method
	Average rate of return	1	Sheth Publication	Online teaching- Excel and Table top method
	Discounted pay back period	1	Sheth Publication	Online teaching- Excel and Table top method
	Net present value	1	Sheth Publication	Online teaching- Excel and Table top method
	Profitability Index	1	Sheth Publication	Online teaching- Excel and Table top method



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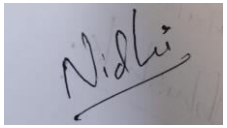
	IRR		Sheth Publication	Online teaching- Excel and Table top method
	Decision tree analysis	1	Sheth Publication	Table top method & PPT
Chapter 3- Capital Rationing	Divisible project & Indivisible project	1	Sheth Publication	Table top method & PPT
Chapter 4- Capital Structure Decision	Weighted Average Cost of Capital	1	Sheth Publication	Table top method & PPT
	Net Operating Income	1	Sheth Publication	Table top method & PPT
	Net Operating Income approach		Sheth Publication	Table top method & PPT
	MM approach		Sheth Publication	Table top method & PPT
Chapter 5 - Dividend Decision	Walter Model	1	Sheth Publication	Table top method & PPT
	Gordon model		Sheth Publication	Table top method & PPT
	MM model		Sheth Publication	Table top method & PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _11_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Sandra Shamir Almeida DEPARTMENT : B.COM (Accounting & Finance)

CLASS : TYBAF (A,B, C) SEM : V MONTH : JUNE – SEP YEAR : 2018-19

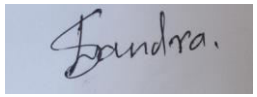
LEARNING OBJECTIVE/S :

- The learners will be able to learn various aspects about Strategic Financial Management, Need and Importance of Strategy, Financial Planning, Role of Financial Manager, Concept, Types, Advantages and Ethics in Mutual Funds, Concepts of Debentures and Bonds, Details of Receivables Management.
- Finance is the Lifeblood and Backbone of business.
- This subject is helpful to develop Financial & Management skills among learners.

PAPER/ UNIT/ TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE CO-ORDINATOR** **SIGNATURE OF THE H.O.D.**

FINANCIAL MANAGEMENT-II	**MODULE I : STRATEGIC FINANCIAL MANAGEMENT** ● Strategic Financial Management - Need and Importance ● Corporate, Business and Functional Strategy ● Financial Planning – Need and Importance ● Profit Maximization ● Wealth Maximization ● Interface of Financial Policy and Strategic Management ● Relationship of Finance to Economics and Accounting ● Role of Financial Manager.	05	**Strategic Financial Management by CA G.Sekar & CA B. Saravana Prasath** **Financial Management (Theory and Practice by Prasanna Chandra)**	CHALK & DUSTER



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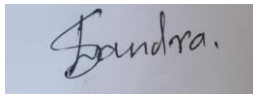
	MODULE IV : Mutual Funds and Bond Valuation. ●Introduction to Mutual Fund - History & Origin, Definition, Meaning, Characteristics, Advantages, Disadvantages, Limitations of Mutual Funds. ●Ethics in Mutual Fund ●Entities Involved – Sponsor, Trust, Trustee, Asset Management Company, Registrar and Transfer Agent (RTA) and Fund Houses in India. ●Classification of Mutual Fund – Functional/ Operational – Open ended, Close ended, Interval Portfolio-Income, Growth, Balanced, MMF,	10	**Financial Management Principles and Applications by Sheridan Titman, Arthur Known, John D Martin** **Financial Management by S.P. Gupta**	CHALK & DUSTER



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	Geographical/Location-Domestic and Offshore, Tax Saving Funds, Exchange Traded Funds, Balanced Funds, Fixed Term Plan, Debt Funds and SIP. ●Calculations of NAV, Entry Load & Exit Load. ●Bond Valuation – Meaning, Measuring Bond Returns – Yield To Maturity, Yield To Call & Bond Pricing. Bond Pricing Theorems, Bond Risks and Bond Duration. ● (Practical Problems on YTM & Bond Duration.)			

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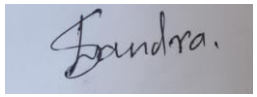
	MODULE V : Credit Management ●Credit Management- Terms of Payment, Credit Policy Variables, Credit Evaluation, Credit Granting Decision, Control of Accounts Receivables i.e. Receivables Management, Ageing Schedule and Credit Management in India.	**10**	**Financial Management by Rajeev Bansal**	CHALK & DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 25



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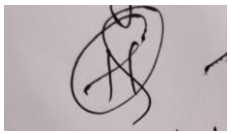
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.Com (Accounting and Finance) CLASS: T.Y.BAF SEMESTER: V
MONTH: JUL ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES The learners will be able to study the meaning and basic concepts of GST.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.INTRODUCTION TO INDIRECT TAX AND GST	FESTURES OF INDIRECT TAX,ADVANTAGES AND DISADVANTAGES,AUTHORITY OF TAXES IN INDIA	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	CHALK-BOARD
	GENESIS OF GST IN INDIA,POWER TO TAX GST,MEANING & DEFINITION OF GST	01		
	CONCEPTS- CGST,IGST,SGST,UTGST	01		
	EXPORT OF GOODS AND SERVICES,IMPORT OF GOODS AND SERVICES	01		
	GST COUNCIL AND GST NETWORK	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.Com (Accounting and Finance)

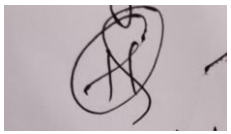
CLASS: T.Y.BAF SEMESTER: V MONTH: JUL ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:

The learners will be able to understand levy and collection of GST and concepts of supply as well.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
2.LEVY AND COLLECTION OF GST	LEVY AND COLLECTION OF GST,	02	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	CHALK-BOARD
	COMPOSITE AND MIXED SUPPLY	02		
	POWER TO GRANT EXEMPTION,NEGATIVE LIST OF GST	02		
	GST RATE SCHEDULE FOR GOODS AND SERVICES	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.Com (Accounting and Finance)

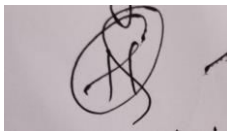
CLASS: T.Y.BAF SEMESTER: V MONTH: AUG ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:

The learners will be able to study the place and time concept of supply and computation of value of supply as well.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
3.CONCEPTS OF SUPPLY	TAXABLE EVENT SUPPLY	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	CHALK-BOARD
	PLACE OF SUPPLY	02		
	TIME OF SUPPLY	01		
	VALUE OF SUPPLY	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



SIGNATURE OF THE STAFF **SIGNATURE OF THE CO-ORDINATOR** **SIGNATURE OF THE H.O.D.**

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Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.Com (Accounting and Finance)

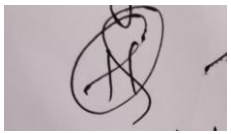
CLASS: T.Y.BAF SEMESTER: V MONTH: AUG ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:

The learners will be able to study the preparation to tax invoices and debit &credit notes.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
4.DOCUMENTATION	TAX INVOICES	02	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	CHALK-BOARD
	DEBIT AND CREDIT NOTES	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 04



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TEACHING PLAN (UNIT PLAN)

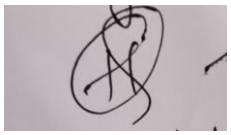
NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.Com (Accounting and Finance)

CLASS: T.Y.BAF SEMESTER: V MONTH: AUG-SEPT ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES: The learners will be able to understand the computation of input tax credit &GST under interstate and intra state supplies.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
5.INPUT TACX CREDIT & COMPUTATION OF GST	ELIGIBILITY& CONDITIONSFOR ITC	02	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI - IPCC BOOKS	CHALK-BOARD
	APPORTIONMENT OF CREDIT & BLOCKED CRDITS	02		
	CREDIT IN SPECIAL CIRCUMSTANCES	02		
	COMPUTATION OF GST UNDER INTERSATE &INTRA STATE SUPPLY	06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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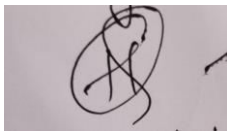
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.Com (Accounting and Finance) CLASS: T.Y.BAF SEMESTER: V
MONTH: SEPT ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES: The learners will be able to study the liability for registration under GST and its procedure as well.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
6.REGISTRATION	Person liable for registration	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	CHALK-BOARD
	PERSON NOT LIABLE FOR REGISTRATION	01		
	PROCEDURE FOR REGISTRATION,DEMEED REGISTRATION,AMENDMENT,	02		
	CANCELLATION & REVOCATION OF REGISTRATION	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05



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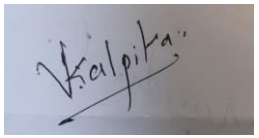
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK **DEPARTMENT:** B.Com (Accounting and Finance) **CLASS**: TYBAF **SEMESTER**: V

MONTH: JUNE-JULY **ACADEMIC YEAR**:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: To understand the basic concepts and theories of the production management. Gaining knowledge about **managing production** processes. How to run operations effectively. Better understanding of modern **production** techniques. Better understanding of quality **management**.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MANAGEMENT, UNIT- PRODUCTION MANAGEMENT	Definition of Production Management – Scope of Production Management, Steps in Production Planning and Control	2	Principles of Management , Ramasamy , Himalya Publication , Mumbai	Chalk and board
	Meaning of Productivity - Measurement of Productivity – Measure to increase Productivity – Productivity Movement in India	2	Principles of Management , Tripathi Reddy , Tata Mc Grew	



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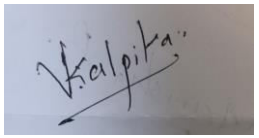
			Hill	
	Meaning and Definition of Quality Management – TQM – Quality Circles – ISO 9000/14000	2	Same as above	
	Inventory Management – Meaning and Methods	2	Samas abovee	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8



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TEACHING PLAN (UNIT PLAN)

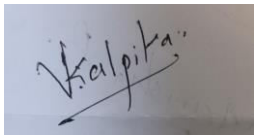
NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: B.Com (Accounting and Finance) CLASS: TYBAF SEMESTER: V

MONTH: JULY-AUGUST ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:

The learners will be able to: the student will be able to: Demonstrate an understanding of the overall role and importance of the **finance** function. Demonstrate basic **finance management** knowledge. The basic objective of this unit is to equip the students with the understanding time value of money & use it for decision making. And students are aware various sources of finance. This unit also provides students with knowledge on management of working capital & capital budgeting.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MANAGEMENT,UNIT:-FINANCIAL MANAGEMENT	Meaning and Definition of Financial Management – Functions of Financial Management	2	Fundamentals of Financial Management by D. Chandra Bose, PHI Learning Pvt. Ltd., New Delhi	Chalk and board, online news papers, websites



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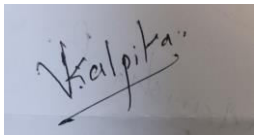
	Capital Budgeting- Introduction, Importance and Process	2	Financial Management: Theory and Practice by Prasanna Chandra, Tata McGraw Hill, New Delhi	
	Capital Structure- Meaning, Factors affecting Capital Structure	2		
	Capital Market – Meaning and Constituents – Functions	2		
	Fundamental Analysis – Technical Analysis - Venture Capital – DEMAT Account - Futures and Options	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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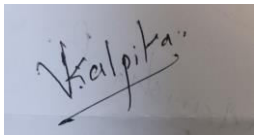
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KALPITA MITESH VARTAK **DEPARTMENT:** B.Com (Accounting and Finance) **CLASS**: TYBAF **SEMESTER**: V

MONTH: JUNE-JULY **ACADEMIC YEAR**:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: To understand the basic concepts and theories of the production management. Gaining knowledge about **managing production** processes. How to run operations effectively. Better understanding of modern **production** techniques. Better understanding of quality **management**.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MANAGEMENT, UNIT- PRODUCTION MANAGEMENT	Definition of Production Management – Scope of Production Management, Steps in Production Planning and Control	2	Principles of Management , Ramasamy , Himalya Publication , Mumbai	Chalk and board
	Meaning of Productivity - Measurement of Productivity – Measure to increase Productivity – Productivity Movement in India	2	Principles of Management , Tripathi Reddy , Tata Mc Grew	



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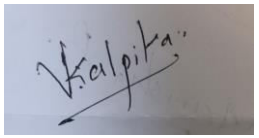
			Hill	
	Meaning and Definition of Quality Management – TQM – Quality Circles – ISO 9000/14000	2	Same as above	
	Inventory Management – Meaning and Methods	2	Samas abovee	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 8

TEACHING PLAN (UNIT PLAN)



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VIVA COLLEGE, Virar (W)
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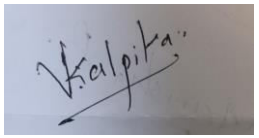
NAME OF THE STAFF: KALPITA MITESH VARTAK DEPARTMENT: B.Com (Accounting and Finance) CLASS: TYBAF SEMESTER: V

MONTH: JULY-AUGUST ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: the student will be able to: Demonstrate an understanding of the overall role and importance of the **finance** function. Demonstrate basic **finance management** knowledge. The basic objective of this unit is to equip the students with the understanding time value of money & use it for decision making. And students are aware various sources of finance. This unit also provides students with knowledge on management of working capital & capital budgeting.

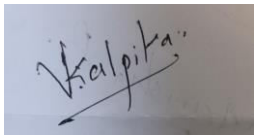
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MANAGEMENT,UNIT:- FINANCIAL MANAGEMENT	Meaning and Definition of Financial Management – Functions of Financial Management	2	Fundamentals of Financial Management by D. Chandra Bose, PHI Learning Pvt. Ltd., New Delhi	Chalk and board, online news papers, websites
	Capital Budgeting- Introduction, Importance and Process	2	Financial Management: Theory and	



SIGNATURE OF THE STAFF **SIGNATURE OF THE CO-ORDINATOR** **SIGNATURE OF THE H.O.D.**

			Practice by Prasanna Chandra, Tata McGraw Hill, New Delhi	
	Capital Structure- Meaning, Factors affecting Capital Structure	2		
	Capital Market – Meaning and Constituents – Functions	2		
	Fundamental Analysis – Technical Analysis - Venture Capital – DEMAT Account - Futures and Options	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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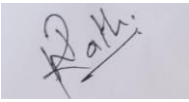
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Neeta Rath Department: -B.Com (Accounting and Finance)
Class: - T.Y.BAF SEM - V MONTH-: -July - oct YEAR: -2018/19
LEARNINIG OBJECTIVES: - The learner will be able to learn marketing & human resources management.

PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED
MANAGE	MODULE: I MARKETING MANAGEMENT: - 4ps of marketing, product, price, place and promotion, product life cycle, Branding & packaging, price management, pricing strategies, place distribution management, distribution decisions & types.	**7**		Chalk & duster



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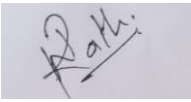
MENT APPLICATIONS II	PROMOTION MANAGEMENT: - Promotion strategies, Integrated marketing communication,	**8**		

UNIT III Human Resource Management	HRM- feature , functions , HRP – Meaning and Process of HRP	3	Marketing Management By Philip ,Kotlar	Chalk Board, Discussion
	HRD- Methods of HRD, Performance appraisal - Concept, Traditional and Modern Methods	3		
	Employee Retention- Techniques	3		
	Leadership- traits , Styles	3		
	Motivation – factors and theories	3		



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ABHISHEK MADAYE_____ DEPARTMENT: B. COM. (Accounting & Finance)

CLASS: _____TYBAF_____ SEMESTER: _____VI MONTH: ___DEC-MARCH__ ACADEMIC YEAR: _2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : approaches of business valuation,theory and practical problems on hire purchase and lease financing and Working capital financing.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FINANCIAL MANAGEMENT,UNIT 1,BUSINESS VALUATION	Conceptual framework of valuation: book value,Market value,Economic Value,Liquidation Value, Replacement,Salvage value,Value of Goodwill And fair value. Approaches Of Valuation: Assets based approach to valuation,Earning based approach to valuation,Earning measures on cash flows basis,Market VAlue added Approach and	5	Seth publication	Chalk & Duster

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	economic value added			
UNIT 4 LEASE AND HIRE PURCHASE FINANCING	INTRODUCTION:Meaning and types of leases,rational, maschiunes ,operating leases, leasing as financing decision,cash flow of the finance lease. Hire Purchase: Meaning,Need and Importance, Calculation of hire purchase installment. Choice between hire purchase and lease financing	15	Seth publication	Chalk & Duster
UNIT 5 WORKING CAPITAL FINANCING	INTRODUCTION:key features and characteristics of trade credit, bank credit, commercial papers,certificate of deposits and factoring. Practical problems based on factoring and calculation of yield of CP's and CD's.	10	Seth publication	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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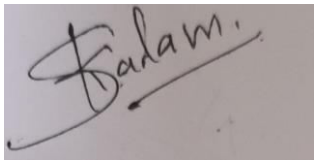
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:: Prof. SACHIN ARJUN KADAM DEPARTMENT: B.Com (Accounting and Finance)

CLASS: TYBAF SEMESTER: VI MONTH: APRIL ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II	Chapter 2: Absorption costing, Marginal Costing, CVP Analysis. Meaning, Define, Difference between Absorption costing and Marginal costing, Advantages and Limitations. Cost volume and profit analysis : BEP, meaning, concept, practical pr	6	Manan prakashan, sheth publication	Chalk, printed notes
UNIT III	Chapter 3: Managerial decision making Make or buy, sales mix decision, exploring new materials, plant	5	Manan prakashan, sheth publication	Chalk, printed notes



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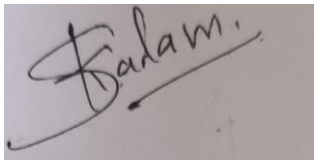
	shut down decision and practical problems.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___11_____



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TEACHING PLAN (UNIT PLAN)

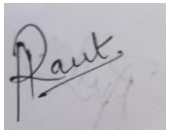
NAME OF THE STAFF: _ANKITA ARUN RAUT_____ DEPARTMENT: B.Com (Accounting and Finance)

CLASS: ____TYBAF_____ SEMESTER: __VI_____ MONTH: __DEC-MARCH___ ACADEMIC YEAR: __2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	BUDGETING & BUDGETORY CONTROL: meaning, objectives, advantages & limitations of budgets, zero base budgeting, functional, flexible & fixed budgeting. Practical: Q1 to Q5 on flexible budget, Q6 to Q10 on functional budgets.	15	Manan Prakashan	Chalk & Duster
2	STANDARD COSSTING & VARIANCE ANALYSIS: Preliminaries, standard cost system, introduction of different variances. Practical: Q1 to Q3 material cost V, Q4 to Q6 labour cost V, Q7 to Q8 Variable OH V, Q9 & Q10 Fixed OH V, Q11 & Q12 Sales V.	15	Manan Prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: REENA BEHERA DEPARTMENT: B.Com (Accounting and Finance) CLASS: T.Y.B.A.F

SEMESTER: VI MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:
The Learner/Students will be able to under the concept of Indian economy in terms of classification of various sector such as primary, secondary and tertiary sector and their contribution towards the development of Indian Economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indian Economy-III Unit I, II & III	Unit I: Introduction to Agricultural Sector Demographic features, Urbanization and its effects, agricultural sector – institution, reforms, technology, pricing, finance, marketing and National Agricultural Policy.	15	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	Lecture, group discussion, test, oral presentation of important topics.
	Unit II: Industrial Sector Growth & pattern of industrialisation, Industrial Policy of 1991, Public sector and Disinvestment, small scale sector problems and	15	V.K. Puri S.K. Misra:	Lecture, group discussion, test, oral presentation of important topics.

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	prospects.		Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	
	Unit III: Service Sector and External Sector Nature, scope, trends in banking-insurance-healthcare-tourism industry, external sector, structure and direction of foreign trade, BOP since 1991, FDI and Foreign capital in India with transition, SAARC, ASEAN &WTO role and Impact.	15	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	Lecture, group discussion, test, oral presentation of important topics.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____45____

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TEACHING PLAN (UNIT PLAN)

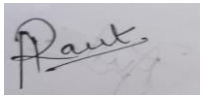
NAME OF THE STAFF: ANKITA ARUN RAUT_____ DEPARTMENT: _____B.Com (Accounting and Finance)____

CLASS: _____TYBAF_____ SEMESTER: _____VI_____ MONTH: ___DEC-MARCH__ ACADEMIC YEAR: _2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	FINAL A\C FOR ELECTRICITY CO.: Fin. A\C as per electricity Rules, Receipt & Expenditure A\C, Gen B\S, contingency Res., Disposal of Surplus, Practical: Q1 to Q4 on Rec & Exp on Cap A\C, Q5 to Q8 on Fin A\C of electricity Co.	15	Manan Prakashan	Chalk & Duster
2	FINAL A\C FOR CO-OPERATIVE SOCIETY: (Co-operative housing society & Consumer Co-operative society) Provisions of Maharashtra st.Co operative Society Act & Rules, Accounting provisions, format of Final A\C- Form N. Practical: Q1 to Q4 Fin A\C of Co-operative housing Society, Q5 to Q8 fin A\C of consumer co-operative society.	15	Manan Prakashan	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____30____



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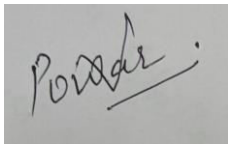
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Mr. VISHWANATH V. PAWAR**_____ DEPARTMENT: B.Com (Accounting and Finance) CLASS: **_TYBAF_____**

SEMESTER: **Sem VI_____** MONTH**:_Dec to March_____** ACADEMIC YEAR : **2018-19**

LEARNING OBJECTIVE/S: The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1	Investment Accounting (w.r.t. Accounting Standard- 13)	6		Chalk Board
	1) For shares (variable income bearing securities) 2) For debentures/Preference. shares (fixed income bearing securities) 3) Accounting for transactions of purchase and sale of investments with ex and cum 4) interest prices and finding cost of investment sold and carrying cost as per 5) weighted average method (Excl. brokerage). 6) Columnar format for investment account.		Manan Prakashan	
	Introduction to IFRS	4		Chalk Board, class discussion
Unit 2	1) Accounting standards 2) Indian Accounting standards (Ind AS)		Manan Prakashan	



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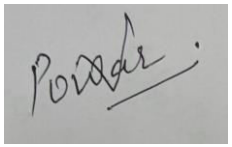
	3) Comparison of Ind AS, IFRS and AS			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SANDRA ALMEIDA DEPARTMENT: B.Com (Accounting and Finance) SUBJECT : FINANCIAL MANAGEMENT

CLASS: TYBAF SEMESTER: VI MONTH: DEC 2018 – APRIL 2019 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : TO ENSURE REGULAR AND ADEQUATE SUPPLY OF FUNDS TO THE CONCERN AND GIVE ADEQUATE RETURNS TO THE SHAREHOLDERS. .AND TO ENSURE OPTIMUM UTILIZATION OF FUNDS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FINANCIAL MANAGEMENT	1. BUSINESS VALUATION	13	MANAN ,SHETH PRAKASHAN	CHALK AND BLACKBOARD,
	2. MERGERS AND ACQUISITIONS	12		
	3. ASSETS AND LIABILITIES RESTRUCTURING	06		
	4. LEASE AND HIRE PURCHASE FINANCING	14		
	5. WORKING CAPITAL FINANCING	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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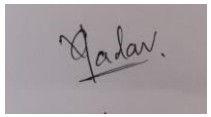
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI YADAV DEPARTMENT: B.Com (Accounting and Finance) CLASS: TYBAF SEMESTER: VI

MONTH : DEC- MAR ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
	Chapter 1 BUDGETING & BUDGETORY CONTROL: meaning, objectives, advantages & limitations of budgets, zero base budgeting, functional, flexible & fixed budgeting. Practical: Q1 to Q5 on flexible budget, Q6 to Q10 on functional budgets.	15	Manan Prakashan	Chalk & Duster	
	Chapter 2: Absorption costing, Marginal Costing, CVP Analysis. Meaning, Define, Difference between Absorption costing and	15	Manan Prakashan	Chalk & Duster	



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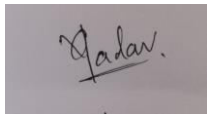
	Marginal costing, Advantages and Limitations. Cost volume and profit analysis : BEP, meaning, concept, practical problems.				
	Chapter 3: Managerial decision making Make or buy, sales mix decision, exploring new materials, plant shut down decision and practical problems.		Manan prakashan	Chalk & Duster	
	Chapter 4: STANDARD COSSTING & VARIANCE ANALYSIS: Preliminaries, standard cost system, introduction of different variances. Practical: Q1 to Q3 material cost V, Q4 to Q6 labour cost V, Q7 to Q8 Variable OH V, Q9 & Q10 Fixed OH V, Q11 & Q12 Sales V.		Manan Prakashan	Chalk & Duster	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.Com (Accounting and Finance)

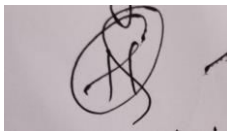
CLASS: T.Y.BAF SEMESTER: VI MONTH: DEC ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:

The learners will be able to study the payment and return of taxes under GST as well as interest payment and refunds.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.PAYMENT OF TAX &REFUNDS	PAYMENT OF TAX,INTEREST AMOUNT,	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	CHALK-BOARD
	TDS, TCS	01		
	REFUND OF TAX	02		
	INTEREST ON DELAYED REFUNDS	02		
	INETREST ON DELAYED PAYMENTS	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.Com (Accounting and Finance)

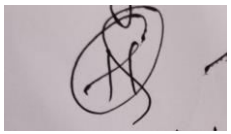
CLASS: T.Y.BAF SEMESTER: VI MONTH: JAN ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:

The learners will be able to study the return filing of GST .

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
2.RETURNS	TYPES OF RETURNS	02	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	CHALK-BOARD
	PROVISIONS RELATING TO RETURNS	02		
	FILING OF RETURNS	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07



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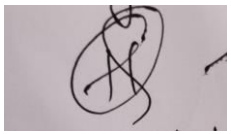
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.Com (Accounting and Finance) CLASS: T.Y.BAF SEMESTER: VI MONTH: JAN -FEB ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:The learners will be able to understand audit and assessment procedures and E-WAY Bill.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
3.ACCOUNTS, AUDIT, ASSESSMENT & RECORDS	ELECTRONIC WAY BILL,SELFASSESSMENT	02	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	CHALK-BOARD
	SCRUTINY OF RETURNS, NON-FILER OF RETURNS	02		
	ASSESSMENT OF UNREGISTERED PERSON, ASSESSMENT IN SPECIAL CASES,	02		
	AUDIT BY TAX AUDITORS	01		
	SPECIAL AUDIT	01		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.Com (Accounting and Finance) CLASS: T.Y.BAF SEMESTER: VI
MONTH: FEB ACADEMIC YEAR: 2018-2019

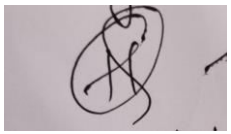
LEARNING OBJECTIVES:

The learners will be able to understand customs laws along with the valuation of imported and exported goods.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
4.CUSTOM ACT- I	INTRODUCTION TO CUSTOM LAWS	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	CHALK-BOARD
	EXEMPTION FROM CUSTOM DUTY, TAXABLE EVENT	03		
	CHARGES OF CUSTOM DUTY	03		
	TYPES OF CUSTOM DUTIES	02		
	VALUATION OF IMPORTED & EXPORTED GOODS	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)



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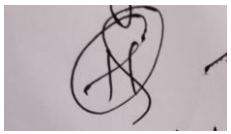
NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.Com (Accounting and Finance) CLASS: T.Y.BAF SEMESTER: VI
MONTH: FEB ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVES:The learners will be able to compute custom duty under different provisions like Baggage Rules, postal goods and duty Drawback.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
5.CUSTOM ACT-II	ALL IMPORT &EXPOER PROCEDURES	01	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	CHALK-BOARD
	PROCEDURE RELATED TO BAGGAGE	04		
	GOODS IMPORTED & EXPORTED BY POST & STORES	02		
	PROVISIONS RELATING TO COASTAL GOODS	02		
	WAREHOUSING & DRAWBACK	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

TEAC HING PLAN (UNIT PLAN)



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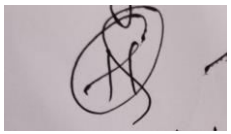
NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: B.Com (Accounting and Finance) CLASS: T.Y.BAF
SEMESTER: VI MONTH: MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:The learners will be able to study Foreign Trade Policy and current FTP 2015-20

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
6.FOREIGN TRADE POLICY	INTRODUCTION,LEGISLATION& FEATURES OF FTP, FTP2015-20	04	TEXTBOOK (MANAN PRAKASHAN,SHETH PUBLICTION), ICAI -IPCC BOOKS	CHALK-BOARD
	ADMINISTRATION,CONTENT & SCOP	02		
	EXEMPTION &REMISSION SCHEMES,DUTY FREE IMPORT AUTHORIZATION SCHEME	02		
	REWARD SCHEME, EOU,STP	02		
	BTP AND EHTP SCHEME	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12



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TEACHING PLAN (UNIT PLAN)

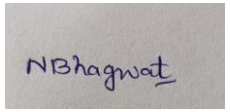
NAME OF THE STAFF: Dr. NILIMA BHAGWAT DEPARTMENT: B.Com (Accounting and Finance) CLASS: T.Y.B.A.F

SEMESTER: VI MONTH: NOVEMBER - FEBRUARY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:
The Learner/Students will be able to under the concept of Indian economy in terms of classification of various sector such as primary, secondary and tertiary sector and their contribution towards the development of Indian Economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Indian Economy-III Unit IV	Unit I: Money and Banking ● Money market and its features ● Monetary Policy of RBI ● Progress of Commercial Banking in India ● Development of Capital Markets ● SEBI and Its Functions	15	V.K. Puri S.K. Misra: Indian Ecomomy Datt & Sundaram: Indian Economy Uma Kapila: Indian Economy	Lecture, group discussion, test, oral presentation of important topics.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA ARUN RAUT DEPARTMENT: COMMERCE

CLASS: FYFM SEMESTER: I MONTH: JUL-NOV ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the accounting concepts and standards, will able to pass journal entries and prepare ledgers subsidiary books trial balance, will able to prepare bank reconciliation, will able to bifurcate capital and revenue income and expenditure. Will able to calculate depreciation will able to prepare final account.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	NATURE PURPOSE OF A/C : Meaning & Scope of A/C, A/C Concepts, A/C Standards	4	Seth Publication	Chalk & Duster
2	Books of A/C : Journals Ledger Q. 1 to 5, Subsidiary books Q. 1 to 5, Trial Balance Q. 1 to 5, A/C Framework	15	Seth Publication	Chalk & Duster
3	Introduction to Finance Standard : Bank reconciliation Statement Q. 1 to 6,	12	Seth Publication	Chalk & Duster

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	Treatment of Capital and revenue Q. 1 to 6, Income and Expenditure, Depreciation A/C – Method of Depreciation Q. 1 to 6 (WDV / SLM)			
4	Preparation of Final A/C : Final A/C for Sole Trader Practical Q. 1 to 5 & Final A/C for Partnership firm Practical Q. 6 to 10,	12	Seth Publication	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____MS SEEMA SIHANA_____ DEPARTMENT: COMMERCE_____ CLASS: __FYBFM_____ SEMESTER: _____I_____ MONTH: AUGUST TO OCTOBER 2019 _____ ACADEMIC YEAR: ____2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : TO IDENTIFY BUSINESS OPPORTUNITIES, IMPROVINGPERFORMANCE, TO KNOW HOW BUSINESS ENVIRONMENT IS ESSENTIAL FOR THE EFFECTIVENESS OF THE ORGANIZATIONAL OBJECTIVES.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Unit 1 Business and its Environment	Business Objectives, Dynamics of Business and its Environment, Types of Business Environment	15	Business Environment- Upadhyay . S	Chalk and duster, Group Discussion
	Importance of Environmental Analysis, SWOT Analysis,			
	PESTLE Analysis			
Unit 2 Business and Society	Business Ethics: Nature and Scope of Ethics, Ethical Dilemmas, Corporate Culture and Ethical Climate.	15	Business Environment- Chopra BK	Chalk and Duster, Group Discussion
	Development of Business Entrepreneurship: Entrepreneurship and Economic Development, Micro, Small and Medium Enterprises Development (MSMED) Act, 2006, Entrepreneurship as a career option.			

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	Consumerism and Consumer Protection: Consumerism in India, Consumer Protection Act 1986.			
Unit 4 International Environment	Strategies for going Global: MNCs, TNCs, WTO,	15	Business Environment in India- Suresh Bedi	Chalk and Duster, Group Discussion
	Foreign Trade in India : Balance of Trade, FDI Investment Flows and its Implication for Indian Industries.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____45_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:_____VISHAKHA SANE_____ DEPARTMENT: COMMERCE CLASS: FYBFM(BUSINESS ECONOMICS) SEMESTER: ___1____ MONTH: __NOV____ ACADEMIC YEAR: __2018-2019_____

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1,2,3	1.SCOPE AND IMPORTANCE OF BUSINESS ECONOMICS Basic tools,opportunity cost principle-incremental cost-functional relationship,the basics of market demand,market supply and equilibrium conditions.	10	MANAN PRAKASH	CALK AND DUSTER

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	2.DEMAND ANALYSIS- DEMAND FUNCTION AND DEMAND ESTIMATION AND FORECASTING-Nature of demand curve under different market. meaning significant,types and measurement of elasticity of demand. meaning and significant method of demand forecasting.	10		
	3.SUPPLY AND PRODUCTION DECISIONS- PRODUCTION FUNCTION-short run analysis with Law of variable proportion, Long run production function,Law of return to scale.	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____35____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PROF. NAZIA SAJID SHAIKH. CLASS: FYFM- _ SEMESTER: SEM I MONTH: JUNE-OCT.

ACADEMIC YEAR : 2018-19. SUB: INTRODUCTION TO FINANCIAL SYSTEM.

LEARNING OBJECTIVE/S:
The learners will be able to : Understand an overview of financial system, a brief about financial markets, financial regulatory and financial instruments.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1	OVERVIEW OF FINANCIAL SYSTEM. -An Introduction to financial system, Evolution of Financial system (Capital market oriented) -Functions of Financial system. -Financial system in India compared with those in developed nations and developing nations	15	Banking and financial services. Mukund Sharma. (Himalaya Publication)	Chalk and Duster.

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MODULE 2	-Constituents of the Financial system and interrelationships between various components. FINANCIAL MARKETS. -Capital Market, Money Market, Foreign exchange market, Commodity Market, Derivative Market, Meaning, classification and Structure, subsegment ,Role played, Participants	15		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MADHURA SURVE** DEPARTMENT: **COMMERCE** CLASS: **FYBFM** SEMESTER: **I** MONTH: **JULY** – **SEPTEMBER** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to : Understand some basic knowledge about financial market, about reguk

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED	
MODULE 3	Financial Regulators: Meaning and features of financial regulators, Role and functions of financial regulators, Kinds of financial regulators, markets regulated by each regulator	**15**	**Banking and financial services. Mukund Sharma. (Himalaya Publication)**	**Chalk and Duster**	
MODULE 4	Financial Instruments:	**15**			

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	Meaning and classification of financial instruments (multiple ways of classifying financial instruments) Types of financial instruments, Evaluation of financial instruments (risk return trade-off), Characteristics of financial instruments, New financial instruments				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

CLASS: FYFM SEMESTER: I MONTH: JULY-NOVEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:

The learners will be able to:

- Define Ratio, Continued Ratio, and Inverse Ratio and solve the questions based on these terms.
- Understand the concept of Proportion, Continued Proportion, Direct Proportion and Inverse Proportion.
- Solve the questions based on different types of Proportion and relate the situations in day to day life.
- Understand the concept of Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation.
- Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Ratio, Proportion & Percentage	Unit1	▪ Define Ratio, Continued Ratio, Inverse Ratio ▪ Problem solving on ratio	2 4 2 4	Business Mathematics (Manan ,Vipul , Sheth	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT.

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			▪ Define Proportion its types. ▪ Problem solving on proportion ▪ Explanation on concept of percentage and computation of percentage.	3	Publications)	TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT 2 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

CLASS: FYFM SEMESTER: I MONTH: JULY-NOVEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:

The learners will be able to:

- Define Profit and Loss and terms related to it.
- Understand the formula of Trade discount and cash discount.
- Learn and understand the concept of Commission and Brokerage.
- Focus on how to use these terms in day to day life.

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PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Profit and Loss	Unit2	▪ Introduction to formula of Profit, Loss, %profit ,%loss ▪ Solve problems based on the above formulas ▪ Introduction to terms like trade discount, cash discount. ▪ Exercise based on cost price, selling price, trade discount, cash discount. ▪ Introduction to terms like Commission and brokerage. ▪ Solving problems based on commission and brokerage	1 3 1 4 2 4	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT 3 PLAN)

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NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

CLASS: FYFM SEMESTER: I MONTH: JULY-NOVEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:

The learners will be able to:

- Define Simple and Compound interest and its formula.
- Understand the concept of this topic and learn how to use in day to day life.
- Learn meaning of EMI, annuity and its types, also calculation of present and future value.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Interest and Annuity	Unit3	▪ Introduction to the formula of Simple interest and sums based on it. ▪ Introduction to the formula of Compound interest and sums based on it monthly, quarterly, .half yearly and yearly. ▪ Introduction and sums based on	2 4 4	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster

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			EMI, reducing balance and flat rate of interest. ▪ Introduction to annuity and its types, calculation of present value and future value by using its formula. ▪ Concept on Stated annual rate and effective annual rate and solving sums based on it.	3 2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT 4 PLAN)

NAME OF THE STAFF: SWETLANA G DIAS DEPARTMENT: COMMERCE

CLASS: FYFM SEMESTER: I MONTH: JULY-NOVEMBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:
The learners will be able to:

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- Learn the concept of face value, market value, dividend, equity shares, bonus shares, preference shares.
- Solve the questions based on buying and selling of shares with and without brokerage.
- Define net asset value of mutual funds, entry/exit load
- Understand the concept of Systematic Investment Plan (SIP).
- Solve simple problems on calculation of net income after considering entry load and exit load change in net asset value and SIP.
- Focus and how to apply this knowledge in day to day life

.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Shares and Mutual Funds	Unit4	▪ Concept of Shares, Face value, market value, dividend. ▪ Explanation of types of Shares. ▪ Sums based on Shares ▪ Concept of Mutual Funds and its types ▪ Calculation of net income after	1 2 3 2 3	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : Blackboard, Chalk & Duster

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			considering entry load and exit load ▪ Change in net asset value and problems based on it. ▪ Concept of SIP and sums based on it.	 2 2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____MS VEENA SIHANA_____ DEPARTMENT: COMMERCE_____ CLASS: __FYBFM_____ SEMESTER: _____I_____ MONTH: AUGUST TO OCTOBER 2019 _____ ACADEMIC YEAR: ____2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand and Analyse Micro Economic Concepts

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Scope and Importance of	Introduction to Business Economics	2	Principles of Micro Economics by Gregory Mankiw	Chalk and Duster

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Business Economics	Basic Concepts for Business Economics Analysis	2		
	Functional Relations and Tools for Economics Analysis	2		
	Introduction to Demand and Supply	2		
	Market Equilibrium and Changes in Market Equilibrium	2		
	Total	10		
Unit 2				
Demand Analysis	Demand Function	3	Principles of Economics by M. L. Jingan	Chalk and Duster
	Elasticity of Demand	3		
	Demand Estimation and Forecasting	4		
	Total	10		

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Unit 5				
Pricing Practices	Pricing Practices – I	5	Advance Economics by M. L. Jhingan	Chalk and Duster
	Pricing Practices – II	5		
	Total	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____30_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ____MS SEEMA SIHANA_____ DEPARTMENT: COMMERCE_____ CLASS: __FYBFM_____ SEMESTER: _____I_____ MONTH: AUGUST TO OCTOBER 2019 _____ ACADEMIC YEAR: ____2019-20_____

LEARNING OBJECTIVE/S:
The learners will be able to : TO IDENTIFY BUSINESS OPPORTUNITIES, IMPROVINGPERFORMANCE, TO KNOW HOW BUSINESS ENVIRONMENT IS ESSENTIAL FOR THE EFFECTIVENESS OF THE ORGANIZATIONAL OBJECTIVES.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 Business and its Environment	Business Objectives, Dynamics of Business and its Environment, Types of Business Environment	15	Business Environment- Upadhyay . S	Chalk and duster, Group Discussion

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	Importance of Environmental Analysis, SWOT Analysis,			
	PESTLE Analysis			
Unit 2 Business and Society	Business Ethics: Nature and Scope of Ethics, Ethical Dilemmas, Corporate Culture and Ethical Climate.	15	Business Environment- Chopra BK	Chalk and Duster, Group Discussion
	Development of Business Entrepreneurship: Entrepreneurship and Economic Development, Micro, Small and Medium Enterprises Development (MSMED) Act, 2006, Entrepreneurship as a career option.			
	Consumerism and Consumer Protection: Consumerism in India, Consumer Protection Act 1986.			
Unit 4 International Environment	Strategies for going Global: MNCs, TNCs, WTO,	15	Business Environment in India- Suresh Bedi	Chalk and Duster, Group Discussion

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	Foreign Trade in India : Balance of Trade, FDI Investment Flows and its Implication for Indian Industries.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____45_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___TEJASWINI YOGESH NAIK. DEPARTMENT: __COMMERCE_ CLASS: __FYFM SEMESTER: ___II__

MONTH: _____NOVEMBER - MARCH_ ACADEMIC YEAR: ___2018-19_

LEARNING OBJECTIVE/S:
The learners will be able to : __Meaning of shares , types of shares , process of issue of shares, forfeiture of shares , surrender of shares , journal entries for issue of shares , meaning of debentures , types of debentures ,features of debentures , issue of debentures issue redemption of debentures._

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting	1. Introduction to company accounts. : Issue of shares , types of shares , forefeiture of shares , surrender of shares , journal entries on issue of shares 2. Meaning of debentures , features of debentures , types of debentures , issue of debentures , redemption of debentures.	13 12	Manan publication	Blackboard

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _25

TEJASWINI NAIK

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AARADHANA R SINGH DEPARTMENT: COMMERCE

CLASS: FYFM SEMESTER: II MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

- Understand Global market and the effect of going global on different sectors especially agriculture, employment and IT.
- Get insight on human and constitutional right which they can exercise for the better life and society.
- Know the importance of environment in our lives and ways to protect it.
- Interpret the effect of stress and conflict on their life and will get the knowledge of combating it.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Unit-1 Globalisation and Indian Society	GLOBALISATION AND INDIAN SOCIETY Understanding the concepts of liberalization, privatization and globalization; Growth of information technology and communication and its impact manifested in everyday life; Impact of globalization on industry: changes in employment and increasing migration; Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides.	07		Chalk, Board and Duster
Unit-2 Human Rights	HUMAN RIGHTS Concept of Human Rights; origin and evolution of the concept; The Universal Declaration of Human Rights; Human Rights constituents with special reference to Fundamental Rights stated in the Constitution	10		Chalk, Board and Duster
Unit-3 Ecology	ECOLOGY: Importance of Environment Studies in the current developmental context; Understanding concepts of Environment, Ecology and their interconnectedness; Environment as natural capital and connection to quality of human life; Environmental Degradation- causes and impact on human life Sustainable development- concept and components; poverty and environment.	10		Chalk, Board and Duster
Unit-4 Understanding Stress and	UNDERSTANDING STRESS AND CONFLICT Causes of stress and conflict in individuals and society; Agents of socialization and the role played by them in developing the individual; Significance of values, ethics and prejudices in developing the individual; Stereotyping and prejudice as	10		Chalk, Board and Duster

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Conflict	significant factors in causing conflicts in society. Aggression and violence as the public expression of conflict			
Unit-5 Managing Stress and Conflict in Contemporary Society	MANAGING STRESS AND CONFLICT IN CONTEMPORARY SOCIETY Types of conflicts and use of coping mechanisms for managing individual stress; MASLOW'S THEORY OF SELF-ACTUALISATION DIFFERENT METHODS OF RESPONDING TO CONFLICTS IN SOCIETY; conflict-resolution and efforts towards building peace and harmony in Society.	08		Chalk, Board and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ___TEJASWINI YOGESH NAIK. DEPARTMENT: __COMMERCE_ CLASS: __FYFM SEMESTER: ___II__

MONTH: _____NOVEMBER - MARCH_ ACADEMIC YEAR: ___2018-19_

LEARNING OBJECTIVE/S:
The learners will be able to : __Meaning of shares , types of shares , process of issue of shares, forfeiture of shares , surrender of shares , journal entries for issue of shares , meaning of debentures , types of debentures ,features of debentures , issue of debentures issue redemption of debentures._

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial accounting	1. Introduction to company accounts. : Issue of shares , types of shares , forefeiture of shares , surrender of shares , journal entries on issue of shares 2. Meaning of debentures , features of debentures , types of debentures , issue of debentures , redemption of debentures.	13 12	Manan publication	Blackboard

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _25

TEJASWINI NAIK

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Shruti Pramod Patil DEPARTMENT: Commerce CLASS: F.Y.F.M SEMESTER: II

MONTH: November to March ACADEMIC YEAR: 2018-2019 Subject: Environmental Science

LEARNING OBJECTIVES:
The learners will be able to understand need to study this subject. It helps them to understand current environmental problems in the society and their responsibility towards the environment. They will learn about ecosystem and biodiversity for better understanding of the environment.

UNIT 1	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environment: An overview	1. Environment- structure, components and typology	4	1.Environmental science: R. Shantnu 2.Fundamentals of Ecology: Odum	Teaching Method: 1. lecture method 2.discussion method Teaching aid: chalkboard
	2. Ecosystem as part of environment- Functioning and levels of organisation	6		

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	3 Biodiversity- Classification, value, threats to biodiversity	5	E.P.	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

LEARNING OBJECTIVES:

The learners will be able to understand about different types resources and problems caused by improper utilization of natural resources. They will also understand the concept of sustainability and its need to handle current environmental problems.

UNIT 2	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Natural Resources	1. Definition, importance and classification of natural resources	2	Environmental science: R. Shantnu	Teaching Method: 1. lecture method 2.discussion method Teaching aid: chalkboard
	2. Utilisation and conservation of water, forest, soil and energy resources	8		
	3. Issues associated with natural resources	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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LEARNING OBJECTIVES:
The learners will be able to understand about economic activities and environmental problems associated with them. They will also study some Case studies with reference to India.

UNIT 3	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environment and Economic Activities	1. Economic activities-nature and pattern- primary, secondary and tertiary	4	Environmental science: R. Shantnu	Teaching Method: 1. lecture method 2.discussion method Teaching aid: chalkboard
	2. Environmental problems associated with economic activities	7		
	3. Case studies with reference to India	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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LEARNING OBJECTIVES:
The learners will be able to understand about the concepts of Environmental Management, Environmental audit , EIA. They will also understand Concept and components of Geospatial Technology.

UNIT 4	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Environment Management	1. Environment management- Concept, need and relevance of environmental education	4	1. Environmental science: R. Shantnu 2.Environmental	Teaching Method: 1. lecture method 2.discussion method Teaching aid: chalkboard
	2. Environmental Impact Assessment, Environmental audit	5		

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	3. Role of technology in Environment Management-GIS,GPS, Remote sensing as tools	5	studies: P.G. Shinde	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Priyanka Devnath_Rajput DEPARTMENT: Commerce CLASS: F.Y.B.F.M

SEMESTER: II MONTH: November - March ACADEMIC YEAR: 2018- 2019 SUBJECT: Computer Skills- I

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of Computer Hardware, Windows Operating System, Application of Internet, MS Word and MS Excel.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Computer Hardware	A) Personal Computers- identification/demonstration of different storage Devices like CD and CD drive, hard disk- HDD, storing and retrieving data from various storage devices.	04	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Identification of various input and output devices. Primary memory, RAM and ROM- Processor- CPU, its speed- machine cycle, ports, computer buses, Different types of printers.	04		

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	C) Introduction to trouble shooting of personal computers.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Windows	A) Introduction, features, various versions of windows, My computer, my documents, recycle bin, network neighborhood.	05	Computer Skills - I By Rimple Sanchla	Board , Chalk and Duster

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	B) Start menu, taskbar, file and folder operation (creating, copying, moving, deleting), system tools, creating shortcuts.	05	and www.wikipedia.com	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Internet	A) What is internet, most popular internet services, functions of internet like email, WWW, FTP, UseNet, Instant messaging.	05	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Internet telephony, using address book, working with task list, scheduling appointments, reminders, events.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV Word – 2013	A) Getting started, The Word window, New documents, Document navigation, Editing text, Working with text, Undo and Redo commands, Cut, copy, and paste, Find and replace Text formatting,.	03	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk, Duster And Computer (MS-Word Software)
	B) Character formatting, Tab settings, Paragraph formatting, Paragraph spacing and indents Tables, Creating tables, Working with table content, Changing the table structure Page layout, Headers and footers.	04		
	C) Page setup Graphics, Adding graphics and clip art, Working with graphics Proofing, printing, and exporting, Spelling and grammar, AutoCorrect, Printing and exporting documents.	03		
	Practical: - Create Window- Cut, Copy, Paste, Find & Replace Text Formatting, Header & Footers, Adding graphics and clip art, Spelling and grammar in Word - 2013.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - V Excel- 2013	A) Fundamentals of Excel, Cut, Copy, Insert, Delete, Paste Special, Custom Formatting, Undo, Redo.	03	Computer Skills - I By Rimple Sanchla and	Board , Chalk, Duster And Computer (MS- Excel
	B) Excel Formulas – Basic, Useful functions and Paste Function, Calc, Comments, Drawing toolbar, Edit, Replace, Delete, Clear.	03		

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	C) Essential Printing, Data Sorting, Hiding, AutoFormats, Protection, Basic Charts, Basic Formatting, If Function.	04	www.wikipedia.com	software)
	Practical: - Create Spreadsheet in Excel - 2013, Create Table- Insert & Delete Records, Basic Excel Formulae, Cut, Copy, Paste & Basic Charts in Excel-2013.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Khan Parveen Saba DEPARTMENT: Commerce CLASS: FYBFM SEMESTER: II

MONTH: January ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to : (1) Understand the concept of statistics

(2) learn about the Graph(Histogram, polygon) etc

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS Population and Sample Unit I	(1) Definition of Statistics, Scope of Statistics, financial market, concept of population and sample	02	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks

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	(2) Method of Sampling	01		
	(3) Data Condensation and Graphical method	03		
	(4) Attributes and Variables	03		
	(5) Graphs(Histogram and frequency)	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 Lectures

TEACHING PLAN (UNIT II PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYBFM SEMESTER: II

MONTH: January- February ACADEMIC YEAR: 2020-21

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LEARNING OBJECTIVE/S:
The learners will be able to :

(1) concept of measure of Central tendency with examples

(2) understand the concept of Mean,Median and Mode

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATIATICS Measure of Central tendency Unit II	(1) definition of average and type of averages	02	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) mean, median, mode with sums	04		
	(3)Quartiles and Percentile	02		

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	(4) Decile	02		
	(5) Combine mean	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

TEACHING PLAN (UNIT III PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYBFM SEMESTER: II

MONTH: February - March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) understand the concept of measure of dispersion

(2) Learn whar are the absolute and relative measure of dispersion

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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BUSINESS STATIATICS Measure of dispersion Unit III	(1) Concept of measure of dispersion	01	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) Various measures of Dispersion	02		
	(2) Quartile deviation	03		
	(4) Mean deviation, Standard deviation	03		
	(5) Variance and Combined variance	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

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TEACHING PLAN (UNIT IV PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYBFM SEMESTER: II

MONTH: March-April ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S:
The learners will be able to :

(1) understand the different different concept of correlation analysis

(2) learn about regression analysis

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS Correlation &	(1) meaning and type of correlation	01	S.L agarwal for Business statistics	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,

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Regression Unit IV			BUSINESS STATISTICS Gupta, Richard and David	
	(2) determination of correlation: scatter diagram ,Karl Pearson correlation coefficient	02		
	(3) meaning and concept of regression	03		
	(4) slope of regression line ,regression coefficient	03		
	(5) regression line by method of least square	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

TEACHING PLAN (UNIT V PLAN)

NAME OF THE STAFF: Khan Parveen saba N. DEPARTMENT: commerce CLASS:FYBFM SEMESTER:I I

MONTH: April ACADEMIC YEAR: 2020-21

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LEARNING OBJECTIVE/S:
The learners will be able to: (1) Understand the use of Graphs

(2) concept of linear programming problem

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS Linear Programming Problems	(1) Concept of LPP	01	S.L agarwal for Business statistics BUSINESS STATISTICS Gupta, Richard and David	Blackboard , chalk and Duster Discussion, Problem solving Homeworks,
	(2) Formulation of LPP	02		
	(3) Sums based on formulation of LPP	04		
	(4) Graphically Method	02		

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	(5) sums based on Graphically method	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12 lectures

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NAME OF THE STAFF: _____Jinal Chohan_____

DEPARTMENT: ____COMMERCE_____ CLASS: ____FYFM_____

SEMESTER: __2___ MONTH: __Nov- April_____ ACADEMIC YEAR: _____2018-19_____

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the management functions of the organization and various management objectives for the smooth functioning of the organization.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction	Nature and process of management, basic management roles and skills	5	Vipul Prakashan	Chalk and Board
	nature of managerial work, approaches to management,	5	Vipul Prakashan	Chalk and Board
	classical behavioural, systems and contingency approaches, contemporary issues and challenges	5	Vipul Prakashan	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Planning and decision making	concept, purpose and process of planning	4	Vipul Prakashan	Chalk and Board
	kinds of plans, strategies, policies and planning, premises, goal setting, MBO	6	Vipul Prakashan	Chalk and Board
	decision making, conditions forms of significance, leading and managing, leadership styles, leadership theories	5	Vipul Prakashan	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15____

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
Organising	fundamentals of organising, bases of departmentation,	4	Vipul Prakashan	Chalk and Board
	distribution of authority, coordination, organisation structure, and design,	5	Vipul Prakashan	Chalk and Board
	leadership- nature and significance, leading and managing,	5	Vipul Prakashan	Chalk and Board
	leadership styles, leadership theories			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____14_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED

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Management control	Nature, purpose and process of controlling, kinds of control system	4	Vipul Prakashan	Chalk and Board
	prerequisites of effective control systems, resistance to control, controlling techniques	4	Vipul Prakashan	Chalk and Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____8_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. DR (CA) MABEL LOBO DEPARTMENT: Commerce CLASS:SYFM SEMESTER: III

MONTH: June'2018 to Sept'2019 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: To educate students about how to manage risk and diversification with respect to portfolio management
The learners will be able to : understand the basics with respect to portfolio management

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Portfolio Management	Investment process Investment categories Defining investment goals and objectives	08	Vipul Prakashan, online sources available	Chalk and duster
	Investment constraints Process of asset allocation Different approaches to asset allocation decision Overview of asset allocation techniques	08	Vipul Prakashan, online sources available	Chalk and duster

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. DR (CA) MABEL LOBO DEPARTMENT: Commerce CLASS:SYFM SEMESTER: III

MONTH: June'2018 to Sept'2019 ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: To educate students about how to manage risk and diversification with respect to portfolio management
The learners will be able to : understand the basics with respect to portfolio management

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Portfolio Analysis	Analysis: Diversification Portfolio risk and return single index model The sharpe index model Portfolio Beta	08	Vipul Prakashan, online sources available	Chalk and duster
	Selection : Markowitz Risk – Return Optimization Concept of utility Sharpe optimization model	08	Vipul Prakashan, online sources available	Chalk and duster

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	Geometric mean model Safety first model Stochastic Dominance model			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16 per Division

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: - Nilambari Yogesh Shidhaye Department: - Commerce
Class: - S.Y.F.M (A, B) SEM: - III MONTH-: July-sept YEAR: -2018/19

LEARNINIG OBJECTIVES: The learner will be able to know the primary market and secondary market. In that concept IPO, RED – Hearing Prospectus, ASBA, Green shoe option, sweat equity, ESOP, NSE and BSE comes into this picture.

PAPER/TITLE/UNIT	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ICT TOOLS USED
Equity Market	MODULE: II PRIMARY MARKET. IPO- Methods, followed, Book building, offer for sale, Role of merchant bankers in fixing the price, Red-Herring Prospectus – Its unique features, ASBA and its features, Green Shoe Option, Sweat equity, ESOP, Right issue of shares, Non-voting shares, ADR, GDR, IDR. MODULE: -III SECONDARY MARKET Definition and functions of stock exchange, Evolution and growth of stock exchange in India, NSE, BSE, SME, exchange and overseas stock exchange, Recent development in stock exchange, Merger of SEBI with FOMC, Stock, Market indices.	15 Lectures 15 Lectures		Chalk & duster Chalk & duster

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Jagruti Naukudkar** DEPARTMENT: **Commerce**

CLASS: **SYBFM** SEMESTER**: III** MONTH: **June to Sep** ACADEMIC YEAR: **2018 -19**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Identify various investment avenues, process of asset allocation
2) Understand Portfolio management strategies

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Portfolio Management	Unit 1 : Introduction to portfolio management	8		Chalk Board, group discussion
	1) Investment process, Investment categories, defining investment goals and objectives, Investment			

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	constraints 2) Process of asset allocation, different approaches to allocation decision, overview of allocation techniques			
	Unit 2 : Portfolio Management Strategies	8		Chalk Board, group discussion
	1) Active strategy, passive strategy, semi active strategy, duration shift and immunization, efficient market hypotheses, top down and bottoms up			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _16_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCY TINISH DEPARTMENT: COMMERCE CLASS: SY BCOM (FINANCIAL MARKET) (FC) SEMESTER: III MONTH: JUNE TO OCT ACADEMIC YEAR: 2018 -2019

LEARNING OBJECTIVE/S:
The learners will be able to understand the framework of money markets in India, types, role of foreign exchange, its recent developments, credit rating agencies and various developments pertaining to money markets etc

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 REGULATORY FRAMEWORK OF MONEY MARKET UNIT 4 RECENT DEVELOPMENTS IN MONEY MARKETS	UNIT 2 - REGULATORY FRAMEWORK OF RBI, FIMMDA, FOREIGN EXCHANGE DEALERS ASSOCIATION INDIA (FEDAI), conDS, NDS-OM	15	FC – MONEY MARKETS, MANAN PRAKASHAN	LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS
	UNIT-4 – INTEGRATION OF UNORGANIZED SECTOR WITH ORGANIZED SECTOR, WIDENING OF CALL MARKET, INTRODUCTION OF INNOVATIVE INSTRUMENTOFFERING OF MARKET RATES OF INTEREST, PROMOTION OF BILL CULTURE, ENTRY OF MONEY MARKET MUTUL FUNDS, SETTING UP OF CREDIT RATING AGENCIES, ADOPTION OF SUITABLE MONETORY POLICY, ESTABLISHMENT OF	15	FC – MONEY MARKETS, MANAN PRAKASHAN	LECTURING, GROUP DISCUSSIONS, TESTS, GROUP PRESENTATIONS

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	DFHI, SETTING UP OF SECURITY TRADING CORPORATION OF INDIA ltd.(STCI)			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Priyanka Devnath_Rajput DEPARTMENT: Commerce CLASS: S.Y.B.F.M

SEMESTER: III MONTH: June - October ACADEMIC YEAR: 2018- 2019 SUBJECT: Computer Skills - II

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of Excel, Data Base Management System, Different system of E-Business Software and Online Banking.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Advanced Spreadsheet	Pivot Table.	01	Computer Skills - II By Rimple Sanchla And www.Guru99.com https://www.guru99.com/excel-tutorials.html	Board , Chalk, Duster And Computer (MS- Excel Software)
	Advanced formulae.	03		
	Lookups.	02		
	Macros.	02		
	Working with other programs.	02		
	Inserting a spreadsheet sheet in word document.	01		
	Modifying an inserted spreadsheet.	01		
	Inserting a linked chart in a Word Document.	01		

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	Inserting graphic in a spreadsheet.	02		
	Practical: Pivot, Advance Formulae, Lookups, Macros, Inserting linked chart in a word document	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Data Base Management System	Concepts.	01	Computer Skills - II By Rimple Sanchla And www.Guru99.com https://www.guru99.com/dbms-	Board , Chalk, Duster and Computer Software
	Tables.	02		
	Fields.	02		
	Datatypes.	03		
	RDBMS.	03		
	Primary Key.	02		
	Foreign Key.	02		

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	Practical: - Create Table, Primary Key, Foreign Key, Insert Data, Delete table.	05	tutorial.html	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Modern E Business Software Systems	Introduction.	01	Computer Skills - II By Rimple Sanchla And www.wikipedia.com	Board , Chalk and Duster
	Enterprise Resource Planning – ERP.	03		
	Supply chain Management- SCM.	02		
	Customer Relationship Management- CRM.	02		
	Sales Force Automation- SFA.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV Other Emerging Technologies	Other emerging technologies	03	Computer Skills - II By Rimple Sanchla And www.wikipedia.com	Board , Chalk and Duster
	Net-banking	03		
	Online banking software	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE- SELF FINANCE SUBJECT: FC III Money Market

CLASS: SYBFM SEMESTER: III MONTH: June- Sept ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: The learners will be able to : Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Introduction to money markets	1. Meaning of Money Market, features of money markets, importance of money market: Role of Primary dealers in money markets.	5	FC III Money Market- VIPUL Prakashan	Lecture method, Discussion method
	2. Development of trade & industry, Development of capital market	5	FC III Money Market- VIPUL Prakashan	Lecture method, Discussion method
	3. Smooth functioning of commercial banks, Effective central bank control, Formulation of suitable monetary policy, source of finance to government	5	FC III Money Market- VIPUL Prakashan	Lecture method, Discussion method
Unit 4: Money Market Instruments	1.Conventional: Treasury bills, Money at call and short notice in the call loan market, Commercial bills, promissory notes in the bill market.	5	FC III Money Market- VIPUL Prakashan	Lecture method, Discussion method
	2. Modern: Commercial papers, Certificate of deposit, Inter-bank participation certificates, Repo instrument, Banker's Acceptance.	5	FC III Money Market- VIPUL Prakashan	Lecture method, Discussion method
	3. Money Market mutual fund: meaning, advantages and disadvantages, regulatory framework for money market mutual funds, various money market funds operational in Indian market	5	FC III Money Market- VIPUL Prakashan	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Prof. Abhishek Madaye DEPARTMENT:Commerce
CLASS: S.Y.B.F.M
SEMESTER: III MONTH: August to December ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S:
The learners will be able to: Understand the basic concepts of Management Accounting,analysis and interpretation ,working capital and statement of Cash flow.

Paper, Module /Unit	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Management accounting,unit1, Introduction to Management Accounting	**Meaning, nature, scope and functions of Management accounting-Role of Management Accounting in decision making-Management accounting and Financial Accounting**	5	SETH PUBLICATION, VIPUL PUBLICATION	CHALK AND BOARD
UNIT 2,Analysis and interpretation of Accounts	**Vertical form of Balance Sheet and Profit & Loss account suitable for analysis Trend AnalysisComparative StatementsCommon size statementSimple problems based on the above**	15	SETH PUBLICATION, VIPUL PUBLICATION	CHALK AND BOARD
UNIT 3,Ratio analysis and interpretation based on Vertical financial Statements as above	**a)Balance sheet Ratios Current RatioLiquid RatioStock Working capital RatioProprietary RatioDebt Equity RatioCapital Gearing Ratio)Revenue Statement RatiosGross Profit RatioExpenses RatioOperating RatioNet Profit RatioStock Turnover**	15	SETH PUBLICATION, VIPUL PUBLICATION	CHALK AND BOARD

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	Ratio)Combined RatiosReturn on Capital Employed (including long term borrowings)Return on Proprietor's Fund (shareholders' fund and Preference Capital)Return on Equity CapitalDividend Payout RatioDebt Service coverage RatioDebtors Turnover RatioCreditors Turnover Ratio4Cash flow StatementsPreparation of cash flow state			
UNIT 4	**Cash flow Statements :**Preparation of cash flow statements with reference to Accounting Standard No 3 – Indirect Method Only	15	SETH PUBLICATION, VIPUL PUBLICATION	CHALK AND BOARD
UNIT 5	**Working Capital-Concept:** Estimation of working capital requirements in case of trading and manufacturing organizations	10	SETH PUBLICATION, VIPUL PUBLICATION	CHALK AND BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VARADA KATLE DEPARTMENT:commerce CLASS: sy Bfm SEMESTER:III MONTH: JUNE -18ACADEMIC YEAR: 18-19

SUBJECT : COMMODITIES MARKET

LEARNING OBJECTIVE/S: TO SHARE KNOWLEDGE
The learners will be able to : UNDERSTAND THE TOPIC

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Commodities market	Unit -1 Introduction to commodity market Emergence of commodity mkt ,Dynamic of global commodity mkt	5	Vipul publication	Chalk and duster method
	Unit II commodity mkt in India Commodity exchange in India ,role of information Technology Linkage between equity mkt and commodity mkt	5		
	Unit III commodity exchanges : Function &role , trading &clearing method commodity future	5		
	Unit IV Strengthening commodity market in India Role of government ,role of commodity exchange training and development of dealer	5		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __20_

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BRISTI BISWAS DEPARTMENT: COMMERCE (SELF-FINANCE) CLASS: SYBFM

SEMESTER: IV MONTH: NOVEMBER-FEBRUARY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:
The learners will be able to understand the concept of using macroeconomics for the growth of the economy by developing a core understanding regarding income, expenditure, measurement, and trade cycles, demand and supply of money and levels of inflation for the development of the economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics – II Macro Economics MODULE I	Unit I: Introduction to MacroEconomic data and Theory - Circular flow of income in open an closed economy - Measurement of National Product , Green GNP and NNP - Trade cycle: features and phases - Say's Law of Market	10	H.L.Ahuja Modern Economics	Lecture, group discussion, test, oral presentation of important topics.
	Unit II: Money, Inflation and Money policy - Money supply determinants and factors	10	D.N .Diwedi Macro Economics	Lecture, group discussion, test, oral presentation of important topics.

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MODULE II	- Demand for money, classical and Keynes approach and also Friedman approach - Money & Prices Fisher and Cambridge equation - Inflation: types, nature, Policy Measures			
MODULE III	Unit III: Constituents of fiscal policy - Meaning, scope and fiscal functions - Dalton and Musgrave principle of Maximum social advantage - The concept of public goods and roe of government	15	G.Ackley Macro -Economic Theory andH.L.Bhatia Public fianance Policy	Lecture, group discussion, test, oral presentation of important topics.
MODULE IV	Unit IV ; Open Economy; Theory and issues of International trade. - The basis of International Trade -foreign investment -Balance of payment - foregin exchange and foreign exchange market	10	H.L AHUJA TEXT BOOKS AND PAPERS	PDFs and PPT TEXT REFERENCE

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __35_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: NIKITA SUNIL JOGLE DEPARTMENT: COMMERCE CLASS: SYFM SEMESTER: IV

MONTH: JANUARY - MARCH ACADEMIC YEAR:2018 - 2019

LEARNING OBJECTIVE/S:
The learners will be able to : understand the basics of commodity trading & the rules related to commodity derivatives.

SUBJECT – COMMODITIES DERIVATIVES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3 – Trading: Basic Concepts	Basic concepts such as margins, circuit filters – delivery norms – contracts specifications, trading system & entities in the trading system, trader workstation, order types & conditions, exposure limits, commodities to be traded: types of commodities: Bullion (silver & gold), agricultural commodities. Clearing, settlement & risk management: calendar & settlement schedule, position determination, settlement mechanism, daily mark to market settlement, Settlement price – daily settlement	11	Text book	Chalk & Board

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	price, final settlement price, margining – initial margin, daily mark to market margin, open interest limits, second line of defense, NSCCL span. Final settlement: cash settlement, physical settlement (warehousing) exception handling: funds shortages, delivery shortages.			
4 – Regulatory Framework	Rules governing commodity derivatives – derivatives exchange, rules governing intermediaries, investor grievances, arbitration rules.	7	Text book	Chalk & Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 18

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE- SELF FINANCE SUBJECT: EQUITY MARKETS II

CLASS: SYBFM SEMESTER: IV MONTH: Dec-March ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: The learners will be able to : Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I: Development in the Indian Equity Market	1. Equity Markets: domestic Savings and Investments, disinvestment FDI and foreign portfolio investment, role of retail investors coma share price and share price volatility.	11	Equity Markets II- VIPUL Prakashan, Seth Publications	Lecture method, Discussion method
	2. Regulatory framework: Role of SEBI	4	Equity Markets II- VIPUL Prakashan, Seth Publications	Lecture method, Discussion method
Unit 4: Dealing in	1. Dealing in stock exchange: role of brokers, stock market quotations, procedure for buying and selling, BOLT- online	11	Equity Markets II- VIPUL Prakashan, Seth	Lecture method, Discussion method

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Stock Exchange	trading/ NEAT system		Publications	
	2. Clearing and settlement: Clearing and settlement, order matching.	4	Equity Markets II- VIPUL Prakashan, Seth Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: COMMODITIES DERIVATIVES DEPARTMENT: COMMERCE

CLASS: SYBFM SEMESTER: IV MONTH: DECEMBER, JANAURY ACADEMIC YEAR: 2018 – 2019

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 INTRODUCTION OF DERIVATIVES	Derivatives Definition, Types of derivatives, Product Participants and Functions	2		• Chalk • Board • Discussion • Examples
	Difference Between – Forward contract & Future Contract, Exchange traded & OTC Derivatives, Commodity Derivative & Financial derivative,	1		
	Warehousing, Quantity of underlying assets,	1		
	Global commodity exchanges, Commodity exchanges in India,	3		

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	Commodities permitted for trading, Kabra Committee report, Commodity specific issues- Cropping & Growth pattern	4		
	Price trends and Factors that influence prices,	2		
	Instrument Available for Trading Types, Basics and Payoffs	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: COMMODITIES DERIVATIVES DEPARTMENT: COMMERCE

CLASS: SYBFM SEMESTER: IV MONTH: JANUARY, FEBRUARY ACADEMIC YEAR: 2018 – 2019

LEARNING OBJECTIVE/S:
The learners will be able to :

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 PRICING COMMODITY DERIVATIVES	Introduction , Investment Assets v/s Consumption Assets	2		• Chalk • Board • Discussion • Examples
	Cost of carry model- Pricing futures contracts on investment commodities	2		
	Pricing futures contracts on consumption commodities	2		
	Future Basis, Concept of Hedging, Speculation and Arbitrage	2		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 8

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE-SELF FINANCE SUBJECT: FOREIGN EXCHANGE (FC)
CLASS: SYBFM SEMESTER: IV MONTH: October- March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The learners will be able to: Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Foreign Exchange Market:	An Introduction FOREX trading volume, FOREX trading locations, Details about major traded currencies, Evolution of foreign exchange ,Market and Foreign Exchange System Market Participants: Banks and Financial Institutions, Merchants, other customers, speculators and hedgers, Central Bank, Forex dealers and market makers and brokers, FOREX – trading and SWIFT Robots	15	Vipul Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Unit 2: Introduction to Indian Foreign Exchange Market	FOREX market in India: A historical perspective FERA Vs. FEMA, Pre-liberalization Exchange Rate Regime in India and Hawala market	12	Vipul Publications	Lecture method, Discussion method
	Brief introduction to currency convertibility in current and Capital account.	3	Vipul Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3: Operational aspects of foreign exchange market and foreign exchange contracts	a) Floating Rate, Currency Boards &Currency Basket Systems, Brief review on various exchange rate regime, Advantages of free and Fixed Exchange Rate regime, Pros & Cons of managed floating exchange rate regime, Prevalence of Currency Boards Regime, Practice of Currency Basket Regime.	8	Vipul Publications	Lecture method, Discussion method
	b) Foreign Exchange Contracts: Spot and Forward Contracts Cash, Spot trading Trade Date, Settlement PR date Spot trading roll over mechanism. Foreign Exchange Forward contracts, Fixed Maturity Contract, Partially Optional Contract, Fully Optional Contract, Non-Delivery Forward Contracts, Foreign Exchange Futures Contract, Different Dimensions of Foreign Exchange Future, Contract specification trading at National Stock Exchange of India.	7	Vipul Publications	Lecture method, Discussion method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4: Foreign Exchange Arithmetic and Risk Management	Types of Exchange Rates Direct Rate, Indirect Rate and Cross Rate Arbitrage- Geographical and triangular Interest Rate- spot Contracts, forward contracts and SWAP Points Risk Management in Foreign Exchange Market- Need and importance of foreign exchange management methods adopted (Spot and forward, arbitrage, cross currency deals, SWAPS, options and futures	15	Vipul Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE-SELF FINANCE SUBJECT: MERCHANT BANKING
CLASS: SYBFM SEMESTER: IV MONTH: October- March ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be able to: Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Introduction to Merchant Banking	Introduction to Merchant banking, Importance, need, functions, Merchant banking services - Project counselling, Loan syndication and Corporate counselling; Pre-issue merchant banking activities - Obtaining stock exchange approvals, action as per SEBI guide lines, Finalizing the appointments with - manager/advisers, Underwriters, Brokers, Bankers, Advertising agency, Drafting and approval of prospectus; Post-issue merchant banking activities – Issue subscription, Allotment of shares, Refunds, Periodical reports to SEBI.	15	Vipul Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 2- Initial Public Offering (IPO)	Initial Public Offering - Issuance Process, Role of registrar, SEBI guidelines for IPO eligibility, IPO grading, Draft Red Herring Prospectus (DRHP), Listing agreement, Pricing the issue, Book building process, Allotment; SEBI Guidelines in Drafting the Offer Document; Pre and Post launch activities in IPO, SEBI Guidelines on QIP,	12	Vipul Publications	Lecture method, Discussion method
	Rights and Bond Issues	3	Vipul Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3- Issue of DRs, ADRs and CPs	Types and Process of Issuing of Depository Receipts (DRs) - American Depository Receipts (ADRs), Global Depository Receipts (GDRs), European Depository Receipts (EDRs), Indian Depository Receipts (IDRs), ADR structure and norms, Indian Depository Receipts (IDRs) and Guidelines	12	Vipul Publications	Lecture method, Discussion method

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	Procedure for issue of Commercial Paper – Credit Rating, Redemption process.	3	Vipul Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 4: Issue of Bond and Debentures	Procedure for Issue of Bond and Debentures, Foreign currency convertible bonds	15	Vipul Publications	Lecture method, Discussion method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **KALPANA JAIN** DEPARTMENT**:** ACCOUNTANCY CLASS: **S.Y.B.F.M.**

SEMESTER: I**V** MONTH: November - **February** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S : To explain the concepts of Corporate Finance.

The learners will be able to :understand the concepts in simple way which will help them to understand the importance of it in Practical life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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Unit I Corporate Finance -An Overview	***Functions of Finance in a Business enterprise** ***Emergence of Corporate Finance as an Integral part of Business Finance.** ***Need for professional approach in managing corporate finance.** ***Need for professional approach in managing corporate finance.** ***Role and Functions of a corporate finance Manager** ***Requirements of an efficient Corporate Finance Manager.**	02 02 02 02 01 02	Financial Derivatives – C.S.Divyesh Patel	Chalk-Board Method
Unit II Planning the Corporate Financial Activities	*Theories of Capitalisation. *Difference between Owned Capital and Borrowed Capital. * Cost of Capital * Practical problems based on Cost of Capital *Marginal Costing *Marginal cost Statement and Formulas *Break -Even Analysis *Practical problems on Marginal Costing	01 01 01 05 01 02 01 05	Options,Futures and Other	Chalk-Board Method

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Unit III Capital Structure Unit-IV Sources and Method of Raising Corporate Finance	*Meaning and Definition of Capital Structure *Factors affecting Capital structure -Trading on Equity. *Concepts of Watered Capital,Over-Capitalisation and Under-Capitalisation. *NPV,IRR,DCF Analysis and Payback Period. * Practical problems on calculation of EPS *Practical problems on calculation of NPV,IRR,PI and Payback Period. *Types and features of Corporate Securities. *Management of New issues including Pricing of securities. *Role of Commercial Banks and Investment Banking Financing the Corporate Sector. *Leasing as a method of Corporate Finance. *Practical problems	01 01 02 03 05 05 02 02 03 02 06	Derivatives – John C Hull Sankarshan Basu	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNITS: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ambari Patwardhan DEPARTMENT: SFC CLASS: SYBFM SEMESTER: IV MONTH: December to April

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: Business Law
The learners will be able to : The pupils will be able to learn about theformation of various entities like compant partnership and LLP Act, where they will learn the concept of IPR, essentials and types and rules regarding the such entities

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Companies Act 2013	Definition, advantages – disadvantages of company , types	4	The Companies Act by Cr. Avatar singh	Black board, chalk
	Lifting of corporate Veil, Documents and procedure for incorporation of company, Effect of Incorporation	3		
	Membership of company	2	The Companies Act by Cr. Avatar singh	Black board, chalk
	Memorandum of association and Article of association	2		

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	Prospectus , Meaning, contents, types and legal framework	2	The Companies Act by Cr. Avatar singh	Black board, chalk
	Directors, types, DIN , legal position. Advantages and disadvantages , women directors , managing directors	2		Black board, chalk
	Meetings , types e-voting	2	The Companies Act by Cr. Avatar singh	
IPR	IPR rights in India and types, Patents- meaning, features, conditions, opposition to grant patents , expiration of Patent, remedies available	2		Black board, chalk
	Copyright- Meaning, registration, term of copy right, what works are protected infringement and remedies.	2	The Companies Act by Cr. Avatar singh	
	Trademarks – Meaning, types, registration process, infringement and remedies, passing off, services marks	2		Black board, chalk
Indian Partnership Act	Definition, types, test of partnership, partnership deed, property of the firm dissolution of partnership	3		

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LLP 2008	Definition, body corporate, salient features, Nature , difference between LLP and partnership, conversion, winding up and dissolution of LLP	3		
Securities Contract Act	Securities- terms of listing, - delisting , Appellate tribunal, recognition, bye-laws, types of contracts, securitaization-reconstruction of financial assets	4		
SEBI	SEBI – objectives, establishment, powers and functions , accounts audit, penalties, registration Issues of disclosure investors protection guidelines.	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: GAURI YADAV DEPARTMENT: COMMERCE CLASS: TYBFM

SEMESTER: V MONTH: JUNE- OCT ACADEMIC YEAR: 2018-19

The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Introduction to Derivatives	Definition – Types- Participants and Functions- Development of Exchange traded derivatives- Global derivatives markets- Exchange traded vs OTC derivatives markets- Derivatives trading in India- L.C.Gupta committee- J.C. varma committee- Requirements for a successful derivatives markets		SHETH PUBLICATIONS DERIVATIVES and Risk Management Basics	CHALK & DUSTER
2.Futures and options- introduction	1.Futures: Introduction- Future terminology- Key features of futures contracts- Future vs. Forwards- Pay off for futures- Equity futures- Equity futures in India-Index futures- Stock futures- Future trading strategiesHedging- Speculation-		SHETH PUBLICATIONS DERIVATIVES and Risk	CHALK & DUSTER

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	Arbitrage- Spread trading. Options: Introduction- Option terminology- Types- 2.Options pay off- Equity options contracts in India-Index Options – Stock options- Options trading strategies- Hedging- Speculation- Arbitrage- Straddle- Strangles- Strips and Straps – Spread trading		Management Basics	
3.Pricing of Future Options	1.The cost of carry models for stock and index futures- cash price and future price, arbitrage opportunity. 2. Factors affecting options pricing- Option pricing models- Binominal pricing model- The black and Scholes model –Pricing of Index options. 3.Sensitivity of option premia (Delta, Gamma, Lambda, Theta, Rho)		SHETH PUBLICATIONS DERIVATIVES and Risk Management Basics	CHALK & DUSTER
4. Trading Clearing and Settlement of Options and Futures	1.Futures and Options trading system- Trader workstations- contract specification- specification for stock and index eligibility for trading charges. 2. Clearing entities and their role- clearing mechanism – adjustment for corporate actions- open position calculation 3.Margining and settlement mechanism- Risk management-		SHETH PUBLICATIONS DERIVATIVES and Risk Management Basics	CHALK & DUSTER

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	SPAN – Mechanics of SPAN- Overall portfolio margin requirements.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Rashmi Gurunani**_____ DEPARTMENT: **Commerce**_____

CLASS: **_TYBFM_____** SEMESTER: **Sem V_____** MONTH**: _June to Oct_____** ACADEMIC YEAR : **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to :

Importance of Business Ethics and Corporate Governance

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Ethics and Corporate Governance	Unit 1 : Business Ethics	10		Chalk Board, Group Discussion
	1) Role of Board of Directors 2) Organisation climate and structure and ethics Addressing ethical dilemmas 3) Code of ethics; ethics committee, ethics training, integrity pact			

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	Unit 2 : Corporate Governance- Conceptual Framework 1) Introduction, need and scope 2) Evolution of Corporate Governance 3) Developments in India 4) Elements of Good Corporate Governance	10		Chalk Board, Group Discussion
	Unit 3 : Corporate Governance & Shareholders Rights 1) Rights of Shareholders 2) Challenges for exercising Shareholders Rights 3) Corporate Governance & Related Party Transactions 4) Role of Investor Association in Securing Shareholders Rights 5) Role of Institutional Investor in Corporate Governance	10		Chalk Board, Group Discussion
	UNIT 4: Corporate Governance Forums and Legislative Framework of Corporate Governance in India 1. National Foundation of Corporate Governance 2. Global Corporate Governance forum 3. Listing agreements 4. SEBI Guidelines 5. Companies Act	10		Chalk Board, Group Discussion

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _24_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan D. Satam DEPARTMENT: Commerce (Self Finance)

CLASS: TYBFM SEMESTER:V MONTH: JUNE 2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: Learning about Business Valuation in Financial markets.
The learners will be able to : Students will be able to learn techniques and its applications of analysis and valuate of market securities.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Valuation	**1. Valuation methods** Introduction to valuation models: asset based approach, Income based approach, market based approach Discounted cash flow valuation Relative valuation Free Cash Flow valuation Simple practical problems	15	Vipul and Seth publication	Chalk - Board and online trading sites.
	2. **Valuation of Select Tangible Assets** Valuation of Fixed Assets: Related costs in relation to fixed asset valuation, self constructed fixed assets, assets	15	Vipul and Seth publication	Chalk - Board and online trading sites.

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	acquired in exchange, fixed assets held for disposal Valuation of Shares: Basics of Company analysis and stock selection,			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Rohan D. Satam DEPARTMENT: Commerce (Self Finance)

CLASS: TYBFM SEMESTER:V MONTH: JUNE 2018 ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: Learning about Technical analysis in Financial markets.
The learners will be able to : Students will be able to learn techniques and its applications of analysis of market securities.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Technical Analysis	**1. Introduction to Technical Analysis** Technical analysis, Basic assumptions, Strengths and Weakness, Charts, Candlestick charts analysis with one two and three candles like hammer, hanging man, shooting star, bearish and bullish harami; Pattern Study - Support and resistance, Head and shoulders, Double top and double bottom and Gap theory.	15	Vipul and Seth publication	Chalk - Board and online trading sites.

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	2. **Major Indicators and Oscillators** □ Stochastic, RSI, Williams %R, MFI, Bollinger bands, Moving Averages, MACD	15	Vipul and Seth publication	Chalk - Board and online trading sites.
	3. Major Theories in Technical Analysis □ Dow Theory and Eliot Wave Theory	15	Vipul and Seth publication	Chalk - Board and online trading charts.
	4. **Risk Management, Trading Psychology and Trading Strategies** □ Risk Management – Need, techniques, uses of stop loss, qualities of successful traders, golden rules of traders, do's and don'ts in trading, Rules to stop losing money, Choosing the right market to trade, Importance of discipline in trading; Day trading, Advantages of day trading, Risks associated with trading, Strategies for day trading, Momentum trading strategies.	15	Vipul and Seth publication	Chalk - Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Snehal Deshmukh DEPARTMENT: BFM

CLASS:TYBFM . SEMESTER: V

SUBJECT : MARKETING IN FINANCIAL SERVICES MONTH: AUGUST 2018-DECEMBER 2019 ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:

The learners will be able to :

TO KNOW THE DIVERSITY OF DEMAND FOR FINANCIAL SERVICES AND TO IDENTIFY AND EXPLOIT NICHE IN THE MARKET WITH A NEW OR MODIFIED SERVICE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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	1. FOUNDATION OF SERVICES MARKETING	6	SHETH , VIPUL PRAKASHAN	Chaik
	2. SERVICES MARKET SEGMENTATION	3		
	3. ISSUES IN MARKETING OF SETVICES - 7 PS OF SERVICE MARKETING, SERVICE DELIVERY PROCESS	9		
	- SERVICE BLUEPRINTS,SERVICE MAPPING,PERSONAL SELLING	8		
	4. ISSUES IN MARKETING OF SERVICES.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Vasanthi shenoy

DEPARTMENT: COMMERCE

CLASS: TYBFM SEMESTER: V MONTH: AUG, SEP,OCT& NOV ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to :

Comprehension based Learning to Esemplastic into Objective type Exams. To Understand What is Research And Research Methodology. To Gain Knowledge about Equity Research and Fundamentals of Research. And to Learn Various Concepts of Company Analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	Unit 1 : Introduction to Research and Research Methodology Introduction Meaning & Objective of Research Features And Importance of Research in Financial Market Objective And Types of Research Formulation of Research Problem Meaning & Needs of Good Research Design Data Collection & it's Types	5		Google Meet, Google Slides, Microsoft Excel
	Unit 2 : Equity Research – An Overview Meaning & Goals of Equity Research Elements, Types & Process of Equity Research Classification of Stock, Market Participants, Role & Different approach of Equity Research in Capital Market Role, Qualities & Responsibilities of Research Analyst	5		Google Meet, Google Slides, Microsoft Excel

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	Basic Principles of Interaction with Clints / Companies.			
	Unit 3 : Fundamentals of Research A) Fundamentals of Research Key points considered before Investing Research on Business & Stocks Technical & Behavioural Finance B) Economic Analysis Principles of Micro & Macro Economics Key Economic Variables, Sources / Data of Information C) Industry Analysis Michael Porter's Five Force Model PESTLE Analysis,	5		Google Meet, Google Slides, Microsoft Excel

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	BCG Analysis, SCP Analysis Key Industry drivers / Sources of information			
	Unit 4: Company Analysis A) Qualitative Dimensions Business and Business Models Company's SWOT Analysis Management Quality & it's Governance Pricing Power & Sustainability Power Sources of Information B) Quantitative Analysis History v/s Future of Business Reading Financial Statement	5		Google Meet, Google Slides, Microsoft Excel

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	Peer Comparison, Dividend & Earning History Role of Corporate Actions Sources of Information			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____20_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : Archana Ramchandra Patil DEPARTMENT : Commerce

CLASS : TYBFM SEM : VI MONTH : Nov - March YEAR : 2018-19

LEARNINGOBJECTIVE/S : Learner will be able to learn various restructuring strategies of business.

PAPER/ UNIT/ TITLE	SUBTITLES	NO. OF LECURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
CORPORATE RESTRUCTURING	**MODULE II :MERGER & ACQUISITION- STRATEGIC ASPECT** Maximization of organisation value and merger & acquisition, definition of strategy, process of strategic planning, alternative strategy methodologies, approaches to strategy formulation, formulating a competitive strategy, diversification strategy, internal vs. External growth	10		Chalk & board
	MODULE IV : TAKEOVERS AND LEVERAGES BUYOUTS ●Takeover defences, friendly vs. Hostile takeovers, alternative takeover tactics, preventive anti-takeover measures, active anti takeover ●Going private transactions, methods of going private ●Leveraged buyouts, elements of a typical LBO operation, forms	10		Chalk & board

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	of LBO financing, characteristics of an ideal leveraged buy-out candidate, sources of gains in LBOs, management buyouts, management by ins, leverage cash outs			

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. FIROZKHAN KHURSHIT KHAN** DEPARTMENT**: COMMERCE**

CLASS: **T.Y.B.FM** SEMESTER: **VI** MONTH: **MARCH** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S : To impart the practical knowledge of Strategic Corporate Finance.

The learners will be able to : Develop unique Skills to solve practical problems of Corporate Finance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT- 02 Fund raising	**Unit: 2 - Fund raising** • Fundraising: Identification of different sources of capital, determination of capital structure and factors affecting the capital structure, cost of capital and cost saving strategy, production of a business plan, and financial forecasts to enable potential funders to assess the proposition. • Alternate Sources of Financing- Different Approaches to and moels of Infrastructure Projects Financing- Public Private Partnership (PPP) and its relevance, • Dividend Vs Share Repurchase Policy, Problem of too much cash, Issue of Stock Liquidity and Illiquidity.	15	Pratap G Subramanyam: Snow White Publication Jayant Varma : Vision Books	Chalk-Board Method
UNIT-3	**Unit: 3 - Company Valuation**	15	Pratap G Subramanyam:	Chalk-Board Method

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Company Valuation	• Company Valuation: An Overview of Valuation, Valuation Principles and Practices more, the impact of "what if" scenarios, the key financial and commercial factors affecting the business, Value enhancement tools &techniques, the link between valuation and corporate finance. • Management Buyouts: Establishing feasibility of the buy-out, Negotiating the main terms of the transaction with the vendor including price and structure, developing the business plan funders, negotiations with potential funders so that the most appropriate funding offers are selected. • Management Buy-ins: Management Buy-in/Buy-outs, Vendor-initiated buy-outs/buy-ins. • Due Diligence: finance due diligence for both purchasers and financial institutions		Snow White Publication Jayant Varma : Vision Books	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: COMMERCE

CLASS: T.Y.BFM SEMESTER: VI MONTH: DEC-JAN ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:

The learners will be able to understand different types of risk and risk management process.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.INTRODUCTION TO RISK MANAGEMENT	CONCEPT AND IDENTIFICATION OF RISK,RISK	02	TEXT BOOK (VIPUL PRAKASHAN & SHETH	

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	AND UNCERTAINTY		PUBLICATION)	CHALK-BOARD
	STRATEGIC &OPERATIONAL RISK	02		
	DYNAMIC NATURE OF RISK,FINANCIAL RISK	03		
	BUSINESS RISK	02		
	OBJECTIVES &PROCESS OF RISK MANAGEMENT	03		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: COMMERCE

CLASS: T.Y.BFM SEMESTER: VI MONTH: FEB-MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:

The learners will be able to study the foreign exchange market and management of risk associated with it.

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PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
3.FOREIGN EXCHANGE RISK	MEANING ANF FEATURES OF FOREX MARKET	02	TEXT BOOK (VIPUL PRAKASHAN & SHETH PUBLICATION)	CHALK-BOARD
	INDENTIFYING AND ANALYSING FOREX RISK	02		

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	RISK COMMITTEE IN INDENTIFYING AND MANAGING RISK	02		
	MANAGING FOREX EXCHNAGE RISK	02		
	MEASURING FOREX EXCHANGE RISK	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: COMMERCE

CLASS: T.Y.BFM SEMESTER: VI MONTH: DEC-JAN ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:

The learners will be able to understand different types of risk and risk management process.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LECTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.INTRODUCTION TO RISK MANAGEMENT	CONCEPT AND IDENTIFICATION OF RISK,RISK	02	TEXT BOOK (VIPUL PRAKASHAN & SHETH	

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	AND UNCERTAINTY		PUBLICATION)	CHALK-BOARD
	STRATEGIC &OPERATIONAL RISK	02		
	DYNAMIC NATURE OF RISK,FINANCIAL RISK	03		
	BUSINESS RISK	02		
	OBJECTIVES &PROCESS OF RISK MANAGEMENT	03		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

SIGNATURE OF THE STAFF
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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: QURESHI HEENA OBAID DEPARTMENT: COMMERCE

CLASS: T.Y.BFM SEMESTER: VI MONTH: FEB-MARCH ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVES:

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The learners will be able to study the foreign exchange market and management of risk associated with it.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
3.FOREIGN EXCHANGE RISK	MEANING ANF FEATURES OF FOREX MARKET	02	TEXT BOOK (VIPUL PRAKASHAN & SHETH PUBLICATION)	CHALK-BOARD
	INDENTIFYING AND ANALYSING FOREX RISK	02		

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	RISK COMMITTEE IN INDENTIFYING AND MANAGING RISK	02		
	MANAGING FOREX EXCHNAGE RISK	02		
	MEASURING FOREX EXCHANGE RISK	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANISHA RAMCHANDRA BHOSALE DEPARTMENT: B.COM (financial market) CLASS: T.Y.B.F.M

SEMESTER: 6TH MONTH: November – February ACADEMIC YEAR: 2018-2019 SUBJECT : MUTUAL FUND MANAGEMENT

LEARNING OBJECTIVE/S:
The learners will be able to :

1. To introduce learners about mutual funds organization and management.
2. To acquaint students with the knowledge of different types of Mutual Fund and systematic investment plans.
3. To recognize the objectives of AMFI and mutual fund Products.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
MODULE 1: MUTUAL FUND ORGANIZATION AND MANAGEMENT	• Introduction : Meaning of Mutual Fund, Structure in India, Sponsors, Trust, Role of AMC, NFOs , Registrars, Agents,	5	Mutual Funds in India : Amitabh Gupta	1.Lecture and discussion.
	• Types of Mutual Fund Schemes	4		

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	• Objectives of AMFI, Advantage of mutual funds, Systematic Investment Plan (SIP) ,Systematic Transfer Plan (STP) ,Systematic Withdrawal Plan (SWP)	6	Working of Mutual Fund Organisations in India : P Mohana Rao	
MODULE 2: MUTUAL FUND PRODUCTS	• Mutual fund Products and Features : Equity Funds: Definition, Features of Equity funds, Index fund, Large Cap Funds, Mid Cap Funds, Sectoral Funds, Types of Equity Schemes, Arbitrage funds, Multi-Cap Fund Quant funds , P/E Ratio funds , International Equities Fund, Growth Schemes.	5		
	• Gold Exchange Trade Funds (ETFs):Introduction, Features, working of ETFs , Market Marking with ETFs, Creation Units, Portfolio Deposit and Cash Component	4		
	• Debt Fund: Features, Interest Rate Risk, Credit Risk, Pricing of Debt Instrument Schemes , Fixed Maturity Plans, Capital Protection Funds, Gilt funds, Balanced Funds, MIPs, Child Benefit Plans.	4		

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	• Liquid funds: Features, Floating rate Scheme, Portfolio of liquids Funds.	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SAYLI VAIBHAV PATIL DEPARTMENT: COMMERCE-SELF FINANCE SUBJECT: Corporate Restructuring

CLASS: TYBFM SEMESTER: VI MONTH: Dec-February ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: The learners will be able to: Receive knowledge or information regarding the unit taught within the time frame with examples which students will be able to develop thus helping them to demonstrate their knowledge and proficiency during exams.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module 1: Introduction and Concepts	1. Meaning of Corporate Restructuring, Need, Scope and Modes of Restructuring 2. Emerging Trends 3.Planning, Formulation and Execution of Various Corporate Restructuring Strategies - Mergers, Acquisitions, Takeovers, Disinvestments and Strategic Alliances, Demerger and Hiving off 4.Expanding Role of Professionals	15	Corporate Restructuring-Vipul Prakashan, Seth Publication	Lecture method, Discussion method, participation method

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Module 3: Funding of Merger and Takeover and Financial Restructuring	1. Financial Alternatives; Merits and Demerits 2. Funding through various Types of Financial Instruments including Equity and Preference Shares, Debentures, Securities with Differential Rights, Swaps, Stock Options; ECBs, Funding through Financial Institutions and Banks 3. Rehabilitation Finance, Management Buyouts/Leveraged Buyouts, Reduction of Capital, 4. Reorganization of Share Capital, Buy-Back of Shares – Concept and Necessity, Procedure for Buy-Back of Shares by Listed and Unlisted Companies.	15	Corporate Restructuring-Vipul Prakashan, Seth Publication	Lecture method, Discussion method, participation method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SONAL RAUT DEPARTMENT: COMMERCE

CLASS: TYBFM SEMESTER: VI MONTH: DEC,JAN.FEB &MAR ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

Comprehension based Learning to Esemplastic into Subjective type Exams. To Understand What is Strategic Corporate Finance. To Gain Knowledge about Fund Raising and Credit Risk Management. And to Learn Various Concepts of Company Valuation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Unit I:- Strategic Corporate Finance ▪ Introduction, Strategy Vs. Planning, Wealth Maximization ▪ Economic Value Addition, Types of Financial Strategies ▪ Traditional Vs. Strategic Cost, Relevant Vs. Irrelevant Cost ▪ Types of Strategic Costing, Target Costing, Life Cycle Costing	15	Stephen A. Ross Ram Kumar Kulkarni	CHALK AND BLACKBOARD

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UNIT I. II.	▪ Quality Costing, Zero Based Costing, Traditional Vs. Activity Based Costing ▪ Strategic Cost Reduction Techniques And Value Chain Analysis.			
III. IV	Unit II:- Fund Raising ▪ Identification of Different Sources Of Capital ▪ Alternate Sources of Finance, Public Private Partnership ▪ Different Approach to the Model of Infrastructure Projects ▪ Dividend Vs. Shares Repurchase Policy, Problems of Excess Cash ▪ Issue Of Stock Liquidity and Illiquidity ▪ Determining Capital Structure, Cost of Capital & Cost of Saving Strategies ▪ Production of Business Plan ▪ Financial Forecasts to enable potential Funders to assess the Proposition ▪ Solved Questions on the Same	15	Stephen A. Ross Ram Kumar Kulkarni	CHALK AND BLACKBOARD
	Unit III:- Company Valuation ▪ Management Buy-in and Buy-outs, Establishing Feasibility of Buy-outs ▪ Vender Initiated Buy-I, and Buy-outs, ▪ Finance due Diligence for both Purchase and Financial Institutions. ▪ An Over view, Key Financial & Commercial Factors Affecting Business ▪ Link Between Valuation And Corporate Finance ▪ Valuation of Company & Goodwill ▪ Solved Questions on the Same	15	Stephen A. Ross Ram Kumar Kulkarni	CHALK AND BLACKBOARD
	Unit IV:- Credit Risk Management ▪ Credit Analysis, Default Risk, Quantity Methods ▪ Expected And Unexpected Losses, Credit VAR ▪ Counterparty Risk, Risk Management Choices ▪ Process Control Efforts, Financial, Physical and Operational Hedging ▪ Value Based Management	15	Stephen A. Ross Ram Kumar Kulkarni	CHALK AND BLACKBOARD

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Babli Arvind Jha DEPARTMENT: Commerce

CLASS: T Y B Com (FM) SEMESTER: VI MONTH: November ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :
Understand a variety of techniques to identify, access, manage & monitor risk. The learners will able to understand the importance of planning and implementing identified risk management action.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Risk Management	**Evaluation of Risk** • Evaluation of Organization's ability to bear them • Risk Measurement • Sources and Impact of Common Business Risk Market, Credit , Liquidity, Technological, Legal Environmental, Reputation, Country Risk • Identify and assess the impact upon the stakeholder involved in Business Risk • Nature and Importance of Financial Risk, Evaluation of Financial Risk, Evaluation of Alternative Risk Management Tools • Role of Risk Manager and Risk Committee in identifying and managing risk	15	Risk Management: Prof C K Roy:Vayu Education The Essentials of Risk Management: Michel Crouhy, Dan Galai,, Robert Mark :MC Graw Hill Education	Chalk & talk, Black-Board Method, Group Discussion,

	Exchange Rate Risk • Interest Rate Market and Mathematics • Identifying and Analyzing Interest Rate Risk • Measuring Interest Rate Risk	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

Babli Jha

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TEACHING PLAN (UNIT 1 PLAN)

NAME OF THE STAFF: MADHU SHARMA DEPARTMENT: B.com(Financial Management) CLASS: FYFMG

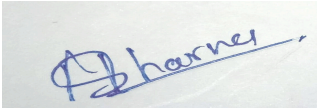
SEMESTER: I MONTH: SEPTEMBER-NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:

The learners will be able to:

- Define Ratio, Continued Ratio, and Inverse Ratio and solve the questions based on these terms.
- Understand the concept of Proportion, Continued Proportion, Direct Proportion and Inverse Proportion.
- Solve the questions based on different types of Proportion and relate the situations in day to day life.
- Understand the concept of Variation, Inverse and Direct Variation and also how to differentiate between Proportion and Variation.
- Learn the meaning of Percentage and computation of Percentage.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Ratio, Proportion	Unit1	▪ Define Ratio, Continued Ratio, Inverse Ratio	1 1	Business Mathematics	LECTURE METHOD, DISCUSSION ,



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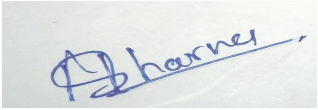
	& Percentage		▪ Problem solving on ratio ▪ Define Proportion its types. ▪ Problem solving on proportion ▪ Explanation on concept of percentage and computation of percentage.	1 1 1	(Manan ,Vipul , Sheth Publications)	PROBLEM SOLVING, ASSIGNMENT. TEACHING AIDS : whiteboard, Duster, PPT's

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 5



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TEACHING PLAN (UNIT 2 PLAN)

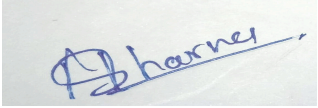
NAME OF THE STAFF: MADHU SHARMA DEPARTMENT: B.com (Financial Management)

CLASS: FYFMG SEMESTER: I MONTH: SEPTEMBER-NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:
The learners will be able to:

- Define Profit and Loss and terms related to it.
- Understand the formula of Trade discount and cash discount.
- Learn and understand the concept of Commission and Brokerage.
- Focus on how to use these terms in day to day life.

RPAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Profit and Loss	Unit2	▪ Introduction to formula of Profit, Loss, %profit ,%loss ▪ Solve problems based on the above formulas ▪ Introduction to terms like trade discount, cash discount.	1 2 1	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT.



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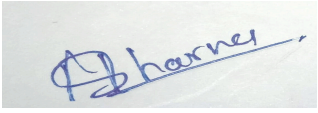
			▪ Exercise based on cost price, selling price, trade discount, cash discount. ▪ Introduction to terms like Commission and brokerage. Solving problems based on commission and brokerage	2 1		TEACHING AIDS : whiteboard, Duster, PPT's

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 07



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TEACHING PLAN (UNIT 3 PLAN)

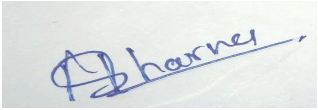
NAME OF THE STAFF: MADHU SHARMA DEPARTMENT: B.com(Financial Management) CLASS: FYFMG

SEMESTER: I MONTH: SEPTEMBER-NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:
The learners will be able to:

- Define Simple and Compound interest and its formula.
- Understand the concept of this topic and learn how to use in day to day life.
- Learn meaning of EMI, annuity and its types, also calculation of present and future value.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Interest and Annuity	Unit3	▪ Introduction to the formula of Simple interest and sums based on it. Introduction to the formula of Compound interest and sums based on it monthly, quarterly, .half yearly and yearly.	2 2	Business Mathematics (Manan ,Vipul , Sheth Publications)	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT.



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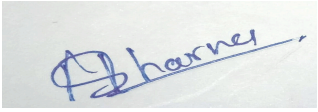
			▪ Introduction and sums based on EMI, reducing balance and flat rate of interest. ▪ Introduction to annuity and its types, calculation of present value and future value by using its formula. ▪ Concept on Stated annual rate and effective annual rate and solving sums based on it.	2 2		TEACHING AIDS : whiteboard, Duster, PPT's

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08



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TEACHING PLAN (UNIT 4 PLAN)

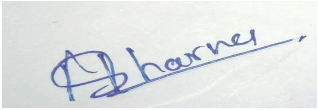
NAME OF THE STAFF: MADHU SHARMA DEPARTMENT:B.com (Financial Management)

CLASS: FYFMG SEMESTER: I MONTH: SEPTEMBER-NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:
The learners will be able to:

- Learn the concept of face value, market value, dividend, equity shares, bonus shares, preference shares.
- Solve the questions based on buying and selling of shares with and without brokerage.
- Define net asset value of mutual funds, entry/exit load
- Understand the concept of Systematic Investment Plan (SIP).
- Solve simple problems on calculation of net income after considering entry load and exit load change in net asset value and SIP.
- Focus and how to apply this knowledge in day to day life.

PAPER, UNIT, TITLE			SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS MATHEMATICS	Shares and Mutual Funds	Unit4	▪ Concept of Shares, Face value, market value, dividend. Explanation of types of Shares. ▪ Sums based on Shares	2 3	Business Mathematics	LECTURE METHOD, DISCUSSION , PROBLEM SOLVING, ASSIGNMENT.



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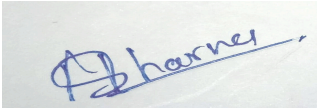
			▪ Concept of Mutual Funds and its types Calculation of net income after considering entry load and exit load ▪ Change in net asset value and problems based on it. ▪ Concept of SIP and sums based on it.	1 2 2	(Manan ,Vipul , Sheth Publications)	TEACHING AIDS : whiteboard, Duster, PPT's

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:PRINCI TINISH DEPARTMENT: B.com (Financial Management) CLASS: FYFMG

SEMESTER: I MONTH: JULY-OCT ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Indian Culture, Politics, Constitution, Rights

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1	**Overview of Indian Society.** Understanding the multi-cultural diversity of Indian society through its demographic composition: population distribution according to religion, caste, and gender; Appreciate the concept of linguistic diversity in relation to the Indian situation; Understand regional variations according to rural, urban and	**5**	**Textbook of Vipul's prakashan & online references**	**Blackboard, Chalk, Google classroom**

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	tribal characteristics; Understanding the concept of diversity as difference			
Unit 2	**Concept of Disparity-1** Understanding the concept of disparity as arising out of stratification and inequality; Explore the disparities arising out of gender with special reference to violence against women, female feticide (declining sex ratio),and portrayal of women in media; Appreciate the inequalities faced by people with disabilities and understand the issue of people with physical and mental disabilities	**8**	**Textbook of Vipul's prakashan & online references**	**Blackboard, Chalk, Google classroom**
Unit 3	**Concept of Disparity-2** Examine inequalities manifested due to the caste system and inter-group conflicts arising thereof; Understand inter-group conflicts arising out of regionalism and linguistic differences	**8**	**Textbook of Vipul's prakashan & online references**	**Blackboard, Chalk, Google classroom**

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Unit 4	**The Indian Constitution** Philosophy of the Constitution as set out in the preamble; The structure of the Constitution-the Preamble, Main Body and Schedules; Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution	**8**	**Textbook of Vipul's prakashan & online references**	**Blackboard, Chalk, Google classroom**
Unit 5	**Significant Aspects of Political Processes** The party system in Indian politics; Local self-government in urban and rural areas; the 73rd and 74th Amendments and their implications for inclusive politics; Role and significance of woman in politics	**8**	**Textbook of Vipul's prakashan & online references**	**Blackboard, Chalk, Google classroom**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 37

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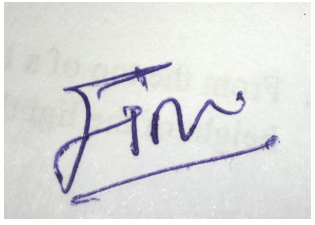
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI CHERIYAN SUB: BUSINESS ENVIRONMENT DEPARTMENT: B.COM(Financial Management)
CLASS:FYFMG SEMESTER: I MONTH: August TO November ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the meaning of business and different types of business environments.
- Get knowledge of environmental analysis through PESTEL Analysis, SWOT Analysis
- Interpret foreign trade in India, Balance of Trade, FDI Investment Flows and its Implication for Indian Industries.
- Know in detail about WTO, MNCs and TNCs.
- Have in-depth knowledge about social audit, carbon credit and CSR of the corporate enterprise.



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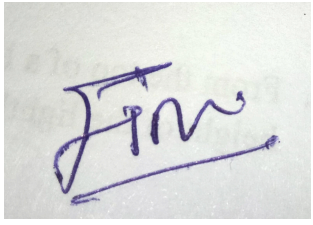
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit1 & 2 -Business Ethics	A) Business Objectives- meaning, features, importance and core objectives of business B) Dynamics of Business and its Environment C) Types of Business Environment D) ENVIRONMENTAL ANALYSIS- Meaning, Importance, Factors E) PESTEL Analysis F) SWOT Analysis	20	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion , example method and evaluation method
Unit- 3 & 4 Contemporary Issues	A) Corporate social responsibility B) Social responsibility of business C) Ecology and business D) Carbon credit E) Corporate governance F) Social audit	20	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion and example method



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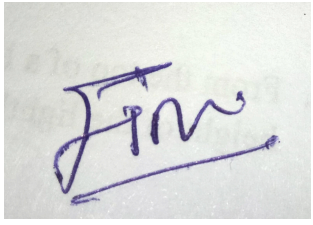
	G) Evolution of social audit H) Benefits of social audit I) Social audit v/s commercial audit			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40



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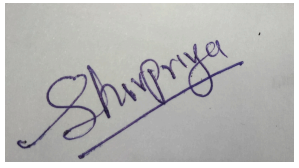
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. Sivapriya Achari DEPARTMENT: B.com(financial Management) CLASS: FYBFMG

SEMESTER: I MONTH: July - November ACADEMIC YEAR: 2018-19 SUBJECT: Business Communication

LEARNING OBJECTIVE/S: To help students understand the various aspects of communication. All Socio - economic activities require effective communication skills. The learners will be able to prepare resumes to attend interviews, convening meetings, planning strategies, making presentations, drafting reports etc, all call for honing our writing and speaking skills. To make students aware of the importance of developing skills.

PAPER, UNIT, TITLE				
Unit1. Theory of Communication	1) Concept of Communication- Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World Impact of technological advancements on communication 2) Channels and Objectives of Communication: Channels : Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board



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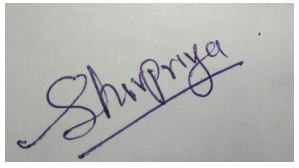
	Objectives of Communication: Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Moral of Employees 3) Methods and Modes of Communication: Methods: Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette Modes: Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing			



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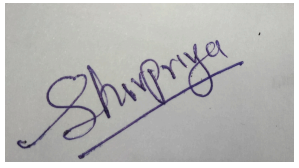
Unit 2 - Obstacles to Communication in Business World	1) Problems in Communication /Barriers to Communication: Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers	15	Manan Publication, Sheth Publication, Vipul Publication	Chalk - Board



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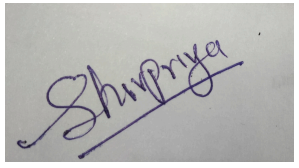
	2) Listening: Importance of Listening Skills, Cultivating good Listening Skills – 4 3) Introduction to Business Ethics: Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility Teachers can adopt a case study approach and address issues such as the following so as to orient and sensitize the student community to actual business practices: Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour			



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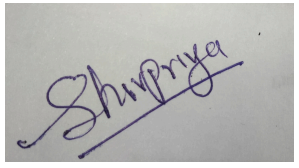
Unit 3 : Business Correspondence	1)Theory of Business Letter Writing: Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation [Letter of Appointment, Promotion and Termination, Letter of Recommendation (to be taught but not to be tested in the examination)]	15	Manan Publication, Sheth Publication, Vipul Publication	Online



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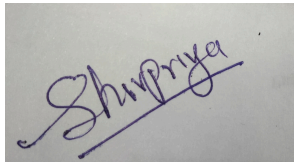
	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities ⇨ Listening Comprehension ⇨ Remedial Teaching ⇨ Speaking Skills: Presenting a News Item, Dialogue and Speeches ⇨ Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. ⇨ Reading Comprehension: Analysis of texts from the fields of Commerce and Management	15		Online

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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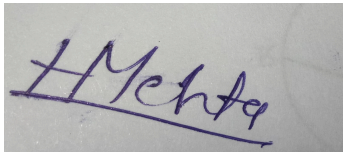
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA SUB: INDIAN FINANCIAL SYSTEM DEPARTMENT: B.com (Financial Management)

CLASS: FYFMG SEMESTER: I MONTH: August TO November ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the meaning of the Indian financial system and different functions of the financial system.
- Get knowledge of the financial market and its components along with its functionality.
- Interpret the various financial instruments and services offered by financial institutions across the globe.
- Know in detail about commodity markets and various categories of commodities.
- Gain insight on commodity derivatives and various commodity exchanges.



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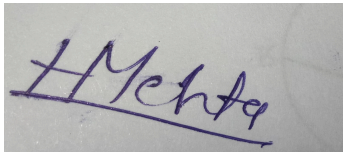
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1&2 -Financial System Unit- 3 & 4 Non-banking financial institutions	A) Financial System- meaning, nature, importance, role B) Structure if Indian financial system C) Flow of funds in financial system D) Financial system and economic development E) Economic development and economic growth F) Financial development and its effect on economic development G) Indicators of economic development H) Factors influencing financial development in India	20	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion, example method and evaluation method



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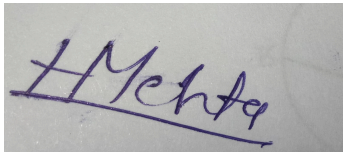
	A) NBFCs- meaning, concept, nature, role of NBFCs B) Sources of finance C) RBI guidelines for NBFCs- role and functions D) NABARD- role and functions E) SEBI- role and functions F) SEBI as a regulator	20	Global Economy and business environment by Francis Cherunilam	Chalk-board, discussion and example method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMOL VAJE DEPARTMENT: B.com (financial Management CLASS: FYFMG SEMESTER: I MONTH: August to DEC

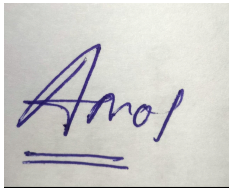
ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & Remember- the concept of financial accounting, solve Final accounts

2) Understand & Remember- the concept of single entry system; solve single entry

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1&2- Single Entry	Single Entry	10	Book by Vipul publications/Internet	Google Classroom, Chalk and duster
	Practical Problems	10	Book by Vipul publications/Internet	Google Classroom, chalk and duster
Unit3& 4- Final Accounts	Trading A/c, Profit & Loss A/c, Balance Sheet	10	Book by Vipul publications/Internet	Google Classroom, chalk and duster
	Practical Problems	10	Book by Vipul publication/Internet	Google classroom, chalk and duster



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TEACHING PLAN (UNIT PLAN)

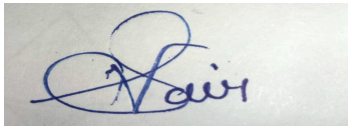
NAME OF THE STAFF: **SUNITA NAIR** DEPARTMENT**: B.com (Financial Management)** CLASS: **F.Y.FMG**

SEMESTER: **I** MONTH: **JUNE TO OCTOBER** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S : Provide a strong foundation in fundamentals of Economics

The learners will be able to : Enable the students to pursue further studies in this discipline understanding the functioning of Domestic as well as global economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Micro-economics Paper-1	**Module 1- Scope importance of Business Economics:** Basic tools, opportunity cost principles, cost principle, basic economics relation, total average and marginal relation. The basis of market demand market supply equilibrium price-in demand and supply curve and equilibrium	10	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication,	Black Board Method



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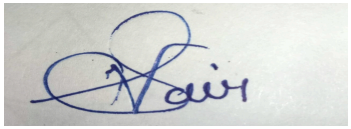
Micro-economics Paper-1	**Module 2- Demand Analysis:** Market, what is competition -demand curve, market demand versus individual demand: movement along the demand curve shifts in demand curve supply, market supply and individual supply three steps in the analyzing change in equilibrium, price ceiling and floor taxes and the impact- price elasticity of demand -total revenue and elasticity of demand- impact of price elasticity on revenue. DEMAND ESTIMATION AND FORECASTING; Meaning and significance , method of demand estimation , survey and statistical method.	10	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication,	Black Board Method
Micro-economics Paper-1	**Module 3:SUPPLY AND PRODUCTION COST OF PRODUCTION: Production function short run analysis with the law of variable production function with two variable , ridge lines and least cost combination of input ; long run production function and law of return to Scale ,economic and economics of Scale.** **COST CONCEPT;** Accounting cost and economic cost, implicit and explicit, social cost in private cost , historical cost and replacement cost, sankosh and incremental cost, fixed and variable cost, total average and marginal cost, cost output relation in short run and long run (sums)	10	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication,	Black Board Method
Micro-economics Paper-1	**Module 4** ;MARKET STRUCTURE; Perfect cooperation and monopoly and pricing and output decision under imperfect competition Short run and long run equilibrium of competitive firm and of industry – monopoly –short run n long run equilibrium of a firm under monopoly .	10	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication	



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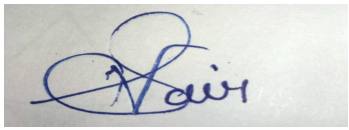
	Monopolistic competition ;Equilibrium of a firm under monopolistic competition , debate over role of advertising. Oligopolistic market; key attribute of oligopoly collusive and non-collusive market – price rigidity – Cartel and price leadership model		
Micro-economics Paper-1	**Module 5 Pricing practices.** **Cost oriented pricing method ; cost – plus (full cost pricing , marginal pricing , mark up pricing , discriminating pricing ,multiple – product pricing – transfer pricing .**	10	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: B.com (Financial Management) CLASS: FYFMG SEMESTER: SEM II MONTH: Dec-April ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS UNIT I POPULATION AND SAMPLE	Definition of Statistics, Scope of Statistics in Management and Financial Markets, Concept of Population and Sample with Illustration. Methods of Sampling: SRSWR, SRSWOR, Stratified, Systematic (Description of Sampling Procedures Only). Data Condensation and Graphical Methods: Raw Data, Attributes and Variables, Classification, Frequency Distribution, Cumulative Frequency Distribution. Graphs: Histogram and Frequency Polygon. Diagrams: Multiple Bar, Pie, Subdivided Bar.	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: B.com (Financial Management) CLASS: FYFMG SEMESTER: SEM II MONTH: Dec-April ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS UNIT II MEASURES OF CENTRAL TENDENCY	Criteria for Good Measures of Central Tendency, Arithmetic Mean, Median, Mode for Grouped and Ungrouped Data, Combined Mean	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT: B.com (Financial Management) CLASS: FYFMG SEMESTER: SEM II MONTH: Dec-April ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS UNIT III MEASURES OF DISPERSION	Concept of Dispersion, Absolute and Relative Measures of Dispersion, Range Variance, Standard Deviation, Coefficient of Variation, Quartile Deviation, Coefficient of Quartile Deviation.	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

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NAME OF THE STAFF: SHREYA TANEJA DEPARTMENT:B.com (Financial Management) CLASS: FYFMG SEMESTER: SEM II
MONTH: Dec-April ACADEMIC YEAR: 2018-19
LEARNING OBJECTIVE/S:
The learners will be able to: develop critical and logical thinking and will able to solve various problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BUSINESS STATISTICS UNIT IV CORRELATION AND REGRESSION	Concept of Correlation, Positive and Negative Correlation, Karl Pearson's Coefficient of Correlation, Meaning of Regression, Two Regression Equations, Regression Coefficients and Properties.	15	Statistical Methods - S.G. Gupta (S. Chand & Co.	Chalk and board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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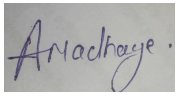
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ABHISHEK MADHAYE DEPARTMENT: B.com (Financial Management)

CLASS: FYBFMG SEMESTER: II MONTH: OCT- JUNE ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The learners will be able to : Understand the Financial Services and how they work

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1	**Introduction to Finance and Financial Planning** Finance, Definition, Nature and scope of Finance function Financial Management: Meaning, scope and objectives Organisational framework of financial management- Relationship of finance department with other departments- Role of Finance Manager Financial Planning: Concept- objectives-types-steps-significance- basic considerations- limitations	**8**	**Textbook of Vipul's prakashan & online references**	**Blackboard, Chalk, Google classroom**
Unit 2	**Capital Structure and Capitalisation**	**7**	**Textbook of Vipul's**	**Blackboard, Chalk, Google classroom**



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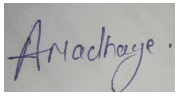
	Meaning of Capital Structure- Criteria of determining capital structure- factors influencing capital structure Meaning of Capitalisation , narrower and broader interpretation Over capitalization - Meaning, causes, consequences, remedies Under capitalisation- Meaning, causes, consequences, remedies		**prakashan & online references**	
Unit 3	**External Sources of Finance** Shares- Meaning, types, advantages, limitations Debentures- Meaning, types, advantages, limitations Public Deposits- Meaning, advantages, limitations Borrowing from banks- types of loans, advantages, limitations	**5**	**Textbook of Vipul's prakashan & online refrenses**	**Blackboard, Chalk, Google classroom**
Unit 4	**Internal Sources of Finance** Reserves and surplus, bonus shares, retained earnings, Dividend policy, Role of Depreciation, Importance, advantages and limitations of these sources.	**4**	**Textbook of Vipul's prakashan & online refrenses**	**Blackboard, Chalk, Google classroom**

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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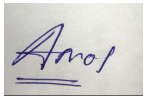
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMOL VAJE. DEPARTMENT: B.com (Financial Management) CLASS: F.YFMG SEMESTER:II **MONTH:** DEC TO APRIL **ACADEMIC YEAR: 2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to : TO ENHANCE THE ABILITIES OF LEARNER TO DEVELOP THE CONCEPT OF FINANCIAL ACCOIUNTING AND ITS SIGNIFICANCE IN THE BUSINESS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
BRANCH ACCOUNTING	MEANING ,CLASSIFICATION OF BRANCHES, ACCOUNTING FOR DEPENDENT BRANCH NOT MAINTAINING FULL BOOKS DEBTORS METHOD , STOCK & DEBTORS METHOD	15		CHALK & DUSTER METHOD PPT , GOOGLE CLASSROOM
DEPARTMENTAL ACCOUNTS	MEANING , BASIS OF ALLOCATION OF EXPENSES & INCOMES, INTER DEPARTMENTAL TRANSFER AT COST PRICE & INVOICE PRICE, STOCK RESERVE	15		
	DEPARTMENTAL TRADING P&L ACCOUNT & BALANCE SHEET	15		
HIRE PURCHASE INSTALLMENT	MEANING, CALCULATION OF INTEREST, ACCOUNTING FOR HIRE PURCHASE TRANSACTION , JOURNAL ENTRIES, LEDGER ACCOUNTS DISCLOSURE IN BALANCE SHEET FOR HIRER & VENDOR	15		
PARTNERSHIP ACCOUNTS	ADMISSION OF A PARTNER, RETIREMENT OF A PARTNER, DEATH OF A PARTNER, DISSOLUTION OF A PARTNERSHIP , PIECEMEAL DISTRIBUTION			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRINCI TINISH **DEPARTMENT:B.com (Finance Management)** **CLASS: F.Y.Fmg**
SUBJECT: FOUNDATION COURSE II **SEMESTER: II** **MONTH: December- March** **ACADEMIC YEAR: 2018-19**

A teaching plan is a document that outlines the structure and details of a single session. A good teaching plan is a comprehensive write-up of the step-by-step teaching methods, the estimated duration of each segment of teaching, and the materials and resources needed for the session.

LEARNING OBJECTIVE/S:

By the end of the session Students will be able to:

The general education curriculum will enable students to acquire skills, knowledge, and experience for living in interconnected contexts so they can contribute to making life better for others, themselves and the larger world.

(For a detailed description of each component see Appendix A).

APPENDIX {A}

UNIT TITLE	Components	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Globalization & Indian Society	**Concepts of liberalization, privatization and globalization**	2	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

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	Growth of information technology and communication and its impact manifested in everyday life	1	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
	Impact of globalization on industry: changes in employment and increasing migration	1	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
	Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides.	1	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

Total no of lecture 05

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UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Human Rights	a]Concept of Human Rights.	01	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
	b] Evolution of Human Rights	02	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
	c] The Universal Declaration of Human Rights	03	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHO
	d] Fundamental Rights in Constitution	04	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • .INTERACTIVE METHOD

Total no of lecture 10

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UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 Ecology	a] Concept of environment & ecology	02	Book by Manan publications/Internet	1. CHALK & BLACK BOARD METHOD 2. .INTERACTIVE METHOD
	b] Importance of environmental studies, Environment as a Natural capital & quality of human life	03	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • .INTERACTIVE METHOD
	c] Environmental Degradation. i. Causes ii. Impact on human life	02	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • .INTERACTIVE METHOD
	d] Sustainable Development i. Concept ii. Components	02	Book by Vipul publication/internet	• CHALK & BLACK BOARD METHOD • 2 .INTERACTIVE METHOD
	e] Poverty & Environment	01		• 1.CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

Total no of lecture 10

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UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 Understanding Stress & Conflicts	Causes of stress & Conflicts in individual & society,	1	Book by Manan publications/Internet	Online
	Agents of Socialization & the role played by them in developing the individual.	1	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
	Significance of values, ethics & prejudices in developing the individuals.	1	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
	Stereotypying & prejudice as significant factors in causing conflicts in society.	1	Book by Manan publication/internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
	Aggression & Violence as the public expression of conflicts.	1	Book by Manan publication/internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

Total no of lecture 05

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UNIT TITLE	Components	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 5 Managing stress & conflict in Contemporary Society	**Types of conflicts and use of coping mechanisms for managing individual stress**	1	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
	Maslow's theory of self-actualisation,	1	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD
	Different methods of responding to conflicts in society, Conflict Resolution, & Efforts towards building peace & harmony in society.	1	Book by Manan publications/Internet	• CHALK & BLACK BOARD METHOD • INTERACTIVE METHOD

Total no of lecture 03

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SHRUTI PATIL **DEPARTMENT:** B.com (Financial Management)**.CLASS:** F.Y.FMG.

SEMESTER: II **MONTH: JANUARY ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S: The learners will be able to :

- Understand key concepts from economic, political, and social analysis as they pertain to the design and evaluation of environmental policies and institutions.
- Appreciate concepts and methods from ecological and physical sciences and their application in environmental problem solving.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EVS **Modules 1: Environment: an overview**	Environment structure, components and typology Ecosystem as part of environment- Functioning and levels of organization Biodiversity- Classification, value, threats to biodiversity	15	Basics in Environmental Studies, Dr. Pushpendra	CHALK AND DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SHRUTI PATIL **DEPARTMENT:** B.com (Financial Management)

CLASS: F.Y.FMG. **SEMESTER:** II **MONTH: FEBRUARY** **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

- Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems.
- Reflect critically about their roles and identities as citizens, consumers and environmental actors in a complex, interconnected world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EVS Modules 2: Natural Resources	Definition, importance and classification of natural resources Utilization and conservation of water, forest, soil and energy resources Issues associated with natural resources	15	Environmental Management, Swapan Deb.·	CHALK AND DUSTER

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

- Understand core concepts and methods from ecological and physical sciences and their application in environmental problem-solving.
- Appreciate key concepts from economic, political, and social analysis as they pertain to the design and evaluation of environmental policies and institutions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
EVS **Modules 3:Economic activities** **Modules 4:Environment Management**	nature and pattern- primary, secondary and tertiary Environmental problems associated with economic activities Case studies with reference to India Environment Management Environment management- Concept, need and relevance of environmental education Environmental Impact Assessment, Environmental audit Role of technology in Environment Management- GIS,GPS, Remote sensing as tools	30	Environment and Sustainable Development, Sundar, I.·	CHALK AND DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT:15

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PLAN (UNIT TEACHING PLAN)

NAME OF THE STAFF: Ms. Priyanka Rajput DEPARTMENT:B.com (financial Management) CLASS: F.Y.F.M.G

SEMESTER: II MONTH: November - March ACADEMIC YEAR: 2018-19 SUBJECT: Computer Skills- I

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of Computer Hardware, Windows Operating System, Application of Internet, MS Word and MS Excel.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Computer Hardware	A) Personal Computers- identification/demonstration of different storage Devices like CD and CD drive, hard disk- HDD, storing and retrieving data from various storage devices.	04	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Identification of various input and output devices. Primary memory, RAM and ROM- Processor- CPU, its speed- machine cycle, ports, computer buses, Different types of printers.	04		
	C) Introduction to trouble shooting of personal computers.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Windows	A) Introduction, features, various versions of windows, My computer, my documents, recycle bin, network neighborhood.	05	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Start menu, taskbar, file and folder operation (creating, copying, moving, deleting), system tools, creating shortcuts.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Internet	A) What is the internet, most popular internet services, functions of internet like email, WWW, FTP, UseNet, Instant messaging.	05	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Internet telephony, using address book, working with task list, scheduling appointments, reminders, events.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV Word – 2013	A) Getting started, The Word window, New documents, Document navigation, Editing text, Working with text, Undo and Redo commands, Cut, copy, and paste, Find and replace Text formatting,.	03	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk, Duster And Computer (MS-Word Software)
	B) Character formatting, Tab settings, Paragraph formatting, Paragraph spacing and indents Tables, Creating tables, Working with table content, Changing the table structure Page layout, Headers and footers.	04		
	C) Page setup Graphics, Adding graphics and clip art, Working with graphics Proofing, printing, and exporting, Spelling and grammar, AutoCorrect, Printing and exporting documents.	03		
	Practical: - Create Window- Cut, Copy, Paste, Find & Replace Text Formatting, Header & Footers, Adding graphics and clip art, Spelling and grammar in Word - 2013.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - V Excel- 2013	A) Fundamentals of Excel, Cut, Copy, Insert, Delete, Paste Special, Custom Formatting, Undo, Redo.	03	Computer Skills - I By Rimple Sanchla and www.wikipedia.com	Board , Chalk, Duster And Computer (MS- Excel software)
	B) Excel Formulas – Basic, Useful functions and Paste Function, Calc, Comments, Drawing toolbar, Edit, Replace, Delete, Clear.	03		
	C) Essential Printing, Data Sorting, Hiding, AutoFormats, Protection, Basic Charts, Basic Formatting, If Function.	04		
	Practical: - Create Spreadsheet in Excel - 2013, Create Table- Insert & Delete Records, Basic Excel Formulae, Cut, Copy, Paste & Basic Charts in Excel-2013.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:AVINASH PAWAR **DEPARTMENT**: B.com (Financial Management) **CLASS:** FYFMG (DIV- A) **SUBJECT –** BUSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** January **ACADEMIC YEAR:** 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students' writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Presentation Skills	4 Principles of Effective Presentation Effective use of OHP Effective use of Transparencies How to make a Power-Point Presentation	15	PPT	Online Lectures on Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:AVINASH PAWAR **DEPARTMENT**: B.com (Financial Management) **CLASS:** FYFMG (DIV- A) **SUBJECT –** BUSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** FEB **ACADEMIC YEAR:** 2018-19

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Interviews:** Group Discussion, Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit **Meetings:** Need and Importance of Meetings, Conduct of Meeting and Group Dynamics, Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions **Conference:** Meaning and Importance of Conference, Organizing a Conference **Modern Methods:** Video and Tele – Conferencing	12	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:AVINASH PAWAR **DEPARTMENT**: B.com (Financial Management) **CLASS:** FYFMG (DIV- A) **SUBJECT –** BUSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** MAR **ACADEMIC YEAR:** 2018-19

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Group Communication	**Public Relations:** Meaning, Functions of PR Department, External and Internal Measures of PR	03	PPT	Online Lectures through Google Meet
3) Business Correspondence	Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters, Promotional Leaflets and Fliers, Consumer Grievance Letters, Letters under Right to Information (RTI) Act	15	PPT	Online Lectures through Google Meet

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:AVINASH PAWAR **DEPARTMENT**: B.com (Financial Management) **CLASS:** FYFMG (DIV- A) **SUBJECT –** BUSINESS COMMUNICATION – II **SEMESTER:** II **MONTH:** APR **ACADEMIC YEAR:** 2018-19

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
4) Language and Writing Skills	**Reports:** Parts, **Types** - Feasibility Reports, Investigative Reports **Summarisation:** Identification of main and supporting/sub points, Presenting these in a cohesive manner	15	PPT	Online Lectures through Google Meet

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

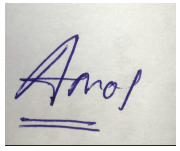
NAME OF THE STAFF: AMOL VAJE/ABHISHEK MADHAYE_____ SUBJECT: MANAGEMENT ACCOUNTING

DEPARTMENT: B.com (Financial Management)__ CLASS: ____SYFMG SEMESTER: III MONTH: __JUNE ACADEMIC YEAR: __2018-19__

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 Introduction to Management Accounting	Meaning and Definition of Management Accounting, Nature and Frame work	1	Management Accounting By I.M Pandey	• Chalk • Board • Discussion • Examples
	Functions of Management Accounting, Decision Making Process	1		
	Information of Decision making (Information, Strategic, tactical and operational information)	1		
	Financial Accounting v/s Management Accounting, Qualities of Management Accounting	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____5____



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TEACHING PLAN (UNIT PLAN)

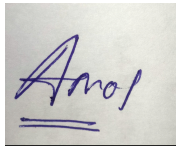
NAME OF THE STAFF: AMOL VAJE/ABHISHEK MADHAYE SUBJECT: MANAGEMENT ACCOUNTING

DEPARTMENT: B.com (Financial Management)__ CLASS: _SYFMG SEMESTER: II MONTH: __JUNE ACADEMIC YEAR: __2018-19__

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1& 2 Analysis and Interpretation of Accounts	Introduction and importance of financial statements, Vertical form of Balance sheet and Profit and loss Account suitable for analysis	6	Management Accounting By I.M Pandey	• Chalk • Board • Discussion • Examples
	Simple sums based on Analysis of Financial Statement	6		
	Format and Calculation Tricks of Trend Analysis Comparative Statement Common size Statement Practical Illustration	14		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __26__



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TEACHING PLAN (UNIT PLAN)

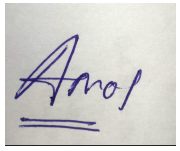
NAME OF THE STAFF: AMOL VAJE/ABHISHEK MADHAYE : MANAGEMENT ACCOUNTING

DEPARTMENT: :B.com (Financial Management)CLASS:SYFMG SEMESTER: III MONTH: __JUNE ACADEMIC YEAR: __2018-19__

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Accounting concepts which will help learner to apply those accounting techniques in this competitive world.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3& 4 CASH FLOW STATEMENT	Introduction and Meaning Of cash flow statement.	3	Management Accounting By I.M Pandey	• Chalk • Board • Discussion • Examples
	Operating, Investing and financing activities	3		
	Format of cash flow statement	4		
	Practical illustration	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____20___



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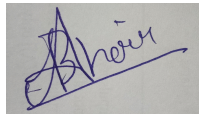
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHWINI BHOIR DEPARTMENT:B.com(FINANCIAL MANAGEMENT) CLASS: SYFMG SEMESTER: III

SUBJECT: BUSINESS LAW MONTH: JUNE TO OCTOBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: to provide brief idea about framework of Indian Business Law.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 - Indian Contract Act-1872 Part-1:	Contract Definition of Contract and Agreement, Essentials of Valid Contract, Classification of Contracts, Offer and Acceptance Rules of valid offer and acceptance, Counter offer, standing or open offer, distinguish between offer and invitation to offer. Concept of Communication and Revocation of offer and acceptance (sec. 3,5) Capacity to Contract (S: 10-12)-Minor, Unsound Mind, Disqualified Persons. Consideration (5. 2 & 25)-Concept and Importance of consideration, Legal rules of Consideration, Exceptions to the Rule, 'No Consideration No Contract (Ss. 25) Unlawful Consideration (523)	12		Board and chalk
UNIT 2 - Indian Contract Act-1872 Part-II:	Consent (Ss.13, 14-18, 39.53, 55, 66)-Agreements in which consent is not free Coercion, Undue Influence, Misrepresentation Fraud, Mistake Void Agreements (S. 24-30)-Concept, Void Agreements under Indian Contract Act Contingent Contract (5. 31), Quasi Contract (5.58-72), Concept of E- Contract& Legal Issues in formation and discharge of E-Contract. Concept of Performance of Contract (537) Modes of Discharge of Contract, Remedies on breach of Contract (73-75)	12		Board and chalk



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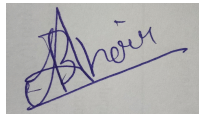
UNIT 3 - Special Contracts:	Law of indemnity & Guarantee (Ss. 124-125, Ss. 126-129, 132-147) Concept, Essentials elements of Indemnity and Guarantee, Contract of Indemnity vs. Guarantee, Modes of Discharge of Surety. Law of Bailment (5, 148, 152-154, 162, 172, 178, 178A, 179)- Concept, Essentials: of Bailment, Kinds of Bailment, Rights and Duties of Bailor and Bailee Law of Pledge Concept, Essentials of valid Pledge, Lien concept. Difference - between Pledge and Lien, Rights of Pawnor & Pawnee (Ss 173, 174, 177) Law of Agency (Ss. 182 185, 201-209) Concept, Modes of creation of Agency. Modes of termination of Agency, Rights& Duties of Principal and Agent.	12		Board and chalk
UNIT 4 - The Sale of Goods Act-1930	Contract of Sale Essentials elements of contract of sale, Distinction between Sale and Agreement to sell (5.4) Distinguish between Sale and Hire Purchase Agreement, Types of Goods Effects of destruction of Goods (5-6,7,8), Conditions & Warranties (Ss) 11-25 & 62, 631-Concept. Distinguish between Conditions and Warranties, implied Conditions & Warranties, Concept of Doctrine of Caveat Emptor-Exceptions. Property-Concept, Rules of transfer of property (5s. 18-26) Unpaid Seller (5 45-54, 55 & 56), Concept, Rights of an unpaid seller, Remedies for Breach of contract of Sale (Ss. 55-61) Auction sale - Concept. Legal Provisions (S. 64)	12		Board and chalk
UNIT 5 - The Negotiable Instruments (Amended) Act 2015:	Negotiable Instruments Concept (513) Characteristics, Classification Negotiable Instruments (S. 11, 12, 17-20, 42, 43, 104,134,135) Maturity of Instruments Promissory Note and Bill of Exchange (Ss. 45, 108-116) Concept, Essentials of Promissory Note, Bill of Exchange S 4,5), Essential features of note and Bill of exchange, Kinds Promissory note and Bill of exchange. Cheque (5.6) Concept, Types & Crossing of Cheque, Distinguish between Bill of Exchange & Cheque, Dishonour of Cheque-Concept & Penalties (5s. 138, 139,142) Miscellaneous Provisions 15. 8-10, 22, 99-102, 118-122, 134 137) -Parties to Negotiable instruments Hoider, Hoider in due course, Rights & Privileges of Holder, in due course Payment in due course, Noting & Protest (99-104A)	12		Board and chalk

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____60___



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TEACHING PLAN (UNIT PLAN)

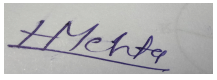
NAME OF THE STAFF: HEMANGI MEHTA SUBJECT: Entrepreneurial Development (ED) DEPARTMENT: B.com (Financial Management)

CLASS:SYBFMG SEMESTER:III MONTH:June-aug ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I& II Entrepreneurial Project Development	Idea Generation – sources and methods , identification and classification of ideas ,Environment scanning and SWOT analysis .	8	Entrepreneurial Development by Dr.S.S.Khanka & S.Chand	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Preparation of project plan , points to be considered ,components of an ideal business plan	8		
	Project formulation , project appraisal – aspects and methods	8		
	Technological feasibility – managerial competency	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

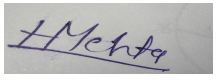
NAME OF THE STAFF: HEMANGI MEHTA SUBJECT: Entrepreneurial Development (ED) DEPARTMENT: B.com(FinancialManagement}

CLASS:SYBFMG SEMESTER:III MONTH:sep-oct ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III SLEGAL CONSIDERATION FOR DIFFERENT FORMS OF ORGANISATION	Cultural and environmental issues in setting up of business enterprise	4	Entrepreneurial Development by Dr.S.S.Khanka & S.Chand	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Sole trading firms , partnership firms	4		
	Unlimited liability partnership firms , limited company	4		
	Joint stock company , public co. , private co. NGOs	6		
	Quick start methods of business franchising	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FEROZ KHAN DEPARTMENT: B.com (Financial Management)

CLASS: S.Y.FMG SEMESTER: III MONTH: June ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:

The learners will be able to understand the basic concepts and definitions under direct tax.

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
1.DEFINITIONS & BASIS OF CHARGE	DEFINITIONS-ASSESEE, ASSESSEMNT YEAR,ANNUAL VALUE,PERSON.PREVIOUS YEAR	01	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	Chalk-Board
	BSIS OF CHARGE SECTION 3-9	01		
	EXCLUSIONS UNDER SCTION 10	01		
	RESIDENTIAL STATUS	02		
	SCOPE OF TOTAL INCOME	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
2.HEADS OF INCOME	INCOME FROM HOUSE PROPERTY-SEC22 TO27, ANNUAL VALUE	04	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	PowerPoint presentation & MS excel
	PROFIT & GAIN FROM BUSINESS &PROFESSION	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 08

PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
3.DEDUCTION UNDER CHAPTER VI A 4.Incone from Salary	80A-RESRTICTION ON CLAIMS,80C-PAYMENT OF LIC		TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	Chalk-Board l
	80CCC-CONTRIBUTION TO PENSION FUND, 80D-MEDICLAIM INSURANCE PREMIUM,			
	80DD-MEDICAL TRATMENT OF HANDICAPPED			
	80E-INTEREST ON EDUCATIONAL LOAN,80TTA-INTEREST ON SAVING BANK ACCOUNT			
	80U-HANDICAPED ASSESSEE Salary	03 06		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 7

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PAPER,UNIT, TITLE	SUBTOPICS	NO.OF LESTURES ALLOTED	REFERENCES	TEACHING METHOD/ ICT TOOLS USED
4.COMPUTATION OF TOTAL INCOME	COMPUTATION OF TOTAL INCOME OF INDIVIDUAL	2	TEXT BOOK (MANAN PRAKASHAN &SHETH PUBLICATION)	PowerPoint presentation & MS excel
	COMPUTATION OF TOTAL INCOME OF HUF AND DEDUCTIONS	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 05

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TEACHING PLAN (UNIT PLAN)

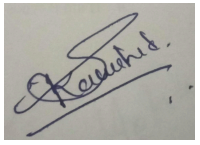
NAME OF THE STAFF: **KAUSHIK SAVE** DEPARTMENT: **B.com (Financial Management)**

CLASS: **SYBFMG Div A** SEMESTER**: III** MONTH: **June To Sep** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Knowledge based & Conceptual learning to get acquainted with objective type test
2) Revise the concepts of Partnership Final Accounts
3) Solve practical questions using concepts
4) Introduction to Accounting with computer.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Corporate Accounting	Unit 1&2 : Partnership Final Accounts	30	Manan Publication, Vipul Publication	Chalk Board, PPT
	1) Concepts - Admission, Retirement & Death 2) Treatment of Goodwill 3) Practical problems		Sheth Publication	



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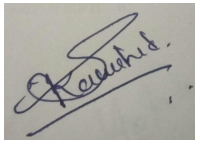
	Unit 3&4 : Accounting with Computers	30	Manan Publication, Vipul Publication	Chalk Board, PPT
	1) Inventory vouchers- stock journal 2) Manufacturing Journal godown management, batch-wise management.		Sheth Publication	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____60_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MEZBIN LALANI SUBJECT: Entrepre DEPARTMENT: B.com(Financial Management)

CLASS:SYBFMG SEMESTER:III MONTH:June-oct ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I,II SOCIAL LAGISLATION UNIT III,IV Laws related to compensation management	Employee state insurance Act, 1948	10	Business Regularity Framework by Dr. G.K.Vashney & WEB	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Miscellaneous provision Act, 1948	10		
	The payment of wages Act , 1948	10		
	Payment of bonus Act,, 1956	10		
	The payment of gratuity Act, 1972	12		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 52

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **TEJASWINI PATIL** DEPARTMENT: B.com (Financial Management) CLASS:**SYFMG** SEMESTER: III

MONTH: June to October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to understand the concept of cost accounting, material labour and overheads cost.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1. Introduction to cost accounting Unit 3. Labour cost	Evolution Objectives and Scope of Cost Accounting Importance and Advantages of Cost Accounting Difference between Cost Accounting and Financial Accounting Limitations of Financial Accounting Definitions: Cost, Costing and Cost Accounting Classification of Cost on Different Bases Cost Allocation and Apportionment Essentials of Good Costing System, Coding System	15	Manan prakashan Cost Accounting: Principles & Practices Book Reference By M. N. Arora	Chalk, board and duster

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Unit 4. Overheads	Labour Cost: The Concept Composition of Labour Cost Labour Cost Records Overtime / Idle Time / Incentive Schemes	15	Manan prakashan Cost Accounting: Principles & Practices Book Reference By M. N. Arora	Chalk, board and duster
	Overheads: The Concept Classification of overheads on different bases Apportionment and Absorption of Overheads	15	Manan prakashan Cost Accounting: Principles & Practices Book Reference By M. N. Arora	Chalk, board and duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

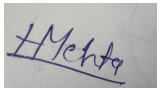
NAME OF THE STAFF: hEMANGI MEHATA SUBJECT: Office Management DEPARTMENT:B.COM (Financial Management)

CLASS: SYFMG SEMESTER:IV MONTH:Jan-feb ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & II Office accommodation and environment & Office automation	Office building , size , layout, safety and security measures, reception , importance shape size control.	6	Office Management by R.K.Chopra and Priyanka Gouri	Chalk board method, discussion, YouTube video, debates
	Communication –features, classification , barriers Arrangements and adjustment –furniture , chamber, cabin , rooms	6		
	Uses and abuses of labor saving appliances, kind of office machines.	6		
	Objective and advantages of various machines, use of machine, manual charts.	6		
	Kind of reports, report preparation, enquires.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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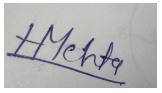
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III & IV HRM for office management & Planning and scheduling office work	Recruitment , selection training and development of office staff Office supervision	6	Office Management by R.K.Chopra and Priyanka Gouri	Chalk board method, discussion, YouTube video, debates
	Motivation – financial and non-financial incentive to subordinate Discipline, work control ,work distribution	6		
	Office routine, flow of work, office manual, control over stationary	6		
	Routine of handling mail, importance of correspondence	6		
	Various forms of correspondence, forms and supplies.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ASHWINI DATTATRAY BHOIR DEPARTMENT:B.com(Financial Management) SYFMG SEMESTER: IV

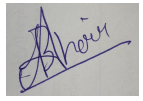
MONTH: NOVEMBER - MARCH ACADEMIC YEAR: 2018-19 SUBJECT - BUSINESS LAW -II

LEARNING OBJECTIVE/S:
The learners will be able to Know Various kinds of companies and features and procedures for incorporating a company.

The learners will be able to Know Partnership Meaning, Procedure for Registration of Partnership, Types of Partner, Rights and Duties of Partner.

The learners will be able to Know Rights of Consumers, forms of its Violation and Consumer Protection Act.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Module. No. 1 Indian companies Act, 2013 Part -1	Chapter I – Company, Features, Role of promoters, Duties and Liabilities of the promoter, effects of pre incorporation contracts, consequences of non- registration, and lifting of corporate veil. Chapter II – Classification of companies, Distinction between Private company and public company, Advantages and disadvantages of Private company and public company, Common Procedure for Incorporation of company. Chapter III – Memorandum of Association and Article of Association – Concept, Clauses of MOA, AOA – Contents,	10	Company Law Avtar singh Indian Partnership Act, 1932- Pollock & Mulla Agrawal V.K. Consumer protection Law and practice	1) Lecture and Discussion 2) Case Study 3) Black Board, Chalk and Duster



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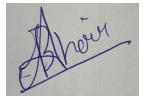
	Doctrine of constructive notice, Doctrine of Ultra Vires, Doctrine of Indoor management. Chapter IV - Prospectus : concept, Kinds, Contents, Private Placement		Vipul Prakashan	
Module. No. 2 Indian companies Act, 2013 Part – 2	Chapter - I Member of a Company: Concept, Who can become a member, Modes of acquiring membership, Cessation of membership, Right and liabilities of members. Chapter – II Director: Qualification and disqualification, Classification, Director Identification number, Legal position of director. Chapter – III Meetings : Types, Legal provisions of statutory meeting, Annual General meeting, Extra-Ordinary meeting.	10		
Module. No. 3 Indian Partnership Act, 1932	Chapter I - Partnership: Concept, Essentials, True test of Partnership, Partnership Deed, Types of Partnership, Rights and duties of Partners, Distinguish between Partnership and Hindu Undivided Family.	10		



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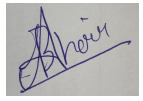
Module No. 4 Consumer Protection Act, 1986 and Competition Act 2002.	Chapter II - Dissolution: Concept, Modes of Dissolution, Consequences of Dissolution Chapter III - Limited Liability Partnership 2008: Concept, Characteristics, Advantages and Disadvantages, Procedure for Incorporation. Chapter IV - Extent of L.L.P.: Conversation of LLP, Mutual Rights and Duties of Partners, winding up of LLP, Distinction between LLP and Partnership. Chapter - I Concept, Objects, Reasons for enacting the Consumer Protection Act, Definition of Consumer, Consumer Dispute, Complaint, Defect, Deficiency, Unfair Trade Practices, Goods and Services. Chapter - II - Consumer Protection Councils and Redressal Agencies: District, State and National. Chapter - III - Competition Act 2002: Concept, Salient Features, Objectives and Advantages. Chapter IV Abuse of Dominant Position, Competition Commission of India, Anti-Competition Agreements.	10		



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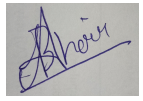
Module No. 5 Intellectual Property Rights	Chapter I – Intellectual Property right: Concept, Nature, Introduction and background of IPR in India. Chapter II – IPR relating to patents, Concepts of Invention and discovery, comparison, Concepts of patents, General principals applicable to working of patented inventions, Terms of patents, Infringement of patent right and remedies. Chapter III - IPR Relating to Copyrights: Concept of Copyright, Ownership of Copy right, Duration or term of copy right, Original work and fairs use, Rights of copyright holder, Infringement of copyrights and Remedies. Chapter IV - IPR Relating to Trademarks: Concept, Functions, Types, trademarks that cannot be registered, Registration of trademarks and Rights of the Proprietor of Trade Marks. Procedure for registration of TradeMarks., infringement of Trademarks and Remedies.	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 50



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TEACHING PLAN (UNIT PLAN)

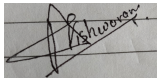
NAME OF THE STAFF: ARJUN VISHWAKARMA___ DEPARTMENT: B.com (Financial Management) CLASS: S.Y.F.Mg

SEMESTER: IV MONTH: NOVEMBER - MARCH ACADEMIC YEAR: 2018-19 SUBJECT: Information Technology in Management

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of Business Process Management, E-Commerce, MIS and Tally accounting software.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I Business Process	A) Introduction, Definition and Meaning of business process Flow of business process for accounting, purchase, sales and finance Classification of business processes.	03	Information Technology in Management By- Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Introduction, Definition and Meaning of Business Process Management Principles and practices of Business Process Management Business Process Management life cycle.	04		
	C) Theories of Business Management Process Implementation of Business process Management - need, key factors and importance Automation of business Processes - benefits, risks, challenges.	05		
	D) Accounting systems automation IT and Business Process Management Information systems - Meaning, Use of IT in Management.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Electronic Commerce	A) Meaning, Advantages and Limitations of E Commerce, The role of Strategy in E-Commerce, Value chains in E Commerce.	03	Information Technology in Management By - Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Infrastructure for Electronic Commerce Web Based Tools for Electronic Commerce, Electronic Commerce software, Security Threats to electronic Commerce.	04		
	C) Implementing Security for Electronic Commerce, Electronic Payment Systems, and Strategies for Marketing.	03		
	D) Sales & Promotion Strategies for Purchasing Logistics & Support Activities, Electronic Markets & Communities, Business Plans for Implementing Electronic Commerce.	05		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III Concept of MIS Reports in Computer Environment	A) Introduction, Concept of MIS, Need for MIS	03	Information Technology in Management By - Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Characteristics of MIS, Outputs of MIS, Role of MIS.	03		
	C) Guidelines for Developing MIS reports, Functional Aspects of the MIS, Problems in MIS.	05		
	D) Knowledge required for studying MIS, MIS and Computer.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV Computerized accounting system and Auditing	A) Role & Need and requirements of computerized accounting Basic requirements of computerized accounting system Limitations of computerized accounting system.	03	Information Technology in Management By - Rimple Sanchla and www.wikipedia.com	Board , Chalk and Duster
	B) Understand the development and design of a computerized accounting system, determining how the accounting data will be processed.	03		
	C) Introduction of accounting software, Advantages, uses and various types of accounting software Accounting software TALLY - Accounting and reports.	05		
	D) Need and importance of IT in auditing, auditing in IT environment.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:KAUSHIK SAVE/FIROZ KHAN____ SUBJECT: DIRECT TAX DEPARTMENT:B.com (Financial Management_)__

CLASS: ____SYFMG____ SEMESTER: __IV_____ MONTH: __NOVEMBER __ ACADEMIC YEAR: ____2018-19___

LEARNING OBJECTIVE/S:
The learners will be able to: To Understand the basic principles underlying the Provision of Tax, its procedures and sources.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 1 Clubbing of Income	Introduction of Clubbing of Income, Section 64(1)(ii), (iv),(vii) – Clubbing provisions relating to spouse Section 64(1) (vi) and (viii) – Clubbing provisions relating to son's wife Section 64(1A) – Clubbing provisions relating to Minor child	3	Income Taxes Law and Practice By Dr.V.K. Singhania	Chalk Board And Discussion Method
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __8__

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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SUBTOPICS	PAPER, UNIT, TITLE	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Sec: 70 - Set off Loss from one Source against Income from another Source under the Same Head of Income Sec: 71 - Set Off Loss from One Head against Income of another Head Sec: 71B - Carry Forward & Set off Losses from House Property Sec: 72 - Carry Forward & Set Off of Losses of Business Losses Sec: 73- Losses in Speculation Business Sec: 74- Loss under the head Capital Gains	UNIT – 2 Setoff & Carry Forward oLosses	4	Income Taxes Law and Practice By Dr.V.K. Singhania	Chalk Board And Discussion Method
Practical Illustrations		4		

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 3 Computation of Tax liability of Individual & HUF	Tax Slab Rate, Rebate, surcharges etc.	3	Income Taxes Law and Practice By Dr.V.K. Singhania	Chalk Board And Discussion Method
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __8__

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 5 Return of Income	Introduction of Return on Income, Section 139(1) – compulsory filing of return of income Section 139(1A)-Furnishing return to employee	2	Income Taxes Law and Practice By Dr.V.K. Singhania	Chalk Board And Discussion Method
	Section 139(1B)-Income tax return through computer Section 139 (1C) – Persons exempt from filing return	2		
	Section 139 (3) – Return of Loss, Section 139 (4) – Belated Return, Section 139 (5) – Revised Return Section 139 (6) – Particulars furnished with returns	2		
	Section 139 (6A) – Particulars of Business with return Section 139 (9) – Defective Return	1		
	Practical Illustrations	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __10__

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TEACHING PLAN (UNIT PLAN)

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT – 6 Tax Deducted at Source Advance Tax Interest Payable	Introduction of Tax Payment and TDS, Section 192- TDS on salary, Section 194A- TDS on Interest, Section 194C- TDS on contractor	2	Income Taxes Law and Practice By Dr.V.K. Singhania	Chalk Board And Discussion Method
	Section 194H- TDS on Commission, Section 194I- TDS on Rent, Section 194J- TDS on Professional Fees	2		
	Advance Tax U/S 207, 208, 209, 210 ,211	4		
	Interest Payable U/S 234(A), 234(B), 234(C)	2		
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15__

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 7 DTAA	Introduction to DTAA, Types of Double Taxation Relief, Bilateral Relief Section 90 Unilateral Relief Section 91 Tax Slab Rate	3	Income Taxes Law and Practice By Dr.V.K. Singhania	Chalk Board And Discussion Method
	Practical Illustrations	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __5__

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 8 Tax Planning and Ethics in Taxation	Meaning of Tax Planning, Tax Management, Tax Avoidance Tax Evasion Ethics in Taxation Consequence of Tax Avoidance Difference between Tax Planning, Tax Avoidance, Tax Evasion Objectives, Importance, Essentials of Tax Planning Types and areas of Tax Planning Forms of the Organisation Corporate Structuring Financial Management Decisions Tax Planning for Employees Government Measures to prevent Tax Avoidance, Evasion	5	Income Taxes Law and Practice By Dr.V.K. Singhania	Chalk Board And Discussion Method

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TEACHING PLAN (UNIT PLAN)

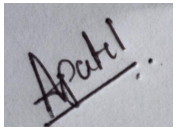
NAME OF THE STAFF: **AMITA PATIL** DEPARTMENT**:** B.com(Financial Management) CLASS: **S.Y.F.M.G.**

SEMESTER: **IV** MONTH: November- **March** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S : To explain the concepts of Cost Accounting.

The learners will be able to :understand the concepts in simple way which will help them to solve the practical problems

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit I Classification of Costs and Cost Sheet.	***Classification of Costs** ***Problems on Identification of Costs** *Cost of Sales ***Cost Centre, Cost Unit** ***Profit Centre , Investment Centre** ***Format of Cost Sheet** ***Total cost and Unit Costs concept** ***Different Costs for different purposes with examples * Practical problems on Cost Sheet**	02 03 01 02 02 01 01 01 07	Cost and Management Accounting -S Chand Cost Accounting – MC Shukla	Chalk-Board Method
Unit II Reconciliat Accounts	*Introduction * Practical problems on Reconciliation of Cost and Financial Accounts.	01 09		Chalk-Board Method



Signature of Staff

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Unit-III Contract Costing.	*Introduction *Progress payment, Retention money Contract Accounts *Accounting for plant used for contract *Treatment of profit on incomplete contract *Contractees Account *Problems on Contract Account including simple contract, multiple contract,and two consecutive years contract.	01 02 01 01 01 09		
Unit -IV Process Costing	*Introduction and Meaning of Process Costing * Process or Normal loss *Abnormal loss and Abnormal gains *Joint Products and By-product *Practical problems on Process Costing including simple process,joint Products and By-product	01 01 01 01 09		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNITS: 60
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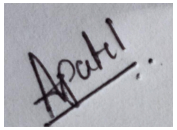

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TEACHING PLAN (UNIT PLAN)

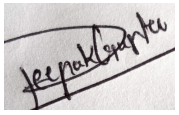
NAME OF THE STAFF: DEEPAK GUPTA SUBJECT: Corporate Accounting DEPARTMENT: B.com (Financial Management)

CLASS: SYFMG SEMESTER: IV MONTH: Nov – March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:
The learners will be able to: Imparting an adequate knowledge of the subject matter.

SR.NO.	TOPICS/MODULES/UNITS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Preparation final accounts of companies	15	Ainapure, Manan Prakashan	Chalk and Duster
2	Redemption of preference shares	15		Chalk and Duster
3	Redemption of debenture	15		Chalk and Duster
4	Ascertainment and treatment of profit prior to incorporation	15		Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE SUBJECT: 60



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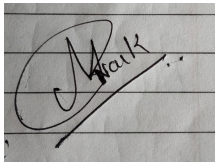
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MEGHA NAIK DEPARTMENT: B.com(Financial Management) CLASS:. SYFMG SEMESTER: IV.

MONTH: DEC - MAR ACADEMIC YEAR : 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : understand the financial problems related to investors, cooperations, and the communication between investors and companies in the capital markets.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.CORPORATE FINANCE AN OVERVIEW	Functions of finance in business enterprise Emergence of corporate finance as integral part of business finance Need for professional approach in managing corporate finance Requirement of an efficient corporate finance manager	10	Vipul prakashan	Chalk & Duster
2. Planning the Corporate Financial Activities	Theories of Capitalisation Owned capital and borrowed capital cost of capital Break even analysis Illustrations Q.1 TO Q.6	15	Vipul prakashan	Chalk & Duster



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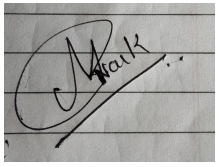
3. Capital Structure	Meaning and definition Factors affecting capital structure Watered capital, over capitalization, and under capitalization NOV, IRR, DCF analysis and payback period Illustrations Q.1 TO Q.6	15	Vipul prakashann	Chalk & Duster
4.Sources and Methods of raising Corporate Finance	Types and features of corporate securities Management of new issues including pricing of securities Role of commercial banks, investment bank in financing corporate sector Leasing method of corp[orate finance	15	Vipul prakashann	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 55



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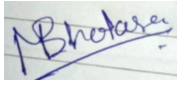
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MANEESHA BHOSLE _ DEPARTMENT: B.COM(Financial Management). CLASS: TYBFMG SEMESTER: SEM V

MONTH: JUNE TO AUG ACADEMIC YEAR: 2018-19 SUB: RESEARCH METHODOLOGY.

LEARNING OBJECTIVE/S:
The learners will be able to: Understand Research , Types of Research, Hypothesis , Research Design, Sampling, Data collection and processing, Survey Instrument.**TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 40**



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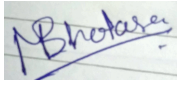
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
***MODULE 1&2. INTRODUCTION TO RESEARCH.**	***Research:** Meaning, Objectives, importance of research, Research process, Characteristics of Good Research. ***Hypothesis :** Meaning, Importance, Types and Sources. ***Research Design:** Meaning, Importance, Steps, Scope & Essential of Good research. ***Sampling :** Meaning , Methods of Sampling.: Probability Sampling Non-Probability Method.	**20**	**Regression Modeling Strategies: Frank Harell.**	**Chalk and Duster**
MODULE 3&4.DATA COLLECTION AND PROCESSING	***Types of Data and Sources:** Primary and Secondary Data Sources. ***Methods of collection of Primary Data:** Observation , Experiment, Interview , Survey. ***Survey Instrument:** Questionnaire : Types of questions , Scaling techniques.	**20**		



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TEACHING PLAN (UNIT PLAN)

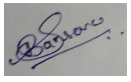
NAME OF THE STAFF: SHRUTI BASARE SUBJECT: Financial Management -I DEPARTMENT: B.com (Financial Management)

CLASS: TYFMG SEMESTER: V MONTH: June-July-August ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I& II Investment Decisions	Introduction , Purpose of Capital Budgeting	02	Financial Management by Arvind Dhond	Chalk & Board, Discussion.
	Capital Budgeting Process, Types of Capital Investment Decisions	02		
	Project Cash Flows & Net Profit Approval	02		
	Basic Principles of measuring Project Cash Flows	02		
	Capital Budgeting Techniques (Sums)- (Only Time Adjusted/ Discounted Cash Flows)- NPV, PI, IRR, Discounted Pay Back	12		
	Capital Rationing (Sums)	10		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

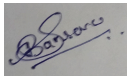
NAME OF THE STAFF: SHRUTI BASARE SUBJECT: Financial Management- I DEPARTMENT: B.com (financial Management)

CLASS: TYFMG SEMESTER: V MONTH: August-September-October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III & IV Types of Financing	Introduction	2	Financial Management by Arvind Dhond	Chalk & Board, Discussion.
	Needs of Finance & Sources	6		
	Long Term Sources of Finance	14		
	Short Term Sources of Finance	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMOL VAJE / MEZBIN LALANI SUBJECT: Financial Analysis & Business Valuation DEPARTMENT: B.com (Financial Management)

CLASS: TYFMG SEMESTER: V MONTH: June- July- August ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I Analysis of Financial Statements & Statement of Shareholder's Equity	**Financial Analysis-** Meaning, Importance & Types	02	Financial Analysis & Business Valuation by Farhat Fatma Shaikh and Heena Murad Khanche, And Internet	Chalk & Board, Discussion.
	Financial Statement Analysis- Meaning, Importance & Limitations	02		
	Analysis & Interpretation- Benefits, Limitations & Types	03		
	Financial Statement Analysis – Traditional Approach vs Modern Approach	02		
	Reformulating the statement of Owner's Equity	02		
	Comprehensive Income Reporting **(Sums)**	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMOL VAJE/ MEZBIN LALANI SUBJECT: Financial Analysis & Business Valuation DEPARTMENT:B.com (Financial Management)

CLASS: TYFMG SEMESTER: V MONTH: October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Analysis of Income, Profitability, Growth & Sustainable Earning	Analysis of Changes in Income **(Sums)**	05	Financial Analysis & Business Valuation by Farhat Fatma Shaikh and Heena Murad Khanche, And Internet	Chalk & Board, Discussion.
	Bond Analysis, Profitability Analysis **(Sums)**	05		
	Growth Analysis	02		
	Analysis of Changes in Profitability & Sustainable Growth	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMOL VAJE / MEBIN LALANI SUBJECT: Financial Analysis & Business Valuation DEPARTMENT: B.com (Financial Management)

CLASS: TYFMG SEMESTER: V MONTH: August ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Business Valuation & Models	Meaning & Principles of Business Valuation	03	Financial Analysis & Business Valuation by Farhat Fatma Shaikh and Heena Murad Khanche, And Internet	Chalk & Board, Discussion.
	Techniques & Role of Business Valuation	03		
	Free Cash Flow Valuation	01		
	Valuation of Firm (CVA & EVA) **(EVA Sums)**	05		
	Contingent Claim Valuation	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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NAAC accredited "B" Grade, 2.69 CG

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMOL VAJE/MEZBIN LALANI SUBJECT: Financial Analysis & Business Valuation DEPARTMENT: B.com (Financial Management)

CLASS: TYFMG SEMESTER: V MONTH: September ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Valuation of Business for Mergers & Acquisitions and Valuation of Intellectual Property	Basics of Merger & Acquisition	01	Financial Analysis & Business Valuation by Farhat Fatma Shaikh and Heena Murad Khanche, And Internet	Chalk & Board, Discussion.
	Approaches to Valuation in case of M & A, Selection of appropriate cost of capital for valuation	02		
	Forms of Consideration & terms of Acquisition **(Sums)**	03		
	Exchange Ratio based used for Computation **(Sums)**	03		
	Theory of Intellectual Property & Methods of Valuation	01		
	Valuation of Brands **(Sums)**	03		
	Valuation of Real Estates **(Sums)**	03		

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TEACHING PLAN (UNIT PLAN)

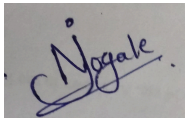
NAME OF THE STAFF: NIKITA JOGLE SUBJECT: Corporate Accounting DEPARTMENT: B.com (financial Management)

CLASS: TYFMG SEMESTER: V MONTH: September-October ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I &II Final Accounts of Insurance Companies(Excl. Life Insurance)	General Insurance- Various Types of Insurance	2	Corporate Accounting by Ainapure	Chalk & Board, Discussion.
	Special terms like Premium, Claims, Commission, Management Expenses, Reserve for Unexpired Risk, Reinsurance	4		
	Final Accounts in a prescribed Form – **Revenue Statement – Form B – RA (Sums)**	10		
	Profit/Loss Account – Form B – PL (Sums)	6		
	Balance Sheet – Form B – BS (Sums) (Including Comprehensive Sums)	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

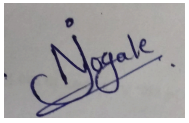
NAME OF THE STAFF: NIKITA JOGLE SUBJECT: Corporate Accounting DEPARTMENT: Commerce

CLASS: TYFMG SEMESTER: V MONTH: June-July-August ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III&IV Accounting for Foreign Currency Transactions	Accounting of Foreign Currency Transactions in relation to purchase & sale of goods, services & assets and loan & credit transactions. Computation and Treatment of Exchange Rate Differences **(Sums)**	30	Corporate Accounting by Ainapure	Chalk & Board, Discussion.

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEENA QUERESHI SUBJECT: Auditing DEPARTMENT: B.com (Financial Management)

CLASS: TYFMG SEMESTER: V MONTH: June - July ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I Introduction to Auditing	Basics of Financial Statements, Users of Financial Statements, Definition of Auditing, Objectives of Auditing, Inherent Limitations of Auditing	04	Auditing by Ainapure, Auditing by Sachin Bhandarkar & Sandeep Gupta	Chalk & Board, Discussion.
	Errors & Frauds- Concept, Reasons & Circumstances. Types of Errors, Types of Frauds, Risk of Fraud & Error in Audit, Auditor's duties & responsibilities in respect of Fraud.	04		
	Principles of Audit	01		
	Types of Audit- Meaning, Advantages & Disadvantages	02		
	Miscellaneous Advantages of Independent Audit, Qualities of Auditor, Auditing vs Accounting, Auditing vs Investigation, View the concept of True & Fair	03		

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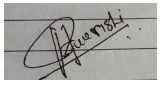
PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT II Audit Planning, Procedures & Documentation	**Audit Planning-** Meaing, Objectives, Factors, Sources of obtaining Information, Discussion with Client, Overall Audit Plan	04	Auditing by Ainapure, Auditing by Sachin Bhandarkar & Sandeep Gupta	Chalk & Board, Discussion.
	Audit Programme- Meaning, Factors, Advantages, Disadvantages, Overcoming Disadvantages, Methods of Work, Pre Commencement Work of Audit, Overall Audit Approach	04		
	Audit Working Papers- Meaning, Importance, Factors, Features, Contents of Permanent Audit File, Contents of Temporary Audit File, Ownership Custody & Access of Working Papers, Auditors Lien on Working Papers & Clients' Books	04		
	Audit Notebook- Meaning, Structure, Contents, General Information, Current Information & Importance	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Auditing Techniques	**Test Check-** Test Checking vs Routine Checking, Test Check Meaning, Features, Factors, When Test Checks can be used, Advantages, Disadvantages & Precautions	04	Auditing by Ainapure, Auditing by Sachin Bhandarkar & Sandeep Gupta	Chalk & Board, Discussion.
	Audit Sampling- Meaning, Purpose, Factors in determining sample size, Methods of selecting sample items, Evaluation of sample results, Auditors Liability in conducting Audit based on sample.	05		
	Internal Control- Meaning & Purpose, Review, Advantages, Auditors duties, Inherent Limitations, Internal Control samples for Sales & Debtors, Purchases & Creditors, Wages & Salaries	04		
	Internal Check vs Internal Control, Internal Check vs Test Check	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

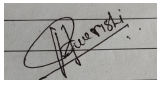
NAME OF THE STAFF: Abigail D'mello SUBJECT: Auditing DEPARTMENT: B.com (Financial Management)

CLASS: TYFMG SEMESTER: V MONTH: October ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : Impart an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Internal Audit	Meaning & Basic Principles of establishing Internal Audit	03	Auditing by Ainapure, Auditing by Sachin Bhandarkar & Sandeep Gupta	Chalk & Board, Discussion.
	Objectives of Internal Audit	02		
	Evaluation of Internal Audit by Statutory Auditor	03		
	Usefulness of Internal Audit	03		
	Internal Audit vs External Audit, Internal Check vs Internal Audit	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: HEMANGI MEHTA SUB: BUSINESS ETHICS DEPARTMENT: B.COM(Financial Management)CLASS: TYFMG

SEMESTER: V MONTH: JUNE TO OCTOBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:
The learners will be able to:

- Understand the meaning of globalization and the world-wide business network.
- Get knowledge of business ethics in marketing and e-commerce.
- Interpret the relationship between business, business ethics and its effect on business development.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1&2- **Business Ethics in Global Economy**	• Concept of globalization • Global business network • Relationship among business, business ethics and business development • Developing business ethics in global economy • Marketing ethics in foreign trade • Role of business ethics in business • Ethical issues in E-commerce • Measure to prevent unethical practices in e-commerce	25	Global Economy and business environment by Francis Cherunilam VIPUL, Manan prakashan and Sheth publication	Chalk Board, Discussion, and Test

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Unit 3&4- **Functional Ethics**	**1. Meaning of functional ethics** 2. **Types of ethics according to functions of business** (marketing, HRM and finance) **3. Intellectual Property Rights** • Patent • Copy-right • Trade Marks **4. Ethical issues:** • Patent • Copyright • Trade mark	25		Chalk Board, Discussion, and Test

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 50

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA A. ALMEIDA DEPARTMENT: B.com(Financial Management) CLASS: TYFMG SEMESTER: VI MONTH: JANUARY-MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Students will be able to explore different avenues of investment, equipped with the knowledge of security analysis, apply the concept of portfolio management for the better investment, invest in less risk & more return securities.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. Portfolio Management- An Introduction	**Investment-** Meaning, Characteristics, Objectives, Investment VS Speculation, Investment Vs Gambling and types of investors. **Portfolio Management-** Meaning, Evolution, Phases, Role of portfolio managers, Advantages of portfolio management. **Investment Environment-** Investment Environment in India and factors conducive for Investment in India. **Portfolio Analysis-** Meaning and its components, calculation of expected return and risk, calculation of covariance, Risk- Return trade off.	09	Vipul Prakashan	Chalk & Duster, Group Discussion

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2. Portfolio Analysis and Selection.	**Portfolio Selection-**Meaning, Feasible Set of portfolios, Efficient set of portfolios, selection of optimal portfolio, Markowitz Model, Limitations Markowitz Model, Measuring Security Return and Portfolio Return, Risk under Single Index Model and Multi Index Model.			
	Portfolio Management- Valuation **Portfolio Revision:** Meaning, need, constraints and strategies. **Portfolio Evaluation: -** Meaning, need, measuring returns (Sharpe, Treynor and Jense Ratios) & Decomposition of performance. **Bond Valuation**: Meaning, Measuring Bond Returns, Yield to Maturity, Yield to call and Bond Pricing. Bond Pricing Theorems, Bond Risks & Bond Duration.	05		
3. Fundamental Analysis	Economy Analysis: Meaning, Economic Analysis, Barometric or Indicator Approach, Econometric Model Building & Opportunistic Model Building. Industry Analysis: Concept of Analysis, Industry Life Cycle, Industry Characteristics. Company Analysis: Financial Statements, Analysis of Financial Statements Practical Questions on – Debt Equity Ratios,Totall Debt Equity Ratio, Proprietory Ratios, Interest Coverage Ratio, Profitability Ratios related to Sales, Investment & Equity Shares Efficiency or Activity Ratios.	09	Vipul Prakashan	

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4. Technical Analysis	Assessment Risk.			
	Dow Theory Meaning and Principles of Technical Analysis, Price Chart, Line Chart, Bar Chart, Japanese Candlestick Chart, Trends & Trend Reversals, Chart Patterns, Support & Resistance, Reversal Patterns, Continuation Patterns & Elliot Wave Theory. **Mathematical Indicators:** Calculation of moving averages, Oscillators & Relative strength index. Market Indicators Fundamental Analysis v/s Technical Analysis	04		
5. Efficient Market Theory and CAPM	Random Walk Theory The Efficient Market Hypothesis Forms of Market Efficiency Competitive Market Hypothesis CAPM Arbitrage Pricing Theory (APT).	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 31

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TEACHING PLAN (UNIT PLAN)

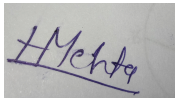
NAME OF THE STAFF : HEMANGI MEHTA SUBJECT: Organizational Behavior DEPARTMENT: Commerce B.com (financial Management)

CLASS: TYFMG SEMESTER:VI MONTH:Jan-feb ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I & II Introduction to OB and understanding others : Interpersonal relationships	Organizational Behavior multidiscipline , different models of OB , perception, personality , value, attitude.	6	Organizational Behavior by Robbins,Stephen , Pearson	Chalkboard method, discussion, YouTube video,debates
	Job satisfaction, motivation, learning.	6		
	Conflict management,nature of conflict, level of conflict,source of conflict.	6		
	Effect of conflict,process of conflict,stages of conflict, conflict handling orientation.	6		
	Power and organizational politics, sources of power, organizational politics, political power.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

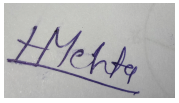
NAME OF THE STAFF: HEMANGI MEHTA SUBJECT:Organizational Behavior DEPARTMENT: Commerce (SFC)

CLASS: TYFMG SEMESTER:VI MONTH: March-April ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III & IV Group behavior and team behavior & Stress management and change	Group behavior, Types of group, identifying and rewarding informal leader,key role of leaders	6	Organizational Behavior by Robbins,Stephen , Pearson	Chalkboard method, discussion, YouTube video,debates
	Team and team building,modern organization,teamwork ,types of teams,skill useful in team building.	6		
	Stress management and counseling, elements of job performance, approaches to stress management	6		
	Counseling, characteristics and types of counseling, change and it's effects	6		
	Response to change, resistance to change, transformational leadership,three stage model of change process.	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

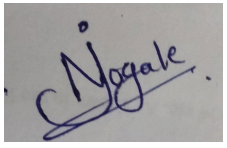
NAME OF THE STAFF:NIKITA JOGLE SUBJECT: Corporate Accounting DEPARTMENT: B.com (Financial Management)

CLASS: TYFMG SEMESTER: VI MONTH: Dec – MAR ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:
The learners will be able to: Imparting an adequate knowledge of the subject matter.

SR.NO.	TOPICS/MODULES/UNITS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1	Consolidated financial statement	15	Ainapure, Manan Prakashan	Chalk and Duster
2	Internal reconstruction	15		Chalk and Duster
3	AS – 14 – amalgamation, absorption	15		Chalk and Duster
4	External reconstruction	15		Chalk and Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE SUBJECT : 60



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TEACHING PLAN (UNIT PLAN)

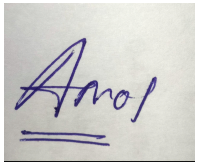
NAME OF THE STAFF: AMOL VAJE DEPARTMENT: B.com (Financial Management) CLASS: .B.COM (FINANCIAL MANAGEMENT) SEMESTER: VI **MONTH:** DEC TO APRIL

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to : TO ENHANCE THE ABILITIES OF LEARNER TO DEVELOP THE CONCEPT OF FINANCIAL MANAGEMENT AND ITS SIGNIFICANCE IN THE BUSINESS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
RISK & RETURN	INTRODUCTION , MEANING OF RETURN, TYPES OF RETURN, HOLDING PERIOD RETURN, ANNUALIZED RETURN, EXPECTED RETURN, MEANING OF RISK TYPES OF RISK – BUSINESS RISK , FINANCIAL RISK, INTEREST RATE RISK MARKET RISK AND LIQUIDITY RISK (INCLUDING PRACTICAL PROBLEMS	15 15	FUNDAMENTAL OF FINANCIAL MGMT- PRASANNA CHANDRA	CHALK & DUSTOR MEYTHOD PPT , GOOGLE CLASSROOM
CAPITAL STRUCTURE THEORIES CASH MANAGEMENT	MEANING, CHOICE OF CAPITAL STRUCTURE, IMPORTANCE, OPTIMAL CAPITAL STRUCTURE, INSTRUCTION TO LEVERAGES TYPES OF LEVERAGES : OPERATING LEVERAGES, FINANCIAL LEVERAGES, & COMPOSITE LEVERAGES, RELATIONSHIP BETWEEN OPERATING LEVERAGES & FINANCIAL LEVERAGES COST OF CAPITAL , EBIT-EPS ANALYSIS, & MARKET PRICE SHARE CAPITAL STRUCTURE THEORIES, CAPITAL STRUCTURE DIVIDEND POLICY- PAYOUT RATIO	15 15	PRINCIPLES OF CORPORATE FINANCE- R.A.BREALYS & S.C. MYRES.	



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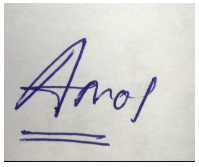
RECEIVABLE MGMT	(INCLUDING PRACTICAL PROBLEMS) MOTIVES FOR HOLDING CASH, OBJECTIVES OF CASH MANAGEMENT, FACTORS DETERMINING CASH NEEDS, BASIC STRATEGIES OF CASH MANAGEMENT, CASH MANAGEMENT TECHNIQUES OR PROCESS, MARKETABLE SECURITES ABD CASH MANAGEMENT PRACTICES IN INDIA INCLUDING PRACTICAL PROBLEMS INTRODUCTION, ASPECTS OF RECEIVABLE MGMT, CREDIT POLICY, CREDIT EVALUATION, CREDIT GRANTING DECISION CONTROL ON ACCOUNTS, RECEIVABLE INCLUDING PRATICAL PROBLEMS		FUNDAMENTAL OF FINANCIAL MGMT-PRASANNA CHANDRA	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

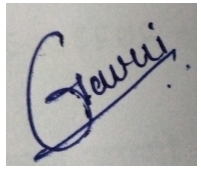
NAME OF THE STAFF: GAURI YADAV DEPARTMENT: B.com (Financial Management) CLASS:TYFMG . SEMESTER: VI

SUBJECT : AUDITING MONTH: DECEMBER - FEBRUARY ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

To give knowledge to students about how to find reliability of financial position and profit and loss statements. The aim is to ensure that the accounts reveal a true and fair face of the business and all of its transactions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	1.**VOUCHING** Audit of Income Revenue from Sales and Services, Rental Income, Interest & Dividends Income, Royalties Income, Recovery of Bad debts written off, Commission Received 1.2 Audit of Expenditure Purchases, Salaries & Wages, Rent, Insurance Premium, Telephone expense , Petty	15	SHETH , VIPUL,MANAN PRAKASHAN	PPT, CHALK AND BOARD



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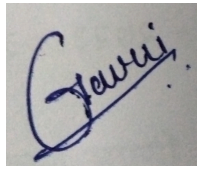
	cash payment, Advertisement, Travelling Salesmen's Commission, Freight Carriage and Custom Duties			
	2.**VERIFICATION** 2.1 Audit of assets Plant & Machinery, Furniture and fixtures, Accounts Receivable, Investments, Inventory, Goodwill, Patent Rights 2.2 Audit of Liabilities Outstanding Expenses, Accounts Payable, Secured loans, Unsecured Loans, Contingent Liabilities, Public Deposits	15		
	3. **Audit and Assurance Standards** 3.1 Significance of the Audit and Assurance Standards issued by Institute of Chartered Accountants of India. Responsibility of auditor for AAS 3.2 Understanding of following standards SA 200 Basic principles of Governing an Audit SA 200A Objective and scope of the audit of financial statements SA 230 Audit documentation SA 320 Audit materiality SA 570 Going Concern	15		
	4**. Audit of Limited Companies** 4.1 Qualifications, Disqualifications, Appointments (First & Subsequent auditor), Reappointment, Removal of auditors.	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT : 60



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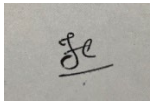
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS. FINI CHERIYAN_____DEPARTMENT: COMMERCE_ _____CLASS __F.Y.BIM SEMESTER: I___MONTH: _JULY-NOVEMBER 2022 ACADEMIC YEAR: __2018-19_____

LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTTED	REFERENCE /S	TEACHING METHOD/ ICT TOOLS USED
Foundation Course–I (Money Market) Unit I, II, III,and IV	**Module I- Introduction to Money Markets** Meaning of money market, Features of money market, Importance of money market, Role of Primary dealers, Development of trade and industry, Development of capital market, Smooth functioning of commercial banks, Effective Central Bank Control, Formulation of suitable monetary policy, Source of finance to government.	5	Text Book Internet	1.Chalk and Black Board Method 2 Example 3 Discussion
	Module II- Regulatory Framework of Money Markets	10	**Text book**	
	Regulatory framework of RBI, FIMMDA (Fixed Income, Money Market and Derivatives Association) and FEDAI (Foreign Exchange Dealers Association of India), NDS-OM Web/			1.Chalk and Black Board Method 2 Example 3 Discussion
	. **Module III- Money Market InstrumentsConventional:- Treasury bills, Money at call and Short Notice in the Call Loan market, Commercial bills, Promissory notes in the bill market.Modern:- Commercial papers, Certificate of Deposit, Inter-bank Participation Certificates, Repo instrument, Banker's Acceptance.Money Market Mutual Fund:- Meaning, advantages, disadvantages, Regulatory framework for money marketmutual funds, various money market funds operational in Indian market.**	10	Text book	1.Chalk and Black Board Method 2 Example 3 Discussion
	Module IV- Recent Developments in Money Market Integration of Unorganised sector with the Organised sector, Widening of call money market, Introduction of Innovative Instrument, Offering of market rates of interest, Promotion of bill culture, Entry of money market mutual funds, Setting up of credit rating agencies, Adoption of suitable monetary policy, Establishment of DFHI, Setting up of Security	10	Text book Internet The Indian constitution	1.Chalk and Black Board Method 2 Example 3 Discussion



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TEACHING PLAN (UNIT PLAN)

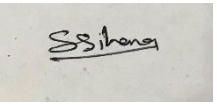
NAME OF THE STAFF: MS SEEMA SIHANA **DEPARTMENT**: COMMERCE (COMMERCE) **CLASS:** FY IMG **SUBJECT –** BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** AUGUST **ACADEMIC YEAR:**2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

1) To introduce key concepts of communication. To understand the various aspects of communication.
2) To make students aware with functional and operational use of language in organization
3) To enhance students writing and presentation skills.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1) Theory of Communication	**1) Concept of Communication**- Meaning, Definition, Process, Need, Feedback. Emergence of communication as a key concept in the Corporate and Global World Impact of technological advancements on communication **2) Channels and Objectives of Communication:** **Channels :** Formal and Informal - Vertical, Horizontal, Diagonal, Grapevine **Objectives of Communication:** Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Moral of Employees **3) Methods and Modes of Communication:** **Methods:** Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette **Modes:** Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing	15	Textbook of Manan Publication	Chalk & Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **Bristi Biswas** SUB: ECONOMICS DEPARTMENT**: SFC** CLASS: **F.Y.B.I.M**

SEMESTER: **I** MONTH: **JUNE TO OCTOBER** ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S : Provide a strong foundation in fundamentals of Economics

The learners will be able to : Enable the students to pursue further studies in this discipline understanding the functioning of Domestic as well as global economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Micro-economics Paper-1	**Module 1- Scope importance of Business Economics:** Basic tools, opportunity cost principles, cost principle, basic economics relation, total average and marginal relation. The basis of market demand market supply equilibrium price-in demand and supply curve and equilibrium	05	H.L. Ahuja, Dr. J.P. Mishra, Manan Prakashan, Elite Publication,	Black Board Method
Micro-economics Paper-1	**Module 2- Demand Analysis:** Market, what is competition - demand curve, market demand versus individual demand: movement along the demand curve shifts in demand curve supply, market supply and individual supply three steps in the analysing change in equilibrium, price ceiling and floor taxes and the impact-price elasticity of demand -total revenue and elasticity of demand-impact of price elasticity on revenue. DEMAND ESTIMATION AND FORCSTING; Meaning and significance , method of demand estimation , survey and statistical method.	10	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication,	Black Board Method

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Micro-economics Paper-1	**Module 3:SUPPLY AND PRODUCTION COSTOF PRODUCTION: Production function short run analysis with the law of variable production function with two variable , ridge lines and least cost combination of input ; long run production function and law of return to Scale ,economic and economics of Scale.** **COST CONCEPT;** Accounting cost and economic cost, implicit and explicit, social cost in private cost , historical cost and replacement cost, sankosh and incremental cost, fixed and variable cost, total average and marginal cost, cost output relation in short run and long run (sums)	05	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication,	Black Board Method
Micro-economics Paper-1	**Module 4** ;MARKET STRUCTURE; Perfect cooperation and monopoly and pricing and output decision under imperfect competition Short run and long run equilibrium of competitive firm and of industry – monopoly –short run n long run equilibrium of a firm under monopoly . Monopolistic competition ;Equilibrium of a firm under monopolistic competition , debate over role of advertising. Oligopolistic market; key attribute of oligopoly collusive and non-collusive market – price rigidity – Cartel and price leadership model	05	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication	
Micro-economics Paper-1	**Module 5 Pricing practices.** **Cost orientation pricing method ; cost – plus (full cost0 pricing , marginal pricing , mark up pricing , discriminating pricing ,multiple – produt pricing – transfer pricing .**	05	H.L. Ahuja, Dr. J.P. Mishra Elite Publication, Himalaya Publication	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS SWETLANA DIAS DEPARTMENT: COMMERCE CLASS: FYBIM SEMESTER: I MONTH: AUGUST ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Develop and maintain problem-solving skills
2) mathematical ideas to model real-world problems.
3) Translate words into math language, and construct an abstract model that describes the problem.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT-1- Introduction, Organising, Data, Frequency Distribution, Data Representation	Organizing Data, Frequency Distribution, Measure of Central tendency, Org Data, preparation of frequency distribution graphical and diagrammatic representation histogram, frequency polygon and gives. Definition of averages and objective of averages types of average. Arithmetic mean, Geometric, harmonic mean and its usages, mode and medium (using graph also) for both) for grouped as well as ungrouped data	10	VIPUL ,MANAN, RISHABH PUBLICATION	Chalk and Duster Method
	UNIT -2 Measures of Central Tendencies			
	Concept and idea of dispersion. Various measures Range, quartile deviation, Mean Deviation, Standard Deviation and corresponding relative measure of dispersion. Geographical representation and utility of various is measure of Dispersions 4 Co-variance, Correlation and Regression	10	VIPUL ,MANAN, RISHABH PUBLICATION	Chalk and Duster Method
UNIT 3 - Measures of Dispersion	Concept and idea of dispersion. Various measures Range, quartile deviation, Mean Deviation, Standard Deviation and corresponding relative measure of dispersion. Geographical representation and utility of various is measure of	08	VIPUL ,MANAN, RISHABH PUBLICATION	Chalk and Duster Method

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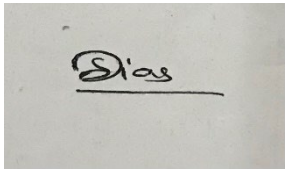
	Dispersions			
UNIT -4 Co-variance, Correlation and Regression	Meaning, definition and Application of covariance, concept of correlation. Rank correlation, regression concept, relationship with correlation, Assumptions in simple Regression, Estimation using Simple Regression: Fitting of straight line, method of least square, construction of characteristic line/estimation line 5 Probability, Probability Distribution	10	VIPUL ,MANAN, RISHABH PUBLICATION	Chalk and Duster Method
Unit 5 Probability, Probability Distribution and decision	Probability, Probability Distribution and decision Theory Concept of probability yen diagrams, Rules of Probality conditional & unconditional probality, Baye theorem. Discrete and continuous variable. Expected value of the variable, Decision theory normal distribution	10	VIPUL ,MANAN, RISHABH PUBLICATION	Chalk and Duster Method
Unit-6 Index Nos.	Concept and usage of index nos. Construction of index nos. Types of index nos. Aggregate and Relative method of constructing index nos. Chain base index nos. Test of consistency: Time reversal factor reversal and circular test . Quantity and Value index nos for agricultural, industrial production, Retail Prices, Consumer price index nos. for security prices, etc.	06	VIPUL ,MANAN, RISHABH PUBLICATION	Chalk and Duster Method
UNIT 7 Insurance	Insurance Meaning, Objective, Purpose and need for Insurance. Fundamentals of Insurance Calculation of age, Premiums, Bonuses, Paid up value of a policy, Maturity Value of the Policy. Claim Calculation and Surrender Value.	06	VIPUL ,MANAN, RISHABH PUBLICATION	Chalk and Duster Method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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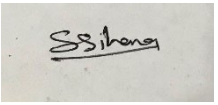
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS SEEMA SIHANA **DEPARTMENT**: COMMERCE (COMMERCE) **CLASS:** FY IMG **SUBJECT –** BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** SEPTEMBER **ACADEMIC YEAR:**2018-19

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
2) Obstacles to Communication in Business World	**1) Problems in Communication /Barriers to Communication:** Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers 2) **Listening:** Importance of Listening Skills, Cultivating good Listening Skills – **3) Introduction to Business Ethics:** Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility Teachers can adopt a case study approach and address issues such as the following so as to orient and sensitize the student community to actual business practices: Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour	15	Textbook of Manan Publication	Chalk & Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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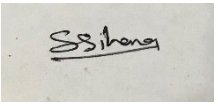
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: MS SEEMA SIHANA **DEPARTMENT**: COMMERCE (COMMERCE) **CLASS:** FY IMG **SUBJECT –** BUSINESS COMMUNICATION **SEMESTER:** I **MONTH:** OCTOBER **ACADEMIC YEAR:**2018-19

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
3) Business Correspondence	**1)Theory of Business Letter Writing:** Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing, Personnel Correspondence: Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation [Letter of Appointment, Promotion and Termination, Letter of Recommendation (to be taught but not to be tested in the examination)]	15	Textbook of Manan Publication	Chalk & Blackboard
4) Language and Writing Skills	Commercial Terms used in Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc Cohesion and Coherence, self-editing, etc [Interpretation of technical data, Composition on a given situation, a short informal report etc.] Activities Listening Comprehension Remedial Teaching Speaking Skills: Presenting a News Item, Dialogue and Speeches Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling. Reading Comprehension: Analysis of texts from the fields of Commerce and Management	15	Textbook of Manan Publication	Chalk & Blackboard

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 30



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TEACHING PLAN (UNIT PLAN)

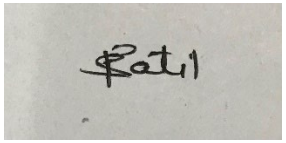
NAME OF THE STAFF: SAYALI PATIL SUBJECT: Basic of Investment & Wealth Creation (BIWC) DEPARTMENT: Commerce (SFC)

CLASS:FYBIM SEMESTER:I MONTH:aug-dec ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I TO IV GENERAL PRINCIPLES OF INVESTING	Introduction to investments – saving , investing , speculation , interest rate , compound interest rate	03	Basic of Investment & Wealth Creation by Kevin D.Peterson	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Investment objectives – SMART GOALs	03		
	Asset classes available for investments	03		
	Debt management ,personal financial statement analysis	03		
	Forms of business ownership	03		

TOTAL NUMBER OF LECTURES ALLOCATED PER UNIT : 15



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TEACHING PLAN (UNIT PLAN)

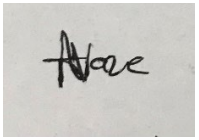
NAME OF THE STAFF: AMOL VAZE SUBJECT:FIN. ACCOUNTING DEPARTMENT: Commerce (SFC)

CLASS:FYBIM SEMESTER:I MONTH: aug -dec ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, II Income and expenditure, revenue and capital Unit III,IV Hire purchase	Income and expenditure, revenue and capital problems, Features, bank reconciliation statement, AS Journals entry, ledger, problems	60	**Vipul prakashan**	Chalk & Board, Discussion

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

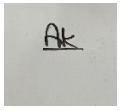
NAME OF THE STAFF: AMBUJAM KURUP SUBJECT: INDIAN FINANCIAL SYSTEM (IFS) DEPARTMENT: Commerce (SFC)

CLASS:FYBIM SEMESTER:I MONTH: aug -dec ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
FINANCIAL INSTITUTIONS AND FINANCIAL SERVICES & FINANCIAL REGULATORS AND FINANCIAL INSTRUMENTS	Financial institutions - Kinds of financial institutions ,features , functions , role , size , structure , participants & importance of each kind of institute .	15	INDIAN FINANCIAL SYSTEM by M.Y.Khan	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Financial services – role, function , types of financial services , a table showing the institution and services offered .	15		
	Financial regulators –features , role , functions , types . A table showing the various regulators , the markets they regulate .	15		
	Financial instruments – classification ,types , features New financial instruments .	15		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNITS : 60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:VISHWANATH PAWAR DEPARTMENT: COMMERCE CLASS:. FYIMG SEMESTER: II

MONTH: DEC - MAR ACADEMIC YEAR : 2018-19 SUB: ACCOUNTING -II

LEARNING OBJECTIVE/S:
The learners will be able to : understand the financial problems related to investors, cooperations, and the communication between investors and companies in the capital markets.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1.Investment Accounting w.r.t AS 13	For shares (variable income bearing securities) For debenture bonds etc. (fixed income bearing securities) Accounting for transactions of purchase and sales of investments with ex and cum interest prices and finding cost of investment sold and carrying cost as per weighted average method Columnar format for investment account Illustration 1 to 6	15	Manan Prakashan	Chalk & Duster
2. Foreign currency transactions vide AS 11	Accounting for translation of foreign currency transactions vide AS 11 (excluding foreign branches and forward exchange contracts and hedging contracts) "In relation to purchase and sale of goods, services and assets and loan and credit transactions." Computation and treatment of exchange differences Illustration 1 to 6	15	Manan Prakashan	Chalk & Duster

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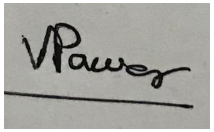
3. Accounts of Non–Trading Institutions & Service Industries				
	meaning of Non profit Organization , Features Difference between Profit and Non Profit organization Tpyes of receipts and payments Steps in preparation of income and expenditure account format Illustration 1 to 6	15	board of Maharashtra	Chalk & Duster
4.Issue of Shares and Debentures, Redemption of Preference sharee	Company Provisions for issue of share and debentures Journal entries. Company Law / Legal Provisions for redemption of preference shares in Companies Act ii. Sources of redemption including divisible profits and proceeds of fresh issue of shares iii. Premium on redemption from security premium and profits of company iv. Capital Redemption Reserve Account - creation and use Illustration 1 to 6	15	Vipul prakashann	Chalk & Duster

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **MR. ABHISHEK MADHYE**_____DEPARTMENT:__**COMMERCE**__

CLASS __**F.Y.B.I.M**_____ SEMESTER:_**II**_____**MONTH**: DECEMBER - APRIL 2023 ACADEMIC YEAR: __**2018-19**_____

LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Introduction to Financial Markets	**Module I- An Introduction to the Financial Markets** **Overview of Financial Markets, Structure of Financial Markets, (Multiple ways to classify market functions)** **Capital formation process through markets.**	**5**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**
	Module II- Capital Markets and Money Markets	**10**	**Text book and Internet**	
	Capital Markets:- Meaning, classification and structure, various sub-segments of the market, Role played by the capital market, capital market instruments, participants in these markets, various capital market regulators, advantages and drawbacks. **Money Markets:- Meaning, classification and structure, various sub-markets of the market, Role played by the money market, money market instruments, participants in these markets, various money market regulators, advantages and drawbacks.**			**1 Chalk and Black Board Method** **2 Example** **3 Discussion**

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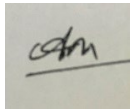
	Module III- Foreign Exchange Markets, Commodity Markets and Derivatives Markets **Foreign Exchange Markets:- Meaning, classification and structure, role played by the foreign exchange markets, foreign exchange market instruments, participants in these markets, various foreign exchange market regulators, advantages and drawbacks, the link between exchange rates, forex markets and the currency reserves of a country.** **Commodity Markets:- Meaning, classification and structure, functions of the commodity market, Debate or commodity market as a financial market, structure and working of the market, regulation of the market, advantages and drawbacks.** **Derivative Markets:- Meaning, classification and structure, functions of the derivative markets, evolution of the derivative market, structure and the working of the market, regulation of the market, advantages and drawbacks.**	**10**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**
	Module IV- Market Exchanges and Market Regulators **Market Exchanges:- Types of exchanges, role played by exchanges, NSE, BSE, MEX, OTCEI.** **Market Regulators:- SEBI**	**10**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**



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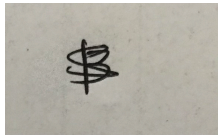
TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SOBOURNA BANARJEE** DEPARTMENT: **COMMERCE**

CLASS **F.Y.B.I.M** SEMESTER: **II** **MONTH**: DECEMBER - APRIL 2023 ACADEMIC YEAR: **2018-19**

LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUB TOPICS	NO. OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Presentation skills OHP Transparencies Language and Writing Skills Reports Summarisation	**15**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**
	Group Communication InterviewMeetings Conference Public Relations REFERENCE BOOK	**15**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**
	Business Correspondence Trade letters and others important letters like Inquiry,complaint's,claims,sales,leaflets,fliers,consumer grievance and RTI letters	**15**	**Text book and Internet**	**1 Chalk and Black Board Method** **2 Example** **3 Discussion**



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Name of the staff : FINI CHERIYAN

Department : COMMERCE

Class : FYBIM

Semester : II

Academic Year : 2018-19

UNIT	TOPIC	NO.OF LECTURES ALLOTTED	REFERENCE	TEACHING METHOD
1. Globalisation & Indian Society	Concepts of Globalisation, Privatisation, Liberalisation, Growth of IT & Communication etc.	9	Text Book	Board & Chalk
2. Human Rights	Concept of Human Rights, Evolution, Universal Declaration of Human Rights etc.	9	Text Book	Board & Chalk

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3. Ecology	Concept of Environment & Ecology, Importance of EVS, Environmental Degradation etc.	9	Text Book	Board & Chalk
4. Understanding Stress & Conflict	Meaning & Causes of Stress, Meaning & Causes of Conflicts, Significance of Values, Ethics & Prejudices in developing the Individual etc.	9	Text Book	Board & Chalk
5. Managing Stress & Conflicts in Contemporary Society	Types of Conflicts, Coping with Stress, Maslow's Theory etc.	9	Text Book	Board & Chalk

Total Lectures allotted - 45

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TEACH.ING PLAN (UNIT PLAN)

NAME OF THE STAFF: NIKITA JOGLE DEPARTMENT: COMMERCE CLASS: FYBIM SEMESTER: II (FIN.INT.) MONTH: DECEMBER-FEBRUARY ACADEMIC YEAR: 2018-19 LEARNING OBJECTIVE/S: TO MAKE STUDENTS AWARE ABOUT FINANCIAL SYSTEM.
The learners will be able to: FINANCIAL SYSTEM AND THEIR BENEFIT

PAPER, UNIT, TITLE	SUBTOPICS		NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I, II, III & IV	**1. Basics of Financial Intermediaries** Definition of Financial System Meaning of Financial Intermediaries Need for financial intermediation in the Financial System Role and functions of Financial Intermediaries Benefits of Financial intermediaries (w.r. t economies of Scale) Implication of financial intermediation (effect on economic development. Hirshliefer Model) Registration of Financial Intermediaries Taxonomy of Financial Intermediaries.		15	VIPUL PRAKASHAN (IFS), INTERNET	1. CHALK & BLACK BOARD METHOD 2. INTERACTIVE METHOD,
	Taxonomy of Financial Taxonomy of Financial Intermediaries Banks, Credit Unions, Financial Advisors and Brokers, Insurance Companies, Investment Schemes and Mutual Funds Pension funds, Non		15	VIPUL PRAKASHAN (IFS), INTERNET	1. CHALK & BLACK BOARD METHOD 2. INTERACTIVE METHOD

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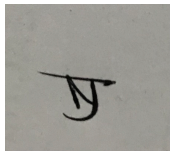
	Banking Financial Companies Financial Institution IDFC, ILFS, PFC, NABARD, SIDB) Credit Rating Agencies-Role and Importance				
	3.Theories and Management of Financial Intermediation Theories of Financial Intermediation Transaction costs Liquidity insurance Information asymmetry, Management of Financial Intermediaries and Issues pertaining to Performance measurement ALM for liquidity risk • Credit Risk Interest Rate Risks Regulation of DMAT		15	VIPUL PRAKASHAN, (IFS) INTERNET	1. CHALK & BLACK BOARD METHOD 2. INTERACTIVE METHOD
	4.Future Trend Financial intermediaries-Global Perspective Future and Challenges in Financial Intermediaries		10	VIPUL PRAKASHAN (IFS), INTERNET	1. CHALK & BLACK BOARD METHOD 2. INTERACTIVE METHOD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 55



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SAYALI PATIL SUBJECT: INTRODUCTION TO WEALTH MGMT DEPARTMENT: SFC

CLASS: FYBIM SEMESTER: II MONTH: DECEMBER- MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1: Overview of Wealth management	1.**Introduction to Wealth management-**Definition of Wealth management; understanding wealth management; wealth management process; phases in wealth management process; wealth management market in India	4	Wealth Management- TYBMS- Rishab Publication/Internet	• Chalk • Board • Discussion • Examples • Google Classroom
	2.**Holistic Planning Framework-**Sources of wealth; human Capital; Financial Capital; Financial Life Cycle; Working Life – Pre-family independence; Family; Pre-retirement; Retirement – Active retirement; Passive Retirement; Elderly Care; Retirement related risk – risk identification; Market Risk, Asset Allocation Risk, Interest Rate Risk, Inflation Risk, Health/liquidity risk, Longevity Risk	4		
	3.**The Financial Planning process-**Establish and define the relationship with the client; Personal Fact Finding; Analyze Client's financial status, Risk profile and determine financial goals; Develop financial planning recommendation and present it to client; Implement client's financial planning recommendations; Monitor and review the client's situation	4		
	4.**Asset Classes-** Debt as an asset class; Role of debt in wealth management; risk of investing in debt securities; Equity as an asset class – investing in stks	3		
Unit 3:	1.Employee Benefits and Superannuation Benefits-Employee Benefits – Salary and Bonus; Reimbursement of expenses; Health Benefits; Group	4		

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Retirement Planning	Insurance; LTA, TA, Concessional Loans; Defined Benefit Plans and Limitations – Characteristics of DB Plans, Types of Defined Benefit Plans, their Features, Applicability and withdrawal norms, Taxability; Defined Contribution Plans and Limitations – Characteristics of DC Plans, Types of Defined contribution Plans, their features, Applicability. And withdrawal norms, taxability; Superannuation benefits and schemes –Trust Funds, Private Fund Managers, and Insurance Companies, Benefits - on retirement, Voluntary retirement and Death			
	2.Retirement Needs and Factors in retirement Planning-Introduction to retirement planning - Significance of retirement planning; Purpose and need of retirement planning; Role of Wealth planner in retirement planning; Importance of starting early; Analysis of Client's Life Cycle – Early earning stage and established earning stage; stability and visibility of earnings; Accumulation and Distribution phase; Life Expectancy Vs. Retirement age; Early Vs. Delayed retirement; Risk of living longer than expected; Factors considered in retirement planning – Nature of Income; salaried, bonus and self-employed; standard of living; time horizon; inflation in accumulation and distribution phase; profile of assets sustainable till retirement; income generating potential of fixed assets; liquidity aspects of fixed and other assets; Profile of financial and other liabilities nearing retirement; Analysis of client's retirement needs – Estimating household expenses on retirement; Corpus estimated to meet post retirement needs; Alternate arrangements for supplementing retirement corpus; cost of escalation of medical expenses in post-retirement; charitable activities and social work	4		
	3.Retirement Planning Process	3	Wealth Management- TYBMS- Rishab Publication/Internet	• Chalk • Board • Discussion • Examples Google Classroom

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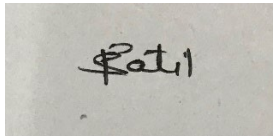
	4.Income Streams during Retirement – Employer Provided superannuation plans; Provident Fund; Public Provident Fund; Small Savings Schemes; NPS; Pension Plans from MF's and Insurance Companies; Reverse Mortgage to supplement post retirement expenses.	4		
	3.Retirement Planning Process	3		
	4.Income Streams during Retirement – Employer Provided superannuation plans; Provident Fund; Public Provident Fund; Small Savings Schemes; NPS; Pension Plans from MF's and Insurance Companies; Reverse Mortgage to supplement post retirement expenses.	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2 & 4: 16



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SAYALI PATIL SUBJECT: INTRODUCTION TO WEALTH MGMT DEPARTMENT: ACCOUNTANCY

CLASS: FYBIM SEMESTER: II MONTH: DECEMBER- MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 Role of Insurance in Wealth Management	Assessment and identification of Risk Cover – Gathering data on current Life Insurance Cover; Identifying clients life insurance needs	18	Wealth Management- TYBMS- Rishab Publication/Internet	• Chalk • Board • Discussion • Examples • Google classroom
	Analysis of Life Insurance Needs – Economic Value of human life; Replacement of the future income of the insured; Replacement of the expenses and financial liabilities of the insured; provision in the life cover of certain financial goals and financial liabilities; Review of coverage for changes in income, assets and financial liabilities			
	Types of Life Insurance Policies - Term Insurance; Whole Life Insurance: Endowment Policy; Investment Linked Insurance (ULIP); Insurance Linked annuities; Life insurance Policy riders Calculation of Claim amount and other benefits – Types of Bonus; Maturity Claim; Death Claim; Surrender Value; Return on Savings Component; Taxation aspect of various insurance Policies			
	Health Insurance and Accident Insurance – Individual vs. Family floater Policy; Critical Illness policy; Group health Insurance; Personal and group accident Insurance; Personal Disability Insurance – Permanent and Temporary, Partial and Total; Scope of benefits – long term and short term disability			
	Property and Liability Insurance – basis of property cover – Reinstatement, Book or Market Value; Insuring House, Household items, business unit, plant and			

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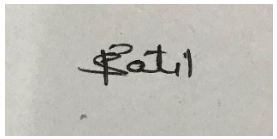
	machinery; personal Umbrella Policy; miscellaneous oversees travel insurance; Motor Insurance – Comprehensive and Mandatory Third party coverage; No claim Bonus and claims			
	Professional Indemnity Insurance; Keyman Insurance; Marine Insurance, Cargo and Hull Insurance; Inland Transit Insurance			
	Insurance Regulatory and Development Authority (IRDA)Act-1999; TheInsuranceAct-1938; PublicLiabilityInsuranceAct-1991; MotorVehicleAct-1988 EmployeeStateInsuranceAct-1948			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 2: 18



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TEACHING PLAN (UNIT PLAN)

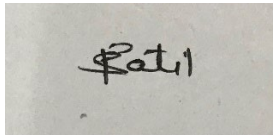
NAME OF THE STAFF: Ms. SAYALI PATIL SUBJECT: INTRODUCTION TO WEALTH MGMT DEPARTMENT: ACCOUNTANCY

CLASS: FYBIM SEMESTER: II MONTH: DECEMBER- MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Understand the Concepts well and relate to practical knowledge.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 4 **Estate Planning**	**Estate Planning Overview**– The concept of Estate Planning; Purpose and Need of Estate Planning; Risks and Drawbacks involved in Estate Planning; Hindu and Indian Succession Act; Succession-Testate and Intestate	15	Wealth Management- TYBMS- Rishab Publication/Internet	• Chalk • Board • Discussion • Examples • Google classroom
	Planning Process – Collect comprehensive information and examine circumstances to set Estate planning goals; Determine value of client's estate and liquidity aspects; Estimate cost of transfer and other expenses; Develop a plan of transfer; Implement plan and review periodically			
	Methods of Estate Planning - Will; Trust; Insurance; Gift; Power of Attorney; Transfer of property and partition			
	Will –Characteristics and Contents of a Will; Types of Will-Unprivileged, Privileged, Joint, Mutual and Conditional; Legal requirements and Testamentary capacity; Modifying or revoking Will; Probate Process			
	Powers of Attorney – Use and purpose; Types-General and Special; Revocation; Role of the executor			
	Trust - Classification of Trust – Revocable and Irrevocable			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 4: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHAL DESHMUKH DEPARTMENT:

CLASS: FYBIM SEMESTER: II MONTH: Jan-Mar COMMERCE ACADEMIC

LEARNING OBJECTIVE/S: YEAR: 2018-19

The learners will be able to : Creating, Evaluating, Analyzing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED		REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Investment Banking, Unit 1: Introduction of Investment Bank Investment Banking, Unit 2: Concepts of Investment Banking	Investment its meaning and scope, types of asset classes, asset allocation, creating portfolio and process of portfolio management	15 lec			Chalk and Board, Google Classroom

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Investment Banking, Unit 3: Risk and Return	Unit 3: Risk and Return Risk and return concepts, types of risk and its application, ASBA, IPO and FPO, SEBI disclosures and other regulators.	5 lec			Chalk and Board, Google Classroom
Investment Banking,	Unit 4: Investment Banking Activities Industry analysis,	6 lec			Chalk and Board, Google Classroom

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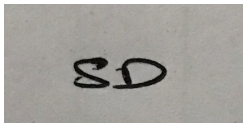
Unit 4: Investment Banking Activities	role of IPO in value unlocking, recent trends and developments, investments banking activities				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _45_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. AMITA PATIL SUBJECT: COST ACCOUNTING DEPARTMENT: ACCOUNTANCY

CLASS: SYBIM SEMESTER: III MONTH: JUNE – JULY- AUGUST ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 **UNIT COSTING & RECONCILIATION OF COST & FINANCIAL ACCOUNTS**	Introduction to Costing – Characteristics, objectives, importance, advantages of cost, costing and cost accounting.	2	COST ACCOUNTING BY SAXENA & VASHIST	● Chalk ● Board ● Discussion ● Examples ● Google classroom
	Methods of costing, techniques of costing, types of cost.	1		
	Classification of cost into – direct, indirect, factory, administrative, selling, fixed, variable and semi variable.	1		
	Classification of costs, Cost of Sales, Cost Centre, Cost Unit, Profit Centre and Investment Centre	1		
	Cost Sheet, Total Costs and Unit Costs, Different Costs for different purpose	1		
	Format of Cost sheet and calculation of per unit	1		
	Practical Illustrations	6		
	Introduction to reconciliation, meaning, cost accounting and financial accounting.	1		

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	Need for reconciliation, rules for reconciliation	1		
	Practical Illustrations	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. AMITA PATIL SUBJECT: COST ACCOUNTING DEPARTMENT: ACCOUNTANCY

CLASS: SYBIM SEMESTER: III MONTH: SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to:

Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3 **MARGINAL COSTING**	Introduction to Marginal Costing, Meaning of Absorption Costing, Difference between Marginal costing and Marginal costing.	1	COST ACCOUNTING BY SAXENA & VASHIST	● Chalk ● Board ● Discussion ● Examples ● Google classroom
	Features, Assumptions, Advantages, Limitations of Marginal costing	1		
	Marginal Cost, Marginal cost equations, P/V ratio, contribution, Break even analysis meaning and graphic presentation, MOS	2		
	Practical illustration	5		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 3: 09

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMOL VAJE DEPARTMENT: COMMERCE CLASS: SYBIM SEMESTER: III MONTH: August to September

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & Remember- the concept of portfolio revision & portfolio evaluation
2) Understand and remember the concept of bond valuation

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 3- Portfolio Management	Portfolio revision	01	Book by Vipul publications/Internet	Google Classroom, Chalk and duster
	Portfolio Evaluation	02	Book by Vipul publications/Internet	Google Classroom, chalk and duster
	Sums on Portfolio Evaluation	04	Book by Vipul publications/Internet	Google Classroom, chalk and duster
Unit 4- Bond Valuation	Bond valuation	02	Book by Vipul publication/Internet	Google classroom, chalk and duster
	Sums on Bond Valuation	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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TEACHING PLAN (UNIT PLAN)

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SHRUTI BASARE DEPARTMENT: COMMERCE CLASS: SYBIM SEMESTER: III MONTH: August to September ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:

The learners will be able to :

1) Understand & Remember- the concept of portfolio management
2) Understand and remember the concept of portfolio analysis and selection by using several methods

Module no/unit no	contents	No of lectures	Reference used	Medium
Unit 1. Portfolio Management – An Introduction	A) Investment- Meaning, Characteristics, Objectives, Investment V/s Speculation, Investment V/s Gambling and Types of Investors B) Portfolio Management – Meaning, Evolution, Phases, Role of Portfolio Managers, Advantages of Portfolio Management. C) Investment Environment- Investment Environment in India and factors conducive for investment in India.	8	Vipul publication	Board,Chalk
Unit 2 .Portfolio Analysis and	A) Portfolio Analysis – Meaning and its Components, Calculation of Expected Return and Risk, Calculation of Covariance, Risk – Return Trade off. B) Portfolio Selection – Meaning,	8	Vipul publication	Board,Chalk

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Selection	Feasible Set of Portfolios, Efficient Set of Portfolios, Selection of Optimal Portfolio, Markowitz Model, Limitations of Markowitz Model, Measuring Security Return and Portfolio Return, Risk under Single Index Model and Multi Index Model.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI CHERIYAN SUBJECT: Foundation course (FC) DEPARTMENT: Commerce (SFC)

CLASS:SYBIM SEMESTER:III MONTH:June-july-aug ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III Fundamental of Investment and it's Avenues	• Fundamentals of Investments- Meaning and definition, Needsand importance of investment, Investment objective, Elements of investment, Investment avenue, Taxes and investments, Place of liquidity in investment decisions, Importance of Investment management	05	Google, Derivative markets (SYBFM) Book, Equity Markets (SYBFM) -old publication	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	• Sources and Avenue of Investments- Bank products, Bank and credit union, Bonds, stocks, Investment funds, Annuities, Featured of Equity share & Preference share, Feature of Debenture,	04		
	Valuation of Equity share and it's technique, Valuations of Debenture and it's Techniques, Valuations of bullion gold and silver, characteristics and important features of investment in bullion, Bullion market and it's operation,	04		
	Factors influencing demand and supply of bullion, Gold, ETF, Linksge with foreign exchange & currency.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI CHERIYAN SUBJECT: Foundation Course (FC) DEPARTMENT: Commerce (SFC)

CLASS:SYBIM SEMESTER:III MONTH: sep-oct ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV Financial literacy & Individual Investing	• Introduction to Financit literacy:- Meaning, Needs & Importance of financial literacy, components of financial literacy	04	Introduction to Financial literacy	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Individual economic system, personal finance planning, RBI initiative in financial literacy.	03		
	• Individual Investing:- Getting ready to invest- saving verse investment- Getting started - discipline & planning are key - Define your goal and investment	04		

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	time frame - Decide if you need income growth or both			
	Understand the risk - Diversify to minimize risk - Recognize the importance of cost and tax	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMOL VAJE / MEGHA NAIK DEPARTMENT: COMMERCE

CLASS: SYBIM SEMESTER: III MONTH: July-Oct ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Management, Unit 1 & 2 **Introduction of Finance and Financial Management**	**Introduction of Finance and Financial Management** **A) Introduction to Finance** ● Meaning and definition of finance ● Importance of finance ● Types of Finance: Public and Private ● Sources of finance Long term Sources : Term Loans, Debentures, Bonds, Zero Coupon bonds, Convertible Bonds, Equity shares, Preference shares, CD, CP, Public Deposits Short Term sources**:** Bank Finance, Trade Credit ,Other Short Term Sources Venture Capital and Hybrid Financing B) Financial Management ● Meaning and Importance of Financial Management ● Scope of Financial Management	10 lec	Vipul Prakashan SYBBI sem III	Chalk and Board, Google Classroom

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	● Functions and Objectives of Financial Management ● Primary Objective of Corporate Management ● Agency Problem ● Organization of Finance Function Emerging role of Finance Managers in India C) Objectives of the Firm ● Profit Maximization and Shareholders Wealth Maximization ● Profit V/s Value Maximization			
Financial Management, Unit 3 & 4 **Investment Decisions**	**Investment Decisions**: **Capital Budgeting** **A) Capital Budgeting** ● Nature of Capital Budgeting ● Purpose of Capital Budgeting ● Capital Budgeting Process ● Types of Capital Investment ● Basic Principle of Measuring Project Cash Flows ● Increment Principle, Long Term Funds Principle, Exclusion of Financial Cost Principle, Post Tax Principle ● Probability technique for measurement of cash flow ● Capital Budgeting Techniques: Net Present Value Profitability Index and Discounted Pay Back Method. ● A Comparison; Project Selection Under Capital Rationing	10 lec	Vipul Prakashan SYBBI sem III	Chalk and Board, Google Classroom

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	(Note: Problems on computation of cash flow, ranking of projects on various			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _30_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHAL DESHMUKH SUBJECT: Fundamentals of Capital Markets(FOCM) DEPARTMENT: Commerce (SFC)

CLASS:SYBIM SEMESTER:III MONTH:June-july-aug ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I INTRODUCTION TO CAPITAL MARKET	Overview of Capital market – authorities governing capital market in INDIA , securities market reforms and regularity measures to promote investors confidence	05	CAPITAL MARKET AND INVESTMENT MANAGEMENT BY M.S. KHAN	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Capital market instruments and ratings – equity , debenture , preference shares , nonvoting shares	04		
	Derivatives ,hybrid instruments	03		
	Rating and grading of instruments – concept , scope , factors influencing rating of instruments .	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SNEHAL DESHMUKH SUBJECT: Fundamentals of Capital Markets (FOCM) DEPARTMENT: Commerce (SFC)

CLASS:SYBIM SEMESTER:III MONTH: sep-oct ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT IV RESOURCE MOBILISATION IN INTERNATIONAL MARKET	Introduction to Global Finance – depository receipt , ADR & GDR , pricing of securities , two way fungibility scheme	04	CAPITAL MARKET AND INVESTMENT MANAGEMENT BY M.S. KHAN	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
	Provisions of companies act 2013 , issues relating to GDRs , procedure of issuance of GDR/FCCBs	03		
	Foreign Currency Exchangeable Bonds – FCCB & FCEB , issue of FCEB 2008 scheme	04		
	FCCB & ordinary shares scheme 1993 , external commercial borrowings – forms & features	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VARADA KATLE **SUBJECT** : FOCM

DEPARTMENT: COMMERCE (SFC) CLASS: S.Y.BIM SEMESTER: III MONTH: AUGUST- NOVEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 2 & 4 MARKET INFRASTRUCTURE FOR CAPITAL MARKET	Introduction To Stock Exchange: Functions and Significance, Operations and Trading Mechanism of Stock Exchanges, Types of Delivery, Margins, Margin Trading, Book Closure and Record Date, Trading and Partly Paid Shares and Debentures, Trend Line, Trading Volume, Turnover and Outstanding Position, Market Making, Short Selling, Securities Lending and Borrowing, Straight Through Processing and Direct Market Access (DMA)	20		• Chart • Diagram • Discussion • Chalk • Board • Examples

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____20_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. VAIKHARI PATIL DEPARTMENT: Commerce (COMMERCE) CLASS: S.Y.B.I.M

SEMESTER: III MONTH: July - October ACADEMIC YEAR: 2018-19 SUBJECT: I.T in Investment Management- I

LEARNING OBJECTIVE/S:
The learners will be able to: To gain the knowledge of E-Commerce, MIS, ERP, CRM, and Different types of E-Payment, MS Word and MS Excel.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - I E-Commerce	A) Introduction to Electronic Commerce :- E-Commerce Framework, E-Commerce and media convergence, Anatomy of E-Commerce Applications, E-Commerce Consumer and Organization Applications.	04	E- Commerce -By Marriappa M. and www.wikipedia.com	Board , Chalk and Duster
	B) The network Infrastructure for Electronic Commerce: - Market forces influencing the I-way, Components of I-way, Network Access Equipment.	02		
	C) E-Commerce and World Wide Web: - Architectural framework of E-Commerce, WWW and its architecture, hypertext publishing, Technology behind the web, Security and the Web.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 10

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - II Support Systems	A) Management Information System (MIS) :- Definition of MIS, Role and Impact of MIS, MIS and Users, MIS as a Control System, MIS –a support to the Management, Management Effectiveness and MIS, Organization as a System, MIS: Organization Effectiveness.	06	Management Information System- by Waman Jawadekar and www.wikipedia.com	Board , Chalk and Duster
	B) Enterprise Resource Planning(ERP) :- Definition of ERP, Need of ERP, History of ERP, Benefits of ERP, ERP applications and Emerging trends, ERP –A Subset of Enterprise Applications.	05		
	C) E-CRM: - Customer Relationship Management, Typical Business Touch points, Orbits.	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - III E-Payments	A) An overview, B2C payments, B2B payments.	04	Board of Studies in Banking& Finance, University of Mumbai and www.wikipedia.com	Board , Chalk and Duster
	B) Types of E- payment system – Credit card payment, debit cards, accumulating balance, online stored value payment systems, digital cash, digital (electronic) wallets, agile wallet, smart cards and digital cheques, plastic money.	09		
	C) Secure Electronic Transaction (SET) Protocol.	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT - IV MS-Office: Packages for Institutional Automation	A) Ms-Word: Usage of smart art tools, bookmark, cross-reference, hyperlink, mail merge utility and converting word as PDF files.	03	Microsoft Office Professional 2013 - By Beth Melton www.wikipedia.com	Board , Chalk, Duster and Computer(MS-Word & MS-Excel Software)
	B) Ms-Excel: Manipulating data, Working with charts, Working with PIVOT table and what-if analysis.	02		
	C) Advanced excel functions-Vlookup(), hlookup(),pv(),fv(), pvschedule(),goal seek(), confidence(),AVERAGE(), averagea(),averageif(), averageifs(),MIN(), MAX(), COUNT(),COUNTA(), countif(), countifs(), ROUND(), INT(), avedev().	06		
	D) Nested functions, name,cells/ranges/constants, relative, absolute & mixed cell reA) ferences, >,<,=operators, Logical functions using if, and, or, not, date and time functions & annotating formulae.	06		
	E) Macros: Creating and executing VBA macros embedded in an excel sheet.	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 20

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms. SUREKHA BHARGAV SUBJECT: MUTUAL FUND MANAGEMENT DEPARTMENT: COMMERCE

CLASS:SYBIMSEMESTER: III MONTH:JUNE, JULY ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The learners will be able to : Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 1 & 2 INTRODUCTION TO MUTUAL FUND	History, Origin, Definition, Meaning of Mutual Fund	2	MUTUAL FUNDS by R.K.Mohapatra	● Chalk ● Board ● Discussion ● Examples ● Google classroom ● YouTube videos
	Characteristics, Advantages, Disadvantages of Mutual Fund, Ethics	2		
	Entities involved – Sponsors, Trust, Trustee, AMC, Registrar &Transfer Agent and Fund Houses in India	8		
	Legal Framework, Role of Regulatory agencies – SEBI, RBI, AMFI, Ministry of Finance, SRO, Company Law Board, Registrar of Companies	6		
	Mutual Fund guidelines on advertisement, accounting, taxation, valuation norms, purchase mutual fund, investor protection	8		
	Mutual Fund regulation and grievances mechanism	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 1: 30

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Ms SUREKHA BHARGAV SUBJECT: MUTUAL FUND MANAGEMENT DEPARTMENT: COMMERCE

CLASS: SYBIM SEMESTER: III MONTH: AUGUST, SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The learners will be able to : Understand the Concepts well and relate to practical knowledge

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT 3& 4 FINANCIAL PLANNING AND MUTUAL FUND	A) Basics of Financial Planning – Steps, Life Cycle, Wealth Cycle, risk profiling, asset allocation, contingencies funds	6	MUTUAL FUNDS by R.K.Mohapatra	● Chalk ● Board ● Discussion ● Examples ● Google classroom ● YouTube videos
	B) Investor guides towards Financial planning – Eligibility for investment in mutual fund, KYC, Long bond fund, Short bond fund, Ultra Short bond fund, Need for financial advisors, colour coding mutual fund, difference between advisors and distributor, FD and mutual fund, dividend and growth option	12		
	C) Developing model portfolio for Investors – meaning, step by step approach of building model portfolio	6		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT 4: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FIROZ KHAN DEPARTMENT: COMMERCE CLASS: S.Y.BIM SEMESTER: IV MONTH: January to March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand & Remember- the meaning of salary; section 10, sections 15-17; calculation of income from salary; various allowances (taxable, partly taxable, non-taxable); perquisities; rules and calculation of Gratuity, Pension, Leave encashment.
2) Understand & Remember- the meaning of income from other sources; sections 56-59; calculation of income from other sources.
3) Understand & Remember- the meaning of capital gains; Section 45, 48, 49, 50, 54 and 55, calculation of capital gains.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1 - Definitions Unit 2- Heads of Income	Definitions Residential Status Scope of Income	10	Book by Manan publications/Internet	Chalk & Board
	Salary Income from House Property Capital Gains Business & Profession Other sources	25	Book by Manan publications/Internet	Chalk & Board

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Unit 3 - Deduction under chapter Vl A	80A, 80C, 80CCC, 80D, 80E, 80TTA, 80U	05	Book by Manan publications/Internet	Chalk & Board
Unit 4- Computation of Total Income	Practical Sums on Total Income	05	Book by Manan publications/Internet	Chalk & Board

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VISHAKHA SANE DEPARTMENT: COMMERCE (COMMERCE) CLASS: SYBIM

SEMESTER: III MONTH: NOV-MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVES:
The learners will be able to understand the concept of using macroeconomics for the growth of the economy by developing a core understanding regarding income, expenditure, measurement, and trade cycles, demand and supply of money and levels of inflation for the development of the economy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Business Economics – II Macro Economics Unit: I, II & III IV,V	Unit I: Overview of Macro Economics - Circular flow of income in open an closed economy - Measurement of National Product , Green GNP and NNP - Trade cycle: features and phases - Say's Law of Market	3	H.L.Ahuja Modern Economics	PPT LECTURE VIA GOOGLE MEET, Google classroom, quiz, test, online discussion
	Unit II: Money, Prices and Inflation - Money supply determinants and factors - Demand for money, classical and Keynes approach and also Friedman approach - Money & Prices Fisher and Cambridge equation - Inflation: types, nature, Policy Measures Unit III: Introduction to Public Finance - Meaning, Scope and Major Fiscal Functions	4	D.N.Diwedi Macro Economics	
	UNIT 3; **Public revenue, Public Expenditure and Debt Sources of**	4		PPT LECTURE VIA GOOGLE MEET, Google classroom, quiz, test, online discussion

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	Public Revenue: tax and non-tax revenues Objectives of taxation - Canons of taxation - Types of taxes: direct and indirect - Tax Base and Rates of taxation: proportional, progressive and regressive taxation Shifting of tax burden: **Impact and incidence of taxation** - Processes- factors influencing incidence of taxation Economic Effects of taxation: on Income and Wealth, Consumption, Savings, Investments and Production. Redistributive and Anti – Inflationary nature of taxation and their implications **Public Expenditure**: Canons - classification - economic effects of public spending - on production, consumption, distribution, employment and stabilization – Theories of Public Expenditure: Wagner's Hypothesis and Wiseman Peacock Hypothesis - Causes for Public Expenditure Growth. Significance of Public Expenditure: Social security contributions- Low Income Support and Social Insurance Programmes. **Public Debt** : Classification - Burden of Debt Finance : Internal and External Public Debt and Fiscal Solvency	4	AHUJA .H.L, MODERN ECONOMIC BHATIA H.L PUBLIC GINANCE	
	UNIT 4			

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	Fiscal Management and Financial Administration Fiscal Policy: Meaning, Objectives, constituents and Limitations. Contra cyclical Fiscal Policy and Discretionary Fiscal Policy : **Principles of Sound and Functional Finance Budget**- Meaning objectives and types - Structure of Union budget - Deficit concepts- **Fiscal Responsibility and Budget Management Act.** Intergovernmental Fiscal Relations : fiscal federalism and fiscal decentralization - central-state financial relations – 14th Finance Commission recommendations	5		PPT LECTURE VIA GOOGLE MEET, Google classroom, quiz, test, online discussion

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: FINI CHERIYAN SUBJECT: FOUNDATION COURSE III DEPARTMENT: Commerce (SFC)

CLASS:SYBIM SEMESTER:IV MONTH: December to February ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Imparting an adequate knowledge of the subject matter.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT I- Introduction to Banking Sector	A. Introduction to Banking Sector: Meaning of Banking Companies, Primary and Secondary Functions of Banks, Banking Systems in India, Overview of RBI, Public, Private, Co-operative, Payment Bank and Regional Rural Banks. B. Introduction to Insurance Sector: Meaning of Insurance Companies, Functions, Principles, Types of Insurance Policies and their advantages and Disadvantages. C. Significance and Role of Banking and Insurance in Mobilizing Savings, Investment, Wealth Accumulation and Economic Growth.	10	An overview of Banking and Insurance – Vipul Prakashan	▪ Chalk – Board method ▪ Discussions ▪ Google classroom ▪ YouTube videos
Unit-II Regulatory and Developmental Framework governing	A. Overview of Regulatory Architecture: Banking Regulation Act, 1949, Banking Regulation Act(Amendment),2017, Payment and Settlement Act, 2007, Negotiable Instrument Act, 1881.	10	An overview of Banking and Insurance – Vipul Prakashan	

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Banking and Insurance Sector	B. Overview of Regulatory Architecture relating to Insurance Sector: Introduction to Insurance Act 1938, IRDA Act, 1999 and The Insurance Laws (Amendment) Act, 2015 Developmental activities of RBI and IRDA			
Unit-III Introduction to Life and Health Insurance	A. Life Insurance Business: Components, Human Life Value Approach, Mutuality, Principle of Risk Pooling, Life Insurance Contract, Determinants of Risk Premium. B. Health insurance: Meaning, IRDA Regulations, Determinants of Health Insurance, Health Insurance Market in India and determinants of Risk Premium.	10	An overview of Banking and Insurance – Vipul Prakashan	
Unit-IV Microfinance and Financial Inclusion	A. Microfinance: Introduction, Need and Code of Conduct for Microfinance Institutions in India, Advantages, Purpose, Limitations and Models of SHG- Bank Linkage Program, Role of NABARD and SIDBI, Portfolio Securitization, SHG-2,NRLM and SRLM, Priority Sector ad its Classification. B. Financial Inclusion: Need and Extent, RBI Committee Report of Medium Term Path on Financial Inclusion 2015, World Findex Report 2017, Features and Procedures of Pradhan Mantri Jan Dhan Yojna and PM Mudra Yojna, Features, Procedures and Significance of Stand up India Scheme for Green Field.	15	An overview of Banking and Insurance – Vipul Prakashan	

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 45

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: VARADA KATLE DEPARTMENT: CLASS: F.Y FMG (FC) SEMESTER: IV

COMMERCE MONTH: January - March ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

1) Understand and remember the concept of liberalization, privatization and globalization; information technology and communication and its impact.
2) Understand impact of globalization on industry, employment; impact of migration.
3) Understand changes agrarian sector due to globalization; rise in corporate farming; identify reasons for increase in farmers' suicides.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit 1- INTRODUCTION TO EQUITY MARKET	Meaning and definition of Equity shares, growth of corporate sector and simultaneous growth of equity shareholders, tradeoff between ownership and management	10	Book by Manan publications/Internet	
	In companies. Development equity culture in india		Book by Manan publications/Internet	
			Book by Manan publications/Internet	
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Unit 2- COMPONENTS OF EQUITY MARKET	A) Basics of Primary Market IPO, Book building, Red-Herring Prospectus -it's unique features. Green Shoe option, Sweat equity, ESOP Right issue of shares. Non-voting shares and Role of merchant bankers in fixing the price B) Market For Equity Secondary Markets Definition and functions ofStock Exchanges. Evolution and Growth of Stock Exchanges. Stock Exchanges in India, NSE, BSE, OTCEI and Overseas Stock Exchanges. Recent Development in Stock Exchanges and Stock Market Indices. C) Dealings in Stock Exchanges - Role of Brokers, Stock Market Quotations Procedure for buying & selling shares. BOLT - On Line Trading/ NEAT System, Clearing & Settlement system	20	Book by Manan publications/Internet	Google meet and Google slide
Unit 3: LAW RELATING TO ISSUE OF SHARES	Issue and listing of securities A) Meaning and Definition of equity shares, Growth of corporate sector the simultaneous growth of equity shareholders. Trade-off	15	Book by Manan publications/Internet	Google meet and Google slide
		15		

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Unit 4: EVOLVING ROLE OF EQUITY MARKET	A) Issue and Listing of Securities Listing of Securities, Issue of Capital and Disclosure Requirements (ICDR), Procedure for issue of various types of shares and debentures, Employee Stock Option Scheme and Employee Stock Purchase Scheme, Delisting of Securities. Evolving Role of Equity Market A) Role of Equity Markets in economic development Need for attracting more investors towards equity. Need for strengthening secondary markets, Link between primary Market and secondary market. B) Developments in the indian Equity Market, Channelizing domestic savings & investments, Role of FDI & Foreign Institution Investment, Role of Retail Investors and Role of SEBI in promoting equity markets Board of Studies in Banking & Finance, University of Mu		Book by Manan publications/Internet	Google meet and Google slide

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 60

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:ABHISHEK MADHAYE DEPARTMENT:

CLASS: SYBIM SEMESTER: IV MONTH: Jan-Mar COMMERCE ACADEMIC

LEARNING OBJECTIVE/S: YEAR: 2018-19

The learners will be able to : Creating, Evaluating, Analysing, Applying, Understanding and Remembering

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Financial Management, Unit 1: **Working Capital Management:**	• Management of Working Capital in India. • Estimating Working Capital Needs. • Operating or Working Capital Cycle. • Working Capital Financing: Trade Credit; Bank Credit; Commercial Papers; Certificate of Deposits (CDs); Financing.	6 lec	Vipul Prakashan SYBBI sem IV	Chalk and Board, Google Classroom

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Financial Management, Unit 2: **Management of Components of Working Capital**	Unit 2: **Management of Components of Working Capital:** ● Management of Cash and Marketable Securities: Motives for Holding Cash; Objectives of Cash Management; Factors Determining Cash Needs; Basic Strategies of Cash Management; Cash Management Techniques / Processes; Marketable Securities; and Cash Management Practices in India. ● Receivables Management: Objectives; Credit Policies; Credit Terms; and Collection Policies. ● Inventory Management: Objectives; and Techniques.	6 lec	Vipul Prakashan SYBBI sem IV	Chalk and Board, Google Classroom

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Financial Management, Unit 3: **Financial Planning**	(3) Financial Planning: ● Introduction. ● Meaning and Essentials of Budget. ● Types of Budget. ● Advantages of Budgeting. ● Zero Based Budgeting. ● Master Budget. ● Sales Budget, Production Budget, Material Budget, Cash Budget and Flexible Budget.	7		Chalk and Board, Google Classroom

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Financial Management, Unit 4: **Financial Planning**	(4) Financial Policy and Corporate Strategy: ● Meaning of Strategic Financial Management. ● Strategic Financial Decision Making Framework. ● Functions of Strategic Financial Management. **Business Risk and Financial Risk:** ● Introduction. ● Debt v/s Equity Financing. ● Types of Leverage. ● Investment Objective/Criteria for Individuals/Non-Business Purpose. ● Practical Sums	6		Chalk and Board, Google Classroom

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _25_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: AMOL VAJE/ SHRUTI BASARE DEPARTMENT: COMMERCE CLASS: SYBIM SEMESTER: IV MONTH: JANUARY-MARCH ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to: Students will be able to explored to different avenues of investment, equipped with the knowledge of security analysis, apply the concept of portfolio management for the better investment, invest in less risk & more return securities.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
1. **Fundamental Analysis**	**Economy Analysis:** Meaning, Economic Analysis, Barometric or Indicator Approach, Econometric Model Building & Opportunistic Model Building. **Industry Analysis:** Concept of Analysis, Industry Life Cycle, Industry Characteristics. **Company Analysis:** Financial Statements, Analysis of Financial Statements Practical Questions on – Debt Equity Ratios,Totall Debt Equity Ratio, Proprietory Ratios, Interest Coverage Ratio, Profitability Ratios related to Sales, Investment & Equity Shares Efficiency or Activity Ratios. Assessment Risk.	09	Vipul Prakashan	Chalk & Duster, Group Discussion

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2. Technical Analysis	Dow Theory Meaning and Principles of Technical Analysis, Price Chart, Line Chart, Bar Chart, Japanese Candlestick Chart, Trends & Trend Reversals, Chart Patterns, Support & Resistance, Reversal Patterns, Continuation Patterns & Elliot Wave Theory. **Mathematical Indicators:** Calculation of moving averages, Oscillators & Relative strength index. Market Indicators Fundamental Analysis v/s Technical Analysis	04		
3. Efficient Market Theory	A) Random Walk Theory B) The Efficient Market Hypothesis C) Forms of Market Efficiency D) Competitive Market Hypothesis	05	Vipul Prakashan	
4. Capital Asset Pricing Model	A) CAPM- Fundamental Notions of Portfolio Theory, Assumptions of CAPM, Efficient Frontier with Riskless Lending & Borrowing, Capital Market Line, Security Market Line & Pricing of Securities with CAPM. B) Arbitrage Pricing Theory (APT)- The Return generating model, factors affecting stock return, Expected return on stock, APT V/s CAPM.	06		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 24

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUHRI KINI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V MONTH:

JULY - OCTOBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: INTRODUCE CONCEPT OF VACCINES ,IMMUNOPATHOLOGY AND ITS PERSPECTIVE IN ORGAN TRANSPLANTATION

The learners will be able to : DEVELOP BASIC UNDERSTANDING OF IMMUNOLOGY AND ITS PRACTICAL APPLICATION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT IV- APPLIED IMMUNOLOGY	ANTIGEN ANTIBODY REACTION	05	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	ONLINE LECTURE
	VACCINES AND VACCINATIONS	05	KUBY IMMUNOLOGY	PRESENTATION
	TRANSPLANTATION IMMUNOLOGY	05		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY CLASS:S.Y.B.Sc SEMESTER: V MONTH:

JULY - OCTOBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: TO FAMILIARIZE CELLULAR ARCHITECTURE AND ITS IMPORTANCE OF TISSUE TO VITAL ORGAN
The learners will be able to : APPRECIATE WELL ORGANIZED TISSUE AND CELL SYSTEM IN BODY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

PAPER III UNIT I	VERTICAL SECTION OF SKIN	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES

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MAMMALIAN HISTOLOGY	V.S OF TOOTH	02	TEXTBOOK OF HISTOLOGY GARTNER ,LESLIE	PRESENTATION
	T.S OF TOUNGE	02		
	T.S OF ALIMENTARY CANAL	05		
	T.S OF ASSOCIATED DIGESTIVE GLANDS	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: VI MONTH: DECEMBER - APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: TO INTRODUCE CONCEPT OF HOMEOSTASIS – THERMOREGULATION AND OSMOREGULATION. The learners will be able to : SHALL COMPREHENDTHE ADAPTIVE RESPONSES OF ANIMALS TO ENVIRONMENTAL CHANGES FOR SURVIVAL.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II HOMEOSTASIS	HOMEOSTASIS	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES

	THERMOREGULATION	05		PRESENTATION
	OSMOTIC AND IONIC REGULATION	05		
		03		
		T03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: VI

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

MONTH: DECEMBER – APRIL ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: TO INTRODUCE LEARNER TO CHEMICAL AND MOLECULAR PROCESSES THAT AFFECT GENETIC MATERIAL
The learners will be able to : RECOGNIZE SIGNIFICANCE OF MOLECULAR BIOLOGY AND DNA REPAIR MECHANISM.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT I MOLECULAR BIOLOGY	TYPES OF MUTATION	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES
	INDUCED MUTATION	04		PRESENTATION
	DNA REPAIR MECHANISM	03		
	EUKARYOTIC GENE EXPRESSION	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: **ZOOLOGY**
CLASS: **S.Y.B.Sc (ZOOLOGY)** SEMESTER: **III** MONTH: **JULY - OCTOBER** ACADEMIC YEAR: **2022-2023 LEARNING OBJECTIVE/S**: INTRODUCE CLASSICAL EXPERIMENT FOR PROVING DNA AS A GENETIC MATERIAL AND STRUCTURES OF NUCLEIC ACIDS ALONGWITH CENTAL DOGMA THEORY
The learners will be able to : IMPORTANCE OF NUCLEIC ACID AND APPRECIATE GENE REGULATION ACTIVITY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I, U-III, NUCLEIC ACIDS	GENETIC MATERIAL	7	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES GENETICS - GARDNER	POWERPOINT PRESENTATION /ONLINE LECTURES
	FLOW OF GENETIC INFORMATION IN EUKARYOTIC CELL	5		
	GENE EXPRESSION AND REGULATION	3		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY CLASS: S.Y,BSc. SEMESTER: IV MONTH: DEC-FEB
ACADEMIC YEAR: 2022-2023 LEARNING OBJECTIVE/S: STUDY STRUCTURAL AND FUNCTIONAL ORGANIZATION OF CELL
The learners will be able to : ACQUIRE INSIGHT OF TRANSPORT MECHANISM FOR COMPOSITION AND MAINTAINANCE OF CELL.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II -.U.I	INTRODUCTION TO CELL BIOLOGY	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE

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CELL BIOLOGY			ZOOLOGY	LECTURES
	NUCLEUS	5		
	PLASMA MEMBRANE	4		
	TRANSPORT ACROSS MEMBRANE	2		
	CYTOSKELETAL STRUCTURE	2		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY CLASS: T.Y.BSc. SEMESTER:V

MONTH: _JUNE-SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: Learners will get insights of diagnostic techniques.
The learners will be able to : ___Understand various techniques involved in blood analysis and pathology studies. ___

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Hematology	Scope of Applied Hematology	1	University textbook. Textbook of Pathology by Godkar	Chalk and Board and PPT
	Microscopic examination of blood: Blood cancer, Infectious disease and Haemoglobinopathies	4		Chalk and Board and PPT
	Coagulopathies	2		Chalk and Board and PPT
	Biochemical examination: liver functions, Kidney functions, Carbohydrate metabolism amd Hormone analysis.	8		Chalk and Board and PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY CLASS: T.Y.BSc. SEMESTER: V

MONTH: _JUNE-SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will be learning the pathophysiology od various diseases.
The learners will be able to : The learners will be able to understand the root cause of any disease and its precautionary measures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
General Pathology	Introduction	1	University textbook and Textbook on Pathology	Chalk and Board and PPT
	Cell Injury	3		Chalk and Board and PPT
	Retrogressive changes	3		Chalk and Board and PPT
	Disorders of Pigmentation	3		Chalk and Board and PPT
	Necrosis	3		Chalk and Board and PPT Chalk and Board and PPT

	Gangrene	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY CLASS: F.Y.BSc. SEMESTER: II

MONTH: JANUARY- APRIL ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will study the impact of stress and infectious disease.
The learners will be able to : The learners will be able to understand stress related problem and develop a strong mind set. They will understand the causes of infectious diseases and its precautionary measures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
	Stress related disorder: Diabeters, BP, Anxiety, Insomania	6	University Textbook	Chalk and Board and PPT

Common	Communicable and Non-Communicable disorders: TB, Typhoid, Hepatitis A and B, AIDS, Gonorreah, Asthama, Bronchitis, Oral Cancer.	9	Textbook on Pathology	Chalk and Board and PPT
Diseases				

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY CLASS: S.Y.BSC. SEMESTER: IV MONTH: _NOVEMBER-MARCH ACADEMIC YEAR:2022-23

LEARNING OBJECTIVE/S: The learners will study the ultrastructure of cell organelles.
The learners will be able to : The lerners will be able to understand the intricate and complex functioning of the cell.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

	Introduction to Endomembrane system	1		Chalk and Board and PPT
	Endoplamic Reticulum: Origin, Occurrence, Morphology and Functions.	3		Chalk and Board and PPT
ENDO MEMBRANE	Golgi Complex: Origin, Occurrence, Morphology and Functions.	3		Chalk and Board and PPT
SYSTEMS	Lysosomes: Origin, Occurrence, Morphology and Functions.	3		Chalk and Board and PPT

Mitochondria: Origin, Occurrence, Morphology and Functions.Marker Enzymes, Biogenesis Semiautonous nature of Mitochondria

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15_____

Chalk and Board and PPT

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY CLASS: T.Y.BSc. SEMESTER: VI

MONTH: _JUNE-SEPTEMBER ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will study the various aspects oif Enzyme Biochemistry.
The learners will be able to : The learners will be able to understand the structure and functions and kinetics of Enzymes.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENZYMOLOGY	Introduction and Nomemclature	2	Biochemistry by Leininger	Chalk and Board and PPT
	Enzyme action and Kinectics	5	Biochemistry by Satyanarayana	Chalk and Board and PPT
	Enzyme Inhibition	3	University Textbook	Chalk and Board and PPT
	Regulation of Enzyme Activity	3		
	Industrial Applications of Enzymes	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY CLASS: SEMESTER: ___6_____ MONTH: _NOVEMBER-MARCH ACADEMIC YEAR: 2022-23

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LEARNING OBJECTIVE/S: The learners will study various aspects of Genetic Disorders
The learners will be able to : The learners will be aware about the impact and changes that takes at gene level.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HUMAN GENETICS	Non- Disjunction during Mitosis and Meiosis	7	Diagnostic Regcognition of Genetic Disorders.	Chalk and Board and PPT
	Genetic Disorders	5		Chalk and Board and PPT Karyotypes
	Diagnosis	3		Chalk and Board and PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY **DEPARTMENT**: ZOOLOGY CLASS: __FYBSC SEMESTER: I MONTH: July

ACADEMIC YEAR: _2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : To know about the Hoarded wealth of the marvelous animal world and thereby enhance their interest and knowledge in the subject of zoology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-1	Echolocation in bats and cetaceans; Mechanism of pearl formation in Mollusca.	3	University Text book for FYBSc.	Power point presentation
	Bioluminiscence in animals; Regeneration in animals	3	University Text book for FYBSc.	Power point presentation
	Mimicry in butterfly and its significance; mechanism of coral formation.	3	University Text book for FYBSc.	Power point presentation
	Bird Migration; adaptive features of desert animals	3	University Text book for FYBSc.	Power point presentation
	Breeding and parental care in Pisces and Amphibians	3	University Text book for FYBSc.	Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __FYBSC SEMESTER: II MONTH: November

ACADEMIC YEAR: _2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : _____Understand the current status of wildlife in India from different relevant governing agencies vis-a vis with adversity of poaching and biopiracy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-3	Concept of endangered and criticaly endangered species using examples of Indian wildlife with respect to national parks and wildlife sanctuaries of India.	5		Power point presentation
	Management statergies with special respect to Tiger and Rhinoceros in India.	4		Power point presentation
	Ecotourism	3		Chalk and board method/ Power point presentation
	Biopiracy	3		Chalk and board method/ Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __SYBSC SEMESTER: III MONTH: July

ACADEMIC YEAR: _2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Know how animals interact with each other and their surroundings and they will be able to understand different behavioral patterns

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3, UNIT-1	Introduction to Ethology	4		Chalk and board method/ Power point presentation
	Aspects of animal behaviour	6		Chalk and board method /Power point presentation
	Social behaviour	5		Chalk and board method/ Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: SYBSC SEMESTER: IV MONTH: November

ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : Get a panoramic view of the impact of human activities leading to pollution and its implication.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3, UNIT-1	Air pollution	3		Chalk and board method
	Water pollution	3		Chalk and board method
	Soil pollution	3		Chalk and board method
	Noise pollution	1		Chalk and board method
	Radioactive pollution	1		Chalk and board method
	Solid waste pollution	2		Chalk and board method
	Pollution Climate change and global warming	2		Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __TYBSC SEMESTER: V MONTH: July

ACADEMIC YEAR: _2022-23

LEARNING OBJECTIVE/S:
The learners will be able to apprehend the basis of classification and modern classification up to the class of lower invertebrate animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-1	Levels of organization	03		Chalk and board method
	Symmetry	02		Chalk and board method
	Coelom and metamerism	02		Chalk and board method
	Taxonomy	04		Chalk and board method/Powerpoint presentation
	Kingdom Protista	04		Chalk and board method/Powerpoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: TYBSC SEMESTER: V MONTH: July

ACADEMIC YEAR: _2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to understand the various types of epidermal and dermal derivatives along with their function.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV, UNIT-1	Basic structure of integument	03		Chalk and board method/ Powerpoint presentation
	Epidermal derivatives of vertebrates	04		Chalk and board method/ Powerpoint presentation
	Dermal derivatives of vertebrates	04		Chalk and board method /Powerpoint presentation
	Special derivatives of integument	04		Chalk and board method/ Powerpoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: TYBSC SEMESTER: VI MONTH: NOVEMBER

ACADEMIC YEAR: _2022-2023

LEARNING OBJECTIVE/S To introduce basic concepts of modern Chordate classification with evolution point of view and to understand the concept of taxonomy in higher animal kingdom.
:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-1	General characters,difference between non chordates and chordates, Origin of chordates.	5		Chalk and board method
	Protochordata	5		Chalk and board method
	Group Euchordata	5		Chalk and board method/ Powerpoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: TYBSC SEMESTER: VI MONTH: NOVEMBER

ACADEMIC YEAR: _2022-23

LEARNING OBJECTIVE/S: To introduce learners to zoogeographic distribution(present and past) of animal species.
To introduce learners to various ways of animal distribution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV, UNIT-IV	Introduction:Plate tectonics and continental drift theory.	4		Chalk and board method
	Animal distribution and barriers	5		Chalk and board method/ Powerpoint presentation
	Zoogeographical realms	6		Chalk and board method/ Powerpoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY

CLASS: FYBSc. SEMESTER: I MONTH: JULY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
To make learners aware of risks involved in handling of different hazardous chemicals, sensitive (electrical/electronic) instruments and infectious biological specimens especially during practical sessions in the laboratory and to train them to avoid mishap.
The learners will be able to: Learners would work safely in the laboratory and avoid occurrence of accidents (mishaps) which will boost their scholastic performance and economy in use of materials/chemicals during practical sessions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT I- Laboratory safety, Units and Measurement	INTRODUCTION TO GOOD LABORATORY PRACTICES	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	USE OF SAFETY SYMBOLS	03		PRESENTATION
	UNITS OF MEASUREMENT	09		CHALK AND BOARD

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: III MONTH: JULY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:

The learners will be able to : To Introduce basic terms of genetics & to study Mendelian principles of inheritance and other forms pattern of inheritance.

The learners will be able to : Understand and apply the principles of inheritance. Understand the concept of multiple alleles, linkage and crossing over

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER I UNIT I- FUNDAMENTALS OF GENETICS	Introduction to genetics	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	Mendelian Genetics	08		CHALK AND BOARD
	Multiple Alleles and Multiple Genes	03		CHALK AND BOARD
	Linkage and Crossing Over	02		CHALK AND BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
To introduce the topic of immunology by emphasizing the basic concepts to build a strong foundation and to give an overview of the immune system that plays an important

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role in disease resistance.

The learners will be able to : *The learner shall comprehend the types of immunity and the components of immune system. The learner will realize the significant role of immune system in giving resistance against diseases.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III- BASIC IMMUNOLOGY	Overview of Immunology	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	Cells and Organs of immune system	04		PRESENTATION
	Antigens	04		PRESENTATION
	Antibodies	04		CHALK AND BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY

CLASS: FYBSc. SEMESTER: II MONTH: NOV ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
TO FACILITATE THE LEARNING OF POPULATION ECOLOGY,ITS DYNAMICS AND REGULATORY FACTORS IMPORTANT FOR ITS SUSTENANCE
The learners will be able to : THE UNIT WOULD ALLOW LEARNERS TO STUDY ABOUT NATURE OF ANIMAL POPULATION ,SPECIFIC FACTORS

AFFECTING ITS GROWTH AND ITS IMPACT ON THE POPULATION OF OTHER LIFE FORMS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: IV MONTH: NOV ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:
The learners will be able to : To develop the learner's knowledge and understanding of genetic variability within a population and how the change in the gene pool leads to evolution of species.

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NAME OF THE STAFF: DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: NOV ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to : The learner shall understand the types and secretions of endocrine glands and their functions and their disorders.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: NOV ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S:

The learners will be able to : Learner will understand the paradigms of discovery and commercialization of biological resources and knowledge gained by self-medication by animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SONAL RAMESH DANDGE** DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **V** MONTH: **JUNE** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S:
The learners will be able to : To sensitize learner regarding the various threats to the wildlife. To introduce learner various way that can help in the protection, conservation, management and enhancement of wildlife populations and habitat.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV UNIT II -WILDLIFE MANAGEMENT	2.1 HABIT, HABITAT, TERRITORY AND NICHE OF WILD ANIMALS	03	UNIVERSITY TEXTBOOK	PRESENTATION
	2.2 THREATS TO WILDLIFE	05		CHALK AND DUSTER
	2.3 WILDLIFE CONSERVATION	07		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**:** **SONAL DANDGE** DEPARTMENT: **ZOOLOGY**

CLASS**:** **S.Y,BSc**. SEMESTER**:** **IV** MONTH**:** **NOV** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S: TO INTRODUCE THEM WITH THE BASIC KNOWLEDGE OF RESEARCH, SCIENTIFIC WRITING AND IT'S METHODOLOGY

The learners will be able to : UNDERSTAND THE WAYS AND METHODS OF WRITING A RESEARCH PAPER, TYPES OF RESEARCH AND THE ETHICS RELATED TO SCIENTFIC RESEARCH AND ITS WRITING

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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P-I.U.III RESEARCH METHODOLGY AND SCIENTIC WRITING	RESEARCH, DEDUCTIVE REASONING.INDUCTIVE REASONING	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND DUSTER
	TYPES OF RESEARCH ,7C'S RULE,RESEARCH METHODOLOGY	3		THESIS AND ABSTRACT FOR REFERNCE
	SCIENTIFIC WRITING. TYPES OF WRITING ABSTRACT WRITING,MONOGRAPH,REVIEW WRITING,POSTER PRESENTATION	4		POSTER AND PRESENTATIONS FOR REFERNCE
	BIBLIOGRAPHY ,TYPES OF PRESENTATION, USE OF COMPTER IN RESEARCH	3		
	PLAGIARISM.ETHICS IN RESEARCH	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SONAL DANDGE** DEPARTMENT: **ZOOLOGY**

CLASS: **F.Y,BSc.** SEMESTER: **II** MONTH: **DEC-FEB** ACADEMIC YEAR: **2022-2023**

LEARNING OBJECTIVE/S: TO EXPLAIN THE COMPONENTS OF ECOSYSTEM AND HOW ECOSYSTEM IS ESSENTIAL FOR SURVIVAL OF ANIMALS

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The learners will be able to : UNDERSTAND THE IMPORTANCE OF ECOSYSTEMAND VARIOUS FAUNA BEING EXTINCT BECAUSE OF INTERUPTING OF HUMAN BEING

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III COMMON HUMAN DISEASE		2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND DUSTER
		4		PRESENTATION
		4		
		2		
		3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **_SONAL RAMESH DANDGE** DEPARTMENT: **ZOOLOGY** CLASS: **T.Y.Bsc** SEMESTER: **VI** MONTH: **APRIL-MAY**

ACADEMIC YEAR:**2022-23**

LEARNING OBJECTIVE/S: TO INTRODUCE THE LEARNER VARIOUS NATURAL RSOURCES ,THEIR EXPLOITATION AND HOW GOVERNMENT PLAYS AN IMPORTANT ROLE TO IMPLIMENT VAROIUS LAWS
The learners will be able to : UNDERSTAND DIFFERENT FACTORS AFFECTING ENVIRONMENT AND NEED TO UNDERSTAND VAROIUS LAWS ANGAINST GOVERONMENT FOR EXPLOITATION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
APPLIED COMPONENT	NATURAL RESOURCES AND THEIR CLASSIFICATION	2	ENVIRONMENTAL BIOLOGY BY P.S. VERMA	CHALK AND DUSTER PRESENTATION
	EXPLOITATION AND MODIFICATION OF NATURAL RESOURCES	2		
	SUSTAINABLE DEVELOPMENT	3	UNIVERSITY TB FOR COURSE BY BOARD OF	

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			STUDIES ZOOLOGY	
	WASTE MANAGEMENT, WATER MANAGEMENT	4		
	LAWS GOVERNING ENVIRONMENT	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT- 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SONAL DANDGE** DEPARTMENT: **ZOOLOGY** CLASS: **S.Y.B.sc** SEMESTER: **III** MONTH: **DEC-FEB**

ACADEMIC YEAR:**2022-2023**

LEARNING OBJECTIVE/S: TO INTRODUCE CONCEPT OF PARASITISM , MODES OF TRANSMISSION OF PARASITES AND PRECAUTIONS TO PREVENT DISEASES

The learners will be able to : _TO UNDERSTAND VARIOUS PARASITES, THEIR LIFE CYCLE, THE SYMPTOMS OF THE DISEASE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER 3, UNIT II PARASITOLOGY	INTRODUCTION TO PARASITOLOGY AND TYPES OF PARASITES	2	PARASITOLOGY BY SHARMA	CHALK AND DUSTER PRESENTATION
	HOST PARASITE RELATIONSHIP, HOST SPECIFICITY	3	PARASITOLOGY BY CHATTERJEE .K.D	
	LIFE CYCLE, PATHOGENECITY, CONTROL MEASURES AND TREATMENT OF THE FOLLOWING PARASITES Entamoeba histolytica, Faciola hepatica, Taenia solium, Wucheria bancrofti	4	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	
	MORPHOLOGY,LIFE CYCLE, PATHOGENECITY,CONTROL MEASURES AND TREATMENT OF THE FOLLOWING PARASITES HEAD LOUSE, MITE, BED BUG	3		
	PARASITOLOGICAL SIGNIFICANCE	3		

TOTAL NUMBER OF LECTUES ALLOCATED TO THE UNI

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: FYBSc. SEMESTER: I MONTH: JULY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : To orient learner about rich heritage of Biodiversity of India and make understand significance of its conservation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II BIODIVERSITY AND ITS CONSERVATION	INTRODUCTION AND LEVELS TO BIODIVERSITY	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	BIODIVERSITY HOTSPOT	03	BIODIVERSITY – S.CHAND PUBLICATION	PRESENTATION
	VALUES OF BIODIVERSITY	03		
	THREATS OF BIODIVERSITY	03		
	CONSERVATION AND ITS MANAGEMENT	03		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: III MONTH: JULY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : To introduce the concepts of physiology of nutrition, excretion and osmoregulation. To expose the learners to various nutrition apparatus, excretory and osmoregulatory struct

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPERII UNIT I NUTRITION AND EXCRETION	EXCRETION APPARATUS ,PHYSIOLOGY	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	PROCESS AND COMPARATIVE STUDY	03		PRESENTATION
	NUTRITION TYPES AND PROCESS	04		CHARTS
	COMPARATIVE STUDY	03		

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	PHYSIOLOGY	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : To acquaint learners with the details of Sepia as a representative of invertebrate animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT IV TYPE STUDY SEPIA	GENERAL CHARACTERISTICS AND CLASSIFICATION	02	INVERTEBRATE BY KOTPAL	CHALK AND BOARD

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	DIGESTIVE SYSYTEM ,REPRODUCTIVE SYSTEM	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	PRESENTATION
	EXCRETORY SYSTEM	03		CHARTS
	NERVOUS SYSTEM	02		
	CIRCULATORY SYSTEM	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: FYBSc. SEMESTER: II MONTH: NOV ACADEMIC YEAR: 2022-2023

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LEARNING OBJECTIVE/S:
The learners will be able to : Learners will be able to promptly recognize stress related problems at initial stages and would be able to adopt relevant solutions which would lead to psychologically strong mind set promoting positive attitude important for academics and would be able to acquire knowledge of cause, symptoms and precautions of infectious diseases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III COMMON HUMAN DISEASE	STRESS RELATED DISORDER – SYMPTOMS, EFFECTS,CAUSES, PREVENTION,REMEDY	07	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	COMMUNICABLE AND NON COMMUNICABLE DISEASE – SYMPTOMS, EFFECTS,CAUSES, PREVENTION,REMEDY	07		PRESENTATION
				CHARTS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR:2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : To develop learner's knowledge and understanding of genetic variability within a population and how the change in the gene pool leads to evolution of species.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPERII- POPULATION GENETICS AND EVOLUTION	INTRODUCTION TO POPULATION GENETICS,BRIEF EXPLANATION OF TERM OF GENETICS	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	
	HARDY WEINBERG LAW,FACTORS AFFECTING LAW	04		PRESENTATION
	PATTERN OF NATURAL SELECTION	04		CHARTS
	SPECIES CONCEPT AND SPECIEATION AND ISOLATION MECHANISM	03		

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	EVOLUTIONARY GENETICS	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR:2022-2023 _____

LEARNING OBJECTIVE/S:
The learners will be able to : To introduce to the learner the details of endocrine glands and its disorders.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III ENDOCRINOLOGY	INTRODUCTION TO ENDOCRINOLOGY AND TYPES OF GLANDS	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	
	ENDOCRINE SYSTEM,AND ITS MECHANISM	02	TEXTBOOK OF ENDOCRINOLOGY – WILLIAMS	PRESENTATION
	CLASSIFICATION AND PROPERTIES OF HORMONE, MECHANISM OF HORMONES ACTION	04		CHARTS

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	HISTOLOGY,FUNCTIONS AND DISORDERS OF PITUITARY,THYROID	04		
	PARATHYROID,PANCREAS AND ADRENAL	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : To introduce the learner to the concepts of bioprospecting and zoopharmacognosy. To introduce learner with various ethological aspects by which non-human animals
apparently self-medicate themselves.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV UNIT III BIOPROSPECTING AND ZOOPHARMACOGNOSY		03	UNIVERSITY TEXTBOOK BY	

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	INTRODUCTION TO BIOPROSPECTING		BOARD OF STUDIES	
	TYPES OF BIOPROSPECTING	03		PRESENTATION
	CONSERVATION – ADVANTAGE AND DISADVANTAGE , INTRODUCTION TO ZOOPHARMACOGNOSY	03		CASE STUDIES
	SELF MEDICATION AND ITS MECHANISM	03		
	APPLICATION AND ITS CONTRIBUTION	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:F.Y.B.Sc SEMESTER: I MONTH: SEPTEMBER- JANUARY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: TO AQUAINT LEARNERS TO STUDY THE MODERN DEVELOPMENT IN FIELD OF ZOOLOGY WITH RESPECT TO ITS APPLICATION FOR BENEFITS TO HUMAN AND WORLD
The learners will be able to : HELP YOUNG MINDS THINK OUT OF THE BOX WITH RESPECT TO NEW DEVELOPMENT BENIFITING THE HUMANS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II- ANIMAL BIOTECHNOLOGY	INTRODUCTION TO BIOTECHNOLOGY , SCOPE AND ACHIEVEMENTS	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES
	TRANSGENESIS,CLONING	04	BIOTECHNOLOGY– SATYANARAYAN & CHAKRAPANI	PRESENTATION
	ETHICAL ISSUES	03		
	DNA FINGERPRINTING AND GENE THERAPY	04		
	GREEN GENES	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:S.Y.B.Sc SEMESTER: III

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: TO UNDERSTAND THE BASICS OF GENETICS WITH RESPECT TO SEX DETERMINATION AND ITS PURPOSE
The learners will be able to : TO CORRELATE WITH THE GENETIC DISORDER WITH THE STRUCTURE OF CHROMOSOME,NUMBER OF CHROMOSOME AND SEX DETERMINATION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II- CHROMOSOME AND HEREDITY	TYPES , STRUCTURE AND CLASSIFICATION OF CHROMOSOMES	04	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES
	SEX DETERMINATION – HORMONAL ,TEMPERATURE AND CHROMOSOMAL	04	GENETICS - FAIRBANK	PRESENTATION
	SEX LINKED INHEITANCE	02	GENTEICS – MANGE AND MANGE	

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	SEX LIMITED INHERITANCE	02		
	SEX INFLUENCED INHERITANCE	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: TO COMPREHEND THE GENERAL CHARACTERS AND CLASSIFICATION OF KINGDOM ANIMALIAE FROM PORIFERA TO NEMATODA AND SPECIFIC CHARACTERS OF ORGANISMS BELONGING TON THESE PHYLA
The learners will be able to : FAMILIARIZING WITH CLASSIFICATION AND ABLE TO IDENTIFY ANIMAL IN HABITAT

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II- KINGDOM ANIMALIA I	GENERAL CHARARCTERS	01	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES INVERTEBRATE ZOOLOGY – R.L.KOTPAL	POWERPOINT PRESENTATION /ONLINE LECTURES
	PHYLUM PORIFERA – CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		PRESENTATION

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	PHYLUM CNIDARIA CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		LIVE ANIMALS
	PHYLUM PLATYHELMINTHES CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		
	PHYLUM NEMATODA CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V MONTH: JULY - OCTOBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: TO INTRODUCE PRINCIPLE OF TOXICOLOGY WITH RESPECT TO TOXIC RESPONSE ,NATURE AND ITS EFFECTS IN TOXICITY TESTING AND ITS REGULATORY AFFAIRS
The learners will be able to : BROAD UNDERSTANDING IN THE FIELD HELPING STUDENT PREPARE FOR EMPLOYMENT IN PHARMACEUTICAL INDUSTRY AND RELATED ARENAS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT II- TOXICOLOGY	INTRODUCTION,PRINCIPLE AND SCOPE TO TOXICOLOGY ,	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES

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	TOXINS AND TOXICANTS , CONCEPT OF LC50,LD50,ED50	04	FUNDAMENTALS OF TOXICOLOGY – KAMLESHWAR PANDEY & J .P.SHUKLA	PRESENTATION
	CHARACTERS OF EXPOSURE	02		
	TYPES AND ROUTES OF TOXICITY	04		
	DOSE RESPONE RELATIONSHIP AND TARGET ORGAN TOXICITY	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **BHUMIKA ASHOK OZA** DEPARTMENT: **ZOOLOGY**
CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **VI** MONTH: **DEC-FEB** ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S: TO INTRODUCE THEM WITH CHORDATE CLASSIFICATION WITH POINT OF EVOLUTION AND UNDERSTAND THE CONCEPT OF TAXONOMY.
The learners will be able to : UNDERSTAND PHYLOGENY AND SPECIAL FEATURES ALONGWITH TAXONOMY UPTO CLASS OF CHORDATES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I, U-II, GROUP EUCHORDATA II	DIVISION GNATHOSTOMATA	3	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES

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	DIPNOI	5	CHORDATES BY JORDAN AND VERMA CHORDATE ZOOLOGY BY R.L.KOTPAL	LIVE ANIMALS
	SUPERCLASS TETRAPODA	5		PHOTOGRAPHS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA OZA DEPARTMENT: ZOOLOGY
CLASS: S.Y,BSc. SEMESTER: IV MONTH: DEC-MARCH ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S: TO IMPART SCIENTIFIC KNOWLEDGE TO THE LEARNERS ABOUT HOW LIFE ORIGINATED AND EVOLVED ON OUR PLANET
The learners will be able to : GAIN INSIGHT ABOUT ORIGIN OF LIFE AND ITS DIFFERENT THEORIES.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I.U.I ORIGIN AND EVOLUTION OF LIFE	INTRODUCTION THEORY FOR ORIGIN OF LIFE	3	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY BBC WORLD FACTS AND DISCOVERY VIDEOS	ONLINE LECTURES
	EVIDENCES IN NFAVOUR OF ORGANIC EVOLUTION	5		YOU TUBE VIDEOS
	THEORIES OF ORGANIC EVOLUTION	5		POSTER AND PRESENTATIONS FOR REFERNCE
				DISCOVERY PLUS SERIES

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA OZA DEPARTMENT: ZOOLOGY
CLASS: F.Y,BSc. SEMESTER: II MONTH: FEB – APRIL ACADEMIC YEAR: 2022-2023
LEARNING OBJECTIVE/S: TO EXPLAIN THE SOURCE AND IMPORTANCE OF HEALTHY MIND, BODY AND DIETARY HABITS.
The learners will be able to: UNDERSTAND THE IMPORTANCE OF GOOD DIETARY HABITS AND LEAD A HEALTHY LIFESTYLE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, HUMAN HEALTH AND DISEASE	BALANCED DIET AND NUTRITION AND DIET CHART	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND DUSTER
	MALNUTRITION DISORDERS – CAUSES,SYMPTOMS,PRECAUTION AND REMEDIES	5		BMI STUDY BY ASSIGNMENT AND PROJECT
	LIFESTYLE DISORDERS- CAUSES, SYMPTOMS, PRECAUTION AND REMEDIES	5		
	SIGNIFICANCE OF BREAST FEEDING AND BREASTMILK,DIETARY FIBRES	2		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **BHUMIKA ASHOK OZA** DEPARTMENT: **ZOOLOGY**
CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **VI** MONTH: **DEC-FEB** ACADEMIC YEAR: **2022-2023**
LEARNING OBJECTIVE/S: UNDERSTAND DIFFERENT FACTORS AFFECTING THE ENVIRONMENT AND VARIOUS METHODS TO IMPROVE ENVIRONMENTAL STEWARDSHIP
The learners will be able to :UNDERSTAND DIFFERENT IMAPCT ,FACTOTRS AND LAWS REGARDING ENVIRONMENT

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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P-IV ,U-I, ENVIRONMENT MANAGEMENT	NATURAL RESOURCES AND THEIR CLASSIFICATION	3	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY CSIR REFERENCE BOOK-PATHFINDER ENVIRONMENTAL SCIENCE BY THAKUR INDUSHEKHAR AND S CHAND PUBLICATION	POWERPOINT PRESENTATION /ONLINE LECTURES
	EXPLOITATION AND MODIFICATION OF NATURAL RESOURCES	4		YOUTUBE VIDEOS
	WATER MANAGEMENT	2		NEWSPAPER CASE STUDIES
	WASTE MANAGEMENT	4		
	ACTS AND RULES OF ENVIRONMENTAL MANAGEMENT	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____DEPARTMENT: _____ CLASS: _____SEMESTER: _____MONTH: _____ ACADEMIC YEAR:_____

LEARNING OBJECTIVE/S:

The learners will be able to :

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA SURESH SHAHASANE DEPARTMENT: ZOOLOGY CLASS: T.Y. B.Sc, SEMESTER: 5

MONTH: JUNE- OCTOBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: *To introduce the learner to the basics of developmental biology with reference to chick as a model and also familiarize with experiments related to it.*

The learners will be able to :*Learner will be able to understand the processes involved in embryonic development and practical applications of studying the chick embryology.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:4 UNIT:4 TITLE:Developmental biology of Chick	Introduction to Developmental Biology:	1	DEVELOPMENTAL BIOLOGY BY GILBERT	1)TEACHING METODS : Lecturing ,Demonstrative,Brain storming, Direct teaching, case -study , Comparative method
	Structure of Hen's egg, physico-chemical nature and forms of yolk- granular, platelets and spheres; fertilization, cleavage, blastulation, gastrulation	3	DEVELOPMENTAL BIOLOGY OF CHICK BY PATTEN	2)Teaching resources: LIVE SPECIMEN, PERMENANT SLIDES , A.V., TEXTBOOK , INTERNET , PICTURES, CHARTS
	Structure of chick embryo – 18 hou rs, 24 hou rs, 33 hou rs, 48 hou rs and 72 hou rs	8	CHORDATE ZOOLOGY BY JORDAN	
	Extra embryonic membranes	2		
	Organizer: Introduction, Spemann Mangold experiment, Hensen's node as an organizer	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SHWETA SURESH SHAHASANE DEPARTMENT: Zoology

CLASS: :F.Y.B.Sc. SEMESTER: 1 MONTH: JUNE -OCTOBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: *To make learners aware of risks involved in handling of different hazardous chemicals, sensitive (electrical/electronic) instruments and infectious biological specimens especially during practical sessions in the laboratory and to train them to avoid mishap*

The learners will be able to : *Learners would work safely in the laboratory and avoid occurrence of accidents (mishaps) which will boost their scholastic performance and economy in use of materials/chemicals during practical sessions.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:2 UNIT:1 TITLE: INSTRUMENTATION	**Introduction to good laboratory practices**	1	Methods in Biostatistics – B. K. Mahajan	1)Teaching methods:Questions, Peer learning by making buzz groups of students,role play,debate,case-study,problem solving and decision making strategy
	Use of safety symbols : meaning, types of hazards and precautions	2	A Manual of Medical Laboratory Technology -A. H. Patel	2) learning resources: textbook,pictures and A.V. , Internet.
	Calculations and related conversions of each: Metric system- length(meter to micrometer); weight (gram to microgram), Volumetric (Cubic measures)	1	Calculations in Molecular biology and Biotechnology - Frank H. S tephenson	

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	Temperature: Celsius, Fahrenheit, Kelvin	1	Text Book of Zoology, F.Y.B.Sc. Semester I Course 2	
	Concentrations : Percent solutions, ppt, ppm, ppb dilutions,Normality, Molarity and Molality.	2		
	Biostatistics: Introduction and scope, Sampling and its types, Central Tendencies (mean, median, mode) Tabulation, Graphical representations (Histograms, bar diagrams, pie diagrams)	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SHWETA SURESH SHAHASANE DEPARTMENT: ZOOLOGY

CLASS:F.Y. B. Sc. SEMESTER: 2 MONTH:December-March ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: *To impart knowledge of different components of ecosystem and educate about essentials of coexistence of human beings with all other living organisms*

The learners will be able to : *Learners will grasp the concept of interdependence and interaction of physical, chemical and biological factors in the environment and will lead to better understanding about implications of loss of fauna specifically on human being, erupting spur of desire for conservation of all flora and fauna*

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:Ecology and Wildlife Management. Unit: 2 TITLE: Ecosystem	Ecosystem - Definition and components	2	Fundamentals of Ecology - Eugene P. Odum	1)Teaching methods:Questions, Peer learning by making buzz groups of students,role play,debate,case-study,problem solving and decision making strategy.
	Biogeochemical cycles (Water, Oxygen, Nitrogen, Sulphur)	2	Fundamentals of Ecology - M. C. Dash	2) learning resources: textbook,,A.V. program, Internet,POWERPOINT PRESENTATION, YOUTUBE VIDEOS.
	Fresh water ecosystem – Lentic and Lotic	2	Ecology - Mohan P. Arora	
	Food chain and food web in ecosystem (Fresh water and Grass land)	3	Ecology and Environment - Sharma P. D	
	Ecological pyramids - energy, biomass and number	2	Ecology : Principles and Applications - Chapman J.L	
	Animal interactions (commensalism, mutualism, predation, antibiosis, parasitism)	3	Ecology - Subramaniam	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA SURESH SHAHASANE DEPARTMENT: ZOOLOGY CLASS:S.Y.B.Sc

SEMESTER:3 MONTH: JUNE- OCTOBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: *To disseminate information on economic aspects of zoology like apiculture, vermiculture, dairy science. To encourage young learners for selfemployment.*

The learners will be able to : *Learners would gain knowledge on animals useful to mankind and the means to make the most of it. Learners would learn the modern techniques in animal husbandry. Learners would be pursuing entrepreneurship as careers*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER:3 UNIT:3 TITLE:Economic Zoology	**APICULTURE:Methods of bee keeping and management** **Economic importance**	5	Economic Zoology- Biostatistics and Animal behaviour	1)TEACHING METODS : Lecturing ,Demonstrative,Brain storming, Direct teaching, case -study , Comparative method
	VERMICULTURE:Rearing methods, management and economic importance	4	Economic Zoology- Shukla G.S	2)Teaching resources: LIVE SPECIMEN , A.V., TEXTBOOK , MANNUALS, INTERNET , PICTURES, CHARTS, POWER POINT PRESENTATIONS AND YOUTUBE VIDEOS .ONLINE WORSHOPS
	DAIRY SCIENCE:Dairy development in India **Dairy Processing** **Milk and milk products**	6	A handbook on Economic Zoology, S.Chand	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA SURESH SHAHASANE _ DEPARTMENT: ZOOLOGY CLASS: S.Y.B.Sc. SEMESTER: IV

MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : acquaint the key concept of embryology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:Comparative Embryology ,Aspect of Human Reproduction, Pollution and its effect on organisms UNIT:1 TITLE:Comparative Embryology.	1)Types of Eggs-Based on amount and distribution of yolk.	2	1)Developmental Biology by Gilbert.	1)TEACHING METODS : Lecturing ,Demonstrative,Brain storming, Direct teaching, case -study , Comparative method
	2)structure and types of sperms	1	2)Developmental Biology by Berri and Tata Mc Craw.	2)Teaching resources: Clay models , A.V., PowerPoint presentations
	3)Types of cleavage- Holoblastic and Meroblastic	1	3)Chick Embryology by Pattern	
	4)Types of blastulae	1	4)Chordate Embryology by Verma and Tyagi.	

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	5)Gastrulation	2	5)Chordate Zoology by Jordan	
	6)Coelom -formation and types	2		
	7)Extra embryonic membranes	6		
	8)Types of placentae -Based on histology,morphology and implantation.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA SURESH SHAHASANE DEPARTMENT: ZOOLOGY CLASS: T.Y. B.Sc,

SEMESTER: 5 MONTH: JUNE- OCTOBER ACADEMIC YEAR:2022-2023

LEARNING OBJECTIVE/S: *To introduce the learner to the basics of developmental biology with reference to chick as a model and also familiarize with experiments related to it.*

The learners will be able to :*Learner will be able to understand the processes involved in embryonic development and practical applications of studying the chick embryology.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:4 UNIT:4 TITLE:Developmental biology of Chick	Introduction to Developmental Biology:	1	DEVELOPMENTAL BIOLOGY BY GILBERT	1)TEACHING METODS : Lecturing ,Demonstrative,Brain storming, Direct teaching, case -study , Comparative method

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	Structure of Hen's egg, physico-chemical nature and forms of yolk-granular, platelets and spheres; fertilization, cleavage, blastulation, gastrulation	3	DEVELOPMENTAL BIOLOGY OF CHICK BY PATTEN	2)Teaching resources: LIVE SPECIMEN, PERMENANT SLIDES , A.V., TEXTBOOK , INTERNET , PICTURES, CHARTS
	Structure of chick embryo – 18 hou rs, 24 hou rs, 33 hou rs, 48 hou rs and 72 hou rs	8	CHORDATE ZOOLOGY BY JORDAN	
	Extra embryonic membranes	2		
	Organizer: Introduction, Spemann Mangold experiment, Hensen's node as an organizer	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA SURESH SHAHASANE DEPARTMENT: ZOOLOGY CLASS: T.Y. B.Sc,

SEMESTER: 6 MONTH: DECEMBER- MARCH ACADEMIC YEAR:2022-2023

LEARNING OBJECTIVE/S: To acquire knowledge of the various aspects of diseases affecting fishes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER: applied component UNIT:4 TITLE: Diseases	Viral diseases, prophylaxis and preventive measures	5L	Text Book of Fish Biology and Indian Fisheries by Dr. R. P. Parihar, Central Pub. House, Allahabad.	1)TEACHING METODS : Lecturing ,Demonstrative,Brain storming, Direct teaching, case -study , Comparative method
	Bacterial, fungal, protozoan infections and treatment	5L	Handbook of Fish Biology and Fisheries Edited By J.B. Hart and John Reynold.	2)Teaching resources: LIVE SPECIMEN, PERMENANT SLIDES , A.V., TEXTBOOK , INTERNET , PICTURES, CHARTS
	Crustacean infections and treatment Physiological disorders (Dropsy) / diseases and treatment	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: III MONTH: JULY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
The learners will be able to : To introduce the learner to the science of dairy. To make the learner aware about care of different pet animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III UNIT III APPLIED ZOOLOGY - (DAIRY SCIENCE)	3.2 DAIRY SCIENCE	01	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	PRESENTATION
	3.2.1 ROLE OF DAIRY DEVELOPEMENT IN RURAL ECONOMY	01		PRESENTATION
	3.2.2 MILK AND MILK PRODUCTS	03		PRESENTATION

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S:
To introduce the learner to different bones of human skeleton and their functional importance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV UNIT II HUMAN OSTEOLOGY	2.1 INTRODUCTION	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES,	PRESENTATION
	2.2 AXIAL SKELETON	06		PRESENTATION
		06		PRESENTATION

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	2.3 APPENDICULAR SKELETON		TEXT BOOK OF HUMAN ANATOMY BY TORTORA	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: Learner shall comprehend boat building techniques and design of engines used in mechanized boats.
Learner shall understand the operations of various types of nets and fishing method.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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AC UNIT - II	2.1 Basic boat building	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES, TEXT BOOK OF CRAFTS AND GEAR	PRESENTATION
	2.2 Basic studies of marine engines: Sectional View of 2-stroke and 4-stroke Diesel engines Winch and Deck Side Equipment	06		PRESENTATION
	2.3 Operations: Gill, Trawl, Purse seine Nets Hooks and Lines Non-conventional Fishing Methods	06		PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR:2022-2023 _

LEARNING OBJECTIVE/S:
The learners will be able to : To give learner insight into the structure of biomolecules, and their role in sustenance of life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT - III -BIOMOLECULES	3.1 BIOMOLECULES	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	PRESENTATION
	3.2 CARBOHYDRATES	04		PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR:2022-2023 _____

LEARNING OBJECTIVE/S:
The learners will be able to : To sensitize learner regarding the various threats to the wildlife. To introduce learner various way that can help in the protection, conservation, management and enhancement of wildlife populations and habitat.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV UNIT II -WILDLIFE MANAGEMENT	2.1 HABIT, HABITAT, TERRITORY AND NICHE OF WILD ANIMALS	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	PRESENTATION
	2.2 THREATS TO WILDLIFE	05		PRESENTATION
	2.3 WILDLIFE CONSERVATION	07		PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR:2022-2023 _____

LEARNING OBJECTIVE/S:
The learners will be able to: Learners will acquire the knowledge and would put in to practice the preservation and processing techniques for commercial ventures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AC UNIT - V Unit 5: PRESERVATION AND PROCESSING	5.1 Traditional methods and their modifications: i) Icing ii) Drying iii) Salting	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES Fish Biology by C.B.C. Srivastava –	PRESENTATION
	5.2 Introduction to refrigeration: Types and properties of refrigerants	05		PRESENTATION

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	5.3 Principle and steps involved in can reform and canning of fish	04	Narendra Pub. House.	PRESENTATION
	5.4 Equipment and utensils used in seafood processing	03		PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAUSTUBH JADHAV DEPARTMENT: ZOOLOGY

CLASS: FYBSc. SEMESTER: I MONTH: JULY-DECEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: TO ORIENT LEARNERS ABOUT RICH HERITAGE OF BIODIVERSITY OF INDIA MAKE THEM UNDERSTAND SIGNIFICANCE OF ITS CONSERVATION.
The learners will be able to : LEARNERS WOULD APPRECIATE TREASURE OF BIODIVERSITY, ITS IMPORTANCE AND HENCE WOULD CONTRIBUTE THEIR BEST FOR ITS CONSERVATION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II- BIODIVERSITY AND ITS CONSERVATION	INTRODUCTION TO BIODIVERSITY	01	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	
	LEVEL OF BIODIVERSITY	03	BIODIVERSITY- K.C AGARWAL	CHALK AND BOARD
	INTRODUCTION OF BIODIVERSITY HOTSPOTS	03		
	VALUE OF BIODIVERSITY	02		

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	THREATS TO BIODIVERSITY	03	FUNDAMENTALS OF WILDLIFE MANAGEMENT-RAJESH GOPAL	
	BIODIVERSITY CONSERVATION AND MANAGEMENT	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAUSTUBH JADHAV DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: V MONTH: JULY-DECEMBER ACADEMIC YEAR: 2022-2023

LEARNING OBJECTIVE/S: TO COMPREHEND THE GENERAL CHARACTERS AND CLASSIFICATION OF KINGDOM ANIMALIA FROM PORIFERA TO NEMATODA AND SPECIFIC CHARACTERS OF ORGANISMS BELONGING TO THESE PHYLA.
DESIRED OUTCOME:
THE LEARNERS WILL BE FAMILIARIZED WITH CLASSIFICATION UP TO PHYLUM NEMATODA ALONG WITH THEIR EXAMPLES.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II- KINGDOM ANIMALIA I	INTRODUCTION	01	UNIVERSITY TEXTBOOK BY	POWERPOINT PRESENTATION

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			BOARD OF STUDIES	
	PHYLUM: PORIFERA	03	INVERTEBRATE ZOOLOGY- JORDAN & VERMA	CHALK AND BOARD
	PHYLUM: CNIDARIA	04		
	PHYLUM: PLATYHELMINTHES	04		
	PHYLUM: NEMATODA	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAUSTUBH JADHAV DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: V APPLIED COMPONENTS MONTH: JULY-DECEMBER ACADEMIC YEAR: 2022-2023

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LEARNING OBJECTIVE/S: TO ACQUIRE KNOWLEDGE OF VARIOUS BREEDING TECHNIQUES HATCHERY AND NURSERY MANAGEMENT OF VARIOUS CARPS

DESIRED OUTCOME: LEARNERS WILL UNDERSTAND BREEDING TECHNIQUES AND SKILLS NECESSARY FOR CULTURING OF MAJOR CARPS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
UNIT III: FARMING OF MAJOR CARPS	INTRODUCTION	02	HANDBOOK OF FRESHWATER FISHES OF INDIA BY BEAVEN	POWERPOINT PRESENTATION
	BREEDING TECHNIQUE OF MAJOR CARPS AND COMMON CARPS	04	TRAINING MANUAL ON BREEDING, REARING AND MANAGEMENT OF INDIAN MAJOR CARPS-CARI (ICAR)	CHALK AND BOARD
	HATCHERY AND NURSERY MANAGEMENT	04		
	MONOCULTURE AND POLYCULTURE PRACTICES	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUHRI KINI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: INTRODUCE CONCEPT OF VACCINES ,IMMUNOPATHOLOGY AND ITS PERSPECTIVE IN ORGAN TRANSPLANTATION

The learners will be able to : DEVELOP BASIC UNDERSTANDING OF IMMUNOLOGY AND ITS PRACTICAL APPLICATION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT IV- APPLIED IMMUNOLOGY	ANTIGEN ANTIBOGY REACTION	05	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	ONLINE LECTURE
	VACCINES AND VACCINATIONS	05	KUBY IMMUNOLOGY	PRESENTATION
	TRANSPLANTATION IMMUNOLOGY	05		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY CLASS:S.Y.B.Sc SEMESTER: V

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: TO FAMILIARIZE CELLULAR ARCHITECTURE AND ITS IMPORTANCE OF TISSUE TO VITAL ORGAN
The learners will be able to : APPRECIATE WELL ORGANIZED TISSUE AND CELL SYSTEM IN BODY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT I-	VERTICAL SECTION OF SKIN	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES

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MAMMALIAN HISTOLOGY	V.S OF TOOTH	02	TEXTBOOK OF HISTOLOGY GARTNER ,LESLIE	PRESENTATION
	T.S OF TOUNGE	02		
	T.S OF ALIMENTARY CANAL	05		
	T.S OF ASSOCIATED DIGESTIVE GLANDS	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: VI

MONTH: DECEMBER - APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: TO INTRODUCE CONCEPT OF HOMEOSTASIS – THERMOREGULATION AND OSMOREGULATION.
The learners will be able to : SHALL COMPREHENDTHE ADAPTIVE RESPONSES OF ANIMALS TO ENVIRONMENTAL CHANGES FOR SURVIVAL.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II- HOMEOSTASIS	HOMEOSTASIS	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES
	THERMOREGULATION	05		PRESENTATION
	OSMOTIC AND IONIC REGULATION	05		
		03		
		T03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: VI

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MONTH: DECEMBER – APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: TO INTRODUCE LEARNER TO CHEMICAL AND MOLECULAR PROCESSES THAT AFFECT GENETIC MATERIAL
The learners will be able to : RECOGNIZE SIGNIFICANCE OF MOLECULAR BIOLOGY AND DNA REPAIR MECHANISM.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT I- MOLECULAR BIOLOGY	TYPES OF MUTATION	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES
	INDUCED MUTATION	04		PRESENTATION
	DNA REPAIR MECHANISM	03		
	EUKARYOTIC GENE EXPRESSION	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: **ZOOLOGY**
CLASS: **S.Y.B.Sc (ZOOLOGY)** SEMESTER: **III** MONTH: **JULY - OCTOBER** ACADEMIC YEAR: **2021-2022**
LEARNING OBJECTIVE/S: INTRODUCE CLASSICAL EXPERIMENT FOR PROVING DNA AS A GENETIC MATERIAL AND STRUCTURES OF NUCLEIC ACIDS ALONGWITH CENTAL DOGMA THEORY
The learners will be able to : IMPORTANCE OF NUCLEIC ACID AND APPRECIATE GENE REGULATION ACTIVITY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I, U-III, NUCLEIC ACIDS	GENETIC MATERIAL	7	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES GENETICS - GARDNER	POWERPOINT PRESENTATION /ONLINE LECTURES
	FLOW OF GENETIC INFORMATION IN EUKARYOTIC CELL	5		
	GENE EXPRESSION AND REGULATION	3		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY
CLASS: S.Y,BSc. SEMESTER: IV MONTH: DEC-FEB ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S: STUDY STRUCTURAL AND FUNCTIONAL ORGANIZATION OF CELL
The learners will be able to : ACQUIRE INSIGHT OF TRANSPORT MECHANISM FOR COMPOSITION AND MAINTAINANCE OF CELL.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II -.U.I CELL BIOLOGY	INTRODUCTION TO CELL BIOLOGY	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	POWERPOINT PRESENTATION /ONLINE LECTURES
	NUCLEUS	5		
	PLASMA MEMBRANE	4		
	TRANSPORT ACROSS MEMBRANE	2		
	CYTOSKELETAL STRUCTURE	2		

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DR. SMITA SUBRAMANIAN DEPARTMENT:Zoology

CLASS: F.Y.BSc.(CBZ) SEMESTER: I MONTH: __AUGUST-NOVEMBER ACADEMIC YEAR: __2021-22

LEARNING OBJECTIVE/S: To acquaint learners to Biotechnology with respect to advancement in Zoology
The learners will be able to : The Learners will be able to understand various aspects of Biotechnology and new approach and techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II AMIMAL BIOTECHNOLOGY	Biotechnology Scopes	1	University Textbook and Biotechnology.	Chalk and Board PPT
	Transgenesis	6		Chalk and Board PPT
	Applications of Biotechnology	8		Chalk and Board PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. SMITA SUBRAMANIAN DEPARTMENT:Zoology

CLASS: S.Y.BSc.(BZ/CZ) SEMESTER: III MONTH: JUNE- OCTOBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will study aspects of control and coordination, locomotion and reproduction
The learners will be able to : The learners will be able to understand the various mechanism of control and coordination, locomotion and reproduction in different animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II CONTROL AND COORDINATION, LOCOMOTION AND REPRODUCTION	Control and coordination,	5	University Textbook and Non- Chordate and Chordate Zoology	Chalk and Board PPT
	Locomotion	5		Chalk and Board PPT
	Reproduction	5		Chalk and Board PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY

CLASS: T.Y.BSc. SEMESTER: V MONTH: _JUNE-SEPTEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: Learners will get insights of diagnostic techniques.
The learners will be able to : ___Understand various techniques involved in blood analysis and pathology studies. ___

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Hematology	Scope of Applied Hematology	1	University textbook. Textbook of Pathology by Godkar	Chalk and Board PPT
	Microscopic examination of blood: Blood cancer, Infectious disease and Haemoglobinopathies	4		Chalk and Board PPT
	Coagulopathies	2		Chalk and Board PPT
	Biochemical examination: liver functions, Kidney functions, Carbohydrate metabolism amd Hormone analysis.	8		Chalk and Board PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY

CLASS: T.Y.BSc. SEMESTER: V MONTH: _JUNE-SEPTEMBER ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will be learning the pathophysiology od various diseases.
The learners will be able to : The learners will be able to understand the root cause of any disease and its precautionary measures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
General Pathology	Introduction	1	University textbook and Textbook on Pathology	Chalk and Board PPT
	Cell Injury	3		Chalk and Board PPT
	Retrogressive changes	3		Chalk and Board PPT
	Disorders of Pigmentation	3		Chalk and Board PPT
	Necrosis	3		Chalk and Board PPT
	Gangrene	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY

CLASS: SEMESTER:IV MONTH: _NOVEMBER-MARCH ACADEMIC YEAR:2021-22

LEARNING OBJECTIVE/S: The learners will study the ultrastructure of cell organelles.
The learners will be able to : The learners will be able to understand the intricate and complex functioning of the cell.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENDO MEMBRANE SYSTEMS	Introduction to Endomembrane system	1	University textbook AND Cell Biology	Chalk and Board PPT
	Endoplamic Reticulum: Origin, Occurrence, Morphology and Functions.	3		Chalk and Board PPT
	Golgi Complex: Origin, Occurrence, Morphology and Functions.	3		Chalk and Board PPT
	Lysosomes: Origin, Occurrence, Morphology and Functions.	3		Chalk and Board PPT
	Mitochondria: Origin, Occurrence, Morphology and Functions.Marker Enzymes, Biogenesis Semiautonous nature of Mitochondria	5		Chalk and Board PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY

CLASS: SEMESTER: VI MONTH: _November-March ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S: The learners will study the various aspects oif Enzyme Biochemistry.
The learners will be able to : The learners will be able to understand the structure and functions and kinetics of Enzymes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
ENZYMOLOGY	Introduction and Nomemclature	2	Biochemistry by Leininger	Chalk and Board PPT
	Enzyme action and Kinectics	5	Biochemistry by Satyanarayana	Chalk and Board PPT
	Enzyme Inhibition	3	University Textbook	Chalk and Board PPT
	Regulation of Enzyme Activity	3		Chalk and Board PPT
	Industrial Applications of Enzymes	2		Chalk and Board PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY

CLASS: T.Y.BSc. SEMESTER: VI MONTH: _NOVEMBER-MARCH ACADEMIC YEAR: 2022-23

LEARNING OBJECTIVE/S: The learners will study various aspects of Genetic Disorders
The learners will be able to : The learners will be aware about the impact and changes that takes at gene level.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
HUMAN GENETICS	Non- Disjunction during Mitosis and Meiosis	7	Diagnostic Regcognition of Genetic Disorders.	Chalk and Board PPT
	Genetic Disorders	5		Chalk and Board PPT
	Diagnosis	3		Chalk and Board PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __FYBSC SEMESTER: I MONTH: July

ACADEMIC YEAR: _2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : To know about the Hoarded wealth of the marvelous animal world and thereby enhance their interest and knowledge in the subject of zoology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-1	Echolocation in bats and cetaceans; Mechanism of pearl formation in Mollusca.	3	University Text book for FYBSc.	Power point presentation
	Bioluminiscence in animals; Regeneration in animals	3	University Text book for FYBSc.	Power point presentation
	Mimicry in butterfly and its significance; mechanism of coral formation.	3	University Text book for FYBSc.	Power point presentation
	Bird Migration; adaptive features of desert animals	3	University Text book for FYBSc.	Power point presentation
	Breeding and parental care in Pisces and Amphibians	3	University Text book for FYBSc.	Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __FYBSC SEMESTER: II MONTH: November

ACADEMIC YEAR: _2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : _____Understand the current status of wildlife in India from different relevant governing agencies vis-a vis with adversity of poaching and biopiracy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-3	Concept of endangered and criticaly endangered species using examples of Indian wildlife with respect to national parks and wildlife sanctuaries of India.	5		Power point presentation
	Management statergies with special respect to Tiger and Rhinoceros in India.	4		Power point presentation
	Ecotourism	3		Chalk and board method/ Power point presentation
	Biopiracy	3		Chalk and board method/ Power point presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __SYBSC SEMESTER: III MONTH: July

ACADEMIC YEAR: _2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Know how animals interact with each other and their surroundings and they will be able to understand different behavioral patterns

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3, UNIT-1	Introduction to Ethology	4		Chalk and board method/ Power point presentation
	Aspects of animal behaviour	6		Chalk and board method /Power point presentation
	Social behaviour	5		Chalk and board method/ Power point presentation

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: SYBSC SEMESTER: IV MONTH: November

ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Get a panoramic view of the impact of human activities leading to pollution and its implication.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3, UNIT-1	Air pollution	3		Chalk and board method
	Water pollution	3		Chalk and board method
	Soil pollution	3		Chalk and board method
	Noise pollution	1		Chalk and board method
	Radioactive pollution	1		Chalk and board method
	Solid waste pollution	2		Chalk and board method

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	Pollution Climate change and global warming	2		Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __TYBSC SEMESTER: V MONTH: July

ACADEMIC YEAR: _2021-22

LEARNING OBJECTIVE/S:
The learners will be able to apprehend the basis of classification and modern classification up to the class of lower invertebrate animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-1	Levels of organization	03		Chalk and board method
	Symmetry	02		Chalk and board method
	Coelom and metamerism	02		Chalk and board method
	Taxonomy	04		Chalk and board method/Powerpoint presentation
	Kingdom Protista	04		Chalk and board method/Powerpoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: TYBSC SEMESTER: V MONTH: July

ACADEMIC YEAR: _2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to understand the various types of epidermal and dermal derivatives along with their function.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV, UNIT-1	Basic structure of integument	03		Chalk and board method/ Powerpoint presentation
	Epidermal derivatives of vertebrates	04		Chalk and board method/ Powerpoint presentation
	Dermal derivatives of vertebrates	04		Chalk and board method /Powerpoint presentation
	Special derivatives of integument	04		Chalk and board method/ Powerpoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: TYBSC SEMESTER: VI MONTH: NOVEMBER

ACADEMIC YEAR: _2021-2022

LEARNING OBJECTIVE/S To introduce basic concepts of modern Chordate classification with evolution point of view and to understand the concept of taxonomy in higher animal kingdom.
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-1	General characters,difference between non chordates and chordates, Origin of chordates.	5		Chalk and board method
	Protochordata	5		Chalk and board method
	Group Euchordata	5		Chalk and board method/ Powerpoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: TYBSC SEMESTER: VI MONTH: NOVEMBER

ACADEMIC YEAR: _2021-22

LEARNING OBJECTIVE/S: To introduce learners to zoogeographic distribution(present and past) of animal species.
To introduce learners to various ways of animal distribution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV, UNIT-IV	Introduction:Plate tectonics and continental drift theory.	4		Chalk and board method
	Animal distribution and barriers	5		Chalk and board method/ Powerpoint presentation
	Zoogeographical realms	6		Chalk and board method/ Powerpoint presentation

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY

CLASS: FYBSc. SEMESTER: I MONTH: JULY 2021 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
To make learners aware of risks involved in handling of different hazardous chemicals, sensitive (electrical/electronic) instruments and infectious biological specimens especially during practical sessions in the laboratory and to train them to avoid mishap.
The learners will be able to: Learners would work safely in the laboratory and avoid occurrence of accidents (mishaps) which will boost their scholastic performance and economy in use of materials/chemicals during practical sessions.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT I- Laboratory safety, Units and Measurement	INTRODUCTION TO GOOD LABORATORY PRACTICES	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	USE OF SAFETY SYMBOLS	03		PRESENTATION
	UNITS OF MEASUREMENT	09		CHALK AND BOARD

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: III MONTH: JULY 2021 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:

The learners will be able to : To Introduce basic terms of genetics & to study Mendelian principles of inheritance and other forms pattern of inheritance.

The learners will be able to : Understand and apply the principles of inheritance. Understand the concept of multiple alleles, linkage and crossing over

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER I UNIT I- FUNDAMENTALS OF GENETICS	Introduction to genetics	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	Mendelian Genetics	08		CHALK AND BOARD
	Multiple Alleles and Multiple Genes	03		CHALK AND BOARD
	Linkage and Crossing Over	02		CHALK AND BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: V MONTH: JUNE 2021 ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
To introduce the topic of immunology by emphasizing the basic concepts to build a strong foundation and to give an overview of the immune system that plays an important role in disease resistance.

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The learners will be able to : *The learner shall comprehend the types of immunity and the components of immune system. The learner will realize the significant role of immune system in giving resistance against diseases.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III- BASIC IMMUNOLOGY	Overview of Immunology	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	Cells and Organs of immune system	04		PRESENTATION
	Antigens	04		PRESENTATION
	Antibodies	04		CHALK AND BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY

CLASS: FYBSc. SEMESTER: II MONTH: NOV 2021 ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
TO FACILITATE THE LEARNING OF POPULATION ECOLOGY,ITS DYNAMICS AND REGULATORY FACTORS IMPORTANT FOR ITS SUSTENANCE
The learners will be able to : THE UNIT WOULD ALLOW LEARNERS TO STUDY ABOUT NATURE OF ANIMAL POPULATION ,SPECIFIC FACTORS

AFFECTING ITS GROWTH AND ITS IMPACT ON THE POPULATION OF OTHER LIFE FORMS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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CLASS: SYBSc. SEMESTER: IV MONTH: NOV 2021 ACADEMIC YEAR: 2021-22

LEARNING OBJECTIVE/S:
The learners will be able to : To develop the learner's knowledge and understanding of genetic variability within a population and how the change in the gene pool leads to evolution of species.

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: NOV 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

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The learners will be able to : The learner shall understand the types and secretions of endocrine glands and their functions and their disorders.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: NOV2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

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The learners will be able to : Learner will understand the paradigms of discovery and commercialization of biological resources and knowledge gained by self-medication by animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : SONAL SALVI DEPARTMENT: **ZOOLOGY**

CLASS: F**.Y.B.Sc (ZOOLOGY)** SEMESTER: **II** MONTH: **DEC-FEB** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: TO FACILITATE THE LEARNING OF POPULATION ECOLOGY,ITS DYNAMICS AND REGULATORY FACTORS IMPORTANT FOR ITS SUSTENANCE

The learners will be able to : THE UNIT WOULD ALLOW LEARNERS TO STUDY ABOUT NATURE OF ANIMAL POPULATION ,SPECIFIC FACTORS AFFECTING ITS GROWTH AND ITS IMPACT ON THE POPULATION OF OTHER LIFE FORMS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT I- POPULATION ECOLOGY	INTRODUCTION TO POPULATION DYNAMICS	05	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	PAPER I UNIT I- POPULATION ECOLOGY
	POPULATION GROWTH REGULATION	04	FUNDAMENTALS OF ECOLOGY - ODUM	
	POPULATION GROWTH PATTERN	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY

CLASS: S.Y,BSc. SEMESTER: IV MONTH: DEC-FEB ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S ¬ To acquaint the learners with different aspects of human reproduction. ¬ To make them aware of the causes of infertility, techniques to overcome infertility and the concept of birth control.

The learners will be able to : Learners will able to understand human reproductive physiology ¬ Learners will become familiar with advances in ART and related ethical issues.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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P-III.U.II Aspects of Human Reproduction	Human Reproductive system and Hormonal regulation	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND BOARD
	Contraception & birth control	2		CHALK AND BOARD
	Infertility	4		POSTER AND PRESENTATIONS FOR REFERNCE
	Treatment of Infertility	4		
	Techniques and Ethical considerations of ART	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **VI** MONTH: **DEC-FEB** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: *To introduce learner to bioinformatics - a computational approach to learning the structure and organization of genomes, phylogeny and metabolism.*

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The learners will be able to : *Learner shall become aware of the computational point of view of studying the genomes.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I,U-IV, **Type study: Shark**	**Habit & habitat, distribution, external characters, classification and economic importance.**	5	CHORDATE ZOOLOGY- JORDAN AND VERMA UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	PRESENTATION
	Skin, exoskeleton, endoskeleton and systems a) Digestive system b) Respiratory system c) Blood vascular system d) Nervous system and receptor organs e) Urinogenital system, copulation, fertilization and development	9		YOUTUBE VIDEOS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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VidhyaDayanandPatil College of Arts
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NAME OF THE STAFF: SONAL SALVI DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **VI** MONTH: **DEC-FEB** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: *To introduce learner to bioinformatics - a computational approach to learning the structure and organization of genomes, phylogeny and metabolism.*
The learners will be able to : *Learner shall become aware of the computational point of view of studying the genomes.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III,U-IV, **Bioinformatics**	**Introduction**	3	**Bioinformatics** – RASTOGI AND RASTOGI **Bioinformatics** – ATTWOOD UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND BOARD
	Databases - Tools and their uses	4		YOUTUBE VIDEOS
	Sequence alignment methods	3		PRESENTATION, CHALK AND BOARD
	Predictive applications using DNA and protein sequences	2		CHALK AND BOARD

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____DEPARTMENT: _____

CLASS: _____SEMESTER: _____MONTH: _____ ACADEMIC YEAR:_____

LEARNING OBJECTIVE/S:
The learners will be able to :

_____

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____DEPARTMENT: _____

CLASS: _____SEMESTER: _____MONTH: _____ ACADEMIC YEAR:_____

LEARNING OBJECTIVE/S:
The learners will be able to :

_____

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_____

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SONAL RAMESH DANDGE** DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **V** MONTH: **JUNE** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S:
The learners will be able to : To introduce basic concepts of classification up to class in animal kingdom from phylum Annelida to Hemichordata and to familiarize with their characters.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Unit III: Kingdom Animalia II	3.1: Phylum Annelida- General Characters 3.1.2: Classification up to class with distinguishing features	2	UNIVERSITY TEXTBOOK INVERTEBRATE ZOOLOGY BY JORDAN AND VERMA	PRESENTATION
	3.2: Phylum Arthropoda- General Characters and Example	3		CHALK AND DUSTER
	3.3: Phylum Mollusca General Characters and Example	2		
	3.4: Phylum Echinodermata- General Characters and Example	3		
	3.5 Minor phyla- General Characters and Example	2		
	3.6 Phylum Hemichordata	3		

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	3.7 Basic concepts of phylogeny: Phylogenetic tree of invertebrates			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**:** **SONAL DANDGE** DEPARTMENT: **ZOOLOGY**

CLASS**:** **S.Y,BSc**. SEMESTER**:** **IV** MONTH**:** **NOV** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: TO INTRODUCE THEM WITH THE BASIC KNOWLEDGE OF RESEARCH, SCIENTIFIC WRITING AND IT'S METHODOLOGY

The learners will be able to : UNDERSTAND THE WAYS AND METHODS OF WRITING A RESEARCH PAPER, TYPES OF RESEARCH AND THE ETHICS RELATED TO SCIENTFIC RESEARCH AND ITS WRITING

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I.U.III	RESEARCH, DEDUCTIVE REASONING.INDUCTIVE REASONING	2		CHALK AND DUSTER

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RESEARCH METHODOLGY AND SCIENTIC WRITING	TYPES OF RESEARCH ,7C'S RULE,RESEARCH METHODOLOGY	3	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	THESIS AND ABSTRACT FOR REFERNCE
	SCIENTIFIC WRITING. TYPES OF WRITING ABSTRACT WRITING,MONOGRAPH,REVIEW WRITING,POSTER PRESENTATION	4		POSTER AND PRESENTATIONS FOR REFERNCE
	BIBLIOGRAPHY ,TYPES OF PRESENTATION, USE OF COMPTER IN RESEARCH	3		
	PLAGIARISM.ETHICS IN RESEARCH	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SONAL DANDGE** DEPARTMENT: **ZOOLOGY**

CLASS: **F.Y,BSc**. SEMESTER: **II** MONTH: **DEC-FEB** ACADEMIC YEAR: **2021-22**

LEARNING OBJECTIVE/S: TO EXPLAIN THE COMPONENTS OF ECOSYSTEM AND HOW ECOSYSTEM IS ESSENTIAL FOR SURVIVAL OF ANIMALS

The learners will be able to : UNDERSTAND THE IMPORTANCE OF ECOSYSTEMAND VARIOUS FAUNA BEING EXTINCT BECAUSE OF INTERUPTING OF HUMAN BEING

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I, U-II, ECOSYSTEM	DEFINATION OF ECOSYSTEM, COMPONENTS OF ECOSYSTEM	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND DUSTER
	IMACT OF TEMPERATURE ON BIOTA, VARIOUS BIOGEOCHEMICAL CYCLES	4		PRESENTATION
	FRESHWATER ECOSYSTEM, FOOD CHAIN	4		
	FOOD WEB, ECOLOGICAL PYRAMID	2		
	ANIMAL INTERACTION THAT IS POSITIVE INTERACTION AND NEGATIVE INTERACTION	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: **_SONAL RAMESH DANDGE** DEPARTMENT: **ZOOLOGY** CLASS: **T.Y.Bsc** SEMESTER: **VI** MONTH: **APRIL-MAY**

ACADEMIC YEAR:**2021-22**

LEARNING OBJECTIVE/S: TO INTRODUCE THE LEARNER VARIOUS NATURAL RSOURCES ,THEIR EXPLOITATION AND HOW GOVERNMENT PLAYS AN IMPORTANT ROLE TO IMPLIMENT VAROIUS LAWS
The learners will be able to : UNDERSTAND DIFFERENT FACTORS AFFECTING ENVIRONMENT AND NEED TO UNDERSTAND VAROIUS LAWS ANGAINST GOVERONMENT FOR EXPLOITATION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV, UNIT I ENVIRONMENTAL MANAGEMENT	NATURAL RESOURCES AND THEIR CLASSIFICATION	2	ENVIRONMENTAL BIOLOGY BY P.S. VERMA	CHALK AND DUSTER PRESENTATION
	EXPLOITATION AND MODIFICATION OF NATURAL RESOURCES	2		
	SUSTAINABLE DEVELOPMENT	3	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	

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	WASTE MANAGEMENT, WATER MANAGEMENT	4		
	LAWS GOVERNING ENVIRONMENT	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT- 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SONAL DANDGE** DEPARTMENT: **ZOOLOGY** CLASS: **S.Y.B.sc** SEMESTER: **III** MONTH: **DEC-FEB**

ACADEMIC YEAR:**2021-22**

LEARNING OBJECTIVE/S: TO INTRODUCE CONCEPT OF PARASITISM , MODES OF TRANSMISSION OF PARASITES AND PRECAUTIONS TO PREVENT DISEASES
The learners will be able to : _TO UNDERSTAND VARIOUS PARASITES, THEIR LIFE CYCLE, THE SYMPTOMS OF THE DISEASE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 3, UNIT II	INTRODUCTION TO PARASITOLOGY AND TYPES OF PARASITES	2	PARASITOLOGY BY SHARMA	CHALK AND DUSTER PRESENTATION

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PARASITOLOGY	HOST PARASITE RELATIONSHIP, HOST SPECIFICITY	3	PARASITOLOGY BY CHATTERJEE .K.D	
	LIFE CYCLE, PATHOGENECITY, CONTROL MEASURES AND TREATMENT OF THE FOLLOWING PARASITES Entamoeba histolytica, Faciola hepatica, Taenia solium, Wucheria bancrofti	4	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	
	MORPHOLOGY,LIFE CYCLE, PATHOGENECITY,CONTROL MEASURES AND TREATMENT OF THE FOLLOWING PARASITES HEAD LOUSE, MITE, BED BUG	3		
	PARASITOLOGICAL SIGNIFICANCE	3		

TOTAL NUMBER OF LECTUES ALLOCATED TO THE UNI

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: FYBSc. SEMESTER: I MONTH: JULY 2021 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : To orient learner about rich heritage of Biodiversity of India and make understand significance of its conservation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II BIODIVERSITY AND ITS CONSERVATION	INTRODUCTION AND LEVELS TO BIODIVERSITY	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	BIODIVERSITY HOTSPOT	03	BIODIVERSITY – S.CHAND PUBLICATION	PRESENTATION
	VALUES OF BIODIVERSITY	03		
	THREATS OF BIODIVERSITY	03		
	CONSERVATION AND ITS MANAGEMENT	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: III MONTH: JULY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : To introduce the concepts of physiology of nutrition, excretion and osmoregulation. To expose the learners to various nutrition apparatus, excretory and osmoregulatory struct

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPERII UNIT I NUTRITION AND EXCRETION	EXCRETION APPARATUS ,PHYSIOLOGY	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	PROCESS AND COMPARATIVE STUDY	03		PRESENTATION
	NUTRITION TYPES AND PROCESS	04		CHARTS
	COMPARATIVE STUDY	03		
	PHYSIOLOGY	02		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : To acquaint learners with the details of Sepia as a representative of invertebrate animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT IV TYPE STUDY SEPIA	GENERAL CHARACTERISTICS AND CLASSIFICATION	02	INVERTEBRATE BY KOTPAL	CHALK AND BOARD
	DIGESTIVE SYSYTEM ,REPRODUCTIVE SYSTEM	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	PRESENTATION

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	EXCRETORY SYSTEM	03		CHARTS
	NERVOUS SYSTEM	02		
	CIRCULATORY SYSTEM	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: FYBSc. SEMESTER: II MONTH: NOV 2021 ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : Learners will be able to promptly recognize stress related problems at initial stages and would be able to adopt relevant solutions which would lead to psychologically strong mind set promoting positive attitude important for academics and would be able to acquire knowledge of cause, symptoms and precautions of infectious diseases.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III COMMON HUMAN DISEASE	STRESS RELATED DISORDER – SYMPTOMS, EFFECTS,CAUSES, PREVENTION,REMEDY	07	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	COMMUNICABLE AND NON COMMUNICABLE DISEASE – SYMPTOMS, EFFECTS,CAUSES, PREVENTION,REMEDY	07		PRESENTATION
				CHARTS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR:2021-2022 _

LEARNING OBJECTIVE/S:

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The learners will be able to : To develop learner's knowledge and understanding of genetic variability within a population and how the change in the gene pool leads to evolution of species.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPERII-POPULATION GENETICS AND EVOLUTION	INTRODUCTION TO POPULATION GENETICS,BRIEF EXPLANATION OF TERM OF GENETICS	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	
	HARDY WEINBERG LAW,FACTORS AFFECTING LAW	04		PRESENTATION
	PATTERN OF NATURAL SELECTION	04		CHARTS
	SPECIES CONCEPT AND SPECIEATION AND ISOLATION MECHANISM	03		
	EVOLUTIONARY GENETICS	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR:2021-2022 _____

LEARNING OBJECTIVE/S:
The learners will be able to : To introduce to the learner the details of endocrine glands and its disorders.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III ENDOCRINOLOGY	INTRODUCTION TO ENDOCRINOLOGY AND TYPES OF GLANDS	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	
	ENDOCRINE SYSTEM,AND ITS MECHANISM	02	TEXTBOOK OF ENDOCRINOLOGY – WILLIAMS	PRESENTATION
	CLASSIFICATION AND PROPERTIES OF HORMONE, MECHANISM OF HORMONES ACTION	04		CHARTS
	HISTOLOGY,FUNCTIONS AND DISORDERS OF PITUITARY,THYROID	04		
	PARATHYROID,PANCREAS AND ADRENAL	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : To introduce the learner to the concepts of bioprospecting and zoopharmacognosy. To introduce learner with various ethological aspects by which non-human animals
apparently self-medicate themselves.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV UNIT III BIOPROSPECTING AND ZOOPHARMACOGNOSY	INTRODUCTION TO BIOPROSPECTING	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	
	TYPES OF BIOPROSPECTING	03		PRESENTATION
	CONSERVATION – ADVANTAGE AND DISADVANTAGE , INTRODUCTION TO ZOOPHARMACOGNOSY	03		CASE STUDIES
	SELF MEDICATION AND ITS MECHANISM	03		

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	APPLICATION AND ITS CONTRIBUTION	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SHWETA SURESH SHAHASANE DEPARTMENT: Zoology

CLASS: :F.Y.B.Sc. SEMESTER: 1 MONTH: JUNE -OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: *To make learners aware of risks involved in handling of different hazardous chemicals, sensitive (electrical/electronic) instruments and infectious biological specimens especially during practical sessions in the laboratory and to train them to avoid mishap*

The learners will be able to : *Learners would work safely in the laboratory and avoid occurrence of accidents (mishaps) which will boost their scholastic performance and economy in use of materials/chemicals during practical sessions.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:2 UNIT:1 TITLE: INSTRUMENTATION	**Introduction to good laboratory practices**	1	Methods in Biostatistics – B. K. Mahajan	1)Teaching methods:Questions, Peer learning by making buzz groups of students,role play,debate,case-study,problem solving and decision making strategy
	Use of safety symbols : meaning, types of hazards and precautions	2	A Manual of Medical Laboratory Technology -A. H. Patel	2) learning resources: textbook,pictures and A.V. , Internet.
	Calculations and related conversions of each: Metric system- length(meter to micrometer); weight (gram to microgram), Volumetric (Cubic measures)	1	Calculations in Molecular biology and Biotechnology - Frank H. S tephenson	

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	Temperature: Celsius, Fahrenheit, Kelvin	1	Text Book of Zoology, F.Y.B.Sc. Semester I Course 2	
	Concentrations : Percent solutions, ppt, ppm, ppb dilutions,Normality, Molarity and Molality.	2		
	Biostatistics: Introduction and scope, Sampling and its types, Central Tendencies (mean, median, mode) Tabulation, Graphical representations (Histograms, bar diagrams, pie diagrams)	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SHWETA SURESH SHAHASANE DEPARTMENT: ZOOLOGY

CLASS:F.Y. B. Sc. SEMESTER: 2 MONTH:December-March ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: *To impart knowledge of different components of ecosystem and educate about essentials of coexistence of human beings with all other living organisms*

The learners will be able to : *Learners will grasp the concept of interdependence and interaction of physical, chemical and biological factors in the environment and will lead to better understanding about implications of loss of fauna specifically on human being, erupting spur of desire for conservation of all flora and fauna*

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:Ecology and Wildlife Management. Unit: 2 TITLE: Ecosystem	Ecosystem - Definition and components	2	Fundamentals of Ecology - Eugene P. Odum	1)Teaching methods:Questions, Peer learning by making buzz groups of students,role play,debate,case-study,problem solving and decision making strategy.
	Biogeochemical cycles (Water, Oxygen, Nitrogen, Sulphur)	2	Fundamentals of Ecology - M. C. Dash	2) learning resources: textbook,,A.V. program, Internet,POWERPOINT PRESENTATION, YOUTUBE VIDEOS.
	Fresh water ecosystem – Lentic and Lotic	2	Ecology - Mohan P. Arora	
	Food chain and food web in ecosystem (Fresh water and Grass land)	3	Ecology and Environment - Sharma P. D	
	Ecological pyramids - energy, biomass and number	2	Ecology : Principles and Applications - Chapman J.L	
	Animal interactions (commensalism, mutualism, predation, antibiosis, parasitism)	3	Ecology - Subramaniam	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA SURESH SHAHASANE DEPARTMENT: ZOOLOGY CLASS:S.Y.B.Sc

SEMESTER:3 MONTH: JUNE- OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: *To disseminate information on economic aspects of zoology like apiculture, vermiculture, dairy science. To encourage young learners for selfemployment.*

The learners will be able to : *Learners would gain knowledge on animals useful to mankind and the means to make the most of it. Learners would learn the modern techniques in animal husbandry. Learners would be pursuing entrepreneurship as careers*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER:3 UNIT:3 TITLE:Economic Zoology	**APICULTURE:Methods of bee keeping and management** **Economic importance**	5	Economic Zoology- Biostatistics and Animal behaviour	1)TEACHING METODS : Lecturing ,Demonstrative,Brain storming, Direct teaching, case -study , Comparative method
	VERMICULTURE:Rearing methods, management and economic importance	4	Economic Zoology- Shukla G.S	2)Teaching resources: LIVE SPECIMEN , A.V., TEXTBOOK , MANNUALS, INTERNET , PICTURES, CHARTS, POWER POINT PRESENTATIONS AND YOUTUBE VIDEOS .ONLINE WORSHOPS
	DAIRY SCIENCE:Dairy development in India **Dairy Processing** **Milk and milk products**	6	A handbook on Economic Zoology, S.Chand	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA SURESH SHAHASANE _ DEPARTMENT: ZOOLOGY CLASS: S.Y.B.Sc. SEMESTER: IV

MONTH: DECEMBER TO MARCH ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : acquaint the key concept of embryology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:Comparative Embryology ,Aspect of Human Reproduction, Pollution and its effect on organisms UNIT:1 TITLE:Comparative Embryology.	1)Types of Eggs-Based on amount and distribution of yolk.	2	1)Developmental Biology by Gilbert.	1)TEACHING METODS : Lecturing ,Demonstrative,Brain storming, Direct teaching, case -study , Comparative method
	2)structure and types of sperms	1	2)Developmental Biology by Berri and Tata Mc Craw.	2)Teaching resources: Clay models , A.V., PowerPoint presentations
	3)Types of cleavage- Holoblastic and Meroblastic	1	3)Chick Embryology by Pattern	
	4)Types of blastulae	1	4)Chordate Embryology by Verma and Tyagi.	

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	5)Gastrulation	2	5)Chordate Zoology by Jordan	
	6)Coelom -formation and types	2		
	7)Extra embryonic membranes	6		
	8)Types of placentae -Based on histology,morphology and implantation.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA SURESH SHAHASANE DEPARTMENT: ZOOLOGY CLASS: T.Y. B.Sc,

SEMESTER: 5 MONTH: JUNE- OCTOBER ACADEMIC YEAR:2021-2022

LEARNING OBJECTIVE/S: *To introduce the learner to the basics of developmental biology with reference to chick as a model and also familiarize with experiments related to it.*

The learners will be able to :*Learner will be able to understand the processes involved in embryonic development and practical applications of studying the chick embryology.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:4 UNIT:4 TITLE:Developmental biology of Chick	Introduction to Developmental Biology:	1	DEVELOPMENTAL BIOLOGY BY GILBERT	1)TEACHING METODS : Lecturing ,Demonstrative,Brain storming, Direct teaching, case -study , Comparative method

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	Structure of Hen's egg, physico-chemical nature and forms of yolk-granular, platelets and spheres; fertilization, cleavage, blastulation, gastrulation	3	DEVELOPMENTAL BIOLOGY OF CHICK BY PATTEN	2)Teaching resources: LIVE SPECIMEN, PERMENANT SLIDES , A.V., TEXTBOOK , INTERNET , PICTURES, CHARTS
	Structure of chick embryo – 18 hou rs, 24 hou rs, 33 hou rs, 48 hou rs and 72 hou rs	8	CHORDATE ZOOLOGY BY JORDAN	
	Extra embryonic membranes	2		
	Organizer: Introduction, Spemann Mangold experiment, Hensen's node as an organizer	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA SURESH SHAHASANE DEPARTMENT: ZOOLOGY CLASS: T.Y. B.Sc,

SEMESTER: 6 MONTH: DECEMBER- MARCH ACADEMIC YEAR:2021-2022

LEARNING OBJECTIVE/S: To acquire knowledge of the various aspects of diseases affecting fishes

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER: applied component UNIT:4 TITLE: Diseases	Viral diseases, prophylaxis and preventive measures	5L	Text Book of Fish Biology and Indian Fisheries by Dr. R. P. Parihar, Central Pub. House, Allahabad.	1)TEACHING METODS : Lecturing ,Demonstrative,Brain storming, Direct teaching, case -study , Comparative method
	Bacterial, fungal, protozoan infections and treatment	5L	Handbook of Fish Biology and Fisheries Edited By J.B. Hart and John Reynold.	2)Teaching resources: LIVE SPECIMEN, PERMENANT SLIDES , A.V., TEXTBOOK , INTERNET , PICTURES, CHARTS
	Crustacean infections and treatment Physiological disorders (Dropsy) / diseases and treatment	5L		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: III MONTH: JULY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
The learners will be able to : To introduce the learner to the science of dairy. To make the learner aware about care of different pet animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III UNIT III APPLIED ZOOLOGY - (DAIRY SCIENCE)	3.2 DAIRY SCIENCE	01	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	PRESENTATION
	3.2.1 ROLE OF DAIRY DEVELOPEMENT IN RURAL ECONOMY	01		PRESENTATION
	3.2.2 MILK AND MILK PRODUCTS	03		PRESENTATION

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S:
To introduce the learner to different bones of human skeleton and their functional importance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV UNIT II HUMAN OSTEOLOGY	2.1 INTRODUCTION	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES, TEXT BOOK OF HUMAN	PRESENTATION
	2.2 AXIAL SKELETON	06		PRESENTATION
	2.3 APPENDICULAR SKELETON	06		PRESENTATION

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			ANATOMY BY TORTORA	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: Learner shall comprehend boat building techniques and design of engines used in mechanized boats.
Learner shall understand the operations of various types of nets and fishing method.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AC UNIT - II	2.1 Basic boat building	03	UNIVERSITY TEXTBOOK BY	PRESENTATION

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	2.2 Basic studies of marine engines: Sectional View of 2-stroke and 4-stroke Diesel engines Winch and Deck Side Equipment	06	BOARD OF STUDIES, TEXT BOOK OF CRAFTS AND GEAR	PRESENTATION
	2.3 Operations: Gill, Trawl, Purse seine Nets Hooks and Lines Non-conventional Fishing Methods	06		PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR:2021-2022 _

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LEARNING OBJECTIVE/S:
The learners will be able to : To give learner insight into the structure of biomolecules, and their role in sustenance of life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-II UNIT - III - BIOMOLECULES	3.1 BIOMOLECULES	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	PRESENTATION
	3.2 CARBOHYDRATES	04		PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR:2021-2022 _____

LEARNING OBJECTIVE/S:
The learners will be able to : To sensitize learner regarding the various threats to the wildlife. To introduce learner various way that can help in the protection, conservation, management and enhancement of wildlife populations and habitat.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV UNIT II -WILDLIFE MANAGEMENT	2.1 HABIT, HABITAT, TERRITORY AND NICHE OF WILD ANIMALS	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	PRESENTATION
	2.2 THREATS TO WILDLIFE	05		PRESENTATION
	2.3 WILDLIFE CONSERVATION	07		PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR:2021-2022 _____

LEARNING OBJECTIVE/S:
The learners will be able to: Learners will acquire the knowledge and would put in to practice the preservation and processing techniques for commercial ventures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AC UNIT - V Unit 5: PRESERVATION AND PROCESSING	5.1 Traditional methods and their modifications: i) Icing ii) Drying iii) Salting	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES Fish Biology by C.B.C. Srivastava – Narendra Pub. House.	PRESENTATION
	5.2 Introduction to refrigeration: Types and properties of refrigerants	05		PRESENTATION
	5.3 Principle and steps involved in can reform and canning of fish	04		PRESENTATION
	5.4 Equipment and utensils used in seafood processing	03		PRESENTATION

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:F.Y.B.Sc SEMESTER: I MONTH: SEPTEMBER- JANUARY ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: TO AQUAINT LEARNERS TO STUDY THE MODERN DEVELOPMENT IN FIELD OF ZOOLOGY WITH RESPECT TO ITS APPLICATION FOR BENEFITS TO HUMAN AND WORLD
The learners will be able to : HELP YOUNG MINDS THINK OUT OF THE BOX WITH RESPECT TO NEW DEVELOPMENT BENIFITING THE HUMANS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II- ANIMAL BIOTECHNOLOGY	INTRODUCTION TO BIOTECHNOLOGY , SCOPE AND ACHIEVEMENTS	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES
	TRANSGENESIS,CLONING	04	BIOTECHNOLOGY– SATYANARAYAN & CHAKRAPANI	PRESENTATION
	ETHICAL ISSUES	03		
	DNA FINGERPRINTING AND GENE THERAPY	04		

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	GREEN GENES	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:S.Y.B.Sc SEMESTER: III

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: TO UNDERSTAND THE BASICS OF GENETICS WITH RESPECT TO SEX DETERMINATION AND ITS PURPOSE
The learners will be able to : TO CORRELATE WITH THE GENETIC DISORDER WITH THE STRUCTURE OF CHROMOSOME,NUMBER OF CHROMOSOME AND SEX DETERMINATION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II- CHROMOSOME	TYPES , STRUCTURE AND CLASSIFICATION OF CHROMOSOMES	04	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES

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AND HEREDITY	SEX DETERMINATION – HORMONAL ,TEMPERATURE AND CHROMOSOMAL	04	GENETICS - FAIRBANK	PRESENTATION
	SEX LINKED INHEITANCE	02	GENTEICS – MANGE AND MANGE	
	SEX LIMITED INHERITANCE	02		
	SEX INFLUENCED INHERITANCE	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: TO COMPREHEND THE GENERAL CHARACTERS AND CLASSIFICATION OF KINGDOM ANIMALIAE FROM PORIFERA TO NEMATODA AND SPECIFIC CHARACTERS OF ORGANISMS BELONGING TON THESE PHYLA
The learners will be able to : FAMILIARIZING WITH CLASSIFICATION AND ABLE TO IDENTIFY ANIMAL IN HABITAT

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II- KINGDOM ANIMALIA I	GENERAL CHARARCTERS	01	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES INVERTEBRATE ZOOLOGY – R.L.KOTPAL	POWERPOINT PRESENTATION /ONLINE LECTURES
	PHYLUM PORIFERA – CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		PRESENTATION
	PHYLUM CNIDARIA CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		LIVE ANIMALS
	PHYLUM PLATYHELMINTHES CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		
	PHYLUM NEMATODA CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V MONTH: JULY - OCTOBER ACADEMIC YEAR: 2021-2022

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LEARNING OBJECTIVE/S: TO INTRODUCE PRINCIPLE OF TOXICOLOGY WITH RESPECT TO TOXIC RESPONSE ,NATURE AND ITS EFFECTS IN TOXICITY TESTING AND ITS REGULATORY AFFAIRS

The learners will be able to : BROAD UNDERSTANDING IN THE FIELD HELPING STUDENT PREPARE FOR EMPLOYMENT IN PHARMACEUTICAL INDUSTRY AND RELATED ARENAS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT II- TOXICOLOGY	INTRODUCTION,PRINCIPLE AND SCOPE TO TOXICOLOGY ,	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES
	TOXINS AND TOXICANTS , CONCEPT OF LC50,LD50,ED50	04	FUNDAMENTALS OF TOXICOLOGY – KAMLESHWAR PANDEY & J .P.SHUKLA	PRESENTATION
	CHARACTERS OF EXPOSURE	02		
	TYPES AND ROUTES OF TOXICITY	04		
	DOSE RESPONE RELATIONSHIP AND TARGET ORGAN TOXICITY	02		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **BHUMIKA ASHOK OZA** DEPARTMENT: **ZOOLOGY**
CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **VI** MONTH: **DEC-FEB** ACADEMIC YEAR: **2021-2022**
LEARNING OBJECTIVE/S: TO INTRODUCE THEM WITH CHORDATE CLASSIFICATION WITH POINT OF EVOLUTION AND UNDERSTAND THE CONCEPT OF TAXONOMY.
The learners will be able to : UNDERSTAND PHYLOGENY AND SPECIAL FEATURES ALONGWITH TAXONOMY UPTO CLASS OF CHORDATES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I, U-II, GROUP EUCHORDATA II	DIVISION GNATHOSTOMATA	3	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES CHORDATES BY JORDAN AND VERMA CHORDATE ZOOLOGY BY R.L.KOTPAL	POWERPOINT PRESENTATION /ONLINE LECTURES
	DIPNOI	5		LIVE ANIMALS
	SUPERCLASS TETRAPODA	5		PHOTOGRAPHS

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA OZA DEPARTMENT: ZOOLOGY
CLASS: S.Y,BSc. SEMESTER: IV MONTH: DEC-MARCH ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S: TO IMPART SCIENTIFIC KNOWLEDGE TO THE LEARNERS ABOUT HOW LIFE ORIGINATED AND EVOLVED ON OUR PLANET
The learners will be able to : GAIN INSIGHT ABOUT ORIGIN OF LIFE AND ITS DIFFERENT THEORIES.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I.U.I ORIGIN AND EVOLUTION OF LIFE	INTRODUCTION THEORY FOR ORIGIN OF LIFE	3	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY BBC WORLD FACTS AND DISCOVERY VIDEOS	ONLINE LECTURES
	EVIDENCES IN NFAVOUR OF ORGANIC EVOLUTION	5		YOU TUBE VIDEOS
	THEORIES OF ORGANIC EVOLUTION	5		POSTER AND PRESENTATIONS FOR REFERNCE

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				DISCOVERY PLUS SERIES

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA OZA DEPARTMENT: ZOOLOGY
CLASS: F.Y,BSc. SEMESTER: II MONTH: FEB – APRIL ACADEMIC YEAR: 2021-2022
LEARNING OBJECTIVE/S: TO EXPLAIN THE SOURCE AND IMPORTANCE OF HEALTHY MIND, BODY AND DIETARY HABITS.
The learners will be able to: UNDERSTAND THE IMPORTANCE OF GOOD DIETARY HABITS AND LEAD A HEALTHY LIFESTYLE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

B.A. Ozaa

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

Late Shri. Vishnu Waman Thakur Charitable Trust
Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
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P-II, U-II, HUMAN HEALTH AND DISEASE	BALANCED DIET AND NUTRITION AND DIET CHART	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND DUSTER
	MALNUTRITION DISORDERS – CAUSES,SYMPTOMS,PRECAUTION AND REMEDIES	5		BMI STUDY BY ASSIGNMENT AND PROJECT
	LIFESTYLE DISORDERS- CAUSES, SYMPTOMS, PRECAUTION AND REMEDIES	5		
	SIGNIFICANCE OF BREAST FEEDING AND BREASTMILK,DIETARY FIBRES	2		
	BMI	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **BHUMIKA ASHOK OZA** DEPARTMENT: **ZOOLOGY**

B.A. Oza

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **VI** MONTH: **DEC-FEB** ACADEMIC YEAR: **2021-2022**

LEARNING OBJECTIVE/S: UNDERSTAND DIFFERENT FACTORS AFFECTING THE ENVIRONMENT AND VARIOUS METHODS TO IMPROVE ENVIRONMENTAL STEWARDSHIP

The learners will be able to :UNDERSTAND DIFFERENT IMAPCT ,FACTOTRS AND LAWS REGARDING ENVIRONMENT

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-IV ,U-I, ENVIRONMENT MANAGEMENT	NATURAL RESOURCES AND THEIR CLASSIFICATION	3	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY CSIR REFERENCE BOOK-PATHFINDER ENVIRONMENTAL SCIENCE BY THAKUR INDUSHEKHAR AND S CHAND PUBLICATION	POWERPOINT PRESENTATION /ONLINE LECTURES
	EXPLOITATION AND MODIFICATION OF NATURAL RESOURCES	4		YOUTUBE VIDEOS
	WATER MANAGEMENT	2		NEWSPAPER CASE STUDIES
	WASTE MANAGEMENT	4		
	ACTS AND RULES OF ENVIRONMENTAL MANAGEMENT	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

B.A. Ozna

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____DEPARTMENT: _____ CLASS: _____SEMESTER: _____MONTH: _____ ACADEMIC YEAR:_____

LEARNING OBJECTIVE/S:
The learners will be able to :

_____

_____

_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

B.A. Ozna

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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B.A. Ozra

SIGNATURE OF THE STAFF

SIGNATURE OF THE H.O.D.

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAUSTUBH JADHAV DEPARTMENT: ZOOLOGY

CLASS: FYBSc. SEMESTER: II MONTH: JANUARY- APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: TO FACILITATE THE LEARNING OF POPULATION ECOLOGY,ITS DYNAMICS AND REGULATORY FACTORS IMPORTANT FOR ITS SUSTENANCE

The learners will be able to : THE UNIT WOULD ALLOW LEARNERS TO STUDY ABOUT NATURE OF ANIMAL POPULATION ,SPECIFIC FACTORS AFFECTING ITS GROWTH AND ITS IMPACT ON THE POPULATION OF OTHER LIFE FORMS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT I- POPULATION ECOLOGY	INTRODUCTION TO POPULATION DYNAMICS	05	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION
	POPULATION GROWTH REGULATION	04	FUNDAMENTALS OF ECOLOGY - ODUM	CHALK AND BOARD
	POPULATION GROWTH PATTERN	04		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAUSTUBH JADHAV DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: JANUARY- APRIL ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: TO INTRODUCE THE LEARNERS TO THE DISTINGUISHING CHARACTERS OF DIFFERENT CLASSES
THE LEARNERS WILL BE ABLE TO : THIS UNIT WILL ALLOW LEARNERS TO UNDERSTAND THE CHARACTERISTIC FEATURES OF CLASS REPTILIA, AVES AND MAMMALS WITH THE HELP OF EXAMPLES.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT III- GROUP EUCHORDATA III	INTRODUCTION	1	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	CLASS: REPTILIA -GENERAL CHARACTERS EXAMPLES	4	CHORDATE ZOOLOGY, E. L. JORDAN	CHALK AND BOARD
	CLASS: AVES- GENERAL CHARACTERS EXAMPLES	4		
	CLASS: MAMMALIA-GENERAL CHARACTERS EXAMPLES	4		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: KAUSTUBH JADHAV DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI APPLIED COMPONENTS MONTH: JANUARY- APRIL ACADEMIC YEAR: 2021-2022

LEARNING OBJECTIVE/S: TO ACQUIRE KNOWLEDGE OF VARIOUS FISH BY-PRODUCTS AND GOOD MANUFACTURING PRACTICES
THE LEARNERS WILL BE ABLE TO : LEARNER WILL GAIN IN-DEPTH KNOWLEDGE OF FISH BY PRODUCTS AS WELL AS VALUE ADDED PRODUCTS WHILE ALSO LEARNING GOOD MANUFACTURING PRACTICES FOR MANUFACTURING THIS PRODUCTS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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UNIT VI: BY-PRODUCTS AND VALUE ADDED PRODUCTS	INTRODUCTION TO BY-PRODUCTS	1	TEXT BOOK OF FISH BIOLOGY AND INDIAN FISHERIES BY DR. R. P. PARIHAR,	POWERPOINT PRESENTATION
	PROXIMATE COMPOSITION OF FISH MEAT AND PRODUCTS	3	WEALTH OF INDIA VOL. IV – CSIR PUB.	
	TYPES OF BY-PRODUCTS	3		
	DIFFERENT TYPES OF VALUE ADDED PRODUCTS FROM FISH AND SHELLFISH	5		
	GOOD MANUFACTURING PRACTICES	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUHRI KINI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: INTRODUCE CONCEPT OF VACCINES ,IMMUNOPATHOLOGY AND ITS PERSPECTIVE IN ORGAN TRANSPLANTATION

The learners will be able to : DEVELOP BASIC UNDERSTANDING OF IMMUNOLOGY AND ITS PRACTICAL APPLICATION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT IV- APPLIED IMMUNOLOGY	ANTIGEN ANTIBOGY REACTION	05	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	ONLINE LECTURE
	VACCINES AND VACCINATIONS	05	KUBY IMMUNOLOGY	PRESENTATION
	TRANSPLANTATION IMMUNOLOGY	05		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY CLASS:S.Y.B.Sc SEMESTER: V

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: TO FAMILIARIZE CELLULAR ARCHITECTURE AND ITS IMPORTANCE OF TISSUE TO VITAL ORGAN
The learners will be able to : APPRECIATE WELL ORGANIZED TISSUE AND CELL SYSTEM IN BODY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT I- MAMMALIAN HISTOLOGY	VERTICAL SECTION OF SKIN	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES
	V.S OF TOOTH	02	TEXTBOOK OF HISTOLOGY GARTNER ,LESLIE	PRESENTATION
	T.S OF TOUNGE	02		
	T.S OF ALIMENTARY CANAL	05		

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	T.S OF ASSOCIATED DIGESTIVE GLANDS	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: VI

MONTH: DECEMBER - APRIL ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: TO INTRODUCE CONCEPT OF HOMEOSTASIS – THERMOREGULATION AND OSMOREGULATION.
The learners will be able to : SHALL COMPREHENDTHE ADAPTIVE RESPONSES OF ANIMALS TO ENVIRONMENTAL CHANGES FOR SURVIVAL.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II- HOMEOSTASIS	HOMEOSTASIS	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES
	THERMOREGULATION	05		PRESENTATION

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	OSMOTIC AND IONIC REGULATION	05		
		03		
		T03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: VI

MONTH: DECEMBER – APRIL ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: TO INTRODUCE LEARNER TO CHEMICAL AND MOLECULAR PROCESSES THAT AFFECT GENETIC MATERIAL
The learners will be able to : RECOGNIZE SIGNIFICANCE OF MOLECULAR BIOLOGY AND DNA REPAIR MECHANISM.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT I- MOLECULAR BIOLOGY	TYPES OF MUTATION	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES

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	INDUCED MUTATION	04		PRESENTATION
	DNA REPAIR MECHANISM	03		
	EUKARYOTIC GENE EXPRESSION	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: **ZOOLOGY**
CLASS: **S.Y.B.Sc (ZOOLOGY)** SEMESTER: **III** MONTH: **JULY - OCTOBER** ACADEMIC YEAR: **2020-2021**
LEARNING OBJECTIVE/S: INTRODUCE CLASSICAL EXPERIMENT FOR PROVING DNA AS A GENETIC MATERIAL AND STRUCTURES OF NUCLEIC ACIDS ALONGWITH CENTAL DOGMA THEORY
The learners will be able to : IMPORTANCE OF NUCLEIC ACID AND APPRECIATE GENE REGULATION ACTIVITY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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P-I, U-III, NUCLEIC ACIDS	GENETIC MATERIAL	7	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES GENETICS - GARDNER	POWERPOINT PRESENTATION /ONLINE LECTURES
	FLOW OF GENETIC INFORMATION IN EUKARYOTIC CELL	5		
	GENE EXPRESSION AND REGULATION	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY
CLASS: S.Y,BSc. SEMESTER: IV MONTH: DEC-FEB ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S: STUDY STRUCTURAL AND FUNCTIONAL ORGANIZATION OF CELL
The learners will be able to : ACQUIRE INSIGHT OF TRANSPORT MECHANISM FOR COMPOSITION AND MAINTAINANCE OF CELL.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II -.U.I CELL BIOLOGY	INTRODUCTION TO CELL BIOLOGY	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	POWERPOINT PRESENTATION /ONLINE LECTURES
	NUCLEUS	5		
	PLASMA MEMBRANE	4		
	TRANSPORT ACROSS MEMBRANE	2		
	CYTOSKELETAL STRUCTURE	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

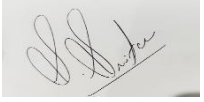
NAME OF THE STAFF: DR. SMITA SUBRAMANIAN DEPARTMENT:Zoology

CLASS: F.Y.BSc.(CBZ) SEMESTER: I MONTH: __AUGUST-NOVEMBER ACADEMIC YEAR: __2020-21

LEARNING OBJECTIVE/S: To acquaint learners to Biotechnology with respect to advancement in Zoology
The learners will be able to : The Learners will be able to understand various aspects of Biotechnology and new approach and techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-I AMIMAL BIOTECHNOLOGY	Biotechnology Scopes	1	University Textbook and Biotechnology.	PPT
	Transgenesis	6		PPT
	Applications of Biotechnology	8		PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____



SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

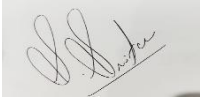
NAME OF THE STAFF: D. SMITA SUBRAMANIAN DEPARTMENT:Zoology

CLASS: S.Y.BSc.(BZ/CZ) SEMESTER: III MONTH: JUNE- OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will study aspects of control and coordination, locomotion and reproduction
The learners will be able to : The learners will be able to understand the various mechanism of control and coordination, locomotion and reproduction in different animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-III CONTROL AND COORDINATION, LOCOMOTION AND REPRODUCTION	Control and coordination,	5	University Textbook and Non- Chordate and Chordate Zoology	PPT
	Locomotion	5		PPT
	Reproduction	5		PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____



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TEACHING PLAN (UNIT PLAN)

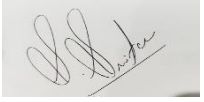
NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY

CLASS: T.Y.BSc. SEMESTER: V MONTH: _JUNE-SEPTEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: Learners will get insights of diagnostic techniques.
The learners will be able to : ___Understand various techniques involved in blood analysis and pathology studies. ___

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit -II Applied Hematology	Scope of Applied Hematology	1	University textbook. Textbook of Pathology by Godkar	PPT
	Microscopic examination of blood: Blood cancer, Infectious disease and Haemoglobinopathies	4		PPT
	Coagulopathies	2		PPT
	Biochemical examination: liver functions, Kidney functions, Carbohydrate metabolism amd Hormone analysis.	8		PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____



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TEACHING PLAN (UNIT PLAN)

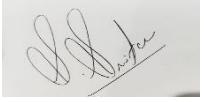
NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY

CLASS: T.Y.BSc. SEMESTER: V MONTH: _JUNE-SEPTEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will be learning the pathophysiology od various diseases.
The learners will be able to : The learners will be able to understand the root cause of any disease and its precautionary measures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Pape-III Unit-III General Pathology	Introduction	1	University textbook and Textbook on Pathology	PPT
	Cell Injury	3		PPT
	Retrogressive changes	3		PPT
	Disorders of Pigmentation	3		PPT
	Necrosis	3		PPT
	Gangrene	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____



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TEACHING PLAN (UNIT PLAN)

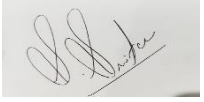
NAME OF THE STAFF: Dr. SMITA SUBRAMANIAN DEPARTMENT:Zoology

CLASS: F.Y.BSc.(CBZ) SEMESTER: II MONTH: FEBRUARY-APRIL ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will understand various aspects of population Dynamics
The learners will be able to : The learners will learn the factors affecting population dynamics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I Unit-I Population Ecology	Population Dynamics	7	University Textbook and Bhattacharyya	PPT
	Polulation Growth Regulation	5		PPT
	Population Growth Patterns	1		PPT
	Human Census	2		PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY

CLASS: SEMESTER:IV MONTH: _NOVEMBER-MARCH ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S: The learners will study the ultrastructure of cell organelles.
The learners will be able to : The learners will be able to understand the intricate and complex functioning of the cell.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-II ENDO MEMBRANE SYSTEMS	Introduction to Endomembrane system	1	University textbook AND Cell Biology	PPT
	Endoplamic Reticulum: Origin, Occurrence, Morphology and Functions.	3		PPT
	Golgi Complex: Origin, Occurrence, Morphology and Functions.	3		PPT
	Lysosomes: Origin, Occurrence, Morphology and Functions.	3		PPT
	Mitochondria: Origin, Occurrence, Morphology and Functions.Marker Enzymes, Biogenesis Semiautonous nature of Mitochondria	5		PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15

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TEACHING PLAN (UNIT PLAN)

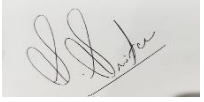
NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY

CLASS: SEMESTER: VI MONTH: _November-March ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will study the various aspects oif Enzyme Biochemistry.
The learners will be able to : The learners will be able to understand the structure and functions and kinetics of Enzymes.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-II ENZYMOLOGY	Introduction and Nomenclature	2	Biochemistry by Leininger	PPT
	Enzyme action and Kinetics	5	Biochemistry by Satyanarayana	PPT
	Enzyme Inhibition	3	University Textbook	PPT
	Regulation of Enzyme Activity	3		PPT
	Industrial Applications of Enzymes	2		PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY

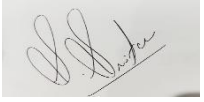
CLASS: SEMESTER: VI MONTH: _NOVEMBER-MARCH ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: The learners will study various aspects of Genetic Disorders

The learners will be able to : The learners will be aware about the impact and changes that takes at gene level.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper—III Unit-III HUMAN GENETICS	Non- Disjunction during Mitosis and Meiosis	7	Diagnostic Regcognition of Genetic Disorders.	PPT
	Genetic Disorders	5		PPT
	Diagnosis	3		PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __FYBSC SEMESTER: I MONTH: July

ACADEMIC YEAR: _2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : _____ To know about the Hoarded wealth of the marvelous animal world and thereby enhance their interest and knowledge in the subject of zoology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-1	Echolocation in bats and cetaceans; Mechanism of pearl formation in Mollusca.	3		Google meet,PPT
	Bioluminiscence in animals; Regeneration in animals	3		Google meet,PPT
	Mimicry in butterfly and its significance; mechanism of coral formation.	3		Google meet,PPT
	Bird Migration; adaptive features of desert animals	3		Google meet,PPT
	Breeding and parental care in Pisces and Amphibians	3		Google meet,PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __FYBSC SEMESTER: II MONTH: November

ACADEMIC YEAR: _2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : _____Understand the current status of wildlife in India from different relevant governing agencies vis-a vis with adversity of poaching and biopiracy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-3	Concept of endangered and criticaly endangered species using examples of Indian wildlife with respect to national parks and wildlife sanctuaries of India.	5		Google meet,PPT
	Management statergies with special respect to Tiger and Rhinoceros in India.	4		Google meet,PPT
	Ecotourism	3		Google meet,PPT
	Biopiracy	3		Google meet,PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __SYBSC SEMESTER: III MONTH: July

ACADEMIC YEAR: _2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Know how animals interact with each other and their surroundings and they will be able to understand different behavioral patterns

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3, UNIT-1	Introduction to Ethology	4		Google meet,PPT
	Aspects of animal behaviour	6		Google meet,PPT
	Social behaviour	5		Google meet,PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: SYBSC SEMESTER: IV MONTH: November

ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : Get a panoramic view of the impact of human activities leading to pollution and its implication.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3, UNIT-1	Air pollution	3		Google meet,PPT
	Water pollution	3		Google meet,PPT
	Soil pollution	3		Google meet,PPT
	Noise pollution	1		Google meet,PPT
	Radioactive pollution	1		Google meet,PPT
	Solid waste pollution	2		Google meet,PPT
	Pollution Climate change and global warming	2		Google meet,PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __TYBSC SEMESTER: V MONTH: July

ACADEMIC YEAR: _2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to apprehend the basis of classification and modern classification up to the class of lower invertebrate animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-1	Levels of organization	03		Google meet,PPT
	Symmetry	02		Google meet,PPT
	Coelom and metamerism	02		Google meet,PPT
	Taxonomy	04		Google meet,PPT
	Kingdom Protista	04		Google meet,PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: TYBSC SEMESTER: V MONTH: July

ACADEMIC YEAR: _2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to understand the various types of epidermal and dermal derivatives along with their function.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV, UNIT-1	Basic structure of integument	03		Google meet,PPT
	Epidermal derivatives of vertebrates	04		Google meet,PPT
	Dermal derivatives of vertebrates	04		Google meet,PPT
	Special derivatives of integument	04		Google meet,PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: TYBSC SEMESTER: VI MONTH: NOVEMBER

ACADEMIC YEAR: _2020-2021

LEARNING OBJECTIVE/S: To introduce basic concepts of modern Chordate classification with evolution point of view and to understand the concept of taxonomy in higher animal kingdom.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-1	General characters,difference between non chordates and chordates, Origin of chordates.	5		Google meet,PPT
	Protochordata	5		Google meet,PPT
	Group Euchordata	5		Google meet,PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: TYBSC SEMESTER: VI MONTH: NOVEMBER

ACADEMIC YEAR: _2020-2021

LEARNING OBJECTIVE/S: To introduce learners to zoogeographic distribution(present and past) of animal species.
To introduce learners to various ways of animal distribution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV, UNIT-IV	Introduction:Plate tectonics and continental drift theory.	4		Google meet,PPT
	Animal distribution and barriers	5		Google meet,PPT
	Zoogeographical realms	6		Google meet,PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY CLASS:F.Y.B.Sc SEMESTER: I MONTH: JULY - OCTOBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To make learners aware of risks involved in handling of different hazardous chemicals, sensitive (electrical/electronic) instruments and infectious biological specimens especially during practical sessions in the laboratory and to train them to avoid mishap.

The learners will be able to: Learners would work safely in the laboratory and avoid occurrence of accidents (mishaps) which will boost their scholastic performance and economy in use of materials/chemicals during practical sessions.

Laboratory safety, Units and Measurement

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT I- Laboratory safety, Units and Measurement	INTRODUCTION TO GOOD LABORATORY PRACTICES	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	USE OF SAFETY SYMBOLS	03		PRESENTATION
	UNITS OF MEASUREMENT	09		CHALK AND BOARD

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY CLASS:S.Y.B.Sc SEMESTER: III

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: To Introduce basic terms of genetics & to study Mendelian principles of inheritance and other forms pattern of inheritance.
The learners will be able to : Understand and apply the principles of inheritance. Understand the concept of multiple alleles, linkage and crossing over

FUNDAMENTALS OF GENETICS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT I- FUNDAMENTA	Introduction to genetics	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD

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LS OF GENETICS	Mendelian Genetics	08		CHALK AND BOARD
	Multiple Alleles and Multiple Genes	03		CHALK AND BOARD
	Linkage and Crossing Over	02		CHALK AND BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V MONTH: JULY - OCTOBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: *To introduce the topic of immunology by emphasizing the basic concepts to build a strong foundation and to give an overview of the immune system that plays an important role in disease resistance.*

The learners will be able to : *The learner shall comprehend the types of immunity and the components of immune system. The learner will realize the significant role of immune system in giving resistance against diseases.*

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BASIC IMMUNOLOGY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III- BASIC IMMUNOLOGY	Overview of Immunology	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	Cells and Organs of immune system	04		PRESENTATION
	Antigens	04		PRESENTATION
	Antibodies	04		CHALK AND BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: *To introduce the learner to basics of general pathology.To impart knowledge of retrogressive, necrotic, pathological conditions in the body.To explain repair mechanism of the body.*

The learners will be able to : *Learner will be familiar with various medical terminology pertaining to pathological condition of the body caused due to diseases.*

General Pathology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT III- **General Pathology**	General Pathology	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	Cell injury	04	FUNDAMENTALS OF TOXICOLOGY – KAMLESHWAR PANDEY & J .P.SHUKLA	CHALK AND BOARD
	Retrogressive changes	02		CHALK AND BOARD

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	Disorders of pigmentation	04		PRESENTATION
	Necrosis	02		PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : SONAL SALVI DEPARTMENT: **ZOOLOGY**

CLASS: F**.Y.B.Sc (ZOOLOGY)** SEMESTER: **II** MONTH: **DEC-FEB** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To impart knowledge about source, quantum and need for conservation of fast depleting water resource and essentials of maintaining proper sanitation, hygiene and optimizing use of electronic gadgets.

The learners will be able to : Promoting optimum conservation of water, encouragement for maintaining adequate personal hygiene, optimum use of electronic gadgets, avoiding addiction, thus facilitating achievement of the goal of healthy young India in true sense.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, Public Health and Hygiene	**Health**	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND BOARD
	Water and water supply	4		CHALK AND BOARD
	Hygiene	2		
	Radiation risk	4		
	First Aid	2		

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	Blood bank – Concept and significance	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY

CLASS: S.Y,BSc. SEMESTER: IV MONTH: DEC-FEB ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S ¬ To acquaint the learners with different aspects of human reproduction. ¬ To make them aware of the causes of infertility, techniques to overcome infertility and the concept of birth control.

The learners will be able to : Learners will able to understand human reproductive physiology ¬ Learners will become familiar with advances in ART and related ethical issues.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III.U.II	Human Reproductive system and Hormonal regulation	2		CHALK AND BOARD

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Aspects of Human Reproduction	Contraception & birth control	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND BOARD
	Infertility	4		POSTER AND PRESENTATIONS FOR REFERNCE
	Treatment of Infertility	4		
	Techniques and Ethical considerations of ART	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **VI** MONTH: **DEC-FEB** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: *To introduce learner to bioinformatics - a computational approach to learning the structure and organization of genomes, phylogeny and metabolism.*

The learners will be able to : *Learner shall become aware of the computational point of view of studying the genomes.*

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I,U-IV, **Type study: Shark**	**Habit & habitat, distribution, external characters, classification and economic importance.**	5	CHORDATE ZOOLOGY-JORDAN AND VERMA UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	PRESENTATION
	Skin, exoskeleton, endoskeleton and systems a) Digestive system b) Respiratory system c) Blood vascular system d) Nervous system and receptor organs e) Urinogenital system, copulation, fertilization and development	9		YOUTUBE VIDEOS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **VI** MONTH: **DEC-FEB** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: *To introduce learner to bioinformatics - a computational approach to learning the structure and organization of genomes, phylogeny and metabolism.*

The learners will be able to : *Learner shall become aware of the computational point of view of studying the genomes.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III,U-IV, **Bioinformatics**	**Introduction**	3	**Bioinformatics** –RASTOGI AND RASTOGI **Bioinformatics** –ATTWOOD UNIVERSITY TB FOR COURSE	CHALK AND BOARD
	Databases - Tools and their uses	4		YOUTUBE VIDEOS
	Sequence alignment methods	3		PRESENTATION, CHALK AND BOARD
	Predictive applications using DNA and protein sequences	2		CHALK AND BOARD

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			BY BOARD OF STUDIES ZOOLOGY	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____DEPARTMENT: _____

CLASS: _____SEMESTER: _____MONTH: _____ ACADEMIC YEAR:_____

LEARNING OBJECTIVE/S:
The learners will be able to :

_____

_____

_____

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____DEPARTMENT: _____

CLASS: _____SEMESTER: _____MONTH: _____ ACADEMIC YEAR:_____

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LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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Late Shri. Vishnu Waman Thakur Charitable Trust
BhaskarWaman Thakur College of Science
YashvantKeshavPatil College of Commerce
VidhyaDayanandPatil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SONAL RAMESH DANDGE** DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **V** MONTH: **DEC-FEB** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: TO INTRODUCE VARIOUS ORGANS IN THE BODY AND DIFFERENT TISSUES WHICH PLAYS AN IMPORTANT ROLE TO MAINTAIN WHOLE SYSTEM.
The learners will be able to : UNDERSTAND THE WELL PLANNED ORGANIZATION AND FUNCTIONS OF ORGAN SYSTEMS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-IV, MAMMALIAN HISTOLOGY	VERTICAL SECTION OF SKIN	2	TEXTBOOK OF HISTOLOGY, DESHMUKH SHIVAJI A TEXTBOOK OF HISTOLOGY BY KHANNA	PRESENTATION
	DIGESTIVE SYSTEM OF MAMMAL , VERTICAL SECTION OF TOOTH	3		CHALK AND DUSTER
	TRANSVERSE SECTION OF TONGUE	2		
	TRANSVERSE SECTION OF STOMACH, SMALL INTENSTINE, LARGE INTENSTINEOF MAMMALS	3		
	GLANDS ASSOCIATE WITH DIGESTIVE SYSTEM	2		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

	TRANSVERSE SECTION OF SALIVARY GLAND AND LIVER	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**:** **SONAL DANDGE** DEPARTMENT: **ZOOLOGY**

CLASS**:** **S.Y,BSc**. SEMESTER**:** **IV** MONTH**:** **DEC-FEB** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: TO INTRODUCE TEHM WITH THE BASIC KNOWLEDGE OF RESEARCH, SCIENTIFIC WRITING AND IT'S METHODOLOGY

The learners will be able to : UNDERSTAND THE WAYS AND METHODS OF WRITING A RESEARCH PAPER, TYPES OF RESEARCH AND THE ETHICS RELATED TO SCIENTFIC RESEARCH AND ITS WRITING

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I, UNIT I	INTRODUCTION OF ORIGIN OF THE UNIVERSE, CHEMICAL EVOLUTION,ORIGIN OF LIFE,ORIGIN OF EUKARYOTIC CELL	4		CHALK AND DUSTER

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

ORIGIN AND EVOLUTION OF LIFE	EVIDENCES OF FAVOUR OF ORGANIC EVOLUTION	3	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	PRESENATION
	PALAENTOLOGY, ANATOMY, EMBRYOLOGY AND GEOGRAPHICAL DISTRIBUTION	2		YOUTUBE VIDEOS
	THEORIES OF ORGANIC EVOLUTION, LAMARCK,DARWIN,MUTATION THEORY	3		
	MODERN SYNTHETIC THEORY,WEISMAN GERMPLASM THEORY	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SONAL DANDGE** DEPARTMENT: **ZOOLOGY**

CLASS: **F.Y,BSc**. SEMESTER: **II** MONTH: **DEC-FEB** ACADEMIC YEAR: **2020-2020**

LEARNING OBJECTIVE/S: TO EXPLAIN THE COMPONENTS OF ECOSYSTEM AND HOW ECOSYSTEM IS ESSENTIAL FOR SURVIVAL OF ANIMALS

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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The learners will be able to : UNDERSTAND THE IMPORTANCE OF ECOSYSTEMAND VARIOUS FAUNA BEING EXTINCT BECAUSE OF INTERUPTING OF HUMAN BEING

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I, U-II, ECOSYSTEM	DEFINATION OF ECOSYSTEM, COMPONENTS OF ECOSYSTEM	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND DUSTER
	IMACT OF TEMPERATURE ON BIOTA, VARIOUS BIOGEOCHEMICAL CYCLES	4		PRESENTATION
	FRESHWATER ECOSYSTEM, FOOD CHAIN	4		
	FOOD WEB, ECOLOGICAL PYRAMID	2		
	ANIMAL INTERACTION THAT IS POSITIVE INTERACTION AND NEGATIVE INTERACTION	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **_SONAL RAMESH DANDGE** DEPARTMENT: **ZOOLOGY** CLASS: **T.Y.Bsc** SEMESTER: **VI** MONTH: **APRIL-MAY**

ACADEMIC YEAR:**2020-2021**

LEARNING OBJECTIVE/S: TO INTRODUCE THE LEARNER VARIOUS NATURAL RSOURCES ,THEIR EXPLOITATION AND HOW GOVERNMENT PLAYS AN IMPORTANT ROLE TO IMPLIMENT VAROIUS LAWS
The learners will be able to : UNDERSTAND DIFFERENT FACTORS AFFECTING ENVIRONMENT AND NEED TO UNDERSTAND VAROIUS LAWS ANGAINST GOVERONMENT FOR EXPLOITATION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV, UNIT I ENVIRONMENTAL MANAGEMENT	NATURAL RESOURCES AND THEIR CLASSIFICATION	2	ENVIRONMENTAL BIOLOGY BY P.S. VERMA	CHALK AND DUSTER PRESENTATION
	EXPLOITATION AND MODIFICATION OF NATURAL RESOURCES	2		
	SUSTAINABLE DEVELOPMENT	3	UNIVERSITY TB FOR COURSE BY BOARD OF	

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

			STUDIES ZOOLOGY	
	WASTE MANAGEMENT, WATER MANAGEMENT	4		
	LAWS GOVERNING ENVIRONMENT	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT- 14

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SONAL DANDGE** DEPARTMENT: **ZOOLOGY** CLASS: **S.Y.B.sc** SEMESTER: **III** MONTH: **DEC-FEB**

ACADEMIC YEAR:**2020-2021**

LEARNING OBJECTIVE/S: TO INTRODUCE CONCEPT OF PARASITISM , MODES OF TRANSMISSION OF PARASITES AND PRECAUTIONS TO PREVENT DISEASES

The learners will be able to : _TO UNDERSTAND VARIOUS PARASITES, THEIR LIFE CYCLE, THE SYMPTOMS OF THE DISEASE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER 3, UNIT II PARASITOLOGY	INTRODUCTION TO PARASITOLOGY AND TYPES OF PARASITES	2	PARASITOLOGY BY SHARMA	CHALK AND DUSTER PRESENTATION
	HOST PARASITE RELATIONSHIP, HOST SPECIFICITY	3	PARASITOLOGY BY CHATTERJEE .K.D	
	LIFE CYCLE, PATHOGENECITY, CONTROL MEASURES AND TREATMENT OF THE FOLLOWING PARASITES Entamoeba histolytica, Faciola hepatica, Taenia solium, Wucheria bancrofti	4	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	
	MORPHOLOGY,LIFE CYCLE, PATHOGENECITY,CONTROL MEASURES AND TREATMENT OF THE FOLLOWING PARASITES HEAD LOUSE, MITE, BED BUG	3		
	PARASITOLOGICAL SIGNIFICANCE	3		

TOTAL NUMBER OF LECTUES ALLOCATED TO THE UNI

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SONAL RAMESH DANDGE** DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **V** MONTH: **DEC-FEB** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: TO INTRODUCE VARIOUS ORGANS IN THE BODY AND DIFFERENT TISSUES WHICH PLAYS AN IMPORTANT ROLE TO MAINTAIN WHOLE SYSTEM.
The learners will be able to : UNDERSTAND THE WELL PLANNED ORGANIZATION AND FUNCTIONS OF ORGAN SYSTEMS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-IV, MAMMALIAN HISTOLOGY	VERTICAL SECTION OF SKIN	2	TEXTBOOK OF HISTOLOGY, DESHMUKH SHIVAJI A TEXTBOOK OF HISTOLOGY BY KHANNA	PRESENTATION
	DIGESTIVE SYSTEM OF MAMMAL , VERTICAL SECTION OF TOOTH	3		CHALK AND DUSTER
	TRANSVERSE SECTION OF TONGUE	2		
	TRANSVERSE SECTION OF STOMACH, SMALL INTENSTINE, LARGE INTENSTINEOF MAMMALS	3		
	GLANDS ASSOCIATE WITH DIGESTIVE SYSTEM	2		

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	TRANSVERSE SECTION OF SALIVARY GLAND AND LIVER	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**:** **SONAL DANDGE** DEPARTMENT: **ZOOLOGY**

CLASS**:** **S.Y,BSc**. SEMESTER**:** **IV** MONTH**:** **DEC-FEB** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: TO INTRODUCE TEHM WITH THE BASIC KNOWLEDGE OF RESEARCH, SCIENTIFIC WRITING AND IT'S METHODOLOGY

The learners will be able to : UNDERSTAND THE WAYS AND METHODS OF WRITING A RESEARCH PAPER, TYPES OF RESEARCH AND THE ETHICS RELATED TO SCIENTFIC RESEARCH AND ITS WRITING

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I, UNIT I	INTRODUCTION OF ORIGIN OF THE UNIVERSE, CHEMICAL EVOLUTION,ORIGIN OF LIFE,ORIGIN OF EUKARYOTIC CELL	4	UNIVERSITY TB FOR COURSE	CHALK AND DUSTER

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

ORIGIN AND EVOLUTION OF LIFE	EVIDENCES OF FAVOUR OF ORGANIC EVOLUTION	3	BY BOARD OF STUDIES ZOOLOGY	PRESENATION
	PALAENTOLOGY, ANATOMY, EMBRYOLOGY AND GEOGRAPHICAL DISTRIBUTION	2		YOUTUBE VIDEOS
	THEORIES OF ORGANIC EVOLUTION, LAMARCK,DARWIN,MUTATION THEORY	3		
	MODERN SYNTHETIC THEORY,WEISMAN GERMPLASM THEORY	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SONAL DANDGE** DEPARTMENT: **ZOOLOGY**

CLASS: **F.Y,BSc**. SEMESTER: **II** MONTH: **DEC-FEB** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: TO EXPLAIN THE COMPONENTS OF ECOSYSTEM AND HOW ECOSYSTEM IS ESSENTIAL FOR SURVIVAL OF ANIMALS

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I, U-II, ECOSYSTEM	DEFINATION OF ECOSYSTEM, COMPONENTS OF ECOSYSTEM	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND DUSTER
	IMACT OF TEMPERATURE ON BIOTA, VARIOUS BIOGEOCHEMICAL CYCLES	4		PRESENTATION
	FRESHWATER ECOSYSTEM, FOOD CHAIN	4		
	FOOD WEB, ECOLOGICAL PYRAMID	2		
	ANIMAL INTERACTION THAT IS POSITIVE INTERACTION AND NEGATIVE INTERACTION	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **_SONAL RAMESH DANDGE** DEPARTMENT: **ZOOLOGY** CLASS: **T.Y.Bsc** SEMESTER: **VI** MONTH: **APRIL-MAY**

ACADEMIC YEAR:**2020-2021**

LEARNING OBJECTIVE/S: TO INTRODUCE THE LEARNER VARIOUS NATURAL RSOURCES ,THEIR EXPLOITATION AND HOW GOVERNMENT PLAYS AN IMPORTANT ROLE TO IMPLIMENT VAROIUS LAWS
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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV, UNIT I ENVIRONMENTAL MANAGEMENT	NATURAL RESOURCES AND THEIR CLASSIFICATION	2	ENVIRONMENTAL BIOLOGY BY P.S. VERMA	CHALK AND DUSTER PRESENTATION
	EXPLOITATION AND MODIFICATION OF NATURAL RESOURCES	2		
	SUSTAINABLE DEVELOPMENT	3	UNIVERSITY TB FOR COURSE BY BOARD OF	

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

			STUDIES ZOOLOGY	
	WASTE MANAGEMENT, WATER MANAGEMENT	4		
	LAWS GOVERNING ENVIRONMENT	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT- 14

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SONAL DANDGE** DEPARTMENT: **ZOOLOGY** CLASS: **S.Y.B.sc** SEMESTER: **III** MONTH: **DEC-FEB**

ACADEMIC YEAR:**2020-2021**

LEARNING OBJECTIVE/S: TO INTRODUCE CONCEPT OF PARASITISM , MODES OF TRANSMISSION OF PARASITES AND PRECAUTIONS TO PREVENT DISEASES

The learners will be able to : _TO UNDERSTAND VARIOUS PARASITES, THEIR LIFE CYCLE, THE SYMPTOMS OF THE DISEASE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER 3, UNIT II PARASITOLOGY	INTRODUCTION TO PARASITOLOGY AND TYPES OF PARASITES	2	PARASITOLOGY BY SHARMA	CHALK AND DUSTER PRESENTATION
	HOST PARASITE RELATIONSHIP, HOST SPECIFICITY	3	PARASITOLOGY BY CHATTERJEE .K.D	
	LIFE CYCLE, PATHOGENECITY, CONTROL MEASURES AND TREATMENT OF THE FOLLOWING PARASITES Entamoeba histolytica, Faciola hepatica, Taenia solium, Wucheria bancrofti	4	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	
	MORPHOLOGY,LIFE CYCLE, PATHOGENECITY,CONTROL MEASURES AND TREATMENT OF THE FOLLOWING PARASITES HEAD LOUSE, MITE, BED BUG	3		
	PARASITOLOGICAL SIGNIFICANCE	3		

TOTAL NUMBER OF LECTUES ALLOCATED TO THE UNI

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: FYBSc. SEMESTER: I MONTH: JULY 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : To orient learner about rich heritage of Biodiversity of India and make understand significance of its conservation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II BIODIVERSITY AND ITS CONSERVATION	INTRODUCTION AND LEVELS TO BIODIVERSITY	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	BIODIVERSITY HOTSPOT	03	BIODIVERSITY – S.CHAND PUBLICATION	PRESENTATION
	VALUES OF BIODIVERSITY	03		
	THREATS OF BIODIVERSITY	03		
	CONSERVATION AND ITS MANAGEMENT	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: III MONTH: JULY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : To introduce the concepts of physiology of nutrition, excretion and osmoregulation. To expose the learners to various nutrition apparatus, excretory and osmoregulatory struct

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPERII UNIT I NUTRITION AND EXCRETION	EXCRETION APPARATUS ,PHYSIOLOGY	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	PROCESS AND COMPARATIVE STUDY	03		PRESENTATION
	NUTRITION TYPES AND PROCESS	04		CHARTS
	COMPARATIVE STUDY	03		

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	PHYSIOLOGY	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : To acquaint learners with the details of Sepia as a representative of invertebrate animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT IV TYPE STUDY SEPIA	GENERAL CHARACTERISTICS AND CLASSIFICATION	02	INVERTEBRATE BY KOTPAL	CHALK AND BOARD
	DIGESTIVE SYSYTEM ,REPRODUCTIVE SYSTEM	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	PRESENTATION
	EXCRETORY SYSTEM	03		CHARTS

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	NERVOUS SYSTEM	02		
	CIRCULATORY SYSTEM	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: FYBSc. SEMESTER: II MONTH: NOV 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Learners will be able to promptly recognize stress related problems at initial stages and would be able to adopt relevant solutions which would lead to psychologically strong mind set promoting positive attitude important for academics and would be able to acquire knowledge of cause, symptoms and precautions of infectious diseases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III COMMON HUMAN DISEASE	STRESS RELATED DISORDER – SYMPTOMS, EFFECTS,CAUSES, PREVENTION,REMEDY	07	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD

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	COMMUNICABLE AND NON COMMUNICABLE DISEASE – SYMPTOMS, EFFECTS,CAUSES, PREVENTION,REMEDY	07		PRESENTATION
				CHARTS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR:2020-2021 _

LEARNING OBJECTIVE/S:
The learners will be able to : To develop learner's knowledge and understanding of genetic variability within a population and how the change in the gene pool leads to evolution of species.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPERII-POPULATION GENETICS AND EVOLUTION	INTRODUCTION TO POPULATION GENETICS,BRIEF EXPLANATION OF TERM OF GENETICS	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	
	HARDY WEINBERG LAW,FACTORS AFFECTING LAW	04		PRESENTATION
	PATTERN OF NATURAL SELECTION	04		CHARTS
	SPECIES CONCEPT AND SPECIEATION AND ISOLATION MECHANISM	03		
	EVOLUTIONARY GENETICS	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR:2020-2021 _____

LEARNING OBJECTIVE/S:
The learners will be able to : To introduce to the learner the details of endocrine glands and its disorders.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III ENDOCRINOLOGY	INTRODUCTION TO ENDOCRINOLOGY AND TYPES OF GLANDS	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	
	ENDOCRINE SYSTEM,AND ITS MECHANISM	02	TEXTBOOK OF ENDOCRINOLOGY – WILLIAMS	PRESENTATION
	CLASSIFICATION AND PROPERTIES OF HORMONE, MECHANISM OF HORMONES ACTION	04		CHARTS
	HISTOLOGY,FUNCTIONS AND DISORDERS OF PITUITARY,THYROID	04		
	PARATHYROID,PANCREAS AND ADRENAL	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

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The learners will be able to : To introduce the learner to the concepts of bioprospecting and zoopharmacognosy. To introduce learner with various ethological aspects by which non-human animals apparently self-medicate themselves.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV UNIT III BIOPROSPECTING AND ZOOPHARMACOGNOSY	INTRODUCTION TO BIOPROSPECTING	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	
	TYPES OF BIOPROSPECTING	03		PRESENTATION
	CONSERVATION – ADVANTAGE AND DISADVANTAGE , INTRODUCTION TO ZOOPHARMACOGNOSY	03		CASE STUDIES
	SELF MEDICATION AND ITS MECHANISM	03		
	APPLICATION AND ITS CONTRIBUTION	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **V** MONTH: **SEPTEMBER -DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To introduce to the learner the composition of blood, haemorrhage and haematopoiesis and to acquaint the learner with the physiology of blood clotting and clinical aspects of haematology

The learners will be able to: Learner shall be familiar with the fundamental concepts in haematology .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, HEMATOLOGY	Composition of blood ; Blood volume	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	POWERPOINT PRESENTATION
	Plasma proteins	2		YOUTUBE VIDEOS
	RBCs	3		PHOTOGRAPHS FOR SYMPTOMS
	WBCs	3		
	Blood clotting	2		

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	Hemoglobin	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **S.Y.B.Sc (ZOOLOGY)** SEMESTER: **III** MONTH: **SEPTEMBER -DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To introduce the concepts of physiology of respiration and circulation .To expose the learners to various respiratory and circulatory structures in different classes of organisms.

The learners will be able to: Learners would understand the increasing complexity of respiratory and circulatory physiology in evolutionary hierarchy. Learners would be able to correlate the habit and habitat with respiratory and circulatory structures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER 2 UNIT 2 Study of Respiration and circulation	Comparative study of Respiratory organs; Accessory respiratory structures	4	University TB for course by board of studies zoology	Powerpoint presentation
	Structure of lungs and physiology of respiration in man; Comparative study of circulation: Open and closed - single and double	3		Youtube videos
	Types of circulating fluids	2		Photographs of the system
	Comparative study of Hearts	4		
	Structure and mechanism of working of heart in man	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **F.Y.B.Sc. (ZOOLOGY)** SEMESTER: **I** MONTH: **SEPTEMBER -DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To provide all learners a complete insight about the structure and train them with operational skills of different instruments required in Zoology.

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The learners will be able to: Students will be skilled to select and operate suitable instruments for the studies of different components of Zoology of this course and also of higher classes including research.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 UNIT 3 Instrumentation	Microscopy ; Centrifuge	3	University TB for course by board of studies zoology	Powerpoint presentation
	Colorimetry and Spectroscopy	3		Youtube videos
	pH	3		Photographs of instruments
	Chromatography	3		
	Electrophoresis	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **VI** MONTH: **JANUARY-MAY** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To introduce to the learner the fundamental concepts of tissue culture .
The learners will be able to: The learners shall understand the significance of tissue culture as a tool in specialized areas of research .Also, will appreciate it applications in industries like biotechnology, in fields such as in vitro fertilization and replacement of animals in medical and toxicology experiments

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, ANIMAL TISSUE CULTURE	Introduction to animal cell culture	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	POWERPOINT PRESENTATION
	Aseptic techniques	2		YOUTUBE VIDEOS
	Culture media: : Physicochemical properties – pH, CO2 and bicarbonate, buffering, O2 , osmolality, temperature, viscosity, surface tension and foaming	3		PHOTOGRAPHS FOR SYMPTOMS
	Types of media ; Serum ; Complete Media	3		
	Cell lines: Primary and established cell lines and their characters. Preparation of cells/organs for culture	2		
	Cell lines: Primary and established cell lines and their characters. Preparation of cells/organs for culture	3		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **S.Y.B.Sc (ZOOLOGY)** SEMESTER: **IV** MONTH: **JANUARY-MAY** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able to:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, ANIMAL TISSUE CULTURE	Research, Deductive reasoning, Inductive reasoning	2	University TB for course by board of studies zoology	POWERPOINT PRESENTATION
	Types of research ,7c's rule, Research Methodology	2		Youtube videos
	Scientific Writing, Types of Writing Abstract Writing, Monograph, Review Writing	3		Photographs for symptoms

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	Poster presentation ; Bibliography	3		
	Types of Presentation, Use of computer in research	3		
	Plagiarism. Ethics in Research	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **F.Y.B.Sc (ZOOLOGY)** SEMESTER: **II** MONTH: **JANUARY-MAY** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To educate learners about causes, symptoms and impact of stress related disorders and infectious diseases.
The learners will be able to: Learners will be able to promptly recognize stress related problems at initial stages and would be able to adopt relevant solutions which would lead to psychologically strong mind set promoting positive attitude important for academics and would be able to acquire knowledge of cause, symptoms and precautions of infectious diseases.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-III, Common human Diseases	Cause, symptoms, precaution and remedy : Hypertension, Diabetes type II, anxiety	3	University TB for course by board of studies zoology	Powerpoint presentation
	Cause, symptoms, precaution and remedy : insomnia, migraine, depression	3		Youtube videos
	Tuberculosis and Typhoid	2		Photographs for symptoms
	Hepatitis (A and B), AIDS, Gonorrhea and Syphilis	3		
	Diseases of respiratory system- Asthma, Bronchitis.	2		
	Oral Cancer	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:F.Y.B.Sc SEMESTER: I MONTH: SEPTEMBER- JANUARY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: TO AQUAINT LEARNERS TO STUDY THE MODERN DEVELOPMENT IN FIELD OF ZOOLOGY WITH RESPECT TO ITS APPLICATION FOR BENEFITS TO HUMAN AND WORLD
The learners will be able to : HELP YOUNG MINDS THINK OUT OF THE BOX WITH RESPECT TO NEW DEVELOPMENT BENIFITING THE HUMANS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II- ANIMAL BIOTECHNOLOGY	INTRODUCTION TO BIOTECHNOLOGY , SCOPE AND ACHIEVEMENTS	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES
	TRANSGENESIS,CLONING	04	BIOTECHNOLOGY– SATYANARAYAN & CHAKRAPANI	PRESENTATION
	ETHICAL ISSUES	03		
	DNA FINGERPRINTING AND GENE THERAPY	04		
	GREEN GENES	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:S.Y.B.Sc SEMESTER: III

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: TO UNDERSTAND THE BASICS OF GENETICS WITH RESPECT TO SEX DETERMINATION AND ITS PURPOSE
The learners will be able to : TO CORRELATE WITH THE GENETIC DISORDER WITH THE STRUCTURE OF CHROMOSOME,NUMBER OF CHROMOSOME AND SEX DETERMINATION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II- CHROMOSOME AND HEREDITY	TYPES , STRUCTURE AND CLASSIFICATION OF CHROMOSOMES	04	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES
	SEX DETERMINATION – HORMONAL ,TEMPERATURE AND CHROMOSOMAL	04	GENETICS - FAIRBANK	PRESENTATION
	SEX LINKED INHEITANCE	02	GENTEICS – MANGE AND MANGE	

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	SEX LIMITED INHERITANCE	02		
	SEX INFLUENCED INHERFITANCE	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: TO COMPREHEND THE GENERAL CHARACTERS AND CLASSIFICATION OF KINGDOM ANIMALIAE FROM PORIFERA TO NEMATODA AND SPECIFIC CHARACTERS OF ORGANISMS BELONGING TON THESE PHYLA
The learners will be able to : FAMILIARIZING WITH CLASSIFICATION AND ABLE TO IDENTIFY ANIMAL IN HABITAT

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II- KINGDOM ANIMALIA I	GENERAL CHARARCTERS	01	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES INVERTEBRATE ZOOLOGY – R.L.KOTPAL	POWERPOINT PRESENTATION /ONLINE LECTURES
	PHYLUM PORIFERA – CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		PRESENTATION

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	PHYLUM CNIDARIA CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		LIVE ANIMALS
	PHYLUM PLATYHELMINTHES CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		
	PHYLUM NEMATODA CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V MONTH: JULY - OCTOBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: TO INTRODUCE PRINCIPLE OF TOXICOLOGY WITH RESPECT TO TOXIC RESPONSE ,NATURE AND ITS EFFECTS IN TOXICITY TESTING AND ITS REGULATORY AFFAIRS
The learners will be able to : BROAD UNDERSTANDING IN THE FIELD HELPING STUDENT PREPARE FOR EMPLOYMENT IN PHARMACEUTICAL INDUSTRY AND RELATED ARENAS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT II- TOXICOLOGY	INTRODUCTION,PRINCIPLE AND SCOPE TO TOXICOLOGY ,	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES

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	TOXINS AND TOXICANTS , CONCEPT OF LC50,LD50,ED50	04	FUNDAMENTALS OF TOXICOLOGY – KAMLESHWAR PANDEY & J .P.SHUKLA	PRESENTATION
	CHARACTERS OF EXPOSURE	02		
	TYPES AND ROUTES OF TOXICITY	04		
	DOSE RESPONE RELATIONSHIP AND TARGET ORGAN TOXICITY	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **BHUMIKA ASHOK OZA** DEPARTMENT: **ZOOLOGY**
CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **VI** MONTH: **DEC-FEB** ACADEMIC YEAR: **2020-2021**
LEARNING OBJECTIVE/S: TO INTRODUCE THEM WITH CHORDATE CLASSIFICATION WITH POINT OF EVOLUTION AND UNDERSTAND THE CONCEPT OF TAXONOMY.
The learners will be able to : UNDERSTAND PHYLOGENY AND SPECIAL FEATURES ALONGWITH TAXONOMY UPTO CLASS OF CHORDATES

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I, U-II, GROUP EUCHORDATA II	DIVISION GNATHOSTOMATA	3	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES

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	DIPNOI	5	CHORDATES BY JORDAN AND VERMA CHORDATE ZOOLOGY BY R.L.KOTPAL	LIVE ANIMALS
	SUPERCLASS TETRAPODA	5		PHOTOGRAPHS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA OZA DEPARTMENT: ZOOLOGY
CLASS: S.Y,BSc. SEMESTER: IV MONTH: DEC-MARCH ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S: TO IMPART SCIENTIFIC KNOWLEDGE TO THE LEARNERS ABOUT HOW LIFE ORIGINATED AND EVOLVED ON OUR PLANET
The learners will be able to : GAIN INSIGHT ABOUT ORIGIN OF LIFE AND ITS DIFFERENT THEORIES.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I.U.I ORIGIN AND EVOLUTION OF LIFE	INTRODUCTION THEORY FOR ORIGIN OF LIFE	3	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY BBC WORLD FACTS AND DISCOVERY VIDEOS	CHALK AND DUSTER
	EVIDENCES IN NFAVOUR OF ORGANIC EVOLUTION	5		YOU TUBE VIDEOS
	THEORIES OF ORGANIC EVOLUTION	5		POSTER AND PRESENTATIONS FOR REFERNCE

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA OZA DEPARTMENT: ZOOLOGY
CLASS: F.Y,BSc. SEMESTER: II MONTH: DEC-FEB ACADEMIC YEAR: 2020-2021
LEARNING OBJECTIVE/S: TO EXPLAIN THE SOURCE AND IMPORTANCE OF HEALTHY MIND,BODY AND DIETARY HABITS.
The learners will be able to : UNDERSTAND THE IMPORTANCE OF GOOD DIETARY HABITS AND LEAD A HEALTHY LIFESTYLE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, HUMAN HEALTH AND DISEASE	BALANCED DIET AND NUTRITION AND DIET CHART	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND DUSTER
	MALNUTRITION DISORDERS – CAUSES,SYMPTOMS,PRECAUTION AND REMEDIES	5		BMI STUDY BY ASSIGNMENT AND PROJECT
	LIFESTYLE DISORDERS- CAUSES, SYMPTOMS, PRECAUTION AND REMEDIES	5		
	SIGNIFICANCE OF BREAST FEEDING AND BREASTMILK,DIETARY FIBRES	2		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **BHUMIKA ASHOK OZA** DEPARTMENT: **ZOOLOGY**
CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **VI** MONTH: **DEC-FEB** ACADEMIC YEAR: **2020-2021**
LEARNING OBJECTIVE/S: UNDERSTAND DIFFERENT FACTORS AFFECTING THE ENVIRONMENT AND VARIOUS METHODS TO IMPROVE ENVIRONMENTAL STEWARDSHIP
The learners will be able to :UNDERSTAND DIFFERENT IMAPCT ,FACTOTRS AND LAWS REGARDING ENVIRONMENT

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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P-IV ,U-I, ENVIRONMENT MANAGEMENT	NATURAL RESOURCES AND THEIR CLASSIFICATION	3	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY CSIR REFERENCE BOOK-PATHFINDER ENVIRONMENTAL SCIENCE BY THAKUR INDUSHEKHAR AND S CHAND PUBLICATION	POWERPOINT PRESENTATION /ONLINE LECTURES
	EXPLOITATION AND MODIFICATION OF NATURAL RESOURCES	4		YOUTUBE VIDEOS
	WATER MANAGEMENT	2		NEWSPAPER CASE STUDIES
	WASTE MANAGEMENT	4		
	ACTS AND RULES OF ENVIRONMENTAL MANAGEMENT	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____DEPARTMENT: _____ CLASS: _____SEMESTER: _____MONTH: _____ ACADEMIC YEAR:_____

LEARNING OBJECTIVE/S:

The learners will be able to :

_____

_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:F.Y.B.Sc SEMESTER: I MONTH: OCTOBER-DECEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: TO AQUAINT LEARNERS TO STUDY THE MODERN DEVELOPMENT IN FIELD OF ZOOLOGY WITH RESPECT TO ITS APPLICATION FOR BENEFITS TO HUMAN AND WORLD
The learners will be able to : HELP YOUNG MINDS THINK OUT OF THE BOX WITH RESPECT TO NEW DEVELOPMENT BENIFITING THE HUMANS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II- ANIMAL BIOTECHNOLOGY	INTRODUCTION TO BIOTECHNOLOGY , SCOPE AND ACHIEVEMENTS	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	TRANSGENESIS,CLONING	04	BIOTECHNOLOGY– SATYANARAYAN & CHAKRAPANI	PRESENTATION
	ETHICAL ISSUES	03		
	DNA FINGERPRINTING AND GENE THERAPY	04		
	GREEN GENES	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:S.Y.B.Sc SEMESTER: III

MONTH: AUGUST- NOVEMBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: TO UNDERSTAND THE BASICS OF GENETICS WITH RESPECT TO SEX DETERMINATION AND ITS PURPOSE
The learners will be able to : TO CORRELATE WITH THE GENETIC DISORDER WITH THE STRUCTURE OF CHROMOSOME,NUMBER OF CHROMOSOME AND SEX DETERMINATION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II- CHROMOSOME AND HEREDITY	TYPES , STRUCTURE AND CLASSIFICATION OF CHROMOSOMES	04	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	SEX DETERMINATION – HORMONAL ,TEMPERATURE AND CHROMOSOMAL	04	GENETICS - FAIRBANK	PRESENTATION
	SEX LINKED INHEITANCE	02	GENTEICS – MANGE AND MANGE	
	SEX LIMITED INHERITANCE	02		
	SEX INFLUENCED INHERFITANCE	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V MONTH: JULY - OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: TO COMPREHEND THE GENERAL CHARACTERS AND CLASSIFICATION OF KINGDOM ANIMALIAE FROM PORIFERA TO NEMATODA AND SPECIFIC CHARACTERS OF ORGANISMS BELONGING TON THESE PHYLA

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The learners will be able to : FAMILIARIZING WITH CLASSIFICATION AND ABLE TO IDENTIFY ANIMAL IN HABITAT

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II- KINGDOM ANIMALIA I	GENERAL CHARARCTERS	01	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	PHYLUM PORIFERA – CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03	INVERTEBRATE ZOOLOGY – R.L.KOTPAL	PRESENTATION
	PHYLUM CNIDARIA CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		LIVE ANIMALS
	PHYLUM PLATYHELMINTHES CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		
	PHYLUM NEMATODA CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: TO INTRODUCE PRINCIPLE OF TOXICOLOGY WITH RESPECT TO TOXIC RESPONSE ,NATURE AND ITS EFFECTS IN TOXICITY TESTING AND ITS REGULATORY AFFAIRS

The learners will be able to : BROAD UNDERSTANDING IN THE FIELD HELPING STUDENT PREPARE FOR EMPLOYMENT IN PHARMACEUTICAL INDUSTRY AND RELATED ARENAS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER III UNIT II- TOXICOLOGY	INTRODUCTION,PRINCIPLE AND SCOPE TO TOXICOLOGY ,	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	TOXINS AND TOXICANTS , CONCEPT OF LC50,LD50,ED50	04	FUNDAMENTALS OF TOXICOLOGY – KAMLESHWAR PANDEY & J .P.SHUKLA	PRESENTATION
	CHARACTERS OF EXPOSURE	02		
	TYPES AND ROUTES OF TOXICITY	04		
	DOSE RESPONE RELATIONSHIP AND TARGET ORGAN TOXICIT	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SHWETA SURESH SHAHASANE DEPARTMENT: ZOOLOGY

CLASS:F.Y. B. Sc. SEMESTER: 2 MONTH:December-March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: *To impart knowledge of different components of ecosystem and educate about essentials of coexistence of human beings with all other living organisms*

The learners will be able to : *Learners will grasp the concept of interdependence and interaction of physical, chemical and biological factors in the environment and will lead to better understanding about implications of loss of fauna specifically on human being, erupting spur of desire for conservation of all flora and fauna*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:Ecology and Wildlife Management. Unit: 2 TITLE: Ecosystem	Ecosystem - Definition and components	2	Fundamentals of Ecology - Eugene P. Odum	1)Teaching methods:Questions, Peer learning by making buzz groups of students,role play,debate,case-study,problem solving and decision making strategy.
	Biogeochemical cycles (Water, Oxygen, Nitrogen, Sulphur)	2	Fundamentals of Ecology - M. C. Dash	2) learning resources: textbook,,A.V. program, Internet,POWERPOINT PRESENTATION, YOUTUBE VIDEOS.

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	Fresh water ecosystem – Lentic and Lotic	2	Ecology - Mohan P. Arora	
	Food chain and food web in ecosystem (Fresh water and Grass land)	3	Ecology and Environment - Sharma P. D	
	Ecological pyramids - energy, biomass and number	2	Ecology : Principles and Applications - Chapman J.L	
	Animal interactions (commensalism, mutualism, predation, antibiosis, parasitism)	3	Ecology - Subramaniam	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SHWETA SURESH SHAHASANE DEPARTMENT: ZOOLOGY

CLASS:F.Y. B. Sc. SEMESTER: 2 MONTH:December-March ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S: *To impart knowledge of different components of ecosystem and educate about essentials of coexistence of human beings with all other living organisms*

The learners will be able to : *Learners will grasp the concept of interdependence and interaction of physical, chemical and biological factors in the environment and will lead to better understanding about implications of loss of fauna specifically on human being, erupting spur of desire for conservation of all flora and fauna*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:Ecology and Wildlife Management. Unit: 2 TITLE: Ecosystem	Ecosystem - Definition and components	2	Fundamentals of Ecology - Eugene P. Odum	1)Teaching methods:Questions, Peer learning by making buzz groups of students,role play,debate,case-study,problem solving and decision making strategy.
	Biogeochemical cycles (Water, Oxygen, Nitrogen, Sulphur)	2	Fundamentals of Ecology - M. C. Dash	2) learning resources: textbook,,A.V. program, Internet,POWERPOINT PRESENTATION, YOUTUBE VIDEOS.
	Fresh water ecosystem – Lentic and Lotic	2	Ecology - Mohan P. Arora	
	Food chain and food web in ecosystem (Fresh water and Grass land)	3	Ecology and Environment - Sharma P. D	
	Ecological pyramids - energy, biomass and number	2	Ecology : Principles and Applications - Chapman J.L	

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	Animal interactions (commensalism, mutualism, predation, antibiosis, parasitism)	3	Ecology - Subramaniam	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA SURESH SHAHASANE DEPARTMENT: ZOOLOGY CLASS:S.Y.B.Sc SEMESTER:3

MONTH: JUNE- OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: *To disseminate information on economic aspects of zoology like apiculture, vermiculture, dairy science. To encourage young learners for selfemployment.*

The learners will be able to : *Learners would gain knowledge on animals useful to mankind and the means to make the most of it. Learners would learn the modern techniques in animal husbandry. Learners would be pursuing entrepreneurship as careers*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:3 UNIT:3 TITLE:Economic Zoology	**APICULTURE:Methods of bee keeping and management** **Economic importance**	5	Economic Zoology- Biostatistics and Animal behaviour	1)TEACHING METODS : Lecturing ,Demonstrative,Brain storming, Direct teaching, case - study , Comparative method
	VERMICULTURE:Rearing methods, management and economic importance	4	Economic Zoology- Shukla G.S	2)Teaching resources: LIVE SPECIMEN , A.V., TEXTBOOK , MANNUALS, INTERNET , PICTURES, CHARTS, POWER POINT PRESENTATIONS AND YOUTUBE VIDEOS .ONLINE WORSHOPS
	DAIRY SCIENCE:Dairy development in India **Dairy Processing** **Milk and milk products**	6	A handbook on Economic Zoology, S.Chand	

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____

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TEACHINGPLAN(UNITPLAN)

NAMEOFTHESTAFF:SHWETASURESHSHAHASANE _DEPARTMENT:ZOOLOGY CLASS:S.Y.B.Sc. SEMESTER:IV MONTH:DECEMBERTOMARCHACADEMICYEAR:2020-2021

LEARNINGOBJECTIVE/S:
Thelearnerswillbeableto:acquaintthekeyconceptofembryology

PAPER,UNIT,TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
PAPER:ComparativeEmbryology,AspectofHumanReproduction,Pollutionanditseffectonorganisms UNIT:1 TITLE:ComparativeEmbryology.	1)TypesofEggs-Basedonamountanddistributionofyolk.	2	1)DevelopmentalBiologybyGilbert.	1)TEACHINGMETODS:Lecturing ,Demonstrative,Brainstorming,Directteaching, case-study,Comparativemethod
	2)structureandtypesofsperms	1	2)DevelopmentalBiologybyBerriandTataMcCraw.	2)Teachingresources:Claymodels,A.V., PowerPointpresentations
	3)Typesofcleavage-HoloblasticandMeroblastic	1	3)ChickEmbryologybyPattern	
	4)Typesofblastulae	1	4)ChordateEmbryologybyVermaandTyagi.	
	5)Gastrulation	2	5)ChordateZoologybyJordan	
	6)Coelom-formationandtypes	2		
	7)Extraembryonicmembranes	6		
	8)Typesofplacentae-Basedonhistology,morphologyandimplantation.			

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:_____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA SURESH SHAHASANE DEPARTMENT: ZOOLOGY CLASS: T.Y. B.Sc

SEMESTER: ___5_____ MONTH: JUNE- OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: *To comprehend various aspects of quality control and packaging involved in fish processing and marketing*

The learners will be able to : *Learner will be oriented towards understanding the various stages of quality Control. Learner will gain knowledge about the postmortem changes, spoilage mechanisms and methods involved in evaluating the freshness and quality of fishes and prawns / shrimps. Learner shall comprehend the value of maintaining and taking sanitary precautions during the processing and packaging operations*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:APPLIED COMPONENT UNIT:6 TITLE:Quality control and packaging	Post mortem changes and mechanism of spoilage	4	Mannuals on fishery by FAO	TEACHING METHODS:Activity based learning, Peer learning, critical thinking, Comparative, concept mapping ,case -study
	Brief methods for evaluating freshness and quality of fish and prawns / shrimps	4	Fish Biology by C.B.C. Srivastava	Teaching resources :Internet , pictures, charts , POWERPOINT PRESENTATION, YOUTUBE VIDEOS, etc.
	Sanitary operations	3	Marine Fish and Fisheries by Dr. D. V. Bal	
	Various packaging materials used in freezing and canning industry	1		
	Quality Policy and Quality Analysis: ISO 22000/HACCP/ BRC/IFS	3		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA SURESH SHAHASANE DEPARTMENT: ZOOLOGY CLASS: T.Y. B.Sc, SEMESTER: 5

MONTH: JUNE- OCTOBER ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S: *To introduce the learner to the basics of developmental biology with reference to chick as a model and also familiarize with experiments related to it.*

The learners will be able to :*Learner will be able to understand the processes involved in embryonic development and practical applications of studying the chick embryology.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:4 UNIT:4 TITLE:Developmental biology of Chick	Introduction to Developmental Biology:	1	DEVELOPMENTAL BIOLOGY BY GILBERT	1)TEACHING METODS : Lecturing ,Demonstrative,Brain storming, Direct teaching, case - study , Comparative method
	Structure of Hen's egg, physico-chemical nature and forms of yolk- granular, platelets and spheres; fertilization, cleavage, blastulation, gastrulation	3	DEVELOPMENTAL BIOLOGY OF CHICK BY PATTEN	2)Teaching resources: LIVE SPECIMEN, PERMENANT SLIDES , A.V., TEXTBOOK , INTERNET , PICTURES, CHARTS
	Structure of chick embryo – 18 hou rs, 24 hou rs, 33 hou rs, 48 hou rs and 72 hou rs	8	CHORDATE ZOOLOGY BY JORDAN	
	Extra embryonic membranes	2		
	Organizer: Introduction, Spemann Mangold experiment, Hensen's node as an organizer	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA SURESH SHAHASANE DEPARTMENT: ZOOLOGY CLASS: T.Y. B.Sc, SEMESTER: 5

MONTH: JUNE- OCTOBER ACADEMIC YEAR:2019-20

LEARNING OBJECTIVE/S: *To introduce the learner to the basics of developmental biology with reference to chick as a model and also familiarize with experiments related to it.*

The learners will be able to :*Learner will be able to understand the processes involved in embryonic development and practical applications of studying the chick embryology.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:4 UNIT:4 TITLE:Developmental biology of Chick	Introduction to Developmental Biology:	1	DEVELOPMENTAL BIOLOGY BY GILBERT	1)TEACHING METODS : Lecturing ,Demonstrative,Brain storming, Direct teaching, case - study , Comparative method
	Structure of Hen's egg, physico-chemical nature and forms of yolk- granular, platelets and spheres; fertilization, cleavage, blastulation, gastrulation	3	DEVELOPMENTAL BIOLOGY OF CHICK BY PATTEN	2)Teaching resources: LIVE SPECIMEN, PERMENANT SLIDES , A.V., TEXTBOOK , INTERNET , PICTURES, CHARTS
	Structure of chick embryo – 18 hou rs, 24 hou rs, 33 hou rs, 48 hou rs and 72 hou rs	8	CHORDATE ZOOLOGY BY JORDAN	
	Extra embryonic membranes	2		
	Organizer: Introduction, Spemann Mangold experiment, Hensen's node as an organizer	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHINGPLAN(UNITPLAN)

NAMEOFTHESTAFF:SHWETASURESHSHAHASANE DEPARTMENT:Zoology CLASS:T.Y.B.Sc.SEMESTER:VI MONTH:December-March ACADEMICYEAR:2020-2021

LEARNINGOBJECTIVE/S:
Thelearnerswillbeableto:getanideaoforobinofChordates,itstaxanmotuptoclasswithreferencetophylogenyandtheirspecialfeatures.

PAPER,UNIT,TITLE	SUBTOPICS	NOOFLECTURES ALLOTED	REFERENCE/S	TEACHINGMETHOD/ICTTOOLSUSED
PAPER:Taxonomy ofChordates UNIT:1 TITLE:Phylum Chordate:Group Protochordataand GroupEuchordataI	1)Generalcharacters,Differencebetweennon-ChordatesandChordatesand Originofchordates	2	1)ChordateZoology byJordan	TEACHINGMETHODS:Activitybasedlearning, Peerlearning,criticalthinking,Comparative, conceptmapping,case-study
	2)PROTOCHORDATA: a)GeneralcharachersofgroupProtochordata b)DistinguishingcharactersofSubphylumUrochordataandCephalochordatac)Subphylum Urochordata c)SubphylumCephalochordata	6	2)ModerntextbookofZoology–Vertebrates;ProfessorR.L.Kotpal;Rastogipublication;Third Edition	Teachingresources:models,pictures,chartsetc.
	3)GROUPEUCHORDATAI: a)Generalcharacters b)SubphylumVertebrata:Generalcharacters c)DivisionAgnathaandGnathoatomata d)GeneralcharacterswithexampleofclassOstracodermiiandClassCyclostomata.	7	3)Minorphyla–Generalinformation;ProfessorR.L.Kotpal;Rastogi Publication;FifthEdition	
			4)VertebrateZoologyforDegreestudents;V.K.Agarwal;S.Chand Publication;2012	

TOTALNUMBEROFLECTURESALLOCATEDTOTHEUNIT:15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SHWETA SURESH SHAHASANE DEPARTMENT: Zoology

CLASS: :F.Y.B.Sc. SEMESTER: 1 MONTH: JUNE -OCTOBER ACADEMIC YEAR: 2020-21

LEARNING OBJECTIVE/S: *To make learners aware of risks involved in handling of different hazardous chemicals, sensitive (electrical/electronic) instruments and infectious biological specimens especially during practical sessions in the laboratory and to train them to avoid mishap*

The learners will be able to : *Learners would work safely in the laboratory and avoid occurrence of accidents (mishaps) which will boost their scholastic performance and economy in use of materials/chemicals during practical sessions.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:2 UNIT:1 TITLE:INSTRUMENTATION and ANIMALBIOTECHNOLOGY	**Introduction to good laboratory practices**	1	Methods in Biostatistics – B. K. Mahajan	1)Teaching methods:Questions, Peer learning by making buzz groups of students,role play,debate,case-study,problem solving and decision making strategy
	Use of safety symbols : meaning, types of hazards and precautions	2	A Manual of Medical Laboratory Technology - A. H. Patel	2) learning resources: textbook,pictures and A.V. , Internet., POWER POINT PRESENTATION, YOUTUBE VIDEOS
	Calculations and related conversions of each: Metric system- length(meter to micrometer); weight (gram to microgram), Volumetric (Cubic measures)	1	Calculations in Molecular biology and Biotechnology - Frank H. S tephenson	

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	Temperature: Celsius, Fahrenheit, Kelvin	1	Text Book of Zoology, F.Y.B.Sc. Semester I Course 2	
	Concentrations : Percent solutions, ppt, ppm, ppb dilutions,Normality, Molarity and Molality.	2		
	Biostatistics: Introduction and scope, Sampling and its types, Central Tendencies (mean, median, mode) Tabulation, Graphical representations (Histograms, bar diagrams, pie diagrams)	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: III MONTH: JULY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
The learners will be able to : To introduce the learner to the science of dairy. To make the learner aware about care of different pet animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-III UNIT III APPLIED ZOOLOGY - (DAIRY SCIENCE)	3.2 DAIRY SCIENCE	01	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	PRESENTATION
	3.2.1 ROLE OF DAIRY DEVELOPEMENT IN RURAL ECONOMY	01		PRESENTATION
	3.2.2 MILK AND MILK PRODUCTS	03		PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:
To introduce the learner to different bones of human skeleton and their functional importance.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV UNIT II HUMAN OSTEOLOGY	2.1 INTRODUCTION	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES, TEXT BOOK OF HUMAN ANATOMY BY TORTORA	PRESENTATION
	2.2 AXIAL SKELETON	06		PRESENTATION
	2.3 APPENDICULAR SKELETON	06		PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: V MONTH: JULY ACADEMIC YEAR: 2020-2021

LEARNING OBJECTIVE/S:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AC UNIT - II	2.1 Basic boat building	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES, TEXT BOOK OF CRAFTS AND GEAR	PRESENTATION
	2.2 Basic studies of marine engines: Sectional View of 2-stroke and 4-stroke Diesel engines Winch and Deck Side Equipment	06		PRESENTATION
	2.3 Operations: Gill, Trawl, Purse seine Nets Hooks and Lines	06		PRESENTATION

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	Non-conventional Fishing Methods			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: IV MONTH: JANUARY ACADEMIC YEAR:2020-2021 _

LEARNING OBJECTIVE/S:
The learners will be able to : To give learner insight into the structure of biomolecules, and their role in sustenance of life.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER-II UNIT - III -BIOMOLECULES	3.1 BIOMOLECULES	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	PRESENTATION
	3.2 CARBOHYDRATES	04		PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 06

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR:2020-2021 _____

LEARNING OBJECTIVE/S:

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The learners will be able to : To sensitize learner regarding the various threads to the wildlife. To introduce learner various way that can help in the protection, conservation, management and enhancement of wildlife populations and habitat.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV UNIT II -WILDLIFE MANAGEMENT	2.1 HABIT, HABITAT, TERRITORY AND NICHE OF WILD ANIMALS	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	PRESENTATION
	2.2 THREATS TO WILDLIFE	05		PRESENTATION
	2.3 WILDLIFE CONSERVATION	07		PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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NAME OF THE STAFF: JUBER ANSARI DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: JANUARY ACADEMIC YEAR:2020-2021 _____

LEARNING OBJECTIVE/S:
The learners will be able to:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
AC UNIT - V Unit 5: PRESERVATION AND PROCESSING	5.1 Traditional methods and their modifications: i) Icing ii) Drying iii) Salting	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES Fish Biology by C.B.C. Srivastava – Narendra Pub. House.	PRESENTATION
	5.2 Introduction to refrigeration: Types and properties of refrigerants	05		PRESENTATION
	5.3 Principle and steps involved in can reform and canning of fish	04		PRESENTATION
	5.4 Equipment and utensils used in seafood processing	03		PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUHRI KINI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: INTRODUCE CONCEPT OF VACCINES ,IMMUNOPATHOLOGY AND ITS PERSPECTIVE IN ORGAN TRANSPLANTATION

The learners will be able to : DEVELOP BASIC UNDERSTANDING OF IMMUNOLOGY AND ITS PRACTICAL APPLICATION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT IV- APPLIED IMMUNOLOGY	ANTIGEN ANTIBOGY REACTION	05	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	ONLINE LECTURE
	VACCINES AND VACCINATIONS	05	KUBY IMMUNOLOGY	PRESENTATION
	TRANSPLANTATION IMMUNOLOGY	05		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY CLASS:S.Y.B.Sc SEMESTER: V

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: TO FAMILIARIZE CELLULAR ARCHITECTURE AND ITS IMPORTANCE OF TISSUE TO VITAL ORGAN
The learners will be able to : APPRECIATE WELL ORGANIZED TISSUE AND CELL SYSTEM IN BODY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT I-	VERTICAL SECTION OF SKIN	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES

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MAMMALIAN HISTOLOGY	V.S OF TOOTH	02	TEXTBOOK OF HISTOLOGY GARTNER ,LESLIE	PRESENTATION
	T.S OF TOUNGE	02		
	T.S OF ALIMENTARY CANAL	05		
	T.S OF ASSOCIATED DIGESTIVE GLANDS	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: VI

MONTH: DECEMBER - APRIL ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: TO INTRODUCE CONCEPT OF HOMEOSTASIS – THERMOREGULATION AND OSMOREGULATION.
The learners will be able to : SHALL COMPREHENDTHE ADAPTIVE RESPONSES OF ANIMALS TO ENVIRONMENTAL CHANGES FOR SURVIVAL.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II- HOMEOSTASIS	HOMEOSTASIS	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES
	THERMOREGULATION	05		PRESENTATION
	OSMOTIC AND IONIC REGULATION	05		
		03		
		T03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: VI

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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MONTH: DECEMBER – APRIL ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: TO INTRODUCE LEARNER TO CHEMICAL AND MOLECULAR PROCESSES THAT AFFECT GENETIC MATERIAL
The learners will be able to : RECOGNIZE SIGNIFICANCE OF MOLECULAR BIOLOGY AND DNA REPAIR MECHANISM.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT I- MOLECULAR BIOLOGY	TYPES OF MUTATION	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES
	INDUCED MUTATION	04		PRESENTATION
	DNA REPAIR MECHANISM	03		
	EUKARYOTIC GENE EXPRESSION	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: **ZOOLOGY**
CLASS: **S.Y.B.Sc (ZOOLOGY)** SEMESTER: **III** MONTH: **JULY - OCTOBER** ACADEMIC YEAR: **2019-2020**
LEARNING OBJECTIVE/S: INTRODUCE CLASSICAL EXPERIMENT FOR PROVING DNA AS A GENETIC MATERIAL AND STRUCTURES OF NUCLEIC ACIDS ALONGWITH CENTAL DOGMA THEORY
The learners will be able to : IMPORTANCE OF NUCLEIC ACID AND APPRECIATE GENE REGULATION ACTIVITY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I, U-III, NUCLEIC ACIDS	GENETIC MATERIAL	7	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES GENETICS - GARDNER	POWERPOINT PRESENTATION /ONLINE LECTURES
	FLOW OF GENETIC INFORMATION IN EUKARYOTIC CELL	5		
	GENE EXPRESSION AND REGULATION	3		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY
CLASS: S.Y,BSc. SEMESTER: IV MONTH: DEC-FEB ACADEMIC YEAR: 2019-2020
LEARNING OBJECTIVE/S: STUDY STRUCTURAL AND FUNCTIONAL ORGANIZATION OF CELL
The learners will be able to : ACQUIRE INSIGHT OF TRANSPORT MECHANISM FOR COMPOSITION AND MAINTAINANCE OF CELL.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II -.U.I CELL BIOLOGY	INTRODUCTION TO CELL BIOLOGY	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	POWERPOINT PRESENTATION /ONLINE LECTURES
	NUCLEUS	5		
	PLASMA MEMBRANE	4		
	TRANSPORT ACROSS MEMBRANE	2		
	CYTOSKELETAL STRUCTURE	2		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

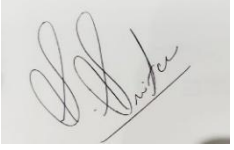
NAME OF THE STAFF: DR. SMITA SUBRAMANIAN DEPARTMENT:Zoology

CLASS: F.Y.BSc.(CBZ) SEMESTER: I MONTH: __AUGUST-NOVEMBER ACADEMIC YEAR: __2019-20

LEARNING OBJECTIVE/S: To acquaint learners to Biotechnology with respect to advancement in Zoology
The learners will be able to : The Learners will be able to understand various aspects of Biotechnology and new approach and techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II AMIMAL BIOTECHNOLOGY	Biotechnology Scopes	1	University Textbook and Biotechnology.	Chalk and Board PPT
	Transgenesis	6		Chalk and Board PPT
	Applications of Biotechnology	8		Chalk and Board PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. SMITA SUBRAMANIAN DEPARTMENT:Zoology

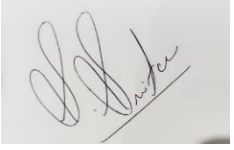
CLASS: S.Y.BSc.(BZ/CZ) SEMESTER: III MONTH: JUNE- OCTOBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The learners will study aspects of control and coordination, locomotion and reproduction

The learners will be able to : The learners will be able to understand the various mechanism of control and coordination, locomotion and reproduction in different animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II CONTROL AND COORDINATION, LOCOMOTION AND REPRODUCTION	Control and coordination,	5	University Textbook and Non- Chordate and Chordate Zoology	Chalk and Board PPT
	Locomotion	5		Chalk and Board PPT
	Reproduction	5		Chalk and Board PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____



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TEACHING PLAN (UNIT PLAN)

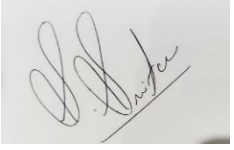
NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY

CLASS: T.Y.BSc. SEMESTER: V MONTH: _JUNE-SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: Learners will get insights of diagnostic techniques.
The learners will be able to : ___Understand various techniques involved in blood analysis and pathology studies. ___

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Applied Hematology	Scope of Applied Hematology	1	University textbook. Textbook of Pathology by Godkar	Chalk and Board PPT
	Microscopic examination of blood: Blood cancer, Infectious disease and Haemoglobinopathies	4		Chalk and Board PPT
	Coagulopathies	2		Chalk and Board PPT
	Biochemical examination: liver functions, Kidney functions, Carbohydrate metabolism amd Hormone analysis.	8		Chalk and Board PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15



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TEACHING PLAN (UNIT PLAN)

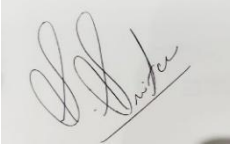
NAME OF THE STAFF: Dr. SMITA SUBRAMANIAN DEPARTMENT:Zoology

CLASS: T.Y.BSc. SEMESTER:V MONTH:JUNE - SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The learners will learn various methods of statistics
The learners will be able to : The learners will understand the different uses of statistical analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Unit-IV BIOSTATISTICS	Probability Distribution	3	University Textbook and Biostatistics by Chatterji and Rastogi	Chalk and Board PPT
	Measures of Variation	3		Chalk and Board PPT
	Testing Hypothesis	3		Chalk and Board PPT
	Parametric and Non-Parametric Test	3		Chalk and Board PPT Chalk and Board PPT
	Correlation	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __FYBSC SEMESTER: I MONTH: July

ACADEMIC YEAR: _2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : _____ To know about the Hoarded wealth of the marvelous animal world and thereby enhance their interest and knowledge in the subject of zoology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-1	Echolocation in bats and cetaceans; Mechanism of pearl formation in Mollusca.	3		Chalk and board method
	Bioluminiscence in animals; Regeneration in animals	3		Chalk and board method
	Mimicry in butterfly and its significance; mechanism of coral formation.	3		Chalk and board method
	Bird Migration; adaptive features of desert animals	3		Chalk and board method
	Breeding and parental care in Pisces and Amphibians	3		Chalk and board method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __FYBSC SEMESTER: II MONTH: November

ACADEMIC YEAR: _2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : _____Understand the current status of wildlife in India from different relevant governing agencies vis-a vis with adversity of poaching and biopiracy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER-I, UNIT-3	Concept of endangered and criticaly endangered species using examples of Indian wildlife with respect to national parks and wildlife sanctuaries of India.	5		Chalk and board method
	Management statergies with special respect to Tiger and Rhinoceros in India.	4		Chalk and board method
	Ecotourism	3		Chalk and board method
	Biopiracy	3		Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __SYBSC SEMESTER: III MONTH: July

ACADEMIC YEAR: _2019-2020

LEARNING OBJECTIVE/S:

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The learners will be able to : Know how animals interact with each other and their surroundings and they will be able to understand different behavioral patterns

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3, UNIT-1	Introduction to Ethology	4		Chalk and board method
	Aspects of animal behaviour	6		Chalk and board method
	Social behaviour	5		Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: SYBSC SEMESTER: IV MONTH: November

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : Get a panoramic view of the impact of human activities leading to pollution and its implication.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3, UNIT-1	Air pollution	3		Chalk and board method
	Water pollution	3		Chalk and board method
	Soil pollution	3		Chalk and board method
	Noise pollution	1		Chalk and board method
	Radioactive pollution	1		Chalk and board method
	Solid waste pollution	2		Chalk and board method

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	Pollution Climate change and global warming	2		Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __TYBSC SEMESTER: V MONTH: July

ACADEMIC YEAR: _2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to apprehend the basis of classification and modern classification up to the class of lower invertebrate animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-1	Levels of organization	03		Chalk and board method
	Symmetry	02		Chalk and board method

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	Coelom and metamerism	02		Chalk and board method
	Taxonomy	04		Chalk and board method
	Kingdom Protista	04		Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: TYBSC SEMESTER: V MONTH: July

ACADEMIC YEAR: _2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to understand the various types of epidermal and dermal derivatives along with their function.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV, UNIT-1	Basic structure of integument	03		Chalk and board method
	Epidermal derivatives of vertebrates	04		Chalk and board method
	Dermal derivatives of vertebrates	04		Chalk and board method
	Special derivatives of integument	04		Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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Bhaskar Waman Thakur College of Science
Yashvant Keshav Patil College of Commerce
Vidhya Dayanand Patil College of Arts
VIVA COLLEGE, Virar (W)
NAAC accredited "B" Grade, 2.69 CGPA

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: TYBSC SEMESTER: VI MONTH: NOVEMBER

ACADEMIC YEAR: _2019-2020

LEARNING OBJECTIVE/S: To introduce basic concepts of modern Chordate classification with evolution point of view and to understand the concept of taxonomy in higher animal kingdom.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-1	General characters,difference between non chordates and chordates, Origin of chordates.	5		Chalk and board method
	Protochordata	5		Chalk and board method
	Group Euchordata	5		Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: TYBSC SEMESTER: VI MONTH: NOVEMBER

ACADEMIC YEAR: _2019-2020

LEARNING OBJECTIVE/S:
To introduce learners to zoogeographic distribution(present and past) of animal species.
To introduce learners to various ways of animal distribution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV, UNIT-IV	Introduction:Plate tectonics and continental drift theory.	4		Chalk and board method
	Animal distribution and barriers	5		Chalk and board method
	Zoogeographical realms	6		Chalk and board method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY CLASS:F.Y.B.Sc SEMESTER: I MONTH: JULY - OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To make learners aware of risks involved in handling of different hazardous chemicals, sensitive (electrical/electronic) instruments and infectious biological specimens especially during practical sessions in the laboratory and to train them to avoid mishap.

The learners will be able to: Learners would work safely in the laboratory and avoid occurrence of accidents (mishaps) which will boost their scholastic performance and economy in use of materials/chemicals during practical sessions.

Laboratory safety, Units and Measurement

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT I- Laboratory safety, Units and Measurement	INTRODUCTION TO GOOD LABORATORY PRACTICES	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	USE OF SAFETY SYMBOLS	03		PRESENTATION
	UNITS OF MEASUREMENT	09		CHALK AND BOARD

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY CLASS:S.Y.B.Sc SEMESTER: III

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To Introduce basic terms of genetics & to study Mendelian principles of inheritance and other forms pattern of inheritance.
The learners will be able to : Understand and apply the principles of inheritance. Understand the concept of multiple alleles, linkage and crossing over

FUNDAMENTALS OF GENETICS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT I-FUNDAMENTA	Introduction to genetics	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD

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LS OF GENETICS	Mendelian Genetics	08		CHALK AND BOARD
	Multiple Alleles and Multiple Genes	03		CHALK AND BOARD
	Linkage and Crossing Over	02		CHALK AND BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V MONTH: JULY - OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: *To introduce the topic of immunology by emphasizing the basic concepts to build a strong foundation and to give an overview of the immune system that plays an important role in disease resistance.*

The learners will be able to : *The learner shall comprehend the types of immunity and the components of immune system. The learner will realize the significant role of immune system in giving resistance against diseases.*

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BASIC IMMUNOLOGY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III- BASIC IMMUNOLOGY	Overview of Immunology	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	Cells and Organs of immune system	04		PRESENTATION
	Antigens	04		PRESENTATION
	Antibodies	04		CHALK AND BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: *To introduce the learner to basics of general pathology.To impart knowledge of retrogressive, necrotic, pathological conditions in the body.To explain repair mechanism of the body.*

The learners will be able to : *Learner will be familiar with various medical terminology pertaining to pathological condition of the body caused due to diseases.*

General Pathology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT III- **General Pathology**	General Pathology	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	Cell injury	04	FUNDAMENTALS OF TOXICOLOGY – KAMLESHWAR PANDEY & J .P.SHUKLA	CHALK AND BOARD
	Retrogressive changes	02		CHALK AND BOARD

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	Disorders of pigmentation	04		PRESENTATION
	Necrosis	02		PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI

DEPARTMENT: ZOOLOGY CLASS:F.Y.B.Sc SEMESTER: I MONTH: JULY - OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER II UNIT II-	INTRODUCTION TO BIOTECHNOLOGY AND ITS APPLICATION		UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	GENE THERAPY		BIODIVERSITY – S.CHAND PUBLICATION	PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SONAL RAMESH DANDGE** DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **V** MONTH: **DEC-FEB** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: TO INTRODUCE VARIOUS ORGANS IN THE BODY AND DIFFERENT TISSUES WHICH PLAYS AN IMPORTANT ROLE TO MAINTAIN WHOLE SYSTEM.
The learners will be able to : UNDERSTAND THE WELL PLANNED ORGANIZATION AND FUNCTIONS OF ORGAN SYSTEMS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-IV, MAMMALIAN HISTOLOGY	VERTICAL SECTION OF SKIN	2	TEXTBOOK OF HISTOLOGY, DESHMUKH SHIVAJI A TEXTBOOK OF HISTOLOGY BY KHANNA	PRESENTATION
	DIGESTIVE SYSTEM OF MAMMAL , VERTICAL SECTION OF TOOTH	3		CHALK AND DUSTER
	TRANSVERSE SECTION OF TONGUE	2		
	TRANSVERSE SECTION OF STOMACH, SMALL INTENSTINE, LARGE INTENSTINEOF MAMMALS	3		
	GLANDS ASSOCIATE WITH DIGESTIVE SYSTEM	2		

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	TRANSVERSE SECTION OF SALIVARY GLAND AND LIVER	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SONAL DANDGE** DEPARTMENT: **ZOOLOGY**

CLASS: **S.Y,BSc**. SEMESTER: **IV** MONTH: **DEC-FEB** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: TO INTRODUCE TEHM WITH THE BASIC KNOWLEDGE OF RESEARCH, SCIENTIFIC WRITING AND IT'S METHODOLOGY

The learners will be able to : UNDERSTAND THE WAYS AND METHODS OF WRITING A RESEARCH PAPER, TYPES OF RESEARCH AND THE ETHICS RELATED TO SCIENTFIC RESEARCH AND ITS WRITING

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I, UNIT I	INTRODUCTION OF ORIGIN OF THE UNIVERSE, CHEMICAL EVOLUTION,ORIGIN OF LIFE,ORIGIN OF EUKARYOTIC CELL	4	UNIVERSITY TB FOR COURSE	CHALK AND DUSTER

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ORIGIN AND EVOLUTION OF LIFE	EVIDENCES OF FAVOUR OF ORGANIC EVOLUTION	3	BY BOARD OF STUDIES ZOOLOGY	PRESENATION
	PALAENTOLOGY, ANATOMY, EMBRYOLOGY AND GEOGRAPHICAL DISTRIBUTION	2		YOUTUBE VIDEOS
	THEORIES OF ORGANIC EVOLUTION, LAMARCK,DARWIN,MUTATION THEORY	3		
	MODERN SYNTHETIC THEORY,WEISMAN GERMPLASM THEORY	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SONAL DANDGE** DEPARTMENT: **ZOOLOGY**

CLASS: **F.Y,BSc**. SEMESTER: **II** MONTH: **DEC-FEB** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: TO EXPLAIN THE COMPONENTS OF ECOSYSTEM AND HOW ECOSYSTEM IS ESSENTIAL FOR SURVIVAL OF ANIMALS

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The learners will be able to : UNDERSTAND THE IMPORTANCE OF ECOSYSTEMAND VARIOUS FAUNA BEING EXTINCT BECAUSE OF INTERUPTING OF HUMAN BEING

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I, U-II, ECOSYSTEM	DEFINATION OF ECOSYSTEM, COMPONENTS OF ECOSYSTEM	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND DUSTER
	IMACT OF TEMPERATURE ON BIOTA, VARIOUS BIOGEOCHEMICAL CYCLES	4		PRESENTATION
	FRESHWATER ECOSYSTEM, FOOD CHAIN	4		
	FOOD WEB, ECOLOGICAL PYRAMID	2		
	ANIMAL INTERACTION THAT IS POSITIVE INTERACTION AND NEGATIVE INTERACTION	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **_SONAL RAMESH DANDGE** DEPARTMENT: **ZOOLOGY** CLASS: **T.Y.Bsc** SEMESTER: **VI** MONTH: **APRIL-MAY**

ACADEMIC YEAR:**2019-2020**

LEARNING OBJECTIVE/S: TO INTRODUCE THE LEARNER VARIOUS NATURAL RSOURCES ,THEIR EXPLOITATION AND HOW GOVERNMENT PLAYS AN IMPORTANT ROLE TO IMPLIMENT VAROIUS LAWS
The learners will be able to : UNDERSTAND DIFFERENT FACTORS AFFECTING ENVIRONMENT AND NEED TO UNDERSTAND VAROIUS LAWS ANGAINST GOVERONMENT FOR EXPLOITATION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV, UNIT I ENVIRONMENTAL MANAGEMENT	NATURAL RESOURCES AND THEIR CLASSIFICATION	2	ENVIRONMENTAL BIOLOGY BY P.S. VERMA	CHALK AND DUSTER PRESENTATION
	EXPLOITATION AND MODIFICATION OF NATURAL RESOURCES	2		
	SUSTAINABLE DEVELOPMENT	3	UNIVERSITY TB FOR COURSE BY BOARD OF	

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			STUDIES ZOOLOGY	
	WASTE MANAGEMENT, WATER MANAGEMENT	4		
	LAWS GOVERNING ENVIRONMENT	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT- 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **SONAL DANDGE** DEPARTMENT: **ZOOLOGY** CLASS: **S.Y.B.sc** SEMESTER: **III** MONTH: **DEC-FEB**

ACADEMIC YEAR:**2019-2020**

LEARNING OBJECTIVE/S: TO INTRODUCE CONCEPT OF PARASITISM , MODES OF TRANSMISSION OF PARASITES AND PRECAUTIONS TO PREVENT DISEASES
The learners will be able to : _TO UNDERSTAND VARIOUS PARASITES, THEIR LIFE CYCLE, THE SYMPTOMS OF THE DISEASE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER 3, UNIT II PARASITOLOGY	INTRODUCTION TO PARASITOLOGY AND TYPES OF PARASITES	2	PARASITOLOGY BY SHARMA	CHALK AND DUSTER PRESENTATION
	HOST PARASITE RELATIONSHIP, HOST SPECIFICITY	3	PARASITOLOGY BY CHATTERJEE .K.D	
	LIFE CYCLE, PATHOGENECITY, CONTROL MEASURES AND TREATMENT OF THE FOLLOWING PARASITES Entamoeba histolytica, Faciola hepatica, Taenia solium, Wucheria bancrofti	4	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	
	MORPHOLOGY,LIFE CYCLE, PATHOGENECITY,CONTROL MEASURES AND TREATMENT OF THE FOLLOWING PARASITES HEAD LOUSE, MITE, BED BUG	3		
	PARASITOLOGICAL SIGNIFICANCE	3		

TOTAL NUMBER OF LECTUES ALLOCATED TO THE UNI

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF : SONAL SALVI DEPARTMENT: **ZOOLOGY**

CLASS: F**.Y.B.Sc (ZOOLOGY)** SEMESTER: **II** MONTH: **DEC-FEB** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: To educate learners about causes, symptoms and impact of stress related disorders and infectious diseases.
The learners will be able to : Learners will be able to promptly recognize stress related problems at initial stages and would be able to adopt relevant solutions which would lead to psychologically strong mind set promoting positive attitude important for academics and would be able to acquire knowledge of cause, symptoms and precautions of infectious diseases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-III, Common Human Diseases and Disorders	Stress related disorders	7	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND BOARD
	Communicable and non-communicable diseases	8		CHALK AND BOARD

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY

CLASS: S.Y,BSc. SEMESTER: VI MONTH: DEC-FEB ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To develop learner's knowledge and understanding of genetic variability within a population and how the change in the gene pool leads to evolution of species.

The learners will be able to : Learner would understand the forces that cause evolutionary changes in natural populations. ¬ Learner would comprehend the mechanisms of speciation ¬ Learner will be able to distinguish between microevolution, macroevolution and megaevolution

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I.U.II	Introduction to population genetics	1		CHALK AND BOARD

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Population genetics and evolution	Population genetics	6	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND BOARD
	Evolutionary genetics	8		POSTER AND PRESENTATIONS FOR REFERNCE

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY

CLASS: T.Y,BSc. SEMESTER: VI MONTH: DEC-FEB ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: To *introduce to the learner the fundamental concepts of tissue culture and guide them progressively to certain areas of animal tissue culture.*

The learners will be able to : *The learner shall understand the significance of tissue culture as a tool in specialized areas of research. The learner will appreciate its applications in various industries.*

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, **Unit IV: Animal Tissue Culture**	**Aseptic techniques**	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND DUSTER
	Culture media	5		CHALK AND DUSTER
	Advantages of tissue culture - control of the environment, *in vitro* modelling of *in vivo*	5		CHALK AND DUSTER
	conditions	2		CHALK AND DUSTER
	Limitations of tissue culture	1		CHALK AND DUSTER

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: SONAL SALVI DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **VI** MONTH: **DEC-FEB** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: *To introduce learner to bioinformatics - a computational approach to learning the structure and organization of genomes, phylogeny and metabolism.*

The learners will be able to : *Learner shall become aware of the computational point of view of studying the genomes.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III,U-IV, **Bioinformatics**	**Introduction**	3	**Bioinformatics** –RASTOGI AND RASTOGI **Bioinformatics** –ATTWOOD UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND BOARD
	Databases - Tools and their uses	4		YOUTUBE VIDEOS
	Sequence alignment methods	3		PRESENTATION, CHALK AND BOARD
	Predictive applications using DNA and protein sequences	2		CHALK AND BOARD

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____ DEPARTMENT: _____

CLASS: _____ SEMESTER: _____ MONTH: _____ ACADEMIC YEAR: _____

LEARNING OBJECTIVE/S:
The learners will be able to :

_____

_____

_____

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: _____DEPARTMENT: _____

CLASS: _____SEMESTER: _____MONTH: _____ ACADEMIC YEAR:_____

LEARNING OBJECTIVE/S:
The learners will be able to :

_____

_____

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: FYBSc. SEMESTER: I MONTH: JULY 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : To orient learner about rich heritage of Biodiversity of India and make understand significance of its conservation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II BIODIVERSITY AND ITS CONSERVATION	INTRODUCTION AND LEVELS TO BIODIVERSITY	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	BIODIVERSITY HOTSPOT	03	BIODIVERSITY – S.CHAND PUBLICATION	PRESENTATION
	VALUES OF BIODIVERSITY	03		
	THREATS OF BIODIVERSITY	03		
	CONSERVATION AND ITS MANAGEMENT	03		

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: III MONTH: JULY 2019 ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : To introduce the concepts of physiology of nutrition, excretion and osmoregulation. To expose the learners to various nutrition apparatus, excretory and osmoregulatory struct

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPERII UNIT I NUTRITION AND EXCRETION	EXCRETION APPARATUS ,PHYSIOLOGY	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	PROCESS AND COMPARATIVE STUDY	03		PRESENTATION

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	NUTRITION TYPES AND PROCESS	03		CHARTS
	COMPARATIVE STUDY	03		
	PHYSIOLOGY	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: V MONTH: JUNE 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : To acquaint learners with the details of Sepia as a representative of invertebrate animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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		ALLOTED		
PAPER I UNIT IV TYPE STUDY SEPIA	GENERAL CHARACTERISTICS AND CLASSIFICATION	02	INVERTEBRATE BY KOTPAL	CHALK AND BOARD
	DIGESTIVE SYSYTEM ,REPRODUCTIVE SYSTEM	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	PRESENTATION
	EXCRETORY SYSTEM	03		CHARTS
	NERVOUS SYSTEM	02		
	CIRCULATORY SYSTEM	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL

DEPARTMENT: ZOOLOGY

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CLASS: FYBSc. SEMESTER: II MONTH: NOV 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : Learners will be able to promptly recognize stress related problems at initial stages and would be able to adopt relevant solutions which would lead to psychologically strong mind set promoting positive attitude important for academics and would be able to acquire knowledge of cause, symptoms and precautions of infectious diseases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III COMMON HUMAN DISEASE	STRESS RELATED DISORDER – SYMPTOMS, EFFECTS,CAUSES, PREVENTION,REMEDY	07	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	COMMUNICABLE AND NON COMMUNICABLE DISEASE – SYMPTOMS, EFFECTS,CAUSES, PREVENTION,REMEDY	07		PRESENTATION
				CHARTS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: IV MONTH: NOV 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:
The learners will be able to : To develop the learner's knowledge and understanding of genetic variability within a population and how the change in the gene pool leads to evolution of species.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT II ASPECTS OF HUMAN REPRODUCTION	MALE AND FEMALE REPRODUCTIVE SYSTEM	04	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	MALE INFERTILITY AND FEMALE INFERTILITY REASONS AND CAUSES	03		PRESENTATION
	CONTRACEPTIVE METHODS	04		CHARTS
	ART	03		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: NOV 2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to : The learner shall understand the types and secretions of endocrine glands and their functions and their disorders.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III ENDOCRINOLOGY	INTRODUCTION TO ENDOCRINOLOGY AND TYPES OF GLANDS	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	ENDOCRINE SYSTEM,AND ITS MECHANISM	03	TEXTBOOK OF ENDOCRINOLOGY – WILLIAMS	PRESENTATION
	CLASSIFICATION AND PROPERTIES OF HORMONE	03		CHARTS

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	HISTOLOGY,FUNCTIONS AND DISORDERS OF PITUITARY,THYROID	03		
	PARATHYROID,PANCREAS AND ADRENAL	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: NOV2019 ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S:

The learners will be able to : Learner will understand the paradigms of discovery and commercialization of biological resources and knowledge gained by self-medication by animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV UNIT III BIOPROSPECTING AND ZOOPHARMACOGNOSY	INTRODUCTION TO BIOPROSPECTING	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD

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	TYPES OF BIOPROSPECTING	03		PRESENTATION
	CONSERVATION – ADVANTAGE AND DISADVANTAGE , INTRODUCTION TO ZOOPHARMACOGNOSY	03		CASE STUDIES
	SELF MEDICATION AND ITS MECHANISM	03		
	APPLICATION AND ITS CONTRIBUTION	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **V** MONTH: **SEPTEMBER -DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To introduce to the learner the composition of blood, haemorrhage and haematopoiesis and to acquaint the learner with the physiology of blood clotting and clinical aspects of haematology

The learners will be able to: Learner shall be familiar with the fundamental concepts in haematology .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, HEMATOLOGY	Composition of blood ; Blood volume	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	POWERPOINT PRESENTATION
	Plasma proteins	2		YOUTUBE VIDEOS
	RBCs	3		PHOTOGRAPHS FOR SYMPTOMS
	WBCs	3		
	Blood clotting	2		

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	Hemoglobin	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **S.Y.B.Sc (ZOOLOGY)** SEMESTER: **III** MONTH: **SEPTEMBER -DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To introduce the concepts of physiology of respiration and circulation .To expose the learners to various respiratory and circulatory structures in different classes of organisms.

The learners will be able to: Learners would understand the increasing complexity of respiratory and circulatory physiology in evolutionary hierarchy. Learners would be able to correlate the habit and habitat with respiratory and circulatory structures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER 2 UNIT 2 Study of Respiration and circulation	Comparative study of Respiratory organs; Accessory respiratory structures	4	University TB for course by board of studies zoology	Powerpoint presentation
	Structure of lungs and physiology of respiration in man; Comparative study of circulation: Open and closed - single and double	3		Youtube videos
	Types of circulating fluids	2		Photographs of the system
	Comparative study of Hearts	4		
	Structure and mechanism of working of heart in man	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **F.Y.B.Sc. (ZOOLOGY)** SEMESTER: **I** MONTH: **SEPTEMBER -DECEMBER** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To provide all learners a complete insight about the structure and train them with operational skills of different instruments required in Zoology.

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The learners will be able to: Students will be skilled to select and operate suitable instruments for the studies of different components of Zoology of this course and also of higher classes including research.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 UNIT 3 Instrumentation	Microscopy ; Centrifuge	3	University TB for course by board of studies zoology	Powerpoint presentation
	Colorimetry and Spectroscopy	3		Youtube videos
	pH	3		Photographs of instruments
	Chromatography	3		
	Electrophoresis	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **VI** MONTH: **JANUARY-MAY** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To introduce to the learner the fundamental concepts of tissue culture .
The learners will be able to: The learners shall understand the significance of tissue culture as a tool in specialized areas of research .Also, will appreciate it applications in industries like biotechnology, in fields such as in vitro fertilization and replacement of animals in medical and toxicology experiments

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, ANIMAL TISSUE CULTURE	Introduction to animal cell culture	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	POWERPOINT PRESENTATION
	Aseptic techniques	2		YOUTUBE VIDEOS
	Culture media: : Physicochemical properties – pH, CO2 and bicarbonate, buffering, O2 , osmolality, temperature, viscosity, surface tension and foaming	3		PHOTOGRAPHS FOR SYMPTOMS
	Types of media ; Serum ; Complete Media	3		
	Cell lines: Primary and established cell lines and their characters. Preparation of cells/organs for culture	2		
	Cell lines: Primary and established cell lines and their characters. Preparation of cells/organs for culture	3		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **S.Y.B.Sc (ZOOLOGY)** SEMESTER: **IV** MONTH: **JANUARY-MAY** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S:
The learners will be able to:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, ANIMAL TISSUE CULTURE	Research, Deductive reasoning, Inductive reasoning	2	University TB for course by board of studies zoology	POWERPOINT PRESENTATION
	Types of research ,7c's rule, Research Methodology	2		Youtube videos
	Scientific Writing, Types of Writing Abstract Writing, Monograph, Review Writing	3		Photographs for symptoms

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	Poster presentation ; Bibliography	3		
	Types of Presentation, Use of computer in research	3		
	Plagiarism. Ethics in Research	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **F.Y.B.Sc (ZOOLOGY)** SEMESTER: **II** MONTH: **JANUARY-MAY** ACADEMIC YEAR: **2020-2021**

LEARNING OBJECTIVE/S: To educate learners about causes, symptoms and impact of stress related disorders and infectious diseases.
The learners will be able to: Learners will be able to promptly recognize stress related problems at initial stages and would be able to adopt relevant solutions which would lead to psychologically strong mind set promoting positive attitude important for academics and would be able to acquire knowledge of cause, symptoms and precautions of infectious diseases.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-III, Common human Diseases	Cause, symptoms, precaution and remedy : Hypertension, Diabetes type II, anxiety	3	University TB for course by board of studies zoology	Powerpoint presentation
	Cause, symptoms, precaution and remedy : insomnia, migraine, depression	3		Youtube videos
	Tuberculosis and Typhoid	2		Photographs for symptoms
	Hepatitis (A and B), AIDS, Gonorrhea and Syphilis	3		
	Diseases of respiratory system- Asthma, Bronchitis.	2		
	Oral Cancer	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:F.Y.B.Sc SEMESTER: I MONTH: JULY - OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: TO ACQUAINT LEARNERS TO STUDY THE MODERN DEVELOPMENT IN FIELD OF ZOOLOGY WITH RESPECT TO ITS APPLICATION FOR BENEFITS TO HUMAN AND WORLD
The learners will be able to : HELP YOUNG MINDS THINK OUT OF THE BOX WITH RESPECT TO NEW DEVELOPMENT BENEFITING THE HUMANS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II- ANIMAL BIOTECHNOLOGY	INTRODUCTION TO BIOTECHNOLOGY , SCOPE AND ACHIEVEMENTS	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	TRANSGENESIS,CLONING	04	BIOTECHNOLOGY– SATYANARAYAN & CHAKRAPANI	PRESENTATION
	ETHICAL ISSUES	03		
	DNA FINGERPRINTING AND GENE THERAPY	04		

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	GREEN GENES	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:S.Y.B.Sc SEMESTER: III

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: TO UNDERSTAND THE BASICS OF GENETICS WITH RESPECT TO SEX DETERMINATION AND ITS PURPOSE
The learners will be able to : TO CORRELATE WITH THE GENETIC DISORDER WITH THE STRUCTURE OF CHROMOSOME,NUMBER OF CHROMOSOME AND SEX DETERMINATION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II- CHROMOSOME AND HEREDITY	TYPES , STRUCTURE AND CLASSIFICATION OF CHROMOSOMES	04	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	SEX DETERMINATION – HORMONAL ,TEMPERATURE AND CHROMOSOMAL	04	GENETICS - FAIRBANK	PRESENTATION

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	SEX LINKED INHEITANCE	02	GENTEICS – MANGE AND MANGE	
	SEX LIMITED INHERITANCE	02		
	SEX INFLUENCED INHERFITANCE	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: TO COMPREHEND THE GENERAL CHARACTERS AND CLASSIFICATION OF KINGDOM ANIMALIAE FROM PORIFERA TO NEMATODA AND SPECIFIC CHARACTERS OF ORGANISMS BELONGING TON THESE PHYLA
The learners will be able to : FAMILIARIZING WITH CLASSIFICATION AND ABLE TO IDENTIFY ANIMAL IN HABITAT

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER I UNIT II- KINGDOM ANIMALIA I	GENERAL CHARARCTERS	01	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	PHYLUM PORIFERA – CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03	INVERTEBRATE ZOOLOGY – R.L.KOTPAL	PRESENTATION
	PHYLUM CNIDARIA CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		LIVE ANIMALS
	PHYLUM PLATYHELMINTHES CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		
	PHYLUM NEMATODA CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2019-2020

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LEARNING OBJECTIVE/S: TO INTRODUCE PRINCIPLE OF TOXICOLOGY WITH RESPECT TO TOXIC RESPONSE ,NATURE AND ITS EFFECTS IN TOXICITY TESTING AND ITS REGULATORY AFFAIRS

The learners will be able to : BROAD UNDERSTANDING IN THE FIELD HELPING STUDENT PREPARE FOR EMPLOYMENT IN PHARMACEUTICAL INDUSTRY AND RELATED ARENAS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT II- TOXICOLOGY	INTRODUCTION,PRINCIPLE AND SCOPE TO TOXICOLOGY ,	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	TOXINS AND TOXICANTS , CONCEPT OF LC50,LD50,ED50	04	FUNDAMENTALS OF TOXICOLOGY – KAMLESHWAR PANDEY & J .P.SHUKLA	PRESENTATION
	CHARACTERS OF EXPOSURE	02		
	TYPES AND ROUTES OF TOXICITY	04		
	DOSE RESPONE RELATIONSHIP AND TARGET ORGAN TOXICITY	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA ASHOK OZA DEPARTMENT: ZOOLOGY CLASS:F.Y.B.Sc SEMESTER: I MONTH: JULY - OCTOBER ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II-	INTRODUCTION TO BIOTECHNOLOGY AND ITS APPLICATION		UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	GENE THERAPY		BIODIVERSITY – S.CHAND PUBLICATION	PRESENTATION

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA OZA DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **VI** MONTH: **DEC-FEB** ACADEMIC YEAR: **2019-2020**

LEARNING OBJECTIVE/S: TO INTRODUCE THEM WITH GENETIC ALTERATION AND ITS DIAGNOSIS
The learners will be able to : UNDERSTAND AND BE AWARE OF ABNORMALITIES CAUSED DUE TO CHANGE IN GENE AND ITS IMPACT ON GENOME LEVEL.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-III, U-III, HUMAN GENETICS	KARYOTYPE & IT'S USES (HUMAN KARYOTYPE)	2	GENETICS – ANDERSON AND FAIRBANK UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	KARYOTYPE CHARTS
	NON DISJUNCTON DURING MITOSIS AND MEIOSIS AND ITS RESULTANT CHROMOSOMAL ABBREATION	2		CHALK AND DUSTER
	DELETION ,TRANSLOCATION,INVERSION ,UNIPARENTAL DISOMY,	2		PHOTOGRAPHS FOR SYMPTOMS
	DUPLICATION,ANEUPLOIDY,POLYPLOIDY,BREAST CANCER,ANGELMAN SYNDROME,PARDAR WILLI SYNDROME	3		

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	INBORN ERROR OF METABOLISM –PKU & G6PD, ALBINISM ,ALKAPTONURIA	2	GENETICS BY – MANGE & MANGE	
	GENETIC TESTING ,BANDING OF CHROMOSOME, GENETIC COUNSELING	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA OZA DEPARTMENT: ZOOLOGY

CLASS: S.Y,BSc. SEMESTER: IV MONTH: DEC-FEB ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: TO INTRODUCE TEHM WITH THE BASIC KNOWLEDGE OF RESEARCH, SCIENTIFIC WRITING AND IT'S METHODOLOGY

The learners will be able to : UNDERSTAND THE WAYS AND METHODS OF WRITING A RESEARCH PAPER, TYPES OF RESEARCH AND THE ETHICS RELATED TO SCIENTFIC RESEARCH AND ITS WRITING

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I.U.III	RESEARCH, DEDUCTIVE REASONING.INDUCTIVE REASONING	2		CHALK AND DUSTER

B.A. Ozra

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RESEARCH METHODOLGY AND SCIENTIC WRITING	TYPES OF RESEARCH ,7C'S RULE,RESEARCH METHODOLOGY	3	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	THESIS AND ABSTRACT FOR REFERNCE
	SCIENTIFIC WRITING. TYPES OF WRITING ABSTRACT WRITING,MONOGRAPH,REVIEW WRITING,POSTER PRESENTATION	4		POSTER AND PRESENTATIONS FOR REFERNCE
	BIBLIOGRAPHY ,TYPES OF PRESENTATION, USE OF COMPTER IN RESEARCH	3		
	PLAGIARISM.ETHICS IN RESEARCH	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: BHUMIKA OZA DEPARTMENT: ZOOLOGY

CLASS: F.Y,BSc. SEMESTER: II MONTH: DEC-FEB ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S: TO EXPLAIN THE SOURCE AND IMPORTANCE OF HEALTHY MIND,BODY AND DIETARY HABITS.
The learners will be able to : UNDERSTAND THE IMPORTANCE OF GOOD DIETARY HABITS AND LEAD A HEALTHY LIFESTYLE.

B.A. Ozea

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-II, HUMAN HEALTH AND DISEASE	BALANCED DIET AND NUTRITION AND DIET CHART	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND DUSTER
	MALNUTRITION DISORDERS – CAUSES,SYMPTOMS,PRECAUTION AND REMEDIES	5		BMI STUDY BY ASSIGNMENT AND PROJECT
	LIFESTYLE DISORDERS- CAUSES, SYMPTOMS, PRECAUTION AND REMEDIES	5		
	SIGNIFICANCE OF BREAST FEEDING AND BREASTMILK,DIETARY FIBRES	2		
	BMI	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **BHUMIKA ASHOK OZA** DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **VI** MONTH: **DEC-FEB** ACADEMIC YEAR: **2019-2020**

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LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II,U-II, ENZYMOLOGY	CLASSIFICATION AND NOMENCLATURE OF ENZYMES	3	BIOCHEMISTRY SATYNARAYAN AND CHAKRAPANI UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY CSIR REFERENCE BOOK- PATHFINDER	CHALK AND DUSTER
	FACTORS AFFECTING ENZYME ACTION, ALLOSTERIC REGULATION	4		YOUTUBE VIDEOS
	MICHELIS –MENTEN EQUATION.LINEWEAVER BRUK PLOT	3		
	SIGNIFICANCE OF Km.Vmax, LOCK AND KEY HYPOTHESIS,INDUCED FIT MODEL	2		

B.A. Ozora

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	TYPES OF INHIBITOR –COMPETITIVE,UNCOMPETITIVE,NON COMPETITIVE	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

B.A. Ozora

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF:SHWETA SURESH SHAHASANE DEPARTMENT: Zoology

CLASS: :F.Y.B.Sc. SEMESTER: 1 MONTH: JUNE -OCTOBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: *To make learners aware of risks involved in handling of different hazardous chemicals, sensitive (electrical/electronic) instruments and infectious biological specimens especially during practical sessions in the laboratory and to train them to avoid mishap*

The learners will be able to : *Learners would work safely in the laboratory and avoid occurrence of accidents (mishaps) which will boost their scholastic performance and economy in use of materials/chemicals during practical sessions.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:2 UNIT:1 TITLE:INSTRUMENTATION and ANIMALBIOTECHNOLOGY	**Introduction to good laboratory practices**	1	Methods in Biostatistics – B. K. Mahajan	1)Teaching methods:Questions, Peer learning by making buzz groups of students,role play,debate,case-study,problem solving and decision making strategy
	Use of safety symbols : meaning, types of hazards and precautions	2	A Manual of Medical Laboratory Technology - A. H. Patel	2) learning resources: textbook,pictures and A.V. , Internet.
	Calculations and related conversions of each: Metric system- length(meter to micrometer); weight (gram to microgram), Volumetric (Cubic measures)	1	Calculations in Molecular biology and Biotechnology - Frank H. S tephenson	

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	Temperature: Celsius, Fahrenheit, Kelvin	1	Text Book of Zoology, F.Y.B.Sc. Semester I Course 2	
	Concentrations : Percent solutions, ppt, ppm, ppb dilutions,Normality, Molarity and Molality.	2		
	Biostatistics: Introduction and scope, Sampling and its types, Central Tendencies (mean, median, mode) Tabulation, Graphical representations (Histograms, bar diagrams, pie diagrams)	8		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA SURESH SHAHASANE DEPARTMENT: __Zoology_____

CLASS:F.Y.B.Sc.Div B _____ SEMESTER:II MONTH: December-March ACADEMIC YEAR:2019-2020 _____

LEARNING OBJECTIVE/S:
The learners will be able to : understand the current status of wildlife conservation in India in light of of guidelines from different relaxant governing agencies vis-a-vis with adversity of poaching and biopiracy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:Ecology and Wildlife management. UNIT: TITLE:National parks and Sanctuaries Of India.	1)Concept of endangered and critically endangered species using examples of Indian Wildlife with respect to National Parks and Wildlife sanctuaries of Indian	6	1)Introduction to Ecology and Wildlife - textbook	1)Teaching methods:Questions, Peer learning by making buzz groups of students,role play,debate,case-study,problem solving and decision making strategy and field visit.
	2)Management strategies with special reference to Tiger and Rhinoceros in India	4	2)Wildlife laws and its impact on tribes.	2) learning resources: textbook,map,pictures and satellite images,A.V. program, Internet.
	3)Ecotourism	2	3)Indian Mammals by Vivek manon.	
	4)Biopiracy	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA SURESH SHAHASANE _ DEPARTMENT: ZOOLOGY CLASS: S.Y.B.Sc. SEMESTER: IV MONTH: DECEMBER TO MARCH

ACADEMIC YEAR: 2019-2020

LEARNING OBJECTIVE/S:
The learners will be able to : acquaint the key concept of embryology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:Comparative Embryology ,Aspect of Human Reproduction, Pollution and its effect on organisms UNIT:1 TITLE:Comparative Embryology.	1)Types of Eggs-Based on amount and distribution of yolk.	2	1)Developmental Biology by Gilbert.	1)TEACHING METODS : Lecturing ,Demonstrative,Brain storming, Direct teaching, case -study , Comparative method
	2)structure and types of sperms	1	2)Developmental Biology by Berri and Tata Mc Craw.	2)Teaching resources: Clay models , A.V., PowerPoint presentations
	3)Types of cleavage- Holoblastic and Meroblastic	1	3)Chick Embryology by Pattern	
	4)Types of blastulae	1	4)Chordate Embryology by Verma and Tyagi.	
	5)Gastrulation	2	5)Chordate Zoology by Jordan	
	6)Coelom -formation and types	2		
	7)Extra embryonic membranes	6		
	8)Types of placentae -Based on histology,morphology and implantation.			

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA SURESH SHAHASANE DEPARTMENT: ZOOLOGY CLASS: T.Y. B.Sc,

SEMESTER: 5 MONTH: JUNE- OCTOBER ACADEMIC YEAR:2020-2021

LEARNING OBJECTIVE/S: *To introduce the learner to the basics of developmental biology with reference to chick as a model and also familiarize with experiments related to it.*

The learners will be able to :*Learner will be able to understand the processes involved in embryonic development and practical applications of studying the chick embryology.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:4 UNIT:4 TITLE:Developmental biology of Chick	Introduction to Developmental Biology:	1	DEVELOPMENTAL BIOLOGY BY GILBERT	1)TEACHING METODS : Lecturing ,Demonstrative,Brain storming, Direct teaching, case -study , Comparative method
	Structure of Hen's egg, physico-chemical nature and forms of yolk- granular, platelets and spheres; fertilization, cleavage, blastulation, gastrulation	3	DEVELOPMENTAL BIOLOGY OF CHICK BY PATTEN	2)Teaching resources: LIVE SPECIMEN, PERMENANT SLIDES , A.V., TEXTBOOK , INTERNET , PICTURES, CHARTS
	Structure of chick embryo – 18 hou rs, 24 hou rs, 33 hou rs, 48 hou rs and 72 hou rs	8	CHORDATE ZOOLOGY BY JORDAN	
	Extra embryonic membranes	2		
	Organizer: Introduction, Spemann Mangold experiment, Hensen's node as an organizer	1		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

SHWETA SHAHASANE

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SHWETA SURESH SHAHASANE DEPARTMENT: ZOOLOGY CLASS: T.Y. B.Sc, SEMESTER: 5

MONTH: JUNE- OCTOBER ACADEMIC YEAR:2020-2021

LEARNING OBJECTIVE/S: *To introduce the learner to the basics of developmental biology with reference to chick as a model and also familiarize with experiments related to it.*

The learners will be able to :*Learner will be able to understand the processes involved in embryonic development and practical applications of studying the chick embryology.*

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER:4 UNIT:4 TITLE:Developmental biology of Chick	Introduction to Developmental Biology:	1	DEVELOPMENTAL BIOLOGY BY GILBERT	1)TEACHING METODS : Lecturing ,Demonstrative,Brain storming, Direct teaching, case - study , Comparative method
	Structure of Hen's egg, physico-chemical nature and forms of yolk- granular, platelets and spheres; fertilization, cleavage, blastulation, gastrulation	3	DEVELOPMENTAL BIOLOGY OF CHICK BY PATTEN	2)Teaching resources: LIVE SPECIMEN, PERMENANT SLIDES , A.V., TEXTBOOK , INTERNET , PICTURES, CHARTS
	Structure of chick embryo – 18 hou rs, 24 hou rs, 33 hou rs, 48 hou rs and 72 hou rs	8	CHORDATE ZOOLOGY BY JORDAN	
	Extra embryonic membranes	2		
	Organizer: Introduction, Spemann Mangold experiment, Hensen's node as an organizer	1		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUHRI KINI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: INTRODUCE CONCEPT OF VACCINES ,IMMUNOPATHOLOGY AND ITS PERSPECTIVE IN ORGAN TRANSPLANTATION

The learners will be able to : DEVELOP BASIC UNDERSTANDING OF IMMUNOLOGY AND ITS PRACTICAL APPLICATION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT IV- APPLIED IMMUNOLOGY	ANTIGEN ANTIBOGY REACTION	05	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	ONLINE LECTURE
	VACCINES AND VACCINATIONS	05	KUBY IMMUNOLOGY	PRESENTATION
	TRANSPLANTATION IMMUNOLOGY	05		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY CLASS:S.Y.B.Sc SEMESTER: V

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: TO FAMILIARIZE CELLULAR ARCHITECTURE AND ITS IMPORTANCE OF TISSUE TO VITAL ORGAN
The learners will be able to : APPRECIATE WELL ORGANIZED TISSUE AND CELL SYSTEM IN BODY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT I-	VERTICAL SECTION OF SKIN	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES

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MAMMALIAN HISTOLOGY	V.S OF TOOTH	02	TEXTBOOK OF HISTOLOGY GARTNER ,LESLIE	PRESENTATION
	T.S OF TOUNGE	02		
	T.S OF ALIMENTARY CANAL	05		
	T.S OF ASSOCIATED DIGESTIVE GLANDS	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: VI

MONTH: DECEMBER - APRIL ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: TO INTRODUCE CONCEPT OF HOMEOSTASIS – THERMOREGULATION AND OSMOREGULATION.
The learners will be able to : SHALL COMPREHENDTHE ADAPTIVE RESPONSES OF ANIMALS TO ENVIRONMENTAL CHANGES FOR SURVIVAL.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II- HOMEOSTASIS	HOMEOSTASIS	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES
	THERMOREGULATION	05		PRESENTATION
	OSMOTIC AND IONIC REGULATION	05		
		03		
		T03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 13

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: VI

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MONTH: DECEMBER – APRIL ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: TO INTRODUCE LEARNER TO CHEMICAL AND MOLECULAR PROCESSES THAT AFFECT GENETIC MATERIAL
The learners will be able to : RECOGNIZE SIGNIFICANCE OF MOLECULAR BIOLOGY AND DNA REPAIR MECHANISM.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT I- MOLECULAR BIOLOGY	TYPES OF MUTATION	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	POWERPOINT PRESENTATION /ONLINE LECTURES
	INDUCED MUTATION	04		PRESENTATION
	DNA REPAIR MECHANISM	03		
	EUKARYOTIC GENE EXPRESSION	04		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: **ZOOLOGY**
CLASS: **S.Y.B.Sc (ZOOLOGY)** SEMESTER: **III** MONTH: **JULY - OCTOBER** ACADEMIC YEAR: **2018-2019**
LEARNING OBJECTIVE/S: INTRODUCE CLASSICAL EXPERIMENT FOR PROVING DNA AS A GENETIC MATERIAL AND STRUCTURES OF NUCLEIC ACIDS ALONGWITH CENTAL DOGMA THEORY
The learners will be able to : IMPORTANCE OF NUCLEIC ACID AND APPRECIATE GENE REGULATION ACTIVITY

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I, U-III, NUCLEIC ACIDS	GENETIC MATERIAL	7	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES GENETICS - GARDNER	POWERPOINT PRESENTATION /ONLINE LECTURES
	FLOW OF GENETIC INFORMATION IN EUKARYOTIC CELL	5		
	GENE EXPRESSION AND REGULATION	3		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANUSHRI KINI DEPARTMENT: ZOOLOGY
CLASS: S.Y,BSc. SEMESTER: IV MONTH: DEC-FEB ACADEMIC YEAR: 2018-2019
LEARNING OBJECTIVE/S: STUDY STRUCTURAL AND FUNCTIONAL ORGANIZATION OF CELL
The learners will be able to : ACQUIRE INSIGHT OF TRANSPORT MECHANISM FOR COMPOSITION AND MAINTAINANCE OF CELL.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II -.U.I CELL BIOLOGY	INTRODUCTION TO CELL BIOLOGY	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	POWERPOINT PRESENTATION /ONLINE LECTURES
	NUCLEUS	5		
	PLASMA MEMBRANE	4		
	TRANSPORT ACROSS MEMBRANE	2		
	CYTOSKELETAL STRUCTURE	2		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

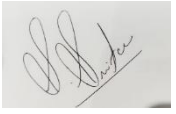
NAME OF THE STAFF: DR. SMITA SUBRAMANIAN DEPARTMENT:Zoology

CLASS: F.Y.BSc.(CBZ) SEMESTER: I MONTH: __AUGUST-NOVEMBER ACADEMIC YEAR: __2018-19

LEARNING OBJECTIVE/S: To acquaint learners to Biotechnology with respect to advancement in Zoology
The learners will be able to : The Learners will be able to understand various aspects of Biotechnology and new approach and techniques.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-I AMIMAL BIOTECHNOLOGY	Biotechnology Scopes	1	University Textbook and Biotechnology.	Chalk and Board PPT
	Transgenesis	6		Chalk and Board PPT
	Applications of Biotechnology	8		Chalk and Board PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____



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TEACHING PLAN (UNIT PLAN)

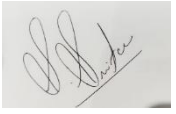
NAME OF THE STAFF: D. SMITA SUBRAMANIAN DEPARTMENT:Zoology

CLASS: S.Y.BSc.(BZ/CZ) SEMESTER: III MONTH: JUNE- OCTOBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The learners will study aspects of control and coordination, locomotion and reproduction
The learners will be able to : The learners will be able to understand the various mechanism of control and coordination, locomotion and reproduction in different animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-III CONTROL AND COORDINATION, LOCOMOTION AND REPRODUCTION	Control and coordination,	5	University Textbook and Non- Chordate and Chordate Zoology	Chalk and Board PPT
	Locomotion	5		Chalk and Board PPT
	Reproduction	5		Chalk and Board PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____



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TEACHING PLAN (UNIT PLAN)

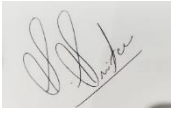
NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY

CLASS: T.Y.BSc. SEMESTER: V MONTH: _JUNE-SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The learners will be learning the pathophysiology od various diseases.
The learners will be able to : The learners will be able to understand the root cause of any disease and its precautionary measures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Pape-III Unit-III General Pathology	Introduction	1	University textbook and Textbook on Pathology	Chalk and Board PPT
	Cell Injury	3		Chalk and Board PPT
	Retrogressive changes	3		Chalk and Board PPT
	Disorders of Pigmentation	3		Chalk and Board PPT
	Necrosis	3		Chalk and Board PPT
	Gangrene	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ___15_____



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TEACHING PLAN (UNIT PLAN)

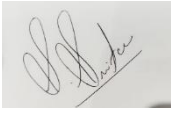
NAME OF THE STAFF: Dr. SMITA SUBRAMANIAN DEPARTMENT: Zoology

CLASS: T.Y.BSc. SEMESTER:V MONTH:JUNE - SEPTEMBER ACADEMIC YEAR: 2019-20

LEARNING OBJECTIVE/S: The learners will learn various methods of statistics
The learners will be able to : The learners will understand the different uses of statistical analysis.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-III Unit-IV BIOSTATISTICS	Probability Distribution	3	University Textbook and Biostatistics by Chatterji and Rastogi	Chalk and Board PPT
	Measures of Variation	3		Chalk and Board PPT
	Testing Hypothesis	3		Chalk and Board PPT
	Parametric and Non-Parametric Test	3		Chalk and Board PPT
	Correlation	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: Zoology

CLASS:T.Y.BSc. SEMESTER:V MONTH:JUNE- SEPTEMBER ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Unit-III Muscles of long bones of Human limbs.	Introduction and Types of long limb muscles	2	University Textbook and Anatomy by Guyton.	Chalk and Board PPT
	Muscles of forelimbs	6		Chalk and Board PPT
	Muscles of Hind limbs	7		Chalk and Board PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

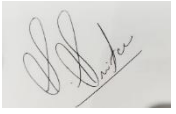
NAME OF THE STAFF: Dr. SMITA SUBRAMANIAN DEPARTMENT:Zoology

CLASS: F.Y.BSc.(CBZ) SEMESTER: II MONTH: FEBRUARY-APRIL ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S: The learners will understand various aspects of population Dynamics
The learners will be able to : The learners will learn the factors affecting population dynamics.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I Unit-I Population Ecology	Population Dynamics	7	University Textbook and Bhattacharyya	Chalk and Board and PPT
	Polulation Growth Regulation	5		Chalk and Board and PPT
	Population Growth Patterns	1		Chalk and Board and PPT
	Human Census	2		Chalk and Board and PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: ____15_____



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TEACHING PLAN (UNIT PLAN)

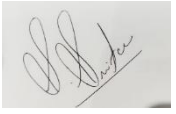
NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY

CLASS:S.Y.BSc. SEMESTER:IV MONTH: _NOVEMBER-MARCH ACADEMIC YEAR:2020-21

LEARNING OBJECTIVE/S: The learners will study the ultrastructure of cell organelles.
The learners will be able to : The learners will be able to understand the intricate and complex functioning of the cell.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-II Unit-II ENDO MEMBRANE SYSTEMS	Introduction to Endomembrane system	1	University textbook AND Cell Biology	Chalk and Board and PPT
	Endoplamic Reticulum: Origin, Occurrence, Morphology and Functions.	3		Chalk and Board and PPT
	Golgi Complex: Origin, Occurrence, Morphology and Functions.	3		Chalk and Board and PPT
	Lysosomes: Origin, Occurrence, Morphology and Functions.	3		Chalk and Board and PPT
	Mitochondria: Origin, Occurrence, Morphology and Functions.Marker Enzymes, Biogenesis Semiautonous nature of Mitochondria	5		Chalk and Board and PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: __15



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TEACHING PLAN (UNIT PLAN)

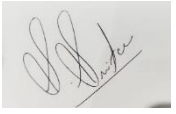
NAME OF THE STAFF: Dr.SMITA SUBRAMANIAN DEPARTMENT: ZOOLOGY

CLASS: T.Y.BSC. SEMESTER: VI MONTH: NOVEMBER-MARCH ACADEMIC YEAR: 218-19

LEARNING OBJECTIVE/S: The learners will study various aspects of Genetic Disorders
The learners will be able to : The learners will be aware about the impact and changes that takes at gene level.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper—III Unit-III HUMAN GENETICS	Non- Disjunction during Mitosis and Meiosis	7	Diagnostic Regcognition of Genetic Disorders.	Chalk and Board and PPT
	Genetic Disorders	5		Chalk and Board and PPT
	Diagnosis	3		Chalk and Board and PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15



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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: Dr. SMITA SUBRAMANIAN DEPARTMENT:Zoology

CLASS: T.Y.BSc. SEMESTER: VI MONTH: NOVEMBER-MARCH ACADEMIC YEAR:2018-19

LEARNING OBJECTIVE/S: The learners will understand the various factors affecting the environment.
The learners will be able to : The learners will learn the various methods of environment management.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
Paper-IV Unit-I Environment Management	Natural Resources and their Classification	2		Chalk and Board and PPT
	Exploitation and Modification of Natural Resources	1		Chalk and Board and PPT
	Waste Management	5		Chalk and Board and PPT
	Water Management	5		Chalk and Board and PPT
	Acts and Rules of Environment Management	2		Chalk and Board and PPT

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __FYBSC SEMESTER: I MONTH: July

ACADEMIC YEAR: _2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : _____ To know about the Hoarded wealth of the marvelous animal world and thereby enhance their interest and knowledge in the subject of zoology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-1	Echolocation in bats and cetaceans; Mechanism of pearl formation in Mollusca.	3		Chalk and board method
	Bioluminiscence in animals; Regeneration in animals	3		Chalk and board method
	Mimicry in butterfly and its significance; mechanism of coral formation.	3		Chalk and board method
	Bird Migration; adaptive features of desert animals	3		Chalk and board method
	Breeding and parental care in Pisces and Amphibians	3		Chalk and board method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __FYBSC SEMESTER: II MONTH: November

ACADEMIC YEAR: _2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : _____Understand the current status of wildlife in India from different relevant governing agencies vis-a vis with adversity of poaching and biopiracy.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER-I, UNIT-3	Concept of endangered and criticaly endangered species using examples of Indian wildlife with respect to national parks and wildlife sanctuaries of India.	5		Chalk and board method
	Management statergies with special respect to Tiger and Rhinoceros in India.	4		Chalk and board method
	Ecotourism	3		Chalk and board method
	Biopiracy	3		Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __SYBSC SEMESTER: III MONTH: July

ACADEMIC YEAR: _2018-19

LEARNING OBJECTIVE/S:

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The learners will be able to : Know how animals interact with each other and their surroundings and they will be able to understand different behavioral patterns

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3, UNIT-1	Introduction to Ethology	4		Chalk and board method
	Aspects of animal behaviour	6		Chalk and board method
	Social behaviour	5		Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: SYBSC SEMESTER: IV MONTH: November

ACADEMIC YEAR: 2018-19

LEARNING OBJECTIVE/S:
The learners will be able to : Get a panoramic view of the impact of human activities leading to pollution and its implication.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-3, UNIT-1	Air pollution	3		Chalk and board method
	Water pollution	3		Chalk and board method
	Soil pollution	3		Chalk and board method
	Noise pollution	1		Chalk and board method
	Radioactive pollution	1		Chalk and board method
	Solid waste pollution	2		Chalk and board method

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	Pollution Climate change and global warming	2		Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: __TYBSC SEMESTER: V MONTH: July

ACADEMIC YEAR: _2018-19

LEARNING OBJECTIVE/S:
The learners will be able to apprehend the basis of classification and modern classification up to the class of lower invertebrate animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-1	Levels of organization	03		Chalk and board method
	Symmetry	02		Chalk and board method

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	Coelom and metamerism	02		Chalk and board method
	Taxonomy	04		Chalk and board method
	Kingdom Protista	04		Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: TYBSC SEMESTER: V MONTH: July

ACADEMIC YEAR: _2018-19

LEARNING OBJECTIVE/S:
The learners will be able to understand the various types of epidermal and dermal derivatives along with their function.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV, UNIT-1	Basic structure of integument	03		Chalk and board method
	Epidermal derivatives of vertebrates	04		Chalk and board method
	Dermal derivatives of vertebrates	04		Chalk and board method
	Special derivatives of integument	04		Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: TYBSC SEMESTER: VI MONTH: NOVEMBER

ACADEMIC YEAR: _2018-19

LEARNING OBJECTIVE/S To introduce basic concepts of modern Chordate classification with evolution point of view and to understand the concept of taxonomy in higher animal kingdom.
:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-I, UNIT-1	General characters,difference between non chordates and chordates, Origin of chordates.	5		Chalk and board method
	Protochordata	5		Chalk and board method
	Group Euchordata	5		Chalk and board method

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: JOHNSON VARKEY DEPARTMENT: ZOOLOGY CLASS: TYBSC SEMESTER: VI MONTH: NOVEMBER

ACADEMIC YEAR: _2018-19

LEARNING OBJECTIVE/S: To introduce learners to zoogeographic distribution(present and past) of animal species.
To introduce learners to various ways of animal distribution.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER-IV, UNIT-IV	Introduction:Plate tectonics and continental drift theory.	4		Chalk and board method
	Animal distribution and barriers	5		Chalk and board method
	Zoogeographical realms	6		Chalk and board method

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY CLASS:F.Y.B.Sc SEMESTER: I MONTH: JULY - OCTOBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: To make learners aware of risks involved in handling of different hazardous chemicals, sensitive (electrical/electronic) instruments and infectious biological specimens especially during practical sessions in the laboratory and to train them to avoid mishap.

The learners will be able to: Learners would work safely in the laboratory and avoid occurrence of accidents (mishaps) which will boost their scholastic performance and economy in use of materials/chemicals during practical sessions.

Laboratory safety, Units and Measurement

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT I- Laboratory safety, Units and Measurement	INTRODUCTION TO GOOD LABORATORY PRACTICES	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	USE OF SAFETY SYMBOLS	03		PRESENTATION
	UNITS OF MEASUREMENT	09		CHALK AND BOARD

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY CLASS:S.Y.B.Sc SEMESTER: III

MONTH: JULY - OCTOBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: To Introduce basic terms of genetics & to study Mendelian principles of inheritance and other forms pattern of inheritance.
The learners will be able to : Understand and apply the principles of inheritance. Understand the concept of multiple alleles, linkage and crossing over

FUNDAMENTALS OF GENETICS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT I-	Introduction to genetics	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD

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FUNDAMENTALS OF GENETICS	Mendelian Genetics	08		CHALK AND BOARD
	Multiple Alleles and Multiple Genes	03		CHALK AND BOARD
	Linkage and Crossing Over	02		CHALK AND BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V MONTH: JULY - OCTOBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: *To introduce the topic of immunology by emphasizing the basic concepts to build a strong foundation and to give an overview of the immune system that plays an important role in disease resistance.*

The learners will be able to : *The learner shall comprehend the types of immunity and the components of immune system. The learner will realize the significant role of immune system in giving resistance against diseases.*

BASIC IMMUNOLOGY

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III- BASIC IMMUNOLOGY	Overview of Immunology	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	Cells and Organs of immune system	04		PRESENTATION
	Antigens	04		PRESENTATION
	Antibodies	04		CHALK AND BOARD

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI DEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V

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MONTH: JULY - OCTOBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: *To introduce the learner to basics of general pathology.To impart knowledge of retrogressive, necrotic, pathological conditions in the body.To explain repair mechanism of the body.*

The learners will be able to : *Learner will be familiar with various medical terminology pertaining to pathological condition of the body caused due to diseases.*

General Pathology

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT III- **General Pathology**	General Pathology	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	Cell injury	04	FUNDAMENTALS OF TOXICOLOGY – KAMLESHWAR PANDEY & J .P.SHUKLA	CHALK AND BOARD
	Retrogressive changes	02		CHALK AND BOARD
	Disorders of pigmentation	04		PRESENTATION

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	Necrosis	02		PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: SONAL SALVI

DEPARTMENT: ZOOLOGY CLASS:F.Y.B.Sc SEMESTER: I MONTH: JULY - OCTOBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II-	INTRODUCTION TO BIOTECHNOLOGY AND ITS APPLICATION		UNIVERSITY TEXTBOOK BY	CHALK AND BOARD

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			BOARD OF STUDIES	
	GENE THERAPY		BIODIVERSITY – S.CHAND PUBLICATION	PRESENTATION

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYADARSHINI DHOLE DEPARTMENT: ZOOLOGY CLASS:F.Y.B.Sc SEMESTER: I MONTH: JULY - OCTOBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: TO ACQUAINT LEARNERS TO STUDY THE MODERN DEVELOPMENT IN FIELD OF ZOOLOGY WITH RESPECT TO ITS APPLICATION FOR BENEFITS TO HUMAN AND WORLD
The learners will be able to : HELP YOUNG MINDS THINK OUT OF THE BOX WITH RESPECT TO NEW DEVELOPMENT BENEFITING THE HUMANS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II- ANIMAL BIOTECHNOLOGY	INTRODUCTION TO BIOTECHNOLOGY , SCOPE AND ACHIEVEMENTS	02	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	TRANSGENESIS,CLONING	04	BIOTECHNOLOGY– SATYANARAYAN & CHAKRAPANI	PRESENTATION
	ETHICAL ISSUES	03		
	DNA FINGERPRINTING AND GENE THERAPY	04		

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	GREEN GENES	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYADARSHINI DHOLEDEPARTMENT: ZOOLOGY CLASS:S.Y.B.Sc SEMESTER: III MONTH: JULY - OCTOBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: TO UNDERSTAND THE BASICS OF GENETICS WITH RESPECT TO SEX DETERMINATION AND ITS PURPOSE
The learners will be able to : TO CORRELATE WITH THE GENETIC DISORDER WITH THE STRUCTURE OF CHROMOSOME,NUMBER OF CHROMOSOME AND SEX DETERMINATION

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II- CHROMOSOME AND HEREDITY	TYPES , STRUCTURE AND CLASSIFICATION OF CHROMOSOMES	04	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	SEX DETERMINATION – HORMONAL ,TEMPERATURE AND CHROMOSOMAL	04	GENETICS - FAIRBANK	PRESENTATION

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	SEX LINKED INHEITANCE	02	GENTEICS – MANGE AND MANGE	
	SEX LIMITED INHERITANCE	02		
	SEX INFLUENCED INHERFITANCE	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYADARSHINI DHOLEDEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V MONTH: JULY - OCTOBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: TO COMPREHEND THE GENERAL CHARACTERS AND CLASSIFICATION OF KINGDOM ANIMALIAE FROM PORIFERA TO NEMATODA AND SPECIFIC CHARACTERS OF ORGANISMS BELONGING TON THESE PHYLA
The learners will be able to : FAMILIARIZING WITH CLASSIFICATION AND ABLE TO IDENTIFY ANIMAL IN HABITAT

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II-	GENERAL CHARARCTERS	01	UNIVERSITY TEXTBOOK BY	CHALK AND BOARD

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KINGDOM ANIMALIA I			BOARD OF STUDIES	
	PHYLUM PORIFERA – CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03	INVERTEBRATE ZOOLOGY – R.L.KOTPAL	PRESENTATION
	PHYLUM CNIDARIA CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		LIVE ANIMALS
	PHYLUM PLATYHELMINTHES CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		
	PHYLUM NEMATODA CHARACTERS ,CLASSSIFICATION AND EXAMPLE	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 16

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYADARSHINI DHOLEDEPARTMENT: ZOOLOGY CLASS:T.Y.B.Sc SEMESTER: V MONTH: JULY - OCTOBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S: TO INTRODUCE PRINCIPLE OF TOXICOLOGY WITH RESPECT TO TOXIC RESPONSE ,NATURE AND ITS EFFECTS IN TOXICITY TESTING AND ITS REGULATORY AFFAIRS

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The learners will be able to : BROAD UNDERSTANDING IN THE FIELD HELPING STUDENT PREPARE FOR EMPLOYMENT IN PHARMACEUTICAL INDUSTRY AND RELATED ARENAS.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT II- TOXICOLOGY	INTRODUCTION,PRINCIPLE AND SCOPE TO TOXICOLOGY ,	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	TOXINS AND TOXICANTS , CONCEPT OF LC50,LD50,ED50	04	FUNDAMENTALS OF TOXICOLOGY – KAMLESHWAR PANDEY & J .P.SHUKLA	PRESENTATION
	CHARACTERS OF EXPOSURE	02		
	TYPES AND ROUTES OF TOXICITY	04		
	DOSE RESPONE RELATIONSHIP AND TARGET ORGAN TOXICITY	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: PRIYADARSHINI DHOLEDEPARTMENT: ZOOLOGY CLASS:F.Y.B.Sc SEMESTER: I MONTH: JULY - OCTOBER ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to :

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT II-	INTRODUCTION TO BIOTECHNOLOGY AND ITS APPLICATION		UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	GENE THERAPY		BIODIVERSITY – S.CHAND PUBLICATION	PRESENTATION

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: _____

SIGNATURE OF THE STAFF

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **V** MONTH: **SEPTEMBER -DECEMBER** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: To introduce to the learner the composition of blood, haemorrhage and haematopoiesis and to acquaint the learner with the physiology of blood clotting and clinical aspects of haematology

The learners will be able to: Learner shall be familiar with the fundamental concepts in haematology .

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, HEMATOLOGY	Composition of blood ; Blood volume	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	POWERPOINT PRESENTATION
	Plasma proteins	2		YOUTUBE VIDEOS
	RBCs	3		PHOTOGRAPHS FOR SYMPTOMS
	WBCs	3		
	Blood clotting	2		

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	Hemoglobin	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **S.Y.B.Sc (ZOOLOGY)** SEMESTER: **III** MONTH: **SEPTEMBER -DECEMBER** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: To introduce the concepts of physiology of respiration and circulation .To expose the learners to various respiratory and circulatory structures in different classes of organisms.

The learners will be able to: Learners would understand the increasing complexity of respiratory and circulatory physiology in evolutionary hierarchy. Learners would be able to correlate the habit and habitat with respiratory and circulatory structures.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2	Comparative study of Respiratory organs; Accessory respiratory structures	4	University TB for course by board of studies zoology	Powerpoint presentation

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UNIT 2 Study of Respiration and circulation	Structure of lungs and physiology of respiration in man; Comparative study of circulation: Open and closed - single and double	3		Youtube videos
	Types of circulating fluids	2		Photographs of the system
	Comparative study of Hearts	4		
	Structure and mechanism of working of heart in man	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **F.Y.B.Sc. (ZOOLOGY)** SEMESTER: **I** MONTH: **SEPTEMBER -DECEMBER** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: To provide all learners a complete insight about the structure and train them with operational skills of different instruments required in Zoology.

The learners will be able to: Students will be skilled to select and operate suitable instruments for the studies of different components of Zoology of this course and also of higher classes including research.

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PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER 2 UNIT 3 Instrumentation	Microscopy ; Centrifuge	3	University TB for course by board of studies zoology	Powerpoint presentation
	Colorimetry and Spectroscopy	3		Youtube videos
	pH	3		Photographs of instruments
	Chromatography	3		
	Electrophoresis	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **VI** MONTH: **JANUARY-MAY** ACADEMIC YEAR: **2018-2019**

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LEARNING OBJECTIVE/S: To introduce to the learner the fundamental concepts of tissue culture .

The learners will be able to: The learners shall understand the significance of tissue culture as a tool in specialized areas of research .Also, will appreciate it applications in industries like biotechnology, in fields such as in vitro fertilization and replacement of animals in medical and toxicology experiments

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, ANIMAL TISSUE CULTURE	Introduction to animal cell culture	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	POWERPOINT PRESENTATION
	Aseptic techniques	2		YOUTUBE VIDEOS
	Culture media: : Physicochemical properties – pH, CO_2 and bicarbonate, buffering, O_2 , osmolality, temperature, viscosity, surface tension and foaming	3		PHOTOGRAPHS FOR SYMPTOMS
	Types of media ; Serum ; Complete Media	3		
	Cell lines: Primary and established cell lines and their characters. Preparation of cells/organs for culture	2		
	Cell lines: Primary and established cell lines and their characters. Preparation of cells/organs for culture	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **S.Y.B.Sc (ZOOLOGY)** SEMESTER: **IV** MONTH: **JANUARY-MAY** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S:
The learners will be able to:

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-I, ANIMAL TISSUE CULTURE	Research, Deductive reasoning, Inductive reasoning	2	University TB for course by board of studies zoology	POWERPOINT PRESENTATION
	Types of research ,7c's rule, Research Methodology	2		Youtube videos
	Scientific Writing, Types of Writing Abstract Writing, Monograph, Review Writing	3		Photographs for symptoms
	Poster presentation ; Bibliography	3		

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	Types of Presentation, Use of computer in research	3		
	Plagiarism. Ethics in Research	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PRADNYA SALVANKAR** DEPARTMENT: **ZOOLOGY**

CLASS: **F.Y.B.Sc (ZOOLOGY)** SEMESTER: **II** MONTH: **JANUARY-MAY** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: To educate learners about causes, symptoms and impact of stress related disorders and infectious diseases.

The learners will be able to: Learners will be able to promptly recognize stress related problems at initial stages and would be able to adopt relevant solutions which would lead to psychologically strong mind set promoting positive attitude important for academics and would be able to acquire knowledge of cause, symptoms and precautions of infectious diseases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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P-II, U-III, Common human Diseases	Cause, symptoms, precaution and remedy : Hypertension, Diabetes type II, anxiety	3	University TB for course by board of studies zoology	Powerpoint presentation
	Cause, symptoms, precaution and remedy : insomnia, migraine, depression	3		Youtube videos
	Tuberculosis and Typhoid	2		Photographs for symptoms
	Hepatitis (A and B), AIDS, Gonorrhea and Syphilis	3		
	Diseases of respiratory system- Asthma, Bronchitis.	2		
	Oral Cancer	2		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **PRIYANKA DESAI** DEPARTMENT: **ZOOLOGY**

CLASS: **T.Y.B.Sc (ZOOLOGY)** SEMESTER: **V** MONTH: **DEC-FEB** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: TO INTRODUCE VARIOUS ORGANS IN THE BODY AND DIFFERENT TISSUES WHICH PLAYS AN IMPORTANT ROLE TO MAINTAIN WHOLE SYSTEM.
The learners will be able to : UNDERSTAND THE WELL PLANNED ORGANIZATION AND FUNCTIONS OF ORGAN SYSTEMS

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-II, U-IV, MAMMALIAN HISTOLOGY	VERTICAL SECTION OF SKIN	2	TEXTBOOK OF HISTOLOGY, DESHMUKH SHIVAJI A TEXTBOOK OF HISTOLOGY BY KHANNA	PRESENTATION
	DIGESTIVE SYSTEM OF MAMMAL , VERTICAL SECTION OF TOOTH	3		CHALK AND DUSTER
	TRANSVERSE SECTION OF TONGUE	2		
	TRANSVERSE SECTION OF STOMACH, SMALL INTENSTINE, LARGE INTENSTINEOF MAMMALS	3		
	GLANDS ASSOCIATE WITH DIGESTIVE SYSTEM	2		

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	TRANSVERSE SECTION OF SALIVARY GLAND AND LIVER	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF**:** **PRIYANKA DESAI** DEPARTMENT: **ZOOLOGY**

CLASS**:** **S.Y,BSc**. SEMESTER**:** **IV** MONTH**:** **DEC-FEB** ACADEMIC YEAR: **2018-2019**

LEARNING OBJECTIVE/S: TO INTRODUCE TEHM WITH THE BASIC KNOWLEDGE OF RESEARCH, SCIENTIFIC WRITING AND IT'S METHODOLOGY

The learners will be able to : UNDERSTAND THE WAYS AND METHODS OF WRITING A RESEARCH PAPER, TYPES OF RESEARCH AND THE ETHICS RELATED TO SCIENTFIC RESEARCH AND ITS WRITING

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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PAPER I, UNIT I ORIGIN AND EVOLUTION OF LIFE	INTRODUCTION OF ORIGIN OF THE UNIVERSE, CHEMICAL EVOLUTION,ORIGIN OF LIFE,ORIGIN OF EUKARYOTIC CELL	4	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND DUSTER
	EVIDENCES OF FAVOUR OF ORGANIC EVOLUTION	3		PRESENATION
	PALAENTOLOGY, ANATOMY, EMBRYOLOGY AND GEOGRAPHICAL DISTRIBUTION	2		YOUTUBE VIDEOS
	THEORIES OF ORGANIC EVOLUTION, LAMARCK,DARWIN,MUTATION THEORY	3		
	MODERN SYNTHETIC THEORY,WEISMAN GERMPLASM THEORY	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF **PRIYANKA DESAI** DEPARTMENT: **ZOOLOGY**

CLASS: **F.Y,BSc**. SEMESTER: **II** MONTH: **DEC-FEB** ACADEMIC YEAR: **2018-2019**

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LEARNING OBJECTIVE/S: TO EXPLAIN THE COMPONENTS OF ECOSYSTEM AND HOW ECOSYSTEM IS ESSENTIAL FOR SURVIVAL OF ANIMALS

The learners will be able to : UNDERSTAND THE IMPORTANCE OF ECOSYSTEMAND VARIOUS FAUNA BEING EXTINCT BECAUSE OF INTERUPTING OF HUMAN BEING

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
P-I, U-II, ECOSYSTEM	DEFINATION OF ECOSYSTEM, COMPONENTS OF ECOSYSTEM	2	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	CHALK AND DUSTER
	IMACT OF TEMPERATURE ON BIOTA, VARIOUS BIOGEOCHEMICAL CYCLES	4		PRESENTATION
	FRESHWATER ECOSYSTEM, FOOD CHAIN	4		
	FOOD WEB, ECOLOGICAL PYRAMID	2		
	ANIMAL INTERACTION THAT IS POSITIVE INTERACTION AND NEGATIVE INTERACTION	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: **_PRIYANKA DESAI** DEPARTMENT: **ZOOLOGY** CLASS: **T.Y.Bsc** SEMESTER: **VI** MONTH: **APRIL-MAY**

ACADEMIC YEAR:**2018-2019**

LEARNING OBJECTIVE/S: TO INTRODUCE THE LEARNER VARIOUS NATURAL RSOURCES ,THEIR EXPLOITATION AND HOW GOVERNMENT PLAYS AN IMPORTANT ROLE TO IMPLIMENT VAROIUS LAWS
The learners will be able to : UNDERSTAND DIFFERENT FACTORS AFFECTING ENVIRONMENT AND NEED TO UNDERSTAND VAROIUS LAWS ANGAINST GOVERONMENT FOR EXPLOITATION.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV, UNIT I ENVIRONMENTAL	NATURAL RESOURCES AND THEIR CLASSIFICATION	2	ENVIRONMENTAL BIOLOGY BY P.S. VERMA	CHALK AND DUSTER PRESENTATION

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MANAGEMENT	EXPLOITATION AND MODIFICATION OF NATURAL RESOURCES	2		
	SUSTAINABLE DEVELOPMENT	3	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	
	WASTE MANAGEMENT, WATER MANAGEMENT	4		
	LAWS GOVERNING ENVIRONMENT	3		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT- 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF **PRIYANKA DESAI** DEPARTMENT: **ZOOLOGY** CLASS: **S.Y.B.sc** SEMESTER: **III** MONTH: **DEC-FEB**

ACADEMIC YEAR:**2018-2019**

LEARNING OBJECTIVE/S: TO INTRODUCE CONCEPT OF PARASITISM , MODES OF TRANSMISSION OF PARASITES AND PRECAUTIONS TO PREVENT DISEASES
The learners will be able to : _TO UNDERSTAND VARIOUS PARASITES, THEIR LIFE CYCLE, THE SYMPTOMS OF THE DISEASE.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

SIGNATURE OF THE STAFF **SIGNATURE OF THE H.O.D.**

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		ALLOTED		
PAPER 3, UNIT II PARASITOLOGY	INTRODUCTION TO PARASITOLOGY AND TYPES OF PARASITES	2	PARASITOLOGY BY SHARMA	CHALK AND DUSTER PRESENTATION
	HOST PARASITE RELATIONSHIP, HOST SPECIFICITY	3	PARASITOLOGY BY CHATTERJEE .K.D	
	LIFE CYCLE, PATHOGENECITY, CONTROL MEASURES AND TREATMENT OF THE FOLLOWING PARASITES Entamoeba histolytica, Faciola hepatica, Taenia solium, Wucheria bancrofti	4	UNIVERSITY TB FOR COURSE BY BOARD OF STUDIES ZOOLOGY	
	MORPHOLOGY,LIFE CYCLE, PATHOGENECITY,CONTROL MEASURES AND TREATMENT OF THE FOLLOWING PARASITES HEAD LOUSE, MITE, BED BUG	3		
	PARASITOLOGICAL SIGNIFICANCE	3		

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TOTAL NUMBER OF LECTUES ALLOCATED TO THE UNI

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: FYBSc. SEMESTER: I MONTH: JULY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : To orient learner about rich heritage of Biodiversity of India and make understand significance of its conservation.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER I UNIT II BIODIVERSITY AND ITS CONSERVATIO N	INTRODUCTION AND LEVELS TO BIODIVERSITY	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	BIODIVERSITY HOTSPOT	03	BIODIVERSITY – S.CHAND PUBLICATION	PRESENTATION
	VALUES OF BIODIVERSITY	03		
	THREATS OF BIODIVERSITY	03		
	CONSERVATION AND ITS MANAGEMENT	03		

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TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: III MONTH: JULY ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : To introduce the concepts of physiology of nutrition, excretion and osmoregulation. To expose the learners to various nutrition apparatus, excretory and osmoregulatory struct

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPERII UNIT I NUTRITION AND EXCRETION	EXCRETION APPARATUS ,PHYSIOLOGY	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	PROCESS AND COMPARATIVE STUDY	03		PRESENTATION

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	NUTRITION TYPES AND PROCESS	03		CHARTS
	COMPARATIVE STUDY	03		
	PHYSIOLOGY	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: V MONTH: JUNE ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : To acquaint learners with the details of Sepia as a representative of invertebrate animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED

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PAPER I UNIT IV TYPE STUDY SEPIA	GENERAL CHARACTERISTICS AND CLASSIFICATION	02	INVERTEBRATE BY KOTPAL	CHALK AND BOARD
	DIGESTIVE SYSYTEM ,REPRODUCTIVE SYSTEM	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	PRESENTATION
	EXCRETORY SYSTEM	03		CHARTS
	NERVOUS SYSTEM	02		
	CIRCULATORY SYSTEM	02		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 12

TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: FYBSc. SEMESTER: II MONTH: NOV ACADEMIC YEAR: 2018-2019

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LEARNING OBJECTIVE/S:
The learners will be able to : Learners will be able to promptly recognize stress related problems at initial stages and would be able to adopt relevant solutions which would lead to psychologically strong mind set promoting positive attitude important for academics and would be able to acquire knowledge of cause, symptoms and precautions of infectious diseases.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III COMMON HUMAN DISEASE	STRESS RELATED DISORDER – SYMPTOMS, EFFECTS,CAUSES, PREVENTION,REMEDY	07	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	COMMUNICABLE AND NON COMMUNICABLE DISEASE – SYMPTOMS, EFFECTS,CAUSES, PREVENTION,REMEDY	07		PRESENTATION
				CHARTS

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

TEACHING PLAN (UNIT PLAN)

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NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: SYBSc. SEMESTER: IV MONTH: NOV ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:
The learners will be able to : To develop the learner's knowledge and understanding of genetic variability within a population and how the change in the gene pool leads to evolution of species.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER III UNIT II ASPECTS OF HUMAN REPRODUCTION	MALE AND FEMALE REPRODUCTIVE SYSTEM	04	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	MALE INFERTILITY AND FEMALE INFERTILITY REASONS AND CAUSES	03		PRESENTATION
	CONTRACEPTIVE METHODS	04		CHARTS
	ART	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 14

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: NOV ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to : The learner shall understand the types and secretions of endocrine glands and their functions and their disorders.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER II UNIT III ENDOCRINOLOGY	INTRODUCTION TO ENDOCRINOLOGY AND TYPES OF GLANDS	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	ENDOCRINE SYSTEM,AND ITS MECHANISM	03	TEXTBOOK OF ENDOCRINOLOGY – WILLIAMS	PRESENTATION
	CLASSIFICATION AND PROPERTIES OF HORMONE	03		CHARTS
	HISTOLOGY,FUNCTIONS AND DISORDERS OF PITUITARY,THYROID	03		
	PARATHYROID,PANCREAS AND ADRENAL	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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TEACHING PLAN (UNIT PLAN)

NAME OF THE STAFF: ANKITA PATIL DEPARTMENT: ZOOLOGY

CLASS: TYBSc. SEMESTER: VI MONTH: NOV ACADEMIC YEAR: 2018-2019

LEARNING OBJECTIVE/S:

The learners will be able to : Learner will understand the paradigms of discovery and commercialization of biological resources and knowledge gained by self-medication by animals.

PAPER, UNIT, TITLE	SUBTOPICS	NO OF LECTURES ALLOTED	REFERENCE/S	TEACHING METHOD/ ICT TOOLS USED
PAPER IV UNIT III BIOPROSPECTING AND ZOOPHARMACOGNOSY	INTRODUCTION TO BIOPROSPECTING	03	UNIVERSITY TEXTBOOK BY BOARD OF STUDIES	CHALK AND BOARD
	TYPES OF BIOPROSPECTING	03		PRESENTATION
	CONSERVATION – ADVANTAGE AND DISADVANTAGE , INTRODUCTION TO ZOOPHARMACOGNOSY	03		CASE STUDIES

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	SELF MEDICATION AND ITS MECHANISM	03		
	APPLICATION AND ITS CONTRIBUTION	03		

TOTAL NUMBER OF LECTURES ALLOCATED TO THE UNIT: 15

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